

**Multi-year Expert Meeting  
Enhancing the Enabling Economic Environment  
at all Levels in Support of Inclusive and  
Sustainable Development, and the Promotion of  
Economic Integration and Cooperation**

26-27 October 2017

**Beyond GVCs:  
Local Production Systems and  
the Political Economy of Capabilities Development in LDCs**

Paper submitted by

**Antonio Andreoni**  
Department of Economics, SOAS University of London  
Anti-Corruption Evidence (ACE) Research Partnership Consortium

This expert paper is reproduced by the UNCTAD secretariat in the form and language in which it has been received.  
The views expressed are those of the author and do not necessarily reflect the view of the United Nations.

# Beyond GVCs: Local Production Systems and the Political Economy of Capabilities Development in LDCs

**Antonio Andreoni**

Department of Economics, SOAS University of London  
Anti-Corruption Evidence (ACE) Research Partnership Consortium  
[aa155@soas.ac.uk](mailto:aa155@soas.ac.uk)

## Outline

### **1. Global structural change**

### **2. The G/RVCs and local production system (LPS) nexus**

- Variety of national and international production networks
- Governance models (value creation, value capture and endogenous asymmetries in international networks)
- Value creation-tasks dynamics and technological change in G/RVCs

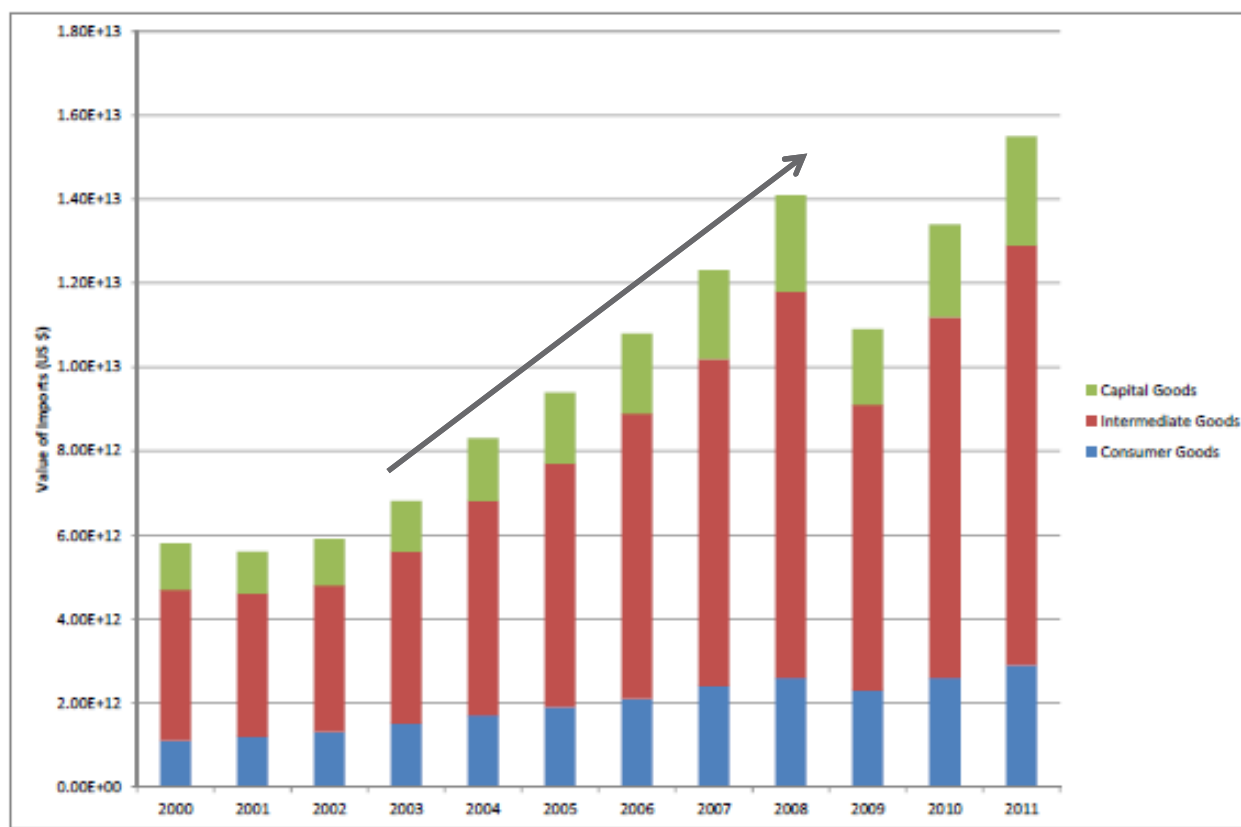
### **3. Industrialisation as a local production system development process involving both vertical and horizontal (cross-sectoral) integration and different types of linkages**

### **4. (Local) productive capabilities development as a learning process**

### **5. (Local) productive capabilities development as a political economy process and the binding constraints**

# Global structural change .1

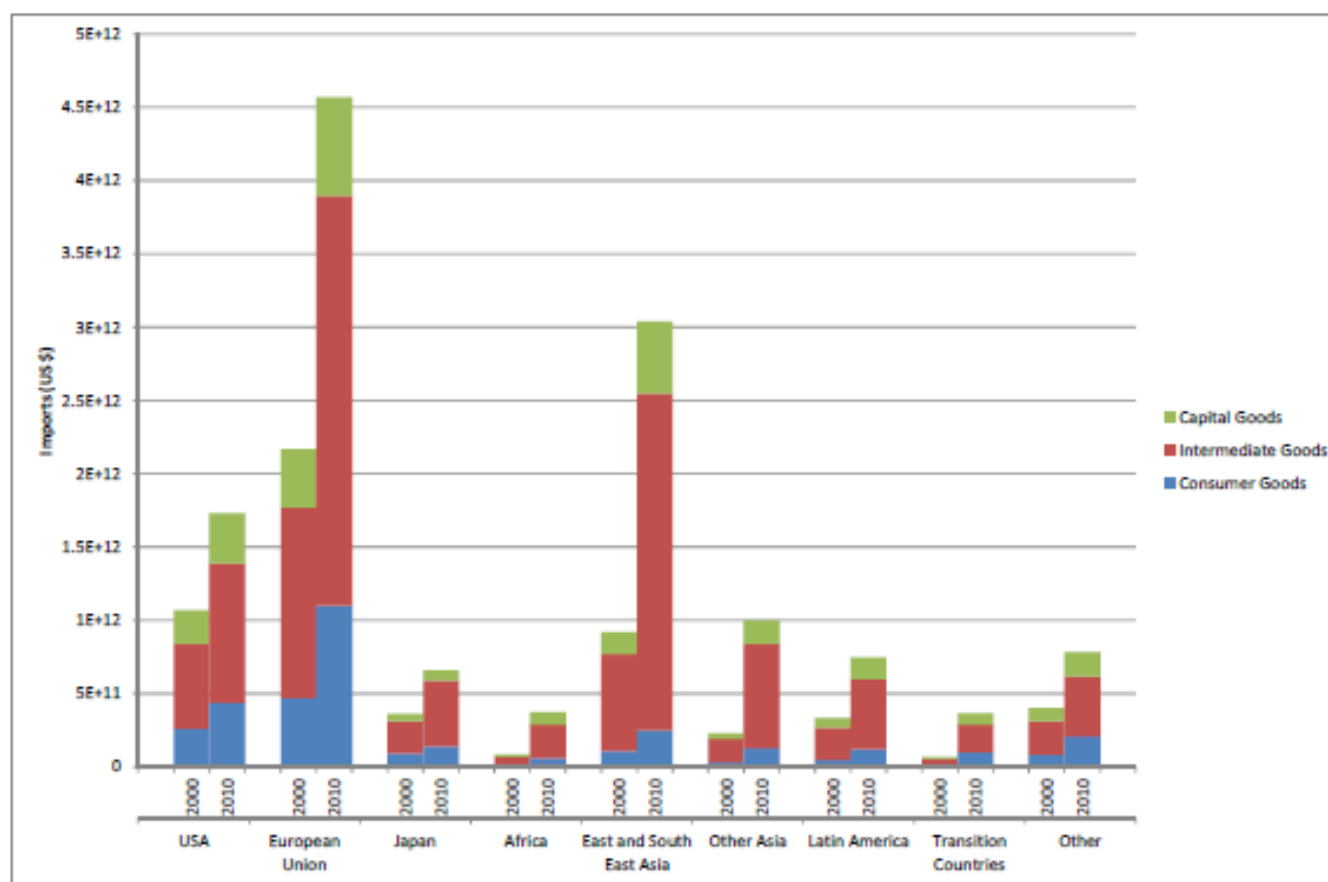
- **Increasing value of world imports** (with intermediate goods making up 65% of world imports in 2011)



Source: UNCOMTRADE-Eora GVC Data; See: Foster-McGregor et al, 2016

# Global structural change .2

- **Not in all regions (and the RVCs argument – see Baldwin)**

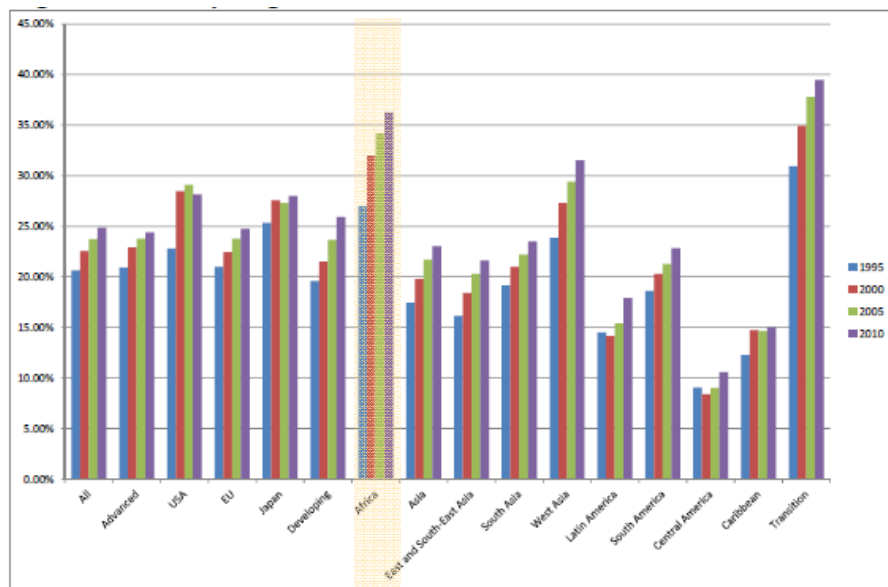


Source: UNCOMTRADE-Eora GVC Data; See: Foster-McGregor et al, 2016

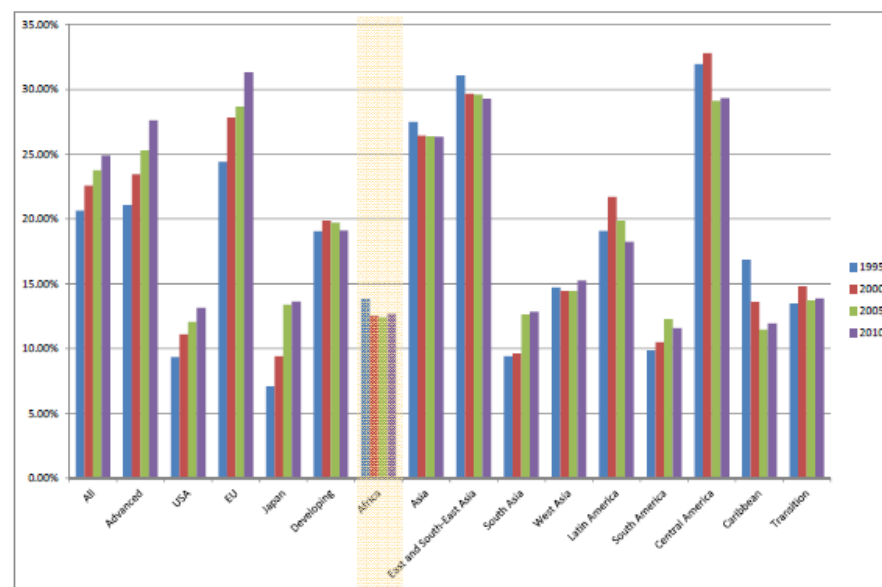
# Global structural change .3

- **No downstream integration:** Much of Africa's participation in GVCs is in upstream production, with firms in Africa providing primary products and simple manufactures to firms in countries further down the value chain (> value contribution, just 1% of foreign VA)

## Mainly upstream integration

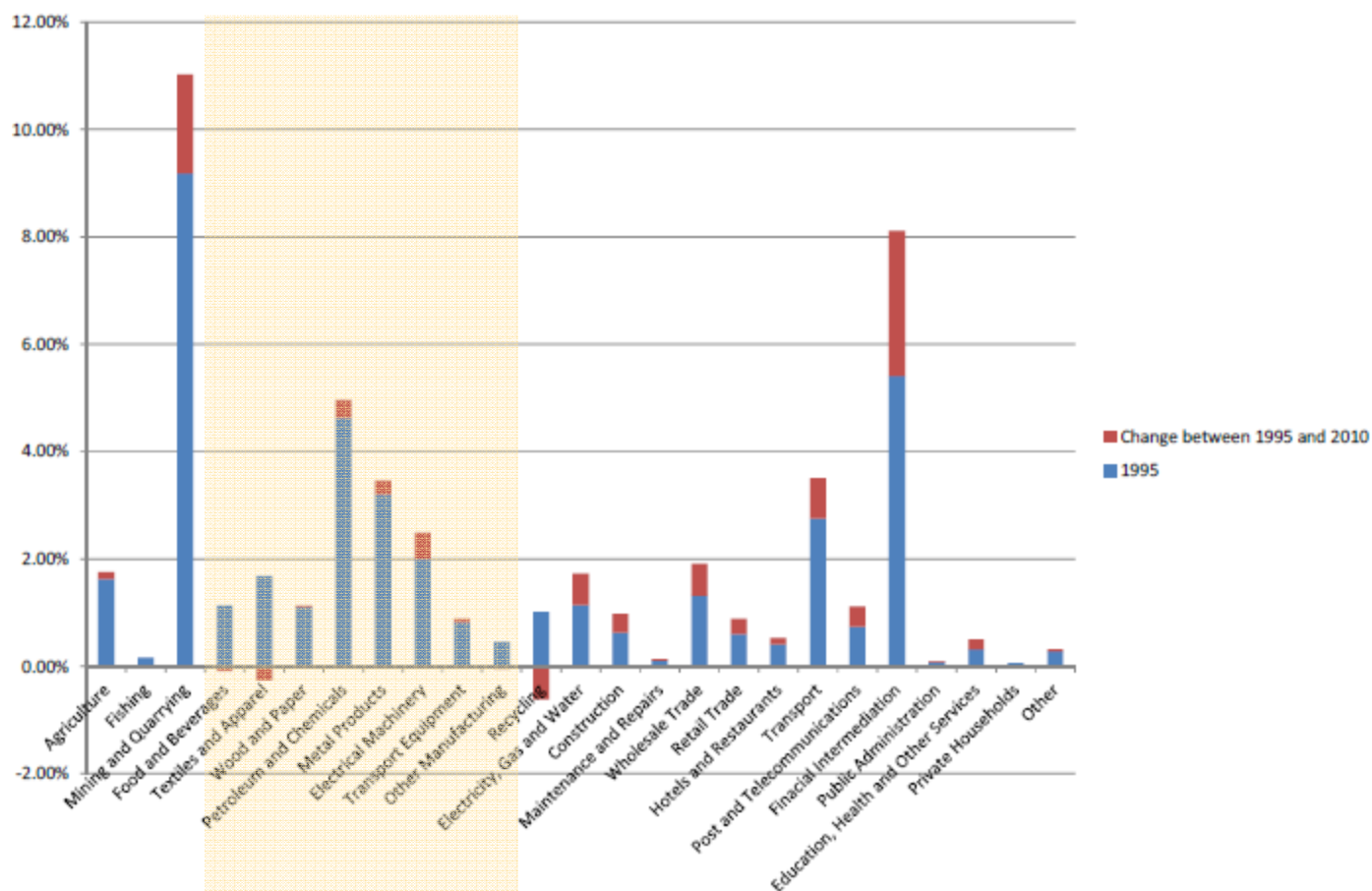


## Limited downstream integration, and stagnant since 1995



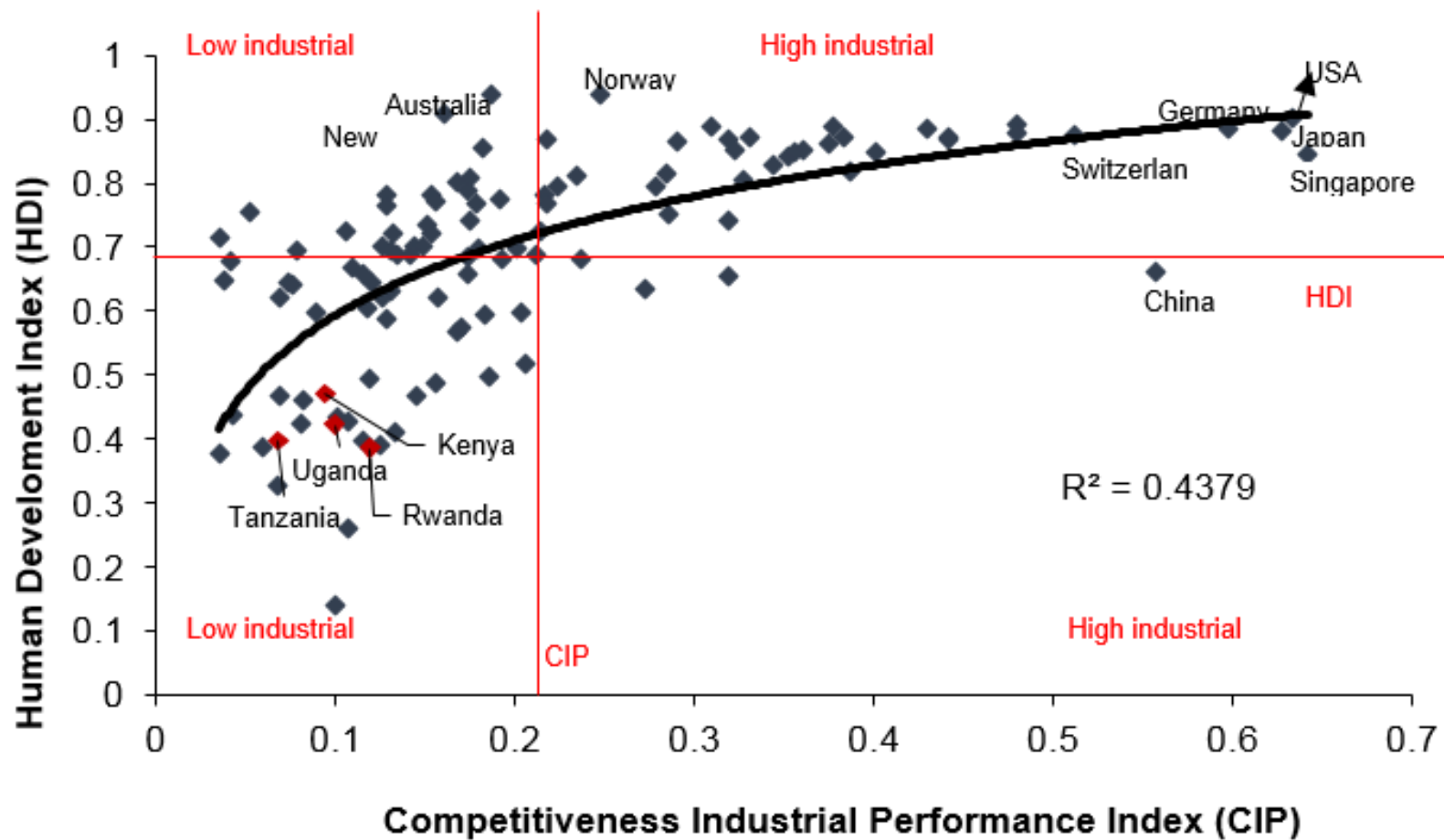
# Global structural change .4

- **Not in all sectors (G/RVCs without industrialisation)**



Source: UNCOMTRADE-Eora GVC Data; See: Foster-McGregor et al, 2016

# Is GVC-led industrialisation working?



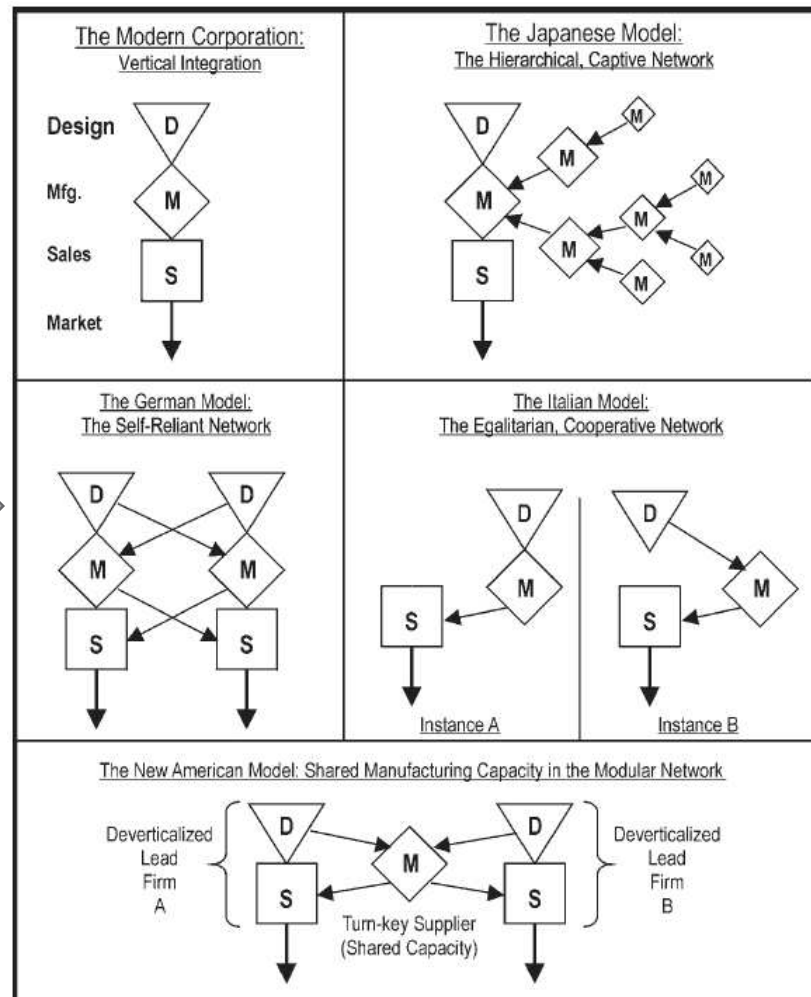
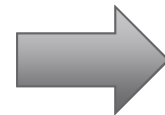
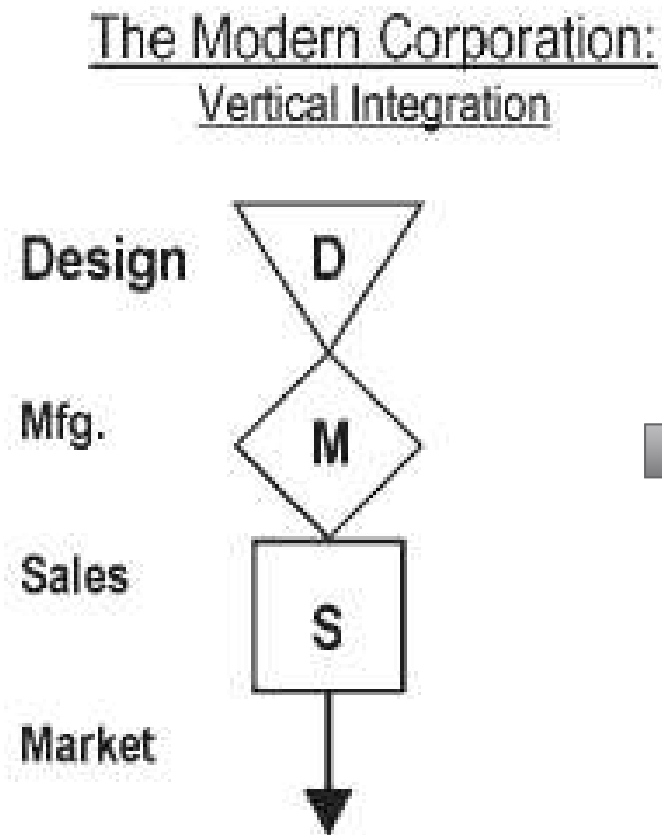


R/GVCs analysis focus:

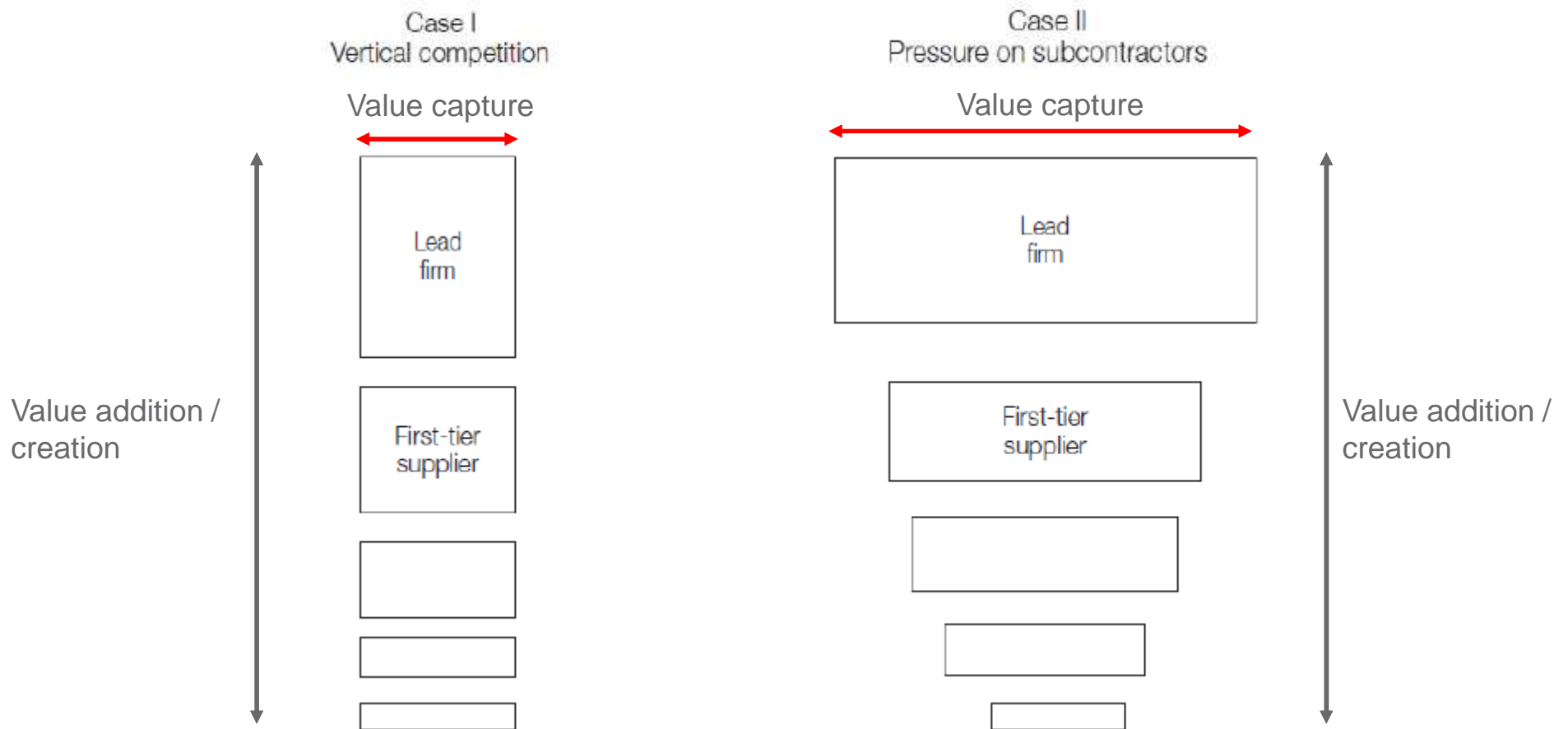
**If / when / where and why a G/RVCs-led model of industrialisation works depends on:**

- Types of national and international production networks
- Governance models (value creation, value capture and endogenous asymmetries in international network)
- Value creation-tasks dynamics and technological change in G/RVCs

# Types of national and international production networks



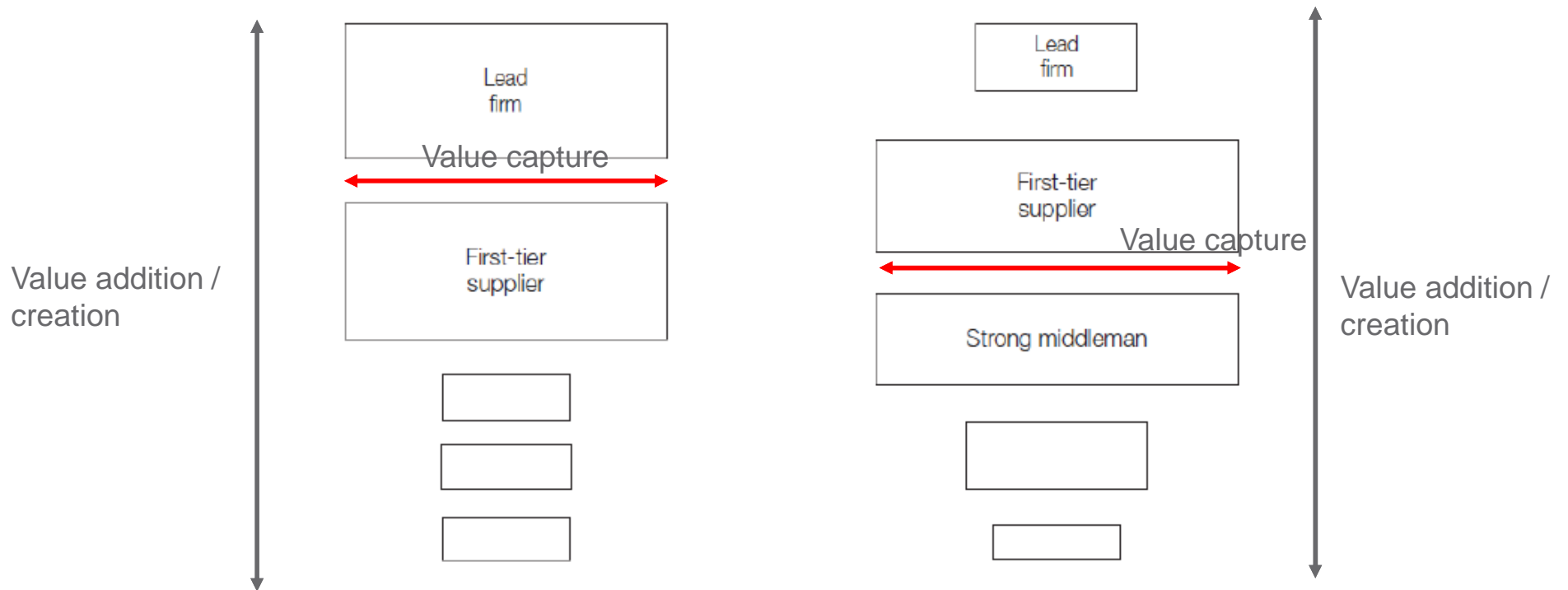
# Governance models (value creation, value capture and endogenous asymmetries in international networks)



# Governance models (value creation, value capture and endogenous asymmetries in international network)

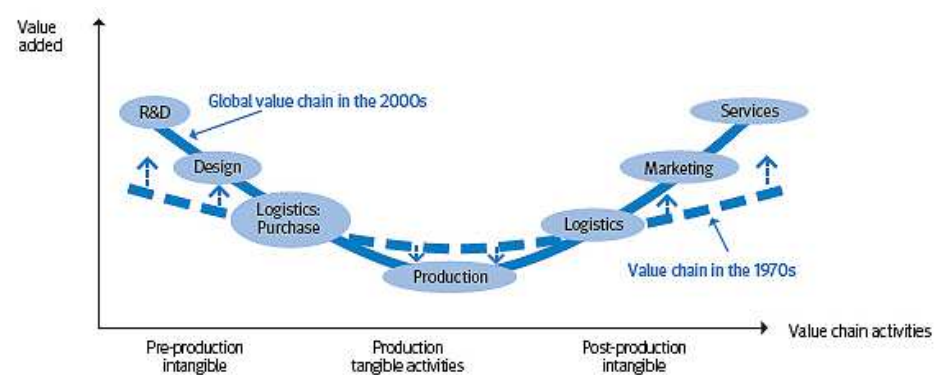
Case III  
Strong first-tier supplier

Case IV  
Strong middleman



# Value creation-tasks dynamics and technological change in G/RVCs

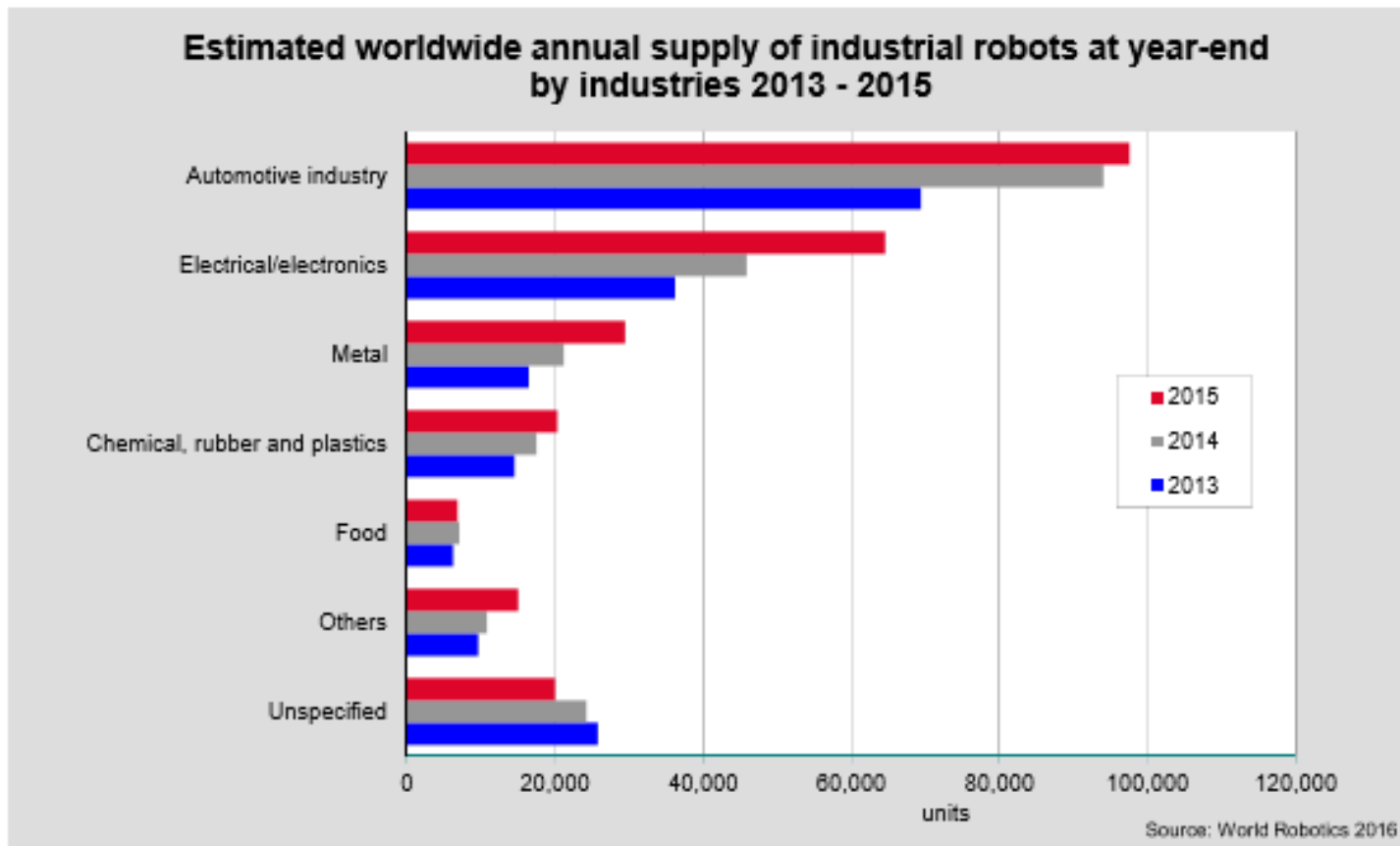
- **Different types of smiling curve/s** (over time and across sectors), **and manufacturing tasks determining spikes in value along the chains** (e.g. critical product systems and complex automated products)



Source: "Interconnected Economies Benefiting from Global Value Chains", OECD 2013.



# Value creation-tasks dynamics and **technological change** in G/RVCs



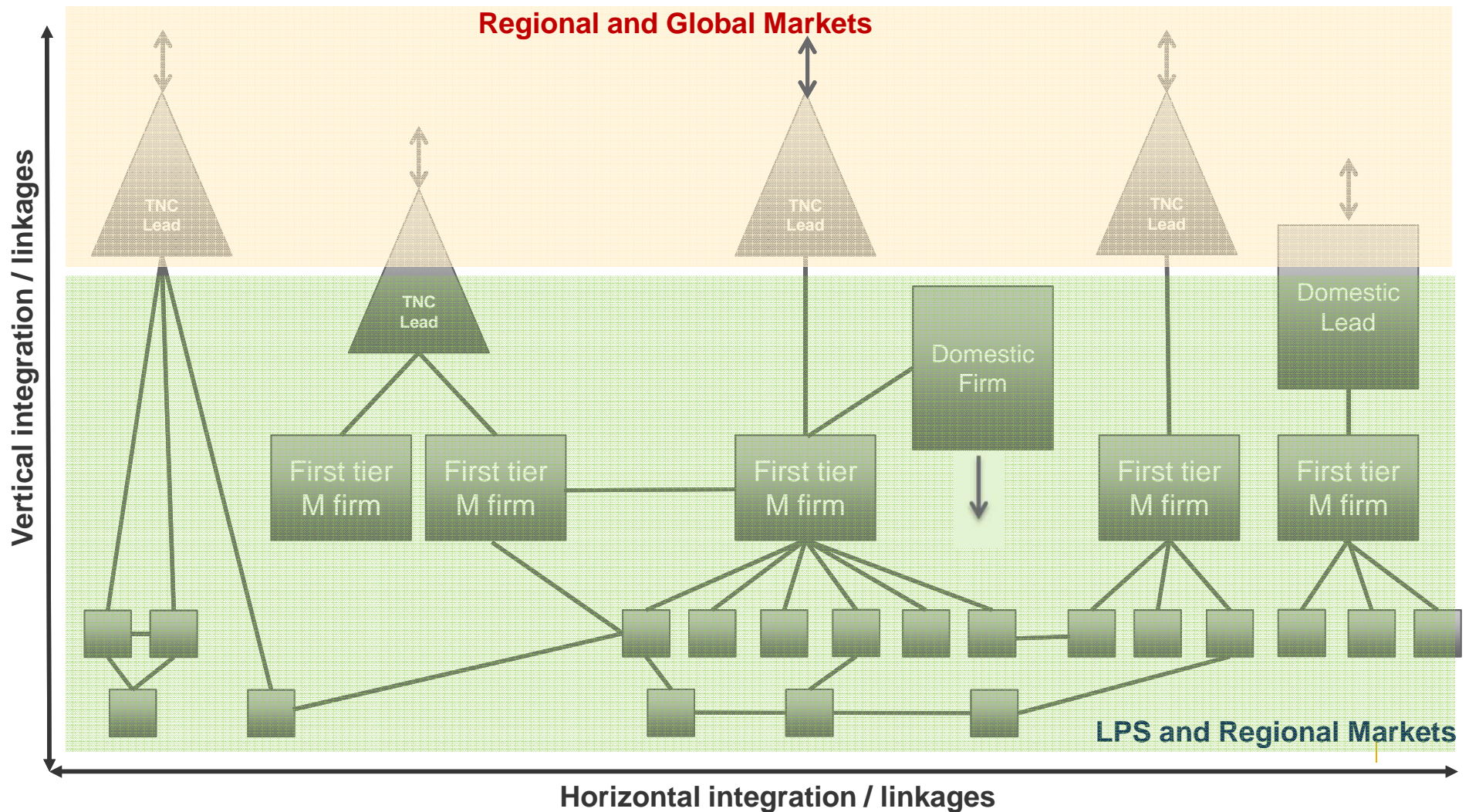
## Beyond GVCs focus analysis

If / when / where and why a G/RVCs-led model of industrialisation works depends on:

**the extent to which the local economy becomes increasingly integrated**

- **vertically along the G/RVCs**
- **horizontally across productive firms (and sectors and tiers) of the local production system**

# The nexus between G/RVCs and local production system (LPS): vertical vs horizontal integration/linkages





## The nexus between G/RVCs and local production systems

### Local production systems (LPSs):

1. Are defined by **different types of backward and forward linkages**:
  - **Production linkages**: input-output relationships inducing backward/forward investments (“Hirschman linkage effect”) along and across sectoral value chains (both vertically and horizontally)
  - **Technological linkages**: technological relationships/relatedness inducing inter-sectoral learning (e.g. mfg-agro), indigenous innovation (e.g. product re-engineering), and diversification pathways

# The nexus between G/RVCs and local production systems

## Local production systems (LPSs):

1. Are defined by **different types of backward and forward linkages** (cont.):

- **Consumption linkages:** income/rents flows mainly earned/captured in the process of staple production and export (tropical agro products and minerals), but also income inflows (e.g. tourism)
- **Fiscal linkages:** resource flows resulting from state taxing new incomes and rents as well as undertaking trade policies, investment activities, etc.

## **(Local) productive capabilities development as a learning process**

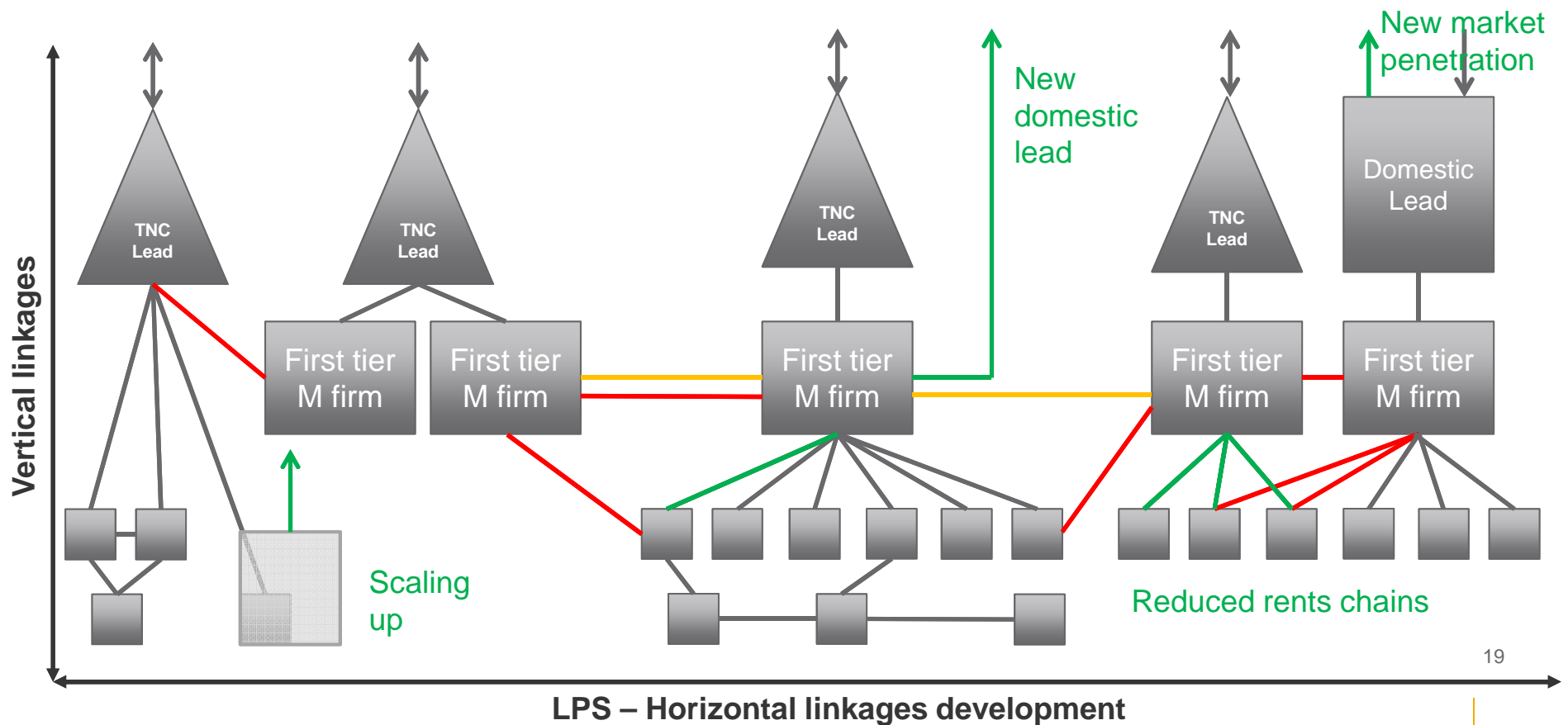
### **2. Linkages constitute the fundamental structure of a LPS with both a potential for**

- **inducing** learning and diversification dynamics, investment in micro-level process efficiency, and production scaling-up (both technology push and demand/intermediate demand pull)
- **constraining** scale-efficient investments, productivity enhancing investments, value-creation and diversification processes, via production-related interlocking bottlenecks

## Analytical map of LPS dynamics

**a. Increasing LPS production linkages and technological linkages**

**b. Increasing value distribution/creation opportunities (reduced rents chains)**



## Interlocking bottlenecks and political economy factors constraining local production system development (1)

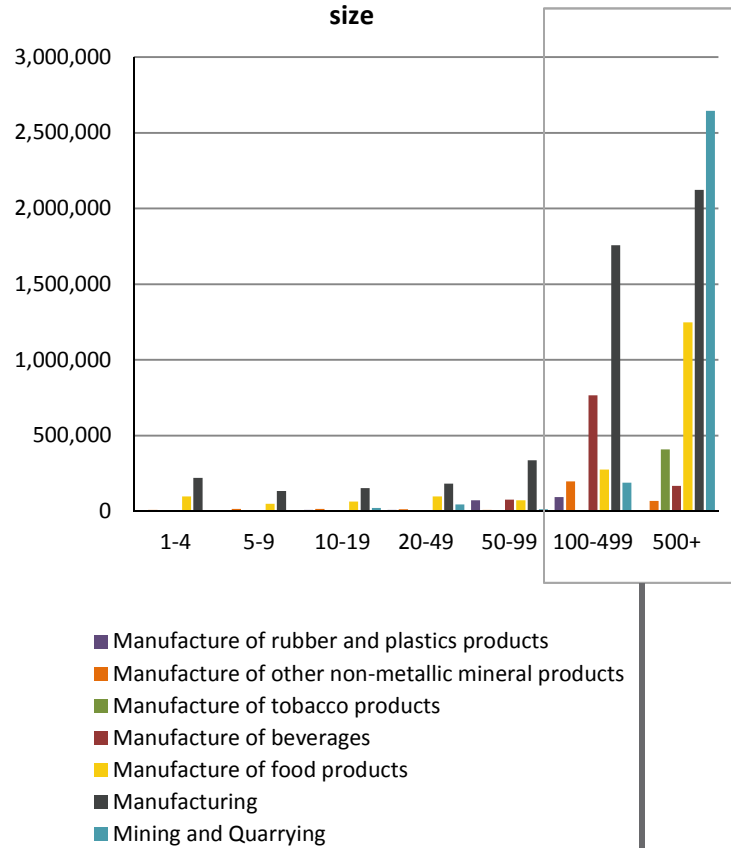
### Production linkages in EA:

- over-dependence on imported (also smuggled) intermediate goods including agricultural and industrial raw materials;
- agricultural sector uncompetitive for lack of infrastructural investments and competitive raw materials/reliable supply (e.g. irrigation or agro-processing bottlenecks – e.g. Zanzibar/Pemba milk and salt industry);
- price manipulation and rents extraction (e.g. sugar price) reduce opportunities for SMEs development
- domestic supply chains are limited (when present there is little competition) and “missing middle” companies with high concentration in MVA and EXP > structural dualism;

Source: Andreoni 2017

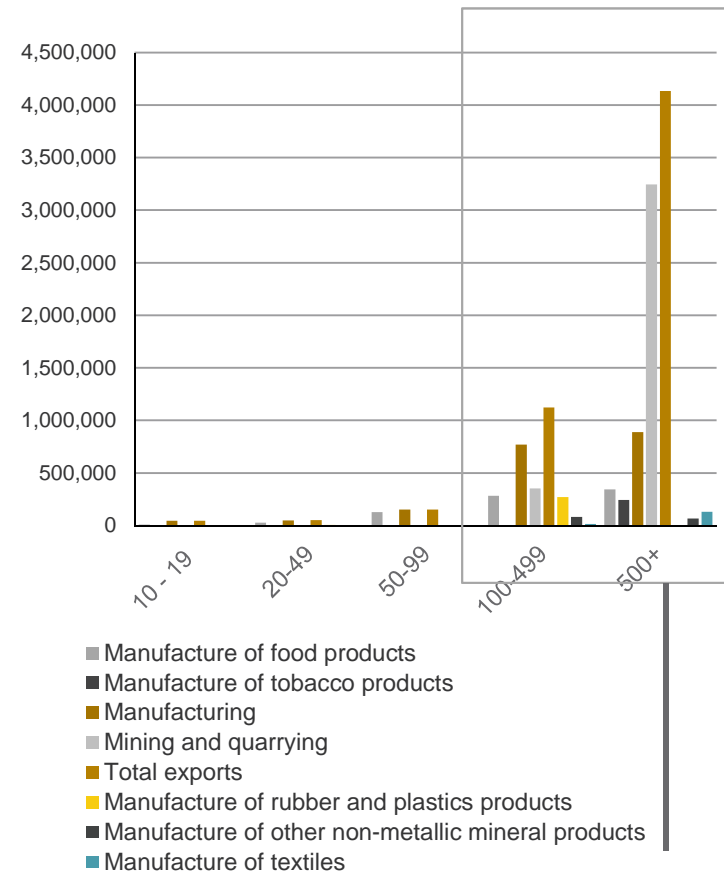
# Example: Manufacturing sector structural dualism

**MVA by industrial sector and major manufacturing industries and by establishment size**



80%VA, 200 est

**Total export by industrial sectors and establishment size**



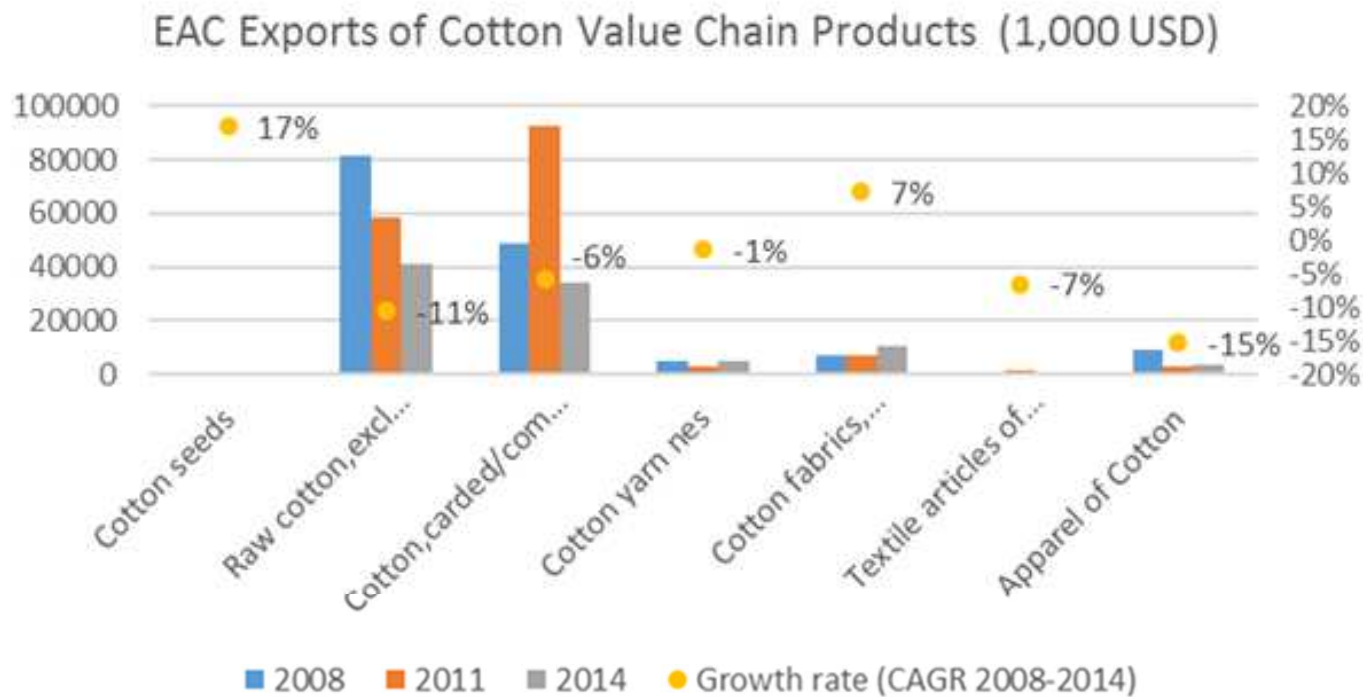
87%VA, 200 est

## Interlocking bottlenecks and political economy factors constraining local production system development (2)

### Technological linkages in EA:

- Firms tech capabilities are limited given chronic lack of engineering skills and limited investments in vocational training (e.g. VET schemes are dysfunctional – e.g. skills levy in Tanzania)
- Limited technological scale-up and manufacturing capabilities (public technology intermediaries are underfunded and lack of specialist contractors – Gatsby-DFID funded Msingi is an opportunity for EA)
- Small companies do not meet product and process standards;
- Limited transfer of manufacturing technologies to agriculture
- Limited capacity in VC upgrading, even in low-tech sectors

**Limited VC upgrading:** Cotton textiles and apparel exports declined by 7 % and 15 % respectively per annum in the EAC.



See: EAC Industrial Competitiveness Report 2017



## Interlocking bottlenecks and political economy factors constraining local production system development (3)

### Consumption linkages in EA:

- significant increases in consumption/rents extraction, however the new incomes tend to be captured by imported (and smuggled) products
- cheaper products/dumping practices driven by scale-economies – China mfg products crowding out low-tech value chain entrance;
- ‘perceived’ higher quality;
- standardised and reliable products, interchangeability for intermediate products

## Interlocking bottlenecks and political economy factors constraining local production system development (4)

### Fiscal linkages in EA:

- low enforcement capabilities in tax and duties collection;
- high mineral rents and low royalties;
- huge informal economy and limited tax base;
- low government capacity in using rents for productive investments;
- tax elusion (e.g. tourism industry in Zanzibar; mining sector in South Africa, etc.)

## Interlocking bottlenecks and political economy factors constraining local production system development (5)

**Political economy factors:** the distribution of power among business organisations and political clientelistic networks (political settlement – Khan) is such that:

- Conflicts between importers/rentiers and productive organisations
- Complex interests configuration: The same person can be a politician, businessman, importer, rentier, producer...
- Business organisations tend to be uncompetitive and rely on political connections to operate in the market
- Conflicts within sectoral value chains, insiders and outsiders...

## Industrial policy implications

- The effectiveness of policy and business/FDI investment strategies depend on **targeting critical nodes/bottlenecks, organisations, and linkages in the local production system** (e.g. sector/task specific skills development, competition in different VCs tiers, increasing local content/VA, reducing rents chains/resource capture, improving investment promotion EPZs/SEZs, etc.).
- Policy and business investments strategies must be **structurally feasible** (production/technology assessment) as well as **politically viable** (political settlement analysis).



**Thanks for your attention  
Comments are welcome**

**aa155@soas.ac.uk**

## References

- Andreoni, A. (2014) 'Structural Learning: embedding discoveries and the dynamics of production', ***Structural Change and Economic Dynamics***, 29, 58-74.
- Fuso Nerini, F., Andreoni, A. D. Bauner and M. Howells (2016) 'Powering production: The case of the sisal fibre production in the Tanga region, Tanzania', ***Energy Policy***, 98, 544-556.
- Andreoni, A. and Chang, H-J. (2016) 'Bringing production transformation and jobs creation back into development: Alice Amsden's legacy for a New Developmentalist agenda' ***Cambridge Journal of Regions, Economy and Society***, 10 (1): 173-187
- Andreoni, A. (forthcoming, 2017a) 'Anti-corruption in Tanzania: A political settlement analysis', **SOAS-ACE Working paper**.
- Andreoni, A. (forthcoming, 2017b) 'A Generalised Linkage Approach to Local Production Systems Development', in *Quality of Growth in Africa*, forthcoming in the IPD Volume for **Columbia University Press**.