Structural Economic Transformation: selected experiences

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Overview

1. Understanding innovation and economic transformation (productivity change)
2. Ingredients of sector economic transformation
3. Country examples
   - Digitalisation and Nepal
   - Regional integration and Rwanda
   - Industrial policy and Ethiopia
4. Implications at national and international levels
Economic transformation: three levels of productivity change

- The continuous process of
  - (A) moving labour and other resources from lower- to higher-productivity sectors (structural change) (e.g. McMillan and Rodrik)
  - (B) raising within-sector productivity growth. It can come about as a result of:
    - B1 reallocation of resources away from the least productive firms towards more productive firms (e.g. Hsieh & Klenow); firm entry / exit, or
    - B2 increased efficiency of existing firms (e.g. Woodruff, different efficiencies for different product lines within a firm).

→ Take away message Large opportunities exist at all levels, and they are larger in lower-income settings, see data briefing
SET APPROACH TO ECONOMIC TRANSFORMATION

What is happening?
Economic transformation diagnostics

Why is this happening?
Political economy analysis

What should be done?
Economic policy analysis

How to make it happen
Practical policy advice
Ingredients of successful transformation at sector level

New Gatsby Africa-ODI (2019) paper detailing sector transformation in eleven African and Asian cases shows how sector dynamics depend crucially on:

1. Correct identification of the economic opportunities
2. Conducive political-economic conditions at the sector level
3. Credible commitments to investors
4. Reasonably good provision of public goods
5. Specific efforts to tackle investment coordination problems, and
6. Taking advantage of a moment of unusual opportunity.

→ Contrast e.g. two LLDCs: Ethiopian airlines (success) vs Malawian maize (failure)
Nepal, Rwanda, Ethiopia

Manufacturing % of GDP

Low & middle income

Nepal

Rwanda

Ethiopia

Digitalisation and manufacturing in LLDCs

- Banga and te Velde (2018): digitalisation is opp and threat to manufacturing-led development
- LLDCs face a digital divide (less internet penetration, less use, and fewer benefits)
- If LLDCs do not respond, it will lose manufacturing or never attract it
- Two solutions:
  - Build industrial capabilities in window of opportunity
  - Prepare / targeted action for a digital future

Cost of operating robots to become cheaper than labour for some tasks but inflexion point later in poorer compared to e.g. US
Digital technology supports manufacturing value chains

Hawassa Industrial Park, Ethiopia

A-Z factory, Arusha, Tanzania
Cloudfactory in Nepal

- Multinational digital firm operating from Nepal, it has 2,000 well-paid jobs worldwide (2018), with around 1,300 workers in Nepal.

- Provides ICT business processing outsourcing: digital labour

- Digital technology can provide a lifeline and a link to the global economy for some of the most remote / landlocked places in the world if they have appropriate skills and internet access.
POLICY FRAMEWORK IN A DIGITAL ECONOMY

- Digital technologies
  - Production (e.g. CNC, CAD)
  - Transaction and distribution (e.g. digitalised customs, platforms)

- Government policies
  - Building digital capabilities
  - Competitiveness
  - Inclusive digital change

- Manufacturing firm capabilities
  - Digital capabilities
  - Other firm capabilities (e.g. managerial skills)
Trade costs and industrialisation in Rwanda

→ International support mechanisms such as TMEA

→ But also requires industrial capabilities
Complementary policy
Source: Booth and Calabrese (2018)

• The National Strategy for Transformation (2017) commits Rwanda to generating 214,000 decent and productive jobs per year over the next seven years

• Rwanda to show commitment to industrialisation by:
  – **Specialising wisely**, incl. commercialised smallholder agriculture and manufacturing of well-chosen ‘niche’ products that are in growing demand in global markets
  – **Clustering new industries** in specialised zones
  – **Developing the country’s own private sector** in partnership with suitable foreign anchor firms
  – **Steering implementation**, with both adequate coordination authority and sufficient capacity to respond to market opportunities and the needs of firms
<table>
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<tr>
<th>Functional area</th>
<th>Performance expectations</th>
<th>Expert score of conduct and performance</th>
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<tbody>
<tr>
<td><strong>Quality industrial policy process</strong></td>
<td>Effective lead agency</td>
<td>Ethiopia: 5</td>
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<td>Robust, inclusive process of formulating and implementing industrial strategies</td>
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<td>Monitoring of implementation</td>
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<td><strong>Conducive trade rules and trade facilitation</strong></td>
<td>Sound tariff regime</td>
<td>Ethiopia: 2</td>
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<td>Active support for exporters</td>
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<td>Developing trade standards</td>
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<td>Efficient port procedures</td>
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<td><strong>Provision and regulation of Special Economic Zones, industrial or clusters.</strong></td>
<td>Efficient legislation</td>
<td>Ethiopia: 4</td>
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<td>Coordinated and speedy action around zones</td>
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<td><strong>Effective investment facilitation, including aftercare</strong></td>
<td>Clarity on roles, responsibilities and mandates of EPZAs, government ministries and IPAs</td>
<td>Ethiopia: 4</td>
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<td>Identification of suitable investors</td>
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<td>Active engagement with firms</td>
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<td>Supporting firms in-country</td>
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<td><strong>Local capability building (for local content or national capability acquisition)</strong></td>
<td>Capacity building programmes (skills and technology development in tandem with private sector)</td>
<td>Ethiopia: 2</td>
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<td>Local content unit with clear negotiation strategies</td>
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<td><strong>Supportive infrastructure planning</strong></td>
<td>Prioritisation of infrastructure needs of manufacturers</td>
<td>Ethiopia: 3</td>
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<td>Efficient port/airport handling</td>
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<td><strong>Learning with the private sector to address initial and emerging constraints</strong></td>
<td>Trust-based relationships, feedback mechanisms</td>
<td>Ethiopia: 2</td>
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<td>Mechanisms that hold government to commitment</td>
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<td><strong>Selective, conditional support to building firm capabilities (including finance)</strong></td>
<td>Banking system that supports industrial priorities</td>
<td>Ethiopia: 2</td>
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<td>Mechanisms that hold firms to commitment</td>
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US AGOA imports of textiles and garments: Ethiopia’s recent increase

Source: US International Trade Committee
Fostering innovation and ET: Implications at country and international levels

• Innovation and economic transformation are long term processes that required focused attention

• Landlockedness can be tackled by:
  – Integration and reduction in trade costs
  – Embracing and targeting a digital economy
  – Quality of industrial policy (eco-systems, innovation systems)

• International support for: infrastructure (IT, trade-related infra is complement to eg AfCFTA), financing instruments, digital co-operation, and co-ordination.
Shaping policy for development