

Structural Transformation: It's Not Just Manufacturing Anymore

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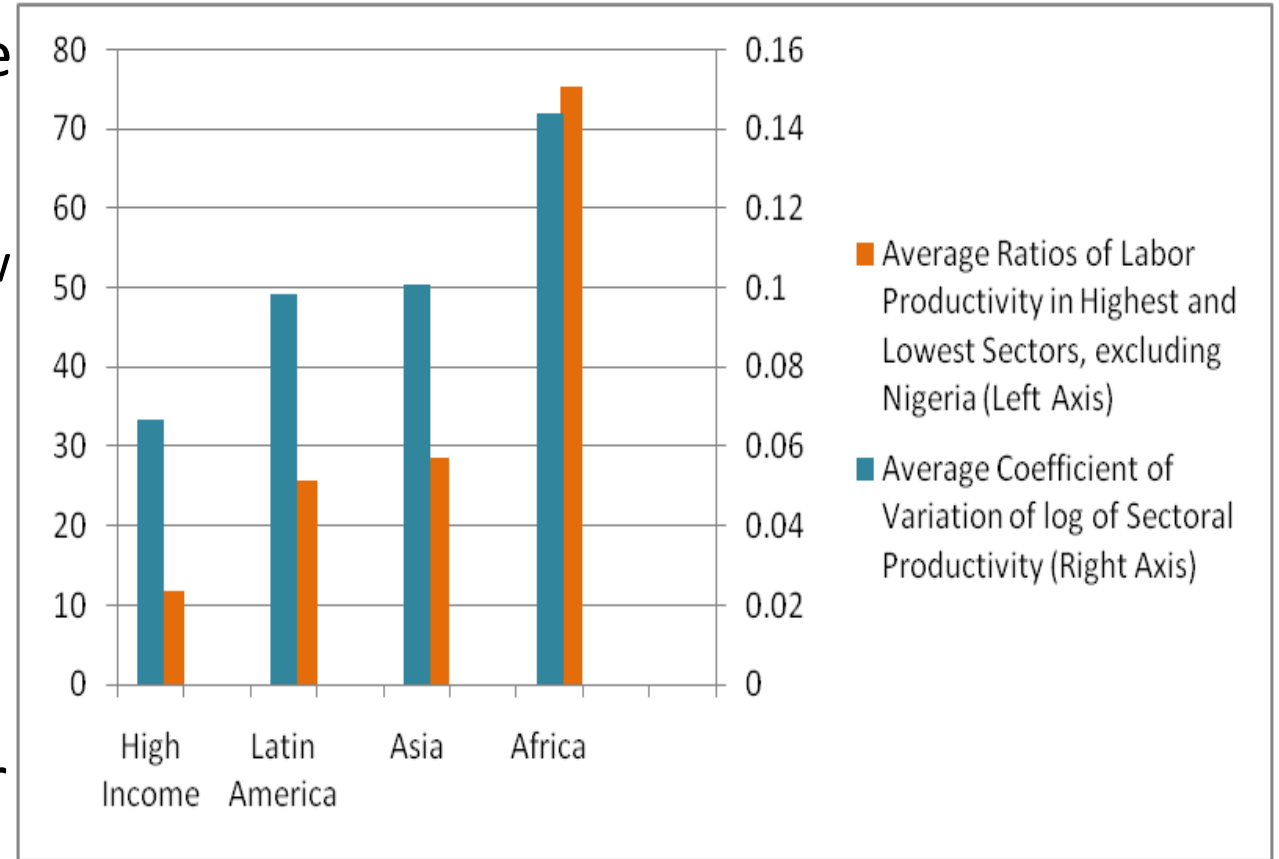
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Rediscovering Structural Change

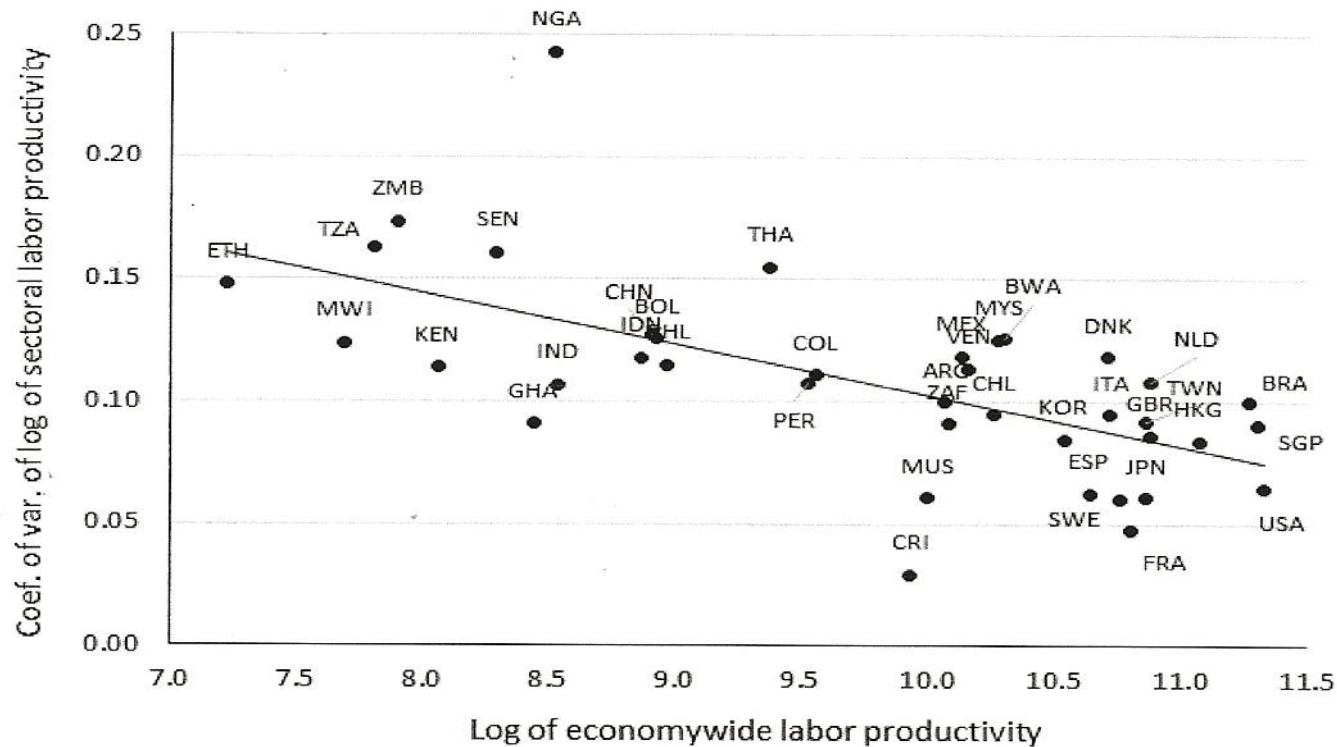
- An idea as old as the study of economic development
 - Lewis, Kuznets and Chenery
- Academic interest in structural change waned in the 1980s & 90s
 - Cross country regressions consigned it to the “residual”
- The result for public policy was a focus on “whole economy” drivers of growth such as openness, institutions, governance, etc.
 - These prescriptions proved to be of little practical relevance to public policy
- Since 2000 a group of “new structuralists” have emerged in development economics

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



Productivity differences across sectors decline as incomes rise



Note: Both economywide and sectoral labor productivity is value-added at 2005 purchasing power parity (PPP) dollar divided by total or sectoral employment and it is 2000-2010 average

Source: Authors' calculations using GGDC data.

Regional differences in the role of structural change are striking

- In East Asia within sector productivity growth and structural change were complementary
- In Latin America and Africa structural change between 1990 and 2000 was going in the wrong direction
 - An increasing share of the labor force was in lower productivity sectors
 - “Growth reducing” structural change slowed overall growth
 - In Africa recent structural change (2000-2010) has been from agriculture into low productivity services

Figure 4.b. Decomposition of Productivity Growth by Country Group, 1990-1999 (weighted)

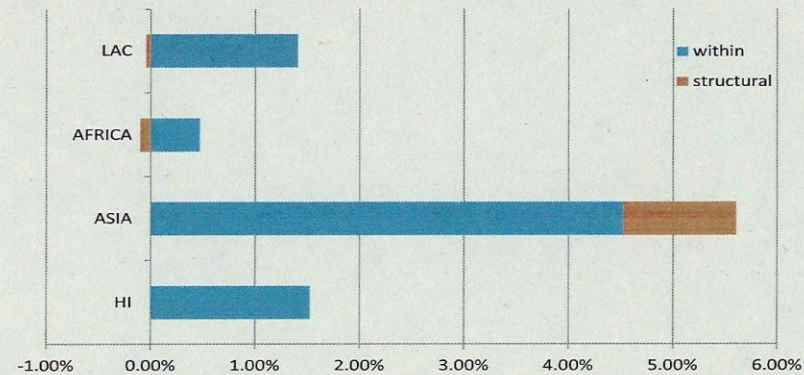
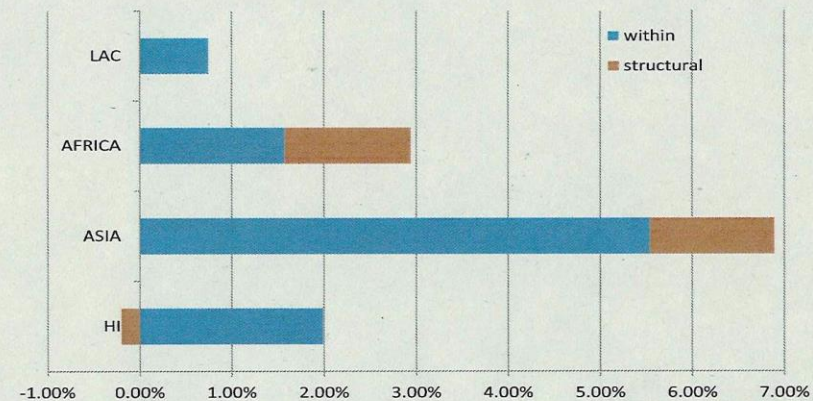
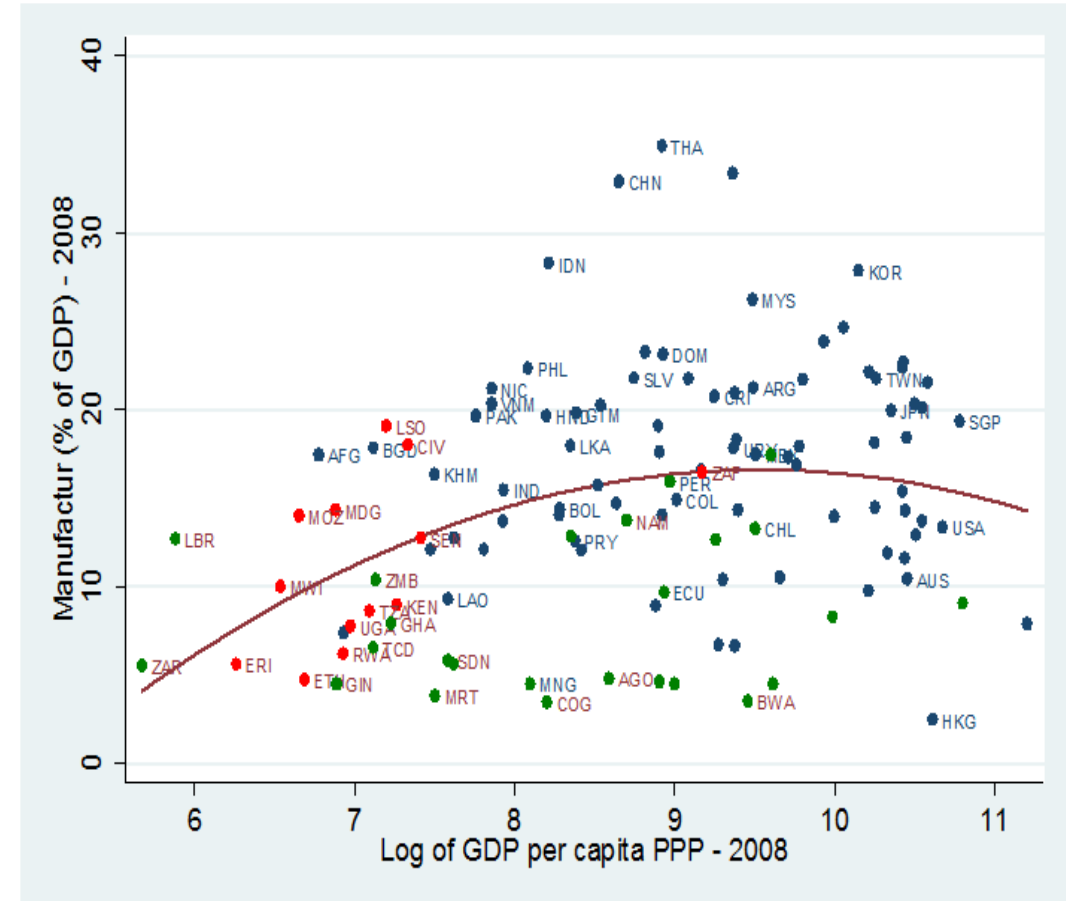


Figure 4.d. Decomposition of Productivity Growth by Country Group, Post 2000 (weighted)



So too are regional differences in the role of Industry

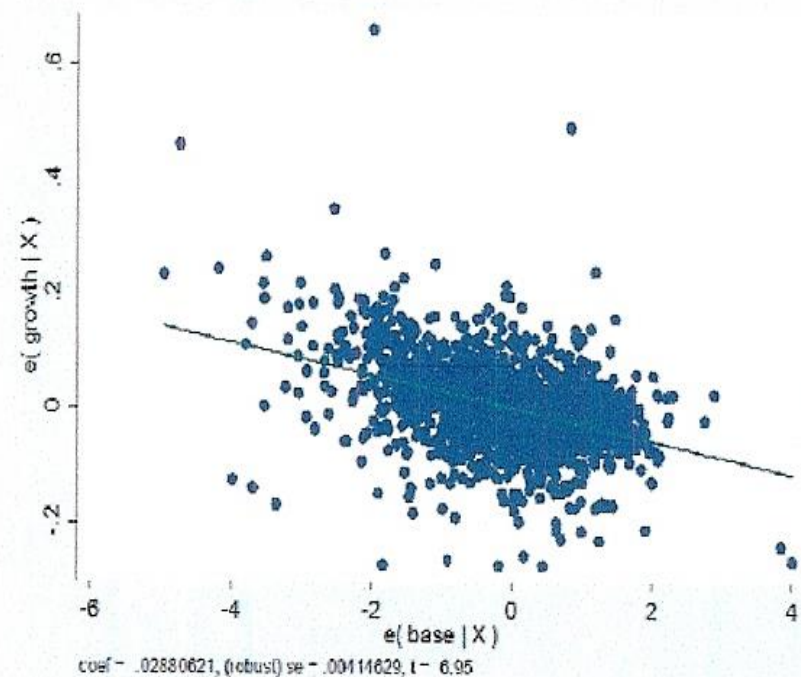
- Historically, industry has led the process of structural change
- It has played an outsized role in East Asia
- Industry has played only a minor role in Africa's growth turn around
- Latin America appears to have fallen into a "middle income trap" of premature industrial stagnation



This is a worry because industry may be “special”

- Formal manufacturing is the only sector in which convergence to high income productivity levels takes place over long periods
- Convergence is “unconditional” with respect to
 - Regions
 - Geography
 - Institutions
- Unconditional convergence does not apply to agriculture or services

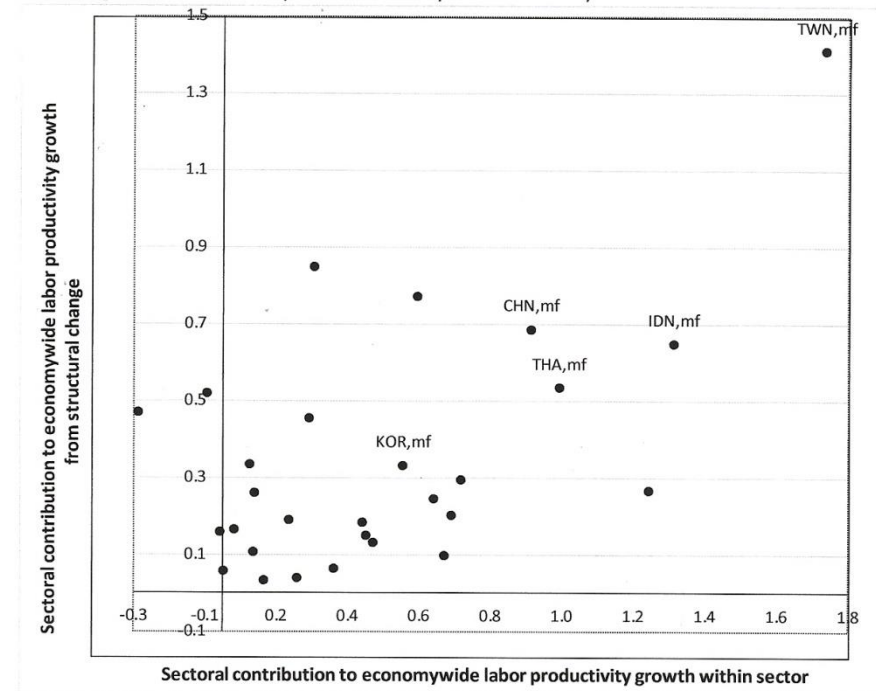
Full sample: 115 countries



Implications for Growth

- Industry is an “engine” of growth that is more important for poor economies than for rich ones
- Its impact on overall growth depends on:
 - The size of the industrial sector
 - Its rate of growth
 - Its distance from best practice productivity levels
- Manufacturing has driven structural change throughout East Asia

Figure 11. Sectoral Contributions to Economywide Labor Productivity Growth within Sector and from Structural Change during First Decade of Growth Acceleration across Five Asian Countries (Measured in Percentage Points of Economywide Productivity Annual Growth)

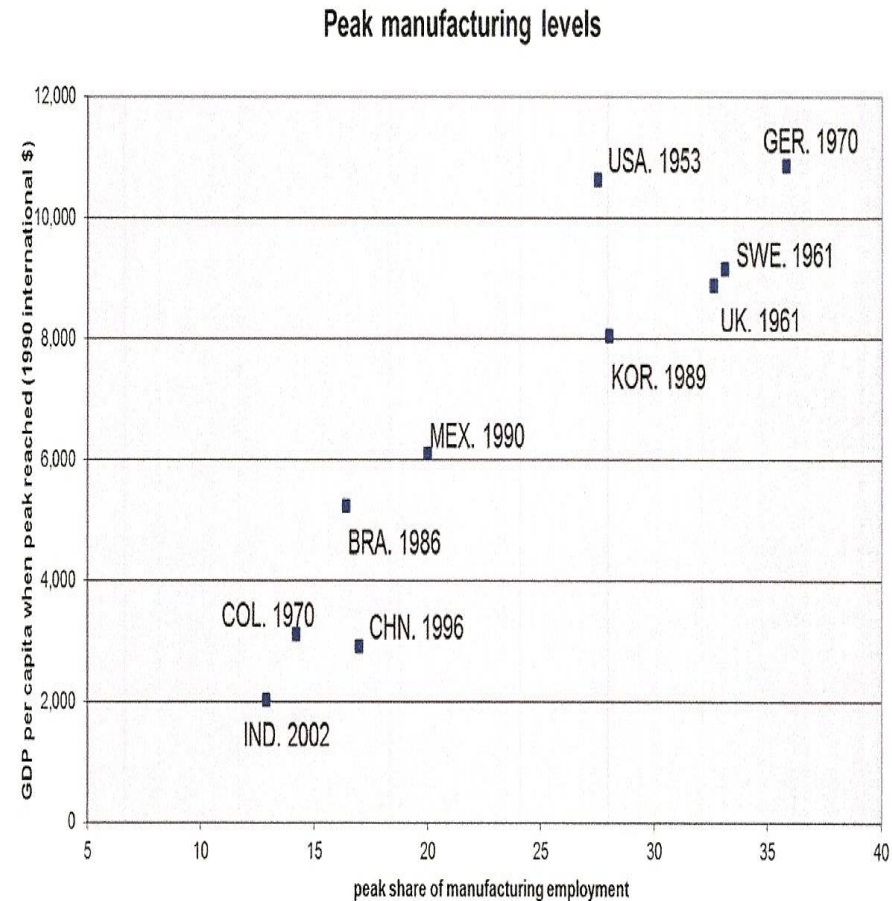


Note: “mf” represents manufacturing sector.

Source: Authors’ calculations using GGDC data

A “Premature” Shift out of Industry?

- Early industrializers peaked in manufacturing at higher level of per capita income
- Some possible reasons
 - Trade in tasks
 - Changes in manufacturing technology
 - The growth of tradable services
- Global value chains may be redefining the boundaries of “industry”
 - “Services are being outsourced rather than performed in a vertically integrated “manufacturing” firm



The rise of “industries without smokestacks”

- Technology and falling transport costs have created a class of tradable services and agro-industry that are more similar to manufacturing than to traditional services or agriculture
 - Think call centers versus restaurants; cut flowers versus subsistence agriculture
- These “industries without smokestacks” share many of the firm characteristics of manufacturing
 - Technical change, learning agglomeration
- They also offer a broader array of options for structural change.



Some Implications for Policy

- Patterns of structural change in contemporary low income countries may differ substantially from historical experience.
- The challenge for policy makers is to promote the growth of high productivity sectors capable of absorbing large numbers of moderately skilled workers.
- Africa's resource endowments suggest that many of these activities will be "industries without smokestacks."
- Fortunately, because these "industries" share many firm characteristics with smokestack industries, they also respond to broadly similar policy initiatives.

Four Drivers of Industrial Productivity and Location

- The “basics” (aka the “Investment Climate”)
 - Infrastructure and skills
 - Institutions and regulation
- Competition and exports
 - Competition increases productivity through entry and exit
 - Firms in low income countries increase their productivity by exporting
- Firm capabilities
 - The tacit knowledge and working practices that affect both productivity and quality
- Agglomerations
 - Industrial clusters confer significant productivity gains
- The basics are necessary but not sufficient
 - Exports, geography and capabilities are interrelated

New Directions for Industrial Policy in Africa

Mounting an “Export Push”

- High social returns to exporting but high private costs of entry
 - The classic rationale for public action
- Entering global markets will need an “East Asian style” export push
 - Broad ownership and effective institutions (leadership from the top)
 - Trade related infrastructure and trade logistics
- Support for regional institutions and infrastructure in Africa
- Sustaining an open trading system and rationalizing preferences

New Directions for Industrial Policy in Africa

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
- New approaches to management training

New Directions for Industrial Policy in Africa

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

Thank You

(And three shameless book plugs)

