

PN-ARS-088  
89495,

**Employment and Incomes in Ecuador:  
A Macroeconomic Context**

**May 1990**



**Sigma One Corporation**

**RESEARCH TRIANGLE OFFICE:**

**Sigma One Corporation  
Post Office Box 12836  
Research Triangle Park,  
North Carolina 27709-2836**

**Phone: (919) 361-9800**

**FAX: (919) 361-5858**

**Telex: 490-000-8487 CGI U**

**Employment and Incomes in Ecuador:  
A Macroeconomic Context**

**By**

**Dominique Hachette  
and  
David L. Franklin**

**Prepared For:  
The United States Agency for International Development  
Mission to Ecuador  
Contract 518-0090-C-00-9182-00**

**May 1990**

**Sigma One Corporation**

## **EXECUTIVE SUMMARY**

This report presents an assessment of the current situation in Ecuador regarding employment and labor incomes. It is based on analysis of available official data, reviews of other studies and numerous interviews with officials of the Government of Ecuador, labor leaders, entrepreneurs, workers and other knowledgeable persons. This report is one of a series of four interrelated studies of the current macroeconomic situation in Ecuador. The other studies analyze the financial sector, trade and export promotion policies, and the role of government in the provision of goods and services. This study relies on economic performance data developed for the other studies for its macroeconomic framework and on econometric and numerical analyses of the available data; the data and the analytical methods are presented as appendices to the integrated report of the four studies. This study addresses the labor incomes' problems in Ecuador in the context of economic stagnation and high inflation; these conditions have as their symptoms a severe deterioration of urban labor incomes.

### **Principal Findings**

1. The labor problems in Ecuador are related to very low workers' incomes and not, primarily, to the levels of unemployment. Relatively low urban unemployment rates in the urban areas probably represent economically efficient searching for employment in the modern sectors of the economy. Some of the measured unemployment results from segmentation of the urban labor markets.
2. There exists evidence that the urban labor markets are segmented into formal and informal components. The segmentation arises because the labor laws provide for permanent tenure and for ease of unionization. As a consequence employers and unions combine their economic interests to prevent free entry into formal sector employment. Approximately twenty percent of the labor force receives artificially high remunerations as a result of the segmentation and the rest receives lower remunerations than would prevail in a more flexible labor market. If the labor market imperfections were removed, the relative wages between formal and informal employment would improve by about 30% in favor of the informal sector workers.
3. Urban incomes have fallen, in real terms, from their 1980 peaks throughout the eighties as a result of several severe external shocks to the economy and as a result of macroeconomic distortions and instability. Formal sector wages have fallen in real terms more than real per capita income; labor market rigidities and financial market distortions (including subsidized credit) have impeded labor absorption in the modern sectors in spite of the severe fall in real wages. If labor market and capital market rigidities were eliminated, employment and wages would rise on an economy wide basis. For example, manufacturing

employment would be about 15% percent higher and average incomes in the sector would be about 20% more.

4. On a positive side, agricultural incomes and employment rose after 1984 in response to improved pricing incentives provided by policy of devaluation of the real exchange rate and a reduction of controls and interventions in agricultural product markets. The response of agriculture to the improved exchange rate and prices prevented a deeper deterioration of national income (GDP) in the face of declining terms of trade for Ecuador's exports.
5. The urban informal markets for labor have grown explosively as response to the economic rigidities in the formal labor markets, distortions to capital markets and protection afforded to the formal industrial sector by the trade policy and the industrial development laws. The growth in the urban informal markets has also been fueled by demographic factors, which until recently have included rapid rural to urban migration. The urban informal labor markets are the source of incomes for the majority of the extremely poor persons from the urban areas; the extent of urban poverty would be less if the structure of economic incentives were more neutral and flexible. Among the poorest persons are those in households in which women are the principal income earners; there is evidence to believe that women suffer from wage discrimination in all sectors.
6. Public sector employment has grown rapidly and accounts for about 15% of the labor force. Efforts to control inflation can be severely hampered if salary increases to public sector employees are financed through monetary expansion. Public sector wage setting is also transmitted to the formal sector and higher wages erode the gains in international competitiveness afforded by the periodic devaluations of the currency. These phenomena combine to make the stabilization efforts less effective and more protracted. Continued inflation erodes nominal wages and creates pressures for further wage increases.
7. The government's announced program of economic reforms to increase the international openness of the economy could be greatly enhanced by increased flexibility in the labor markets. The gains from increased openness would lead to improved labor incomes. The fall in wages that has been experienced has already increased the competitiveness of the economy, but the gains are not been realized because tariff protection to industry taxes exports, capital market distortions fuel capital flight and discourage savings, and labor market regulations and laws discourage international investment and domestic employment. A mutually consistent package of reforms in trade, financial and labor policies could lead to an improvement of approximately 20% in labor incomes, but formal sector wages would have to fall by perhaps 10 to 20% in the short run.
8. The government's economic plan to improve the international competitiveness of the Ecuadorean economy calls for gradual implementation of a number of far reaching measures. These all should provide economic growth by expanding

international marketing opportunities for agricultural and non-agricultural products. Even with increased openness and reduced trade protection to industry many subsectors would remain protected naturally in the domestic markets by transport and transaction costs. The costs of economic adjustment would be borne by a small minority of currently well situated entrepreneurs and workers in the industrial sector. Workers in other sectors would gain substantially as has been demonstrated by the performance of the agricultural sector.

9. Additional to the now widely recognized need for macroeconomic reforms and continued fiscal and monetary austerity, there is a nascent awareness that labor markets must be more flexible to support the macroeconomic reforms. The authorities are considering some measures to promote labor market flexibility, such as "in-bond" manufacturing schemes that would relax provisions in the labor code to promote employment. On the other hand, concern for employment and labor income problems has led to proposals for emergency employment programs. These latter bring the risk of impeding rather than favoring an economic recovery through their potential deleterious effects on labor market efficiency and on the success of the stabilization program.

## **A Strategy for Policy Dialogue**

A strategy for policy dialogue to promote increased labor incomes in Ecuador could consist of the following elements:

1. Encourage acceleration of the trade and financial sector reforms within a framework of macroeconomic stability. The lowest income groups in the society will benefit the most from success of the economic program. An economic regime in which the exchange rate and the interest rates are determined by the country's international opportunities will improve the well being of the poorer population groups.
2. Efforts to "chip away" at the rigidities in the labor legislation should be encouraged to demonstrate that increased labor flexibility can lead to improvements in labor incomes. Similarly, projects that support the development of non-protected enterprises in all sectors would further demonstrate that the Ecuadorean economy has the capacity to respond to economic incentives provided by markets that are allowed to function without intervention or privilege.
4. The international financial institutions and the bi-lateral development agencies should include conditionality provisions to restructure the process of wage bargaining in the formal sector to exclude government involvement, to be on a firm by firm basis, and to not be tied to public sector salaries.
5. Assistance to specific subsectors such as the food marketing system in which many of the participants are poor women should have high payoffs in terms of income as well as on other social indicators, e.g. nutrition and child survival.
6. Financial and technical assistance to improve the information base for policy dialogue, such as support for INEC's proposal to carry out a nationwide household income and expenditure survey, is most important in monitoring the success of the policy reform process. Complementary support to INEM and the central bank is also warranted.
7. There is a need to distinguish between the problems of chronic poverty and transitory problems arising from economic adjustment or the existing distortions. Chronic poverty needs to be addressed at its roots through permanent programs in education (particularly skill oriented vocational training), health, sanitation and basic infrastructure. Emergency employment programs are not warranted; they pose the risk of delaying or impeding the movement of resources to their most productive use.

## Table of Contents

EXECUTIVE SUMMARY . . . . .	i
1.0 INTRODUCTION AND BACKGROUND . . . . .	1
2.0 AN OVERVIEW OF THE MACROECONOMIC ENVIRONMENT FOR FOR EMPLOYMENT. . . . .	4
2.1 External Shocks and Per Capita Income . . . . .	5
2.2 Exchange Rate and Trade Policy Reforms . . . . .	7
2.3 Some Macroeconomic Effects on Labor Incomes . . . . .	10
3.0 STRUCTURE AND PERFORMANCE OF THE LABOR MARKET . . . . .	13
3.1 Labor Market Segmentation . . . . .	14
3.2 Decline in Real Wages for Urban Workers . . . . .	17
3.3 Agricultural Incomes and Improved Incentives . . . . .	19
3.4 Informality as a Response to Economic Rigidities . . . . .	21
3.5 Employment Effects of Capital Market Distortions . . . . .	22
4.0 A POLICY FRAMEWORK FOR IMPROVED LABOR INCOMES . . . . .	25
4.1 An Assessment of the Income and Employment Effects of Reform . . . . .	26
4.2 A Strategy for Policy Dialogue . . . . .	27
BIBLIOGRAPHY . . . . .	29

## List of Figures

### Figure

1	Components of GDP, 1951-1988 . . . . .	4
2	Terms of Trade, 1962-89 . . . . .	5
3	External Effects on GDP . . . . .	6
4	Real Exchange Rate . . . . .	9
5	Relative Prices of Tradables . . . . .	9
6	Labor-Capital Value Added Ratio . . . . .	10
7	Value of Goods and Services . . . . .	11
8	Absorption and Foreign Borrowing . . . . .	12

## List of Tables

### Table

1	Labor Market Structure and Monthly Wages in Ecuador . . . . .	15
2	Indices of Real Total Remunerations in Formal Sectors in Ecuador 1981 to 1988 . . . . .	18
3	Ecuador Nominal and Real Minimum Wages 1970-1986 . . . . .	18
4	Evolution of Sectoral Labor Productivity (1982-88) . . . . .	19
5	Evolution of Real Per Capita Incomes Indexed Within Population Group to 1975 . . . . .	20
6	Evolution of Real Per Capita Incomes (1975-1988) by Population Groups . . . . .	21
7	Annual Average Ratio of Value Added Accruing to Labor Relative to Capital in National Accounts . . . . .	23

## **1.0 INTRODUCTION AND BACKGROUND**

The purpose of this study is to assist USAID/Ecuador in identifying a policy dialogue strategy for promoting increased productive employment and improved labor incomes in Ecuador. The study forms part of a set of four interrelated studies for Macroeconomic Policy Reform; the other studies cover the financial sector, trade policy and the role of government subsidies. The overall purpose is to promote broad-based economic growth and stability.

This study focuses on employment and income generation. The emphasis is on the effects of labor market structure and policies as they interact with economic incentives to determine the demand for labor within the productive sectors of the economy. The study is based primarily on the analysis of secondary data developed by official Ecuadorean institutions and on reviews of selected studies of employment issues for Ecuador. The main period of reference is the decade of the eighties, although some background material from the previous two decades is presented for contextual reasons.

Whitaker (1989) provides an excellent review of the performance of Ecuador's labor markets as revealed, primarily, by census data through 1982. He describes the labor market as poorly developed, fragmented, informal, and operating at high costs regarding the matching of skills and abilities with jobs. He concludes, however, that the labor market has worked well to move workers between regions and economic sectors in response to economic incentives. His diagnosis is that the main problems relate to distortions in macroeconomic policy and to extremely limited investments in human capital.

With the population growing at very high rates (three percent per year from 1950 to 1990) and expected to continue to grow at a relatively high rate of 2.6% through the end of this century, it is expected to reach 14 million persons by the year 2000. The labor force is growing even faster, and approximately 135,000 new job seekers will be added each year over the next ten years. This rapid growth of the labor force results from the demographic movement of the population into working age and the increased participation by women in the labor market. The urban labor force has grown even faster as a result of high rates of rural to urban migration. Whitaker attributes the high rate of rural to urban migration to macroeconomic policies that were biased against agricultural activities and the high degree of subsidization of the urban population.

In this context, agriculture remained the largest employer of any economic sector, but its share of the labor force had declined from nearly 60% in 1970 to 45% in 1982. By 1982 the services sector increased its share of employment from 15 to 25% in the 1970-1982 period. Other service oriented sectors like construction, transportation and finance also increased their share of the labor force in that inter-censal period. Industry, which was the beneficiary of the country's import substitution strategy for development, reduced its rate of labor absorption and grew by only 8.4% in absolute terms during the inter-censal period (Whitaker, 1989).

Whitaker also considers some performance aspects of the labor market including the possibility of "segmentation" as a result of the labor code and other social legislation. He describes the labor code as, "one of the most ambitious pieces of labor legislation in Latin

America". The code calls for the setting of minimum wages in all firms, work rules, a complex structure of compensation on top of the basic wage, and importantly labor stability rights for employees with tenure of 90 days or more. The code applies more stringently to larger firms, and small firms and artisan enterprises are exonerated partially from some of its most binding provisions. The effects of the code are to tax labor demand. Considering other analysts' (Fletcher, *et al*, 1988) claims that the labor market is segmented, Whitaker speculates that reported wage differentials between the formal sectors and the so called informal sector may be attributable to productivity differences such as may arise from higher stocks of human capital. He allows the possibility that the labor market in the public sector may be segmented, because "public sector jobs are highly sought after", tenure is essentially permanent and the pay is very good and the work load light. This notwithstanding his major conclusion is that the labor markets are functioning efficiently, in spite of the labor code.

Fletcher *et al*, however, assert that the labor market is probably segmented and that the use of labor in high wage industries is suboptimal and pushes labor into low productivity jobs in the low paid informal sector. This condition results also, in part from the capital bias in the import substitution and industrialization strategy that has been pursued. They emphasize that the underemployment problem is basically a problem of low productivity and low earnings. They call for policy reform to "reduce regulations that cause or perpetuate unequal earnings across industries". They recommend that policy dialogue "go beyond macro and trade policy reforms that encourage export oriented growth to address sectoral policy issues that determine the number and types of jobs ..." They suggest a focus on small-farm households and low scale production that is labor intensive.

They also suggest public works programs to provide short term income transfers to the seasonally underemployed in rural areas and for the urban destitute. They cast doubt on the need for massive employment programs, however, because these will simply transfer the work force from existing productive activities to the employment program. They recommend locating small scale enterprises in regions where agricultural incomes are rising to generate more employment than would be achieved by locating production in major cities. Fletcher *et al* argue that the results of policy induced distortions in the labor market (segmentation) be corrected by regulation on the types and locations of employment generation efforts.

The Fletcher report provides a thorough discussion of the concept of underemployment in the informal sector as short hand for low productivity low paid work. They also present a complete discussion on labor market institutions and policies, including some description of the union movements in Ecuador. The power of the unions is not analyzed, but the authors do attribute some responsibility for labor market wage differentials to the unions. They also present a description of the size distribution of firms that is useful for understanding the potential role of small, medium and large manufacturing enterprises in the generation of employment. The essence of this latter information is that labor market rigidities prevent firms from achieving their optimum size and factor mix. This implies that employment levels are sub-optimal and that the labor market distortions generate inefficiencies.

One of the most important concepts that will be addressed in this study is the issue of labor segmentation, and its potential effects on incomes, employment and efficiency.

Another less fundamental, but important related concept, is informality in the labor market.

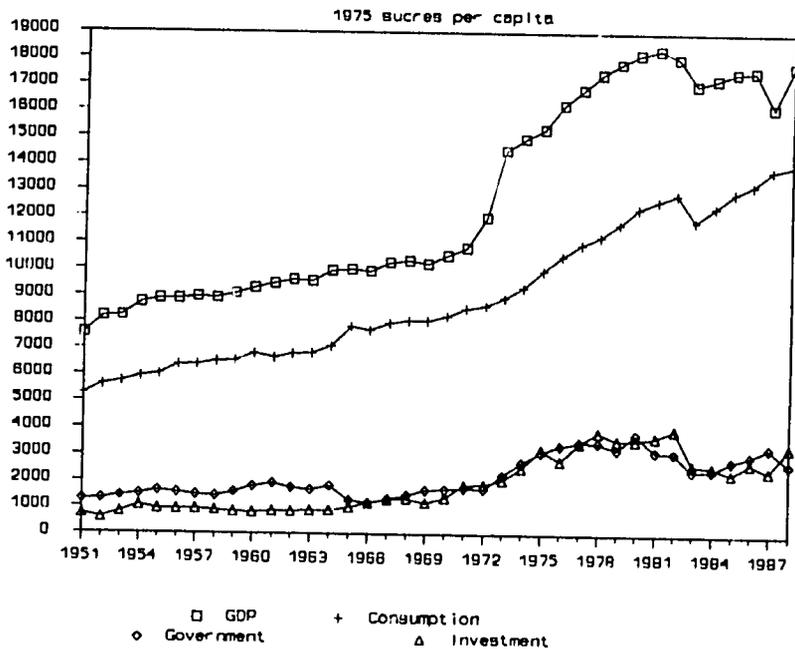
Segmentation of a labor market would imply that institutional arrangements, legal or not, would impede the functioning of the market to equate labor supply and demand at wages that reflect the value of the last hour of work supplied (and demanded) to the wage rate. An interference that impedes wages from adjusting so that demanders use their desired numbers of workers, and all the workers that desire to work at the equilibrium are unable to find employment could be a sign of segmentation. Strictly speaking, segmentation implies that workers that are otherwise qualified are prevented from obtaining employment even if they are willing to accept the prevailing wage. Typically, segmentation is produced by barriers to entry to all potential workers for the purpose of maintaining higher wages for the persons that are employed. Such barriers to entry could be contrived by unions or racial and gender discrimination, or they could be natural, such as lack of information.

Informality in Ecuador is defined by employment in firms with less than five employees or at wages below the minimum wage or for work hours that are less than fulltime, when the worker desires fulltime work (INEM,1988). There is no sharp dichotomy as in other countries where informality implies illegality; rather in Ecuador informality is a legal response to a stringent labor law.

## 2.0 AN OVERVIEW OF THE MACROECONOMIC ENVIRONMENT FOR EMPLOYMENT

The Eighties are referred to by Ecuadoreans as the decade of crises and adjustment. Per capita income (gross domestic product: GDP) peaked in 1981 after a thirty year uninterrupted and increasing trend of real growth (Figure 1 presents per capita estimates for GDP, private consumption, government expenditures and investment, as reported to the IMF, for the period 1951 to 1988). At the end of 1989 per capita income had fallen back to the level of 1978, and since 1982 per capita GDP has averaged ten percent lower than the 1981 peak. Growth during the seventies was unprecedented; early in the decade growth was fueled by international investment in the development of oil, and later by oil revenues and accelerated international borrowing. Petroleum had made Ecuador a preferred borrower in international capital markets. While real per capita income today is nearly fifty percent higher than its long term historical trend, Ecuadoreans look back to the seventies and consider themselves significantly poorer.

Fig. 1. Components of GDP, 1951-1988



## 2.1 External Shocks and Per Capita Income

Many blame the onset of the "international debt crisis" in 1981-82 for the fall in per capita income. Unlike other countries in Latin America, Ecuador has not suffered as much from the debt crisis as from a dramatic fall in its international terms of trade. Figure 2 presents the U.S. dollar price of Ecuador's exports relative to the U.S. producer price index; this ratio serves as an approximate measure of the terms of trade since the United States is Ecuador's principal trading partner. This measure of the terms of trade shows a sixty percent drop from their peak in 1981. The fall in the terms of trade was primarily the result of the fall in petroleum prices (Ecuador's principal export), and in part to a secular decline in the price of coffee. Had Ecuador's export base been more diversified, the fall in income would not have been as great.

Fig. 2. Terms of Trade, 1962-89

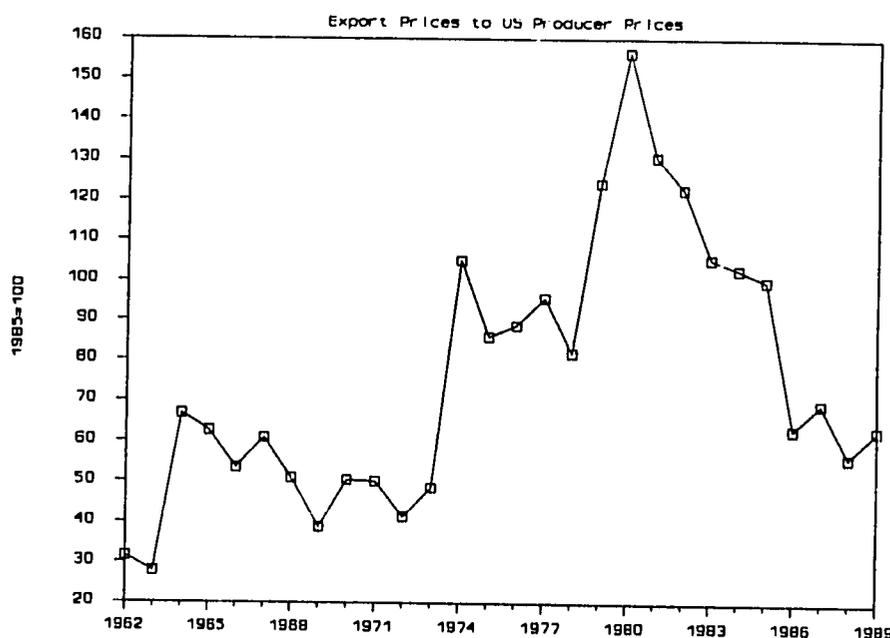
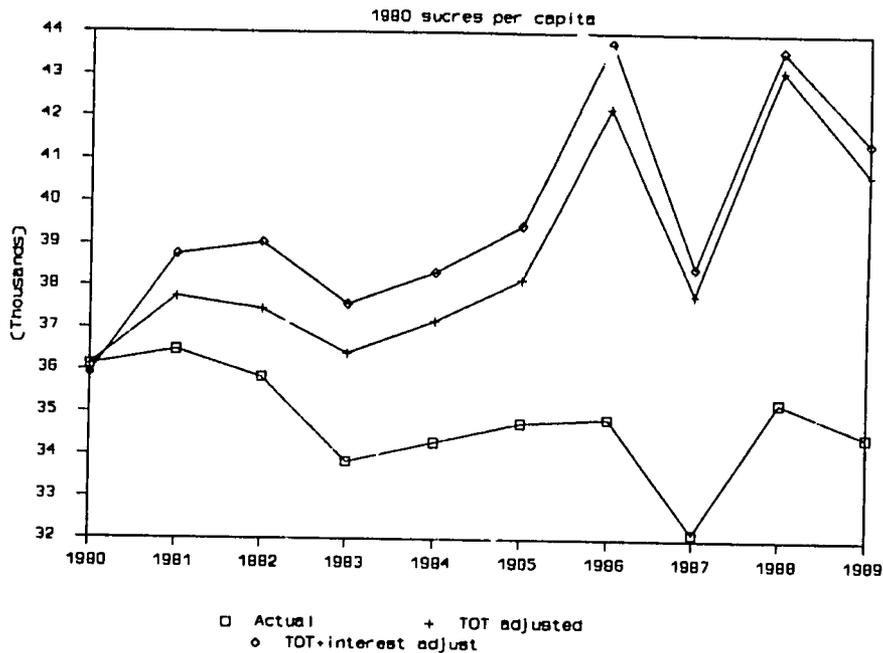


Figure 3 shows the effects of the fall in the terms of trade and the rise in interest rates on foregone per capita income. If the terms of trade had remained at their 1980 level, per capita income today would be approximately 12% higher, at the current volume of output. The effects of international interest rates are insignificant in relation to the terms of trade effects. Even if Ecuador were meeting its international debt obligations and paying interest at the prevailing international market rates, debt service would account for at most two percentage points in terms of real per capita GDP. Since Ecuador has continued to be a net positive recipient of international capital through new credits and forced borrowing from its creditors (debt service arrears account for about half of the net capital inflows in recent years), the debt problem is not yet a cause for Ecuador's economic difficulties.

Fig. 3. External Effects on GDP



The fall in per capita income rests squarely on the fall in petroleum prices and the natural disasters of 1982-83 (The El Niño floods) and 1987 (an earthquake that severed the oil pipeline). The effects of the 1987 earthquake were aggravated by the mismanagement of the economy in the period prior to the mid-term elections of 1986. The Febres-Cordero government went on a public expenditure binge in early 1986 after a year and a half of prudent management. The extra spending was to win over the electorate for a plebescite that would have radically changed the political rules of the game to weaken the power of the established political parties. The government lost the plebescite and their majority in congress. The political authorities also were stepping up expenditures at the time when petroleum prices fell drastically (from around US\$20 to below US\$10 per barrel). The increase in expenditures and the reduced oil revenues moved the fiscal conditions from a surplus to a sharp deficit.

The fall in the price of oil in 1986 and the 1987 earthquake were used as excuses for continued mismanagement of the economy. During this period the imbalances in the internal account were accommodated by rapid and substantial increases in money growth. This fueled an inflation spiral that today dominates the economic scene. From the end of 1986 to date (May, 1990), the consumer price index has quadrupled. When the present government took office in August of 1988, inflation was running at an all time high rate in excess of 70%. Inflation peaked at nearly 100% on an annual basis a year ago. It is running at over 50% on an annual rate. Inflation is the central issue in the economy today.

The present government has made a tremendous effort to stabilize the economy by reducing the fiscal deficit from around 10% of GDP in 1988 to a projected 2.5% for 1990,

and by severely restricting credit through the commercial banking system. In spite of these efforts, it does not appear that inflation will be reduced below its present levels this year. The high rate of inflation has aggravated rigidities in the financial markets and it has also been used as a means for eroding public sector and other urban salaries in real terms (see next section). Inflation is hard to fight because the government is a major employer and the financial markets are highly dependent on central bank credit. The government has been pursuing a gradualistic austerity plan in its effort to stabilize the economy. While there has been substantial success in the stabilization program, many believe that the gradual approach is prolonging the stagnation of the economy. The fight against inflation requires reduced government expenditure and reduced financial liquidity; at the same time, interest rate policies of the development banks and the crawling peg approach to management of the economy, among other things, are believed to be fueling capital flight.

## **2.2 Exchange Rate and Trade Policy Reforms**

The mismanagement of the 1986-87 crisis (drop in oil prices and the earthquake) and real sector interventions, such as trade and price controls that were being used as attempts to manage the financial instability, have reversed (or at least retarded) a process of price liberalization that began after 1982. If the attempts at liberalization of the economy had not occurred in the mid-eighties, conditions today would be even worse. The liberalization efforts lasted at most three years, from 1984 to 1986. During these years per capita incomes recovered modestly, but they have been falling since 1987.

In May of 1982 the Hurtado government installed an emergency economic program to respond to the drop in oil prices and the drying up of foreign capital. The principal purpose was to reduce the rapidly widening current account deficit. The currency was devalued for the first time in about ten years and the exchange rate regime was placed on an adjustable peg basis. The purpose was to stimulate exports, but at the same time severe import restrictions were put in place. Exporters were required to surrender all their foreign exchange earnings to the central bank, and the allocation of foreign exchange for imports was strictly controlled. The economy as a whole continued to be operated with a high level of public intervention. On the labor front, real minimum wages fell from their peak values in 1980; by 1984 real salary levels in the formal sector had fallen to 70 percent of their 1980 levels.

Leon Febres Cordero was elected president in 1984. He came into office with a plan to liberalize the economy and to increase reliance in competitive markets and the private sector for the allocation of resources. During his administration, exchange rate management was further liberalized through a multiple exchange rate system that eventually allowed exporters to keep their foreign exchange. The multiple exchange rate system was used to tax oil exports for the benefit of the public sector and to implicitly subsidize certain "strategic goods" such as medicines and wheat (subsequently the list of strategic goods was reduced). A central bank "free" rate was established for private trade and an open market rate was

allowed to float "dirty" in the financial markets<sup>1</sup>. The central bank rate was periodically devalued to promote exports. The stated ultimate objective of the monetary authorities was to move to a completely market determined exchange rate system that would give international competitiveness to the whole economy. During the Febres Cordero administration the sucre to US dollar rate was devalued by 90% in real terms.

On the import side, tariff and non-tariff barriers were at first reduced as part of an effort of trade liberalization; by 1986 the structure of incentives revealed a bias in favor of exporting activities as a reversal of nearly ten years of an anti-export bias that had been part of an import substitution industrialization strategy. Lower and more uniform tariffs and a reduction of non-tariff barriers were also used as a tactic for reducing smuggling and improving fiscal revenues. Domestically some consumer subsidies were reduced, but many implicit subsidies to producers were maintained or increased in efforts to stimulate production. On the fiscal side substantial success was achieved in improving tax collections, and in 1985 the fiscal budget was in surplus for the first time in recent history.

In 1985, the first full year of the Febres Cordero administration, it appeared as if the market oriented and outward looking economic strategy would be successful. The current account deficit was reduced, the economy was growing again, and Ecuador was being looked upon with favor by the international financial and donor community. The minimum wage was raised in real terms for the first time since 1981. Agriculture was booming in response to the significant improvement in the real exchange rate (the relative domestic price of tradeables to nontradeables) that resulted from the nominal devaluations and the incipient trade liberalization (Figure 4). In fact, the effects of the trade liberalization were quite significant in that the relative price of agricultural products (in Ecuador all agricultural products are tradeable internationally) to nontradeables increased substantially; more than the relative price of manufactured goods (Figure 5). In 1987/88 industrial protection from the tariff and non-tariff barriers had been reduced to a third of its 1980 peak, as measured by our calculations of a tariff equivalent to the trade interventions.

The measures undertaken by the Borja government to control the current account balance after August 1988 (import prohibitions and other restraints to trade) restored the relative prices of industrial and agricultural goods to their levels of the early seventies. Recently, however the restrictions on imports have been again relaxed, along with other measures that are already increasing the openness of the economy.

Furthermore, the government has announced a three year plan to reduce trade distortions further. These actions and the continuing efforts to maintain a realistic exchange rate regime in the face of continuing inflation should increase the international competitiveness of the economy.

---

<sup>1</sup> Reportedly the central bank would intervene in the free exchange market to achieve its exchange rate goals. Apparently the free market is very thin and can be easily manipulated.

Fig. 4. Real Exchange Rate

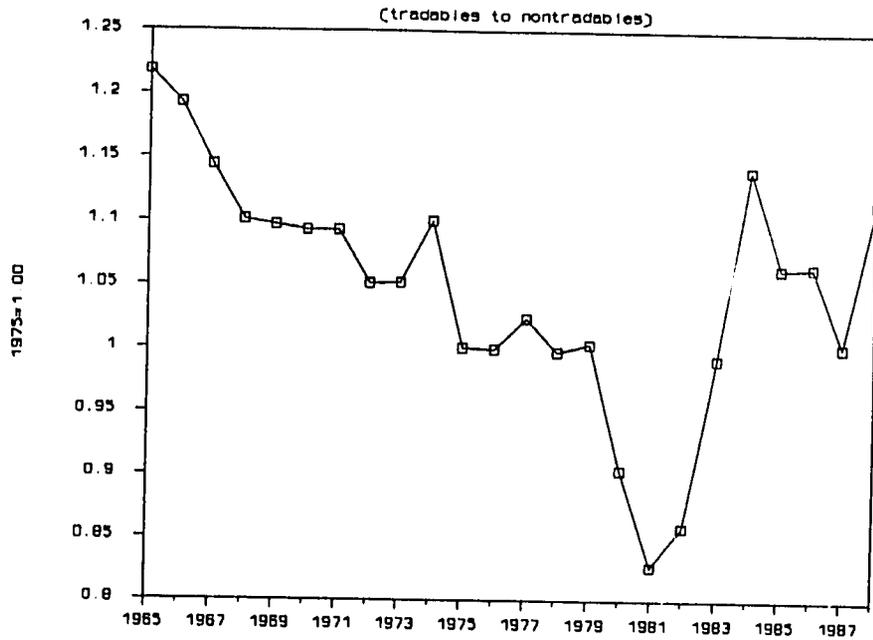
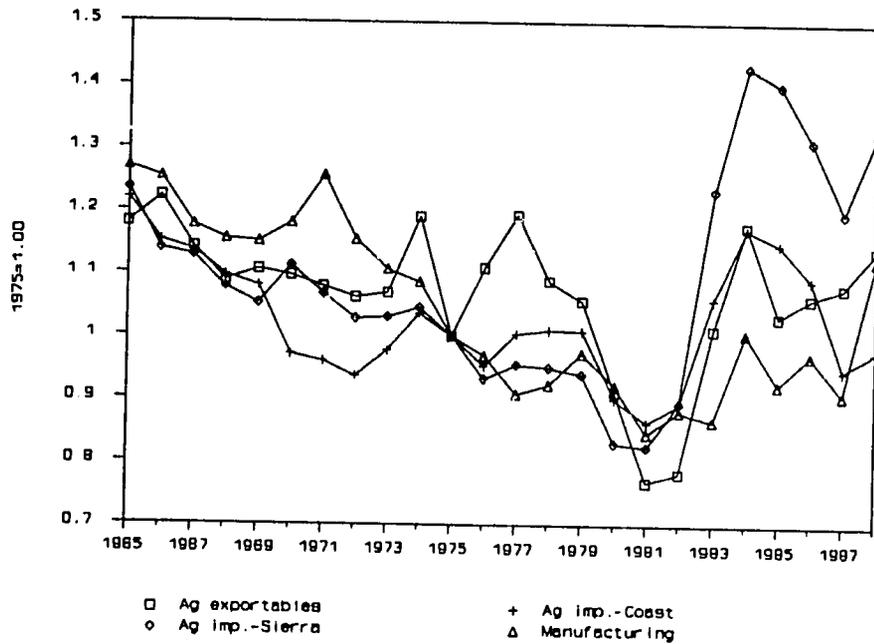


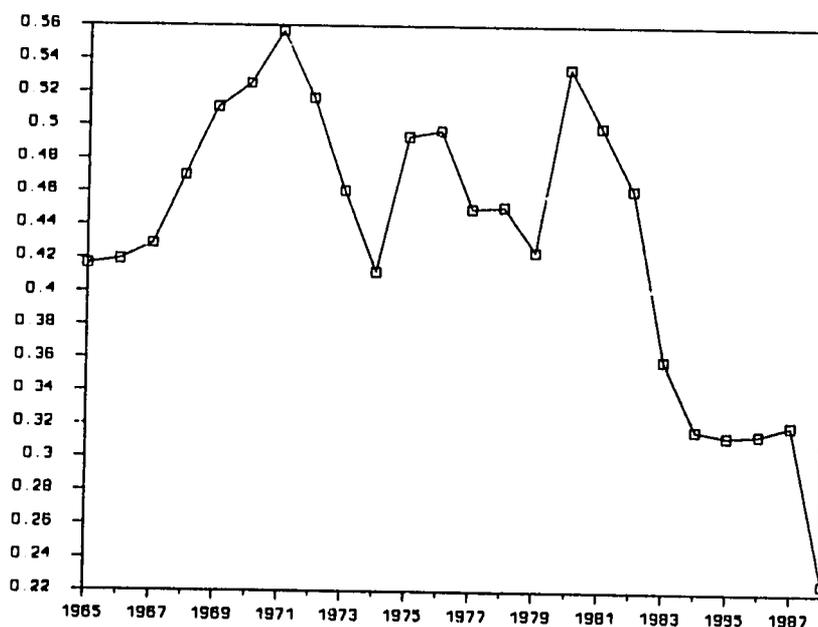
Fig. 5. Relative Prices of Tradables



### 2.3 Some Macroeconomic Effects on Labor Incomes

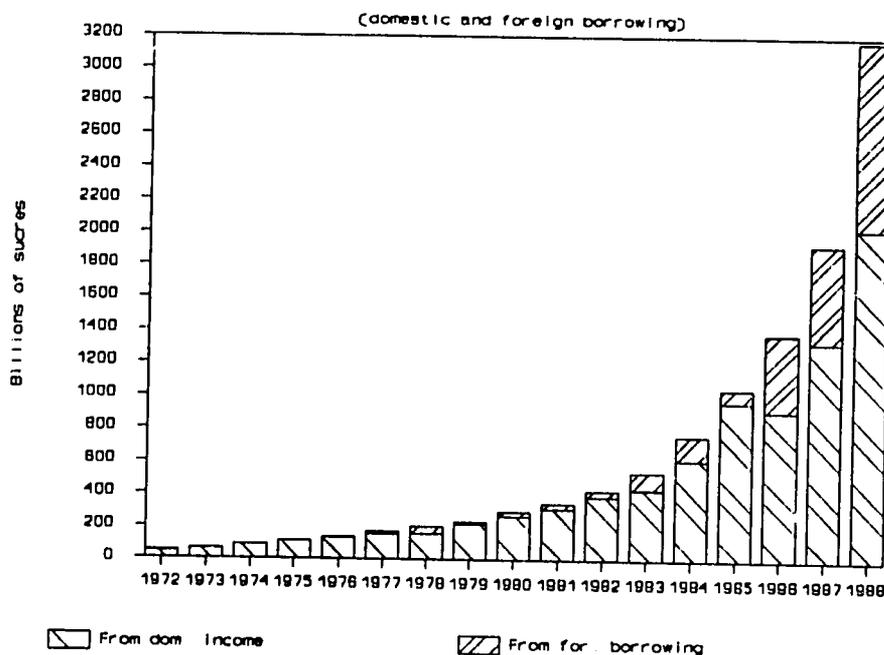
Perhaps the most notable, and alarming, economic fact of the eighties is the declining share of labor incomes in the economy. The labor to capital ratio in domestic value added fell from around 0.52 in 1980 to 0.23 in 1988 (Figure 6). As will be seen in the next section employment in the formal sectors has stagnated and real wages for urban workers in the formal sector have fallen drastically (at the end of 1989 the real minimum wage was half of its 1980 level). Some explain this fact by referring to the increasing informalization of the labor force, and that the national accounting reflects the increasing prevalence of self employed workers and micro enterprises. This issue will be dealt with in further depth in the next section, however, it is important to point out that throughout the eighties the financial markets have operated at extremely low or negative real rates of interest. The public sector, through various institutions, has been the lender of first resort at subsidized rates. This has caused capital to become progressively cheaper than labor for the firms with access to cheap credit. For example, the ratio of the nominal minimum wage to the nominal lending rates of the development banks has more than doubled during the eighties. The effect of this on the price of labor relative to capital has been to nullify the fall in real wages for the industrial sector.

Fig. 6 Labor-Capital Value Added Ratio



Per capita private consumption has leveled off throughout the eighties, with perhaps only a slight decline (2%) over the decade.<sup>2</sup> In the face of declining real per capita GDP and declining real wages, this fact suggests several things. Consumption levels may be being maintained by dissaving on the part of households; this is consistent with the negative returns to domestic savings in the financial markets. Importantly, however, private consumption throughout the eighties was also fueled by international borrowing. Since 1982, an increasing share of the value of all goods and services that have been absorbed by the Ecuadorean economy have been provided by international creditors (Figure 7). Furthermore, in the recent crisis a substantial portion of the increase in international indebtedness has been used to finance consumption (Figure 8). While some of the increased indebtedness reflects payment arrears, Ecuador appears to have continued to be a net recipient of capital from foreign lenders. The multilateral and official development agencies appear to have taken up the slack after private credit dried up.

Fig. 7 Value of Goods and Services

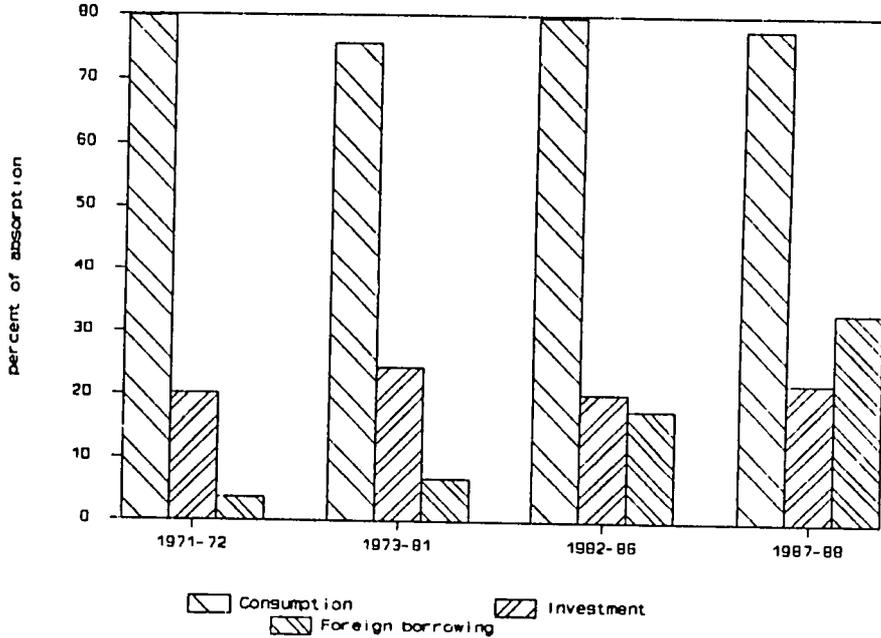


What these facts suggest is that international lending has allowed Ecuador to maintain its subsidized credit markets and that this has artificially cheapened capital relative to labor. There is some evidence that capital flight has accelerated during the last half of the eighties; the liabilities of US banks to residents in Ecuador have increased as Ecuadorean savers move their funds to seek higher yields. The principal culprit in the macroeconomic framework

<sup>2</sup> Data reported by Ecuador to the IMF shows a small increase in percapita consumption, as reported in *International Financial Statistics*.

seems to be the distorted capital markets that inhibit productive employment, and stimulate consumption and capital flight.

Fig. 8 Absorption and Foreign Borrowing



Recently, the government announced a courageous plan of policy reforms leading to increasing exposure of the economy to international competitive forces. These policies when implemented should enhance economy wide income generation; the risk exists, however, that the gradual approach being pursued could erode the potentially progressive gains which could be obtained under a more rapid program of policy reform and structural adjustment. The gradual approach provides opportunity for political pressures to force incomplete implementation of the reforms or for attempts to compensate the losers through direct and indirect subsidies. Incomplete implementation and subsidies would leave distortions in the pricing regime and create incentives for rent seeking.

### 3.0 STRUCTURE AND PERFORMANCE OF THE LABOR MARKET

The specific problems in Ecuador's labor markets are those of very low incomes for the greater majority of the participants. Ecuador does not have a significant unemployment problem, *per se*. Open unemployment in the urban areas has been estimated at 7% for 1988 and at 7.9% for 1989 by the Institute for Employment (INEM). INEM defines unemployment in the standard international concept of a person that is not working but is looking for work. In INEM's reports the unemployed are considered to be looking for work in the formal or modern sectors of the labor market. Persons with short work weeks, substandard wages or working in the informal sector are said to be underemployed. As such underemployment serves as a sobriquet for "employed at a very low income level".

The INEM (1987) report on employment, underemployment and unemployment from their "Permanent Survey of Households" indicates that open unemployment in urban areas is a problem for young men after leaving secondary schooling and for women after leaving primary school. Larger households report a higher unemployment rate than smaller households; this has two explanations. Larger households provide a "social safety net" for their members during job search and larger households have a higher supply of unskilled labor than do smaller households. It also implies that households with fewer working age persons cannot afford to be unemployed. For example, the rates of unemployment are lowest for male household heads. The unemployment rate for women is twice that of men.

As the age of the workers increases, a higher proportion of the labor force is in the informal sector. This suggests that new entrants into the labor market tend to queue for jobs in the formal sector. The higher the level of schooling the higher the chance of employment in the formal sector. About 25% of persons with secondary schooling are in the informal sector, whereas only eight percent of university graduates are in the informal sector. In general, informality of employment is associated with older, less educated, heads of households.

For women heads of households the rate of participation in the informal sector is higher, otherwise women represent 39% of the informal labor force and 34% of the formal (Farell, 1989). Wage differentials between women and men are marked in both the formal and informal sectors; some authors have suggested that there is frank evidence of discrimination against women in the wage setting process. The wage gap between men and women is greater in the informal sector than in the formal sector.

The basic problems in the labor markets of Ecuador center on the low productivity of labor efforts in all sectors. The labor market provides positive but comparatively low returns to private and social investments in schooling. Low productivity and low skill levels cause low wages for most workers. The low productivity conditions arise from distortions to the macroeconomic pricing regime that discourage domestic savings and investment in all forms of capital and from rigid labor market conditions in the "modern" sectors. All these factors restrict labor demand in the modern sectors of the economy, forcing many to work for low incomes in the informal sectors.

Worker productivity (sectoral value added per worker) declined in all sectors, except for agriculture during the eighties. Formal sector labor productivity fell around 25% in real terms and real wages fell between 30-40%. Wages in the urban informal sector may have fallen by 10-15%. Overall wage differentials between sectors narrowed, but all are now at very low levels relative to their 1980 values. Only one-third of the informal sector receives remunerations above the basic official minimum wage, and three-fourths of the formal sector receive remunerations above the minimum wage. At the same time the minimum wage has been eroded to less than half of its 1980 value in real terms. At the end of 1989, the minimum wage would buy one-half of a family's food needs (Jarrin *et al*, 1989); a typical urban household with earnings lower than three minimum wages would be extremely poor.

The labor market provides positive but comparatively low returns to private and social investments in schooling (World Bank, 1989). Low skill levels cause low wages for most workers, and the distortions in the labor and capital markets are disincentives for workers' investments in human capital. All these factors severely restrict labor demand in the modern sectors of the economy, and force persons into self employment in the informal sector (approximately 45% of the informal labor force is self employed). Only 24% of the informal sector could be considered as salaried or permanently employed workers (Farrell, 1989).

### **3.1 Labor Market Segmentation**

There is significant evidence that certain labor markets operate under segmented conditions. Employees of the public sector and a minority of the private sector work force receive remunerations that are significantly higher than can be explained by human capital differences with workers in the informal parts of the labor market. The segmentation apparently arises from provisions in the labor code, official wage setting, and the employers' fear of unionization. Approximately a fifth of the labor force works under the segmented conditions; half of these are employed by the public sector. Government employees, employees of parastatal enterprises, and some workers in the so-called modern formal sector receive remunerations in excess of what could be attributed to human capital. This assertion is based on results from a World Bank study that estimated a "human capital" wage function to calculate wage differentials for schooling, experience, sector of employment and gender. The authors of this report used those results to calculate the wage difference that could be attributed to "human capital" between employees in the formal and informal subsectors of each economic sector. The wage differences between labor markets in the industrial, construction, and commercial sectors, as presented in Table 1, are larger than can be attributed to human capital differences.

As a further example of segmentation, in the protected industrial sector, average wages in 1988 (52,504 sucres per month) exceeded the value of the marginal product of labor by 35%, whereas average wages for the rest of the formal industrial sector were approximately equal to the value of the marginal product. Wages for the informal part of the industrial sector (25,270 sucres per month) were 65% of the sectoral marginal product. While it is possible that these wage differences reflect differences in productivity, the fact that these results are consistent with the comparisons based on schooling would suggest the presence of segmentation in the industrial sector.

**Table 1. Labor Market Structure and Monthly Wages in Ecuador  
(Sucre of November 1988)**

Economic Activity or Sector of Employment	No. of Persons in Labor Force	Percent of Total	Earnings Monthly
TOTAL LABOR FORCE	* 3444368	100.0	
URBAN LABOR FORCE	2222803	64.5	37439
Urban Unemployment	155349	4.5	
PRIVATE SECTOR (urban)			
Industrial:	378324	11.0	34638
Protected Formal *	104759	3.0	52504 S
Formal Not-prot'd	82903	2.4	35979 S
Informal	190662	5.5	25270
Construction:	154292	4.5	33295
Formal	66701	1.9	42632 S
Informal	87591	2.5	26356
Commercial:	546727	15.9	33827
Protected Formal *	31524	0.9	54647 S
Formal Not-prot'd	86797	2.5	53834 S
Informal	412870	12.0	29763
Services (Basic):	112890	3.3	49184
Protected Formal *	20775	0.6	44925 N
Formal Not-prot'd	65399	1.9	56136 N
Informal	50241	1.5	46718 N
Financial Services:	156163	4.5	53190
Formal	149223	4.3	54085 N
Informal	6940	0.2	41739 N
Other Services:	356079	10.3	38308
Formal Sector	249112	7.2	48381 N
Informal	106967	3.1	41739 N
Domestic Services	112603	3.3	10054
Agricultural (urban)	127088	3.7	36488
PUBLIC SECTOR (urban)			
Government Services	387032	11.2	48282 S
TOTAL RURAL *	1221565	35.5	n.a.

Main source of data is the preliminary release from the INEM 1988 Survey of Households in urban areas. Items marked "\*" have been derived from INEC's survey of establishments. "S" denotes evidence of segmentation relative to informal markets.

Labor market segmentation in the protected industrial sector implies that the sector employs fewer workers than would be employed if the market were allowed to clear at competitive wages. The protective trade policy for the industrial sector is frequently justified in terms of its supposedly positive employment effects, yet only about 100,000 workers are employed in the protected industrial sector (three percent of the labor force). The sector as a whole would employ from 15 to 20 thousand more workers if the segmentation were removed<sup>3</sup>.

There is also evidence that the public sector labor market is segmented. As in the case of the private sector, wage differences between public sector employees and the informal service sectors cannot be attributed to schooling differences, and it would be difficult to measure public sector productivity. Anecdotal evidence suggests that university trained professionals work at low paid and low status occupations in the informal sector while waiting to obtain employment in the public sector institutions. Public sector employment has grown at a phenomenal rate, from five percent of the labor force in the early seventies before the oil bonanza to over twelve percent of the labor force today (approximately 400,000 workers).

In the private sector the segmentation results from unionization and the labor stability law. Unions serve as a direct and indirect mechanism to restrict entry of other workers—directly as unions endeavor to create monopoly conditions for themselves and indirectly through the employers fear of labor problems. The stability law prevents personnel turnover and impedes new hirings even in an economic upturn because a person that's once hired is very difficult to fire.

The protection to the minority of workers in the segmented labor markets is provided by a strict labor code, particularly its provisions for labor stability, and a complex array of compensations additional to the basic wage structure. Within the formal sectors there is wide disparity in the wage structure; for example, some public sector enterprises have salary levels at three times the salaries of central government employees. Similar disparities exist within the formal private sector. In general, formal sector earnings are 150% those of the informal sector.

Basic wages and salaries represent only half of total remuneration to workers in the formal sector. For public sector workers the additional remunerations can amount to as much as 180% of the basic salary. Employers in the artisan sector have fought to be allowed to hire apprentices at wages lower than the basic official minimum and without fringe benefits.

Basic salaries are set by ministerial decree for almost all occupations upon the recommendation of sectorial commissions that represent employers, unions and the government. As of January 1, 1990, basic nominal salaries were raised by an average of fifteen percent. During the last week of 1989 the official register published the wage decrees from the minister

---

<sup>3</sup> The authors of this report used econometric estimates of the manufacturing production function that were provided by members of the World Bank's Industrial Sector mission to calculate marginal products and labor demand equations. The results cited in this section were calculated by the Sigma One Corporation staff.

of labor at the rate of 200 pages per day. Each decree asserts that all current wages and salaries that exceed the published official minimum for each given occupation are fixed at the higher level. Within each class of employer the official decrees provide little or no wage differentials for skills, experience or knowledge. These two aspects sharply curtail the employers incentives to reward higher productivity; thus, wage differences are more likely the result of labor market rigidities.

Labor unions are pervasive in the protected sectors, but are strongest in the public sector entities. The most important effect of labor unions is to force many firms to operate at low and economically inefficient sizes as firms stay below the level of fifteen employees to avoid unionization. The stability provisions of the labor code and the fear of unions on the part of entrepreneurs also lead to short term contracting of workers. This hinders the formation of firm specific and general human capital, and promotes low productivity labor. The labor movement as a whole does not appear particularly powerful in comparison to that in other Latin American countries. They have accepted declines in real wages greater than the declines in labor productivity in the formal private sector. Perhaps only the unions in the oil sector and other parts of the public sector are strong.

Employment in the protected private sectors has risen by approximately six percent since 1982, while the economically active population grew by 24 percent during this period. In the protected and unionized industrial sector, employment levels were maintained at the expense of severe falls in real wages (approximately 30% in the decade).

### **3.2 Decline in Real Wages for Urban Workers**

During the decade of the eighties, economy wide stagnation resulting from deteriorating terms of trade in international markets, natural disasters in 1982-3 and 1987, and serious macroeconomic mismanagement in the period 1986-1988 have led to substantial deterioration of real wages in urban areas. Table 2 presents the real declines in formal sector remunerations and Table 3 presents the urban minimum wage. The sharpest wage declines occurred in the public sector (except for petroleum workers) and in the formal industrial and commercial sectors.

The declines in real wages did not induce the increases in employment that would have resulted if the labor and capital markets were not so distorted. The distortions in the capital market account for about 9,000 foregone industrial jobs and the distortions in the labor market for approximately another 13,000. That is to say that if the distortions were removed, employment in the industrial sector would be higher by 22,000 and output up by 6%.

**TABLE 2. Indices of Real Total Remunerations in Formal Sectors in Ecuador 1981 to 1988**

<u>Year</u>	<u>Services</u>	<u>Commercial</u>	<u>Manufacturing</u>
1981	100	100	100
1982	86	93	94
1983	67	74	79
1984	69	76	90
1985	66	78	94
1986	64	78	95
1987	62	72	86
1988	44	60	60

**Table 3. Ecuador: Nominal and Real Minimum Wages 1970-1986**

<u>Year</u>	<u>Nominal Minimum Wage</u>	<u>Consumer Price Index</u>	<u>Real Minimum Wage</u>		<u>Food Price Index</u>	<u>Real Wage In Terms Of Food</u>
	<u>Sucres Per Month</u>		<u>1975 Sucres</u>	<u>Percentage Change</u>		<u>1975 Sucres</u>
1975	1250	1.00	1250	—	1.00	1250
1976	1500	1.11	1356	8.5	1.10	1364
1977	1500	1.25	1197	-11.7	1.26	1190
1978	1500	1.40	1071	-10.5	1.42	1056
1979	2000	1.54	1298	21.1	1.56	1282
1980	4000	1.74	2297	77.0	1.71	2339
1981	4000	2.03	1971	-14.2	1.94	2062
1982	4600	2.36	1950	-1.1	2.41	1909
1983	5600	3.50	1600	-18.0	4.36	1284
1984	6600	4.59	1437	-10.2	5.94	1111
1985	8500	5.88	1445	0.6	7.82	1087
1986	10000	7.24	1382	-4.4	9.33	1072
1987	14500	9.37	1547	12.0	12.01	1207
1988	22000	14.83	1484	-4.1	19.74	1115
1989	27000	24.99	1080	-27.2	36.57	738

The official minimum wage and the wages that are set in reference to it have fallen in real terms from their peaks in 1980. The real value of the official minimum wage is today half of the 1980 level. Urban wages have fallen much faster than the falls in per capita income during the eighties, and much faster than the fall in national income attributable to factors external to the Ecuadorean economy. Real wages fell from their peak in 1980 until 1984, they leveled off during the period from 1985 to 1986 and have fallen drastically since 1987. The rigidities in the capital and labor markets have prevented employment levels to rise in response to the lower real wages. These factors have also driven the rapidly growing urban labor force towards informal activities, particularly to self-employment.

### 3.3 Agricultural Incomes and Improved Incentives

Agriculture appears to be reversing a long term trend of decline in labor absorption, and employment levels in this sector have returned to the levels of 1980. This appears to be the result of a significant increase in labor productivity in agriculture (Table 4), which in turn seems to have resulted from the improvements in the domestic terms of trade facing agriculture. The improvement in relative prices for agriculture were achieved through increases in the real exchange rate (prices of tradeables relative to non tradeables); a policy regime that has been pursued by the three democratic governments of the decade, as the principal means of macroeconomic adjustment to the deterioration in the country's international terms of trade. Agriculture's response to the improvements in the exchange rate regime are the sole bright spot in the performance of the economy during the eighties. While value added per worker increased by 25% since 1982, not all the gains would have been transmitted to agricultural workers and small farmers because agricultural credit markets are also highly distorted in favor of non-labor inputs, particularly for the larger farms.

**Table 4. Evolution of Sectoral Labor Productivity (1982-88)  
Sectoral Value Added (VA) in Thousands of 1975 Sucres**

Year	Sectors					
	Agricultural		Industrial		Services	
	persons (000s)	VA/person	persons (000s)	VA/person	persons (000s)	VA/person
1982	1199	27.928	321	59.810	1339	65.013
1983	1190	25.023	331	58.299	1424	57.527
1984	1187	26.651	341	55.762	1507	56.202
1985	1183	28.488	348	54.648	1597	54.689
1986	1175	30.510	360	52.043	1689	52.727
1987	1189	32.405	369	54.122	1762	50.977
1988	1204	34.117	379	55.290	1841	49.409

Nevertheless, our calculations reveal a major redistribution of income away from urban households to rural households, as a result of agriculture's response to improved incentives in spite of the deterioration in the international terms of trade for agricultural commodities. The change in the distribution of income arose primarily because agriculture responded to improved incentives by producing, and less as a result of the increased real price of food. Changes in food prices account for about a third of the change in relative incomes between the rural and urban populations. Rigidities in product, capital and labor markets have prevented economic adjustments and accentuated the effects of the economic shocks on the urban population.

Tables 5 and 6 present the evolution of incomes in per capita terms for specific population groups for the period 1975-1988. The estimates were calculated through use of the National Expenditure Surveys (Urban, 1976 and Rural, 1979) to allocate sectoral value added to the households in each of the groups. The incomes were converted to real terms by deflating with a cost of living index that was calculated specifically for each population group. The results measure the purchasing power of the households in each group.

**Table 5. Evolution of Real Per capita Incomes (1975-1988)  
Indexed within population group to 1975**

Year	Quito		Sierra		Guayaquil		Coast	
	Upper	Lower	Urban	Rural	Upper	Lower	Urban	Rural
1975	100	100	100	100	100	100	100	100
1976	104	105	105	101	108	107	109	114
1977	110	111	110	104	116	114	117	123
1978	112	115	113	108	116	116	120	127
1979	111	115	113	110	116	117	122	133
1980	118	122	122	122	119	122	131	142
1981	118	122	123	129	117	121	133	151
1982	113	117	117	127	112	116	128	150
1983	97	99	96	111	97	99	108	135
1984	91	93	88	108	93	94	102	137
1985	91	93	89	112	92	93	104	144
1986	90	92	89	113	93	93	106	151
1987	92	93	91	120	93	93	111	162
1988	89	92	91	121	95	96	111	157

The information in the tables confirms the rise in per capita incomes resulting from the oil boom in the period from 1975 to 1980. Incomes then fall in 1982-83 as a combined result of the external economic crisis and the El Niño disaster. Significantly, rural household incomes begin to recover in 1984 in response to the economy wide pricing reforms, primarily the exchange rate policy. Through 1988, rural incomes continued to improve as a result of the exchange rate policy which has attempted to maintain competitiveness for the tradeable sectors through the mini-devaluation scheme in the presence of the inflationary

process of the last few years. The tables also confirm the large fall in real per capita incomes for the urban population, particularly Quito and the Sierra.

**TABLE 6. ECUADOR: Evolution of Real Per capita Incomes (1975-1988)  
By Population Groups (in 1975 Suces)**

<u>Year</u>	<u>Quito</u>		<u>Sierra</u>		<u>Guayaquil</u>		<u>Coast</u>	
	<u>Upper</u>	<u>Lower</u>	<u>Urban</u>	<u>Rural</u>	<u>Upper</u>	<u>Lower</u>	<u>Urban</u>	<u>Rural</u>
1975	45537	8896	13968	8160	59298	10507	19388	8830
1976	47482	9372	14677	8248	64013	11268	21053	10067
1977	49961	9879	15361	8521	68661	11989	22665	10832
1978	51992	10213	15804	8820	68881	12186	23340	11194
1979	50697	10223	15768	8984	68877	12265	23571	11738
1980	53620	10855	17041	9975	70803	12766	25470	12519
1981	53563	10875	17166	10530	69441	12662	25769	13336
1982	51268	10408	16298	10392	66562	12139	24829	13255
1983	44018	8837	13395	9090	57397	10359	20940	11892
1984	41395	8270	12324	8801	55062	9839	19722	12099
1985	41437	8242	12397	9113	54451	9716	20177	12714
1986	41068	8185	12402	9203	55235	9787	20647	13308
1987	41747	8253	12703	9789	55173	9761	21535	14309
1988	40417	8207	12668	9907	56275	10081	21514	13835

In general, the results presented in the tables are consistent with similar analysis by Franklin and Valdés (1985) for Peru. That is to say that the principal benefits from a price policy reform are captured by the producers of tradeables, in this case agricultural households. The deterioration of urban incomes cannot all be attributed to the exchange rate reforms although it is a necessity for urban wages to fall relative to rural wages if the exchange rate reform is to be effective after a period of overvaluation of the exchange rate.

### 3.4 Informality as a Response to Economic Rigidities

The major absorber of labor has been the urban informal sector that has absorbed as much as a forty percent increase in its labor force. This labor market is economically efficient in that it rapidly clears at market determined wages, but it operates at low levels of productivity for many reasons. Lack of information and lack of social "safety nets" undoubtedly lead to mismatching of skills to jobs. Many of the enterprises are constituted by self employed persons who operate at low levels of skills and at low levels of capitalization, others invest a lot of time in job search or in low return activities such as petty trade.

The informal sector has been the labor markets' safety valve, but all is not well there. The National Institute for Employment (INEM) estimates that 2/3 participants in the informal

sector are, in some sense, poor. For example, INEM studies report that over half of the households dependent on informal sector workers are poor as determined by their incomes relative to the cost of a food basket. Within these, 20% of the informal labor force form part of households that are extremely poor or indigent (Herrera and Pisoni, 1989).

The pace of impoverishment of the working population owes its impetus to rigidities in all markets, not just the labor market. The most severe distortion is in the financial market because capital moves freely and rapidly across borders. Rigidities in the goods markets are also easily circumvented through smuggling, under-invoicing of exports and at the extreme, the evolution of black markets. Human capital is relatively less mobile and therefore must absorb the brunt of the inefficiencies that result from policy distortions.

The most salient features of the labor market are that a minority of workers are protected from competitive pressures by a stringent labor code, and that the rest of the labor market works efficiently to match supply with demand at very low wage rates. The wage rates in the unprotected labor market are lower than they would be if it were not for the presence of the protected labor market in the public sector, industry and to a lesser degree in the services sectors. Our estimates suggest that the relative ratio of wages in the protected industrial sector to the rest of the industrial sector's labor market would be 30% less, if that market were not segmented.

The dilemma for policy makers is that the beneficiaries from the current situation are well situated with respect to economic power and political influence. A policy to give flexibility to the labor market will be impeded, because the persons who stand to gain are currently not at the center of power and those that stand to lose are politically visible if not, in fact, powerful. Of these, the most powerful appear to be unionized public sector employees.

### **3.5 Employment Effects of Capital Market Distortions**

The payments to labor on an economy wide basis fell drastically during the eighties from their peak levels achieved during the seventies in the era of the petroleum boom. The sharpest fall occurred with the onset of the crisis in 1981-2, the fall in labor's share of value added was halted temporarily during 1984 to 1987 and has fallen sharply again since then. The most likely reason for this is the interaction of the anti-employment bias in the protected modern sectors with the access by firms in these sectors to subsidized capital. Rigidities in the labor and financial markets interact to reinforce a severe misallocation of domestic resources away from the country's international comparative advantage. Capital is scarce, and labor is abundant. Yet, the economy is increasingly more capital intensive. Not only has capital been artificially cheap and labor relatively expensive for the modern sector, but domestic savings are discouraged by the interest rate policies that have been followed. This means that firms in the informal sector do not have access to financial capital and must operate with sub-optimal factor combinations; *i.e.*, at low levels of labor productivity.

It is very important to point out that the numbers reported in the national accounts seriously overstate the return to physical capital, because the denominator in the ratio includes

the returns to all non-wage factors in the enterprises, including human capital, entrepreneurial talent and any economic rents that might accrue (Table 7). As such, the numbers reflect the process of informalization of the economy as much as anything. This process of informalization is nothing more than the response to the rigidities in the labor and capital markets.

**Table 7. Annual Average Ratio of Value Added Accruing to Labor Relative to Capital in National Accounts**

<u>Period</u>	<u>Export</u>	<u>Agriculture</u>		<u>Industry</u>	<u>Rest</u>	<u>Total</u>
		<u>Coast</u>	<u>Sierra</u>			
1973-81	0.16	0.18	0.22	0.47	0.77	0.47
1982-86	0.09	0.12	0.13	0.31	0.61	0.35
1987-88	0.05	0.07	0.09	0.18	0.43	0.27

The distortions in the capital and labor markets have caused the economy to become more capital intensive at a time that capital has been increasingly scarce in domestic and world markets. Ecuador uses more capital for its output than similarly situated developing countries. The private financial intermediaries are accustomed to being retailers for central bank resources and the central bank is viewed as the lender of first resort. These conditions lead to non-price rationing of lending to the protected sectors and blunt the effect of monetary policy as a tool for stabilization of the economy.

The scope for macroeconomic management also is severely hampered by the government's pervasive role in the productive sectors of the economy and the large numbers of highly paid public sector employees. The public sector wage bill amounts to between ten to twelve percent of the nation's GDP (*Weekly Analysis*, October 23, 1989). Furthermore, the fiscal system remains rigid as a result of a high dependence on oil revenues for financing of the government's budgets and the operations of public sector companies. This is aggravated by a system of earmarking revenues for specific public sector expenditures. Together these rigidities in government expenditure and the public sectors large wage bill predispose the economy to instability arising from external shocks or from domestic policy errors.

The price level (as measured by the consumer price index) has increased fourfold since 1987. There is reason for concern that the nominal wage increases in January may be fueling the rate of inflation. An analysis prepared for the National Development Council (CONADE) by Martin Rama (1988) suggests that under the current inflationary conditions, a nominal wage increase is eroded away by 80 to 100% in real terms within nine months by its own effect on inflation through the increased requirement for money creation to finance it. The recent public sector wage increase amounted to more than 1.5% of nominal GDP. This relationship is most important to income and employment generation in the private sector, because rising inflation aggravates the rigidities in the financial and goods markets through their combined

effects on the real exchange rate and makes macroeconomic management even more difficult under the present conditions.

In rigid financial markets, nominal interest rates remain negative or below international opportunity costs as a result of inflation; thus, capital flight is stimulated. The resulting increase in demand for foreign exchange puts downward pressure on the domestic currency. In the goods markets, inflation causes the nominal exchange rate to diverge from purchasing power parity and the presence of tariff and nontariff barriers to trade cause the relative prices of tradeable to non-tradeable (the real exchange rate) to fall and the domestic currency to appreciate in real terms. All of these effects work in the same direction to erode the economy's international competitiveness. Efforts to restore competitiveness through periodic nominal devaluations (a pre-announced crawling peg and unannounced mini-devaluations) feed inflation directly and indirectly through their effect on expectations. If economic agents lose confidence in the success of the stabilization measures and in the exchange rate management scheme, the currency can come under a speculative assault, as has occurred recently in Argentina and earlier in Mexico.

Labor market policy has an important role to play in the success of the fight against inflation by breaking the cycle between officially set wages and inflation. Success on the inflation front would ameliorate rigidities in the capital and goods markets and allow for more effective exchange rate policies to restore incentives for the production of tradeable, rather than nontradeables. This latter point is most important in that the nontradeables include the protected government sector and parts of the informal services sectors. The first should not absorb any more labor and the latter can only do so at declining real wage rates. To the extent that resources are retained in the nontradeable sectors through administered wages, differential levels of protection and through capital market distortions, the tendency will be for the real exchange rate to erode the incentives for production and employment in the tradeable sectors. Real incomes of the work force will then be limited by the extent of the small domestic markets. Access to the few higher paying jobs will continue to be protected, and the real wages in the unprotected sectors will be lower as a result of the limited market and the continuing growth of the labor force.

#### **4.0 A POLICY FRAMEWORK FOR IMPROVED LABOR INCOMES**

Increasing flexibility and transparency in the functioning of the labor markets should be an important ingredient of the proposed economic program. The earliest opportunity for labor market reform is in removing the government's role in the wage setting process for the private sector. Wages should be bargained collectively on a firm by firm basis between management and labor. Unless firms are able to adjust their costs to reflect factor productivity, they will be unable to respond to the competitive pressures of a more open economy. The fall in real wages in the formal private sector may have already improved competitiveness substantially; a change in the wage setting process could help retain or enhance competitiveness. Public sector wages could then be set relative to workers opportunity costs, and the levels of employment determined by the government's budget constraint. Alternatively, given a fixed real wage bill for the public sector, unions could choose to negotiate for a level of employment or for real wages but not for both. Ostensibly, they would choose stability at lower real wages. Eventually the premium in public sector wages would be eroded and workers would move to the private sector jobs. Such a policy would lend great credibility to the government's stabilization and structural reform initiatives.

While it is recognized that the present government does not have the political support to promote major changes in the stability provisions of the labor code, emergency legislation and administrative efforts to increase labor market flexibility should be encouraged. For example, recent newspaper reports suggest an interest for "in-bond" manufacturing schemes, commonly known in Latin America as "maquiladoras". These schemes could help demonstrate that flexibility in trade, capital and labor market conditions can improve the incomes of workers.

Under a more neutral set of economic rules, wages in the protected sectors would be lower and employment levels higher, but on the other hand, employment and wages in the unprotected sectors would be higher. Since the protected sectors represent, at most, a fourth of the labor force, it is clear that the majority of relatively poor persons are paying to maintain the incomes of a small privileged minority in the urban areas. Urban labor incomes could be as much as twenty percent higher, on average, if there were greater flexibility in factor and product markets. Econometric studies undertaken for CONADE and by the World Bank suggest that if small firms were allowed to grow without fear of unionization that they would increase their labor demands by one and one-half times their growth in output.

The principal order of business for improving labor earnings in Ecuador, however, is to encourage acceleration of the government's proposed reforms to trade, exchange rate, financial market policies in a framework of macroeconomic stability and credibility. Supply side policies directed at improving the structure of economic incentives through trade liberalization and capital market flexibility with a consistent exchange rate regime will improve the incomes of the great majority of workers in the unprotected urban and rural sectors without labor market liberalization in the formal sectors. Concern for this latter privileged minority should not be used to impede the improvement of conditions for the greater majority of poor working people throughout the economy.

Some entrepreneurs interviewed for this study stated that the labor code is not a major impediment to their operations; if the economic incentives for production exist, they can live with the labor legislation. A nontraditional agricultural exporter stated that when he began operations he used temporary contracts to avoid the labor stability provisions of the labor code. He has found that retaining a skilled work force is more important than the cost implied by the labor stability considerations. The point is that the process of economy wide reforms must provide the incentives for private investment and growth; the labor market distortions affect the workers more negatively than they do the owners. Even though employers have learned how to get around the labor legislation or have learned to live with it, this does not mean that labor inputs are not artificially more costly. Furthermore from an investment point of view, in a world of highly mobile capital, a potential investor would view the labor market rigidities as a higher cost and a source of additional risk. Moreover, since labor is not highly productive even at the low wages, the investment would likely flow to other countries without the costs and problems imposed by Ecuador's labor laws and practices.

#### **4.1 An Assessment of the Income and Employment Effects of Reform**

In late January and early February of this year the economic authorities published their plans for economy wide reforms in letters to the World Bank and the International Monetary Fund. The following is a qualitative assessment of employment and income effects that could be expected from the implementation of the proposed measures as an integral package.

Financial sector reforms to increase reliance by the financial intermediation system on private sources of capital should help reverse the anti-employment bias generated by the dependence on subsidized credit. In 1984, the credit subsidies amounted to 4% of GDP, a substantial transfer to those lucky enough to be first in the queue, but a severe disincentive to employment.

The government has recognized that capital for investment must be generated by improved export performance and their plans are to pursue an exchange regime that maintains international competitiveness. This would imply higher reliance on labor as a source of comparative advantage and should improve labor absorption and labor incomes in the internationally competitive sectors.

The government has proposed to gradually eliminate the subsidies provided by the state enterprises in energy and other sectors. These are highly regressive, as is inflation. An accelerated accomplishment of these proposals will greatly improve the scope for macroeconomic management and improve the distribution of income. It should also free fiscal resources for needed expenditures in health, education and basic infrastructure.

The recently established tax reform is progressive in that it eliminates many low paid workers from the tax rolls and it also eliminates exemptions for non-wage remunerations for the higher paid workers. The tax reform should contribute to greater transparency in the wage setting process. The equality of the top marginal rate for persons with the corporate rate and the exclusion of dividends from taxation should encourage capital deepening from retained

earnings in the firms and it should reduce incentives for corporate "gold-bricking" and "gold plating" in closely held corporations. The reform of the income tax laws also enhances the degrees of freedom for tariff reform. All these factors should improve labor demand.

In the area of trade policy and domestic pricing policy, the authorities have announced a gradual plan to promote competition domestically and internationally. Maintenance of a realistic real exchange rate will be enhanced by the trade reforms. There are a number of enterprises and subsectors that can be competitive. Their income and employment effects would be positive under a more open and competitive economy. This process should not be retarded because a few overcapitalized white elephants in the protected industrial sector may fail. They have been living off economic rents and if they can be competitive, they have the capital base to survive, if not, their employment loss will be minor with respect to the gains in the rest of the economy.

Specifically, these policies should enhance economywide employment and income generation. The risk exists, however, that the gradual approach being pursued could erode away the potentially progressive gains which could be obtained under a more rapid program of policy reform and structural adjustment. The gradual approach provides opportunity for political pressures to force incomplete implementation of the reforms or for attempts to compensate the losers through direct and indirect subsidies. Incomplete implementation and subsidies would leave distortions in the pricing regime and create incentives for rent-seeking by the beneficiaries of any compensatory schemes.

The authorities have recognized that the economy can expand only if the productive sectors have access to international markets, and real labor earnings will increase only if there is an expansion of demand for labor in the private sector. It is a fallacy to think that increased wages and increased employment in the public sector will produce positive multiplier effects. If this were so, the economy should be booming and real wages rising, because public sector employment and nominal wages rose throughout the eighties. A policy of higher wages in the protected private sector would erode away any competitiveness that may have been achieved by the fall in real wages. Improved worker incomes require economic growth and corrections of the anti-investment and anti-employment bias in the capital markets.

Consideration of the role of labor policy in support of structural reform would involve regulations to allow new and perhaps temporary workers to be contracted for indefinite periods without the protection of the labor stability provisions by firms that could demonstrate an existing international comparative advantage in terms of domestic resource costs. Such contracts could be reviewed on a yearly basis to promote their palatability with the labor unions. These provisions would encourage firms to become competitive and to increase their use of labor, particularly if capital market distortions were removed.

## 4.2 A Strategy for Policy Dialogue

A strategy for policy dialogue to promote increased labor incomes in Ecuador could consist of the following elements:

1. Encourage acceleration of the trade and financial sector reforms within a framework of macroeconomic stability. The lowest income groups in the society will benefit the most from success of the economic program. An economic regime in which the exchange rate and the interest rates are determined by the country's international opportunities will improve the well being of the poorer population groups.
2. Efforts to "chip away" at the rigidities in the labor legislation should be encouraged to demonstrate that increased labor flexibility can lead to improvements in labor incomes. Similarly, projects that support the development of non-protected enterprises in all sectors would further demonstrate that the Ecuadorean economy has the capacity to respond to economic incentives provided by markets that are allowed to function without intervention or privilege.
4. The international financial institutions and the bilateral development agencies should include conditionality provisions to restructure the process of wage bargaining in the formal sector to exclude government involvement, to be on a firm by firm basis, and to not be tied to public sector salaries.
5. Assistance to specific subsectors such as the food marketing system in which many of the participants are poor women should have high payoffs in terms of income as well as on other social indicators, e.g., nutrition and child survival.
6. Financial and technical assistance to improve the information base for policy dialogue, such as support for INEC's proposal to carry out a nationwide household income and expenditure survey, is most important in monitoring the success of the policy reform process. Complementary support to INEM and the central bank is also warranted.
7. There is a need to distinguish between the problems of chronic poverty and transitory problems arising from economic adjustment or the existing distortions. Chronic poverty needs to be addressed at its roots through permanent programs in education (particularly skill oriented vocational training), health, sanitation and basic infrastructure. Emergency employment programs are not warranted; they pose the risk of delaying or impeding the movement of resources to their most productive use.

## BIBLIOGRAPHY

- Farrell, Gilda, "Medición de subempleo y segmentación moderno-informal del mercado de trabajo urbano: resultados de la Encuesta de Hogares en las principales áreas urbanas del Ecuador", presented at Seminario: analisis de la Encuesta de Hogares y diseño de politicas de empleo, Quito, January 1989.
- Fletcher, L.B., G.A. Marquez, and D.E. Sarfaty, "Formulating a Strategy for Employment Generation in Ecuador: Issues and Priorities", Development Alternatives, Inc., November 1988.
- Franklin, D .L., J. Leonard, and A. Valdes, "Consumption Effects of Agricultural Policies: Peru; Trade Policy, Agricultural Prices, and Food Consumption: An Economy-wide Perspective" Sigma One Corporation, October 1985.
- Gomez-Castellanos, Luisa and G. Psacharopoulos, "Earnings and Education in Ecuador: Evidence from the 1987 household survey", The World Bank, 1989.
- Herrera, J. and Pisoni, R., " El mercado de trabajo urbano en el Ecuador", Presented at, Seminario: analisis de la Encuesta de Hogares y diseño de politicas de empleo, Quito, January 1989.
- Instituto Nacional de Empleo (INEM). "Household Employment Survey", November 1987
- Instituto Nacional de Empleo (INEM). Datos de la Encuesta de Hogares en las principales areas urbanas del Ecuador, 1988.
- International Monetary Fund, *International Financial Statistics*, data tape and monthly issues 1970-1985.
- International Monetary Fund, *International Financial Statistics*, November 1989.
- Jarrin, Andres, and A. Romero-Follette, "Marco de Referencia Preliminar Para una Estrategia de Desarrollo Urbano para La A.I.D.", Robert R. Nathan Associates, Inc., November 1989.
- Rama, Martin, "Ecuador: La Politica Salarial y Sus Efectos Macroeconomicos", PREALC., Diciembre 1988.
- Weekly Analysis of Ecuadorean issues*, Walter R. Spurrier, Editor. October 23, 1989.
- Whitaker, M.D., "The Human Factor and Agriculture", Working paper No. 18-89. USAID, Office of Agriculture and Rural Development, October 1989.