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GOVERNMENT IN THE PROCESS OF TRADE AND DEVELOPMENT

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Introduction

Governments play a pervasive role in all aspects of a nation's economy. Policies with regard to the trade sector are particularly important. They determine the degree to which international markets, information, and technology can interact with domestic resources and capacities to generate long-term development patterns.

Countries have taken two distinct approaches. The outward-oriented countries (OOC) have pursued policies that have opened domestic markets to the world economy. The inward-oriented countries (IOC), on the other hand, have pursued policies that tend to isolate the country from the forces of the international marketplace. Although there is a tendency to think that OOC follows laissez-faire policies and the IOC follows interventionist policies, this is not entirely correct. On close examination, both types of countries intervene in their economies. The distinction between these two types of development strategies, therefore, is in the nature of the interventions.

The classical trade argument is that small economies can accelerate the growth process by pursuing an outward-oriented strategy. An outward-oriented strategy enables an economy to specialize and, therefore, attain an equilibrium growth path in excess of what could be achieved using domestic resources alone. Imports serve to increase competition in domestic markets by providing a stimulus for improving product quality and efficiency in the production of import substitutes. Competition in foreign markets provides the same stimulus to producers of exportables goods. Foreign trade in capital and intermediate goods facilitate technical transfers across countries. An open economy also provides economic agents with the opportunity to use world contingent claims markets (insurance, forward, and futures markets) so that unanticipated variations in income streams can be reduced. Another important advantage of openness to world markets is the potential for economic agents to exploit the informational efficiency of world spot and future prices.

Under assumptions that preclude market failure, and given that lump-sum income transfers are possible, the above strategy maximizes exchange, production, and economic efficiencies. According to Buchanan "as long as governmental action is restricted largely, if not entirely, to protection of individual rights, person and property and enforcing voluntarily negotiated private contracts, the market process dominates economic behavior and ensures that any economic rents that appear will be dissipated by the force for competitive entry" (8, p. 14).²

The problem is that lump-sum income transfers are seldom feasible and the conditions that give rise to market failure (externalities, public goods, risk, and information asymmetries) are common. Whenever these conditions prevail, collective action by producers, consumers, and the government can give rise to an increase in welfare. Public investments in agricultural research, general and technical education, and infrastructure are typical areas that have high rates of returns (14, p. 63). Technical education and infrastructure have been estimated to account for approximately half of the differences in agricultural labor productivity among a sample of 43 countries (14, p. 151). The provision of information and the support of institutions for risk sharing are other examples of the potential social profitability of government intervention. Economies work imperfectly so that in the process of economic

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²Underscored numbers in parentheses are listed in the References at the end of this article.

growth some groups benefit, while others do not. It is often the role of government to redress these imbalances.

Recent studies by Balassa of country adjustments to world economic shocks provide strong empirical evidence that government interventions have been inimical to the growth process in many countries and that while adjustments have occurred in some countries, they have either occurred with considerable lag or because of the inability to finance external debt (5). This experience raises several questions. For instance, why have some countries persisted in their pursuit of interventions that exacerbated adjustments to external shocks or that were wasteful of resources? Are these interventions intended for the overall benefit of their respective economies but, in reality, a sequence of policy mistakes or failures of the planning processes? But, if this were the case, why have countries failed to learn from these mistakes? Or, are interventions the outcome of political pressure exerted by domestic interest groups seeking to achieve outcomes that might favor them but are socially wasteful of resources?

Insights into these questions are important to understanding the consequences of private sector choices on the development process. Since government intervention is pervasive in many countries, our ability to understand private sector choices is restricted because their rules are either conditional on the exogenous variables of government policy or are jointly determined with the policy rules. In the former case, we face problems akin to forecasting the values of exogenous variables; in the latter, we face problems of identification.

The next section focuses on the policy instruments governments commonly employ to intervene in their economies. This discussion is first carried out in a broad context based on the experience of a large number of countries. Then, to provide depth, a more detailed and narrow-based analysis of interventions in the Dominican Republic is presented. This section concludes with a brief discussion of some of the important economic implications of these interventions to trade and growth. To provide some insight into the motivation for government intervention in ways that appear detrimental to the growth process and the "stickiness" of these interventions to changes in a countries economic environment, the discussion of section III focuses on a growing body of literature that Colander has termed neoclassical political economy (11). In the latter part of this section, we again narrow our focus to characterize a class of economic models which has as its common core, endogenous government behavior with rent-seeking households. A summary concludes the paper.

Policy Instruments and Their Manipulation

Analyses of countries' reactions to the 1973-74 and 1979-80 shocks to world markets provide insight into the different policies pursued by the OOC's and IOC's (4). The OOC, because of their greater exposure to world markets (28 percent of gross national product (GNP), compared with 10 percent for IOC), suffered larger terms-of-trade effects and adverse export volume effects than did the IOC. The policy response of the OOC was to apply deflationary policies to limit their reliance on external finance. They also pursued output-increasing and efficient import substitution policies. These adjustments served to compensate for the adverse balance-of-payments effects of external shocks and reversed the temporary decline in their economic growth. While many of these countries (such as Korea) have relatively high-external debt to GNP ratios, they have managed to avoid debt service difficulties.

It was the IOC, many of which are major importers of U.S. agricultural commodities, that ran into difficulties. Inward-oriented countries tended to pursue policies to maintain internal market distortions despite world market shocks. In general, the policies pursued by many of the IOC served to transfer resources from agriculture into (1) inefficient import substitution activities, (2) activities that tended to lower the cost of wage goods, namely food, and (3) into government programs, projects, and state-owned enterprises, many of which were not socially profitable (27). These transfers were, in part, accomplished by interventions in

foreign trade markets where quotas, tariffs, export taxes, and exchange rates are effective policy instruments. Results from a recent International Monetary Fund (IMF) study of developing countries found that the average effective rates of protection in manufacturing were 50 percent during 1966-72 and 60 percent in the late seventies (16). Many countries that have high rates of protection for manufacturers frequently allow imports of raw materials intended for export production to enter duty free (16, p. 74).

These instruments are often used to protect the industrial sector from competing imports. This serves to distort the domestic terms of trade against agriculture because those sectors receiving preferential treatment are made to appear profitable relative to agriculture. In many countries (Egypt, Tanzania, Peru, Philippines, Zaire, and others), these instruments were also used to maintain low and stable prices of food through excessive imports relative to import levels under free trade or to discourage the export of food crops for which a country has a comparative advantage (7,12,23,31). Furthermore, primary exportable commodities tended to be heavily taxed in many countries.

Interventions are not restricted to these markets. Interventions in domestic capital markets have given rise to negative real interest rates, in part, because nominal rates remain fixed during periods of high inflation. At various times during the seventies, negative real interest rates were particularly large in Brazil, Ghana, Jamaica, Nigeria, Peru, and Turkey (35, p. 58). The experiences documented by Balassa (4) for Brazil and Turkey and Carbo de Melo and Tybout (11) for the Latin American countries of the southern cone support the view that the effects of below equilibrium real interest rates tend to lower the efficiency of investment by discriminating among capital users, to favor the application of capital intensive techniques, to discourage domestic savings, and to encourage capital outflow. These effects have encouraged many countries to rely on external sources of finance.

Controls on nominal exchange rates and foreign exchange allocations have clearly been important policy instruments for many countries. A common characteristic among the IOC is that they tend to have overvalued real exchange rates. For the most part, there seems to be general agreement that an overvalued real exchange rate is (1) effective in discriminating against agriculture (an important source of foreign exchange earnings in many countries), (2) a stimulus to imports, (3) a destabilizing element to a country's capital account, and (4) a factor inducing protection against imports.

Monetary and fiscal policy, foreign trade policy, and direct sectoral interventions of the form discussed are among the determinants of real exchange rates. But, the form of the exchange regime is also important. As emphasized by Krueger, most developing countries have employed quantitative restrictions on current accounts and, in many cases, severe restrictions on capital flows (18). In the case of exchange control regimes, the nominal exchange rate takes on a more important role as a policy instrument because the domestic price of importable commodities is cut off from the world price. Given an increase in the domestic price level, the domestic price of exportable commodities relative to import-competing goods will tend to fall. The nominal exchange rate becomes important because it determines the degree to which the relative price of import-competing goods exceeds their world relative price.

The experience of the southern cone countries (Argentina, Chile, and Uruguay) is notable for the initial success and then apparent failure of policy reforms (11). Prior to the 1974-76, all three countries faced highly protected economies where interest rates had been controlled for decades, price controls had been in place since the early fifties and labor markets had been subject to innumerable regulations. Corbo and others suggested that earlier but abandoned attempts at deregulation "implied that the authorities probably faced deeply entrenched political interest groups and recalcitrant expectations (9, p. 636)."

The initial results of liberalization were remarkable. In Argentina, the central government budget deficit was reduced from an average of 12 percent of gross domestic product (GDP) in

the pre-reform crises period to 8 percent, and inflation was cut in half. In Chile, the government budget deficit was reduced from 16 percent of GDP to 1 percent, and inflation was halved. Uruguay experienced 8 years of rapid growth with declining government budget deficits and declining rates of inflation.

Corbo and others suggested that the new policy regimes created a boom-bust cycle so that with the change in world environment of the early eighties, the economies of these countries collapsed (11). This resulted in the abandonment of the liberalization effort that they attributed to policy inconsistencies focused on: a lack of fiscal restraint (Argentina and Uruguay), the indexation of wages (Chile), and the confusing management of the exchange rate. Each country experienced an accumulation of external debt and rising real exchange rates in the early eighties, which ultimately led to discrimination against exports. Moreover, they argued that the microeconomic reforms of both the commercial and financial sectors failed to eliminate important distortions.

Interventions in foreign trade markets that induce a transfer of resources from agriculture invariably lead to depressed conditions in the sector. Some governments seem to react to these depressed conditions by developing policies to subsidize agricultural inputs and policies to raise farm-level commodity prices, while at the same time maintaining low and stable food prices to urban consumers. These policies lead to a narrowing of the marketing margin and, in some countries (such as Egypt and Peru), they lead to farm-level prices that are higher than their retail market counterparts (23,33).³

Without subsidies, the narrowing of the margin implies lower returns to the resources employed in marketing activities and, hence, to an exodus of merchants and middlemen traditionally involved in these activities. The implementation of the policy often leads to the taking over of marketing functions by government agencies and state-owned enterprises.

The direct budgetary expenditures to subsidize marketing activities are often augmented by additional losses generated by inefficient state-owned enterprises. The contribution that many state-owned enterprises make to the central government's budget deficit can be large (31). Estimates of losses associated with state-owned enterprises of all types in seven countries ranged from a low of less than 1 percent of GNP in Korea to over 10 percent of GNP in Sri Lanka (29).

The Dominican Republic

To provide more depth to the general remarks above, we summarized some of the key results from an on-going study by Greene and Roe of the political economy of agricultural prices in the Dominican Republic during the 1966-85 period (13). We focused on three major crops; rice, which was imported in eleven of the past 20 years, and the two major export crops, sugar and coffee. These crops comprised about 54 percent of the total annual value of agricultural production between 1982-84 of which sugar and coffee accounted for over 40 percent.

³Some insight into the pervasiveness of production and product marketing controls can be obtained from a USDA/University of Minnesota study of food policies in 21 developing countries (32). The study found that all 21 countries employed some type of domestic production or marketing controls for food grains. These included control of procurement, processing, storage, and transportation. The countries implemented these controls through licensing, subsidy schemes to middlemen (primarily at wholesale), and through support of state-owned enterprises. The extent of control in a country tended to be in direct proportion to the expenditure share of the crop in household consumption. Eighteen countries imposed marketing controls on wheat, 19 imposed controls on rice, 13 imposed controls on maize, and 14 imposed controls on sorghum. The African countries in the study tended to employ the largest array of controls over the most crops, followed by Asian countries and the Latin American countries.

The recent economic history of the Dominican Republic can be summarized as follows. Since the 1973-74 shock to world markets, the economic performance of the country's economy has slowly deteriorated, reaching a point in 1983 where debt rescheduling negotiations with the IMF resulted in agreement on a series of steps to liberalize the economy. Agriculture has declined from about 30 percent of the country's GDP in 1966 to about 18 percent in 1984. Annual real rates of growth in agriculture's GDP has averaged about 0.7 percent, while the overall economy grew at about 3.3 percent between 1974-84. Government budget deficits averaged around 5.6 percent of GDP since 1977. By Latin American standards, the rate of inflation has been low, 24.5 percent in 1984 and 37.5 percent in 1985. Nevertheless, inflation has resulted in negative real interest rates on savings deposits in 9 out of the past 14 years. The country's trade deficit grew at an annual average rate of about 22 percent during 1977-83, reaching a high of US\$669.8 million in 1980 when exports of goods and services were only about 60 percent of imports. Concomitant with the rising deficit, the country's parallel market for peso-dollar exchange diverged from the official 1-to-1 rate by about 25 percent in 1982, accelerated to a divergence of over 50 percent in 1983, and then to 180 percent in 1984. During this period, exports declined from 25 percent of the country's real GDP to less than 15 percent in 1982. An outcome of the IMF negotiations was a unification of the parallel and official rate in 1985 at 3.12 pesos to the U.S. dollar.

The state-owned sugar mills (CEA and INESPRES), the state-owned marketing and import monopoly for rice, corn, and other commodities play key roles in implementing the country's price policy. These enterprises have incurred large deficits in recent years. As the sole marketing agent, INESPRES influences prices at various levels in the marketing chain by engaging in domestic and foreign market transactions until markets clear at announced prices. In September 1986, authority for rice marketing was transferred from INESPRES to the agricultural bank in an effort to reduce the degree of intervention in rice marketing.

Estimates of nominal producer and consumer rates of protection for rice, sugar, and coffee are reported in table 1. These estimates are referred to as the "direct effects" of government intervention on the domestic prices of these crops relative to their border price counterparts. Estimates of the total relative rates of protection (from now on referred to as "total effect") are reported in table 2. The total effect takes into account the effects of the equilibrium peso to dollar rate of exchange and the direct effects. The numeraire for domestic farm prices is the price index of nonfood goods. The numeraire for border prices is the nonfood price index where its trade component has been adjusted for implicit tariffs and the peso-dollar rate of exchange. The equilibrium rate of peso-to-dollar exchange is an estimate of the rate that would prevail in the absence of implicit taxes and tariffs. In most years, the estimated equilibrium rate corresponds closely to the peso-dollar rate reported in the peso-dollar parallel market (27).

A comparison of the two tables shows that the direct effects amounted to a subsidy (tax) to the producers (consumers) of rice in most years. The direct effects on the export crops of sugar and coffee suggest that in most years the producers of these crops were taxed. Consumers received an implicit subsidy on coffee, but their consumption of sugar was implicitly taxed. However, when the total effects are taken into account, the implicit tax (subsidy) on producers (consumers) of these crops increase substantially.

The increase in implicit taxes and subsidies is attributable to two factors. First, the equilibrium exchange rate had the effect of (1) raising the border price of each respective crop and (2) raising the trade component of the price index of nonfood goods, that is the numeraire. The increase in the border price of the respective crops has the effect of increasing the estimate of the implicit tax (subsidy) to producers (consumers), while the increase in the trade component of the price index of nonfood goods tends to decrease the tax (subsidy) to producers (consumers).

Table 1--Direct nominal rates of protection, Dominican Republic

Year	Producer			Consumer		
	Rice (1)	Sugar (2)	Coffee (3)	Rice (4)	Sugar (5)	Coffee (6)
	<u>Percent</u>					
1966	15.1	1/	2.2	-3.1	45.6	16.5
1967	15.7	1/	-0.5	2.5	37.4	16.7
1968	43.0	1/	2.8	23.8	45.9	11.7
1969	36.2	80.4	1.3	26.0	74.2	10.4
1970	22.5	31.3	-23.8	24.0	81.7	-14.6
1971	22.0	7.0	-2.0	16.2	95.8	-7.3
1972	4.2	-9.2	-14.8	14.1	110.0	-15.1
1973	-34.0	-25.4	-16.1	-41.0	121.8	-12.8
1974	-34.0	-48.3	-5.3	-25.2	169.8	-0.5
1975	11.2	-56.7	-5.9	23.6	272.2	-22.6
1976	42.9	-70.1	-19.8	40.8	234.4	-11.4
1977	23.9	-54.4	-21.2	18.2	133.6	-16.0
1978	23.2	-39.9	-3.4	9.3	119.7	-15.1
1979	35.9	16.3	-23.2	6.8	64.6	-21.6
1980	8.4	71.6	-4.3	6.4	59.2	3.0
1981	7.1	-53.7	7.4	6.7	189.4	0.0
1982	92.3	-4.0	-27.2	38.6	96.1	-19.0
1983	90.0	201.4	-26.1	45.0	55.7	-16.4
1984	-2.1	91.8	-31.1	-31.6	55.1	-15.0
1985	60.4	440.0	-74.7	-17.3	39.1	-40.0

Note: Nominal rate of protection equals $[P9i] - Pb(i)]/Pb(i)$ where $P(i)$ is the price of the i -th crop $Pb(i)$ denotes the border price of the i -th crop in pesos evaluated at the official rate of peso-dollar exchange. Adjustments have been made to account for domestic processing, marketing, and transportation costs so that the relevant farm level to border price equivalent prevails.

Column (2) estimates are based on the world market price for sugar (market 11), not the weighted average price between the U.S. market (market 12) and market 11.

Column (5) estimates are also based on the market 11 equivalent price. If the weighted market 12 and 11 prices had been taken as the opportunity cost prices, then the direct effect would have been negative (subsidy) in many years.

1/ Market 11 price was less than the shutdown price for sugar.

Source: (13, various tables).

Second is the impact of the tariff and quota equivalent tariff effect on the price index of nonfood goods. Adjustments to the trade component of the price index of nonfood goods to account for these effects tend, in most years, to dominate the increasing exchange rate effect [(2) above] on the trade component of the nonfood price index.

Thus, protection of the domestic nonfood sector through tariffs and quota restrictions on trade in nonfood goods exceeded the opposite effect on the index attributable to an overvalued rate of peso-dollar exchange. Consequently, the total effects reversed what was otherwise an implicit subsidy (tax) to rice producers (consumers). Total effects also served to exacerbate the implicit tax (subsidy) on producers (consumers) of these crops, while at the same time increasing the protection to producers of nonfood import substitutes and taxing consumption (both urban and rural) of the import-substitute goods. These additional effects came about because of the overvalued exchange rate and the effects on nonfood goods of tariffs and quotas.

The partial equilibrium welfare effects (measured as changes in Marshallian consumers surplus and quasi-rents) of the total effect of the interventions are reported as a percentage of agricultural GDP in table 3. These estimates are based on an estimated system of complete demand elasticities (35) and on estimated supply elasticities for rice, sugar, and coffee (13).

Table 2--Total relative rates of protection, Dominican Republic.

Year	Producer			Consumer		
	Rice/ PNA (1)	Sugar/ PNA (2)	Coffee/ PNA (3)	Rice/ PNA (4)	Sugar/ PNA (5)	Coffee/ PNA (6)
	<u>Percent</u>					
1966	-17.0	1/	-28.7	-30.2	128.0	-16.0
1967	-15.3	1/	-29.6	-24.9	186.3	-14.6
1968	4.2	1/	-27.8	-9.8	116.1	-18.6
1969	-1.0	-1.0	-29.2	-8.4	15.1	-19.8
1970	-11.0	-23.3	-46.3	-9.9	3.1	-38.0
1971	-12.5	-35.9	-33.3	-16.6	-10.7	-33.5
1972	-19.8	-37.2	-35.8	-12.1	-15.8	-35.0
1973	-48.7	-47.2	-36.2	-54.1	-25.7	-32.3
1974	-46.6	-59.7	-25.1	-39.5	-34.7	-19.4
1975	-4.9	-63.6	-20.7	5.8	-61.3	-33.8
1976	16.8	-76.3	-35.2	15.1	-58.6	-27.6
1977	1.7	-64.7	-35.8	-3.0	-33.5	-31.0
1978	-5.6	-58.5	-27.1	-16.3	-38.3	-35.0
1979	2.3	-33.4	-43.0	-19.6	-14.1	-41.0
1980	-19.4	2.5	-30.7	-20.9	-28.0	-23.7
1981	-18.3	-66.2	-20.5	-18.6	-76.4	-23.7
1982	27.4	-46.9	-53.6	-8.2	-60.3	-46.3
1983	12.4	-2.4	-58.5	-14.2	-44.4	-50.6
1984	-10.3	-48.2	-69.5	-37.3	-70.3	-59.3
1985	46.3	367.4	-77.0	-24.6	-71.5	-45.3

Note: Total relative rate of protection equals: $[P9i)/PNA - P*(i)/PNA*]/[P*(i)/PNA*]$ where $P*(i)$ denotes the border price of the i -th crop evaluated at the estimated equilibrium rate of peso-dollar exchange, PNA denotes the price index of nonfood goods and PNA* denotes the price index of nonfood goods where adjustments are made for the exchange rate and implicit taxes on the trade component of the index.

Column (2) estimates are based on the world market price for sugar (market 11), not weight average price between the U.S. market (market 12) and market 11.

Column (5) estimates are also based on the market 11 equivalent price. If the weighted market 12 and 11 prices had been taken as the opportunity cost prices, then the direct effect would have been negative (subsidy) in many years.

1/ Market 11 price was less than the shutdown price for sugar.

Source: (13, various tables).

Gains and losses are not reported in these estimates of quasi rents to merchants, middlemen, and state-owned enterprises, which comprise the vertical markets between primary producers and final consumers of these crops.

The results in table 3 suggest that the implicit transfers from the producers of these crops were large. The largest magnitudes correspond to those years when one or more of the three crops were experiencing high relative border prices. The total implicit annual transfers to consumers (column (4), table 3) were positive since about 1970 and, on average, amounted to about 4 percent of agriculture's GDP. Relative to the transfers from producers, these magnitudes seem small. However, it should be kept in mind that sugar and coffee are primarily exported. Hence, the total implicit transfer from producers exceeds the transfer to consumers.

Column (5) of table 3 shows the estimated total effect of interventions in these crops on the country's foreign exchange earnings. Clearly, interventions have served to increase consumption of traded goods, decrease their supply, and caused the country to forego foreign exchange earnings amounting to an average of over 21 percent of the annual value of imports during 1973-84.

Table 3--Estimated transfers to (+) and from (-) producers, consumers, and foreign exchange earnings based on total relative rates of protection, Dominican Republic.

Year	Transfers to--				Foreign exchange loss to exporters (5)
	Producers		Consumers		
	(1)	(2)	(3)	(4)	
	DR\$	Percent	DR\$	-----Percents-----	
1966	61.5	5.3	-11.7	-1.0	-7.2
1967	109.2	9.7	-42.9	-3.8	-5.3
1968	72.0	5.3	-45.9	-3.4	16.5
1969	-33.2	-2.3	-5.5	-.4	4.8
1970	-156.9	-10.5	6.5	.4	1.7
1971	-195.2	-12.3	26.7	1.7	5.9
1972	-226.0	-12.4	17.6	1.0	1.5
1973	-471.4	-23.5	153.9	7.7	-21.0
1974	-828.5	-39.2	138.5	6.6	-27.0
1975	-894.9	-48.8	54.0	2.9	-19.0
1976	-1155.5	-55.8	24.3	1.2	-32.8
1977	-576.2	-33.2	21.1	1.2	-16.9
1978	464.8	-25.1	59.3	3.2	-26.9
1979	-275.0	-14.9	16.5	.9	-15.1
1980	-98.3	-5.9	30.3	1.8	-14.9
1981	-799.2	-50.8	118.2	7.5	-19.8
1982	-358.9	-23.5	47.6	3.1	-26.0
1983	-93.6	6.2	38.1	2.5	-19.2
1984	-430.6	-28.0	128.9	8.4	-16.8
1985	11.4	.9	67.7	5.2	NA

NA = Not available.

Note: Column (1) equals the sum of quasi-rents based on estimated supply functions for rice, sugar, and coffee and the total price effects reported in table 2. Column (3) equals Marshallian consumers surplus based on a complete system of estimated consumer demand elasticities and total price effects reported in table 2. Columns (2) and (4) express these results as a percentage of agricultural GDP at constant 1984 prices. Column (5) expresses the change in the US\$ value of foreign trade in rice, sugar, and coffee from the results in table 2 as a percentage of the value of actual exports. Columns (1) and (3) are in constant 1984 DR\$.

Source: (13, various tables).

While these results imply that government policy served to transfer resources out of agriculture, consideration should also be given to the government transfers into agriculture. These estimates, while only approximate, are provided in table 4. Column (1) and (2) of the table are the sum of current and capital expenditures identified in government accounts as agricultural expenditures by central government and autonomous government institutions, exclusive of CEA and INESPRES. Of course, these expenditures include salaries, administrative costs, and payments for activities that may only be indirectly related to agriculture and, in many cases, activities that are carried out in urban areas. The largest portion of the expenditures include the country's agrarian reform program, maintenance and investments in irrigation, rural roads and agricultural extension.

Columns (3) and (4) of table 4 report the annual fiscal surplus and deficits of CEA and INESPRES's rice marketing activities, respectively. A surplus is treated as an annual transfer of resources from agriculture; a deficit is treated as a transfer to agriculture. A deficit could be related to subsidies passed on to consumers from absorbing the costs of carrying out marketing functions.

Data in column (6) suggest that transfers to agriculture as a percentage of agriculture's GDP have averaged about 23 percent over the period 1974-84. However, the implicit transfers out of agriculture, based on the estimates of the total effects of government interventions,

Table 4--Transfers into and out of agriculture, Dominican Republic

Year	Expenditure		Fiscal accounts		Direct transfers to agriculture (5)	Share of GDP agriculture	
	Current (1)	Capital (2)	CEA (3)	INESPRE (4)		Transfers to agri. 1/ (6)	Quasi-rent 2/ (7)
	-----Million DR\$ 3/-----					-----Percent-----	
1966	NA	NA	NA	NA	NA	NA	5.27
1967	NA	NA	NA	NA	NA	NA	9.73
1968	61.81	43.96	NA	NA	105.77	7.75	5.27
1969	90.82	17.22	NA	NA	108.04	7.52	-2.31
1970	96.36	85.97	-19.58	0	201.95	13.47	-10.47
1971	115.88	117.87	-2.00	30.80	204.95	12.96	-12.34
1972	110.23	125.72	-.74	15.19	221.51	12.15	-12.34
1973	91.63	165.95	30.65	36.45	190.48	9.51	-23.54
1974	101.05	287.15	28.89	-89.72	449.03	32.26	-39.22
1975	104.38	386.87	89.25	34.75	367.25	20.01	-48.76
1976	143.53	277.19	-20.68	14.55	426.86	20.60	-55.77
1977	137.16	242.33	73.06	-37.35	344.05	19.80	-33.16
1978	139.96	281.89	-67.84	-9.80	499.50	26.95	-25.08
1979	198.88	205.83	-43.57	70.71	577.57	20.45	-14.89
1980	188.31	196.63	-170.46	-5.23	560.63	33.45	-5.87
1981	180.91	275.51	-79.29	-83.71	619.42	39.34	-50.76
1982	152.11	147.18	-143.33	1.60	441.02	28.65	-23.32
1983	156.06	156.47	-96.88	-13.25	431.66	28.64	-6.21
1984	171.81	152.70	-15.50	-43.20	383.21	24.93	-28.02

NA = Not available.

1/ Column (6) is (5) as percentage of agricultural GDP.

2/ Column (7) is quasi-rents based total effects as percentage of Agriculture GDP.

3/ Constant 1984 DR\$.

Source: (13).

averaged over 30 percent of agriculture's GDP over the same period. These results omit dead weight losses. If the transfers back to agriculture yield a net social rate of return lower than the social rate of return to the same resources employed by producers, then the transfer is effectively less than the 23-percent estimate. In any case, it appears that interventions have served, on net, to transfer resources from the sector.

These results suggest that interventions in other sectors of the Dominican Republic's economy have also served to increase the tax on agriculture. In many countries, the policy decisionmaking process is not characterized as a hierarchical system of control; instead, various public organizations often have some degree of autonomy (particularly state-owned enterprises (SOE)) with associated principal agent problems. CEA, INESPRES, and the ministry of agriculture tend to be associated with interventions that, for the most part, relate to the direct effects reported in table 1.

It can be conjectured that the main political activity of rural producer groups to lobby for higher prices was through these organizations. Hence, their efforts toward seeking a differential advantage came about through direct effects. Urban groups, composed of urban households and import-competing industrialists, focused on trade and exchange rate policies to seek their differential advantage. The welfare of urban households was consistent with those of domestic industrialists who benefited from an overvalued exchange rate and import tariffs and quotas. While urban households may have been a "free rider" to the coalition of urban import-competing industrialists during the early seventies and eighties, their support of this coalition is suggested by the urban riots in April 1984, which led to the death of about 100 people. This protest was in response to the government's announcement to discontinue the sale of foreign exchange at the official exchange rate for food.

Policy Intervention

The direct effects of interventions give rise to a host of indirect effects. The indirect effects come about, in part, because interventions have contributed to increased government expenditures with corresponding increased deficits. Often associated with a country's expenditures is an increase in currency stocks, an increase in inflation, a decrease in real interest rates, and a declining real exchange rate. A decline in the real exchange rate serves to further increase the implicit subsidy to imports, to tax exports, and to induce deficits on a country's trade account. Since agriculture is a major export sector in many developing countries, these interventions serve to extract resources from agriculture. The resulting decline in foreign exchange earnings has induced some countries (such as Indonesia, Egypt, and Tanzania) to respond by postponing the import of capital goods and raw materials, which, in turn, has also had deleterious effects on the output of industrial goods (20,24,31). Hence, these interventions tend to decrease export shares, while at the same time increasing a country's demand for external finance. Moreover, the accumulation of external debt is not, in general, allocated to socially profitable investments, but to cover fiscal deficits, the maintenance of inefficient import substitution activities and to finance SOE activity that could be more efficiently carried out by private enterprise.⁴

The relationship between government induced market distortions and the rate of economic growth is far more complicated than the confines of this paper permit us to explore. Numerous studies (Krueger (19) and Cavallo and others (9) background papers to the 1986 World Development Report) provide evidence that shows that the growth rate has responded to the removal of trade barriers, that growth is negatively correlated with exchange rate misalignment, and that increased instability in exchange rates is negatively correlated with investments in many countries. As Lucas (21) points out, these effects should perhaps be treated as off-equilibrium growth path effects, that is, level effects. The level effects from the removal of distortions should not be confused with equilibrium growth path effects that are a more fundamental and, in our view, a more complex issue.⁵

Lucas suggests that factors affecting the equilibrium growth rate are predominantly associated with externalities (21). The extent to which governments become preoccupied with interventions in sectors of their economies where markets are relatively efficient in the allocation of scarce resources, the more likely they are to underinvest in aligning the net social rates of returns in activities where externalities are present.

This "underinvestment" effect is likely exacerbated by three additional factors. First, distortions in an economy make the identification and computation of distortion adjusted shadow prices on public investments a complex process. Hence, errors of under investment can easily be made because, particularly for agriculture, distortions almost always lower the unadjusted estimates of the net social rate of return to these activities.

⁴Additional indirect evidence reported by the IMF (16, p. 89) suggests that IOC's, which eventually experienced debt-servicing problems, had earlier experienced declining domestic savings rates. Their declining output-capital ratios over this period suggest a decrease in the efficiency of their investments and, relative to the OOC's, the tendency to use borrowed funds in such a way that does not increase the economy's capacity to generate foreign exchange.

⁵The possibility that externalities are an important key to the equilibrium rate of growth (and hence economic development, with an explicit role for government) led Lucas to extend the Solow model to account for an individual productivity effect of learning by doing on own resources and to have an external effect on the productivity of all other resources. In this set up, human capital accumulation is taken to be specific to the production of particular goods. Because the individual human capital contribution to the productivity of other resources is not perceptible, nor can the individual capture the return to this external effect, an equilibrium growth path and an optimal growth path can be obtained from the model. If different goods are taken to have different potentials for human capital growth, then the same considerations of comparative advantage that determine which goods get produced will also dictate each country's rate of human capital growth. The model admits the possibility of wide and sustained differences in growth rates across countries, differences that one would not expect to be systematically linked to each country's initial capital levels.

Second, as evidence from the IOC indicate, extensive interventions almost always yield fiscal deficits in central government accounts. Hence, from the perspective of public planning authorities, additional resources allocated to activities where externalities are present means, in light of distortions already in place, inducing further distortions or to draw upon already extended sources of external credit to obtain extra public funds.⁶ In the presence of distortions, the opportunity cost of additional public funds is likely to be quite high.

Third, many developing countries are characterized by poor institutional development, which inhibit the existence and manipulation of first-best policy instruments, an example of which might be a value-added tax. Obtaining additional funds often implies the manipulation of second-best policy instruments, which raises the net social opportunity cost of public investments.

Market Interventions and Government Behavior

Insights into the motivation for government intervention are provided in a growing body of literature that Colander termed neoclassical political economy (10). The key strands of this literature are distinguished by the more "informal" theories of the political science school typified most recently by Bates' (5) research on the behavior of governments in East Africa and by Mancur Olson on distributional coalitions and the free-rider problem. "Formal" theories have been developed by the public choice school, by Buchanan (8) and the field of trade and development where emphasis is placed on rent seeking by (Krueger (19)) or, as Bhagwati (7) has suggested, on directly unproductive profit-seeking (DUP) activities. We draw selectively on this literature for what we view to be some of the more important insights within the context of this paper. Given the complexity of motivations and means for government intervention, the insights provided are based on observation and deduction rather than formal empirical analysis.

Bates (5, p. 169) views public policy as the outcome of political pressures exerted by members of the domestic economy seeking their own interests. In the case of developing countries, he argues that this view is consistent with the observation that urban consumers are potent pressure groups demanding low-priced food. They have political influence because of their geographical concentration and strategic location. They can quickly organize, and they are largely employed in providing public services so they can, with relative ease, impose deprivation on others. Bates notes that urban unrest forms a significant prelude to changes of governments in Africa (5).

Interests of urban consumers coincide with those of domestic industrialists who view low-priced food as serving to decrease the pressure on wages. The industrialists also are effective in obtaining protection from imports because of the notion that the key to development lies in industrialization. Since industrial goods account for a small share of most households' budgets in LDC's, import protection of industrial goods will not have a large direct impact on expenditures of most households. The outcomes are policies that tend to support both import substitution and low-cost food to urban households.

The same argument applies to developed economies. In advanced stages of development, the food share of the consumer's budget declines so that consumers become less sensitive to increases in food prices. Agriculture becomes a smaller component in the total economy and farmers tend to be more specialized. Within their area of specialization, farmers are better

⁶In countries that face binding budget constraints, the targeting of foreign aid to activities where externalities are present would seem to be more socially optimal than to target foreign aid to activities that induce government to intervene in sectors of their economies where markets are reasonably efficient in the allocation of scarce resources. Egypt is an example where foreign aid increased the public sector's grain storage capacity.

able to organize than are urban groups. With food a small share of consumer's expenditures, protection demands in agriculture can be met at lower political cost with the result that the agricultural sector receives more protection than the industrial sector.

Honma and Hayami (15) and Anderson (2,3) provide some empirical support of this general view and extend it to explain why policy regimes in developed countries tend to protect agriculture and regimes in developing countries tend to tax agriculture. Anderson (3) notes in his study of the growth of agricultural protectionism in east Asia that countries tend to switch from taxing agriculture to taxing manufacturing in the course of economic development. The timing of this switch is associated with agriculture's declining comparative advantage relative to manufacturing. Anderson draws upon Down's concept of the political market for policies where the demanders of policy interventions are the potential beneficiaries and the political leadership is the supplier of policy interventions. The result is consistent with that of Bates (5). When food accounts for a large share of the consumer's budget relative to manufactured goods, the political cost of obtaining additional support for agriculture is high relative to additional support for food deficit households and manufacturers. Hence, policies that are carried out tend to tax agriculture relative to manufacturers.

While these arguments provide insight into the motivation for interventions, why do governments prefer to intervene in markets that would perform relatively well if left alone? They could accomplish the same objectives in areas where markets function poorly. Bates argues that market interventions facilitate the allocation of political rents (5). Market interventions permit governments to target the allocation of subsidies through control of the marketing functions, while, at the same time, transferring resources to supporters (civil servants) engaged in carrying out these interventions. In Bates' terminology, market interventions facilitate the "organization of the rural constituency" who supports the government and "disorganize the rural opposition."

Olson focuses attention on the formation of special interest groups into coalitions and on their role in obtaining a differential advantage through lobbying activities. He tends to emphasize the behavior of individual interests on the nature and behavior of the coalition. Important among the inferences he draws are that: broad-based coalitions tend to take into account the adverse macroeconomic effects of their lobbying efforts so that the adverse effects of the differential advantage they seek tends to be less than narrow-based coalitions. Narrow-based coalitions tend to be more interested in the distribution of society's income to members of the coalition since resources to expand societies output have to be shared with the rest of society, while the benefits of the same resources spent on redistributing society's output in its favor accrue entirely to the group. The policy instruments that narrow-based coalitions influence or control tend to be sticky to changes in economic conditions. The stickiness arises because of the need to negotiate the implications of changing economic conditions within and between various interest groups. This has the effect of increasing the time required to respond to economic shocks.⁷

The literature on DUP or rent-seeking activities offers a point of departure for obtaining empirical insights into the factors motivating government intervention than does the more informal, but perhaps broader based theories of Bates and others.⁸ Starting with this approach, we posit a simplified model of endogenous government behavior with rent-seeking households.

⁷Pryor attempted to obtain empirical support for the overall implication of Olson's theory, namely that economies characterized by broad-based coalitions should out perform economies characterized by narrow based coalitions (24,25). He concludes that ... "Olson's theory is formulated in a manner still too general to prove successful in the empirical tests..."

⁸An excellent review of this literature is provided by Bhagwati (7). A review and some extensions also appear in Colander (10).

Consider the case of a two-good, two-household rural-urban economy that takes its external terms of trade as given. The government in this economy is assumed to announce prices (P_a, P_n) of the rural and urban goods and to engage in domestic and foreign trade until markets clear.⁹

Household choices are defined by:

$$\text{Max } V_i = V_i(q_{ai}, q_{ni})$$

$$[q_{ai}, q_{ni}, a_i]$$

subject to

$$(1) Q_i P_i - a_i = P_a q_{ai} + P_n q_{ni}$$

where the index $i = a$ (rural), n (urban) denotes households, $V_i(\cdot)$ is the household's direct utility function, q_{ai} and q_{ni} are quantities consumed of the rural and urban good by the i -th household, and Q_i is the i -th household's endowment of the rural ($i = a$) and urban ($i = n$) good. Hence, there is no production in this version of the model.

In this simplified model, the choice variable a_i is most unambiguously viewed as a bribe. It could also be viewed as expenditures allocated to the process of lobbying, negotiating, and other activities involved in influencing political authorities.

In our more general specification, a_i is a vector of inputs allocated to lobbying and other rent-seeking activities. The reallocation of inputs from production to lobbying and other directly unproductive activities (DUP) can provide pecuniary returns to individual households, but it can be socially wasteful.¹⁰

Before households can choose a_i , they must know the effect of the bribe on the government's choice of levels for the instruments P_a and P_n . If the choice of a_n results in an increase in P_n relative to P_a , then urban households can be better off than rural households whose endowment Q_a is in rural produced goods. Hence, in principal, a Cournot-Nash game exists between rural and urban households.

The government is assumed to form preferences over households. For simplicity, we denote these preferences in terms of U :

$$(2) U = I_a V_a + I_n V_n + I_f V_f(R)$$

where V_a and V_n are the utility of rural and urban households defined above and, for our purposes here, V_f is the utility of an aggregate of next period households.¹¹ The I_i is an influence function that defines the parameters of equation (2), and hence, the government's preference ordering. These are defined below. R is the budgetary consequence of government interventions:

$$R = (1 - P_a)(Q_a - q_{aa} - q_{an}) + (P_n - 1)(q_{nn} + q_{na} - Q_n)$$

⁹This assumption is somewhat arbitrary. Other instruments, such as ad valorem taxes or tariffs, could also have been chosen as policy instruments.

¹⁰DUP activities in these models can be welfare improving if the initial point of departure is from a distorted economy, as in the case of Krueger's pioneering article (19).

¹¹A more general formulation is $U(V_a, V_n; I_1) + U(V_f(R; I_2))$. However, this complicates the specification of the properties of the influence functions I_i . Moreover, it is unlikely that the hierarchical structure of a policy decisionmaking process in a county is sufficiently free of principal agent problems that it can be expressed by a single objective function. Instead, each decisionmaking unit of government may seek pecuniary gains subject to budget and legal constraints.

where border prices are unity. If the government does not discriminate over households, then domestic prices are unity and R is zero. Hence, a choice of prices P_a and P_n that subsidize current period households (R negative) are treated as a lump sum claim^a on of I_n an income transfer from the next period households.¹² In this static version of the model, we treat the variables (except R) of the indirect utility functions of future households as predetermined.¹³

The relationship between the influence functions I_i and bribes are adapted from Becker. We only sketch their properties here. Influence functions (I_a, I_n) depict the political influence of the pressure (denoted p_a, p_n) applied by rural and urban^{a, n} households to obtain subsidies or avoid taxes. These functions^{a, n} have the properties:

$$I_a + I_n + I_f = 1, 0 < I_j < 1, \text{ and } -I_a/p = I_n/p$$

where, because of the static version of the model, I_f is predetermined and $p = p_a/p_n$ (that is, the ratio of pressure applied by rural and urban households, respectively).¹⁴ These conditions imply that the pressure exerted by urban households lowers the pressure exerted by rural households.

The pressure functions (p_a, p_n) are akin to the technology that translate the allocation of resources (bribes in our case)ⁿ into pressure. Becker's specifications also accounts for the relative size of a group and the problem of free riders within a group. In the context of our model (a single household), the pressure functions can be simply specified as a function of bribes:

$$p_i = f_i(a_i), \text{ for } i = a, n.$$

The function f_i defines the technology of converting bribes into pressure.

The decision rules for the government's policy instruments P_a and P_n can be obtained by assuming that the government chooses these instruments as though itⁿ sought to maximize equation (2). The exogenous variables in the government's policy "decision rules" include the level of bribes, a_a and a_n . Denote these "decision rules" as

$$(3) P_a = P_a(a_a, a_n)$$

$$(4) P_n = P_n(a_a, a_n).$$

We can now return to the households' problem. Assuming that households correctly perceive the objective of government, equation (2), know the political process through the influence functions and the technology reflected in the pressure functions, equations (3) and (4) can be substituted into the household's budget constraint equation (1). Except for the knowledge or assumptions of the bribing behavior of the other household (that is, the game component of the problem), the i -th household is now in a position to choose q_{ai}, q_{ni} and a_i . It can be shown that the household chooses a_i to maximize income.

The essential characteristic of the phenomena of DUP activities depicted in this framework is that an environment exists where it is rational for individuals to allocate resources in search

¹²A more elaborate model would treat this as a dynamic problem where the government makes choices over some continuum of time with explicit account taken of fiscal, monetary, and domestic and world capital market opportunities to deal with surplus or deficits in R .

¹³The government's choices of P_a and P_n only affect current period markets. A dynamic version of the model would require an expectation formation mechanism to forecast future bribes, and, therefore, the preference weights over future households.

¹⁴An example of a functional form satisfying this condition is: $I_a = (e^P - 1)/e^P, I_n = (1 - I_f e^P)/e^P$.

of pecuniary returns that do not increase the utility of others either directly or indirectly through increased production. If the bribes of urban households yield more influence than those of rural households, then a possible outcome is for rural households to be taxed ($P_a < 1$), for urban households to receive a net subsidy ($P_n > 1$), and for the government to incur a negative trade balance ($R < 0$), implying claims on the income of next period households. And, as in the case of the Dominican Republic, it will cause a decline in foreign exchange earnings and mounting foreign indebtedness.

If endowments and bribes were replaced by production activities and resources, then the withdrawal of resources from production to DUP activities would decrease production possibilities in the current period and increase claims on the incomes of next period households. Depending on the specification of the influence functions, the DUP activities (bribes) of urban households can increase the profitability of countervailing DUP activities of rural households.¹⁵ Hence, an environment that induces the seeking of differential advantage of one group can indirectly induce DUP activities by another group whose welfare is affected by the activities of the former group.

Countries that pursue inward-oriented strategies contain elaborate administrative systems for resource allocation. These systems, often characterized by state-owned enterprises, include quantitative restrictions on imports and exports, licensing of investment in typically import substitution activities, controls on foreign investment, and numerous other instruments to influence incentives (tariffs, taxes, and subsidies). An implication of the theory on DUP activities is that the mere presence of these elaborate structures can be expected to generate more resource wastage than would be expected from an outward-oriented strategy. It would also seem that these arguments might be extended to explain, in part, the formation of state-owned enterprises (such as INESPRES and CEA in the Dominican Republic) that permit the capturing of rents by directors and employees of the enterprise.

Inducing a liberalization of interventions in an economy confronts the activities of groups seeking their differential advantage. For liberalization schemes to be successful, they need to be carried out without creating a differential advantage to some groups. The more extensive the extent and scope of intervention, the more difficult this task is likely to become. Corbo and others suggest this result when they attribute part of the failure of liberalization in the southern cone to "authorities probably faced deeply entrenched political interest groups and recalcitrant expectations."

The liberalization of interventions in an economy is likely to be more difficult the longer the distortions have been in place. Distortions in an economy that have been in place for a considerable period of time induce structural changes so that the value of protection gets built into the value of sector specific assets. An example is import competing plants and equipment that process commodities or fabricate goods that in the absence of protection lose part of their value, the loss being greater the more difficult it is to transfer the capital to other enterprises. Another example is the human capital employed in import-competing sectors that would be replaced with the loss of seniority rights and perhaps the need to undergo retraining to obtain equivalent wage levels in other activities. Hence, liberalization in the short run almost surely causes adverse wealth effects to some groups that are in direct proportion to the length of time the distortions have been in place.

Some households may not have been previously involved in DUP activities, but are simply responding to market signals (even though they may be distorted). In the presence of threatened liberalization and adverse wealth effects, they may become strong opponents to change. The end result could well be that threatened liberalization, as in the case of the

¹⁵The implication is that the cross-second partial derivative is positive.

Dominican Republic, gives rise to an increase in DUP activities so that a financial crisis is required before governments can carry out policy reforms.

Perhaps, interventions and the DUP activities they generate are simply the result of policy mistakes in many countries. In practice, government planning-policy implementing processes, even when directed toward sources of market failure, are complex with a multiplicity of policy instruments and a maze of programs and projects. The development planning literature of Agarwala has documented the experiences of many countries where the mismanagement of complex processes and the development of plans based on faulty causes and effects and program-project implementation assumptions have given rise to realizations that bore little resemblance to outcomes anticipated when the plans were first initiated. Since physical and administrative infrastructures are poorly developed in many developing countries, it is difficult to target interventions that have minimal market distortion effects.

The process of liberalization is likely to be complex and difficult because of the conditions under which distortions have been generated. In many countries, liberalization may only come about when circumstances do not allow for a choice. Governments who bias their trade and development patterns to accommodate rent-seeking behavior tend to generate government budget deficits, which have to be financed either domestically or internationally. When financial crisis occurs, such as the world debt crisis of the eighties, these deficits can no longer be financed. The choices under such circumstances are very limited and policy liberalization tends to become a financial necessity rather than a luxury.

Summary and Conclusions

This paper focused on the nature of government interventions in the trade and development process. A basis was presented to explain why such interventions are generated and maintained even after it is apparent that interventions are inducing distortions that are socially wasteful. The policies pursued by inward-oriented and other selected countries were used to illustrate the policy instruments these governments commonly employ and the effects these interventions have on trade and economic growth. A case study of the Dominican Republic was used to provide more indepth insights into the magnitude and impact of distortions.

It appears that for inward-oriented countries interventions often result in overvalued real exchange rates, low and frequently negative real interest rates, and tariff and quota restrictions that tend to protect the domestic import-competing sector. Along with these interventions are interventions in domestic agricultural markets by state-owned enterprises and marketing boards who play key roles in determining agricultural input and output prices. These interventions appear to be contributing factors to central government budget deficits and to discourage public investments in areas of market failure.

The broader theories of Bates and Olson were highlighted for the insights they provide into the motivation for government intervention. The discussion on rent-seeking households was used as a basis for developing a formal model of government behavior. This approach postures that interventions are the outcome of competing interest groups seeking to achieve outcomes that are favorable to themselves but outcomes that can be socially wasteful.

Key implications are: In the early stages of development, the interests of urban consumers and import-competing industrialists coincide so that interventions tend to tax agriculture relative to the urban-industrial sector of an economy. In seeking differential advantage, an economy composed of narrow-based coalitions tends to seek interventions that are more wasteful of society's resources than are broader based coalitions. Also, narrow-based coalitions tend to slow the adjustment of interventions to changes in an economy's environment because of the time required to negotiate and to re-establish acceptable terms of

intervention. If the key to economic growth lies in society's management of market failure and investment in areas where the market failure induces underinvestment, then rent-seeking behavior interferes with this process. Rent-seeking behavior can be triggered by errors or failures of the policymaking process, which inadvertently provides some groups with a differential advantage relative to other groups. The longer distortions are in place, the more likely that sector-specific resources will reflect the value of these distortions. Thus, attempts to liberalize may encounter resistance from previously apolitical groups who face the possibility of loss in wealth.

The removal of interventions will almost surely require a comprehensive plan that deals with the sources of resistance discussed in the previous section. The time period required to carryout the plan will depend on the degree of distortions and the political importance of the enterprises that owe their existence to them. Substantial effort will be required to convince those who face adjustment costs of the longrun social benefits of discontinuing these policies.

A plan will need to address the following issues (1) the design of programs and projects that are socially profitable in areas where markets function poorly, (2) the development of an equitable means of privatizing public enterprises and, with natural monopolies, finding forms of organization that give rise to least cost operations and pricing behavior, (3) the development of socially least cost forms of public revenue generation as a substitute for instruments that give rise to distortions, and (4) the design of policies to ameliorate adjustment costs faced by low-income household.

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