SUPPORTING ECONOMIC TRANSFORMATION

DANI RODRIK: THE FUTURE OF ECONOMIC TRANSFORMATION IN DEVELOPING COUNTRIES

Event Report

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Stephany Griffith-Jones (Financial Markets Director, Initiative for Policy Dialogue, Columbia University, and ODI Research Associate) introduced the panel composed of:

- Professor Dani Rodrik – Ford Foundation Professor of International Political Economy, John F. Kennedy School of Government, Harvard University
- Dr Dirk Willem te Velde – Head of the International Economic Development Group, ODI and Director of the Supporting Economic Transformation programme
- Nick Lea – Senior Economic Advisor to the Chief Economist, DFID

PAST, PRESENT AND LIKELY FUTURE OF STRUCTURAL TRANSFORMATION – PROFESSOR DANI RODRIK (HARVARD UNIVERSITY)

Certain fast transformers have demonstrated rapid economic growth and convergence, but that engine of growth has run out and the potential for developing countries, including low-income countries, is now is limited.

UKaid from the British people

There are two fundamental mechanisms for growth:

- Neoclassical theory dictates that growth depends on the accumulation of fundamental capabilities, including human capital (such as education and skills), as well as institutions and governance to improve the rules of the game for the economy
- Structural shifts where economies composed of traditional and modern parts, or low productivity and high productivity sectors and sub-sectors, shift from traditional towards modern parts of the economy

MANUFACTURING

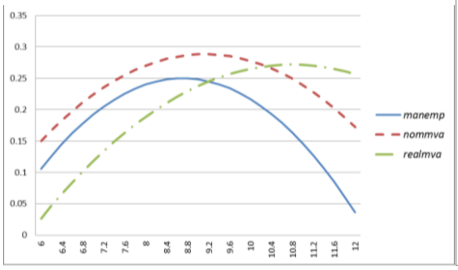
Manufacturing has a special role in the economy due to productivity dynamics, labour absorption and tradability:

- Large parts of the manufacturing sector tend to have high technological improvements
- Productivity convergence in (formal) manufacturing appears quite general – regardless of period, region, sector, or aggregation
- Traditionally manufacturing has been a sector that has been able to absorb a lot of unskilled labour
- Can expand exports without turning the terms of trade against itself

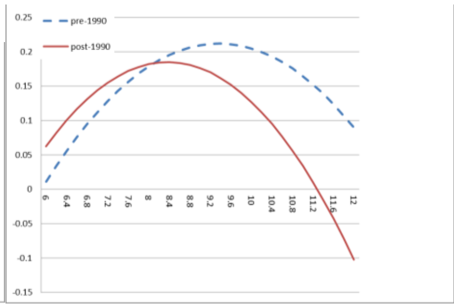
Successful economic policy is pragmatic, opportunistic, often “unorthodox” and promotes domestic manufacturing industries – such as protection of home market, subsidisation of exports, managed currencies, local-content rules, development banking, special investment zones. The specific form varies across country contexts, but in almost all successful cases were designed to expand exports.

Empirical evidence points to the fact that the past experience may not be a good guide towards future transformation. Manufacturing shares as a function of per-capita GDP, manufacturing employment and output shares show inverted U-relationships, with diminishing returns past a certain point, where the relative price of manufacturing and the share of value added per employment tend to decline (see figures below). Comparing the stimulated manufacturing output shares and employment in pre- and post-1990 shows that de-industrialisation is occurring much sooner post-1990.

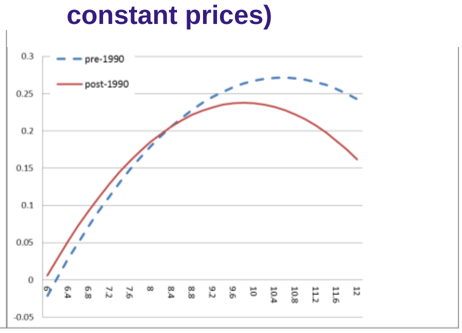
Simulated manufacturing shares as a function of per-capita GDP (1990 international dollars)



Simulated manufacturing employment share



Simulated manufacturing output shares (MVA/GDP at constant prices)



Source: Rodrik (2015) PPT presentation

When all countries are analysed together there is a secular decline in manufacturing employment shares (of total employment), with a greater than 10% decline between the 1950s and 2000s. Regionally, Latin America and sub-Saharan Africa (excluding Mauritius) show strong declines in manufacturing employment share (or employment de-industrialisation) over the same period, consistent also with developed countries experience. The exception is Asia which has demonstrated increases in manufacturing employment share.

A closer analysis of the data shows that it is low-skilled employment that is in decline. Premature de-industrialisation is much more worrying in developing countries, which are reaching peak levels of manufacturing at much lower levels of income, and which have not yet exploited their comparative advantage in manufacturing.

There are certain key trends that explain this phenomenon:

- Shifts in the relative price of manufacturing where technological progress means that for any constant output, less labour is required. This alone cannot account for the trends seen in Africa and Latin America, unless also combined with the fact that:
  - Global markets have become much more competitive due to the success story of Asian exports, which have driven a lot of production out of competitor markets
  - Divergence in patterns between manufacturing exporters and non-manufacturing exporters, with the latter able to avoid de-industrialisation
  - Technological changes have a smaller impact on employment where countries have exploited a strong comparative advantage in manufacturing
- Global value chains facilitate entry into manufacturing but diminish returns from it because of disconnect to the rest of the economy

Patterns of structural change differ between (a) the East Asia (fast transformers) and advanced economies, and (b) low-income countries. For the latter most labour is moving from informality in agricultural sectors to informality in manufacturing and services sectors, with only a small amount of formalisation with structural change. However the former have demonstrated a strong trend away from informal agriculture into formal manufacturing and services employment.

This analysis suggests that promoting re-industrialisation will be difficult, so alternative priorities should be on raising productivity in services and reducing the share of small, informal firms.

SERVICES

There are two types of services:

- High productivity, tradable services (typically skill-intensive) e.g. business and financial services
- Low productivity, largely non-tradable services (typically low-skill)

Services sectors often encounter dualism of high-productivity (modern) and low-productivity (traditional) employment. A large proportion of services employment is in developing countries is in low-productivity non-tradable services. Low productivity services cannot act as growth policies since they cannot expand without turning their terms of trade against themselves, the continued expansion in one segment relies on expansion in others, there are limited gains from sectoral “winners” and the problem of slow accumulating fundamentals.

In principle, we know how to improve productivity in traditional services, for example helping firms grow, supporting modern firms’ expansion, de-regulation and enforcement of formality. However, there is an employment-productivity trade-off in services due to a preponderance of small low productivity firms that absorb excess supply of labour. There are limited examples of productivity growth alongside employment expansion in services.

How did manufacturing avoid this problem? The key is in tradability; higher-than-average productivity growth in a tradable sector of (small) open economy translating into greater output; and, the possibility of higher employment even if productivity growth is driven by labour-replacing technology. In non-tradable sectors, the output-boosting effect is attenuated by decline in relative prices (and profitability).

Looking at the evidence demonstrates that there have been drags on growth in Latin America, Middle East and North Africa, and sub-Saharan Africa, from adverse structural change with labour moving from higher to lower productivity activities.

Potential alternative pathways to high growth include increasing returns and investment in human capital as well as institutional capabilities, or enhancing number of sectors with escalator possibilities like manufacturing.

CONCLUSIONS

Growth in emerging markets has been unsustainably high in the last decade and will decrease by a couple of percentage points. Convergence will continue, but not as rapidly, and in large part because of low growth in advanced economies. As domestic rather than global trends drive growth, significant heterogeneity in long-term performance across developing countries is likely.

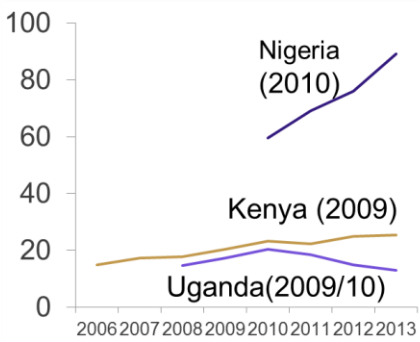
PANEL RESPONSES

DIRK WILLEM TE VELDE (SET PROGRAMME DIRECTOR, ODI)

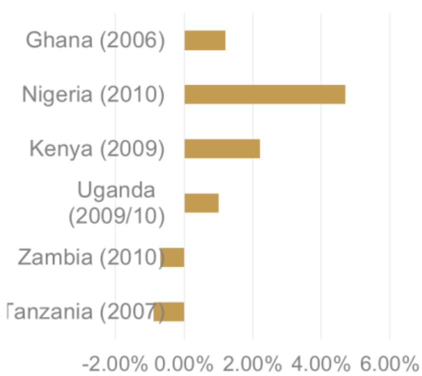
Economic transformation is a process moving resources to high-productivity activities, both within and between sectors, and is essential for improving the quality of growth that is broad-based, resilient against shocks, and generates increased opportunities for further growth. Economic transformation can be considered as a developing-country led agenda. The **Supporting Economic Transformation (SET) programme** is an ODI programme, funded by UK DFID, aims to support countries in their quest for economic transformation through data analysis, analysing opportunities and challenges in economic transformation and understanding economic transformation policy.

We are systematically underestimating the extent of economic transformation in African countries. Recent national accounts rebasing has resulted in increased levels of GDP, as well as increases in the shares of manufacturing and services to GDP, see below figures.

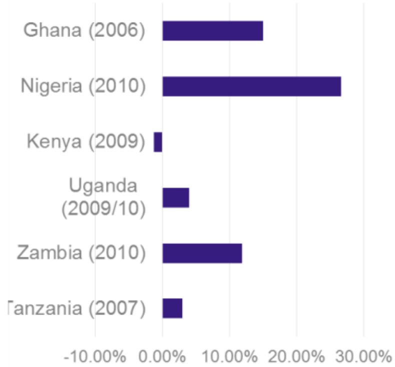
Change in level of GDP (%)



Change in manufacturing share GDP (%) (pp)

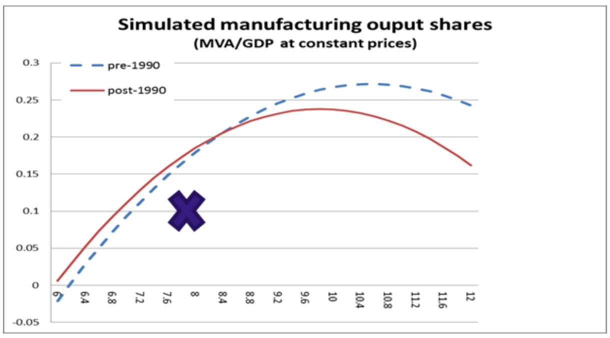


Change in services share of GDP (%) (pp)



Recent data suggest some African countries have successfully mastered some manufacturing capabilities.

- Annual real manufacturing growth in the period 1997-2012 shows a global growth rate of 2.3%, with a growth rate of 3.4% in sub-Saharan Africa and certain outliers (e.g. Tanzania, 7.9%)
- Rebasing has demonstrated a greater role for manufacturing
- The high growth of the in between sector (McMillan) is not measured due to a lack of data
- Chinese special economic zones recently created approximately 20,000 jobs in Africa, including in manufacturing
- There are increases across sub-Saharan Africa in the economic complexity index, with top increases in the 2000-2012 in Uganda (rank 2 out of 121), Tanzania (10), Kenya (12), but not Nigeria (78), Zambia (85), or Zimbabwe (91)
- Sub-Saharan Africa is still far away from Rodrik's manufacturing peak, see figure right



The role and scope of services in GDP, employment and value chains is growing, and creating quality services linkages for agriculture and manufacturing productivity is crucial. Jobs that don't go into manufacturing often end up in low productivity services. The role of services in economic transformation is also changing: the share of services in employment has increased in lower income countries post-2005 compared with pre-2005; share of services in value added has increased in the period 1960-2013 (including in South Africa, Kenya, India, Tanzania, Rwanda, Uganda). However high growth services at the least employment intensive e.g. financial services. Looking to global value chains, evidence suggests that services contribute an increasing part of export portfolios, increasing value addition and shift away from raw materials exports.

If sub-Saharan Africa wants to get the most out of future economic opportunities (within and between sectors), it requires effective use of selective policies within appropriate institutional settings. This includes public actions to support structural change (such as export push policies, exchange rate protection, selective industrial policies, spatial industrial policies and national development banks) as well as public actions to support within-sector productivity growth (such as management training, attracting foreign direct investment, export diversification, developing global value chains and increasing agricultural productivity). All of these actions will however be influenced by political economy considerations.

NICK LEA (CHIEF ECONOMIST OFFICE, DFID)

The stark picture presented by Dani Rodrik can be equated to a "local priest losing his faith" and maintained the role of economics role transforming the lives of many people.

Certain great Rodrikian insights need to be considered:

- The role of growth diagnostics, in identifying key constraints
- The importance of convergence in the long-term
- Growth frictions created by weak institutions and the use of policy shortcuts, including export processing zones, industrial policies
- Unconditional convergence in manufacturing, with key insight from the East Asia miracle in terms of manufacturing labour absorption, inelastic global demand and learning externalities (all countries have used some kind of undervaluing shortcut)
- Growth as a sum of fundamentals, modern convergence and modern sector size
- The services trade-off in high productivity services with little employment

Development professionals are often drawn towards absolute figures, however relative figures are those that are the most important. For example, African incomes remain at 6% of OECD country incomes. From the donor perspective, accountability in aid requires an appreciation of exchange rates to ensure financing is counterbalanced to increase productivity.

Caution however needs to be exercised in over-pessimistic futurology:

- Early Rodrik literature discussed the WTO's future intolerance of short-cuts, however there is still a degree of tolerance for industrial policy
- The role of technology and market change in de-industrialisation – certain 'industrialisation peaks' may in fact be false starts; shifts in classifications of what constitutes 'services' may mean the reclassification of industrial activities as services; despite de-industrialisation peaks the role of manufacturing can still be a driver of development (there are also dangers of using logarithmic scale graphs); and, despite reductions in unskilled labour demand there is still demand
- Classification issues may have some impact, where what used to be classified as manufacturing may now be labelled as services, underestimating the level of manufacturing
- There is under-emphasis on the role of deadlocks in political economy stagnating growth. Long-standing political equilibriums can prevent long-term development action in countries that e.g. could have got their fundamentals right by now but instead are finding it difficult to achieve fiscal macro stability and to preside effectively over investments
- An under-emphasis on tightening of Chinese labour markets

DISCUSSION

Stephany Griffith-Jones summarised the discussion and welcomed questions from the floor. Tim Lankaster (Oxford University) outlined the importance of saving as an investment, and its contribution to the fast growth experiences of East Asia and Russia. Duncan Green (Oxfam) asked on what escalator services would look like, also outlining the the need to explore the link with the rising inequality question. John Burton (KPMG) highlighted Asia as a large exception given it accounts for approximately two-thirds of the world's population – changing demography might leave a gap for Africa to step into, requiring investment in labour and education to create opportunities for Africans (including more trade in services). Another participant outlined the infant industry problem, with the liberalisation of under-developed countries creating competition with developed countries. All successful industrialisation strategies have depended on interventionist policies to address inequalities in the global system, and taking away the ability to introduce such policies has resulting in rising inequalities and increased potential for crises.

Dani Rodrik responded to the panellists and questions from floor participants. He outlined that his pessimism has arisen from undue optimism about the growth prospects of low income and emerging economies. It will be important to investigate the impact of rebasing and what it has implied for structures of economies. Africa cannot necessarily follow the East Asia miracle, which is unsustainable. The timing is not quite right for Africa to take over from Asia, as despite the likelihood of China losing some of its manufacturing overseas it still has a significant head-start, and if this was the case there would have been greater economic substitution seen pre-financial crisis. Discussions on savings investment have gone out of fashion because that is not where the main constraints are. Escalator services sub-sectors still need to be identified (with the hope that there are some). Dani highlighted the importance of considering inequality in the context of growth and employment growth. On the point of classification of services, he noted that many services (e.g. research and development) are being done in-house, which is likely to have the opposite effect of exaggerating the size of manufacturing activities. There is a need to create jobs for the people present in a given country, not the people (with the level of skills) you wish you had in the country, which will require longer-term investment in skills. In terms of infant industries, import substitution effects are not as great due to the China / Asia experience and decline in import tariffs, and is a big reason why countries won't be able to achieve the same industrialisation experience.

Stephany Griffith-Jones outlined the role of the green revolution (towards climate mitigation) in changing the development model and present new opportunities for developing countries, including in leapfrogging. She welcomed more interventions from the floor. In response, Stefan Dercon (DFID Chief Economist) outlined that a lot of African governments and regional organisations are being very unrealistic about Africa's growth prospects, given previous industrialisation waves not comparable to the Asian experience. There is likely to be a higher level of heterogeneity amongst African countries in the industrialisation experience. Mark Bohlund (Bloomberg) highlighted that automation is not widespread in textiles and manufacturing, so what is the potential role for automation in the manufacturing industry? Other participants asked on the role of agriculture, transforming services from informal to formalised sectors, and the role of overseas development assistance in fundamentals investment (such as health and education) to improve the quality of, if not the levels, of growth.

Dani Rodrik identified that a 'double hump' of industrialisation does not occur unless it is very small and spans only a short timeframe of 2-3 years. He used the example of China, which had more people employment in manufacturing before its economic reforms, which enabled it to become an export superpower, than after. He highlighted the role of private sector relationships which can alleviate bottlenecks, however the public-private sector relationship still then needs to be institutionalised towards pragmatic policy-making. Overseas development assistance should focus on what developing countries think they need in individual cases, despite the present of certain common features and obstacles. Often there are fundamental reasons keeping the size of the formal sector low, rather than economic regulations, taxes and the cost of formality, which need to be addressed. There is a large role for agriculture as an absorber of employment; certain agricultural sectors in different countries have shown higher productivity growth than manufacturing sectors, however the majority of this has come from commercial farms and agribusiness which are not so employment generating. There is therefore a need to identify sectors that have the potential to increase both productivity and employment. In terms of automation and skills, these often remain at low levels in manufacturing sectors such as garments. Differences between demand and supply of jobs is also often disjointed, compared with the China example, creating very large discrepancies in the labour force.

Stephany Griffith-Jones welcomed final comments from the other panellists. Nick Lea finished on the importance of considering the countries left behind that exhibit different dynamics to general regressions, how can they achieve fundamentals? A specific focus should be given to the political economy traps of mineral countries, encountering difficulties of persistent and stubborn political equilibriums, and specific research efforts should be given to the issue. Dirk Willem te Velde underlined that African countries are industrialising at faster level than we had thought. The key concern is not on when they will hit the peak manufacturing curve, but on political economy sensitivities. For services, we should think not only about the direct jobs created, but also about the indirect jobs generated.

Stephany Griffith-Jones closed the event, thanking the panellists and participants for an illuminating seminar.

PICTURES