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Growth without development: Looking beyond inequality

Does polarisation explain the divergence between growth and development?

Several countries, particularly in Asia, have seen soaring economic growth over the last decade. But when it comes to social indicators, such as health and education, they have made more limited progress. Inequality is often blamed for the poor links between economic growth and human development, but data show that links between economic growth, inequality and human development are less robust than often assumed.

Important features of income distribution are not easily captured by conventional measures of inequality such as the Gini coefficient, particularly the way in which income is distributed across society. It was the Wolfson polarisation measure, for example, that highlighted the phenomenon of the disappearing US middle class – missed by the Gini.

Unlike the measurement of inequality, polarisation measures focus on the clustering of members of a society at more than one income level – referred to as poles – capturing convergence around these income levels.

Polarisation measures help to clarify why economic growth does not always translate into human development. They provide a distinct and complementary insight into the link between growth and human development, capturing the distributional aspects missed by traditional inequality measures. They lead, therefore, to different policy recommendations.

Polarisation: Distinct policy relevance

What are the distinct policy implications that are provided by polarisation measures, and missed by measures of inequality?

The two polarisation indices used most often are by Wolfson, and by Duclos, Esteban and Ray (DER). The Wolfson bipolarisation measure is the more conventional, assuming two groups in the income distribution: those above average income and those below. Developed in 1994, it marks the first major attempt to quantify income polarisation and is now used by the World Bank for its household survey analysis (PovcalNet).

A family takes shelter after floods in Pakistan – here, poverty means more than lack of income.

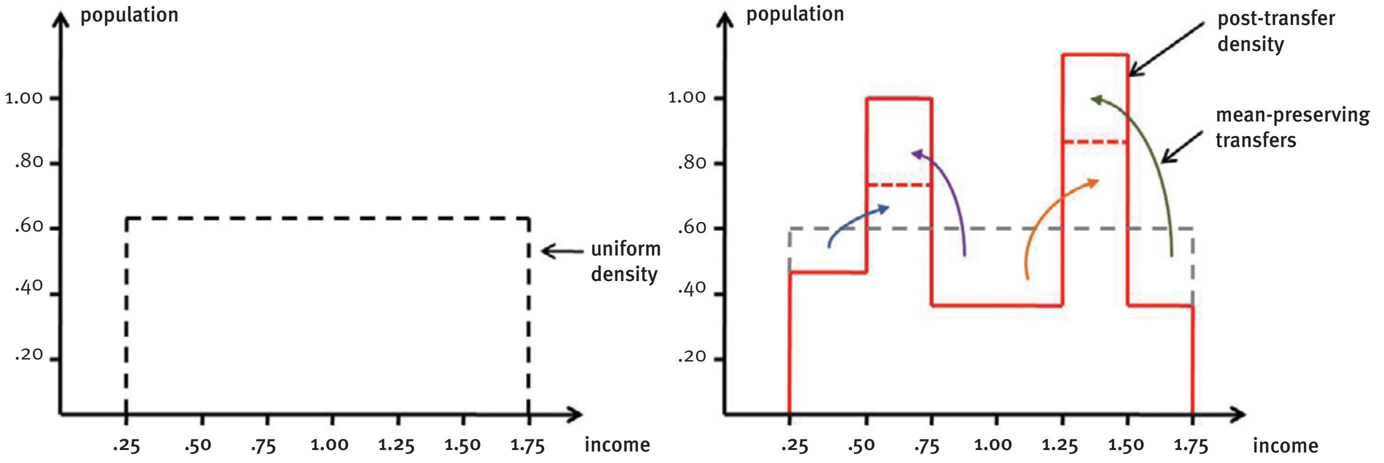
A rise in the Wolfson index indicates a deepening in bipolarisation and a disappearance of the middle class. To mitigate further hollowing out of the middle-income groups, two types of policies are needed. To reduce the poorer group, policy could build human capacity by, for example, eliminating secondary school fees. It could support income generation through small and medium enterprises or micro-finance grants. Policy recommendations to spread the wealth in the high-income group may include redistributive policies, such as progressive taxation.

The DER index, developed in 2004, measures polarisation across an income distribution without assuming a specific number of groups. It therefore provides insights that are distinct from those of the Wolfson index, which assumes just two income groups in the population. A rise in the DER does not mean that the middle class is falling away, rather that the income distribution has 'greater variation', 'spikiness' or 'multimodality' (Duclos et

Key points

- Polarisation hinders both growth and human development
- Measuring income polarisation provides a distinct insight into the link between growth and human development
- Policy recommendations based on polarisation measures will differ from those based on conventional inequality measures, and are likely to be more nuanced

Figure 1: Inequality versus polarisation



Source: adapted from Wolfson (1997).

al. 2005). The DER may, for example, reflect rising polarisation among three income poles – extremely poor, poor and high income earners.

The DER measure can be divided into three components. The first is mean alienation: the average distance between individuals on an income distribution. The theory, often found in the literature on inequality, is that a person may feel estranged from those far away in terms of income. The second component is mean identification, which captures the density of people clustered around a particular income level. Based on theoretical foundations, Duclos et al (2005) assume that an individual at one particular income level identifies with those on the same level – an identification that grows as the group expands. Increased identification means that groups that are already densely populated become more populated at the expense of smaller groups. The danger is not only the risk of increasing antagonism between larger poles, but that these larger groups carry more weight when advocating for particular aims, regardless of the costs for growth and development across the wider society.

The third component is a correlation component, measuring the relationship between alienation and identification. Because the DER can be 'unpacked', it shows whether rising identification or alienation are responsible for the changes in polarisation. It can, therefore, tell policy makers whether they should focus on reducing alienation or identification.

Polarisation vs. inequality

The terms polarisation and inequality tend to be used synonymously. In a *New York Times* article, Daniel Altman links the two when he writes '...meaningful discussion of the potential widening of inequality – the polarization of rich and poor – has been sadly lacking' (Altman, 2003). A Brookings Institution publication called *Globalization and Income Polarization in Rich Countries* discusses inequality throughout. Distinguishing between the two is important, as they require distinct policy responses.

Inequality measures assume that a transfer from a wealthy person to a less wealthy person will reduce inequality (referred to as the principle of transfers). Polarisation measures, however, focus on where on the income distribution curve this transfer occurs. This determines the impact. Consider a transfer of resources from a person with a higher income to someone with a lower income, both of whom earn above the average income, such as an education subsidy financed by a progressive tax system. The transfer results in a convergence of income between two people. One has a little less, the other a little more. According to the principle of transfers, inequality should decrease. In fact, polarisation may increase, as this transfer has contributed to a reduction in the size of the middle income group, and an increase in the size of the wealthy group.

Figure 1 shows how inequality measures can hide distributional divergences. The horizontal axes represent income levels normalised around the average, while the vertical axes represent the population. The dotted black line on the left denotes an equal population size for each income (a uniform density function).

Consider a series of income transfers that reshape the income distribution, as shown on the right of Figure 1. The extremely poor become wealthier (blue arrow), the super-rich become less rich (green arrow), and middle income groups become more or less wealthy (orange and purple arrows). These transfers may include targeted cash transfers, fuel subsidies, food stamps and progressive tax schemes, etc. The income distribution, depicted by the red line, now has two peaks clustered around two income levels – the somewhat poor and the somewhat wealthy – and the middle group falls away. The polarised curve (red line) is considered more equal (based on conventional inequality measures) than the uniform density curve (black dotted line) (Wolfson, 1997).

This shows that conventional inequality measures fail to capture the changes in an income distribution that are captured by polarisation measures.

Empirical evidence

Duclos, Esteban and Ray (2005) have applied their measure to 21 countries to show the difference between their polarisation measure and a Gini inequality measure. The UK and US, for example, have the same Gini coefficient, yet the UK has a higher polarisation measure. When the DER is examined more closely, mean identification outweighs average alienation in the UK, resulting in a higher polarisation index. So policies to address polarisation in the UK should focus more on identification issues.

Or take the example of the US and the Czech Republic. They have similar polarisation measures, but the Czech Republic is more equal by Gini standards. This is captured in the alienation component – people feeling estranged from those with different incomes – which is higher for the US than the Czech Republic. The high alienation component in the US, however, is balanced by a lower identification and correlation component, resulting in a polarisation measure equal to that of the Czech Republic. This analysis suggests that policies in the Czech Republic should respond more to identification, while those in the US should focus more on reducing alienation. Policy measures associated with each of these are discussed below.

Gasparini et al. (2006) have performed a similar exercise on household surveys from 21 Latin American and Caribbean countries. A comparison between Mexico and the Dominican Republic shows that both have the same levels of average alienation, yet the Dominican Republic has higher polarisation as a result of greater levels of identification. Policy measures should, therefore, focus more on reducing identification than policies in Mexico.

These examples compare two countries, but a comparison can be made across two points in time. Trend analysis will reveal whether changes in polarisation are driven by alienation or identification.

Gasparini et al. have also looked at the factors that drive polarisation, in particular, how labour incomes affect income distribution. A strong relationship between polarisation (as measured by the DER index), labour income, and household income suggests that individual skill levels hamper engagement in an economy, and thus contribute to income polarisation. They find that many Latin American and Caribbean countries have experienced a polarisation between those with the skills to take advantage of a new economic environment and those who have struggled to adapt.

Growth, polarisation and development

How might polarisation have an impact on the link between growth and human development? The role of inequality in the link between growth and human development is well documented, but does not fully explain the phenomenon of growth without development in many developing countries. The link between growth, human development and polarisation is less well known. It shows five major areas of influence.

First, weak social cohesion. Polarisation reflects social cohesion better than inequality, as it captures alienation between groups in society, and identification within these groups. The little literature that exists on the relationship between income polarisation and conflict shows that, as a society becomes more polarised, conflict is more likely (Horenstein and Olivieri, 2004). A study in Latin America and the Caribbean (Gasparini et al. 2006) finds that 'the combination of weaker institutions with higher polarization quickly translated into situations of social tension and conflict'. This link is complex. It includes both economic and non-economic variables. A society can be equal in economic terms, but have tensions across ethnic or religious lines. In contrast, a society that is polarised by income can exhibit social cohesion, during times of war for example. But in general, weak social cohesion, social tensions and conflict undermine human development and slow down economic growth.

Second, political and fiscal instability. In a cross-country study, Woo (2005) examines the role of polarisation on macro-economic stability, finding the greatest fiscal instability among countries with highly polarised economic societies. Woo also examines how polarisation between socio-economic groups impacts the evolution of fiscal instabilities. When politicians disagree on the composition of government funds, Woo contends that each has an incentive to overexploit the common pool of resources, with a negative effect on the whole. This behaviour, he writes, is 'more likely to occur and be more severe in societies with higher degrees of polarisation'. Further, he contends that political instability associated with polarisation shortens the time horizons of policy-makers, encouraging short-sighted policies that lead to fiscal deficits at the expense of macroeconomic stability. This discourages private investments by foreign and local entrepreneurs, penalising economic growth.

Third, bias in the distribution of social spending. Bandyopadhyay (2004) examines how income is distributed and how this distribution changes across Indian States. He finds that unequal distribution in social spending, reflecting socio-ethnic and political differences, contributes significantly to a 'twin peak' phenomenon where the lower income states converge to form one pole, while other wealthier states form another. So, when policy decisions reflect polarisation, they can actually perpetuate it. This is particularly the case when policies lead to poor investment in human development for some groups.

Fourth, disappearing middle income groups and elite domination. The erosion of the middle class has consequences for growth and human development, as this class forms the backbone of a healthy economy. Without the middle class, growth cannot be sustained. Birdsall et al. (2000) stress that 'a healthy market economy requires the active involvement of middle groups – as stakeholders, entrepreneurs, skilled workers, and consumers'. Supporting the emergence of the middle class requires investment in human development. However, equitable investments are less likely when a society is polarised and an elite group dominates politics. Easterly (2001) finds that societies that are dominated by an elite tend to have lower levels of human capital formation. He concludes that 'a middle class consensus' (i.e. a high share of income for the middle class and a high degree of ethnic homogeneity) is associated with higher levels of human and infrastructure capital accumulation.

Fifth, insecure property rights and legal rights. While the elite may well ensure their own property rights, they rarely extend these to the general public. Keefer and Knack (2002) contend that polarisation reduces the enforcement of property and contractual rights, creating an environment of uncertainty that penalises growth. Insecure property and contractual rights, they argue, 'affect growth directly, by influencing the choice of production process and the efficiency with which production is carried out, and indirectly by reducing incentives to invest'.

Insecure rights can deprive people of their 'just' earnings and, in turn, lead to underinvestment in human development. If opportunities for income generation are insecure, incentives to invest in human capital formation will be low and the risks associated with social investments will keep human development low. It is vital, then, to address polarisation when translating growth into development.

Policy and polarisation measures

Policy recommendations based on typical inequality measures imply, in general, a transfer of resources from the well off to the less well off, regardless of where the individuals lie on the income distribution curve. Transfers may, inadvertently, aggravate polarisation. Policy responses and recommendations based on polarisation measures tend to be more nuanced because they consider disparities and clustering within society and will differ according to whether polarisation stems from alienation or identification.

The key difference between policies to reduce alienation and those to reduce identification lies in their aim. Policies to reduce alienation aim to bring group averages together, while those to address identification aim to fill gaps in an income distribution by increasing the spread of the poles. Both may entail cash transfers, progressive tax schemes, social programmes or subsidies, etc., but they are tailored and targeted to shape the income distribution in distinct ways. These policies should vary according to the specific income groups targeted, as policies for wealthy groups differ from those for poorer groups.

While a detailed discussion on the costs associated with the use of polarisation measures is beyond the scope of this briefing, they may include the high administrative costs of targeting or political tensions, when addressing underlying causes of polarisation.

Polarisation measures, like inequality measures, can be used in analysis to anticipate distributional impacts of macro-economic policies or economic shocks. They will, however, provide distinct insights, and can contribute to a better understanding of the social and political implications of external shocks. Political or social factors, of course, drive the trends towards rising polarisation, so any reduction in polarisation requires an understanding of the political context and historical background.

A polarisation approach offers distinct, yet complementary, insights and, therefore, policy responses. It also leads us to consider a wide array of instruments beyond simply spending on the poor, including property rights, inclusion policies and policies for the non-poor, and how these can be complemented to facilitate the link between growth and human development. Many countries face challenges in forging this link as they try to translate economic growth into human development. Perhaps a polarisation approach can help them identify where inequities arise, and their nature.

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