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GUESSING THE INCOME DISTRIBUTION EFFECTS OF TRADE LIBERALIZATION AND LABOUR REFORM IN COLOMBIA[1]

by

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1. Introduction

Colombia emerged from the 1980s in a much better economic state than most other countries of the region. Present export and overall growth prospects are also favourable, given the oil/gas discoveries and the demonstrated export capacity in a range of other products. Trade liberalization, the major policy change in recent years, is also expected by its proponents to have a positive effect on growth. Related components of the market-oriented reforms have been privatization, financial market reform, and reform of labour legislation.

This paper considers the possible labour market effects of the economic policy reforms of the last decade in Colombia, in particular the "apertura" or liberalization of trade which began (or accelerated, depending on how one looks at it) in the early 1990s and the labour market reforms of the early 1990s. While our concern is with labour market outcomes in general, including unemployment, wage levels, quality of work, stability of work, etc., we focus on the distribution of income (especially labour income) as a key indicator of how well the economy is serving the interests of the majority of the population. A highly unequal distribution of income means that the number of jobs paying somewhere close to the average income in the economy is low relative to the size of the labour force. Some people see in the "apertura", labour market and related reforms a serious threat to employment and income distribution. Comparable reform packages have been associated in several Latin American countries with dramatic increases in inequality, increases large enough to pose a serious threat to any country planning to undertake them. Another threat comes from the possible Dutch disease effects of strong export growth in the mineral sector. Few countries have experienced the benefits of major oil booms without accompanying problems and costs, one of the major fears being a worsening of income distribution.

Effects of the policy reforms initiated in the first years of this decade may be expected to appear soon, while those of the gradual liberalization underway from the mid-1980s may already have been felt. Predictions as to their distribution impact have varied from the many who feel that freer markets increase inequality to those who believe that trade liberalization in particular should have the opposite effect, based on the simple Hecksher-Ohlin theory that the freeing of trade should shift factor demand in favour of unskilled labour and of agriculture and thereby improve the distribution of income (e.g. Krueger, 1990). The main reason for concern in Colombia, however, is not the predictions of the theory,

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which are in any case ambiguous[1], but the empirical record from other countries: the experience of sharply higher inequality in Chile, Argentina and perhaps Uruguay, and a less dramatic increase in Mexico around the time of the broadly similar policy reforms undertaken in those countries. These experiences suggest that any optimistic expectations on the distribution front should be discarded; the important question is whether the impact will be negative and large; a neutral outcome should be cause for satisfaction. Clearly if both the mineral export boom[2] and the liberalization cum related policy reforms were to have negative impacts on Colombia's income distribution, the combined effect might be quite severe. Hence the importance of assessing the possible dimensions of these threats and the ways in which they might be avoided or offset.

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[1] Even the implications of the static Hecksher-Ohlin model become ambiguous as soon as a third factor (e.g. skilled labour) is allowed for. In any case, many other mechanisms could operate differently under a more open than a less open economy, so theory gives little or no overall guidance as to what sort of impacts are most likely. De Melo and Robinson (1980) used a CGE to provide evidence that in the light of Colombia's being a primary product exporter, in the medium term outward-oriented policies would be more detrimental to income distribution than would inward-looking ones.

Meanwhile Lora and Steiner (1994) use a static CGE model to test for the effects of elements of the recent trade liberalization policy on Colombia's income distribution. Unfortunately the model has tracked a declining urban Gini when the real shift appears to have been in the other direction.

[2] Colombia has yet to confront the challenges associated with a major mineral export boom. Booth (1992, 327) notes that both neoclassical models (highlighting the dichotomy between traded and non-traded goods/services) and broader political economy ones suggest that the rural sector and the regions from which the traditional export items came will suffer and the urban middle class be the main beneficiary during an oil boom. Whether these effects would still show up in the middle or the long run (with the mineral sector still booming) would depend among other things on the responsiveness of migration to earnings differentials, and on whether public policy (e.g spending in the social sectors) was designed to counteract the direct impacts of the boom. The two models have quite different predictions for what will happen after the boom ends, the simplest neoclassical versions implying a reversal of the resource flows, though more complete analyses attempt to deal with possible irreversibilities. The political economy models highlight the attempt by the groups enriched by the boom to maintain their new (if it is new) status, income levels, etc.

It is interesting to consider whether the combined effects of policy reforms and a mineral export boom would tend to reinforce each other or to offset each other. In one respect the latter should be the case: while the boom lowers the relative price of other tradeables, the policy reforms (the trade reform, to be specific) have the opposite effect. At a more concrete level, one hope of the trade reform is to bring more labour intensive exports like clothing, leather goods, furniture and some agricultural products more firmly into the export sphere. But, with the easy "rents" which it implies, Cusiana brings the threat of Dutch-disease effects on such relatively labour intensive sectors.

With respect to the labour market effects of the apertura and other policy reforms, the evidence to date from Colombia somewhat inconclusive; the hints it provides are mixed, and the period involved is in any case too short to provide definite answers. Though some industries have clearly been hurt by the import liberalization, urban unemployment has remained low by Colombian standards. Most important, however, there appears to have been a relatively sharp reversal of the previous equalizing trend in the urban distribution of income. Thus far the worsening appears to be less drastic than what happened in the 1970s/80s in Chile or Argentina, but if the negative trends apparent through early 1993 (the most recent data we have been able to incorporate here) were to continue for a few more years the accumulated worsening would become comparable to those extreme cases.[3] Even if the outcome is less dramatic, however, it does create challenges which will need to be met if the policy reforms are to make the positive impact their architects hope for. One is a much more effective education/training system, in particular one which quickly shrinks that low-skill tail of the labour force, which if we believe the unfolding patterns in other Latin American countries may suffer relative income losses from the trade opening. Another is the more effective integration of labour-intensive small and medium firms into successful exporting and import-competing activities. A better understanding of the potential challenges can be provided by a detailed look at the Chilean and Argentine experiences.

2. The Danger of Replicating the Chilean or Argentine Experience

Recent experience in Chile and Argentina (1970s and 1980s) provides worrisome examples of unprecedentedly sharp increases in inequality. Between 1974 and 1988 Argentine GNP grew by only 4%; at the heart of the crisis (1980-82) it fell by a dramatic 13%. Accompanying this medium-run macroeconomic failure was an unusually sharp increase in income inequality, the Gini coefficient among income earners in greater Buenos Aires rising from 0.365 (1974-75 average) to 0.46 (1987-88 average). It is been plausibly argued

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[3] There has been growing concern in Colombia that the new "model" is having an adverse effect on income distribution (Sarmiento, 1993).

that, given the prominence of wage goods among Argentina's exports, an increase in the real exchange rate (through devaluation, for example) would, _ceteris paribus_, lead to a decrease in the real wage rate and a worsening of the distribution of income. But it is also clear that the decade-plus worsening of the income distribution cannot be fully explained by this link with the real exchange rate, since net worsening occurred between periods with the same real exchange rate (Berry et al, 1994a, Table 2.28). It is also possible that worsening was related to slow growth over the period as a whole as well as over short periods, consistent with the general proposition argued by Morley (1994). Changes in labour policy are another strong candidate; the bulk of the increase in inequality between the mid 1970s and the late 1980s[4] occurred between 1976 and 1978 (Berry et al, 1994b, Table 4.5), as the new military government fixed wages, repressed trade unions, eliminated collective bargaining and the right to strike, and reformed the labour code to the detriment of workers (Cortes and Marshall, 1993). Structural changes wrought by the change in trade policy might also have worsened inequality; the "liberalization episode" of 1976-82 (during which imports skyrocketed in 1979 and 1980) led not only to a fall of 11% in manufacturing output but to a decline of employment in that sector by 37%, as output per worker rose by a striking 41% (Gelbard, 1990, 54). Many small and medium firms exited, while many large firms cut employment, increased capital stock and improved technology.

Chile's experience is also of special interest; since 1973 the economy has undergone the most radical policy reforms of any nation in the region; unlike Argentina, these reforms were not subsequently reversed. The country has suffered two severe recessions; after each collapse growth resumed quickly and was strong, but average annual growth over 1970-92 was only 3.2%, despite an impressive 6% average since 1984. As of the late 1960s inequality was somewhat less severe than in most other Latin countries; data for greater Santiago indicate a marked improvement during the Allende administration, followed by a sharp reversal. The distribution of consumption among greater Santiago households suffered one of the largest deteriorations ever recorded statistically in a developing country, occurring primarily between 1969 and 1978 but also over the decade which followed (Berry et al, 1994a, Table 2.29b). It appears that most of the worsening occurred very quickly during the five years after Allende's fall, and especially during the recovery from the dramatic recession of 1975.[5] A number of the policy steps taken by the Pinochet regime probably contributed to the accentuating inequality, including the

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[4] When another discrete worsening seems to have occurred (Morley, 1994, 8).

[5] If the national trend in consumption distribution were like that of Santiago, the consumption decline in the bottom quintile of households over 1969-78 would have been 40%.

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extensive privatization and the curtailment of agricultural credit to small farmers (leading to land concentration) and of preferential financing to small entrepreneurs. Perhaps most important was the reform of the labour legislation, which relaxed worker dismissal regulations, suspended unions (to 1979, when they were again authorized to operate, but with many restrictions), greatly reduced the social security tax paid by the employers and reduced other non-wage costs as well. Wealth and capital gains taxes were eliminated, profit tax rates substantially reduced, and public employment greatly cut back. Unemployment rates (for greater Santiago) rose to unprecedented levels in the neighbourhood of 20-25% (depending on the definition used). Only in 1989 did this rate fall below 10%; since then the fall has been continuous, to just 5% in 1992 (ECLAC, 1992, 42). According to Ffrench-Davis (1992, 15) average wages in 1989 were still 8% lower in 1970; as of 1992 they were probably marginally above the 1970 level, a very slow recovery indeed. The coverage of the minimum wage was restricted considerably and its level fell in the 1980s.

One striking feature of the post-1973 period in Chile and an important aspect of the evolution of the labour market was a sharp increase in the relative income of persons with university and vocational secondary vis a vis those with less education, an increase which occurred mainly in periods of economic expansion (Robbins, 1994). This shift was clearly one proximate cause of the worsening in income distribution. Robbins' analysis indicates that it was not primarily the result of shifts in the composition of employment among industries, but rather a "within sector" phenomenon. It may reflect a greater relative payoff to higher education under a more open economy. In Argentina wage differentials narrowed between 1980 and 1986, then widened sharply in the succeeding three years during which inequality jumped upwards (Morley, 1993, 92). In the downturn of 1988-89 the real wage decline was heavily concentrated among those with the least education and in the least skilled jobs.

Over Mexico's long period of rapid growth up to the debt crisis in the early 1980s it appears that most wages rose substantially (Gregory, 1986) and that inequality either fell (as argued by Hernandez-Laos and Cordoba, 1982) or stayed about constant. Recent household surveys for 1984 and 1989 indicate a worsening of distribution over that period (the Gini coefficient of per capita household income rising from 0.49 to 0.52--see Alarcon, 1993, 105), worrisome but probably less extreme than those of either Argentina or Chile.

Colombia's experience over the 1970s-1980s appears to have been unique within the region, since a fair case can be made that income distribution showed some net improvement, while the country was also recording one of the few good growth records over that span. An important part of the story is the unusually marked decline in earnings differentials across educational levels and between genders, declines especially concentrated in the late 1970s while the economy was still growing rapidly and in the early 1980s when it was not (Tenjo, 1993). Rural earnings were also showing

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considerable improvement at this time (Ministerio de Agricultura y Departamento Nacional de Planeación, 1990, 228).

Differences in economic structure or in growth rates could be at the root of the contrast between Colombia's experience during the 1970s and 1980s and those of Argentina and Chile. If the contrast was due more to differences in policy, the intriguing hypothesis would be that Colombia's positive experience was due to the absence of major shifts in trade or labour market policy. Before looking in more detail at the distributional experience in Colombia, we review its macroeconomic performance over the last couple of decades.

3. Economic Policy and Macroeconomic Performance Since the 1960s
The path of the Colombian economy over the period since the late 1960s has reflected exogenous international events (prices, exports demand, evolution of the drug industry, etc), the country's resource base, and its economic policy. Our main concern in this paper is the extent to which the evolution of employment and income distribution has been affected by policies on trade/industrial policy, the exchange rate and the labour market.

Since the late 1960s Colombia's macroeconomic performance has been among the best (or least bad) in Latin America. Over 1970-93 average GDP growth was 4.4%, placing the country second only to Brazil at 5.1% (Berry et al, 1994b, Table 1). Growth was also the least unstable among major countries in the region, as the debt crisis and the accompanying recessions hit Colombia much less hard than most other countries. Growth in the early 1990s (through 1993) has been about average for the region, at a little over 3% per year.

This creditable record dates from the late 1960s and has been based on generally good exchange rate management since the switch to a flexible rate in 1967, a trade regime offering incentives both for import substitutes and for exports, and a relatively prudent fiscal and monetary policy, under which fiscal deficits never reached the unsustainable levels of several other countries of the region and monetary growth was accordingly more modest. The administration of Lleras Restrepo marked an important turning point for the economy. The 1967 trade and exchange rate reforms ushered in one of the most successful periods of industrial and export growth in Colombia's history, and put an end to a liberalization episode which had taken place since 1965 under severe pressures from the donor agencies (Diaz-Alejandro, 1976, Ch.7). The Lleras government refused to devalue and instead adopted the crawling peg, stringent import and exchange controls, and a stable export promotion policy (Ocampo, 1994, 136). This process was interrupted since the late 1970s by the Dutch disease effects of the coffee and foreign indebtedness booms between 1975 and 1982, reflected in the real appreciation of the peso and a mini-episode of import liberalization around 1980. As industrial and overall growth slackened (hitting bottom in 1982-83 with little or no growth), export coefficients declined and structural change ceased. Since the mid-1980s there has been renewed growth in the industrial

sector, but the presumably falling returns from the ISI elements of the model and the acute change in the external conditions facing the country led to a radical turnabout in policy in 1990-91, and the adoption of a more explicitly outward-oriented strategy (Ocampo, 1994, 145). It is still too early to do more than guess at the growth effects of this strategy.

Protectionism, though well embedded in policies since the 19th century, played a somewhat secondary role during the first phase of import substitution, while real exchange rate fluctuations provided the most important price signals to industrial entrepreneurs (Ocampo, 1994, 134). Ocampo sees the 1967 package as the consolidation and rationalization of the mixed strategy followed since the late 1950s. In 1969 the Andean Pact introduced ISI in a regional context, but dissatisfaction with it spread in the early 1970s and most of its mechanisms proved inoperative. The Pastrana administration (1970-74) was not favourably disposed to ISI and placed more emphasis on export growth. Over the years a gradual import liberalization occurred. By the mid-1970s inflation was a serious threat; the López government (1974-78) addressed it via tight monetary and fiscal policy, which however was reversed by the Turbay administration in favour of expansionary fiscal policy, tight monetary policy and import liberalization, leading to a consolidated public sector deficit of 7.1% by 1982 and massive public sector borrowing abroad. Real appreciation deepened in the early 1980s debt boom and export promotion was downgraded, not as a result of an explicit decision but of short-term macroeconomic considerations. The deteriorating situation led the Betancur administration (1982-86) to rapidly reverse more than a decade of import liberalization. The average nominal tariff level was raised from 32% to 49% between 1982 and 1984, though the average collected tariff did not rise until 1985, and peaked at around 24% between 1986-88 from the earlier level of around 15% (Table 1). As of 1991 it was back down to 13.3%, a little below the 1970s level. The tariff equivalent of the QRs rose quickly over 1982-85 from 11% to 31%, though falling back quickly in the years to follow. The liberalization during the rest of the decade was moderate (Ocampo, 1994).

During the early 1980s, thus, the economy had become more closed; from a high of 22% in 1982 the constant (1975) price import/GDP ratio fell to 14.4% in 1984, then fluctuated in the 16-18% range through 1991 (Table 2). The comparable current price series declined and rose more smoothly. The time profile on the export side is similar; after the lows of 1982-83 of under 15% (constant prices) or 12.0 or less (current prices) the recovery brought the shares to around 19% over 1986-89.

The two principal goals of policy in the 1980s were to overcome the dangerous fiscal deficit (which reached as high as 7% of GDP) and to overcome the balance of payments deficit which led to a rapid decline of reserves (Becerra et al, 1993, 106). From 1986 on, except for the 2.1% in 1988) the deficit has been under 2% and over 1990-92 it was essentially zero. The current account was balanced from 1986 on, and a surplus of 500M in 1990 gave a nice

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cushion with which to begin the apertura.

Industrial growth was unstable during the 1980s. Like the overall growth rate, it remained below the levels reached over 1967-74; by the end of the 1980s, slowing growth and accelerating inflation was increasingly interpreted as the result of a structural blockage based on two factors, stagnation in the growth of factor productivity and lack of dynamism in investment, frequently blamed in turn on the inward looking development model (Republica de Colombia, 1991, 7; Montenegro, 1991, cited by López, 1994, 19). This contributed to a perception that trade policy required a radical change towards an explicitly outward oriented strategy, a perception that was consistent with a generally more market friendly ideology in Latin America at this time.

The Gaviria administration (1990-94) came to power facing a difficult inflation challenge (to which the need to devalue in the previous years had contributed) and committed to continuing and accelerating the already initiated process of liberalization, which was accompanied by a partial freeing of exchange controls, more open access to foreign investment and a liberalization of the labour market. The government was aware that distributional problems might result from the liberalization, a concern derived both from an understanding of the sorts of adjustments which would be involved in the process of "apertura" and related reforms, and from the experience of other countries of the region, Europe and elsewhere.

The apertura was carried out quickly, though its effects on imports were delayed.[6] While in December 1989, 38.8% of tariff positions were free, 60.1 required previous permission, and 1.1% were prohibited; by Nov. 1990 these numbers were 96.7, 3.3% and 0. The long postponed liberalization of intra-Andean Pact trade was accelerated and virtually completed by Jan. 1992, and the decision was made to put a customs union in place in 1992 with tariffs slightly lower than those adopted by Colombia in 1991 (Ocampo, 1994, 145). The ratio of tariffs (including surcharges) collected to GDP, around 1.5% at the beginning of the decade, fell to 1.1% in 1984, recovered to 1.7-1.9% over 1985-88 (when a CIF tax on imports was added to the customs and surtaxes), fell to 1.0% in 1992 but

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[6] There has been some difference of opinion with respect to how fast Colombia's trade liberalization has taken in comparison with those of other countries of the region. Lora and Steiner (1994) conclude, as does Edwards (1994) that it has been fast. Edwards reports that the Chilean reform took about five years in the 1970s while that of Colombia took just one year after being initiated in 1991. Others, like Sheahan (1994) view the Colombian liberalization as gradual, from back in the mid-1980s. Clearly the issue is partly one of whether one focuses on the tariff and QRs or on the size of trade flows.

then rose to 1.3% in 1993 as imports surged. The average tax[7] on imports of goods and non-factor services ranged between 10 and 14% over most of the 1980s, and fell only in 1992 and 1993 to the neighbourhood of 5% (Table 1). Thus, though the import taxes did fall sharply in 1992, the decline is less than might be suggested by the data on tariff positions.

The crawl of the peso was accelerated to prepare the ground for the liberalization and some external funding was arranged in expectation of an import surge. The import surge came much later than expected, and foreign exchange mounted to the equivalent of 18 months of imports, from a normal 6 months or so. Contributing factors included the expectation by economic agents of further tariff reductions, leading them to delay imports, and the government's emphasis on curbing inflation, which led some people to expect a recession. The tight money policy pushed real interest rates quite high and since the government opened the capital market at an early stage of the apertura this helped to flood the economy with foreign exchange, rendering the monetary policy unsuccessful. With inflation accelerating and imports not growing, and believing that the main factor in this situation was the expectation of further tariff cuts, the government decided to accelerate the program, dropping rates in 1991 to the levels previously planned for 1994 (Becerra et al, 1993, 123). When even this did not raise imports quickly, the government felt forced to appreciate, even though one of the arguments which had been put forward for the speeded-up opening was to avoid a revaluation which would compromise the development of the export sector. At the beginning of 1992 the newly created Junta del Banco de la Republica decided to lower the anomalously high interest rate to a level consistent with the international market, and accept that the money supply would be a passive variable.

Imports finally jumped in 1992 (by 30%) and surged in 1993 (by over 50%). The export quantum rose sharply in 1990 (mainly due to coffee), since which time growth has been moderate. The current price export/GDP ratio appears to have levelled off at around 20%.

Growth, which had recovered to average 4.5% over 1985-90, fell to a low of under 2.5% in 1991, from which it has gradually accelerated to somewhere in the range 4-5% in 1993. The fixed investment ratio (current prices) was quite stable at 17-18% of GDP during the 1980s until it jumped in 1988 to 19.5%, since which it fell systematically to 14.2% in 1991, recovering to 15.5% in 1993. The constant price series moved in a similar way. We presume that there was an increase in 1993.

The Changing Pattern of Trade

The composition of exports has changed significantly since the early 1980s, when coffee accounted for about half of the total.

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[7] Excluding the value added taxes applied also to domestic goods.

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Since then its absolute dollar value has fallen while that of mining products rose sharply to about 2.2B of a total of 7.3 in 1992, with coffee at just 1.3, other agriculture at and other at 2.6B. Beginning in 1990 coffee accounted for less than 20% of the value of merchandise exports and in 1993 its share was down to under 16% and less than half of the value of mineral exports. Manufactures rose from about 7% of the total in 1970 to 31% in 1991 (World Bank, 1993, 268).

The main manufactured export sectors have been foods, textiles and chemicals (accounting for three quarters of such exports in the 1980s). Three structural features seem to have been important. These exports are relatively natural resource and unskilled labour intensive (Thoumi, 1979; Villar, 1983). Exporting firms are relatively larger and more capital intensive than non-exporting firms in each sector (Echavarria and Perry, 1981; Villar, 1983). A few capital and human resource intensive firms have been successful in combining import substitution and important penetration of regional markets (Ocampo, 1994, 155). These regional markets are dominant in the cases of chemicals and machinery (70% in 1990) while the natural resource based exports go mainly to developed countries. The 1980s and early 1990s may have seen some modification in these patterns, though the evidence is not yet conclusive: there has been some increase in more skill-intensive exports, and also an apparent increase in the share of exports coming from small and medium sized plants (Escandón and Berry, 1994).

The fairly rapid quantum growth of exports in the last few years (about 8% per year since 1988) and the considerable changes in their composition would suggest that some Hecksher-Ohlin effects might show up. On the import side this is even more evident, with the slow growth over the late 1980s followed by the dramatic increases in 1992 and 1993. Consumer goods fell to under 10% of total imports by value in 1984-85, then gradually recovered to 13.4% in 1992, while intermediate goods fluctuated in the range 50-60% of the total. The big surge of imports in 1992 and 1993 saw consumer goods rise especially fast (by 82.3% in 1993 alone) to reach 18% of the total.

4. Trends in the Distribution of Income

As noted above, it is fairly generally accepted that income inequality decreased in Colombia between the early 1970s and the early 1980s, both in urban areas and for the nation as a whole, and both for earners and for households. Londoño's detailed study suggests a decline in the Gini coefficient between 1971 and 1978, from 0.53 to 0.48, with essentially no change from then until 1988, for which his estimate is 0.475 (Londoño, 1989). Though some ambiguity remains as to the trends in the 1970s due to data problems, our main concern here is with the period beginning in the late 1970s, during which the economy went through a brief period of liberalization (early 1980s), then a sharp reduction in openness followed by a gradual re-opening through the rest of the 1980s and the abrupt apertura of the early 1990s. Labour market reforms

occurred mainly around 1990, though union power was clearly weakened by the recession of the early 1980s.

Our estimates of income distribution in three of Colombia's largest four cities (Bogota, Medellin and Barranquilla) reveal a quite significant and continuous[8] decline in inequality between 1976 and 1990, more striking among earners (whose Gini coefficient fell from 0.50 to 0.41) than among persons ranked by per capita family income (where the decline was from 0.52 to 0.46--see Table 3).[9] Among earners, the relative income of the top to the bottom decile fell from 28.6 fold to 18.8 fold. The distribution among earners is of interest because it reflects directly the way the economy determines the incomes of factor owners, while the distribution among persons (a variant of the distribution among families) is of ultimate concern since it is most revealing of the welfare distribution in the society. Inequality bottomed out in 1990 (our data refer to March) after which it has increased sharply, especially that among earners (where the Gini coefficient rose from 0.41 to 0.47), but significantly also among persons (Gini up from 0.47 to 0.51). Earner inequality thus returned to the 1980 level (with the top decile to bottom decile ratio back up to 27.3), but remained below that of 1976, while inequality among persons now exceeded that of 1980 and was close to the 1976 level, reflected in a Gini coefficient of 0.52. In each case the largest deterioration was that between 1990 and 1991. Among earners the 1990-93 period saw significant declines in the income share of the first six deciles (30.8% to 27.4%), while the only major gainer was the top decile (36.2% to 40.4%--see Table 4a). In percentage terms the biggest losers were the lowest deciles the first saw its share fall by 23% from 1.93% to 1.48%, about the level of the late 1970s.[10]

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[8] Though the smoothness of the trends might disappear were all of the years to be included in the series.

[9] Since it is universally the case that capital incomes are less fully reported than labour incomes, we presume that our estimates of inequality understate the actual levels, probably by a few percentage points in the Gini coefficients (See Altimir, 1987, for a discussion). Our assumption and hope is that this and other sources of errors in the estimates will not have changed much over time; in one respect where we feel this assumption might not hold--related to the introduction of the "salario integral" around 1990--we have undertaken some sensitivity analysis to verify that it does not explain much of the observed increase in inequality since 1990. Another possible bias could result from failure to take account of differences in the cost of living index relevant to different income classes.

[10] Figures on the structure of income by job categories presented by Lopez (1994, 265) are consistent with these figures, in that they suggest an increase in inequality between 1988 and 1992, one which seems to occur within each major category, from

Among persons, all deciles lost except the top one, whose share jumped from 37.3% to 42.5%, to nearly recover the 1976 level (Table 4b). Percentage share losses at the bottom were less than in the earner distribution, with the first decile losing 17%, from 1.75% to 1.45%. Most of the bottom deciles still had a slightly higher share than in 1976, as reflected in the marginally lower Gini than in that year.

Other authors have reported quite different trends in urban inequality from those presented here. Thus the series reproduced as Col (3) of Table 3 shows a pattern virtually the opposite of that reflected in the conceptually similar Col (1), in that the Gini coefficient rises through 1989, after which it falls, especially in 1992 (whose observation does however correspond to a different month (June) than that for the other years (September).[11] Although, other things being equal, one would attribute greater meaning to the series covering the wider population base (those of Col.3 refer to the urban areas as a whole), for a variety of methodological reasons we doubt the validity of these estimates and hence disregard them in the discussion which follows.[12]

It is interesting that the trends in level of concentration of each of the major components of personal income parallel those of total income (Table 5). Note also that business income has become more important over time at the expense of labour income.[13] Since the latter is the most equally distributed of the components distinguished here, its falling share of total income probably contributes an upward push to the overall level of inequality. (Business income is in the middle with respect to the Gini coefficient while "other" income, which includes rental income, interest income, dividends, pensions, and other transfers) is the most concentrated of the three. Business income is most important in the lowest and the highest deciles, while labour income is

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paid workers to the self-employed to the employers. Although we do not present a distribution for 1988 the inequality trends suggest a considerably lower level in that year than in 1992.

[11] Another source, presumably drawing on the estimates using this methodology, reports a decline in the urban Gini from 0.47 in 1988 to 0.44 in 1992 (Banco de la Republica, 1994).

[12] The differences in methodologies between our estimates and those shown in Col.(3) of Table 3, explained in the appendix, probably explain an important part of the difference in results.

[13] Taking the figures literally, the same could be said of "other" income, but as noted earlier, this may be due to a change in reporting procedures. Since it seems safe to assume that some of the reported increase is due to those changes, it would appear that the business component has had a continuous upward trend.

predominant in the middle of the distribution (Table 6). At lower levels of the distribution, however, business income probably reflects income from informal activities, and to the extent that these activities use very little capital, it is mostly labour-based income and its level is likely to be heavily influenced by the outcomes of the labour market. More generally, the very similar time patterns of the distributions of labour and of business incomes suggest close links between the markets in which the two types of income are determined.

With respect to the reversal of the former positive trend in the level of inequality, the increase in the Gini of labour incomes was occurred mainly between 1990 and 1991 (March of each year), while the concentration of business incomes, though also rising most sharply between 1990 and 1991, continued up over the next two years as well. Thus the overall worsening since 1991 has come from the distribution of business income; in 1993 its effect was offset by a decrease in concentration of "other" income.

Unfortunately, Colombia does not have systematic national household surveys allowing the sort of analysis just carried out for urban areas to be undertaken at the national level. Rural data available for 1988 and 1992, suggest little change in inequality between those two years (the respective Gini coefficients being 0.46 and 0.45). But a serious cause for concern is the evidence that while urban incomes rose by 18% between 1990 and 1993, rural incomes fell by at least 5% over this period (Lora and Herrera, 1994a). It would be natural to interpret such an outcome as due in part to the production problems of the agricultural sector in 1992 and in part to the price impact of the apertura. Together with the sharply increasing inequality in the urban areas and the constant level in rural areas (at least over 1988-92), this widening gap between the two distributions would suggest an even larger increase in inequality at the national level than for the urban areas; it also suggests that, depending on where the poverty line is drawn, the percent of population in poverty was probably increasing over the early 1990s.[14]

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[14] Urrutia (1993) estimates that the national poverty incidence rose sharply in 1992 to reach 19%, up from 15.4% in 1991 and 18.7% in 1988.

Another attempt to measure trends in distribution and poverty at the national level, that of Fresneda (1994, Cuadro 5), reports estimated Gini coefficients of 0.481 for 1978 and 0.472 for 1992 (distribution of households ranked by per capita household income); a significant increase in income shares for the bottom three deciles (e.g. 4.2% to 5.4% for the bottom quintile) was offset by the increasing share of the top decile. At the same time he reports that according to the income measure of poverty, the share of people in that state fell only from 56.3 in 1978 to 53.5% in 1992 (and from 23.3 to 20.5% for the extreme poverty line), though according to the unsatisfied basic needs criterion the share fell from 70.5% in 1973 to 45.6% in 1985 and to 32.2% in 1993. In

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5. Developments in The Labour Market

A number of significant changes which have taken place in Colombian labour markets since the late 1970s are part of the backdrop to the pre and post-1990 evolution of income distribution. Possibly the most important are: (i) a sharp increase in female participation rates; (ii) increasing levels of education in the labour force, especially among women; (iii) a marked equalization of incomes between men and women, partly as a result of changes in levels of education; (iv) a re-allocation of labour, again especially female labour, from low to higher paying occupations; and (v) towards the late 1980s and early 1990s, a change in hiring practices (more temporary work), and the introduction of important labour market reforms. Taken together, they have no doubt had a variety of effects on income distribution, with the net impact hard to predict.

One of the most important developments was the increase in female participation rates - one of the largest in Latin America. In Bogota, for example, the participation rate of women over 12 years rose from around 37% in 1976 to 51% in 1992 (Table 7), with the increase especially important in the age range 20-50 years, and among women with secondary and university education. The rate for men also increased until the mid 1980s, although much less sharply, and decreased afterwards.

Since the mid 1950s the accumulation of human capital, in the form of significant improvements in the level of education, has proceeded rapidly, with particularly large increases among women in general and among members of the labour force. As expected, this process generated an important decrease in the returns to investment in education from about 15.6% and 21% for wage-earning men and women respectively in 1976 to 11.3% and 13.9% in 1989[15]; most of the decrease occurred between 1976 and 1984, especially in the case of men whose rates during the late 1980s remained more or less

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connection with the former Fresneda distinguishes three factors affecting the trend in poverty incidence: an increase in average per capita income of 18.1% which reduced the poverty incidence by 7.2 percentage points, the small improvement in (current price) distribution which lowered it by 0.4 points, and an increase in the relative price of the bundle of goods purchased by the poor, which raised it by 4 points. The latter two figures imply that the distribution of purchasing power (income deflated by the price increase of a given income groups market basket) worsened a little over this period.

Although Fresneda does not present comparable figures for intervening years, if we assume that his figures, like others, show an improvement over the late 1970s and early 1980s, they are consistent with a sharp increase in inequality in the early 1990s for the country as a whole.

[15] These figures refer to the average earnings advantage from having one more year of education.

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stable, while those of women continued to decline, but at a slower pace than in the first part of the period. This decline was more important at the primary and secondary levels than at the university level (see Table 8 and Tenjo 1993, Table 3); from around 1990 the relative incomes of university graduates tended to rise moderately for males and more markedly for females.

Together with the accelerated increase in female education there was an important narrowing of the gender income gap. In 1976 the average hourly wage of men was 30% higher than that of women. By 1992 the differential had dropped to zero (Table 9). In terms of monthly labour income the differential decreased from 62% to around 30% in the same period. Most of the decline in the differential (about two thirds of it) occurred in the seventies and early 1980s, with a levelling off towards the latter part of the decade, and possibly a new smaller decline in the early 1990s. The declining earnings differentials during the early 1980s appear to have contributed to the decrease in the level of income inequality during those years in the three cities studied here.

Overall labour market outcomes reflected the macroeconomic trends of the post-1980 period. Urban unemployment jumped in the early 1980s recession to reach nearly 15% in 1985/86, and the share of paid workers, (excluding domestics) in employment fell by about 2% (López, 1993b, 16). But real earnings of paid workers rose by 10% over 1980-84, while those of the self employed fell by about 18%, a combination of outcomes which Lopez interprets as a result of a slowing of the rate of inflation. All groups lost in real income over June 1984 to June 1992, though the timing of their losses was different.

Labour Flexibility and Labour Market Reform
The flexibility of Colombia's labour market was a matter of discussion in the 1970s and 1980s. Some trends pointed to decreasing flexibility, though others suggested the opposite. Thus unionization in large scale manufacturing had declined from over 60% in the mid-1960s to just 27% in the second half of the 1980s-- Ocampo, 1994, 163). Job instability, always high in rural areas, seems to have increased in urban areas since around the end of the 1970s (López, 1994, 2). In this respect the labour market became more flexible, first in fact and then in law (with the reforms of 1990). From about 5-6% of urban employment in 1976-78, temporary jobs rose to and levelled off at about 13-14% in the late 1980s (Fedesarrollo, 1992, 34). By 1991-92 the share was on the rise again, reaching a seven city average of 19.5% in June-Sept 1992 and averaging 20.8% for males and 21.6% for females in Bogota over 1990-92.

Since at least the mid or late 1980s there has been an important debate on the need to reform labour legislation and labour practices. Some of the views expressed during that debate were incorporated in legislation passed in the early 1990s, which unequivocally eliminated the major legal restrictions on labour mobility. Among the most important reforms were:
(i) introduction of the so called Salario Integral (SI) in order to

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reduce uncertainty in the estimation of labour costs, and simplifying the administration of payrolls.

(ii) changes in the severance payment regime (Cesantías). Previously employers were supposed to create a reserve equivalent to one month of salary for each year of work, based on the last salary received by the worker; thus every time the wage/salary of a worker changed (usually upwards) the whole reserve had to be re-estimated. Further, only the nominal value of earlier withdrawals by the worker from this account were deducted. An annual interest of 12% was paid on the amount owed at date of retirement (Ocampo, 1987). The essence of reform consisted in removing the requirement of re-adjusting the fund every time the salary changed, in exchange for paying competitive interest rates.

(iii) changes removing some job protection and facilitating the use of part-time and temporary workers. Some observers have argued that changes in the interpretations of the law and the attitude of employers were more important than the actual changes in the legislation in this area.

As López (1993a, 45) has argued, the previous system of severance payments and firing constraints favoured excessive labour rotation initially and made it prohibitive to fire after 10 years. With the reform new workers will operate under the new rules, but the workers hired before this date remain under the old system, slightly modified to make it easier to fire after 10 years but with payment of a higher indemnity. He attributes the traditional pattern of the worker's life cycle substantially to the legislation: youth move into paid jobs, rotate fairly fast and are then constrained to dedicate the last part of their careers to the management of micro-enterprises (Londoño, 1987). Paid workers are 77% of the 20-24 age group; this share falls rather smoothly to under 30% for those 60 and over (López, 1993a, 43), with the age profile of the self-employed showing the opposite pattern.

How may the introduction of the <u>Salario Integral</u> have affected labour market outcomes and the distribution of income? Workers under SI generally receive more money per month than under the previous system, but do not get fringe benefits. Since the household surveys we are working with estimate only current monthly payments (they do not question workers about their accrued but unpaid fringe benefits) the switch to SI will lead to an increase in some workers' reported monthly income, but not (or not in the same degree) in their true income. If earners for whom fringe benefits are important fall disproportionately near the top of the income distribution, the introduction of SI will cause an increase in the reported Gini coefficient, thus creating an apparent (but not real) worsening of the distribution of income. If fringe benefits are most important for low income workers the opposite effect would hold.

The evidence from the 3 cities (Bogotá, Medellín and Barranquilla) is inconclusive as to whether the introduction of SI had a significant spurious effect on measured inequality or not. Suggesting that it might have are the facts that: (i) the Gini coefficients show a considerable increase in 1991, just after the

law of 'Salario Integral' was passed at the end of 1990 (Table 3);
(ii) the increase in average income between March 1990 and March
1991 was about 33%, much higher that the average of 26.3% per year
for the period 1989-92-- that increase was higher for the upper
deciles (the 9th and 10th deciles had an increase of over 40%). On
the other hand, although labour income shows the same patterns just
described, what dominated the movements both in total monthly
income and in its concentration was the business component. The
largest component of the increase in income in 1991, both at the
average level and by deciles, is business income (Table 10), and
the largest Gini increase was for business income. Thus, though the
hypothesis that the observed increase inequality in 1991 was a
spurious result of the introduction of Salario Integral is
plausible, other factors were clearly at play and one must
tentatively conclude that any role it may have had was relatively
minor.

Increases in Part-Time and Temporary Work
        The share of workers in our three cities employed in temporary
jobs (defined as those who are called to work sporadically, working
only in certain times or periods) increased sharply in 1991, as did
the share of working less than 40 hours per week. The evidence
suggests that such changes affected mostly the bottom deciles of
the distribution of income.
        Note first that the number of hours work per week for the
bottom two deciles of the income earners distribution declined
continuously since 1990, while the figure for the rest of the
deciles was constant, although with minor fluctuations (Table 11).
This is consistent with the hypothesis that the changes in the
labour legislation facilitated the use of part-time work at low
paying levels, but that higher paying occupations were not affected
by the legislative changes in an important manner. The reduction in
the number of hours is particularly interesting because it happened
during a period of relatively low unemployment. Second, there is a
clear increase in the overall proportion of workers with temporary
jobs after 1990 (Table 12), probably reflecting the changes in
labour legislation mentioned above. Again, the lowest half of the
distribution presents the highest increases while no significant
changes are observed in the two top deciles, consistent with the
hypothesis that the institutional changes of the late 1980s and
early 1990s which facilitated the use of temporary work affected
primarily the lower and middle ranks of the distribution of income.
A significant increase in the prevalence of temporary work occurred
in all job categories, and was greater for independent workers than
for paid workers and more for employees in micro-enterprises than
for those in medium and large establishments (López, 1993a, 45),
which would seem to suggest that it was more a matter of changes in
the market conditions than of the legislation.
        The proportion of earners working part time (less than 40
hours a week), after fluctuating without clear trend between 1976
and 1990, moved up sharply in the next two years as the reforms

were taking effect, but then fell back again in 1993 (Table 13).
Both the level and the volatility of this variable are especially
high in the bottom two deciles of earners. Though part time work
was of some significance for other groups as well, its effects are
concentrated among the lower-income workers. An important part of
the increase in part-time work over 1990-92 probably involved an
increase in involuntary underemployment as indicated by the
increase in the proportion of part-time workers wanting to work
more hours (see Table 13). This is particularly evident in the
lowest three deciles, where in 1992 about 40% of the part-time
workers expressed their desired to work more hours per week.

The above, together with the fact that the average monthly
income at the bottom of the distribution fell relative to other
levels (and in absolute real terms) probably indicates that the
wellbeing of the poorest component of the population was negatively
affected by the changes in labour legislation. Note, however, that
for both males and (especially) females most part-time work is by
preference, and the time patterns of this "voluntary" component and
the "non-voluntary" one are quite similar (López, 1993a, 47). López
(1992), using data from DANE's household surveys of June 1990 and
1992, concludes that the reform increased employment instability
(rate of job separation) for older workers while reducing it for
the newer workers. While there is no organized information on the
prevalence of fixed term contracts, job contracts and work on
commission, there are indications of rapid increases in the
frequency of each (López, 1993a, 40).

The Early 1990s and the Labour Market Effects of the Reforms
        The liberalization and modernization undertaken since
1990 appear not to have created major short-run problems in the
labour market, notwithstanding modest dismissals from the public
sector. There is no evidence of a negative trend in unemployment
rates over the longer run and the process of liberalization which
began in the early 1990s has coincided with declining unemployment.
Though rapid economic growth has not returned, the predicted costs
in terms of open unemployment (e.g. Ramírez, 1991) of the opening
have thus far not emerged, though as of the early 1990s open
unemployment in Bogota was, as usual, high for youth of 16-20
years--19% for males and 27% for females. Female unemployment was
relatively high for much of the prime working age range also, only
falling below 10% for women over about 35 years.

Between June 1988 and June 1992, the employment structure
moved in ways normally associated with growth and modernization.
Paid workers as a share of employment rose from 61.3% to 62.9%
(data for 10 urban centres), with the increase concentrated in the
medium and large (11 workers and up) private firms (29.9 to 33%)
while the government share fell from 10.3 to 9.3% and the micro-
enterprise share from 21.1 to 20.6 (López, 1993a, 33). The main
decrease was in "other employment"--domestics and family workers.
Self-employed non-professionals fell while employers rose, both in
microenterprise (5.6% to 6.2%) and medium/large.

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The interesting question now is what will happen in the medium and longer run. The serious problems which will continue to characterize and be played out in the labour market will be more ones of employment quality, stability and enhancement of skills than of quantity per se. The demand side will have to adjust further to the gender and educational changes on the supply side. The key question is how these changes in labour market functioning, related to the changes in legislation and in goods markets, etc. show up in family incomes, poverty, and family instability of income and welfare. Though the rate of temporary employment has risen, the increasing share of employees in medium and larger establishments is likely to represent a gain in terms of stability.

6. Closing Comments

It goes without saying that one cannot at this time demonstrate unequivocally what the labour market impacts of the package of reforms undertaken in Colombia have been, and even less identify the impact of specific reforms like the "apertura" and the changes in labour legislation. Concerns that high unemployment might result have clearly not proved warranted, and were probably based on an underestimate of the flexibility of the Colombian labour market. There are, however, real grounds for concern in the significant rise in urban inequality and the probably even sharper increase at the national level since 1990. This, together with the now well established fact that reform packages broadly similar to Colombia's have coincided with dramatic increases in inequality in other Latin countries, makes it essential both that the recent trends be better understood and that appropriate counter measures be taken. The levelling off of inequality in 1993 hopefully signals that the upward trend has come to an end, though it will be imperative to extend the series used here as soon as possible to ascertain whether that is indeed the case.

APPENDIX: METHODOLOGY OF THE ESTIMATES OF INCOME DISTRIBUTION

The figures on which we base the analysis of this paper are estimated using DANE's household surveys for Bogotá, Medellin and Barranquilla corresponding to the month of March.

Income was defined as the sum of labour (including the estimated value of payment in kind when available), business and "other" income. In the case of labour income the figures were converted to a monthly basis by multiplying by 1, 2, 3, or 4.286 according to whether the respondent indicated that payment took place monthly, every two weeks, every 10 days, or every week respectively. In the case of daily payment the conversion to a monthly basis was done by multiplying the daily earnings by an estimate of the number of days worked in the month derived as the reported weekly hours worked divided by 8 and multiplied by the number of weeks per month (4.286). This approach is different from that adopted by other studies which convert daily into monthly payments by multiplying by an estimate of the number of working days in the month (30, 25, or some other figure). Note that the different periodicity of income reporting is likely to introduce two types of error in estimates of inequality. First, it overstates inequality among those with short reporting periods; whereas among daily workers there is likely to be some averaging out across the weeks of the month (and year) in amount of work, the procedure used here "assumes" that anyone who worked many hours in the week of the survey did so every week of the month and anyone who worked very little also did so every week of the month. Second, it understates the average difference in monthly income between those with permanent jobs and those without, since some of the latter will go through some weeks in which they do not earn at all.

A possibly major source of distortion that we tried to correct was the truncation in the reporting of incomes produced by the fact that the questionnaires of the household surveys allow only for a maximum of six-figure incomes. Incomes of one million pesos or more are represented by the figure 999998. This distorts the income of the higher percentiles of the distribution and results in both an underestimate of the Gini coefficient at each point of time and (a bigger problem for the analysis of changes in distribution over time) an increasing underestimate over time as the number of "high income" earners whose incomes are excluded rises quickly in a growing, inflationary economy like Colombia's. The correction includes the following steps: (1) It was assumed that the distribution of each income item has a log-normal distribution. (2) The mean and standard deviation of the log-normal distribution was estimated using the non-zero values in the sample below $999,998. (3) The conditional mean for values 999,998 or higher were estimated. The conditional mean is given by the unconditional mean plus the standard unconditional standard deviation times the inverse Mill's ratio defined at the point of truncation. (4) Finally the conditional mean was replaced for the truncated values.

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The "trimming" of the sample (exclusion of the highest and lowest 200 observations) in an attempt to deal with this truncation problem is not, in our judgement, a proper procedure. Unlike the other studies of inequality which we have seen, we did not undertake such a trimming. Though for some purposes this procedure may make sense, it is clearly dangerous when the subject of analysis is income concentration, since the excluded values at the upper end could account for a significant share of total income.

Domestic servants and other non-relatives of the household head were excluded from the estimation of the distribution of household income per capita. However, they were included in the distribution of earners' income.

Bibliography

Altimir, Oscar (1987). "Income Distribution Statistics in Latin America and Their Reliability", Review of Income and Wealth, Vol. 33, No.4.

Banco de la Republica (1994). "Distribucion del Ingreso en Colombia; Una Nueva Estimacion" in "Notas Editoriales" Revista del Banco de la Republica, enero.

Becerra, B., Manuel Francisco, Jorge Vivas Reyna, Luis Fernando Medina S. and Isidro Hernandez R. Colombia: Estado, Crecimiento Económico y Equidad, Bogotá, Contraloria General de la República, 1993.

Berry, Albert, Maria Teresa Mendez and Jaime Tenjo (1994a). Growth, Macroeconomic Stability and Employment Expansion in Latin America. Geneva, ILO. Paper prepared under the ILO/UNDP project "Economic Policy and Employment". Paper No. 6.

Berry, Albert, Maria Teresa Mendez and Jaime Tenjo (1994b). "Growth, Macroeconomic Stability and the Generation of Productive Employment in Latin America" in A.R.Khan (editor) Growth, Macroeconomic Stability and the Expansion of Productive Employment: A Global Strategy. Macmillan.

Booth, Anne (1992). "Income Distribution and Poverty" in Anne Booth (Editor) The Oil Boom and After: Indonesian Economic Policy and Performance in the Soeharto Era. Singapore: Oxford University Press.

Contraloría General de la República Economía Colombiana, no. 247, Marzo-Abril 1994.

Cortes, Rosalia and Adriana Marshall (1993). "State social intervention and labour regulation; the case of the Argentine" Cambridge Journal of Economics, Vol 17, No.4.

de Melo, Jaime and Sherman Robinson (1980). "The Impact of Trade Policies on Income Distribution in a Planning Model for Colombia" Journal of Policy Modelling, Vol 2, No.1.

Diaz-Alejandro, Carlos F. (1976). Foreign Trade Regimes and Economic Development: Colombia. New York, National Bureau of Economic Research.

Echevarría, J.J. and G. Perry (1981). "Aranceles y Subsidios a las Exportaciones: Análisis de su Estructura Sectorial y de su Impacto sobre la Industria Colombiana", Coyuntura Económica, July.

Economic Commission for Latin America and the Caribbean (1992)

Preliminary Overview of the Economy of Latin America and the Caribbean 1992. Santiago. ECLAC.

Economic Commission for Latin America and the Caribbean (1993) *Preliminary Overview of the Economy of Latin America and the Caribbean 1993*. Santiago. ECLAC.

Edwards, Sebastian (1994). "Trade and Industrial Policy Reform in Latin America", paper presented at the seminar on Macroeconomic, Structural and Social Policies for Growth, Rio de Janeiro, March.

Fedesarrollo (1992). *Coyuntura Social*, No.7.

Ffrench-Davis, Ricardo (1992). "Economic Development and Equity in Chile: Legacies and Challenges in the Return to Democracy", Paper presented at the conference "The New Europe and the New World: Latin America and Europe 1992" Oxford University, September, 1992.

Fresneda, Oscar (1994) "Evolucion de la Pobreza en Colombia: Un Balance de dos Decadas".

Gelbard, Enrique A. (1990). "Changes in Industrial Structure and Performance Under Trade Liberalization: The Case of Argentina" Unpublished Ph. D. Dissertation, University of Toronto.

Gregory, Peter (1986) *The Myth of Market Failure.* Johns Hopkins University Press.

Hernandez-Laos, Enrique and Jorge Cordoba (1982). *La distribucion del ingreso en Mexico*. Mexico: Centro de Investigacion para la Integracion Social.

Interamerican Development Bank (1994). *Colombia: Socioeconomic Report*, Economic and Socuial Development Department, Country Economics Division.

Krueger, Anne O. (1990), "The Relationship Between Trade, Employment, and Development," in G. Ranis and T.P. Schultz (editors) *The State of Development Economics: Progress and Perspectives*. Cambridge, Mass. Basil Blackwell.

Londoño, Juan Luis (1986). "Ciclo de vida, relaciones contractuales y la inserción de los jovenes en el mercado de trabajo". *Coyuntura Económica.* Bogota, Vol. 16, No. 3, octubre.

Londoño, Juan Luis (1987). "La dinamica laboral y el ritmo de actividad economica: Un repaso empirico de la ultima decada" in José Antonio Ocampo and Manuel Ramírez (editors) *El Problema Laboral Colombiano: Informes a la Mision Chenery*. Bogotá. Contraloría General de la República, Departamento Nacional de Planeación and Servicio Nacional de Aprendizaje-SENA, Tomo 1.

Londoño, Juan Luis (1989). Income Distribution in Colombia 1971-88: Basic Estimation, Report to the World Bank.

Londoño de la Cuesta, Juan Luis (1990)."Income Distribution During the Structural Transformation: Colombia 1938-1988". Unpublished Harvard University Dissertation. Cambridge, Massachusetts.

López, Hugo (1992). "Cuánto Ganan las Empresas con la Reforma a las Cesantías? Hay un Buen Margen para una Mayor Cotización Patronal a la Seguridad Social." Documento Universidad de Antioquia/ISS, No. 1. Medellín, Universidad de Antioquia.

López Castaño, Hugo (1993a). "Contexto Macroeconómico Colombiano, Mercado Laboral Urbano y Retos Para una Política de Empleo", Medellín, Fundación Friedrich Ebert de Colombia.

López, Hugo (1993b). "Contexto Macroeconomico Colombiano, Mercado Laboral y Urbano y Retos para una Politca de Empleo". FESCOL Documentos de Trabajo.

López Castano, Hugo (1994a). Mercado Laboral, Papel del SENA y Sistema de Informacion Para el Empleo, Informe de Consultoria para el SENA, Medellin, Junio.

López Castano, Hugo (1994b). "Mercado laboral urbano y desempleo friccional y estructural en Colombia: El papel del SENA" Planeacion y Desarrollo, Vol. XXV--Edicicion Especial "Lecciones de Indonesia; Formacion para un nuevo mercado laboral". Mayo.

Lora, Eduardo and Roberto Steiner (1994). "Structural Reforms and Income Distribution in Colombia" paper presented at the Interamerican Seminar on Economics sponsored by the National Bureau of Economic Research, Mexico City, November.

Lora, E. and A. M. Herrera (1994). "Ingreosos rurales y evolucion macroeconomica" in C. Gonzalez and C.F. Jaramillo, Competitividad sin Pobreza, Departamento Nacional de Planeacion-Fonade-TM editores.

Ministerio de Agricultura y Departamento Nacional de Planeación (1990). El Desarrollo Agropecuario en Colombia, Informe Final: Misión de Estudios del Sector Agropecuario. Bogotá, Editorial Presencia.

Misión de Empleo (1986). Informe Final de la Misión de Empleo: El Problema Laboral Colombiano: Diagnóstico, Perspectivas y Políticas, published as Separata No. 10 (agosto-septiembre de 1986) of Economía Colombiana, Revista de la Contraloría General de la República. Bogotá.

Montenegro, Armando (1991). Bases del Plan de Desarrollo, ponencia presentado en el Foro Programas Socio-laborales y Modernización

Económica. Bogotá, marzo.

Morley, Samuel A. (1993). <u>Poverty and the Distribution of Income During Latin American Adjustment in the 1980's</u>. Mimeo.

Morley, Samuel A. (1994). <u>Poverty and Inequality in Latin America: Past Evidence, Future Prospects</u>. Washington, D.C., Overseas Development Council.

Ocampo, José Antonio (1987). "El Régimen Prestacional del Sector Privado" in José Antonio Ocampo and Manuel Ramírez (editors) <u>El Problema Laboral Colombiano: Informes a la Mision Chenery</u>. Bogotá. Contraloría General de la República, Departamento Nacional de Planeación and Servicio Nacional de Aprendizaje-SENA, Tomo 2.

Ocampo, José Antonio (1994). "Trade Policy and Industrialization in Colombia, 1967-91" in Gerald K. Helleiner (editor) <u>Trade Policy and Industrialization in Turbulent Times</u>. London. Routledge.

Ramírez, Manuel (1991). "Efectos de las Medidas de Apertura Sobre Produccion y Empleo". Bogotá. Ministerio de Trabajo y Seguridad Social.

República de Colombia (1991). Presidencia y Departamento Nacional de Planeación, <u>La Revolución Pacifica: Modernización y Apertura de la Economía</u>. Bogotá.

Reyes Posada, Alvaro (1987). "Tendencias del Empleo y la Distribución del Ingreso". in José Antonio Ocampo and Manuel Ramírez (editors) <u>El Problema Laboral Colombiano: Informes a la Misión Chenery</u>. Bogotá. Contraloría General de la República, Departamento Nacional de Planeación and Servicio Nacional de Aprendizaje-SENA, Tomo 1.

Robbins, Donald J. (1994). "Relative Wage Structure in Chile, 1957-1992: Changes in the Structure of Demand for Schooling". Draft Version. Harvard University.

Sarmiento A., Libardo, (1993). "Política Social y Gasto Público en los Noventa. Qué Tan Significativos Son los Cambios?" <u>Coyuntura Social</u>, No. 8, Agosto, 1993.

Sheahan, John (1994). Paper presented at the conference on "Retos y Perspectivos de la Economia Peruana", organized by the Consorcio de Investigacion Economica, Lima, Nov. 22-23, 1994.

Tenjo, Jaime (1993). "Evolución de los Retornos a la Inversión en Educación 1976-89", in <u>Educación, Mercado de Trabajo y Desarrollo en Colombia</u>, special issue of <u>Planeacion y Desarrollo</u>. Bogota, Departamento Nacional de Planeación.

Thoumi, F. E. (1979). "La Utilización del Capital Fijo en la

Industria Manufacturera Colombiana", <u>Revista de Planeación y Desarrollo,</u> Septiembre-Diciembre.

Urrutia, Miguel (1993). "Distribucion del ingreso y la pobreza en Colombia: evolucion reciente", Notas Editoriales" <u>Revista del Banco de la Republica</u>, enero.

Villar, L. (1983). "Las Exportaciones Menores en Colombia: Determinantes de su Evolución y su Composición", M.A. thesis, Universidad de los Andes, Bogota.

World Bank (1993). <u>World Development Report 1993</u>. Washington. The World Bank.

Table 1
Import taxes as a Share of GDP and of the Value of Imports, 1980-93

Year	Import Taxes Over GDP	Import Taxes Over Imports[b]	Import Taxes over Merchandise Imports
1980	1.4	8.5	14.9
1981	1.5	9.3	14.8
1982	1.4	8.8	14.8
1983	1.3	9.1	14.5
1984	1.1	8.1	14.8
1985	1.7	12.5	19.3
1986	1.9	13.7	23.9
1987	1.7	11.4	24.9
1988	1.8	11.7	24.1
1989	1.5	9.9	22.4
1990	1.4	8.7	18.1
1991	1.6	10.7	13.3
1992	1.0	5.6	
1993	1.3	4.6	

a) preliminary
b) includes nonfactor services.

Sources: Columns 1 and 2 are from Interamerican Development Bank, 1994, Tables 2 A and 8. Column 3 is from Ocampo, 1994, pp.140-141.

Table 2

Exports and Imports in Relation to GDP, Colombia 1980-1993

| Year | GDP | Constant 1975 Prices | | | | Current Prices | |
		Exports	Imports	Exports /GDP	Imports /GDP	Exports /GDP	Imports /GDP
1980	525.8	90.6	107.1	17.2	20.4	17.4	16.5
1981	537.7	81.6	111.2	15.5	21.3	13.0	16.2
1982	542.8	80.5	119.8	14.8	22.1	12.0	15.9
1983	551.4	77.3	112.3	14.0	20.4	11.1	14.3
1984	569.9	84.9	108.2	15.0	14.4	12.6	13.5
1985	587.6	95.9	101.2	16.3	17.2	14.4	13.6
1986	621.8	118.1	112.4	19.0	18.1	20.1	13.9
1987	655.1	126.6	118.1	19.3	18.0	18.0	14.9
1988	681.9	128.8	121.0	18.9	17.7	17.5	15.4
1989	705.1	136.4	116.6	19.3	16.5	18.9	15.2
1990	735.5	161.6	126.2	22.0	17.2	21.7	16.1
1991	750.7	167.2	120.9	22.3	16.1	22.3	15.0
1992	777.2	178.4	156.6	23.0	20.1	20.4	17.7
1993			24.0	28.0	20.0		

Source: National accounts of Colombia.

Table 3
Income Distribution Trends in Colombia Since 1976

Year	Persons Ranked by per Person Family Income, 3 Cities[a], March (1)	Earners, 3 Cities[a] (2)	Persons Ranked by Per Person Family Income, Urban Areas[b], September (3)	Urban Households (4)
1976	0.520	0.500		0.496
1978				0.483
1980	0.492	0.464	0.46	0.461
1983			0.46	0.459
1984	0.475	0.442		
1985			0.47	0.474
1986			0.48	
1987			0.47	
1988			0.49	
1989	0.470	0.421	0.50	
1990	0.459	0.413	0.49	
1991	0.483	0.451	0.48	
1992	0.494	0.468	0.45[c]	
1993	0.507	0.467		

a. Bogotá, Medellín and Barranquilla.
b. The data refer to the major urban centres of Colombia plus a few smaller centres.
c. Refers to June; methodology not comparable to that for earlier observations (communication from L. Sarmiento)

Sources: Columns 1 and 2 are calculations by the authors using DANE household surveys for March of each year. Income has been corrected for truncation problems (see appendix on methodology). Column 3 is from Sarmiento, 1993, p 73. Column 4 is from Reyes, 1987, p 81.

Table 4B
Decile Distribution of Income Among Persons
Ranked by Total Family Income Per Capita, 1976-1993 (March)
Bogotá, Medellín and Barranquilla

Decile	1976	1980	1984	1989	1990	1991	1992	1993
1	1.40%	1.49%	1.57%	1.76%	1.75%	1.73%	1.55%	1.45%
2	2.46%	2.74%	2.83%	2.97%	2.99%	2.80%	2.70%	2.62%
3	3.25%	3.65%	3.73%	3.86%	3.94%	3.67%	3.62%	3.45%
4	4.11%	4.51%	4.68%	4.74%	4.88%	4.51%	4.46%	4.27%
5	5.03%	5.42%	5.77%	5.78%	6.01%	5.62%	5.43%	5.25%
6	6.20%	6.56%	7.03%	6.94%	7.20%	6.81%	6.61%	6.44%
7	7.84%	8.30%	8.68%	8.56%	8.99%	8.40%	8.22%	7.97%
8	10.46%	10.88%	11.25%	11.06%	11.21%	10.81%	10.77%	10.47%
9	16.01%	16.06%	15.98%	15.64%	15.70%	15.66%	15.47%	15.55%
10	43.24%	40.40%	38.48%	38.68%	37.33%	40.00%	41.17%	42.53%
top 5%	30.58%	28.07%	26.38%	26.77%	23.34%	28.20%	29.44%	29.73%
top 1%	12.87%	11.29%	10.06%	10.28%	7.31%	10.67%	11.68%	11.22%
Gini	0.520	0.492	0.475	0.470	0.459	0.483	0.494	0.507

Table 4A
Decile Distribution Among Income Earners, 1976-1993 (March)
Bogotá, Medellín and Barranquilla

DECILE	1976	1980	1984	1989	1990	1991	1992	1993
1	1.51%	1.49%	1.51%	1.79%	1.93%	1.68%	1.48%	1.48%
2	3.05%	3.58%	3.66%	3.94%	3.97%	3.53%	3.23%	3.42%
3	3.61%	4.69%	4.83%	5.38%	5.56%	4.96%	4.71%	4.87%
4	4.36%	4.97%	5.34%	5.73%	5.89%	5.24%	5.18%	5.06%
5	5.31%	5.64%	5.98%	6.22%	6.30%	5.82%	5.62%	5.49%
6	6.25%	6.62%	7.06%	7.01%	7.12%	6.56%	6.47%	6.31%
7	8.00%	8.02%	8.67%	8.27%	8.41%	8.02%	7.77%	7.82%
8	10.00%	10.11%	10.68%	10.40%	10.42%	10.17%	10.27%	10.28%
9	14.76%	14.49%	15.02%	14.73%	14.22%	15.27%	14.96%	14.74%
10	43.15%	40.40%	37.27%	36.52%	36.19%	38.76%	40.32%	40.43%
top 5%	30.58%	28.42%	25.85%	25.50%	24.70%	27.00%	28.63%	28.82%
top 1%	12.33%	11.31%	9.86%	10.19%	9.12%	10.49%	11.94%	9.57%
Gini	0.500	0.464	0.442	0.421	0.413	0.451	0.468	0.467

Table 5
Gini Coefficients of the Distribution of Income Among Earners,
Various Income Components, 1976-93 (March)
Bogotá Medellín and Barranquilla

| Year | Labour Income | | Business Income | | Other Income | | TOTAL |
	GINI	Weight	GINI	Weight	GINI	Weight	GINI
1976	0.439	67.27%	0.577	26.13%	0.829	6.60%	0.500
1980	0.373	63.77%	0.565	28.39%	0.841	7.84%	0.464
1984	0.360	58.25%	0.510	27.35%	0.644	14.40%	0.442
1989	0.341	57.20%	0.487	27.63%	0.606	15.17%	0.421
1990	0.346	58.89%	0.466	28.74%	0.688	12.37%	0.423
1991	0.371	56.09%	0.516	30.19%	0.631	13.72%	0.451
1992	0.370	55.04%	0.533	29.47%	0.694	15.49%	0.468
1993	0.374	54.92%	0.547	31.06%	0.651	14.00%	0.467

Notes: The Gini coefficients for total income, labour income and business
income are in each case calculated for that group of indivualis receiving the
type of income in quesiton and on the basis only of that type of income. Thus
a person with labour income and other income would appear in the labour
income distribution as having only his/her labour income." Note that the
surveys do not collect both labour and business income for anyone, i.e. it
excludes this possible income combination from consideration and thus it
leaves an unknown amount of income unreported.

Source: DANE household surveys.

Table 6
Composition of Earner's Income by Deciles

I) LABOUR INCOME SHARE

Decile	1976	1980	1984	1989	1990	1991	1992	1993
1	48.24%	39.02%	26.37%	30.19%	30.79%	37.59%	24.38%	23.90%
2	71.07%	63.61%	52.66%	48.63%	46.43%	38.58%	44.07%	48.01%
3	84.48%	86.31%	67.16%	52.25%	51.81%	55.01%	61.33%	64.74%
4	79.37%	88.11%	82.52%	87.59%	86.89%	88.76%	84.96%	86.42%
5	83.32%	82.20%	80.42%	79.28%	82.82%	70.57%	74.63%	77.74%
6	78.84%	80.08%	64.92%	65.39%	62.61%	72.13%	71.57%	67.36%
7	79.53%	79.27%	63.65%	65.69%	67.37%	65.17%	63.38%	71.46%
8	77.09%	72.63%	70.99%	66.08%	68.61%	61.67%	67.87%	66.65%
9	71.48%	70.63%	57.13%	56.02%	61.69%	61.45%	57.45%	53.20%
10	55.36%	46.09%	46.20%	46.09%	47.53%	43.88%	40.47%	40.95%
Total	67.27%	63.77%	58.25%	57.20%	58.89%	56.09%	55.04%	54.92%

II) BUSINESS INCOME SHARE

Decile	1976	1980	1984	1989	1990	1991	1992	1993
1	42.28%	46.10%	42.96%	34.96%	37.40%	34.81%	43.73%	48.68%
2	25.81%	29.42%	27.90%	30.01%	35.96%	43.25%	34.34%	35.54%
3	13.36%	10.87%	19.73%	30.91%	34.94%	27.39%	24.13%	22.52%
4	18.55%	9.25%	11.53%	3.75%	4.99%	4.38%	5.03%	4.52%
5	14.24%	14.33%	10.66%	11.32%	10.34%	21.54%	15.31%	15.25%
6	19.26%	16.74%	22.22%	24.09%	25.42%	18.26%	20.97%	20.11%
7	17.49%	16.41%	25.95%	21.39%	23.44%	22.24%	25.11%	17.63%
8	19.02%	21.77%	15.94%	20.32%	21.73%	24.83%	20.50%	20.98%
9	22.94%	21.36%	29.27%	29.08%	26.71%	26.59%	26.84%	31.73%
10	34.22%	42.45%	36.39%	36.65%	38.29%	40.44%	39.76%	43.11%
Total	26.13%	28.39%	27.35%	27.63%	28.74%	30.19%	29.47%	31.06%

Table 7
Unemployment and Participation Rates
Bogotá, 1976-93 (March)

Year	MEN Partic	MEN Unempl	WOMEN Partic	WOMEN Unempl	TOTAL Partic	TOTAL Unempl
1976	71.37	7.80	36.85	12.17	52.61	9.46
1980	75.16	8.07	43.17	11.18	57.63	9.34
1984	76.49	9.81	44.86	17.01	59.30	12.77
1986	76.89	10.54	48.08	19.41	61.23	14.32
1987	78.31	9.24	48.98	18.26	62.63	13.01
1988	77.96	7.96	48.78	17.83	62.16	12.16
1989	76.85	7.13	47.33	13.38	60.94	9.75
1990	75.04	5.22	46.45	11.77	59.73	7.97
1991	75.15	5.99	50.07	13.58	61.74	9.28
1992	75.76	6.03	51.09	11.52	62.41	8.46

Table 8A
Average Monthly Labour Income of Each Level of Education
as a Proportion of Complete Primary Monthly Income, 1976-93
Bogotá, Medellín and Barranquilla

Education Level	1976	1980	1984	1989	1990	1991	1992	1993
		M	E	N				
No educat	74.7%	82.6%	79.7%	81.1%	82.1%	86.6%	76.0%	84.5%
Compl Prim	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compl Sec	225.9%	168.8%	151.0%	133.2%	132.7%	129.6%	124.1%	123.1%
Compl Univ	586.7%	465.7%	391.4%	367.9%	381.1%	379.7%	376.0%	384.1%
Average	159.7%	148.8%	143.1%	140.3%	141.7%	148.9%	143.3%	140.6%
		W	O	M	E	N		
No educat	95.0%	83.3%	89.1%	80.7%	89.0%	87.5%	82.6%	86.7%
Compl Prim	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compl Sec	200.4%	157.1%	154.9%	145.4%	146.5%	154.2%	149.5%	146.1%
Compl Univ	355.9%	311.4%	294.6%	301.4%	295.7%	332.4%	343.4%	358.5%
Average	135.6%	127.8%	133.2%	139.7%	140.7%	150.2%	154.1%	155.1%

Table 8B
Hourly Labour Income by Levels of Education as a
Percentage of Hourly Labour Income of Primary Education, 1976-93
Bogotá, Medellín and Barranquilla

	1976	1980	1984	1989	1990	1991	1992	1993
		M	E	N				
No educat	73.4%	73.5%	74.5%	81.8%	90.1%	83.8%	83.0%	84.0%
Compl Prim	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compl Sec	244.3%	187.7%	166.4%	139.0%	137.5%	139.7%	138.3%	125.5%
Compl Univ	638.7%	513.0%	436.3%	399.6%	414.4%	431.9%	429.5%	411.0%
Average	169.3%	159.7%	152.2%	146.2%	149.9%	161.0%	157.6%	146.6%
		W	O	M	E	N		
No educat	84.9%	84.9%	83.8%	73.9%	85.3%	88.0%	82.7%	96.0%
Compl Prim	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Compl Sec	239.4%	190.9%	188.7%	168.3%	169.7%	166.5%	158.5%	169.6%
Compl Univ	485.1%	381.2%	401.9%	361.5%	358.8%	408.5%	392.2%	402.5%
Average	152.9%	144.1%	157.0%	157.4%	159.2%	166.9%	168.4%	171.7%

Table 9
Ratio of Men's To Women's Income,1976-93
Bogotá, Medellín, Barranquilla

AVERAGE MONTHLY INCOME (BSNSS & LABOUR) BY EDUCATIONAL LEVELS

	1976	1980	1984	1989	1990	1991	1992	1993
No educ	1.12	1.12	1.12	1.57	1.41	1.32	1.28	1.50
Comp Prim	1.54	1.48	1.39	1.29	1.40	1.45	1.60	1.38
Comp Sec	1.51	1.46	1.30	1.31	1.23	1.23	1.33	1.28
Com Univ	2.18	1.69	1.65	1.46	1.66	1.51	1.54	1.54
Average	1.74	1.57	1.44	1.34	1.39	1.39	1.45	1.36

AVERAGE HOURLY INCOME (BSNSS & LABOUR) BY EDUCATIONAL LEVELS

	1976	1980	1984	1989	1990	1991	1992	1993
No educ	1.17	1.00	0.88	1.03	1.10	1.04	1.09	1.15
Comp Prim	1.48	1.35	1.36	1.38	1.23	1.30	1.37	1.24
Comp Sec	1.38	1.19	1.11	1.35	1.05	1.02	1.30	1.07
Com Univ	1.73	1.53	1.42	1.35	1.36	1.33	1.36	1.45
Average	1.59	1.38	1.28	1.33	1.19	1.19	1.26	1.18

AVERAGE MONTHLY LABOUR INCOME BY EDUCATIONAL LEVELS

	1976	1980	1984	1989	1990	1991	1992	1993
No educ	1.08	1.21	1.15	1.32	1.22	1.33	1.27	1.38
Comp Prim	1.38	1.22	1.29	1.32	1.32	1.35	1.38	1.42
Comp Sec	1.55	1.31	1.25	1.21	1.19	1.13	1.15	1.19
Com Univ	2.27	1.83	1.71	1.61	1.70	1.54	1.52	1.52
Average	1.62	1.42	1.38	1.32	1.33	1.33	1.29	1.28

AVERAGE HOURLY LABOUR INCOME BY EDUCATIONAL LEVELS

	1976	1980	1984	1989	1990	1991	1992	1993
No educ	1.17	1.06	1.18	1.45	1.37	1.19	1.23	1.23
Comp Prim	1.35	1.21	1.32	1.31	1.29	1.25	1.23	1.41
Comp Sec	1.38	1.19	1.17	1.08	1.05	1.05	1.07	1.04
Com Univ	1.78	1.62	1.44	1.45	1.50	1.32	1.34	1.44
Average	1.50	1.34	1.28	1.22	1.22	1.21	1.15	1.20

Table 10
Annual Rates of Growth of Idividuals' Monthly Income
Bogotá, Medellín, and Barraquilla

TOTAL INCOME

Decile	76-80	80-84	84-89	89-90	90-91	91-92	92-93
1	24.92%	21.78%	22.52%	28.99%	20.04%	11.05%	25.00%
2	29.29%	22.06%	20.57%	21.83%	22.12%	15.18%	30.58%
3	31.83%	22.20%	21.27%	24.52%	22.36%	18.76%	28.38%
4	28.56%	23.25%	20.52%	23.99%	22.12%	22.87%	22.57%
5	26.77%	22.96%	19.89%	22.51%	25.74%	20.63%	22.61%
6	26.77%	23.07%	18.95%	22.73%	25.60%	22.64%	22.47%
7	25.38%	23.40%	18.15%	22.92%	29.11%	20.82%	25.60%
8	25.59%	22.84%	18.58%	21.34%	31.35%	25.08%	25.03%
9	24.85%	22.38%	18.68%	17.81%	40.90%	21.96%	23.50%
10	23.66%	19.45%	18.69%	20.40%	40.62%	27.91%	25.49%
Total	25.31%	21.47%	19.09%	21.28%	33.78%	24.00%	24.95%

LABOUR INCOME (Only labour income earners)

	76-80	80-84	84-89	89-90	90-91	91-92	92-93
1	25.81%	22.11%	22.69%	22.85%	30.29%	-0.42%	32.08%
2	29.11%	22.22%	20.67%	18.56%	24.50%	14.78%	30.97%
3	32.13%	22.45%	21.13%	23.36%	21.91%	20.15%	28.09%
4	28.52%	23.34%	20.60%	23.99%	22.14%	22.81%	22.62%
5	27.06%	22.85%	19.92%	22.48%	24.95%	21.51%	22.70%
6	26.51%	23.23%	18.92%	22.88%	25.50%	22.28%	22.87%
7	25.38%	23.36%	18.12%	24.16%	28.18%	21.36%	26.15%
8	25.18%	23.20%	18.54%	21.97%	31.28%	24.12%	27.11%
9	24.30%	22.89%	18.69%	19.83%	38.90%	21.69%	25.37%
10	22.60%	20.35%	18.75%	28.70%	32.27%	22.01%	31.25%
Total	24.61%	22.98%	19.23%	23.13%	30.58%	21.25%	24.94%

BUSINESS INCOME (Only business income earners)

	76-80	80-84	84-89	89-90	90-91	91-92	92-93
1	24.16%	22.98%	23.37%	29.03%	12.64%	19.48%	25.46%
2	28.88%	22.86%	20.40%	26.41%	20.92%	15.63%	29.13%
3	30.76%	22.58%	21.81%	26.00%	23.26%	16.56%	28.58%
4	28.90%	23.47%	20.28%	24.81%	20.91%	23.04%	23.75%
5	24.83%	23.66%	20.68%	23.19%	28.87%	17.21%	23.00%
6	26.83%	23.31%	19.55%	23.05%	25.80%	21.09%	21.13%
7	24.99%	24.41%	17.82%	23.36%	27.60%	21.44%	22.16%
8	25.54%	21.91%	19.05%	26.37%	27.27%	26.05%	24.18%
9	24.18%	22.66%	19.27%	17.01%	42.35%	19.73%	26.48%
10	23.07%	18.35%	19.54%	11.19%	48.02%	24.48%	30.22%
Total	26.73%	19.32%	19.70%	18.50%	36.85%	24.80%	29.21%

Notes:
The growth rates in the table are geometric rates (difference in natural logarithms). For the estimation the rates of labour income only those receiving labour income were included. Similarly in the estimation of the rates of business income.

Table 11
Average Number of Weekly Hours of Work
Bogotá, Medellín, and Barranquilla

AVERAGE HOURS WORKED IN THE WEEK BEFORE THE SURVEY

Decile	1976	1980	1984	1989	1990	1991	1992	1993
1	42.99	37.15	35.67	36.80	38.13	36.12	33.58	36.72
2	47.41	46.79	46.15	46.67	44.29	45.30	43.70	46.23
3	49.14	49.38	49.21	49.71	48.18	47.68	49.12	50.04
4	50.59	50.09	47.40	49.20	46.92	49.46	49.09	49.13
5	51.84	49.10	49.54	49.52	48.47	49.01	48.94	49.53
6	50.00	50.00	49.59	50.64	48.81	49.42	50.67	50.36
7	49.09	48.70	48.74	50.68	50.58	49.84	50.75	50.68
8	47.58	48.89	48.44	50.10	49.13	49.21	49.50	49.87
9	48.00	47.87	48.41	50.31	47.95	48.84	49.33	49.91
10	48.03	48.06	47.62	49.29	48.20	47.65	48.91	49.39
Total	48.51	47.70	47.36	48.68	47.34	47.55	47.79	48.46

AVERAGE WEEKLY HOURS NORMALLY WORKED

Decile	1976	1980	1984	1989	1990	1991	1992	1993
1	44.04	38.41	36.76	37.53	39.62	36.77	34.03	37.13
2	47.85	47.50	47.12	47.29	45.53	45.54	43.85	46.64
3	49.47	49.42	49.85	50.09	49.57	47.63	49.28	50.18
4	50.91	50.29	48.16	49.32	48.80	49.56	48.97	49.14
5	52.10	49.46	50.39	49.63	50.10	48.97	49.04	49.79
6	50.05	50.18	50.34	50.88	50.65	49.27	50.52	50.48
7	49.36	49.04	49.56	50.88	52.03	49.89	50.69	50.73
8	47.67	49.06	49.30	50.28	50.90	48.94	49.58	49.80
9	47.87	47.94	49.16	50.30	49.69	48.69	49.15	49.91
10	47.99	47.95	49.09	49.25	49.92	47.71	48.70	49.25
Total	48.77	48.01	48.25	48.91	48.96	47.58	47.80	48.57

Table 12
Proportion of People with Temprary Jobs
Bogotá, Medellín, and Barranquilla

DECILE	1976	1980	1984	1989	1990	1991	1992	1993
1	36.85%	33.55%	41.13%	34.22%	29.80%	38.67%	35.06%	29.65%
2	22.05%	24.36%	29.99%	22.87%	20.83%	22.81%	27.29%	21.39%
3	17.25%	11.84%	20.79%	20.58%	14.34%	19.01%	24.88%	18.15%
4	14.54%	9.01%	16.51%	19.88%	16.67%	21.08%	23.00%	19.83%
5	14.21%	10.04%	16.07%	17.30%	14.44%	15.24%	19.14%	14.77%
6	10.25%	12.37%	12.72%	12.28%	9.25%	17.23%	15.09%	14.37%
7	10.17%	8.58%	11.46%	10.65%	7.21%	10.83%	14.81%	10.42%
8	8.61%	7.29%	9.30%	8.92%	8.00%	9.03%	10.28%	9.05%
9	8.13%	5.95%	7.98%	6.65%	6.27%	6.86%	7.64%	6.88%
10	4.01%	4.04%	5.33%	4.78%	3.97%	5.08%	4.69%	4.58%
AVRAGE	14.61%	12.70%	17.13%	15.81%	13.08%	16.58%	18.19%	14.91%

Table 13
Proportion of Persons working Part Time
Bogotá, Medellín,and Barranquilla

PROPORTION OF PEOPLE WORKING LESS THAN 40 HOURS

DECILE	1976	1980	1984	1989	1990	1991	1992	1993
1	33.58%	47.11%	51.17%	48.89%	45.20%	50.12%	58.26%	52.32%
2	15.64%	18.64%	23.98%	25.11%	28.68%	26.25%	35.73%	26.69%
3	6.94%	7.42%	9.84%	11.69%	9.84%	13.94%	15.82%	12.07%
4	6.38%	3.97%	7.45%	3.61%	3.39%	3.64%	6.52%	4.41%
5	6.49%	8.12%	7.45%	6.95%	4.81%	7.49%	8.75%	5.94%
6	7.02%	10.58%	9.78%	6.87%	7.12%	8.62%	8.76%	7.75%
7	7.37%	10.37%	8.78%	7.02%	5.88%	8.94%	10.27%	8.05%
8	11.19%	10.16%	9.30%	9.23%	8.98%	9.85%	11.75%	9.91%
9	10.02%	11.31%	9.82%	8.43%	8.95%	10.55%	12.26%	9.53%
10	8.58%	11.18%	9.78%	10.24%	7.86%	10.96%	11.67%	7.90%
AVRAGE	11.32%	13.88%	14.73%	13.80%	13.07%	15.03%	17.98%	14.46%

PROPORTION OF PERSONS WORKING LESS THAN 40 HOURS WHO WANT
TO WORK MORE

DECILE	1976	1980	1984	1989	1990	1991	1992	1993
1	46.57%	35.75%	41.26%	35.91%	31.06%	38.93%	40.73%	33.40%
2	49.64%	47.06%	36.29%	27.49%	26.37%	37.83%	40.45%	31.51%
3	48.39%	38.71%	33.93%	27.47%	17.14%	32.17%	38.54%	24.09%
4	42.11%	36.36%	39.13%	33.33%	28.95%	21.43%	30.12%	26.92%
5	51.72%	35.29%	35.56%	25.00%	20.00%	29.07%	32.14%	26.39%
6	36.51%	34.83%	27.65%	20.00%	22.08%	27.84%	27.59%	23.60%
7	34.85%	28.74%	22.29%	18.68%	13.64%	32.32%	22.14%	22.11%
8	30.00%	29.41%	25.46%	12.50%	12.87%	13.76%	29.61%	11.30%
9	27.78%	22.11%	15.91%	13.76%	7.00%	15.00%	21.43%	12.04%
10	16.88%	19.15%	11.80%	8.15%	6.74%	16.00%	15.13%	7.53%
AVRAGE	38.44%	32.74%	28.93%	22.23%	18.59%	26.43%	29.79%	21.89%