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THE SOCIAL CHALLENGE OF THE NEW ECONOMIC ERA IN LATIN AMERICA[1]

by

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The Social Challenge of the New Economic Era in Latin America

1. Introduction

The last two decades have been traumatic ones for the countries of Latin America and the Caribbean (LAC). Virtually all have confronted major economic crises and the related social and political strains. For many of them the international debt crisis of the early 1980s signalled the arrival of their own economic crisis, though in a few the timing was different for reasons related to country-specific policies or exogenous shocks. Crises involved macroeconomic imbalance, hyperinflation and the resulting need to stabilize; international payments imbalance calling for structural adjustment away from production of non-tradables to that of tradables; output losses associated with the need to stabilize and curtail imports; and, due to the above combination of events, rapidly falling absorption, real wages, and living standards. In an extreme case like Peru, per capita income fell by 21% over 1974-85, while real wages fell by over 50% (Verdera, 1994; Cox Edwards, 1992). For the region as a whole, per capita output in 1990 was about 8% below the 1980 level and per capita income about 15% due to the negative shift in the region's terms of trade over that decade (Table 1).

The 1990s have promised better things. Though per capita output is still a bit below that of 1980 (see Table 2) and per capita income nearly 10% below, the regional growth rate has returned to the 3-4% range, hardly dramatic but enough to begin the recovery of per capita incomes-- up by about 6% over 1990-94 (CEPALC, 1994, 11). A few really strong performers--especially Chile and Argentina--have created the hope that others should be able to follow and that the region as a whole might be able to get back to the healthy growth rates of the 1960s and 1970s. Some of the return of optimism is based simply on the better growth performance of the early 1990s, some on the dramatic return of capital, both flight capital which had previously left, and new foreign capital coming in (Culpeper, 1993), some on the entry of Mexico and the planned entry of Chile into NAFTA and the expectation that other Latin countries will benefit either from entry into a trading block or the closer integration of countries in the block, and some on the widespread more general belief that the currently more market-friendly economic policies have been a change for the better vis a vis those of the pre-crisis period.

How well-founded are these hopes? Will a return to healthy growth bring a quick reduction of poverty and a gradual decline in the historically high levels of inequality characterizing this part of the world? This is an apparent implication of recent analyses (e.g. Morley, 1994) which conclude that inequality tends to rise with recession and fall with prosperity. What policies will be most important to achieve growth with rapid poverty alleviation? Are the market-friendly economic reforms currently being widely adopted in the region promising for both growth and improved distribution?

This volume focuses on the question of how labour market outcomes, and especially the distribution of income, have been related to economic events and to policy changes in Latin America and the Caribbean, with a view to predicting the distribution of the benefits from expected future growth. Its immediate raison d'être is the accumulating evidence that the market-friendly policy shift has been systematically associated with an abrupt and important deterioration in income distribution. The pivotal question is whether this association is or is not a causal one. If so, it is urgent to ascertain which components of the typical policy package are most responsible for this outcome; hopefully it is not those same ones as are most important to a strong growth performance. If not, it is nevertheless crucial to understand the source of worsening, and to plan remedial steps.

The volume does not focus on the implications of the end of the debt crisis and the above mentioned policy shift for economic growth. Whether growth will or will not be rapid (say 5% per year for the region) is tremendously important, of course, since even a fairly severe worsening of income distribution over the medium term might not be too difficult to weather if average incomes were rising fast enough to spread some of the fruits of growth accruing to those at and near the bottom of the income pyramid. At this time, however, it would be foolhardy to assume that growth will be rapid enough to push distributional concerns into the background. One reason is that most of the impressive growth performances in the Third World have taken place in less market-friendly contexts, with Hong Kong and post-1975 Chile perhaps the only very notable exceptions. Another is the obvious problem which a number of LAC countries have been suffering in the management of their exchange rates, the continuing proclivity towards overvaluation and the resulting sluggish growth (Helleiner, 1994). Finally, in spite of the new-found access to foreign capital, gross domestic investment has not yet approached its pre-crisis level of about 25% (Table 1). All of these problems might be substantially resolved within five years or so, but the grounds for such an expectation are not overly strong[1], so the prudent response is to "be worried" about the possible implications of any sharp deterioration in distribution, along with the other unwelcome evidence--that temporary jobs, part-time jobs, and more generally job insecurity are a growing feature of labour markets in the region.

Until their respective crises, most LAC countries had, with varying degrees of intensity, pursued import substitution strategies of development put in place or fleshed out in the early

[1] One interesting element of the optimistic school of thought is that a more outward oriented economic system promotes faster rates of productivity growth. Most of the studies undertaken to date have suffered from severe quality problems, and , in my judgment at least, add up to very little at this point.

post-war years. By the time the crises arrived, opinion among economists--in the industrial countries, the international institutions and the developing countries themselves had, again in varying degree, begun to shift against this strategy. Some felt that for countries like those of LAC it had already made such contributions as it could make; others felt that it had been a mistake from the start and that free trade would have served these countries better all along (Corbo, 1988). In fact several of the countries of the region had been shifting towards more outward oriented policies, Brazil and Colombia undertaking clear moves in that direction in the late 1960s. In any case, when the crises were upon them, their restricted policy space, perhaps combined with a lack of opportunity to consider policy alternatives, led to widespread adoption of the by-then-conventional policy prescription: trade and foreign investment liberalization; labour market reforms to reduce the degree of regulations and constraints on business; privatization and downsizing of the public sector; financial sector reforms; and tax reforms designed to simplify the systems, reduce the apparent progressivity built into income taxes, replace direct with indirect taxes.

The most-discussed and perhaps (though less obviously) the most important of these policy changes is the liberalization of trade and foreign investment, which increases the integration of the Third World countries into the world economy. While many analysts feel that such integration will foster better growth performances in the LDCs, predictions as to the employment and distributional impact of market-oriented reform packages in general and trade liberalization in particular have varied widely and on balance been less positive. The popular view that freer markets generally increase inequality has been countered by the view that trade liberalization 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 that the balance has shifted towards pessimism on this front, however, is not the predictions of the theory which are in any case ambiguous, but the empirical evidence on the aftermaths of liberalization experiences within the region and around the world. It is not only that the transition towards market economies in the Eastern European countries appears to have led to rapidly widening income inequality, but that such experiences have been frequent elsewhere also, including both industrialized countries and a number of developing ones, most prominently several from Latin America (Berry and Stewart, 1995). Dramatic increases in inequality occurred in Chile, Argentina, and perhaps also in Uruguay, the Dominican Republic and Mexico, concurrent with market-oriented policy packages which included trade liberalization as a central feature. It is natural that such increases would give pause to other countries contemplating similar reforms. While it remains to be seen what has happened or is happening in some of the other countries which have introduced the reform packages, and there is a possibility that Costa Rica has somehow avoided paying the price of increased inequality (see below), the regional record as it now stands suggests that any optimistic expectations with respect to the distribution impact of the reform package should be discarded. The important question now is whether the impact in a given country will be negative and large; a neutral outcome should be cause for satisfaction. Hence the importance of assessing the possible dimensions of this threat and the ways it might be avoided or attenuated.

Latin America has long been noted for the extreme inequality of incomes and opportunities characteristic of nearly all countries of the region. The urgency of dealing with this region's unnecessary poverty--unnecessary because average incomes are generally high enough to imply that there would be little poverty if the income share of the bottom few deciles were not so low--has naturally been heightened by the economic crisis of the 1980s and the sharp declines in per capita income observed in many countries.

The negative events of the last twenty years have changed the expectations with respect to the future of distribution in LAC from a cautiously optimistic one to a more worried one. During the 1960s and the 1970s the literature made much both of the high level of inequality in Latin America and of the perception that it was worsening. In the event there seem to be few well confirmed cases of negative trends during this time (Brazil's experience over the 1960s-early 1970s appears to be one--see Pfefferman and Webb, 1983). The more striking feature of the 1960s and early 1970s was the absence of any general trend either towards equality <u>or</u> inequality and the stability of distribution over time (lack of volatility) within nearly all countries (Berry, 1988). In the 15 year period 1975-90 Colombia's urban distribution showed a clear shift toward equality, with the narrowing of earnings differentials by level of education an apparently important factor. This experience suggested that a number of other countries might be close to a "turning point" in the evolution of their income distribution[2], since the rapid expansion of the upper levels of education was a widespread phenomenon in the region. The slowing of population growth added another element of optimism that excess supply at the lower-skill end of the labour market would be a less significant factor in future than in the past. It was thus against a reasonably optimistic assessment of recent and expected future patterns that the new evidence of worsening has emerged to muddy

[2] Whether interpreted as the Kuznets turning point or in some other way. Many countries of the region may have been close to the end of their "labour surplus" phase by the time the debt crisis put an end to the earlier growth process; assuming they have not slipped back too far from that turning point during the years of stagnation, it might not take many years of healthy growth for them to enter the tight labour market situation at which low skill wages begin to rise quickly.

the waters.[3]

In his important study of the distributional outcomes of the 1980s in Latin America, Altimir concludes that the "normal" distributive patterns in the coming phase of hopefully sustained growth will tend to be more unequal, at least in the urban areas, than in the last stages of the previous growth phase, during the 1970s.[4] Few students of distribution in LAC countries seem now to question this view; the main issues are (i) how much more unequal will the new post-adjustment patterns be, (ii) whether continued growth under the new structures will eventually bring about a reduction in inequality, a question which could be phrased in terms of whether the Kuznets hypothesis or other "stage of development" related considerations will eventually come into play, and (iii) whether policy steps can substantially improve the distributional trends of the next few decades without disturbing the growth prospects of these countries.

Altimir's overall conclusion with respect to the future is that "the prospects for poverty alleviation through growth alone, without improvements of the relative distribution of incomes and vigorous social policies, appear so limited as to be disheartening and seem likely to be counterproductive for social integration and, ultimately, for sustainable growth"[5] ..."the abatement of absolute poverty will have to lean much more on social policy and its effectiveness." (ibid, 29). This is an especially sobering assessment, when one considers that the only case in which inequality has begun to abate after the full implementation of reforms is Chile, that at least 15 years passed from the beginning of the process before this happened, and that the current distribution remains far more unequal than the pre-crisis level. If other countries are to suffer the distribution-worsening pressures which have been so powerful in countries like Chile and Argentina,

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[3] This discussion sweeps the many data deficiencies under the rug. In fact, one must admit that all statements with respect to distribution trends in Latin America are subject to many qualifications, and the best one can do is make good guesses.

[4] Altimir (1994, 26-27) singles out Colombia, Costa Rica, Uruguay and perhaps Mexico as the countries where circa-1990 inequality was not significantly greater than that of the late 1970s or early 1980s and suggests that this may be due to these being countries in which "social justice values have traditionally imbued institutions, objectives of equity have been quite consistently incorporated in policy design throughout the adjustment phase, and both adjustment and policy reforms have been approached gradually and pragmatically". He notes that gradualism was abandoned in Mexico in the last phase of the reform process, but that this shift coincided with the special event--entry into NAFTA.

[5] He cites ECLAC, 1990, which takes a similar position.

it would require major offsetting policies even to hold distribution constant. If the new model does not generate fast growth for some time--and on this one can only wait to see, given the relatively untried character of the model and its important differences from the policy package which proved so successful in East Asia--the short and medium run could hold many tensions and strains.[6]

The research reported in this volume is designed to contribute to our understanding of the impact of liberalization-integration and other components of the reform policy package on the labour market and labour market outcomes (employment and unemployment, the character and quality of employment, and income distribution), through detailed looks at the experience of a number of countries of the LAC region, comparison among those experiences and selective use of other information. Special attention is directed to the impact on income distribution, both by earners and by families, on the grounds that the trends in these variables are the most meaningful summing up of the labour market impacts in question. We draw on Canada's experience for comparative purposes because of its high degree of integration with the U.S. economy and its recent entry into a free trade area with that country. One of the major foci is the patterns of wage differentials between more skilled and less skilled workers, a matter much discussed in the United States and other developed countries over the last decade during which inequality has increased in the majority of such countries (Berry and Stewart, 1995).

This chapter summarizes the empirical evidence on recent income distribution trends in the LAC countries, focusing especially on the timing of changes in distribution and the hypotheses suggested by that timing. Before turning to that evidence, we review some of the hypotheses put forward to explain the recent negative trends in distribution and/or other worrisome

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[6] Though it is easy to identify many elements of the new model which should improve efficiency and growth performance vis a vis the old one, the relatively hard evidence that such has been the case remains thin. For example, most of the analyses of total factor productivity growth and its positive association with the policy reforms are fragile and unpersuasive. None of the micro-level analysis of this sort constitutes *per se* a source of strong confidence in the model. The growth records which countries achieve will this be the main test of its merits. Thus far Chile stands out as the only strong success, and that after a lengthy gestation period.

It is as easy to conclude that human capital formation will be pivotal in the new world towards which the countries of LAC are moving as that the reforms will provide certain benefits. But the empirical analysis and the understanding of how various types of human capital accumulation affect economic performance are also in their infancy and hence not a strong reed to build policy on at this time.

aspects of labour market outcomes.

2. Possible Explanations for Negative Distributional Trends

As a result of deficient data bases and limited quantitative analysis directed to the explanation of levels and trends in inequality in Latin America or in developing countries generally, there is little by way of verified theory. The Kuznets hypothesis has received a great deal of discussion, but remains controversial.[7] Limited discussion has also revolved around the Lewis labour surplus model and the proposition that as countries reach the point at which the labour market begins to tighten up the distribution of income may be expected to improve (Berry, 1983). Among structural features, the distribution of agricultural land as well as of other productive assets, the distribution of education (Knight and Sabot,), the size structure of firms and the degree of openness to international markets have all received some attention either in a static sense and/or as features whose change over time may be predicted to contribute to distributional trends over time (Bourguinon and Morrisson, 1989; Fields, 1984). It has of course long been recognized that the speed and pattern of technological change could have a significant effect on distribution. There has been less analysis in developing than in developed countries of the impact of the economic or business cycle, partly because the sort of cycle so prevalent in the industrialized countries has not been generally present in a similar form in the LDCs, but Morley's recent work (1994) presents an important analysis of the record of the 1980s in LAC.

One can distinguish three broad methodological approaches to achieving a better understanding of the factors underlying changes in income and consumption distribution: cross country comparisons of distribution outcomes[8] and hypothesized determinants thereof; over-time studies of the experience of individual countries; and micro-type analysis designed to test for the evidence that a particular hypothesized mechanism was indeed at work.[9]

A important aspect of the study of determinants of distribution involves the relationships among the various relevant "distributions". Probably the three main ones to bear in mind are: (i) the distribution of income among <u>earners</u> (sometimes limited to those with labour and/or business earnings, i.e. excluding those

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[7] Note the Williamson books and Bigsten and Fields, etc.

[8] It is of course important not to forget that country-specific features may be very important and may make it difficult to learn from cross country comparisons of experience.

[9] Thus a test of the impact of trade levels or trade policy on distribution would tend to distinguish tradable and non-tradeable goods sectors, assess their relative factor intensities, etc.

receiving only rents); (ii) the distribution of income among families or persons (usually ranked by per capita family income or some variant thereof); and (iii) the distribution of consumption among families or persons--often argued to be the most useful as a guide to the distribution of material welfare. The distribution of income among earners is of special importance because it most directly reflects the functioning of the economy. The mapping from this distribution to the other two is however a matter of great importance, since any social assessment of how good or bad distribution is has to be based on them. With the increasing prevalence of multi-earner households (or at least with the increase in the share of adults who work outside the house) the correlation between the distribution of earner income and that of family or personal income may have been weakening. Finally there is the functional distribution (that between factors of production--labour, capital, and natural resources), long a prominent tool in the economic theory surrounding distribution but much less central to contemporary analysis of distribution in LDCs.[10] Given the sharp drop in many wage series in LAC countries during the crisis (considerably more marked than the falls in per capita output or income), and their halting recovery, an obvious hypothesis is that

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[10] It is less important in empirical work than much earlier theorizing would have suggested it should be for two reasons: first, there is a much greater variance of incomes earned from "labour" in the broad sense of the term than was built into early models, hence it is clear that the whole story about distribution is not incorporated in a simple concept like the labour share; second, it is hard empirically to estimate the labour share with great precision, because much labour income is imputed (part of the general category "business" income) and because the distribution of capital income is the least understood aspect of overall distribution because of the very faulty data. Here too, no simple assumption such as homogeneity among recipients of capital income could be taken seriously. All this notwithstanding, it _is_ important to focus on the functional distribution of income when one can do so with any success. One of the striking weaknesses of most of the analyses of distributional trends over the last couple of decades in LAC, the period of the phenomena of interest to us here, is the lack of attempts to assess trends in the capital share. A basic methodological problem lies in the fact that one must, as one approach to it estimate, calculate capital income as the residual after the estimate of labour income; the estimate of net capital income (net of depreciation, the relevant concept) is complicated by its dependence on the estimate of depreciation. In most national accounts the rules for estimation of depreciation are arbitrary, probably not very valid, and especially misleading during periods when the investment rate is changing quickly and hence the ratio of net investment to gross investment is also changing quickly. Serious analyses of this matter for LAC countries are few or non-existent.

the capital share has risen markedly. But it would be dangerous to take this for granted until one can claim better measurement of capital income than we can claim at this time. In summary, the assessment of any hypothesis on the determinants of distribution and its trends, should, whenever possible be carried out using the full battery of "distributions"; there is no guarantee that the impact identified on earner income will necessarily show up also in the family income or consumption distributions, and none of the survey based distributions are likely to effectively identify the role of capital income.

Since there is an obvious tendency for income differences across groups to perpetuate themselves through the process of bequest (of capital, human capital, work attitudes, social contacts, etc), measuring the overall distributional impact of any given factor which can be shown to have an effect at some point of time involves understanding the dynamic process which underlies the way distributions change over time. It has thus far proven difficult to assess the long run distribution impacts of presumed determinants, because of our very incomplete understanding of the dynamic process surrounding distribution. What does seem clear is that there is a very high level of inertia in income distributions, so that if one country achieves a high level of inequality at an early stage of development and another a high level of inequality, those differences will tend to persist for a long period, perhaps becoming accentuated or perhaps becoming damped but in either case staying strong. One no doubt oversimplified interpretation of the Taiwan-Brazil contrast in current levels of inequality would be that Taiwan had a major agrarian reform early in its development process and Brazil did not, with the resulting differences persisting strongly over time.

While our main interest is in the impacts of the policy reforms and related structural changes on distribution, in order not to run too great risks of misreading the evidence it is important to have all major possible determinants in mind. A suggested list is presented below. The interaction among factors and between policies and background factors can be very important, and some flavour for main hypotheses of this type is provided below. The categories distinguished are not mutually exclusive, and it may be best to think of them as alternative ways of organizing the range of mechanisms which may come into play. Trade-related hypotheses can also involve structure (since a country's size and its factor endowment help to determine how trade-oriented it will be), as well, obviously, as policy.

<u>"Stages of Development" hypotheses</u> have been important since Kuznets (1955) argued that there was a general tendency for distribution to worsen in the early stages of development, then improve later on. He explained this pattern primarily as the result of the transition process whereby an economy evolves from a condition in which it is the traditional, rural low-income sector dominates, through a middles phase in which both the traditional sector and the much higher-income modern sector are important, to

the final stage in which the modern sector dominates. In the middle phase, the importance of the two sectors, each with its own income variance but around quite different medians, raises the overall level of inequality. Kuznets' own discussions of the historical evidence from now-industrialized countries has subsequently been complemented by the work of Williamson (   ) and others. In the LDCs, cross-country studies have in general been consistent with the hypothesis (e.g. Alhuwalia, 1976) but over-time analyses have not (Fields,   ), perhaps however because the periods of time for which data have been available are relatively short.

Various aspects of the economic structure of a country are expected to affect income distribution. Most apparently relevant is the agrarian structure (distribution of land, tenure system, etc); a strong case can be made that it not only underlies the degree of a country's inequality in the early stages of development but also, through the inertia which characterizes the evolution of distribution in most countries, many later developments as well. More generally, the distribution of assets appears almost tautologically to be an important determinant of inequality (Adelman, 1975?; Adelman and Robinson, 1978); the size distribution of firms or plants, generally correlated with the ownership distribution of assets, has also been suggested as a determinant and built into various models of distribution.

Openness as measured by export and import ratios, is affected both by such structural features of a country as its size and resource endowment, as well as by its policies.

Elements of societal structure like the ethnic composition of the population, the prevalence and impact of the extended family, and the evolution of the nuclear family may also have significant impacts.

Although not our focus here, the relationship between distribution and the cycle of recession/recovery is important both as a hypothesis in its own right and because the coincidence of timing between the economic cycle and policy reforms can make it hard to sort out whether it is economic downturn or policy changes which lies behind the observed increases in inequality. If economic downturns were the main factor underlying the large increases in inequality observed in many LAC countries, a positive prognosis for the future would be plausible. Both Morley (1994) and Altimir (1994) put considerable emphasis on the relationship of distribution to the cycle. Altimir notes that the fast growing countries tended to see improvements in distribution during the 1970s whereas the slow growing ones saw the opposite. He also sees some ties in the 1980s, but does not draw much optimism from his reading of the evidence.[11] Morley's stronger conclusion is that

[11] While noting that the countries still wrapped up in recession and instability at the end of the 1980s (Argentina, Brazil, Panama and Peru) showed levels of inequality higher than at

during the 1980s improvements almost always coincided with economic growth and worsening with downturns. Our own case studies suggest the relationship is less tight than he argues, with exceptions (at least partial) being urban Colombia, where inequality fell through the downturn of the early 1980s but rose in the context of growth in the early 1990s; Brazil, where the most recent downturn (1990-92) saw a lessening of inequality; Costa Rica, for which Trejos and Sauma (1994) report a decline in the Gini coefficient (among families ranked by per capita income) during the early 1980s crisis and some worsening during the recovery which followed; Dominican Republic and possibly Uruguay (see below). Fields and Newton (1994) reach a similar conclusion based on their look at the evidence from Venezuela, Brazil and Costa Rica. While further research will no doubt throw more light on this issue, the most likely general conclusion would seem to be that, though there is probably some average tendency for downturns (upturns) to be associated with increasing (decreasing) inequality, there are many exceptions to this relationship and, more important from our point of view, the cycle cannot explain the majority of the observed changes in inequality over the last couple of decades in the LAC countries.[12] From our practical perspective, the main concern with the cycle hypothesis will thus be to try to normalize for it as well as possible, so that the effects of the cycle do not become too confused with those in which we are more directly interested.

Hypotheses linking <u>technology</u> to increasing inequality abound at present since it is generally perceived that we are in the midst

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the beginning of the crisis, he also observed that "income distribution improvements-where they existed- only took place along with real wage increases....; these are less likely during the stabilization processes still faced by Brazil and Peru and have not yet occurred during the current Panamanian recovery.

"Consequently, one should not expect significant equity improvements in these countries as a consequence of stabilization and recovery. Indeed, full deployment of policy reforms and associated adjustment measures-particularly on the fiscal front-may still bring a medium-term increase in income inequality." (Altimir, 1994, 26). Based on the experiences of Colombia and Chile, he concludes that only modest reductions can be expected when countries attain a sustained growth path.

[12] The only possible condition under in which this conclusion might not hold would be one in which some of the effects of the cycle occur with substantial lags. The same problem of not having a good idea of the lag structure of the causal relationships involved plagues the analysis of the policy changes as well; some effects may occur quickly, others more slowly. Most serious in this context is the possibility that some negative effects are short-term and tend to reverse themselves with time.

of a major burst of technological change involving both robotics and other innovations which displace blue-collar workers, together with computer-based displacement of certain types of white-collar jobs; the labour favoured by these changes falls in the high skills category. These hypotheses are commonly put forward to explain for the rather general trend toward increasing levels of inequality around the world. At a world level as well as in LAC, however, it is difficult to disentangle the effects of such technological change from those of globalization, whose timing has been rather similar. Thus in the U.S. debate on the sources of the increase in inequality observed during the 1980s, these two hypotheses contend.[13]

In the Latin American context two related considerations must be borne in mind as one assesses the role of technological change. First, since virtually all of the countries of the region suffered serious economic setbacks, either in the 1980s or the 1970s or both, most have been in a recovery mode since those set-backs, which saw both their growth and their investment levels fall precipitously. Since the incorporation of new technology occurs substantially through new investment, technological change would presumably be concentrated during the recovery; a degree of technological updating which might otherwise have been spread out over a couple of decades might instead occur in a much shorter period. Second, the opening up to trade (with different relative focus on pushing exports vs. liberalizing the domestic market according to the country and, among other things, its exchange rate policy) has tended to coincide with recovery in quite a few countries. It too has pushed technological adoption and adaptation in certain ways and probably tended overall to accelerate that process. Sorting out the impact of the "technology factor" in the LAC countries thus involves <u>both</u> taking account of the evidence on its manifestations in other countries of the world <u>and</u> disentangling its effects from those of abrupt changes in the degree of openness, of the stage of recovery and of other possible factors.

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[13] In the U.S. context the initial studies (e.g. Revenga 1992; Murphy and Welch, 1991; Borjas, Freeman and Katz, 1992) put the spotlight on trade competition as a key factor in the decline of employment and wages of production vis a vis non-production workers in the U.S. More recent studies (Bound and Johnson, 1992; Berman, Bound and Griliches, 1994) conclude that the proximate cause is biased technological change, such as the introduction of computers. They identify the decreasing ratio of production to non-production workers within industries as the crucial determinant of the outcome. Lawrence and Slaughter (1993) rule out the Stopler-Samuelson effect on the grounds that it predicts employment moving in the opposite direction to relative wages. Wood (1994) has argued that import competition is the dominant source of increasing inequality in the industrial countries generally.

The Policy-Related Hypotheses

Our central concern here is with the market-friendly policies adopted in varying degree by most LAC countries over the last decade or so, including trade and foreign investment liberalization, privatization and generally downsizing of the public sector, labour market reforms, etc. It is useful to specify some of the major ideas on the table.

(i) There are competing ideas as to why openness matters, and which aspects of it matter, but not much disagreement that it does namatter. The Heckscher-Ohlin theory emphasizes differences in factor proportions between exportables and importables. Other theories relate rate of technology adoption and the type of technology adopted to degree of openness (Pack, 1992). Less often mooted is the "economies of scale in trade" hypothesis whereby, regardless of what happens at the production level, there are important economies of scale in the commercial and financial aspects of international trade. This helps to explain why large firms dominate trade in many sectors and smaller firms are less involved. To the extent that factor proportions are closely related to firm size (there is much empirical evidence for this relationship) one would expect globalization to favour the larger firms and hence to raise the returns to capital and lower those to labour. Unlike the Heckscher-Ohlin hypothesis, which tends to suggest differing impacts of trade on different types of countries (e.g. labour abundant vs. capital abundant) this theory might suggest a negative effect on distribution in all countries, though a more marked one in those where the static Heckscher-Ohlin effect also worked negatively.

A debated aspect of the trade policy question is the appropriate way to think of economies in Heckscher-Ohlin terms, in particular the number of factors of production which must be distinguished. Results can be reversed according to whether a model with a single labour factor is closer to the facts than one with two or more categories of labour which bear different relationships of substitution or complementarity with other factors. Simple two factor or three models tend to view agriculture as the sector most penalized by protection, whereas the evidence from several LAC countries has suggested that some agricultural activities are among the most protected.

(ii) Symmetrical with traditional two-factor trade theory is the proposition that foreign investment should improve the functional distribution of income in the host country by raising the capital/labour ratio and hence the ratio of wages to returns to capital. Feenstra and Hanson (1994), who link foreign investment to widening wage dispersion between higher skilled and lower skilled workers in Mexico, is thinking of a different mechanism, one in which activities which are shifted from the source country to the host country are less capital intensive than average in the former and more capital intensive than average in the latter.

(iii) There is a considerable literature in developed countries which reports that unions, minimum wages and other types of labour market legislation usually have the effect of narrowing earnings differentials. Among the interpretations are that they prevent the exploitation of relatively undefended workers, that they prevent differences in ability from being reflected in different earnings as much they might otherwise do, etc. In developing countries, though this view has also been prominent, there is a competing view that the protection of the labour elite increases the inequality of labour income. What it does to overall distribution is theoretically unclear; it depends in part on how much of the rents taken by protected labour are at the expense of capital (and which among the groups of capital owners pay them), and the extent to which they are at the expense of the rest of labour (if indeed they are). This issue has been very little addressed from an empirical point of view in LAC countries or other LDCs, but the evidence from Chile, Argentina and other countries makes it clear that it must receive serious attention in general. Also relevant to this hypothesis (and to some of the others) is the common recent finding that the intra-cell variance of income has risen substantially in recent years, i.e. the income differentials not explained by level of education, experience, sector, etc. The technology hypotheses could suggest that previously unimportant differences among people in training, education, and skills among people become important as a result of the change in technology; differences in capacity to adjust to new technology could show up in short-run differences in productivity which were not previously present. To the extent also that labour institutions tend to damp the variance of income within categories defined by variables like these, the waning influence of those institutions could let differences appear which were previously constrained away from appearing.

A very important research issue at this time is the relationship between trends in wages, wage differentials and income distribution. This is so partly because much of the important research on the impact of trade and other reforms in industrialized countries has focused in the first (and usually also the last) instance on their impact on wage structure (by industry, by job position, by level of education, etc). The assumed link from say a widening of observed wage dispersion to a worsening of income distribution may not be too risky in such countries, but the situation is more complicated in LDCs. Often the wage series available are not representative of the labour force in general, e.g. formal sector manufacturing wages may not move too closely with average wages in the forma and informal sectors taken together. With the large informal sectors and a high level of self-employment, wage series are not reliable guides even to the distribution of earner income, let alone those of family income or consumption. Also, with the sectoral and occupational composition of the labour force sometimes changing fairly fast (a tendency accentuated by the rapidly rising female participation rates in some countries), average wages of all employed workers may move rather differently from those of specific categories. Analysis of wage structure is as important in LDCs as in developed countries, but the subsequent mappings from those trends onto income distribution is an important challenge.

(iv) Public sector activities create incomes (or "rents", depending sometimes on how one views them) for the type of worker hired, and sometimes for those who are well connected. Most observers feel these are generally middle class and middle income people, and that the shrinking of this sector will accordingly be felt mainly by the middle deciles of the distribution. But much may also depend on the indirect effects of the downsizing. If former public sector employees proceed to "bump down" some in lower income categories, the ultimate (general equilibrium) effect might be more complicated.

(v) To the extent that the prevalence of small (and medium) enterprise has a lot to do with the demand for labour, especially relatively less-skilled labour, its size and growth rate will be possible determinants of income inequality. One hypothesis to explain Taiwan's income equality is the dominance of small farms and small firms over the formative part of its development process. Brazil is at or close to the other end of this spectrum, and so its level of inequality.

(f) Much income inequality is directly related to an unequal distribution of human capital, which in turn reflects the functioning of the education/training process. Educational access is related to income distribution, especially in countries with important private educational sectors. Both the predictions based on the character of the ongoing technological revolution and some evidence from industrial and developing countries that wage dispersion by education and skill levels has recently been rising, imply that this is a major issue for the future. Though educational and training policy does not figure prominently in our analysis of the sort of sudden changes in distribution witnessed over the last decade or so (even 10-15 years is a short period for the impact of policy to manifest itself) it must obviously be assigned a central role in planning for the future.

While all of the above possible causal factors no doubt play some role in the evolution of income distribution, some are unlikely to be behind the sharp changes witnessed in so many LAC countries. This probably includes educational policy and performance, small enterprise policy and performance (though less clear re the latter since SSE may have suffered disproportionately from liberalization and or/recession). Trade policy, labour policy, size of public sector, technology change, and business cycle factors are all obvious possible candidates.

3. The Distribution Record of Latin America and the Caribbean

Growth and Trickle-Down Prior to the 1980s

As the Latin American countries progressed through the 1960s and 1970s, it appeared that severe poverty might be more or less eradicated by another decade or so of "growth without redistribution"-- that is, growth within the context of an essentially unchanged and very high level of income inequality.[14] This outcome was a possibility because of Latin America's higher average income than in most of the Third World.

Over the period 1950-80 the region's per capita income rose by about 3% per year. With the poverty line which Altimir (1982) attempted to apply across countries for 1970, poverty incidence was about 38% of households (Table 2).[15] The growth record over 1950-70 would suggest that poverty incidence in 1950 (using the same poverty line) was around 65%[16]; over 1970-80 it probably fell to somewhere around 25%. Had per capita income growth continued over the last two decades of the century at the 3% per year observed over 1950-80, poverty incidence would probably have fallen to about

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[14] As of the 1960s and early 1970s all of the Latin countries had very high levels of inequality by the standards of other less developed countries, with the exceptions of Cuba, by then a centrally planned socialist economy, Argentina and Uruguay; somewhat less inegalitarian than those but still better than the regional average were Chile, Costa Rica and probably Venezuela. The most common explanations of the lower inequality in the Southern Cone included their higher level of development (e.g., farther along in the Kuznets cycle) with associated development of social security systems, wage protection, etc. and their greater racial homogeneity.

Given their high levels of per capita income and low inequality relative to the region as a whole, the Southern Cone countries suffered lower incidence of poverty than the rest of the region; somewhat comparable poverty lines suggest 1970s incidence of under 20% for these three cases, of somewhere between 20 and 30% for Costa Rica and Venezuela, and of over 40% for all of the other countries (Table 2).

[15] Data were not available for all countries, but those excluded had only 12% of the region's population and were not obviously atypical in terms of degree of inequality. Since the data relate (in all or nearly all cases) to the distribution of households ranked by household income, the share of people below the poverty lines might be somewhat different from what these figures show, though it is not clear in which direction they may be biased.

[16] Assuming the distribution of income for the region as a whole was not dissimilar to that observed for Colombia in 1970; Colombia's Gini coefficient was in the middle of the pack at that time.

10-15%[17]; with reasonably effective poverty redressal policies (targeted employment schemes, food schemes, etc.) of the sort which can more easily reach a large share of the poor when the incidence of poverty gets down to this relatively low level, it would have been realistic to think that no more than a few percent would have been critically poor.

Although most countries of the region did not witness major shifts in income distribution during the 1970s, some patterns hinted at possible changes in the not too distant future. Thus, the sharp increase in real wages of lower skilled workers in Brazil during the "economic miracle" of the late 1960s and early 1970s, and the less dramatic increase in real wages in agriculture and some other sectors of the Colombian economy suggested that these two economies might be on the verge of a tighter labour market and continuing wage increases, especially among those lower skilled workers (Pfefferman and Webb, 1983; Berry, 1990).

The Crash, the Halting Recovery, and the Policy Response

This happy outcome was of course not forthcoming, courtesy of the debt crisis and the periods of decline and difficult recovery which followed. The timing of the economic crises varied somewhat, with the Southern Cone countries already in difficulties by the mid-1970s, while for most of the others the onset was signalled by the international debt crisis of the early 1980s. Particularly severe short period (2-4 years) declines in per capita income were suffered by Costa Rica, Chile, Peru and Venezuela, while GDP per capita fell by over 20% during the 1980s in Argentina, Venezuela, Peru, Bolivia and Nicaragua (though the first two regained some of that ground in 1991-92). For the region as a whole per capita national income fell by about 13% over 1980-85 and has fluctuated a little with no significant movement either way since then (Table 1). A brief spurt of modest growth over 1985-87 petered out by the late 1980s, the last three years of which all saw average growth of less than 1%. 1991 and 1992 were better again, with an average of around 3%.

With this sort of macroeconomic performance it was obvious that there would be many "losers" during this period. The only countries which did not suffer a net decline in gross national income per capita between 1980 and 1992 are Colombia and Chile. In one important sense the poor have been the big losers from the "lost decade" since the fact of being poor means that income declines and/or lost opportunities to advance hurt more.

The debt crisis provided the push to induce and/or oblige the region to jettison its trademark import-substitution strategy for a more liberalized trading system, as well as to move towards

[17] If this extra period of growth brought with it a significant tightening of the labour market, it might have been realistic to expect the income share of the bottom few deciles to rise (though perhaps not the very bottom decile).

adoption of the other elements of what is now a standard package of reforms to labour markets, financial markets and the public sector. Some countries had already taken significant steps away from the traditional combination of protectionism and overvalued exchange rates and the resulting bias against trade. Both Colombia and Brazil moved to encourage exports in the late 1960s; Colombia's adoption of a crawling peg exchange rate put an end to the systematic overvaluation of earlier years. These approaches were qualitatively similar to the East Asian practice of encouraging exports while continuing to protect imports. Chile went much farther as the Pinochet regime introduced the most free-trade free-market system in the region, including a real import liberalization bringing tariff rates down to 10% by 1980; though they were raised somewhat in the mid-1980s the average was back down to 15% as the decade came to a close (UNCTAD, 1992, 44). Argentina had an important liberalization episode between 1976 and 1982, in which the average effective rate of protection fell from 158% to 54% (Gelbard, 1990, 46). In the second half of the 1980s most of the countries of the region have initiated significant reforms, varying in detail and in timing, and having few if any close precedents in the developing (or the developed) world.

Distribution and Poverty Effects of the Policy Reforms: Evidence from Country Experience

In any attempt to predict the medium-term future of income distribution and poverty in Latin America one can draw both on analysis of how recent trends in structural variables and in policies would be expected to affect income distribution, and on a reading of the record of countries which have undertaken some or all of the reforms far enough back in time to make their experience useful. Although considerable uncertainty still surrounds the precise evolution of income distribution during the crisis and adjustment periods in most of the countries of Latin America, and it is difficult to sort out the effects of policy changes from those of the crisis itself and of longer run structural trends dating back to the pre-crisis years, analysis of the record is nevertheless quite rewarding. In spite of data problems in some countries and uncertainties with respect to the causal processes at work in others, one is left with the powerful impression of a preponderance of negative shifts in distribution around the time of the introduction of policy reforms, and the feeling that this negative impact is not fully explicable by other obvious candidates like stage of the cycle, rate of inflation, etc.

With the exceptions noted, the evidence discussed below suffers from a number of defects, including in particular:

(i) changes in price vectors are not allowed for;

(ii) usually data are available only for urban areas;

(iii) capital incomes are inadequately measured so changes in the

capital share might go largely undetected[18]; wealth effects are, as always, absent;
(iv) incomes from secondary incomes are not well recorded;
(v) there are the usual, numerous, sources of misreporting;
(vi) apparent effects of inflation on distribution may be illusory, related to lags in the adjustment of the wages and prices which are important to different groups of people.

The evidence which, taken together, points a large finger at the policy package as the source of increasing inequality, comes from Argentina, Chile, Colombia, Dominican Republic, Ecuador, Mexico, and Uruguay. In no case with satisfactory quality data do we have clear evidence of the opposite pattern. Costa Rica is a special and important case since it appears to be an exception (distribution constant rather than worsening); unfortunately its data suffer a flaw just at the time liberalization was being introduced. Several other countries have not undertaken the reform package far enough back in time to generate useful data by now, and for others the data are simply of too questionable quality. We organize the discussion around groups of countries whose experiences appear to share a number of relevant characteristics.

<u>Chile, Argentina and Uruguay</u>

These three Southern Cone countries differ from the rest of the LAC nations in that all introduced significant liberalizing economic reforms in the early or mid-1970s, before similar efforts

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[18] Usually the most useful and reliable information comes from household income surveys, but their main defect is the systematically weak reporting of non-labour incomes. When there is no reason to believe that the labour share has changed markedly or that the distribution of capital income has been altered, this underreporting is unlikely to greatly bias the estimated trends. During the 1980s, however, there <u>is</u> some reason to believe that the capital share has risen, as the result of higher interest rates, on government domestic debt among other things (Felix and Caskey, 1989). During the crises themselves, a common pattern was government borrowing abroad or locally to shore up the exchange rate; this facilitated massive capital flight. Governments (e.g. those of Chile and Ecuador) essentially socialized private foreign liabilities, which are the domain of the rich; the Chilean Central Bank, pushed by the international banks to act as guarantor of private non-guaranteed foreign loans, subsidized debtors to the tune of about 4% of GDP over the period 1982-85 (Meller, 1992, 60). Later, when the crises had passed and structural adjustment begun, high interest rates remained the order of the day as part of the new financial orthodoxy. Our understanding of the net effects of the various impacts on capital incomes during this period is not adequate to say with certainty that the capital share has risen by enough to imply an overall trend to worsening since the onset of the crises, but that possibility must be borne in mind.

were undertaken in the other LAC countries.[19] These cases thus offer a longer period during which possible impacts of the reforms might have ben felt. In all cases serious deterioration of distribution seems to have occurred, though the Uruguayan data are somewhat suspect in terms of quality/comparability over time. Argentina and Chile suffered unusual worsening of income distribution, with high unemployment an aspect of the period in question in Chile, and falling labour incomes for the lower deciles the dominant feature in Argentina.

Chile's experience is the most important from our perspective, since the policy experiments date well back in time and, despite some vacillations, the basic strand of policy has been maintained subsequently. The country has had two severe recessions since 1970, the first associated with Allende's overthrow, as GDP fell by 23% over 1972-75, and the second with the international debt crisis, when GDP fell between 1981 and 1982. After each collapse growth resumed quickly and was strong, but their impact was still to hold average annual growth over 1970-92 to only 3.2%, though registering an impressive 6% since 1984. Since 1973 the economy has undergone the most radical policy "reforms" of any nation in the region.

As of the late 1960s inequality was a little less severe than in most other Latin countries.[20] The data for greater Santiago indicate a sharp improvement during the Allende administration, followed by a sharp reversal such that by 1976 household income inequality was markedly worse than in the pre-Allende period and no longer superior to the levels observed in most other Latin countries (Table 3).[21] Less frequent but hopefully more comparable

[19] As noted above, Brazil and Colombia had already taken serious steps to encourage exports by the late 1960s, but had not (at this time) undertaken an important liberalization of imports, nor imposed changes on the institutions governing the labour market.

[20] As of 1967-68 the comparable data from the ECIEL study revealed a Gini coefficient for the distribution of income among households of .451 in Santiago, compared to .487 in Lima, an average of .473 in four Colombian cities and an average of about 0.43 in two Venezuelan cities (Musgrove, 1978, 36). Brazil's cities would have presumably recorded higher figures and those of Argentina lower ones.

[21] Paradoxically, the data on distribution among income recipients, while showing the same cycle as for the household distribution, do not indicate that the level of inequality was greater in the late 1970s than in 1970. This anomaly, still to be fully explained, does not greatly diminish the likelihood that household distribution did worsen significantly.

A problem with the Chilean information, as with that for Argentina, is that published distribution data over time are only available for greater Santiago, not for the country as a whole. But data on the distribution of consumption among greater Santiago households show 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 (Table 4). Since it is reasonable to assume that distribution at the end of the Allende years was better than that of 1969 (to which the data refer), it would appear that the worsening occurred very sharply over the next 5 years, consistent with the evidence on the household distribution of income. 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%.[22] [23] Meller reports an increase in poverty

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Santiago is probably fairly representative of the country, as suggested by the similarity of measured inequality for the few years for which both city and national data are available. There is no automatic inconsistency in the different trends shown for the income recipient and the household distributions, since the relationship between the two can change with family composition or with the participation of secondary workers. Still, of course, it would be possible to have more confidence in the conclusions suggested here if this difference were already satisfactorily explained.

Another inadequacy of the available calculations is their failure to take account of changes in the relative prices of the consumption items purchased by different income classes. Over the course of the 1980s the increase in the relative price of food may have made the distribution trends worse than the figures on nominal distribution of income make them out to be.

Note that the suddenness of the increase in recorded inequality between 1975 and 1976 may be related to the severe inflation at that time, which can produce volatility in the estimates.

[22] Over that period average private consumption per person fell by about 13% and the share of the bottom quintile by 32%.

[23] In summary, the short-run movements of the various distributions coincide rather closely and the main problem with the Chilean data is the fact that for the most part they are restricted to Santiago. The main question is how much of a total shift occurred between the pre-Allende period and the late 1980s before the level of inequality began to diminish. Judging by the consumption distribution figures (important both because of their presumed greater accuracy than income figures and because they should be a good measure of welfare) there was an incredible increase in the Gini coefficient of twelve percentage points (from 0.31 to 0.42). The household distribution series suggests an increase of about five points between 1970 (which seems representative of late 1960s, judging by the series for income recipients) to 1987-89; the Gini of the household per capita

incidence from 17% in 1970 to 45% in 1985 with poverty lines not more than 6% apart (Meller, 1992, 23). Even if this may somewhat exaggerate the trend, there is no doubt that poverty increased sharply.[24] A special and interesting feature of the Chilean experience was the combination of make-work policies for low income groups and targeted poverty redressal which seems to have helped to limit the most serious poverty impacts of the negative income trends just discussed. A number of the policy steps taken by the Pinochet regime would be expected to foster inequality. The extensive privatization, mainly carried out during the severe recession of 1972-74, led to acute concentration of ownership and the formation of large conglomerates (Meller, 1992, 27).[25] Curtailment of agricultural credit to small farmers led to land concentration as well. Preferential financing to small entrepreneurs was cut back. 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. After the second crisis (1981-1983) wage indexation was abolished, replaced by a real wage "floor", specified to be the real wage prevailing in 1979. Wealth and capital gains taxes were eliminated, profit tax rates substantially

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distribution rose by about 6.5 points. (In all cases, of course, the difference would be somewhat greater relative to the low point of inequality around 1974.) It thus appears that the likely increase in the Gini of the most interesting distributions was somewhere between important (6 points) and dramatic (12 points). Further work is needed to clarify the magnitude of the worsening; the pace and degree of the improvements now apparently underway obviously deserve attention as well.

A strange feature of the observed record is that the distribution among earners (recipients) appears to have changed little from around 1970 through at least the early 1980s (Riveros, 1985, 334 has data up to 1983). This puts a premium on understanding the relationship among the various distributions, and in particular that between the distribution among earners and among families.

[24] The high incidence of television sets (over 70%), refrigerators(49%), radios (83%) and bathrooms(74%) even in the lowest quintile throws some question on the 45% figure, though it is true that some of these items probably became much more prevalent due to the low prices which came with the import liberalization around 1980.

[25] Note that the direct effects of this concentration might be felt almost entirely within the top 10% of the income distribution.

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% but 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 on 1992 they were probably marginally above the 1970 level[26], a very slow recovery indeed. The coverage of the minimum wage was restricted considerably and its level fell in the 1980s. Fringe benefits had been greatly reduced from their 1970 level and public expenditure per capita in health care, education and housing had also decreased (Ffrench-Davis, 1992, 14).

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 (Robbins, 1994). This shift was clearly a proximate cause of the worsening in income distribution, but it remains to be explained exactly why it happened. 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, a possibility hinted at by the apparent importance of university training for small or medium firms to achieve success in manufacturing exports in Colombia (Berry and Escandon, 1994) and other countries. It may alternatively be more a result of the dismantling of union power and changes in labour legislation in Chile.

Argentina has a by-now lengthy tradition of relative income equality together with a singularly weak growth performance. Between 1974 and 1988 GNP grew by only 4%; at the heart of the crisis (1980-82) it fell by a dramatic 13%. Accompanying this macroeconomic failure has been an unusually sharp increase in income inequality, the Gini coefficient among income earners in greater Buenos Aires rising from about 0.36 over 1974-76 to somewhere within the range 0.41-0.46 from 1978 on (Marshall, Chapter , Tables 4A and 4B).[27] The dramatic increase occurred

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[26] If the series cited by Ffrench-Davis (the source of the wage data is INE) is consistent with that reported by ECLAC (1992, 44), which shows an increase of 11.7% over 1989-92, then the 1992 figure is 3% above that of 1970.

[27] Data on the distribution among households in this same greater Buenos Aires region and among income earners in the country as a whole seem to move in parallel with those just cited for those time periods when they are available, which does not in either case include much beyond 1980. As a result it has been necessary to use the Buenos Aires earner data, but with considerable confidence that they do not misrepresent the trends which actually occurred among

very suddenly between 1976 and 1978 (Marshall, Table 4A). Since then the level of concentration has fluctuated without clear trend; after falling in the early 1980s it reached a temporary peak in 1989 (under intense inflation), fell back to the previous level from which it has varied little, although the share of the bottom 30% has continued to fall somewhat; from an average of 11.6% over 1974-76, it fell to the 10.5 range in the early 1980s and was by 1994 down to 8.5%.

One apparent determinant of short-run movements in the level of inequality is the real exchange rate, whose role is suggested by the short run inverse relationship, over 1970-87 at least, between the real exchange rate (Argentine currency per dollar) and both the real wage and the ratio of the real wage to per capita income (Berry, 1990, 31). It is plausible, given the prominence of wage goods among Argentina's exports, that 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 clear that the longer-run worsening of the income distribution cannot be fully explained by this link with the real exchange rate since net worsening occurred over periods when there was no net increase in the real exchange rate. Other factors must therefore have been at work. Possibly structural changes wrought by the change in trade policy worsened inequality; the liberalization episode referred to above led not only to a fall of 11% in manufacturing output between 1976 and 1982, but to a employment reduciton of 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. It is also possible that the very large capital flight from the country played a role, by lowering the amount of capital available to complement the labour force. Changes in labour policy almost certainly played a significant role; the bulk of the increase in inequality since the mid 1970s occurred between 1976 and 1978 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). Unlike Chile, Argentina's experience at this time was not characterized by high levels of unemployment.

Among the issues in the interpretation of the Chilean and Argentine cases are whether the traditional (and still relatively) high levels of social expenditures in these countries mean that the poor are in fact less so than they might appear to be, and better able to weather the storm of economic adjustment and the effects of a worsening distribution of private income. Table 5 presents some relevant evidence on this point. Chile, fourth behind Uruguay, Venezuela and Mexico in terms of 1988 per capita GDP (expressed in constant purchasing power dollars), ranked higher by such other

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households in the nation as a whole (Berry, 1990).

criteria as average years of schooling for adults of 25 and up (first as of 1980 with 6.1 years), adult literacy (tied for third in 1985 at 92%), access to health services (first in 1985-87 at 97%) and among the leaders in share of national income spent by the state on health services, education and primary education, and expenditure on and coverage of social security benefits. As a reflection of all of these, the life expectancy of about 72 was fifth in the region, and was significantly exceeded only by Cuba and Costa Rica; the improvement of 14.7 years between 1960 and 1990 was exceeded only by a few countries which started much lower, like Peru and Guatemala. The UNDP's Human Development Report of 1991 ranked the country second only to Uruguay in Latin America in terms of overall "quality of life". French-Davis (1992, 12) comments positively also on the country's capacity to build low-cost housing effectively and on the massive food programs for pre-school and school children. Indicators like child mortality continued to move favourably during the 1970s and 1980s (though short term movements in these figures may not be accurate).

Whatever welfare interpretation one places on the income distribution shifts of these last two decades in Argentina and Chile, it is important to consider their causes. In Chile it may be presumed that wealth shifts associated with the "socialization" of the debts of important economic actors were a factor, as was the general favouritism towards the rich relative to the earlier period (through tax policy, credit policy, the undoing of land reform, etc). Although they do not have easily predictable effects, the fact that there were such sharp policy shifts in trade and in labour market policy naturally puts the spotlight on them as possible causes. For many observers the tearing down of labour market institutions is an obvious source of worsening; though this prediction would be far from obvious in a country with a relatively small "protected" segment of the labour force and a large unprotected one, in relatively advanced and highly urbanized countries like Chile and Argentina a negative effect is quite plausible. Such a worsening might be especially strong in an economy where large rents come from a high productivity mining (Chile) or agricultural (Argentina) sector and where the public sector and other service activities might be thought of as living off those rents. When the public sector shrinks and wages are more closely linked to the marginal product of labour in the private sector, one might expect wages to fall more than in many other types of economy.

The "economic cycle" has some potential explanatory power in both countries. The first crash in Chile was very sharp, with the decline over 1972-75 focused in 1973 and 1975, especially the latter. Among both recipients and households the big increase in inequality came in 1976, suggesting the possibility of a short lag. Household per capita inequality did not rise at all in 1975 according to Riveros' data, though household distribution did and so did earner distribution. Riveros (1994, 195) notes that distribution worsened during the boom related to financial inflows over 1978-82. The other big output drop was in 1982, with earner

distribution unchanged and household inequality up a little. Eventually inequality has come down in the wake of fast growth, though this could more likely be a tightening of the labour market. In Argentina the tie between weak economic performance and worsening distribution is also partial.
Distribution worsened sharply in both 1977 and 1978; the first of these saw growth of nearly 5% (albeit a recovery from two bad years) and the second a comparable shrinking. The severe downturn of 1988-89 brought a marked but quite temporary worsening, which had disappeared again even as the economy continued to shrink in 1990.

As for Uruguay, its story has fascinating similarities and differences with each of the other two countries, especially with Chile. Protectionism and monetary mismanagement have prevailed over most of the post-war period, and average growth has been very slow. For a small economy, Uruguay has been relatively closed, with the export/GDP ratio sometimes as low as the 10-14% range. Economic stagnation and high inflation rates gradually engendered social and political instability in the 1960s. Inflation was high and growth negative in the early 1970s, just before the military coup of 1973. The new economic team installed in 1974 introduced a program of price stability and relaxed some of the existing controls on foreign trade and capital movements. Stabilization attempts were only partially successful in cutting the deficit; one problem was the increase in military spending. A military priority was to liberalize labour markets (Gillespie, 1991, cited by Allen and Labadie, 1994, 10). They had a severe distaste for strikes as damaging to the nation's well-being. The National Confederation of Workers (CNT) called a general strike; a few days later it was disbanded and employers given the right to fire anyone who did not return to work (Allen and Labadie, 1994, 11). 12,00 public and 4000 private sector workers were fired, with employers taking the opportunity to rid themselves both of trade union officials and of workers they were unhappy with for other reasons. The general strike lasted for two weeks, after which neither the union movement nor collective bargaining played any visible role for 10 years.

Meanwhile, import licensing and quotas were abolished between 1974 and 1977, the level and dispersion of tariffs was reduced and export taxes on agricultural goods cut. The average growth of just over 4% per year over 1974-78 was led by export-oriented industrial activities--clothing, leather goods, shoes and fishing (Favaro and Bension, 1993, 195); the investment rate rose from 10% to 19%. The deficit remained high, however, due to increased spending on the military and on public investment projects, which offset the fall in the areas of wages and transfers. Attempts to restrict monetary growth were offset by inflows of cash, especially from Argentina.

The initial trade reforms of 1974 were followed by a trade liberalization program that attempted to simplify the tariff structure and gradually to reduce the level of protection to the target level of 35%. The stages of the program were announced in advance to give the private sector a better chance to plan effectively. Implementation was begun in 1979; with inflation soaring the government elected to reduce tariffs ahead of schedule, but by the time the 1982 crisis set in the push was derailed (Favaro and Bension, 1993, 281). The trade liberalization, intended to shift resources toward the tradables, did not have this effect because its impact was more than offset by the exchange rate overvaluation which was part of the stabilization effort.

The policies pursued between 1979 and 1982 together with the overvaluation of the Argentine currency led to an increase in aggregate demand that induced a rise in both wages and employment. Before the crash appeared in the second half of 1981 the investment ratio got as high as 18.7% and the export share was above 18% (Favaro and Bension, 1993, 283).

The 1980 referendum called by the military on constitutional change was defeated by a significant margin; this event marked the first step toward the re-opening of the political system (Allen and Labadie, 1994, 14). The macroeconomic crisis became increasingly evident as the pre-announced rate of devaluation (Tablita) became unsustainable and external public debt shot up from 9.2% of GDP in 1982 to 40% in 1985. Unions started to reappear as it became clear that the military wanted to hand the reins over to the civil society, and the new movement proved at least as militant as the old. Wage councils were reinstituted in 1985, along with the return to democracy (Allen and Labadie, 1994, 15).

A couple of years of fast recovery were once again followed by stagflation. Though the budget deficit was down to 3.2% of GDP in 1990, as of 1994 only the trains and buses had been privatised; a bill for wider privatization passed congress but a petition led to a referendum which killed it. Williamson (1990) cites the lack of deregulation in the labour market, where firing was again almost impossible, payroll taxes heavy and trade unions still strong, as a possible source of the still sluggish growth performance. Authors like Allen and Labadie also suggest that the labour market institutions are likely to render the labour market less efficient.

The evolution of income distribution in Uruguay is less well laid out than for most of the other countries discussed here. It seems clear that a net worsening has occurred since the early 1960s, but neither the timing, the degree nor the characteristics of the worsening are well understood. The data for the Montevideo household distribution suggest a very large increase between the early 1960s (Gini around 0.37) and 1984 (Gini of 0.48). The pattern is not at all continuous however (Table 6), and some of the early 1980s observations have the appearance of outliers. The average of the three figures for the period 1961-62 to 1967 is 0.385 while the average for the three over 1980-84 is 0.441 for an increase of 5.6 points. The reported inequality of earned income among Montevideo households rose very fast over the 1970s, but the sources consulted have no observations for the 1980s.[28] It will be important to get observations for the period since 1985 when the unions were able to get back into the act.

The distribution pattern of the 1970s is of particular importance because of the important policy changes introduced at that time. Most of the evidence, as noted, points to a substantial increase in inequality, and this is the general consensus among students of the issue. The sharp fall in wages during that decade is consistent with it,[29] as is the apparently sharp widening in the earnings differentials across people of different educational levels. Figures presented by Indart (1981, reported in Favaro and Bension, 1993, 286) show a tremendous increase between 1972 and 1979; for example, the earnings ratio for persons with completed university to those with incomplete primary rose from 2.1 (extremely low, by the standards of other countries, making one wonder whether there is a data problem) to 5.6.[30]

Favaro and Bension (1993, 199) suggest that the opening of

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[28] If one believed in the end point observations for the Montevideo distribution of total household income, one would conclude that the net increase over 1963-84 was at least 10 points. If one also accepted the validity of the figures on the distribution of earned income among households (it is not easy to accept both because of their apparently different patterns over time), one would conclude that inequality dipped sharply in the 1980-82 period. 1980 was the last year of fast growth; in 1982 output dropped sharply in 1982 and was dramatically lower again in 1984.

[29] The real wage indexes calculated by the Direccion General de Estadistica y Censos (DGEC) and the Banco Central del Uruguay (BCU) show tremendous declines (around 35-40%) during 1970-78 (Favaro and Bension (1993, 199). The national accounts showed a sharp drop in the (paid?) wage share over 1974-78, from 40.4% to 31.7% (ibid, 275). The authors note that, although the wage series point to immiserization of workers, the other indices (infant mortality, water supply, etc) indicate improvements.

[30] Allen and Labadie (1994, 112) do not report the raw data they use, but their earnings coefficients for Montevideo suggest something between the two earlier estimates cited above. Buchelli (1992) shows a ratio of 4.8 (monthly income) for males with 4 or more years of tertiary education vs. those with completed primary and a ratio of 7.8 for females, very high by comparative standards. The male figure is almost identical to the 1979 figure of Indart, though we have not been able to find whether that source refers to both sexes or to males alone; in either case it appears that education-related earnings differentials may not have changed too much in the 1980s, even after the return of unions etc. This is consistent with Allen and Labadie's reported earnings function coefficients for the decade; these fall but not very sharply.

the economy[31], the reduction in the relative size of the government, and the prohibition of labour union activity all contributed to increasing inequality. They believe that the behaviour of the labour market during previous decades was greatly influenced both by the unions and by the state's participation in the wage boards, in the determination of wage levels, and as employer of a significant share of the labour force. These factors, they feel, weighed in favour of a more uniform wage structure than would have resulted from market forces, created disincentives for more skilled workers and led to considerable emigration by this group. This view, expressed with different details, is also held by Allen and Labadie.[32] The Uruguayan experience is widely interpreted

[31] Though citing the opening of the economy as a possible factor contributing to the increase in income differentials during the 1970s, Favaro and Bension (1993) describe a scenario in which the effect might be expected to be the opposite. "The changes in relative prices observed after 1973 led to an expansion of export-oriented activities, which were relatively more labour intensive than import-substituting activities and which made more intensive use of unskilled labourers. Export-oriented firms were, on average, newer and smaller than firms oriented toward the domestic market. The power of unions and the role of pre-existing wage structures as determinants of absolute and relative wages were thus less important in these firms. Thus, the rapid expansion of the economy after 1973 produced an uneven increase in wages for different labour categories because of the scarcities of different labour skills and their short-run supply elasticities. Highly educated workers benefited." The evidence presented is certainly consistent with the last point. But data reproduced by the authors (Table 12-8, p.286) show that those employed in small firms (perhaps in fact plants?) with fewer than 50 workers) had average wages still just 65% those of workers in large ones (200 and up). The average in export oriented sectors was 76% that for import substitution sectors. To assess this interesting argument, some quantitative evidence of the greater labour intensity of the export sectors would be needed. It appears unlikely that the trade opening would have had a major impact on distribution. If it did, then such positive influences as it had must have been overwhelmed by the other ones, coming from changes in the institutions governing the labour market, from the downsizing of the public sector or from other sources.

[32] They suggest that narrowing of various differentials since 1985 may be the result of the return of the wage councils and unions to action after being suspended during the years of military rule. For Montevideo males, returns to schooling (the coefficient of the Mincerian earnings function fluctuated without trend over 1981-87 (the range was 9.1-9.7), then fell to the range 0.84-0.88 (Allen and Labadie, 1994, 112). For females this coefficient

as one in which, whatever their impact on distribution, labour market rigidities and imperfections have been an important drag on economic growth.

Mexico and the Dominican Republic

Unlike the southern Cone countries discussed above, Mexico and the Dominican Republic did not undertake major policy reforms until the 1980s. In each case the crisis hit in the early 1980s. The Mexican experience is much the more studied of the two, and of special importance given the country's recent entry into NAFTA, making it the first developing country to enter a free trade area with large developed countries. Mexico may have an unusually fast integration into this larger external economy.

Mexico grew rapidly during the 1970s (second only to Brazil), but then ran afoul of its debt build-up and achieved an average growth of only about 2% since 1980, with the 1990s performance still in that range in spite of the major policy reforms of the late 1980s. In contrast to Brazil, whose balance of payments was negatively affected by the oil price hikes, Mexico eventually benefitted from the high price of oil, but by the latter 1970s was attempting to maintain a level of expenditures inconsistent with its tax effort, and turned to heavy foreign borrowing to make up the difference. The debt crisis brought an output decline of about 8%, a serious bout of inflation, and a sharp decline in real wages of about 30% over 1982-86. Students of Mexico are currently waiting to see how the set of policy reforms and the accession to NAFTA will affect the country's performance. The slow growth of the early 1990s has been associated with the large capital inflow and resulting overvaluation of the exchange rate.

Mexico's industrial development was nurtured in a rather typical import substitution policy regime which provided moderate levels of effective protection to manufacturing, and which included a number of sector specific programmes in infant industries which gave increasing emphasis to export targets and to price competitiveness (Ros, 1994, 208). By 1980 the structure of

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dropped in 1982 and rose over 1989-91. The earnings gap between Montevideo and the interior gap from 44% in 1981 to 28% in 1988 before rising again to 39% in 1990. The authors suggest that all of these results are consistent with the greater role played by collective bargaining after 1985, but in fact it is hard to see any break in the trends at this time, and would seem quite easy to explain the compression of differentials by changes on the supply side.

Based on a regression model, they find real wages in all manufacturing to be 7.7% higher in the first quarter of 1985 in a model with a variety of other variables (Allen and Labadie, 1994, 132). An additional 3.6% increase occurred in industries that became fully unionized relative to those that stayed union-free, possibly an underestimate of this effect. How these wage effects might impact on income distribution is, however, not clear.

industrial production and trade was radically transformed vis a vis a few decades earlier. Policies were overhauled in the 1980s in response to the debt crisis, with liberalization undertaken in the late 1980s. Current trends in the trade pattern and in the industrial structure are for the most part a continuation of past trends, this "smooth" transition attributed by some (e.g. Ros, 1994; 209) to a combination of successful import substitution in the past and the fact that the debt crisis and declining terms of trade forced macroeconomic policy to provide unprecedented levels of exchange rate protection which facilitated the adjustment of industrial firms to a more open economy.

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.[33] Alarcon and McKinley (1994) report that the Gini coefficient of total household income (grouped data) rose from 0.43 in 1984 to 0.475 in 1992, most of the increase having occurred by 1989 (Table 7).[34] [35] The five point increase in the Gini coefficient of urban inequality over 1984-89 is comparable to that in many of the other countries discussed here, for which typically the data are limited to those areas or even to the capital city. During this period the main shift in distribution favoured the top decile, whose share in total household distribution rose from 32.8% to 37.9%. (Alarcon, 1994, 87). This share presumably rose more markedly in the urban areas, based on the greater overall increase

[33] Because Mexico's income distribution data have until recently been less complete than those of most other major countries of the region, it is not possible to trace the record back in time with a high degree of confidence. Fortunately the household surveys of 1984 and 1989 do provide valuable and hopefully fairly comparable evidence relating to the crisis period and the first part of the adjustment process.

[34] For households ranked by per capita household income (individual data), the increase for 1984 to 1989, from 0.488 to 0.519 (Table 7), was a little smaller than that just cited.

[35] The evidence that the number of super-rich has increased rapidly in Mexico (two Mexicans were included in Forbes magazine's 1991 list of billionaires, but the 1994 list included 24) may mean that these data understate the increase in inequality, since household surveys essentially never include evidence from that very small group of very rich families. Only after more detailed analysis, involving a wider range of methodologies, will the Mexican story become clearer.

in inequality there.[36]

The increased inequality among households has been significant but not out of line with that observed under similar circumstances in other countries of the region. What is unusual about the Mercian case is the increased concentration among wage and salary earners; for this group the Gini coefficient rose moderately from 0.419 in 1984 to 0.443 in 1989, then leapt to 0.519 in 1992 (Table 8), probably one of the highest Gini coefficients of wage income observed anywhere.[37] The variance within virtually all groups exploded over 1989-92 (Alarcon and McKinley, 1994, Table 4), but most especially at higher levels of education, in the border states, in export manufacturing industries and, surprisingly, among union workers. There was an increase in rural areas but it only made up for the decrease over 1984-89, so all of the country-wide increase over 1984-92 is accounted for by the urban areas. By occupation there was no increase in income variance among "poor" workers (in domestic service, helpers and unskilled labourers in industry and street vendors or urban agricultural workers (Alarcon and McKinley, 1994, 18); at the other extreme, in the "elite" occupations (professionals, mangers, supervisors, etc) the Theil L indexes more than doubled.[38]

In terms of many of the known correlates of wage income,

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[36] As for the completeness of reporting, Lustig and Mitchell's (1994) comparison of the 1984 and 1989 survey suggest a considerable improvement in income reporting coverage between the two years, from 40% in the former to 55% in the latter (their Table 2). The two survey's reported about the same share of wage to total income, while this share was substantially lower in the national accounts for 1989. One wonders about the national accounts validity here. Non-wage income is of different types and so overall it is hard to judge whether the apparent change in reporting would in fact have led to a upward bias in the reported Gini trends. This is clearly possible, but hard to assess. it sounds as if a look at the national accounts may be needed or at how these authors did their calculations.

[37] The Gini coefficient for urban wage earners leapt from 0.37 in 1984 to 0.41 in 1989 and up to 0.528 in 1992. (I presume that these figures refer to wages and not to other income and that the persons in the comparison are those whose main income is from wages.)

[38] Note that these figures are described by the authors as not comparable over time because their maximum value varies with the log of average monthly wages (Alarcon and McKinley, 1994, Table 6) but it seems that the standardized Theil rises by about as much, see their Table 5. In any case the relative variance can probably be read fairly well from this.

differentials actually narrowed over 1984-89 (compositional changes may have shifted things in the opposite direction), while for the later period higher education and elite occupations saw considerable relative increase, though in the latter case this less than offset the sharp decline in the previous period. The category most clearly achieving a relative gain over the two periods was the people with higher education,[39] but the ratio of 3.8 vis a vis those with no education (is this interpretation correct?) in 1992 is not high by international standards (Alarcon and Mckinley, 1994, Table 7).

Table 9 suggests that some of the increase in inequality between 1984 and 1989 did come from widening gaps in wages across traditional segments of the market, in particular between poorer states and others and between border states and the rest; the former lost ground and the latter gained. The rural/urban gap also increased markedly. But several factors were working in the opposite direction, in particular the narrowing gaps between union and nonunion workers and between nontraded goods sectors and traded goods sectors. There was, however, a sharp decline in the share of income in agriculture/livestock and an increase in "profits" from industrial and commercial enterprises.

At least two puzzles need to be solved before the picture of wage structure changes since the early 1980s will be clear. An independent source of evidence (data from the annual industrial surveys) indicates that the earnings gap between non-production and production workers in manufacturing has been widening, but it suggests an earlier turning point from a previous trend towards narrowing to the present one--about 1985. These data show a long trend of declining relative wages prior to the recent survey, from nearly 3.0 in 1965 to a low of about 1.85 in 1985 and back up to close to 2.2 by 1988 (Feenstra and Hanson, 1994, Figure 3). Feenstra and Hanson also make use of a special SECOFI sample of 2354 plants, where they find an increase in relative annual earnings of non-production to production workers of 29% over 1984-90, with 24 percentage points occurring over 1987-90.[40]

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[39] The sort of increase in wage variance observed in Mexico during 1989-92 suggests that human capital as traditionally measured has much lower value now than before; it explains a considerable smaller share of variance, though the implicit rates of return may not be lower since the gaps have widened. It clearly means that among the people with higher education some are now doing astonishingly well; it will be important to sort out who these people are.

[40] It is worth noting that both the household survey data and the industrial survey data point to a dramatic increase in wage differentials within a three year period; the problem is that for the former it is 1989-92 and for the later 1987-90. (We have not seen the industrial survey figures for 1991-91). Assuming both sources do have a story to tell, it will be important to find out

The second puzzle involves the relationship between the distribution of earner income and that of household income. If we accept that income dispersion among paid workers increased dramatically over 1984-92, and especially over 1989-92, why has this not shown up in a larger increase in the concentration of household income? More puzzling perhaps is the fact that the pseudo-Ginis of wage income among households show only a modest increase over 1989-92 and actually fall a little over 1984-89 (Table 7).[41] On the other hand the pseudo Gini for profits from industrial and commercial enterprises and from services rose dramatically over 1984-89, fuelling the overall increase in household inequality observed during that period, a story similar in kind though more striking in degree to that reported below from Colombia. If all of the data are reasonably accurate, the implication appears to be that the sharp widening of dispersion of wage income among earners has been largely offset in the household distribution by the fact that a considerable share of the individuals moving up in the earnings hierarchy belong to families which are not high in the family distribution. This important question warrants further probing.[42]

The confusing Mexican story lends itself to a variety of policy-relevant interpretations. Though the stresses of the crisis beginning in 1982 were severe, and though certain income gaps (e.g. between poor and non-poor states) did widen, the overall increase in inequality was modest, if we trust the household distribution data. But the sharp widening of wage dispersion in the 1989-92 period, and the evidence of widening gaps between more and less skilled workers call for analysis. Has increased openness had something to do with the latter expansion? Has the declining importance of traditional labour market institutions played a role? Where does technological change come into the story? Such a large and sudden increase in wage dispersion would seem hard to explain by something like technological change alone, although it could be

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why the increase was so concentrated in a short period of time.

[41] Whether judged by the small change (a decline) in the log variance of earnings of wage workers (Table 8) or the constancy in the pseudo-Gini for wages in the household income distribution (Table 7), the wage structure appears not to have been behind that increase in overall inequality, not even in the sense of the wage share having fallen, since according to this evidence it did not.

[42] Should one, given the very different stories being told here according to which distribution one looks at, look into the mappings among distributions and consider using a distribution by adult equivalents? (The next draft of the Berry-Tenjo paper on Colombia will include results of such an exploration.) Also it would be very interesting to know what happened to the distribution by consumption.

interacting with other factors.

Feenstra and Hanson suggest that the widening wage gap by skill may be due to the inflow of capital. In their model a movement of capital from the North to the South (or more generally a higher rate of investment in the latter) lowers the relative wages of unskilled workers in both countries. (Whether they will be worse off in absolute terms depends also on the impact of the capital movement on the relative prices of goods to wages.) The key idea is that the activities transferred from the North to the South when capital moves in that direction will be more skill-intensive than the average of those formerly found in the South but less skill intensive than the average of those formerly found in the North. Mexico's FDI boom of the late 1980s was large in relation to the existing capital stock, hence provides a good laboratory test. As predicted in the theory, the relative wage movement in Mexico parallels that observed of the U.S. In Mexico the increase in the skilled/unskilled wage ratio was greatest in the border region (50% for both hourly and annual wages --Feenstra and Hanson, 1994, 33).

Liberalization of trade (begun in 1985) is considered complementary with the foreign investment flow and the authors do not try to disentangle the effects of the two phenomena. They doubt that the relaxation of minimum wages, begun in 1983, was important in the widening gap. The real product minimum wage fell by 30.8% over 1984-90. Bell (1994) finds no evidence of a negative correlation between minimum wages and employment, suggesting that the minimum wage decline was not behind the fall in relative wages of production workers.

At least two studies have addressed the relationship between trade liberalization and employment and/or wages, using models involving regressions estimated with pooled cross-section and time series information (true?). Feliciana (1993) finds no impact of liberalization on industry-level employment. Revenga (1994), however, uses firm level data and obtains a negative and significant coefficient for the impact of the tariff (or tariff equivalent) on employment. She includes a wage rate in the employment equation, unlike Feliciana (1993). The wage equation estimated suggests that lowering tariffs raises real wages; wages of non-production workers do not appear to be very responsive to changes in protection levels whereas those of production workers do (Revenga, 1994, 18-19). The author finds this positive effect on wages puzzling, and concludes that it may reflect changes in the composition of labour towards higher-skilled workers. This line of study needs further work to verify that the equations have been well specified, and that longer run effects have been adequately picked up.[43] If the result holds up that employment effects are

[43] Cross-section analysis is likely to miss some of the impacts of trade, as suggested by the fact that Revenga's results do not seem consistent with the fact that there has been little change in the national ratio of non-production to production workers though

modest[44], and more especially that the average wage impact is positive (though she does not claim this strongly), then one may conclude that the main worrisome impact of liberalization is that on income distribution. It would be interesting to "blow" her results up to a global level to see whether they might account for much of the worsening which has taken place.

The Dominican Republic's economy grew rapidly until 1977. The external crisis hit in the early 1980s and led to an adjustment program composed of fiscal, monetary and exchange rate elements, that continued until 1986 by which time the adjustment had taken place and growth returned. The new 1986 government stimulated the economy through an ambitious programme of public investment, in pursuit of which it shrunk real current expenditures, contributing to a fall in the real wages of government workers (Sanatan and Rather, 1993, 54). Inflation broke loose in this period, after relative stability up until 1984.

Sanatan and Rather (1993, 55) report that after a small decline in inequality between 1976 and 1984--the Gini apparently falling from 0.45 to 0.43, there was a sharp jump to 0.51 in 1989. The authors blame the inflation, among other things for the deterioration.[45]

Colombia and Ecuador

Colombia, Ecuador, and Peru are among the relatively late-comers to the market-friendly policy package, both doing so only in the 1990s, and Colombia has the distinction of being perhaps the only country to adopt the package even though it was not under severe pressure of circumstance to do so. It is also special in that the distribution record of the previous 15 year period was a positive one. With respect to the labour market effects of the apertura and other policy reforms, the evidence is mixed, and the period involved is in any case too short to provide definite answers, though most of the effects of the gradual liberalization underway from the mid-1980s may already have been felt. 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

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there are substantial changes across regions (Feenstra and Hanson, 1994, 27).

[44] The paper finds that a 10 point reduction in tariff levels, such as that experienced between 1985 and 1'990 is associated with a 2-3% reduction of employment, though for production workers the elasticity is 0.27 (18).

[45] It would be important to have more recent data to see if the high Gini coefficient reported for 1989 was a blip.

of income. 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 could become comparable to extreme cases like Chile and Argentina.[46]

Colombia's experience over the 1970s-1980s appears to have been unique within the region, since a good 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. 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, Mendez and Tenjo, 1994, Table 2.1). 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. In the early 1990s (through 1994) has been a little above average for the region, at about 3.5% 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

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

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% (Berry and Tenjo, 1995, 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 (Berry and Tenjo, 1995, 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). Industrial growth was slow and unstable during the decade. By the end of the 1980s, slowing growth and accelerating inflation were 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 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. It 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.[47] 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 then rose to 1.3% in 1993 as imports surged. The average tax[48] 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% (Berry and Tenjo, 1995, 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 reserves grew. 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

[47] 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.

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

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). After a further delay, 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 1993-94. 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.

As noted above, it is fairly generally accepted that income inequality decreased in Colombia between the early 1970s and the 1980s, both in urban areas and for the nation as a whole, and both for earners and for households.[49] 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 considerable improvement at this time (Ministerio de Agricultura y Departamento Nacional de Planeación, 1990, 228). 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[50] 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

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[49] 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).

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

10).[51] 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 Berry and Tenjo, 1995, 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. Among persons, all deciles lost except the top one, whose share jumped from 37.3% to 42.5%, to nearly recover the 1976 level (Berry and Tenjo, 1995, 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.[52]

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[51] 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.

[52] Other authors have reported quite different trends in urban inequality from those presented here. Thus the series reproduced in Table 10 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). (Another source, presumably drawing on the estimates using this methodology, reports

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 11). Note also that business income has become more important over time at the expense of labour income.[53] 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 predominant in the middle of the distribution (Berry and Tenjo, 1995, 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. The reversal of the former positive trend in the level of inequality mainly reflects the increasing concentration of business 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, 1994). 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

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a decline in the urban Gini from 0.47 in 1988 to 0.44 in 1992 -- Banco de la Republica, 1994). 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 this discussion. The differences in methodologies between these differing estimates probably explain an important part of the difference in results (Berry and Tenjo, 1995, appendix).

[53] 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.

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;[54] 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.

Although the available evidence suggests that Colombia's experience seems to fall clearly in the category of those cases in which distribution was improving prior to the economic reforms and then worsened significantly, several caveats and additional twists are worth noting. First, it is possible that the introduction of the <u>Salario Integral</u>,[55] together with any impact it has had on the correctly measured distribution of income and other labour market outcomes, also created a bias towards the observation of increasing inequality among labour incomes. Some evidence is consistent with this hypothesis, though as noted above, what dominated the movements both in total monthly income and in its concentration was the business component (Berry and Tenjo, 1995). Second, it seems likely that the use of nominal price measures of inequality understate the increase since 1990 since it appears that the relative prices of luxury goods have fallen with respect to those of necessities. In his analysis Fresneda (1994) distinguishes three factors affecting the trend in poverty incidence over 1978-92: 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 last figure implies a faster increase in the price of the bundles of

[54] 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.

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.

[55] The system by which a single payment replaces the complex system of base wages and fringe benefits which was in place before the labour market reform of late 1990 (see Berry and Tenjo, 1995).

goods consumed by the poor relative to the rich over this period as a whole; it would not be surprising if the increase was concentrated in the period of "apertura".

Ecuador's experience with adjustment and liberalization is only now under serious study by C. Larrea. His initial findings suggest that a sharp increase in urban inequality occurred between 1989 and 1991, reflected both in the distribution of income among recipients and that among households. In the latter case the Gini rose from an average of 0.412 in 1988-89 to an average of 0.461, the share of the bottom decile fell from 2.15% to 1.53% while that of the top decile jumped from 31.2% to 34.9% and that of the top 5% from 20.35% to 23.0%. The country embarked on import liberalization in 1990 and imports boomed.

Costa Rica: Reform Without Widening Gaps?

Judging by the evidence available and reviewed above, Costa Rica may be the only LAC country which has undertaken the market-friendly set of reforms without suffering a significant widening of income differentials--say an increase in the Gini coefficient of five percentage points or more.

Costa Rica brought a tradition of social and political stability to the trials of the 1980s, and came off a strong post-war economic performance in which average GDP growth exceeded 6% over 1950-80. A good social service system gave the country the highest life expectancy in Latin America, with the exception of Cuba, and the absence of an army allowed it to allocate more resources to civilian uses. Growth in the 1970s was fragile, however, based on an expansionary monetary and fiscal policy, a fortuitous increase in coffee prices in 1976-77 and much investment financed by foreign savings. There was a continuous expansion of public sector employment (Gindling and Berry, 1992). The second oil price hike, rising interest rates and the world recession brought a sharp 14% decline in GDP over 1980-82, a 23% fall in income per capita and a 25% cut in real wages. At the depths of the trough a new president with ties to labour and (through his party) to previous social legislation took office, buoyed by a high level of public support and confidence. Over the next few years an adjustment program was put in place, including tax increases, weakening of the power of unions (union strength had lain mainly in the public sector), privatization, and new incentives for exports, especially non-traditional ones. It has been relatively successful in reestablishing a decent growth performance, about 4% per year (through 1992) after returning to its pre-crisis GDP level in 1985. Policy changes were less extreme, more gradual and less erratic than in Chile. In contrast to both those cases (especially Chile), real wages did not long remain low, as the indexing mechanism which linked nominal wage increases to past inflation was left in place with only mild modification so that when tightened monetary and fiscal policy brought inflation quickly to heel real wages moved back to or near their previous peak in only three or four years.

The national unemployment rate also returned quickly to its normal range, around 5%. Overall this must tentatively be counted one of the more successful adjustment performances in the region, in the sense of reestablishing growth without a lengthy period of significantly higher poverty than before.

Although Costa Rica's distribution record is somewhat ambiguous because of data problems, it seems likely that it has not suffered a significant worsening of inequality over the period from before the crisis (late 1970s) to the present. The data (Table 13) suggest a marked worsening of the household distribution between 1985 and 1987 (over 4 percentage points in the Gini coefficient) at about the time that the export push begins in a serious way, but this may have been due to the change in the sample and the questionnaire--an issue obviously requiring further analysis.

Income distribution in Costa Rica has traditionally been unequal, but substantially less so than in such extreme cases as Brazil. Estimates of the Gini coefficient of household income (with households ranked by income, not per capita income) have typically fallen in the range 0.43-0.50. Trejos compares 1971 and 1983 data,[56] reporting that the Gini coefficient rose from 0.44 to 0.47, including increases in both urban and rural regions.[57] If a worsening did occur,[58] we do not know from this comparison whether it was during the 1970s or during the crisis of the early 1980s. The only reasonably comparable household distribution estimates from just before and after the crisis (which set in 1980) refer to the labour incomes of families headed by paid workers; in 1979 the Gini coefficient for this group was 0.45, in 1982 0.42 (Table 13).

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[56] Most earlier estimates are insufficiently comparable with those of 1983 to provide much of a clue as to trends; Trejos chose 1971 to maximize such comparability.

[57] CEPAL (1987) reports a Gini coefficient of 0.43 for 1971, citing Cespedes, 1973, the same source cited by Trejos and Elizalde (1986). Trejos and Elizalde (1986, 89-90) highlight the markedly higher share of the top decile (overall, but especially in urban areas--37.1% to 32.9%) and the widening gap between it and the 2nd decile. But the top decile had dropped back again by 1986 to near its 1971 share.

[58] The difference between 0.43 and 0.45 is small, and may overstate the true increase in inequality since income coverage may have been less in 1971 than in 1983.

For 1971, CEPAL (1987b, Cuadro 4) notes that the income reported in the survey was 21.3% below the corresponding national accounts figure, 16.5% below disposable income and 14.1% below consumption. In 1983 the income reported was ____ below disposable income and 2.4% above consumption. This differential in reporting, which usually involves weaker reporting of capital incomes, could explain a 1 or 2 percentage point difference in the Gini Coefficient.

Most of the bottom deciles showed significant gains in their income share, with the exception of the lowest.[59] The sharp drop in real wages in the formal and public sectors would be expected to lower labour income most sharply for the deciles near the top of the distribution, consistent with the significant share declines for deciles eight and nine over 1979-82. As those incomes rebound in later years the shares move back up again. The behaviour of the share of the bottom decile or so is not clear. The 1977 survey showed lower shares than earlier or later ones, but it remains to be seen whether this was due to data inadequacies.[60]

As for the post crisis period, the recent study by Trejos and Sauma (1994) provides the most reliable evidence, though like all sources it suffers the uncertainties due to a change of data collection practice between 1986 and 1987,[61] doubly unfortunate since the process of economic liberalization was just getting underway at that time. To achieve the maximum of data comparability over the period since 1980, these authors decide to use the household surveys, and to limit the analysis to primary monetary income in wages and business income of the self-employed[62] (Trejos and Sauma, 1994, 1)[63]

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[59] Severe under-coverage of income in 1982 is explained by CEPAL as being due to the accelerated inflation of that year (nearly 100% vis-a-vis 1981). So this source may be creditable in spite of the high figure.

[60] Altimir (1984) reports a decline in the Gini coefficient of wage and salary income of paid worker households (households ranked by per capita income) from 0.376 to 0.346 between July 1979 and June 1982 with significant share increases for each of the bottom deciles--from 2.0 to 2.6 for the lowest deciles.

[61] Both the Household Survey design and the staff carrying out the survey and its processing changed between 1986 and 1987.

[62] Though the authors refer to independent workers in this context, it appears that in fact they mean the self-employed, since data are presented for employers in their Cuadro 2 and the rest of the discussion seems to suggest this.

[63] The income concepts reported have become more complete over the years. Transfers were included in the survey from 1987 and capital income from 1991. Income in kind is included in the surveys but not computed by Trejos and Sauma for paid workers, though it is partially included in the case of business income since 1987.

To improve comparability over time the authors work with a subset of 90-92% of the families in the survey, those with an employed or unemployed head and if non-participant, having positive primary income. At first glance it would appear that the exclusions might affect distribution a lot, since capital incomes are not included. But those incomes are presumably very badly reported in

These authors date the crisis as 1980-82, the period of stabilization with some moves towards adjustment as 1982-86, and the adjustment period as post-1986. They report that inequality fell during the crisis, both overall and in urban areas, and suggest that it may reflect the relative success of the minimum wage policy designed to protect those with low incomes. Some further improvement in distribution took place through 1985, followed by the big increase in measured inequality over 1985-87, which could however relate to the change in methodology of data collection. Alternatively it could reflect the first effects of the apertura. After 1987 the tendency of inequality is down.

With Gini's usually in the range 0.35-0.40, the distribution of income among earners appears to be substantially less unequal than that among households when all sources of income are included in the latter estimates; problems of comparability are probably also somewhat less severe. Figures from CEPAL's (1987b) review of distribution data suggest little change over 1976-80 for the distribution among paid workers, possibly a mild worsening over 1980-1982, and then a rather marked improvement in the next two years. Our estimates of distribution among workers (paid or

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any case. There is also a problem of increasing non-reporting, rising from 4% of the employed in 1980 to 17% in 1993, and for families from 2% to 20% (Trejos and Sauma, 1994, Cuadro 2). It all happens between 1980 and 1985 after which these ratios fluctuate around the high levels cited. For the self-employed and employers the rates are very high, for the latter 30-40% for most years since 1985. All figures were much lower before that. This problem was confronted by using imputations based presumably (not quite explicit here) on an earnings function. Some additional sensitivity analysis might be worth while in this context, since otherwise the estimated trends over 1980-87 could be suspect.
(Gindling-Berry found that the share of employees not reporting incomes rose from a range of about 2%-5% over 1976-79 to 15-30% over 1981-86 before falling to under 10% in 1987-88. Their analysis of the characteristics of these non-reporting employees does not suggest a higher degree of non-randomness, but one cannot demonstrate that the trends in inequality were unaffected by fluctuations in the share who did not report. Incomes from second jobs seem to be very ill reported, so a valid series on household income distribution might look rather different from anything shown in the tables used here.)

The survey data were adjusted to that of the population censuses with appropriate factors, in order to compare reporting coverage with that of the national accounts. This confrontation suggests variable coverage, increasing considerably in all categories over 1980-87, then falling in each category and for overall primary income (Trejos and Sauma, 1994, Cuadro 3).

The authors describe an adjustment to 81% of the national accounts primary income figures, to allow for capital income of corporations, etc.

unpaid) (Table 13) reveal the same pattern through 1986, whose Gini coefficient of 0.36 is below the pre-crisis figures, followed by the same sort of abrupt worsening in 1987 as characterizes the household estimates.[64]

As for the period of macroeconomic crisis, the earner data indicate some worsening, while the more problematic household data suggest the opposite. The marked increase in non household heads as a share of employed workers would by itself produce some worsening in the earner distribution, but might in fact improve household distribution.

Given its importance as a possible exception to the pattern of increasing inequality in Latin America, Costa Rica's distributional history warrants further scrutiny and analysis in an attempt to overcome the problems of data non-comparability. The statistical regime change between 1986 and 1987 could have produced the observed worsening at that time; further, the combination of the high and varying share of families not reporting incomes and the need to focus only on primary labour and business incomes in order to achieve a modicum of comparability over the 1980s leaves open the possibility that the real distribution trend was substantially different from that estimated by Trejos and Sauma, the most definitive study available at this time.[65]

These qualifications notwithstanding, the best guess at this time is that there was no significant, lasting impact of the post-1986 reforms on the level of inequality in Costa Rica. Trejos and Sauma report Ginis of essentially the same magnitude in 1993 as in 1980 (Table 13). The nearly three percentage point decline between 1980 and 1985 is balanced by the four point increase over 1985-87. Since there is some likelihood that the latter increase is illusory, there is a corresponding possibility that this Gini (i.e. the Gini reflecting these families and the types of income included) actually fell between 1980 and 1993, and that it was about constant between 1985 and 1993.[66] The Gindling-Berry estimates of Ginis for the earnings data show a more abrupt increase between 1986 and 1987, but they too show only a small net

[64] In both 1987 and 1988 the share of the bottom decile is very low (1.5%) and that of the top deciles higher (at around 34%) than for year since 1975.

[65] One hint that this may be the case comes from the fact that the estimated Ginis using the set of families and the forms of income they used are much lower than most other estimates of household inequality.

[66] Note that these Gini coefficients are close to those of Colombia for wage income, but assuming that a significant amount of business income is indeed included in the Costa Rica data (Trejos and Sauma do not show the distribution of households by activity of head) than the latter is considerably less.

increase between 1980 and 1988. While not impossible, it therefore seems unlikely that a correctly measured distribution of household income would show an increase of, say, five percentage points from the pre-reform period or perhaps the pre-crisis period and the post-reform period. If this is the case, Costa Rica stands as the sole exception to the otherwise universal tendency for such reforms to be associated with increased inequality of that magnitude.

What might lie behind this unusual record? Gindling and Robbins (1994a) throw some interesting light on this question, at least in the context of the earnings distribution among individuals. Their various measures of salary and wage inequality show a steep fall between 1976 and 1980, an increase during the recession, a fall in the recovery of 1982-85, then a more gradual fall from 1987 to 1993.[67] In the problematic period 1985-87 there was a very sharp increase. If that increase were accepted as real, the variance of monthly salaries over the whole period 1976-93 would have declined slightly; the variance of wage earnings, which in any case increased much less during 1985-87, shows a clear and very marked decline.

Gindling and Robbins decompose the observed changes in earnings inequality into those related to observables (i.e. to the distribution of observable determinants of incomes, including education and experience), changes in the prices of those observables, and changes in non-observables. Over the period as a whole the observable quantities component showed an upward trend, i.e. its effect was to increase overall inequality within each of the two categories of workers. For salaried workers the price effect shows a downward trend, not interrupted in 1985-87, which seems to level off from 1988 but resume again in 1992 and 1993 (Gindling and Robbins (1994a, Figure 2). The time profile of the coefficients of education and experience are similar to those for inequality--a sharp reduction over 1976-80, fluctuations, and then downward but more slowly from 1987 (Gindling and Robbins, 1994a, 25). The increase in university enrolment over 1970-80 was dramatic, that between 1985 and 1990 considerably smaller. The deceleration (or termination) of the fall of returns to education may also be due to changes in the pattern of labour demand. After 1985 little reduction in inequality occurred, though the increase in relative supply did continue, suggesting that "demand may have become skill-based after 1985, coincident with the gradual implementation of trade liberalization policies in the form of devaluations and reduction of tariffs" (Robbins and Gindling, 1994a, 7)

One broad interpretation of the Costa Rica story is that it shares many features of those for other LAC countries but differs in degree. For example, while the earnings differentials by skills

[67] Results are presented only for salaried workers, but the authors undertook the same analysis including the self-employed and note that the results were similar (Gindling and Robbins, 1994a, 12).

does cease to fall measureably, it does not increase sharply as in the case of Chile.[68] And thogh the variance of salary incomes rose for a couple of years after liberalizaiton began, it then continued its downward movement.

Other countries: Peru, Brazil, and Venezuela

A number of country expereinces have not been reviewed in the above discussion, either because the statistical evidence on their income distribution trends is weak, or because their particular histroy is less revealing of the relationship between economic reforms and distribution. It is nonetheless worth looking quickly at the evidence with respect to their patterns of distributional change.

Peru, always one of the poorest countries in Latin America, had followed an export-led growth strategy until the late 1950s, and had been one of the slower growing countries of the region. It then moved to an ISI approach, using levels of protection for manufacturing activities which were high even by regional standards (Paredes, 1994, 217). Initially this approach led to high rates of both industrial and overall growth, but the increasingly protectionist steps of the late 1960s and early 1970s introduced strong anti-export and anti-agricultural sector biases. Compounded by a sharp deterioration of the terms of trade and serious macroeconomic mismanagement, this led to stagnation and then a plummeting of economic activity, and produced a strong political consensus that the country needed to liberalize its economy (Paredes, 1994, 217).

Given the small size of this country and its market, and the fact that the easy ISI industries had expanded to their limits by the mid-1970s, a greater recourse to exports was the only logical outlet. But the country did not pursue this objective in an organized fashion; the export booms and the episodes of active export promotion have, rather, been short-term policy responses to

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[68] Note that, after the possible spurious increase between 1985 and 1987, the log variance of salaries continues to rise between 1987 and 1989 (that of wages does not). If this increase reflected the sort of "stretching out" of variance among higher earning white collar workers which has been observed in other countries of the region in the wake of economic reforms, the striking thing here is that it lasted only a couple of years and was fairly quickly reversed.

Note however that the pattern emerging in Table 1 of Robbins and Gindling (1994b) shows a recent widening involving only university, not secondary-trained people. If true, this seems very consistent with the Chilean story. But with all university lumped together (incomplete and complete) it could also be an artificial product of the fact that average years of university (for those with at least some) was rising.

balance of payments crises. Manufactured exports, most with a high natural resource content, showed promise when they enjoyed a boom between the mid-1970s and 1980, rising quickly from 4% to about 20% of output (Paredes, 1994, 234). But by 1988 that share was back to 8%, due substantially to Peru's failure to devalue in a way sufficient to maintain competitiveness. The real exchange rate was also highly variable during this period.

In their efforts to confront the country's economic problems and challenges, Peruvian governments have oscillated between forceful state intervention and reliance on the market, with disastrous economic and political consequences. The well meaning Velasco military government (1968-75) continued the traditional discrimination against food agriculture and was seriously inadequate in policy management and execution. The liberal policies of 1981-82 had a dramatic impact on industry. The Garcia administration was noted for its lack of realism. Among the many stabilization and liberalization programs in Latin America, the Peruvian version (beginning in 1990) has been the most extreme (Sheahan, 1993). Results have been mixed. Adoption of a floating exchange rate and the elimination of controls on capital movements under conditions of tight liquidity appreciated the currency, blocking exports and stimulating imports.

Peru has thus registered one of the poorest growth performances among Latin countries, combining a mediocre record in the 1970s with a disastrous one since then. Although it is not clear whether distribution has changed significantly (for want of conveneiently comparable data at tdiffderent points of time[69]), the real incomes of workers have suffered more than in any other major country, and these started at a low level to begin with.
As one of the category of recent (1990s) reformers, it is not surprising that Peru's recent distribution record is too hazy for anything to be drawn from it at this time.

Brazil's macroeconomic story involves the well-known history of deficit finance and inflation, and the heavy borrowing during the 1980s which set the stage for this country's debt crisis. On the trade side the heyday of classical ISI lasted only until the mid-1960s (Fritsch and Franco, 1994, 105) and was marked by a dramatic decline in the import ratio, related both to the size and potential self-sufficiency of the country and to policy. The second period, which lasted until the first oil shock, was characterized by a slow import liberalization, decisive export promotion and a stable real exchange rate, with the result that both import and export propensities underwent noticeable recoveries. In the third (ongoing) period there has been a return to import-repressive policies, but accompanied by the reinforcement of export promotion instruments. Broadly speaking, the policy regime has been mixed, somewhat like Colombia's until 1990. Brazil has not, as of this

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[69] For a useful recent review of the distribuion evdience see Rodriguez, 1994.

time, embarked on the major set of reforms recently implemented in Colombia.

Brazil's fast growth of the pre-1980 period was not capital-saving and relied on a high investment rate to fund some of the more capital intensive industries. During the 1970s, the increased oil-import bill contributed to a need for foreign exchange. Brazil's subsequent borrowing was not unreasonable given the low cost of capital at the time and the feasibility of the plans for its use, though the country did not help its fiscal situation or the balance by payments by keeping the price of oil and substitutes well below the world level.

Brazil's current stabilization program is very recent (1994) and although important structural reforms have been undertaken--tariffs often over 100% in the late 1980s have been cut to a maximum of 35% and an average of just 14% and the restrictions on foreign investment greatly reduced--the whole process is too new to have generated evidence on the possible impact of economic policy reform. The country eschewed major policy reforms during the 1980s although its economic performance was very erratic. Between 1980 and 1983 per capita income fell by about 15%, after which it recovered fairly strongly through 1986, then slipped again; there were bouts of extreme inflation and a major heterodox attempt to bring it under control. Income distribution, which worsened somewhat between 1960 and 1970, has shown no trend since then. Through 1987 the reported Gini coefficient for the distribution of income among Brazilian households (ranked by total household income) never moved outside the range 0.584-0.597 while the share of the bottom 50% of the population fluctuated within the range 12.2-12.9% (Hoffmann, 1989a and 1989b). Since then the indicators of inequality have been somewhat less stable, but no net change has been registered.[70] Some social indicators continued to advance during the 1980s, albeit less rapidly than before. World Bank data on life expectancy, infant mortality, food production per capita and the share of the population with access to electricity all show improvements between 1980 and 1987, whereas the share with access to safe water fell. Some improvements may be the result of past investments; low levels of current investment will take their toll in the future.

Brazil's growth performance during the 1980s was comparable to Colombia's, and the level of development not far from Colombia's (per capita income somewhat higher but most social indicators about the same), leading one to ask why that country did not see the narrowing of earnings differentials and accompanying improvements in income distribution observed in Colombia. One hypothesis is that the high prominence of the public sector contributed to keeping up

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[70] Fluctuations in the measured Gini coefficient have been associated with the rate of inflation and the real exchange rate, and the Gini did reach historically high levels around 1990-91 but has since returned to the normal range (see the data presented in Cardoso, 1993)

the wages of high income occupations.[71] Another is that the capital intensive character of industrialization played a role.

Per capita income rose rapidly in Venezuela during the 1970s due to the terms of trade shift as oil prices jumped up; though GNP per capita rose by just 11% (or 1% per year), gross national income per capita increased at 3.4% per year and per capita consumption jumped by 68% (5.3% per year). Between 1980 and 1983, GNP fell by 10% but gross national income by a much sharper 21% and gross national income per capita by 28%, the steepest decline of any country in the region. Despite very limited grwoth through 1986, per capita consumption remained 36% above the 1970 level. One special feature of Venezuela's 1980s problems was thus the very sharp decline from earlier high levels of income and consumption.[72] Another was an econmic strucutre which makes balance of payments adjustment particualrly difficultu.[73]

The fall in oil prices in 1986 deepened the crisis but the government, elected in 1983 and facing the electorate again in 1988, opted against prudent economic policy in favour of budget and trade deficits. By 1989 the economy was in crisis and the government announced a radical economic reform, supported by the International Financial Institutions (The world Bank and the International Monetary Fund). Effects were quick--both fiscal and trade equilibria were brought to heel, though GDP fell by 8% in 1989 and inflation reached 81% that year before ceding in 1990. The urban riots of February, 1989 were followed by an ambitious package of social policy measures. Higher oil prices in 1990 (due to the Iraqi invasion) took care of the balance of payments and allowed a resumption of growth. In 1991 an ambitious expansion program in oil generated strong growth than continued into 1992, and Venezuela was coming to be viewed a case of successful adjustment under democratic government and the darling of the international financial organizations. But macroeconomic imbalances, helped along by a 30% fall in the terms of trade since 1990, brought the

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[71] A hypothesis communicated to me by Ricardo Paes de Barros.

[72] Poverty has unequivocally increased in Venezuela to the point where it now affects a third of the population.

[73] Morley (1994, 45) notes that this is a country in which the poor are likely to be hurt by devaluations in their role as consumers but not helped in their role as producers. The output of the major export is unlikely to be influenced by the exchange rate (being mainly determined by quota) and the price of imported food is pushed up by devaluation; its relative price rose very sharply, by 89%, over 1980-89. Adjustment to balance of payments deficits are likely to be long, "require extended periods of recession, and generate bitter disputes over real wage reductions."

expansion to a halt and led to another cumulative fall in output (of 8-9%) in 1993 and 1994 (ECLAC, 1994b, 39).

Household income data, available on a systematic basis since 1976 and reporting on monetary income from labour and self-employment (CEPAL, 1988, 12) suggest a lower level of inequality than in most other Latin American countries. The Gini coefficient of household income has varied within the range 0.39-0. 44, and the share of the bottom decile of families from 1.55 to 2.0%. There was a gradual decrease in all the household inequality indicators over 1976-81, in which the Gini coefficient, for example, fell from 0.44 to 0.39. In the year of the greatest economic decline, 1983, the Gini stood at its lowest level, 0.39. It then rose to 0.43 by early 1985, as per capita income eased down a little further, but by late 1987 it was back at about the same level as in the early 1980s. Overall the picture was one of striking stability.

Marquez et al (1993, 151 and Table 5.2) report a worsening of distribution between 1981 and 1990, raising the possibility that it occurred just at the end of the decade, and may have been related to either to the recession of 1989, to the adjustment, or to the liberalization. The estimated Gini coefficient of total household income rose from 0.398 in 1981 to 0.418 in 1990, but the more relevant Gini of "per capita income of members of the household--rose from 0.397 to 0.444.[74] Anomalies in the figures presented detract from the confidence which can be placed in these figures.[75]

4. Lessons, Challenges, Implications and Questions

Such confidence as old school Latin American leaders had in the future of their countries a couple of decades ago evaporated in the trauma of the debt crisis and its painful aftermaths. Though the record of growth and poverty reduction over 1950-1980 was a strong one, much ground was then lost in the next decade and poverty indices have increased seriously. Now the countries of the region are launched in a different, more outward-oriented and less interventionist economic model, which shows clear signs of working well in some countries but has been slower than might have been hoped in allowing the region to recover its former growth; ECLAC's

[74] The authors also effect a classification of the households into four socio-economic groups, reporting that between 1981 and 1990 the lower class group lost 1% of GDP, the lower middle lost 4.4%, upper middle 0.6% and the upper gained 5.9%.

[75] While the text seems to reflect understanding of the possible differences between the two and the fact that families will be differently ranked (Marquez et al, 1993, 147), it is not explained why the 1981 indicators are the same for both (this clearly suggests that something is wrong), nor whether the unit in the second case is the person or the family. In the second figures the increase over 1981-89 is sharp with some recovery in 1990.

1994 estimate of GDP expansion for the region is 3.7% (ECLAC, 1994b, 38). Unless growth accelerates quickly in the next few years, and in some countries even if it does, it will once again be overoptimistic to assume that growth will prove an adequate antidote to poverty. The reasons are summarized below.

1. Distribution has worsened significantly, if not dramatically, in most countries undertaking market-friendly economic reforms.

Slower than expected growth is one source of dampened hopes. But the main one is the accumulated evidence, reviewed above, that the economic reforms have been systematically associated with severe accentuation of (primary) income inequality; in the LAC region the only probable exception to this generalization is Costa Rica. Insufficient data are available to judge whether the distribution of secondary of income (after allowing for taxes, transfers, public provision of goods) has moved differently from the primary distribution or not. Effective targeting has made a positive impact in some cases, but the reduction of government activity may have had a regressive effect, as may the changes in tax systems toward the greater use of indirect taxes. This question deserves much more study than it has thus far received.

The country experiences reviewed above suggest that the "normal" observed increase in inequality accompanying reforms is 5-10 percentage points as measured by the Gini coefficient of primary income (Table 14). Though published evidence detailed enough to permit such comparisons is available on only a subset of the countries, it seems likely that this increase is typically the result of a jump in the share of the top decile, most of this accruing to the top 5% or perhaps to the top 1% (as in the cases of Colombia and Ecuador households) while most of the bottom deciles lose.[76] In the three Colombian cities analyzed by Berry and Tenjo, the ratio of the income of the top 5% of households to the bottom decile rose from 13 fold to 20 fold. The share of the bottom decile (the biggest loser in percentage terms) fell from 1.75% to 1.45% of total recorded income. At a moderate GDP per capita growth rate of 2% per year, it will require nearly 10 years of distribution-neutral growth to recover the "lost ground" implicit in this income share decline. If per capita income growth could be accelerated to, say, 5%, the recovery period would be only four years. In Ecuador, where the percentage decline for the bottom decile was sharper (from 2.2% to 1.5%), nearly 20 years of distribution-neutral growth at 2% per year per capita would be needed and about eight years at 5%. It must be remembered that these estimates are imprecise, and probably include some biases towards an overestimate of the increase in inequality and some in the opposite direction. If the true figures were one-half of those reported here, the overall importance of rising inequality would not be too worrisome, as long as one could be reasonable confident of good growth performances in

[76] For Colombia, detailed data are presented in Berry and Tenjo, 1995, Tables 4A and 4B.

the coming years. If the true increases are twice those reported here (also possible), then the phenomenon would be of threatening proportions.

Although no one would argue that the typical Latin pattern of economic expansion with extreme inequality is anywhere close to ideal, growth of that sort is certainly better than no growth at all when it comes to poverty alleviation. Hopefully more equitable growth can be achieved at some point in the future: indeed, some evidence suggests that a continuation of the earlier growth patterns would soon bring a number of Latin countries to a phase of declining inequality. The sharp increase of unskilled real wages in Brazil during the "economic miracle" of the late 1960s and early 1970s suggests that fast growth may have a large "trickle-down" at the stage where such an economy now finds itself. A tempting hypothesis is that several of them are approximately at a "turning point" to labour scarcity; every year that their attainment of that point is delayed by weak macroeconomic performance can have a heavy cost in terms of poverty unalleviated.

While the picture as a whole raises very serious questions about the implications of the sort of policy package now being widely adopted in Latin America and elsewhere, the fact that the two cases of sharpest increases in inequality are relatively high income countries with traditionally moderate levels of inequality and with strong systems of social services means that the social cost of increasing inequality has been much less than it might have been. Comparable increases in inequality in the poorer countries of the region would have had a much greater impact on poverty and, accordingly, much higher social cost. In most of those countries many of the poor are found in agriculture, so trends in their incomes would weigh more heavily in the overall distributional and poverty outcomes than was the case in Chile and Argentina.

2. <u>Something other than economic recessions has accounted for major worsening of income distribution in many LAC countries.</u> Though it may be true, as argued by Morley (1994) that economic downturns were the main factor underlying the increases in inequality observed in many LAC countries during the 1980s, this conclusion would not by itself imply that distributional concerns can be safely left aside for the time being. As noted in section 2 above, the 1980s evidence on the inequality-growth link appears to be somewhat less tight than Morley judged it to be. Still, his conclusion that the best policy to reduce poverty in economies mired in stagnation and underutilization of capacity is to get the economy moving is certainly valid. Our main concern here is not with that issue, nor with the impact of crisis, stabilization and adjustment on distribution; the crises are hopefully now history, and stabilization and adjustment were necessary. Our focus is on the question of how economic reforms have affected distribution, so the empirical evidence on which we rely include observations from both before and after the whole crisis-stabilization-adjustment sequence. In Argentina, Chile and Uruguay, the main events occurred in the 1970s; in Mexico and the Dominican Republic in the 1980s,

and in Colombia, Ecuador, Peru and Brazil at the end of the 1980s or the early 1990s. Our review of those countries where enough evidence is available to say something on this count indicates clearly that, though the economic cycle has certainly been a factor in some countries' short-run distribution patterns, most of the observed worsening on which we focus here has other origins.

3. <u>While the causal relationships have not yet been well understood, the close association between adoption of market-friendly economic reforms and accentuation of inequality is evident and a cause for serious concern</u>.

No definitive conclusions as to what underlies the observed increases in inequality can be derived from the comparison of country experiences alone. Drawing on both those experiences and the limited microeconomic evidence on the various elements of the reform package and on other hypothesized causes of worsening, we tentatively suggest that ongoing technological change, more open trade regimes, the dismantling of labour institutions, and the "socialization" of debts (whereby the state makes itself responsible for certain private debts which might otherwise threaten macroeconomic or financial stability) have all had negative impacts on distribution. The effect of the scaling down of the public sector (directly and via the privatization of public enterprise) seems more open to question. Increasing foreign investment has also been proposed as a source of worsening (in Mexico, for example), but judgment should probably be reserved on this point also. Many questions remain with respect to how these various factors interact among themselves and/or complement each other, both in terms of their growth effects and their implications for income distribution.

Trade and labour market reforms have been consistent elements of the reform packages instituted in the LAC countries where distribution has worsened significantly. In each case it is easy to see mechanisms whereby their effects on distribution <u>might</u> be negative, and in each case there is at least some empirical evidence suggesting that those mechanisms are at work. In the case of trade, for example, it appears likely that the comparative advantage of the region does not lie in unskilled labour-intensive products. Import liberalization appears to shift the price vector in favour of better-off families. Although optimists have argued that the opening up of trade should be expected to raise the relative incomes of agricultural workers, recent evidence on this point is not encouraging. A significant feature of the 1984-89 period in Mexico was the contribution of a widening gap between urban and rural incomes to the overall increase in inequality, and of the sharp decline in income from agriculture and livestock as a share of rural income (Alarcon, 1993, 139, 148). In Colombia an unprecedented increase in the gap between urban and rural incomes has appeared within the last two years, coincident with the process of liberalization. It is increasingly clear that in such countries there is a major part of the agricultural sector which cannot compete easily with an onslaught of imports, and whose labour resources are unlikely to be quickly mobile to other sectors. Meanwhile, labour market reforms appear to open the way for wider wage and salary differentials among individuals. A tentative guess would be that these two elements of reform packages may underlie most of the negative trends in distribution.

The "socialization" of international and other debts in order to save teetering financial and other enterprises has doubtless had a significantly negative impact on distribution, as shown in the case of Chile by Meller (1992). This was, however, a crisis-response policy, less germane to our present concerns than the now ongoing financial liberalizations (assuming that such liberalization does not henceforth lead to financial crises as they sometimes did during the 1970s and 1980s--see Diaz-Alejandro, 1985). Solid evidence has yet to come in as to their distribution impacts, but there are plenty of reasons to suspect that these could be negative, and that the optimists will here, as in the area of trade policy, prove to have been excessively optimistic.

The impact of foreign investment is another area in which the conventional wisdom, based on a two-factor model in which an increase in the capital stock would raise the relative returns to labour, may be off base for the LAC region. But further analysis will be necessary before much can be said with confidence in this area.

The downsizing of the public sector is widely believed to be a factor in worsening distribution, as witness the literature reviewed in the cases of Uruguay, Chile and other countries. There is little doubt that many middle income groups could lose in this process. But in some countries (e.g. Colombia) where there is detailed evidence on the relative incomes of public and private sector employees, the gap in favour of the former is large enough to make one guess that the distributional effect would as likely be positive as negative. Clearly a fairly good understanding of the indirect as well as the direct effects of such a downsizing are necessary for any predictions to be persuasive.

4. <u>Neither theory nor the record has provided much evidence on how "lasting" are the negative distributional effects which have been recorded.</u> This is a major drawback. Enough of the economic reform episodes are recent so that it might be hoped that many of the accompanying negative effects are temporary, associated with the transition to a new model, and likely to peter out with time and the adjustment of economic actors to the new reality. The only ray of hope thus far in this area comes from Chile, where distribution has improved noticeably in the last five years or so. But the period between initial worsening and beginning of improvement is almost 15 years, long by any standard, and it is not clear that the recent improvement should be interpreted as the reversal of those initial impacts or simply the result of another process, such as the tightening of the labour market predicted by labour surplus theory. Even if the latter is the case this outcome is reassuring, since it might imply that distributional losses resulting from the economic reforms will, fortuitously, be offset after some time by

other aspects of the growth process; though distribution may remain less equal than it would have been without the reforms, it will not permanently remain more unequal in absolute terms.

The need to better understand the likely future of income differentials is thus further highlighted by the need to know what impacts are permanent and which ones are not.

5. It is urgent to learn from the record, in order to achieve better combinations of growth and distribution than those of the last two decades. All country experiences no doubt have valuable lessons built into them, but those of Chile, Colombia and Costa Rica are perhaps the most interesting from the perspective of learning how to guide policy more effectively in future. Costa Rica is the one country which may have come through a reform process without a major deterioration of distribution. Colombia appears to have achieved the most significant pre-reform improvement in distribution, at least in the urban areas. And Chile undertook the reforms earliest, suffered high social costs thereafter, but has also pioneered a number of impressive policy experiments of relevance to other countries. Chile is of interest both for what went wrong and for what appears to have been done right. Riveros, for example, emphasizes in his contribution to this volume, that the high social costs were due in part to the lack of a coherent labour market policy, and the corresponding lack of clear institutions governing that market.

Possible lessons from Costa Rica, assuming further analysis confirms its status as the happy exception to the general experience of increasing inequality, might involve some or all of that country's commonly commented on special features: its middle-of-the-road democratic governments, the absence of a military and the relative strong system of social services; the gradual ways in which most reforms have been adopted; the combination of union weakness (since the early 1980s) with considerable government control over wages and salaries; the relatively high levels of education; the low levels of unemployment.

6. Some priority policy areas seem clear from the recent record in the LAC region and from our partial understanding of how those economies are now functioning. Among these are education/training systems--clearly important in light of the danger that low skilled persons are being left behind; small and medium enterprise policy, important given the major role this sector plays in the creation of productive employment; poverty redressal, whether through better targeting or otherwise, in light of evidence that considerable social spending has not in the past been very efficiently carried out, and the fact that under conditions of rapid economic change such systems must be unusually adept in order to do their job well. While their general importance may be easily accepted, the precise policy formula most likely to bear fruit in each of these areas is much less clear. Designing it has obviously high priority.

Some progress has been made toward the goal of appropriate support the microenterprise or informal sector, with the concerned assistance of non-governmental organizations of both national and international origin. Less attention has been directed to the fairly small but not micro-level firms; there is some concern that the trade, fiscal and capital market reforms will be applied in ways not conducive to the success of this group, whose potential is little understood and whose interests have received little attention from the key policy makers in most countries of the region. In increasingly open economies it will be important that its capacity to export, either directly or indirectly through effective intermediaries or through subcontracting arrangements, be fostered; evidence from countries like Korea and Indonesia strongly suggests that this will require proactive government policy.[77]

Each of the major elements of the economic reform package already instituted or now being instituted in the LAC countries also deserves priority attention. In most cases there were reasonably persuasive arguments for reforms of the general character actually undertaken, though in all cases the extent of reform and the precise elements making up the package could be questioned, since the design was inevitably based on mainly untested theory. Now that the evidence is clear that the distributional outcomes have been unfavourable, and even the growth results rather more modest than many had hoped and expected, it is clearly important that each component be reassessed. It will therefore be a challenge to design and to carry out necessary reforms with an eye on avoiding significantly perverse effects on income distribution. Together with the importance of more careful and professional design of policy packages will be prompt and in depth monitoring of welfare outcomes and their relationships to policy. For example if capital inflows are prone to worsen distribution in Latin America, hints of this should become apparent in the not too distant future.

7. <u>Better information and more analysis in the distribution areas will be needed for policy to become more professional.</u>

The full story on how the trauma of these past years has affected the distribution of income, poverty, and welfare in Latin America and whether it will leave a permanent imprint on those variables in future cannot be told until there is better information on the distribution of capital incomes, of rural incomes, and of social services. It is conceivable, though not likely in my own judgment, that the capital share has risen region-wide by enough to suggest even more acute worsening then currently available figures indicate; it is also possible that relative rural incomes have moved positively enough so that the record reviewed here appears unduly negative. The fact that some welfare indicators other than recorded incomes have evolved differently, and usually

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[77] Based on the conclusions of an ongoing World Bank study of the export success and support systems of small and medium manufacturing firms in Korea, Indonesia, Japan and Colombia (levy et al, 1994).

more positively, than incomes *per se*, is reassuring but needs to be better understood. It may mainly reflect the fact that there are significant lags between investment and payoff in these areas, it may imply that service provision fell significantly less than did expenditures during the crisis years (plausible since wages are the main cost of education and those wages fell), or it may suggest that some of the improvements (e.g. in child mortality) are substantially independent of macroeconomic performance and/or increasingly influenced by efficient targeting programs.

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Table 1

Trends in Output, Income, and Other Macroeconomic Variables Since 1980 in Latin America and the Caribbean

(Indices: 1980=100)

	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1980-1990	1990-1994
GDP (Market Prices)	100.0	102.6	106.3	110.6	111.5	112.6	112.9	116.8	120.3	124.1	128.7		
GDP growth rate		2.8	3.7	3.2	0.8	1.0	0.3	3.5	3.0	3.2	3.7	1.2	3.3
GDP Per Capita	100.0	91.8	93.3	95.6	94.5	93.6	92.1	93.6	94.6	95.8	97.8		
Absorption of Goods & Services)	100.0	93.9	98.1	100.3	100.9	101.4	101.7	107.6	112.4	116.4			
Consumption	100.0	100.4	104.3	106.4	107.4	108.4	108.9	115.0	118.6	121.9			
Investment	100.0	72.1	77.6	79.6	79.0	77.5	77.3	82.8	91.8	98.3			
Gross Nat. Income	100.0	97.5	99.6	103.0	103.6	104.8	105.2	110.0	113.3	116.2			
GNI per Capita	100.0	87.2	87.4	88.5	87.1	86.4	85.2	88.2	89.1	88.3			

Sources: for the first two rows, ECLAC, 1992, pp.40-1 and 1994b, p.37; for the other rows CEPALC, 1991, p.37 and CEPALC, 1994, p.88. There are slight inconcistencies (of about 0.5%) in the figures for 1986 and 1987 between the earlier source (used for years 1985 and 1986) and the more recent one.

Table 2

Poverty Incidence by Country, Latin America, 1970

	Population (Millions)	Population Percent	Regional Incidence of Poverty 1970
Brazil	96	36.3	49
Mexico	52.8	20.0	34
Argentina	24.0	9.1	8
Colombia	21.3	8.1	45
Venezuela	10.6	4.0	25
Peru	13.2	5.0	50
Chile	9.5	3.6	17
Uruguay	2.8	1.1	
Ecuador	6.1	2.3	
Guatemala	5.2	2.0	
Dominican Republic	4.4	1.7	
Bolivia	4.3	1.6	
El Salvador	3.6	1.4	
Paraguay	2.4	0.9	
Costa Rica	1.7	0.6	24
Panama	1.5	0.6	39
Nicaragua	2.1	0.8	
Honduras	2.7	1.0	65
Latin America[b]	264.2		38.53

Source: Altimir (1982).

Table 3

Summary of Distribuion Data for Chile:
Gini Coefficents and Quantile Shares

	Greater Santiago						Chile	
Year	R (EOD) (1)	H_{hy} (2)	Share 40% (3)	H_{pcy} (4)	H_{pcy}[a] (5)	Share 40% (6)	H_{hc}[b] (7)	H_{hy} (8)
1957	.48							
1958	.50							
1959	.50							
1960	.48	.459	13.69					
1961	.51							
1962	.51							
1963	.50							
1964	.48							
1965	.49	.475	12.87					
1966	.49							
1967	.52							
1968	.52	.498	11.70					.455[c]
1969	.52						.312	
1970	.52	.501	11.50	.434				
1971	.50							.460
1972	.46							
1973	.46							
1974	.46	.450	12.78	.423				
1975	.48	.471		.413				
1976	.53	.538		.489				
1977	.52	.526		.476				
1978	.51	.520 .440[d]		.466	.485	10.77	.390	
1979	.51	.518						
1980		.526	10.28					

1981		.522	11.24					
1982		.539	9.95					
1983		.542	10.07					
1984		.555	9.33	.515				
1985		.532	10.13	.501				
1986		.539	10.00	.500				
1987		.531	10.22	.495				
1988		.573 .487[d]	10.91	.501	.519	10.91	.428	
1989		.552 .454[d]	11.61	.500	.522	9.95		
1990		(.54) .460[d]			.514	10.26		
1991		.430[d]			.488	11.36		
1992								
1993								
1994								

Symbols: R-distribution of income among income recipients
H_{hy}-distribution of household income among households ranked by household income
H_{pcy}-distribution of income among persons ranked by per capita household income
H_{hc}-distribution of households ranked by household income or consumption (not clear--see note "b").

a) Gini coefficients calculated from quintile distribution presented in Ritter (1992, 81). The true Gini's, based on the ungrouped information, would be a couple of points higher. We assume the figures of Cols. 1,2, and 4 are based on ungrouped data (to verify).

b) Figures from Meller (1992, 22) suggest that families are ranked by family income (not per capita income or consumption). Data from source are for the bottom and middle 40% groups and the top quintile. Accordingly they underestimate the Gini coefficient considerably. There may even be a possiblitiy that the ranking criteria were different as among the years for which the figures are reported.

c) Average of two figures for 1968.

d) Figures estimated on the basis of the data presented in

Ritter (1992, 81).

Sources:
Col.1: CEPAL, 1987). Whereas the other figures in this column were estimated by CEPAL's Division of Statistics and Quantitative Qnalysis, an alternative figure (0.49) was presented for 1973; it was estimated by the "Programa de Actividades Conjuntas "ELAS/CELADE".

Cols. 2-4 are from Riveros, this volume. It remains to be clarified that the definitions given here are the correct ones. The figure for 1988 would seem to be a typo, given that the bottom 40% share rises rather than falling in that year. The 1990 figure has been added tentatively to the series on the basis of figures reported by Morley (1994, 8), who shows the same 1987 figure as does Riveros (0.53) and adds this one, citing Pardo et al.

Col. 8 is from CEPAL, 1987, cuadro 5.1.

Table 4

The Quintile Distribution of Consumption Among Households in Greater Santiago, 1969, 1978 and 1988

(Percent of total consumption)

Qunitile	1969	1978	1988
1	7.6	5.2	4.4
2	11.8	9.3	8.2
3	15.6	13.6	12.6
4	20.6	21.0	20.0
5	44.5	51.0	54.9
Total	100.0	100.0	100.0

Source: Ffrench-Davis, 1992, 16.

Table 5
Indicators of the Standard of Living and of Social Services in Selected Countries of Latin America

Country	Life Expectancy at Birth 1960	Life Expectancy at Birth 1990	Percent With Access to Health Services (1985-87)	Adult Literacy Rate (1985)	Real GDP per Capita ($PPP) (1988)	Mean years of School (1980) (25+)	Public Health Expend. as % of GNP 1960	Public Health Expend. as % of GNP 1986	Public Educat. Expend. as % of GNP 1960	Public Educat. Expend. as % of GNP 1986	Percent of Public Educ. Expend. to Primary (1987-88)
Cuba	63.8	75.4	..	92	..	5.7	3.0	3.2	5.0	6.2	20.4
Costarica	61.6	74.9	80	92	4320	5.6	3.0	5.4	4.1	4.5	37.7
Panama	60.7	72.4	81	86	3790	5.9	3.0	5.7	3.6	5.4	39.3
Uruguay	67.7	72.2	82	95	5790	6.1	2.6	2.7	3.7	6.6	35.8
Chile	57.1	71.8	97	92	4720	6.2	2.0	2.1	2.7	4.0	51.9
Argentina	64.9	71.0	72	95	4360	6.0	1.3	1.6	2.1	3.3	..
Venezuela	59.5	70.0	..	86	5650	5.3	2.6	2.2	3.7	4.3	20.7
Mexico	57.0	69.7	..	85	5320	4.0	1.9	1.7	1.2	2.8	23.7
Colombia	56.6	68.8	60	85	3810	5.2	0.4	0.8	1.7	2.8	39.9
Brazil	54.7	65.6	..	79	4620	3.3	0.6	2.4	1.9	3.4	52.3
Paraguay	63.8	67.1	63	88	2590	4.6	0.5	0.2	1.3	1.0	36.6
Dominican Republic	51.8	66.7	80	80	2420	4.3	1.3	1.4	2.1	1.6	44.4
El Salvador	50.5	64.4	58	69	1950	3.4	0.9	0.8	2.3	1.9	60.3
Ecuador	53.1	66.0	64	83	2810	5.4	0.4	1.2	1.9	4.2	45.7
Peru	47.7	63.0	75	82	3080	5.7	1.1	0.8	2.3	2.2	31.1
Honduras	46.5	64.9	74	68	1490	3.0	1.0	2.6	2.2	5.0	46.6
Guatamala	45.6	63.4	34	52	2430	4.0	0.6	0.7	1.4	1.8	38.2
Bolivia	42.7	54.5	64	73	1480	4.0	0.4	0.4	1.5	2.9	54.4

Source: United Nations Development Programme (UNDP), Human Development Report 1991, Oxford University Press, 1991, 122-153.

Table 6
Evidence on the Distribution of Income in Uruguay
(Gini coefficients except as indicated)

Year	Montevideo		Rural	Uruguay	
	H_{hy}	H_{hye}	H_{hy}	Coeffic. of Variation Manu-blue	Manu-white
1961-62	0.366				
1963	0.371		0.424		
1967	0.418				
1968		0.369		30.59	36.99
1976	0.450	0.405			
1978				15.48	35.30
1979		0.491			
1980	0.424				
1981				20.60	19.10
1982	0.415		0.398		
1984	0.484		0.406		

H_{hy} Distribution of household income among households ranked by income

H_{hye} Distribution of earned income among households ranked by income.

Source: Favaro and Bension, 1993, 198-99 and 340. The main original sources are Melgar, 1982 and Rossi, 1982.

Table 7

Selected Data on Distribution in Mexico, 1984, 1989, and 1992

	1984		1989		1992	
	Share of Total Income	Gini & Psuedo Gini	Share of Total Income	Gini & Psuedo Gini	Share of Total Income	Gini & Psuedo Gini
Households Ranked by Household Income (Grouped data)						
Total	100.0	0.429	100.0	0.469	100.0	0.475
Wages	46.9	0.444	46.4	0.430	45.5	0.466
Profits	7.1	0.468	10.2	0.634	8.4	0.613
Servcies	4.7	0.427	6.5	0.623	7.3	0.635
Agric./Live.	10.4	0.395	4.9	0.257	4.5	0.328
Non-monetary	21.2	0.390	22.6	0.455	26.1	0.429
Urban[a]		0.407		0.453		
Rural[a]		0.403		0.410		
Households Ranked by Per Capita Household Income (Individual Data)[b]						
Total		0.488		0.519		
Urban				0.499		
Rural				0.442		

* Calculations are based on grouped data. Households are ranked by total household income.

a) From Alarcon, 1994, 112.
b) ibid, p.87, 121.
Source: Alarcon and Mckinley, 1994, Table 2, exept as noted.

Table 8

Measures of the Inequality of Wage Income in Mexico, 1984, 1989, and 1992

All Wage Earners	1984	1989	1992
Standard Deviation of Log Variance	1.036	0.978	1.299
Standardized Theil*	0.039	0.031	0.047
Gini Coefficient	0.419	0.443	0.519
Coefficient of Variation	0.930	1.092	1.319
Rural Wage Earners			
Standard Deviation of Log Variance	1.144	1.0241	1.145
Standardized Theil*	0.051	0.032	0.038
Gini Coefficient	0.471	0.433	0.466
Coefficient of Variation	0.964	0.908	1.064
Urban Wage Earners			
Standard Deviation of Log Variance	0.912	0.841	1.331
Standardized Theil*	0.031	0.024	0.047
Gini Coefficient	0.383	0.411	0.514
Coefficient of Variation	0.870	1.020	1.288
Urban Manufacturing Wage Earners			
Standard Deviation of Log Variance	0.770	0.835	1.320
Standardized Theil*	0.026	0.024	0.048
Gini Coefficient	0.369	0.411	0.528
Coefficient of Variation	0.960	1.018	1.437

* Theil's L index divided by the natural logarithm of mean monthly wages.

Source: Alarcon and McKinley, 1994, Table 5.

Table 9

Selected Data on the Structure of Earnings in Mexico, 1984, 1989, and 1992

	1984	1989	1992
Wage differentials			
Female/Male	76.7	71.6	74.7
Rural/urban	55.6	45.6	55.1
Nontradables/tradables	85.8	97.3	107.7
Nonunion/union	75.1	86.1	96.8
Nonborder states/border states	93.6	79.1	95.2
Poor states/nonpoor states	91.8	82.2	86.5

Source: Alarcon and McKinley, 1994, Table 3.

Table 10
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 11
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 receving 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 13

Indicators of the Concentration of Income in Costa Rica, 1969-93

	Households Ranked by per captia Income[a] (Trejos-Sauma)			Households	Households of paid workers	Earners	Households	Households
	Total	Urban	Rural	Total[b]	Total[c]	Total	Total[d]	Total[e]
1969								
1970								
1971				0.44				
1972								
1973								
1974								
1975								
1976								
1977								
1978								
1979					0.45			
1980	0.348	0.325	0.310			0.395		
1981						0.403		
1982					0.42	0.42		
1983	0.337	0.317	0.330	0.47		0.383		
1984						0.376		
1985	0.322	0.293	0.316			0.375		
1986						0.372		
1987	0.363	0.336	0.353			0.36		
1988	0.369					0.42		
1989	0.348					0.419		
1990	0.348	0.324	0.337					
1991	0.361	0.334	0.352					
1992	0.348	0.333	0.334					
1993	0.354	0.334	0.339					

Note: Except as indicated, the Gini coefficients for households are calculated on households ranked by household income, not by household income per capita.

a) From Trejos and Sauma (1994, Cuadro 6). To achieve comparability over the years the authors use only the data on primary monetary income in wages or business income. The families included are 90-92% of all families, i.e. those with an employed or unemployed head and those whose heard is a non-participant but who report positive incomes.

b) From Trejos and Elizalde, (1986), who chose these two years on the grounds that the data were relatively comparable. CEPAL (1987) reports a Gini coefficient of 0.43 for 1971, citing Cespedes (1973), the same source cited by Trejos and Elizalde.

c) Naciones Unidas (1987), Cuadros 5.1 and 4.

d) Refers to all income (?). The 1983 figure is from Trejos and Elizalde (1986), though the Gini coefficient is corrected from that source; the 1986 datum is from unpublished data.

e) Calculations by Gindling and Berry on the basis of unpublished data from the household surveys. As noted by Trejos and Sauma (1994), a significant increase occurred over the decade in the share of household not reporting income; in these figures households have been excluded if any member did not report earnings. Household reporting zero income were however left in the sample, they accounted for between 8.6 and 12.1% of families over this period (Gindling and Berry, unpublished, Table 10). All forms of income were included (?), which probably explains why the Gini coefficients are very much higher than those reported by Trejos and Sauma (see Table 13, Cols. 1-3).

Table 14
Summary of Relationships Between Economic Reforms and Distribution, Countries for Which Data are Available

Country	Main Period of Worsening	Degree of Worsening, main period	Degree of worsening, to present	Characteristics of main Period of Worsening
Argentina (Greater Buenos Aires)	1976-78	8 points, followed by some easing	8 points	Liberalization, labour repression, no net growth
Chile (Greater Santiago)	1974-76	7-9 points	7-9 points	Liberalization, labour repression, sharp recession
Uruguay (Montevideo)	1976-79 or 1982-84	9 points or 7 points	not available	Liberalization, labour repression, growth <u>or</u> ...., recession
Mexico	late 1980s	3-5 points	3-5 points	Liberalization, some labour reform, slow growth
Dominican Republic	In period 1984-89	8 points	not available	May have coincided with adjustment
Colombia (three major cities)	1990-92	4-7 points	4-7 points	Liberalization, labour market reforms, moderate growth
Ecuador (Urban)	1989-921	5 points	5 points	Liberalization, labour reforms, slow growth
Costa Rica	1985-87 (?)	0-4 points (?)	0-3 points	Liberalization, mild labour reforms (?), moderate growth

Notes: (i) Distribution worsening measured in percentage point increases of the Gini coefficient. (ii) Depending on data availability, the Gini coefficient may refer to income earners, households ranked by household income, households ranked by per capita income, or other distributions available. Completeness of income coverage varies with the case, as discussed *in the text.*