

***Has income distribution really worsened in the South?  
And has income distribution really worsened between the  
North and the South?<sup>1</sup>***

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The North has become more unequal, in particular countries like the United States and the United Kingdom. This is the conclusion—at times categorical and at other times tinged—of numerous studies on the distribution of income done in recent years. Several reasons are argued: trade with the South reduces the demand for unskilled labour in industrialised countries; immigration increases the supply of this human resource; the new technology of information and telecommunications is biased towards skilled labour; the desindustrialisation<sup>2</sup> of the North expels labour to the tertiary sector, where industries with high wage levels coexist with industries with low wages; the flexibilisation of labour markets, with the consequent weakening of trade unions, reduces the negotiating power of the labour force.

While these forces push in one single direction in the North: expansion of the gaps in income between those who avail themselves to the maximum of the new forces of globalisation—skilled labour—and those which have difficulty in marching to the pace of the changes—unskilled labour, it is not clearly perceived that these are the fundamental forces which explain the distribution in the South or, more so, that in the case of these countries the forces mentioned above push unidirectionally, just as they do in the North.

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<sup>1</sup> The first part of this paper was presented in the Second Global Forum on Human Development, which took place in Rio de Janeiro on 9-10 October, 2000.

<sup>2</sup> Understanding desindustrialisation to be an increase in the productivity of industry which leads to a reduction in the requirement for industrial employment.

Trade, for example, increases the demand for unskilled and semi-skilled labour, which leads to an improvement in income distribution evident in the former case and can attenuate the latter; migration usually reduces the supply of unskilled labour<sup>3</sup> and increases remittances for poor families; the desindustrialisation of the North does not necessarily translate into desindustrialisation in the South, for industries, such as the textile industry, relocate in the latter; foreign investment flows also increase capital available per worker and can lead to an improvement in distribution. On the other hand, however, the new technology has in the South the same bias in favour of skilled labour which it has in the North, and to this should be added forces such as mass privatisations which, although in the medium and long term could redound to greater growth, they almost certainly affect distribution in the short term.

In short, the South does not have this unidirectional clarity between globalisation and inequality which prevails in the studies on industrialised countries. Consequently, many of the statements on the supposed worsening in equity in developing countries have not been seriously validated in practice. The terrors against globalisation on this front originate on fragile assumptions and ideological biases more than on firm evidence.

And what about income distribution between the North and the South? Are the developing countries falling behind even more, or are they shortening the distance with the industrialised countries? In this case, the economic literature is not of much use, for in practice there is an abundance of experience of success and failure in the South, which makes it difficult to conclude whether the developing countries are coming close to the North or are being left behind.

This paper, therefore, is divided into two parts. The first analyses distribution within countries; the second focuses between countries and the totality of the countries of the world. It closes with some concluding remarks.

## **1) What the household surveys say on income distribution in the South**

Income distribution has tended to be studied in the South for countries individually or, in the best of cases, for specific regions. It is only recently, with the availability of statistics providing international data bases, that it is possible to attempt a study for developing countries together.

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<sup>3</sup> The “brain drain” is not the norm in South-North migration.

For purposes of this section, the author took the data from the data base of UNU/WIDER-UNDP, World Income Inequality Data Base, Version 1.0, 12 September, 2000. We include the data available at total level of countries which had a rating of OK by their authors (we excluded rural or urban and NO OK); as to definition used, we included all, e.g. gross income, net income, gross expenditure, net expenditure. It is estimated that the UNU/WIDER-UNDP data base is the most complete of those at present available, as it includes the statistics of Deininger and Squire in the World Bank and the Luxembourg Income Study (LIS), apart from other statistics which their authors have compiled.

In view of the fact that there are 183 developing countries (countries which are not high income OECD, according to the definition of the World Bank), it was decided to take a selection of them. However, for this to be representative and reflect the tendency in respect of distribution occurring in the South, it was decided to select those countries which make up almost 95% of total population in the South (practically all those countries with more than eight million inhabitants in 1998).<sup>4</sup>

Table 1 shows this selection of 67 countries.<sup>5</sup> There is evidently a shortage of information as to distribution of income. Of the 67, only 57 have some type of information,<sup>6</sup> and of these only 21 countries have more than 10 Gini coefficients for the 40-year period from 1960 to 1999, and only 11 countries have more than 10 ratios between the first and last quintile for the same period, and the values are reduced to 16 and 18 countries if only values for different years are taken into consideration.

It should be added that, as the definitions vary between countries or for one same country over time, the data lose comparability. Moreover, the fact that only the Gini coefficients and the quintiles<sup>7</sup> (with which the ratios are constructed) are presented also limits the utility of the data, given the known weaknesses of Gini—the differentiated weight which it gives to changes in distribution—and the quintiles—which does not capture the changes at the highest and lowest ends. This shortage and weakness in the data contrasts with the ample availability which tends to be usual in the case of the OECD countries, and also

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<sup>4</sup> Not that the inclusion of small countries or territories is underestimated; it is simply that we start with the premise that a description of the tendencies in a considerable number of these small countries or territories could only give a mistaken impression as to what occurs in the South, for all of them added together (the 116 small ones) only cover 5% of the population of the developing countries.

<sup>5</sup> The first value is the population in 1998, then follow the Gini number and the available ratios. The value after the diagonal includes only the Gini and ratios for different year.

<sup>6</sup> The list also mentions Czechoslovakia, USSR and Yugoslavia.

<sup>7</sup> In the case of a few countries, information is available at the level of decile.

almost makes impossible, from the beginning, to talk with propriety of tendencies regarding the distribution of income in the South.

Figures 1-6 describe the behaviour of the Gini coefficients (ratios between top and bottom quintiles are also included) for this selection of countries. Figure 7 and Table 2, which contains basic statistics for the Gini, make it possible to comment precisely on each country as (contrary to Figures 1-6) it covers only the existing Ginis for the more usual definition of the country (e.g. gross income, net income, expenditure, net expenditure).

### **East Asia**

- China maintained stable distribution of income up to the mid-80s. As of then, this distribution worsened. The Ginis in gross income for the last few years are between the highest values of its history, somewhat far from its average value of 31.9.
- Indonesia has maintained its income distribution stable. The highest Gini in expenditure was recorded a long time ago, in 1982. Its available Ginis for recent years are not far from the average of 34.4.
- Philippines has been characterised as having a high inequality throughout its history. The highest Gini in gross income goes back to 1965 (51.1), the average being 43.7. The inequality in the Philippines, however, has kept rather stable, with minor ups and downs.
- Thailand is another country with high levels of inequality: the average Gini in gross income is 46.2. The highest value (52.8) took place recently in 1992. However, the last Gini for 1996 fell to 45.3.
- South Korea has kept a stable pattern on income distribution. The highest Gini (38.6) took place in 1980.
- Malaysia is the East Asian country with the greatest historical inequality: average Gini of 50.1 in gross income. The highest Gini (53.0), however, is for 1976, while recent values are lower than the average.
- There is absolutely no information on Myanmar and North Korea, and the situation is almost the same in Vietnam and Cambodia, for observations are very few.

In short, China, given its size, certainly changes the regional average with a few points in which its Gini moves and the simple displacement of the indicator in that country would lead us to conclude that income distribution worsened in the region as a whole. It is interesting to note, however, that no other country in East Asia follows this pattern. South Korea in particular, the most advanced country in the region, and for which we would expect a replication of the amount of inequality in the industrialised countries, has not followed this tendency. Other

countries like Philippines, Thailand and Malaysia, although they start with high levels of inequality, have not shown signs of aggravation.

### **South Asia**

- In India, income distribution has varied very little. The average Gini in net expenditure is 31.4 and the maximum and minimum values in close to 40 years have been 33.1 and 29.2, respectively. The highest value took place in 1961.
- Pakistan is another country with a good deal of stability in regard to the distribution of income. Its values are slightly higher than those of India (although in this case the definition is gross income). The average Gini is 34.4, but once again, the maximum Gini (37.0) goes back to 1964.
- Bangladesh has the greatest and most volatile inequality among the countries of South Asia. The highest Gini in gross income (42.6) is for 1997, and recent values are not far from the average.

In the case of South Asia, therefore, we appreciate a long-term stability with respect to the distribution of income.

### **Middle East and North Africa**

Not much can be said for the Middle East and North Africa. In the case of Iraq, Iran and Syria, there is no information available, and in the case of Iran, Egypt, Algeria, Morocco and Yemen, very little can be said with the scarce information available. Tunisia is the only country on which something can be said in relation to its income distribution. It has kept stable, with an average Gini of 42.7 in net expenditure.

### **Sub-Saharan Africa**

In the case of Sub-Saharan Africa, the situation is more serious, for there is no appreciable information on any of the 22 countries with more than eight million inhabitants in 1998. In those cases in which there are five Ginis or more, the number is reduced if we attempt to distinguish by definition used. It would be foolhardy, therefore, to draw any conclusion on the tendency in income distribution for Sub-Saharan Africa with such little information.

### **Latin America and the Caribbean**

- Brazil has the greatest inequality in Latin America. The behaviour, however, has been rather stable at these highest levels. The highest Gini (63.7) in gross

income, occurred recently in 1991, but the most recent information available (1996) brought it back down to levels close to its historical average of 58.1.

- Mexico has had a pattern similar to the Brazilian—relative stability—with levels of inequality slightly lower. The average Gini in gross income is 52.5. Recent years show Gini coefficients around this average.
- Colombia shows the most volatile behaviour in regard to distribution of income in Latin America. In recent years, the Gini for gross income has rallied, above the average Gini of 53.6.
- Venezuela, contrary to Colombia, presents the lowest volatility in the region. The Gini in recent years in gross income is not far removed from the average of 43.2.
- Chile is another country with high inequality, principally after the 70s. In recent years, its Ginis in gross income have been once again approaching the highest value in its history (57.0) in 1982.
- In the case of Peru, Ecuador, Cuba and the Dominican Republic, there is not sufficient information available.

In short, although it can be concluded that Latin America has the highest inequality levels in the world, it is not possible to identify trends towards a greater increase in its Ginis. The exception would be Colombia and Chile, where there are signs of increase in inequality in recent years.

### **Eastern and Central Europe**

- Russia has experienced an appreciable rise in its inequality. In 1996, it reached its maximum Gini in gross income (37.8) throughout its history. The increase is even greater if we compare with data for the former USSR.
- Ukraine does not show a definite pattern with regard to income distribution. Its highest value in gross income (34.6) occurred in 1980, then fell, and since then has risen again, but without reaching the earlier level.
- Poland, like Russia, has seen its inequality levels rise. The highest Gini in its history in net income (34.2) is in fact the highest Gini available in 1997.
- Yugoslavia (Serb) has the highest volatility of the countries of Eastern and Central Europe. The Gini for recent years, however, has kept below the average Gini in net income (33.5).
- Hungary present a highly stable income distribution. The highest Gini (29.2) occurred in 1994, but then fell to levels approaching its average in net income (24.0).
- Bulgaria is another country in which inequality has increased continuously. Its average of 23.0 in gross income fell behind, and its most recent levels are significantly greater.
- In the case of Turkey, Uzbekistan, Romania, Kazakhstan, Czech Republic and Belarus, there is not sufficient information.

There is no doubt that Eastern and Central Europe has suffered a worsening in its distribution of income. It is interesting to note, however, that even in this case the tendency is not universal in this region, for there are countries which maintain a certain stability in their distribution.

## **2) About income per capita between the North and the South**

For this section, we worked with the 2000 version of the World Development Indicators Database. We worked with three incomes at per capita level: a) GNP per capita in constant dollars of 1995 (available for the period 1960-1998), b) GNP per capita in current dollars according to the Atlas Method of the World Bank (period 1964-1998), and c) GNP per capita in purchasing power parity (period 1975-1998). For ease of reference, we refer to them as series A, B and C, respectively.

Table 3 shows not only that the periods differ from one series to another but also that the availability of observations (countries) increases as the years advance, which obviously redounds in a “growth” of world population additional to normal demographic growth.

Figure 7 presents the Gini coefficients for the three indicators. Figures 8-13 expands on this information with the following ratios: a) top/bottom decile, b) top/medium decile, c) medium/bottom decile, d) top/bottom quintile, e) top/medium quintile, y f) medium/bottom quintile. Tables 4-9 show the percentage of income which corresponds to each decile and quintile, according to the three definitions used. The principal findings are mentioned below.

- Inequity among countries is very great. No country, not even the most inequitable, shows such great inequality. Obviously, the parameters are not strictly comparable as, in the estimated between countries, there is a universe which, in most of the cases, is 177 countries for series A, whereas the estimated within countries work with household surveys of thousands of homes (by definition they are not universe samples), which means to say that Switzerland and Luxembourg are included in the former estimates but not the Bills Gates of each country in the latter.
- We do not perceive a precise tendency as to income distribution, or better said, there are two tendencies which move in opposite directions depending on the indicator used. The Gini shows that distribution worsens if one uses series A and B and improves with series C (the top/bottom ratio shows more or less the tendency, with the exception of series A, which in this case experienced more volatility).

- The indicators are very sensitive to the addition of countries and therefore to population over time. For example, if one takes series B (which reflects worse equity over the years) and countries entering are followed up, it is appreciated that the “increase” in inequity in the second half of the sixties is due in part to the addition of Bangladesh (in 1966) and Indonesia and Mali (in 1968). These countries were poor and the first two in particular were highly populated, so that when they entered the statistics they became located in the first decile of income, with a clear “worsening” of world equity. The leap in the Gini in 1972 was also due to the entry of India which, with its gigantic population, was then located in the first, second and third deciles of income.<sup>8</sup> Ethiopia and Somalia entered in 1985, also with the consequent “worsening” of world income distribution. In 1989, Romania and six countries which had become dismembered from the USSR entered, and in all cases became located in deciles 7-9, while Cambodia entered into the first decile. Of course, we are not arguing that the increase in inequity is explained only by the increase in population, but we must recognise, once annual follow-up is given the countries which entered and the “growth” in world population which that represents, that the increase in population becomes the principal determining factor of the increase in world inequity insofar as series A and B are concerned. In fact, the simple correlation between growth in the Gini and population growth is positive and attains 0.7255 in the case of series B and up to 0.9412 in Series A.
- World income distribution is strongly marked by the Chinese phenomenon. In the first place, China appears as an ample “step”, as millions of Chinese enter the world count as percentiles with the same income per capita; once again, if we take as example series B (in which world distribution worsens), it is seen that in 1964 China represented 36.5% of world population, so that its income per capita was a determining factor in explaining what was happening in deciles 1-4. In recent years, due not only to its lower population growth but also to the entry of other countries, its weight has been reduced, but even so it continues prominent: 21.7% in 1998 (in comparison, India represented 18.3% when it entered in 1972 and is still at relatively the same level in 1998, 18%). In the second place, what happens as regards the growth of income and its distribution in China can have paradoxical effects in the world. It is said, for example, that the high growth rates in the Chinese economy in recent years has accentuated inequality in that country, according to household surveys (as the first part of this paper also shows). This high economic growth, however, also redounds in a greater GDP per capita for China and, consequently, increases the low and medium deciles of the world, thus improving global equity. Therefore, should Chinese growth be classified

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<sup>8</sup> That same year Qatar and Virgin Islands entered the ninth and tenth deciles, respectively, although in both cases they are very small countries.



as equitable or inequitable? Thirdly, China's advance explains to a great extent why there has been an expansion in the gap between the "world middle class" and the "world lower class" (see medium/bottom decile and quintile for the three series). China belonged to the latter in the past but is now part of the former.

- The improvements in world equity do not necessarily represent effective improvements for the developing countries. As occurred with income follow-up of countries and the "growth" in population which that represents we should also follow-up to years of recession in the industrialised countries, and it can be observed that that is when the distribution of world income tends to improve. If we take series B once again, it is seen that equity "improved" during the recessions of 1970, 1974 and 1975, which followed the increase in the price of oil, during the recession in the early 80s (1980-82), during the 1991 recession, and markedly pronounced during 1997 and 1998, in which years the Japanese economy faced a series of problems and the Asian financial crisis was unleashed, which not only affected the Asian countries but also impacted the industrialised countries. The moral, then, is that you cannot simply applaud the drops in the world Gini, because it might be that one could believe that the developing countries enjoyed an improvement in their economic situation during those years when it is evident that it is precisely in years of recession in the North that the countries of the South suffer more.
- The inequality indicators are congruent one with another in some cases, but not in all (for example, there may be positive or negative correlation between inter-annual growth in the Gini and the ratios). What is clear is the lesser volatility of the Ginis, which is obvious as they cover the totality of percentiles, whereas the ratios concentrate only on the extremes. Finally, if each of the three series is divided into two stages, it is seen that volatility has been less in recent years.

### **3) Concluding Remarks**

1. The scarcity of data on income distribution for developing countries does not make it possible to draw any conclusion as to possible improvement or worsening of equity.
2. Even adding those few cases in which there is a reasonable historical series, there is no evidence of a firm tendency towards an improvement in equity. Distribution remains without major changes for a great number of countries, and there are even some which show an improvement.
3. The only case in which we can affirm that greater inequality has occurred is in the former Socialist countries, including China (but not in all), which is not strange if we take into account the economic "earthquake" which the change in system implied.

4. That belief that globalisation in recent years is worsening the distribution of income in developing countries has no firm basis on the theoretical plane (in view of the fact that the forces push in different directions) nor on the empirical one, although certainly the opposite thesis that globalisation improves equity would also not have it.
5. With the scarce number, low quality and difficulties in comparison of the available data on income distribution for most of the developing countries, there is little that can be done on the econometric plane to find the determinants of distribution in a crossed sample of countries. More positive is any effort which can be made individually for those few countries which do have an appreciable historical series.
6. The analysis of income distribution among countries also faces a series of obstacles. Despite the availability of information, it is not possible to conclude whether it has improved or worsened, as the different time series give different answers. Obviously, those who believe that inequity has increased will try to use the data in current dollars to validate their beliefs, whereas those who believe that it has not worsened will try PPP dollars and in some cases to constant dollars.
7. A complete perception of world income distribution will only come about when we work with household surveys which are relatively uniform among countries and when it can be transferred reliably to one only currency. Only thus can we draw a true world Lorenz curve and only thus can we estimate a Gini adjusted to reality. This, however, does not appear to be an objective which will be reached in the short term (despite the attempts of the World Bank).<sup>9</sup>

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<sup>9</sup> Branko Milanovic has built what he calls “true world income distribution”, following this procedure and converting to PPP dollars. However, given the statistical demands which this required, he did it only for 1988 and 1993 (Milanovic, Branko (1999) “True world income distribution, 1988 and 1993: First calculation based on household surveys alone”, World Bank Policy Research Working Paper).