Global income inequality on the rise Gini coefficient since 1960

Rising inequality

A look at the Gini index distribution since 1960 (Fig.1) reveals two main features:

- Globally, incomes were roughly as unequally distributed in 2011 as in 1960.
- The more egalitarian nations are becoming significantly less so.

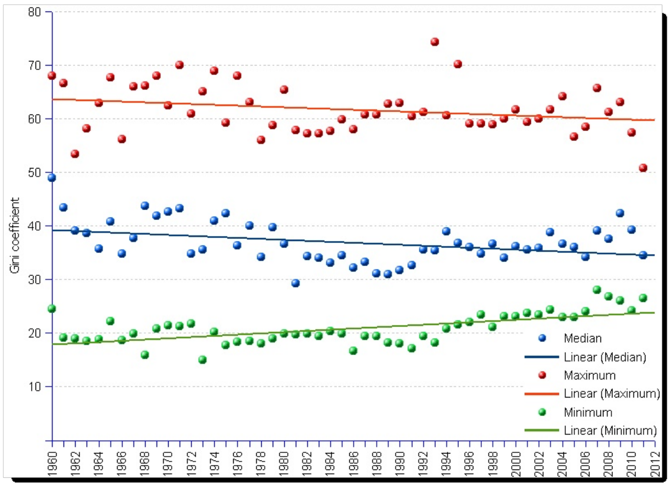

Figure 1: Gini parameters – 1960 - 2011.

The chart shows the Gini index median, highest and lowest values from 1960 to 2012, and the corresponding regression lines. Although the incompleteness and heterogeneousness of the data command caution, the trends appear quite clearly.

Wealth of individuals cannot be meaningfully measured by GDP (gross domestic product) or other related aggregates per capita, because the latter are arithmetic averages that say nothing of the varying size of each individual's share. The Gini index however reveals how shares of income differ among the population: a low Gini value points towards a comparatively egalitarian distribution, while a high value reveals a lop-sided distribution with a huge gap between the haves and the have-nots.

The evolution of the Gini distribution parameters (maximum, median and minimum) along the years elicits three major inferences:

1. In 2011 as in 1960, strong asymmetry prevailed among the less egalitarian nations (maximum parameter). It is true that inequality has decreased somewhat, but at a snail pace: -0.57% per year.
2. The world at large is not truly becoming more egalitarian — medians move slowly downwards along the full period, at the annual rate of -0.69%. But a closer analysis reveals that they have been moving upwards in the last dozen years.
3. Meanwhile, inequality spreads among the historically more egalitarian nations. The Gini minimum values have regularly increased at the average annual rate of 0.15%, thus slowly bridging the gap to the median. Egalitarian nations have been seduced by the beauties of asymmetry.

Fairness, not equality

The concept of equality — and its corollary inequality — entail high risk when applied to the fight against poverty. They implicitly suggest that equality is the highest good, linearly opposed to the ugliest evil that is inequality. The Gini mathematical construct reinforces this very same idea, suggesting a continuous function between the Gini indexes of zero and of 100. It is not necessarily so from a real world perspective.

Outside the limited area of the basic legal rights — e.g. the right to vote, the right to buy and sell property, the right not to be convicted without trial, etc. — equality is of secondary importance economically, socially and psychologically. The reason is simple. There is a clean break separating misery or extreme poverty, if you prefer, on one side, from the continuum going from poverty to extreme wealth on the other side. The distance between the miserable and the poor is far greater and harder to resolve than the distance between the poor and the extremely rich.

Quoting Charles Péguy, the duty of pulling the extremely poor out of misery, and the duty to share the wealth evenly are not of the same order: the former is a duty of emergency, the latter is a duty of convenience. Indeed, when every man is provided with the real necessary, the bread , the shelter and the book, the distribution of luxury does not matter. Who on earth should care about the distribution of golden faucets in glittering bathrooms?

Considering equality as the topmost goal is a double mistake. As a target, it is wrong: fairness and decency are key, not equality. As a policy, it is also wrong: the greedy and the grabbers can easily dismiss efforts to promote fraternity with the argument that inequality is a fact of life, it is designed by mother nature itself. Eradicating misery, not achieving equality, that is what society's efforts should aim at. Gini trend analysis suggests that, by misreading the agenda, the world is becoming more unequal, whatever the good intentions.

Inequality reasserting itself

The Gini median for the period 1960 to 2011 breaks down into two distinct periods (Fig.2): the line follows a downward trend from 1960 through the 1980s, reaches the inflection point in 1989, and moves upwards thereafter. The first 30-year period (blue line; slope of the linear regression: -0.38%) indicates a trend towards a more egalitarian pattern. From 1990 onwards (red line; slope: 0.19), inequality reasserts itself, the line taking an ascending path. In other words, inequality remained quite resilient, and successfully reversed the egalitarian trend that had prevailed from 1960 to 1989. Relating the trend reversal to key events of the late 1980s, namely the fall of the Berlin wall, the collapse of the Soviet Union, the triumph of right wing economic policy, and the alleged "End of History" may trigger amusing thoughts.

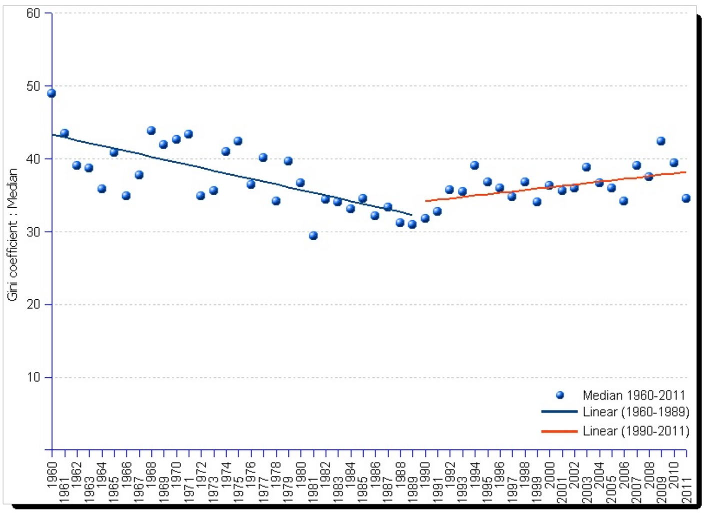

Figure 2: Gini medians 1960 - 2011 : inflection point in 1989.

So, inequality is triumphant — but why should one care? Setting aside the intricacies of the debate around egalitarianism or nonegalitarianism, one can point out three fairly good reasons for feeling concerned.

1. The humanistic reason. Many of us consider improper of the human condition and simply unacceptable the situation whereby some fellow humans are kept in the hell of extreme poverty, without a glimpse of a chance of ever escaping therefrom, while others lavishly spend inexhaustible riches to indulge in egotistic or self-aggrandizing pleasures, including spectacular charitable giving.
2. The social reason. A society where the better-offs are immune to solidarity and co-operation, and remain aloof to the misery of the worse-offs, rushes straight against the wall. The spiral of oppression, rebellion, retribution and retaliation is inescapable. Unfairness breeds generalized violence.
3. The economics reason. Although economists used to purport that economics couldn't and should not delve into ethics or sociology, today's mainstream economics acknowledges that inequality may affect a country's development prospects in many adverse ways. It may lead to inefficient allocation of resources that restrain economic development. It may strangle the access to credit, assets, or basic infrastructure. It may stifle entrepreneurial initiative. And it may facilitate the emergence of power groups capable of perpetuating asymmetries in status and wealth, which in turn are bad for investment, innovation, and risk-taking. In short, inequality is a bad policy.

The economics argument helps to understand the shift taken since the late 1990s by the world economy governance from a focus on structural adjustment (basically meaning spending cuts and belt tightening), to the longer-term concern with the reduction of poverty and inequality (World Bank, 2006. World Development Report 2006 “Equity and Development”). Alas, as suggested by the trend inflection, that concern sounds like baloney: inequality is on the rise.

More wealth, slimmer shares

The gross world product (GWP) has increased (Fig.3) by US$44 trillion or five fold from 1960 to 2012 — at an annual average rate of 3.5% (in US constant dollars, 2005=100). This surge of affluence should have induced not only a decrease of world poverty, but also a narrowing of the inequality gap.

Since the 1960s, the concepts of solidarity and co-operation have been reinvented as the building blocks of a prosperous and healthy society. Such social-ethnologists as Marcel Mauss, showing how gift exchanges create bonds that reinforce the social fabric, were brought back to the front stage of the societal debate. Political scientists and game theorists demonstrated that cooperation and trust can win over pure competitive strategies. Economists showed that fairness and cooperation can be not only closer to human nature than the selfish homo economicus of classical economics, but also more congruent with Darwinian success-breeding altruistic behaviors. Also, for quite a while, fear of socialism induced hardliners to give away a few crumbs in exchange for a portion of social consensus. In synch with these lines of thinking, international organizations, national governments and non-governmental organizations intensified action plans to allegedly enhance social cohesion, solidarity and fairness.

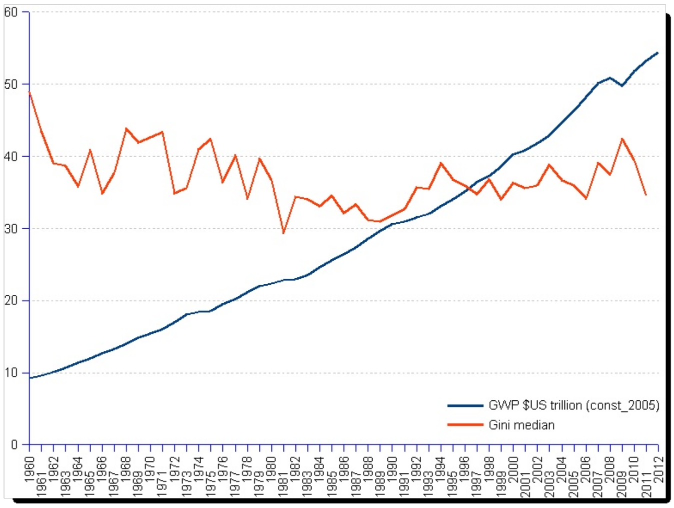

Figure 3: Gini coefficient and GWP (Gross world product, constant US$, 2005=100).

The top Millennium Development Goal

On early September 2000, a small crowd of world leaders met in the United Nations (UN) Headquarters in New York to hold the so-called Millennium Summit, the output of which was a set of 8 Millennium Development Goals (MDGs) with, at the topmost position, the aim "To eradicate extreme poverty and hunger" by 2015.

Mediocre output

Today, the results are mixed to say the least. The World Bank (WB), while claiming that "the world has become considerably less poor in the past three decades", concedes that "global income inequality increased slightly between the late 1980s and the middle of the last decade ... Citizens and policy makers alike are concerned with growing income disparities. " (World Bank 2012. Inequality In Focus, Vol 1, Nbr 1, April 2012). While the chasm between the well-paid and the low-paid deepens and the number and wealth of billionaires go through the roof, the UN acknowledge that 1.2 billion people are still living in extreme poverty, 60.9 per cent of workers in the developing world still live on less than $4 a day, the proportion of undernourished people worldwide is 15 percent or 870 million people (The Millennium Development Goals Report 2013, United Nations, 2013), and the number of unemployed people has increased by 131.8 million since 2007, leaving 201.8 million people without jobs in 2013 (Global Employment Trends 2014, ILO, 2014). How can we reconcile the official good-intentions with such a modest performance?

Drivers of inequality

1. A possible explanation is that the official rhetoric is just that. Indeed, abundant criticism has been addressed to International Monetary Fund (IMF), WB, Organization for Economic Cooperation and Development (OECD) and other such promoters and advocates of the war on poverty. Is their commitment to the heralded goals genuine, or are these at best a "communication" smoke screen in support of the hijacking of the world riches by the installed powers?
2. The concept of diminishing returns has been central in micro-economics. It explains that, in a situation where some factors are constrained (e.g. land, machinery), the yield of a variable input (e.g. work) tends to shrink in terms of output per additional unit employed, leading to a double penalty of lower productivity and rising costs. Equilibrium is achieved by optimizing the use of inputs. Beyond this point,

only inefficiency and decay should be expected. However, in the late 20th century, a new environment emerged capable of exhibiting behaviors of increasing returns. In electronics-based businesses, product unit costs tend to zero, allowing the big to grow bigger and the strong, stronger (think of Google or Amazon). The system breeds inequality: trying to reduce it is both pointless and risky for the leading contenders.

3. Another driver of inequality has emerged in the form of the "winner takes all" economy. In the classic supply-and-demand model, the market should adjust the price of any good or service to the latter's ability to perform. Higher grade, higher price, weaker demand, and conversely. There was room for a range of economic participants with different profiles, each one responding to different demand specifications as to capacity, quality, and price ranges. The "winner takes all" economy rewards only relative performance: the winner commands high price and a growing market share because of just being number one, whatever the performance margin to the number two. Little or nothing is left to the followers. Inequality becomes the rule. Changes of relative positions become rare or take place extremely slowly — compare the prestige and paycheck of the top performer of your favorite sport, the top pop star, or the top heart surgeon to those of their followers.

It can't last long

These underlying forces generate strong social and economical inefficiencies. Even supposing that the UN, IMF, WB, OECD and others' efforts to promote fairness and eradicate poverty are authentic and unbiased, it seems naive to expect much change. Their programs do not impact the deep-rooted system behavior that lavishly rewards the heavy weights while ignoring the crowds, that worships the winners while looking upon the masses as non-deserving, self-made, despicable losers. Which leaves us with two unanswered questions : how to build long-term prosperity on such a lopsided foundation? For how long will the outcasts shy away from reclaiming their fair share of the cake?

Data sources:

1. World Bank - PovcalNet [http://iresearch.worldbank.org/PovcalNet/index.htm?2].
2. UN University, World Income Inequality Database, Gini index [http://www.wider.unu.edu/wiid/wiid.htm].

Reference:
http://stats.areppim.com/stats/stats_ginixparam.htm.

Gini Coefficient Median, Maximum & Minimum 1960-2012					
Year	Median	Maximum		Minimum	
1960	49	68	Kenya	24.6	Bulgaria
1961	43.4	66.6	Peru	19.1	Czechoslovakia
1962	39.1	53.5	Sweden	19	Czechoslovakia
1963	38.7	58.2	New Zealand	18.5	Czechoslovakia
1964	35.8	63	Kenya	18.8	Czechoslovakia
1965	40.9	67.8	Ecuador	22.2	Bulgaria
1966	34.8	56.3	New Zealand	18.7	Czechoslovakia
1967	37.7	66	Kenya	19.9	Germany
1968	43.8	66.3	Zimbabwe	15.9	Bulgaria
1969	41.9	68	Kenya	20.9	Bulgaria
1970	42.6	62.5	Ecuador	21.5	Bulgaria
1971	43.3	70	Kenya	21.3	Bulgaria
1972	34.9	61	Brazil	21.8	Bulgaria
1973	35.6	65.1	Jamaica	15	Portugal
1974	41	69	Kenya	20.2	Bulgaria
1975	42.5	59.3	Gabon	17.8	Bulgaria
1976	36.4	68	Kenya	18.4	Bulgaria
1977	40.1	63.2	Gabon	18.6	China
1978	34.2	56	Brazil	18	Australia
1979	39.7	58.9	Brazil	19	Australia
1980	36.6	65.5	Jamaica	19.9	Sweden
1981	29.3	57.9	Brazil	19.7	Sweden
1982	34.4	57.3	Kenya	19.9	Sweden
1983	34	57.3	Kenya	19.4	Sweden
1984	33.1	57.7	Brazil	20.4	Sweden
1985	34.5	59.9	Malawi	19.9	Czechoslovakia
1986	32.2	58.1	Brazil	16.6	Luxembourg
1987	33.3	60.9	Lesotho	19.4	Slovak Republic
1988	31.1	60.9	Brazil	19.4	Czech Republic
1989	31	62.9	Sierra Leone	18.3	Slovak Republic
1990	31.8	63	South Africa	18	Slovak Republic
1991	32.7	60.5	Zambia	17.2	Portugal
1992	35.7	61.3	Central African Republic	19.5	Slovak Republic
1993	35.5	74.3	Namibia	18.3	Slovak Republic
1994	39	60.7	Swaziland	20.9	Finland
1995	36.8	70.3	Zimbabwe	21.6	Czech Republic
1996	36	59.1	Brazil	22.1	Finland
1997	34.8	59.2	Brazil	23.5	Finland
1998	36.8	59	Brazil	21.2	Czech Republic
1999	34	60	Lesotho	23.2	Czech Republic
2000	36.3	61.7	Bolivia	23.1	Czech Republic
2001	35.6	59.5	Haiti	23.7	Czech Republic
2002	35.9	60.1	Bolivia	23.4	Czech Republic
2003	38.8	61.8	Ecuador	24.3	Slovenia
2004	36.7	64.3	Comoros	23	Sweden
2005	36	56.7	Honduras	23	Sweden
2006	34.2	58.5	Colombia	24	Denmark, Slovenia, Sweden
2007	39.1	65.8	Seychelles	28.1	Slovak Republic
2008	37.6	61.3	Honduras	26.9	Slovak Republic
2009	42.4	63.1	South Africa	26	Slovak Republic
2010	39.4	57.5	Colombia	24.2	Bangladesh
2011	34.5	50.8	Rwanda	26.5	Belarus
2012	n/a	n/a		n/a	
Average annual change rate	-0.69%	-0.57%		0.15%	
Slope of the regression line	-0.091	-0.079		0.116	

Gini Coefficient Median 1960 - 2012	
Year	Gini Median
1960	49
1961	43.4
1962	39.1
1963	38.7
1964	35.8
1965	40.9
1966	34.8
1967	37.7
1968	43.8
1969	41.9
1970	42.6
1971	43.3
1972	34.9
1973	35.6
1974	41
1975	42.5
1976	36.4
1977	40.1
1978	34.2
1979	39.7
1980	36.6
1981	29.3
1982	34.4
1983	34
1984	33.1
1985	34.5
1986	32.2
1987	33.3
1988	31.1
1989	31
1990	31.8
1991	32.7
1992	35.7
1993	35.5
1994	39
1995	36.8
1996	36
1997	34.8
1998	36.8
1999	34
2000	36.3
2001	35.6
2002	35.9
2003	38.8
2004	36.7
2005	36
2006	34.2
2007	39.1
2008	37.6
2009	42.4
2010	39.4
2011	34.5
2012	n/a
Slope 1960-1989	-0.38
Slope 1990-2011	0.19

Gini Coefficient Median compared to Gross World Product (GWP) 1960-2012		
Year	GWP $US trillion (constant_2005 =100)	Gini Median
1960	9.19	49
1961	9.58	43.42
1962	10.11	39.1
1963	10.64	38.65
1964	11.34	35.8
1965	11.98	40.85
1966	12.68	34.83
1967	13.24	37.7
1968	14.04	43.78
1969	14.86	41.94
1970	15.45	42.64
1971	16.06	43.32
1972	16.96	34.9
1973	18.05	35.61
1974	18.38	41
1975	18.54	42.45
1976	19.49	36.44
1977	20.27	40.1
1978	21.14	34.22
1979	21.99	39.71
1980	22.39	36.65
1981	22.85	29.35
1982	22.94	34.36
1983	23.55	34.05
1984	24.66	33.1
1985	25.6	34.54
1986	26.43	32.16
1987	27.35	33.31
1988	28.62	31.15
1989	29.69	30.95
1990	30.54	31.75
1991	30.95	32.7
1992	31.53	35.68
1993	32.03	35.53
1994	33.04	39
1995	34.01	36.8
1996	35.12	36
1997	36.43	34.81
1998	37.33	36.75
1999	38.58	34
2000	40.22	36.3
2001	40.91	35.59
2002	41.76	35.91
2003	42.92	38.84
2004	44.71	36.7
2005	46.33	36
2006	48.22	34.21
2007	50.13	39.09
2008	50.85	37.57
2009	49.78	42.36
2010	51.77	39.37
2011	53.24	34.48
2012	54.48	n/a
Annual average change	3.50%	-0.69%
Change	44	-14.5
Change in percent	479.40%	-29.60%

