Inequality Among World Citizens: 1820–1992

By François Bourguignon and Christian Morrisson*

This paper investigates the distribution of well being among world citizens during the last two centuries. The estimates show that inequality of world distribution of income worsened from the beginning of the 19th century to World War II and after that seems to have stabilized or to have grown more slowly. In the early 19th century most inequality was due to differences within countries; later, it was due to differences between countries. Inequality in longevity, also increased during the 19th century, but then was reversed in the second half of the 20th century, perhaps mitigating the failure of income inequality to improve in the last decades. (*JEL* D31, F0, N0, O0)

The revival of interest in empirical growth economics during the 1990's brought with it a revival of interest in the world distribution of income. Indeed, most of the recent literature on convergence of GDP per capita across countries goes beyond theoretical issues of the determinants of the economic growth of nations. It deals with the world distribution of income and with whether the distribution between rich and poor is likely to equalize or to become more polarized in the long run.[1]

This treatment of world inequality is oversimplified because it considers all citizens in a given country as perfectly identical. By ignoring income disparities within countries, the recent empirical growth literature gives a biased view of the evolution of world inequality over time, clearly underestimating it. This line of work focuses on "international" rather than "world" inequality. By 1820, for instance, this paper estimates that the Gini coefficient for world distribution of income was 0.50 whereas it would have been only 0.16 if individual incomes had been equal within each country.

A possible justification for focusing on international differences in GDP per capita is that they tend to change more quickly and more dramatically than national differences. Therefore, the dynamics of the world distribution of income would derive mainly from the component of world inequality that arises from the evolution of differences between countries rather than within countries. Indeed, this paper shows that inequality among countries is a key factor in explaining world inequality. But it also shows that world inequality is not well approximated by the hypothesis that all citizens within a country have the same income.

Many attempts have been made to estimate changes in world inequality of personal incomes.[2] This paper, by updating previous work from the 1950's to the 1980's and extending it back to the beginning of the 19th century, is the first to take a broad historical view. This view of world inequality over almost two centuries differs substantially from the literature on world economic inequality in the post-World War II

* Bourguignon: Delta, 48 Boulevard Jourdan, 75014 Paris, France (e-mail: bourg@delta.ens.fr) and World Bank; Morrisson: University Paris I and Delta, 36 Chemin Desvallières, 92410 Ville d'Avray, France. We thank Anthony Atkinson, Gary Fields, Branko Milanovic, and two anonymous referees for helpful comments on earlier drafts of this paper. We also thank participants at seminars sponsored by the World Bank and the International Labour Organization. Assistance by Bénédicte Sabatier is gratefully acknowledged. Any errors remain the authors' responsibility.

[1] See the 1997 symposium of the *Journal of Economic Perspectives* on the "Distribution of World Income," which deals with convergence issues, especially the articles by Charles I. Jones (1997) and Lant Pritchett (1997). See also Danny T. Quah (1996a, b).

[2] Studies on the postwar period until the 1980's include Alan P. Kirman and Luigi M. Tomasini (1969), John Whalley (1979), Albert Berry et al. (1983a, b, 1991), Irma Adelman (1984), Robert Summers et al. (1984), Margaret E. Grosh and E. Wayne Nafziger (1986), Henri Theil (1989), Pan A. Yotopoulos (1989), Martin Ravallion et al. (1991), Ronald V. A. Sprout and James H. Weaver (1992), Theil and James L. Seale, Jr. (1994), and T. Paul Schultz (1998). For recent estimates directly based on available national household surveys see Shaohua Chen and Ravallion (2000) and Branko Milanovic (2002).

era. It also differs from the limited, historically oriented literature (William J. Baumol et al., 1994; Pritchett, 1997) because it provides a quantitative rather than a qualitative picture of the evolution of world income inequality.

This paper shows that world income inequality was already high in the early 19th century (a Gini coefficient of 0.50), when the industrial revolution was under way in Britain and beginning in France. Then, with the spreading of the industrial revolution to Western Europe and to European-populated countries in the Americas and the Pacific—referred to, following Angus Maddison (1995), as the "European offshoots"—and increasing inequality within these booming countries, world inequality soared. From 1820 to the eve of World War I, inequality rose almost continuously. The Gini coefficient went from 0.50 to 0.61, and the Theil index from 0.52 to 0.79. The increase in inequality decelerated somewhat between the wars and slowed even more after 1950. By then, however, the world Gini coefficient had reached 0.64, a level of inequality unknown in most contemporary societies (even today's more inegalitarian countries have Gini coefficients less than 0.60). Roughly speaking, world inequality peaked in the middle of the 20th century after more than a century of continuous divergence. Changes during the last 50 years look minor compared with that dramatic evolution, and the situation appears to be stabilizing.[3]

This overall evolution of world inequality hides complex mechanisms and changes in the nationality of individuals at various levels in the world income hierarchy. For instance, during the initial period of world divergence, strong convergence was taking place among European countries and their offshoots in America and the Pacific after 1890, whereas income disparities between this group of countries and the rest of the world were growing. Likewise, the apparent stabilization of world income distribution since 1950 reflects a relative slowing of economic growth among European countries and their offshoots, a catching up by Japan and East Asia, and the take-off of China beginning in the 1980's. However, differences in growth in GDP per capita among countries are insufficient to explain this complex evolution in the 19th or 20th century. For instance, China's growth performance has been important in shaping the evolution of the world distribution of income because of China's exceptionally large demographic weight and its dramatic changes in income distribution. Similarly, the increased world disparities observed in the 19th century as a consequence of the industrial revolution had much to do with initial population size in Western Europe and its growth rate. This paper's main contribution is a detailed description of the evolution of world income distribution over the last two centuries. Moreover, the paper quantifies the importance of aggregate economic growth, population growth, and the structure of domestic income inequalities in this process.

Income is only one dimension of economic well being. Any analysis of the evolution of world inequality should also take other dimensions into account. Unfortunately, finding historical data for these other dimensions is even more difficult than finding data for income. This paper considers the evolution of inequality in longevity around the world, using national estimates of life expectancy at various points in time. That evolution parallels the evolution of income for about a century, after which it reversed, unlike the evolution of income inequality. If life expectancy is taken as a proxy for the health of a population, then evidence suggests that health disparities are probably not much larger today than they were in the early 19th century. Whether this should be interpreted as mitigating the failure of world income inequality to decline is a difficult conceptual question and is not tackled here. However, it is worth noting that the evolution of world inequality may not be the same along income and nonincome dimensions of well being.

In Section I, the paper first looks at the data and the methodology used to reconstitute the world distribution of income while taking domestic income disparities into account rather than assuming no heterogeneity within countries, as most of the recent literature does. Section II presents the findings on the overall evolution of world income distribution since 1820 and the results of sensitivity analysis for several assumptions made in constructing the data base. It also compares this evolution with and without accounting for domestic income

[3] Note that the estimates obtained by Milanovic (2002) would not suggest such a deceleration in the increase of world inequality. This is discussed in more detail later in this paper.

inequality. Section III provides a partial explanation of changes in world income distribution by decomposing the changes into the contribution of three components: the evolution of the world structure of GDP per capita, the structure of population, and domestic income inequality. It also analyzes the movement of countries and world citizens along the world income scale. Section IV focuses on changes in world disparities in life expectancy. The main findings are summarized in the concluding section.

I. Methodology and Data for the World Distribution of Income

Estimation of the distribution of income relies on three types of data for each country (denoted by i) included in the analysis: real GDP per capita, Y_i, expressed in constant purchasing power parity (PPP) dollars; population, N_i; and the distribution of income summarized by nine decile income shares, D_{ij}, $j = 1, ..., 9$ and the top two vintile shares, D_{ij}, $j = 10, 11$. The world distribution is then obtained by assuming that each quantile in a country is made up of individuals with identical incomes. For each country, nine groups are defined of $0.1N_i$ people with income $y_{ij} = 10Y_i^* \times D_{ij}$, for $j = 1, ..., 9$ and two groups of $0.05N_i$ people with income $y_{ii} = 20Y_i \times D_{ij}$, for $j = 10, 11$. These groups are pooled and ranged by income and then the cumulative function and Lorenz curve of the world distribution of income are computed. With n countries, these two functions are thus described by $11n$ points. Income inequality measures are computed on these $11n$ groups. It is also possible to follow the country composition of the various quantiles of the world distribution (what share of the top centile of the world belongs to country X?) and the world rank of the various quantiles of a given country (what share of the population of country X is in the top world decile, or any other quantile, of the world distribution?)

Data on GDP per capita and population are from Maddison (1995), the first to construct a consistent historical series starting as early as 1820 for some countries and ending in 1992. Because the data series for many Eastern European and non-European countries did not start until some time between 1870 and 1913, the original series needed to be extended back to 1820. To fill in the gaps, growth rates observed for comparable neighboring countries over the same period were used. Countries were also grouped in a slightly more aggregated way than in Maddison (1995) to avoid dealing with countries that were too small to affect world income distribution and to minimize problems of missing income distribution data (see the Appendix for groupings). The groupings were based on considerations of historical consistency and homogeneity. For instance, Austria, Hungary, and Czechoslovakia were grouped because they share obvious common characteristics over the 1820–1992 period, not just the post-World War II period. Similarly, Germany was kept united throughout the whole period. Argentina and Chile, two Latin American countries with recent European immigration, were also considered jointly, as were Taiwan and the Republic of Korea, two economies that shared a similar evolution over the last 40 years and similar histories of economic growth and income distribution during the previous hundred years or so.

Data were assembled for 33 countries or groups of countries. Each country or county group represents at least 1 percent of world population or world GDP in 1950. None of them can thus be thought of as negligible in the world economy. Countries like China,[4] India, Italy, and the United States, whose weight in the world is significant, are considered individually. The groups include small groups of comparable, medium-size countries and large groups of very small countries that came into existence only relatively recently and so could not be followed over a much longer period. For instance, Sub-Saharan Africa is broken down into four countries or groups: Nigeria, the largest country in the region; South Africa; Cote d'Ivoire, Ghana, and Kenya, three countries with a similar economic evolution; and the remaining 46 countries. Data are available, though very imperfectly, for the first three groups, whereas for the countries in the last group data are limited to the recent past.

To permit a simpler analysis of the evolution of the distribution of world income, the 33

[4] There has been some discussion on the recent growth performance of China. The calculations used here correspond to Maddison's (1995) "fast growth" scenario. Calculations assuming more modest growth performance were also made. They are not reported here for lack of space; however, they do not lead to fundamentally different conclusions.

groups were also aggregated into six blocks, defined geographically, economically, or historically: Africa; Asia excluding the "dragons" (Japan, Korea, and Taiwan); the Asian dragons; Latin America excluding Argentina and Chile; Eastern Europe (Bulgaria, Greece, Poland, Romania, Russia, Turkey, and Yugoslavia); and Western Europe and offshoots (all of Western Europe, including Austria, Hungary, and Czechoslovakia, and its offshoots in America, including Argentina and Chile, and in the Pacific).

Because of the obvious discrepancy between household purchasing power and GDP per capita, using GDP per capita in place of mean personal income may bias the estimation of the evolution of world inequality. Correcting for the share of nonhousehold income in GDP or the share of nonconsumption expenditures or taking into account the effects of changes in the terms of trade on the purchasing power of national agents proved impossible for the historical period. For comparability reasons, the GDP per capita convention was retained even after 1950, though a better approximation of international differences in mean living standards would have been possible.

Data sources for income distribution in the 33 country groups differ by period under analysis. Data are generally size-weighted disposable household income per capita.[5] For the post-World War II period, the data are updated from Berry et al. (1983a, b). For the pre-World War II period, data for today's developed countries are from existing historical series and adapted to fit the decile/vintile definition. Data for the United States and the United Kingdom are from Peter Lindert (2000). Data for continental Europe are from Morrisson (2000). Distribution data are available or can be guessed from available historical evidence for a few other countries for a few dates prior to 1950. For the remaining countries and country groups, distribution was arbitrarily assumed to be the same as in a similar country for which some evidence was available for the appropriate period. (The data, data sources, and assumptions behind them are available at: ⟨http://www.delta.ens.fr/XIX⟩.)

In view of these assumptions, it would be unwise to take the resulting estimates of national income distribution at face value. This also holds for GDP per capita estimates for the distant past. To gauge the resulting imprecision in world distribution estimates, measurement errors were generated randomly on Y_i and D_{ij}, and Monte Carlo experiments were conducted to determine plausible confidence intervals for world inequality measures.

Multiplicative measurement errors on GDP per capita are assumed to be distributed normally with mean unity and a standard deviation of 10 percent during the 19th century, 5 percent for the first half of the 20th century, 2.5 percent after 1950, and 0 in 1992. These seemed reasonable orders of magnitude. For distribution data, stochastic deviations from central estimates, D_{il}^0 were specified as:

$$(1)\quad D_{ij} = D_{ij}^0 + u_{i\cdot}(D_j^M - D_{ij}) + v_{i\cdot}(D_j^m - D_{ij})$$

where u_i and v_i are two independent, normally distributed, zero-mean random variables with identical standard deviation, and D_j^M and D_j^m are two arbitrary reference distributions corresponding to the most and the least inegalitarian distributions among all directly observed distributions. The standard deviation of the measurement error terms, u_i and v_i, was calibrated so that the resulting standard deviation of the Gini coefficient averaged 2 percentage points in the 19th century and 1 percentage point in the 20th century. With the width of the 95-percent confidence interval approximately equal to double these values, these seemed reasonable orders of magnitude. Indeed, a Gini coefficient of 0.44 rather than 0.40 would today imply a very significant difference in our knowledge of the distribution. All these measurement errors are drawn independently for all countries for all dates, for GDP per capita, and for the distribution of income.

II. Evolution of World Distribution of Income Since 1820

Table 1 shows the shares of various income quantiles in world income and a set of standard inequality measures for selected years at 20- to 30-year intervals over the whole period. Stan-

[5] Distribution data in agreement with this definition are generally available for the recent period. For more distant periods, available distribution data have been corrected in an approximate way to fit the same definition.

TABLE 1—THE WORLD DISTRIBUTION OF INCOME AND LIFE EXPECTANCY: INEQUALITY AND POVERTY INDICES FOR SELECTED YEARS

	1820					1910	
Index	Estimate	SE[a]	1850	1870	1890	Estimate	SE[a]
Income shares (percents)							
Bottom 20 percent	4.7	0.16	4.3	3.8	3.4	3.0	0.11
Bottom 40 percent	13.5	0.39	12.1	11.0	9.9	8.8	0.24
Bottom 60 percent	25.7	0.61	23.3	21.4	19.5	17.6	0.37
Bottom 80 percent	43.7	0.74	40.7	38.0	35.0	33.0	0.48
Top 10 percent	42.8	0.64	45.2	47.6	49.8	50.9	0.52
Top 5 percent	31.8	0.51	32.2	33.4	34.9	36.7	0.54
Summary inequality measures							
Coefficient of Gini	0.500	0.009	0.532	0.560	0.588	0.610	0.005
Theil index	0.522	0.018	0.598	0.672	0.745	0.797	0.017
Mean logarithmic deviation	0.422	0.016	0.485	0.544	0.610	0.668	0.015
Standard deviation of logarithm	0.826	0.016	0.873	0.919	0.971	1.027	0.015
Mean world income (PPP $ 1990)	658.7	23.2	735.7	890.0	1,113.8	1,459.9	24.1
World population (millions)	1,057.0		1,201.1	1,266.0	1,450.5	1,719.0	
Poverty							
Headcount (percents)							
Poverty	94.4	0.32	92.5	89.6	85.7	82.4	0.38
Extreme poverty	83.9	0.94	81.5	75.4	71.7	65.6	1.21
Headcount (millions)							
Poverty	997.8	3.4	1,110.5	1,134.3	1,243.6	1,416.5	8.2
Extreme poverty	886.8	9.9	978.8	954.0	1,040.5	1,127.7	24.1
Life expectancy							
Mean	26.5				29.9	32.8	
Theil index (between countries)	0.012				0.032	0.045	

[a] The computation of these standard errors is explained in the text.

dard errors of these inequality measures, computed in the Monte Carlo experiment described above, are reported for a few years. Figure 1 shows the evolution of density curves estimated using Kernel techniques on country decile observations. For the sake of clarity only four curves are shown, which delimitate in an obvious way the period under analysis.

The evolution shown by these indicators is unambiguous. World inequality worsened quickly and more or less continuously from 1820 to 1950, pausing only between 1910 and 1929. The rate of increase then decelerated considerably. On average, the Gini coefficient rose by 1 percentage point every decade from 1820 to 1950 and then almost leveled off between 1950 and 1992. On closer inspection, however, the indicators in Table 1 reveal a slightly more intricate picture for 1950–1992. Income distribution continued to worsen during the period, improving only between 1950 and 1960 and showing some signs of stability between 1970 and 1992. In particular, the share of the four bottom world deciles stopped falling between 1980 and 1992 for the first time since 1820, but that of the top decile increased again after a slight drop in the 1950's.

This finding is robust with respect to measurement errors. Since the distribution of all summary measures was close to normal, twice the standard error reported in Table 1 in each direction corresponds to a 95-percent confidence interval. With these confidence intervals, the overall imprecision in the change in the Gini coefficient during 1820–1950 does not exceed 2.5 percentage points, whereas the estimated increase is 14 percentage points. After 1950, however, measurement errors make the continuing increase in world income inequality ambiguous. Both conclusions apply to all summary inequality measures, including the ordinates of the Lorenz curve at the top of Table 1. All distributions observed in the 19th century Lorenz-dominate all distributions observed in the 20th century, even when measurement errors are taken into account. At the other end of the period, the distribution in 1992 is Lorenz-dominated by all distributions observed before

TABLE 1—*Continued*

	1950					1992	
1929	Estimate	SE[a]	1960	1970	1980	Estimate	SE[a]
2.9	2.4	0.04	2.4	2.2	2.0	2.2	0.03
8.2	6.8	0.10	6.8	6.1	5.7	6.4	0.07
16.7	14.2	0.17	14.1	12.8	12.5	13.5	0.10
32.3	31.1	0.23	31.9	30.4	29.5	28.2	0.13
49.8	51.3	0.31	50.0	50.8	51.6	53.4	0.14
35.0	35.5	0.31	34.1	34.2	35.0	36.0	0.19
0.616	0.640	0.002	0.635	0.650	0.657	0.657	0.001
0.777	0.805	0.009	0.776	0.808	0.829	0.855	0.005
0.690	0.775	0.008	0.766	0.823	0.850	0.827	0.005
1.064	1.154	0.007	1.161	1.210	1.234	1.184	0.005
1,817.1	2,145.5	16.1	2,798.6	3,773.8	4,544.0	4,962.0	—
2,042.1	2,511.3		3,024.7	3,664.5	4,414.0	5,459.1	
75.9	71.9	1.07	64.3	60.1	55.0	51.3	1.06
56.3	54.8	0.42	44.0	35.6	31.5	23.7	0.52
1,550.5	1,805.6	26.8	1,946.5	2,200.7	2,426.6	2,800.5	57.8
1,149.7	1,376.2	9.0	1,330.1	1,304.7	1,390.3	1,293.8	24.1
38.5	50.1			59.4		61.1	
0.046	0.025			0.012		0.013	

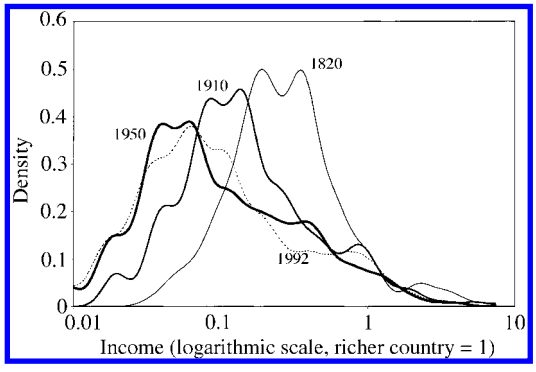

FIGURE 1. GAUSSIAN KERNEL ESTIMATE OF THE DENSITY OF THE WORLD INCOME DISTRIBUTION: 1820, 1910, 1950, AND 1992

1950. However, comparison with the 1950, 1970, and 1980 distributions yields ambiguous results when confidence intervals are taken into account.[6]

The Lorenz-dominance criterion ignores gains in social welfare due to a higher mean income by focusing exclusively on the distribution of *relative* incomes. Changes in world social welfare may be gauged by using generalized Lorenz dominance, which compares the absolute income of successively poorer segments of the population.[7] Simple calculations made from the data in Table 1 show that this dominance criterion breaks down only once, between 1929 and 1950. Except for that interval, the mean income of all bottom quantiles of the world distribution increased continuously.

The change in the world distribution of income is dramatically illustrated by the evolution of the density curve, as shown in Figure 1. To

[6] Using estimates directly based on household surveys, Milanovic (2002) finds an unambiguous increase in world inequality between 1987 and 1997. This does not necessarily contradict the results here. World inequality may have increased since 1992 or the use of GDP per capita rather than mean household income as directly estimated in household surveys may cause some discrepancy over a relatively short period of time.

[7] On this concept, see Anthony F. Shorrocks (1983).

make the curves comparable over time, income was normalized by the mean income of the richest country. The continuous and rapid increase in world inequality is noticeable with the leftward shift of the main modes of the distribution and the lengthening of its right-hand tail. In conformity with the results reported above, this shift stops after 1950. Another noticeable change is the shift of the secondary mode in the right-hand part of the curve. This mode, representing the distribution of income in the richest countries, tends to move leftward at an approximately constant distance from the first mode and to become more prominent over time. Between 1950 and 1992, however, this evolution seems to have been reversed.

In addition to the relative income scales explored in Figure 1 and through inequality measures, it is interesting to look at absolute scales. The poverty and extreme poverty ratios reported in Table 1 show the proportion of the world population below two absolute income thresholds. The poverty lines were calibrated so that poverty and extreme poverty headcounts in 1992 coincided roughly with estimates from other sources (see World Bank, 1990, 2001; Chen and Ravallion, 2000): 2.8 billion and 1.3 billion people, respectively.[8] The poverty lines are then taken to be constant over time.

With this definition of poverty, the worsening of the world distribution of income was not severe enough to cause the proportion of poor people to increase despite the growth in world mean income. In effect, world economic growth, though strongly inegalitarian, contributed to a steady decline in the headcount measure of poverty throughout the period under analysis. Over the 172 years considered here, the mean income of world inhabitants increased by a factor of 7.6. The mean income of the bottom 20 percent increased only by a factor of slightly more than 3, that of the bottom 60 percent by about 4, and that of the top decile by almost 10. At the same time, however, the extreme poverty headcount fell from 84 percent of the world population in 1820 to 24 percent in 1992. Even with the weaker definition of poverty, the drop is substantial: from more than 90 percent in 1820 to 51.3 percent in 1992.

While the poor declined steadily as a proportion of the population during the last two centuries, the number of poor people continued to rise. The number of people in extreme poverty rose as well, although the increase seems to have stopped in the last 20 years or so. Both evolutions result from a complex combination of effects linked to growth in the mean income of the world population, changes in its distribution, and differential rates of population growth along the world income scale. But changes in world distribution of income played a major role. World economic growth since 1820 could have caused poverty to decline dramatically, despite population growth, had the world distribution of income remained unchanged—that is, had the growth rate of income been the same across and within countries. Had that been the case, the number of poor people would have been 650 million in 1992 rather than 2.8 billion and the number of extremely poor people 150 million instead of 1.3 billion. Likewise, the leveling off in the number of extremely poor people since 1970 can be attributed to the stabilization of their relative position since then.

Differences in country economic growth rates practically explain all of the increase in world inequality and in the number of poor people. Table 2 decomposes world inequality into that due to income disparities within a country or country group and that due to disparities between countries, using two inequality measures. The within-country component of inequality is obtained by difference and corresponds to average country inequality weighted by total income for the Theil index or total population for the mean logarithmic deviation (see Bourguignon, 1979; Shorrocks, 1980). The between-country component refers to the inequality that would be observed if incomes were identical within each country.

As expected, within-country inequality decreased as a share of world inequality over the 1820–1992 period, though it remained an essential part of total inequality throughout the period (see Table 2). It represented 80 percent and more of total inequality in the first half of the 19th century, a time when most countries were at about the same income level. Essentially, the United Kingdom, some continental European countries, and the United States were

[8] These definitions correspond to poverty lines equal to consumption per capita of $2 and $1 a day, expressed in 1985 PPP.

TABLE 2—DECOMPOSITION OF WORLD INCOME INEQUALITY INTO "WITHIN" AND "BETWEEN" INEQUALITY (VARIOUS INEQUALITY MEASURES)

	Theil index			Mean logarithmic deviation			Standard deviation of logarithm	
Year	Inequality *within* country groups	Inequality *between* country groups	Total inequality	Inequality *within* country groups	Inequality *between* country groups	Total inequality	Inequality *between* country groups	Total inequality
1820	0.462	0.061	0.522	0.370	0.053	0.422	0.300	0.826
1850	0.470	0.128	0.598	0.374	0.111	0.485	0.432	0.873
1870	0.484	0.188	0.672	0.382	0.162	0.544	0.515	0.920
1890	0.495	0.250	0.745	0.393	0.217	0.610	0.592	0.971
1910	0.498	0.299	0.797	0.399	0.269	0.668	0.668	1.027
1929	0.412	0.365	0.777	0.356	0.334	0.690	0.747	1.064
1950	0.323	0.482	0.805	0.303	0.472	0.775	0.907	1.154
1960	0.318	0.458	0.776	0.300	0.466	0.766	0.920	1.161
1970	0.315	0.492	0.808	0.304	0.518	0.823	0.977	1.210
1980	0.330	0.499	0.829	0.321	0.528	0.850	0.994	1.234
1992	0.342	0.513	0.855	0.332	0.495	0.827	0.926	1.184

the only exceptions. GDP per capita in China or India was around $500 (in 1990 PPP); that of the United Kingdom was only three times larger. The gap between countries widened rapidly, however. By 1910 the differential between the United Kingdom and China had risen to 6:1 and by 1950 to 10:1. This widening gap plus the substantial decline in within-country inequality between 1910 and 1950 explain why, by 1950, within-country inequality accounted for only 40 percent of total world inequality—half its share in 1820. Thus the increase in between-country inequality was much larger than the increase in overall inequality—as measured by the Theil index or the mean logarithmic deviation—between 1820 and 1950. In the postwar period, the shares of the within-country and between-country components of inequality seem to have stabilized.[9]

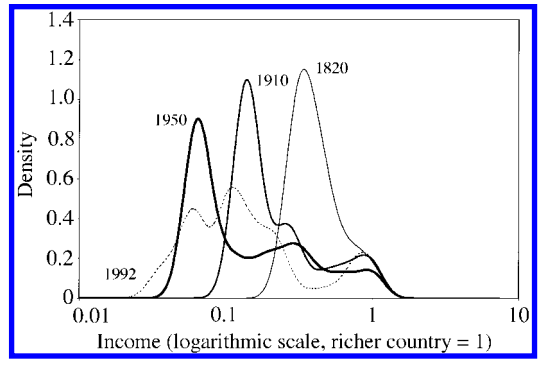

FIGURE 2. GAUSSIAN KERNEL ESTIMATE OF THE DENSITY OF THE WORLD INCOME DISTRIBUTION WHEN INEQUALITY WITHIN COUNTRIES IS IGNORED: 1820, 1910, 1950, AND 1992

The within-country component of world inequality is sufficiently important for the density function of the world distribution of income to be substantially different when country income decile information is used, as in Figure 1, and when they are not, as in Figure 2. The same is true of the evolution of density curves. Figure 2 shows Kernel estimates of the density function using GDP per capita for the groups of countries in the analysis. The density curve for 1820 has a single mode and a small hump at the bottom right end of the curve. The corresponding curve in Figure 1 was flatter with a double-peaked main mode and a secondary mode on the right tail. Over time, the density curve shifts leftward, as in Figure 1, but two secondary modes appear in 1910 and become more prominent in 1950. This evolution is much less pronounced in Figure 1. Likewise, there is a dramatic flattening of the density curve between 1950 and 1992 and a double mode appears in the left half of the curve. No such dramatic

[9] The figures on the change in inequality between countries are consistent with the rough estimates by Pritchett (1997). He found that the standard deviation of the logarithm of income per capita might have doubled between 1870 and 1990, increasing from 0.5 to a little more than 1.

change is observed when inequality within countries is taken into account.

This comparison of Figures 1 and 2 points out the danger of interpreting changes in the distribution of GDP per capita across countries (Fig. 2) as true changes in the world distribution of income, as much of the recent literature does. Economic analysis tends to consider countries as the logical statistical unit for assessing international convergence or divergence of income and to ignore population size. However, if the intention is to analyze the world distribution of income and the degree of inequality or poverty among world citizens, ignoring income disparities within countries may be misleading. The effect of changes in the world hierarchy of GDP per capita may have very different impacts on the distribution of income among world citizens depending on the degree of inequality in countries where income variations are largest.

III. Sources of Changes in the World Distribution of Income

What effect have economic and population growth and changes in domestic income distribution in the countries and country groups had on the evolution of world inequality? The contribution of changes in domestic income distribution is easily computed using the same decomposable measures as above.

The contributions of economic and population growth are a little more difficult to assess. The effect of a country's economic growth is evaluated by computing what the change in world inequality would have been had income per capita in that country grown at the same rate as mean world income per capita during the period under analysis. This permits capturing the effect on world inequality of the differential rate of growth between a country and the rest of the world.

The resulting decomposition is exact for relatively small countries, which cannot significantly affect world averages. Things are different for larger countries and a fortiori for regions. For that reason, the decomposition methodology is approximate—the sum of national contributions may differ from the observed change in inequality.[10] But since the objective is to identify the major sources of change rather than to quantify them precisely, this is not a problem. The same hypothetical scenario of a common growth rate is used for evaluating the contribution of the population growth of a country or a region to the change in world inequality. Table 3 shows the results of that decomposition when the 33 country groups are aggregated into six regions. For simplicity, the period was broken into four intervals of 40–50 years each.

Whether inequality is measured by the Theil index or the mean logarithmic deviation, the dominant disequalizing force throughout the 19th century and the first half of the 20th century was the relatively slow economic growth of the Asian region, the most populated area of the world. Between 1820 and 1950, income per capita in that region, which represented almost two-thirds of the global population in the early 19th century, grew at an average annual rate of 0.2 percent, some 4.5 times slower than the world average and 6 times slower than the average for the Western European regions, including offshoots. India, the slowest growing large country in the world in that period, and China, which did little better, accounted for most of Asia's slow growth. Maddison's (1995) data suggest that income per capita increased slightly more than 10 percent in India and about 17 percent in China between 1820 and 1950 while the increase in European countries in which the industrial revolution started was around 400 percent—and bigger yet in their offshoots. True, the terminal years of this period were among the worst growth years for India and China for the last two centuries. The picture is less dramatic for the subperiod 1820–1910. Even so, however, Asia underperformed all the other regions of the world by a wide margin.

The second major world disequalizing factor was the rapid enrichment of the European population. The first century and a half after the beginning of the industrial revolution witnessed a dramatic divergence in the world economy as the richest countries became ever richer and the

[10] This decomposition discrepancy is reported at the bottom of each panel of Table 3. Note that there is no perfect decomposition formula available in the present case. Ours generalizes the well-known methodology introduced by Dilip Mookherjee and Shorrocks (1982) to noninfinitesimal changes—which was also used in the context of the world distribution of income by Berry et al. (1983a).

TABLE 3—DECOMPOSITION OF CHANGE IN INEQUALITY BY REGIONAL INCOME, POPULATION, AND INEQUALITY EFFECTS

Source of change in world inequality	Africa	Asia	Japan, Korea, and Taiwan	Latin America	Eastern Europe	Europe and European settlements	Total	Total observed change in inequality	Discrepancy
A. *Theil Index:*									
1820–1870									
Difference in income growth from world average	0.005	**0.050**	0.002	0.000	0.000	**0.039**	**0.095**		
Difference in population growth from world average	0.000	0.003	0.000	0.001	0.001	0.010	**0.015**		
Within-country group inequality	0.001	0.001	0.000	0.000	0.000	**0.013**	**0.016**		
Total							**0.126**	0.149	−0.023
1870–1910									
Difference in income growth from world average	0.008	**0.068**	0.000	0.000	0.002	**0.032**	**0.110**		
Difference in population growth from world average	0.000	0.003	0.000	0.000	−0.002	0.007	0.007		
Within-country group inequality	0.001	0.004	0.000	0.001	0.006	−0.001	**0.010**		
Total							**0.127**	0.125	0.002
1910–1950									
Difference in income growth from world average	0.005	**0.110**	0.001	−0.003	−0.004	**0.050**	**0.159**		
Difference in population growth from world average	−0.001	0.000	−0.003	−0.001	0.003	−0.002	−0.004		
Within-country group inequality	0.004	**−0.010**	−0.003	0.000	**−0.038**	**−0.093**	**−0.139**		
Total							**0.016**	0.008	0.009
1950–1992									
Difference in income growth from world average	**0.015**	**−0.064**	0.003	0.001	**0.011**	**0.072**	**0.038**		
Difference in population growth from world average	0.003	**0.009**	0.004	−0.003	**0.015**	−0.005	**0.023**		
Within-country group inequality	0.005	**0.010**	0.000	0.002	0.000	**−0.035**	**−0.018**		
Total							**0.043**	0.050	−0.007
B. *Mean Logarithmic Deviation*									
1820–1870									
Difference in income growth from world average	0.004	**0.042**	0.000	0.001	0.000	**0.030**	**0.077**		
Difference in population growth from world average	0.000	0.004	0.000	0.001	0.003	**0.009**	**0.017**		
Within-country group inequality	0.001	0.001	0.000	0.000	0.000	0.008	**0.010**		
Total							**0.103**	0.121	−0.018
1870–1910									
Difference in income growth from world average	0.007	**0.063**	0.000	0.000	0.000	**0.026**	**0.095**		
Difference in population growth from world average	0.001	0.005	0.000	0.000	0.000	**0.009**	**0.014**		
Within-country group inequality	0.001	0.004	0.000	0.001	0.004	0.002	**0.011**		
Total							**0.121**	0.124	−0.003
1910–1950									
Difference in income growth from world average	0.005	**0.123**	0.001	−0.002	0.000	**0.046**	**0.174**		
Difference in population growth from world average	−0.004	0.002	−0.003	−0.001	0.002	−0.004	**−0.008**		
Within-country group inequality	0.006	**−0.016**	−0.003	0.000	**−0.035**	**−0.020**	**−0.069**		
Total							**0.097**	0.107	−0.010
1950–1992									
Difference in income growth from world average	**0.020**	**−0.083**	**0.042**	0.000	−0.001	**0.077**	**0.055**		
Difference in population growth from world average	−0.003	0.000	0.005	−0.004	**0.012**	**−0.041**	**−0.031**		
Within-country group inequality	**0.012**	**0.030**	−0.001	0.001	−0.002	**−0.011**	**0.029**		
Total							**0.053**	0.053	0.000

Note: Entries in bold correspond to dominant sources of change.

poorest countries were virtually cut off from economic growth.[11] The income differential between Europe and its offshoots on the one hand and Asia or Africa on the other—between the richest 20 percent of the world and the poorest 60 percent—soared from 1:3 in 1820 to 1:5 in 1910 to 1:9 in 1950. This enrichment of Europe plus the growing relative impoverishment of Asia between 1820 and 1950 represented an increase in inequality nearly equivalent to the total increase in world inequality for the whole 1820–1992 period.

The disequalizing contribution of European economic growth to world inequality did not vanish after 1950. Growth in Europe and its offshoots remained systematically higher than the world average during that period too. At the other extreme, however, a big change was taking place. Slow economic growth in Africa was now significantly increasing world inequality, while Asia's improving growth performance was resulting in a substantial drop in world inequality. Driving the dramatic evolution in the Asia region was China's impressive growth, especially in the last 12 years of the period under analysis.[12] Although other countries in Asia also grew faster than the world average during the last 40 years or so (except India[13]), China's growth dominates because of its size.

In addition to Asia's economic growth, a second set of equalizing forces has been the evolution of inequality within regions and countries. The most important change was the decline in inequality in Western Europe during the first half of the 20th century. Two primary forces lay behind that drop. First was the redistribution that took place in most developed countries in the period from before World War I until after World War II. Its impact on the world distribution of income was substantial as measured by an inequality measure like the Theil index, which gives more weight to changes at the top of the distribution. Together with the equalizing effect of the Soviet revolution in Russia and the socialization of Eastern European countries, this equalization of incomes within Western Europe offset a large part of the increase in world inequality arising from divergences in national economic growth rates. This compensation is less important with the mean logarithmic deviation than with the Theil index because of the lower weight it gives to richer countries.

The second force behind the drop in inequality in the Western Europe region was the convergence of mean incomes among European countries and their offshoots during the 20th century. Overall inequality within this group of countries increased slightly between 1820 and 1870, remained stable until 1910, and then fell substantially, causing a drop in the world Theil index of more than 12 percentage points (Table 3). Approximately half of this fall was due to the equalization of national income distributions just mentioned. The rest was due to the evolution of inequality *across* European countries.[14] The increase in European inequality between 1820 and 1870 reflects the divergent evolution of the Anglo-Saxon countries (Australia, Canada, the United Kingdom, and the United States) and the rest of Europe. Income per capita in the United Kingdom was about 40 percent higher than in continental Europe at the beginning of the 19th century. By 1870, this difference had doubled. In the aggregate, inequality changed only slightly between 1870 and 1910. But there was much underlying mobility. The United States and the United Kingdom switched ranks in the world income distribution, Germany returned to its initial position in the group, and Spain and Portugal replaced Chile and Argentina at the bottom of the scale. Some true convergence took place among European countries at the beginning of the 20th century, even though the U.S. advantage over other countries was reinforced at the end of World War II. Europe began to catch up with the United States afterward. As a consequence, inequality between countries in the European group in 1992 dropped back to the level observed in 1820. This very strong convergence, which also included the effects of the

[11] This finding corroborates the intuition developed by Pritchett (1997).

[12] This conclusion would still hold if the lowest estimate of Chinese growth found in the literature were used.

[13] Of course, the equalizing effect of Asian growth would be still stronger if the analysis were extended by a few years to take into account India's recent acceleration of growth.

[14] Indeed, the within-country component of inequality in Table 3 is defined at the *regional* level. It thus includes inequality across countries of the same region.

economic recovery after the war, explains the drop in European inequality shown in Table 3 and its important equalizing effect on the world distribution of income during the 20th century. This effect is less pronounced with the mean logarithmic deviation than with the Theil index, which emphasizes the top of the distribution, which includes most of the European population.

A similar convergence might have been expected as a result of the contribution of the Asian dragons—Japan, Korea, and Taiwan—to the evolution of the world distribution. It is not surprising that this group had no effect on the level of world inequality before 1950, when their growth was like that of other nonindustrial countries. Between 1950 and 1992, however, they leaped over several rungs in the world hierarchy of income, multiplying their income per capita by approximately 10 and moving from slightly below the world mean to the mean of the richest group of countries. This contributed to a worsening of world inequality, although the effect is substantial only with the mean logarithmic deviation (see Table 3).[15]

In sum, both disequalizing and equalizing forces contributed to the change in the world distribution of income from 1820 to 1992. On the disequalizing side, the main forces were the consistently better economic performance of European countries and their offshoots, the relatively poor growth performances of China and India until late in the 20th century, the divergence between Anglo-Saxon and the other European countries in the first half of the 19th century, and the slow growth of Africa in the second half of the 20th century. On the equalizing side, the main forces were the equalizing of incomes within Western European countries, Russia, and Eastern Europe in the interwar period and after World War II; the European countries quick catch-up to the United States after World War II; and China's outstanding growth performance in the last decade or two of the period. While the rapid growth of the Asian dragons was another important phenomenon in this period, the effect on world income distribution was ambiguous and limited.

[15] This difference between the Theil index and the mean logarithmic deviation suggests that the growth of Asian dragons produced an ambiguous shift in the world Lorenz curve.

Two factors have been ignored in this discussion. First, nothing has been said of Latin America because its economic growth over the last two centuries has roughly coincided with the world average. In other words, it has always been midway between the high rates of growth of the European group and the relatively slow rates observed in Asia and Africa. Second, it is remarkable that population growth rates do not seem to be associated with any big change in the world distribution of income. One reason is that changes in the regional structure of world population have not been very big. Over 170 years, the major change has been that the less populated regions in 1820, Africa and Latin America, have grown more rapidly than the others—the growth of the North American, Australian, Argentine, and Chilean populations being amalgamated with that of old Europe. Overall, this has been equivalent to Asia losing some of its demographic importance in favor of Africa and Latin America—not a very significant change for the world distribution of income. It must also be stressed that pure demographic changes have ambiguous effects on the distribution of income when they affect one end of the distribution more than the other, which leads to crossing Lorenz curves. As an example of this ambiguity, the population effect for 1950–1992 is inegalitarian with the Theil index but egalitarian with the mean logarithmic deviation (see Table 3).

Another dimension of the changes in the world distribution of income is the mobility of world citizens within the world income scale. Country differences in GDP per capita, population growth, and income distribution are responsible for changes in the world distribution of income, as analyzed above, and for mobility within the world income scale.

Table 4 shows the regional composition of various quantiles of the world distribution for selected years. Mobility of regional groups of individuals within the world income scale is responsible for changes in that composition, and results from a complex combination of relative changes in countries' relative mean income, population, and domestic income distribution. For instance, the increasing share of European countries and their offshoots in the top world decile between 1820 and 1950 resulted from both their relative increase in population and mean income between 1820 and 1910 and from

TABLE 4—REGIONAL COMPOSITION OF SELECTED WORLD QUANTILES: SELECTED YEARS (PERCENTS)

World quantiles	Africa	Asia	Japan, Korea, and Taiwan	Latin America	Eastern Europe	European countries and offshoots	Total
1820							
Total	6.9	64.9	3.6	1.8	8.2	14.6	100
Bottom 60 percent	7.9	75.8	3.2	1.7	6.0	5.3	100
Mid 30 percent	5.8	55.3	4.4	1.4	12.5	20.5	100
Top 10 percent	4.1	32.5	3.5	3.0	8.0	48.9	100
1910							
Total	6.2	51.6	3.7	3.8	12.9	21.7	100
Bottom 60 percent	8.1	71.1	2.9	4.1	9.5	4.4	100
Mid 30 percent	4.6	25.0	5.6	4.1	21.2	39.6	100
Top 10 percent	0.9	25.0	1.8	1.9	6.3	64.1	100
1950							
Total	8.9	49.6	4.5	5.5	10.9	20.7	100
Bottom 60 percent	12.7	74.4	2.7	4.6	3.5	2.1	100
Mid 30 percent	4.2	18.2	8.7	8.3	25.8	34.8	100
Top 10 percent	1.2	4.4	2.1	3.0	8.3	81.1	100
1992							
Total	12.0	54.8	3.5	7.6	8.3	13.8	100
Bottom 60 percent	17.4	72.7	0.0	6.5	3.2	0.3	100
Mid 30 percent	5.0	36.2	5.3	11.1	19.7	22.6	100
Top 10 percent	1.4	6.1	18.2	3.8	4.1	66.4	100

the increase in their mean income 1910 and 1950. Their declining share between 1950 and 1992 was due to a slower rate of population growth than in the rest of the world and to the rapid economic growth of the Japan, Korea, and Taiwan group, which moved a substantial number of people in that country group into the top world decile. In other words, Europe's ascending supremacy from 1820 to 1950 was checked by the economic rise of the Asian dragons and the relative decline in the European population.

At the other end of the spectrum, the dominant change has been the continuously increasing share of Africa among the world poor, an evolution that accelerated sharply during the 20th century. Because of Africa's rapid population growth and its lower than average economic growth, this region's share among the world's poorest 60 percent increased from 8 percent at the end of the 19th century to 17.5 percent in 1992. This evolution would be even more pronounced with a more restrictive definition of poverty. In 1950, only 12 percent of world inhabitants with incomes of less than half the world median income lived in Africa. By 1992, 30 percent did. Poverty, largely an Asian problem until just after World War II, is fast becoming an African problem. Asia, after a sharp decline from 1820 to 1950, is catching up with more developed regions. Its share in the three mid-deciles of world income doubled from 18 to 36 percent between 1950 and 1992. Finally, Latin America's shares in world income followed its increasing share of the world population, with an increasing concentration in the middle deciles.

Another way of looking at the dynamics of the world distribution of income is to consider how citizens within countries perform on an income scale defined at the world level, the approach taken in the recent literature on convergence and mobility (see, in particular, Quah, 1996a). The corresponding transition matrices are shown in Table 5, with four income bands defined (as in Quah, 1996a) as simple proportions of the world mean.

The dominant impression from Table 5 is of extremely low mobility of individuals throughout the period of analysis. Less than 30 percent of people changed income band during successive 40-year intervals, and less than 10 percent did in the two extreme bands, except between 1910 and 1950. Mobility increased over time, though, by approximately 15 percentage points overall—and it changed direction. Until 1910, mobility was predominantly downward, whereas it was more balanced after 1910. Finally, the implications of the transition matrices shown in

TABLE 5—RELATIVE INCOME MOBILITY MATRIX AND MOBILITY RATIOS: SELECTED PAIRS OF YEARS

Income in final year relative to world mean income (wmi)	Income in initial year relative to world mean income (wmi): Less than 1/2 wmi	From 1/2 to 1 wmi	From 1 to 2 wmi	More than 2 wmi	Total (share in world population)	Mobility ratios
1820–1870						
Less than 1/2 wmi	98.8	35.0	0.0	0.0	52.3	
From 1/2 to 1 wmi	1.2	63.2	10.9	0.0	26.8	
From 1 to 2 wmi	0.0	1.8	80.2	3.7	12.2	
More than 2 wmi	0.0	0.0	8.9	96.3	8.6	
Total	39.1	39.2	14.0	7.7	100.0	
(Immobility ratio)						84.6
(Upward mobility)						3.0
(Downward mobility)						12.4
1870–1910						
Less than 1/2 wmi	99.5	38.3	0.0	0.0	58.9	
From 1/2 to 1 wmi	0.5	60.1	32.6	0.0	20.9	
From 1 to 2 wmi	0.0	1.6	63.1	7.5	10.0	
More than 2 wmi	0.0	0.0	4.3	92.5	10.3	
Total	48.9	26.8	13.8	10.5	100.0	
(Immobility ratio)						78.8
(Upward mobility)						1.6
(Downward mobility)						19.6
1910–1950						
Less than 1/2 wmi	91.7	31.3	0.0	0.0	57.9	
From 1/2 to 1 wmi	8.3	47.5	6.1	0.0	15.5	
From 1 to 2 wmi	0.1	21.2	65.8	19.6	14.2	
More than 2 wmi	0.0	0.0	28.1	80.4	12.5	
Total	55.8	21.4	11.1	11.7	100.0	
(Immobility ratio)						71.4
(Upward mobility)						14.4
(Downward mobility)						14.2
1950–1992						
Less than 1/2 wmi	89.7	20.5	0.0	0.0	56.2	
From 1/2 to 1 wmi	7.8	49.5	20.2	0.0	14.9	
From 1 to 2 wmi	1.7	18.4	45.2	4.8	10.4	
More than 2 wmi	0.8	11.6	34.6	95.2	18.5	
Total	59.1	15.5	13.0	12.4	100.0	
(Immobility ratio)						78.3
(Upward mobility)						15.2
(Downward mobility)						11.4

Notes: The table entries are initial year's population in each income band by income in the final year (percentage). The immobility ratio is the share of world population not changing relative income band. Upward (downward) mobility is the share of world population moving up (down) one income band or more.

Table 5 for the evolution of the world distribution of income changed over time too. In particular, the "twin peaks effect" noted by Quah (1996b), in which mobility leads to a polarized distribution of world income, is noticeable in the 1950–1992 period and to a much lesser extent in 1820–1870. In the two middle periods, comparing the "total" rows and columns of Table 5 simply shows a straight increase in the inequality of the distribution of relative income between the initial and the terminal year.

It is important to note that the changes in the mobility matrices are due largely to the growth performance of a small number of countries or country groups. Thus, the drop in inequality within and across European countries and their

offshoots between 1910 and 1950 explains most of the increase in upward mobility in that period. Likewise, the acceleration of growth in China and the Asian dragons is responsible for the upward mobility observed from 1950 to 1992. Both phenomena can be viewed as exceptional. Thus, to consider the transition matrices for recent periods as stationary, as is often done in the convergence literature, seems largely unjustified in a historical perspective.[16]

IV. Other Dimensions of World Inequality: Life Expectancy

The current income of individuals, even aside from the question of whether average income per capita is satisfactorily proxied by GDP per capita, is a restricted definition of welfare. A more comprehensive definition of economic well being would consider individuals over their lifetime, and inequality would be evaluated not just within the population alive at a point in time but within successive cohorts. To the extent that life expectancy is a summary of people's health conditions, it is another dimension of individual welfare, independent of income and comparable to, but easier to evaluate than other nonincome dimensions like safety, freedom, or access to justice or education. Thus, life expectancy could be another source of inequality, both within and across countries.

Estimates of life expectancy for the 33 countries and country groups considered here were gathered from the historical demography literature for the pre-1950 period and from the United Nations *Demographic Yearbook* for the 1950–1992 period. For countries or periods for which no direct estimate was available, life expectancy was set arbitrarily to that of a comparable neighboring country.[17] Note that all individuals within a country or group of countries are assumed to have the same life expectancy. Thus, unlike for income, within-country inequality of life expectancy is assumed to be zero.

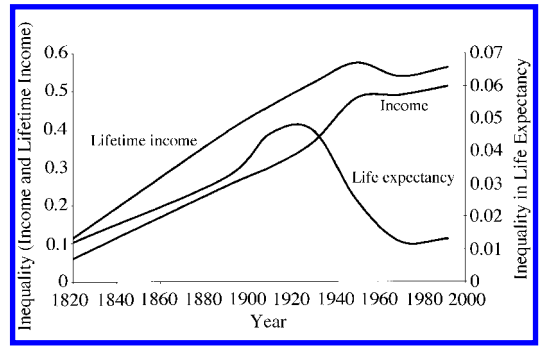

FIGURE 3. EVOLUTION OF INTERNATIONAL INEQUALITY IN INCOME, LIFETIME INCOME, AND LIFE EXPECTANCY (THEIL INDEX)

Average life expectancy in the world has more than doubled, rising from 26 years in 1820 to 60 years today (see bottom of Table 1). Progress was initially slow and deeply inegalitarian. Mean world life expectancy was only 33 years prior to World War II—an improvement of only seven years in more than a century. Underlying this evolution of the mean, however, was near stagnation in Asia and Africa, a seven-year increase in Latin America, and a nearly 17-year increase in European countries and their offshoots. As with income, inequality in life expectancy thus worsened considerably during the 19th century. Unlike income, however, world inequality in life expectancy fell considerably after 1930, as improvement in world mean life expectancy accelerated. Both trends were strongly influenced by the rapid catching up of countries left behind during the 19th century. Average life expectancy increased more than 20 years in several Asian countries between 1930 and 1992, but only 12 to 15 years in European countries. In relative terms, the difference is bigger still.

Thus the evolution of world inequality in life expectancy is quite different from that of GDP per capita (see Figure 3). Around 1930, divergence in life expectancy gave way to convergence.[18] There was no such turning point for income. At best, divergence decelerated after 1950, but it was not reversed.

[16] It is also worth noting that the mobility pattern in world distribution of income during the last 170 years seems far from Markovian, as is generally assumed in the convergence literature. For instance, multiplying the transition matrix of 1820–1870 by that of 1870–1910 results in a matrix that is substantially different from the one actually observed between 1820 and 1910.

[17] Statistical sources and data may be consulted at ⟨http://www.delta.ens.fr/XIX⟩.

[18] The burst of HIV in Africa might well reverse this trend in the future.

The evolution of life expectancy and of GDP per capita can be combined to determine the time path of world inequality of lifetime income. The upper curve in Figure 3 shows the evolution of world inequality of lifetime income, LY, defined in a standard way as (constant) current income (y) discounted over life expectancy (L):

$$LY = y(1 - e^{-\delta L})/\delta. \tag{2}$$

The curve shown in Figure 3 is based on discount rate δ set to 2 percent per annum.[19]

As expected, the evolution of world inequality of lifetime income differs slightly from that of income alone. The initial divergence is reinforced since the increasing disparities in life expectancy compound the divergence in income. After 1950, however, the drop in world inequality in life expectancy combines with the deceleration of income divergence to produce a convergence of world lifetime income. However, the convergence of life expectancy seems to have stopped or slowed considerably during the last two decades of the period so that the evolution of world inequality of lifetime income parallels that of income. Simple simulation shows that this evolution is not very sensitive to changes in the discount rate within a reasonable range or, equivalently, to the inclusion of the growth rate of income in the equation. This combination of the two effects does not take into account the interaction between changes in life expectancy and changes in population growth rates. Life expectancy increased rapidly in developing countries after 1950, reducing the inequality that had built up in the 19th century. But population began to grow faster in these countries, with some nonneutral effects on the distribution of income.

V. Summary of Findings

Unlike the recent literature on income inequality, which focuses on the divergence of GDP per capita across countries in the last 40 years, this paper focuses on a longer period and takes a more general perspective on world inequality. Because the analysis begins in 1820, it takes into account the major effects that the Industrial Revolution had on the world distribution of income. Because the analysis looks explicitly at the distribution of income within countries, it evaluates world inequality among individuals rather than countries. And because the analysis also takes into account the contribution of changes in world disparities in life expectancy, it incorporates a broader view of individual welfare.

To summarize, this analysis shows that world income inequality worsened dramatically over the past two centuries. The Gini coefficient increased 30 percent and the Theil index 60 percent between 1820 and 1992. This evolution was due mainly to a dramatic increase in inequality across countries or regions of the world. The "between" component of the Theil index went from 0.06 in 1820 to more than 0.50 in 1992. Changes in inequality within countries were important in some periods, most notably the drop in inequality within European countries and their offshoots in America and in the Pacific during the first half of the 20th century. In the long run, however, the increase in inequality across countries was the leading factor in the evolution of the world distribution of income. The burst of world income inequality now seems to be over. There is comparatively little difference between the world distribution today and in 1950. This does not mean that the distribution has become stable or that a convergence analogous to that witnessed among European countries and their offshoots in the early 20th century is beginning to take place on a world scale. On the contrary, the increasing concentration of world poverty in some regions of the world is worrying. When world inequality in lifetime income rather than current income is analyzed, 1950 seems to be an important turning point. World inequality seems to have fallen since 1950 as a result of the pronounced drop in international disparities in life expectancy. But now that disparities in life expectancy are back to the levels before the big divergence of the 19th century, this source of convergence has lost its influence.

[19] Note that equation (2) combines income and life expectancy in a very specific way. Another particular combination would be the equal-weight linear formula used by the United Nations Development Programme in computing the Human Development Index. For an in-depth discussion of the measurement of the resulting "multidimensional" inequality see Anthony B. Atkinson and Bourguignon (1982).

Appendix: List of Countries and Country Groups Used in the Analysis

A) Africa

Côte d'Ivoire, Ghana, Kenya
Egypt
Nigeria
North Africa
South Africa
46 African countries

B) Asia

China
India
Indonesia
Bangladesh, Burma, Pakistan
Thailand, Philippines
45 Asian countries

C) Japan, Korea, Taiwan

Japan
Korea, Taiwan

D) Latin America

Brazil
México
Colombia, Peru, Venezuela
37 Latin American countries

E) Eastern Europe

Bulgaria, Greece, Romania, Yugoslavia
Poland
Russia
Turkey

F) Western Europe and European offshoots

Argentina, Chile
Australia, Canada, New Zealand
Austria, Czechoslovakia, Hungary
France
Germany
Italy
Scandinavian countries
Spain, Portugal
Switzerland, Benelux, and microstates
United Kingdom, Ireland
United States

REFERENCES

Adelman, Irma. "Development Strategies and the Size Distribution of World Income." *Middle East Technical University Studies in Development,* 1984, *11*(1–2), pp. 177–93.

Atkinson, Anthony B. and Bourguignon, François. "The Comparison of Multi-Dimensioned Distributions of Economic Status." *Review of Economic Studies,* April 1982, *49*(2), pp. 183–201.

Baumol, William J.; Nelson, Richard R. and Wolff, Edward N. "The Convergence of Productivity, Its Significance, and Its Varied Connotations," in William J. Baumol, Richard R. Nelson, and Edward N. Wolff, eds., *Convergence of productivity: Cross-national studies and historical evidence.* New York: Oxford University Press, 1994, pp. 3–19.

Berry, Albert; Bourguignon, François and Morrisson, Christian. "Changes in the World Distribution of Income between 1950 and 1977." *Economic Journal,* June 1983a, *93*(37), pp. 331–50.

_____. "The Level of World Inequality: How Much Can One Say?" *Review of Income and Wealth,* September 1983b, *29*(3), pp. 217–41.

_____. "Global Economic Inequality and Its Trends since 1950," in Lars Osberg, ed., *Economic inequality and poverty: International perspectives.* Armonk, NY: Sharpe, 1991, pp. 60–91.

Bourguignon, François. "Decomposable Income Inequality Measures." *Econometrica,* July 1979, *47*(4), pp. 901–20.

Chen, Shaohua and Ravallion, Martin. "How Did the World's Poorest Fare in the 1990s?" Mimeo, World Bank, 2000.

Grosh, Margaret E. and Nafziger, E. Wayne. "The Computation of World Income Distribution." *Economic Development and Cultural Change,* January 1986, *34*(2), pp. 347–59.

Jones, Charles I. "On the Evolution of the World Income Distribution." *Journal of Economic Perspectives,* Summer 1997, *11*(3), pp. 19–36.

Kirman, Alan P. and Tomasini, Luigi M. "A New Look at International Income Inequalities." *Economia Internazionale,* August 1969, *22*(3), pp. 437–61.

Lindert, Peter. "Three Centuries of Inequality in

Britain and America," in Anthony B. Atkinson and François Bourguignon, eds., *Handbook of income distribution.* Amsterdam: Elsevier, 2000.

Maddison, Angus. *Monitoring the world economy.* Paris: OECD, 1995.

Milanovic, Branko. "True World Income Distribution, 1988 and 1993: First Calculation Based on Household Surveys Alone." *Economic Journal*, January 2002, *112*(476), pp. 51–92.

Mookherjee, Dilip and Shorrocks, Anthony F. "A Decomposition Analysis of the Trend in UK Income Inequality." *Economic Journal*, December 1982, *92*(368), pp. 886–902.

Morrisson, Christian. "Historical Perspectives on Income Distribution: The Case of Europe," in Anthony B. Atkinson and François Bourguignon, eds., *Handbook of income distribution.* Amsterdam: Elsevier, 2000.

Pritchett, Lant. "Divergence, Big Time." *Journal of Economic Perspectives*, Summer 1997, *11*(3), pp. 3–17.

Quah, Danny T. "Empirics for Economic Growth and Convergence." *European Economic Review*, June 1996a, *40*(6), pp. 1353–75.

_____. "Twin Peaks: Growth and Convergence in Models of Distribution Dynamics." *Economic Journal*, July 1996b, *106*(437), pp. 1045–55.

Ravallion, Martin; Datt, Gaurav and van der Walle, Dominique. "Quantifying Absolute Poverty in the Developing World." *Review of Income and Wealth*, December 1991, *37*(4), pp. 345–61.

Schultz, T. Paul. "Inequality in the Distribution of Personal Income in the World: How it is Changing and Why." *Journal of Population Economics*, August 1998, *11*(3), pp. 307–44.

Shorrocks, Anthony F. "The Class of Additively Decomposable Inequality Measures." *Econometrica*, April 1980, *48*(3), pp. 613–25.

_____. "Ranking Income Distributions." *Economica*, February 1983, *50*(197), pp. 3–17.

Sprout, Ronald V. A. and Weaver, James H. "International Distribution of Income: 1960–1987." *Kyklos*, 1992, *45*(2), pp. 237–58.

Summers, Robert; Kravis, Irving B. and Heston, Alan. "Changes in the World Income Distribution." *Journal of Policy Modeling*, May 1984, *6*(2), pp. 237–69.

Theil, Henri. "The Development of International Inequality: 1960–1985." *Journal of Econometrics*, September 1989, *42*(1), pp. 145–55.

Theil, Henri and Seale, James L., Jr. "The Geographic Distribution of World Income, 1950–1990." *De Economist*, November 1994, *142*(4), pp. 387–419.

United Nations. *Demographic yearbook.* New York: United Nations Publications, various years.

Whalley, John. "The Worldwide Income Distribution: Some Speculative Calculations." *Review of Income and Wealth*, September 1979, *25*(3), pp. 261–76.

World Bank. *World development report 2000/2001: Attacking poverty.* Oxford, U.K.: Oxford University Press, 2001.

_____. *World development report, 1990.* Oxford, U.K.: Oxford University Press, 1990.

Yotopoulos, Pan A. "Distribution of Real Income: Within Countries and by World Income Classes." *Review of Income and Wealth*, December 1989, *35*(4), pp. 357–76.

This article has been cited by:

1. Rajesh Nanarpuzha, Ankur Sarin. 2021. A capability pathway to subjective economic well-being: Looking beyond materialism. *Journal of Business Research* **127**, 66-76. [Crossref]
2. Roxana Gutiérrez-Romero. 2021. Inequality, persistence of the informal economy, and club convergence. *World Development* **139**, 105211. [Crossref]
3. Roxana Gutiérrez-Romero. 2021. How does inequality affect long-run growth? Cross-industry, cross-country evidence. *Economic Modelling* **95**, 274-297. [Crossref]
4. Christian Ahlin, Hyeok Jeong. 2021. A conditional Gini: measure, estimation, and application. *The Journal of Economic Inequality* **101**. . [Crossref]
5. Vítor Gaspar, David Amaglobeli. Tax, Climate Change, and Sustainable Development: Global Problems, Global Solutions? 211-226. [Crossref]
6. Leroy Johnson. Dynamics of Poverty on Globalization 1-11. [Crossref]
7. Jan Vandemoortele. 2021. The open-and-shut case against inequality. *Development Policy Review* **39**:1, 135-151. [Crossref]
8. Arnel M. Borras. 2020. Toward an Intersectional Approach to Health Justice. *International Journal of Health Services* **19**, 002073142098185. [Crossref]
9. Amer Ahmed, Maurizio Bussolo, Marcio Cruz, Delfin S. Go, Israel Osorio-Rodarte. 2020. Global Inequality in a more educated world. *The Journal of Economic Inequality* **18**:4, 585-616. [Crossref]
10. Herbert S. Klein. 2020. History and the Study of Inequality. *The Journal of Interdisciplinary History* **51**:3, 429-441. [Crossref]
11. Luke Amadi. 2020. Globalization and the changing liberal international order: A review of the literature. *Research in Globalization* **2**, 100015. [Crossref]
12. Guillermo Lezama, Henry Willebald. 2020. Inequality in Pre-Income Survey Times: A Methodological Proposal. *Review of Income and Wealth* **66**:4, 931-957. [Crossref]
13. Olle Hammar, Daniel Waldenström. 2020. Global Earnings Inequality, 1970–2018. *The Economic Journal* **130**:632, 2526-2545. [Crossref]
14. Pertev Basri, Dan Lawrence. 2020. Wealth Inequality in the Ancient Near East: A Preliminary Assessment Using Gini Coefficients and Household Size. *Cambridge Archaeological Journal* **30**:4, 689-704. [Crossref]
15. Michail Moatsos. 2020. Long run trails of poverty, 1925–2010. *Empirical Economics* **38**. . [Crossref]
16. Kerui Du, Ying Yu, Jing Li. 2020. Does international trade promote CO2 emission performance? An empirical analysis based on a partially linear functional-coefficient panel data model. *Energy Economics* **92**, 104983. [Crossref]
17. Iñaki Permanyer, Jeroen Smits. 2020. Inequality in Human Development across the Globe. *Population and Development Review* **46**:3, 583-601. [Crossref]
18. Robert C. Allen. 2020. Poverty and the Labor Market: Today and Yesterday. *Annual Review of Economics* **12**:1, 107-134. [Crossref]
19. Soondong Hong, Heejoon Han, Chang Sik Kim. 2020. World distribution of income for 1970–2010: dramatic reduction in world income inequality during the 2000s. *Empirical Economics* **59**:2, 765-798. [Crossref]
20. Arnel M. Borras, Faisal Ali Mohamed. 2020. Health Inequities and the Shifting Paradigms of Food Security, Food Insecurity, and Food Sovereignty. *International Journal of Health Services* **50**:3, 299-313. [Crossref]

21. Joseph Connors, James Gwartney, Hugo Montesinos-Yufa. 2020. The rise and fall of worldwide income inequality, 1820–2035. *Southern Economic Journal* **87**:1, 216-244. [Crossref]
22. Bjorn Lomborg. 2020. Welfare in the 21st century: Increasing development, reducing inequality, the impact of climate change, and the cost of climate policies. *Technological Forecasting and Social Change* **156**, 119981. [Crossref]
23. Fabio Clementi, Michele Fabiani, Vasco Molini. 2020. How polarized is sub-Saharan Africa? A look at the regional distribution of consumption expenditure in the 2000s. *Oxford Economic Papers* **141**. . [Crossref]
24. Erin Lockwood. 2020. The international political economy of global inequality. *Review of International Political Economy* **7**, 1-25. [Crossref]
25. John Gerring, Wouter Veenendaal. Population and Politics **79**, . [Crossref]
26. Viju Raghupathi, Wullianallur Raghupathi. 2020. Healthcare Expenditure and Economic Performance: Insights From the United States Data. *Frontiers in Public Health* **8**. . [Crossref]
27. Ayona Bhattacharjee. 2020. Does Population Longevity Attract Foreign Direct Investments in Developing Countries?. *Global Business Review* **80**, 097215092091536. [Crossref]
28. Paolo Malanima. 2020. The limiting factor: energy, growth, and divergence, 1820–1913. *The Economic History Review* **73**:2, 486-512. [Crossref]
29. Nicolas Taconet, Aurélie Méjean, Céline Guivarch. 2020. Influence of climate change impacts and mitigation costs on inequality between countries. *Climatic Change* **160**:1, 15-34. [Crossref]
30. Ines Lindner, Holger Strulik. 2020. INNOVATION AND INEQUALITY IN A SMALL WORLD. *International Economic Review* **61**:2, 683-719. [Crossref]
31. Gholamreza Hajargasht, William E. Griffiths. 2020. Minimum distance estimation of parametric Lorenz curves based on grouped data. *Econometric Reviews* **39**:4, 344-361. [Crossref]
32. Hideo Noda. 2020. Work–Life Balance and Life Satisfaction in OECD Countries: A Cross-Sectional Analysis. *Journal of Happiness Studies* **21**:4, 1325-1348. [Crossref]
33. . References 143-154. [Crossref]
34. Paul Johnson, Chris Papageorgiou. 2020. What Remains of Cross-Country Convergence?. *Journal of Economic Literature* **58**:1, 129-175. [Abstract] [View PDF article] [PDF with links]
35. Kaushik Basu, S. Subramanian. 2020. Inequality, Growth, Poverty and Lunar Eclipses: Policy and Arithmetic. *Development and Change* **51**:2, 352-370. [Crossref]
36. Vladimir Hlasny. 2020. Nonresponse Bias in Inequality Measurement: Cross-Country Analysis Using Luxembourg Income Study Surveys. *Social Science Quarterly* **101**:2, 712-731. [Crossref]
37. Huan Li, Yehua Dennis Wei, Elfie Swerts. 2020. Spatial inequality in the city-regions in the Yangtze River Valley, China. *Urban Studies* **57**:3, 672-689. [Crossref]
38. Andrew J. Hussey, Michael Jetter, Dianne McWilliam. 2020. The Fundamental Determinants of Economic Inequality in Average Income Across Countries: The Declining Role of Political Institutions. *Review of Income and Wealth* **3**. . [Crossref]
39. Augusto Lopez-Claros, Arthur L. Dahl, Maja Groff. Global Governance and the Emergence of Global Institutions for the 21st Century **4**, . [Crossref]
40. Rebecca Simson, Mike Savage. 2020. The global significance of national inequality decline. *Third World Quarterly* **41**:1, 20-41. [Crossref]
41. Marek Dabrowski. Global Versus National Income Inequalities and Their Impact on Global Governance 201-220. [Crossref]
42. Leonardo Becchetti, Luigino Bruni, Stefano Zamagni. Growth and the environment in the era of globalization 401-443. [Crossref]

43. Michal Burzynski, Christoph Deuster, Frédéric Docquier. 2020. Geography of skills and global inequality. *Journal of Development Economics* **142**, 102333. [Crossref]
44. Francisco J. Beltrán Tapia, Julio Martinez-Galarraga. 2020. Inequality and Growth in a Developing Economy: Evidence from Regional Data (Spain, 1860–1930). *Social Science History* **44**:1, 169-192. [Crossref]
45. Getu Tigre. Multidimensional Inequality in Ethiopia 87-113. [Crossref]
46. Marta Pietras-Eichberger. 1. [Crossref]
47. Stefan Traub, Hongyan Yang. 2020. Tax Competition and the Distribution of Income*. *The Scandinavian Journal of Economics* **122**:1, 109-131. [Crossref]
48. Asis Kumar Banerjee. An Illustration: Multidimensional Development and Inter-State Inequality in India in the 2000s 191-217. [Crossref]
49. Michele F. Fontefrancesco. Food Donation and Food Drive: Strategies to Achieve Zero Hunger 312-320. [Crossref]
50. Robin Maialeh. Contemporary Economics and Inequality 5-38. [Crossref]
51. Shyla Del-Aguila-Arcentales, Aldo Alvarez-Risco, M. Chandra Sekar, Dora Marinova. Cities 39-49. [Crossref]
52. Panagiotis E. Petrakis. Introduction to General and Integrated Development and Growth 29-52. [Crossref]
53. Mustafa K. Mujeri, Neaz Mujeri. Poverty and Inequality 115-169. [Crossref]
54. Robert Holton. Global Inequality and Global Poverty 355-373. [Crossref]
55. Sahan S. Karatasli. Global Inequality and Capitalist World-Economy, 1500—Present: A Critique of Neo-Modernization Theories 307-330. [Crossref]
56. Roger White. Poverty and Deprivation in America 3-27. [Crossref]
57. Jun-ki Park, Deockhyun Ryu, Keun Lee. 2019. What determines the economic size of a nation in the world: Determinants of a nation's share in world GDP vs. per capita GDP. *Structural Change and Economic Dynamics* **51**, 203-214. [Crossref]
58. Lili Yan Ing, Yessi Vadila. 2019. U.S.–China Trade Tensions on Indonesia's Trade and Investment. *Asian Economic Papers* **18**:3, 95-112. [Crossref]
59. Gregory M. Mikkelson. 2019. Invisible Hand or Ecological Footprint? Comparing Social Versus Environmental Impacts of Recent Economic Growth. *Organization & Environment* **165**, 108602661988511. [Crossref]
60. Zheng Chang, Jiayu Chen, Weifeng Li, Xin Li. 2019. Public transportation and the spatial inequality of urban park accessibility: New evidence from Hong Kong. *Transportation Research Part D: Transport and Environment* **76**, 111-122. [Crossref]
61. Vanesa Jordá, Miguel Niño-Zarazúa. 2019. Global inequality: How large is the effect of top incomes?. *World Development* **123**, 104593. [Crossref]
62. William H. Sewell Jr. 2019. L'époque capitaliste. *Tracés* :36, 169-182. [Crossref]
63. Asmund Rygh. 2019. Multinational enterprises and economic inequality. *critical perspectives on international business* **ahead-of-print**:ahead-of-print. . [Crossref]
64. Antonella Rita Ferrara, Rosanna Nisticò. 2019. Does Institutional Quality Matter for Multidimensional Well-Being Inequalities? Insights from Italy. *Social Indicators Research* **145**:3, 1063-1105. [Crossref]
65. Zsolt Darvas. 2019. Global interpersonal income inequality decline: The role of China and India. *World Development* **121**, 16-32. [Crossref]
66. Aparna P. Lolayekar, Pranab Mukhopadhyay. 2019. Spatial dependence and regional income convergence in India (1981–2010). *GeoJournal* **84**:4, 851-864. [Crossref]

67. María Gómez León, Herman J. De Jong. 2019. Inequality in turbulent times: income distribution in Germany and Britain, 1900–50. *The Economic History Review* **72**:3, 1073-1098. [Crossref]
68. Emine Tahsin. 2019. An Investigation of the Palma Ratio for Turkey Both on National and Regional Level. *Sosyoekonomi* 151-182. [Crossref]
69. Thomas McGregor, Brock Smith, Samuel Wills. 2019. Measuring inequality. *Oxford Review of Economic Policy* **35**:3, 368-395. [Crossref]
70. Moreno Bertoldi. 2019. The European Union in the crisis of the postwar economic order. *Journal of Policy Modeling* **41**:3, 507-521. [Crossref]
71. Cem Iskender Aydin. 2019. Identifying Ecological Distribution Conflicts Around the Inter-regional Flow of Energy in Turkey: A Mapping Exercise. *Frontiers in Energy Research* **7**. . [Crossref]
72. Muhammad Hafeez, Chunhui Yuan, Issam Khelfaoui, Almalki Sultan Musaad O, Muhammad Waqas Akbar, Liu Jie. 2019. Evaluating the Energy Consumption Inequalities in the One Belt and One Road Region: Implications for the Environment. *Energies* **12**:7, 1358. [Crossref]
73. Jeffrey M. Chwieroth, Andrew Walter. The Wealth Effect **2**, . [Crossref]
74. Virgile Chassagnon, Guillaume Vallet. 2019. ALBION W. SMALL'S NEGLECTED PROGRESSIVE VIEWS: REDUCING INEQUALITIES FOR A REASONABLE CAPITALISM. *Journal of the History of Economic Thought* **41**:1, 77-98. [Crossref]
75. Naresh Kumar, Ritu Rani. 2019. Regional Disparities in Social Development: Evidence from States and Union Territories of India. *South Asian Survey* **26**:1, 1-27. [Crossref]
76. Elisabetta Basile, Isa Baud. Introduction: Reflecting on Development Studies in the New Millennium 1-22. [Crossref]
77. Enriqueta Camps-Cura. Education and Inequality in North America in the Long Term with Special Reference to the United States 31-40. [Crossref]
78. Michele F. Fontefrancesco. Food Donation and Food Drive: Strategies to Achieve Zero Hunger 1-9. [Crossref]
79. Johannes Berger. Zwölfte Vorlesung: Globale Ungleichheit 259-288. [Crossref]
80. Miguel A. Márquez, Elena Lasarte, Marcelo Lufin. 2019. The Role of Neighborhood in the Analysis of Spatial Economic Inequality. *Social Indicators Research* **141**:1, 245-273. [Crossref]
81. Martin Ravallion. 2019. Global inequality when unequal countries create unequal people. *European Economic Review* **111**, 85-97. [Crossref]
82. Pablo Mitnik, Victoria Bryant, Michael Weber. 2019. The Intergenerational Transmission of Family-Income Advantages in the United States. *Sociological Science* **6**, 380-415. [Crossref]
83. Vincent Geloso, Peter H. Lindert. 2019. Relative Costs of Living, for Richer and Poorer, 1688-1914. *SSRN Electronic Journal* . [Crossref]
84. Guliyeva Aida, Rzayeva Ulviyya. The Asymmetry of the Global Changes 142-166. [Crossref]
85. Caroline Zimm. 2019. Methodological issues in measuring international inequality in technology ownership and infrastructure service use. *Development Studies Research* **6**:1, 92-105. [Crossref]
86. Zhaohai Bai, Jun Zhao, Zhibiao Wei, Xinpeng Jin, Lin Ma. 2019. Socio-economic drivers of pig production and their effects on achieving sustainable development goals in China. *Journal of Integrative Environmental Sciences* **16**:1, 141-155. [Crossref]
87. Thomas Faist. The Transnationalized Social Question: Migration and Social Inequalities 1-15. [Crossref]
88. Costas Azariadis. 2018. Riddles and Models: A Review Essay on Michel De Vroey's A History of Macroeconomics from Keynes to Lucas and Beyond. *Journal of Economic Literature* **56**:4, 1538-1576. [Abstract] [View PDF article] [PDF with links]

89. Facundo Alvaredo, Guillermo Cruces, Leonardo Gasparini. 2018. A short episodic history of income distribution in Argentina. *Latin American Economic Review* **27**:1. . [Crossref]
90. Enric Tello, Marc Badia-Miró. 2018. Land-use and rural inequality profiles in the province of Barcelona in mid-nineteenth century. *Historia Agraria. Revista de agricultura e historia rural* :76, 157-188. [Crossref]
91. MORTEN JERVEN. 2018. THE HISTORY OF AFRICAN POVERTY BY NUMBERS: EVIDENCE AND VANTAGE POINTS. *The Journal of African History* **59**:3, 449-461. [Crossref]
92. Adaner Usmani. 2018. Democracy and the Class Struggle. *American Journal of Sociology* **124**:3, 664-704. [Crossref]
93. Facundo Alvaredo, Lydia Assouad, Thomas Piketty. 2018. Measuring Inequality in the Middle East 1990-2016: The World's Most Unequal Region?. *Review of Income and Wealth* . [Crossref]
94. Marek Dabrowski. 2018. Examining interrelation between global and national income inequalities. *Russian Journal of Economics* **4**:3, 266-284. [Crossref]
95. Dina M. Yousri, Christian Richter. 2018. Sociological challenges for Egypt's development: 1981–2013. *International Economics and Economic Policy* **15**:4, 727-742. [Crossref]
96. Morten Jerven. Wealth and Poverty in African History 329-350. [Crossref]
97. Arthur S. Alderson, Roshan K. Pandian. 2018. What is Really Happening with Global Inequality?. *Sociology of Development* **4**:3, 261-281. [Crossref]
98. Shawn F. Dorius. 2018. Socioeconomic Status Mobility in the Modern World System: Growth and Allocation Effects. *Social Indicators Research* **138**:3, 1049-1074. [Crossref]
99. Jekaterina Navickė, Romas Lazutka. 2018. Distributional Implications of the Economic Development in the Baltics: Reconciling Micro and Macro Perspectives. *Social Indicators Research* **138**:1, 187-206. [Crossref]
100. E. Glen Weyl. 2018. The Openness-equality Trade-off in Global Redistribution. *The Economic Journal* **128**:612, F1-F36. [Crossref]
101. Diana Gutiérrez Posada, Fernando Rubiera Morollón, Ana Viñuela. 2018. Ageing Places in an Ageing Country: The Local Dynamics of the Elderly Population in Spain. *Tijdschrift voor economische en sociale geografie* **109**:3, 332-349. [Crossref]
102. Bjorn Lomborg. Introduction 1-12. [Crossref]
103. Martin Ravallion. 2018. Inequality and Globalization: A Review Essay. *Journal of Economic Literature* **56**:2, 620-642. [Abstract] [View PDF article] [PDF with links]
104. Laurence Roope, Miguel Niño-Zarazúa, Finn Tarp. 2018. How polarized is the global income distribution?. *Economics Letters* **167**, 86-89. [Crossref]
105. Eric W Sanderson, Joseph Walston, John G Robinson. 2018. From Bottleneck to Breakthrough: Urbanization and the Future of Biodiversity Conservation. *BioScience* **68**:6, 412-426. [Crossref]
106. Johannes M. Bauer. 2018. The Internet and income inequality: Socio-economic challenges in a hyperconnected society. *Telecommunications Policy* **42**:4, 333-343. [Crossref]
107. Simone Martelli, Lawrence Bartolomucci, Simone Berardi. 2018. A Common Framework on Inequalities for G7 Countries. *Global Policy* **9**:2, 216-230. [Crossref]
108. Pierre Concialdi. 2018. What does it mean to be rich? Some conceptual and empirical issues. *European Journal of Social Security* **20**:1, 3-20. [Crossref]
109. . Poverty and Time: A Multidimensional Appraisal 201-249. [Crossref]
110. Riccardo Cristadoro. The Unintended Consequences of Globalization and Technological Progress 73-96. [Crossref]

111. Seung Jin Baek. Uncovering Complexity in the Policy Mix for Sustainability Transitions 3-25. [Crossref]
112. Seung Jin Baek. Reconstructing Modernisation Inclusive and Sustainable 27-63. [Crossref]
113. T. Gries, R. Grundmann, I. Palnau, M. Redlin. 2018. Technology diffusion, international integration and participation in developing economies - a review of major concepts and findings. *International Economics and Economic Policy* **15**:1, 215-253. [Crossref]
114. Peter Howitt, David N. Weil. Economic Growth 3299-3309. [Crossref]
115. Laurence Roope, Miguel NiiooZarazza, Finn Tarp. 2018. How Polarized Is the Global Income Distribution?. *SSRN Electronic Journal* . [Crossref]
116. Brindusa Anghel, Henrique S. Basso, Olympia Bover, Jose Maria Casado, Laura Hospido, Mario Izquierdo, Ivvn Kataryniuk, Aitor Lacuesta, Jose Manuel Montero, Elena Vozmediano. 2018. Income, Consumption and Wealth Inequality in Spain (La desigualdad de la renta, el consumo y la riqueza en Espaaa). *SSRN Electronic Journal* . [Crossref]
117. Dong Suh. 2018. An Entropy Approach to Regional Differences in Carbon Dioxide Emissions: Implications for Ethanol Usage. *Sustainability* **10**:1, 243. [Crossref]
118. Steve Dowrick. Inequality (Global) 6372-6381. [Crossref]
119. François Bourguignon. Inequality Between Nations 6404-6410. [Crossref]
120. Paolo Buonanno, Leopoldo Fergusson, Juan F. Vargas. 2017. The Crime Kuznets Curve. *Journal of Quantitative Criminology* **33**:4, 753-782. [Crossref]
121. Miguel Niño-Zarazúa, Laurence Roope, Finn Tarp. 2017. Global Inequality: Relatively Lower, Absolutely Higher. *Review of Income and Wealth* **63**:4, 661-684. [Crossref]
122. José María Sarabia, Vanesa Jordá, Lorena Remuzgo. 2017. The Theil Indices in Parametric Families of Income Distributions-A Short Review. *Review of Income and Wealth* **63**:4, 867-880. [Crossref]
123. Herbert S. Klein. 2017. The "Historical Turn" in the Social Sciences. *The Journal of Interdisciplinary History* **48**:3, 295-312. [Crossref]
124. Roxana Gutiérrez-Romero, Luciana Méndez-Errico. Does inequality foster or hinder the growth of entrepreneurship in the long-run? 299-341. [Crossref]
125. Robert C. Allen. 2017. Lessons from history for the future of work. *Nature* **550**:7676, 321-324. [Crossref]
126. Gabriela Carmen Pascariu, Ramona Ţigănaşu. Integration, Growth and Core-Periphery Pattern in EU's Economy: Theoretical Framework and Empirical Evidences 23-85. [Crossref]
127. Frédéric Docquier, Joël Machado. 2017. Income Disparities, Population and Migration Flows Over the Twenty First Century. *Italian Economic Journal* **3**:2, 125-149. [Crossref]
128. José María Sarabia, Vanesa Jordá, Carmen Trueba. 2017. The Lamé class of Lorenz curves. *Communications in Statistics - Theory and Methods* **46**:11, 5311-5326. [Crossref]
129. Raj Arunachalam, Ajay Shenoy. 2017. Poverty traps, convergence, and the dynamics of household income. *Journal of Development Economics* **126**, 215-230. [Crossref]
130. Thomas Goda, Alejandro Torres García. 2017. The Rising Tide of Absolute Global Income Inequality During 1850–2010: Is It Driven by Inequality Within or Between Countries?. *Social Indicators Research* **130**:3, 1051-1072. [Crossref]
131. Pablo Astorga Junquera. Functional Inequality in Latin America: News from the Twentieth Century 17-41. [Crossref]
132. Rob Dellink, Jean Chateau, Elisa Lanzi, Bertrand Magné. 2017. Long-term economic growth projections in the Shared Socioeconomic Pathways. *Global Environmental Change* **42**, 200-214. [Crossref]

133. Alessandro Vercelli. The Neoliberal Trajectory and the Crisis 119-144. [Crossref]
134. Dani Rodrik. 2017. Is Global Equality the Enemy of National Equality?. *SSRN Electronic Journal* . [Crossref]
135. Ines Lindner, Holger Strulik. 2017. Innovation and Inequality in a Small World. *SSRN Electronic Journal* . [Crossref]
136. Frrddric Docquier, Joel Machado. 2017. Income Disparities, Population and Migration Flows Over the 21st Century. *SSRN Electronic Journal* . [Crossref]
137. Deepa Iyer. 2017. Development in South Asia: A Critique. *SSRN Electronic Journal* . [Crossref]
138. Roxana Gutierrez-Romero, Luciana MMndez-Errico. 2017. Does Inequality Foster or Hinder the Growth of Entrepreneurship in the Long-Run?. *SSRN Electronic Journal* . [Crossref]
139. Vanesa Jordd, Miguel NiiooZarazza. 2017. Global Inequality in Length of Life: 195002015. *SSRN Electronic Journal* . [Crossref]
140. Rory Horner, David Hulme. 2017. Converging Divergence? Unpacking the New Geography of 21st Century Global Development. *SSRN Electronic Journal* . [Crossref]
141. François Gardes. 2017. Angus Deaton, prix à la mémoire d'Alfred Nobel 2015 : un maître de l'économie appliquée. *Revue d'économie politique* **127**:3, 287. [Crossref]
142. A. Xepapadeas, A.N. Yannacopoulos. 2016. Spatial growth with exogenous saving rates. *Journal of Mathematical Economics* **67**, 125-137. [Crossref]
143. Igor Matutinović, Stanley N. Salthe, Robert E. Ulanowicz. 2016. The mature stage of capitalist development: Models, signs and policy implications. *Structural Change and Economic Dynamics* **39**, 17-30. [Crossref]
144. . Monitoring Extreme Poverty 5-98. [Crossref]
145. . Beyond Goal 1.1: Complementary Indicators and Multidimensionality 99-188. [Crossref]
146. Rok Spruk. 2016. Institutional transformation and the origins of world income distribution. *Journal of Comparative Economics* **44**:4, 936-960. [Crossref]
147. Max Haller, Anja Eder, Erwin Stolz. 2016. Ethnic Stratification and Patterns of Income Inequality Around the World: A Cross-National Comparison of 123 Countries, Based on a New Index of Historic Ethnic Exploitation. *Social Indicators Research* **128**:3, 1047-1084. [Crossref]
148. Tim Futing Liao. 2016. Evaluating Distributional Differences in Income Inequality. *Socius: Sociological Research for a Dynamic World* **2**, 237802311562746. [Crossref]
149. Rob Clark. 2016. Examining Mobility in International Development. *Social Problems* **63**:3, 329-350. [Crossref]
150. Martin Ravallion. 2016. Are the world's poorest being left behind?. *Journal of Economic Growth* **21**:2, 139-164. [Crossref]
151. Maxim Pinkovskiy, Xavier Sala-i-Martin. 2016. Lights, Camera ... Income! Illuminating the National Accounts-Household Surveys Debate *. *The Quarterly Journal of Economics* **131**:2, 579-631. [Crossref]
152. Fang Yang, Shiying Pan, Xin Yao. 2016. Regional Convergence and Sustainable Development in China. *Sustainability* **8**:2, 121. [Crossref]
153. Jakob B. Madsen. 2016. Barriers to Prosperity: Parasitic and Infectious Diseases, IQ, and Economic Development. *World Development* **78**, 172-187. [Crossref]
154. August Gächter, Beate Littig. Wie ungleich ist die Welt? 181-193. [Crossref]
155. Zhao Chen, Ming Lu. Globalization and Regional Income Inequality in China 63-87. [Crossref]
156. C.I. Jones. The Facts of Economic Growth 3-69. [Crossref]

157. Christoph Lakner, Branko Milanovic. 2016. Global Income Distribution: From the Fall of the Berlin Wall to the Great Recession. *The World Bank Economic Review* **30**:2, 203-232. [Crossref]
158. Gemma Cairó-i-Céspedes, David Castells-Quintana. 2016. Dimensions of the current systemic crisis: Capitalism in short circuit?. *Progress in Development Studies* **16**:1, 1-23. [Crossref]
159. Thomas Goda. 2016. Global trends in relative and absolute income inequality. *Ecos de Economía* **20**:42, 46-69. [Crossref]
160. Brian A'Hearn, Giovanni Vecchi. 2016. On Historical Household Budgets. *SSRN Electronic Journal* . [Crossref]
161. Vanesa Jordd, Miguel NiiooZarazza. 2016. Global Inequality: How Large is the Effect of Top Incomes?. *SSRN Electronic Journal* . [Crossref]
162. François Bourguignon. 2016. Inégalité mondiale et inégalités nationales : niveaux et durées de vie. *Revue d'économie financière* **122**:2, 179. [Crossref]
163. Frédéric Docquier, Luc Leruth. 2016. Économie du développement en Belgique – Aperçu des tendances actuelles en matière de recherche. *Reflets et perspectives de la vie économique* **LV**:1, 5. [Crossref]
164. José Manuel Saiz-Alvarez. Solidarity Entrepreneurship in Knowledge Economies 163-188. [Crossref]
165. Marcello Basili, Filippo Belloc. 2015. HOW TO MEASURE THE ECONOMIC IMPACT OF VECTOR-BORNE DISEASES AT COUNTRY LEVEL. *Journal of Economic Surveys* **29**:5, 896-916. [Crossref]
166. Kristof Bosmans, Koen Decancq, Erwin Ooghe. 2015. What do normative indices of multidimensional inequality really measure?. *Journal of Public Economics* **130**, 94-104. [Crossref]
167. Ward Rougoor, Charles van Marrewijk. 2015. Demography, Growth, and Global Income Inequality. *World Development* **74**, 220-232. [Crossref]
168. Fernando Gabriel Im, David Rosenblatt. 2015. Middle-Income Traps: A Conceptual and Empirical Survey. *Journal of International Commerce, Economics and Policy* **06**:03, 1550013. [Crossref]
169. Rob Clark. 2015. Revisiting convergence: A research note. *Social Science Research* **53**, 231-238. [Crossref]
170. Jørgen Modalsli. 2015. Inequality in the very long run: inferring inequality from data on social groups. *The Journal of Economic Inequality* **13**:2, 225-247. [Crossref]
171. Paolo Liberati. 2015. The World Distribution of Income And Its Inequality, 1970-2009. *Review of Income and Wealth* **61**:2, 248-273. [Crossref]
172. Glenn Firebaugh. Global Income Inequality 1-14. [Crossref]
173. Vanesa Jordá, José María Sarabia. 2015. Well-Being Distribution in the Globalization Era: 30 Years of Convergence. *Applied Research in Quality of Life* **10**:1, 123-140. [Crossref]
174. ANDREAS P. KYRIACOU, FRANCISCO JOSÉ LÓPEZ VELÁSQUEZ. 2015. Inequality and culture in a cross-section of countries. *Journal of Institutional Economics* **11**:1, 141-166. [Crossref]
175. Vicente Royuela, Gustavo Adolfo García. 2015. Economic and Social Convergence in Colombia. *Regional Studies* **49**:2, 219-239. [Crossref]
176. Jean-Yves Duclos, Bouba Housseini. 2015. Quality, quantity and duration of lives. *Canadian Journal of Economics/Revue canadienne d'économique* **48**:1, 1-27. [Crossref]
177. Ewout Frankema. 2015. Labour-Intensive Industrialization in Global History: A Review Essay. *Economic History of Developing Regions* **30**:1, 44-67. [Crossref]
178. Jing Jian Xiao. Consumer Income 129-149. [Crossref]
179. August Gächter, Beate Littig. Wie ungleich ist die Welt? 1-10. [Crossref]
180. Alexander Lenger, Florian Schumacher. The Global Configurations of Inequality: Stratification, Glocal Inequalities, and the Global Social Structure 3-46. [Crossref]

181. Arpita Banerjee, Pravat Kumar Kuri. Regional Development in India 1-4. [Crossref]
182. Herman de Jong. Living Standards in a Modernizing World – A Long-Run Perspective on Material Wellbeing and Human Development 45-74. [Crossref]
183. Emmanuel S. de Dios, Jeffrey G. Williamson. Deviant Behavior 371-400. [Crossref]
184. Frank A. Cowell, Emmanuel Flachaire. Statistical Methods for Distributional Analysis 359-465. [Crossref]
185. Facundo Alvaredo, Leonardo Gasparini. Recent Trends in Inequality and Poverty in Developing Countries 697-805. [Crossref]
186. Sudhir Anand, Paul Segal. The Global Distribution of Income 937-979. [Crossref]
187. Martin Ravallion. The Idea of Antipoverty Policy 1967-2061. [Crossref]
188. Paul Caruana Galizia. Emigration and Wage Inequality 85-110. [Crossref]
189. Alessandro Vercelli. The Neoliberal Trajectory, the Great Recession and Sustainable Development 37-73. [Crossref]
190. Allen J. Scott, Michael Storper. 2015. The Nature of Cities: The Scope and Limits of Urban Theory. *International Journal of Urban and Regional Research* **39**:1, 1-15. [Crossref]
191. Min Zheng. 2015. Heterogeneous Expectations and Speculative Behavior in Insurance-Linked Securities. *Discrete Dynamics in Nature and Society* **2015**, 1-12. [Crossref]
192. Razvan Stefanescu, Ramona Dumitriu. 2015. Creeterea Economicc a Rommniei ntre 1980 i 2013 (The Economic Growth of Romania between 1980 and 2013). *SSRN Electronic Journal* . [Crossref]
193. Jean-Yves Duclos, Bouba Housseini. 2015. Quality, Quantity and Duration of Lives. *SSRN Electronic Journal* . [Crossref]
194. Thomas Goda, Alejandro Torres. 2015. Class or Location? What Explains the Rising Tide of Absolute Global Income Inequality During 1850-2010?. *SSRN Electronic Journal* . [Crossref]
195. Arjun Jayadev, Rahul Lahoti, Sanjay G. Reddy. 2015. Who Got What, Then and Now? A Fifty Years Overview from the Global Consumption and Income Project. *SSRN Electronic Journal* . [Crossref]
196. Simplice A. Asongu, Oasis Kodila-Tedika. 2015. On the Empirics of Institutions and Quality of Growth: Evidence for Developing Countries. *SSRN Electronic Journal* . [Crossref]
197. Liliana Cano. 2015. Top Income Shares in a Growing South American Economy: Ecuador 2004-2011. *SSRN Electronic Journal* . [Crossref]
198. Eftychia Tsanana, Constantinos Katrakilidis. 2014. Do Balkan economies catch up with EU? New evidence from panel unit root analysis. *Empirica* **41**:4, 641-662. [Crossref]
199. Toke S. Aidt, Peter S. Jensen. 2014. Workers of the world, unite! Franchise extensions and the threat of revolution in Europe, 1820–1938. *European Economic Review* **72**, 52-75. [Crossref]
200. David Warner, D. S. Prasada Rao, William E. Griffiths, Duangkamon Chotikapanich. 2014. Global Inequality; Levels and Trends, 1993-2005: How Sensitive are These to the Choice of PPPs and Real Income Measures?. *Review of Income and Wealth* **60**, S281-S304. [Crossref]
201. . Defining and Assessing the Goal of Ending Poverty by 2030 29-71. [Crossref]
202. . Global Profiles of Poverty and Shared Prosperity, Data, and Measurement Issues 225-261. [Crossref]
203. John Cockburn, Jean-Yves Duclos, Agnès Zabsonré. 2014. Is global social welfare increasing? A critical-level enquiry. *Journal of Public Economics* **118**, 151-162. [Crossref]
204. Vanesa Jordá, José María Sarabia, Faustino Prieto. On the Estimation of the Global Income Distribution Using a Parsimonious Approach 115-145. [Crossref]
205. Florent Bresson. Poverty has Declined, but What about the Burden of Non-Extreme Poverty? Generalized Dominance Criteria for Convex Subsets within the Poverty Domain 147-184. [Crossref]

206. Maxim Pinkovskiy, Xavier Sala-i-Martin. 2014. Africa is on time. *Journal of Economic Growth* **19**:3, 311-338. [Crossref]

207. Fabrice Murtin, Romain Wacziarg. 2014. The democratic transition. *Journal of Economic Growth* **19**:2, 141-181. [Crossref]

208. Camelia Minoiu, Sanjay G. Reddy. 2014. Kernel density estimation on grouped data: the case of poverty assessment. *The Journal of Economic Inequality* **12**:2, 163-189. [Crossref]

209. Jan Luiten van Zanden, Joerg Baten, Peter Foldvari, Bas van Leeuwen. 2014. The Changing Shape of Global Inequality 1820-2000; Exploring a New Dataset. *Review of Income and Wealth* **60**:2, 279-297. [Crossref]

210. William Q Judge, Stav Fainshmidt, J Lee Brown III. 2014. Which model of capitalism best delivers both wealth and equality?. *Journal of International Business Studies* **45**:4, 363-386. [Crossref]

211. Matt X. Richardson, Mike M. Callaghan, Sarah Wamala. Globalization and Global Health 555-576. [Crossref]

212. T. J. Hatton. 2014. How have Europeans grown so tall?. *Oxford Economic Papers* **66**:2, 349-372. [Crossref]

213. Kristof Bosmans, Koen Decancq, André Decoster. 2014. The Relativity of Decreasing Inequality Between Countries. *Economica* **81**:322, 276-292. [Crossref]

214. Luigi Cominelli. 2014. Tra neoliberalismo, neurodiritto e sinistra darwiniana. A proposito di un saggio di Antoine Garapon. *SOCIOLOGIA DEL DIRITTO* :3, 148-159. [Crossref]

215. Ximing Wu, Andreas Savvides, Thanasis Stengos. The Global Joint Distribution of Income and Health 249-279. [Crossref]

216. Nicholas Crafts, Kevin Hjortshøj O'Rourke. Twentieth Century Growth 263-346. [Crossref]

217. William H. Sewell. 2014. The Capitalist Epoch. *Social Science History* **38**:1-2, 1-11. [Crossref]

218. Miguel Niio-Zarazza, Laurence Roope, Finn Tarp. 2014. Global Interpersonal Inequality: Trends and Measurement. *SSRN Electronic Journal* . [Crossref]

219. Ines Lindner, Holger Strulik. 2014. The Great Divergence: A Network Approach. *SSRN Electronic Journal* . [Crossref]

220. Maxim L. Pinkovskiy, Xavier Sala-i-Martin. 2014. Lights, Camera,...Income! Estimating Poverty Using National Accounts, Survey Means, and Lights. *SSRN Electronic Journal* . [Crossref]

221. John Cockburn, Jean-Yves Duclos, Agnes Zabsonre. 2014. Is Global Social Welfare Increasing? A Critical-Level Enquiry. *SSRN Electronic Journal* . [Crossref]

222. Maxim L. Pinkovskiy, Xavier Sala-i-Martin. 2014. Africa Is on Time. *SSRN Electronic Journal* . [Crossref]

223. E. Glen Weyl. 2014. The Openness-Equality Trade-Off in Global Redistribution. *SSRN Electronic Journal* . [Crossref]

224. P.M. Eloundou-Enyegue, Michel Tenikuu, Vongai M. Kandiwa. 2014. Population Contributions to Global Income Inequality: A Fuller Account. *SSRN Electronic Journal* . [Crossref]

225. Yawo Agbényégan Noglo. 2014. Inégalités dans la distribution de la richesse non monétaire au Togo : une application de la décomposition de Gini en valeur de Shapley. *Mondes en développement* **n° 168**:4, 107. [Crossref]

226. Hector E. Maletta. 2014. Hunger Amidst Plenty: World Trends in Undernourishment and Malnutrition. *SSRN Electronic Journal* . [Crossref]

227. Fernando Borraz, Nicolás González, Máximo Rossi. 2013. Polarization and the Middle Class in Uruguay. *Latin American Journal of Economics* **50**:2, 289-326. [Crossref]

228. Lynge Nielsen. 2013. How to Classify Countries Based on Their Level of Development. *Social Indicators Research* **114**:3, 1087-1107. [Crossref]

229. Dean T Jamison, Lawrence H Summers, George Alleyne, Kenneth J Arrow, Seth Berkley, Agnes Binagwaho, Flavia Bustreo, David Evans, Richard G A Feachem, Julio Frenk, Gargee Ghosh, Sue J Goldie, Yan Guo, Sanjeev Gupta, Richard Horton, Margaret E Kruk, Adel Mahmoud, Linah K Mohohlo, Mthuli Ncube, Ariel Pablos-Mendez, K Srinath Reddy, Helen Saxenian, Agnes Soucat, Karen H Ulltveit-Moe, Gavin Yamey. 2013. Global health 2035: a world converging within a generation. *The Lancet* **382**:9908, 1898-1955. [Crossref]

230. Mahmoud A. El-Gamal, Deockhyun Ryu. 2013. Nonstationarity and Stochastic Stability of Relative Income Clubs. *Review of Income and Wealth* **59**:4, 756-775. [Crossref]

231. Iddo I Eliazar, Morrel H Cohen. 2013. Econophysical anchoring of unimodal power-law distributions. *Journal of Physics A: Mathematical and Theoretical* **46**:36, 365001. [Crossref]

232. Christian Morrisson, Fabrice Murtin. 2013. The Kuznets curve of human capital inequality: 1870–2010. *The Journal of Economic Inequality* **11**:3, 283-301. [Crossref]

233. Paul M. Peeters. 2013. Developing a long-term global tourism transport model using a behavioural approach: implications for sustainable tourism policy making. *Journal of Sustainable Tourism* **21**:7, 1049-1069. [Crossref]

234. C. Ferretti, P. Ganugi. 2013. A new mobility index for transition matrices. *Statistical Methods & Applications* **22**:3, 403-425. [Crossref]

235. Andros Kourtellos, Ioanna Stylianou, Chih Ming Tan. 2013. Failure to launch? The role of land inequality in transition delays. *European Economic Review* **62**, 98-113. [Crossref]

236. Jord Hanus. 2013. Real inequality in the early modern Low Countries: the city of 's-Hertogenbosch, 1500-1660. *The Economic History Review* **66**:3, 733-756. [Crossref]

237. Matthew J. Salois. 2013. Regional changes in the distribution of foreign aid: An entropy approach. *Physica A: Statistical Mechanics and its Applications* **392**:13, 2893-2902. [Crossref]

238. Robert Ackland, Steve Dowrick, Benoit Freyens. 2013. Measuring Global Poverty: Why PPP Methods Matter. *Review of Economics and Statistics* **95**:3, 813-824. [Crossref]

239. Duangkamon Chotikapanich, William Griffiths, Wasana Karunarathne, D.S. Prasada Rao. 2013. Calculating Poverty Measures from the Generalised Beta Income Distribution. *Economic Record* **89**, 48-66. [Crossref]

240. Youssoufou Hamadou Daouda. 2013. La croissance économique est-elle pro-pauvres au Niger?. *African Development Review* **25**:2, 203-214. [Crossref]

241. Branko Milanovic. 2013. Global Income Inequality in Numbers: in History and Now. *Global Policy* **4**:2, 198-208. [Crossref]

242. Fabrice Murtin. 2013. Long-Term Determinants of the Demographic Transition, 1870–2000. *Review of Economics and Statistics* **95**:2, 617-631. [Crossref]

243. Leticia Arroyo Abad. 2013. Persistent Inequality? Trade, Factor Endowments, and Inequality in Republican Latin America. *The Journal of Economic History* **73**:1, 38-78. [Crossref]

244. Indunil De Silva. 2013. Inequality decomposition by population subgroups and income sources in Sri Lanka. *Journal of Economic Studies* **40**:1, 4-21. [Crossref]

245. Jing Jian Xiao. Family Economic Well-Being 573-611. [Crossref]

246. Jordi López-Tamayo, Vicente Royuela, Jordi Suriñach. Building a "Quality in Work" Index in Spain 233-262. [Crossref]

247. François Bourguignon, Maurizio Bussolo. Income Distribution in Computable General Equilibrium Modeling 1383-1437. [Crossref]

248. Khalid Zaman, Bashir Ahmad Khilji. 2013. RETRACTED: The relationship between growth and poverty in forecasting framework: Pakistan's future in the year 2035. *Economic Modelling* **30**, 468-491. [Crossref]

249. Maxim L. Pinkovskiy. 2013. World welfare is rising: Estimation using nonparametric bounds on welfare measures. *Journal of Public Economics* **97**, 176-195. [Crossref]

250. Dani Rodrik. 2013. Roepke Lecture in Economic Geography-Who Needs the Nation-State?. *Economic Geography* **89**:1, 1-19. [Crossref]

251. Peter Edward, Andy Sumner. 2013. The Geography of Inequality: Where and by How Much Has Income Distribution Changed Since 1990?. *SSRN Electronic Journal* . [Crossref]

252. Maxim L. Pinkovskiy. 2013. World Welfare is Rising: Estimation Using Nonparametric Bounds on Welfare Measures. *SSRN Electronic Journal* . [Crossref]

253. Thomas Goda. 2013. Changes in Income Inequality from a Global Perspective: An Overview. *SSRN Electronic Journal* . [Crossref]

254. Ewout Frankema, Marlous Van Waijenburg. 2012. Structural Impediments to African Growth? New Evidence from Real Wages in British Africa, 1880–1965. *The Journal of Economic History* **72**:4, 895-926. [Crossref]

255. John Gerring. 2012. Mere Description. *British Journal of Political Science* **42**:4, 721-746. [Crossref]

256. Gholamreza Hajargasht, William E. Griffiths, Joseph Brice, D.S. Prasada Rao, Duangkamon Chotikapanich. 2012. Inference for Income Distributions Using Grouped Data. *Journal of Business & Economic Statistics* **30**:4, 563-575. [Crossref]

257. Justin Yifu Lin, David Rosenblatt. 2012. Shifting patterns of economic growth and rethinking development. *Journal of Economic Policy Reform* **15**:3, 171-194. [Crossref]

258. Jim Glassman. The Global Economy 170-182. [Crossref]

259. Joel Wainwright. The Geographies of Alter-Globalization 330-343. [Crossref]

260. Wenkai Sun, Xiaoxia Wang, Xiaoni Ying. 2012. Does Life Expectancy Affect Private Educational Investment in China?. *China & World Economy* **20**:4, 37-55. [Crossref]

261. Radhika Lahiri, Shyama Ratnasiri. 2012. Growth Patterns and Inequality in the Presence of Costly Technology Adoption. *Southern Economic Journal* **79**:1, 203-223. [Crossref]

262. Branko Milanovic. 2012. Global Inequality: From Class to Location, from Proletarians to Migrants. *Global Policy* **3**:2, 125-134. [Crossref]

263. John S. Ahlquist, Erik Wibbels. 2012. Riding the Wave: World Trade and Factor-Based Models of Democratization. *American Journal of Political Science* **56**:2, 447-464. [Crossref]

264. Gordon Anderson, Oliver Linton, Teng Wah Leo. 2012. A polarization-cohesion perspective on cross-country convergence. *Journal of Economic Growth* **17**:1, 49-69. [Crossref]

265. Elizabeth A. Stanton. 2012. The Tragedy of Maldistribution: Climate, Sustainability, and Equity. *Sustainability* **4**:3, 394-411. [Crossref]

266. Scott Albrecht, Roberto Patricio Korzeniewicz. Globalization and Inequality . [Crossref]

267. Alessandro Vercelli. Sustainability . [Crossref]

268. Maurizio Bussolo, Rafael E. de Hoyos, Denis Medvedev, Dominique van der Mensbrugghe. 2012. Global Growth and Distribution: China, India, and the Emergence of a Global Middle Class. *Journal of Globalization and Development* **2**:2. . [Crossref]

269. Udaya R. Wagle. 2012. The economic footing of the global poor, 1980-2005: The roles of economic growth, openness and political institutions. *Journal of International Development* **24**, S173-S197. [Crossref]

270. Marc Keuschnigg, Jochen Groß. 193-226. [Crossref]

271. Eliezer M. Diniz, Celio Bermann. 2012. Economia verde e sustentabilidade. *Estudos Avançados* **26**:74, 323-330. [Crossref]

272. Alberto Chilosi. 2012. Poverty, Population, Inequality, and Development in Historical Perspective. *SSRN Electronic Journal* . [Crossref]

273. Camelia Minoiu, Sanjay G. Reddy. 2012. Kernel Density Estimation Based on Grouped Data: The Case of Poverty Assessment. *SSRN Electronic Journal* . [Crossref]

274. Jean-Marie Grether, Claude Lutzelschwab, Nicole A. Mathys. 2012. L'essor et le déclin de l'Occident : une perspective géographique. *Revue d'économie du développement* **20**:2, 31. [Crossref]

275. Branko Milanovic. 2011. A short history of global inequality: The past two centuries. *Explorations in Economic History* **48**:4, 494-506. [Crossref]

276. John J. Hisnanick. 2011. Who Are the Winners and the Losers? Transitions in the U.S. Household Income Distribution. *Review of Radical Political Economics* **43**:4, 467-487. [Crossref]

277. Norbert Berthold, Alexander Brunner. 2011. Wie ungleich ist die Welt? Eine empirische Analyse. *Perspektiven der Wirtschaftspolitik* **12**:4, 372-396. [Crossref]

278. Glenn Firebaugh. Income Inequality, Global . [Crossref]

279. Leandro Prados de la Escosura. Improving Human Development: A Long-Run View 87-140. [Crossref]

280. John Echeverri-Gent. 2011. Citizenship in an Unequal World. *Perspectives on Politics* **9**:3, 625-630. [Crossref]

281. THOMAS FAROLE, ANDRÉS RODRÍGUEZ-POSE, MICHAEL STORPER. 2011. Cohesion Policy in the European Union: Growth, Geography, Institutions. *JCMS: Journal of Common Market Studies* **49**:5, 1089-1111. [Crossref]

282. Michel Dumont, Nikolina Stojanovska, Ludo Cuyvers. 2011. World inequality, globalisation, technology and labour market institutions. *International Journal of Manpower* **32**:3, 257-272. [Crossref]

283. Servaas van der Berg. 2011. Current poverty and income distribution in the context of South African history. *Economic History of Developing Regions* **26**:1, 120-140. [Crossref]

284. Harry F. Dahms. Chapter 5 Does Alienation 223-248. [Crossref]

285. Harry F. Dahms. Chapter 6 How Social Science is Impossible without Critical Theory: The Immersion of Mainstream Approaches in Time and Space 249-303. [Crossref]

286. . References 305-322. [Crossref]

287. Harry F. Dahms. Chapter 4 Globalization or Hyper-Alienation? Critiques of Traditional Marxism as Arguments for Basic Income 157-222. [Crossref]

288. Andrew Mountford, Hillel Rapoport. 2011. The brain drain and the world distribution of income. *Journal of Development Economics* **95**:1, 4-17. [Crossref]

289. Ana Paula Belon, Marilisa Berti de Azevedo Barros. 2011. Esperança de vida ao nascer: impacto das variações na mortalidade por idade e causas de morte no Município de Campinas, São Paulo, Brasil. *Cadernos de Saúde Pública* **27**:5, 877-887. [Crossref]

290. Anthony B. Atkinson,, Thomas Piketty,, Emmanuel Saez. 2011. Top Incomes in the Long Run of History. *Journal of Economic Literature* **49**:1, 3-71. [Abstract] [View PDF article] [PDF with links]

291. Ho-fung Hung, Jaime Kucinskas. 2011. Globalization and Global Inequality: Assessing the Impact of the Rise of China and India, 1980–2005. *American Journal of Sociology* **116**:5, 1478-1513. [Crossref]

292. James B. Davies, Susanna Sandström, Anthony Shorrocks, Edward N. Wolff. 2011. The Level and Distribution of Global Household Wealth. *The Economic Journal* **121**:551, 223-254. [Crossref]

293. M. Ravallion. 2011. A Comparative Perspective on Poverty Reduction in Brazil, China, and India. *The World Bank Research Observer* **26**:1, 71-104. [Crossref]
294. Kristian Behrens, Yasuhiro Sato. 2011. MIGRATION, SKILL FORMATION, AND THE WAGE STRUCTURE*. *Journal of Regional Science* **51**:1, 5-30. [Crossref]
295. Erich Weede. Wachstum und Verteilung in einer globalisierten Welt 51-76. [Crossref]
296. Shengyun Wang, Shujuan Yu. Pro-poor Growth Measurement: A Survey 29-38. [Crossref]
297. Álvaro Santos Pereira, Pedro Lains. From an Agrarian Society to a Knowledge Economy? The Rising Importance of Education to the Portuguese Economy, 1950–2009 109-134. [Crossref]
298. Mark McGillivray. Global Inequality in Health: Disparities in Human Longevity among Countries 45-63. [Crossref]
299. Miriam A. Golden. Domestic and International Causes for the Rise of Pay Inequality in OECD Nations Between 1980 and 2000 209-249. [Crossref]
300. Vladimir Popov. 2011. Development Theories and Development Experience: Half a Century Journey. *SSRN Electronic Journal* . [Crossref]
301. Kristof Bosmans, Koen Decancq, André Decoster. 2011. The Evolution of Global Inequality: Absolute, Relative and Intermediate Views. *SSRN Electronic Journal* . [Crossref]
302. Andros Kourtellos, Chih Ming Tan, Ioanna Stylianou. 2011. Failure to Launch? The Role of Land Inequality in Transition Delays. *SSRN Electronic Journal* . [Crossref]
303. Koen Decancq. 2011. Global Inequality: A Multidimensional Perspective. *SSRN Electronic Journal* . [Crossref]
304. Elena Nikolova. 2011. Labour Markets and Representative Institutions: Evidence from Colonial British America. *SSRN Electronic Journal* . [Crossref]
305. Joseph Zeira. 2011. Globalization and Divergence. *SSRN Electronic Journal* . [Crossref]
306. Marlous van Waijenburg, Ewout Frankema. 2011. Structural Impediments to African Growth? New Evidence from Real Wages in British Africa, 1880-1965. *SSRN Electronic Journal* . [Crossref]
307. Maximo Rossi, Fernando Borraz, Nicolas Gonzalez. 2011. Polarization and the Middle Class. *SSRN Electronic Journal* . [Crossref]
308. Henk LM Kox. 2011. The Future of the Fence Around the EU Labour Market. *SSRN Electronic Journal* . [Crossref]
309. Angus Deaton. 2011. Mesurer le développement : autres données, autres conclusions ?. *Revue d'économie du développement* **19**:2, 13. [Crossref]
310. Koen Decancq. 2011. Measuring global well-being inequality: A dimension-by-dimension or multidimensional approach?. *Reflets et perspectives de la vie économique* **L**:4, 179. [Crossref]
311. Leandro Prados de la Escosura. 2010. IMPROVING HUMAN DEVELOPMENT: A LONG-RUN VIEW. *Journal of Economic Surveys* **24**:5, 841-894. [Crossref]
312. Karen Macours, Alain de Janvry, Elisabeth Sadoulet. 2010. Insecurity of property rights and social matching in the tenancy market. *European Economic Review* **54**:7, 880-899. [Crossref]
313. Luis Bértola, Leandro Prados de la Escosura, Jeffrey G. Williamson. 2010. Latin American Inequality in the Long Run. *Revista de Historia Económica / Journal of Iberian and Latin American Economic History* **28**:2, 219-226. [Crossref]
314. Luis Bértola, Cecilia Castelnovo, Javier Rodríguez, Henry Willebald. 2010. Between the colonial heritage and the first globalization boom: on income inequality in the Southern Cone. *Revista de Historia Económica / Journal of Iberian and Latin American Economic History* **28**:2, 307-341. [Crossref]
315. Muhammad Shahbaz. 2010. Income inequality-economic growth and non-linearity: a case of Pakistan. *International Journal of Social Economics* **37**:8, 613-636. [Crossref]

316. Paul M. Romer. 2010. What Parts of Globalization Matter for Catch-Up Growth?. *American Economic Review* **100**:2, 94-98. [Citation] [View PDF article] [PDF with links]

317. Koen Decancq, Erwin Ooghe. 2010. Has the world moved forward? A robust multidimensional evaluation. *Economics Letters* **107**:2, 266-269. [Crossref]

318. Carles Boix. 2010. Origins and Persistence of Economic Inequality. *Annual Review of Political Science* **13**:1, 489-516. [Crossref]

319. Farhad Rassekh, John Speir. 2010. Can economic globalization lead to a more just society?. *Journal of Global Ethics* **6**:1, 27-43. [Crossref]

320. Sadegh Bakhtiari, Hossein Meisami. 2010. An empirical investigation of the effects of health and education on income distribution and poverty in Islamic countries. *International Journal of Social Economics* **37**:4, 293-301. [Crossref]

321. Angus Deaton. 2010. Price Indexes, Inequality, and the Measurement of World Poverty. *American Economic Review* **100**:1, 5-34. [Abstract] [View PDF article] [PDF with links]

322. Hao Zhou, Wei Zou. 2010. Income distribution dynamics of urban residents: The case of China (1995–2004). *Frontiers of Economics in China* **5**:1, 114-134. [Crossref]

323. Samuel H. Cox, Yijia Lin, Hal Pedersen. 2010. Mortality risk modeling: Applications to insurance securitization. *Insurance: Mathematics and Economics* **46**:1, 242-253. [Crossref]

324. Mark McGillivray, Nora Markova. 2010. Global Inequality in Well-being Dimensions. *Journal of Development Studies* **46**:2, 371-378. [Crossref]

325. Steve Dowrick. inequality (global) 161-171. [Crossref]

326. Peter Howitt, David N. Weil. economic growth 38-50. [Crossref]

327. Anthony B. Atkinson, Andrea Brandolini. 2010. On Analyzing the World Distribution of Income. *The World Bank Economic Review* **24**:1, 1-37. [Crossref]

328. Vicente Royuela, Gustavo Adolfo García Cruz. 2010. Economic and Social Convergence in Colombia. *SSRN Electronic Journal* . [Crossref]

329. Shatakshee Dhongde, Camelia Minoiu. 2010. Global Poverty Estimates: Present and Future. *SSRN Electronic Journal* . [Crossref]

330. Georgios Georgiadis, Francisco R. Rodriguez, Jose Pineda. 2010. Has the Preston Curve Broken Down?. *SSRN Electronic Journal* . [Crossref]

331. Marina E. Adshade. 2009. THE RICH ARE DIFFERENT FROM THE REST OF US. *Review of Income and Wealth* **55**:4, 959-967. [Crossref]

332. James B. Davies, Susanna Sandström, Anthony Shorrocks, Edward Wolff. 2009. The global pattern of household wealth. *Journal of International Development* **21**:8, 1111-1124. [Crossref]

333. Miquel Pellicer. 2009. Inequality persistence through vertical vs. horizontal coalitions. *Journal of Development Economics* **90**:2, 258-266. [Crossref]

334. Christian Suter. 2009. Inequality beyond Globalization. *International Journal of Comparative Sociology* **50**:5-6, 419-424. [Crossref]

335. Karen Rasler, William R. Thompson. 2009. Globalization and North—South Inequality, 1870—2000. *International Journal of Comparative Sociology* **50**:5-6, 425-451. [Crossref]

336. Luis Bértola, Cecilia Castelnovo, Javier Rodríguez, Henry Willebald. 2009. Income Distribution in the Latin American Southern Cone during the First Globalization Boom and Beyond. *International Journal of Comparative Sociology* **50**:5-6, 452-485. [Crossref]

337. Eric Berr. 2009. Keynes and Sustainable Development. *International Journal of Political Economy* **38**:3, 22-38. [Crossref]

338. Jesper Roine, Jonas Vlachos, Daniel Waldenström. 2009. The long-run determinants of inequality: What can we learn from top income data?. *Journal of Public Economics* **93**:7-8, 974-988. [Crossref]

339. Joseph Zeira. 2009. Why and How Education Affects Economic Growth. *Review of International Economics* **17**:3, 602-614. [Crossref]

340. ADOLFO MAZA, JOSÉ VILLAVERDE. 2009. SPATIAL EFFECTS ON PROVINCIAL CONVERGENCE AND INCOME DISTRIBUTION IN SPAIN: 1985-2003. *Tijdschrift voor economische en sociale geografie* **100**:3, 316-331. [Crossref]

341. BAS VAN BAVEL, TINE DE MOOR, JAN LUITEN VAN ZANDEN. 2009. Introduction: Factor markets in global economic history. *Continuity and Change* **24**:1, 9-21. [Crossref]

342. Azmat Gani. 2009. Some Aspects of Communicable and Non-communicable Diseases in Pacific Island Countries. *Social Indicators Research* **91**:2, 171-187. [Crossref]

343. Frederic S Mishkin. 2009. Why We Shouldn't Turn Our Backs on Financial Globalization. *IMF Staff Papers* **56**:1, 139-170. [Crossref]

344. Jeroen Smits, Christiaan Monden. 2009. Length of life inequality around the globe. *Social Science & Medicine* **68**:6, 1114-1123. [Crossref]

345. Peter Imbusch. Unglaubliche Vermögen – Elitärer Reichtum 212-230. [Crossref]

346. Koen Decancq, André Decoster, Erik Schokkaert. 2009. The Evolution of World Inequality in Well-being. *World Development* **37**:1, 11-25. [Crossref]

347. François Bourguignon, Victoria Levin, David Rosenblatt. 2009. International Redistribution of Income. *World Development* **37**:1, 1-10. [Crossref]

348. Fan Zhai, William James, Frank Harrigan. From Growth to Convergence: An Introduction 1-39. [Crossref]

349. Maurizio Bussolo, Rafael E. De Hoyos, Denis Medvedev, Dominique van der Mensbrugghe. Global Growth and Distribution: Asia and its Progression to Developed Status 284-324. [Crossref]

350. Thanasis Stengos, Brennan S. Thompson, Ximing Wu. The evolution of the conditional joint distribution of life expectancy and per capita income growth 171-191. [Crossref]

351. Thomas Faist. 2009. The Transnational Social Question. *International Sociology* **24**:1, 7-35. [Crossref]

352. Vinod Thomas. 2009. Income Disparity and Growth. *Global Journal of Emerging Market Economies* **1**:1, 63-86. [Crossref]

353. Anthony B. Atkinson, Andrea Brandolini. 2009. On Analysing the World Distribution of Income. *SSRN Electronic Journal* . [Crossref]

354. Ingvild Almås, Magne Mogstad. 2009. Older or Wealthier? The Impact of Age Adjustments on the Wealth Inequality Ranking of Countries. *SSRN Electronic Journal* . [Crossref]

355. Enriqueta Camps. 2009. Globalization and Culture Shaping the Gender Gap: A Comparative Analysis of Urban Latin America and East Asia (1970 - 2000). *SSRN Electronic Journal* . [Crossref]

356. Frances Stewart. 2009. A Global View of Horizontal Inequalities: Inequalities Experienced by Muslims Worldwide. *SSRN Electronic Journal* . [Crossref]

357. Branko Milanovic. 2009. Global Inequality and Global Inequality Extraction Ratio: The Story of the Last Two Centuries. *SSRN Electronic Journal* . [Crossref]

358. Carles Boix. 2009. Development and Democratization. *SSRN Electronic Journal* . [Crossref]

359. Davide Fiaschi, Marzia Romanelli. 2009. Nonlinear Dynamics in Welfare and the Evolution of World Inequality. *SSRN Electronic Journal* . [Crossref]

360. Jean-Luc Gaffard, Francesco Saraceno. 2009. Redistribution des revenus et instabilité. *Revue de l'OFCE* **110**:3, 75. [Crossref]

361. L. Prados de la Escosura. 2008. Inequality, poverty and the Kuznets curve in Spain, 1850-2000. *European Review of Economic History* **12**:3, 287-324. [Crossref]
362. Leonardo Gasparini, Matías Horenstein, Ezequiel Molina, Sergio Olivieri. 2008. Income Polarization in Latin America: Patterns and Links with Institutions and Conflict. *Oxford Development Studies* **36**:4, 461-484. [Crossref]
363. 2008. An interview with Professor Jeffrey Williamson. *Oxonomics* **3**:1, 20-25. [Crossref]
364. Valpy FitzGerald. 2008. Economic development and fluctuations in earnings inequality in the very long run: The evidence from Latin America 1900-2000. *Journal of International Development* **20**:8, 1028-1048. [Crossref]
365. Simon Caney. 2008. Global Distributive Justice and the State. *Political Studies* **56**:3, 487-518. [Crossref]
366. Deepak Nayyar. 2008. Learning to Unlearn from Development. *Oxford Development Studies* **36**:3, 259-280. [Crossref]
367. MICHAEL WOOLCOCK. 2008. Global Poverty and Inequality: A Brief Retrospective and Prospective Analysis. *Political Quarterly* **79**, 183-196. [Crossref]
368. Shawn F. Dorius. 2008. Global Demographic Convergence? A Reconsideration of Changing Intercountry Inequality in Fertility. *Population and Development Review* **34**:3, 519-537. [Crossref]
369. Stephen M. Mutula. 2008. Digital divide and economic development: case study of sub-Saharan Africa. *The Electronic Library* **26**:4, 468-489. [Crossref]
370. Juan Carlos Córdoba, Geneviève Verdier. 2008. Inequality and growth: Some welfare calculations. *Journal of Economic Dynamics and Control* **32**:6, 1812-1829. [Crossref]
371. Brian Goesling, David P. Baker. 2008. Three faces of international inequality. *Research in Social Stratification and Mobility* **26**:2, 183-198. [Crossref]
372. Jaime Reis. 2008. Regulation, competition and income distribution: An outsider's perspective. *The Quarterly Review of Economics and Finance* **48**:2, 447-456. [Crossref]
373. Evan Hillebrand. 2008. The Global Distribution of Income in 2050. *World Development* **36**:5, 727-740. [Crossref]
374. Glenn Firebaugh, Brian Goesling. Globalization and Global Inequalities: Recent Trends 549-564. [Crossref]
375. Roberto Patricio Korzeniewicz, Timothy Patrick Moran. World Inequality in the Twenty-First Century: Patterns and Tendencies 565-592. [Crossref]
376. Håvard Hegre. 2008. Polarization and Interstate Conflict. *Journal of Peace Research* **45**:2, 261-282. [Crossref]
377. Sudhir Anand,, Paul Segal. 2008. What Do We Know about Global Income Inequality?. *Journal of Economic Literature* **46**:1, 57-94. [Abstract] [View PDF article] [PDF with links]
378. R. Kerry Turner, Brendan Fisher. 2008. To the rich man the spoils. *Nature* **451**:7182, 1067-1068. [Crossref]
379. Peter Howitt, David N. Weil. Economic Growth 1-11. [Crossref]
380. Steve Dowrick. Inequality (Global) 1-10. [Crossref]
381. François Bourguignon. Inequality Between Nations 1-8. [Crossref]
382. Guanghua Wan, Ming Lu, Zhao Chen. Globalization and Regional Income Inequality: Empirical evidence from within China 1-29. [Crossref]
383. Ben W. Ansell, David J. Samuels. 2008. Inequality and Democratization. *SSRN Electronic Journal* . [Crossref]

384. Kym Anderson. 2008. Agriculture, Trade Reform and Poverty Reduction: Implications for Sub-Saharan Africa. *SSRN Electronic Journal* . [Crossref]

385. Ximing Wu, Andreas Savvides, Thanasis Stengos. 2008. The Global Joint Distribution of Income and Health. *SSRN Electronic Journal* . [Crossref]

386. Camelia Minoiu, Sanjay Reddy. 2008. Kernel Density Estimation Basedon Grouped Data: The Case of Poverty Assessment. *IMF Working Papers* **08**:183, 1. [Crossref]

387. Christian Morrisson, Fabrice Murtin. 2008. L'inégalité mondiale de l'éducation et des revenus (1870-2000). *Économie & prévision* **n° 186**:5, 39. [Crossref]

388. Thomas J. White. 2007. Sharing resources: The global distribution of the Ecological Footprint. *Ecological Economics* **64**:2, 402-410. [Crossref]

389. Martin Ravallion, Shaohua Chen, Prem Sangraula. 2007. New Evidence on the Urbanization of Global Poverty. *Population and Development Review* **33**:4, 667-701. [Crossref]

390. Rodrigo R. Soares. 2007. Health and the evolution of welfare across Brazilian municipalities. *Journal of Development Economics* **84**:2, 590-608. [Crossref]

391. Udaya R. Wagle. 2007. Are Economic Liberalization and Equality Compatible? Evidence from South Asia. *World Development* **35**:11, 1836-1857. [Crossref]

392. Jim Glassman. 2007. Recovering from Crisis: The Case of Thailand's Spatial Fix. *Economic Geography* **83**:4, 349-370. [Crossref]

393. Lant Pritchett. The future of migration 358-383. [Crossref]

394. Josef Novotný. 2007. On the measurement of regional inequality: does spatial dimension of income inequality matter?. *The Annals of Regional Science* **41**:3, 563-580. [Crossref]

395. Kathryn M. Neckerman, Florencia Torche. 2007. Inequality: Causes and Consequences. *Annual Review of Sociology* **33**:1, 335-357. [Crossref]

396. Chris Papageorgiou, Andreas Savvides, Marios Zachariadis. 2007. International medical technology diffusion. *Journal of International Economics* **72**:2, 409-427. [Crossref]

397. T. Roy. 2007. A delayed revolution: environment and agrarian change in India. *Oxford Review of Economic Policy* **23**:2, 239-250. [Crossref]

398. Rodrigo R. Soares. 2007. On the Determinants of Mortality Reductions in the Developing World. *Population and Development Review* **33**:2, 247-287. [Crossref]

399. M. Hashem Pesaran. 2007. A pair-wise approach to testing for output and growth convergence. *Journal of Econometrics* **138**:1, 312-355. [Crossref]

400. Anne Boschini, Anders Olofsgård. 2007. Foreign aid: An instrument for fighting communism?. *The Journal of Development Studies* **43**:4, 622-648. [Crossref]

401. Javier A. Birchenall. 2007. Economic Development and the Escape from High Mortality. *World Development* **35**:4, 543-568. [Crossref]

402. Mina Baliamoune-Lutz. 2007. Globalisation and Gender Inequality: Is Africa Different?. *Journal of African Economies* **16**:2, 301-348. [Crossref]

403. Guanghua Wan, Ming Lu, Zhao Chen. 2007. GLOBALIZATION AND REGIONAL INCOME INEQUALITY: EMPIRICAL EVIDENCE FROM WITHIN CHINA. *Review of Income and Wealth* **53**:1, 35-59. [Crossref]

404. Glenn Firebaugh. Income Inequality, Global . [Crossref]

405. François Nielsen. Industrial Revolution . [Crossref]

406. Kaushik Basu. Globalization, Poverty and Inequality: What Is the Relationship? What Can Be Done? 300-318. [Crossref]

407. Machiko Nissanke, Erik Thorbecke. Channels and Policy Debate in the Globalization-Inequality-Poverty Nexus 22-55. [Crossref]

408. José Antonio Ocampo, María Angela Parra. The Dual Divergence: Growth Successes and Collapses in the Developing World Since 1980 61-92. [Crossref]

409. Richard Jolly. Inequality in Historical Perspective 63-73. [Crossref]

410. Giovanni Andrea Cornia, Leonardo Menchini. Health Improvements and Health Inequality during the Last 40 Years 77-99. [Crossref]

411. Farhad Noorbakhsh. International Convergence or Higher Inequality in Human Development? Evidence for 1975–2002 149-167. [Crossref]

412. Briony Smith. 2007. Annotated Bibliography on Social Exclusion, Adverse Incorporation and Chronic Poverty. *SSRN Electronic Journal* . [Crossref]

413. Andrea Brandolini. 2007. Measurement of Income Distribution in Supranational Entities: The Case of the European Union. *SSRN Electronic Journal* . [Crossref]

414. Jean-Pierre Lachaud. 2007. La mesure de la croissance pro-pauvres au Burkina Faso : espace de l'utilité ou des capacités ?. *Revue d'économie du développement* **15**:1, 5. [Crossref]

415. Jean-Pierre Lachaud. 2007. Measuring Pro-Poor Growth in Burkina Faso: Utility or Capabilities Space?. *Revue d'économie du développement* **15**:5, 5. [Crossref]

416. Juan Carlos Cordoba, Geneviève Verdier. 2007. Lucas vs. Lucas: On Inequality and Growth. *IMF Working Papers* **07**:17, 1. [Crossref]

417. David Fielding, Sebastian Torres. 2006. A simultaneous equation model of economic development and income inequality. *The Journal of Economic Inequality* **4**:3, 279-301. [Crossref]

418. Aravinda Meera Guntupalli, Joerg Baten. 2006. The development and inequality of heights in North, West, and East India 1915–1944. *Explorations in Economic History* **43**:4, 578-608. [Crossref]

419. Peter Edward. 2006. Examining Inequality: Who Really Benefits from Global Growth?. *World Development* **34**:10, 1667-1695. [Crossref]

420. Francis Teal. 2006. Consumption and welfare in Ghana in the 1990s. *Journal of Development Studies* **42**:7, 1252-1269. [Crossref]

421. Dilip K. Das. 2006. The DOHA Round of Multilateral Negotiations and the Embellishing Role of the Developing Economies. *The International Trade Journal* **20**:3, 307-354. [Crossref]

422. Michael A. Peters, Peter Fitzsimons. 2006. Book Review: A Brief History of Neoliberalism, Punishing the Discipline: The PBRF Regime. Evaluating the Position of Education — Where to from Here?. *Policy Futures in Education* **4**:3, 320-329. [Crossref]

423. Machiko Nissanke, Erik Thorbecke. 2006. Channels and policy debate in the globalization–inequality–poverty nexus. *World Development* **34**:8, 1338-1360. [Crossref]

424. Kaushik Basu. 2006. Globalization, poverty, and inequality: What is the relationship? What can be done?. *World Development* **34**:8, 1361-1373. [Crossref]

425. Charles Kenny. 2006. Were People in the Past Poor and Miserable?. *Kyklos* **59**:2, 275-306. [Crossref]

426. X. Sala-i-Martin. 2006. The World Distribution of Income: Falling Poverty and ... Convergence, Period. *The Quarterly Journal of Economics* **121**:2, 351-397. [Crossref]

427. Anton Korinek, Johan A. Mistiaen, Martin Ravallion. 2006. Survey nonresponse and the distribution of income. *The Journal of Economic Inequality* **4**:1, 33-55. [Crossref]

428. Claudia Biancotti. 2006. A polarization of inequality? The distribution of national Gini coefficients 1970–1996. *The Journal of Economic Inequality* **4**:1, 1-32. [Crossref]

429. Ramanan Laxminarayan, Anne J Mills, Joel G Breman, Anthony R Measham, George Alleyne, Mariam Claeson, Prabhat Jha, Philip Musgrove, Jeffrey Chow, Sonbol Shahid-Salles, Dean T Jamison.

2006. Advancement of global health: key messages from the Disease Control Priorities Project. *The Lancet* **367**:9517, 1193-1208. [Crossref]

430. Sebnem Kalemli-Ozcan. 2006. *Journal of International Economics* **68**:2, 518-527. [Crossref]
431. Glenn Firebaugh. 2006. Book Review: A Theory of Global Capitalism: Production, Class, and State in a Transnational World. *Work and Occupations* **33**:1, 115-117. [Crossref]
432. . Measuring Inequality and Social Welfare 49-80. [Crossref]
433. Franco Peracchi. Chapter 5 Educational Wage Premia and the Distribution of Earnings: An International Perspective 189-254. [Crossref]
434. Jean-Pascal Bassino. 2006. Inequality in Japan (1892–1941): Physical stature, income, and health. *Economics & Human Biology* **4**:1, 62-88. [Crossref]
435. George M. von Furstenberg. 2006. Consumption smoothing across states and time: International insurance versus foreign loans. *Journal of Policy Modeling* **28**:1, 1-23. [Crossref]
436. Edward S. Greenberg. 2006. Commentary: Reflections on Neil Smith's "The Endgame of Globalization". *Political Geography* **25**:1, 18-26. [Crossref]
437. Steve Dowrick, Muhammad Akmal. Contradictory Trends in Global Income Inequality: A Tale of Two Biases 91-122. [Crossref]
438. Rafael Gomez, Pablo Hernández de Cos. 2006. The Importance of Being Mature: The Effect of Demographic Maturation on Global Per-Capita Income. *SSRN Electronic Journal* . [Crossref]
439. Kristian Behrens, Yasuhiro Sato. 2006. Labor Market Integration and Migration: Impacts on Skill Formation and the Wage Structure. *SSRN Electronic Journal* . [Crossref]
440. Koen Decancq, André Decoster, Erik Schokkaert. 2006. The Evolution of World Inequality in Well-Being. *SSRN Electronic Journal* . [Crossref]
441. Adolfo MAZA, José VILLAVERDE. 2006. A territorial analysis of wage convergence/differentials in Spain. *Revue d'Économie Régionale & Urbaine* **octobre**:4, 615. [Crossref]
442. Xin Meng, Robert Gregory, Youjuan Wang. 2005. Poverty, inequality, and growth in urban China, 1986–2000. *Journal of Comparative Economics* **33**:4, 710-729. [Crossref]
443. Ryan D. Edwards, Shripad Tuljapurkar. 2005. Inequality in Life Spans and a New Perspective on Mortality Convergence Across Industrialized Countries. *Population and Development Review* **31**:4, 645-674. [Crossref]
444. Marius Brülhart, Rolf Traeger. 2005. An account of geographic concentration patterns in Europe. *Regional Science and Urban Economics* **35**:6, 597-624. [Crossref]
445. Fredrik Hedenus, Christian Azar. 2005. Estimates of trends in global income and resource inequalities. *Ecological Economics* **55**:3, 351-364. [Crossref]
446. George M von Furstenberg. 2005. Global Capital Markets, Integration, Crisis and Growth. *Comparative Economic Studies* **47**:3, 591-593. [Crossref]
447. Nancy Brune, Geoffrey Garrett. 2005. THE GLOBALIZATION RORSCHACH TEST: International Economic Integration, Inequality, and the Role of Government. *Annual Review of Political Science* **8**:1, 399-423. [Crossref]
448. Roberto Patricio Korzeniewicz, Timothy Patrick Moran. 2005. Theorizing the relationship between inequality and economic growth. *Theory and Society* **34**:3, 277-316. [Crossref]
449. Mark McGillivray, Anthony Shorrocks. 2005. INEQUALITY AND MULTIDIMENSIONAL WELL-BEING. *Review of Income and Wealth* **51**:2, 193-199. [Crossref]
450. Steve Dowrick, Muhammad Akmal. 2005. CONTRADICTORY TRENDS IN GLOBAL INCOME INEQUALITY: A TALE OF TWO BIASES. *Review of Income and Wealth* **51**:2, 201-229. [Crossref]

451. Anthony B. Atkinson. 2005. Comparing the Distribution of Top Incomes Across Countries. *Journal of the European Economic Association* **3**:2-3, 393-401. [Crossref]

452. Edward Nissan, George Carter. 2005. Decomposition of regional metropolitan and nonmetropolitan income inequality. *Journal of Economics and Finance* **29**:1, 73-84. [Crossref]

453. Gary S. Becker, Tomas J. Philipson, Rodrigo R. Soares. 2005. The Quantity and Quality of Life and the Evolution of World Inequality. *American Economic Review* **95**:1, 277-291. [Abstract] [View PDF article] [PDF with links]

454. Angus Deaton. 2005. Measuring Poverty in a Growing World (or Measuring Growth in a Poor World). *Review of Economics and Statistics* **87**:1, 1-19. [Crossref]

455. François Bourguignon. 2005. Comment on "Measuring Poverty in a Growing World (or Measuring Growth in a Poor World)" by Angus Deaton. *Review of Economics and Statistics* **87**:1, 20-22. [Crossref]

456. Jaume Ventura. A Global View of Economic Growth 1419-1497. [Crossref]

457. Ming Chien Lo, Mark D. Partridge. 2005. An Alternative Approach to the Analysis of the U.S. Per Capita Income Convergence. *SSRN Electronic Journal* . [Crossref]

458. Chris Papageorgiou, Andreas Savvides, Marios Zachariadis. 2005. International Medical Technology Diffusion. *SSRN Electronic Journal* . [Crossref]

459. Bernard Hoekman, L. Alan Winters. 2005. Trade and Employment: Stylized Facts and Research Findings. *SSRN Electronic Journal* . [Crossref]

460. Jaume Ventura. 2005. A Global View of Economic Growth. *SSRN Electronic Journal* . [Crossref]

461. Joseph Zeira. 2005. Machines as Engines of Growth. *SSRN Electronic Journal* . [Crossref]

462. . Health and Development **Vol. 26**, . [Crossref]

463. Duane Windsor. 2004. The Development of International Business Norms. *Business Ethics Quarterly* **14**:4, 729-754. [Crossref]

464. Glenn Firebaugh, Brian Goesling. 2004. Accounting for the Recent Decline in Global Income Inequality. *American Journal of Sociology* **110**:2, 283-312. [Crossref]

465. SERVAAS BERG, MEGAN LOUW. 2004. CHANGING PATTERNS OF SOUTH AFRICAN INCOME DISTRIBUTION: TOWARDS TIME SERIES ESTIMATES OF DISTRIBUTION AND POVERTY1. *South African Journal of Economics* **72**:3, 546-572. [Crossref]

466. Peter Svedberg. 2004. World Income Distribution: Which Way?. *Journal of Development Studies* **40**:5, 1-32. [Crossref]

467. Glenn Firebaugh. 2004. Does industrialization no longer benefit poor countries? A comment on arrighi, silver, and brewer, 2003. *Studies in Comparative International Development* **39**:1, 99-105. [Crossref]

468. Mehmet A. Ulubasoglu. 2004. Globalisation and Inequality. *The Australian Economic Review* **37**:1, 116-122. [Crossref]

469. Bernhard G. GUNTER, Rolph VAN DER HOEVEN. 2004. La dimension sociale de la mondialisation: analyse bibliographique. *Revue internationale du Travail* **143**:1-2, 7-44. [Crossref]

470. Bernhard G. GUNTER, Rolph HOEVEN. 2004. La cara social de la globalización, según la bibliografía especializada. *Revista Internacional del Trabajo* **123**:1-2, 7-47. [Crossref]

471. Bernhard G. GUNTER, Rolph HOEVEN. 2004. The social dimension of globalization: A review of the literature. *International Labour Review* **143**:1-2, 7-43. [Crossref]

472. Brian Goesling, Glenn Firebaugh. 2004. The Trend in International Health Inequality. *Population and Development Review* **30**:1, 131-146. [Crossref]

473. Gaurav Datt, Thomas Walker. 2004. Recent evolution of inequality in East Asia. *Applied Economics Letters* **11**:2, 75-79. [Crossref]

474. Robert Read. 2004. The Implications of Increasing Globalization and Regionalism for the Economic Growth of Small Island States. *World Development* **32**:2, 365-378. [Crossref]

475. 2004. Review of periodical literature published in 2002. *The Economic History Review* **57**:1, 161-220. [Crossref]

476. Kym Anderson. Trade Liberalization, Agriculture and Poverty in Low-Income Countries 37-62. [Crossref]

477. Lant Pritchett. 2004. Boom Towns and Ghost Countries: Geography, Agglomeration, and Population Mobility. *SSRN Electronic Journal* . [Crossref]

478. Angus S. Deaton. 2004. Health in an Age of Globalization. *SSRN Electronic Journal* . [Crossref]

479. George M. von Furstenberg. 2004. Consumption Smoothing Across States and Time: International Insurance vs. Foreign Loans. *SSRN Electronic Journal* . [Crossref]

480. Claudia Biancotti. 2004. A Polarization of Polarization? The Distribution of Inequality 1970-1996. *SSRN Electronic Journal* . [Crossref]

481. Bernhard G. Gunter, Rolph van der Hoeven. 2004. The Social Dimension of Globalization: A Review of the Literature. *SSRN Electronic Journal* . [Crossref]

482. François Bourguignon. 2004. Le triangle pauvreté - croissance - inégalités. *Afrique contemporaine* **211**:3, 29. [Crossref]

483. 2003. Recent Scholarship. *Journal of American History* **90**:3, 1161-1231. [Crossref]

484. Timothy Besley, Robin Burgess. 2003. Halving Global Poverty. *Journal of Economic Perspectives* **17**:3, 3-22. [Abstract] [View PDF article] [PDF with links]

485. Gordon Tullock, Axel Michaelowa. 2003. Comments. *Journal of Economic Perspectives* **17**:3, 203-206. [Abstract] [View PDF article] [PDF with links]

486. Stanley Fischer. 2003. Globalization and Its Challenges. *American Economic Review* **93**:2, 1-30. [Citation] [View PDF article] [PDF with links]

487. Anders Olofsgard, Anne Boschini. 2002. Foreign Aid: An Instrument for Fighting Poverty or Communism?. *SSRN Electronic Journal* . [Crossref]

488. Alicia Adserà, Carles Boix. Constitutions and Democratic Breakdowns 247-302. [Crossref]

489. Andrew Mountford, Hillel Rapoport. 1997. The Brain Drain and the World Distribution of Income and Population. *SSRN Electronic Journal* . [Crossref]

490. Richard Sturn. FAIRTRADE global — Marktlogik oder politisches Programm? 182-191. [Crossref]

491. Harry F. Dahms. Globalization or Hyper-Alienation? Critiques of Traditional Marxism as Arguments for Basic income 205-276. [Crossref]

492. Harry F. Dahms. How social science is impossible without critical theory: The immersion of mainstream approaches in time and space 3-61. [Crossref]

493. José Manuel Saiz-Alvarez. Solidarity Entrepreneurship in Knowledge Economies 1224-1251. [Crossref]