GLOBALIZATION AND INTERNATIONAL INEQUALITIES: GAPS AND POVERTY IN HISTORICAL PERSPECTIVE

GLOBALIZACIÓN Y DESIGUALDES INTERNACIONALES: LAS BRECHAS Y LA POBREZA EN PERSPECTIVA HISTÓRICA

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Resumen

En los últimos cinco años se viene desarrollando una literatura que, por vez primera, analiza sistemáticamente la evolución de la pobreza y la desigualdad a muy largo plazo y a escala mundial. En el trabajo se ofrecen una revisión de esta literatura y nuevas medidas estadísticas de pobreza y de convergencia absoluta de los países, elementos que arrojan nueva luz sobre algunas cuestiones de intenso debate, tales como la evolución de la pobreza y la convergencia o divergencia de los niveles de ingreso de los países en un contexto de globalización. En la parte final se presentan algunas hipótesis preliminares sobre los resultados hallados.

JEL Classification System: N0, O1 [i]

GLOBALIZATION AND INTERNATIONAL INEQUALITIES: GAPS AND POVERTY IN THE LONG RUN

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Foreword

Coinciding with the so called new wave of globalization of the nineties and, more recently, with the growing and stronger criticisms to it, the questions about poverty and the gaps between poor and rich nations and people have gained momentum once again. At the same time, new databases -with broad geographic and historical coverage- and a growing and very recent literature have been published in the last five years or so[iii]. In this paper, both the recent literature and part of the new data are analyzed in order to gain some additional clarity on these very important issues. After this introduction, the paper is divided into eight sections. The first one simply clarifies the scope of variables dealt with in the paper. Sections 2 to 6 are devoted to different historical periods, since the beginning of the Christian era to the end of the second millenium. Section 7 concludes the paper offering a set of stylized facts about the central subject matter of the paper as well as some very exploratory hypotheses about the findings, particularly about the lack of convergence between rich and poor countries.

1. Thematic Scope and Analytical Dimensions

Is it true that the rich get richer and richer and the poor get poorer and poorer? Is there some hope for the underdeveloped or less developed countries (LDCs)[iv] of getting the living standards of developed countries (DCs)? Which have been the main effects of the more recent wave of globalization on the income distribution within and between countries? Is it offering new hopes to a significant number of countries? These are some of the typical questions that we all can read almost everyday in the web or in the media, and the same ones that ignite demonstrations against globalization here and there. In order to rightly answer these question we need first of all put some conceptual order in the debate (Llach, 1996 (1994))[v].

Table 1 offers a taxonomy of dimensions of analysis typically underlying the questions and criticisms, but many times confused in the public arena and even in the literature. The vertical axis distinguishes poverty -i.e., absolute levels of income- from income distribution -i.e., relative levels- and, at the same time, static versus dynamic approaches. The horizontal axis, on the other hand, distinguishes the units of analysis on which the "vertical" dimensions are measured. They can be persons' or households' income, measured with the national or the global income as statistical reference and, or countries' income. Taking all this analytical dimensions together we have twelve different measures. However, the static dimensions will deserve less attention in the paper, with the exception of the situation nowadays. The other six dimensions will be referred for each

one of the historical periods under consideration, as far as enough information is provided by the literature[vi].

Table 1
GAPS AND POVERTY IN THE LONG RUN
Alternative analytical dimensions

Absolute vs. Relative Levels \ Units of Analysis		Persons / Households Income (Reference income as indicated in the columns)		National (aggregate) Income
		National Income	Global Income	
Poverty (absolute levels)	Static	Persons / Households Poverty (HPN)	Persons / Households Poverty (HPG)	Poverty of Countries (PC)
	Dynamic	Evolution of Persons / Households Poverty (EHPN)	Evolution of Persons / Households Poverty (EHPG)	Absolute Growth or Evolution of the Poverty of Countries (EPC)
Income Distribution and Convergence (relative levels)	Static	National Income Distribution (NHID)	Global Income Distribution (GHID)	Global Income Distribution among Countries (GCID)
	Dynamic	Evolution of National Income Distribution (ENID)	Evolution of Global Income Distribution (EGID)	Relative Growth or Absolute Convergence (AC)

2. When Everything Began: the Eve of Economic Growth and Divergence (1-1820) and the Modern European Globalization (1450-1820)[vii]

The idea of a secular divergence in the growth of nations was initially formulated by Kuznets (1955, 1963). This was done not only with his U-shaped curve of income distribution along the process of economic growth, but also with his emphasis in the fact that the present contrast between GCPpc levels of rich and poor countries was a clear signal of secular divergence. More recently, the contributions of Angus Maddison have been important to our empirical knowledge of economic growth in the long run. In spite of the fact that his pre-1820 figures are only indicative and "there is still a substantial degree

of conjecture" (Maddison, 2001, p.44) they have played an additional role in our understanding of the fact -analyzed infra- that *modern economic growth Þ divergence*.

Poverty levels

Persons/households, global income (HPG). We only have systematic statistics regarding persons/households poverty referred to global income and for very recent times. The only relevant information is the proportion and absolute number of poor persons, measured with the same standards as nowadays, in 1820. It was astonishingly high, 94.4% (997.8 M) and those living in extreme poverty were 83.9% (886.8 M). At the same time, life expectancy at birth was 26.5 years (Bourguignon and Morrison, 2002).

Poverty of countries (PC). The *average daily income* was less than $2 per day[viii] for most of the subcontinents (and probably countries) for many centuries. They surpassed that barrier during the following periods: Northern Europe, 1000-1500; Southern Europe, 1500-1700; North America and Oceania, 1700-1820; Eastern Europe, the former USSR and Japan, 1820-1870; Latin America, 1870-1913; Africa and Asia excluding Japan, 1913-1950 and the World average, 1820-1870.

Poverty dynamics.

Poverty of countries (EPC). At the subcontinental level, long periods of absolute decrease in average income were not so common. However, some very relevant cases can be found: Europe before the year 1000, Asia between 1500 and 1870, Africa between 1000 and 1700 (and the former USSR after 1989).

Income distribution and convergence dynamics.

Absolute convergence (AC): subcontinents. We only have statistics for continents' income evolution. Recent estimates by Maddison (2001), have shed new light on the old, intuitive belief, i.e., that economic growth is a very recent phenomenon. Between year 1 and year 1000 the world GDPpc (WGDPpc) declined, with Japan as the only growing region. The world annual growth rate from year 1 to 1820 was 0.022%, in spite of the acceleration which took place from 1700 to 1820 (0.098% per year). As a result, WGDPpc in 1820 was only 50% higher than at the beginning of the Christian era. Even taking into account that estimates previous to 1820 do not have the same precision as afterwards, it seems clear that up to the end of the so called second industrial revolution, world economic growth was incredibly (to our eyes) slow.

Northern Europe, the faster growing region, began to accelerate in an unknown period after the year 1000. Its growth rates were 0.138 from 1000 to 1500, 0.141 from 1500 to 1700 and 0.154 from 1700 to 1820, implying duplication lengths of around 500 years. It's really noteworthy, by the way, that the economic growth was basically the same in the Upper Middle Age and in the Modern era. However, as a consequence of this acceleration -followed slower and lately by Southern Europe and North America + Oceania- *it began a long run, expanding galaxy-like trend, of permanent divergence in countries GDPpc*. Its' variation coefficient (VC), that was almost nil in 1000 (0.04), jumped to 0.25 in 1500 and to 0.37 in 1820[ix]. This divergence process had two main characteristics. On the one hand, its acceleration. Comparing extremes, Northern Europe and Africa, the GDPpc scope widened to 2 in 1700 and to 3 in 1820, but reached almost 6 in 1870. On the other hand, the divergence at this stage was basically explained by the growth of the three aforementioned regions. One of the purposes of Maddison's estimates was to demonstrate that the divergence process began before the great European expansion to the other four continents. His evidence, however, is not conclusive[x]. *Beyond, the fact is that even without implying causality, the divergence process coincided with the modern phase of European globalization*[xi]. Although the subcontinents' GDPpc VC -excluding Northern Europe and

North America + Oceania- steadily increased since the year 0 to 1998, it was only 0.15 in 1500 and 0.23 in 1820, i.e., substantially lower than the VC applied to the whole sample of subcontinents.

Evolution of the national's income distributions (ENID)[xii]. Although we lack reliable and representative statistics of the evolution of national income distributions in such a long period of human history, some conjectures are possible. i) It is very probable that during the long transition from the neolithic times hordes to the great historical civilizations of 2000 BC to the beginning of the Christian era a sustained process of increasing income inequality had been in place. ii) This aristocratic type of inequality remained perhaps stable until the commercial revolution of the XV-XVI centuries and, more intensively, until the industrial revolution. iii) It was then that the Kuznets' U-shaped process began to take place, with an additional, important jump in inequality. This is the part of the story that we can tell, as in this paper.

Syntheses of the period. The basic trait of this period was a permanent trend of divergence, at least at the subcontinental level (Graph 1). So the clearest lesson we can get is that *the eve of income divergence coincided with the beginning of modern economic growth and that it took the form of an expanding galaxy*. Although this does not imply causality, it seems that modern economic growth is *intrinsically* a geographic, localized process and, for that reason, inseparable from the fact of divergence between regions or countries, in a sort of (hopefully) Kuznetsian, very long lasting 'U' process. It is very probable that the national income distribution had followed a similar trend. Both trends look so truthful that, perhaps, *the right questions to pose are not why convergence didn't take place, but why economic growth began and why it happened in a specific place*.

Graph 1
THE EXPANDING GALAXY
SUBCONTINENTS' DIVERGENCE, 0-2000, Northern Europe=100

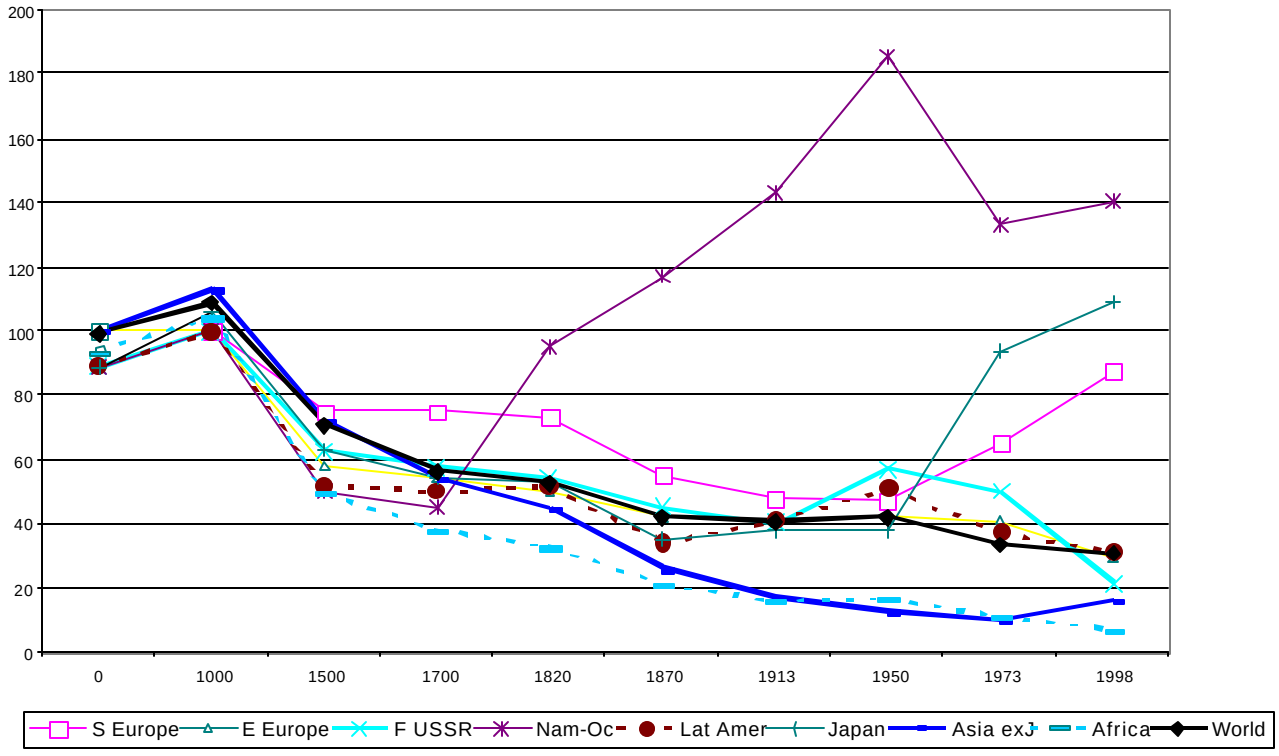

Table 2. WHEN EVERYTHING BEGAN (1): THE EVE OF ECONOMIC GROWTH
GDP pc, major regions, 0-1998, international US$ dollars

Reg/Year	0	1000	1500	1700	1820	1870	1913	1950	1973	1998
N.Europe	450	400	796	1056	1270	2086	3688	5013	12159	18742
S Europe	450	400	597	790	923	1146	1780	2334	7899	16262
E Europe	400	400	462	566	636	871	1527	2120	4985	5461
F.USSR	400	400	500	611	689	943	1488	2834	6058	3893
NAm-Oc	400	400	400	473	1201	2431	5257	9288	16172	26146
Lat Amer	400	400	416	529	665	698	1511	2554	4531	5795
Japan	400	425	500	570	669	737	1387	1926	11439	20413
Asia exJ	450	450	572	571	575	543	640	635	1231	2936
Africa	425	416	400	400	418	444	585	852	1365	1368
World	444	435	565	593	667	867	1510	2114	4104	5709
World Growth Rate	…	(0.0..)	0.01	0.0..	0.01	0.5	1.3	0.9	2.9	1.3

Notes: Reg, Region; NEurope, Northern Europe; SEurope, Southern Europe; EEurope, Eastern Europe; FUSSR, Former USSR; NAm-Oc, North America and Oceania; LatAmer, Latin America; Asia exJ, Asia excluding Japan. Source: Llach and Roldán (2002, based on Maddison (2001, Appendix B). **Variation Coefficients (VC)**. After the year: i) the whole sample; ii) excluding Africa; iii) LDC7, excluding N.Europe and NAm-Oc; iv) LDC5, excluding also S.Europe and Japan.

Year 0. 0.06 / Without Africa: 419, 0.06 / LDC7 0.06 / LDC 5: 0.05
1000. 0.04. WA: 409, 0.05 / LDC7: 0.05 / LDC 5: 0.05
1500. 0.25. WA: 530, 0.24 / LDC7:0.15 / LDC 5: 0.15
1700. 0.32. WA: 646, 0.29 / LDC7:0.20 / LDC 5: 0.15
1820. 0.37. WA: 829, 0.33 / LDC7:0.23 / LDC 5: 0.18
1870. 0.63. WA: 1182, 0.59 / LDC7:0.31 / LDC 5: 0.30
1913. 0.77. WA: 2160, 0.71 / LDC7:0.37 / LDC 5: 0.43
1950. 0.87. WA: 3338, 0.81 / LDC7:0.44 / LDC 5: 0.56
1973. 0.69. WA: 8059, 0.61 / LDC7: 0.67 / LDC 5: 0.61
1998. 0.82. WA: 12456, 0.72 / LDC7: 0.91 / LDC 5: 0.47

3. From the Second Industrial Revolution to the Belle Époque: 1820/1870-1913

Together with the XV-XVI centuries this period was perhaps one of the most economically global. Its most impressive trend was the acceleration of economic growth. World GDPpc , that had multiplied only by a factor of 1.5 between year 1 and 1820, and by a factor of near 2 between year 1 and 1870, multiplied by a factor of 2.3 between 1820 and 1913 and by a factor of 1.7 between 1870 and 1913.

Poverty dynamics

Persons/households, global income (EHPG). We only have systematic statistics at the global level. Worldwide headcount poverty showed contradictory trends that will last to our days. On the one hand, a continuous drop in the proportion of poor people, from 94.4 in 1820 to 82.4 in 1910, and an even more important drop in extreme poverty from 83.9 to 65.6. On the other hand, the number of poor people increased almost permanently from 997.8 M in 1820 to 1416.5 M in 1910 (Bourguignon and Morrison, 2002).

Poverty of countries (EPC). The contrast between rich and poor countries was still very impressive in 1913. The average daily income of countries placed in the poorest 10% of the distribution of countries according to their per capita income (DCGDPpc) was $1.78, comprising 49.5% of the world population. The richest 10% of countries, instead, had an average daily income of $14.44, comprising only 9.6% of the population (Llach y Roldán, 2002).

Income distribution and convergence dynamics

National income distribution dynamics (ENID). Bourguignon and Morrison (2002, 733-34) found that Theil-inequality *within* countries slightly increased between 1820 (0.462) and 1910 (0.498), explaining however a declining proportion of world income inequality (88.5% in 1820 and 62.5% in 1910). This, of course, was due to the fact that the between component increased much more rapidly.

Global income distribution dynamics (EGID). Theil total inequality showed an impressive jump in this period, from 0.522 in 1820 to 0.672 in 1870 and 0.797 in 1910. The Gini coefficient also worsened, from 0.50 in 1820 and 0.56 in 1870 to 0.61 in 1910, while the mean log deviation (mld) jumped from 0.42 to 0.67 between extremes. What is perhaps more impressive, the income participation of the bottom 80% of the distribution decreased from 43.7% in 1820 to 33.0 in 1910 (Bourguignon and Morrison, 2002).

Absolute convergence (AC). At the subcontinental level, and according to Maddison (2001) figures elaborated by Llach and Roldán (2002), there was a permanent increase in the VC, from 0.37 in 1820 to 0.63 in 1870 and 0.77 in 1913[xiii]. This trend was basically due to the fact that Northern Europe and North America + Oceania grew much rapidly than the other regions. The VC without these regions increased from 0.23 in 1820 to 0.31, remaining pretty stable onwards to reach 0.37 in 1913. Not everybody sang the same music, however. For instance, the distance between Latin America and the two most developed regions was reduced between 1870 and 1913. Llach and Roldán (2002) found a slight σ divergence between 1870 and 1913 in a sample of 31 countries (VC: 0.53 to 0.55). These data are coherent with the finding of Bourguignon and Morrison (2002, p.733), according to whom -and not only for this period- "differences in country economic growth rates practically explain all of the increase in world inequality and in the number of poor people". In the period under consideration, inequality between country groups grew from 0.061 (1820) to 0.299 (1910) and its contribution to total Theil inequality from 11.7% to 37.5%.

Syntheses of the period. i) A clearly different stage of modern economic growth began in this period, and it was characterized by acceleration. ii) The galaxy expansion-like divergence among countries continued, but with some convergence stories s1870. Latin America grew at the same rate than North America + Oceania and, the same as Japan, faster than Northern Europe, whose rate was only very slightly above that of Eastern Europe. iii) A secular process of decreasing proportion and, at the same time, increasing absolute numbers of poor people, began to take place. iv) An important worsening of the world income distribution took place, basically explained by differences in country's growth rates.

4. The Snake's Egg: 1913-1950

With two world wars and the worst totalitarian regimes in human history, this was, by far, the less economically global period of modern times. It clearly reminded us very well known sayings, from Cantillon to Cordell Hull, referring that international trade is the opportunity cost of war or other serious political conflicts. The average WGDPpc grew only 0.9% per year, in contrast with 1.3% in 1870-1913.

Poverty dynamics

Persons/households, global income (EHPG). We only have systematic statistics at the global level. Worldwide headcount poverty showed the same contrasting trends as in the previous period. The proportion decreased from 82.4 in 1910 to 71.9 in 1950, and from 65.6 to 54.8 in the case of extreme poverty. On the other hand, the number of poor people increased from 1416.5 M in 1910 to 1805.6 M in 1950, and from 1127.7 M to 1376.2 in the case of extreme poverty (Bourguignon and Morrison, 2002). These results would deserve, however, a deeper scrutiny, since life expectancy in the same period substantially increased from 32.8 to 50.1 years.

Poverty of countries (EPC). The average daily income of countries placed in the poorest 10% of the distribution of countries according to their per capita income dropped from $ 1.81 to 1.44, while the proportion of population living in them dropped form 49.5% to 47.7% (Llach y Roldán, 2002).

Income distribution and convergence dynamics

National income distribution dynamics (ENID). According to Bourguignon and Morrison (2002, 733-34) the Theil inequality within country groups substantially decreased in this period, from 0.498 in 1910 to 0.323 in 1950, while its contribution to total Theil dropped from 62.5% to 40.1%.

Global income distribution dynamics (EGID). Theil total inequality stabilized in this period, and the increase in the coefficient of Gini was very moderate compared to the previous period: 0.61 in 1910 and 0.64 in 1950. The same happened with the income participation of the bottom 80% of the distribution: 33.0% to 31.1% (Bourguignon and Morrison, 2002).

Absolute convergence (AC). Dispersion of subcontinents' GDPpc (VC) continued growing from 0.77 in 1913 to 0.87 in 1950 and the same happened within the LDCs subcontinents (0.37 to 0.44). *At the country level, s divergence reached its peaks for the whole period 1870-2000: 0.59 (n=31) and 0.76 (n=47)*. The Gini coefficient of countries' GDPpc also reached its XX century peak (n=47) after jumping from 0.379 in 1913 to 0.416 in 1950. There also was β divergence and the Kernel density function of countries' GDPpc, remained unimodal (Graph 2, Statistical Appendix). However, these dispersions and divergences had a different meaning from before and afterwards. The economic growth

ranking for this period was led by the USSR, following North America + Oceania, Latin America, Africa and Eastern Europe, all of them growing faster than the world average, and leaving behind Japan, Northern and Southern Europe and Asia (negative growth in the last case) (Llach y Roldán, 2002). Accordingly, Bourguignon and Morrison (2002) found that the participation of the between countries component of world income inequality jumped from, roughly, 40% to 60% both in the Theil and mld measures.

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Syntheses of the period. This period is the only laboratory we have to analyze how would be a non-global or less globalized world. i) The main characteristic was a very widespread deceleration of the world economic growth. Among continents, only Africa and the USSR grew faster than in the *belle époque* (1870-1913). ii) All relevant indicators of continents and countries divergence reached their peaks and β divergence also took place. However, a relevant (but transitory) change in the growth ranking occurred, with the USSR, Latin America, Africa and Eastern Europe gaining positions over the rest of Europe. iii) The secular process of decreasing proportion and, at the same time, increasing absolute numbers of poor people, continued to take place. A deeper research is needed in order to determine if this is compatible with the observed huge increase in life expectancy. iv) Other positive outcomes were the improvement in inequality within countries and stabilization or less deterioration of the world income inequality.

5. The Golden Age: Postwar Consensus and its not so Financial Globalization, 1950/60-1973/80

This period owes its nickname to Eric Hobsbawm, and looking at it in historical perspective it appears really golden. In its 1950-73 definition, it was the best performer regarding not only economic growth, but also different measures of equity.

Poverty dynamics

Persons/households, global income (EHPG). With the only comparable statistics at hand, those at the global level, worldwide headcount poverty shows the same contrasting trends as in the previous periods, but with relevant nuances. Both the proportion of poor and very poor people decreased in 1950-1980 from 71.9% to 55.0% and from 54.8 to 31.5%. Their absolute numbers, however, continued growing although at a slower pace, from 1.805.6M in 1950 to 2.426.6M in 1980 and, in the case of the extremely poor, from 1376.2M to "only" 1390.3M, after dropping to 1304.7 in 1970 (Bourguignon and Morrison, 2002).

Poverty of countries (EPC). Not for all countries were these years golden. Pritchett (1997,2001) found that 18 countries had negative growth rates in 1960-85. The average daily income of the poorest decile in DCGDPpc increased from $ 1.44 to 2.12, at an annual pace of almost 2% (Llach and Roldán, 2002).

Income distribution and convergence dynamics

National income distribution dynamics (ENID). There was an important drop in the mld in DCs (from 0.4 to 0.3), explained by the within component, and almost no change in LDCs after an increase u1975 (Collier and Dollar, WB02). According to Bourguignon and Morrison (2002), even when the world income distribution slightly worsened, the within component registered a decrease in its participation in the total inequality, both in the Theil and the mld measures.

Global income distribution dynamics (EGID). The Gini coefficient decreased in 1950-60 and slightly increased afterwards to finish in 1980 at 0.657, a bit higher than in 1950

(0.657). Roughly the same happened with the Theil index, while the mld increased continuously from 0.775 in 1950 to 0.850 in 1980 (Bourguignon and Morrison, 2002). "World inequality was about the same in the late 1970s as it had been a quarter of a century earlier" (Collier and Dollar, WB02).

Absolute convergence (AC). Taking historical records of world economic growth all together, *the VC at the subcontinental level decreased for the first time in the Christian era*, from 0.87 in 1950 to 0.69 in 1950. The drop still holds excluding Africa (0.81 to 0.61), but neither when Northern Europe and North America + Oceania are excluded (0.44 to 0.67), nor when also Southern Europe and Japan are excluded (0.56 to 0.61). All of the regions got their growth record in this period, with the only exception of Asia excluding Japan. There also was a significant σ convergence at the country's level, from 0.59 to 0.48 (n= 31) and from 0.76 to 0.65 (n=47). In Maddison's sample of 129 countries[xiv], the VC significantly decreased from 1.54 (1.39 without Africa) in 1950 to 1.19 (1.01) in 1973 and 1.02 (0.82) in 1980. According to Collier and Dollar (WB02), there was a significant drop in the between component inequality among DCs, with no significant change in LDCs. Jones (1997) found that during the period 1960-88 a growing number of countries β converged. Finally, Llach and Roldán estimated mixed trends in the Gini coefficient of the DCGDPpc from 1950 to 1970, with stability in the 76 countries sample and a decrease in the 47 countries sample. Two opposing signals arise, however. The first one is the beginning of an important change in the Kernel density function of countries' GDPpc, moving gradually from unimodal until 1950/60 to more and more bimodal afterwards (Graph 2, Statistical Appendix and Llach and Roldán 2002). The second arise from the fact that the between countries inequality continued growing, although at the slowest pace in history (Bourguignon and Morrison, 2002).

Syntheses of the period. The sub-period 1950-73 results the best performer regarding not only economic growth, but also different measures of equity. i) The world economy grew at 2.93% per annum, a historical record. The same happened to all the subcontinents under analysis, with the only exception of Asia excluding Japan. ii) Another record of this period was that, for the first time in the Christian era, there was a decrease in the continent's VC, with some signs of countries' β and σ convergence. iii) Worldwide headcount poverty showed the same contrasting trends as in the previous periods, decreases in proportions and increases in absolute numbers, although at a slower pace the latter. iv) The world income distribution worsened very slightly, with a decrease in the within component's participation, an important drop in inequality in DCs and almost no change in LDCs.

6. The Recent Wave of Financially Biased Globalization: 1980-2000

There are at least four points that enhance the relevance of the analysis of this period. First, globalization took new forms, particularly the trade and financial opening: "By now, the volume of international capital flows relative to global GDP far exceeds the levels reached in the period just before 1913, though the net flows of foreign direct investment have not yet attained the extraordinary levels of the decade before World War I" (Fischer, 2003)[xv]. Second, in spite of it and of the IT revolution, the world economic growth (GDPpc) was only half as rapid as in the golden era (1.41 vs. 2.93). With the only exception of Asia excluding Japan (3.54 vs. 2.92) growth rates were lower in all the other subcontinents. The collapse of the USSR (-1.75) and Eastern Europe (0.37) had intense, negative effects in their growth rates. Africa got almost no growth and Latin America reduced its own from 2.52 to 0.99. Third, there is taking place an intense debate about the benefits of this kind

of globalization for poor people and LDCs. Finally, since this period is still in place, the clarification of the issues raised in this debate are relevant for the current political economy of growth and growth policies.

Poverty dynamics

Persons/households, global income (EHPG). Chen and Ravallion (2001) estimated that from 1987 to 1998 the proportion of people living in poverty fell, both, with less than $1 and $2 per day, and, at the same time, absolute numbers increased. The numbers offered by Ravallion (2002) are a drop from 28.3% to 23.5 %, with increases in Sub-Saharan Africa and Eastern Europe. According to Collier and Dollar (WB02) -based on the same authors and in Bourguignon and Morrison- *after 1980, and particulary after 1993, for the first time since 1820, people in absolute poverty declined from c1400M to c1200M*. Bourguignon and Morrison (2002) estimate that the drop was 100M. Analyzing a longer period, 1970-1998, Sala i Martin (2002a) estimated that the proportions of poor people dropped heavily: from 20% to 5% (less than $1 per day) and from 44% to 8% (less than $2 per day), while the absolute drop from 1990 to 2000 was 400M. The same author (b, p.30) estimated that "global poverty headcount also declined substantially over this period, but especially after 1976": 234M in the $1 line and 450M in the $2 line. However, he adds: "The decomposition of poverty rates across regions suggests that the reductions in poverty were not uniform across continents. The bulk of the decline took place in Asia. Latin America reduced poverty overall, but most of the gains occurred during the 1970's, with little or no gains after that. Africa was the worst performer since poverty headcount in that continent increased by 175M people according to one-dollar definition and by 227 million according to the two-dollar line. One-dollar poverty rates in Africa doubled from 22% to 44% and two-dollar rates increased from 53% to 64%" (ibidem). Some of the promising results about poverty are explained by Freeman, Oostendorp and Rama (2001, WB02) because of the fact that wages in more globalized LDCs grew faster than in DCs.

Challenging the conventional wisdom, Bhalla (2002) estimated a drop in poverty incidence from 25.4% to 13.1% (1980-2000), with increases only in the Middle East and Africa, and in spite of the fact that his poverty line is PPP (1993 base) $1.3 against 1.08 of the World Bank. In absolute numbers, and in sharp contrast with WB estimates, Bhalla's are of 800M poor people in 1998 and 670M in 2000. The contrasts are particularly sharp for South Asia (7.8 Bhalla and 40% Ravallion), Latin America (5.2 vs. 12.1) and East Asia (6.0 vs. 14.7). Bhalla's book has produced a polemic with the World Bank (Bhalla, 2003; World Bank, 2003), and particularly with Ravallion, head of the poverty research unit there (Ravallion, 2003). According to Bhalla (2003), the PNUD Millennium Poverty Goal (15% for 2015) has already been reached[xvi]. He states that the main explanation of the differences with the World Bank is due to lower growth estimates of per capita expenditures (10.4 in 11 years, 1987-1998), based on household survey (NHS) means that are in sharp contrast with national accounts (NA) means. This difference between both means' growth is incredibly high: 16.7 for NHS and 29% for NA in 1987-98[xvii]. Another source of differences is the use by the WB of a consumption, instead of income-all products, exchange rate[xviii].

Poverty of countries (EPC). Llach and Roldán (2002) found an important increase in the average daily income of the 10% poorest countries, from 2.12 in 1970 to 2.94 in 1990 and 3.91 in 2000. This income's growth rate was 84.4% (32.3 in the last 10 years), clearly higher than the growth rates of the average income of the richest decile, that were 67.3 and 18.8%.

Income distribution and convergence dynamics

National income distribution dynamics (ENID). The within component of the mld slightly increased in 1980-95, both in rich and in the most globalized LDCs. The same

happened in China, particularly because the increase in inequality between rural and urban regions (Collier and Dollar, WB02). Masson (2001) found that s1970, and particularly s1980, the coefficient of Gini increased in a sample of 10 big countries. Sala i Martin (2000a) reckoned that within-country inequalities have slightly increased in 1970-1998.

Global income distribution dynamics (EGID). Jones (1997) found that the Kernel distribution of countries' GDP per worker -relative to the US level and weighted by population- was unimodal in 1960 as well as in 1988, showing convergence both at the bottom and at the top. Milanovic (2002) found a sharp increase in the late eighties, partially compensated with a decrease in the early nineties. Its standard errors, however, are so high, that it can be said that no trend really exists. Collier and Dollar (WB, 02) found that at the global level there was a drop in mld -from near 0.9 to less than 0.8. This was the compound effect of a decrease in the between component and an increase in the within component. The same effect occurred, with more intensity, considering the globalized world alone. Sala i Martin (2002, a and b) used two different methodologies. In his (a) paper, he assumed that all individuals within a quintile for each country and year have the same level of income -what results in an underestimation of the level of inequality within the distribution- while in his (b) paper he estimated a level of income to each individual in a country for every year and for the same period, 1970-1998. The basic properties of both Kernel density functions (n=97) comparing 1970 and 1998 look pretty the same: i) it remarkably shifted to the right, implying substantial increases in individual incomes; ii) in 1970 it showed certain bimodality; iii) in 1998 this twin peaks had vanished giving rise to a large world middle class. Some differences arise, however, comparing both distributions. In his (a) paper Sala i Martin said that income disparities substantially declined in 1970-98 in their seven most popular measures: Gini, the variance of the log income, two Atkinson's and three Generalized Entropy Indexes. In his (b) paper he found that (a) distributions underestimate the global level of income inequality but get the correct pattern and that, for that reason, studies that aim to estimate the evolution of income inequality can get the correct answer if they treat all citizens within a quintile identical. Finally, Ravallion (2003) argues that, cautiously distinguishing the between-country component of inequality from the mean income convergence/divergence between countries, it is clear that, while there has been mean-income divergence across countries in the post-war period, the between-country component of overall inequality has been falling. The economic growth in China has been a major contributing factor (Ravallion, 2003). Trying to synthesize what happened with globalization and world income distribution among countries, Wade (2001) presents a typology in which it can be read that, considering market exchange rates, the distribution among countries have significantly worsened, particularly in its non-weighted version. With PPP's GDPs, the non-weighted variant remain more unequal, although less, while in the weighted version he finds little change using Penn World Tables and a deterioration adding the Dowrick and Armal (2001) adjustment.

Absolute convergence (AC). At the continental level we found that, after have substantially decreased between 1950 and 1973, the VC increased again from 0.69 to 0.82, and from 0.61 to 0.72 excluding Africa. Without considering Northern Europe and North America + Oceania, the increase was even more impressive, from 0.67 to 0.91, because of the compound effect of Asia and Southern Europe growth, Africa's stagnation and the former USSR's and Eastern Europe's regression. Adding Southern Europe and Japan to the exclusion, the "pure" LDC's VC decreased from 0.61 to 0.47.

Jones (1997) found that the Kernel distribution of countries' GDP per worker -relative to the US level and non-weighted by population- was unimodal in 1960, while it change into a bimodal (or twin peaks: Quah (1996) in 1988. At the same time, he found divergence of incomes at the bottom and catch-up at the top. Considering the DCGDPpc, Llach and

Roldán (2002) found that the bimodality only insinuated in 1970 transformed itself in a very clear bimodal distribution, even more accentuated in 2000 than in 1990 (Graph II, Statistical Appendix. Sala i Martin (2002b) says that these two peaks vanish using individual data). They add that the Gini coefficients of that distribution show a clear increase in 1970-2000, for both samples (n=47 and =76). The same authors found a significant σ divergence in the three samples of countries they used, while a negligible β convergence also took place. In Maddison's sample of 129 countries[xix], the VC decreased u1980 from 1.19 to 1.02 (1.01 to 0.82 excluding Africa) but stabilized afterwards (1.04, and 0.82 excluding Africa, in 1998). At the same time, the number of converging LDCs increased s1970. While between 1950 and 2000 only 11 LDCs grew faster than the DC's average, the number increased to 18 in 1970-2000 and to 23 in 1990-2000. Most of them were from Eastern Asia and Southern Europe. More recently, South Asian countries (India, Sri Lanka and even Bangladesh), Poland, Egypt, Chile and, only in the 90's, Peru, also joined the club. The membership of other Latin American countries (Argentina and Uruguay) was transitory (Table 4, Statistical Appendix).

"The change in overall distribution of world income and the number of poor people are thus the net outcomes of offsetting effects. Among rich countries there has been convergence: the less rich countries have caught up with the richest, while within some rich countries there has been rising inequality. Among the new globalizers there has also been convergence and falling poverty. Within China there has also been rising inequality, but not on average elsewhere. Between the rich countries and the new globalizers there has been convergence. Between all these groups and the weak globalizers there has been divergence. The net effect is that the long run trend of rising global inequality and rising numbers of people in absolute poverty has been halted and even reversed" (Collier and Dollar, WB02). Sala i Martin (2002a) estimated that the reduction in world income inequality between 1970 and 1998 could be fully accounted by the decline in across-countries income inequalities and that a substantial part of the story, although not all of it, had been the important growth rates of 1.2 billion Chinese individuals. He added that if inequalities within countries miraculously ceased to exist, about 70% of the world inequalities would remain and that, as a consequence, the best strategy to reduce world income inequalities would be to induce aggregate economic growth in poor countries and, in particular, in those countries of the African continent which account for over 95% of the world's poor.

Synthesis of the period. i) Economic growth clearly decelerated in all subcontinents, being Asia the only exception. This suggests that perhaps the first question to answer is not about the effects of ninety's-type globalization on poverty or convergence, but on economic growth per se. ii) After the 1950-1973 break, subcontinents' (VC) and countries' σ divergence came again. Among rich countries and the new globalizers, an also between both of them, there has been convergence. Between all these groups and the weak globalizers there has been divergence. iii) There was important news in worldwide headcount poverty, with a decrease in its absolute numbers for the first time since 1820. The proportion also dropped, perhaps in between WB's and Bhalla's estimates. iv) At the global level there was a drop in mld, from near 0.9 to less than 0.8. This was the compound effect of a decrease in the between component and an increase in the within component. This is compatible with a mean-income divergence across countries, since the former is population weighted and is basically explained by the acceleration of economic growth in China and, to a lesser extent, also India. The net effect of all these facts taken together is that the long run trend of rising global inequality (and rising numbers of people in absolute poverty) has been halted and, perhaps, reversed

7. Stylized Facts and Hypothesis

7.1. Stylized Facts

Modern economic growth and divergence among subcontinents and countries

1. Modern economic growth Þ divergence. As it is well known, economic growth is a very recent phenomenon that started near the beginning of the XIX century. *The eve of income divergence coincided with it and took the form of an expanding galaxy.* So the very idea of modern economic growth is inseparable from the divergence between rich and poor regions or countries. *More explicitly: modern economic growth Þ divergence.*

2. *The right questions*. For those reasons, *the right questions to pose are not why convergence didn't take place, but why economic growth began and why it happened in a specific place*.

3. Long lasting decadences. At the subcontinental level, there are few recent cases of economic decadence in absolute terms. However, when the analysis is done at the country level, more periods of absolute decay appear, the majority of them belonging to Africa and Latin America. This implies that in a relevant number of cases it has been true "poor countries got poorer and poorer". In the case of Latin America, and particularly, in Africa, most of these episodes happened in the last quarter of the XX century.

4. Countries and subcontinents convergence/divergence. The galaxy expansion still continue at the subcontinental level, although some of those regions have begun to converge in different vintages: North America + Oceania in the XVIII-XIX centuries, Southern Europe and Japan since the last Postwar and East Asia since 1970. Considering the modern globalization as a whole (s1870), at the countries' level there have not been significant β convergence and neither σ convergence nor σ divergence in the long run. There were *periods* in which divergence was very clear (1913-1950 and 1980-2000) and periods of convergence (1950-1980). But *the divergent galaxy decelerated its expansion both, at the subcontinental and countries' level in the second half of the XX century*. International social mobility was higher in the second part of the XX century, but only a minority of countries changed their decilic position along the century, most of them moved just one decile -either upwards *or* downwards- and a majority of those who moved belonged to the world middle class at the beginning of the century. Rigidity, on the contrary, looked typical of the extremes of the distribution (Table 3, Statistical Appendix). The number of β converging countries has increased during the last fifty years and they were geographically more disperse. However, this "democratization" of faster growth is too recent to celebrate, (as it is proved by the regressions in Argentina and Uruguay) and *the middle class of countries has tended to reduce its size along the XX century*.

5. Geography's dominance. Most of the countries that clearly converged throughout the XX century belong to Southern Europe and East Asia. Southern Europe appears attracted by the growth forces of Northern Europe, while East Asian countries appear attracted by Japan. *This fact stresses the importance of geographical and particularly regional forces in the process of economic growth*.

6. Globalization. On the one hand, it is very clear that the less economically global period (1930-1950) was at the same time the one with higher increase in dispersion. At the same time, this less global period was the only one in which it was true that rich countries tended to be richer and richer and the poor got poorer and poorer. On the other hand, in the last wave of globalization, not only divergence increased, but also economic growth clearly decelerated in all subcontinents, being Asia the only exception. This suggests that

perhaps the first question to answer is not about the effects of ninety's-type globalization on poverty or convergence, but on economic growth per se.

7. The situation nowadays and projections. Regarding the situation nowadays, countries' Gini coefficient c2000 was near or above their historical peak. LDC's GDPpc is only 0.25% of DC's level (Africa 0.06) and this is the compound result of a relative level of 0.58 in human capital, 0.65 in the ratio physical/human capital and 0.65 in total factor productivity. Finally, current income inequalities are mostly explained by differences in GDPpc across countries. Maddison (2002) continental projections for the period 2001-2015 are that Eastern Europe, former USSR and Asia will converge to OECD income levels, while Latin America and Africa will diverge.

World income distribution

8. National income distributions: ¿a parallel expanding galaxy? Although we lack reliable and representative statistics of the evolution of *national income distributions* in the very long run, some conjectures are possible. It is very probable that during the long transition from the neolithic times hordes to the great historical civilizations of 2000 BC-0 a sustained process of increasing income inequality had been in place. This aristocratic type of inequality remained perhaps stable until the commercial revolution of the XV-XVI centuries and, more intensively, until the industrial revolution. It was then that the Kuznets' U-shaped process began to take place, with an additional, important jump in inequality. During the first half of XX century the trend began to change and there was an important drop in inequality in Northern European countries and their offshoots in North America and the Pacific, and later in East Asia too.

9. World income distribution: signals of stabilization. As a result of the (assumed) worsening of national income distributions and the divergence of subcontinents and countries economic growth, the inequality of world income distribution continuously increased since the very beginning of modern economic growth. In the second half of the XX century world income inequality tended first to decelerate and then to stabilize. This was the compound effect of a) the improvement of national distributions in DCs, and, b) in the last wave of globalization, a decrease in the between component and an increase in the within component. The b) trend is compatible with a mean-income divergence across countries, since *the former is population weighted and basically explained by the acceleration of economic growth in China and, to a lesser extent, also India*. The net effect of all these facts taken together is that the long run trend of rising global inequality has been halted and, perhaps, reversed.

10. The situation nowadays. In spite of the recent promising trends, world income inequality today is higher than in 1950. Seventy percent of these global inequalities are explained by differences in GDPpc across countries and, if inequalities within countries ceased to exist, 70% of world global income inequalities would remain.

Poverty

11. Secular trends. A secular process of decreasing proportion and, at the same time, increasing absolute numbers of poor people, started to take place around the beginning of the XIX century (or perhaps since the beginning of the demographic transition). These trends, however, deserve a more cautious scrutiny, since they don't seem compatible with the observed, sustained increase in life expectancy, from 26 years in 1820 to 60 years nowadays.

12. The last wave of globalization and the situation nowadays. During the last wave of globalization, and for the first time since we have registers, there was a decrease in the

absolute number of poor people. However, estimates differ so incredibly regarding its magnitude that, again, deeper studies are needed here. Of course, success does not mean victory. The number of poor is still too large. It's interesting to remark that there was a reversal of roles between Africa and Asia: in 1970, 11% of the world's poor were in Africa and 76% in Asia. By 1998, Africa hosted 66% of the poor and Asia's share had declined to 15%. Clearly, this reversal was caused by the very different aggregate growth performances.

7.2. Some very preliminar hypotheses

The purpose of these hypothesis is to contribute to the development of the ongoing research program about convergence or divergence, but centered here in some neglected issues. Three kinds of hypothesis are mentioned: a) those referred to the dynamics of economic growth in developed countries; b) those that emphasize the relationships between developed and developing countries and, c) those referred to the dynamics of underdevelopment in less developed countries.

Dynamics of economic growth in developed countries

1. The mysterious origins. As we have said, the question about why and how economic growth begins, and in a specific place, is still open. The newest paradigm of institutional (or cultural) dominance has received a serious defeat with the developments in China in the last 25 years and in Vietnam in the last 10 years. Theoretically speaking, the debate is clearly open (Voth, 2003), where we can learn that there is not consensus yet about the model that can explain the Industrial Revolution.

2. Endogenous growth or rigid steady states. Once economic growth (or development) takes off, externalities and increasing returns to human capital and scientific and technological research begin to play a very important role in its continuity. If this is true, the hopes of economic convergence between rich and poor countries would not vanish in each generation's foreseeable future only if massive investment in human capital and technology takes place. Alternatively, it could be that the steady states of different countries, particularly the poorest, are determined by variables enough rigid as to seriously limit the possibility of fast economic growth.

2. Institutions. The other critical factor in the development of DCs seems to have been the institutional framework, particularly a climate of freedom regarding scientific research and the *gradual* development of civic and political liberties, republicanism and, finally, democracy[xx]. The dominance of the institutions is highlighted by the fact of the growing importance of the between countries component at the time of explaining world income inequalities. However, the economic growth of Asian countries, and particularly that of China or Vietnam, is a challenge to the conventional wisdom about a standard package of institutions as the key of economic growth.

3. Geographic clustering. It seems clear that once economic growth begins in a country, it tend to spread to its' cultural or geographic vicinity. This can be clearly seen in the subcontinental nature of the vintages of modern economic growth: Northern Europe, its' offshoots, Southern Europe, Japan-East Asia. It has, however, important exceptions, like the economic growth of Chile in the last 20 years, without clear clusterization. Although

there are some theoretical explanations of clusterization (mostly those developed after Lucas, 1988), more complete explanations would be welcomed.

Relationships between developed and developing countries

4. Dynamic costs of specialization in primary products. If the endongenous growth model is right, the fact that most of the (now) LDCs integrated themselves in the world markets as commodities producers, while the developed ones were almost from the very beginning manufacturers, appears as a restriction to the access of LDCs to human capital and technological externalities[xxi]. The point here is not exactly the same made by Raúl Prebisch fifty years ago with the thesis of terms of trade deterioration, but the fact that specialization in the production of primary goods, totally or partially deprives LDCs from the plain access to the most critical factors of economic growth.

5. Foreign demand restrictions and barriers to free trade. A different question is that of international demand restrictions for latecomers. Whereas most DCs integrated into the world economy in the free trade context typical of the *belle époque*, LDCs began to produce manufactures in a more restricted market, either because of different kinds of protectionism in DCs or because of the simpler fact of a more intense competition among producers. Considering just agricultural and food protectionism and subsidies, more than 1 billion US$ are spent daily by OECD countries. This is terribly damaging for very poor people in a lot of countries.

6. Brain drain. Governments, firms or universities of DCs are in a better position to pay higher salaries to the most qualified scientists, technicians and professionals from DCs. From the social point of view this is like a donation of LDCs to DCs, and an appreciable loss to LDCs in the process of creating competitive advantages based on human capital. Almost no DC had the same problem in the critical stages of its' economic growht process.

7. Barriers to knowledge access. Even when logical from the point of view of promoting scientific and technological research, the legal monopoly of knowledge given by patents create conditions of difficult access to basic knowledge, even in critical health issues, to LDCs. These conditions seem to be more rigid than they were for DCs when they were industrializing.

8. Limitations to the free movement of people. Independently of the political or value judgement it could deserve, it seems clear that international migrations are now much more restricted than they were a century and a half ago, when millions of unemployed and even starving persons had the opportunity to move from the (considered) overpopulated European or Asian countries to America or Africa. International migration helped the former two continents to better adjust to the demographic transition process. This alternative has not been at hand in most LDCs, which have had to confront, for that reason, more social and political tensions and pressures.

9. Global warming up. The process of global warming up, mostly originated in DCs, has had, and is still having, very damaging effects on the life of very poor people in rural areas all over the world.

Dynamics of underdevelopment

10. Institutions. The dynamics of underdevelopment seems to play a role at least as important as the ones already mentioned in the explanation of divergence or missing convergence. Insufficient institutional development seems to be one of the critical factors behind that dynamics. It encompasses political instability (very important), lack of independent and fair justice, inefficient public administration and public expenditure and blurred property rights, among other factors. In turn this institutional malfunctioning results in an inadequate allocation of resources to the development of human capital, the most critical factor for development according to the theory of economic growth.

11. Poverty vicious circles. In a lot of countries of Asia, Latin America and, particularly, Africa, the vicious circles of poverty described fifty years ago by Gunnar Myrdal are still alive. Vast majorities of the population are too poor to get jobs or education, so they are condemned to remain poor and the favorite victims of diseases. It is very difficult to conceive that these situations could be overcome through conventional ways.

12. Volatility. Emerging and developing economies (and countries) are normally much more volatile than developed ones. Since mid-nineties a big crisis has been taking place in one or more emerging markets every year: Mexico and Argentina (1995), Asia (1997), Russia (1998), Brazil (1999), Turkey (2000), Argentina (2001), Brazil and Uruguay (2002). This is a clear threat to the convergence trend observed during the nineties (Table 7). Perhaps it is time we thought about the flip side of the opening of the capital account, at least when the public sector has huge deficit or when the world trade is restricted by protectionist barriers.

Final words: no globalization, more globalization or a different one ?

Coinciding with the so called new wave of globalization of the nineties and, more recently, with the growing and stronger criticisms to it, the question about the gap between poor and rich nations has gained momentum once again. More than that, the increasingly widespread discontent with globalization is a real threat to the evidently fragile, world peace. The reality that emerge from this paper is that the last wave of globalization was not neither as bad as its critics aurgue nor as good as its partisans believe. One of the main lessons of XX century, however, is that the alternative to globalization could very probably be the reemergence of extreme forms of nationalism and, at the end, wars. In part, this is already happening. Few months ago in New York, then in Afghanistan, in the Middle East, in Irak, in Colombia or in several parts of Africa and Asia.

The only true alternative then, seems to be not to de-globalize, but to build a different globalization. This new globalization should include policies like clear signals of revitalization and modernization of foreign aid to development, reaching the target of 0.7 % of GDP of DCs[xxii]; a sincere new commercial policy of DCs, allowing LDCs to have real access to their markets, particularly in food and agricultural goods; new initiatives regarding debt relief for highly indebted and really poor countries (the experience with the last one was that foreign aid was reduced at the same time); a reconsideration of those policies related to education, science and R&D, including patents, for LDCs; a reformulation of the approaches of international financial institutions regarding new ways of promoting institutional reform in DCs; a serious revision about capital account opening and, finally, a sincere commitment of DCs with the Kyoto Protocol and related measures to protect the environment.

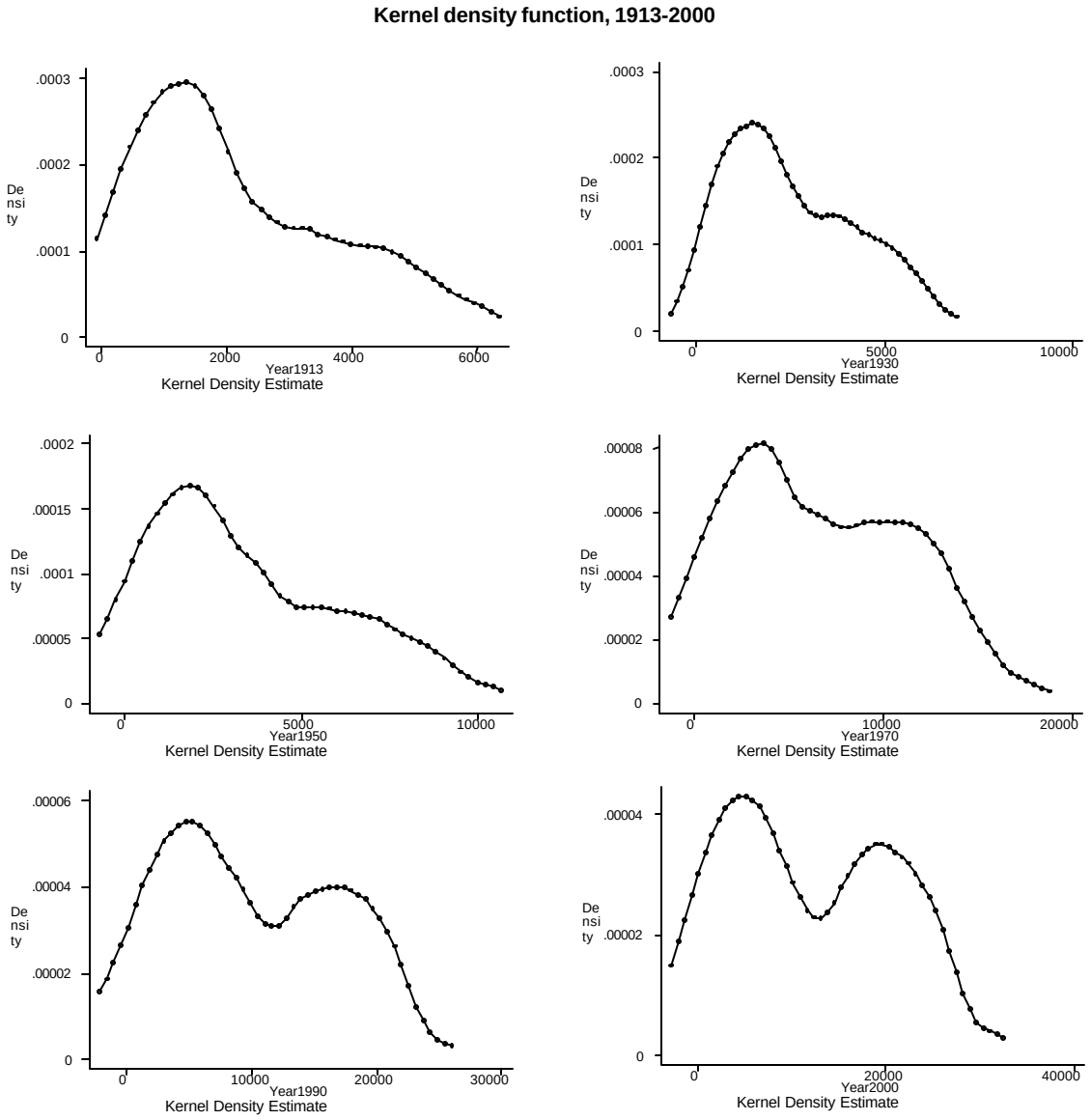
8. Statistical Appendix

Table 3. SUCCESSES AND FAILURES
Countries that moved 2 deciles or more, quoted periods, 1870-2000

Periods	N Countries	2+ deciles up	2+ dec. down	Less than 2	2000 LDC Up	2000 LDC Down
1870-2000	31	7 (22.6%)	6 (19.4%)	18 (58.0%)	1 + 1 (a1)	2 (a2)
1900-2000	41	7 (17.1%)	7 (17.1%)	27 (65.8%)	2 + 1 (b1)	4 (b2
1913-2000	47	9 (19.1%)	9 (19.1%)	29 (61.9%)	5 + 1 (c1)	7 (c2)
1950-2000(a)	56	6 (10.7%)	7 (12.5%)	43 (76.8%)	5 + 1 (d1)	5 (d2)
1950-2000(b)	76	11 (14.5%)	12 (15.8%)	53 (69.7%)	8 + 2 (e1)	10 (e2)

Notes. 2000 LDC: countries with less than US$ ppp15.000 pc in year 2000. (a1) Venezuela, plus Ireland. (a2) Hungary and Russia. (b1) Korea and Thailand, plus Ireland. (b2) Argentina, Czechoslovak, Philippines and Russia. (c1) Brazil, Greece, Korea, Taiwan and Thailand, plus Ireland. (c2) Argentina, Bulgaria, Chile, Hungary, Philippines, Russia and South Africa. (d1) China, Korea, Portugal, Taiwan and Thailand, plus Ireland. (d2) Argentina, Ghana, Russia, South Africa and Venezuela. (e1) Botswana, China, Greece, Korea, Malaysia, Sri Lanka, Taiwan and Thailand, plus Hong Kong and Singapore. (e2) Argentina, Bolivia, Cuba, Côte d'Ivoire, Ghana, Nicaragua, Peru, Russia, South Africa, Venezuela. Elaborated on Maddison (2001).

Graph 2. THE VANISHING WORLD MIDDLE CLASS OF COUNTRIES



Source: based on Maddison (2001)

Table 4
CONVERGING COUNTRIES
LDCs that grew faster than DCs. 1950-2000, 1970-2000,1990-2000

Bold: three periods of faster growth. *Italics*: two periods of faster growth

1950-2000 (N=11)	1970-2000 (N=18)	1990-2000 (N=23)
Taiwan 6.0	**Korea 6.8**	**China 6.7**
Korea 6.0	**Taiwan 6.0**	**(Ireland 6.2)**
Botswana 5.3	**(Singapore 5.6)**	**Taiwan 5.5**
(Singapore 4.7)	**Botswana 5.4**	*Chile 5.1*
(Hong Kong 4.7)	**China 5.1**	**Korea 4.7**
Thailand 4.2	Malaysia 4.6	**Malaysia 4.7**
China 4.2	Thailand 4.6	**(Singapore 4.5)**
Portugal 3.9	*(Hong Kong 4.6)*	Argentina 4.4
Greece 3.7	**(Ireland 4.3)**	*Sri Lanka 3.9*
(Ireland 3.7)	Indonesia 3.2	Myanmar 3.8
Malaysia 3.3	*Sri Lanka 3.1*	*India 3.5*
DCs 2.8	*Egypt 3.1*	**Botswana 3.4**
...	**Portugal 3.0**	Poland 3.4
...	*India 2.5*	**Thailand 3.3**
...	*Pakistan 2.5*	*Uruguay 3.2*
...	*Chile 2.2*	Bangladesh 3.0
...	**Greece 2.2**	**Portugal 2.5**
...	*Uruguay 2.1*	*Pakistan 2.2*
...	DCs 2.0	Peru 2.1
...		Turkey 1.9
		Egypt 1.9
		Ghana 1.8
		Greece 1.8
		DCs 1.7

Source: derived from Maddison (2001)

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10. Notes

[i] Economic History and Economic Development. Strictly speaking, it is interesting to know that no precise classification exists for the main issues dealt with in this paper

[ii] Originally presented to the Pontifical Academy of Social Sciences, Vatican City, April 2002.

[iii] A special mention deserves the book by Angus Maddison, *The World Economy. A Millennial Perspective* (OECD, 2001), on which most of the work of Llach and Roldán (2002) are based.

[iv] Even when the acronym LDCs can be misleading, we use it to refer to all countries with the exception of the developed ones (DCs) in order to avoid confusions between them.

[v] "Let us imagine an arrangement of all homes or people of the world according to their 1994 income level, that is to say, the personal distribution of world income. The reading of this chart would show us that the main single determinant of the households' position in this arrangement is the product per capita of their country...The explanation, of course, is not based on geographical or 'racial' factors, but above all on institutions and their history." (Llach, 1996 (1994), p.127-8)

[vi] When there is not relevant information the measures titles are omitted.

[vii] When immediately preceding a year, c means *circa*, s means since and u means until.

[viii] $ = US$

[ix] The VC is pretty the same excluding Africa.

[x] Among other reasons, because Maddison doesn't present offer enough chronological precision, showing estimates of GDPpc for the years 0, 1000, 1500, 1600, 1700 and 1820.

[xi] Perhaps we don't need to remind the existence of previous waves of European globalization, i.e., Greek, Hellenistic, Roman and, to a certain extent, "Barbarian".

[xii] Of course, there are inequalities more relevant than the economic ones. "Economic inequalities, however intense they might be, have replaced "non-economic" inequalities, still recognizable today, and universal in the past, of human beings divided into "classes" which were considered to be "naturally" different. These ancient types of inequalities were the consequences of forms of domination based purely on brute force or usurpation by a dominant group as in slavery, feudalism, racism or sexism. Institutionalized change in human rights do not appear in the economists' measurements of income or wealth distributions" (Llach, 1996 (1994), p.128)

[xiii] The VC is pretty the same excluding Africa.

[xiv] This author's estimates. Curiously enough, Maddison did not present them.

[xv] Obstfeld and Taylor (2003), quoted by Fischer, believe that capital markets integration was even greater in 1913.

[xvi] According to Bhalla, this holds true for very different methods and using either 1993 or 1996 PPP Penn world tables.

[xvii] Bhalla also put emphasis in the very weird fact that, after adding a new India survey, the poverty estimate of the WB drops from 23.9% in 1998 to 18.2% in 2000, implying a more important drop in 2 years than in the previous 11.

[xviii] Bhalla's criticisms about the use of national household surveys (NHS) clearly deserve attention and are not accordingly treated by the World Bank. The author of this paper, being Secretary of Economic Programming, had the same denial attitude from the WB when he argued the same criticism. WB rightly points out the necessity to filter national NHS's databases in order to get enough homogeneity, as well of the convenience to use directly primary data instead of secondary quintile shares, as Bhalla did. However, at the time of arguing the preference to use NHS instead of national accounts (NA) to estimate the median income or consumption, WB arguments are not convincing at all. This problem was analyzed in Llach and Montoya (1999). This is important because it is the most important source of differences between the two estimates. It is true that Bhalla doesn't prove the superiority of NA, but it is equally true that WB doesn't prove the superiority of NHS either. Arguments about differences in NA against NHS consumption are clearly not

enough. Bhalla says that his poverty estimates for 1980-87 are identical to WB's, while they are completely different for 1987-98. Finally, the question posed by Ravallion could be relevant: if you don't believe the overall survey mean, how can you believe the distribution obtained from the same survey?

[xix] JJLl's estimates. Curiously enough, Maddison did not present them.

[xx] It should be taken into account, however, that the process of institutional building in Europe was indeed very conflictive and bloody. That was the case during the first half of XX century -the so-called European civil war- and until now in the former USSR and the Eastern European countries.

[xxi] It is worth mentioning that most of the countries that converged to DCs, either in Southern Europe or in East Asia, did not integrate themselves in the world economy as primary goods producers.

[xxii] The aid is now 0.22% of GDP, having dropped from 0.34% in 1990. This implied a drop from US$ 45 to 39 billion and 20% in real terms. An interesting proposal is that of Joseph Stiglitz of using part of the international reserves of DCs to invest in LDCs.

Globalization and Poverty Reduction. Can the Rural Poor Benefit from Globalization? 8-9 November 2001, New York Organized by the Division for Social Policy and Development Venue: Conference Room, 23rd Floor, DC2 Building Time: 9:30 a.m. â€“ 5:30 p.m. Justification. The impact of globalization on poverty eradication has increasingly become the focus of attention of governments and international organizations. The economic arguments in favour of globalization stress the positive relationships between increasing international trade and investment flows and faster economic growth, higher living stan Poverties, inequalities, injustices, starvations, backwards and marginalizations are all serious problems many societies are still experiencing. The purpose of this paper is to examine the positive and negative aspects of globalization and realize how one could successfully deal with the challenge it poses.Â a. Globalization has internationalized crimes. Drug trafficking and the trafficking of women and children have become much more difficult to control because of their international character.Â 5. Globalization and international politics: The collapse of the Soviet Union has led to the US control of the global system and international relations. From our perspective, globalization studies imply research that is not just limited to the most popular spheres of economic and political globalization, but also includes the study of global problems such as climatic change, cultural globalization, and so on. In summary, the special character of the Globalization: Yesterday, Today, and Tomorrow is that it delivers a broad international and multicultural spectrum of issues associated with globalization, including the impact of globalization on particular cul-tural-geographic regions. Organization. The 18 articles are grouped into three section