Growth-inequality-poverty dynamics: On the unreasonable reasons

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This article deals with growth inequality, poverty dynamics on the unreasonable reasons. I shall start with a quote on the unreasonable reason. According to Karl Marx, "reason has always existed, but not always in a reasonable form" (Letter to Arnold Ruge, from the Deutsch-Französische Jahrbücher September 1843). I will come back to Karl Marx again by the end of this presentation.

The topic has an international context of intensive empirical research exercises, centred on the "poverty-growth-inequality triangle" (PGI Triangle), originally introduced in 2003 by François Bourguignon, the former Chief Economist (2003-2007) of the World Bank, In his triangular model, inequality and growth affect each other and at the same time, both of them affect absolute poverty also. In his empirical approach, Bourguignon defines the change in poverty as a function of growth, distribution, and changes in distribution, using per capita income (GDP per capita) as the measure of growth and the Gini Index as the measure of inequality in his model. A large number of studies have since then followed using the PGI Triangle framework to study poverty in both developing countries and developed countries. It is in this context that the Economic Survey of India 2020-21 appears.

Unfortunately, inequality has never been a topic of importance in economic survey so far. But somehow this time we have got a full chapter on inequality and growth: Chapter four, titled "Inequality and Growth: Conflict or Convergence?". This Chapter four starts with a quotation from Aristotle, that poverty is the parent of revolution and crime; however, unfortunately, the Chapter does not give any reference to this quote, quite unlike a true research. The Chapter then continues: "In this chapter, the Survey examines if inequality and growth conflict or converge in the Indian context …… the Survey highlights that both

economic growth - as reflected in the income per capita at the state level - and inequality have similar relationships with socio-economic indicators. Thus, unlike in advanced economies, in India economic growth and inequality converge in terms of their effects on socio-economic indicators." (ES Vol. 1: Chapter 4, Page 121).

The writers of this Chapter in fact follows the method in Wilkinson and Pickett (2009). But there is no acknowledgement, no reference, except this sentence: "In the advanced economies, Wilkinson and Pickett (2009), Atkinson (2014) and Piketty (2020) show that higher inequality leads to adverse socio-economic outcomes" (ES Vol. 1: Chapter 4, Page 122). But in the Reference section, Wilkinson and Pickett (2009), and Atkinson (2014) do not appear at all.

Now let us turn to Richard Wilkinson and Kate Pickett (2009)'s study "The Spirit Level: Why Greater Equality Makes Societies Stronger". They consider 23 richest countries with different degrees of social inequality, and examine whether there exists any association between the level of inequality and a number of different indicators of individual wellbeing and social welfare. They measure the extent of income inequality by the ratio of income of the top 20 percent to the lower 20 percent in a society, with data from the UNDP Human Development Report. When the 23 countries are ranked by their degree of income inequality, the Scandinavian countries and Japan come out with the lowest income inequality, and the UK, Portugal, USA, and Singapore, with the highest income inequality.

As the indicators of individual wellbeing and social welfare, they consider nine social problems ("costs of inequality"): (1) community life and social relations, (2) mental health and drug use, (3) physical health and life expectancy, (4) obesity, (5) educational performance, (6) teenage pregnancies, (7) violence, (8) crime and punishment, and (9) unequal opportunities for intergenerational social mobility.

They then analyze bivariate graphs with the degree of income inequality on the x-axis and the extent (mean values) of the costs of inequality on the y-axis and identify a regression line through the cluster of points representing individual countries. The slope of this regression line is intended to indicate the correlation between income inequality and the relevant cost of inequality. A representative graph I reproduce here that shows that countries with lower income inequality have lower levels of social problems, while countries with higher income inequality, higher levels. Isn't this socially desirable?
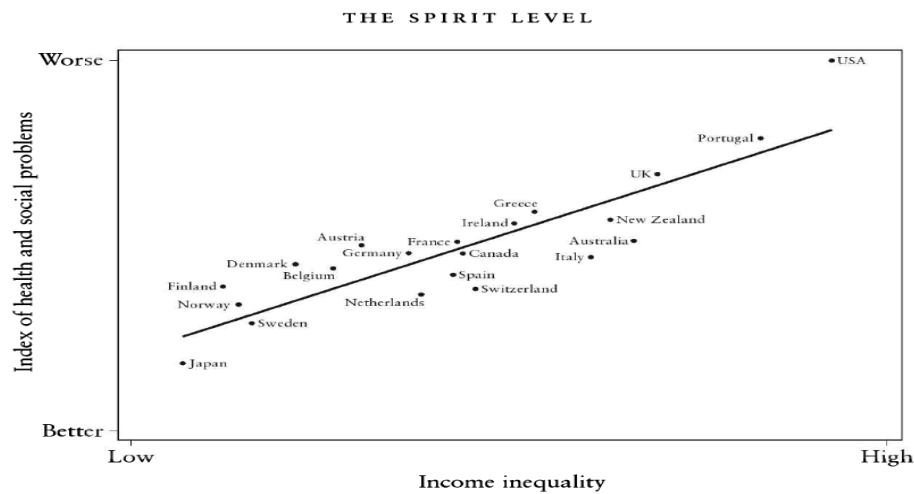
THE SPIRIT LEVEL

Figure 2.2 *Health and social problems are closely related to inequality among rich countries.*

Now let us go back to Chapter four of the Economic Survey 2020-21. We read there: "In this chapter, the Survey examines if inequality and growth conflict or converge in the Indian context. By examining the correlation of inequality and per-capita income with a range of socio-economic indicators, including health, education, life expectancy, infant mortality, birth and death rates, fertility rates, crime, drug usage and mental health, the Survey highlights that both economic growth - as reflected in the income per capita at the state level - and inequality have similar relationships with socio-economic indicators." (ES Vol. 1: Chapter 4, Page 121). And again: "Thus, unlike in advanced economies, in India economic growth and inequality converge in terms of their effects on socio-economic indicators. Furthermore, this chapter finds that economic growth has a far greater impact on poverty alleviation than inequality." (ES Vol. 1: Chapter 4, Page 122). This result they report in terms of a number of bivariate graphs, one set for the Indian States and another for advanced countries. The first graph we reproduce here:

Figure 1: Correlation of inequality and growth (as reflected in income per capita) with health outcomes: India versus Advanced Economies

States in India
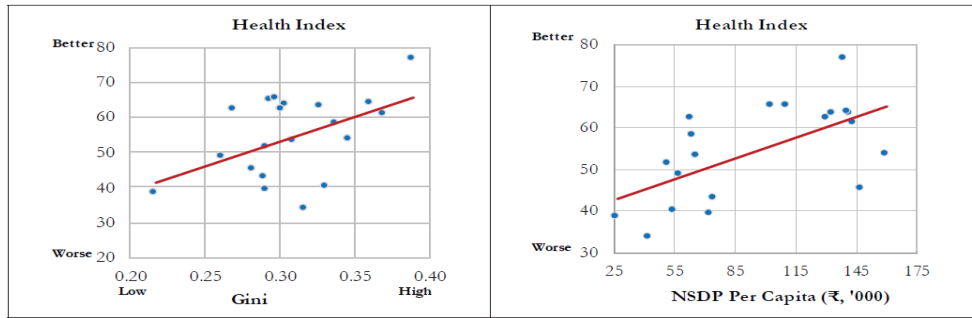
Having better health with higher NSDP per capita (second part of the graph) is very good. But, what about the message of the first part? Better health with higher inequality! Is this socially desirable? However, for the writers of this Chapter this is "convergence", because both the regression lines have similar slopes! Thus, it is not implication, but appearance that matters! Note that the magic of this appearance has an explanation; but these writers are either ignorant of it or trying to conceal it.

Figure 1: Correlation of inequality and growth (as reflected in income per capita) with health outcomes: India versus Advanced Economies

Advanced Economies
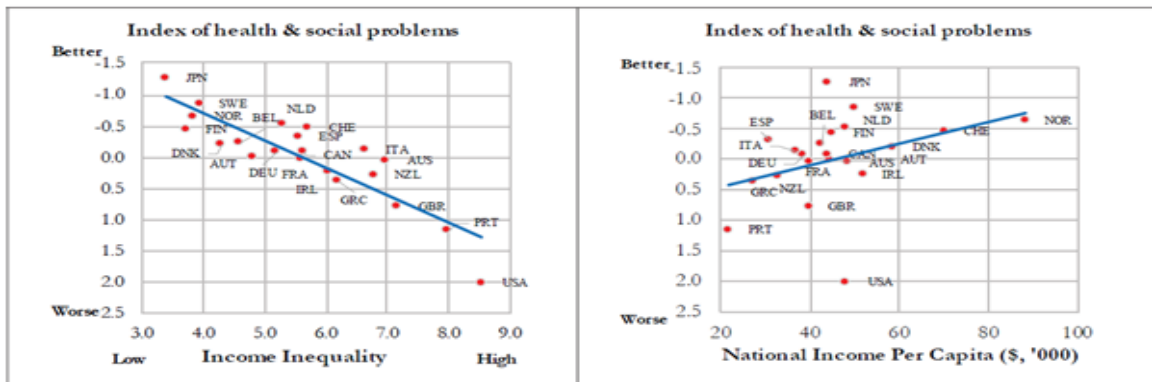
Now comes the case of the advanced countries: It is good to have better health and social conditions with higher national income per capita and very good to have better health and social conditions with lower inequality. But, for the writers of this Chapter this is "conflict", because the regression lines have opposite slopes! Thus, it is not implication, but appearance that matters!

Figure 1: Correlation of inequality and growth (as reflected in income per capita) with health outcomes: India versus Advanced Economies

Advanced Economies
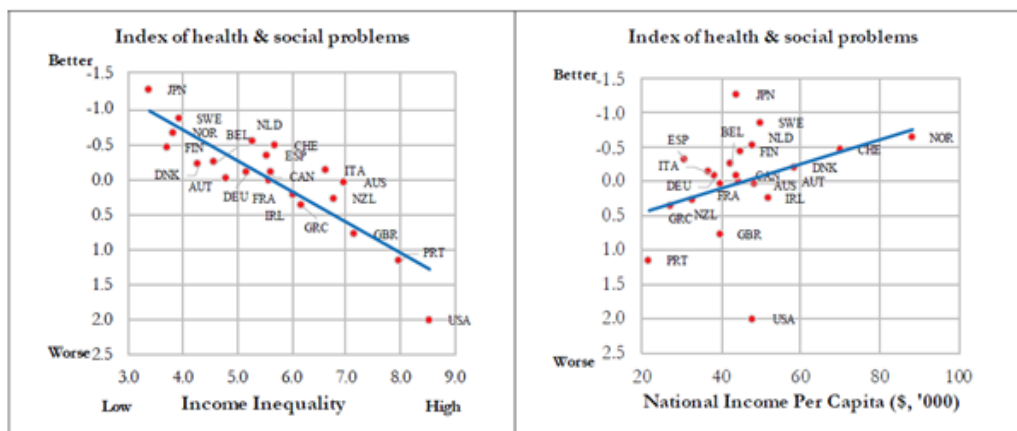
Now I have a quote from Edmund Spenser's The Faerie Queene (Book 1, Canto IX, 386-387): "For he that once hath missed the right way/ The further he doth goe, the further he doth stray." And the writers of this Chapter go on presenting the remaining graphs one by one, but without any discussion on individual graphs, even though some cursory glances do hit some anomalies: for example, in Figure 6, the two lines for 'States in India' slope (though insignificantly) in the opposite directions, but it is still "convergence" and one of the lines for 'Advanced Economies' is just flat while the other is sloping upward, but this is still "conflict"! And in Figure 7, both the lines for 'Advanced Economies' are sloping upward, but this is still "conflict"!

The writers of the Chapter then move on to declare jubilantly that the "findings that inequality and income per capita converge in terms of their correlation with socio-economic outcomes" imply an "absence of a trade-off between economic growth and inequality", and "are buttressed by the Chinese experience as well….." (!) (ES Vol. 1: Chapter 4, Page 135-136). The Chinese experience is detailed in a box, and then comes the bombshell: "Therefore, given India's stage of development, India must continue to focus on economic growth to lift the poor out of poverty by expanding the overall pie. Note that this policy focus does not imply that redistributive objectives are unimportant, but that redistribution is only feasible in a developing economy if the size of the economic pie grows." (ES Vol. 1: Chapter 4, Page 122-123). Last 30 years we have been expanding the economic pie, but for whom? And how

long have we to wait for the officially advocated trickle down from the expanded economic pie? No wonder Keynes said: "We are all dead in the long run!"

"Let's stop and think. Why would anyone advocate that we "give" something to A in hopes that it would trickle down to B? Why in the world would any sane person not give it to B and cut out the middleman? But all this is moot, because there was no trickle-down theory about giving something to anybody in the first place. The "trickle-down" theory cannot be found in even the most voluminous scholarly studies of economic theories." So commented Thomas Sowell, the American economist and social theorist ("Thomas Sowell commentary: Trickle-down economics is a figment of liberal imaginations" in The Columbus Dispatch, 8 Jan 2014).

The following graph (from Thomas Picketty's website: https://wid.world/country/india/) illustrates the last 30 years of the 'Great trickle-up effect' in India:
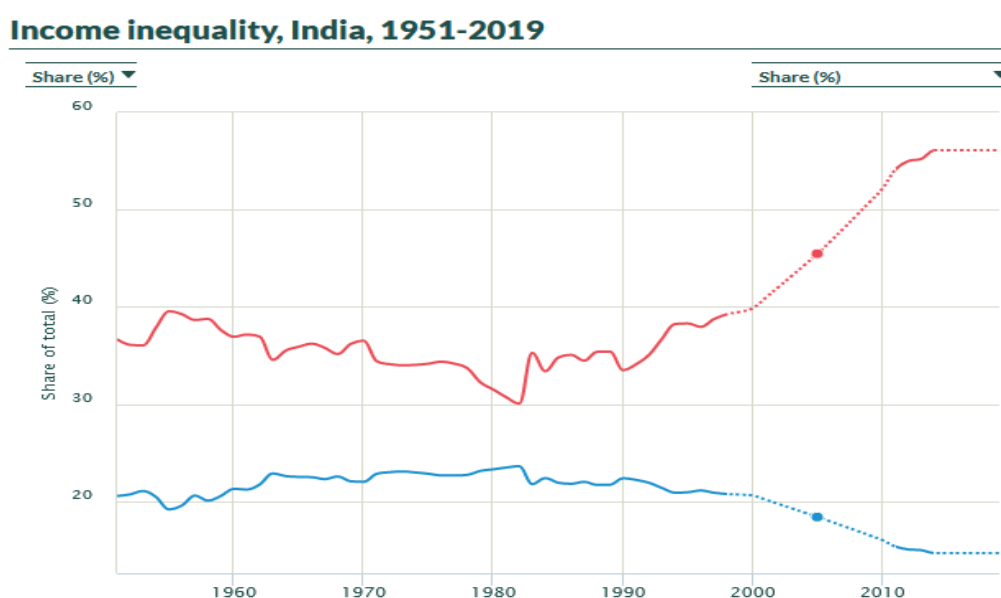
And the Oxfam India adds: "The bottom 50% of the population held 9% of the total assets in the country in 1991, but has seen the share decline by one-third to only 5.3% by 2012. As against this, the share of wealth held by the top 1% has increased from 17% in 1991 to 28% by 2012. The top 10% held more than 50% of the wealth, ….., with the share rising from 51% in 1991 to 63% in 2012." (Oxfam India's Widening Gaps, India Inequality Report 2018. New Delhi, P. 27). Such 'Great trickle-up effect' in fact exemplifies the 'Matthew effect (of accumulated advantage)', a term coined in 1968 by Robert K. Merton, one of the founding fathers of modern sociology. The Matthew effect has a Biblical reference to the parable of the

talents or minas: "To him that hath, more shall be given; and from him that hath not, the little that he hath shall be taken away." (Matthew 25:29). The situation is one where "the rich have become richer, and the poor have become poorer; and the vessel of the state is driven between the Scylla and Charybdis of anarchy and despotism." (Percy Bysshe Shelley, the English Romantic poet, in A Defence of Poetry, 1821).

Now let me come to the unreasonable reasons the Economic survey 2020-21 puts up in disguise: the findings that the writers of Chapter four designed to exhibit look at first glance impressive, but they raise a number of important issues. The first one is that age-old question: Can correlation be taken as indicative of 'causality'? If it is only association, can the extent of income inequality/income per capita alone-in the sense of a mono-relation-in fact be held accountable? In fact, it is not sufficient to show the association on the basis of bivariate, cross-sectional findings: the seeming correlation between two variables, which may be in fact uncorrelated, can be because of a third variable that influences indirectly through these variables. Again, using aggregate data on the macro level can conceal the true 'micro' reality of how the land lies and accommodates the effects of the income distribution - for this we need comparative data on the micro level i.e., survey data.

Finally, and most importantly, it is any child's wisdom that two variables with similar pattern (slope) will have similar association with any other variables(s). In the present case, both the variables, per capita income and inequality, have increasing trend; they are highly corelated; so, high income States have in general high consumption inequality; And hence naturally both will have similar trajectory with other variables! And this is the magic behind the apparent convergence! And it goes without saying that there's nothing 'researchable' in this! The whole exercise in this chapter of ES is a waste of time and resources. The writers of this Chapter are either grossly ignorant of this simple, any child's wisdom or trying to deceive the common man - an intellectually insincere injection for inciting privatization-led economic growth with a prescription for the fictitious trickle-down theory.

Let me conclude with Marx: "Reason has always existed, but not always in a reasonable form. The critic can therefore start out from any form of theoretical and practical consciousness and from the forms peculiar to existing reality develop the true reality as its obligation and its final goal." (Karl Marx, Letter to Arnold Ruge, from the Deutsch-Französische Jahrbücher September 1843).

Below I give a simple mathematical proof for the magic behind the apparent convergence: 'Since high income States have in general high consumption inequality, both will have similar relationship with other variables'.

Proof:

If high income States have in general high consumption inequality, the two variables (per capita income, Y_i and inequality, G_i) will have a positive correlation.

$$\Rightarrow Cov(Y_i, G_i) > 0$$

$$\Rightarrow \check{U}_i y_i g_i > 0 \,,$$

where the small case letters denote variables in mean deviation form; i.e.,

$$\check{U}_i y_i g_i = \check{U}_i (Y_i - \bar{Y})(G_i - \bar{G}).$$

Now the relationships of these 2 variables with another variable, X, are given by

$$G_i = a + bX_i \text{ and } Y_i = c + dX_i.$$

In mean-deviation form:
$$g_i = bx_i \text{ and } y_i = dx_i$$

where $g_i = G_i - \bar{G}$, $y_i = Y_i - \bar{Y}$ and $x_i = X_i - \bar{X}$.

Then, $\Sigma y_i g_i > 0$ implies:
$$\Sigma y_i g_i = \Sigma (bx_i)(dx_i) = bd\Sigma x_i^2 > 0.$$
$$\Rightarrow bd > 0.$$

This is possible iff both b and d (the slopes) are of the same signs.

$\Rightarrow$ The two equations, $G_i = a + bX_i$ and $Y_i = c + dX_i$, are of the same slope (similar relationship).