

# NEW GROWTH STRATEGIES

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# A framework: combining growth theory, convergence and dualism

- Economic dualism is endemic
- Traditional activities
  - traditional agriculture; small, informal firms
- Modern activities
  - high productivity, exhibiting (unconditional) productivity convergence
  - too small to produce significant aggregate effects (B)
- Economy-wide productivity requires steady accumulation of “fundamentals,” which is slow
  - human capital, institutions (A)
- Rapid growth possible nonetheless by expanding modern activities (C)
- Which requires policies that overlap with, but are not same as, fundamentals

$$\begin{aligned}\hat{y} &= \gamma(\ln y^*(\theta) - \ln y) & (A) \\ &+ \alpha_M \pi_M \beta (\ln y_M^* - \ln y_M) & (B) \\ &+ (\pi_M - \pi_T) d\alpha_M & (C)\end{aligned}$$

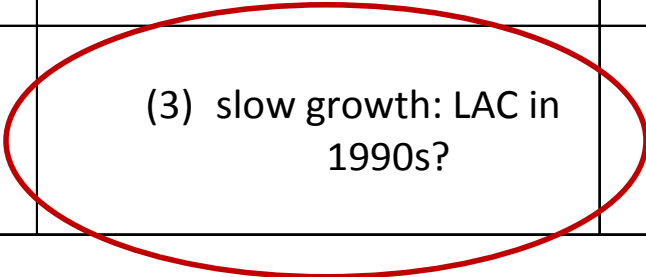
Standard convergence is augmented by two additional terms

# A typology of growth outcomes

		Structural transformation	
		<i>slow</i>	<i>rapid</i>
Investment in fundamentals	<i>low</i>	(1) no growth	(2) episodic growth
	<i>high</i>	(3) slow growth	(4) rapid, sustained growth

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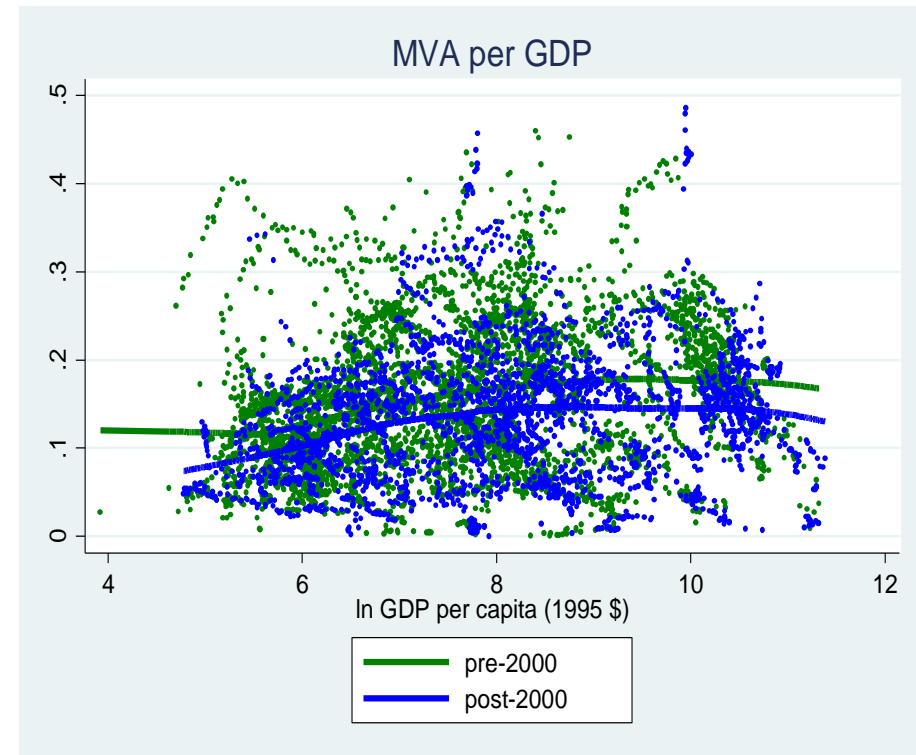
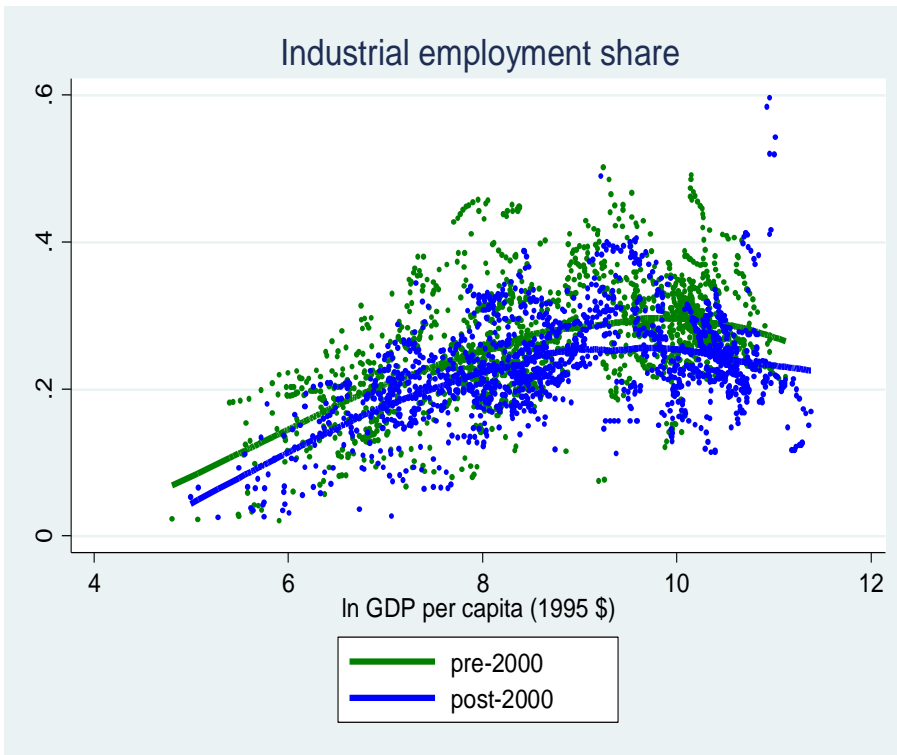
# From mechanics to policies: how did successful countries promote structural change?

- macro “fundamentals”
  - *reasonably* stable fiscal and monetary policies
  - *reasonably* business-friendly policy regimes
  - steady investment in human capital and institutions
    - but more important for sustaining growth past middle income than launching it
- pragmatic, opportunistic, often “unorthodox” government policies to promote domestic manufacturing industries
  - protection of home market, subsidization of exports, managed currencies, local-content rules, development banking, special investment zones, ... with specific form varying across contexts
- a development-friendly global context
  - access to markets, capital and technologies of advanced countries
  - benign neglect towards industrial policies in developing countries

# Why the past may no longer be a good guide

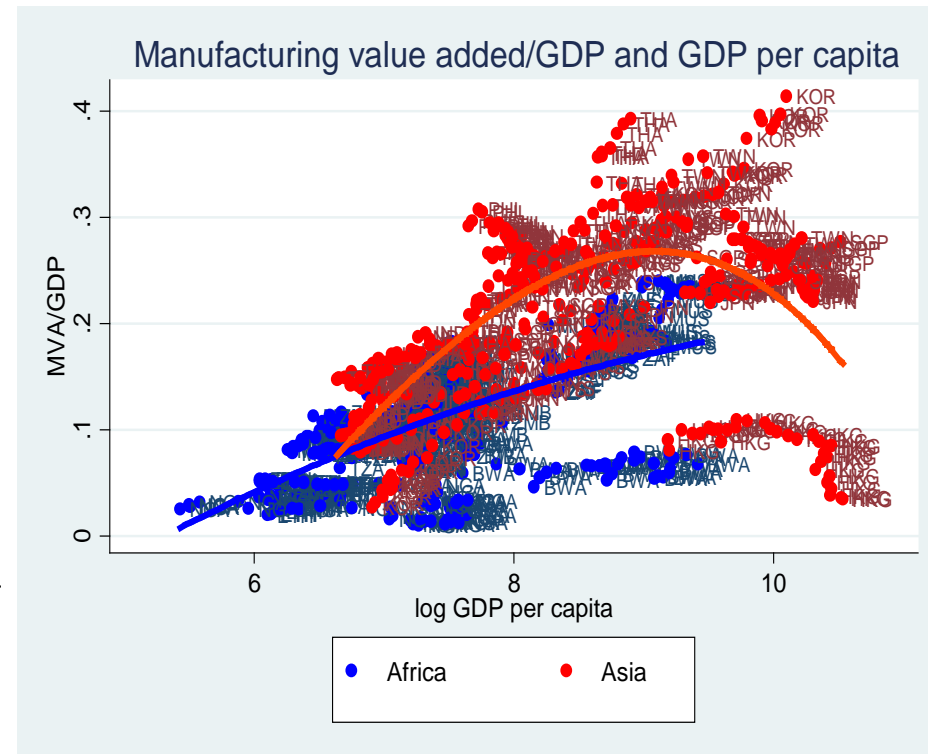
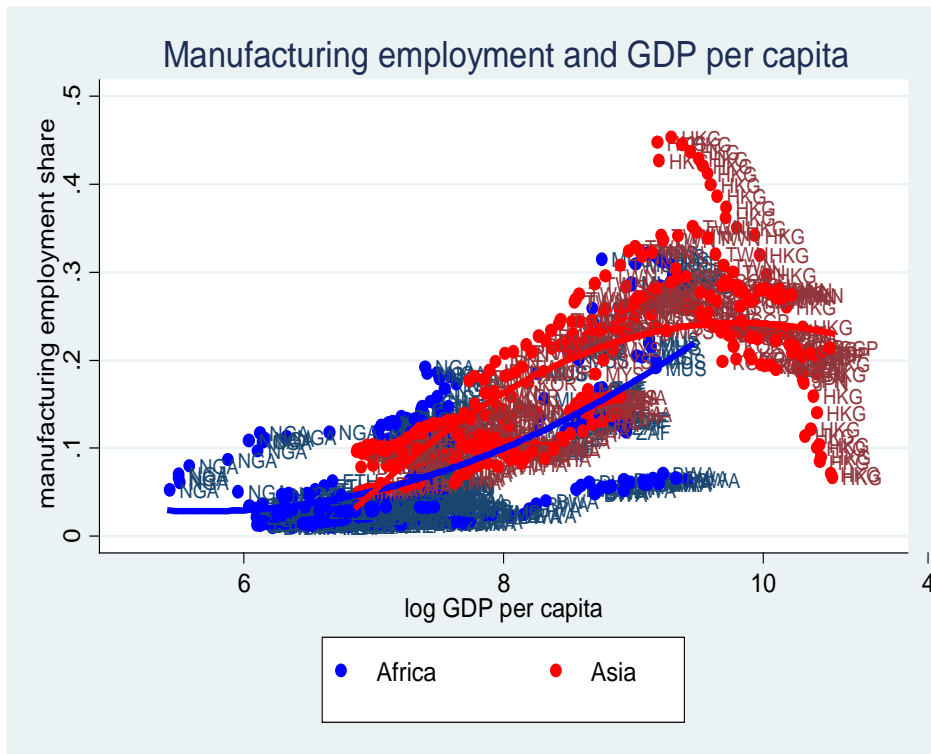
- The uncertain prospects of industrialization
  - globalization and the division of labor
  - global demand patterns
  - technology and skill-intensity
- Recent evidence

# The shrinking space for industrialization



Post-2000 decline in industrial employment share  $\approx 2.4$  % pts. (within country estimates)  
MVA/GDP  $\approx 1.8$  % pts.

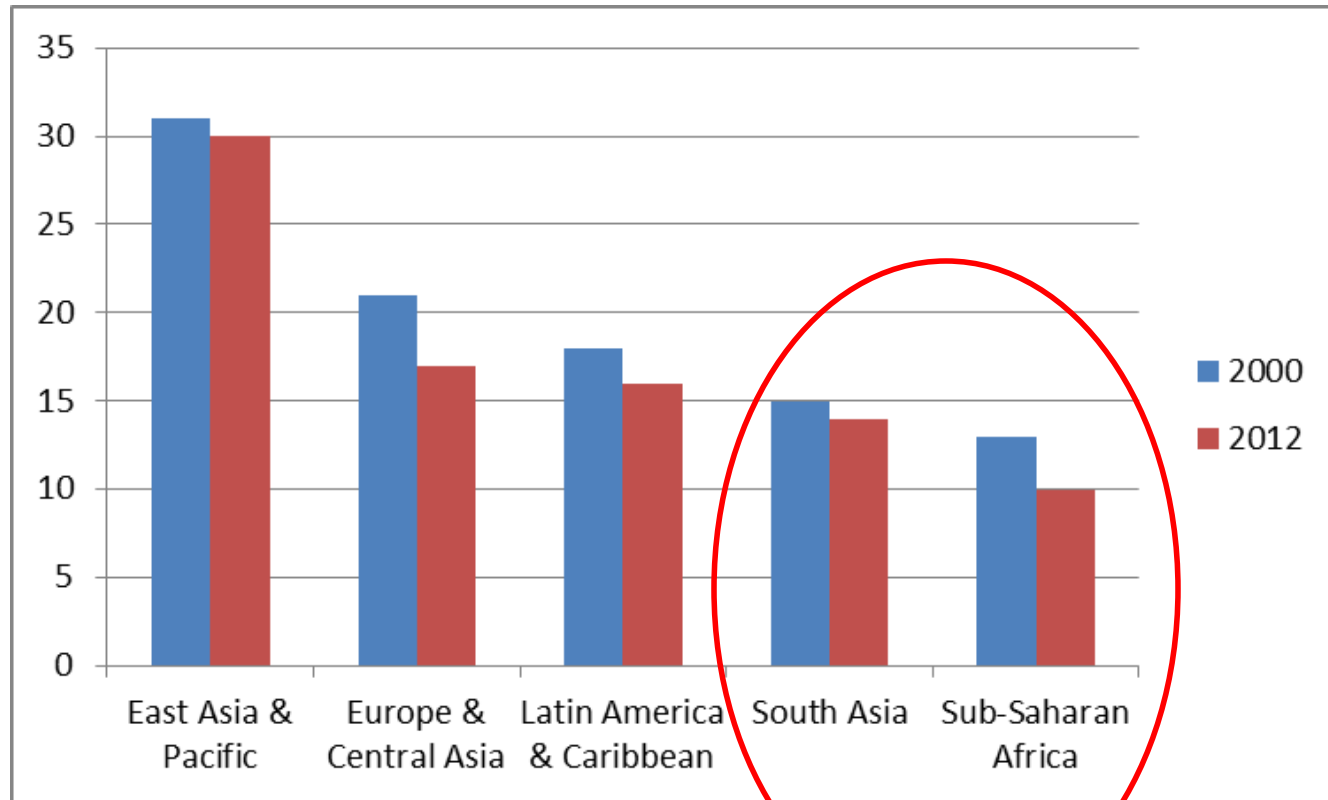
# African manufacturing is lagging behind, even controlling for incomes



Africa: Botswana, Ethiopia, Ghana, Kenya, Mauritius, Malawi, Nigeria, Senegal, Tanzania, South Africa, and Zimbabwe.

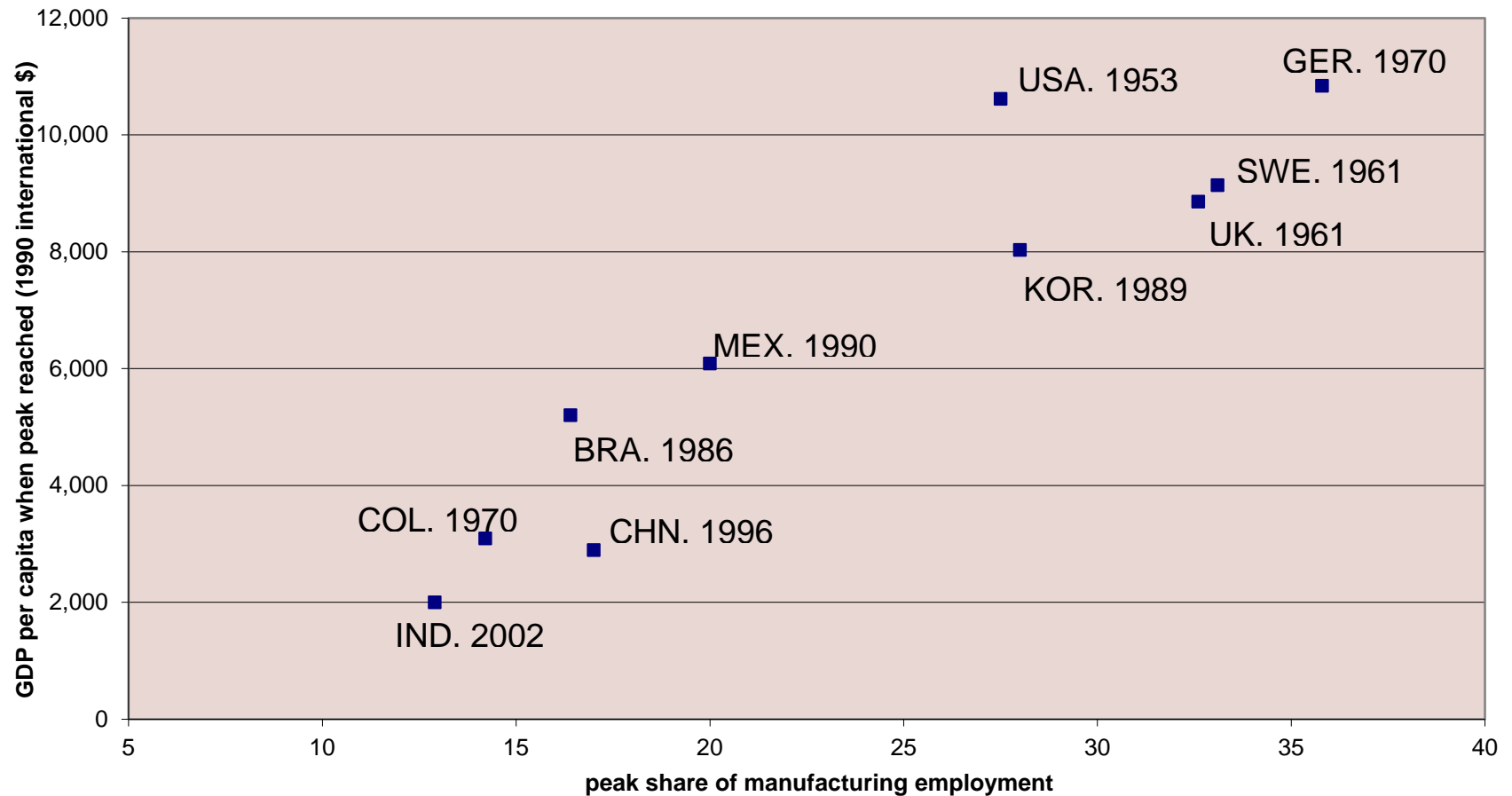
Asia: Hong Kong, Indonesia, India, Japan, Korea, Malaysia, the Philippines, Singapore, Thailand, Taiwan, and Vietnam.

In fact, manufacturing appears to be shrinking, even in LICs



# Premature industrialization

Peak manufacturing levels



# Global value chains facilitate entry to manufacturing but diminish returns from it

**The Ratio of Value-Added to Gross Exports for the Top 20 Exporting Countries**

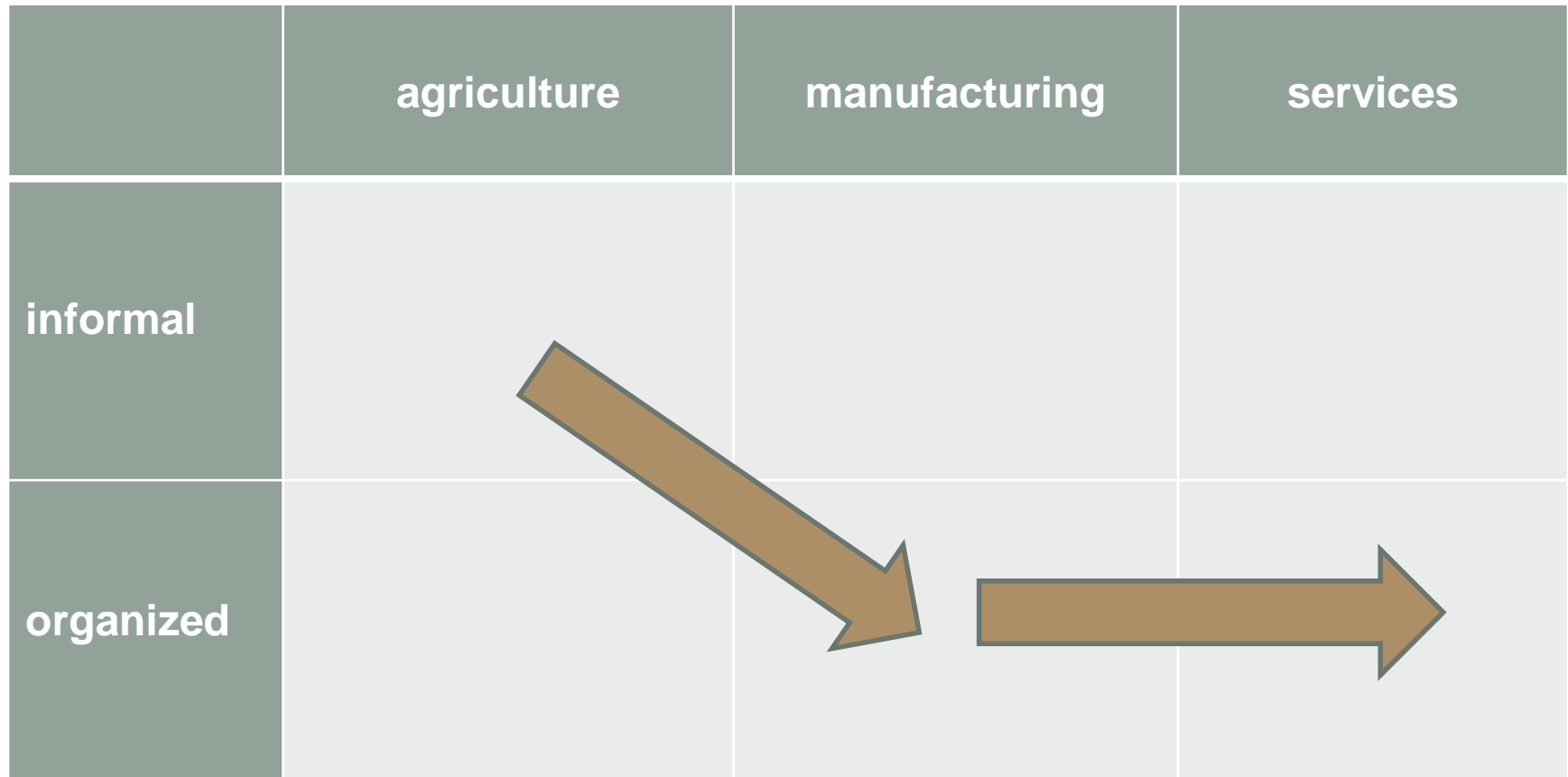
	<i>WIOD</i> 2008	<i>WIOD</i> Change 1995–2008	<i>Johnson–Noguera</i> Change 1970–2008
Germany	0.69	−0.10	−0.16
United States	0.78	−0.05	−0.14
China	0.75	−0.09	−0.20
Japan	0.80	−0.12	−0.09
United Kingdom	0.78	−0.01	−0.04
France	0.71	−0.08	−0.13
Italy	0.73	−0.07	−0.12
Netherlands	0.62	−0.06	−0.11
Canada	0.76	0.02	−0.11
South Korea	0.58	−0.18	−0.18
Russia	0.92	0.00	
Belgium	0.53	−0.07	−0.15
Spain	0.69	−0.09	−0.17
Taiwan	0.51	−0.16	
Mexico	0.70	−0.03	−0.21
India	0.78	−0.12	−0.20
Sweden	0.66	−0.08	−0.13
Australia	0.84	−0.04	−0.06
Brazil	0.86	−0.05	−0.10
Austria	0.65	−0.10	−0.17
Minimum	0.51	−0.18	−0.21
Median	0.72	−0.08	−0.14
Maximum	0.92	0.02	−0.04

*Sources:* World Input-Output Database (WIOD) and author’s calculations, Johnson and Noguera (2014).  
*Notes:* The column “WIOD 2008” is the ratio of value-added exports to gross exports for each country in 2008 from the World Input-Output Database. The column “WIOD change 1995–2008” is the change in this ratio from 1995 to 2008. The column “Johnson–Noguera change 1970–2008” is the change in the ratio of value-added exports to gross exports for each country from 1970 to 2008, from Johnson and Noguera (2014). Blank entries in that column reflect missing data. Exporting countries are ordered top to bottom by total gross exports in 2008.

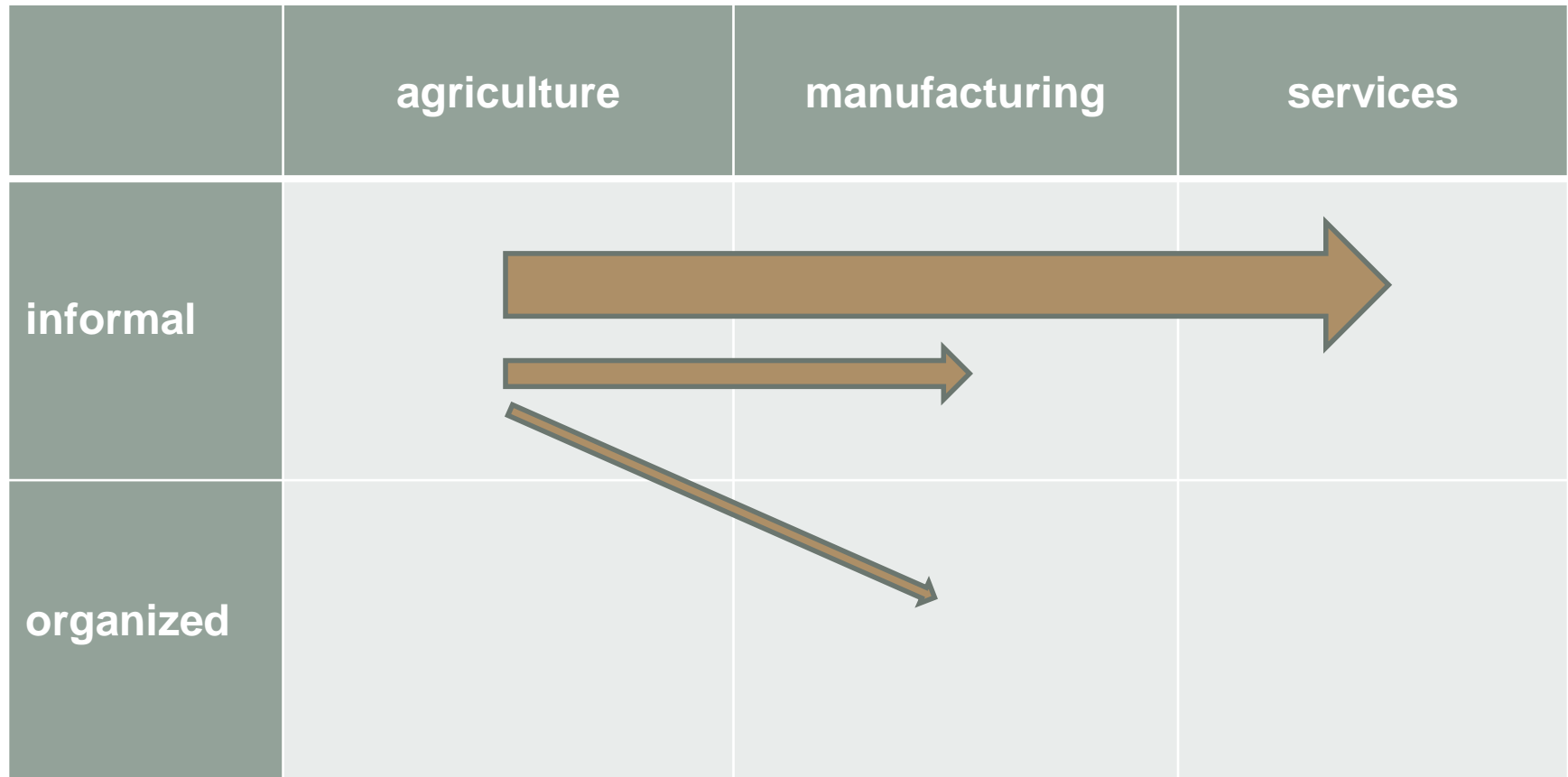
# Patterns of structural change

	agriculture	manufacturing	services
informal			
organized			

# Patterns of structural change: East Asia and advanced countries



# Patterns of structural change: low-income countries today

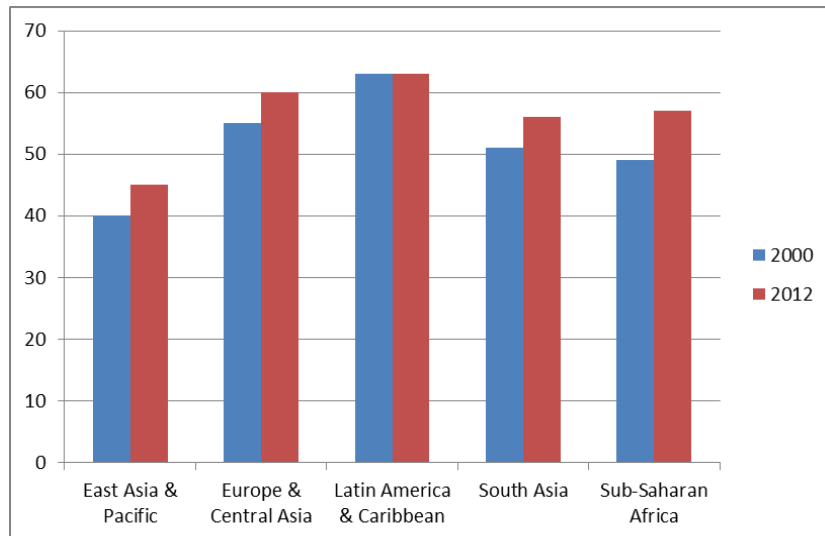


# Intermediate conclusions

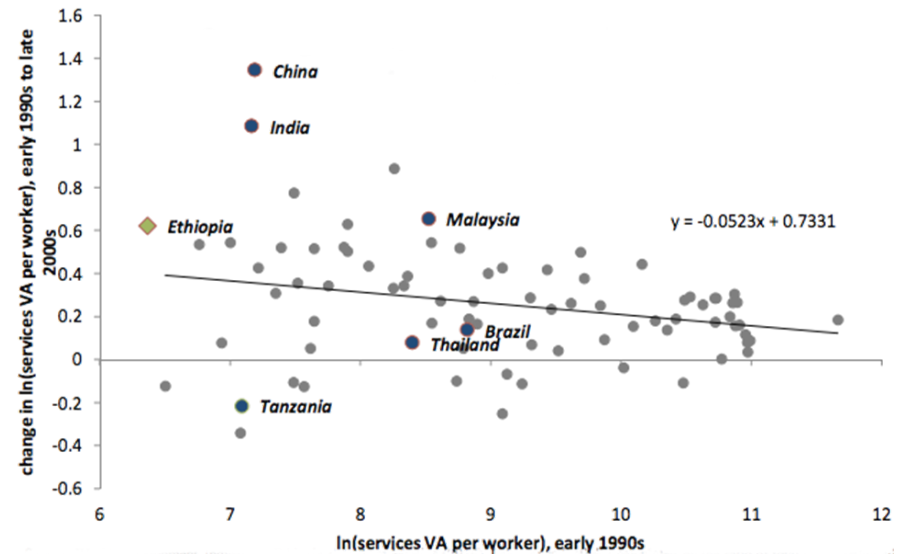
- Promoting (re)industrialization will be difficult -- like swimming against the tide
- Alternative priorities:
  - raise productivity in services and reduce share of small, informal firms
  - this is one and the same challenge, since low productivity in services in large part result of long tail of unproductive firms
- What kind of IP, if at all, for services?

# Is the rise of services really bad for growth?

## Services (%of GDP)



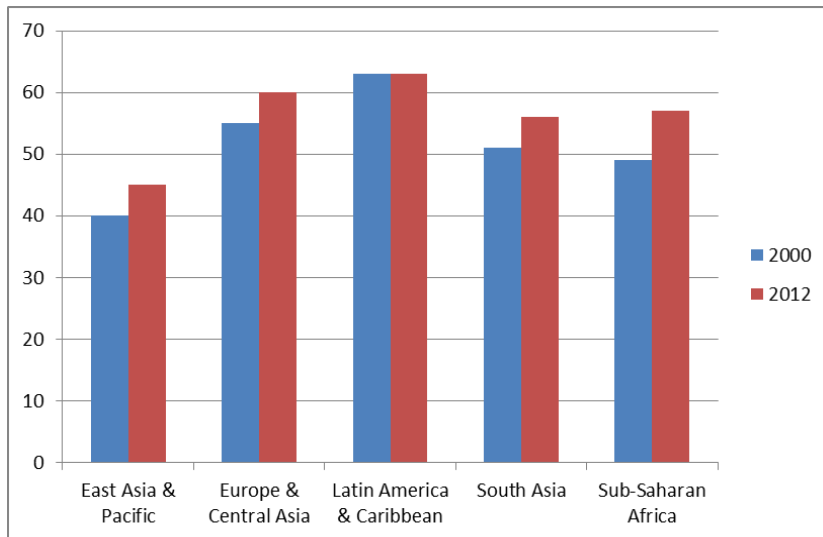
## Unconditional convergence in services (post-1990)



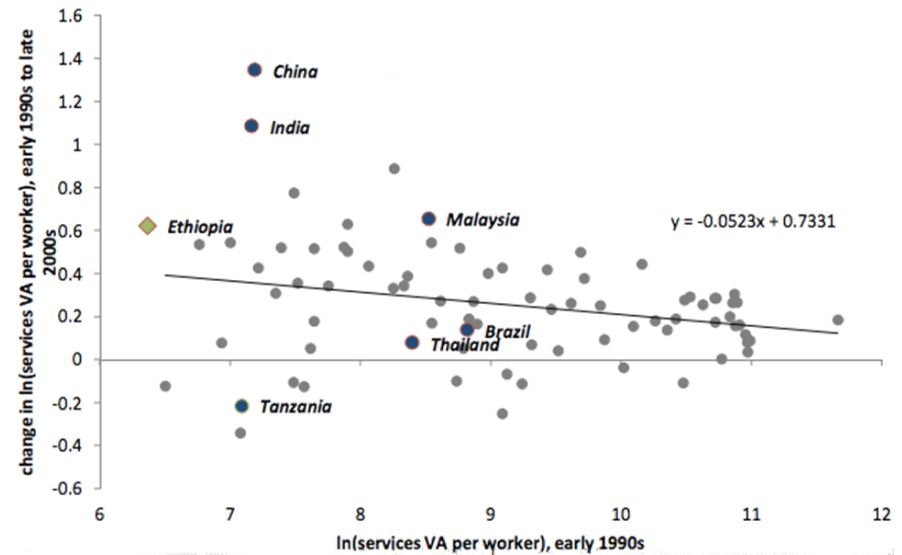
Source: Ghani and O'Connell (2104)

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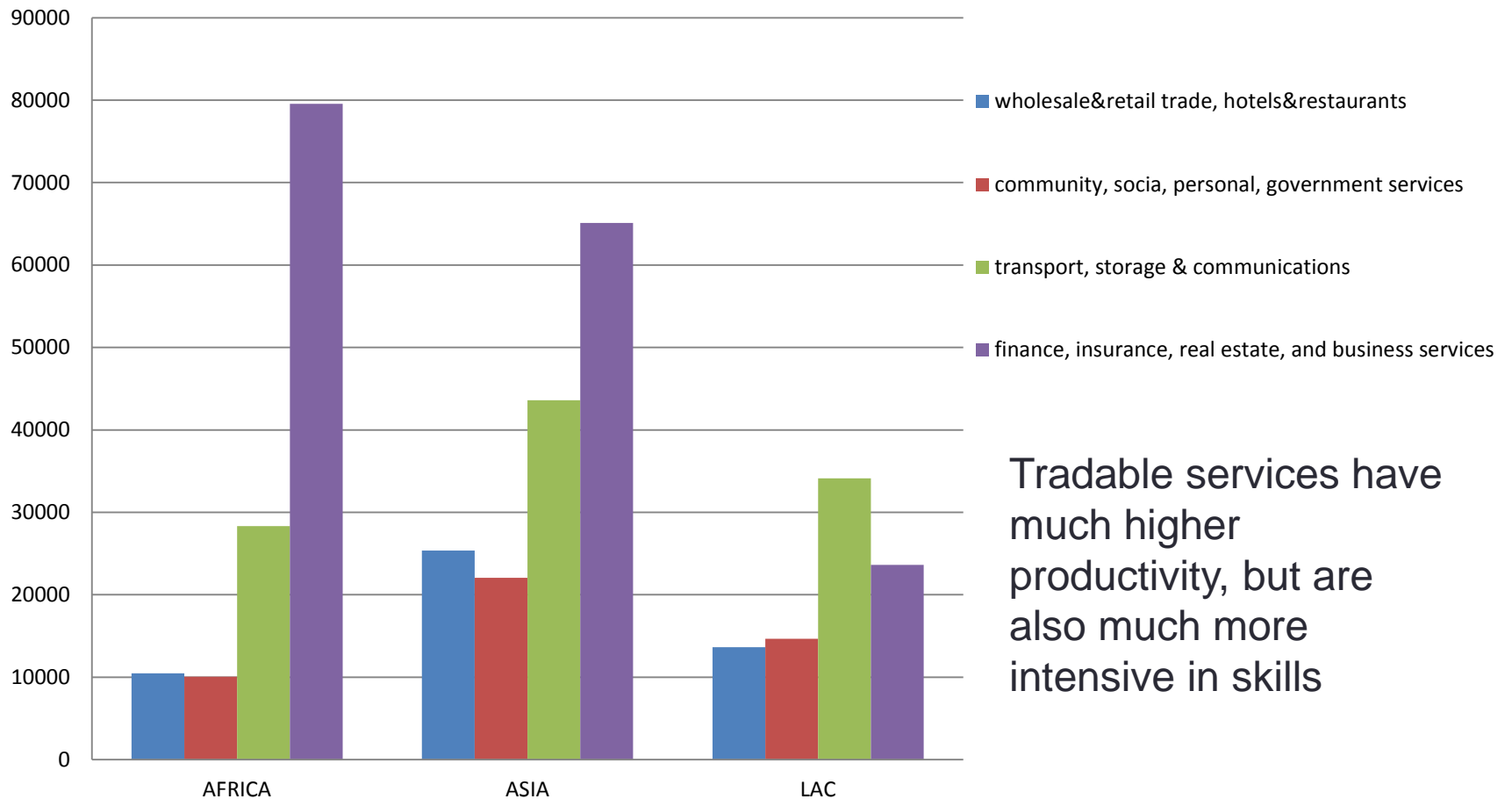
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# Why services are not like manufactures

- High-productivity (tradable) segments of services cannot absorb as much labor
  - since they are typically skill-intensive
  - FIRE, business services
- Low productivity (non-tradable) services cannot act as growth poles
  - since they cannot expand without turning their terms of trade against themselves
  - continued expansion in one segment relies on expansion on others
  - limited gains from sectoral “winners”
  - back to slow accumulating fundamentals (rather than IP)

# Dualism in services: across sectors

Labor productivity (2000 PPP\$)



Tradable services have much higher productivity, but are also much more intensive in skills

# Dualism in services: within sectors (I)

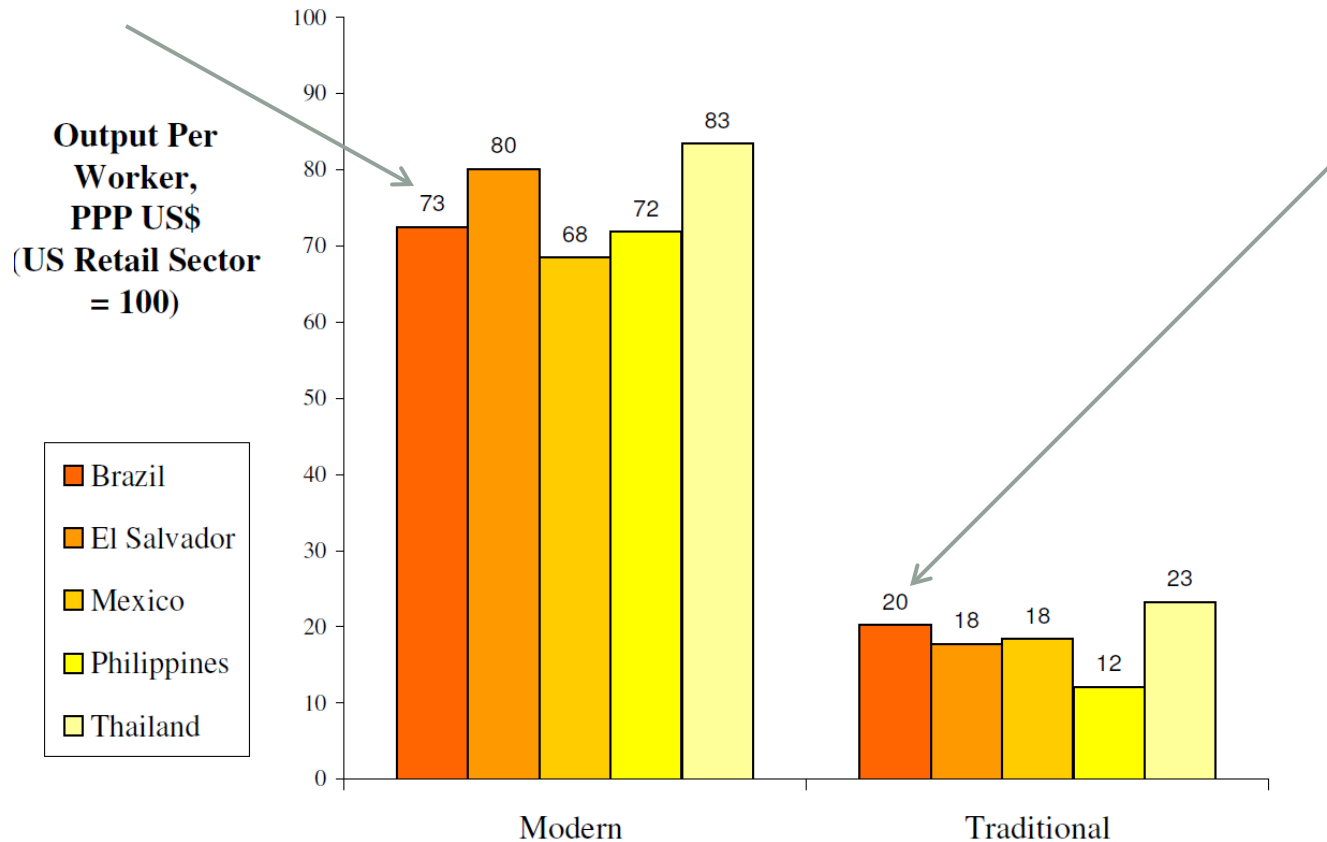
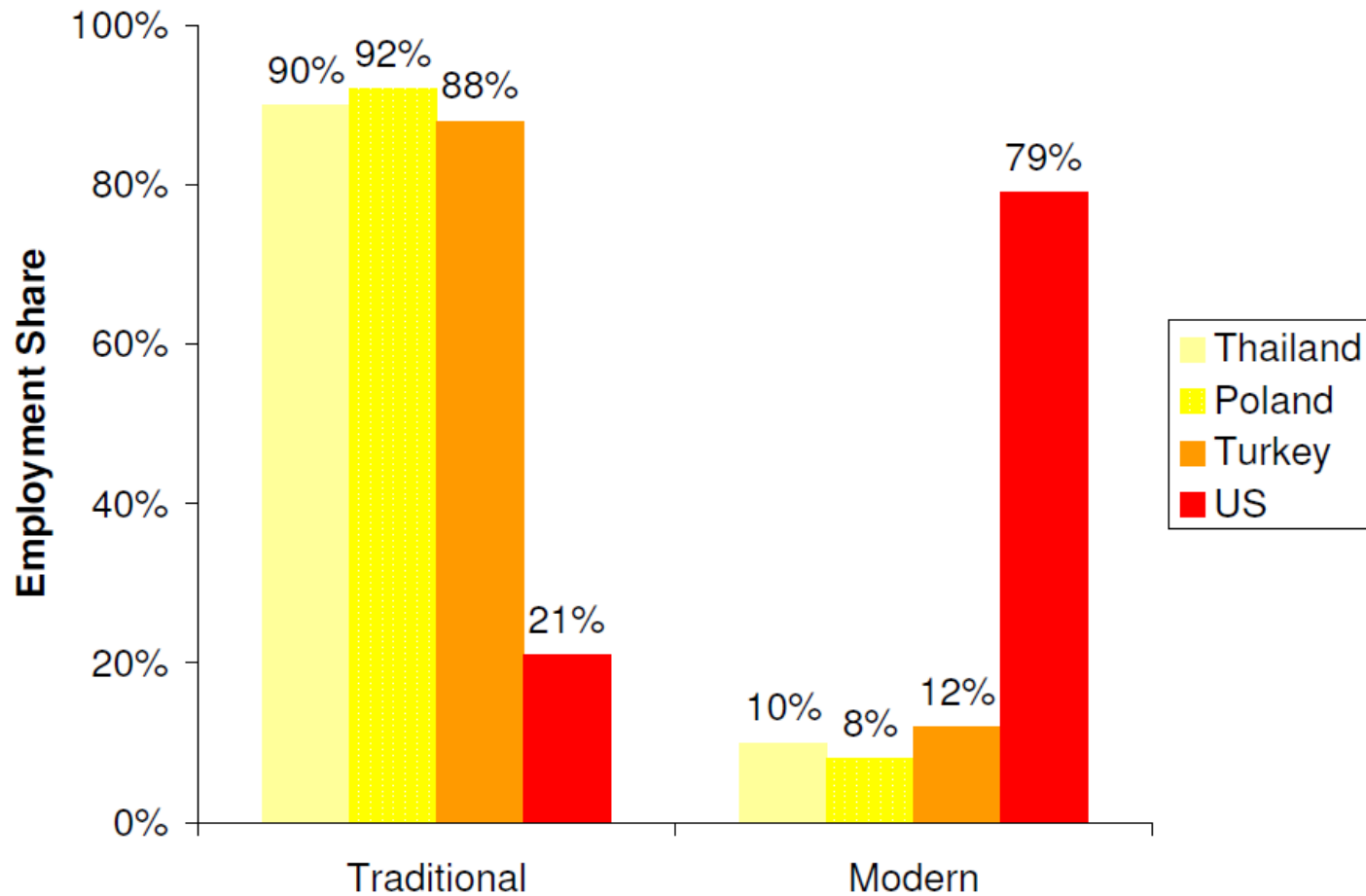


Figure 2: Labor Productivity in Modern and Traditional Stores

Source: McKinsey country studies, via Lagakos (2007)

## Dualism in services: within sectors (II)



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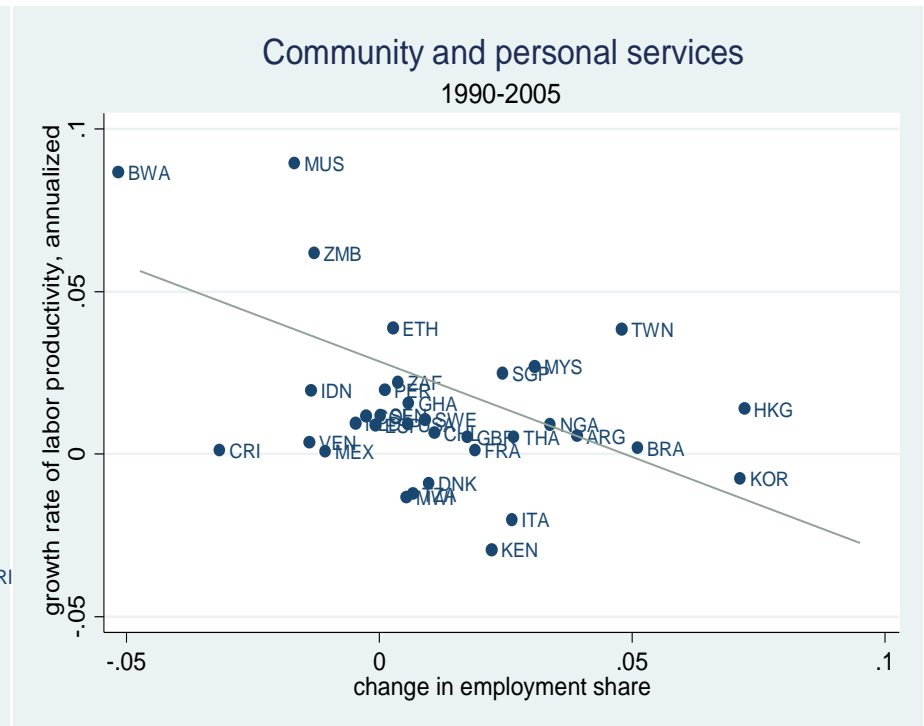
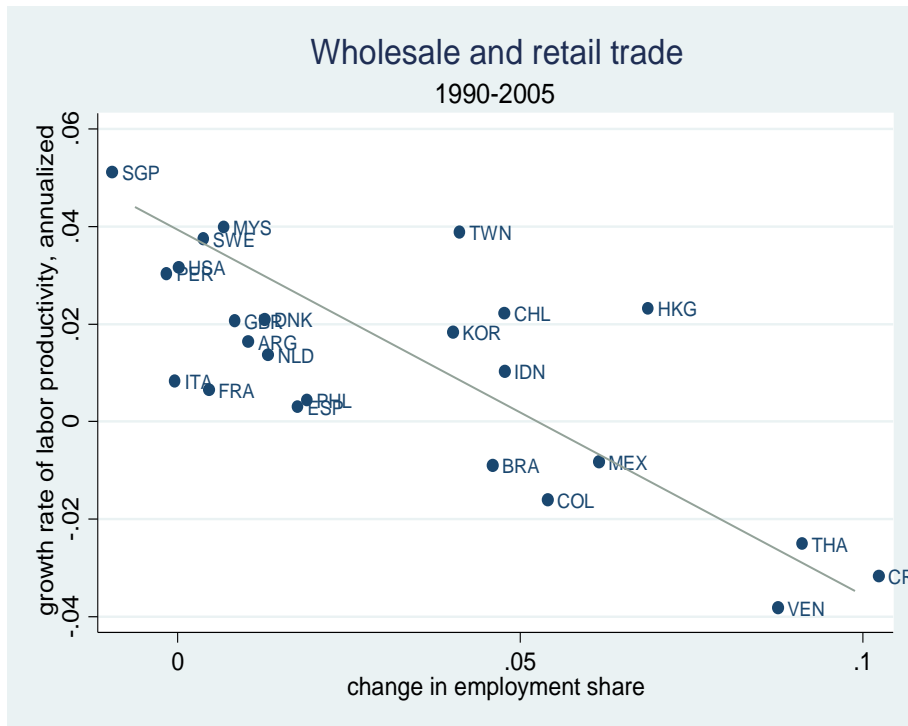
# Policies to address within-sector dualism

- A strategic choice:
  - Help small firms grow?
    - MGI: “Prescribing many of the measures that are needed to improve productivity in traditional enterprises is straightforward...”
  - Or support modern/large firms’ expansion?
    - With fixed costs of adopting new technologies, there are too many small firms
    - Informal firms are inherently unproductive; successful firms start large (LaPorta and Shleifer 2014)
- Deregulate?
  - allow entry (including FDI) and remove costly licensing/certification/regulatory requirements
  - but usual trade-off between competition and Schumpeterian rents
- Enforce formality?
  - by leveling the playing field in taxation, employment, social security policies
  - relieves competition for formal firms: is this good or bad?

## A thorny problem: the employment-productivity trade-off in services

- Large part of the problem in services (e.g. retail trade) is preponderance of small, low-productivity firms that absorb excess supply of labor
- Where do people employed in small firms go?

# Not many examples of productivity growth and employment expansion in services



Service sectors that have best productivity performance typically shed labor; labor absorbing sectors typically have worst productivity performance.

Source: Author's calculations from GGDC data.

# How did manufacturing avoid this problem?

- Key is tradability
- Higher-than-average productivity growth in a tradable sector of (small) open economy translates into greater output
  - and possibly higher employment even if productivity growth is driven by labor-replacing technology
- In non-tradable sectors, the output-boosting effect is attenuated by decline in relative price (and profitability)

# Tradables versus non-tradables

How output responds to productivity shock  $d\theta_j$ :

$$\frac{dq_j/q_j}{d\theta_j} = \frac{dQ/Q}{d\theta_j} - \varepsilon_j^d \frac{dp_j/p_j}{d\theta_j}$$

*overall income growth*

*substitution*

$q_j$ : output of sector  $j$

$Q$ : aggregate real income

$\varepsilon_j^d$ : price elasticity of demand faced by sector  $j$  (absolute value)  
( $\rightarrow \infty$  for tradable good in small open economy)

$p_j$ : sector  $j$ 's (relative) price

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*overall income growth*

$\approx 0$  if sector  $j$  is small

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*substitution*

NT sector  
expansion  
requires much  
larger price  
decline

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# Implication for IP in services

- Services expansion requires simultaneous and complementary productivity gains across the board
- Producing sectoral “winners” yields much smaller benefits
  - much less room for selective policies, prioritization, and “strategic bets”
  - considerable need still for dialog to identify and remove sector-specific impediments, but such dialog has to be necessarily broad based (covering much of the economy)

# Concluding comments

- Paradoxically, IP may become less relevant as its importance becomes better appreciated and countries are gearing up themselves better for it
- Growth in the future will have to come the hard way, through economy-wide improvement in capabilities
  - requiring broad-based investments in human capital and institutions
- Potential growth rates will be lower in the future