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INCOME INEQUALITY IN INDIA HAS BEEN DECLINING SINCE FY17, THE BIG BANG YEAR OF FORMALISATION, PANDEMIC HAS NOT ALTERED THIS TREND

Poverty and inequality are ever debatable issues and have received much attention lately amidst the COVID-19 pandemic. Though our official poverty ratios are till year 2011-12, independent estimates using PLFS household monthly consumption data shows that all India poverty ratio has declined to 17.9% in 2020-21 from 21.9% in 2011-12, with poverty in urban areas lower than in rural areas.

There is now a large debate of how the ongoing COVID-19 pandemic may have exacerbated global income inequality, partly reversing the decline of the previous two decades. Most importantly, within-country income inequality may have also increased because of job and income losses among lower-income population groups.

Interestingly, studies in India have revealed (Gupta et all, NBER, Dec 2021) that inequality declined during the pandemic. In fact, the NBER study concludes that there was decline in income of the rich attributable to the high sensitivity of business income to aggregate fluctuations. Additionally, the study concluded that labour demand for the occupations the rich occupy may have significantly declined than demand for the services provided by the poor. Thus, in hindsight, the pandemic may have been a leveller in terms of inequality with the poor getting protected through measures such as food transfers.

Against this background and the cacophony that income inequality in India has actually worsened during pandemic given that India has a large presence of informal economy, does not stand the test of data scrutiny. This is why.

Firstly, the gap between GDP (Gross Domestic Product) and GDI (Gross Domestic Income) in National Accounting parlance needs to be more aligned within a specified range. Data from different economies indicate that the gap between GDP and GDI (officially known as "the statistical discrepancy") is typically about 1%. However, estimates show that since late 2020 the discrepancy between GDP and GDI has been much larger in the case of US. In the first quarter of this year US's GDI was fully 3.5% larger than its GDP. Now, an interesting question arises; what is the case with India? Here we don't have GDI but NSO provides data on GNI. As per Economics 101, GDP is the total market value of all finished goods and services produced within a country in a set time period while GNI is the total income generated from its residents and businesses regardless of whether they are located in the country or abroad. For India, the average gap between GDP and GNI was around 1.1% during FY12 to FY20. However, this gap increased marginally to 1.3% in FY21 and then 1.6% to FY22. **Also, if we compare the difference from pre pandemic levels, both GDP and GNI were 1.3% higher, indicating that income decline during pandemic and subsequent rise was strikingly similar to output decline and then a rapid recovery. This shows that any impact on income decline was relatively short lived during pandemic.**

Secondly, using output and income data for 33 states for the decade ending FY21 shows that while the output growth as measured by Gross State Domestic Product has steadily increased over the decade, with a minor blip in FY21, the estimated Gini coefficient, a measure of income inequality (in both aggregate and per capita terms) has been declining even before pre pandemic and has moved in a very narrow range. The decline in income inequality has been significant since FY17, the year of big bang formalisation that started with demonetisation, RERA reforms and GST reform in FY18. Our results indicate that at a broader level, Gini coefficient remains constant (in the range of 0.57 to 0.58) throughout the period (FY12 to FY21). Whatever the variations is revealing in the graph is due to the fact that Y-axis is very narrowly bound.

Interestingly, the NBER study shows that income grew during demonetization, though at a slower rate. Consumption inequality seems stable during demonetization.

Our results substantiate that in the Indian context, it is thus an incorrect conjecture to assume that inequality has worsened during pandemic. Our estimated Gini coefficient across states show income inequality during pandemic almost stayed at the same level. **With a progressive growth in output across states as proxied by GSDP, it is clear that the fruits of such a growth have clearly reverberated and dovetailed into an inclusive growth if estimates from Gini coefficient of state-wise per capita income are any indication that has improved since FY17**. **India has thus done quite well during pandemic in terms of navigating income shocks across deciles of population.**

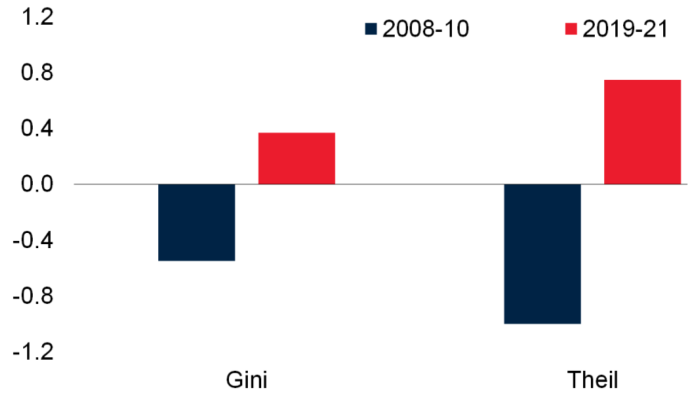
INCOME INEQUALITY DURING IN EMDEs DURING COVID-19

- The ongoing COVID-19 pandemic has exacerbated global income inequality, partly reversing the decline of the previous two decades. Weak recoveries in emerging market and developing economies (EMDEs) are expected to raise between-country inequality. Within-country income inequality is also estimated to have increased somewhat in EMDEs because of severe job and income losses among lower-income population groups.
- The COVID-19 pandemic apparently may have jeopardized the progress made in reducing global income inequality achieved in the previous two decades. In contrast to the global financial crisis of 2008-10, the deep recession triggered by the pandemic and the lagging economic recovery in EMDEs compared with advanced economies have raised between-country income inequality. According to World Bank, by some measures—between-country Gini and Theil indices based on real per capita GDP—between-country inequality reversed back to levels of the early 2010s.

INCOME INEQUALITY: THE CASE FOR INDIA

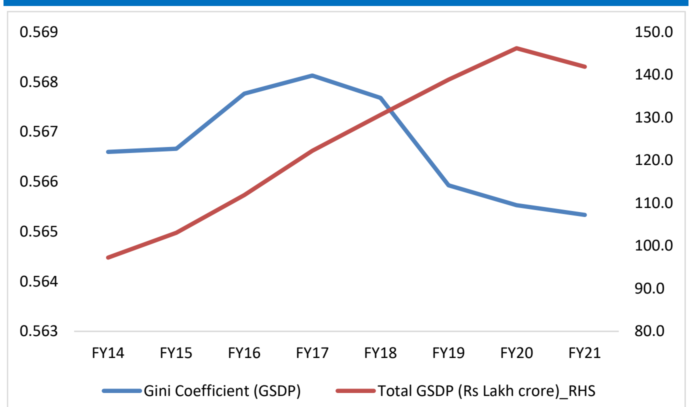
- Using the state level GSDP data from FY12 to FY21, we constructed the Gini coefficient in order to appreciate the situation of income inequality in India. Gini coefficient is a measure of statistical dispersion intended to represent the income inequality or the wealth inequality within a nation or states or a social group. Increase in coefficient indicate increase in inequality and vice-versa.
- Our results indicate that in India on a broader level Gini coefficient remains constant (in the range of 0.57 to 0.58) throughout the period (FY12 to FY21). Whatever the variations is revealing in the graph is due to the fact that Y-axis is very narrowly bound.
- Similar results were obtained with state-wise per-capita income also. Our estimated Gini coefficient across states show a income inequality during pandemic almost stayed at the same level.
- Further, a report by National Bureau of Economic Research (NBER WP 29597, Dec-21) shows a decline in inequality in India during pandemic as Indians in higher percentiles of the income distribution saw larger relative income declines during the pandemic.

Change in global between-country income inequality



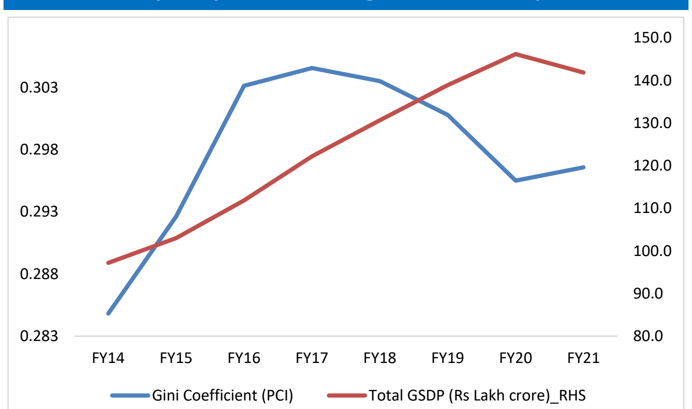
Source: World Bank

Income inequality in India using States' GSDP



Source: SBI Research

Income inequality in India using States' Per Capita Income



Source: SBI Research

REGIONAL INEQUALITY HAS DECLINED IN LAST DECADE

- The per capita income is the most important measure of convergence and equality across States as it determines both the accessibility and affordability of services. Average income increased gradually to reach Rs 18,118 in 2001-02 and further to Rs 68,845 in 2011-12 and Rs 1,74,024 in 2021-22. Though the overall growth has been reasonably strong, inter-State inequality has significantly moderated, albeit persisting at high level. The coefficient of variation of per capita income of States moderated to 67% in 2021-22 from 76% in 2011-12.
- The ratio of per capita income of a State from the average continues to show similar pattern over the years, with Sikkim and Goa leading the pack of States with a ratio exceeding 3, indicating that the average per capita income of these States was more than three times the average income of all the States put together. There is a remarkable consistency in the ranking of States in terms of per capita income, at top, middle and bottom levels. Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Uttar Pradesh and Rajasthan continue to be at the bottom, indicating that the tag 'BIMARU' continues.
- However, it must be emphasised that this issue has been recognised by various Finance Commissions overtime with transfers based on both equity and efficiency. Nearly half of the total tax transfers have been based on equity consideration with the efficiency parameters being given only a token recognition. Centre transfers have been in favour of geographically smaller States and economically weaker States.

GAP BETWEEN GDP AND GNI

- Data from different economies indicate that the gap between GDP and GDI (officially known as "the statistical discrepancy") is typically about 1%. However, according to an article in Economist Magazine, since late 2020 the discrepancy has been much larger in the case of US. In the first quarter of this year US's GDI was fully 3.5% larger than its GDP. That is much more than a rounding error. Now the debate is raging that which is the timely and accurate snapshot of the state of the economy and subsequently what would be the best policy options. In US, if GDP is the better reflection of reality, economic output is still about 2% below its pre-pandemic trend. If GDI is accurate, the economy is 1.2% above trend, a stronger recovery.
- Now, an interesting question arises what is the case with India. Here we don't have GDI but NSO provides data on GNI. As per Economics 101, GDP is the total market value of all finished goods and services produced within a country in a set time period while GNI is the total income received by the country from its residents and businesses regardless of whether they are located in the country or abroad.
- A gap in GDP and GNI indicate that the country is net receivable or net payable. A average gap between GDP and GNI was around 1.1% during FY12 to FY20. However, this gap increased marginally to 1.3% in FY21 and then 1.6% to FY22.

POVERTY RATIO HAS ALSO DECLINED

- Household consumption expenditure survey is used for estimating poverty in India and as the last one was conducted in 2011-12, our official poverty ratios are till date 2011-12. Various estimates have been done for estimating poverty numbers.
- Recently, noted members of the PMEAC have estimated the poverty numbers using PLFS household monthly consumption data which shows that all India poverty ratio has declined modestly to 17.9% in 2020-21 from 21.9% in 2011-12, with poverty in urban areas lower than in rural areas. Poverty in some states including Karnataka, Maharashtra, Rajasthan, J&K, Uttarakhand and Sikkim has increased, while it has declined in states including Assam, Bihar, Chhattisgarh, MP, UP, Odisha and West Bengal.

Gap between Nominal GDP and GNI (Amount in Rs lakh crore)

FY	GDP	GNI	GDP-GNI	(GDP-GNI)/ GDP
FY12	87.4	86.6	0.8	0.9%
FY13	99.4	98.3	1.2	1.2%
FY14	112.3	110.9	1.4	1.2%
FY15	124.7	123.2	1.5	1.2%
FY16	137.7	136.1	1.6	1.2%
FY17	153.9	152.2	1.8	1.1%
FY18	170.9	169.1	1.8	1.1%
FY19	189.0	187.0	2.0	1.1%
FY20	200.7	198.8	1.9	1.0%
FY21	198.0	195.3	2.7	1.3%
FY22	236.6	233.0	3.7	1.6%

Source: NSO; SBI Research; GNI=GDP+Primary income receivable from ROW (net)

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