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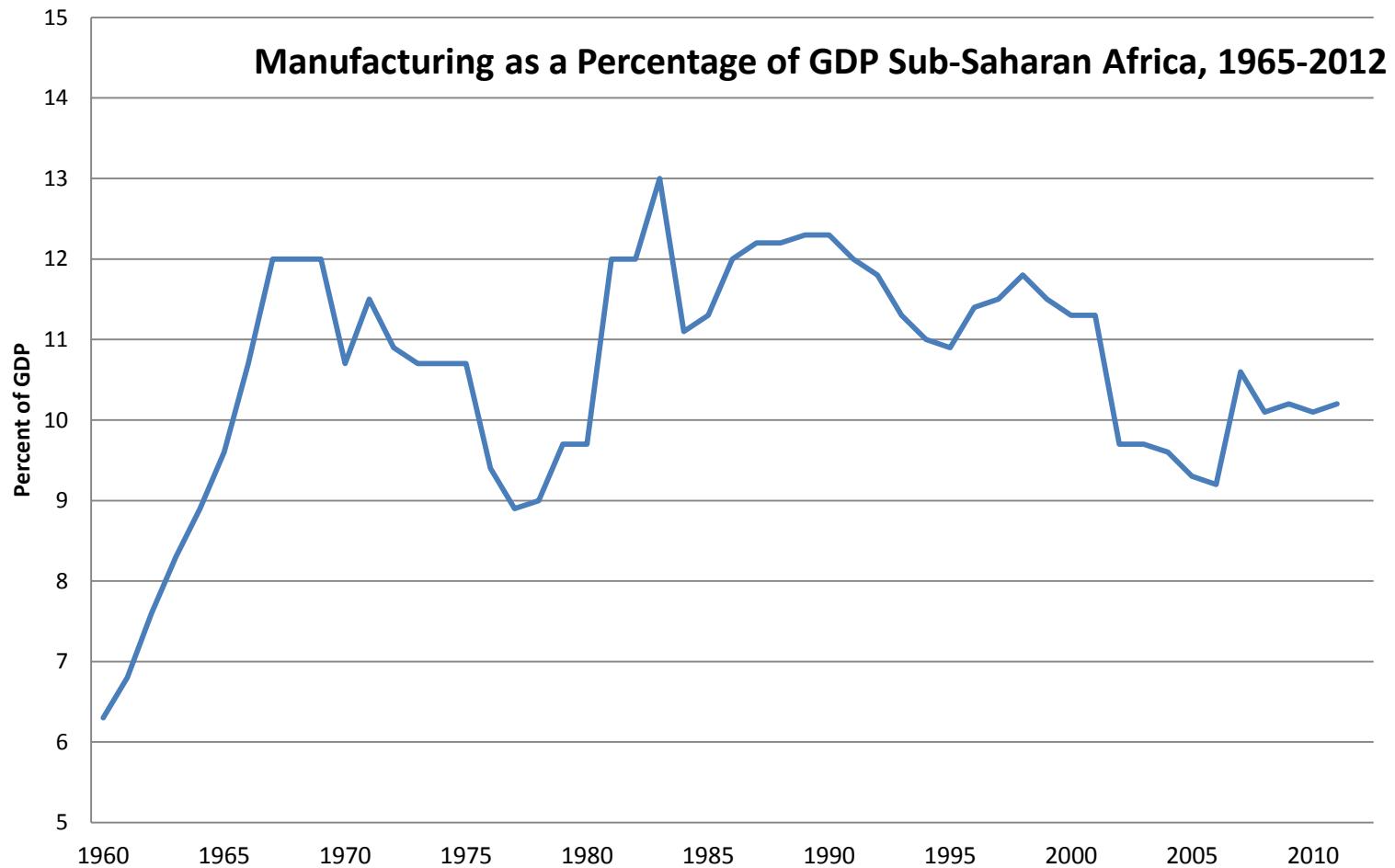
# Reversing Africa's Industrial Decline

## Some Ideas from Learning to Compete

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The Brookings Institution  
Overseas Development Institute  
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# Ending Up Where it Started

## Africa has deindustrialized since the 1980s



# Africa's Deficit in Manufacturing

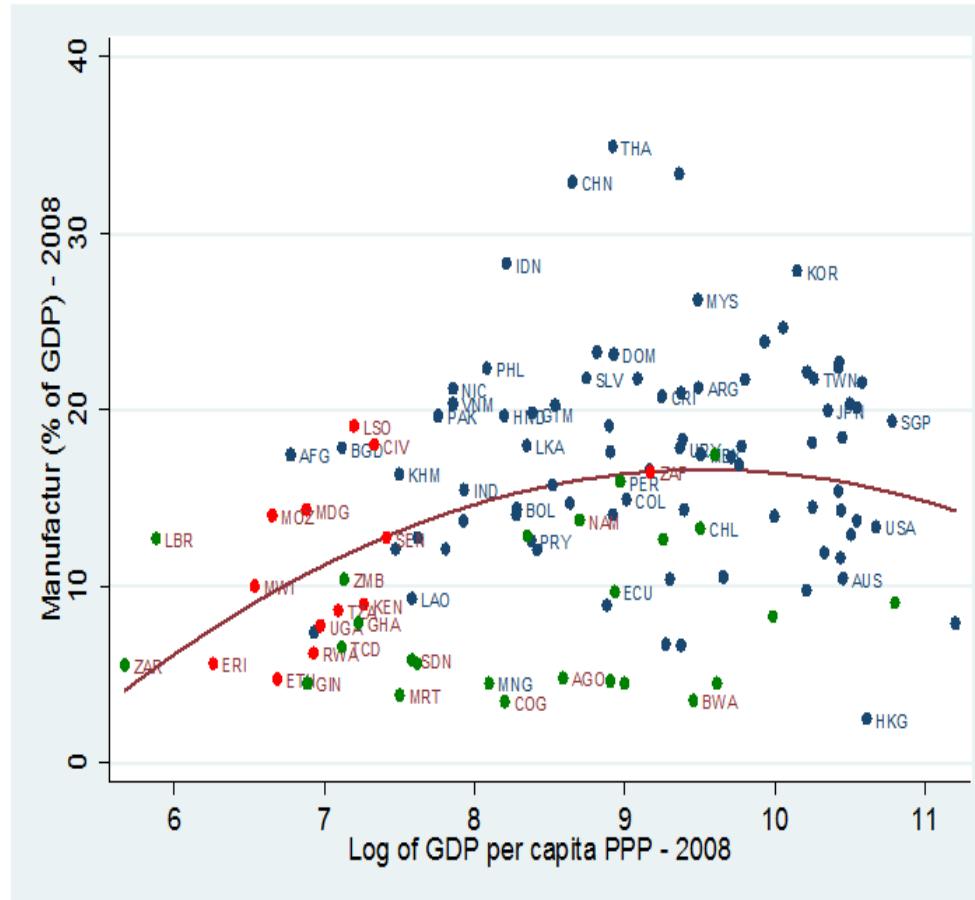
- Africa's share of manufacturing in GDP is less than half of the average for all developing countries
- Per capita manufactured exports are about 10 per cent of the developing country average.
- Africa's share of global manufacturing is smaller today than in 1980

	Mfg. Exports PC 2008 (US\$)	Growth Exports PC 00- 08 (%)	Mfg. Value Added PC 2008 (US\$)	Share of Mfg. in GDP 2008 (%)
Africa Average	49.0	2.85	138.6	9.4
All Developing Countries	487.2	10.05	412.9	21.7

# Africa's Deficit in Manufacturing

Share of Manufacturing in GDP Relative to Income Per Capita, 2008

- Only 4 of 25 economies exceed predicted values
- The fast growing economies (ETH, GHA, KEN, RWA, TZA, UGA) are all negative outliers
- Resource rich economies are extreme outliers



# Learning to Compete

- A Collaborative Research Program of The African Development Bank, The Brookings Institution, and UNU – WIDER
- Trying to Answer a Simple Question:
  - Why is there so little industry in Africa?
- Lead to two others:
  - What makes firms more competitive?
  - What makes countries more attractive to competitive firms

# 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

# The Country Comparative Framework

- Eleven Countries
  - Nine African : Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Senegal, Tanzania, Tunisia and Uganda.
  - Two Asian: Vietnam, Cambodia.
- National researchers
  - Teamed with global experts
- 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.

# 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” (few partial exporters and fewer switchers)
  - Export activity is highly persistent
  - The productivity premium tends to increase 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
  - The positive relationship between exporting and productivity is mainly due to process and quality innovations undertaken by firms
- 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 much more dense in Asia than in Africa

# Firm Capabilities: Different Neighborhoods

Vietnam:

No.	Province	Investor	Product	FDI Firm		Supplier		Customer		Competitor	
				I No.	Inputs	I No.	Products	I No.	Products	I No.	Products
1	Hanoi	Japan	Porcelain products	1	Chemical	1	Porcelain products	x	Porcelain products		
				2		2	Porcelain products	x			
				3		3	Porcelain products	x			
2	Hanoi	Japan	Furniture	4	Glass	4	Furniture	x	Furniture		
				5	Wood	5	Furniture	x	Furniture		
				6	Wood	6	Furniture	x			
				7							
3	Hanoi	Singapore	Tyres and tubes	8	Chemical	7	Tyres and tubes	x	Tyres and tubes		
				9		8	Tyres and tubes	x	Tyres and tubes		
				10	Chemical	9	x	Tyres and tubes			
4	Hanoi	China	Electrical equipment	11	Copper wire	10	Transformers	x	Transformers		
				12		11	Copper wire	x	Transformers		
5	Hanoi	Japan	Motor components	13	Inox	12	Auto assembling	x	Auto spare parts		
				14		13	Auto assembling	x	Auto spare parts		
				15	Inox	14	x	Auto assembling			
6	Hanoi	Multiple	Rubber components	16	Rubber materials	15	Rubber products	x	Rubber products		
				17	Raw rubber	16	Rubber products	x	Rubber products		
				18	Raw rubber	17	Rubber products	x	Rubber products		
				19		18					
7	Hanoi	Japan	Metal components	20	Steel	19	Locks	x	Metal products		
				21		20	Misc. mechanical products	x	Metal products		
				22	Steel	21		x	Metal products		
8	Hanoi	Taiwan	Fibre optic cable	23	Steel, printing ink	22	Antennas	x	Metal products		
				24		23		x	Metal products		
				25	Optic cable	24					
9	Hanoi	Japan	Paint	26	Optic cable	25					
				27	PP bags	26					
				28		27					
10	Hanoi	Multiple	Paint	29	Packing bags/bags	28	Auto assembling	x	Paint		
				30		29	Misc. equipment	x	Paint		
				31		30	Misc. equipment	x	Paint		
11	Hanoi	Multiple	Chemical products	32	Chemical	31					
				33		32	Concrete	x			
				34	Acid	33	Construction	x	Chemicals for construction		
12	Hanoi	Multiple	Carton products	35	Chemical	34	Concrete	x	Chemicals for construction		
				36		35					
				37	Products for packing	36					
13	Hanoi	Japan	Plastic products	38		37					
				39	Paper	38	Ammoniac	x			
				40		39		x			
14	Hanoi	Japan	Plastic products	41	Paper	40	Beer	x	Paper		
				42		41	Milk	x	Beer		
				43	Printing	42		x	Milk		
15	Hanoi	Singapore	Electrical equipment	44		43	Mechanical items	x	Printing		
				45	Electric wires	44	Plastic door	x	Mechanical items		
				46		45	Plastic door	x	Plastic products		
16	Hanoi	Singapore	Electrical equipment	47	Misc. electrical products	46	Misc. plastic products	x	Plastic products		
				48		47		x	Plastic products		
				49	Electric wires	48	Transformers	x			
17	Hanoi	Singapore	Electrical equipment	50		49		x	Electric wires		
				51	Misc. electric products	50	Transformers	x			
				52	Misc. electric equipment	51	Radius	x	Misc. electric products		
18	Hanoi	Japan	Printing products	53		52		x	Misc. electric equipment		
				54	Printing paper	53	Misc. printing products	x			
				55		54	Misc. printing products	x	Misc. printing products		
19	Hanoi	Japan	Printing products	56	Printing paper	55	Misc. printing products	x	Misc. printing products		
				57		56		x			
				58	Printing paper	57	Misc. printing products	x			

Vietnam:

Supplier Customer Competitor

No.	City	Investor	Product	FDI Firm		Supplier		Customer		Competitor	
				I No.	Inputs	I No.	Products	I No.	Products	I No.	Products
1	Nairobi	India	Packaging	1	Tissue and Hygiene products	1	Dairy/Food processing	x	Carton packaging		
2	Nairobi	Switzerland	Footwear	2	Textiles	2	Dairy/Food processing	x	Packaging		
3	Nairobi	USA	Automotive Industry	3		3	Cement	x	Food and Footwear		
4	Nairobi	UK	Pharmaceuticals	4		4					
5	Nairobi	Mauritius	Iron and Steel Industry	5		5	Steel	x	Steel		
6	Nairobi	Taiwan	Textile	6	Carton manufacturer	6					
7	Nairobi	UK	Tobacco	7	Printers	7		x	Tobacco		
8	Nairobi	Netherlands	Petroleum	8	General plastics	8	Sugar	x			
9	Nairobi	USA	Beverages	9	Misc products	9		x			
10	Nairobi	France	Cement	10		10	Beverages	x	Cement		
								x	Cement		
								x	Cement		
								x	Cement		

Note: Out of the 88 identified none refused to participate in the survey. An additional 3 FDI/MNCs were interviewed but their interlinkages were not traced.

# Agglomeration Effects

Cambodia, Ethiopia, Tunisia and Vietnam

- Broad evidence of productivity gains
  - Large (formal) firms appear to benefit more than small (informal) firms
- Localization (“cluster”) effects are strongest in lower income countries
- Where markets are poorly integrated competition offsets productivity gains
  - Prices tend to fall, reducing incentives to cluster

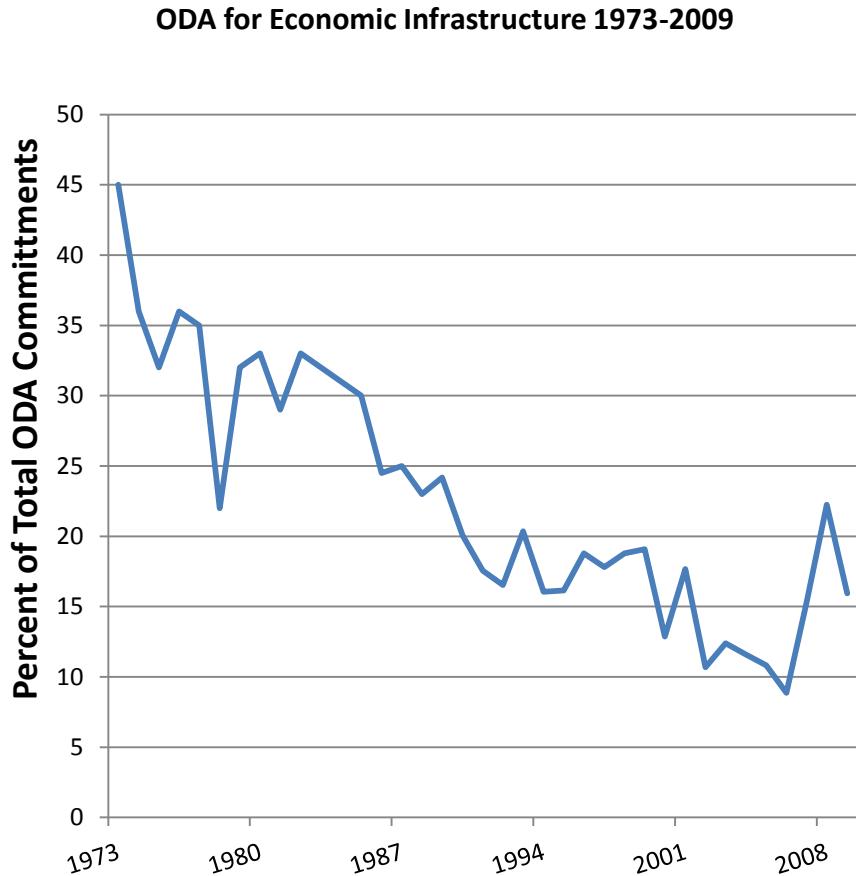
# A Strategy for Industrial Development

- Africa has a chance to break into the global market for industrial goods
  - Changes in Asia
  - Trade in tasks
  - Industries without smokestacks
- But 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

## Reform the Investment Climate agenda

- Stop *Doing* (monkey) *Business*
- Focus on infrastructure and skills development relevant to industry
- Support institutional development for FDI and SEZs



# New Directions for Industrial Policy

## 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 (leadership from the top)
  - Trade related infrastructure and trade logistics
- Support for regional institutions and infrastructure

# New Directions for Industrial Policy

## 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
  - Agglomeration economies create a collective action problem
  - 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

# An Agenda for Aid and Trade

- Coordinating trade and aid is essential
  - Aid will be insufficient but can be leveraged better
  - Trade and aid policies sometimes work at cross purposes
- Supporting an export push
  - Fix “aid for trade” and tie it to trade logistics
  - Unify and streamline trade preferences (start with AGOA and EPA)
  - Support regional economic communities through both aid and preferences

# An Agenda for Aid and Trade

- Focus “aid for trade” first on making Africa’s EPZs world class
- Develop a new “practice area” in firm capabilities
  - Management training seems to pay off
- Give African governments the policy space to take initiatives and make mistakes!



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# Thank You

Working papers at:

<http://www.brookings.edu/about/projects/africa-growth/learning-to-compete>  
[http://www.wider.unu.edu/research/current-programme/en\\_GB/L2C-2010](http://www.wider.unu.edu/research/current-programme/en_GB/L2C-2010)

And Two Shameless Book Plugs:

*Made in Africa: Learning to Compete in Industry* Brookings Institution Press

*Manufacturing Transformation: Comparative Studies of Industrial Development in Africa and Emerging Asia* Oxford University Press