Some thoughts on industrial development and Uganda’s export performance

Klaus Friesenbichler (WIFO)
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Past development paths
Development challenges

Almost all countries follow a broadly similar pattern of structural change.

As economic development gets under way, the share of agriculture in national employment and value added falls, and there is a rapid increase in the share of manufacturing and services.

The resource reallocation process associated with structural change shifts economic activities from agriculture to industry and services.

Cit. ECR 2013, p9
Manufacturing shares

Sample: 164 countries (UN)
Period: 1960-2010
Source: ECR 2013, p51

NB: EU 28: Aggregate without LUX, CYP, MLT; EU North West: AUT, BEL, GER, DEN, FIN, FRA, GBR, IRE, NDL, SWE; EU East: BGR, CZE, EST, HUN, LTU, LVA, POL, ROM, SVN, SVK; EU South: HRV, ESP, GRC, PRT, ITA
Source: UN National Accounts Main Aggregates Database (in Peneder, 2014)
Policy documents on manufacturing
Agriculture and Service Share

Sample: 164 countries (UN)
Period: 1960-2010
Source: ECR 2013: p 51
First take-aways

- Historically, industrialisation has been an important element of economic development processes

- Policy focus on manufacturing
  - "Hump shaped" relationship with ec. development
  - Even though they are declining in both catching-up and developed economies

- ... but what about Services?
  - Also complementing manufacturing

- Shares, not output (agriculture!)
  - I.e., the relative importance of agriculture is declining, not output
Innovation and diversification
Innovation & Diversification

- Two related, yet different concepts
- **Innovation** is about doing things differently
  - ... new products, processes, marketing strategies or organizational forms.
  - ... within existing firms/industries, or by entrants
- **Diversification** refers to a greater variety of ‘tasks’
  - Across all sectors (broadening), or within existing sectors (deepening)
- Benefits are obvious
  - As societies become wealthier, they use more technology and exhibit more diversified structures
Some take-aways from the innovation literature

- Everybody wants change, but nobody wants to change
  - Innovation drives structural change, which generates winners and losers
  - No innovation → standstill
  - Few firms are drivers

- Most (many) firms do not innovate. Everywhere.

<table>
<thead>
<tr>
<th>Country</th>
<th>Non-Innovative Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>33%</td>
</tr>
<tr>
<td>Austria</td>
<td>41%</td>
</tr>
<tr>
<td>UK</td>
<td>40%</td>
</tr>
<tr>
<td>Spain</td>
<td>64%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>25%</td>
</tr>
<tr>
<td>Norway</td>
<td>42%</td>
</tr>
<tr>
<td>Serbia</td>
<td>58%</td>
</tr>
<tr>
<td>Hungary</td>
<td>74%</td>
</tr>
</tbody>
</table>
Diversification

- **Unrelated production variety:**
  - Resilience, in particular in economic crisis

- **Overcoming ‘relatedness’ or ‘path dependence’**
  - Relatedness is a predictor of specialisation patterns
  - Both existing and potentially evolving; also potentially reinforcing persistency in structures

- **Knowledge and capabilities** help escaping predetermined development paths

- **External knowledge** can strengthen domestic capabilities
  - Spillovers are important: the type of inflow matters
Not only different activities, but sophistication

Hausmann and Rodrik, 2006

- I.e. diversity alone is potentially insufficient
  E.g., if it focuses on easy-to-reproduce, standardised products

- Economic development is reflected by sophistication of production structures

Sophistication of export portfolios

- For each internationally traded product we compute a GDP p.c. weighted average of countries that export that good

- Income-productivity level that corresponds to export basket
“Poor countries trade poor countries’ goods”

The bulk of int’l trade occurs within the triade

One Implication: Technology is a door opener
Increasing sophistication in East Africa

Source: WIFO calculations, BACI data
Ugandan exports have steadily increased since the mid 1990s.

- But not quite as much as in KE or TZ.

Source: WIFO calculations, BACI data
And exports have diversified since 1995

Source: WIFO calculations, BACI data
Uganda’s most traded goods

- **Imported goods:** oil, medication, wheat, palm oil, vehicles and technical equipment
  - Largely stable over time

<table>
<thead>
<tr>
<th>HS6</th>
<th>Name</th>
<th>Share 2002</th>
<th>HS6</th>
<th>Name</th>
<th>Share 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Coffee, tea, mati and spices.</td>
<td>29%</td>
<td>71</td>
<td>Natural/cultured pearls, prec stones &amp; metals etc.</td>
<td>27%</td>
</tr>
<tr>
<td>3</td>
<td>Fish &amp; crustacean, mollusc etc.</td>
<td>18%</td>
<td>9</td>
<td>Coffee, tea, mati and spices.</td>
<td>17%</td>
</tr>
<tr>
<td>24</td>
<td>Tobacco and manufactured tobacco substitutes</td>
<td>13%</td>
<td>3</td>
<td>Fish &amp; crustacean, mollusc etc.</td>
<td>6%</td>
</tr>
<tr>
<td>71</td>
<td>Natural/cultured pearls, prec stones &amp; metals etc.</td>
<td>12%</td>
<td>24</td>
<td>Tobacco and manufactured tobacco substitutes</td>
<td>4%</td>
</tr>
<tr>
<td>6</td>
<td>Live tree &amp; other plant; bulb, root; cut flowers etc.</td>
<td>5%</td>
<td>7</td>
<td>Edible vegetables and certain roots and tubers</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: WIFO calculations based on BACI data
Manufactured exports have increased

Source: WIFO calculations based on BACI data
Price index of the overall export portfolio

Export prices have been decreasing compared to KE & TZ
  - Esp. between 1995 and 2000

At the same time …
Import prices have been increasing

Like KE & TZ
Towards export led growth in Uganda
Wrap-up

- Share dynamics of past development paths
  - Puts targets (sector shares) into perspective

- Innovation/technology is an important driver
  - Structural change (winners and losers)

- Diversification into new activities
  - “Smart specialisation” within industries, resilience economy wide
  - Uganda has gradually upgraded its export portfolio, but diversification challenges still remain
Firms/sectors may find export niche markets

The “product space” itself changes over time, and may create opportunities

Changes in the (relative) positioning may open up opportunities

I.e. current situation might change

E.g., as China advances it might (in the medium-long term) move out of certain price-quality combinations
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