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Colombia: Economic Adjustment and the Poor

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Abstract

This paper assesses the impact on the poor of the macroeconomic adjustment program undertaken in 1985-86. It finds that program-induced changes in production, employment, and real incomes have benefited the poor, while the adverse impact of program-induced price changes was modest and was largely cushioned by government policies. The paper describes the dimensions of poverty in Colombia, surveys government programs to alleviate poverty, and reviews the factors contributing to the improvement in the income distribution in recent years.

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Summary

Although Colombia has not used Fund resources since the 1970s, it undertook a Fund-monitored program in 1985-86, at its authorities' request, in order to facilitate financing arrangements with the commercial banks. Against the background of a deteriorating financial performance because of expansionary domestic policies, a growing misalignment of relative prices, and unfavorable external factors, the program sought to improve the balance of payments through tight monetary and fiscal policies and a large adjustment of the exchange rate. By calculating the program's possible first-round price effects, this paper examines how the measures contained in the 1985-86 adjustment program could have affected the poor in Colombia.

By realigning relative prices, reducing inflation, and improving economic growth, the program could have been expected to benefit the poor, particularly those in the traded-goods sector, in both the short and long run. At the same time, however, program measures, such as a large devaluation of the exchange rate, various tax initiatives, increases in public sector tariffs, and the elimination of certain subsidies, might have been expected to disadvantage some poor groups in the short run. Only a few groups suffered during 1985, and their suffering was ameliorated by government action. By 1986, as the program took effect and international coffee prices rose sharply, real wages had recovered, as had growth and employment, and by 1988 there was an improvement in the distribution of income.

I. The Dimensions of Poverty in Colombia

1. Income distribution and incidence of poverty

Colombia has made important progress in reducing poverty over the past twenty years. Rapid economic growth, which led to rising real per capita income, and extensive government programs aimed at poverty alleviation have drastically cut the number of people officially classified as living in poverty. Progress has been particularly noticeable in basic health care and education, resulting in improvements in the indicators of infant mortality, life expectancy, and the literacy rate. Nevertheless, for Colombia's income level (per capita GDP was estimated at about US\$1,345 in 1989), the extent of poverty remains significant.

Urban income distribution is extremely skewed, with the poorest 50 percent of the population receiving 23 percent of the income and the wealthiest 25 percent receiving 57 percent (1988 data, Table 1). This gap may in fact be underestimated, as available information on rents on capital and land tend to understate these magnitudes. Nevertheless, income distribution across the population appears to have shown some improvement since the early 1970s, as measured by the Gini and Theil coefficients. Over the 1976-88 period, those in the bottom 75 percent of the income distribution improved their relative position at the expense of the top 25 percent (Table 2). Most of this improvement was concentrated in the lowest 50 percent of the income scale, particularly among the second quartile.

In rural areas, the inequality of land distribution suggests that the income gap between rich and poor may be as wide if not wider than in urban areas. Approximately 860,000 poor rural households own, on average, 2.6 acres of land, while the 8,394 wealthiest landowners own more than 500 acres. In effect, 7.7 percent of the rural landowners own 83 percent of the land and 92.3 percent of the landowners own 17 percent of the land.

The Colombian Government defines poverty on the basis of "unfulfilled basic needs (UBN)." On this basis, according to data collected in the 1985 Household Survey, 38.1 percent of Colombian households were classified as poor (Table 3). The five indicators used to measure poverty are (1) adequacy of housing, judged on the basis of types of materials used on walls, roofs, and floors; (2) access to public utilities such as electricity, potable water, and sanitation; (3) occupation density--households with more than three inhabitants per room are considered poor; (4) economic dependency--households in which the head has three or fewer years of schooling and in which there are three or more dependents per employed person are considered poor; and (5) number of school-age children (ages 7-12) who do not attend school. Furthermore, a household is said to be in dire misery if it meets two or more of these five indicators of poverty. On this basis, some 17.6 percent of Colombian households were classified as living "in

Table 1. Colombia: Evolution of Income
Distribution in Urban Areas, 1976-88 1/

(As percent of total)

Income Percentile	1976	1978	1980	1983	1985	1988
1-25	5.3	5.9	6.6	7.1	6.8	7.5
26-50	11.6	13.1	14.5	14.5	15.00	15.2
51-75	19.9	20.1	20.8	21.3	20.7	20.6
76-90	21.1	20.8	20.9	21.8	21.1	20.6
91-95	12.6	11.9	11.8	11.6	11.5	11.5
96-100	29.5	28.1	25.3	23.8	24.9	24.7
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
GINI coefficient	0.508	0.479	0.446	0.434	0.447	0.435
Theil coefficient	0.553	0.507	0.430	0.385	0.406	0.384

Source: Moreno (1989), Table 1.

1/ Components may not add to totals due to rounding.

Table 2. Colombia: Assignment of Changes
in the Distribution of Income, 1976-88

(As percent of total)

Income Percentile	1976-83		1983-85		1985-88		1976-88	
	Gainers	Losers	Gainers	Losers	Gainers	Losers	Gainers	Losers
1-25	26.8	--	--	15.2	64.1	--	33.2	--
26-50	4.9	--	29.3	--	21.4	--	52.9	--
51-75	21.3	--	--	38.4	--	12.5	10.3	--
76-90	10.0	--	--	40.9	--	49.9	--	7.8
91-95	--	15.2	--	5.5	--	2.9	--	17.2
96-100	--	84.8	70.7	--	--	20.2	--	71.4
	<u>100.0</u>							

Source: Moreno (1989), Table 5.

1/ Components may not add to totals due to rounding.

Table 3. Colombia: Selected Poverty Indicators 1/

	Total	Urban	Rural
<u>I. Characteristics of the poor</u>			
Total households covered by survey	<u>5,249,970</u>	<u>3,632,320</u>	<u>1,617,650</u>
	<u>(In percent)</u>		
Basic needs unsatisfied	38.1	25.7	66.1
Households in misery	17.6	9.3	36.2
<u>Household characteristics</u>			
Inadequate housing	12.9	7.0	26.2
Overcrowding	12.7	11.1	16.2
Without basic services	21.0	8.4	49.3
High economic dependency	9.8	7.6	14.6
Have school-age children who do not attend school	7.8	4.9	14.4
<u>II. Literacy</u>			
<u>UBN</u>			
Illiterates over 15 years old	22.2	15.4	29.2
Illiterates between 15 and 24 years old	11.2	6.5	16.6
Children 7 to 11 not attending school	33.0	26.7	39.9
<u>In misery</u>			
Illiterates over 15 years old	29.8	23.1	34.1
Illiterates between 15 and 24 years old	16.6	11.0	20.7
Children 7 to 11 not attending school	44.3	38.8	48.2
<u>III. Employment status of head of household</u>			
<u>UBN</u>			
Employed	72.2	68.6	75.4
Unemployed	2.0	3.1	1.1
Inactive <u>2/</u>	21.8	25.2	18.8
<u>In misery</u>			
Employed	73.4	68.1	76.4
Unemployed	2.0	3.6	1.2
Inactive <u>2/</u>	20.4	25.2	17.7

Table 3 (concluded). Colombia: Selected Poverty Indicators 1/

	Total	Urban	Rural
<u>IV. Type of employment</u> <u>3/</u>			
<u>UBN</u>			
Laborers	35.8	31.0	39.6
White collar	17.0	29.4	7.1
Managers	3.7	1.3	5.7
Self-employed	23.7	25.9	22.0
Unpaid family workers	9.7	2.4	15.5
Domestics	5.7	6.4	5.0
<u>In misery</u>			
Laborers	39.6	36.6	41.1
White collar	11.2	21.8	5.9
Managers	3.9	1.1	5.2
Self-employed	23.2	26.3	21.6
Unpaid family workers	11.2	2.3	15.7
Domestics	6.2	8.3	5.2

Source: DANE (1985).

1/ As a percentage of total households, nationally and by rural and urban areas.

2/ The inactive population is defined as those not employed and not seeking employment.

3/ These categories are not mutually exclusive, but rather refer to the respondent's principal employment.

misery," while in rural areas some 36 percent of households were so classified.

There is some evidence to suggest that the UBN concept may tend to overstate the level of absolute poverty. A recent World Bank report notes-

"The (UBN) definition has a number of shortcomings. Firstly, it has a strong bias towards housing and housing-related public service indicators. The problem with using the availability of services as a criteria is that, in rural areas where infrastructural investments tend to lag behind, the lack of access to electricity or sanitation does not necessarily in itself indicate poverty. Poverty is more aptly characterized by other conditions such as malnutrition, illiteracy and unemployment or underemployment." 1/

In these circumstances, for policy purposes, it seems preferable to focus on the narrower definition of poverty, the 17.6 percent of households classified as living in misery. Other measures of poverty, such as nutritional standards, and the income and expenditure based "poverty line" and "indigence" (línea de indigencia) measures developed by DANE suggest that use of the narrower definition may be more appropriate (see DANE (1990b)). 2/

DANE defines the indigent as those whose incomes are not sufficient to buy even a "basic basket" of food. On that basis, some 13.6 percent of the population of Colombia's thirteen largest cities was classified as indigent in 1985. Using 1988 data, individuals earning less than an average of 7,653 pesos per month in urban areas (around 8,400 pesos per month in Bogotá and Cartagena) were classified as indigent, while those earning less than 17,584 pesos monthly (21,949 pesos per month in Bogotá) were classified as falling below the poverty line. This compares with a monthly minimum wage for all productive sectors of 17,946 pesos in 1988. The definition of indigence for rural areas has not been established. However, a 1988 DANE survey (DANE (1988b)) found that in that year roughly 31 percent of the rural work force earned a monthly wage of 12,825 pesos or less (70 percent of the minimum wage), while 52.5 percent earned 25,650 pesos per month or less (1.4 times the minimum wage).

There has been a dramatic reduction in the incidence of poverty since the early 1970s when some 44 percent of all households were classified as living in misery. The most recent PREALC report (PREALC (1990)) attributes the dramatic reduction in the incidence of poverty over the past two decades to a number of factors: the very high levels of economic growth registered over the period, the reduction in the size

1/ World Bank (1988), pp. 7-8.

2/ When referring to the poor, the narrower definition will be used in this note.

of households, the migration of workers from rural to urban areas where they were absorbed by a rapidly growing demand for labor, changes in the structure of rural employment, increases in labor force participation rates, and the expansion of basic education.

Moreover, the PREALC report contends that the growth of real wages in the modern sector over this period benefited a significant proportion of households with wage earners, which permitted them to emerge from poverty. In addition, the evolution of wages in the economy in general also had an important impact on the informal sector, raising incomes in this sector as well. The PREALC report contends that the increase in earnings generally had a decisive impact on earnings in the informal sector, especially in small companies (microempresas), by increasing the demand for goods and services produced in the informal sector (as well as in the rest of the economy). This permitted an expansion of output and employment in the informal sector which in turn helped to reduce the level of poverty over this period.

In rural areas, the PREALC report highlights the importance of structural factors in reducing poverty levels. Among these are the change in the composition of rural employment toward nonagricultural activities with higher income and productivity; an increase in the number of employed persons per family, accompanied by a decline in the number of household members (partly linked to urban migration and lower birth rates); rising wages in the modern agriculture sector; and an improvement in the relative prices of agricultural products.

Major discrepancies remain, however, between poverty levels in rural and urban areas. The most recent (1985) DANE Household Survey indicates that the number of individuals defined as living in misery in rural areas was roughly three times the level observed in urban communities. There are important differences in poverty levels within rural and urban areas as well. For example, in urban areas, the number of those living in poverty (in misery) in smaller towns (subregional centers) was more than double that in regional centers (Table 4). ^{1/} Similarly, in rural areas, only 15.6 percent of peasant farmers in the coffee region were defined as living in absolute poverty, while in the Caribbean region nearly 60 percent of smallholders were classified as living in misery. The disparity in poverty levels between urban and rural areas can also be seen by comparing the adequacy of nutritional levels countrywide with that in rural areas (Tables 5 and 6). For the country as a whole, roughly 20 percent of the population barely has an adequate daily intake of protein, whereas in rural areas over half of the population does not have an adequate daily intake of protein.

^{1/} An extensive description of the socioeconomic characteristics of the types of municipalities listed in Table 4 is provided in Appendix I.

Table 4. Colombia: Disaggregation of Poverty by Productive Activity and Geographical Area 1/

	Total Population (In Millions)	Percentage of population		Percentage of those in misery in each category
		With UBN <u>2/</u>	In misery <u>2/</u>	
<u>Total</u>	<u>27.3</u>	<u>45.6</u>	<u>22.8</u>	100.0
<u>Urban areas</u>	<u>14.9</u>	<u>30.5</u>	<u>11.6</u>	<u>27.6</u>
Regional centers	8.0	25.5	8.1	10.4
Subregional centers	4.2	37.8	17.3	11.7
Urban areas around large cities	2.7	34.2	12.8	5.5
<u>Rural areas</u>	<u>12.4</u>	<u>61.9</u>	<u>36.8</u>	<u>72.4</u>
Commercial agriculture	2.2	44.2	19.1	6.9
Middle-level peasant farmers	3.3	47.8	23.0	12.3
Coffee region	1.1	41.7	15.6	2.8
Other regions	2.2	53.9	26.6	9.5
Smallholders (minifundio)	3.0	73.6	46.8	22.3
Depressed Andean region	1.4	76.6	47.2	10.8
Other Andean region	1.1	64.3	33.4	5.8
Caribbean region	0.5	79.8	59.9	4.6
Large estates, Caribbean region	2.2	76.9	55.8	19.4
Areas being colonized	1.5	72.9	45.8	11.0
Frontier	0.6	69.2	38.7	3.9
Interior	0.9	76.5	52.8	7.4
Marginal agriculture	0.2	78.8	42.4	1.5

Source: DANE (1989b), Table 9.

1/ Excludes the indigenous Indian population.

2/ Data in this table differ from those in Table 3 because they refer to the number of individuals living in poverty and not the number of households (as in Table 3).

Table 5. Colombia: Calorie and Protein Intake
Per Adult Equivalent by Income Strata

	Income Quintiles				
	I	II	III	IV	V
Protein (grams per day)	40.3	60.0	74.3	82.8	84.9
Percent of requirement <u>1/</u>	65.0	96.8	119.8	133.5	136.9
Energy (calories per day)	1,904.5	2,576.3	2,961.1	3,197.1	3,118.8
Percent of requirement <u>2/</u>	63.5	85.9	98.7	106.0	104.0

Source: Sanin et al. (1981).

1/ Grams of protein per day, per adult: 62.

2/ Calories per day, per adult: 3,000.

Table 6. Colombia: Adequacy of Calorie and Protein Intake of Rural Households

Percentage of Adequate Consumption	Calories		Protein	
	Households	Cumulative	Households	Cumulative
	(In percent)		(In percent)	
Up to 30	3.7	3.7	8.3	8.3
31 to 60	17.9	21.6	23.7	32.0
61 to 99	29.0	50.6	24.8	56.8
100 to 110	8.8	59.4	7.8	65.6
111 to 130	16.9	76.3	14.8	79.4
131 to 150	16.0	92.3	15.0	94.4
151 to 180	6.5	98.8	5.5	99.9
More than 181	2.2	100.0	0.1	100.0

Source: DANE (1988a).

2. Income and expenditure composition of the poor

The poor derive their income from a variety of sources. Rough estimates suggest that in 1988 about half the work force in Colombia's four main cities worked in the informal sector, and roughly one third could be classified as poor (Table 7). Regarding the composition of earnings in urban areas, a 1990 DANE income survey (DANE (1990a)) found that the poorest 10 percent of the urban population (which coincides broadly with the definition of poverty as those classified as living in misery) derived only about 21 percent of their earnings from wages from dependent employment. The bulk of their income was derived from earnings from self-employment (41 percent) and from casual employment (22 percent), while a further 17 percent of income was derived from transfers (Table 8).

Similar data on the derivation of income for the poor in rural areas are not available. However, using the data from Table 4 and assuming that those working in commercial agriculture and on the large estates in the Caribbean region are largely involved in dependent employment, it can be inferred that at least 26 percent of the poor in rural areas derive most of their income from wages. The composition of earnings for peasant farmers and smallholders is more difficult to determine. They may derive income both from working their own land and from occasional dependent employment. For the remaining groups, marginal agriculture and areas being colonized, one would expect the bulk of earnings to come from the sale of their own crops.

There is little direct information concerning the relevance of the minimum wage for the poor. Using 1989 data, a recent study published by Fedesarrollo indicates that about 40 percent of those working in the formal sector received the minimum wage or less.^{1/} This percentage was significantly higher for women (53 percent) than for men (32 percent), reflecting the preponderance of women in domestic service and other low paying jobs. The data do not indicate what percentage of those receiving the minimum wage or less can be classified as poor, or to what extent those receiving the minimum wage hold two or more jobs. Nevertheless, some idea of the relevance of the minimum wage for the poor can be gained from the fact that, using 1988 data, the monthly minimum wage was equivalent to 2.3 times the earnings required to purchase a basic basket of goods in urban areas, which defines the line of indigence. The monthly minimum wage was roughly equivalent to the definition of the level of earnings required to keep an individual above the poverty line.

^{1/} Fedesarrollo (1990), Table 5.

Table 7. Colombia: Estimate of Labor Force
in Formal and Informal Employment in Urban Areas

(In percent)

	1982			1984			1988		
	LFP <u>1/</u> (1)	Extent <u>2/</u> (2)	PLFP <u>3/</u> (3)=(1)* <u>2/</u>	LFP <u>1/</u> (1)	Extent <u>2/</u> (2)	PLFP <u>3/</u> (3)=(1)* <u>2/</u>	LFP <u>1/</u> (1)	Extent <u>2/</u> (2)	PLFP <u>3/</u> (3)=(1)* <u>2/</u>
Formal sector	43	26	12	39	18	7	39	19	7
Informal sector	47	35	16	47	35	16	50	33	17
Employed	90	31	28	86	27	23	89	27	24
Unemployed	10	55	5	14	52	7	11	51	6
Total <u>4/</u>	<u>100</u>	<u>33</u>	<u>33</u>	<u>100</u>	<u>30</u>	<u>30</u>	<u>100</u>	<u>30</u>	<u>30</u>

Source: PREALC (1990), Table 2.

1/ Participation of each category in the urban labor force.

2/ Percentage of each category that can be classified as poor.

3/ Participation of those in poor households, by category, in the total urban labor force.

4/ Components may not add to totals due to rounding.

Table 8. Colombia: Sources of Household Income
by Income Classification in Urban Areas

(As percent of total)

Income Deciles	Earnings from Self- Employment	Dependent Labor Income	Other Income <u>1/</u>	Transfers	Total
All households	29.5	42.7	19.5	8.3	100.0
I	40.7	21.1	21.7	16.5	100.0
II	37.9	36.2	11.9	14.0	100.0
III	22.4	56.9	6.0	14.7	100.0
IV	22.7	62.1	5.9	9.3	100.0
V	17.0	66.8	6.5	9.7	100.0
VI	26.8	54.9	8.4	9.9	100.0
VII	30.2	50.6	9.8	9.4	100.0
VIII	27.5	49.7	13.3	9.5	100.0
IX	28.7	44.7	17.1	9.5	100.0
X	32.7	31.7	29.7	5.9	100.0

Source: DANE (1990a), Table 2.

1/ This category includes income from casual employment, income from capital, other income not defined above, and statistical discrepancies.

There appears to be some link between the minimum wage and the formation of wages in other sectors, particularly in construction, the public sector, and the informal sector, all of which are employment categories in which one might expect the poor to be heavily represented. In this regard the PREALC report notes-

"The minimum wage played a more active role during (the 1980s) and its influence on the labor market increased in comparison with previous decades. Between 1976 and 1984, real minimum wages, in addition to recovering lost purchasing power, reached levels which had not been observed before. In addition, the coverage of the minimum wage was increased both in urban and in rural labor markets and minimum wages in agriculture were aligned with those in industry and commerce (in 1984). This implied a significant increase in remuneration in rural areas. The adjustment of minimum wages also explains a significant portion of the increase in average wages in construction, the public sector, and the informal sector, which together represent about 60 percent of urban employment. Finally, the adjustment of the minimum wage had a moderate but increasing influence on the growth of the average wage in rural areas, especially in traditional activities." 1/

Regarding expenditure, the weights used to construct the consumer price index (1988 base year) for low income groups suggest that they devote about 43 percent of their income to buying food, significantly more than other households (Table 9). A further one third of expenditure is devoted to housing, while some 8 percent is devoted to clothing. The CPI weights cover expenditures of working class households (obreros) in urban areas and thus may not reflect precisely the spending patterns of those classified as poor under the misery definition. In fact, a 1981 income survey conducted by DANE suggests that those in the first income quintile (the poorest 25 percent of those surveyed) spent 91 percent of their monthly income on food, while those in the second quintile spent 89.7 percent on food. These percentages seem very high, nevertheless they provide evidence to suggest that the actual expenditure patterns of the poor may be different from those implied by the low-income CPI weights.

About 47 percent of the items covered by the CPI are subject to direct or indirect administrative control (Table 10). Of these, some 9 percent represent food items, while rents and other housing-related costs represent a further 25 percent. Although these items are subject to control, their prices have generally risen in line with the increase in the general CPI.

3. Government policies

The Government's strategy for attacking poverty has been based on the premise that sustained growth and sound economic management are

1/ PREALC (1990), p. 10.

Table 9. Colombia: Weights in the Consumer Price Index
(In percent)

Item	General Index	Low Income Index
Food	34.8	42.6
Housing	32.6	31.3
Of which:		
rents	20.1	19.4
electricity	1.7	1.8
telephone	0.7	0.3
Clothing	9.2	8.2
Health care	3.8	3.3
Education, culture, and entertainment	6.7	4.8
Transportation and communications	6.8	4.0
Of which:		
gasoline	0.8	--
urban buses	1.4	2.2
Other expenditures	6.0	5.8
Total	<u>100.0</u>	<u>100.0</u>

Source: DANE (1989a).

Table 10. Colombia: Items Subject to Price Controls

	Percentage weight in CPI 1/							
	December 1983		December 1984		December 1985		December 1986	
	Direct Controls	Indirect Controls	Direct Controls	Indirect Controls	Direct Controls	Indirect Controls	Direct Controls	Indirect Controls
<u>Total</u>	<u>38.5</u>	<u>7.0</u>	<u>39.0</u>	<u>6.5</u>	<u>45.0</u>	<u>2.9</u>	<u>40.8</u>	<u>6.5</u>
<u>Food items</u>	<u>1.1</u>	<u>5.0</u>	<u>1.6</u>	<u>4.5</u>	<u>7.6</u>	<u>1.0</u>	<u>3.0</u>	<u>6.2</u>
Sugar 2/	--	0.97	--	0.97	--	0.97	--	0.97
Salt	0.1	--	0.1	--	0.1	--	--	0.1
Coffee	1.0	--	1.0	--	1.0	--	--	1.0
Carbonated beverages	--	0.5	0.5	--	0.5	--	0.5	--
Milk	--	3.5	--	3.5	3.5	--	--	3.5
Wheat meal	--	--	--	--	0.2	--	0.7	--
Edible oil and fats	--	--	--	--	2.3	--	2.3	--
Chocolate	--	--	--	--	--	--	--	0.6
<u>Housing items</u>	<u>25.3</u>	<u>0.2</u>	<u>25.3</u>	<u>0.2</u>	<u>25.3</u>	<u>0.2</u>	<u>25.3</u>	<u>--</u>
Rent	21.0	--	21.0	--	21.0	--	21.0	--
Gasoline, diesel	0.1	--	0.1	--	0.1	--	0.1	--
Public utilities	4.2	--	4.2	--	4.2	--	4.2	--
Other housing items	--	0.2	--	0.2	--	0.2	--	--
<u>Other items</u>	<u>12.0</u>	<u>1.8</u>	<u>12.1</u>	<u>1.8</u>	<u>12.1</u>	<u>1.8</u>	<u>12.5</u>	<u>0.3</u>
Medicines	0.9	--	0.9	--	0.9	--	0.9	--
Bus fares	2.0	--	2.0	--	2.0	--	2.0	--
Taxi fares	0.6	--	0.6	--	0.6	--	0.6	--
Cigarettes and beer	--	1.3	--	1.3	--	1.3	0.4	--
Movie entrance fees	2.0	--	2.0	--	2.0	--	2.0	--
Boarding fees and school tuition	3.2	--	3.2	--	3.2	--	3.2	--
Gasoline	0.6	--	0.6	--	0.6	--	0.6	--
Automotive oil	--	0.2	--	0.2	--	0.2	--	0.3
Other goods	0.4	0.3	0.4	0.3	0.4	0.3	0.4	--
Rural property taxes	2.3	--	2.3	--	2.3	--	2.3	--

Source: Banco de la República.

1/ Relative weights used in CPI for middle-income groups.

2/ Includes both refined and unrefined sugar.

among the most important prerequisites for poverty alleviation. Accordingly, the Government has aimed to satisfy the basic needs of the poor by providing essential social services and by generating productive employment opportunities. The Government has sought to attain these goals by shifting public expenditures increasingly toward social sectors. After dropping in terms of GDP during 1985-86, in recent years, to alleviate poverty, the authorities have increased the amount of resources in their programs. Health and education represented about 84 percent of social investment expenditure and about 40 percent of total public investment over 1986-88. In these years social investment expenditure grew at an average annual rate of 7.6 percent in real terms.

A number of core programs for poverty alleviation such as the DRI (program for Integrated Rural Development) were in effect at the time of the initiation of the Fund-monitored program, however, a number of important new programs have been initiated since 1986. The key components of the Government's current poverty alleviation strategy are the PNR (Plan for National Rehabilitation) and the DRI, which are national, multisectoral programs and are the principal vehicles for addressing rural poverty. The PNR focuses on providing the basic necessities for the poorest 10-12 percent of the population. It is aimed at the poorest 224 municipalities, and it includes land distribution, improvements in infrastructure and enhanced public services. The DRI emphasizes providing basic services and financial resources to small farmers.

The Government has initiated a number of other programs targeted to alleviate poverty such as the HBI (Better Homes for Children)--an innovative and successful program that combines supplemental feeding and day care for children in poor communities with the education and training of their mothers; the PEPA (Plan for the Eradication of Absolute Poverty)--a program aimed at poverty in urban areas; and a variety of other programs designed to improve the basic education, health, and housing of the poor.

II. Economic Background and the 1985-86 Program

1. Economic background

Colombia experienced a substantial deterioration in its overall economic and financial performance over 1981-83. Over that period, real GDP growth averaged 1.6 percent a year, compared with 4.9 percent on average over 1975-80, while the overall deficit of the nonfinancial public sector deteriorated sharply from an average of 0.5 percent of GDP over 1975-80 to an average of 6.5 percent of GDP during 1981-83 (Table 11). The external accounts also worsened; the current account swung from a small surplus in 1980 to a deficit that averaged 8.7 percent of GDP over 1981-83.

Table 11. Colombia: Selected Economic Indicators

	Average 1975-80	Average 1981-83	1984	1985	1986	1987	1988	1989
	(Percent change)							
Real GDP	4.9	1.6	3.4	3.1	5.8	5.5	3.6	3.2
GDP deflator	24.4	22.7	22.2	24.9	29.2	22.8	27.1	25.7
CPI (average)	24.2	23.9	16.2	24.0	18.9	23.3	28.1	25.9
Export value (pesos)	31.3	10.7	43.7	44.8	96.1	13.6	33.8	45.1
Export value (U.S. dollars)	19.1	-6.9	12.4	2.6	43.6	-9.0	8.5	13.5
Export volume	7.9	-3.8	5.2	9.7	26.9	18.5	3.7	26.6
Coffee export volume	12.1	-5.6	10.9	-2.0	14.0	-0.9	-19.5	...
Import value (pesos)	33.0	21.3	15.7	30.0	27.3	39.8	42.7	27.9
Import value (U.S. dollars)	20.8	2.5	-9.5	-5.6	-7.1	11.9	15.7	0.1
Import volume	11.5	0.3	-12.2	-2.5	0.4	12.5	11.4	-2.7
Exchange rate								
Col\$/US\$								
Average	-9.4	-15.6	-21.8	-29.2	-26.7	-19.9	-18.9	-21.8
End-of-period	-9.1	-16.9	-22.1	-33.9	-21.4	-17.0	-21.5	-22.6
Real effective exchange rate (end-of-period)	2.6 <u>1/</u>	2.4	-5.8	-22.2	-7.6	0.3	2.1	-6.9
	(As percent of GDP)							
Overall balance of the non-financial public sector	-0.5	-6.5	-6.3	-3.5	-0.3	-2.0	-2.1	-2.2
External current account	0.6	-8.7	-7.6	-5.0	1.5	-0.1	-0.6	0.1
External debt	17.1	32.7	44.1	44.1	44.9	47.1	45.8	41.4
Foreign exchange reserves (in months of imports of total goods and services)	6.8	5.6	2.3	2.8	4.6	4.8	4.8	5.0
Export price of coffee (1985=100; Colombian mild, ex-dock New York)	106.6	94.5	98.9	100.0	150.0	83.9	104.2	76.8

Source: IMF, International Financial Statistics.

1/ 1979-80 only.

The deterioration in the economy reflected both exogenous external factors, principally the decline in international coffee prices, and expansionary domestic policies that sought to reverse the recessionary trends in the economy. Moreover, the seeds of economic deterioration had already been sown in the second half of the 1970s through the pursuit of an external trade and exchange rate policy which led to important distortions in the price system. During this period, as part of their strategy to contain inflation, the authorities allowed the exchange rate to appreciate and pursued a policy of import liberalization combined with reductions in subsidies to domestic manufacturers. This resulted in a stagnation of export diversification and a weakening of the industrial sector. The effect of these policies on the external accounts was compounded after 1978 by the authorities' pursuit of an expansionary fiscal policy. The deterioration in conditions in the world coffee market in 1980 did not lead to any change in policy, and both domestic and external imbalances were quickly reflected in large fiscal and current account deficits which were financed through a rapid buildup of external debt and declining international reserves (Table 11).

The intensification of exchange and trade restrictions was a central element of the authorities' initial strategy to stem the loss of net international reserves over 1982-84. By early 1984, 83 percent of all items in the tariff schedule were subject to prior licensing, 16.5 percent were on the prohibited import list, and only 0.5 percent of items could be imported without any administrative control. To reinforce this policy, the authorities accelerated the rate of depreciation of the peso against the dollar, and adopted fiscal revenue measures in 1983 and 1984. These measures helped to reduce the fiscal and external current account deficits somewhat in 1984, but they still remained unsustainably large.

2. The 1985-86 program

In response to the continuing economic and financial deterioration, the authorities framed a comprehensive adjustment program for 1985 which was supported by a monitoring arrangement with the Fund. The program, which broke with the authorities' earlier policy strategy in favor of a clear-cut demand-management orientation, was designed to redress the imbalances in the economy and bring about a realignment of relative prices through a tightening of monetary and fiscal policies together with the pursuit of an exchange rate policy designed to restore the level of external competitiveness that had prevailed in the mid-1970s. At the same time, the authorities reversed the trade policies pursued over the previous three years and began a significant liberalization of the foreign trade regime. The measures adopted under the 1985-86 program are summarized in Appendix II, while the magnitude of the adjustment sought under the program can be seen in Table 12.

The following measures are of particular relevance because of their possible first-round effects on the purchasing power of the poor: (a)

Table 12. Colombia: Objectives and Outcome of the 1985-86 Program

	1984	1985		1986	
		Target	Outcome	Target	Outcome
<u>(Percent change)</u>					
GDP	3.0	2.0	3.1	4.0	5.8
Consumer prices (average)	16.2	20.0	24.0	22.0	18.9
Consumer prices (end-of-period)	18.3	22.0	22.5	22.0	20.9
<u>(As percent of GDP)</u>					
Public sector balance <u>1/</u>	-7.6	-4.9	-3.6	-2.2	0.3
Revenue	20.9	23.3	23.0	25.7	24.3
Expenditure	28.5	28.2	26.6	27.8	24.0
External current balance <u>1/</u>	-6.5	-4.8	-3.9	-1.0	1.5
<u>(As percent of beginning period liabilities to the private sector)</u>					
Domestic credit	29.3	23.6	31.6	22.3	7.9
Public sector	14.4	3.2	1.6	-3.8	-8.5
Private sector	17.3	21.4	22.9	24.4	20.1
Money and quasi-money	21.6	22.2	35.0	30.4	27.5

Source: Selected staff reports.

1/ As specified in EBS/85/149, EBS/86/245, and EBS/87/278. The data for the public sector and for the balance of payments have since been revised considerably.

the increase in the cost of imports due to the depreciation of the exchange rate, the broadening of the tax base for import duties, and the 8 percent import surcharge, the total effect of which may have been offset to some extent by the liberalization of trade and exchange restrictions; (b) the elimination of certain exemptions from the sales tax; (c) the 35 percent cumulative increase in gasoline prices over 1985-86 and the large increases in other public sector tariffs (40 percent in 1985 and 26 percent in 1986); (d) the reduction in overall public sector expenditure, including a decline in terms of GDP in social expenditure as well as the virtual elimination of public sector transport subsidies (Table 13); (e) the sharp reduction in real terms in public sector wages; and, as a mitigating factor, (f) the granting in 1985 of a 20 percent increase in the minimum wage in line with projected inflation.

Most of the major objectives of the 1985 program were achieved or exceeded (Table 12). Real GDP growth was higher than projected and, despite some quickening of inflation at the beginning of the period, the year-on-year increase in consumer prices was virtually the same as projected under the program. The peso depreciated by 22.2 percent in real effective terms, some 7 percent more than programmed, and by nearly 50 percent against the U.S. dollar over the course of 1985. Real wages declined substantially for all professional categories in 1985 (Tables 14 and 15). Recorded employment in industry continued to fall in 1985 after declining steadily since 1981, however, the national unemployment rate stabilized at about 13 percent notwithstanding an apparent increase in the labor force participation rate (Table 16).

External conditions shifted once again in 1986 due to a sharp increase in international coffee prices. The authorities' main concern at this time was to consolidate the gains made in 1985 and to prevent an acceleration of inflation in the face of a sharp increase in world coffee prices and coffee export revenue. In consequence, the 1986 program aimed at accumulating international reserves, further reducing the fiscal and external current deficits, keeping the real exchange rate at the level achieved at the end of 1985, and continuing with the gradual liberalization of the exchange and trade system.

The combination of the coffee boom and prudent domestic policies led to the elimination of the fiscal and external deficits in 1986. Real GDP grew by 5.8 percent, inflation was reduced further to 20.9 percent by the end of the year, unemployment fell, and real wages recovered strongly in all sectors except construction and the public administration.

III. The Impact of Economic Adjustment Policies on the Poor

As mentioned at the outset, this paper only attempts to examine possible first-round effects of the adjustment program on the poor. As a result, it does not question the basic policy thrust of the adjustment

Table 13. Colombia: Evolution of Central Government Social Expenditure

	1981	1982	1983	1984	1985	1986
(As percent of total expenditure)						
Education	20.6	21.2	22.0	22.5	19.8	18.5
Health	6.1	6.3	6.0	5.6	4.9	4.8
Social assistance and security <u>1/</u>	9.1	9.0	9.2	8.8	9.3	7.5
Housing	2.5	2.5	2.5	5.32/ <u>2/</u>	1.5	1.4
Transport subsidies	3.3	2.4	2.3	1.6	0.9	0.1
Other <u>3/</u>	0.4	0.4	0.6	0.3	0.2	0.5
Total	<u>42.0</u>	<u>41.8</u>	<u>42.6</u>	<u>44.1</u>	<u>36.6</u>	<u>32.8</u>
(As percent of GDP)						
Education	2.8	2.8	2.9	3.2	2.7	2.6
Health	0.8	0.8	0.8	0.8	0.7	0.7
Social assistance and security <u>1/</u>	1.2	1.2	1.2	1.2	1.3	1.0
Housing	0.3	0.3	0.3	0.72/ <u>2/</u>	0.2	0.2
Transport subsidies	0.4	0.3	0.3	0.2	--4/ <u>4/</u>	--4/ <u>4/</u>
Other <u>3/</u>	0.1	0.1	0.1	--4/ <u>4/</u>	--4/ <u>4/</u>	0.1
Total	<u>5.6</u>	<u>5.5</u>	<u>5.6</u>	<u>6.1</u>	<u>5.0</u>	<u>4.6</u>

Source: Contraloría General de la República, Informe Financiero (1986), Table 59.

1/ Roughly 40 percent of this represents expenditure for police.

2/ Reflects a bunching of certain projects.

3/ Mostly water and sewage system infrastructure.

4/ Less than 1 percent.

Table 14. Colombia: Developments in Real Wages in Agriculture
(Annual percentage changes)

	<u>Cold Climate</u>		<u>Hot Climate</u>	
	<u>Meals Included</u>	<u>Meals Excluded</u>	<u>Meals Included</u>	<u>Meals Excluded</u>
1982	-1.8	-2.8	-3.1	-3.1
1983	2.0	1.0	0.5	0.3
1984	-0.3	1.4	-0.6	0.8
1985	-4.9	-4.3	-3.6	-3.3
1986	6.1	7.2	5.0	6.4
1987	4.9	4.3	5.6	5.2
1988	3.3	3.3	2.5	2.0

Source: DANE, Boletín de Estadística, various issues.

Table 15. Colombia: Developments in Real Wages by Sector
(Annual percentage changes)

	Minimum Wage 1/			Wage Cost in Public Sector	Wage in Commerce	Wage in Manufac- turing 3/	Wage in Construc- tion
	Agriculture	Industry	Urban, Non- Industrial				
1981	32.3	-0.6	-0.8	3.0	3.2	1.3	4.6
1982	6.0	4.2	10.1	3.9	4.9	3.3	2.5
1983	4.5	4.5	0.6	4.3	-0.2	5.3	6.4
1984	8.8	5.0	8.8	1.6	1.0	7.2	-1.9
1985	-1.4	-3.3	-1.4	-8.2	-4.2	-2.9	-6.5
1986	4.3	4.3	4.3	-1.3	8.2	4.8	-2.1
1987	-1.1	-1.1	-1.1	...	5.2	-0.7	8.5
1988	-2.4	-2.4	-2.4	...	--	-1.3	...

Sources: DANE, Boletín de Estadística, various issues; and Contraloría General de la República, Informe Financiero, (1986).

1/ The minimum wage for all sectors was unified in July 1984.

2/ Total wage bill divided by government employment.

3/ Excluding the coffee husking process.

Table 16. Colombia: Selected Employment Indicators

	Employment in Industry ^{1/}		National Unemployment Rate	Labor Force Participation Rate
	White Collar (Percent change)	Blue Collar (Percent change)		
1981	-1.7	-5.7	8.3	38.9
1982	-2.7	-6.2	9.0	39.3
1983	-3.1	-8.1	11.7	40.8
1984	-0.4	-1.6	13.1	41.8
1985	-0.1	-1.9	13.0	42.3
1986	1.2	-0.5	12.3	42.8
1987	2.5	3.1	9.9	43.6
1988	4.1	2.5	10.2	44.3

Source: DANE, Boletín de Estadística, various issues.

^{1/} The employment figures mask an important movement from the formal sector to the informal sector, which took place over 1980-84. Many firms shed labor which was then rehired through service contracts with small companies (microempresas) in the informal sector. Thus, the figures exaggerate the decline in actual employment.

program, attempt to measure what the program's impact might be in the longer run, or conjecture what the position of the poor might have been in the absence of adjustment. Moreover, with the data available, it is difficult to pinpoint the impact of the program on the poor in general or on different socioeconomic segments within the category of those classified as poor. Bearing in mind these limitations, two approaches are taken in assessing the impact of the program on the relative position of the poor. First, an estimate of first-round price and income effects is made without the benefit of ex post information, that is, as if the program were being initiated now. The results of this approach are then contrasted with the actual results for 1985-86.

1. First-round effects

As mentioned earlier, the 1985 adjustment program contained a number of measures that affected prices. Staff calculations suggest that the depreciation of the exchange rate together with the effect of the imposition of the 8 percent import surcharge, the broadening of the base for the tax on the sale of imported goods, and, including the mitigating effect of the reduction in the implicit level of import duties, raised the total domestic cost of imports by 20.8 percent in 1985 and by 30.6 percent in 1986 (Table 17). Weighting the increased cost of imports as calculated above by the share of imports in aggregate demand, and assuming a complete and relatively quick passthrough of the higher cost of imports to domestic prices, it is calculated that these measures could have added 3.3 percentage points to the CPI of low-income households in the first round of price adjustment in 1985, and 4.5 percentage points in 1986 (Table 18). An alternative approach to gauging the impact of higher import prices on domestic prices would be to use the calculated elasticities derived from various econometric studies that have investigated the relationship between import prices and domestic prices. These studies generally found that a 10 percent increase in the cost of imports raised domestic prices by between 1 and 2 percent. ^{1/} Using this methodology, the increase in the domestic cost of imports as calculated in Table 17 would raise consumer prices by between 2 and 4 percentage points in 1985, and by 3.1 to 6.2 percentage points in 1986. This is similar to the results obtained with the method employed in Table 18.

The 40 percent average increase in electricity, water, and telephone rates would have added a further 1.9 percentage points to the index in 1985, while the 26.8 percent rise in these public sector tariffs in the following year would have raised the CPI for low-income households by 1.3 percentage points in 1986. Assuming that the reduction in transport subsidies was passed through fully to higher bus fares, this measure would have raised consumer prices by 0.9 percent in 1985 and by 0.5 percent in 1986. The elimination of the VAT exemption for soft drinks could be expected to have had a very small impact on

^{1/} A survey of these studies appears in Herrera (1985).

Table 17. Colombia: Calculation of Program-Induced
Price Effects on Import Prices

(In billions of pesos)

	1984	1985	1986
Value of imports (c.i.f.)	452.9	587.9	748.3
Taxes levied on imports, net of exemptions	74.0	122.3	193.6
Customs duties	45.3	53.7	85.0
Tax on sale of imports	25.8	40.8	62.7
Surcharges <u>1/</u>	2.9	27.8	45.9
Total domestic cost of imports (percent change)	526.9	710.2 (34.8)	941.9 (32.6)
Program-induced effect on import prices		109.7	217.6
Exchange rate <u>2/</u>		84.2	175.2
Discretionary tax element			
Customs duties <u>3/</u>		-1.1	3.7
Tax on sale of imports		3.1	--
Surcharge: 8 percent		23.5	38.7
Surcharge: 2 percent		--	--
		(In percent)	
Implicit increase in the domestic cost of imports caused by exchange rate and discretionary tax measures		20.8	30.6

Sources: IMF, SM/89/246; and Contraloría de la República, Informe Económico (1985 and 1986).

- 1/ Includes both 8 percent and 2 percent surcharges.
2/ Calculated with the nominal effective exchange rate.
3/ Change in implicit tariff.

Table 18. Colombia: Estimation of Program-Induced Price Effects on Low-Income Households 1/

(In percent, annual averages)

	1985		1986	
	Change	Price Impact	Change	Price Impact
1. Import costs	20.8	3.3	30.6	4.5
2. Gasoline price	15.0	0.6	20.0	0.8
3. Elimination of VAT exemption for soft drinks	10.0	0.1	--	--
4. Electricity	40.0	1.0	26.8	0.7
5. Water	40.0	0.8	26.8	0.5
6. Telephone	40.0	0.1	26.8	0.1
7. Reduction of transport subsidies	32.9	0.9	17.2	0.5
8. Total induced effects		<u>6.8</u>		<u>7.1</u>
9. Other goods and services	20.5 <u>2/</u>	14.7	20.5 <u>2/</u>	14.7
10. Total change in CPI (10 = 8 + 9)		<u>21.5</u>		<u>21.8</u>

Source: Staff estimates.

1/ To calculate the price impact, with the exception of import costs, the change in the price of the relevant article was multiplied by its weight in the low-income CPI. For imports, the price change was multiplied by the weight of imports in aggregate demand.

2/ This represents an extrapolation from past trends. The trend value for other goods and services was derived by regressing the log of the index for these items on a time trend over the period 1965-84.

prices in 1985 and no impact in 1986. Assuming an underlying rate of inflation of about 20.5 percent for the other items in the CPI, in line with the results obtained by running a time trend on the CPI for these items, it is estimated that the CPI for low-income households would have risen by about 21.5 percent in 1985 and by 21.8 percent in 1986.

There are a number of obvious pitfalls in this type of analysis, apart from the fact that it only attempts to measure first-round price effects. Firstly, the assumption is that the expenditure pattern implicit in the low income consumer price index is valid for all poor households. As mentioned earlier, there appears to be some evidence to suggest that those classified as poor under the UBN definition, as well as the indigent poor, spend a much larger proportion of their income on food than is suggested by the low-income CPI. Secondly, with the available data it is not possible to differentiate by broad categories of goods the impact of higher import costs on prices and to match this with the expenditure patterns of those classified as poor.

During 1985, the unit value of imports in U.S. dollar terms declined by 5.6 percent, and unit values declined further by 7.1 percent in 1986. Thus, while the devaluation and the increase in import-related taxes may have raised the cost of imports in domestic terms, it is also important to take into account the influence of declining international prices and to try to assess how this decline was spread among import categories. If there was also a decline in the cost of imports in foreign currency terms--of those items either directly consumed by the poor or used as inputs in the production of goods consumed by the poor, this would mitigate to some small extent the negative price effect of the depreciation and the rise in import-related taxes.

Moreover, because of data limitations, it was not possible to adjust the calculation of the impact of the 8 percent import surcharge for the effect of the exemptions from the surcharge. Exempt items were fertilizers, food, imports by the public sector, and imports of scientific books and journals. As food represents nearly half of the low-income CPI, and probably considerably more of the expenditure of the very poor, this exemption from the surcharge could have helped to soften its impact on lower-income groups. Finally, the analysis is based on the assumption of constant markups, which may not be a valid premise in the face of the weakening of economic activity which might be expected to initially accompany the implementation of an adjustment program.

In designing the adjustment package, an attempt was made to maintain the purchasing power of the lower-income groups by providing for a 20 percent average increase in the minimum wage in 1985, which was equivalent to the projected increase in inflation. In addition, the ceiling of 10.5 percent on the average increase in public sector wages was weighted to give a higher-than-average increase to lower paid employees. For those at the lowest end of the wage scale, the increase amounted to 20 percent.

As part of the effort to improve the public sector balance, current expenditure was to be cut by 1 percent of GDP in 1985, but no further cuts were planned for 1986. In the event, among other things, this led to a 0.9 percent of GDP reduction in social expenditures in 1985 and a further cut of 0.4 percent of GDP for social outlays in 1986. ^{1/} Most of the reduction took place in education expenditures, transport subsidies, and housing expenditure. Public transfers (direct income support) rose by only 7.4 percent in nominal terms in 1985, implying a decline of 12.6 percent in real terms with a projected inflation rate of 20 percent. There is not sufficient disaggregated data to discern whether this real decline in transfers was an across-the-board cut or was limited to certain programs. However, to the extent that their income from transfers did fall, and considering that such transfers represent about 16.5 percent of the income of the poorest 10 percent of the population and 14 percent of the income of the next poorest group, this decline in real terms would have represented, all things being equal, a reduction in real income for these two groups of 2.0 percent and 1.8 percent, respectively, in 1985. These trends were reversed in 1986, public transfers increased broadly in line with inflation while the minimum wage was raised in line with actual inflation observed during 1985.

Although the depreciation of the exchange rate could be expected to negatively affect the buying power of the poor in the first instance through its effect on prices, it could be presumed to have had a positive impact on the earnings of the poor in the traded goods sector, particularly for agricultural smallholders, but also for wage earners through its second-round effects on employment and perhaps also wages. Unfortunately, there is no information which could be used to support this intuitive conclusion.

In summary, the first-round effects of the 1985 stabilization program, on balance, could have resulted in a relatively small reduction in the real incomes of the poor, because the negative first-round price effects would have been largely offset by the 20 percent increase in the minimum wage (assuming that developments in the minimum wage is a relevant guide to trends in the earnings of the poor), by the weighting scheme for public sector wages, and by the positive impact of the depreciation of the exchange rate on the tradables sector.

2. The adjustment program in retrospect

Economic developments during 1985-86 turned out to be better than targeted, partly as a result of favorable external factors. Real GDP grew by 3.1 percent in 1985, compared with a projection of 2.0 percent under the program. The low-income CPI rose by 22.7 percent on average, compared with the above-mentioned estimate of 21.5 percent which only

^{1/} Source: Contraloría General de la República, Informe Financiero, (1986), Table 59.

took into account projected first-round price effects. Most of the acceleration of inflation in 1985 seems to have been due to a sharp increase in food prices. However, the rate of growth of housing costs, which includes expenditures for electricity, water, and telephone services, also accelerated from 12.9 percent in 1984 to 14.9 percent in 1985, about in line with the 1.9 percentage point increase calculated as a first-round impact in Table 18. The rate of increase in the cost of clothing and other items for the low-income index actually decelerated in 1985 compared to the previous year (Table 19). These figures make it difficult to pinpoint the impact of higher import costs on domestic prices. The acceleration in food prices was apparently only weakly linked to the depreciation of the exchange rate and had more to do with supply shortages.

Looking at other indicators, the unemployment rate in the formal sector stabilized, but there was a major deterioration in real wages in all sectors ranging from a decline of 8.2 percent on average for public sector workers to 2.9 percent for wages in manufacturing. Wages in agriculture fell by around 4 percent on average in real terms in 1985. ^{1/} In contrast, minimum wages in agriculture and in services fell only slightly, by 1.4 percent. To the extent that trends in the minimum wage are representative of developments in the earnings of the poor--and there is evidence provided by the PREALC report and others to suggest that this is the case--the incomes of the poor would have been relatively better protected than other groups during the adjustment period.

While it may be tempting to speculate what the position of the poor might have been had the adjustment effort not taken place, or about the long-run effects of the adjustment program on the relative position of the poor, there is insufficient information for such an analysis and, in any case, it is beyond the scope of this paper. One could imagine that, in the absence of adjustment, *ceteris paribus*, the expansionary financial policies pursued in the early 1980s would have led to even higher rates of inflation, while the severe distortion of relative prices caused by inappropriate external policies would have further weakened economic growth. This combination, through its negative effects on real income and employment, would have had an adverse impact on all income groups, and on the poor in particular.

Trying to trace the impact of the adjustment measures in the long run is complicated by the sharp recovery of coffee prices in 1986. All things being equal, it would seem safe to assume that the adjustment measures, particularly the realignment of the exchange rate, placed the

^{1/} It should be noted that while a cut in real wages, including minimum wages, could have an immediate negative impact on welfare, especially on the welfare of the poor, if it leads to a reduction in inflation over a longer period, this could more than compensate for the initial negative effects.

Table 19. Colombia: Developments in the Components
of the Consumer Price Index

(Average annual percent change)

	General Index	Middle-Income Index	Low-Income Index
<u>All items</u>			
1984	16.1	18.3	18.3
1985	24.0	21.8	22.7
1986	18.9	21.6	20.7
<u>Food</u>			
1984	19.6	18.6	19.6
1985	27.7	28.2	27.9
1986	23.7	24.5	23.3
<u>Housing</u>			
1984	12.9	11.7	12.9
1985	15.5	15.2	14.9
1986	14.8	15.7	14.0
<u>Clothing</u>			
1984	17.9	17.6	18.1
1985	16.3	15.5	16.7
1986	19.1	17.7	19.9
<u>Other</u>			
1984	24.6	24.7	24.6
1985	19.3	19.3	19.3
1986	22.9	22.6	22.8

Source: DANE, Boletín de Estadística, various issues.

economy in a better position to benefit from the subsequent coffee boom and maintain balanced growth in the longer run.

IV. Concluding Remarks

The simple estimate of the first-round price effects suggests that the initial negative impact of the adjustment program was probably largely cushioned by the Government's action on the minimum wage, by the exemption of food from the 8 percent import surcharge, and by the fact that the items which increased in price as a result of the measures taken under the program accounted for only just over one quarter of the goods and services included in the low-income CPI. In fact, the actual increase in the low-income CPI in 1985 was very similar to that predicted. In addition, the perceived negative distributional effects of the program were narrowly concentrated during 1985. By 1986, under the influence of the coffee boom, real wages had recovered strongly, as had growth and employment, and by 1988 there was a further improvement in the distribution of income.

Because of data limitations and the methodology employed, this paper can only give a fairly rough indication of the impact of the 1985-86 program on the incomes of the poor. For future studies, it would be desirable to have direct data on the expenditure patterns of poor households, rather than having to rely on the weights of the low-income CPI as a proxy. More importantly, because of data limitations, this paper has been unable to quantify the presumably net positive impact of the depreciation of the exchange rate on the incomes of the poor in the traded goods sector which, given the size of the depreciation, could have been substantial. Finally, the data presented in this paper suggest that in a middle-income developing country such as Colombia, the poor are in fact quite heterogeneous. Not only are there important differences in the characteristics of the poor with respect to urban versus rural poverty, but there is also considerable differentiation within these two groups. This makes it difficult to generalize about the impact of program-induced price measures on the poor as a group.

Socio-Economic Characteristics of Colombian Municipalities

<u>Subgroup</u>	<u>Geographical Region Rural structure</u>	<u>General Characteristics</u>
Depressed Andean smallholders (200 municipalities)	Andean region (19.7% of Colombian municipalities, 5.2% of national population).	Municipalities with predominance of smallholders. About half the land holdings are less than 5 hectares. Mainly hillside agriculture with low productivity (mostly for self-consumption). Four out of five people live in rural areas. Half of the population is poor (in misery).
Other Andean smallholders (143 municipalities)	Andean region (14% of municipalities, 4.1% of national population).	Municipalities with high percentage of poor farmers but unable to produce enough to subsist [under basic conditions]. 64% of the population is poor; 37% of the landowners have less than 5 hectares. 20% of working population receives salaries. Farmers' salaries the lowest in the country.
Smallholders from Caribbean Region (31 municipalities)	Caribbean region (3.1% of municipalities, 1.8% of national population).	Municipalities inhabited by fishermen who live in groups close to rivers and marshes. They are always in conflict over land with the commercial farmers and ranchers. Population has the highest rate of regional poverty.
Large estates; ranchers and commercial farmers from Caribbean region (107 municipalities)	Caribbean region (10.5% of municipalities, 7.9% of national population).	Municipalities consist mostly of ranches, but in some sectors commercial agriculture is also practiced. Poverty rate is one of the highest in the country.

<u>Subgroup</u>	<u>Geographical Region</u> <u>Rural structure</u>	<u>General Characteristics</u>
		70% of the land holdings are larger than 50 hectares. One of the highest concentrations of properties exceeding 500 hectares in the country, yet has the highest rate of rural population pressure on land holdings smaller than 500 hectares.
Border colonization (72 municipalities)	Piedemonte y Caqueta zones, Guaviare, Putumayo, Meta, and Casanare. (7.1% of municipalities and 2.4% of national population).	Municipalities with active colonization process. Lack of infrastructure in roads and services, low agricultural capability, and low productivity.
Internal colonization (58 municipalities)	Magdalena, part of Sinú-San Jorge pockets of the internal border in Antioquía, Boyacá, Cundinamarca, Santanderes, Tolima and Cauca (5.7% of municipalities, 3.2% of national population).	Municipalities with "closed" colonization due to the configuration of the land. Some road infrastructure, which gives access to markets. Three of four people are poor, more than half live in misery.

<u>Subgroup</u>	<u>Geographical Region Rural structure</u>	<u>General Characteristics</u>
Rural marginal (39 municipalities)	Pacific regions: the Amazon and areas of Guaviare, Vaupées, Casanare, Meta, Cauca, and Antioquía (38% of municipalities, 0.9% of national population).	Municipalities characterized by low possibilities for development of agriculture and cattle raising. Main sources of income are forestry and fishing. Most municipalities are comprised of native communities, with low percentage of paid laborers.
Middle-level coffee farmers (60 municipalities)	Andean cordillera and inter-Andean valleys, Western area (5.9% of municipalities, 4.0% persons).	Municipalities with more than one-third of the land planted with coffee. Since this generates work, the prosperity of this area brings workers from other poor regions, causing high population density; many workers can only find jobs during the harvest season. The investments made by the National Coffee Fund (FNC) have generated a high coverage of basic services. 60% of the population lives in rural areas, 70% of the population satisfies their basic needs; only 16% lives in misery. 30% of the working population receives salaries.
Middle-level non-coffee farmers (173 municipalities)	Andean cordilleras and inter-Andean valleys.	Municipalities with well-off peasants. 65% of land holdings are smaller than 20 hectares. Low rate of concentration on the land. Area of peasant production for the market. One fourth of the population receives salary.

<u>Subgroup</u>	<u>Geographical Region</u> <u>Rural structure</u>	<u>General Characteristics</u>
Municipalities of commercial agriculture, with high concentration of population in urban areas (32 municipalities)	Andean (altiplanos) valleys and economic enclave areas (3.1% of municipalities, 4.4% of national population).	Municipalities with agricultural businesses, predominantly mid-size and large properties. More than half the land holdings are larger than 20 hectares. High number of agricultural laborers; an average of 40,000 persons per municipality and two of three live in the capitals.
Municipalities of commercial agriculture, with high proportion of population in rural areas.	(Altiplanos) and inter-Andean valleys (3.1% of municipalities, 3.8% of national population).	Municipalities with less than 25,000 inhabitants, almost half live in rural areas. High rates of pressure on the land. 40% of the land holdings are larger than 50 hectares. 25% of the working population receives salary. Almost half of the population is poor.
Secondary towns (31 municipalities)	Urban Structure	Municipalities with a population of about 100,000 inhabitants 85% of which live in urban areas. Characterized by high population growth (migration) during the intercensus period (one in five persons did not live in the municipality before 1980). 37% of the population is poor.

<u>Subgroup</u>	<u>Geographical Region Rural structure</u>	<u>General Characteristics</u>
Subregional centers (21 municipalities)	Main subregional centers (2.1% of municipalities, 15.5% of national population).	Municipalities--mostly capitals of "departments"--constituting the commercial, financial, administrative and service activity centers. Average number of people is about 200,000. The scarcity of dwellings and public services cause problems of basic needs.
Regional centers (5 municipalities)	Main urban centers	Municipalities where most of the country's industrial and financial activities are centered. They are overpopulated--each has about one million. The population density cannot be compared to the rest of the overpopulated areas. 20% of the population is poor; less than 10% lives in misery.

Source: DANE (1989b).

Colombia: Economic Measures Under the 1985-86 Program

I. External Policies

1. In 1985, there was a more rapid depreciation of the exchange rate. Due to overshooting, depreciation slowed in 1986.

2. Changes were made in the level of external protection and in import tariffs.

In 1985, the Government reversed the policy of the preceding three years and significantly liberalized import restrictions. This policy was continued in 1986, to raise to nearly 70 percent the goods that could be imported freely. Also in 1986, the authorities took steps to eliminate certain exchange restrictions, for example, the minimum financing requirement for imports.

With effect from January 1985, the base of the tax on the sale of imported goods (impuesto sobre la venta de bienes importados) was changed to cover all import taxes including the import surcharge, i.e., the tax was then levied on "derechos de aduana," not on "derechos de importacion." This had the effect of broadening the tax base.

At the end of 1985, the Government substantially reduced the export incentives granted through tax credit certificates.

An 8 percent surcharge on the value of imports was imposed in 1985. Exempted were imports of fertilizers and raw materials needed to make fertilizers; imports of food, fertilizers, and raw materials effected by public sector entities; and imports of scientific and cultural books and journals.

II. Fiscal Policy

Revenue Measures

1. An 8 percent import surcharge was imposed (see above).

2. In 1985 some sales tax exemptions were abolished--for soft drinks, but the basic tariff of 10 percent was applied only at the manufacturing level; for most machinery and equipment used for agriculture and cargo transport; and for books and journals, except scientific and cultural publications.

3. Regarding income taxes, companies and individuals with incomes in excess of 2 million pesos were forced to subscribe during 1985 to Budget Financing Bonds (bonos de financiamiento presupuestal) at low interest rates for 20 percent of their tax liability--this represented a prepayment of future tax liabilities. In addition, the deduction for financial costs incurred in the purchase of a home (mortgage relief) was

severely reduced, as were the deductions for travel costs in excess of a certain percentage of wages. A whole range of "retentions at source" were established for investment income and other transactions, for example, 0.5 percent on the majority of investment income, and 1 percent on the acquisition of real estate, vehicles, and construction and housebuilding services. The withholding tax on financial income was raised considerably.

4. Regarding state monopolies, the special income tax deduction for Carbocol was eliminated in 1985, and the special discount for Empetrol was limited.

5. Regarding the stamp tax, in 1985 the rate was increased by 50 percent and the tax was indexed to the CPI. Exempted were imports of fertilizers and other inputs for agriculture.

6. The gasoline tax was increased by 15 percent, from 19.2 pesos (November 1984) to 22.06 pesos per gallon, to align domestic with international prices. This tax was increased further--by 20 percent--in January 1986. This increase was accompanied by the gradual dismantling of transportation subsidies.

Expenditure Measures

1. In 1985, the aim was to cut current expenditure by 1 percent of GDP. Salary increases in the central administration were limited to a weighted average of 10.5 percent (although higher increases of up to 20 percent were allowed for lower paid employees), and cuts in other noninterest current expenditure were considered. Social expenditure fell from 6.1 percent of GDP in 1984 to 5.0 percent of GDP in 1985, and to 4.6 percent of GDP in 1986.

2. Cuts in capital expenditure were made in 1985, mainly as a result of the winding down of certain investment projects.

3. In 1986, noninterest current outlays declined slightly in relation to GDP, while capital outlays fell by 0.6 percent of GDP.

III. Wage Policy

In 1985, the minimum wage was increased by 20 percent, in line with projected inflation. Wage policy was generally easier in 1986, the minimum wage was raised by the full amount of inflation in 1985.

IV. Monetary Policy

Monetary policy was kept tight over 1985-86. There was an increase in preferential lending rates to reduce the subsidy element.

V. Price Measures

In 1985, electricity, water, and telephone rates were increased by 35-40 percent. In 1986, these rates were increased by 2 percent per month.

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