Drivers of Industrial Competitiveness in Tanzania: A capability and sectoral approach

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Overview of Tanzania’s manufacturing sector

- Context:
  - Achieved macro-economic stability (control of inflation, reduction of deficit, etc)
  - Strong presence of international organisations. Yet, most emphasise health and education programmes.

- MVA as % to GDP has declined from already low 9.2% in 1990 to 7.5% in 2000

- Main industries are processed foods (account for 53% of industrial input and employs 30% of manufacturing employment), beverages and tobacco.

- Industrial activity concentrated in Dar, Arusha and Kilimanjaro areas

- Overrepresentation of family-owned microenterprises (5 or less employees) in manufacturing
MVA growth and capacity

MVA Annual Growth rate 1990-2000

- Tanzania: 5.6%
- Kenya: 3.0%
- Uganda: 8.5%
- SSA: 2.3%

MVA per capita

- SSA: 91.8 (1990), 80.7 (2000)
Manufactured export growth and capacity

Manufactured exports per capita 1995-2000

Annual growth rate in manufactured exports 1995-2000

Tanzania: 1995 - 5.50%, 2000 - 7.90%
Kenya: 1995 - -7.10%, 2000 - 7.90%
Uganda: 1995 - 5.1%, 2000 - 5.1%
SSA: 1995 - 5.1%, 2000 - 5.1%

Manufactured exports per capita 1995-2000

Tanzania: 1995 - 3.3, 2000 - 4.4
Uganda: 1995 - 2.1, 2000 - 3
The desired path: technological upgrading
The social dimension of competitiveness

**Manufacturing employment 1990-1999**
Annual growth rate in brackets

- **Tanzania**
  - 1990: 150,000
  - 1995: 160,000
  - 1999: 170,000
  - (1.03% growth)

- **Kenya**
  - 1990: 200,000
  - 1995: 200,000
  - 1999: 210,000
  - (1.76% growth)

**Annual manufacturing wages (US$)**

- **Tanzania**
  - 1990: 298.3
  - 1995: 229.2
  - 1999: 322.5

- **Kenya**
  - 1990: 1,604.90
  - 1995: 1,453.30
  - 1999: 2,227.50
The productivity gap in manufacturing

Source: UNIDO, Industrial Statistics 2002
Economic Arguments for Tanzania’s underperformance in manufacturing

• **Argument 1:**
  – Tanzania’s private sector does not have the capabilities (i.e. skills, technology) to take advantage of sectors of comparative advantage (e.g. agro-processing industries)

• **Evidence:**
  – The inability to transform agricultural inputs in basic agro-processed products has led to post harvest losses of around 25%-40% in the fruit and fish industries
  – Tanzania has a positive trade balance in unprocessed food exports and a negative trade balance in processed food exports
Figure. Changes in the share of food exports in total exports and in the share of processed food exports in total food exports for Tanzania and other African countries, 1995-2000

- **Share of food exports in total exports**
  - S Africa 1995 (1,790)
  - Zimbabwe 2000 (262)
  - Zimbabwe 1995 (294)
  - S Africa 2000 (1,724)

- **Share of processed food exports in total food exports**
  - Mauritius 1995 (437)
  - Kenya 1995 (931)
  - Kenya 2000 (878)
  - Uganda 1995 (470)
  - Uganda 2000 (207)
  - Tanzania 1997 (290)
  - Tanzania 2000 (306)
  - Malawi 1995 (79)
  - Malawi 2000 (98)

Bubble size indicates the value of food exports (US$ million).
Capacity and upgrading in the fruit industry

Bubble size indicates the value of fruit and nut exports (US$ million)

- Kenya 1995 (131)
- Kenya 2000 (177)
- Zimbabwe 2000 (42)
- Zimbabwe 1995 (41)
- Tanzania 1997 (75)
- Tanzania 2000 (91)
- Mozambique 1995 (15)
- Mozambique 2000 (42)
- Malawi 1995 (11)
- Malawi 2000 (10)
- Uganda 1995 (19)
- Uganda 2000 (10)
Capacity and upgrading in the fish industry

Bubble size indicates the value of fish exports (US$ million)

Share of fish exports in total exports

Kenya 2000 (39)
Mauritius 2000 (38)
Tanzania 2000 (74)
Mozambique 2000 (74)
Mauritius 1995 (36)
Kenya 1995 (35)
Tanzania 1997 (60)
Mozambique 1995 (81)
### Tanzania’s trade balance for selected food industries (US$ million 1995, 2000)

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<tbody>
<tr>
<td>Fish</td>
<td>57.7</td>
<td>73.9</td>
<td>66.9</td>
<td>85.6</td>
<td>214.1</td>
<td>202.3</td>
</tr>
<tr>
<td>Fruit and nuts</td>
<td>2.3</td>
<td>0.5</td>
<td>-1.1</td>
<td>-0.7</td>
<td>-64.6</td>
<td>-61.2</td>
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<td>Total food</td>
<td></td>
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**Unprocessed**

**Processed**
Differentials in productivity and wages for the Fish and fruit industries (US$)

Productivity differentials, US$ (relative to average productivity in manufacturing)

Wage differentials, US$ (relative to average wages in manufacturing)
The leather value chain and Tanzania’s performance (US$ million, 2000)
Economic Arguments for Tanzania’s underperformance in manufacturing

- **Argument 2:**
  - Trade liberalisation and regional integration has not triggered industrial growth.

- **Evidence:**
  - Manufactured export performance in EAC and SADC has been disappointing.
  - More worrying, trade agreements have reinforced Tanzania’s role as exporter of primary and very low added manufactures. This is more significant in SADC given the differences in the sophistication and maturity of members’ manufacturing sectors.
Manufactured export performance in EAC

- Uganda 1995 (7)
- Tanzania 1997 (9.3)
- Tanzania 2000 (16.3)
- Uganda 2000 (5.9)
- Kenya 1995 (462)
- Kenya 2000 (315.2)

Bubble size indicates total manufactured exports to EAC (US$ million)

Share of manufactured exports in total exports to EAC

Share of manufactured imports in total imports from EAC
Tanzania’s trade balance in EAC and SADC markets (1995, 2000)
Economic Arguments for Tanzania’s underperformance in manufacturing

• **Argument 3:**
  - Tanzania’s manufacturing has not plugged into global production systems, hence not benefiting from technology transfer

• **Evidence:**
  - FDI inflows remain very low (US$ 193 million in 2000)
  - Most FDI inflows in the country have not targeted the manufacturing sector (only 2-3%)

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**FDI per capita (US$)**

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<th>Country</th>
<th>1995</th>
<th>2000</th>
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<tr>
<td>Tanzania</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Kenya</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Uganda</td>
<td>6</td>
<td>10</td>
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Economic Arguments for Tanzania’s underperformance in manufacturing

• Argument 4:
  – Tanzania lacks the dynamic technology-based SMEs that undertake innovation and demand highly qualified staff.

• Evidence:
  – Tanzania counts with few growth-oriented SMEs (which are often run by non-Africans) and many survivalist microenterprises.
  – R&D financed by productive enterprises is nil.

THIS DOES NOT MAKE TANZANIA DIFFERENT FROM MOST COUNTRIES IN SUB-SAHARAN AFRICA
IMPLICATIONS FOR POLICY:
WHERE CAN AFRICAN COUNTRIES START?

1. Defining a country’s INDUSTRIAL VISION (short, medium and long term goals), based on an thorough industrial assessment using benchmarking exercises to:
   - Find major bottlenecks to industrial activity
   - Find competitive strengths to be exploited (e.g. low wages, high skill level)
   - Identify sectors with growth potential (‘picking winners’)

BUT WHY IS AN INDUSTRIAL VISION SO IMPORTANT?
   a) It helps developing countries define the kind of technology and skills to be developed, and FDI to be attracted
   b) Capability building is faster and more cost-effective
2. Design & implementation of POLICY TOOLS to achieve the industrial vision

- **Industrial policy**
  Licensing and other requirements; competition policy; ownership policy; corporate tax rates

- **Technology policy**
  Technology licensing; tax regime for R&D activities; technology finance; technology institutes- industrial sector linkages; IPR regime

- **Trade policy**
  Restrictions (tariff bands and average tariff rates); customs administration (efficiency and speed); access to world-price inputs for export activity; export taxes or incentives

- **FDI policy**
  Restriction on investment; costs of entry and doing business (legal & bureaucratic barriers); special incentives for investors
CAN SUCCESSFUL EAST ASIAN POLICIES BE REPLICATED IN AFRICA?

• They can but success is unlikely to occur as the international context has changed:
  – Competition is much tougher today
  – There are new rules of the game (e.g. WTO)
  and SSA’s capability base is lower than EA’s in the past

• For SSA, it is therefore better to learn from PRINCIPLES rather than particular POLICIES
  – EXPORT ORIENTATION (CONSENSUS)
  – ROLE OF THE GOVERNMENT ON COMPETITIVENESS (MORE CONTROVERSIAL)