

GPID Briefing Paper 4

WHAT DO WE KNOW ABOUT THE RELATIONSHIP BETWEEN STRUCTURAL TRANSFORMATION, INEQUALITY AND POVERTY?

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SUMMARY

This brief discusses the relationship between structural transformation, inequality and poverty. In the recent decades, most developing and emerging economies have seen large shifts of workers from agriculture to manufacturing and services sectors. At the same time, in several countries, inequality has increased, often accompanied by falling poverty. In this brief, we argue that structural transformation reduces poverty but raises inequality. However, in the majority of developing countries the experience has been a move of workers from agriculture to services, and not to manufacturing.

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.

Structural transformation, inequality and poverty

In the recent decades, most developing and emerging economies have seen large shifts of workers from agriculture to manufacturing and services sectors.

In a famous 1955 paper, Kuznets argued that as low-income countries industrialise, inequality will increase over time as workers move from low productivity agriculture to high productivity manufacturing. Since agriculture tends to be characterised by low inequality while manufacturing is characterised by high inequality, this shift of workers from agriculture to manufacturing will tend to increase overall inequality, though the process of industrialisation will also increase economic growth.

Though Kuznets did not explicitly discuss the implications of industrialisation on poverty, it follows from his argument as well as that of Lewis (1954) that industrialisation will be accompanied by sharp falls in poverty as well (Athukorala and Sen 2014).

Two complications arise when considering Kuznets' thesis from the viewpoint of today. Firstly, very few countries have followed successful industrialisation strategies since the time that Kuznets published his article, and some countries may well be undergoing 'premature deindustrialisation' currently (Rodrik 2016). It is not clear what would be the inequality and poverty implications of the mixed record on industrialisation in developing countries.

Secondly, much of the shift of workers from agriculture has been to services, and not to

manufacturing. Services, in general, tend to have lower levels of productivity than manufacturing, so it is not obvious that structural change that is biased towards services is necessarily inequality increasing to the same degree as the agriculture to manufacturing shift in employment.

In this brief, we revisit the stylised facts of structural transformation, inequality and poverty, using comparable data on these measures for a range of low, middle and now high-income countries in Asia, Africa and Latin America for the period 1950-2010.

We ask whether there is a relationship between structural transformation and inequality and poverty, and whether this relationship may differ across countries which have followed different paths of structural transformation.

To help we categorize 32 countries in our sample into three groups that we call 'structurally under-developed', 'structurally developing' and 'structurally developed'.

We define structurally under-developed countries as countries where agriculture is the largest sector in terms of the number of people employed in the most recent time period available. In our sample, these countries are Ethiopia, India, Kenya, Malawi, Nigeria, Senegal, Tanzania and Zambia.

Structurally developing countries are where more people are employed in the service sector than agriculture, with agriculture being the second largest sector. Bolivia, Botswana, Brazil, China, Colombia, Costa Rica, Egypt, Ghana, Indonesia, Morocco, Peru, Philippines, Thailand and South Africa are structurally developing countries according to our definition.

Lastly, structurally developed countries are countries that have more people employed in the manufacturing sector than agriculture. These countries in the sample are Argentina, Chile, Hong Kong, Korea, Malaysia, Mauritius, Mexico, Singapore, Taiwan, and Venezuela.

We note that within each category, average growth rates of GDP per capita have differed significantly across countries, suggesting a weak link between stages of structural transformation and economic growth.

Empirical patterns of Structural Transformation

A striking feature of structural transformation in our sample of 32 countries is that the movement of employment from agriculture has been mostly to services. This shift of employment from agriculture to services has been accompanied by falling relative productivity of services, which suggests that structural transformation in most developing countries (barring a few countries in Asia) has not been growth enhancing. This has implications for the possible effects that structural transformation may have on inequality and poverty.

In the full sample, we see the steady movement of labour from agriculture to services. However, as already noted, this move of workers to services is not supported by increases in the relative productivity in that sector. Even though agriculture remains the sector with lowest productivity in all country groups, its relative productivity has increased greatly in the previous 30 years. The

average share of employment in the service sector has surpassed the share of employment in agriculture in the mid-90s. Structurally developed countries have passed this level prior to 1980, while the share of employment in their manufacturing sectors has stayed relatively stable with a slight decrease in the relative productivity of manufacturing.

Despite decreasing relative productivity compared to agriculture, the labour shares of both services and manufacturing have been increasing over the 30-year period for structurally developing and under-developed countries. Structurally under-developed countries started to experience significant labour shifts from agriculture to other sectors only from mid-1990s onwards.

If we look at the relationship of the share of agriculture in total employment and inequality, we see a Kuznets-type inverted-U relationship for structurally developed countries. For structurally developing and under-developed countries, a lower employment share in agriculture is accompanied by higher inequality. However, we do not observe a Kuznets relationship between the share of manufacturing in total employment and inequality. This is particularly evident when we take into account the different paths of industrialisation that developing countries have followed.

However, a shift to services unambiguously increases inequality in all categories of countries with different types of structural transformation. This suggests that contrary to Kuznets' argument, the move of employment from agriculture to manufacturing is not necessarily inequality increasing. On the other hand, a move from agriculture to services clearly is.

We find that structural transformation is broadly linked to falling poverty across all categories of countries. Within this overall finding, there are differences in the response of poverty to structural change, depending on whether the country is structurally developed, developing or under-developed, and whether the movement of workers is from agriculture to manufacturing or to services.

Summary

In sum, we find that structural change in the majority of our countries has been a move of workers from agriculture to services, and not to manufacturing. Countries show different paths of structural transformation which cut across geographical regions and growth experiences.

A movement of workers away from agriculture is unambiguously related to an increase in inequality. We do not see a Kuznets type relationship between manufacturing employment share and inequality when we take into account the different paths of industrialisation that our countries have followed.

On the other hand, inequality unambiguously increases with structural transformation, if the movement of workers from agriculture is to services and not to manufacturing. Structural transformation is linked to falling poverty across all categories of countries, though there are differences in the response of poverty to structural transformation, depending on the country.

This brief is based on Baymul and Sen (2017)

References

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