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The Impact of Foreign Capital Transfers on Developing Country Agriculture

by

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ABSTRACT

The impact of foreign capital transfers on developing country agriculture is examined for 13 major borrowers during the period 1973-82. Large foreign capital transfers permit over-valued exchange rates to develop or continue, and these penalize agriculture by reducing the incentives to export and by increasing the incentives to import. Results indicate that an increasing ratio of foreign debt to GNP is associated with an increasing ratio of agricultural imports to GNP and a decreasing ratio of agricultural exports to GNP. It is concluded that further borrowing by debt-burdened countries is unlikely to solve their basic problems unless accompanied by the appropriate economic policy changes necessary for long-term economic growth.

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The Impact of Foreign Capital Transfers on Developing Country Agriculture

Introduction

The traditional view is that transfers of foreign capital are beneficial to the recipient countries, but the recent international debt problems of many developing countries have called this view into question. The present paper does not focus on the current payments crisis, but rather on the impact of the foreign capital transfers themselves on developing country agriculture. Until the 1970s, the resource transfer from developed to developing countries was largely through foreign assistance; either commodity assistance, such as food aid, or foreign exchange assistance. Both these forms have been used since World War II to transfer large amounts of resources to developing countries in an effort to promote economic development in general and often agricultural development in particular. The idea that more foreign assistance is always better than less has prevailed throughout the post-war period, and foreign assistance expanded at particularly high rates during the 1960s and 1970s [Larson and Vogel].

During the 1970s private international capital markets became open to many developing countries, and capital transfers on commercial terms increased substantially. The borrowers included not only private sector firms in developing countries, but also public sector enterprises and the governments themselves. It was not until the international financial crises of the early 1980s that developing country borrowers and their creditors began to question seriously the belief that more capital transfers, including foreign assistance, were always better than less. As strong world markets for exports together with growing economies and low real interest rates during the 1970s changed to weak world markets, stagnant economies and high real interest rates in the early 1980s, many developing countries discovered that they could no longer service their external debt, must to the dismay of their external creditors. Several of the largest developing country borrowers have reached the verge of default, sending shock waves throughout international financial markets. Since August of 1982, some 30 countries have begun to renegotiate terms on as much as $100 billion of public and private external debt owed to official and private creditors.

More appropriate ecomomic policies must be carried out by developing countries as an essential part of the solution to the current international financial crisis. Because agriculture is a major component of the economies of most, if not all, developing countries, the impact of economic policy changes on the agricultural sector becomes particularly important. The most appropriate solutions to the current problems may not involve additional capital transfers from developed to developing countries, particularly if such capital transfers had certain adverse impacts when they originally occurred.

Foreign Capital Transfers

The specific purpose of the present paper is to examine whether large foreign capital transfers have adversely affected the performance of the agricultural sector in developing countries. Foreign capital transfers create opportunities for developing countries to allocate additional resources to promote more rapid economic growth and to earn more foreign exchange to service their debt. However, such opportunities may be wasted if the increased capital transfers enable developing countries to delay making economic policy changes that are appropriate for the longer run. For example, exchange rate, interest rate and agricultural price policies can either stimulate economic growth and prosperity in the agricultural sector or contribute to its stagnation. Economic policies that maintain over-valued exchange rates and low agricultural prices tend to discourage farm production and exports and to encourage food imports.

Foreign capital transfers may be associated with declining farm exports and increasing farm imports. The increased foreign exchange made available through capital transfers may resolve short-term problems of foreign exchange scarcity for the borrowing country and thereby allow debt payments to be met and imports to continue. However, this may also permit an over-valued exchange rate to develop or continue. Most developing countries fix the value of their currency in relation to that of a major trading partner, such as the U.S. dollar, and this exchange rate can be pegged at a value above what would be determined in a free market if large amounts of foreign currency loans are available. If the official exchange rate is over-valued, then revenues received in domestic currency for export sales are accordingly reduced, so that incentives for producers to export, or even to produce those products which might be exported, are reduced. In a similar way, the domestic currency costs of imported goods are reduced, so that incentives to import are increased. These additional imports discourage the production of domestic import substitutes in a situation where such import substitutes may well reflect international comparative advantage.

The net effect of an over-valued exchange rate is to tax exports and subsidize imports, both of which can cause an even greater problem of foreign exchange scarcity in the future. If a developing country thereby fails to adjust, it will need to borrow even more foreign capital in the future to cover its foreign exchange gap. However, foreign debt cannot increase forever relative to a country's output, but can only delay the decision to move to a more appropriate exchange rate. An over-valued exchange rate impacts on agriculture, and hence on the overall economy, in a substantial way in most developing countries because agriculture is almost always a large sector of the economy and because agricultural exports typically represent a major source of foreign exchange earnings.

Exchange rates can become over-valued because of differential rates of inflation and/or a country's structure of protection.[1/] Since all countries have experienced some inflation during the 1970s, the exchange rate will tend to become over-valued when the rate of inflation of a developing country is greater than the rate of inflation of its major trading partners. Domestic costs and prices will increase faster than the

costs and prices of the imported goods, making the latter relatively less expensive. Protective trade policies such as import tariffs and quotas and export taxes and quotas also lead to an over-valued exchange rate by raising the domestic price of the protected good and/or lowering the price of the export good.

The over-valued exchange rate acts as an implicit tax on the agricultural sector for countries that export agricultural goods, while consumers of food are subsidized indirectly because of the low prices for these imported items. The depressed prices for food reduce the incentives for domestic food production and can cause stagnation of the agricutural sector [Larson and Vogel]. At the same time, imports of food may increase because the over-valued exchange rate makes food, as well as other items, relatively cheap to import. In this situation developing countries will tend to export less and import more and to become more dependent upon foreign loans as a source of foreign exchange rather than commodities sold in international markets.

Behavior of Major Developing Country Borrowers

In order to evaluate the impact of foreign capital transfers on developing country agriculture, the present paper examines the ratio of foreign debt to gross national product in various developing countries as compared to the ratio of agricultural imports and exports to gross national product in the same countries. Figures for foreign debt are taken from the World Bank's World Debt Tables and may be somewhat understated because short-term debt (under one year) is not included and because private sector debt without government guarantee may not be fully reported. Figures for gross national product reported by the World Bank are converted to U.S. dollars at the official exchange rate and are thus subject to the usual problems of such conversions. Agricultural imports and exports are taken from the Food and Agriculture Organization's Trade Yearbook. Data are from the decade 1973 through 1982, which covers the period of major growth in the foreign debt of developing countries. Because of year-to-year variations in debt and gross national product, but especially in agricultural production and hence imports and exports, three year averages are used. That is, the ratios of foreign debt, agricultural imports and agricultural exports to gross national product are averaged for the first three years of the period, 1972-74, and subtracted from the same ratios averaged over the last three years of the period, 1980-82.

The evidence for the 13 major developing country borrowers is shown in Table 1.[2/] As expected, the ratio of foreign debt to GNP has increased for most of the major borrowers (9 of 13) over the decade 1973 to 1982. For the 9 countries with an increasing ratio of foreign debt to GNP, the ratio increases more rapidly for Egypt, Israel, Turkey, Mexico, Venezuela, Brazil and Argentina and less rapidly for Algeria and Korea. Four developing countries (Chile, India, Indonesia and Yugoslavia) had decreasing foreign debt to GNP ratios in this period.

As discussed in the previous section, countries with an increasing (decreasing) ratio of foreign debt to GNP can be expected to have an increasing (decreasing) ratio of agricultural imports to GNP and a decreas-

Table 1: Foreign Debt, Agricultural Imports, and Agricultural Exports Relative to Gross National Product for Thirteen Major Developing Country Borrowers, 1973-75 and 1980-82

Major Borrowers[a/]	Change in Three Year Average Ratio: 1973-75 Compared to 1980-82		
	Foreign Debt to GNP[b/]	Agricultural Imports to GNP	Agricultural Exports to GNP
Algeria	+ 3.65	+0.4	-1.4
Argentina	+ 6.1	+0.3	-0.1
Brazil	+ 6.6	-2.7	-0.6
Chile	-22.1	-1.7	+3.1
Egypt	+21.3	+5.8	-4.5
India	- 2.7	-0.3	+0.1
Indonesia	- 9.8	-0.9	+0.9
Israel	+17.8	+0.7	+1.0
Korea	+ 2.2	+0.7	+1.5
Mexico	+11.5	+0.8	-0.3
Turkey	+14.2	0.0	+0.7
Venezuela	+10.6	+0.9	-0.2
Yugoslavia	- 0.5	-0.2	+0.5

[a/] The World Bank defines major borrowers as those countries with debt outstanding and disbursed estimated at more than $13.5 billion in 1982.

[b/] Foreign debt is defined as public and private debt outstanding and disbursed.

Source: World Debt Tables: External Debt of Developing Countries. The World Bank. Washington, D.C. 1983-84 edition.

ing (increasing) ratio of agricultural exports to GNP. Results for the four developing countries with a decreasing ratio of foreign debt to GNP are totally consistent with the expected relationship as they all have a decreasing ratio of agricultural imports to GNP and an increasing ratio of agricultural exports to GNP. Results for the 9 developing countries with an increasing ratio of foreign debt to GNP are also quite consistent with the expected relationship as the ratio of agricultural imports to GNP increases for 8 of the 9 countries, and the ratio of agricultural exports to GNP decreases for 6 of the 9 countries.

For the other developing countries who had some foreign debt as of the end of 1982, the results are similar to those of the major developing country borrowers but less clear cut. This may have occurred because foreign debt or agricultural imports or exports are not as important for these other countries as for the major borrowers. For example, foreign debt may be unimportant for some of these countries in either absolute or relative terms, so that it would be surprising to find results as clear cut as those for the major borrowers. In addition, agricultural exports from some of these other countries may be unimportant or concentrated in one or two primary commodities for which the impact of world market conditions is more important than the impact of foreign capital transfers on exchange rates, as the expected relationship holds much more consistently for agricultural imports than for exports.

In future research it might be useful to try other classifications to improve the results for these other borrowers. Rather than examining countries with a certain absolute size of external debt, a classification by the size of the foreign debt relative to GNP might indicate more clear relationships. These other borrowers could also be classified according to the absolute size of their agricultural imports or exports or the size of either of these relative to GNP in future such research.

Conclusions

Large foreign capital transfers appear to affect adversely the performance of developing country agriculture, most likely through the impact on exchange rates. Borrowing permits over-valued exchange rates to develop or continue, and this reduces the incentives to export and increases the incentives to import. The evidence for 13 major developing country borrowers indicates that an increasing ratio of foreign debt to GNP is associated with an increasing ratio of agricultural imports to GNP and a decreasing ratio of agricultural exports to GNP. Large foreign borrowings during the 1970s were not advisable for many developing countries, not only because of the subsequent payments crises but also because of the adverse impact on the performance of their agricultural sectors. Further foreign borrowing, especially to rescue countries in debt difficulty, is unlikely to resolve the problems underlying the debt crisis unless accompanied by significant economic policy changes with respect to exchange rates and other distortions. It would be unwise to use capital transfers to rescue countries from short-term debt problems and thereby delay the policy changes necessary for long-term economic growth and development.

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Footnotes

1/ See Balassa and Associates for a full discussion of effective protection and for estimates of effective protection for several developing countries. More recent estimates of effective protection for selected countries can be found in Bale and Lutz.

2/ The World Bank has defined major borrowers as those countries with debt outstanding and disbursed of more than $13.5 billion in 1982.