Mining for Change: Natural resources and industry in Africa

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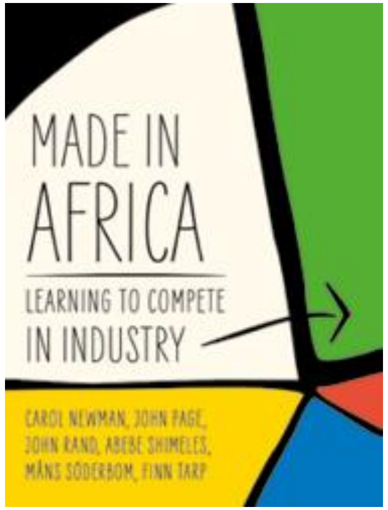
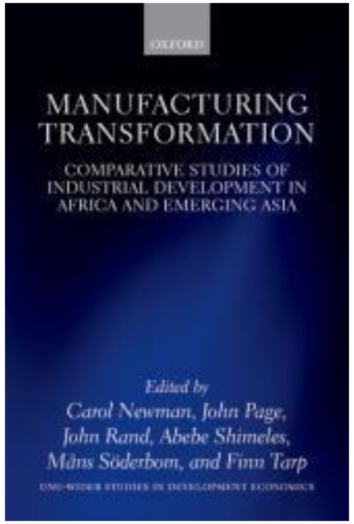
Introduction

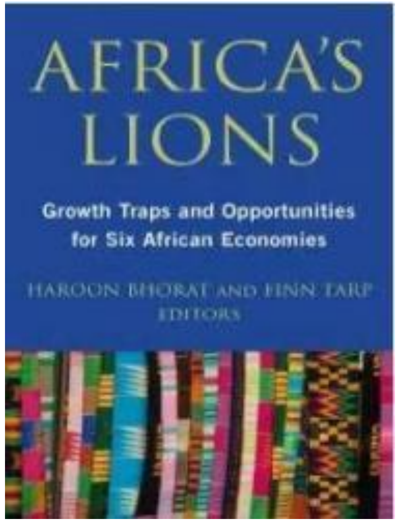
- Background
- General context
  - Research and technical cooperation
  - Structural transformation
  - Global changes
- Mining for change
  - Understanding and managing the boom
  - The role of the construction sector
  - Linking industry to the resource
- Recommendations

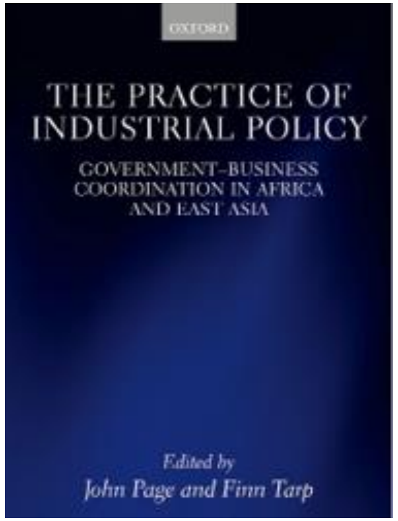
Background: Why is there so little industry in Africa?

- The Mining for Change volume last step in a major international research programme (L2C)
- Carried out by UNU-WIDER during 2010-2018 (among other projects – see Addison and Roe on Extractive Industries)
- Examples of outputs (freely downloadable)









L2C Conference – Industrial development and policy in Africa

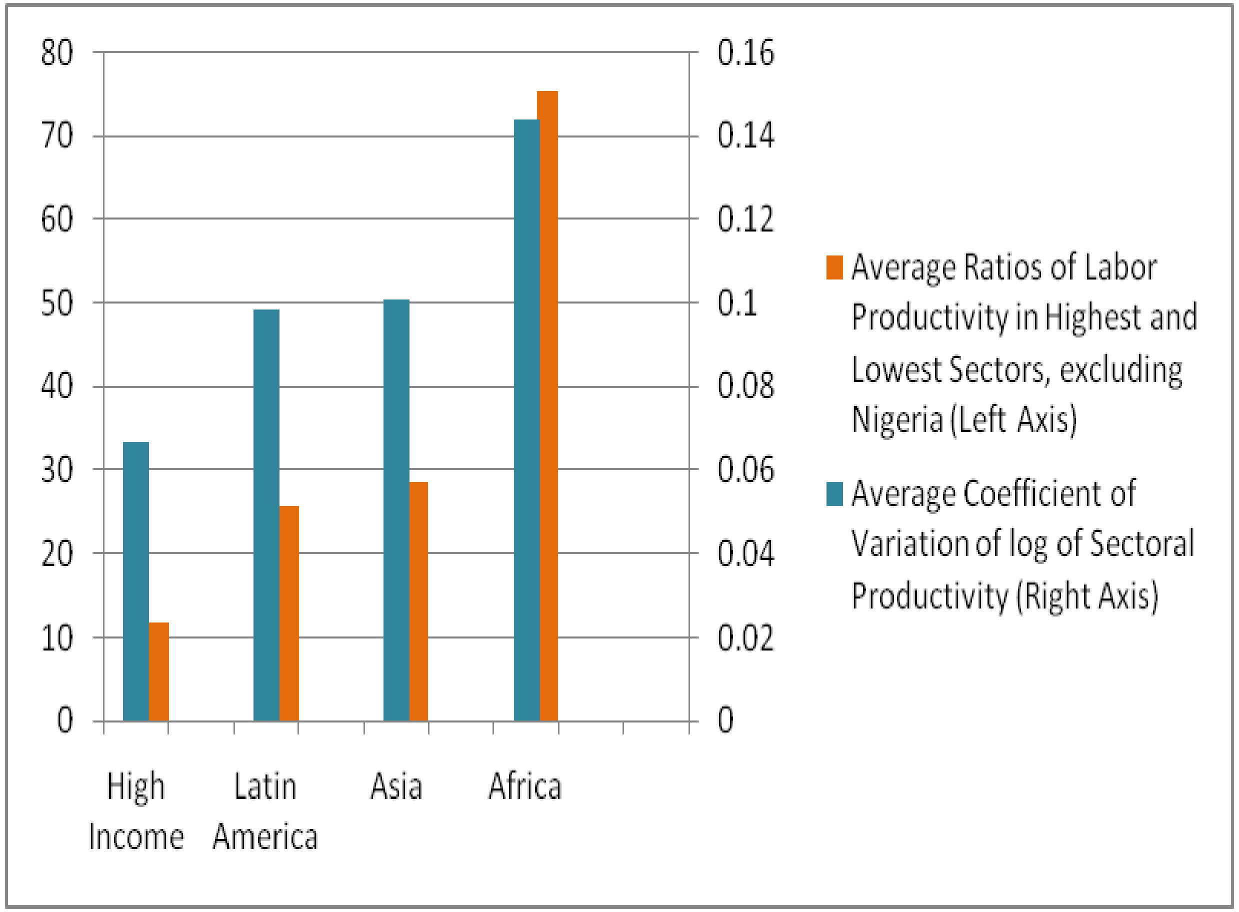
- Directorate of Economic and Development Policies, Ministry of Economics and Finance of Mozambique
- Centre for Economic and Management Studies, University of Eduardo Mondlane
- Development Economics Research Group, University of Copenhagen
- UNU-WIDER

SUPPORTED BY

- Ministry for Foreign Affairs of Finland
- Ministry of Foreign Affairs of Norway

The potential for structural change

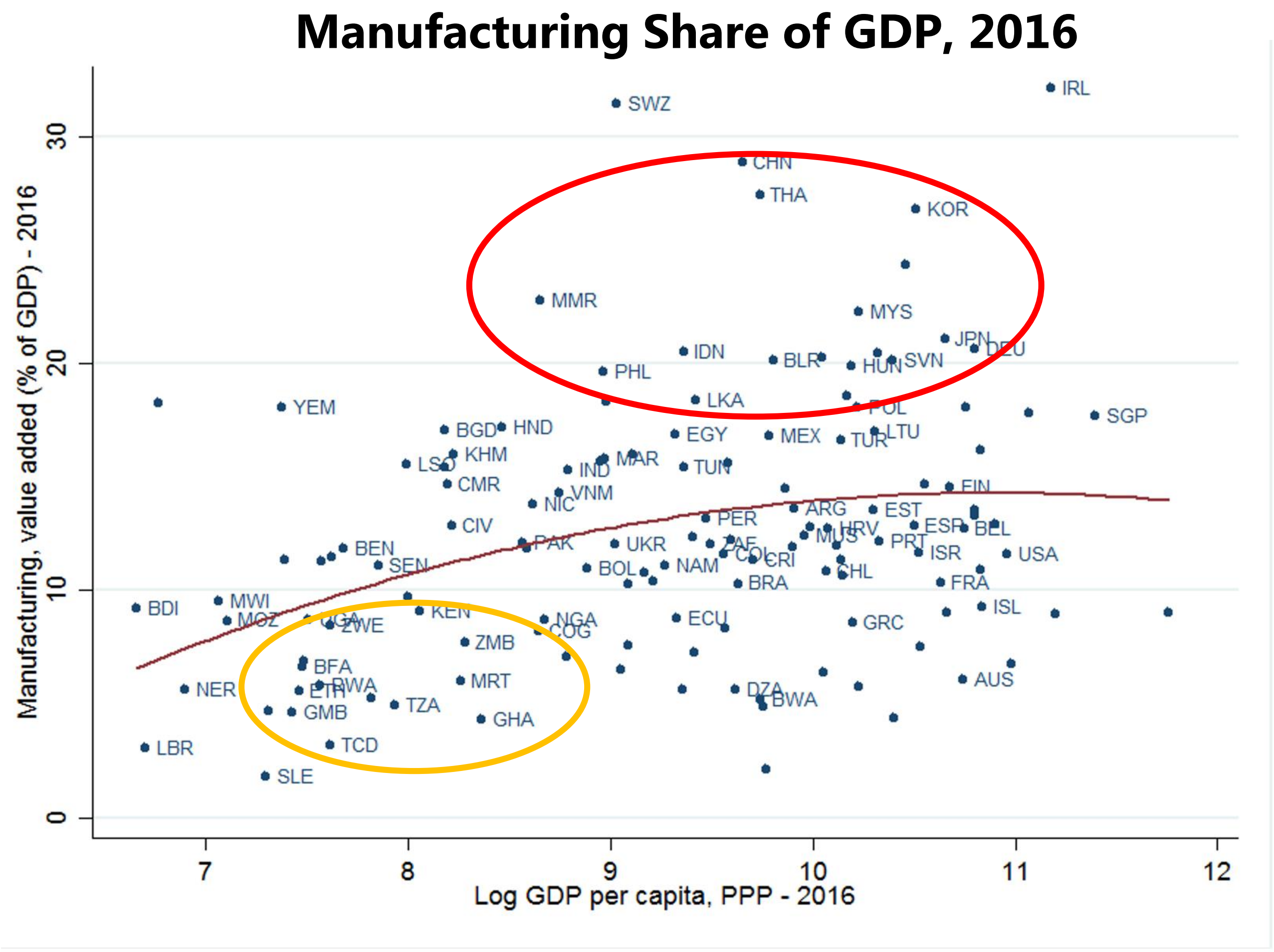
- In countries at low levels of income, productivity differences between sectors are large
  - The movement of resources from low productivity to high productivity employment drives growth
  - As incomes rise, productivity differences among sectors (and enterprises) tend to converge
- Africa has the greatest differences in productivity among sectors, and therefore the greatest potential for structural change



The Rodrik pessimism: Industry is not leading growth in Africa

- Historically, industry has led the process of structural change
  - Moving workers from the land to industry to employ unskilled workers with higher productivity
  - It has played an outsized role in East Asia

- Industry has played only a minor role in Africa's growth turn around
  - The region's fast growing economies (ETH, GHA, KEN, RWA, TZA, UGA) are all negative outliers



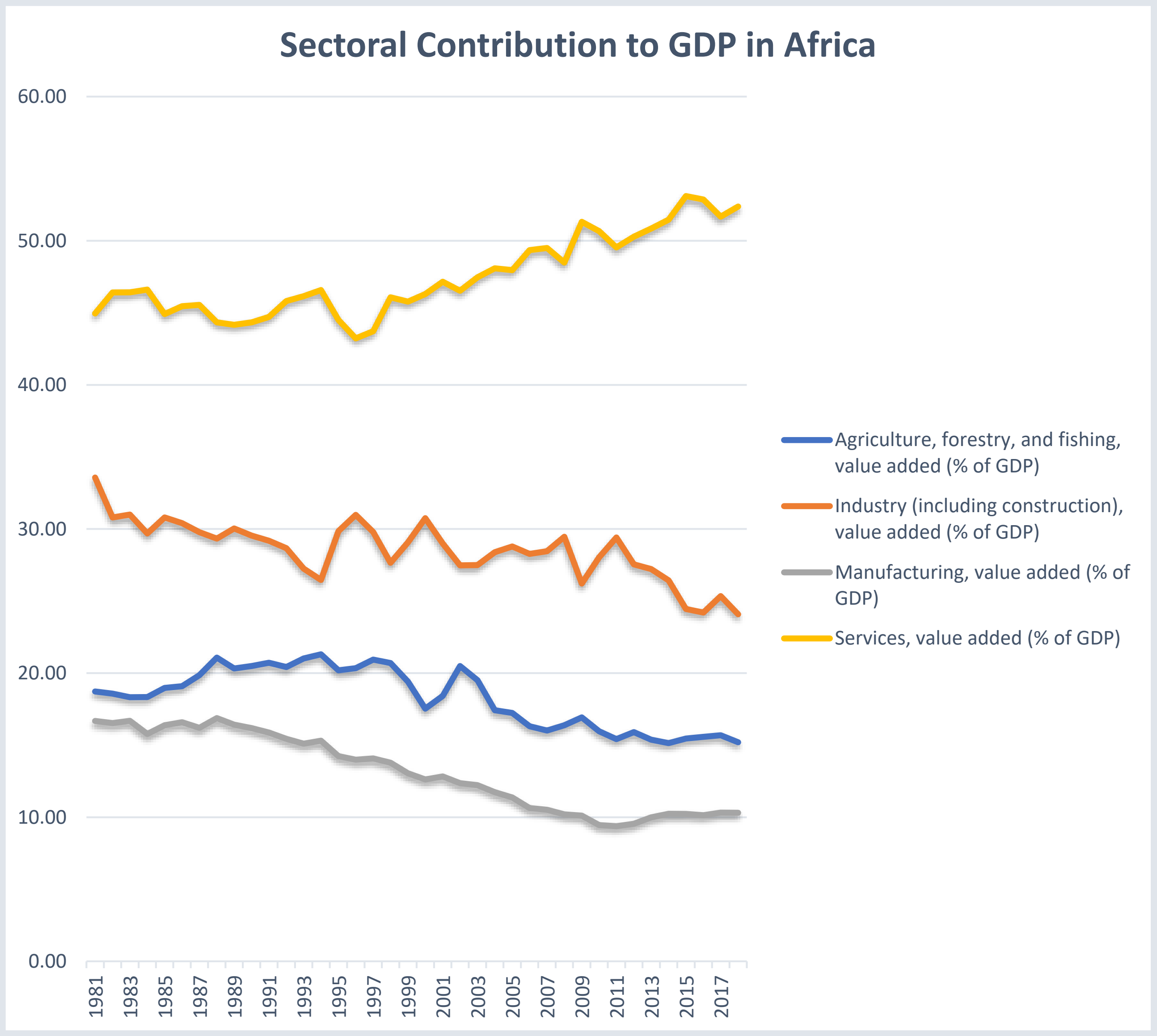
Source: Word Bank World Development Database and World Bank Africa Development Indicators

Structural transformation in Africa

- Although structural change is taking place in the region, the pace and pattern has been distinct from the historical experience of the industrialised countries and East Asia

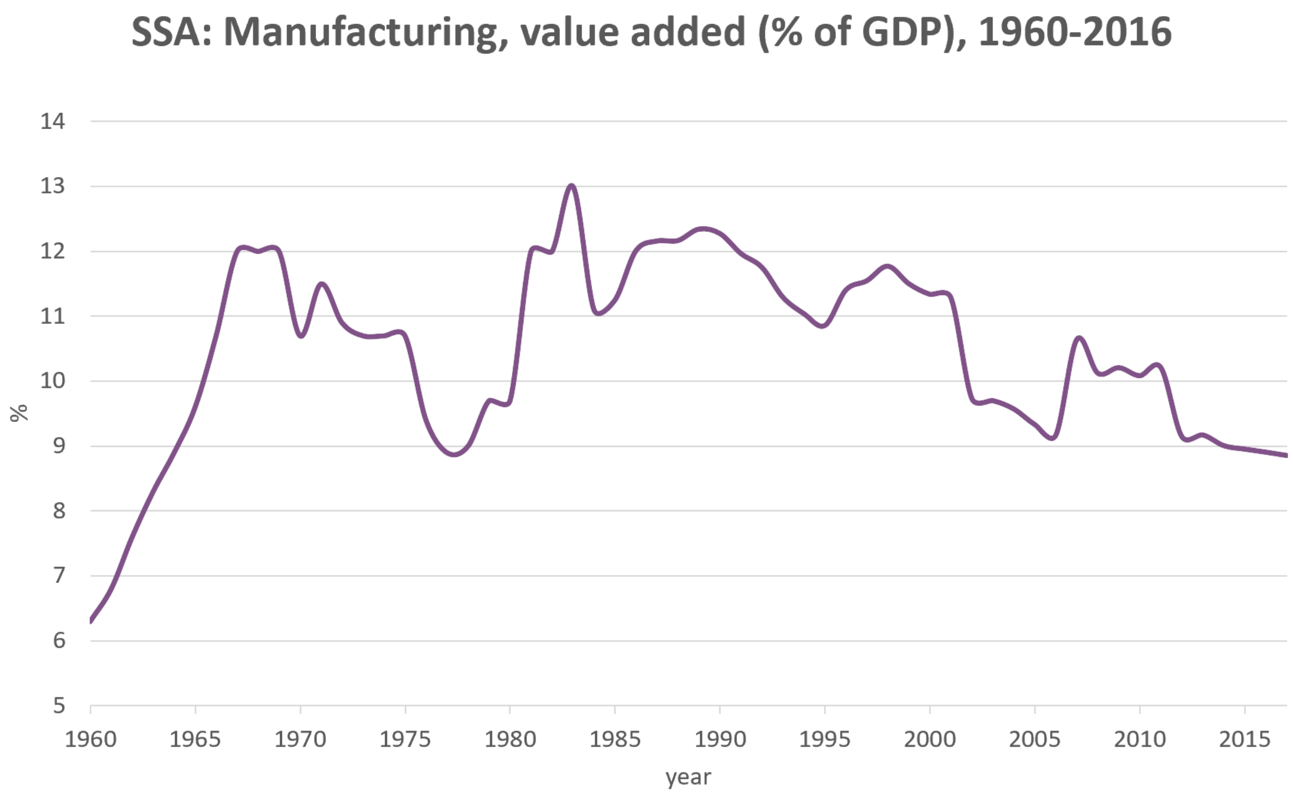
- The structural transformation trajectory of Africa has been different with services as the driver of economic growth

- Despite the evidence that some African economies have grown and diversified over the past two decades, growth in manufacturing output has been slow



Manufacturing in Africa has not grown as a share of GDP

- **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**

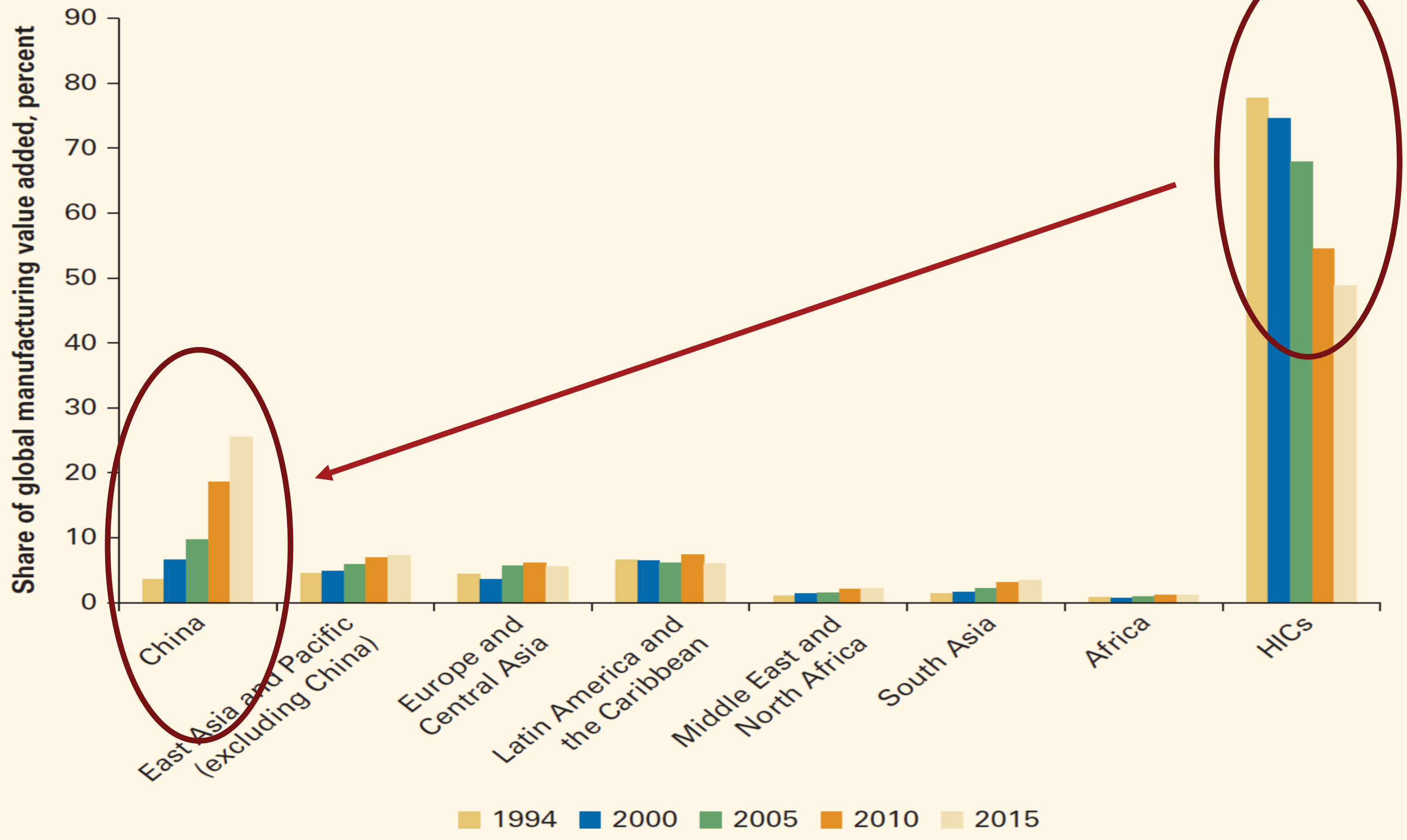


Source: Word Bank World Development Database and World Bank Africa Development Indicators. Author's calculations.
Notes: SSA excludes South Africa.

Three changes in the global economy make industrialization more difficult for Africa

1. China and East Asia dominate as manufacturing center

Share of global manufacturing value added in China, global regions, and high-income countries



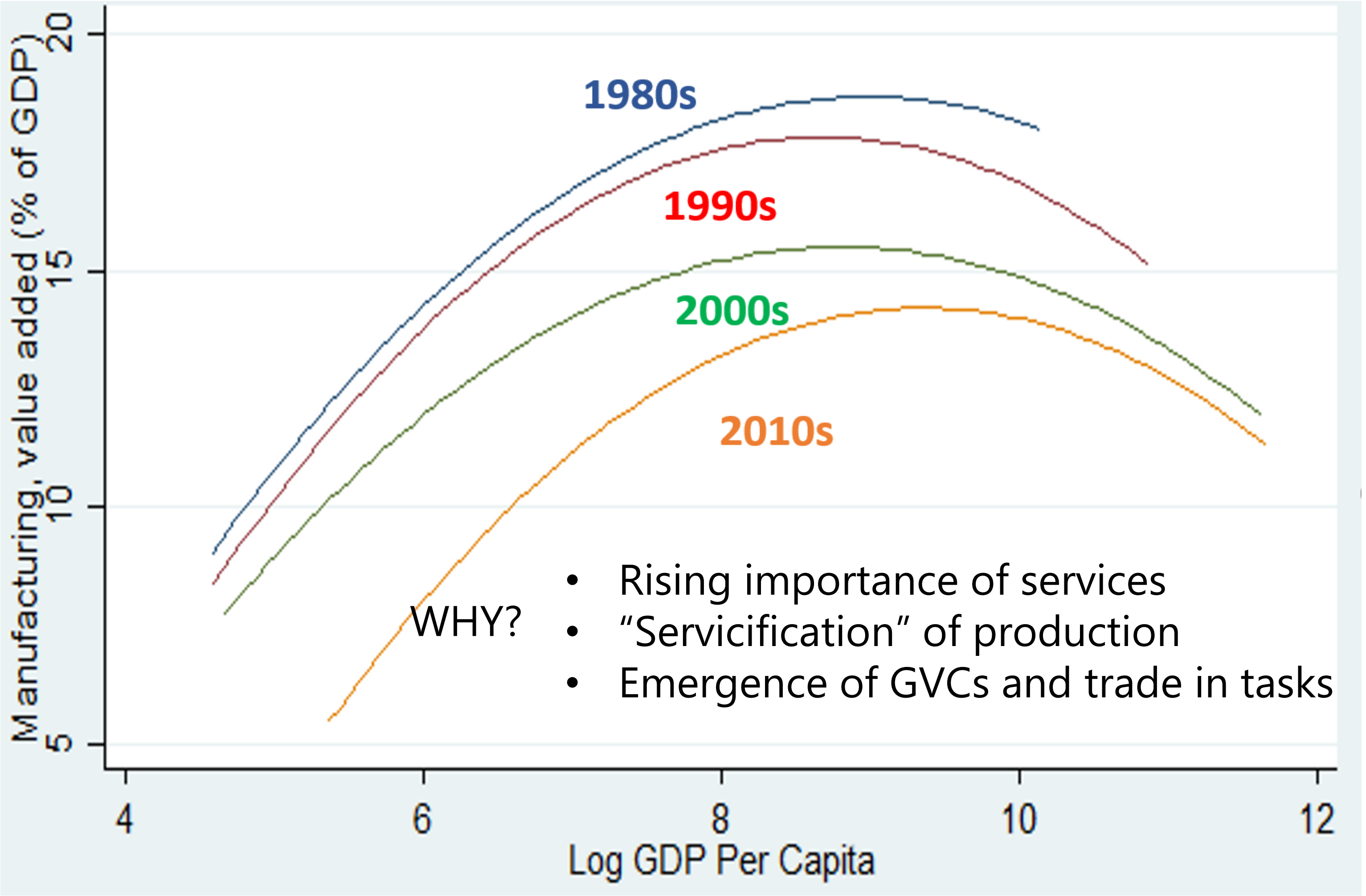
Source: World Development Indicators database.
Note: High-income countries (HICs), as defined in 1994, are those whose gross national income per capita was at least US$8,955.

Three changes in the global economy make industrialization more difficult for Africa

1. China and East Asia dominate as manufacturing centers

2. Manufacturing as a share of GDP is falling everywhere on average

Manufacturing as share of GDP on average declines over four decades

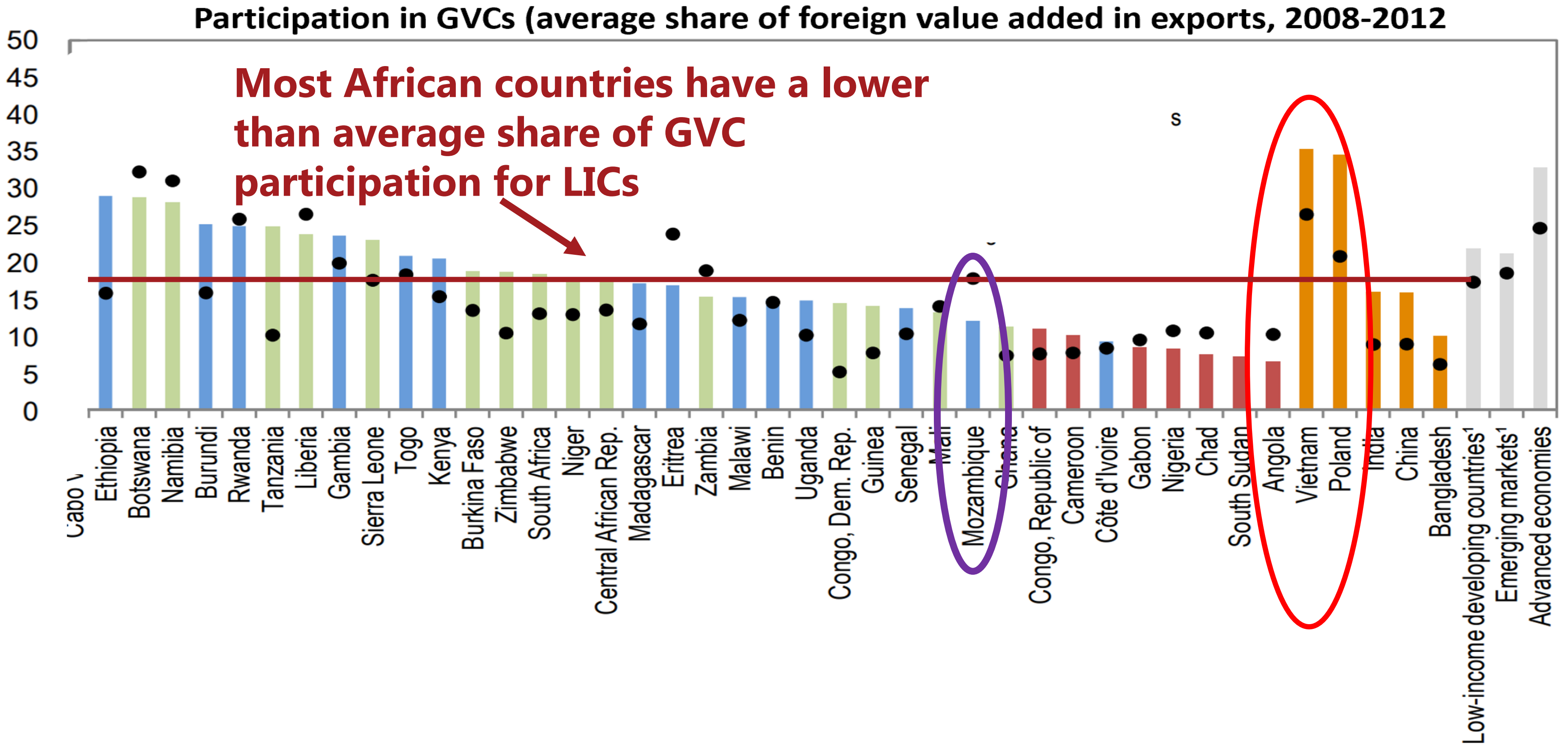


Three changes in the global economy make industrialization more difficult for Africa

1. China and East Asia dominate as manufacturing centers

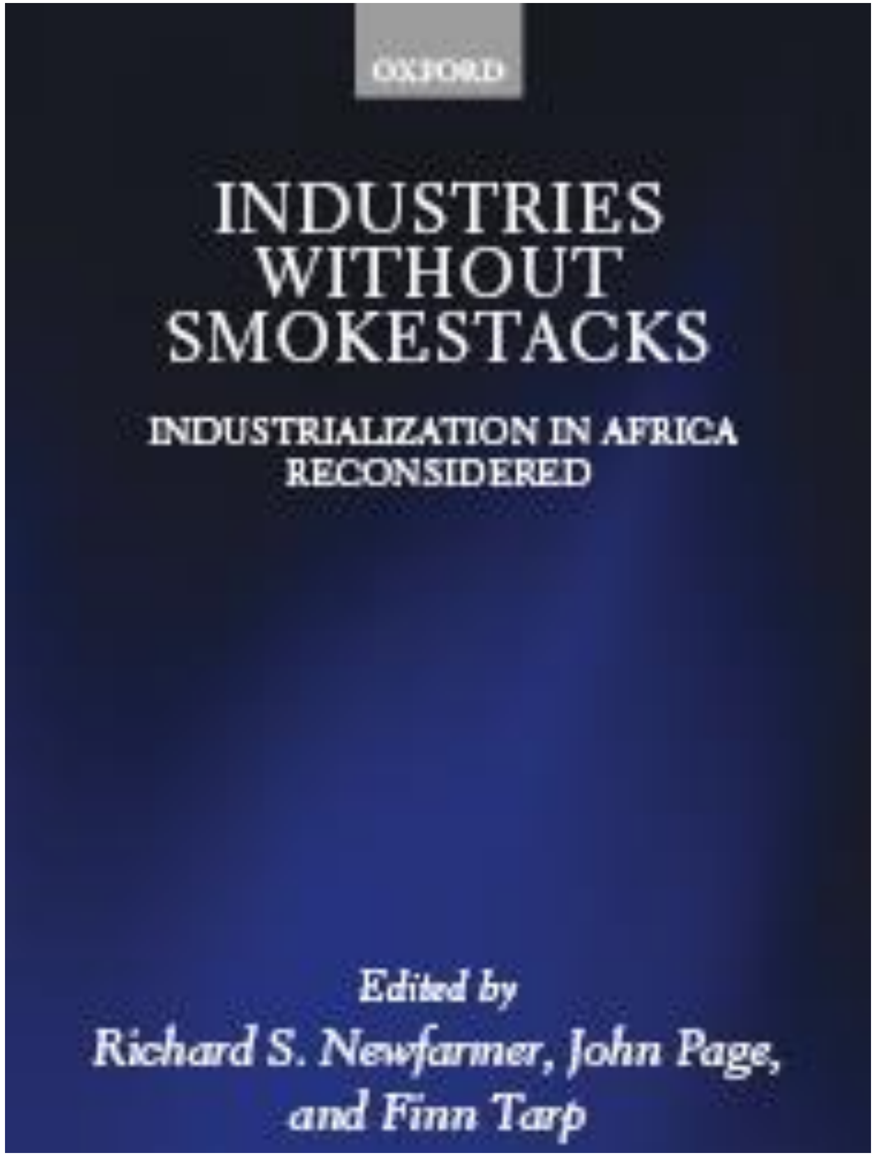
2. Manufacturing as a share of GDP is falling everywhere on average

3. Selling to the global market increasingly requires participating in global value chains



Yet: also new opportunities for Africa to exploit

- Trade in task segmentation of GVCs make production for export accessible
- Services export markets are more dynamic
- Scale barriers in services' markets are negligible or absent, so Africa can enter at an early stage
- As wages rise in China, they look for new locations for their manufacturing plants
- These factors, together with sharply falling transportation and communication cost, create opportunities for "industries without smokestacks"

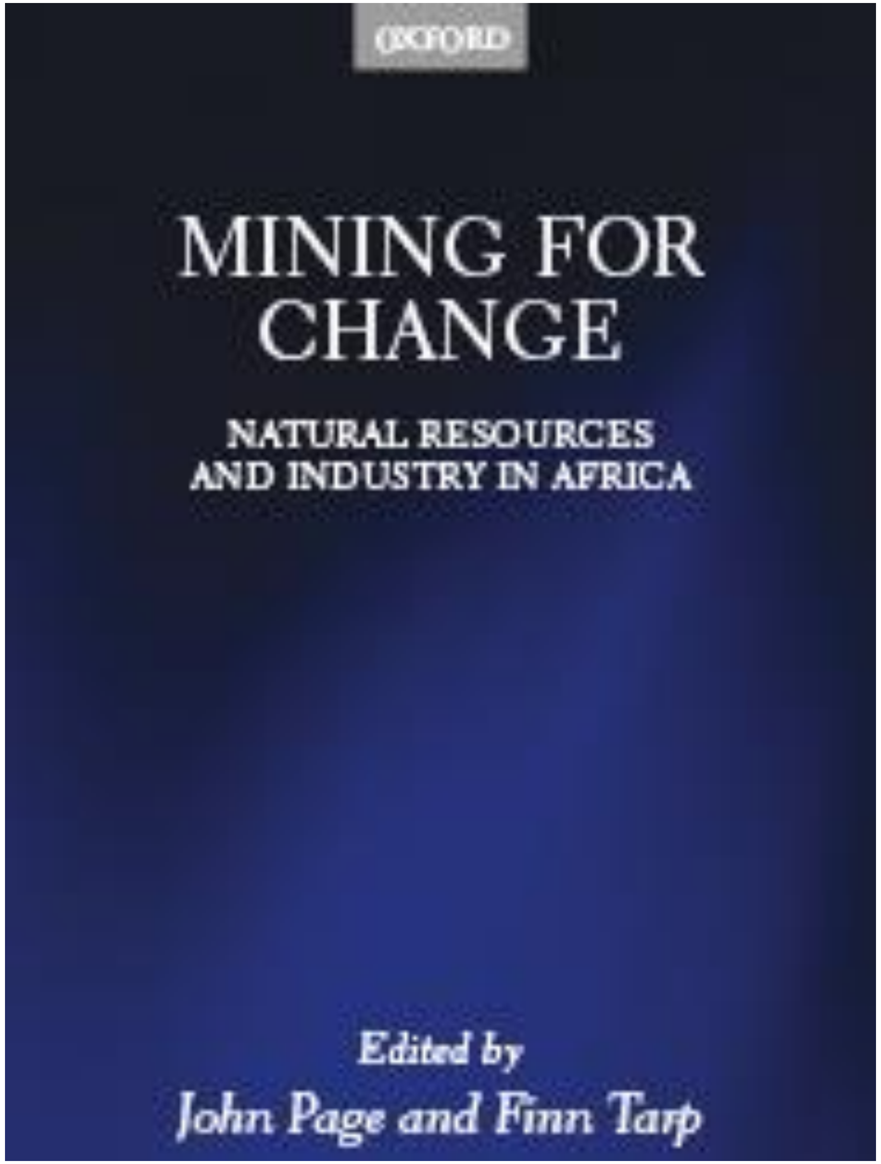


An additional opportunity/challenge: the discovery of natural resources

- For a growing number of countries in Africa, including Mozambique, the discovery of natural resources is a great opportunity but one accompanied by considerable risks
- There is an extensive literature linking natural resource dependence to poor economic performance
- One cause is that resource-abundant economies tend to have economic and export structures that are highly concentrated on only few export products
- Most of Africa's resource-rich economies experienced increases in export concentration during the first decade of the twenty-first century

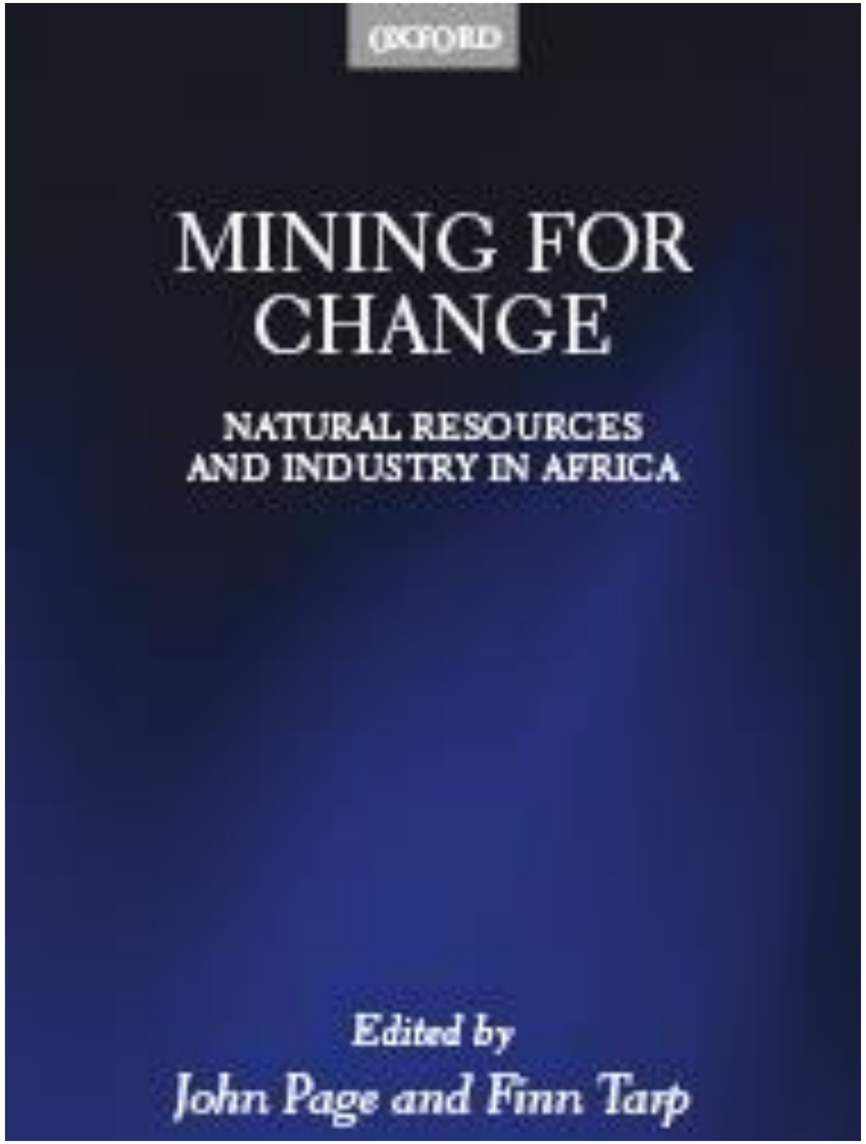
Mining for Change (1)

- More diverse economies tend to succeed better in sustaining growth
- Important to find out how the revenues and opportunities associated with natural resource discoveries can be better used, to support structural change and diversification
- Key question: How can natural resources support inclusive growth in Africa?



Mining for Change (2)

- To answer the question, we address three key areas of public policy:
  - Understanding and managing the boom
  - The role of the construction sector
  - Linking industry to the resource
- In five African resource exporters: Ghana, Mozambique, Tanzania, Uganda, and Zambia



Four key findings

- The size of the natural resource revenue is often overestimated, and the delay in receiving revenue underestimated
- Proper public expenditure management and systems are essential to ensure that investments yield adequate returns
- Constraints on domestic construction firms limit local participation in the construction phase of the resource boom
- While most countries studied succeeded in introducing and enforcing requirements for the employment and gradual skills upgrading of nationals, local procurement regulations have largely failed to increase participation by local firms in MNC value chains

Understanding and managing the boom

- The size of the natural resource revenue, and when it becomes available, are two questions which politicians and the public often do not understand well
- In Ghana, Mozambique, Tanzania and Uganda the size of the natural resource boom has been overestimated and the delay in receiving revenues underestimated
- Some countries, Ghana and Zambia for example, have responded to the news of forthcoming resource revenues by increasing public expenditure and accumulating debt well ahead of the income coming on stream
- A critical failure of public expenditure management in these cases has been the lack of effective systems to prioritize and select investment projects, and lack of adequate provision for the recurrent costs of maintenance

The role of the construction sector

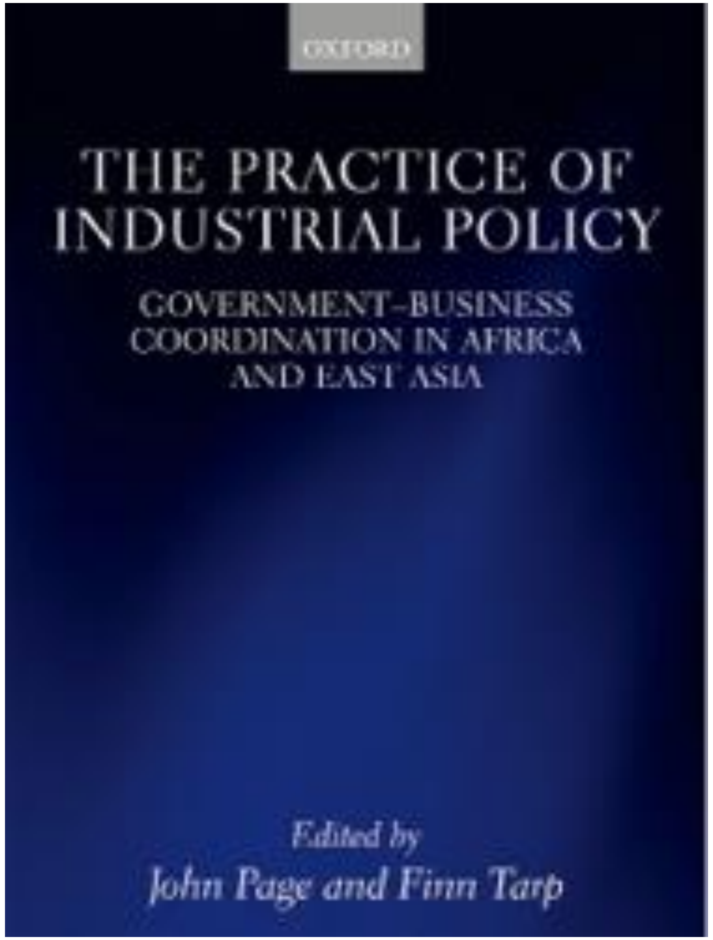
- The construction sector — by making it easier to transform investment effort into investment outcomes — is vital for turning the potential of natural resource revenue into reality
- Lack of firms' capabilities, access to material inputs, skilled labour, and access to finance constrain the ability of domestic construction firms to expand production, limiting local participation in the construction phase of the resource boom
- Institutional and policy reforms can relieve constraints on construction
- In Ghana, Tanzania, Uganda, and Zambia, for example, policy changes can address confused urban land rights and delays in planning permission
- In Tanzania, policy restrictions on imports and the performance of the port can be addressed.
- With planning, construction skills can be developed locally

Increasing local content (1)

- In response to political pressures to 'localize' the benefits of natural resources discoveries, African governments have adopted a wide range of 'local content' and 'value addition' initiatives
- Several countries have created institutions to guide their local content efforts
- However, the research shows that resource extraction multinational companies (MNCs) and their first-tier suppliers often continue to operate almost exclusively with foreign second-tier suppliers
- Most local companies are concentrated at the lower end of the natural resources supply chain

Increasing local content (2)

- Integrating domestic firms into the resource value chain depends on the ability of government and industry to develop an effective public–private partnership
- Creating a unit — located within the office of the head of state or government — to act as broker between the multinational companies and domestic firms — is one way to develop this partnership



Increasing local content (3)

- Training can raise the capabilities of local firms to the minimum level needed to allow them to enter the MNC value chains
- However, the government and the resource extraction companies must agree on the design of the training, and on the qualification process through which a firm achieves ‘approved vendor’ status
- Supplying training without commitment to the process by both parties is unlikely to lead to success

Recommendations (1)

- To improve project selection, governments need to build a cadre of economists with training in project appraisal
- Adopting a medium-term expenditure framework (MTEF) that incorporates multi-year maintenance plans can make budget preparation more forward-looking
- Governments should avoid the temptation to relax prudent debt management practices in the face of pressure from domestic constituencies to front-load spending

Recommendations (2)

- Institutional and policy reforms can relieve constraints on construction. For example, easing the restrictions on movements of skilled artisans can help relieve skills bottlenecks
- Government and industry need to develop an effective public–private partnership to integrate domestic firms into the resource value chain
- Training can raise the capabilities of local firms and allow them to enter the MNC value chains, but governments and resource extraction companies must agree on the design of training and qualification processes for local firms to achieve 'approved vendor' status