Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

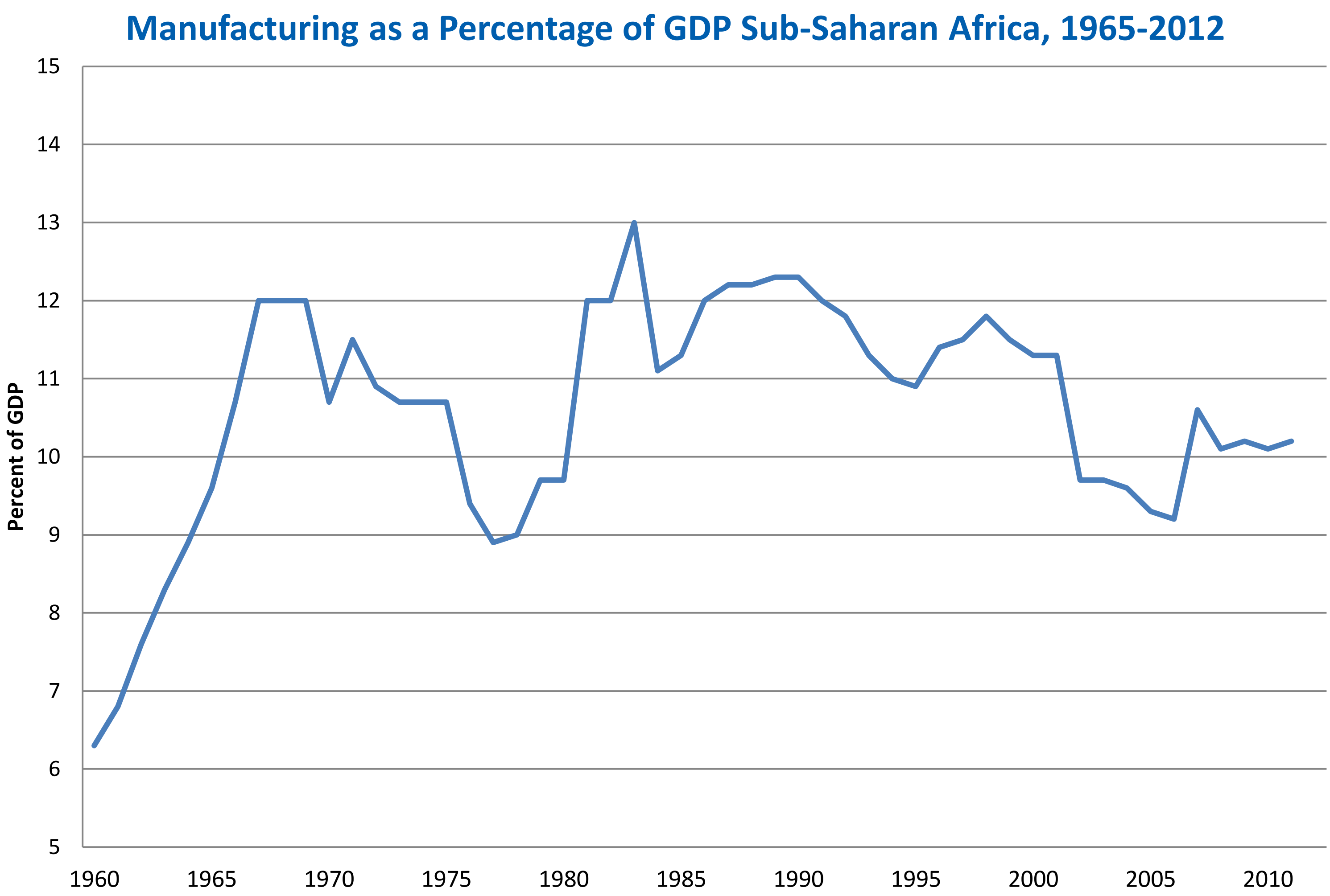
UNU-WIDER
Think Development – Think WIDER

Made in Africa

Carol Newman
Professor in Economics, Department of Economics, Trinity College Dublin
Non-resident Senior Researcher, UNU-WIDER

Ending Up Where it Started

Africa has deindustrialized since the 1980s



Africa's Deficit in Manufacturing

	Manufacturing Value Added Share of GDP 2010 (%)	Manufacturing Value Added Per capita 2010 (USD 1,000)	Manufacturing Exports Share in Total Exports 2010 (%)	Manufacturing Exports Per capita 2010 (USD 1,000)
SSA Average	7.0	36.7	30.0	61.8
Developing Countries Average	21.0	400.2	74.0	579.6

- Manufacturing share is one third of the average for all developing countries.
- Manufacturing output per capita is about 10% of the global developing country average
- Share of manufactured exports in total exports extremely low
- Manufactured exports are about 10% of the developing country average

Why does industry matter for Africa?

Industry matters for growth

- Large differences in output per worker across sectors in SSA
- Substantial growth payoff when resources are moved from lower productivity to higher productivity sectors
- In SSA the movement has been from low productivity agriculture to slightly higher productivity service sector jobs
- Average labour productivity in manufacturing is more than six times that in agriculture
- Great potential for within-sector (and within-firm) productivity gains in the industrial sector

Why does industry matter for Africa?

Industry matters for creating good jobs

- 2013 unemployment rate was 7.6% in SSA
- Not so severe… but most jobs are poor quality
  - 75% of workers in SSA are in vulnerable jobs (ILO)
  - Household enterprises are formed due to lack of any alternative job opportunities
  - Offer low quality in terms of wages, benefits and job security.
- Industrial development offers a high employment, high productivity path for job creation
- This can accelerate the pace of poverty reduction.

Why does industry matter for Africa?

What you make matters

- More diversified production and export structures are associated with higher incomes
- Countries that produce and export more sophisticated products tend to grow faster

Economies that succeed in moving up in terms of diversity and sophistication of the manufacturing sector have greater prospects for sustained long-term growth…..

Two key questions…..

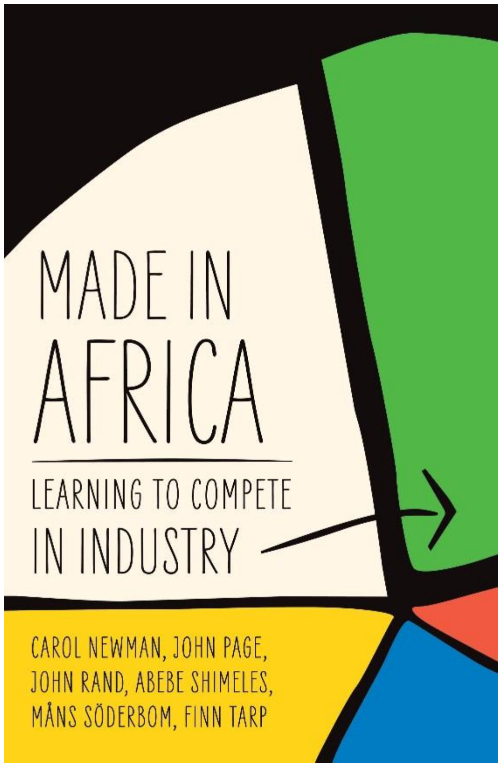
Can Africa break in?

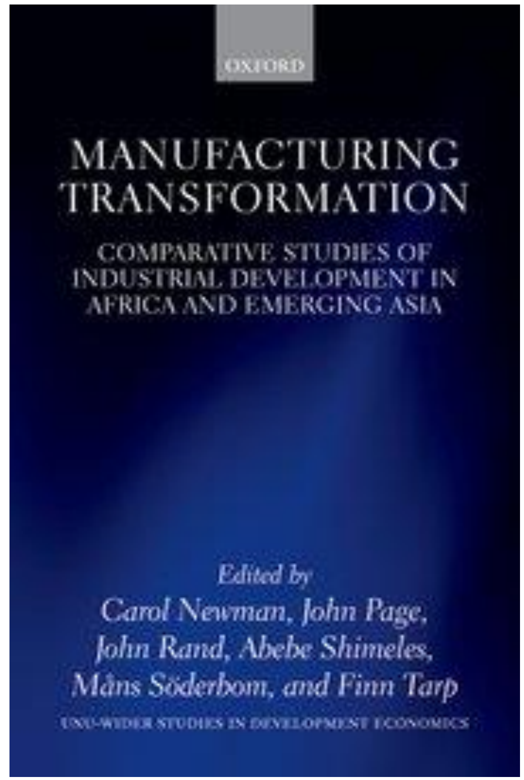
If so, how?

Learning to Compete

Collaborative research programme between UNU-WIDER, the AfDB and The Brookings Institution

See: https://www.wider.unu.edu/project/jobs-poverty-and-structural-change-africa





The practice of industrial policy (OUP)

Case studies of government-business relationships

Special Issue of Journal of African Economies

Learning by exporting

Breaking in

Opportunities for sub-Saharan Africa

1. Changing circumstances in Asia

- Rising costs in China
  - Increasing real wage – average manufacturing wage more than doubled between 2005 and 2010 and again between 2010 and 2016
- Increasing domestic demand in Asia
  - Growing population, incomes and access to credit
- Asian economies are moving up the technology ladder
  - China, Malaysia, Thailand, even Vietnam, are producing more complex products
  - Opening up an opportunity for less sophisticated producers to enter the market
- China is becoming increasingly globally engaged, particularly in Africa
  - FDI from China in 2009 was US$9.3bn

Breaking in

Opportunities for sub-Saharan Africa

2. Trade in tasks

- Production processes in manufacturing can be decomposed into a series of tasks
- Dramatic decline in transport and communications (coordination) costs over the last 20 years
- Efficient for different tasks to be located in different countries
- As much as 80% of global trade is linked to networks of multinational corporations
- This has great potential for late industrializers:
    - Easier to manage a single stage of production than to develop vertically integrated production
- Efficient trade logistics are crucial…..

Breaking in

Opportunities for sub-Saharan Africa

3. Industries without smokestacks

Industry broadly defined as sectors that:

- Benefit from technological change and productivity growth
- Exhibit tendencies for scale and agglomeration
- Can produce higher productivity jobs

Two key opportunities for SSA:

- Tradable services
- Agro-industrial value chains

Breaking in

Opportunities for sub-Saharan Africa

Two necessary conditions:

1. Keeping labour costs low
2. Increasing firm-level productivity

Three drivers of firm-level productivity

Exports and competition

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

Firm capabilities

- The tacit knowledge and working practices that affect both productivity and quality
- Capabilities can spill over to other firms through supply chain links

Agglomerations

- Industrial clusters confer significant productivity gains
- Virtually everything we know about agglomeration economies comes from middle and high income countries

L2C: Learning to Compete

Collaborative research programme between UNU-WIDER, the AfDB and The Brookings Institution

Three track approach

- Detailed case studies of industrialization and the evolution of public policies
- Econometric analysis of the stock of firm level surveys
- Qualitative surveys of FDI firms and linked domestic firms.

Eleven countries

- Nine African : Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Senegal, Tanzania, Tunisia and Uganda.
- Two Asian: Vietnam, Cambodia.

National researchers

- Teamed with global experts

Exports and productivity

Cambodia, Ethiopia, Mozambique, Senegal, Tunisia, Vietnam

Confirming expectations

– More productive firms select into exporting

– Large (and foreign) firms are more likely to export

– Exporting further raises productivity

– Learning effects are stronger in
  - Domestically owned firms
  - More sophisticated products
  - Higher income (or more distant) markets
  - The initial years of exporting

Some surprises

– Many African exporters are "born global" (both FDI and local)

– Few firms "learn to export" over time (few partial exporters and fewer switchers)

– Export activity is highly persistent

– The productivity premium is higher with low national (or sectoral) export participation rates

Firm capabilities

Cambodia, Ghana, Kenya, Ethiopia, Mozambique, Uganda, Vietnam

Africa lacks capable mid-sized firms (50-70 workers)

- Management of a growing labor force is a major constraint

Firms learn capabilities from exporting

Firm to firm knowledge transfers are an important source of capabilities

- FDI is a major source of higher capabilities
- Vertical linkages along supply chains are important for learning

Agglomeration and capabilities

Cambodia, Ethiopia, Tunisia and Vietnam

Industrial clusters confer significant productivity gains

- Jobs created in clusters have additional impacts on the productivity of others
  - Firms (and workers) located in close proximity learn from each other
  - Firms in clusters benefit from a broader pool of skilled labour
  - Clusters help to link local firms with foreign firms and export markets where further learning takes place
- Localization (“cluster”) effects are strongest in lower income countries
- Large (formal) firms benefit more than small (informal) firms

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Panelists:

John Rand: *Linked-In by FDI: The Role of Firm-Level Relationships for Knowledge Transfers in Africa and Asia*

Wided Mattoussi: *Location patterns of manufacturing industries in Tunisia*

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

A strategy for industrial development

A strategy for industrial development

While some firms in some countries are competitive many others are not

– This places a premium on policies to raise firm-level productivity

Investment climate reforms are necessary – but not sufficient!

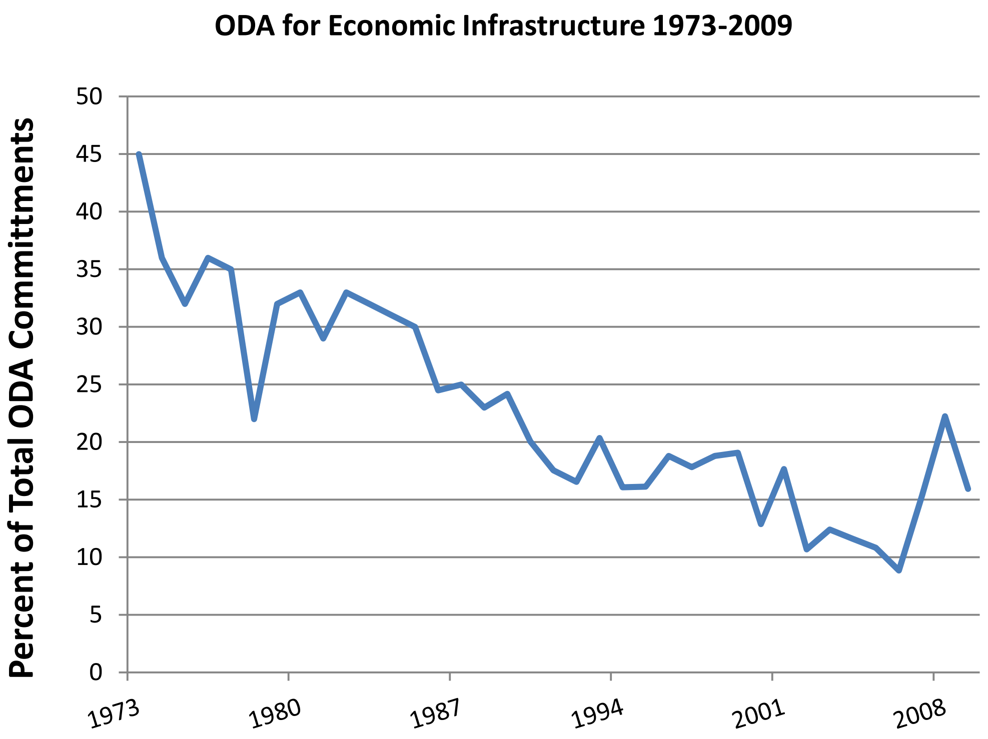
– Drivers of firm-level productivity are interdependent

Exports, geography and capabilities must be linked strategically

– They cannot be addressed piecemeal

New directions for industrial policy (1)
Reform the investment climate agenda

Focus on infrastructure and skills development relevant to industry



New directions for industrial policy (2)
Mounting an “export push”

Productivity gains but high private costs of entry

- Knowledge of potential markets is the most serious constraint for international market entry.

Entering global markets will need an “East Asian style” export push

- A broadly owned strategy and effective institutions
- Trade related infrastructure and trade logistics

Support for regional institutions and infrastructure

New directions for industrial policy (3)
Capabilities and clusters

Building Firm Capabilities

- An export push is a major source of capabilities (demanding buyers; repeated relationships)
- Build effective FDI agencies
- Strengthen domestic value chain relationships

Creating Clusters

- SEZs are a means of creating clusters
- Bring Africa's SEZs up to world class
- Strengthen the links between firms in the SEZ and domestic suppliers/purchasers

Thank you for your participation

Discussants:

Haroon Bhorat, University of Capetown

Witness Simbanegavi, African Economic Research Consortium

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Appendix

Breaking in

Opportunities for sub-Saharan Africa

3. Industries without smokestacks

- Tradable services
    - Since the 1990s global trade in services has grown faster than trade in goods
    - Service exports from developing countries have tripled in last 10 years
    - Services account for 50% of exports from Rwanda and Ethiopia; 15% from Botswana
    - Modern service exports are growing much faster than traditional service exports and will continue to grow as information and communication costs continue to fall
    - Examples: PCCI, Dakar, Senegal; Kencall
    - Africa is at an advantage:
        - Transport costs do not matter - cost differentials can be exploited
        - Sectors that require global languages (English, French, Arabic, Portuguese)
        - Opportunities in information and communication services, financial services, business services

Breaking in

Opportunities for sub-Saharan Africa

3. Industries without smokestacks

- Agro-industrial value chains
    - Horticultural production – fresh fruit, vegetables and flowers.
    - Development of cold-chain technology has made it possible to trade these ‘perishables’ across long distances
    - Packaging and preparation adds value locally and there are opportunites for lead firms that coordinate vertical supply chains
    - Examples: Kenya, Tanzania, Uganda and Ethiopia