OPINION

How the data sets stack up

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APRIL 04, 2018 00:00 IST

UPDATED: APRIL 04, 2018 03:33 IST

Why measuring inequality is not the same as measuring changes in the level of poverty in India

In recent years, there has been a lot of discussion on increasing inequality within several countries of the world, including India, particularly after the publication of Thomas Piketty's book on inequality. It is true that rising inequality has adverse economic and social consequences. The Gini coefficient or other measures of inequality are being used to examine trends in inequality. In this column, we examine the trends in inequality and show that the poverty ratio is equally important as the Gini coefficient in analysing issues relating to growth and distribution.

Consumption inequality

Generally the Gini coefficient, which lies between 0 and 1, is used for measuring inequality. The Gini coefficient of consumption expenditure for rural areas declined marginally between 1983-84 to 1993-94 (from 0.304 to 0.286) while it recorded a marginal rise during the high growth period of 2004-05 and 2011-12 (from 0.304 to 0.311). In the case of urban areas, it stayed the same from 1983-84 to 1993-94 (0.344) while it increased modestly from 2004-05 to 2011-12 (0.376 to 0.390). Using long time series since 1951, a study shows that inequality in rural areas declined while it increased in urban areas in the post-reform period, particularly in the high growth period (Gaurav Datt, Martin Ravallion and Rinku Murugai, "Growth, Urbanization and Poverty Reduction in India", 2016).

One view is that inequality in consumption may be an under-estimate as National Sample Survey (NSS) data may not be capturing the consumption of the rich adequately. The difference between the consumption expenditure according to the National Sample Survey Office (NSSO) and national income could be partly due to this factor. However, there is no strong evidence that underestimation in NSSO is only relating to the upper-income groups. In fact, the Rangarajan Committee examined the issue of differences in consumption between NSSO and NSS. According to the committee, these two estimates of consumption (National Accounts Statistics, or NAS, and household survey based) do not match in any country, and India is no exception. What is alarming in India is that the difference between NAS and NSS is widening over time. For example, the difference was less than 10% in the late 1970s; it rose to almost 50% in 2009-10. Some adjustments made in the report reduced the difference from 45.8% to 32.5%. But still the differences are high.

Income inequality

Income and wealth inequalities are much higher than consumption inequality. According to some estimates, consumption Gini coefficient was 0.36 in 2011-12 in India. On the other hand, inequality in income was high with a Gini coefficient of 0.55 while wealth Gini coefficient was 0.74 in 2011-12. Thus, income Gini was about 20 points higher than consumption Gini while wealth Gini was nearly almost 40 points higher than consumption Gini. Thus, inequality in income and wealth is much higher than that of consumption.

The data base for computing income inequality is not as solid as the base for consumption expenditure. NSSO surveys have been studied for long and have gone through critical analysis. The reasons for sharp differences between consumption Gini coefficient and income Gini coefficient have to be analysed. In some other countries, such differences are no more than 5-10 points. Also, using income tax data for computing income distribution has many problems. In India, only 3-5% of people come under the income tax net.

Trends in poverty ratio

There are many approaches for poverty measurement. Human beings need a certain minimum consumption of food and non-food items to survive. However, the perception regarding what constitutes poverty varies over time and across countries. Generally the approach is to look at it in terms of certain minimum consumption expenditure on food and non-food items. Any household failing to meet this level of consumption expenditure can be treated as a poor household.

We examine here the trends in poverty based on NSS Consumer Expenditure data for the period 1983 to 2011-12. In the pre-reform period, overall poverty declined marginally during 1983 to 1993-94. The rate of decline in poverty was 0.8 percentage points per annum. In fact, the number of persons below the poverty line stayed almost the same at 320 million during this period. The number of persons below poverty declined by 5 percentage points during 1983 to 1987-88 but rose by 4 percentage points during 1987-88 to 1993-94.

Poverty declined faster in the post-reform period, particularly in the 2004-2012 period as compared to 1993-2005. In the post-reform period, overall poverty as defined by the Tendulkar Committee declined faster from 45.3% in 1993-94 to 21.9% in 2011-12 – an annual decline of 1.3 percentage points. Within the post-reform period, the first sub-period 1993-94 to 2004-05 recorded a decline of 0.75 percentage points per annum. But, poverty declined by 2.2 percentage points per annum during the period 2004-05 to 2011-12. This was the period of highest economic growth since Independence. It is the fastest decline of poverty compared to earlier periods.

There are two conclusions on the trends in poverty. First, as the World Bank Study (2016) mentioned above shows, poverty declined by 1.36 percentage points per annum post-1991 compared to 0.44 percentage points per annum prior to 1991. This study shows that among other things, urban growth is the most important contributor to the rapid reduction in poverty even in rural areas in the post-1991 period.

The second conclusion is that within the post-reform period, poverty declined faster in the 2000s than in the 1990s. The official estimates based on Tendulkar poverty lines show that poverty declined much faster during 2004-05 to 2011-12 as compared to the period 1993-94 to 2004-05. Around 135 million people were lifted above the poverty line in the post-reform period.

On the cut-off line for determining poverty ratio, there are controversies. Some people think that the Tendulkar poverty level is low and needs to be raised. As far as reduction in the poverty ratio is concerned, it holds good even if we raise the poverty cut-off to 1.5 times the Tendulkar cut-off. The annexure to Chapter 2 of the Twelfth Five Year Plan gives details of reduction in the poverty ratio for different levels of poverty cut-off.

Growth and distribution

The trends in poverty show that the pace of reduction was much higher in the post-reform period particularly during high growth period. The impact of higher growth on poverty reduction can also be seen from the decile-wise growth in per capita consumption expenditure. A comparison of the growth rate of per capita consumption (in real terms) during the periods 1993-94 to 2004-05 and 2004-05 to 2011-12 shows that the average growth of per capita consumption of the top five deciles is more than that of the bottom five deciles.

However, the ratio of the average growth rates of the two periods is higher for the bottom five deciles as compared to the top five. It implies that the expansion of consumption of the lower deciles of the population was more than the upper deciles.

To conclude, there has been lot of discussion in recent years on inequality. There is no doubt that inequality in itself has several undesirable consequences. It was Simon Kuznets who had argued in a famous paper in 1955 that in the early period of economic growth distribution of income tends to worsen, and that only after reaching a certain level of economic development an improvement in the distribution of income occurs. In this context, measuring inequality is not the same as measuring the changes in level of poverty. Even if the Gini coefficient remains the same or picks up, the poverty ratio can be declining. This has been true of India. The decline in poverty is much higher particularly in the period 2004-05 to 2011-12 in spite of rise in inequality. Thus the changes of the poverty ratio is an equally important indicator to monitor.

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