GPiD Global Poverty & Inequality Dynamics Research Network
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Researching structural change & inclusive growth

GPID Country Note 2

POVERTY, INEQUALITY, AND STRUCTURAL CHANGE IN INDIA

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SUMMARY

India's GDP per capita has increased from an average of 1.1 per cent in 1950-1991 to an average of 6.6 per cent in 1992-2012. This dramatic growth acceleration stands vis-à-vis a more mixed track record of inclusive growth in the past two decades: while poverty has fallen sharply, India has seen an increase in inequality post 1990. Mirroring the acceleration in GDP per capita, there has been an acceleration in aggregate labour productivity, driven primarily by an increase in the productivity of the market services sector. Overall, there has been a slow but steady movement of labour out of agriculture and a shift of employment to services and industry, creating new economic and political challenges.

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About the GPID research network:

The ESRC Global Poverty and Inequality Dynamics (GPID) research network is an international network of academics, civil society organisations, and policymakers. It was launched in 2017 and is funded by the ESRC's Global Challenges Research Fund.

The objective of the ESRC GPID Research Network is to build a new research programme that focuses on the relationship between structural change and inclusive growth.

See: www.gpidnetwork.org

THE DEVELOPER'S DILEMMA

The ESRC Global Poverty and Inequality Dynamics (GPID) research network is concerned with what we have called 'the developer's dilemma'.

This dilemma is a trade-off between two objectives that developing countries are pursuing. Specifically:

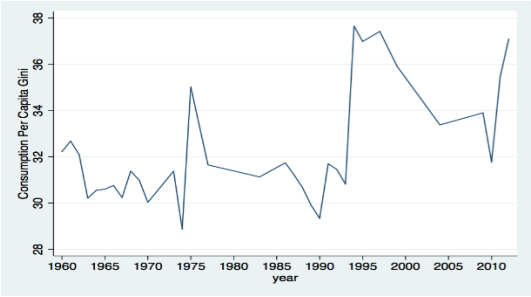
1. Economic development via structural transformation and productivity growth based on the intra- and inter-sectoral reallocation of economic activity.
2. Inclusive growth which is typically defined as broad-based economic growth benefiting the poorer in society in particular.

Structural transformation, the former has been thought to push up inequality. Whereas the latter, inclusive growth implies a need for steady or even falling inequality to spread the benefits of growth widely. The 'developer's dilemma' is thus a distribution tension at the heart of economic development.

1. Trends in Income Dimensions of Inequality and Poverty

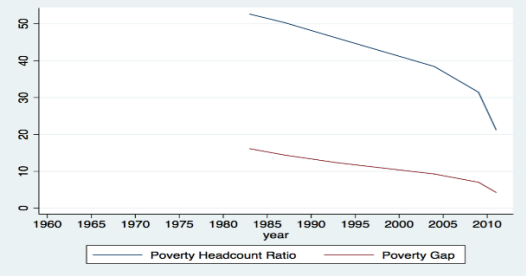
In Figure 1 and 2, we plot the consumption Gini – reliable measures of income inequality are not available for India – and the poverty headcount and poverty gap ratios. There has been an increase in inequality in the post-1990 period accompanied by a sharp fall in poverty. Much of the increase in overall inequality is due to an increase in urban inequality, with rural inequality showing no clear trend (Figure 3). The fall in poverty has been particularly evident for rural households, and the rural poverty rate has now converged to the urban poverty rate (Figure 4)

Figure 1. Trend in Inequality, India



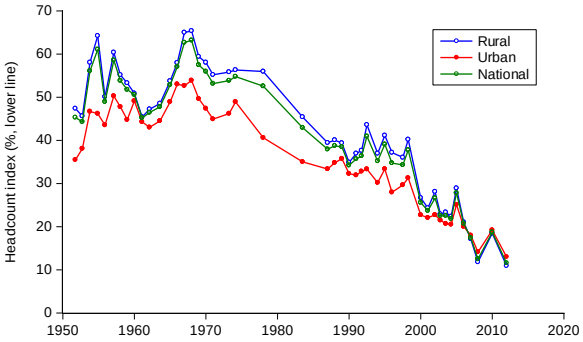
Source: WIID Database, our calculations

Figure 2. Trend in Poverty (Headcount Ratio and Poverty Gap), India



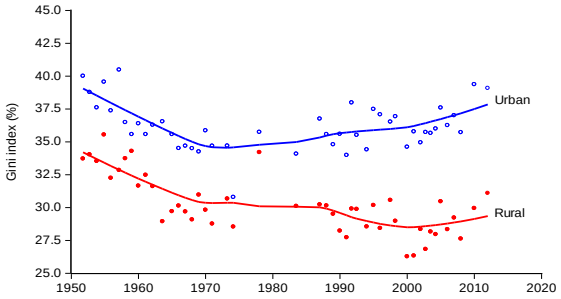
Source: POVCAL data-base, our calculations.

Figure 3. Poverty Rates in India -Total, Rural, Urban, 1950-2012



Source: Datt et al. (2016)

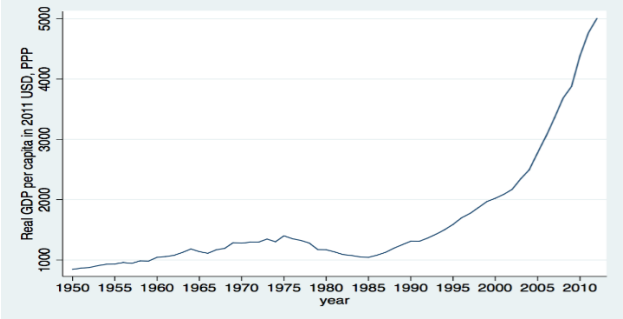
Figure 4. Inequality in India, Rural and Urban 1950-2012



Source: Datt et al. (2016)

The fall in poverty can be mainly attributed to the increase in economic growth in the post-1990 period (a period when India enacted major economic reforms). GDP per capita increased from an average of 1.1 per cent in 1950-1991 to an average of 6.6 per cent in 1992-2012 (Figure 5). Datt et al. (2016) show that the sharp fall in poverty in the post-reform period was not only due to a higher growth rate observed in this period, but also due a higher responsiveness of poverty to growth. This suggests that the pattern of growth in the post-1991 period was more pro-poor in the post-reform period than in the pre-reform period. We discuss possible reasons for the pro-poor bias of growth in the post-1990 period later in the note.

Figure 5. Real GDP per capita, 1950-2012



Source: PWT 8.0

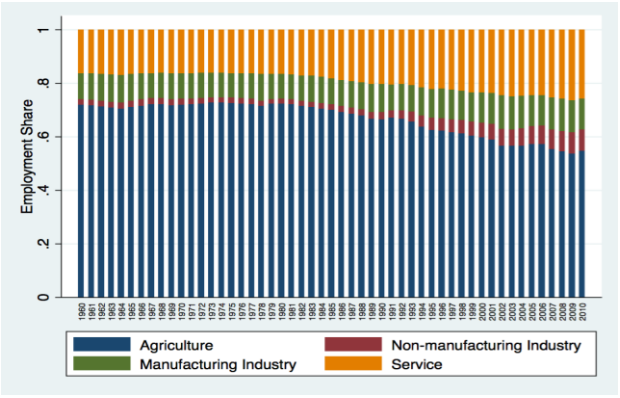
2. Inequality, Poverty and Sectoral shifts in Population and Production

There has been a slow but steady movement of labour out of agriculture – the share of employment in agriculture was 72 per cent in 1960 while it was 55 per cent in 2010 (Figure 6). Much of the out-movement of labour from agriculture has been to non-manufacturing industry and services, which increased from 2 per cent and 16 per cent in 1960 to 8 and 26 per cent in 2010 respectively. In contrast, there has been a small increase in manufacturing employment share from 10 per cent in 1960 to 12 percent in 2010.

The shift of employment from agriculture to services has been accompanied by rapidly increasing relative productivity of services to agriculture, suggesting that structural change relating to the agriculture to services movement has been productivity enhancing (Figure 7). This is less evident in the movement of labour from agriculture to manufacturing where both the shifts in employment and the relative productivity increase has been smaller in magnitude than that of the agriculture-services shift in employment. Therefore, structural change relating to manufacturing has not been as growth and productivity enhancing in the case of India as has been observed in the East Asian countries and China (see Baymul and Sen 2017).

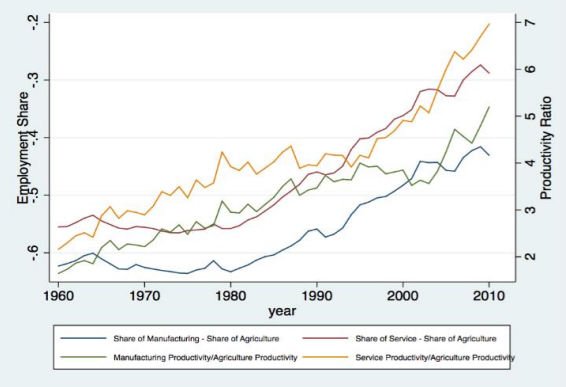
The increase in employment in the industrial sector has been primarily due to the increase in employment of the construction sector, whose share in total industrial employment increased from 13 per cent in 1960 to 37 per cent in 2010 (Figure 8). In the service sector, the growth in employment was mostly due to a large increase in employment in trade and transport, whose shares in total service sector employment increased from 29 per cent and 11 per cent in 1960 to 45 per cent and 19 per cent respectively. There was also an increase in the share of employment in finance (which includes information technology) from 1 per cent in 1960 to 9 per cent in 2010. In contrast, the share of service sector employment in government fell from 47 per cent in 1960 to 16 per cent in 2010 (Figure 9).

Figure 6. Structural Change over time, 1960-2010



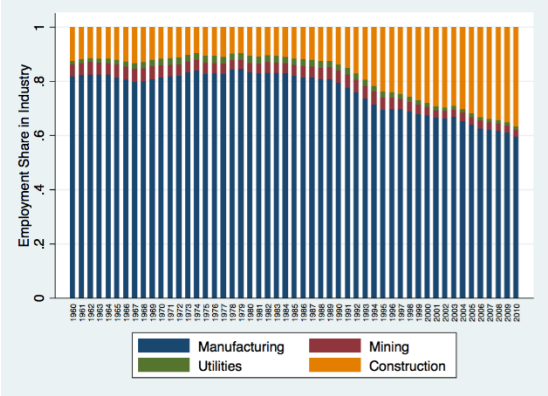
Source: GGDC data, our calculations.

Figure 7. Shifts of Employment and Relative Productivity



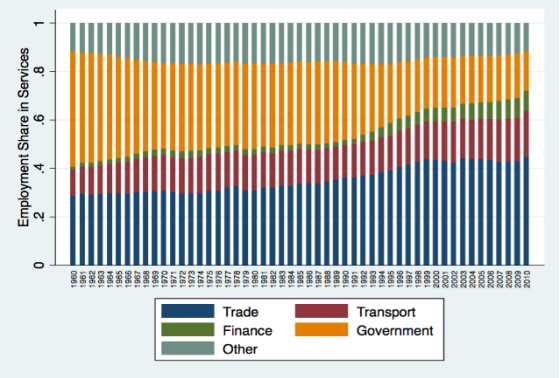
Source: GGDC data, our calculations

Figure 8. Employment Share Shifts in the Industrial Sector, 1960-2010



Source: GGDC data, our calculations.

Figure 9. Employment Share Shifts in the Service Sector, 1960-2010

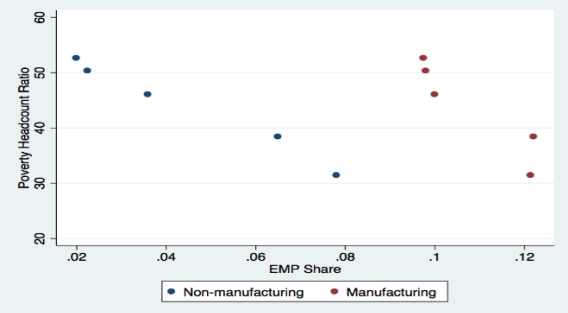


Source: GGDC data, our calculations.

What have been the observed relationships between structural change in manufacturing and services on one hand and poverty and inequality on the other?

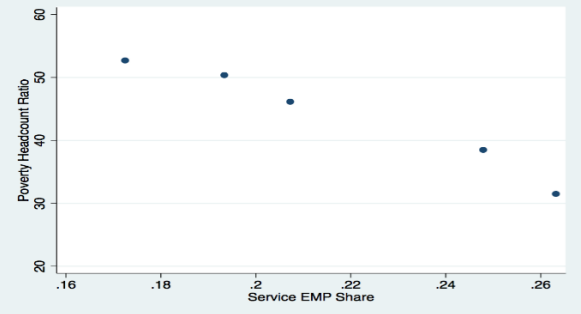
In Figures 10 and 11, we see that the shifts in employment from agriculture to manufacturing/non-manufacturing industry and services have been accompanied by steadily decreasing poverty. However, we see no clear relationship between shifts in employment from agriculture to manufacturing/non-manufacturing industry and services and inequality as measured by the net consumption Gini (Figures 12 and 13).[1]

Figure 10. Structural Change – Manufacturing and Poverty



Source: GGDC and POVCAL data, our calculations.

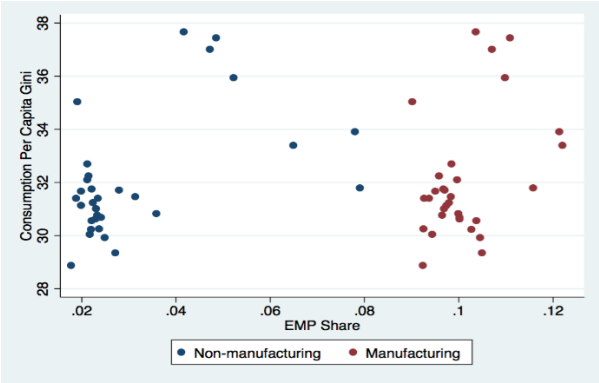
Figure 11. Structural Change – Services and Poverty



Source: GGDC and POVCAL data, our calculations.

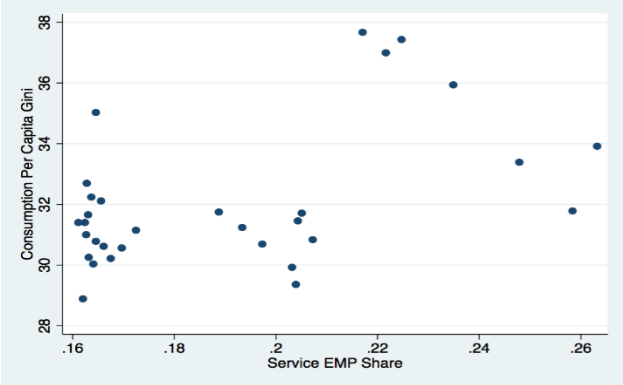
[1] We do not find any difference in our finding of a lack of relationship between structural change and inequality, if we use the top 10 per cent or bottom 40 per cent share in total consumption/income.

Figure 12. Structural Change – Manufacturing and Inequality



Source: GGDC and WIID data, our calculations.

Figure 13. Structural Change – Services and Inequality

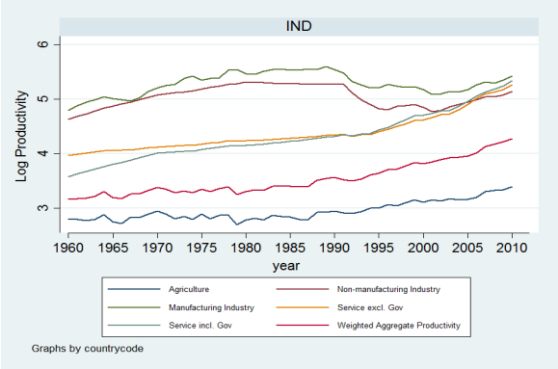


Source: GGDC and WIID data, our calculations

3. Trends in Productivity and Complexity: Causes and Consequences

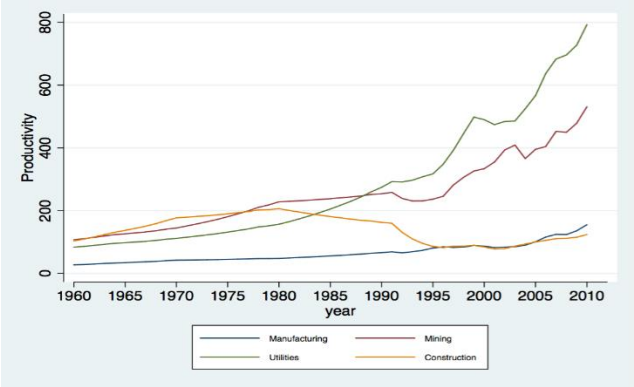
In Figure 14, we plot the aggregate level of labour productivity along with its main components over time. Mirroring the acceleration in GDP per capita since the early 1990s, we observe an acceleration in aggregate labour productivity, driven primarily by an increase in the productivity of the market services sector. There has no perceptible acceleration in the productivity of agriculture, manufacturing and non-manufacturing industry. This suggests that India's acceleration in economic growth has been primarily due to an increase in market services productivity. In fact, by 2010, market services productivity levels had caught up with productivity levels in manufacturing and non-manufacturing industry. This is a surprising feature of India's structural transformation experience as historically the service sector of most developing countries is far less productive than that of the manufacturing sector. The relatively weak productivity performance of the industrial sector in India can be attributed to stagnant productivity levels in the construction sector, which we have seen is by far the largest sub-sector in the industrial sector in terms of employment (Figure 15). In contrast, the increase in productivity in the services sector has been driven by the rapid increase in productivity of the finance sector, which includes information technology, which has a major source of growth and innovation in the Indian economy in the post-1990 period (Figure 16). Economic complexity does not show a clear trend in the post-1990 period (Figure 17).

Figure 14. Aggregate and Sectoral Productivity, 1960-2010



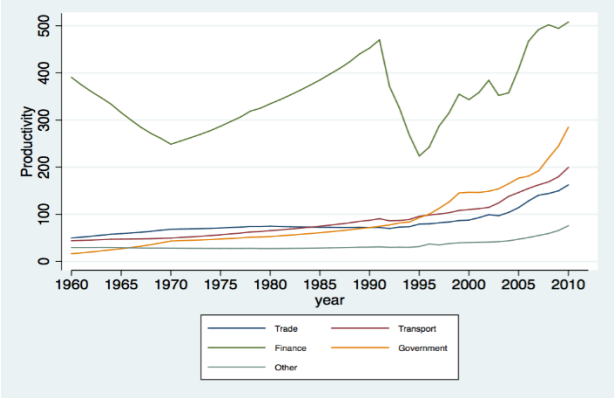
Source: GGDC data, our calculations.

Figure 15. Productivity in the Industrial Sector, 1960-2010



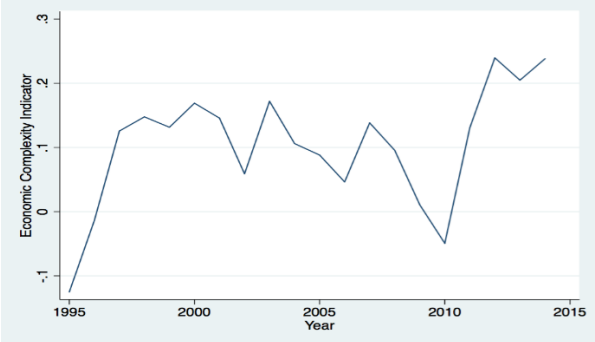
Source: GGDC data, our calculations.

Figure 16. Productivity in the Service Sector, 1960-2010



Source: GGDC data, our calculations.

Figure 17. Evolution of the Economic Complexity Index



Source: GGDC data, our calculations.

4. Policies for inclusive Transformation and Growth

India's record with inclusive growth has been mixed in the past two decades – a sharp fall in poverty with some increase in inequality. The decrease in poverty can be explained in large part by the rapid increase in the construction and trade/hotels/restaurants sectors, both of which are labour-absorbing, especially of unskilled migrants from rural areas (Kotwal et al. 2011). These sectors expanded with the rapid increase in the demand for real estate and non-tradable services that accompanied by the growth accelerations of the 1990s and 2000s. However, neither of these two sectors have been characterized by high levels of productivity growth, and the impulse for growth has mostly come from the capital and skill intensive parts of the services and manufacturing sectors. This differentiates India's experience from that of China's and other East Asian countries. As Wood (2017) shows, India's manufacturing/ primary output ratio is considerably lower than what may be predicted by its factor endowments (that is, high labour-land ratios).

The BJP+ government which came to power in May 2014 has attempted to kickstart manufacturing growth through its "Make in India" policies that tries to streamline the regulatory environment for business along with an investment in public infrastructure. It is too early to say whether such this new policy will be able to reverse India's "lost transformation" in manufacturing.

5. Political economy of Inclusiveness

For India's ruling elites, the country's pattern of structural change and growth – an expanding labour absorbing low productivity non-tradable service sector combined with a more dynamic skill intensive tradable sector (whether in services or manufacturing) – poses significant challenges in a context of an economy where productive job creation lags behind the entry of a large number of young and unskilled workers into the workforce (the so-called "demographic dividend"). The political elites' response to the "growth without productive jobs" phenomenon has been to follow redistributive policies (such as the Mahatma Gandhi National Rural Employment Guarantee Scheme) financed by the higher tax revenues that accompanied the higher growth of the 2000s, without necessarily changing the skill intensive nature of India's current growth.

An inclusive growth strategy would have necessitated the reform of India's delivery of public goods such as education, vocational skill formation and infrastructure, which has so far been beyond the capacities and commitment of India's political and bureaucratic elites to undertake. In addition, the rise of powerful politically connected firms in rent-thick sectors (such as mining and telecom) along with the proclivities of political elites to enter into rent-sharing arrangements with these firms implies that the reforms of institutions along with the disciplining of capitalists that are necessary for a more dynamic manufacturing sector to emerge has been difficult in India's current political context (Kar and Sen 2016, Mehta and Walton 2014).

6. References

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