

87/GS/E

The Economy

Ecuador

July 1973

NATIONAL INTELLIGENCE SURVEY

FOR OFFICIAL USE ONLY

35

WARNING

The NIS is National Intelligence and may not be released or shown to representatives of any foreign government or international body except by specific authorization of the Director of Central Intelligence in accordance with the provisions of National Security Council intelligence Directive No. 1.

For NIS containing unclassified material, however, the portions so marked may be made available for official purposes to foreign nationals and nongovernment personnel provided no attribution is made to National Intelligence or the National Intelligence Survey.

Subsections and graphics are individually classified according to content. Classification/control designations are:

(U/OU) ... Unclassified/For Official Use Only
(C) Confidential
(S) Secret



ECUADOR

CONTENTS

This chapter supersedes the economic coverage in the General Survey dated September 1968.

A. Economic appraisal	1
B. Structure of the economy	4
1. Agriculture, forestry, and fishing	4
a. Land use	4
b. Land tenure and agrarian reform	5
c. Agricultural inputs and productivity ..	6
d. Principal crops	6
(1) Export crops	6
(2) Domestic crops	8
e. Livestock	9
f. Forestry	10
g. Fishing	10
2. Fuels and power	11
a. Petroleum	11
b. Electric power	12
3. Metals and minerals	13
4. Manufacturing	14
5. Construction	16
6. Domestic trade	16

FOR OFFICIAL USE ONLY

	<i>Page</i>		<i>Page</i>
C. Economic policy and development	17	D. International economic relations	23
1. Policy	17	1. Foreign trade	23
a. Government participation in the economy	17	a. Composition of trade	23
b. Public finance	17	b. Direction of trade	24
c. Banking, money supply, and prices	19	c. Trade regulations	25
2. Development planning and investment	20	2. Balance of payments	28
3. Manpower	21	Glossary	28

FIGURES

	<i>Page</i>		<i>Page</i>
Fig. 1 Economic activity (<i>map</i>)	2	Fig. 13 Composition of manufacturing output (<i>table</i>)	15
Fig. 2 Use of resources (<i>chart</i>)	3	Fig. 14 Government revenues and expendi- tures (<i>table</i>)	18
Fig. 3 Gross domestic product (<i>chart</i>)	4	Fig. 15 Government deficit (<i>chart</i>)	19
Fig. 4 Land use (<i>chart</i>)	5	Fig. 16 Money supply (<i>table</i>)	20
Fig. 5 Land tenure (<i>table</i>)	5	Fig. 17 Cost of living (<i>table</i>)	20
Fig. 6 Principal crops (<i>table</i>)	7	Fig. 18 Bank credit (<i>table</i>)	21
Fig. 7 Livestock numbers (<i>table</i>)	9	Fig. 19 Domestic investment (<i>table</i>)	22
Fig. 8 Livestock products (<i>table</i>)	9	Fig. 20 Labor force (<i>table</i>)	22
Fig. 9 Fish catch, (<i>table</i>)	10	Fig. 21 Balance of trade (<i>chart</i>)	23
Fig. 10 Petroleum (<i>table</i>)	11	Fig. 22 Exports (<i>table</i>)	24
Fig. 11 New investment (<i>table</i>)	14	Fig. 23 Imports (<i>table</i>)	25
Fig. 12 Sectoral distribution of manufacturing (<i>chart</i>)	14	Fig. 24 Direction of trade (<i>chart</i>)	28
		Fig. 25 Balance of payments (<i>table</i>)	27



Ecuador, the world's leading producer of bananas, has been heavily dependent on agriculture and is one of the least developed countries in South America, but the emergence of petroleum as a major export has considerably improved the country's prospects for economic development.

The Economy

A. Economic appraisal

Ecuador is a small, poor country that depends heavily on agriculture and lacks most of the requirements for modern industry. Overall economic performance has closely paralleled the growth in traditional agricultural exports, notably bananas, coffee, and cocoa. The economy of Ecuador, the world's leading producer of bananas, has been highly

NOTE—This Chapter is UNCLASSIFIED but is FOR OFFICIAL USE ONLY.



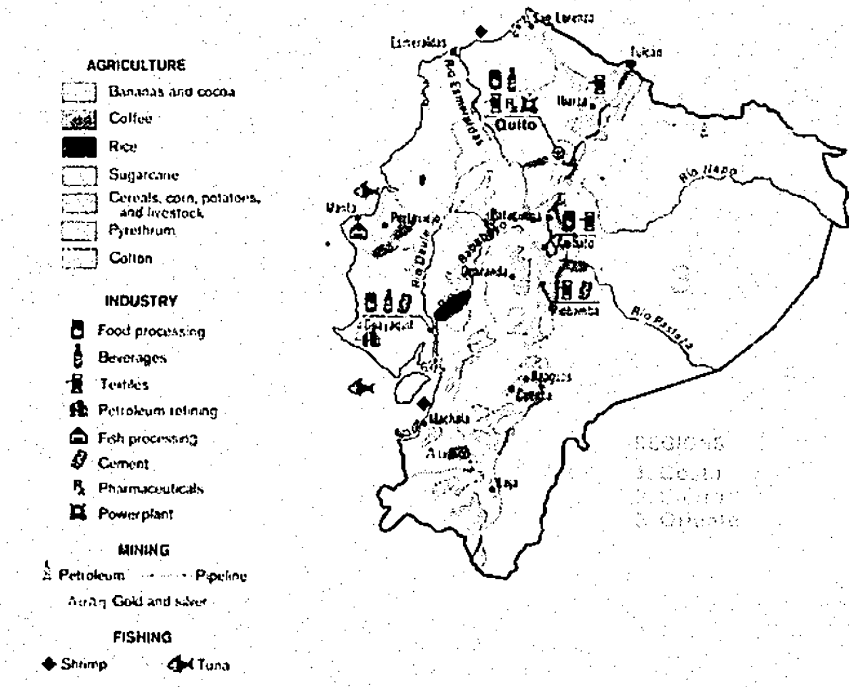


FIGURE 1. Economic activity

vulnerable to fluctuating world market prices for this commodity. While gross domestic product (GDP) has grown at an average annual rate of about 5% since 1950 and nearly 9% annually since 1969, per capita economic gains have been small because of rapid population growth. Per capita GDP—estimated at US\$260 in 1971—is low even by Latin American standards, and income is very unevenly distributed.

Ecuador has two principal agricultural areas—the fertile coastal plains lying west of the Andes and the high basins and valleys of the mountains. Production and export of bananas, coffee, cocoa, and sugar are the main economic activities in the coastal area, while the highlands are more suited to the production of grains, vegetables, and other temperate climate crops (Figure 1). Export crop production and livestock raising are concentrated on larger farm units, but much agricultural activity is of the subsistence type. Factors impeding agricultural growth include the limited amount of arable land, the small size and primitive technology of most farms, and inadequate transportation and marketing facilities. New government programs are aimed at diversifying agricultural output, improving the water supply system, and expanding credit facilities and extension services. Livestock raising and the cultivation of African palm on banana plantations are two

important diversification programs that have been supported by loans from international agencies.

The discovery of petroleum in the Oriente in 1967 and its subsequent development by a U.S. consortium have improved Ecuador's fortunes considerably. Crude oil exports, which were initiated in August 1972 upon the completion of a US\$150 million trans-Andean pipeline, will become the country's chief source of foreign exchange in 1973. Ecuador is also endowed with vast timber reserves (in the interior) and rich offshore fishing grounds, but these resources are only in the primary stages of development. Known metallic mineral reserves, unlike those in neighboring Andean countries, are small and relatively poor in quality.

Manufacturing and construction grew fairly rapidly in the 1960's in response to favorable industrial promotion legislation, the creation of financial intermediaries, and increased government spending for new infrastructure. Although one-third of the manufacturing output is still produced by handicraft shops, the factory sector is expanding rapidly, and manufacturing as a whole has grown at an average annual rate of nearly 7% since 1966. Food processing and textile manufacturing are the most important industries, but new plants have also been established for the production of household appliances, paper and

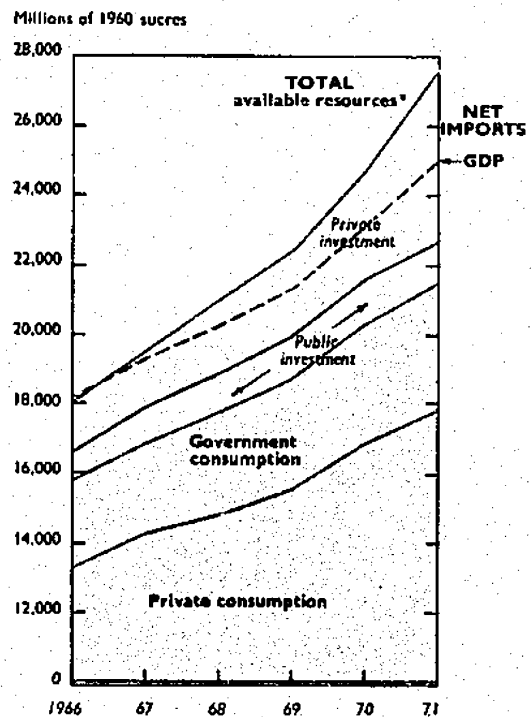
wood products, and glass and rubber products. Construction activity doubled in 2 years as a result of oilfield development in the hinterlands and a housing boom in Quito and Guayaquil, the country's two major cities.

Despite these advances, Ecuador remains largely an agrarian society. The country is generally self-sufficient in agricultural commodities (except for wheat, vegetable oils, and dairy products) and in most manufactured consumer goods but must import many raw materials and intermediate goods, as well as nearly all of its capital equipment. Manufacturing development continues to be restricted by inadequate financial resources, low levels of education and industrial skills, and a small domestic market. Between one-third and one-half of the total population, including a large percentage of the Indian population, remains outside the money economy.

Since the mid-1960's, the government has played a more active role in the development process and has pursued monetary and fiscal policies designed to promote industrial growth. A vital exogenous growth factor has been the large-scale influx of private foreign investment in the petroleum industry. Total fixed capital formation almost doubled during 1970-71, but since about half of the new capital formation was foreign-financed, it did not impinge on consumer expenditures, and the latter rose in line with GDP. The foreign-financed investments were reflected in increased net imports of resources (Figure 2).

The impending petroleum boom also fueled public expectations and led to a premature acceleration in government spending during the 1967-71 period. Although revenues grew rapidly, they were insufficient to cover the 20% annual increase in expenditures. Mounting fiscal deficits were financed largely by Central Bank borrowing, precipitating strong inflationary pressures after many years of relative price stability. The demand for imports not covered by foreign capital inflows also rose, and Ecuador hovered on the brink of a balance of payments crisis during the last year of the Velasco Ibarra administration. The government responded to reserve losses with import restrictions, credit controls on commercial banks, and devaluation of the sucre; however, the fundamental problem of excess liquidity, attributable largely to fiscal irresponsibility, persisted.

In February 1972, the military, headed by Gen. Guillermo Rodriguez Lara, ousted the Velasco regime and immediately initiated a stabilization program. It tightened controls on private sector credit, raised advance import deposits, and curbed government



* Available resources equal GDP plus net imports of goods and services.

FIGURE 2. Use of available resources

expenditures. It also successfully negotiated a US\$40 million private bank loan and, later in the year, a \$17.9 million standby agreement with the International Monetary Fund. As a result of new capital inflows and an improved trade balance, net international reserves were built up from \$28 million in February to \$128 million by the end of the year. Petroleum exports were initiated in mid-August, and the government, confident that the financial crisis had passed, began to ease import and credit restrictions in an effort to mollify domestic businessmen and spur economic activity.

Ecuador is clearly at a crossroads in its development. The military government is committed to reform Ecuador's archaic socioeconomic structure, and new petroleum revenues can finance a reasonably ambitious program. Like its Peruvian counterpart, however, the Rodriguez regime is becoming aware that widespread social reform and rapid economic growth do not always go hand-in-hand. The new regime is in the process of assigning priorities to its sometimes conflicting development goals. Despite rising public expectations, it is unlikely that social

welfare will improve markedly in the short run, given the magnitude of the task and the military government's strong desire to push Ecuador substantially further along the path of economic development.

B. Structure of the economy

Relatively rapid growth in manufacturing and construction during the last decade and the discovery of large quantities of petroleum have reduced Ecuador's dependence on agriculture and on traditional export crops. Although Ecuador still is basically a rural society with more than half its labor force employed in the agricultural sector, agriculture and fishing together account for less than a third of GDP (Figure 3). Manufacturing now contributes more than 17% of GDP, and factory production is diversifying rapidly in response to high protective tariffs and other industrial incentives. Construction activity doubled between 1969 and 1971, stimulated by oil exploration in the Oriente as well as a housing boom in the larger cities, and it now contributes more than 8% of GDP. Commerce, public utilities, and other services expanded more or less in line with the

overall growth rate and accounted for about 44% of GDP in 1971, or about the same as in 1960.

I. Agriculture, forestry, and fishing

Agricultural output rose by an annual average of 3.5% during the 1960's, approximating the population growth rate, but substantially below the 5.5% average annual growth in GDP. Agricultural output is now about evenly divided between export products and domestic crops. Domestic output supplies about 85% of food requirements and many of the agricultural raw materials required by industry. Demand is outpacing production, however, even though per capita food consumption in Ecuador remains well below the Latin American average. Agricultural imports customarily include wheat, fats and oils, tobacco, and dairy products.

a. Land use

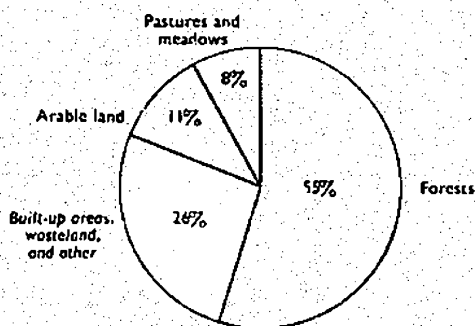
Agricultural production in Ecuador is almost exclusively confined to two areas—the fertile coastal plain (the Costa) and the temperate highland region (the Sierra). The Costa contains about 35% of the country's total land area and about 60% of the cropland. Because of its proximity to the sea, much of the Costa is planted to exportable tropical crops. Rainfall varies widely, however, and coffee growing requires irrigation in the drier areas. The Sierra comprises only 25% of the total land area and most of the remaining cropland, but it contains about half of the population. The region consists of the eastern and western ridges of the Andes and the intermontane basins and valleys. Much of the crop production for domestic consumption and most livestock production take place in the Sierra. Harsh topography, poor soil management, and extreme fragmentation of the land due to population pressure have produced widespread soil erosion and reduced crop yields.

The two remaining areas—the Oriente (East) and the Galapagos Islands—together comprise some 40% of the land area but are of little agricultural significance. The wet and humid Oriente region lies east of the Andes and slopes gently toward the Amazon River basin. It is heavily forested, sparsely populated, and largely undeveloped. Nonetheless, cattle raising is of some importance, and fertile soils in some parts of the region offer land colonization possibilities that are being made more feasible through the construction of access roads by foreign oil companies. The Galapagos Islands consist of a group of arid, rocky, volcanic islands lying about 600 miles off the Ecuadorean coast.

1960	Millions of 1960 sucres	1971*
12,855		22,916
34.8%	Agriculture, forestry, and fishing	36.2%
15.0%	Manufacturing	17.3%
3.9%	Construction	8.1%**
5.9%	Transportation, communication, electric power	5.1%
2.0%	Mining	1.9%
35.5%	Commerce and other services	31.4%

*Estimated.
**Includes road and pipeline construction for petroleum development.

FIGURE 3. Gross domestic product, by sector of origin



NOTE: This distribution excludes the Oriente and the Galapagos Islands, for which information is not available.

FIGURE 4. Land use

Excluding the Oriente and the Galapagos Islands, only about 19% of the land area is devoted to agriculture, and over half is forest covered (Figure 4). The ruggedness of the terrain and the high cost of clearing forests, constructing roads, and improving irrigation facilities are formidable obstacles to agricultural expansion. Population pressure on the land is particularly acute in parts of the Sierra, where the quantity of cultivated land per inhabitant is as low as 1.2 acres.

b. Land tenure and agrarian reform

Land tenure (Figure 5) is characterized by the predominance of small subsistence farms (*mini-*

fundios) and a small number of large multifamily farms (*latifundios*). Most of the *minifundios* are located in the Sierra and are engaged in domestic food production. Farms of 250 acres or more made up only 2% of total farm units but occupied over 17% of the farm land in 1968. Included in this category are the commercial plantations in the Costa, which produce mainly export crops, and manager-operated estates in the Sierra, engaged mainly in livestock raising and food crop production. About 20% of the farms in Ecuador are controlled by absentee owners.

Although pressure for agrarian reform has not been severe, the government initiated a modest reform program in 1964. Its goals included the abolition of unfair tenancy and labor systems, colonizing public lands, subdividing and resettling government-owned estates, and expropriating and subdividing underutilized private holdings. The Institute of Agrarian Reform and Colonization (IERAC) was established as the main implementing agency. IERAC was authorized to expropriate and redistribute private land left idle for 3 years or used "inefficiently," and to set maximum size limits for all landholdings. Government bonds were to be issued as compensation for expropriated lands.

Hampered by a lack of financial resources and the organized opposition of the landed gentry, the agrarian reform program has done little to alter traditional patterns of land tenure. By 1972 less than 450,000 acres had been redistributed to 31,508 families; most of this land had been held by government agencies rather than private landowners. In addition, about 1,300,000 acres had been opened under the colonization program and some 14,500 families were settled on the new land. Perhaps the most notable achievement of the 1964 law has been

FIGURE 5. Changes in land tenure (Area in acres)

FARM SIZE	PERCENTAGE DISTRIBUTION							
	NUMBER OF FARMS		TOTAL AREA		Number of farms		Total area	
	1954	1968	1954	1968	1954	1968	1954	1968
Less than 12.5	251,686	470,347	1,080,000	1,772,500	73.0	74.2	7.2	10.2
12.5 to 24.9	36,250	68,927	878,750	1,165,788	10.5	10.8	4.5	6.7
25 to 49.9	21,400	36,228	735,750	1,213,930	6.5	5.7	4.0	7.0
50 to 124.9	19,415	32,748	1,478,750	2,545,788	5.6	5.2	9.9	13.7
125 to 249.9	8,327	15,555	1,368,000	2,441,633	2.4	2.6	9.1	13.1
250 to 1,249.9	5,787	8,467	2,800,750	4,119,700	1.7	1.3	19.2	23.8
1,250 to 2,499.9	964	922	1,161,750	1,586,385	0.9	0.2	7.8	9.1
2,500 and over	705	426	5,605,000	2,490,083	0.1	0.1	37.4	14.4
Total	344,234	633,218	14,998,750	17,344,807	100.0	100.0	100.0	100.0

the abolition of *huasipungoje*, a form of peonage under which the Indians worked on large estates in return for a small piece of land. Under the law, the Indians were given title to their land parcels and were to be paid wages for their work on the estates. To date, the government has been less successful in eliminating sharecropping and other unsalaried farm labor because such workers have been unable to make the necessary cash payments to purchase their plots.

c. Agricultural inputs and productivity

Agricultural productivity is among the lowest in the Western Hemisphere. Most of the past rise in agricultural output has been attributed to increased farm acreage, although the use of modern inputs—machinery, fertilizers, irrigation, and improved seeds—also has increased. Improved technology has been limited mainly to large estates and commercial farms. In the subsistence sector, the small size of farms, a lack of credit, and insufficient extension services have prevented large productivity gains. Infrastructure development has been held back by the very limited financial and technical resources available to the government. Among the most pressing needs are farm-to-market roads, access roads to colonization areas, and expanded irrigation facilities.

Primitive methods of sowing and harvesting prevail on the slopes of the Sierra and in parts of the Costa; oxen and hand implements are used on most farms. The use of mechanized equipment is confined to a few large farms. Consumption of chemical fertilizers has more than tripled since 1965, but their rate of use is still low and largely restricted to commercial farms. The use of insecticides is also limited mainly to commercial farms. The National Institute of Agricultural Research (INIAP) has made some progress in seed improvement—notably wheat, corn, and some other domestic crops—but yields have remained low even by Latin American standards. Poor soil management in the Sierra has resulted in widespread erosion, which has reduced productivity in some areas.

Although agricultural credit has been increasing fairly rapidly, it is still inadequate. As might be expected, a large proportion of it has been absorbed by the large commercial farms and the export sector. The lack of credit for small farmers is linked to the land tenure problem, since institutional credit is not generally available to farmers that lack clear title to their land. Despite legislation requiring private banks to invest some 15% of their deposit liabilities in the agricultural sector and despite increasing amounts of external assistance, only recently has an attempt been

made to increase credit to small farmers. The U.S. Agency for International Development (AID) has established an agricultural trust fund for this purpose to be administered by the Central Bank.

d. Principal crops

Ecuador produces both tropical and temperate crops for export and is self-sufficient in most domestic food crops. Its farm development program is designed to increase domestic food production—especially soybeans, peanuts, lentils, beans, peas, African palm, and beef—and to diversify agricultural exports. Wide variations in weather and in export prices have had a major impact on both the agricultural sector and the economy as a whole.

(1) *Export crops*—Production of the traditional export crops, bananas, coffee, sugar, and cocoa, has varied according to weather conditions and increases in planted area. Average yields have not changed markedly since 1960 (Figure 6).

The most important export crop is bananas, which supplied about half of total exports in 1971. Less than half of the banana production is exported, and the remainder is either used for domestic consumption or wasted. Output was a record 4 million tons in 1971, even though the area under banana production declined by 5% after the government launched its crop diversification program in 1967. This program has fostered a shift to the higher yielding Cavendish variety, which is more resistant to plant diseases and more readily acceptable in international markets; the lower yielding Gros Michel variety still predominates, however, in terms of total planted acreage.

Soil and climate conditions—particularly in the Provinces of Los Rios,¹ El Oro, Guayas, and Cotopaxi—would allow much higher banana production, but a mounting world surplus has limited sales possibilities. Although Ecuador remains the world's leading banana exporter, its market share has declined steadily since 1964 because of stiffening competition from Central America, Taiwan, and the Philippines. In recent years, Ecuador has offset sizable losses in U.S. and Western European markets by penetrating other areas, notably Japan; however, competition in those markets is also intensifying.

To minimize the economic impact of a potential reduction in earnings from banana sales, the government is attempting to diversify production in the major growing areas. Small producers already have been hit hard by the virtual exclusion of the

¹For diacritics on place names see the list of names at the end of the chapter.

FIGURE 6. Production and acreage of principal crops
(Production in thousands of metric tons; area in thousands of acres)

	1966		1967		1968		1969		1970		1971*	
	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area
Export products:												
Bananas.....	2,318	284	2,780	501	3,710	482	3,870	409	3,955	474	4,014	477
Coffee.....	45	270	67	514	64	472	58	520	60	531	64	529
Cocoa.....	42	346	62	662	50	625	48	563	54	503	60	505
Sugarcane**	4,951	153	9,528	204	9,820	301	9,904	306	10,075	300	10,188	311
Domestic crops:												
Potatoes.....	167	67	403	118	516	121	456	101	542	116	505	106
Corn.....	156	492	170	627	140	630	217	719	270	721	295	720
Rice.....	136	225	170	282	105	277	132	227	186	215	200	222
Beans.....	24	123	38	195	36	212	38	210	46	203	45	205
Wheat.....	58	143	70	188	84	195	94	195	81	188	70	163

*Preliminary.

**Much of the sugarcane is processed into panela (coarse brown sugar) and cane alcohol. Centrifugal sugar output amounted to 283,000 short tons in 1972, produced from 2.6 million tons of cane.

traditional Gros Michel variety from world markets. Although the African palm appears to be well-suited to the same soils and could ease the production deficit in vegetable oils, neither it nor other suitable crops would provide as much employment and income as banana production. The government is sponsoring development of a mixture of bananas and corn for sale as livestock and chicken feed.

Ecuador also has an oversupply of coffee. This commodity, which accounted for 15% of 1971 exports, is grown principally in the coastal province of Manabi on inefficient one-family farms. Over the years, coffee production has fluctuated widely, depending on weather conditions. In 1970, coffee production substantially exceeded the export quota fixed under the International Coffee Agreement, and sizable stocks accrued despite a quadrupling in sales to nonquota markets. In 1971, output remained high, while Ecuador's export quota was cut and nonquota market prices fell from their 1970 level. Although an estimated one-third of the 1972 coffee crop was lost because of bad weather, Ecuador's supplies are expected to be more than sufficient to fill its export quota of 635,000 bags.

Cocoa production in 1971 reached the near-record level of 60,000 tons; only two-thirds of the output was exported because of rising domestic consumption. Ecuador's cocoa is in strong demand in international markets because of its special aromatic flavor. Although it is very susceptible to disease, producers have been reluctant to change to new disease-resistant trees that do not yield the aromatic variety. Cocoa, which accounted for 10% of exports in 1971, is grown mainly in the coastal provinces of Guayas, Los Rios, and Manabi. With government incentives, cocoa production is expected partly to replace banana cultivation on some coastal plantations. An increasing portion of this output will be domestically processed into powdered cocoa.

Sugarcane production has more than doubled since 1960, easily keeping pace with rapidly rising domestic consumption and export demand. Sugar exports, which accounted for 5.6% of total exports in 1971, fluctuate in accordance with the U.S. sugar quota. Production costs generally are too high to permit sales outside the U.S. market, but Ecuador drew on accumulated stocks to take advantage of abnormally high world market prices in 1971. Sugar deliveries to the United States rose considerably in the first half of 1972 because of an increase in Ecuador's quota. Production of centrifugal sugar in 1972 totaled 285,000 short tons.

Pyrethrum, a flower that is dried and powdered into a natural insecticide, was introduced as an export crop

in the early 1960's. Lower world market prices and higher production costs reduced profit margins for domestic producers, leading to a sizable decrease in the area planted to pyrethrum in subsequent years. An increase in the support price paid to farmers resulted in increased plantings, but output from the young plants is small; total output in 1972 was only about 700 tons. Other minor agricultural exports include tea, fruits, mushrooms, castorbeans, and cut flowers.

(2) *Domestic crops*—Production of domestic crops—especially corn, cotton, rice, wheat, beans, barley, and potatoes—has lagged behind demand, which has increased rapidly because of the high population growth rate and rising income levels. Although some progress has been made since the mid-1960's toward increasing yields of some crops, the growth in output is largely attributable to expanding acreage.

Corn, which traditionally has been grown in the highlands, is Ecuador's most important food crop. Both the area harvested and total output reached record levels in 1971, in part because of increased plantings in the Costa and the Oriente where yields are higher. With an output approaching 300,000 metric tons, corn accounts for about one-third of all cereals consumed by the local population and has become increasingly important as a livestock feed.

Wheat production has declined as a result of two successive poor crop years. Output dropped from 94,000 tons in 1969 to 70,000 tons in 1971, requiring imports of about 100,000 tons to satisfy local demand. Production has been held down by poor weather, shortages of seed and fertilizer, and the conversion of some wheat acreage to barley for the expanding brewing industry. Imports of barley and oats are also required to supplement domestic output.

Rice production has risen sharply since 1968 as a result of higher yields from improved cultivation methods, improved seeds, and increased use of fertilizer and irrigation. Despite heavy rains in the coastal growing areas, 1972 output was expected to exceed the 1971 record of 200,000 metric tons.

Potatoes and cassava are the major root crops grown. Potato production, which is concentrated in the Sierra, exceeded 500,000 tons in 1971. Yields have increased as a result of planting improved varieties, better cultivation practices, and greater use of fertilizers and insecticides. Cassava is the basic root crop grown in the Costa; annual production averages 100,000 tons.

Production of pulses has doubled since 1962, and the area planted to beans has increased markedly. Beans, mainly common dry beans, are grown chiefly

FIGURE 7. Livestock numbers
(in thousands)

	1966	1967	1968	1969	1970
Horses, mules, and asses.....	503	510	516	521	533
Cattle.....	2,200	2,300	2,303	2,400	2,440
Hogs.....	1,260	1,276	1,204	1,300	1,330
Sheep.....	1,746	1,750	1,811	1,830	1,800
Goats.....	171	178	184	185	187
Poultry.....	5,500	5,520	5,537	5,544	5,553
Total.....	11,380	11,558	11,735	11,783	11,903

in the Sierra and are an important minor food crop. Castor beans are also being developed as a minor export crop. Cotton is an important nonfood domestic crop. Expanded acreage and improved seeds have made Ecuador almost self sufficient in cotton, but damaging rains in 1972 necessitated larger imports to supply the domestic textile industry.

e. Livestock

Despite growing demand for livestock products, particularly red meat, livestock numbers and meat production continue to increase at a very slow rate (Figures 7 and 8). The cattle population, which has been growing at an average annual rate of about 2%, is distributed among dairy farms in the Sierra and beef ranches on the coastal plains. Development of the industry has been hampered by inadequate marketing and storage facilities, animal losses from foot-and-mouth disease and cholera, and the poor quality of animal feed. Reproductive efficiency is low.

Total meat production in 1971 was estimated at only 86,000 tons, or 33 pounds per capita. Slaughtering facilities are limited, and butchering outside of licensed facilities is common. The lack of

refrigeration and canning facilities disrupts meat distribution to urban areas. Moreover, Peruvian cattle buyers have been competing with local buyers for live cattle, resulting in a rising contraband traffic. These supply constraints and a rising demand for red meat have driven prices steadily upward in the main consumption centers of Quito and Guayaquil.

A large portion of the milk supply and most of the beef are obtained from local Criollo cattle, although Zebu, Hereford, Brahman, and Holstein cattle have been imported for breeding purposes. Powdered milk is imported to supplement domestic milk production, which has generally failed to keep pace with population growth. Factors impeding the expansion of the dairy industry include the inability to transport milk over long distances, the expansion of crop cultivation at the expense of pastureland, and artificially low wholesale price ceilings.

More intensive development of the cattle industry has been the aim of three International Bank for Reconstruction and Development (IBRD) loans totaling US\$15 million. The first two loans were earmarked for improving the coastal beef cattle industry, mainly by converting banana acreage and

FIGURE 8. Livestock products
(in thousands of metric tons)

	1966	1967	1968	1969	1970
Beef and veal*	42	42	41	42	42
Mutton and lamb*	7	7	7	7	7
Pork*	21	23	24	30	35
Poultry.....	4.4	4.8	6.0	7.6	na
Milk.....	440	460	480	480	490
Eggs.....	10.1	10.2	10.2	10.2	10.2
Wool.....	2.1	2.2	2.4	2.4	2.4
Total.....	526.8	548.2	570.6	585.2	**586.6

na Data not available.

*Commercial production from indigenous animals.

**1970 total does not include poultry meat.

wasteland into pastureland. The third loan was extended in late 1970 to finance imports of quality beef and dairy cattle—mainly from the United States—as well as the creation of new pastureland. Research in livestock nutrition and management, including the development of new feeds, is being carried out by JNTAP. In addition, the government has plans for establishing cattle breeding centers and modernizing slaughterhouse facilities. It also has given high priority to developing beef cattle ranching in the upper regions of the Amazon Basin, an area that is being opened by petroleum development.

The sheep and hog populations have been increasing somewhat more rapidly than cattle. The sheep population, estimated at 2 million in 1972, is concentrated in the Sierra—about equally divided between large and subsistence farms. Improved sheep breeds have been imported from both the United States and Australia under a government development program; the first phase of this program emphasized the production of finer quality wool rather than meat. Hogs have generally been raised by small farmers for their own consumption or local sale. Commercial hog production is being stimulated by a government program that aims to raise pork consumption by increasing hog numbers by 7.5% annually from the 1970 level of 1.3 million head. Poultry numbers have gradually increased, but poor feeds and inadequate disease control have continued to take their toll of young chickens.

f. Forestry

Forestry is largely undeveloped. Much of the country's vast timber reserves are located in tropical rain forests in the Oriente and northern Costa regions, where access is difficult. These forested regions, which cover more than half of the total land area, contrast sharply with the denuded highlands of the Sierra.

Ecuador initiated a long-range program for controlled exploitation of its forest areas in 1968, when 13 timber concessions were granted on 840,000 acres in Esmeraldas Province. Under the terms of the agreements, each company was obliged to pay rental fees for the utilization of land and timber, to employ local technicians and labor, to establish integrated lumber operations, and to reforest harvested areas. In 1970, 11 of the 13 concessions were canceled because the companies had failed to initiate construction and installation of facilities within the specified time period. Despite this setback, 14 additional concessions covering 1.1 million acres were granted in neighboring areas in 1970. Prospects for accelerating the exploitation of timber resources were improved by the 1971 Law for Forestry Development, which offers tax and import incentives for investments in this sector.

The only important forest industry is sawmilling. Since the mid-1960's, the annual timber cut totaled about 850 million cubic feet, of which 70% was used as fuelwood and the remainder for construction and manufacturing. Ecuador exports balsa wood and tagna nuts as well as tropical wood products such as kapok, mangrove lumber, and cinchona bark. In July 1972, the government moved to increase domestic production of woodpulp and paper products by granting a 60,000-acre timber concession in Esmeraldas Province to a "mixed" corporation. The increased pulp and paper output should save Ecuador about US\$20 million annually in foreign exchange.

g. Fishing

The small but rapidly growing fishing industry (Figure 9) contributes about 1% of GDP. Rich fishing grounds abound off the coast, as well as in inland rivers and lakes. Ecuador claims sovereignty over waters extending 200 nautical miles from the coast and in all directions from the Galapagos Islands.

FIGURE 9. Fish catch, by species
(Thousands of metric tons)

	1966	1967	1968	1969	1970
Total	12.0	20.1	18.2	20.2	16.6
Crustaceans	9.9	7.6	8.2	10.2	7.7
Shrimp	(5.3)	(6.0)	(6.6)	(8.7)	(6.2)
Lobster	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Other	(1.4)	(1.4)	(1.4)	(1.3)	(1.3)
Herring, sardine, anchovy	8.1	8.5	21.3	23.8	35.0
Redfish, bass, conger	0.9	0.0	0.9	0.9	0.0
Mollusks	3.5	3.5	3.5	2.5	2.5
Other	16.8	16.8	17.4	29.8	20.7
Total	48.2	57.4	60.5	87.4	91.5

Foreign flag vessels are required to purchase both a permit and a license from the Fisheries Directorate in order to fish within these limits.

The annual fish catch has doubled since 1965. Fish exports—mainly shrimp and tuna—exceeded US\$18 million in 1971, supplanting sugar as the fourth-ranking export. Shrimping is confined mainly to the southern end of the Golfo de Guayaquil and to the northern coast. The annual shrimp catch averaged more than 6,500 tons between 1966 and 1970. Tuna fishing is concentrated in the area west of Guayaquil and in the waters around the Galapagos Islands. About 95% of the tuna catch, which has averaged nearly 19,000 tons annually since 1966, consists of the bonito variety.

Although 80% to 85% of the total fish catch is consumed domestically, more than half of the shrimp, lobster, and tuna catch is exported. Frozen shrimp accounted for almost 45% of the total value of fisheries exports in 1970, followed by frozen and canned tuna. Virtually all of the shrimp and a large portion of the tuna are exported to the United States. Considerable quantities of fish are processed by drying and salting. Small amounts of frozen and canned fish are sold in domestic markets, but most fish is trucked fresh from Guayaquil and other coastal areas for daily sale. Several small canneries along the coast also process mackerel and herring for domestic sale. In addition, waste from tuna canning is used in producing fishmeal, the output of which totaled some 7,000 tons in 1970.

Although Ecuador is slowly improving its fishing fleet, the large capital requirements involved have made progress slow. The government has borrowed US\$5.3 million from the IBRD for the construction of

modern tuna boats, and various foreign governments have offered technical assistance for the fishing sector. In 1972, the government was seeking international bids for a new \$20 million fishing complex.

2. Fuels and power

Most thermal energy for industrial and commercial use is obtained from petroleum products. The exploitation of substantial petroleum reserves, discovered in the Oriente in 1967 by a Texaco-Gulf consortium, will enable Ecuador to meet growing domestic needs and become a major petroleum exporter. Increased petroleum availability is expected to make electric power cheaper and more plentiful. Ecuador has no developed coal or natural gas reserves and has only begun to tap its hydroelectric power potential. As in many other Latin American countries, fuelwood is widely used to meet household fuel requirements.

a. Petroleum

Petroleum production was initiated in the 1920's in the coastal region of Peninsula de Santa Elena. Until the mid-1950's, domestic crude output was sufficient to meet consumption requirements; only marginal imports of special finished products were required. In the early 1960's, however, the depletion of known reserves accelerated, and petroleum demand outpaced production gains. After 1965, domestic crude output steadily declined (Figure 10).

The situation has changed markedly, however, as a result of Texaco-Gulf's oil discoveries in the northeast jungle region. Estimated reserves now stand at 5 billion to 6 billion barrels, although this figure

FIGURE 10. Petroleum production and supply
(Millions of 42-gallon barrels)

	1966	1967	1968	1969	1970	1971	1972
Crude output.....	2.50	2.20	1.70	1.57	1.45	1.33	*26.0
Crude imports.....	3.18	3.90	5.00	6.10	7.27	8.36	na
Total.....	5.77	6.10	7.36	7.73	8.72	9.69	na
Crude processed domestically:							
Gasoline.....	2.10	2.28	2.78	2.75	3.10	3.49	na
Residual fuel oil.....	1.50	1.55	1.00	2.11	2.33	3.02	na
Diesel oil.....	1.05	1.20	1.49	1.53	1.81	2.01	na
Kerosene.....	0.48	0.50	0.57	0.62	0.49	0.30	na
Other derivatives and refinery losses.....	0.58	0.57	0.62	0.69	0.96	0.87	na
Total.....	5.77	6.10	7.36	7.73	8.72	9.69	na

na Data not available.

*Estimated.

presupposes relatively successful exploratory drilling by six other consortia in neighboring areas. Natural gas pockets have also been discovered by Texaco-Gulf and another U.S. consortium operating in the Golfo de Guayaquil. If further drilling reveals deposits large enough for commercial production, the government plans to develop liquefied gas exports.

Texaco-Gulf has invested some US\$300 million in the development of its 1.2 million-acre concession, half of which went toward the construction of a pipeline over 300 miles long across the Andes to the Pacific port of Balao, near Esmeraldas. The pipeline was completed in late June 1972, and exports began in mid-August. The pipeline is expected to reach a capacity of 250,000 barrels per day (b.p.d.) in 1973.

The Ecuadorean Government is depending on oil revenues to ease its chronic financial problems. Under the tentative financial arrangements carried over from the Velasco regime, government revenues from the petroleum sector are expected to reach some US\$100 million in 1973, the first full year of crude exports; this figure is equal to three-fifths of total 1971 revenues. Moreover, net foreign exchange earnings from the petroleum sector would total some \$130 million, equal to more than half of total 1971 exports. The primary role as a source of both government revenue and foreign exchange should continue through the 1970's whether or not glowing multiple projections are realized.

With the pipeline completed, the new government has moved to increase its share of petroleum royalties and gain more control over the industry's operations. In June 1972, it retroactively applied to the oil exploration contracts the very restrictive 1971 Hydrocarbons Law, which provides for the reversion of acreage and surface rights and royalty payments. Moreover, existing concession contracts are to be rewritten to conform to the "association principle"; these revised contracts are to be signed with the newly established Ecuadorean State Petroleum Corporation (CEPE) to give the state a direct share of profits. The government has also established tax reference prices and a system for the surrender of foreign exchange received from petroleum exports.

While Texaco-Gulf has indicated that it could probably live with the new regulations, many of the other companies are still engaged in exploratory drilling and thus far have been much less successful in finding oil. Facing higher risks and production costs, some companies have already relinquished their concessions; others may follow if the government opts for a nationalistic petroleum policy rather than one that would attract foreign capital. Representatives of

some companies are hopeful that a mutually satisfactory agreement will emerge from ongoing negotiations as Ecuadorean officials gain practical experience in oil matters.

Each of Ecuador's three refineries has an input capacity of more than 36,000 b.p.d. and produces a variety of petroleum products; nevertheless, the country imports 33,000 to 50,000 barrels of petroleum products per month. The government has selected nine firms to bid on a planned 50,000 b.p.d. refinery at Esmeraldas, which could go onstream by the end of 1975. It is also considering building a refinery at Quito with a 35,000 b.p.d. capacity to supply the Sierra region. Residual products would be used to generate electric power in the area.

In June 1972, the Ecuadorean Oil Tanker Company (FLOPEC) was formed in a joint venture with Kawasaki Kisen Kaisha of Japan. The Japanese firm will supply ships, equipment, and personnel. The ultimate goal is to transport 50% of Ecuador's oil exports in domestic tankers.

b. Electric power

The development of the electric power industry has been slow and has not kept pace with national requirements. Stimulated by oil industry needs, the demand for electricity has grown rapidly. Failure to expand generating facilities in the near future would impose a significant constraint on the country's economic growth. At the end of 1971, installed capacity was estimated at about 320,000 kilowatts (kw.) and production was slightly more than one billion kilowatt-hours (kw.-hr.). Of the total electric power capacity, nearly 60% is thermal and 40% is hydroelectric. Per capita consumption (excluding plant use and losses) is estimated at 155 kw.-hr., one of Latin America's lowest. Only about 40% of the population is served with electricity.

Industry is the principal consumer of electricity, accounting for 40% of national consumption. Other major groups of consumers include households (34%), commercial (13%), and public services and street lighting (13%). Major consumption areas are Guayaquil (46%), Quito (30%), and, to a much lesser degree, Cuenca and Manta.

Electricity is generated by public utility installations (88%) and privately owned powerplants (12%). The power industry is loosely organized and is composed of about 60 enterprises that operate the largest plants (100-kw. and above), and other enterprises which own smaller installations. There are only two major public electric power companies: Quito Electric Company (EEQ) serves Quito and

vicinity, and Electric Company of Ecuador (EMELEC) serves the Guayaquil area. Together, these two companies account for 68% of national capacity and 78% of total output.

The largest powerplants are an old 57,000-kw. steam and diesel plant and a new 35,000-kw. steam plant, both in Guayaquil, and a 40,000-kw hydroelectric plant serving Quito. In addition to these, there are hundreds of small plants that supply communities and industry, but they are generally overloaded and poorly maintained. Transmission systems are few and are not interconnected, and distribution facilities are adequate only in the major urban centers. Some small towns and villages have little or no electricity. There is no international exchange of electricity with neighboring countries. Electricity is 1- and 3-phase, 60-cycle, 120/240- and 120/280-volt alternating current.

A state-sponsored organization, the Ecuadorean Electrification Institute (INECEL), was created in 1961 to implement the national electrification program. INECEL's major functions are to formulate and execute all phases of planning and financing of electric power development and to regulate electricity rates in the country. Equipment for the construction of power facilities is imported from the United States, the United Kingdom, Japan, West Germany, and Poland. Electric power development is financed mainly by loans from the Inter-American Development Bank, the International Development Association, the Export-Import Bank, and other foreign financial agencies. In 1972, the Inter-American Development Bank granted a US\$27.7 million loan for use by INECEL, and the International Development Association loaned \$6.8 million to EEQ for power development in the Quito area.

Expansion of electric power facilities is directed by the National Electrification Program (1972-76), which calls for a significant increase in hydroelectric capacity, a modest increase in the thermal base, and a general improvement in the transmission and distribution systems. The goal is to interconnect most of the larger companies and to place the small, inefficient plants on standby. The increase in electric power capacity during the 5-year period is projected at about 12% annually. Abundant waterpower resources from rivers originating in the Andes are a determining factor in the designing of major hydroelectric projects; four powerplants with a total capacity of about 300,000 kw. are to be built along these rivers. Diesel and gas-turbine plants, with sizes ranging between 2,000 kw. and 20,000 kw., are planned for major and

secondary towns to help in peak load periods. By 1976, total generating capacity is expected to reach 640,000 kw., even with the closing of many old and inefficient installations having a combined capacity of 58,000 kw. The program's other major objectives include the building of new substations, constructing about 1,700 kilometers of transmission lines to link the major consumption centers, and extending the distribution network to new consumers.

3. Metals and minerals

Mineral deposits are small and frequently of unsatisfactory quality. Output consists of small quantities of gold, silver, copper, titanium, cadmium, lead, and zinc ores. Precious metals are used in domestic handicraft industries, but other ores are exported because Ecuador lacks smelting and refining facilities to process them. The value of gold production declined sharply, from US\$687,000 in 1958 to about \$415,000 in 1971. During the same period, the value of copper ore production increased from \$28,000 to about \$553,000.

Because in other countries the Andes Mountains have proven to be rich in minerals, the government has undertaken a comprehensive mineral survey of Ecuador's rugged mountain regions. The United Nations has also sponsored mineral exploration in Ecuador. In 1967, the U.S.-owned Union Carbide Exploration and Mining Corporation was given a concession in Esmeraldas Province for gold exploration. Hematite iron ore was discovered by the Ecuadorean Metallurgical Company in Cotopaxi Province in 1967, and a mining concession was granted to the firm. Under a 1970 joint-venture agreement, a Japanese consortium has been developing copper and molybdenum deposits in Azuay Province. After 2 years of preliminary work, however, the Japanese reportedly have decided to abandon the project, possibly because of uncertain world market conditions and the relatively low metal content of the ore. Reports of uranium deposits circulating in early 1973 suggest that exploitation of that ore may be possible sometime in the future.

Clay, ocher, salt, limestone, gypsum, and sulfur are the only nonmetallic minerals produced. Increasing world market prices for sulfur in the late 1960's stimulated interest in mining volcanic sulfur, and several projects were undertaken involving deposits in Carchi Province near the Colombian border and on Isla Isabela in the Galapagos Islands. FERTISA, the domestic fertilizer firm, opened the Tixan sulfur mines in 1967 to produce sulfuric acid for its operations.

4. Manufacturing

Manufacturing output increased at an average annual rate of about 5½% during 1961-69, and then growth accelerated to 10% yearly in 1970-71. The manufacturing sector employs about 13% of the labor force—approximately the same share as in 1960—and has increased its contribution to GDP from about 15% in 1960 to slightly more than 17% in 1971. Although more than one-third of the manufacturing output is still produced by small, inefficient artisan enterprises, factory production has expanded and diversified significantly. Manufacturing employment is still heavily concentrated in the handicraft sector, however, and Ecuador remains seriously deficient in skilled labor and managerial talent.

The 1957 Industrial Promotion Law has been modified several times in order to strike a balance between efforts to increase government revenues and attempts to accelerate industrial development, and, more recently, to shift the emphasis from import substitution industries to those with an export potential. Although frequent modifications in the law have contributed to an uncertain investment climate, government incentives have helped to increase manufacturing investment (Figure 11). The Industrial Development Center of Ecuador (CENDES) has also helped to promote and advise new industries.

Artisan industries producing shoes, clothing, textiles, furniture, jewelry, and various other handicraft items still contributed over a third of total manufacturing output in 1971 (Figure 12). These family shops benefited marginally from the 1965

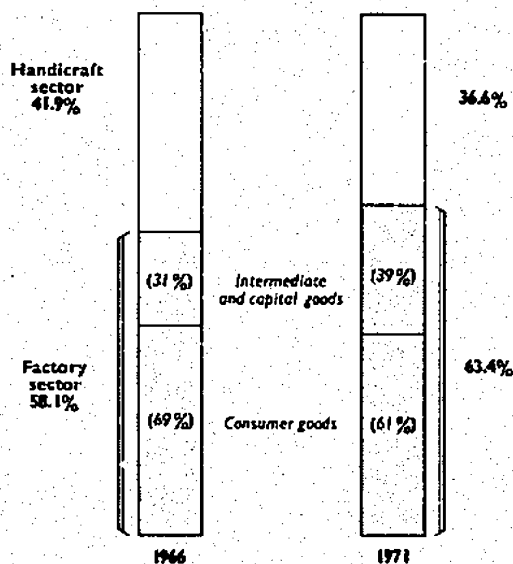


FIGURE 12. Sectoral distribution of manufacturing output

Artisan and Small Industry Promotion Act, which granted them tax exemptions for imports of raw materials and capital goods. More recently, the government established a special marketing agency to sell handicraft items to tourists and to promote overseas sales. Factory production has traditionally been concentrated in food processing, beverages,

FIGURE 11. Total new investment registered under the Industrial Promotion law (Values in millions of sucres)

	TOTAL INVESTMENT	DOMESTIC CAPITAL		FOREIGN CAPITAL	
		Value	Percent	Value	Percent
1957	52,036	30,812	58	22,124	42
1958	41,309	40,070	97	1,230	3
1959	102,832	90,232	89	12,000	11
1960	63,473	63,473	100	...	...
1961	69,091	40,093	70	20,898	30
1962	127,405	122,235	96	5,240	4
1963	135,217	100,807	74	34,410	26
1964	290,610	231,108	80	59,502	20
1965	309,088	226,605	73	82,483	27
1966	175,220	90,535	52	84,685	48
1967	175,748	133,175	75	42,573	25
1968	181,785	170,110	98	2,655	2
1969	318,131	214,550	67	103,581	33
1970	166,269	98,542	59	67,727	41

... Not pertinent.

textiles, and petroleum derivatives. During the past few years, however, new factories have been set up to produce electrical appliances, glass products, paper, automobile tires, plywood, and other goods.

Food processing and beverage production constitute the most important branch of manufacturing, employing about 35% of the factory labor force and contributing 35% of value added by the factory sector in 1971 (Figure 13). This branch supplies all domestic food and beverage requirements except for some fats and oils and powdered milk. Many of the plants engaged in food processing are small farm or family operations that utilize mainly hand labor. A number of modern plants are in operation, however, in such activities as sugar and flour milling, processing of fats and oils, brewing, and bottling of nonalcoholic beverages. Fish canning and powdered cocoa are important new industries with a significant export potential.

Sugar, wheat, and rice milling are the major food processing activities. Two large sugar mills near Guayaquil account for about 75% of the total output of raw and white sugar, estimated at 285,000 short tons in 1972. Current efforts to expand and modernize refining facilities include a trouble-plagued plant being built by a French firm; this plant is to have the largest refining capacity in the country when it goes

into full production. Some 25 flour mills, with a total daily milling capacity of 830 tons, process both domestic and imported wheat. The two largest mills, with daily capacities exceeding 200 tons, are located in Guayaquil. Most of Ecuador's 600 rice mills are small and are scattered throughout the Costa. They produced only 105,000 tons of milled rice in 1971.

Ecuador relies principally on African palm as a domestic source of vegetable oil. Plants located in Guayaquil and Manta process some 10,000 tons annually of crude vegetable oil of all types. Fish oil output is becoming more important and is expected to reach 1,500 tons in 1972. About 17,000 tons of lard are also produced and consumed on small farms.

The meat packing and canning industries have begun to expand as refrigeration facilities are introduced, but production has been confined largely to canned liver, fish, ham, meat pastes, and hash. The total output of milk products amounted to 490,000 metric tons in 1970. Relatively modern milk pasteurization facilities in Quito, Guayaquil, and Latacunga provided about one-third of the milk consumed domestically in 1968; in addition, two firms produce small amounts of powdered milk. Nevertheless, large amounts of processed milk—including powdered milk under U.S. P.L. 480—must be imported to maintain consumption at its low per capita average of about 50 quarts annually.

FIGURE 13. Composition of manufacturing output

	VALUE ADDED		PERCENT	
	1966	1971	1966	1971
	<i>Millions of 1960 sucres</i>			
Total manufacturing output.....	2,781	3,070	100	100
Handicraft sector.....	1,185	1,452	41.9	36.6
Factory sector.....	1,616	2,518	58.1	63.4
Total factory output.....	1,616	2,518	100	100
Consumer goods.....	1,118	1,540	69	61
Food products.....	518	590	33	24
Beverages.....	107	275	10	11
Textiles.....	215	283	13	11
Clothing.....	10	32	1	1
Tobacco.....	22	26	1	1
Other.....	180	334	11	13
Intermediate & capital goods.....	498	978	31	39
Petroleum products.....	117	272	7	11
Chemical products.....	120	230	8	9
Metal products.....	111	213	7	9
Transport equipment.....	18	31	1	1
Other.....	123	232	8	9

Textile manufacturing is the second-ranking manufacturing industry, employing 22% of the factory labor force in 1968 and accounting for 11% of the value added by factory production in 1971. Total capacity has been expanded to approximately 150,000 spindles and 4,000 looms. Although the industry is largely dependent on domestic cotton and, to a lesser extent, on domestic wools, imported synthetic fibers are becoming increasingly important. The largest textile plant—The International Company, Quito—is carrying out a US\$12.2 million program to modernize its facilities and expand its production capacity. Clothing manufacture is still largely an artisan enterprise and contributes little to total factory output.

The chemical industry contributes about 9% of total value added by factory-type manufacturing, but it still imports a considerable proportion of its raw materials. Chief products include paints and varnishes, soaps, insecticides, and fertilizers for the local market. Some surplus pharmaceutical products are available for export, mainly to Colombia. The Ecuadorean Pharmaceuticals and Industrial Laboratories Company (LIFE) and FERTISA, the fertilizer-mixing plant, are two prime examples of chemical firms that have been established as a result of the incentives offered under the Industrial Development Law. Future development of the petrochemical industry will depend on the Andean Pact Sectoral Program of Industrial Development, which calls for the assignment of complete manufacturing complexes to individual countries or groups of countries. The expanding domestic metalworking industry was the first to come under a sectoral program, and one drill bit plant has already been assigned to Ecuador.

Other rapidly growing industries include wood and paper products, building materials, rubber products, and the assembly of household appliances. The output of portland cement has increased from less than 200,000 tons in 1960 to more than 460,000 tons in 1971. The total output of rubber tires and tubing has more than doubled since production was initiated in 1964. Small factory operations also assemble various types of equipment, ranging from consumer durables to transport machinery.

5. Construction

Construction activity grew about 7% annually during 1961-69, reflecting mainly work on new manufacturing facilities and various public works projects. In the following 2 years, however, construction activity almost doubled, and in 1971 it contributed 8% of GDP. This spurt in construction

activity resulted largely from the development of the eastern oilfields and, to a lesser extent, a boom in new housing starts.

Petroleum development has involved construction of a highway network along the pipeline and among the oilfields in the Oriente. These new roads have opened up a vast area for agricultural development. Foreign oil companies have been responsible for financing the pipeline, which alone cost about US\$150 million, and much of the roads and other new infrastructure required to support their operations.

Housing construction in the larger cities also has reached boom proportions, largely because of greater credit availability. Low-income housing remains in very short supply, however, because of rapid population growth and rural-urban migration. At the end of 1968 it was estimated that 60% of Ecuador's 1.1 million housing units were "incomplete" and another 25% were "technically uninhabitable." Upward of 40,000 units are required annually just to meet normal population growth. The large public investments needed to help fill the widening housing gap probably cannot be financed until new oil revenues become available.

Public sector projects that have benefited from foreign loan financing include new water supply systems and road construction. Several of the larger cities are also undertaking projects to improve drinking water and sewerage facilities. Construction has also begun on a national highway system financed in large part by joint AID-IDB-IBRD loans. Work on other public sector projects, such as railroad rehabilitation and port construction, generally has moved slowly because of a lack of funds and skilled administrative and technical personnel. A new US\$19 million port has been built at Guayaquil, however, and a \$20 million loan from a Belgian-West German group is being used to finance rails, rolling stock, and the construction of an oil pipeline to relieve railroad congestion.

6. Domestic trade

Despite its small size, Ecuador does not have one integrated market but a number of separate markets linked by an inadequate transportation network. Development and maintenance of this network are complicated by the rugged terrain and by frequent landslides during the rainy season. The country's wholesale and retail trade is dominated by Quito and Guayaquil, the two main population and manufacturing centers. In addition, most of the financial, transport, and other marketing institutions are based

in those two cities. Guayaquil also serves as the principal distribution point for most imports. Goods are transported inland by truck and, to a lesser extent, on the state-owned railroad system.

Other regional centers of commercial activity include Manta, Esmeraldas, Machala, and Portoviejo in the Costa, and Cuenca, Loja, Riobamba, and Ambato in the Sierra. Almost all of the all-weather roads are in these two regions, while in the Oriente the road system is only beginning to be developed. In the Costa, many population centers are located on rivers or on the ocean, and much transport is by water. Barges, tugs, and rafts handle the bulk of the river traffic.

The marketing system for the manufacturing sector is generally adequate in terms of storage and handling facilities, but the agricultural sector suffers from comparatively inefficient marketing methods, a lack of refrigeration, and an inadequate distribution system. Farm storage facilities are meager, and except for wheat and rice there is little large-scale, modern warehousing of foodstuffs. Ecuador's development plan calls for constructing modern storage and slaughterhouse facilities, establishing uniform grades and standards, building connecting roads between producing areas and market centers, and developing cooperative marketing associations for the benefit of small producers.

Most rural Ecuadoreans participate only marginally in the money economy. Many rural inhabitants still produce their own food, clothing, and other basic necessities. Market activity in rural areas is characterized by small retail stores, market days, and regional fairs. In the larger cities, consumer goods are sold in a diverse array of outlets, including modern supermarkets, small specialty shops, street stalls, and outdoor markets.

C. Economic policy and development

1. Policy

The takeover of the government by military authorities in 1972 was prompted, at least in part, by their determination to direct the large anticipated oil revenues into the country's economic development, a course that they did not expect the civilian politicians to follow. The Rodriguez junta has declared itself to be "nationalist revolutionary," implying at least surface parallels with its Peruvian counterpart. It appears committed to agrarian and tax reforms, invigorating the public banking sector, and increasing state participation in basic industries such as steel, cement,

and petroleum. Thus far, however, the regime has proceeded cautiously. In the domestic sector, private investment is viewed as the key growth element, and little has been done to modify the conservative, land-based power structure. In the event of a shift to a more populist and nationalist stance, foreign oil companies and, to a lesser degree, local moneyed classes provide the most visible targets for government action.

a. Government participation in the economy

By Latin American standards, government economic intervention is limited. The government influences economic activity through its public investment expenditures, credit allocations, and tax policies, but outright state ownership is not extensive. The public sector as a whole accounts for well below 20% of GDP. The more important state enterprises include the State Railways Enterprise, the Ecuadorean Electrification Institute (INECEL), the Ecuadorean State Petroleum Corporation (CEPE), the National Housing Bank, the telephone companies of Quito and Guayaquil, Ecuadorean Air Transport (TAME), the National Vital Products Company (ENPROVIT), the Industrial Development Center of Ecuador (CENDES), the Institute of Agrarian Reform and Colonization (IERAC), and the State Alcoholic Beverage Enterprise.

b. Public finance

In addition to the central government, the public sector includes provincial and municipal councils and a large number of decentralized agencies and autonomous entities. The central government traditionally has collected only about 50% of total public sector tax revenues and accounted for only about 40% of total expenditures. In an effort to increase central government supervision and coordination of public sector financial operations, the National Participation Fund (NPF) was established in 1971 to receive and channel funds previously earmarked for specific public agencies. NPF now distributes funds to some 20 provincial councils, more than 100 municipalities, several government ministries, and some 60 decentralized institutions. Despite this significant consolidation in financial operations, many taxes and expenditures remain outside central government control. Half of the 1973 petroleum royalties, for example, may be earmarked for armed forces' use without passing through the budget.

Central government revenues almost doubled between 1967 and 1971 and amounted to 12% of GDP in 1971 (Figure 14). In 1970, the government

FIGURE 14. Central government revenues and expenditures
(Millions of sucres)

	1967	1968	1969	1970	1971
Revenues:					
Taxes:					
Taxes on income and property	318.9	333.4	408.2	587.0	765.4
Taxes on foreign trade (nonpetroleum)	1,420.9	1,530.7	1,520.3	2,018.0	2,280.4
Taxes on domestic trade	270.9	295.7	383.5	610.9	906.8
Other taxes	147.9	148.2	203.2	192.0	200.1
Total taxes	2,156.6	2,308.0	2,513.2	3,407.9	4,248.7
Of which: Noncash tax receipts	0	0	0	4.5	354.7
Total cash tax receipts	2,156.6	2,308.0	2,513.2	3,403.4	3,894.0
Nontax cash revenues	216.0	319.1	411.6	310.4	207.7
Of which: Petroleum and mineral revenue	(14.0)	(9.4)	(214.2)	(58.2)	(8.1)
Total cash revenues	2,372.6	2,527.1	2,924.8	3,713.8	4,101.7
Total, including noncash receipts	2,372.6	2,527.1	2,924.8	3,718.3	4,456.4
Expenditures:					
Current expenditures:					
Wages and salaries	na	821.8	940.1	1,182.8	1,247.0
Purchases of goods and services	na	78.8	55.3	69.9	50.6
Other (including defense)	na	660.8	748.4	931.4	918.1
Interest payments	na	328.7	387.1	572.8	631.1
Other transfers	na	736.2	741.0	922.0	910.2
Total current	1,858.3	2,626.3	2,871.9	3,678.9	3,757.0
Capital expenditures:					
Fixed capital formation	na	400.6	523.5	508.1	748.4
Purchases of real assets	na	0	0	0	5.1
Capital transfer payments	na	204.5	224.9	381.9	485.4
Others	na	102.7	66.4	27.9	60.6
Total capital	555.1	707.8	814.8	977.9	1,299.5
Total expenditures	2,413.4	3,424.1	3,686.7	4,656.8	5,056.5
Deficit	-20.2	-897.0	-547.7	*-943.0	*-954.8

na Data not available.

*Computed from cash receipts and expenditures only.

established a value-added tax on domestic transactions and an *ad valorem* export tax, both of which have contributed to revenue growth. Import taxes remain the largest revenue source, however, contributing more than half of total tax revenues in 1971. Income and property taxes provide less than one-fifth of revenues. Revenue composition in 1972 and beyond will shift dramatically because of the initiation of oil exports. New petroleum revenues in 1973—the first full year of exports—are expected to equal more than three-fifths of the government's total revenues in 1971.

Since 1967, central government expenditures have increased even more rapidly than revenues, resulting in large deficits (Figure 15). Because prospects for large-scale petroleum revenues created strong pressure

for increased central government spending long before exports were initiated, expenditures increased at an annual rate of more than 20% during this period. In 1971, the central government's cash deficit amounted to 955 million sucres (over US\$37 million), equal to 19% of expenditures. In the mid-1960's, large central government deficits were often offset by surpluses in the rest of the public sector, but since 1968 the public sector as a whole has run a deficit. Deficit financing has entailed increased recourse to inflationary borrowing from the Central Bank.

Wage and salary payments and transfers to the rest of the public sector account for the bulk of central government current expenditures. Capital expenditures also have increased rapidly, and in 1971 exceeded 25% of total expenditures. The Ministry of

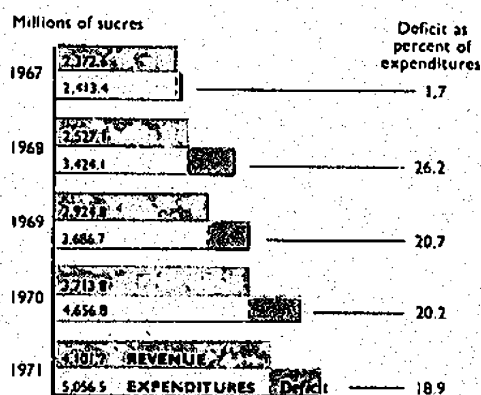


FIGURE 15. Central government deficit

Education and the Ministry of National Defense together account for some 55% of total operating expenditures. The Ministry of Public Works and Communications spends the largest share of investment funds, but expenditures for health and education are also scheduled to increase.

During its early months the Rodriguez government pursued austerity policies to stem the deteriorating fiscal situation. Its 1972 program, formulated after consultation with the International Monetary Fund, held the deficit to US\$40 million, financed entirely by a U.S. commercial bank loan, thus averting inflationary borrowing from the Central Bank. The 1973 budget provides for a 17% increase in expenditures and a deficit of 328 million, despite a great expansion of petroleum revenues.

c. Banking, money supply, and prices

The financial system consists of the Central Bank, the National Development Bank, 19 private commercial banks, and various specialized official and private financial intermediaries. Although the activities of the nonbank financial intermediaries—principally the savings and loan associations—have expanded, the banking system retains 97% of private financial savings. Within the banking system, private banks hold about two-thirds of private savings. Central Bank private holdings include forced savings in the form of prior import deposits.

Although the banking system is well established, economic development has been impaired in past years by the lack of a well-developed capital market. Short-term credit has always been readily available to

established firms from commercial banks under normal conditions, but medium- and long-term investment financing was difficult to obtain. To alleviate this problem Ecuador established during a single decade the National Financial Corporation, the National Development Bank, the Ecuadorean Development Finance Company, and two stock exchanges.

The focal point of the banking system is the Central Bank, which is primarily responsible for carrying out the monetary policies established by the government. The bank's more important functions include servicing the public debt, collecting advance import deposits, extending loans and rediscounts to the banking system, and undertaking open market transactions. The National Development Bank is a state-owned institution engaged primarily in agricultural credit. Also financing agriculture is the Agricultural Bank, a private institution owned by agricultural associations. Its accounts are consolidated with those of the commercial banking system. The Ecuadorean Development Finance Corporation (COFIEC), a private bank that began operations in 1966, finances investments primarily in manufacturing but also in construction, transportation, and agriculture.

Two official nonbank financial intermediaries were established in the 1960's to improve the flow of investment funds. The Ecuadorean Housing Bank was set up in 1961 to promote development of savings and loan associations for financing home ownership. The National Financial Corporation (CFN) was organized in 1964 to stabilize the market for public sector bonds, but in more recent years it has been engaged primarily in financing domestic manufacturing firms.

Of the 19 private commercial banks operating in Ecuador, four are foreign-owned. At the end of 1971, there were 50 commercial bank branches throughout the country; Quito and Guayaquil are by far the major banking centers. In 1970, stock exchanges were established in those two cities, although trading in private corporate stocks is limited.

Monetary policy in Ecuador is directed by a nine-man monetary board, but the Rodriguez government has restricted its voting membership to three members plus a government-appointed chairman. The monetary authorities have traditionally utilized changes in legal reserve requirements, interest and rediscount rates, and advance import deposits to counter economic fluctuations. Portfolio ceilings were introduced in 1970, and a rudimentary kind of open-market operation was authorized in 1972.

FIGURE 16. Money supply
(Millions of sucres)

	1967	1968	1969	1970	1971
Money supply.....	3,281	3,845	4,361	5,428	6,058
Currency in circulation.....	(1,371)	(1,561)	(1,702)	(2,273)	(2,312)
Demand deposits.....	(1,910)	(2,281)	(2,659)	(3,155)	(3,716)
Quasi-money (includes time deposits and advance import deposits).....	3,717	4,530	5,345	6,355	6,952
Total money and quasi-money.....	6,998	8,375	9,706	11,783	13,010
Money supply as a percent of GDP.....	13.1	14.0	14.1	15.3	14.5
Annual percentage increase in money supply.....	11.9	17.2	13.4	24.5	11.6

Before 1968, increases in domestic liquidity had resulted mainly from favorable export performance and Central Bank purchases of foreign exchange. More recently, however, government deficit financing has been mainly responsible for the sometimes excessive rate of money creation (Figure 16). Although money supply as a share of GDP rose from 12% to 14% during the 1960's, in most years monetary expansion had little inflationary impact. Price increases averaged a remarkably low 3 1/2% annually during 1961-69 (Figure 17). In 1970, money supply increased by almost 25% and was largely responsible for a jump in prices of almost 11%. Monetary expansion was held to less than 12% in 1971, but prices continued to climb at about a 6% rate.

Total domestic credit has been increasing at about 15% annually. Reflecting the large fiscal deficits incurred by the central government, the destination of bank credit has changed drastically. In 1971, the central government accounted for 40% of the increase in credit (Figure 18). In that year, outstanding credit to the central government totaled almost US\$120 million—sixfold that of 1967 and equivalent to nearly one-fourth of total domestic credit outstanding.

In 1972, the Rodriguez government imposed a financial stabilization program that reduced domestic liquidity considerably. Nonetheless, growing domestic

FIGURE 17. Percentage changes in cost-of-living index*

YEAR	TOTAL	FOOD	HOUSING	CLOTHING	OTHER
1961-65..	3.2	3.1	3.9	1.2	2.0
1966.....	10.6	11.9	7.5	4.0	8.9
1967.....	2.2	4.4	-1.8	2.1	6.6
1968.....	2.0	4.6	-0.8	-1.0	-1.7
1969.....	5.0	6.6	4.6	10.8	2.8
1970.....	10.8	7.9	13.4	15.7	12.4
1971.....	5.8	6.4	5.5	6.7	4.1

*Average of the indexes for Quito and Guayaquil weighted by population.

demand for foodstuffs and other essentials led to further price increases at a mere moderate pace throughout 1972. In addition to the continuing efforts of the National Vital Products Company (ENPROVIT) to keep prices down, the new government relied for a time on police inspections and stiff penalties for speculators. The campaign against speculators succeeded only in temporarily driving certain items off the market.

2. Development planning and investment

The Ecuadorean military has a strong penchant for planning. The 1963-66 military regime undertook Ecuador's first experiment in development planning, but subsequent civilian governments did not follow through on these initial efforts. The Rodriguez government upon assuming power in February 1972, immediately issued a Plan of Action and commissioned a National Planning Board to draft a 5-year economic plan, which was prepared by December 1972. The plan embodies a highly optimistic assessment of financial resource availability.

The military government, as a "nationalist revolutionary" force, has committed itself to promoting social justice and more rapid economic growth. Like its Peruvian counterpart, however, it has discovered that programs to achieve these fundamental goals sometimes conflict and that priorities have to be established. The Plan of Action envisages a more active role for the "new Ecuadorean man" in the community and for the state in the economy. Land and tax reform are at the forefront of government efforts to redistribute national income and to incorporate more Ecuadoreans into the money economy. The state's role encompasses both economic planning and direct participation in certain state-owned companies and joint ventures. The primary responsibility for achieving the economic goals of the plan clearly rests with the private sector, but with

FIGURE 18. Changes in bank credit
(Millions of sucres)*

	1967	1968	1969	1970	1971
By origin:					
Central Bank.....	-20	678	904	1,310	813
Private commercial banks.....	675	782	208	770	870
National Development Bank.....	61	41	76	-58	125
Interbank float.....	23	37	-15	-2	75
Total.....	730	1,538	1,263	2,020	1,919
By destination:					
Public sector (net).....	-237	401	540	445	773
Central government (net).....	(-181)	(516)	(506)	(567)	(780)
Rest of public sector (net).....	(-56)	(-115)	(43)	(-122)	(-7)
Private sector.....	645	878	567	1,130	704
Unclassified assets (net).....	209	222	102	438	307
Interbank float.....	23	37	-15	-2	75
Total.....	730	1,538	1,263	2,020	1,919
By method of finance:					
Liabilities to private sector.....	881	1,367	1,348	1,926	1,130
Net international reserves (increase -).....	-152	161	-81	45	702
Medium- and long-term foreign liabilities.....	1	10	-4	-56	20
SDR allocation.....	....	....	....	105	88
Total.....	730	1,538	1,263	2,020	1,919

*In August 1970, the sucre was devalued 28%.

government support in the form of investments in basic infrastructure, tax and other incentives, and increased credit availability on a selective basis.

The most important task facing the new government is to allocate the financial resources that will accrue from petroleum exploitation. If current spending is controlled, the increasing oil revenue will permit a substantial increase in public capital formation. After a 15% annual increase during 1967-70, public investment declined by almost 6% and accounted for less than one-fifth of total investment in 1971. Government plans call for substantial investments in electric power, roads, irrigation, and other infrastructure required to stimulate complementary private investment activity. In addition, a significant portion of its new resources is to be channeled into agricultural programs that should generate employment and provide a regular flow of raw materials for agriindustry. The IBRD estimates that project commitments from international agencies should average US\$80 million annually in 1973-76, necessitating a concomitant increase in domestic counterpart funds.

Private capital formation has been the most dynamic force in investment growth since the late 1960's. Sparked by large capital inflows from foreign oil companies, private capital formation increased an

average of 28% annually during 1967-70 and then jumped 64% in 1971—the year in which Texaco-Gulf invested the bulk of the US\$150 million required to construct the trans-Andean pipeline. Largely as a result of petroleum industry investments, the share of foreign capital in total fixed capital formation rose from an average of 16% during the 1961-66 period to 51% in 1971 (Figure 19).

At the end of 1970, direct foreign investment totaled US\$246 million, 78% of which was from U.S. sources. Of the U.S. share, nearly 60% was in the petroleum sector and the remainder in manufacturing (21%), transportation and utilities (13%), and commerce (7%). In addition to Texaco-Gulf, major U.S. investors include Dow Chemical, General Tire, International Paper, and Boise Cascade. The United Kingdom held more than half of direct investment from non-U.S. sources. The small size of the domestic market limits possibilities for foreign investment, but government policies and the degree of political stability will be more important factors over the next few years.

3. Manpower

The labor force in 1971 comprised about 2 million persons, or 31% of the total population. Because of the high birth rate, about half of the population is under

FIGURE 19. Gross domestic investment
(Millions of 1960 sucres)

	1967	1968	1969*	1970*	1971**
Fixed capital formation.....	2,275	2,775	3,276	4,196	6,009
Public.....	(861)	(932)	(1,103)	(1,237)	(1,163)
Private.....	(1,411)	(1,843)	(2,173)	(2,959)	(4,846)
Changes in stocks.....	342	371	401	191	120
Total domestic investment.....	2,617	3,146	3,080	4,390	6,129
Fixed capital formation as a percent of GDP.....	11.8	13.7	15.4	18.2	24.1
Financing of capital formation (in percent):					
Domestic savings.....	78	64	61	53	49
Foreign capital.....	22	36	39	47	51

*Provisional.

**IMF estimate.

15 years of age. More than 55% of the labor force is employed in agriculture, agroindustry, and related services (Figure 20); over 20% is engaged in the growing and exporting of bananas alone. Manufacturing is the second-ranking sector in providing employment, while government and other services, commerce, and construction employ the bulk of the remainder. Factory employment has increased very rapidly.

Urban unemployment has increased with the rising influx of unskilled peasants from rural areas. The National Planning Board estimates that 50% of the total labor force is unemployed or underemployed.

The predominance of small-scale operations and manual labor results in relatively low productivity in both agriculture and manufacturing. Low education levels, poor health, and insufficient technical and managerial skills also restrict productivity. The government is attempting to reorganize and improve the education system, and both AID and the International Labor Organization are assisting in

vocational training programs. The Indian population, which comprises roughly 40% of the total population, is largely unskilled and participates only marginally in the money economy. Job mobility is impeded by traditional attitudes, poor transportation, and ignorance of employment opportunities.

Geographically, the labor force is distributed very unevenly. In 1962, the Sierra contained about 54% of the labor force and the Costa another 44%. At that time, more than one-third of the labor force was concentrated in Quito and Guayaquil, where most of the larger manufacturing firms are located. The massive influx of unskilled workers into Quito and Guayaquil has increased unemployment and the demand for housing and other services. Ecuador also suffers from a "brain drain," as the younger, better educated, and more skilled workers seek better employment opportunities abroad.

Labor legislation, which is contained in the 1938 Labor Code, the 1946 Constitution, and subsequent laws, provides for an 8-hour working day, a 44-hour

FIGURE 20. Distribution of labor force, by economic activity

	1960	1965	1971
Total labor force (thousands).....	1,437	1,651	2,007
Percentage distribution:			
Agriculture, agroindustry, related services.....	57.7	56.7	55.8
Manufacturing.....	18.0	18.9	18.3
Commerce.....	6.4	6.0	7.0
Transport and communications.....	2.8	3.0	3.3
Mining.....	0.3	0.2	0.2
Construction.....	3.1	3.6	4.3
Electricity.....	0.3	0.3	0.4
Public administration.....	2.2	3.2	3.3
Other services.....	14.2	12.5	11.9
Total.....	100.0	100.0	100.0

work week, minimum wages to be set by the government, other worker benefits such as vacations and profit-sharing, and regulated working conditions. Workers' and employers' associations have the right to strike, and procedures have been established for settling labor disputes through a special tribunal or, in the absence of a negotiated agreement, through a government-appointed labor administrator. The 1942 Compulsory Social Security Law provides for sickness, maternity, disability, and old age and death benefits for widows and orphans. At the end of 1969, however, less than 15% of the labor force was insured under the program.

There are three major labor confederations and a large number of independent unions, but less than 15% of the labor force is organized. In mid-1972, the Ecuadorean Confederation of Free Labor Organizations (CEOSL) listed 40,000 members, surpassing the 30,000 active members of the Communist-controlled Confederation of Ecuadorean Workers (CTE). The Ecuadorean Central of Class Organizations (CEDOC) claims 18,000 members and followers. Labor unions are concentrated in Quito and Guayaquil, with membership drawn primarily from manual laborers, white-collar workers, and artisans employed in industry, government, and commerce. The agricultural sector remains largely unorganized.

In December 1970, the minimum monthly wage was raised from US\$24 to slightly more than \$30 for nonagricultural workers, while the minimum wage for rural workers remained at \$24 in the Costa and \$18 in the Sierra. Prevailing labor market conditions influence wage levels more than federal codes, however. Industrial wages generally exceed the minimum level, while agricultural wages are often far below it.

D. International economic relations

I. Foreign trade

Foreign trade is highly important to the Ecuadorean economy. Exports equal about 16% of GDP, and fluctuations in exports greatly influence overall economic performance. Record high export levels in 1970 and 1971 helped to generate a 9% annual rise in real output. Ecuador relies heavily on imports for various industrial materials, most capital goods, and many consumer durables.

Over the last decade or so, imports have increased by an average of 12% annually. Export growth has averaged only 6%, despite an unusually high level of exports in 1970-71 that was attributable to supply

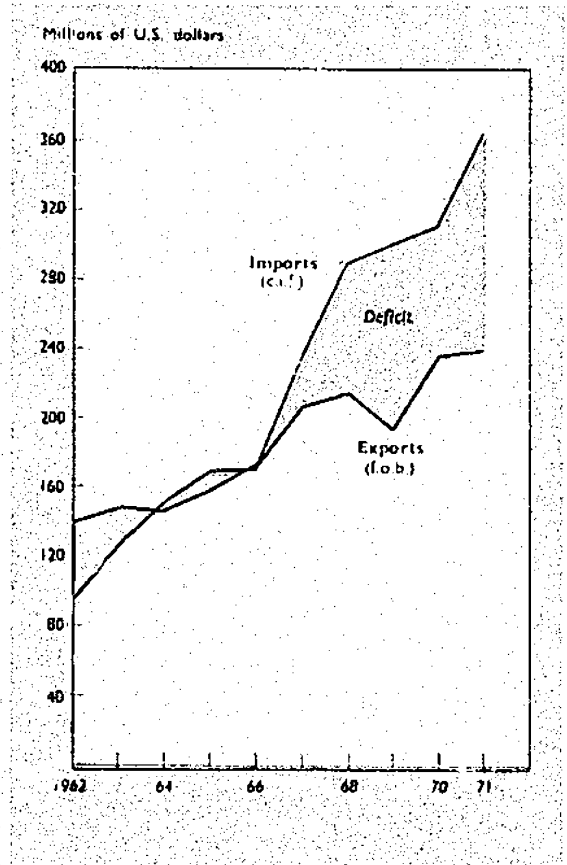


FIGURE 21. Balance of trade

difficulties in other banana-producing countries (Figure 21). Ecuador's lack of export diversification has made the economy vulnerable to fluctuating world demand for bananas and, to a lesser extent, coffee, cocoa, and sugar; however, the development of the petroleum industry has substantially reduced Ecuador's dependence on tropical agricultural exports.

a. Composition of trade

Bananas, coffee, cocoa, and sugar provided more than 80% of total exports in 1971; bananas alone accounted for half of the total (Figure 22). Ecuador benefited from a postwar banana export boom until the mid-1960's, when increased competition from other producers began to cut heavily into its sales. By 1971, its world market share had slipped to 22%, compared with 30% or more in the early 1960's. Other traditional agricultural exports generally have stagnated, and prospects for substantially increased sales are not bright.

FIGURE 22. Commodity composition of exports
(Millions of U.S. dollars)

	1967	1968	1969	1970	1971
Traditional exports:					
Of which:					
Bananas.....	111.1	108.8	105.9	126.0	120.2
Coffee.....	39.8	34.2	26.6	50.5	36.5
Cocoa.....	24.0	38.9	24.5	22.3	25.4
Sugar.....	7.5	7.9	10.8	9.4	13.5
Total.....	183.3	189.8	167.8	209.1	195.6
Nontraditional exports:					
Of which:					
Fish and seafood.....	6.3	8.0	10.5	9.6	18.6
Oilseeds.....	1.3	1.3	1.8	1.8	1.8
Wood.....	3.8	3.8	3.7	3.2	3.8
Mineral products.....	1.1	1.0	1.0	1.0	2.0
Pyrethrum extract.....	1.4	1.6	1.4	1.1	0.8
Cocoa products.....	1.3	2.5	2.1	2.5	4.5
Pharmaceuticals.....	1.5	1.6	1.0	1.4	1.7
Straw products.....	0.9	1.2	1.2	1.7	2.0
Other.....	6.4	4.0	3.5	5.5	10.3
Total.....	24.0	25.0	27.1	27.8	45.5
Total exports.....	207.3	214.8	194.9	236.9	241.1

Ecuador's export trade brightened considerably in 1972 when exports of petroleum began with the opening in August of a trans-Andean pipeline, scheduled to reach full capacity operation in 1973. Petroleum exports are expected to reach US\$180 million in 1973 and to account for 40% to 45% of total exports.

With the notable exception of petroleum, efforts to diversify Ecuador's export trade have been only moderately successful. After several years of very slow increase, nontraditional exports rose 64% in 1971, largely because of the doubling of tuna, shrimp, and other seafood exports. Manufactured exports go mainly to other Andean Common Market countries, where they receive preferential tariff treatment.

Reflecting industrial expansion and crude oil development, imports of industrial materials and capital equipment have increased rapidly. Based on import licenses issued, raw materials and intermediate goods comprised some 50% of imports in 1971, and capital goods accounted for about 36% (Figure 23). Consumer goods, mostly food and other nondurables, made up the remaining 14%. No breakdown is available of the substantial volume of imports that enter the country without licenses.

b. Direction of trade

The United States and Western Europe are Ecuador's main trading partners, although Japan and

the Andean Pact countries have cut into their shares (Figure 24). Exports to the United States consist primarily of bananas, coffee, cocoa, sugar, and fish; Ecuadorean imports from the United States consist mostly of machinery, transport equipment, and wheat. U.S. sales to Ecuador have been bolstered by the import requirements of U.S. oil companies operating in the country. The U.S. share of Ecuador's exports will rise appreciably after 1972 as the United States purchases the bulk of Ecuador's low-sulfur oil.

Western Europe has declined in relative importance in Ecuadorean trade since 1967, but the area still takes more than one-fifth of Ecuador's exports and supplies about 30% of its imports. West Germany is by far the most important trading partner in that area. Exports to Japan have increased sixfold since 1967, as that market has purchased an increasing share of Ecuador's bananas. Trade with Andean Pact countries has increased; exports to those countries increased by 82% in 1971 because of import liberalization by Chile, Colombia, and Peru on 49 commodities being produced in Ecuador. Those exports included such nontraditional items as canned meat and fish, refrigerators, clothing, cocoa products, wood and chemical products, and fruit preserves and juices.

Since 1966, Ecuador has signed trade agreements with the U.S.S.R., Czechoslovakia, East Germany, Poland, Hungary, Bulgaria, and Romania. In 1971, Ecuador also began negotiating a commercial

FIGURE 23. Import licenses issued, by commodity groups*
(Millions of U.S. dollars)

	1967	1968	1969	1970	1971
Consumer goods:					
Of which:					
Nondurables.....	18.5	22.3	24.3	22.0	30.8
Durables.....	10.6	12.7	13.5	12.0	12.2
Other consumer goods.....	0.1	0.7	0.5	0.6	0
Total.....	29.2	35.7	38.3	35.2	43.0
Raw materials and intermediate goods:					
Of which:					
Fuels and lubricants.....	14.4	15.6	17.0	18.6	23.1
Agricultural materials.....	4.0	6.6	7.4	5.0	5.1
Industrial materials.....	75.7	82.8	87.1	82.2	112.4
Construction materials.....	0.2	13.5	15.7	13.7	11.4
Total.....	103.9	118.5	127.4	120.6	152.0
Capital goods:					
Of which:					
For agriculture.....	5.0	5.5	8.0	5.2	4.7
For industry.....	38.1	42.2	44.2	49.0	64.8
Transport equipment.....	26.5	42.6	44.0	37.6	39.4
Total.....	69.6	90.3	96.2	91.8	108.9
Total imports.....	202.7	244.5	261.9	247.6	303.9

*Since some imports enter the country without licenses, and since some licenses are not exercised after they are issued, actual imports do not necessarily agree with the volume of licenses issued.

agreement with the People's Republic of China. Communist countries provide additional markets for Ecuador's tropical agricultural produce, but their exports of merchandise, machinery, and equipment meet resistance in the Ecuadorean market. Total trade with Communist countries amounted to less than US\$20 million in 1971, with the balance of trade heavily weighted in Ecuador's favor. As a result of this imbalance, Ecuador has modified its payments agreements with Hungary and Poland to provide for periodic settlements in convertible currency, and Bulgaria plans to discontinue its agreement in 1973. Barter trade with the U.S.S.R. has fared somewhat better; Ecuador has imported Soviet cement, tractors, and trucks in exchange for tropical agricultural products. Banana deliveries are expected to increase eightfold between 1971 and 1975, and may require Soviet payments in cash as well as manufactured goods.

Since 1967, Communist countries have extended US\$15.4 million in credits to Ecuador, of which only \$6.2 million has been drawn. In 1967, Czechoslovakia extended a \$5 million credit for machinery purchases, and in 1969 Poland extended a \$5 million credit for electric generating plants. In 1971, Czechoslovakia

extended another \$5 million credit for hospital equipment purchases, and the U.S.S.R. offered \$0.4 million for jeep purchases.

c. Trade regulations

Ecuador relies chiefly on duties, tariffs, and quantitative import restrictions to regulate its foreign trade. Import and export duties are also important revenue-raising measures; import controls have been utilized to protect domestic industry and discourage nonessential imports. In 1971, Ecuador adopted the Brussels Customs Nomenclature and incorporated existing specific duties and an *ad valorem* surcharge into a new customs tariff.

Permitted imports are divided into two categories: List I (essential goods, comprising about 85% of licensed imports) and List II (other imports). All items not included on these lists are prohibited, and licenses are required for the bulk of permitted imports. As a requirement for the granting of licenses, import duties and additional taxes must be prepaid in full and advance import deposits must be placed with the Central Bank. Certain imports—including some industrial raw materials and goods financed by foreign

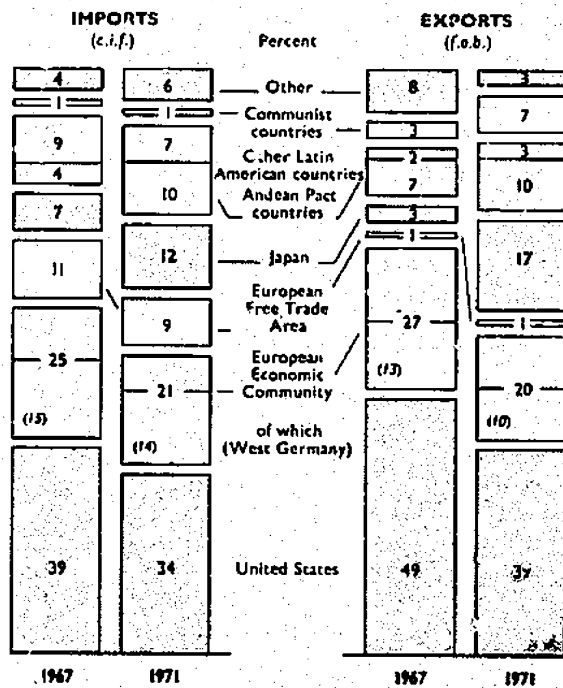


FIGURE 24. Direction of trade

loans—are exempted from advance import deposits. These deposits may also be reduced or eliminated from the imports of domestic firms accorded high priority by the Ministry of Industries, Commerce, and Integration.

In order to insure the full surrender of foreign exchange proceeds to the Central Bank, the government requires that almost all exports be licensed. Ecuador assesses specific and *ad valorem* export duties on bananas, coffee, sugar, cocoa, and seafood. Banana taxes are based on reference prices fixed by the government. Many manufactured or processed goods and other nontraditional agricultural commodities are exempted from export duties and also benefit from export subsidies in the form of tax credit certificates.

In August 1970, Ecuador undertook a comprehensive reform of its exchange system that included a 28% devaluation of the sucre; it also established *ad valorem* import and export duties. In 1971, under pressure from the private sector, the authorities reduced or eliminated several export taxes and reduced advance import deposits, but these actions helped to generate serious balance of payments problems. In November 1971, the Velasco government reestablished the dual exchange rate system that had prevailed prior to

August 1970 and set a new official selling rate of 25 sucres = US\$1. This rate applies principally to exports, imports, government transactions, and transactions related to registered private capital. Approximately 35% of all transactions take place in the parallel free exchange market, where the rate is allowed to fluctuate. During the early months of 1972 the sucre sold at about a 10% discount in the free market, but by January 1973 the sucre strengthened, selling at about the official rate. Following the February 1973 devaluation of the U.S. dollar, Ecuador's Monetary Board set the Central Bank buying rate for dollars at 24.80 sucres and the selling rate at 24.95, but the old rate continued to apply to petroleum transactions. The Ecuadorean Government also expressed its intention to unify the official and free market exchange rates in practice.

Ecuador has set up an Institute of Foreign Trade and Integration to coordinate its participation in the Latin American Free Trade Association (LAFTA) and the Andean Common Market (ANCOM), as well as to develop an export promotion policy. Because they are considered less developed, Ecuador, Bolivia, Paraguay, and Uruguay are accorded special status in LAFTA. Ecuador accords preferential treatment to imports of approximately 1,700 products from other LAFTA members. It also maintains reciprocal lines of credit with Peru, Colombia, Mexico, Bolivia, and Brazil. Ecuador and Bolivia are also accorded special privileges within ANCOM, whose other members include Colombia, Peru, Chile, and Venezuela. Ecuador is a signatory to the International Coffee Agreement but is not a member of GATT.

2. Balance of payments

Ecuador's trade balance, which had been very favorable through the early 1960s, has progressively worsened because of rapidly rising imports and uneven export performance. The widening trade gap, together with a mounting deficit on services, resulted in a large increase in the current account deficit (Figure 25). Its impact on the overall balance of payments was mitigated, however, by a tenfold increase in gross direct private investment, mainly for petroleum development. Although net official long-term capital inflows were only US\$11 million to \$28 million annually during this period, total capital inflows were sufficient to avoid any appreciable loss in net foreign reserves until 1971. That year's balance of payments deficit caused net reserves to plummet from \$56

FIGURE 25. Balance of payments
(Millions of U.S. dollars)

	1967	1968	1969	1970	PROVI- SIONAL 1971
Exports, f.o.b.....	207.3	214.8	194.0	236.9	241.1
Imports, c.i.f.*.....	234.7	290.6	301.0	311.6	305.8
Trade balance.....	-27.4	-75.8	-107.7	-74.7	-134.7
Services (net).....	-42.3	-52.3	-80.9	-77.2	-85.2
Private transfers.....	5.0	4.7	5.3	5.4	5.3
Current account balance.....	-64.7	-123.4	-162.3	-146.5	-205.6
Public transfers (grants).....	7.7	8.5	7.0	8.3	7.7
Private long-term capital (net).....	17.8	30.6	75.3	90.0	143.3
(Of which: Direct investment).....	(16.4)	(29.2)	(72.0)	(90.0)	(137.0)
Official long-term capital (net).....	21.7	28.6	13.2	25.3	10.7
Capital account balance.....	47.2	67.7	65.5	123.6	161.7
Short-term capital (net) (includes errors and omissions).....	25.0	46.8	71.3	10.0	10.8
Allocation of SDR's.....	...	...	...	4.2	3.5
Payments surplus (+) or deficit (-).....	+8.4	-8.0	+4.5	-1.8	-29.0
Increase (-) or decrease (+) in net foreign reserves.....	-8.4	+8.0	-4.5	+1.8	+29.0

... Not pertinent.

*Adjusted for balance of payments purposes and thus do not agree with totals shown in Figure 20.

million to \$25 million—the equivalent of about 1 month's imports.

Increased import restrictions and the initiation of petroleum exports brought a substantial improvement in the balance of payments in 1972. Licensed exports rose 39%, while licensed imports rose only 8%, and the deficit on the trade account narrowed substantially. This smaller deficit, coupled with large inflows of long-term capital, resulted in a basic balance of payments surplus of about US\$100 million, and international reserves rose to \$128 million at the end of 1972.

As of June 1971, Ecuador's total external public debt outstanding amounted to US\$237 million, an increase of 70% over the 1966 level. Of this amount, nearly 80% represented central government indebtedness. About 30% of the total foreign public debt was held by commercial banks and suppliers, 29% by AID, 20% by IDB, and 14% by IBRD. Ecuador's debt service ratio is not high by Latin American standards; estimated debt service payments amounted to only 15% of the receipts from exports in 1971. As the result of large new loans contracted in 1972, increased use of suppliers' credits, and a drawdown of the \$164 million in the foreign aid pipeline, total debt service payments are expected to rise over the next few years. Because

export receipts also will grow appreciably, the external debt burden should not reach unmanageable proportions.

The U.S. Government, the principal source of foreign assistance, has provided nearly two-thirds of the total of such assistance received between 1946 and 1971. Receipts of assistance, by sources, during that period were as follows, in millions of U.S. dollars:

U.S. Government:	
Economic	310.8
Military	60.6
Total U.S. Government	371.4
International agencies:	
International Bank of Reconstruction and Development	71.3
International Finance Corporation	2.2
International Development Association	24.6
Inter-American Development Bank	72.2
United Nations Development Program	21.2
Other United Nations	5.8
Total international	203.3
Total	574.7

U.S. economic assistance took the form of grants, development loans repayable in dollars, and deliveries of surplus agricultural commodities under P.L. 480. In

addition to the US\$203 million received from international agencies by June 1971, over \$75 million remained in the pipeline. The relatively conservative policies pursued by the Rodriguez government and the more stable political outlook augur well for increased

commitments from international agencies. In June 1972, for example, the IBRD was considering an unprecedented \$150 million line of credit to finance various education, port, livestock, fisheries, timber, irrigation, and colonization projects.

Glossary

ABBREVIATION	SPANISH	ENGLISH
ANCOM.....	.....	Andean Common Market
CEDOC.....	<i>Central Ecuatoriano de Organizaciones Clasistas</i>	Ecuadorean Central of Class Organiza- tions
CENDES.....	<i>Centro de Desarrollo Industrial del Ecuador</i>	Industrial Development Center of Ecuador
CEOSL.....	<i>Confederacion Ecuatoriana de Organizaciones Sindicales Libres</i>	Ecuadorean Confederation of Free Labor Organizations
CEPE.....	<i>Corporacion Estatal Petrolera Ecuatoriana</i>	Ecuadorean State Petroleum Corpora- tion
CFN.....	<i>Corporacion Financiera Nacional.....</i>	National Financial Corporation
COFIEC.....	<i>Corporacion Financiera Ecuatoriana...</i>	Ecuadorean Development Finance Cor- poration
CTE.....	<i>Confederacion de Trabajadores Ecuatorianos</i>	Confederation of Ecuadorean Workers
ENPROVIT...	<i>Empresa Nacional de Productos Vitales.</i>	National Vital Products Company
FLOPEC.....	<i>Flota Petrolera Ecuatoriana.....</i>	Ecuadorean Oil Tanker Company
IERAC.....	<i>Instituto Ecuatoriano de Reforma Agraria y Colonizacion</i>	Institute of Agrarian Reform and Colonization
INECEL.....	<i>Instituto Ecuatoriano de Electrificacion.</i>	Ecuadorean Electrification Institute
INIAP.....	<i>Instituto Nacional de Investigaciones Agropecuarias</i>	National Institute of Agricultural Re- search
LAFTA.....	.....	Latin American Free Trade Association
NPF.....	<i>Fondo de Participacion Nacional.....</i>	National Participation Fund
TAME.....	<i>Transportes Aereos Militares Ecuatorianos</i>	Ecuadorean Air Transport

Places and features referred to in this chapter

	COORDINATES	
	° S.	° W.
Amazon Basin (<i>basin</i>).....	1 00	75 50
Ambato.....	1 15	78 37
Andes (<i>mts</i>).....	2 00	78 40
Azuay (<i>province</i>).....	3 00	79 00
Carchi (<i>province</i>).....	0 45 N.	78 00
Cotopaxi (<i>province</i>).....	0 55	78 55
Cuenca.....	2 53	78 59
El Oro (<i>province</i>).....	3 30	79 50
Esmeraldas.....	0 59 N.	79 42
Esmeraldas (<i>province</i>).....	0 40 N.	79 30
Galapagos Islands (<i>isls</i>).....	0 30	90 30
Golfo de Guayaquil (<i>gulf</i>).....	3 00	80 30
Guayas (<i>province</i>).....	2 00	80 00
Guayaquil.....	2 10	79 50
Isla Isabela (<i>isl</i>).....	0 30	91 00
Latacunga.....	0 56	78 37
Loja.....	4 00	79 13
Los Rios (<i>province</i>).....	1 30	79 25
Machala.....	3 10	79 58
Morona Santiago (<i>province</i>).....	0 40	80 05
Morona.....	0 57	80 44
Península de Santa Elena (<i>peninsula</i>).....	2 15	80 50
Portoviejo.....	1 03	80 27
Quito.....	0 13	78 30
Riobamba.....	1 40	78 38
Tixán.....	2 00	78 48

NOTE—All latitudes are South unless otherwise indicated.