Beyond Manufacturing: Structural Change in Africa Reconsidered

John Page
The Brookings Institution, IGC and UNU-WIDER
Kampala, 21 September 2018
Rediscovering Structural Change

• An idea as old as the study of economic development
  • Lewis, Kuznets and Chenery

• Academic interest in structural change waned in the 1980s & 90s
  • Cross country regressions consigned it to the “residual”

• The result for public policy was a focus on “whole economy” drivers of growth such as openness, institutions, governance, etc.
  • These prescriptions proved to be of little practical relevance to public policy

• Since 2000 a group of “new structuralists” have emerged in development economics
  • Lin, Rodrik, Stiglitz
The Potential for Structural Change

• In countries at low levels of income productivity differences between sectors are large
  • The movement of resources from low productivity to high productivity employment drives growth
  • As incomes rise, productivity differences among sectors (and enterprises) tend to converge

• Africa has the greatest differences in productivity among sectors, and therefore the greatest potential for structural change
Regional Differences in the Role of Structural Change are Striking

- In East Asia within sector productivity growth and structural change were complementary.
- In Latin America and Africa structural change between 1990 and 2000 was going in the wrong direction:
  - An increasing share of the labor force was in lower productivity sectors
  - “Growth reducing” structural change slowed overall growth
- In Africa recent structural change (2000-2010) has been from agriculture into low productivity services.
As are Regional Differences in the Role of Industry

• Historically, industry has led the process of structural change

• It has played an outsized role in East Asia

• Industry has played only a minor role in Africa’s growth turn around
  • The region’s fast growing economies (ETH, GHA, KEN, RWA, TZA, UGA) are all negative outliers

Source: World Bank World Development Database and World Bank Africa Development Indicators
Africa Has Deindustrialized

- Africa’s share of manufacturing in GDP is less than half of the average for all developing countries

- Per capita manufactured exports are about 10 per cent of the developing country average.

- Africa’s share of global manufacturing is smaller today than in 1980

Source: World Bank World Development Database and World Bank Africa Development Indicators. Author’s calculations. Notes: SSA excludes South Africa.
Leading Some to Question the Durability of Growth

“there is a genuine question about whether Africa’s growth can be sustained...I come down on the pessimistic side, due to what I think are poor prospects for industrialization”

-- Dani Rodrik (2014)

“... it is unlikely that manufacturing export led growth will have the impact that it had in China and East Asia. It cannot be the sole strategy or even at the heart of a country’s growth strategy.”

-- Joseph E. Stiglitz (2018)
The Brookings-WIDER Research Program

• A multi-year, multi country comparative research program

• *Learning to Compete* (2016) (with AfDB) Tried to Answer a Simple Question:
  Why is there so little industry in Africa?
The Brookings-WIDER Research Program

• *The Practice of Industrial Policy* (2017)
  Comparative studies of business-government coordination in Africa and East Asia

  Expanded the definition of “industry” to tradable services and agro-industrial exports
A Focus on Firms

Most analysis of Africa’s lagging industrial development has focused on the investment climate.
  • Regulatory reform \textit{...Doing Business}
  • Infrastructure and Skills

Investment climate studies focus explicitly on the environment \textit{external} to the firm.

But, the key issues in industrial policy reflect what happens \textit{within} (“firm capabilities”) and \textit{between} firms (externalities and coordination failures).

We wanted to learn: (1) What makes firms more competitive and (2) what makes countries more attractive to competitive firms.
Three changes in the global economy make industrialization more difficult for Africa:

- 1- China and East Asia dominate as manufacturing centers...
Three changes in the global economy make industrialization more difficult for Africa....

• 1- China and East Asia dominate as manufacturing centers...

• 2 - Manufacturing as a share of GDP is falling everywhere on average

Manufacturing as share of GDP on average declines over four decades

- Rising importance of services
- “Servicification” of production
- Emergence of GVCs- and trade in tasks
Three changes in the global economy make industrialization more difficult for Africa:

1. China and East Asia dominate as manufacturing centers...

2. Manufacturing as a share of GDP is falling everywhere on average

3. Selling to the global market increasingly requires participating in global value chains

Most African countries have a lower than average share of GVC participation for LICs
The Rise of “Industries Without Smokestacks”

- Technology and falling transport costs have created a class of tradable services and agro-industry that are more similar to manufacturing than to traditional services or agriculture
  - Think call centers versus restaurants; cut flowers versus subsistence agriculture
- These “industries without smokestacks” share many of the firm characteristics of manufacturing
  - Technical change, learning, agglomeration
- They also offer a broader array of options for structural change.
  - Horticulture and agro-processing
  - Tourism
  - Tradable services, such as Information and communication services
  - Transit trade and logistics
“Industries Without Smokestacks” Have Become More Important in Africa

Of 33 African countries with relevant data:

IWSS grew more rapidly and became more important in export portfolios

Both large and small exporters saw gains on average in these sectors
“Industries Without Smokestacks” Have Become More Important in Africa

IWSS sectors grew more rapidly or at least as fast as traditional sectors in two thirds of African countries – and faster in half of the countries.
Rethinking African “Industrialization”

- Patterns of structural change in contemporary low income countries will differ substantially from historical experience.
- Africa’s resource endowments suggest that many internationally competitive activities will be “industries without smokestacks.”
- This expands the range of options for structural change in Africa.
- The challenge for policy makers is to promote the growth of high productivity sectors capable of absorbing large numbers of moderately skilled workers.
“Industrial Policy” for the 21\textsuperscript{st} Century

• Market imperfections mean that the social returns in growth-promoting investments exceed private returns
  o A case for public action

• Externalities and coordination failures call for a coherent strategy of public action
  o Put differently, Africa needs a strategy for structural change

• Because “industries without smokestacks” share many firm characteristics with smokestack industries, they also respond to broadly similar policies.

• But to design effective policies we need to understand what drives the choice of “industrial” location.
Four Drivers of Industrial Location

• The “basics” (aka the “Investment Climate”)
  • Infrastructure and skills
  • Institutions and regulation

• Competition and exports
  • Competition increases productivity through entry and exit
  • Firms in low income countries increase their productivity by exporting

• Firm capabilities
  • The tacit knowledge and working practices that affect both productivity and quality

• Agglomerations
  • Industrial clusters confer significant productivity gains
Lacking the “Basics”

• Country case studies highlight large gaps in infrastructure:
  • Power is the biggest constraint
  • Transport and logistics come a close second

• Skills related to production and management are lacking in many countries
  • Deficiencies in post-primary education
  • Poorly performing vocational and technical education

• The basics are necessary but not sufficient
  • Exports, geography and capabilities are interrelated
New Directions for Industrial Policy

Mounting an “Export Push”

• High social returns to exporting but high private costs of entry
  o The classic rationale for public action

• Entering global markets will need an “East Asian style” export push
  o Broad ownership and effective institutions (leadership from the top)
  o Trade related infrastructure and trade logistics

• Support for regional institutions and infrastructure in Africa

• Sustaining an open trading system and rationalizing preferences
New Directions for Industrial Policy

Building Firm Capabilities

• Africa lacks capable mid-sized firms (50-70 workers)
  o Management of a growing labor force is a major constraint

• An export push is a major source of capabilities
  o Demanding buyers; repeated relationships

• FDI is another
  o Build effective FDI agencies

• New approaches to management training
Strengthening Domestic Value Chain Relationships:

<table>
<thead>
<tr>
<th>Vietnam</th>
<th>Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backward link</td>
<td>Competitor</td>
</tr>
<tr>
<td>Forward link</td>
<td>Vietnam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Industry Sector</th>
<th>Supplier</th>
<th>Customer</th>
<th>Competitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>Textile and Apparel products</td>
<td>Textile</td>
<td>Garment manufacturers</td>
<td>Textile</td>
</tr>
<tr>
<td>Kenya</td>
<td>Textile</td>
<td>Garment manufacturers</td>
<td>Textile</td>
<td>Textile</td>
</tr>
</tbody>
</table>

Note: Out of the 30 identified as potential to participate in the survey, an additional 10% were also approached but their participation was not confirmed.
New Directions for Industrial Policy

Creating Clusters

• Agglomeration economies create a collective action problem

• SEZs are a means of creating clusters
  o Bring Africa’s SEZs up to world class

• Strengthen the links between firms in the SEZ and domestic suppliers/purchasers
  o “Open architecture” in SEZs and better integration with urban planning
**An Agenda for Aid**

- **Focus on power, transport and skills**
  - Aid will be insufficient but can be leveraged better

- **Support for an export push**
  - Fix “aid for trade” and tie it to trade logistics
  - Unify and streamline trade preferences (start with AGOA and EPA)

- **Capability building**
  - Help create world class FDI agencies
  - Support management information and training
An Agenda for Aid

• Supporting industrial clusters
  • Focus aid for trade first on making EPZs world class
  • Support institutional reforms to integrate and raise the profile of FDI agencies and SEZ administrations
  • Watch China and learn from successes and failures

• Give African governments the policy space to take initiatives and make mistakes!
Three Take-Aways

• Africa can create a new growth miracle, but its form will be much different than East Asia, relying in part on industries without smokestacks

• Policies should not focus obsessively on manufacturing...nor ignore manufacturing.

• The key to growth will be policies that promote higher-productivity activities and exports... in agri-business, tradable services and manufacturing
Three changes in the global economy make industrialization more difficult for Africa

• 1- China and East Asia dominate as manufacturing centers...

• 2 - Manufacturing as a share of GDP is falling everywhere on average

• 3 - Selling to the global market increasingly requires participating in global value chains

Sources: UN Comtrade database; and IMF staff calculations.