Exchange Rate Impacts on U.S. Agriculture and the Potential Role of Dollarization

A Study Provided for the American Farm Bureau Federation

by

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July 16, 2001

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Executive Summary

Exchange rates are an important economic variable influencing the sale, purchase, and competitiveness of U.S. agricultural products worldwide. While a stronger dollar makes U.S. exports more expensive in other countries, it also reduces the cost of imported products, resulting in lower prices for U.S. consumers, but additional import competition for some producers. A weaker dollar has the opposite effects, leading to increased exports and higher producer prices, but lower imports and higher prices for consumers.

Both a currency depreciation and a currency appreciation are, in most cases, short term in nature. Their effects occur during the first several months after the exchange rate change.

The U.S. dollar has appreciated relative to the currencies of most trading partners over the last five years. The currencies of Korea, Brazil, and Mexico have all dropped significantly against the U.S. dollar, while the Japanese yen declined through late 1998, began a moderate recovery, then fell again. These differing currency regimes illustrate the importance of exchange rates and how changes in those rates may affect trade.

From 1996-98, the U.S. dollar appreciated 20 percent relative to the Japanese yen, going from ¥108.81/$ to ¥130.82/$. The price of U.S. soybeans landed in Japan is fell from $9.09/bu to $8.16/bu, but in yen the landed price actually increased from ¥989/bu to ¥1,068/bu, an increase of 8.0 percent. The cost of U.S. soybeans to Japanese buyers increased primarily due to the appreciation of the U.S. dollar even though U.S. prices had fallen significantly. The result was higher priced U.S. soybeans in Japan when compared to soybeans from Brazil, which fell from ¥986/bu to ¥958/bu, allowing Brazilian soybeans to be sold on Japan for about $1.00/bu less than U.S. soybeans.

Attempts to peg or stabilize exchange rates have had mixed results. The United States was forced to float the dollar in the early 1970s due to inflationary pressure.

Exchange rate changes can provide a competitive advantage or disadvantage for U.S. agricultural products on the world market and can also stimulate or mitigate import competition in the domestic market.

The emergence of a large, well integrated global capital market has resulted in the circulation of $480 billion in U.S. dollar currency worldwide. Of this total, 55-70 percent, or $300 billion, is held by foreigners. Global turnover in foreign exchange markets is nearly $1.5 trillion each day. International trade, trade finance, investment, exchange rate changes, and even U.S. interest rates are increasingly influenced by forces beyond U.S. borders.

As the United States debates a new farm policy, the role of exchange rates and their impacts on commodity prices and exports have been important considerations. Although
short term impacts from exchange rate management may be positive for U.S. agricultural exports, attempts to manage the exchange value of the U.S. dollar over the long term may partially or totally mask the forces of comparative advantage.

The biggest drawbacks of exchange rate management to increase export competitiveness would be the inability to effectively influence domestic money supply, inflationary pressure, and higher consumer prices.

Competitive price benefits from currency devaluation tend to erode quickly due to increased inflation brought about by rapid currency depreciation, loss of investor confidence, and capital flight. These events often lead to economic and social unrest, and even political instability in some cases.

Dollarization has become more important as Ecuador and El Salvador have dollarized and Guatemala has allowed bank deposits and circulation of foreign currencies. Most countries in Latin America and the Caribbean practice varied forms of unofficial dollarization.

Dollarization does not remedy any underlying fiscal imbalances or structural flaws in an economy. It also does not provide a solution to institutional mismanagement, graft, or corruption. Dollarization does, however, limit monetary policy alternatives, eliminate seigniorage, and stabilizes prices and interest rates. Price stability, especially inflation, will only persist so long as government follows sound fiscal management policies.

Dollarization addresses only the symptoms of economic mismanagement, not the root causes. Many dollarizing countries need to pay down their debt in order to restore investor confidence. But, dollarization may buy a government the time needed to mend institutional problems, reduce debt, and develop a sound set of macroeconomic policies.

If dollarizing countries fail to coordinate fiscal and monetary policies, then inflation, high real interest rates, and recession will likely result. Finally, dollarization should not be viewed as a panacea or institutional “quick fix” for serious underlying structural problems.
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Exchange Rate Impacts on U.S. Agriculture and the Potential Role of Dollarization

Introduction

Exchange rates are important to U.S. agriculture where exports account for 25 percent of gross cash farm income and relatively large shares of production. Exchange rates are also important variables in transmitting macroeconomic policies to agriculture and the trade sector and in influencing the outcomes of U.S. farm policy.

When the value of the U.S. dollar increases, or appreciates, relative to other currencies, U.S. exports fall, while imports rise. As the value of the U.S. dollar depreciates, U.S. exports rise and imports fall. These impacts have become even more pronounced since the early 1970s with the collapse of the Bretton Woods System of fixed exchange rates and the removal of the U.S. dollar from the gold standard (figure 1). Exchange rates now have significant impacts on U.S. producers due to increased U.S. dependence on trade and because of the growth and influence of the global capital market on both interest rates and the value of the U.S. dollar.

The increased use of the U.S. dollar as the official currency of other countries, or dollarization, has also become more important in recent months as Ecuador and El Salvador have adopted the U.S. dollar as their official currency and as Guatemala has allowed the establishment of foreign currency bank accounts and the circulation of all foreign currencies. These events, along with uncertain prospects for a comprehensive round of multilateral trade negotiations (MTN) and an increase in the formation of preferential trading arrangements among regions, have focused attention on the process and potential of greater globalization.

The emergence of a large, well integrated global capital market has resulted in the circulation of $480 billion in U.S. dollar currency worldwide. Of this total, 55-70 percent, or $300 billion, is held by foreigners (U.S. Senate, Subcommittee on Economic Policy, July 1999). Global turnover in
foreign exchange markets is nearly $1.5 trillion each day (Bank for International Settlements).

International trade, trade finance, investment, exchange rate changes, and even U.S. interest rates are increasingly influenced by forces beyond U.S. borders. A strong U.S. dollar has been instrumental in attracting foreign capital into the United States in order to service a growing current account deficit and kept U.S. interest rates lower than they might otherwise have been.

*Exchange Rates*

The **exchange rate** is the price of one currency in terms of another. Exchange rates are important economic variables because they are used to convert foreign prices into domestic currency and vice versa. These relative prices determine which goods are traded and where they are shipped or sourced. Being able to convert one currency into another at the prevailing exchange rate is crucial to international business and decision making. The difference in relative prices determines the flow of agricultural products and the patterns of trade.

An exchange rate **appreciation** occurs when the value of one currency increases relative to another. For example, if one U.S. dollar is worth new Mexican pesos (NP) 9 on June 1 and two weeks later one dollar is worth NP10, the dollar has appreciated relative to the peso. An exchange rate **depreciation** is when one currency declines in value relative to another. If one euro is worth $1.00 today, but worth only $.85 tomorrow, the euro has depreciated relative to the dollar.

An exchange rate **devaluation** represents action by a government monetary authority to decrease the value of its currency from a fixed level relative to other currencies. An exchange rate **revaluation** is a government action to increase the value of its currency from a fixed level. While a devaluation (revaluation) is induced by a country’s monetary authority, the subsequent depreciation (appreciation) of the currency is market driven as the currency declines (rises) due to the broad
forces of supply and demand.

As the U.S. dollar depreciates in value, the importer’s cost of foreign exchange will decrease leading to lower prices in the import market, an increase in the demand for the product being exported, and higher prices in the U.S. market. As the U.S. dollar appreciates in value, the foreign currency cost to the importer will rise, resulting in higher import prices, a fall in import demand, and lower prices in the U.S. market.

**Impacts of Exchange Rate Changes on Prices and Trade**

The relationship between the exchange value of the U.S. dollar and U.S. agricultural exports appears to be quite strong (figure 1). Between 1985 and 1996, the exchange rate of the U.S. dollar declined 51 percent as U.S. agricultural exports rose 131 percent, reaching a record $60 billion. Since then, the U.S. dollar has appreciated 53 percent, while exports have declined 17 percent. During this latter period the U.S. dollar gained 40 percent relative to the currencies of U.S. agricultural competitors such as Argentina, Australia, Brazil, Canada, and the European Union. It also is important to note the counter-cyclical relationship between the U.S. dollar’s exchange rate and U.S. exports. When the dollar reached its highest level in 1985, U.S. agricultural exports bottomed out at $26 billion one year later. As the dollar fell in value from 1987-96, U.S. agricultural exports increased, peaking at $60 billion in 1996. While many other factors contributed to the long sustained growth in agricultural exports, the relatively low value of the dollar was important in keeping U.S. products competitively priced and relatively inexpensive to foreign buyers.

The impacts of a strong dollar on U.S. commodity loan rates have been mitigated by the use of marketing loans. In the early 1980s, however, a strong dollar increased farm commodity loan rates well above world market prices, leading to loss of U.S. competitiveness, declining market
share, and lower returns to producers.

The U.S. dollar has appreciated relative to the currencies of most trading partners over the last five years (figures 2 and 3). The currencies of Korea, Brazil, and Mexico have all dropped significantly against the U.S. dollar, while the Japanese yen declined through late 1998, began a moderate recovery, then fell again. Australia’s dollar and the euro also have exhibited weakness relative to the U.S. dollar, while the Canadian dollar has shown moderate decline and the Chinese yuan has been pegged to the U.S. dollar. These differing currency regimes illustrate the importance of exchange rates and how changes in those rates may affect trade. The following commodity examples illustrate the importance of the relationship of the U.S. dollar to the currencies of other countries and how changes in those currencies have impacted U.S. agricultural exports.

**Soybeans:** Between 1996 and 1998 the U.S. farm price for soybeans declined from $7.27/bushel (bu) to $5.93/bu, an 18.5 percent drop. (table 1) Over the same period, the U.S. dollar appreciated 20 percent relative to the Japanese yen, going from ¥108.81/$ to ¥130.82/$. When the yen price of U.S. soybeans landed in Japan is compared over this period of time it is important to note that the price of U.S. soybeans in dollars fell from $9.09/bu to $8.16/bu, but in yen the landed price actually increased from ¥989/bu to ¥1,068/bu, an increase of 8.0 percent. The cost of U.S. soybeans to Japanese buyers increased primarily due to the appreciation of the U.S. dollar even though U.S. prices had fallen significantly. The result was higher priced U.S. soybeans in Japan when compared to soybeans from Brazil, which fell from ¥986/bu to ¥958/bu, allowing Brazilian soybeans to be sold on Japan for about $1.00/bu less than U.S. soybeans.
Table 1. Prices, Exchange Rates and Soybean Imports for Japan

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>1998</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Price for Soybeans</td>
<td>$7.27/bu</td>
<td>$5.93/bu</td>
<td>18.5%</td>
</tr>
<tr>
<td>Japanese - U.S. Exchange Rate</td>
<td>¥108.31/$</td>
<td>¥130.82/$</td>
<td>20.8%</td>
</tr>
<tr>
<td>Japanese - Brazil Exchange Rate</td>
<td>¥107.77/Real</td>
<td>¥112.74/Real</td>
<td>4.6%</td>
</tr>
<tr>
<td>Japanese Import Price for U.S. Soybeans</td>
<td>$9.09/bu</td>
<td>$8.16/bu</td>
<td>10.2%</td>
</tr>
<tr>
<td>Yen Import price for U.S. Soybeans</td>
<td>¥989/bu</td>
<td>¥1,068/bu</td>
<td>8.0%</td>
</tr>
<tr>
<td>Yen Import price for Brazilian Soybeans</td>
<td>¥986/bu</td>
<td>¥958/bu</td>
<td>2.8%</td>
</tr>
<tr>
<td>Japanese Imports from U.S. (MT)</td>
<td>3.9 million</td>
<td>3.7 million</td>
<td>5.1%</td>
</tr>
<tr>
<td>Japanese Imports from Brazil (MT)</td>
<td>379 thousand</td>
<td>524 thousand</td>
<td>38.3%</td>
</tr>
</tbody>
</table>

U.S. soybean exports to Japan declined during this period from 3.9 million metric tons (mmt) to 3.7 mmt, while exports from Brazil increased from 379,000 mt to 524,000 mt.

**Wheat:** Exchange rates had similar impacts on the Mexican wheat market. Between 1995 and 1999, the price of U.S. wheat delivered to Mexico declined from $3.95/bu to $3.20/bu.

(2) The U.S. dollar appreciated 48 percent relative to the Mexican peso (NP) during this period from NP6.45/$ to NP9.58/$. This appreciation led to a 20 percent increase in the peso price of U.S. wheat from NP25.46/bu to NP30.64/bu, though the U.S. dollar price of wheat declined 19 percent.

**Corn:** U.S. corn prices in Japan also were affected by adverse exchange rate movements. The U.S. landed corn price decreased from $3.64/bu in 1995 to $3.31/bu in 1998.

(2) The U.S. dollar appreciated 39 percent relative to the Japanese yen, from ¥94.23/$ to ¥130.81/$. The yen price of U.S. corn increased from ¥343/bu to ¥433/bu, an increase of 26 percent even though the U.S. dollar price had declined 9.1 percent.
In addition to the above examples, it is important to note that as the U.S. dollar has appreciated over the last several years, it is very likely that the EU has been able to reduce the level of government export restitutions paid as subsidies on many of their products. While data are not available to establish this factually, the intuitive appeal is quite strong.

Recent empirical evidence supports the strong relationship between exchange rates and agricultural trade. Kapombe and Colyer found that a one percent increase in the Japanese yen-U.S. dollar exchange rate led to a .96 reduction in Japanese demand for U.S. broilers. (table 3) In addition, they also found that a one percent increase in the Hong Kong-U.S. exchange rate resulted in a .56 percent decline in Hong Kong demand for U.S. broilers, while a similar change in the Mexican peso-U.S. dollar exchange rate led to a .58 drop in Mexican demand. Other empirical studies also have documented the importance of the Mexican peso-U.S. dollar exchange rate in influencing U.S. imports of melons (Espinosa-Arellano, Fuller, and Malaga). Their results suggest that the 1994-95 Mexican peso devaluation U.S. imports of watermelon, honeydew, and cantaloupe by 36, 18 and 4 percent, respectively in the short run. In fact, a survey
Table 3. Effects of Exchange Rate Changes on U.S. Agricultural Trade

<table>
<thead>
<tr>
<th>Author/Product/Countries</th>
<th>Exchange Rate Change</th>
<th>% Change in Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kapombe and Colyer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Broilers to Japan</td>
<td>1% U.S. Dollar Appreciation</td>
<td>Exports have .96%</td>
</tr>
<tr>
<td>U.S. Broilers to Hong Kong</td>
<td></td>
<td>Exports have .56%</td>
</tr>
<tr>
<td>U.S. Broilers to Mexico</td>
<td></td>
<td>Exports have .58%</td>
</tr>
<tr>
<td>Espinoza-Arellano et al</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexican Watermelons to U.S.</td>
<td>Mexican Peso Devaluation of 25 % (1994-95)</td>
<td>Exports have 36%</td>
</tr>
<tr>
<td>Mexican Honeydew to U.S.</td>
<td></td>
<td>Exports have 18%</td>
</tr>
<tr>
<td>Mexican Cantaloup to U.S.</td>
<td></td>
<td>Exports have 4%</td>
</tr>
</tbody>
</table>

of historical empirical literature since the early 1970s has revealed that in 32 separate studies of the role of exchange rates on U.S. agricultural trade, the exchange rate was found to be an important explanatory variable in 24 of the studies (Kristinek).

The European Union and the Euro

The European Union (EU) consists of 15 member countries (Belgium, Germany, France, Italy, Luxembourg, Netherlands, Denmark, Ireland, United Kingdom, Greece, Spain, Portugal, Austria, Finland and Sweden). The EU began in 1957 when the European Coal and Gas Community, consisting of six members, signed the Treat of Rome to form the European Economic Community (EEC). The purpose of the EU is to create a common marketplace for the movement of goods and services, a common currency and a central bank. Five governmental bodies oversee the operations of the EU: the Council of the European Union, European Parliament, European Commission, European Court of Justice, and European Central Bank.
Under the Treaty of Maastricht, signed in 1992, eleven of the fifteen members joined the European Monetary Union (EMU) which began January 1, 1999. Britain, Denmark and Sweden chose not to participate, while Greece did not meet the convergence criteria necessary to participate. Greece has since met the required criteria and joined the EMU on January 1, 2001.

Five convergence criteria are required to be met before a country can adopt the euro.

1. The country’s government deficit can be no more than 3% of GDP,
2. The ratio of government debt to GDP can be no more than 60%,
3. Inflation cannot be 1.5% greater than the average of the 3 lowest member’s inflation,
4. Long-term interest rates can be no more than 2% greater than the average interest rates of the 3 lowest members, and
5. Countries must have been members of the Exchange Rate Mechanism for 2 years and not instituted a currency devaluation during that time.

The euro will replace the currency of each of the twelve members beginning January 1, 2002. The euro is already being used to conduct many noncash transactions. Until March 31, 2002, banks will exchange national currencies from other participating countries for euros. A dual currency system will last July 1, 2002 when only euros will be accepted for all transactions and the previous currencies will no longer be legal tender.

The European Central Bank is the governing body responsible for making monetary policy decisions affecting the euro. The combination of the European Central Bank and the national central banks create the European System of Central Banks (ESCB), commonly referred to as the “Eurosystème” or “Eurozone.” National banks that do not belong to the EMU still participate in conducting national monetary policies, but do not have decision making authority for the single
monetary euro-area. National banks are located in their respective countries while the Central Bank is located in Frankfurt, Germany. The primary objectives of the Eurosystem are to maintain price stability, support general economic policies throughout the EU, and to promote the use of open market economic principles to facilitate efficient resource allocation.

As the euro made its debut on January 1, 1999 there was much optimism among many analysts that the euro would remain strong and even replace, or certainly rival, the U.S. dollar as the world’s top reserve currency. The opposite has occurred. Since opening at $1.16, the euro has declined in value to $.85 in June 2001. This weakening of the euro, or conversely, the strengthening of the U.S. dollar by 36 percent, has made U.S. exports more expensive to consumers in Europe and other countries, while EU exports have become cheaper and more competitive. One other aspect of the declining euro has been no need for EU export subsidies on some products and lower subsidies on others.

As the EU expands, taking in six more countries from Central and Eastern Europe during the next five years, it is unclear how the euro-U.S. dollar exchange rate will change. Another factor likely to influence the euro is reform of the Common Agricultural Policy (CAP) and costs that may imposed on EU members as new countries join and budget outlays increase. While countries cannot increase money supply to fund new spending, members have also agreed to limit fiscal expansion. Additional expenditures for agriculture may put significant pressure on an already fragile fiscal balance, leading to a weaker euro.

**Exchange Rate Determination**

Among the most important and well documented determinants of exchange rates are: currency supply and demand, interest rates and macroeconomic policies, inflation, balance of trade
and payments, and expectations about future events or policies. Market forces and governments are the most important forces influencing exchange rates, especially in the short term.

Supply and Demand of Currencies

Exchange rates are determined by the interaction of forces affecting the demand and supply for currencies on the foreign exchange market. More than 100 currencies are traded worldwide, with the values of 48 determined solely by market forces. These exchange rate of these currencies is considered flexible, or floating. The U.S. dollar, Japanese yen, Australian dollar, Canadian dollar, Mexican peso, and the British pound are among the currencies allowed to float independently of most government intervention.

Factors causing the supply of U.S. dollars to increase would result in the dollar depreciating, or falling in value, while factors causing the supply of dollars to decline would cause the dollar to appreciate relative to other currencies. The supply of U.S. dollars is generated by the desire of U.S. businesses and consumers to import foreign goods and services, to lend funds and invest in other countries, to repay debts owed outside the United States, and for transfer payments made to foreigners. As U.S. dollars are offered on foreign markets in settlement of these legal obligations of residents and government, the supply of dollars increases, leading to its depreciation relative to other currencies.

Any force resulting in an increase in the demand for U.S. dollars would cause the dollar to appreciate, while a reduction in demand would cause the dollar’s value to fall. The demand for U.S. dollars results from U.S. exports of goods and services, income received from foreign investment, and investments in the United States by foreign entities. As foreign businesses and consumers buy U.S. foods, for example, the conversion of their currencies into U.S. dollars drives up the demand for
dollars causing the rate of exchange to appreciate.

Currency markets are similar to agricultural markets where prices are determined by supply and demand of any particular commodity. As the supply of dollars increases (decreases), its price, or the exchange rate, depreciates (appreciates). As the demand for dollars increases (decreases), the exchange rate appreciates (depreciates). These results assume that other factors affecting the exchange rate remain unchanged.

**Interest Rates**

The linkage between interest rates and the U.S. dollar is one of primary importance. Interest rates in the United States and other countries help determine the exchange rate of the U.S. dollar relative to other currencies. One of the major effects of an increase in U.S. interest rates is to increase the demand for U.S. dollars. Investors, speculators, businesses, and institutions would transfer funds into the United States to be placed in interest bearing securities, accounts, and other financial assets. This conversion of foreign currency into U.S. dollars drives up the demand for dollars causing its exchange rate to increase. A decline in U.S. interest rates has the opposite effect, causing the dollar to depreciate.

It is important to note that markets or policies in other countries also can influence the U.S. dollar exchange rate. If interest rates rise in another country and U.S. rates remain unchanged, it is likely that the U.S. dollar would depreciate in value relative to the other currency. This occurs because the interest rate differential between the two countries has changed, resulting in a higher expected rate of return on foreign assets when compared to U.S. assets. This outcome assumes that the other country has a stable political and economic systems, and that inflation between it and the United States is similar.
Macroeconomic Policy

Monetary and fiscal policies are the major elements of macroeconomic policy. These policies influence the overall level of economic activity and affect incentives to export and import. The major linkages between macroeconomic policy, U.S. agriculture, and trade are interest rates and exchange rates. Government intervention to influence interest rates, therefore, takes on added importance. Several options exist when considering how and when to influence the exchange rate. One possibility is to use stocks of foreign currency held for currency intervention purposes, called international reserves, to purchase domestic or foreign currencies. Another option is to print domestic currency in order to purchase foreign currency. Still another option is to issue government bonds to raise the necessary funds with which to purchase foreign currencies. Which option, or combination of options, is chosen will depend upon the financial strength of the country and its underlying policy objectives. Further, attempts to affect the exchange rate often have little or no impact, including failed attempts by Brazil and Chile during July 2001.

U.S. monetary and fiscal policies can have major consequences for the value of the dollar. Monetary policy influences the supply of money in the economy by changing the amount of credit available to the banking system. Strict controls on the rate of growth in the U.S. monetary base would result in the contraction of the U.S. money supply. As a result, U.S. interest rates would be higher than under a more liberal monetary policy and the U.S. dollar stronger. This would cause the demand for U.S. exports to fall, lower prices for many agricultural exports, and rising imports. A loose, or expansionary, monetary policy would have the opposite effects, resulting in a lower prevailing interest rate, a weaker U.S. dollar, but also raising the specter of inflation. Under this latter set of circumstances U.S. exports would rise, while imports would fall.
Fiscal policy adjusts government spending through tax regulation and expenditures. U.S. fiscal policies designed to reduce government spending, or a fiscal contraction, will reduce the aggregate demand in the economy, leading to reduced demand for money and lower interest rates. The result will be a lower valued exchange rate for the U.S. dollar, higher exports, and lower imports. A fiscal expansion will increase the demand for money, raise interest rates, and cause the dollar to appreciate.

While the short-run, or direct effects, of macroeconomic policy are clear, the interaction of these policies is less clear, but of critical importance to interest rates, the value of the U.S. dollar, and agriculture. These two sets of policies can reinforce or offset each other and it is important to understand how this may occur. Contractionary fiscal policy, or a reduction in government spending, reduces demand for money and lowers the exchange rate of the dollar because interest rates fall. This will cause exports to rise and imports to decline. If at the same time, however, the money supply is restricted and interest rates rise, then there would be upward pressure on the value of the dollar to partially or completely offset the currency depreciation. This particular policy mix would not benefit export oriented agriculture in the short run because it would result in relatively higher interest rates and a stronger dollar.

Expansionary monetary policy coupled with less government spending would reinforce each other, resulting in lower interest rates, a weaker dollar, higher exports, and lower imports. The short run consequences of this policy mix would be beneficial to U.S. agriculture because it would reduce interest rates and lower costs to producers, while stimulating exports and reducing import competition.
Inflation

Differing price levels, or rates of inflation, between countries are a key source of exchange rate changes. If U.S. inflation rises relative to inflation in other trading countries, for example, U.S. agricultural products would become more expensive. In response to these higher prices, other countries would increase their exports to the U.S. market. As U.S. purchases of foreign goods increased, the supply of U.S. dollars on world exchange markets would expand. Other countries would import less from the United States due to higher prices, reducing the demand for U.S. dollars. The combination of a greater supply of U.S. dollars, along with reduced demand, would cause the exchange value of the dollar to decline. The longer term consequences of inflation would be to stimulate U.S. exports and reduce imports.

Balance of Trade and Payments

The U.S. balance of payments represents the accounting record of all international transactions by private and public entities over a specified period of time - monthly, quarterly, or annually for example. An international transaction is a transfer of goods, services, or assets between residents of the United States and another country. The balance of payments links trade in goods and services to international capital flows and the exchange rate. Exports, income from foreign investment, and travel receipts from foreigners are credits in the U.S. balance of payments leading to the receipt of U.S. dollars from foreigners. Imports, travel expenses of U.S. residents, and income paid on foreign investment in the United States are debits in the U.S. balance of payments since they represent payments to foreigners.

The balance of payments is composed of three main accounts: the current account, the capital account, and the official settlements account. The current account consists of merchandise and
services trade, and investment income. The capital account includes all purchases and sales of foreign and U.S. assets, including transactions in international real and financial assets and the international activities of U.S. banks. The official settlements account represents government holdings of gold, international currency reserves, and reserve assets of the International Monetary Fund. Since every international transaction involves an exchange of assets, the balance of payments utilizes the double-entry accounting system in which debits are balanced by credits and vice versa. In 1999, for example, the U.S. current account was in deficit by $339 billion, while the U.S. capital account was in surplus by $339 billion. The capital account surplus was primarily the result of international capital inflows into the United States equaling $706 billion.

Net capital inflows into the United States are the result of relatively high real rates of return on fixed and portfolio investments, a large politically stable free market economy, and the need to service a growing deficit in merchandise trade. Capital inflows represent not only investment in assets to increase future productivity and incomes, but are a critical source of loanable funds used to provide credit to finance business expansion and consumers purchases, and to maintain U.S. interest rates at levels lower than would be expected without foreign capital.

The balance of trade is an important long-run force affecting the exchange value of the U.S. dollar. Since moving to a flexible exchange rate system in the early 1970s, however, it has become less clear whether the dollar causes changes in the balance of trade, responds to the trade balance, or both. It is generally believed that large, chronic trade deficits and surpluses do affect exchange rates, but the timing and length of time over which the influence exists is less certain.

For example, when the United States experiences a trade deficit, U.S. imports exceed U.S. exports for a given period of time. In this situation, U.S. dollars on the foreign exchange market
exceed other foreign currencies, and as a result, the supply of U.S. dollars increases. This expanded supply of dollars causes its value, the exchange rate, to decline. At the lower exchange rate, U.S. exports are less expensive to foreign buyers while foreign imports are more expensive to U.S. consumers. Consequently, U.S. imports will fall and U.S. exports will rise, partially or completely offsetting the trade deficit.

The rate of adjustment in the balance of trade depends on how responsive, or elastic, exports and imports quantities are to exchange rate changes. A more elastic export supply adjusts quicker to exchange rate changes than a less elastic export supply. It is also clear that this approach to exchange rate determination may not be the best predictor of changes in currency values. The United States has been through a recent period when the trade deficit was quite large by historical standards, but the value of the U.S. dollar remained strong. In this case it is quite likely that more important short run determinants of exchange rates, such as interest rates, were offsetting the effects of the trade deficit on the value of the U.S. dollar.

**Expectations and Market Psychology**

Rapid growth in information technology, electronic funds transfer, and near 24-hour money center global trading operations have revolutionized the speed with which money can be transferred among alternative uses to maximize returns to investors. The role of expectations has taken on added importance in recent years. If foreign investors, for example, learn that U.S. monetary policy may be loosened, their expectations would be for lower U.S. interest rates and a weaker U.S. dollar. They might withdraw large sums of money from U.S. markets, convert it to yen or another currency, with the expectation that the U.S. dollar was going to decline in value. By selling dollars, the investors increase the supply of U.S. dollars and increase the demand for other currencies vis a vis
the dollar, thereby causing the dollar to depreciate even before the policy is implemented.

If the United States has a large trade deficit, this suggests that the dollar should decline in value, then investors may withhold their purchases of U.S. assets until after the depreciation of the dollar. This inaction on the part of market participants may actually cause a temporary shortage of U.S. dollars and an increase in the exchange rate when the expectation was for it to decline in value.

**Exchange Rate Stabilization Policies**

There is disagreement about the advantages and disadvantages of fixed and floating exchange rate systems. One advantage of floating exchange rates is that each country can adopt an independent monetary policy, regardless of the policies pursued by other nations.

**Flexible Exchange Rates**

Flexible, or floating exchange rates are allowed to fluctuate according to the supply and demand for the currency with a minimum of government intervention to determine their value. Flexible rates are transparent and respond quickly to changes in market conditions. Market disequilibrium is less likely to occur under a floating rate system and business and resource allocation decisions are made in a timely, efficient manner. The wide fluctuations of floating rates are often cited as a disincentive to trade and investment. Along with the freedom of domestic financial management under a flexible exchange rate, there may also be less resistance to overspending.

**Fixed, or Pegged, Exchange Rates**

Fixed exchange rates are set by government central banks at some predetermined level and government intervention is usually necessary in order to maintain the fixed, or “pegged” exchange rate. Countries with fixed exchange rate regimes have little or no control over domestic money supply and are reliant on international reserve flows to finance trade deficits. Under a fixed exchange
rate system of several countries, governments must pursue similar monetary policies or differences in inflation will cause economic pressure on currencies and result in a breakdown of currency relationships similar to the early 1970s. The United States, for instance, followed expansionary monetary policy in the late 1960s in order to finance domestic poverty programs and the Vietnam War, resulting in moderate inflation of about six percent. West Germany, however, favored less growth in its monetary base and had minimal inflation. Because of these differentials in price levels, it became increasingly costly for governments to intervene on world currency markets and the fixed exchange rate between the two countries could not be maintained.

Flexible exchange rate regimes have been criticized because they may be subject to destabilizing speculation. It is feared that foreign currency speculators will cause changes in exchange rates to exceed the norm, absent any speculation. These is no empirical evidence that this is a serious influence on any major currency, especially since the late 1970s and the development of a large, well integrated global capital market. Some analysts argue, however, that floating exchange rates result in additional risk and uncertainty for market participants and that while most or all of this risk can be hedged, transactions costs are higher than under a fixed exchange rate system.

**Economic Stability**

If overall economic stability is a policy goal, there are several options worth noting. One possibility is to try and minimize unexpected changes in domestic price levels. If fluctuations in the price of foreign tradeable goods are significant, then a flexible exchange rate regime will insulate the economy from foreign price changes. Large domestic money supply changes will likely lead to the implementation of a fixed currency regime since international money flows act as a shock absorber to reduce domestic price impacts. With a fixed exchange rate, an excess supply of domestic capital will
result in a capital outflow due to a balance of payments deficit. With floating exchange rates, excess money supply is reflected through inflation and a depreciating currency.

**Optimum Currency Areas**

An optimum currency area (OCA) is a region in which exchange rates are fixed within the area and float against currencies outside the area. There is relatively low cost mobility of labor and capital within the OCA. Factors of production are free to move from where they are abundant to where they are scarce. The overall price level and wage rates in each country adjust to reflect this factor mobility while exchange rates among members remain fixed. Fixed exchange rates will be effective within the OCA because the flow of factors of production determine market equilibria within each country. The European Monetary System (EMS) is an example of a regional OCA which is characterized by fixed exchange rates within the OCA and a floating currency, the euro, with the rest of the world.

**Target Zones**

Limited currency flexibility around a fixed value is called a target zone. The exchange rate is allowed to fluctuate with supply and demand conditions, but the amount of change is limited to a predetermined amount. The central banks of target zone members agree to intervene in order to maintain the parameters established for the zone. Most often these parameters represent fluctuations of specified percentages above and below an average exchange rate. Under the former EMS the limits of currency movement were plus of minus 2.25 percent, but were later changed to 15 percent.

**Currency Boards**

A currency board is a government entity that exchanges domestic currency for a foreign currency at a designated fixed rate of exchange, and is normally required to maintain one unit of
foreign reserve currency for each unit of domestic currency in circulation. A currency board is
normally adopted to restore monetary credibility of a government, such as the case of Argentina. A
currency board is similar to a gold standard, or dollar standard, in that the supply of domestic
currency can only be increased if the dollar holdings of the board increase, and there is a guaranteed
rate of exchange between the two currencies. Currency boards may lead to the adoption of the U.S.
dollar of some other currency in place of the domestic currency (see Dollarization below).

There are presently eight countries with operating currency boards: Argentina, Bosnia and
Herzegovina, Brunei, Bulgaria, Djibouti, Estonia, Hong Kong, and Lithuania. Turkey recently
experimented with a currency board when in December 1999 they instituted a crawling-peg exchange
rate which permitted the lira to slowly depreciate against the euro. However, Turkey could not
maintain the regime and was forced to resume a float in February 2001, and the lira subsequently
plummeted. Some economists and others think Argentina should follow suit and allow the peso to
float.

**Multiple Exchange Rate Regimes**

Multiple exchange rate regimes are designed to insulate a country from adverse capital
international capital flows and to provide a stable business environment. This is normally done by
having separate exchange rates for commercial transactions which must be conducted with fixed,
official exchange rates. All capital transactions are conducted at the floating, or flexible rate of
exchange determined by the market.

Although the International Monetary Fund (IMF) generally discourages multiple or dual
exchange rate regimes, 13 countries maintain some form of multiple exchange rate system. Most
typical of these regimes is a dual exchange rate system with a low exchange rate for essential
imports, which charges domestic buyers a relatively low price. For luxury imports, a higher exchange rate is charged, with limited foreign exchange available for these types of purchases.

This type of system can be used to tax or subsidize trade in many different ways. Argentina, for example, charges a relatively competitive exchange rate for the export of soybean meal, but a higher, less competitive exchange rate for raw soybean exports. The objective of this type of policy is to retain raw beans in the country in order to crush them locally, capture the value added in processing, and maintain crushing capacity near optimal levels. In the early 1970s, Chile maintained nine separate exchange rates, depending upon the type of transaction, with essential imports having a favorable exchange rate and nonessential imports a less favorable exchange rate.

**Exchange Rates and Farm Policy**

As a new farm bill is debated in the United States, the impacts of exchange rates on export, imports, and the competitive position of U.S. products on the world market will likely receive some attention. The report by the 21st Century Commission on Production Agriculture notes in a minority view that “a nation whose agricultural producers suffer injury due to changes in relative currency values should retain the ability to implement measures to offset the effects of exchange rate through border and export measures and domestic programs.” (Directions for Future Farm Policy p. 46). It appears that the underlying objective is to mitigate the adverse impacts of a strong U.S. dollar that reduces U.S. exports and increases U.S. imports, resulting in more domestic competition. One of the major impacts of these exchange rate changes is to lower prices to U.S. producers, whether they compete for foreign or domestic markets, and the common linkage for this is the border price. If an exchange rate management policy is pursued, there are several issues that may be important in defining a role for U.S. exchange rates and farm policy.
Attempts to manage the exchange value of the U.S. dollar may partially or totally mask the forces of comparative advantage. This could result in resource misallocation within agriculture and other industries, leading to less efficiency and loss of competitive position over the long run.

Second, exchange rate management policies could also distort market price signals and trade. If this occurred, it would lead to over or under investment in agriculture, further exacerbating resource misuse. The most likely outcome would be the concentration of additional land and capital in agricultural production. While prices and returns would increase in the short run, in the longer term it is likely that higher net returns would result in rising land rental rates and land prices, reducing agricultural competitiveness.

Third, it should be noted that one of the primary objectives of U.S. monetary policy since 1980 has been to control inflation and reduce its negative impacts on the economy. This has been done through controlled growth in the U.S. money supply. Reducing the value of the U.S. dollar would require an expansion in the U.S. money supply, which is inflationary. If the dollar were ‘fixed’ at a certain level, it would limit the ability of the U.S. monetary authority to influence the U.S. money supply. This could result in adverse capital flows from the United States which would drive up U.S. interest rates and cause farm costs to escalate. It is also likely that U.S. trading partners would seek some form of compensation or retaliate against this policy.

Fourth, designing an effective exchange rate management mechanism would prove difficult given the diversity of exchange rate regimes in place throughout the world. There are many occasions when the U.S. dollar appreciates relative to one currency, while simultaneously depreciating against another. Recent experience with the Mexican peso and the euro are two examples of this phenomena.
Finally, exchange rate policy for the United States has traditionally, and continues to be under the purview of the U.S. Treasury. It may prove difficult to convince government officials that agricultural interests are a priority for changing from a floating dollar to a managed currency policy. A coalition of diverse industries, interested in enhancing the competitive position of U.S. business might prove effective in negotiating such a position, but the prospects for success seem limited.

**Dollarization**

Dollarization occurs when another country or a territory outside the United States adopts the U.S. dollar as its official currency. Panama, the Marshall Islands, American Samoa, Puerto Rico, Palau, the Northern Mariana Islands, Guam, the U.S. Virgin Islands, Ecuador, El Salvador, and East Timor are officially dollarized. While official dollarization is not widespread, recent attention was focused on the concept when President Mahuad of Ecuador announced plans to dollarize on January 9, 2000 and completed the process in September 2000. More recently, El Salvador dollarized and Guatemala allows dollar bank accounts. Central bank officials from Argentina, Brazil, and Mexico also have expressed interest in the potentials of dollarization. Unofficial dollarization is dominant in Latin America, the Caribbean, and the former Soviet Union.

Dollarization usually takes one of three forms: official, unofficial, or semiofficial (International Trade Commission).

1. **Official dollarization** occurs when a country formally adopts the U.S. dollar as its official unit of currency and abandons or removes from circulation its own currency. Government employees, other citizens, and debtors are paid in U.S. dollars. Payment of official debt and charges, such as taxes and import duties, is accepted in U.S. dollars. The U.S. dollar becomes the sole legal tender and the country’s central bank
buys back its national currency with dollar reserves over a specified period of time. Official dollarization is also similar to a currency board which is discussed in a latter section of this report.

2. *Unofficial dollarization* occurs when citizens of another country hold part of their assets in U.S. dollars or another foreign currency and part in domestic currency. This can occur without legal or formal sanction by the foreign government. Most of Latin America and the Caribbean are in this category, along with most of the former Soviet Union, Turkey, and Vietnam. Recent estimates indicate that the U.S. dollar share of bank accounts is 85 percent in Peru, 75 percent in Uruguay, and 65 percent in Argentina (Federal Reserve Bank of Dallas), 82 percent in Bolivia, 31 percent in Costa Rica, and 55 percent in Nicaragua (U.S. Senate, Joint Economic Committee, January 2000).

3. *Semiofficial dollarization* occurs when two currencies officially co-exist. The U.S. dollar is typically the legal tender and accounts for most bank deposits. The domestic currency is used for wages, payments, and cash expenses. The Bahamas, Cambodia, Guatemala, Haiti, Laos, and Cambodia are examples of semiofficial dollarization.

**Motives for Dollarization**

Benefits to the dollarizing country can be substantial. International credibility and monetary policy discipline are among the most important. Lower interest rates, reduced inflation, greater financial stability, and increased economic growth also may result. Dollarization may also reduce capital outflow and capital flight associated with a massive currency devaluation or economic crisis. When dollarization occurs, business transaction costs are reduced. Currency risk is eliminated and
trade and investment may be stimulated.

A major obstacle to dollarization for many countries is economic nationalism and pride in their own currencies. When a country dollarizes, it foregoes sovereignty over its own currency, and by default, adopts the monetary policy of the United States. A critical factor is the choice of the conversion rate between the domestic currency and the U.S. dollar. An official exchange rate that is too high or too low can lead to weak near-term economic performance. The dollarizing country also must reconcile relinquishing its national currency.

Often, dollarization is adopted by a country that has a large budget deficit financed by excessive printing of money. While dollarization can reduce national interest rates and inflation, countries must also exercise sound fiscal management for to obtain these results.

Dollarization can, and does, occur without the consent of the United States, but it may have both negative and positive impacts. The United States gains increased seigniorage from dollarization, reducing the cost of financing U.S. debt and improving the overall U.S. fiscal balance. Seigniorage represents the difference between the face value of money, its purchasing power, and the cost of materials to coin and print. Each U.S. dollar costs about $.03 to print, so with perpetual circulation, it would net $.97 in seigniorage. Seigniorage from dollars circulated by the United States is about $25 billion annually. Legislation has been introduced into the U.S. Congress for design of methods for the U.S. government to share seigniorage with countries that dollarize.

Reduced transaction costs for U.S. traders, borrowers, and lenders, and more business for U.S. banks are likely to occur from dollarization. The United States may be relied upon to provide additional dollars to support economic or financial stability in the dollarized country, increasing the costs of dollarization. U.S. monetary policy may be criticized by dollarized countries if those policies
pose difficult economic conditions. Resentment of U.S. policy could, therefore, damage overall foreign relations.

**Issues and Implications**

Dollarization has met mixed results in economic performance. High inflation, low quality domestic currencies, excessive government spending, and unreliable tax revenues have plagued many of the countries pursuing semi or unofficial dollarization. There is little or no evidence of a correlation between a dollarized country and strong, consistent economic growth (U.S. Senate, Joint Economic Committee, January 2000).

U.S. agriculture is one of the most trade sensitive industries in the United States. While large shares of nationally important crops such as wheat and soybeans are exported from the Midwest and the Pacific Northwest, the South is a major producer of cotton, rice, sugar, peanuts, fruits, and vegetables. While cotton producers face increasing competition for export markets, the latter crops are experiencing more foreign competition for markets within the United States. Further, most crops and livestock have experienced low prices and adverse weather over the last several years making the prospects of increased economic uncertainty even more crucial. At least four major issues will most likely have some important implications for the United States.

- There are prospects for foreign governments to rely more upon the United States to resolve their internal economic problems or that they may try to influence U.S. monetary policy, individually or collectively.
- There is the possibility that dollarized countries would switch to another currency, such as the euro or yen, sell dollars on world currency market, causing the dollar to depreciate in value. This might prompt the Fed to sharply increase U.S. interest rates to offset the increase
in dollar money supply and to avoid inflation. Higher interest rates would increase the value of the dollar, reduce U.S. agricultural exports, and most likely depress farm prices and raise operating costs.

- Widespread dollarization might result in fewer antidumping petitions and other disruptive trade actions since currency devaluations by dollarized countries would not occur and there would be less threat from import competition due only to exchange rates due solely to competitive devaluation.

- Trade and investment transaction costs should be lower, leading to increased competitiveness and efficiency for agribusinesses. This could stimulate economic activity and income growth for trade dependent sectors of U.S. agriculture.

Dollarization, Economic Growth and Agricultural Trade

As discussed previously, once a country dollarizes, it adopts U.S. monetary policy and no longer issues its own currency. Therefore, the prevailing inflation and interest rates in the dollarizing country should converge on those of the United States. It is important to note, however, that dollarization is not a panacea and will not replace sound fiscal management. Argentine interest rates exceeded 100 percent in mid-July 2001 due to a $1.5 billion government deficit and reluctance to implement significant macroeconomic reform. Dollarizing countries can still have economic problems if they run large, chronic budget deficits and do not possess or develop the tax base to finance budget shortfalls. Because the dollarized country no longer controls its own monetary policy, simply printing more currency to generate government revenue is not a viable policy option.

Further, transaction costs for businesses in the United States and in the dollarizing nation should decrease since there is no need to convert currencies to facilitate trade and investment.
Businesses save money and time formerly required to operate using a foreign currency, therefore, trade should expand. In addition, there is no need to hedge against exchange rate changes on the futures or options markets. What remains to understand is how all of these factors combine to affect economic growth and agricultural trade with the United States.

Countries that fix, or peg, their currencies to the U.S. dollar do exhibit some of the characteristics of dollarized countries, but are not identical because of the continued use of their own currencies and control over their own monetary policy. Some comparisons of economic growth between countries with fixed and floating exchange rates may be useful, however, to understand relationships between currency stability and economic growth. Countries that have pegged exchange rates to the U.S. dollar or some other currency exhibit GDP growth rates virtually identical to the average for all other countries, with the same volatility. (Federal Reserve Bank of Atlanta). These countries also tend to have lower and less volatile inflation than the average for all nations. Conversely, countries with floating exchange rates exhibit GDP growth rates that are .5 percent higher than the world average and are less volatile.

The benefit for the country with the fixed exchange rate is that inflation is 2.9 percent lower than the world average with less volatility, whereas nations with floating exchange rates have inflation which is almost four percent higher than the world average and exhibits more volatility. Therefore, there appears to be a trade-off between stronger economic growth and lower inflation when considering whether to fix an exchange rate. It may be that dollarization, a much more rigid extension of a currency peg, could lead to results in GDP growth and inflation for the dollarizing country which more closely resemble those of a fixed rate regime rather than a floating rate regime.

When reviewing recent economic growth for countries which have dollarized, Panama, which
has been dollarized for almost one hundred years, has economic growth very similar to that of the United States, with even lower inflation. According to International Monetary Fund (IMF) estimates, Panamanian GDP growth has been within 0.5 percent of U.S. GDP growth each year since 1997.

Argentina, with its currency board keeping the value of the peso equal to one U.S. dollar, has shown different results. The IMF data show that Argentine economic growth has been highly erratic, with GDP growth rates ranging between -3.4 percent (1999) and 8.1 percent (1997). However, Argentina has had inflation lower than that of the United States since 1996, and even had deflation in 1999 and 2000. This is evidence that a currency board is not a guarantee of economic success. Argentina did not maintain fiscal discipline at the federal or state level, and their Congress refused to make the necessary tax reforms to increase Argentine government revenue (American International Group). As a result, Argentina’s currency board reduced international competitiveness as the value of the dollar rose relative to other currencies.

Dollarization occurred in Ecuador, El Salvador, and Guatemala too recently to draw many firm conclusions. Ecuador, after a rough start, seems to be on a higher GDP growth path and has had lower inflation since the dollar was adopted in September 2000.

Regarding U.S. agricultural trade with dollarized versus non-dollarized countries, it must be pointed out that no major U.S. agricultural trading partners, either markets or suppliers, are officially dollarized. Those countries which have dollarized, namely Ecuador, El Salvador, Guatemala and Panama, are either very small economies, have suffered tremendous economic turmoil, or have not had enough post-dollarization experience to draw definite conclusions from their experiences. It may be possible, however, to make some inferences based upon exchange rate policies and experiences of
other countries.

When examining the impacts of exchange rate changes on prices and trade, the examples of U.S. soybean and corn exports to Japan and wheat exports to Mexico were discussed. It was shown that Japanese imports of U.S. soybeans decrease between 1996 and 1998 at least in part because of an increase in the price of U.S. soybeans and decrease in the price of Brazilian soybeans yen terms due primarily to exchange rate fluctuations. If Japan had been dollarized, the domestic price they paid for U.S. soybeans would have fallen during that same time period just as it did in the United States. The same can be said for U.S. corn, which had similar results for the 1995 and 1999 time periods. Therefore, it is likely that U.S. exports of both soybeans and corn would have risen instead of fallen during the time periods examined.

The case of U.S. wheat exports to Mexico, however, is somewhat different. First, NAFTA has led to significant economic integration between the United States and Mexico. Second, while not dollarized, many if not most Mexican firms prefer to do business in dollars, which suits U.S. exporters. Finally, Mexico has avoided much of the economic crises prevalent around the world since 1997 and instead has had consistent economic growth since 1996. As a result, even though the price of U.S. wheat delivered to Mexico rose from NP25.46/bu to NP30.64/bu from 1995 to 1999, strong economic growth in Mexico offset higher prices. This may have contributed, in part, to significant increases in U.S. wheat exports to Mexico.

Finally, monthly U.S. agricultural exports to El Salvador increased 37 percent from January to April 2001. Exports for the complete January to April time period are 41 percent higher than 1999 and 36 percent higher than 2000. El Salvador dollarized on January 1, 2001 and while it is still too early to determine if dollarization alone accounts for this rapid growth in U.S. agricultural
exports, it is encouraging to witness the rebound in an economy that only recently was mired in civil war and economic turmoil.

There are several cases in which exchange rates affect agricultural trade and dollarization could alter some of the impacts. First is the case of export sales to a particular market, the second is in imports from a particular source, and a third is a result of competition in third markets.

When exporting to a certain market, an appreciating dollar causes the price in foreign currency to increase resulting in reduced foreign demand, lower export sales, and declining U.S. prices. A depreciating dollar causes the foreign currency price to decline leading to stronger foreign demand, higher export sales, and rising U.S. prices. Dollarization would eliminate these effects. Price changes would result from other factors affecting supply and demand such as national income, weather, government policies, and third country competition. Exchange rates would no longer be a variable which could either exacerbate or buffer price changes.

When importing from a certain country, a stronger U.S. dollar causes the U.S. price paid for imports to decrease, leading to greater imports, while a weaker dollar causes the U.S. import price to rise and imports to fall. Dollarization would eliminate these potential impacts and the only fluctuation in price would derive from changes in supply and demand.

Finally, when exporting to countries which have more than one supplier, an appreciating dollar decreases the competitiveness of U.S. exports while a depreciating dollar increases the competitiveness of U.S. exports. An example of this previously discussed is the Japanese soybean market in which both the United States and Brazil serve as suppliers. If Brazil dollarized, the real could not be devalued and could no longer depreciate relative to the U.S. dollar. Brazil would not be able to take Japanese market share away from the United States using currency devaluation as a
means. At the same time, U.S. soybeans could not take away Japanese market share from Brazil in the event of a dollar depreciation. Both countries would have to rely more on their inherent comparative advantages in order to compete for international markets.

**Summary and Conclusions**

Exchange rates are an important economic variable influencing the sale, purchase, and competitiveness of U.S. agricultural products worldwide. While a stronger dollar makes U.S. exports more expensive in other countries, it also reduces the cost of imported products, resulting in lower prices for U.S. consumers, but additional import competition for some producers. A weaker dollar has the opposite effects, leading to increased exports and higher producer prices, but lower imports and higher prices for consumers. It is important to note that both a currency depreciation and a currency appreciation are, in most cases, short term in nature. Their effects occur during the first several months after the exchange rate change. Businesses adjust to the new conditions during this period, and if the currency stabilizes, trade usually returns to its normal trend. In the case of the Mexican peso devaluation of 1994-95 for example, U.S. agricultural exports resumed and exceeded previous growth rates by mid-1996.

Attempts to peg or stabilize exchange rates have had mixed results. The United States was forced to float the dollar in the early 1970s due to inflationary pressure. The European Monetary System was successful for a time, but weakened in 1992, with some members withdrawing. Argentina’s adoption of a currency board with an exchange rate pegged to the U.S. dollar was successful until large budget deficits resulted in loss of investor confidence in the system and the government failed to implement the necessary policy reforms. The EU’s adoption of a single currency has been successful so far, but the euro has depreciated relative to the U.S. dollar since its
inception causing many to question its long term viability, especially as countries in Central and Eastern Europe join the union.

Exchange rate changes can provide a competitive advantage or disadvantage for U.S. agricultural products on the world market and can also stimulate or mitigate import competition in the domestic market. As the United States debates a new farm policy, the role of exchange rates and their impacts on commodity prices and exports have been important. Although short term impacts from exchange rate management may be positive for U.S. agricultural exports, attempts to manage the exchange value of the U.S. dollar over the long term may partially or totally mask the forces of comparative advantage. This could result in resource misallocation within agriculture and other industries, leading to less efficiency and loss of competitive position. For U.S. agriculture, these policies could lead to over or under investment, further exacerbating resource misuse. One likely outcome would be the concentration of additional land and capital in agricultural production. While prices and returns would increase in the short run, longer term consequences would be rising land rental rates and land prices, and reduced agricultural competitiveness. For the U.S. economy, the biggest drawbacks of exchange rate management to increase export competitiveness would be the inability to effectively influence domestic money supply, inflationary pressure, and higher consumer prices.

Competitive price benefits from currency devaluation tend to erode quickly due to increased inflation brought about by rapid currency depreciation, loss of investor confidence, and capital flight. These events often lead to economic and social unrest, and even political instability in some cases.

The replacement of a domestic currency with the U.S. dollar, or dollarization, has become more important in recent months as Ecuador and El Salvador have dollarized and Guatemala has
allowed bank deposits and circulation of foreign currencies. Brazil and Mexico have shown some interest in dollarization, but have yet do so. Most countries in Latin America and the Caribbean practice varied forms of unofficial dollarization. Dollarization does not remedy any underlying fiscal imbalances or structural flaws in an economy (Molano). It also does not provide a solution to institutional mismanagement, graft, or corruption. Dollarization does, however, limit monetary policy alternatives, eliminate seigniorage, and stabilizes prices and interest rates. Price stability, especially inflation, will only persist so long as government follows sound fiscal management policies.

At its worst, dollarization addresses only the symptoms of mismanagement, not the root causes. Many dollarizing countries need to pay down their debt in order to restore investor confidence. But, dollarization may buy a government the time needed to mend institutional problems, reduce debt, and develop a sound set of macroeconomic policies. If dollarizing countries fail to coordinate fiscal and monetary policies, then inflation, high real interest rates, and recession will likely result. Finally, dollarization should not be viewed as a panacea or institutional “quick fix” for serious underlying structural problems.
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