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REVISITING KUZNETS: IS RISING INEQUALITY STILL INEVITABLE DURING ECONOMIC DEVELOPMENT?

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SUMMARY

The Kuznets hypothesis on rising inequality during economic development implies a pattern of growth that constrains income/consumption gains at the poorest end of the distribution. Empirically, the Kuznets hypothesis has been generally rejected in cross-sectional data, though it has seen a resurgence in recent time-series data for fast-growing developing countries. This brief explores both Kuznets' original hypothesis and new theories in the Kuznetsian tradition that have contributed to understanding economic development and inequality.

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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.

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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.

The Kuznets hypothesis

The Kuznets hypothesis on rising inequality during economic development implies a pattern of growth that constrains income/consumption gains at the poorest end of the distribution. Empirically, the Kuznets hypothesis has been generally rejected in cross-sectional data, though it has seen a resurgence in recent time-series data for fast-growing developing countries where structural transformation is evident (see Baymul and Sen, 2017; Sumner 2016).

What did Kuznets actually say?

Simon Kuznets is often reduced to the famous curve alone. There is much more depth and many more nuances and caveats than are often recognised (see for more discussion, Kanbur, 2012; 2017). Kuznets (1955) took a Lewisian type model (with a focus on urban-rural rather than 'modern' and 'traditional' sectors) and posited that the labour transition from rural to urban sectors would be accompanied by rising inequality in the early stages of development. In contrast, neoclassical economic theory would posit that the relative scarcity of factors determines inequality outcomes.

The most important point to note regarding Kuznets' seminal work is how tentative it is, and the number of disclaimers due to the scarcity of data available at that time. Kuznets builds theory through an abstract arithmetic model and then draws what he notes are very tentative conclusions. Kuznets' original thesis was based on time-series data for three countries (US, UK, and two states in Germany) plus point estimates for inequality in India, Puerto Rico, and Ceylon. He argued that inequality would rise in an 'upswing' and then fall later in the 'downswing' of what became known as the inverted-U or Kuznets curve. Kuznets only found a rising trend or upswing in the data he used, not an inverted-U (his downswing of the inverted-U was based on theory and a data simulation).

Kuznets (1955, pp. 6–7) outlined two forces that would increase pre-tax and transfer inequality in the long term:

> The first group relates to the concentration of savings in the upper-income brackets … The second source of the puzzle lies in the industrial structure of the income distribution. An invariable accompaniment of growth in developed countries is the shift away from agriculture, a process usually referred to as industrialization and urbanization.

The former of these two forces resonates with Lewis's view on the 'savings class' and Piketty's (2014) focus on capital accumulation as the driver of rising inequality.[1]

Kuznets (1955, pp. 7–8) argued that inequality would rise as the inter-sectoral shift away from agriculture leads to income differences between sectors, and changes within each sector, as some of the population leave the more equal rural sector.[2] Inequality, Kuznets posited, is composed of inequality between and within sectors (urban and rural), and inequality tends to be lower in the rural sector (relative to the urban sector).[3] As the size of the more unequal urban sector increases, this will further add upward pressure on inequality and, given that during economic growth, productivity in urban areas is likely to increase faster than in rural areas, this will add even more upward pressure on inequality.

In short, inequality in the dual sector economy is an aggregation of (i) inequality in each sector (be that urban and rural or traditional and modern 'sectors'); (ii) the mean income of each sector; and (iii) the population shares in each sector (Kanbur 2017). Thus, even the population shift itself could raise inequality as Kuznets (1955, pp. 14–15) himself noted:

> [E]ven if the differential in per capita income between the two sectors remains constant and the intra-sector distributions

[1] More specifically Piketty's theory is that rising inequality in the contemporary period is explained by slow growth (and hence a diverging of wages and returns to capital).

[2] Kuznets argued that the early benefits of growth go to those with capital and education but, as more people move out of the traditional sector, real wages rise in the modern sector and inequality falls. He argued that the poorest lost out more rapidly than other groups as income-expanding opportunities arise away from agriculture. Kuznets argued that the only way to offset this was for the share of lower non-agriculture income groups to rise. He further contended that, in democracies, urban migrants would become politically organized, leading to redistribution.

[3] As Fischer (2014, p. 20) notes, Kuznets posited that 'underdeveloped' countries were more unequal than 'developed' countries (p. 20).

> are identical for the two sectors, the mere shift in the proportions of numbers produces slight but significant changes in the distribution for the country as a whole.

Kanbur and Zhuang (2013) show how the between urban–rural and within urban–rural components of overall inequality can differ considerably between countries, and how the contribution of urbanization itself to inequality changes at the national level can also differ considerably between countries.

Although inequality may rise as a result of movement between sectors, that occurrence may be balanced or outweighed by what happens to the within-sector components and the shares of each sector. Initial inequality between and within sectors will also play a significant role.

Although largely rejected as a universal law in studies in the 1990s, the Kuznets hypothesis remains relevant to development as fast-growing countries have experienced rising inequality since the Cold War (Sumner, 2016).[4]

Critiques of Kuznets

Piketty (2006) is broadly illustrative of critiques of Kuznets. He argues the following:

> The reasons why inequality declined in rich countries … do not have much to do with the migration process described by Kuznets … Inequality dynamics depend primarily on the policies and institutions adopted by governments and societies as a whole. (pp. 2, 11)

As Kanbur (2017) notes, this is unfair to Kuznets. Not only does Kuznets discuss countervailing forces (for example, the two forces noted previously) but also institutional aspects are prominent for Kuznets (1955). For example,

> One group of factors counteracting the cumulative effect of concentration of savings upon upper-income shares is legislative interference and 'political' decisions. These may be aimed at limiting the capital accumulation of property directly through inheritance taxes and other explicit capital levies. They may produce similar effects indirectly […]. All these interventions, even when not directly aimed at limiting the effects of capital accumulation of past savings in the hands of the few, do reflect the view of society on the long-term utility of wide income inequalities. This view is a vital force that would operate in democratic societies even if there were no other counteracting factors … Furthermore, in democratic societies the growing political power of the urban lower-income groups led to a variety of protective and supporting legislation. (pp. 8–9, 16–17)

There is resonance here, too, with Polanyi's (1957) 'double movement' or the dialectical process of the expansion of marketization and the push back against marketization and social protection in a 'counter-movement'. Polanyi argued that liberal reforms seek to establish and expand a market society where all things are commodified, the economy is 'disembedded', and society is subordinate to the market economy. This triggers a reaction of 'counter-movement' whereby the creation of institutions such as labour law seeks to re-embed the economy in society.

New theories in the Kuznetsian tradition

Kuznets in his seminal piece said little about open economies and how an open economy would impact his theory of distribution dynamics. There has been a set of contemporary scholars building new theory in the Kuznetsian tradition. Such scholars have developed theory with a focus on open economies and agrarian liberalization, the role of technology, as well as aspects of national political economy and the distribution of land. For example, Galbraith (2011) argues that it is global forces that have driven the changes in national inequality since 1970. The key drivers of the changes in national inequality are world interest

[4] Anand and Kanbur (1993a, 1993b) dismissed the Kuznets curve. Barro (2008) later found support for the Kuznets curve. Deininger and Squire (1998) found evidence of the curve in some countries and not others. Most recently, Gallup (2012) empirically posits an anti-Kuznets curve or non-inverted-U: inequality declines and then rises. Alvaredo and Gasparini (2015) do, very cautiously, identify a U-shaped curve using 2005 PPP data but the upswing of the curve is entirely in sub-Saharan Africa and the downswing is entirely in high income countries.

rates and commodity prices (and between-sector terms of trade). He argues that a commodity boom reduces inequality in countries with a dominant agricultural sector as it raises the relative income of farmers, and higher rates of interest are bad for debtor countries and this increases inequality. Galbraith presents an 'augmented Kuznets curve', or S-curve, whereby the curve rises, then falls, and then rises again.[5]

In a somewhat similar vein, at least in the sense of a focus on open economies, Lindert and Williamson (2001) argue that it is the shift towards market orientation (domestic to export) of agriculture and not the shift from agriculture to manufacturing and services that causes inequality to rise. Lindert and Williamson predict an initial rise in inequality. However, while Kuznets envisaged a downswing, Lindert and Williamson argue that inequality continues to rise because income in the urban sector outpaces rises in income in the rural sector as agriculture shifts to market orientation.

In contrast, Roine and Waldenström (2014) suggest a new Kuznets curve based on technological developments starting not a sectoral shift of agriculture to industry but a shift from traditional industry to technologically intensive industry. If a given technology makes skilled workers more productive and there is an increase in the relative demand for those workers, the rewards accrue to a small proportion of the population who are skilled workers. Based on Tinbergen's hypothesis that the returns to skills are a competition between education and technology, the supply of skilled workers then determines whether or not their wages rise. Roine and Waldenström (2014) argue that the drivers of the Kuznetsian downturn were political and exogenous shocks.[6]

Oyvat (2016) argues that it is agrarian structures—national land inequality—that are deterministic. Consistent with Kuznets, he argues that migration is driven by higher urban incomes and this suppresses wages in the urban sector. If land inequality is higher, more people will migrate for lower wages as they do not own land or own small plots, and rural incomes are lower which will further depress urban wages. Empirically, Oyvat argues that the level of land inequality has a significant impact on urbanization, intra-urban inequality, and overall inequality. The results suggest that land reforms or subsidies to rural smallholders would thus reduce urban inequality.

Acemoglu and Robinson (2002) discuss the political economy of the Kuznets curve in two models of late capitalism. The first is a high inequality, low output model that they call 'autocratic disaster'. In this model, inequality does not rise, and political mobilization is too limited to address existing inequality. A second model is the 'East Asian miracle' of low inequality and high output where inequality does not rise in order to ensure political stability and avoid the discipline of democracy being forced on elites. They argue that when the process of industrialization does increase inequality, this leads to the political mobilization of the masses that are concentrated in urban areas and factories. Political elites thus undertake reform to ensure their continued position at the top. The extension of the franchise is the best option for elites as it acts as a commitment to future redistribution and thus prevents unrest.[7]

Conclusion

A set of contemporary challenges throw up greater levels of complexity. First and foremost is the experience of premature deindustrialisation in

5 Galbraith (2011) argues that national inequality tends to follow similar trends around the world and that there have been four phases over time: (i) a first period, from 1963 to about 1971, of relative stability in national inequality; (i) a second period from 1972 to 1980 when inequality declined slightly in much of the world due to the post-Bretton Woods inflationary boom based on extensive lending at negative real interest rates; (iii) a third period dated from 1982 to about 2000, consisting of sharply rising inequality due to the debt crisis, the collapse of many communist countries, and the liberalization of the 1990s which led to a fiscal squeeze and public sector retrenchment. There are some exceptions. China and India did not see the rise in national inequality until the 1990s, because they did not liberalize their financial markets; (iv) a fourth period which began in 2000 and is one of modest declines in national inequality due to the slowing down of liberalization and the commodity boom.

6 Lindert (2000) suggests that the factors compressing wage inequality were institutional ones such as labour market regulation, trade unions, and the expansion of basic education.

7 Examples given are those of the UK and France where extension of franchise led to changes in labour market institutions, mass education, and reduced inequality. The thesis of Acemoglu and Robinson (2002) is that capitalist industrialization increases inequality but that this induces a change in political regime towards more redistribution.

developing countries. This typically means that there is a focus on the shrinking proportion of industrial or manufacturing activity in GDP, employment, or exports. This phenomenon, or what Palma (2005) and Rodrik (2015) labelled as 'premature deindustrialization' with reference to developing countries, is that developing countries have reached 'peak manufacturing' in employment and value-added shares at a much earlier point than the advanced nations. What would one expect to be the inequality dynamics of this? The essence of Kuznets was that the labour transition could, unless governments intervene, be unequalizing if people move from the more equal sector (which Kuznets took to be rural in developing countries) to the less equal sector (which Kuznets took to be urban) because of the differences in relative income and the relative population weighting. The Kuznets hypothesis will only hold if the rural sector is more equal or if governments do not intervene to neutralise the forces of inequality that were unleashed by structural change. However, on the other hand, the transition could well be equalizing if the rural sector is more unequal (or if governments intervene). However, it will depend on (i) where in the distribution of each sector the migrant starts out from and ends up in and (ii) on how equalizing the wage gain they get from the urban sector is overall and furthermore, (iii) the extent of counter-balancing forces due to the movement of surplus labour from the traditional sector, which would lead to the average income in that sector to rise and generate a pattern that could be equalizing.

If developing countries seek economic development, then to make for an inclusive form of growth the Kuznetsian forces require neutralizing. Such tensions can be managed to some considerable extent by a focus on expanding public policy intervention. Specifically, the urban–rural income divergence; the skilled–unskilled worker wage divergence; and the capture of productivity gains vis-à-vis capital and labour shares and the within labour shares, and the extent to which productivity growth is translated into real-wage growth or employment growth.

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