

# THE PRODUCTIVITY CHALLENGE: GROWTH BEYOND THE COMMODITY BOOM

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November 2017

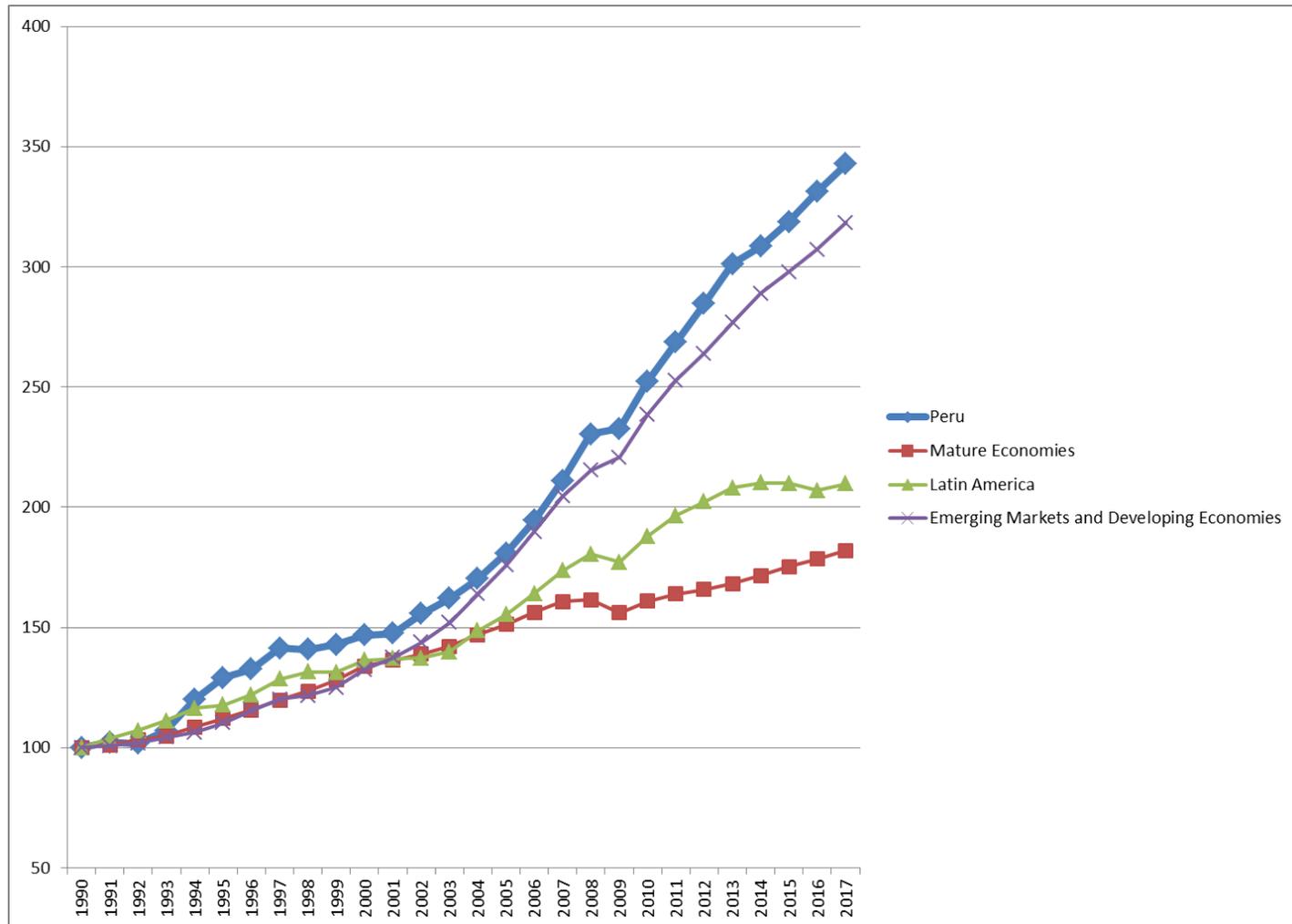
# A new world...

- Commodity super-cycle has ended
- (Premature) deindustrialization is well underway
- Globalization has peaked

# And new priorities...

- Domestic productive integration (vs. international integration)
- Employment generation (vs. technology/innovation)
- Pragmatic government-business collaboration (vs. “neoliberalism”)

# Peru in comparative perspective: GDP growth



# Proximate sources of economic growth

Overall growth =

employment growth

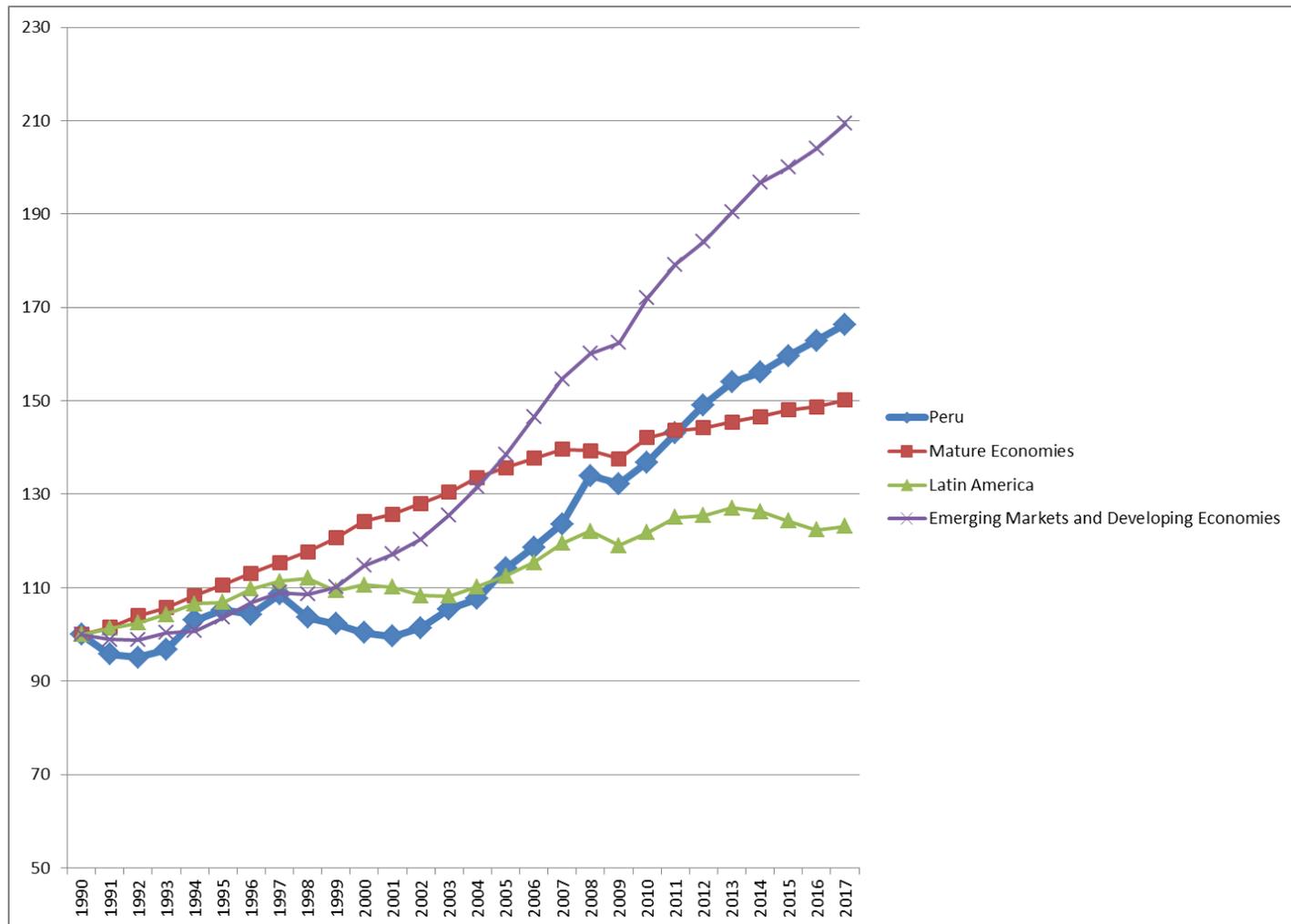
+ upgrading of labor skills

+ physical capital investment

} labor  
productivity  
growth

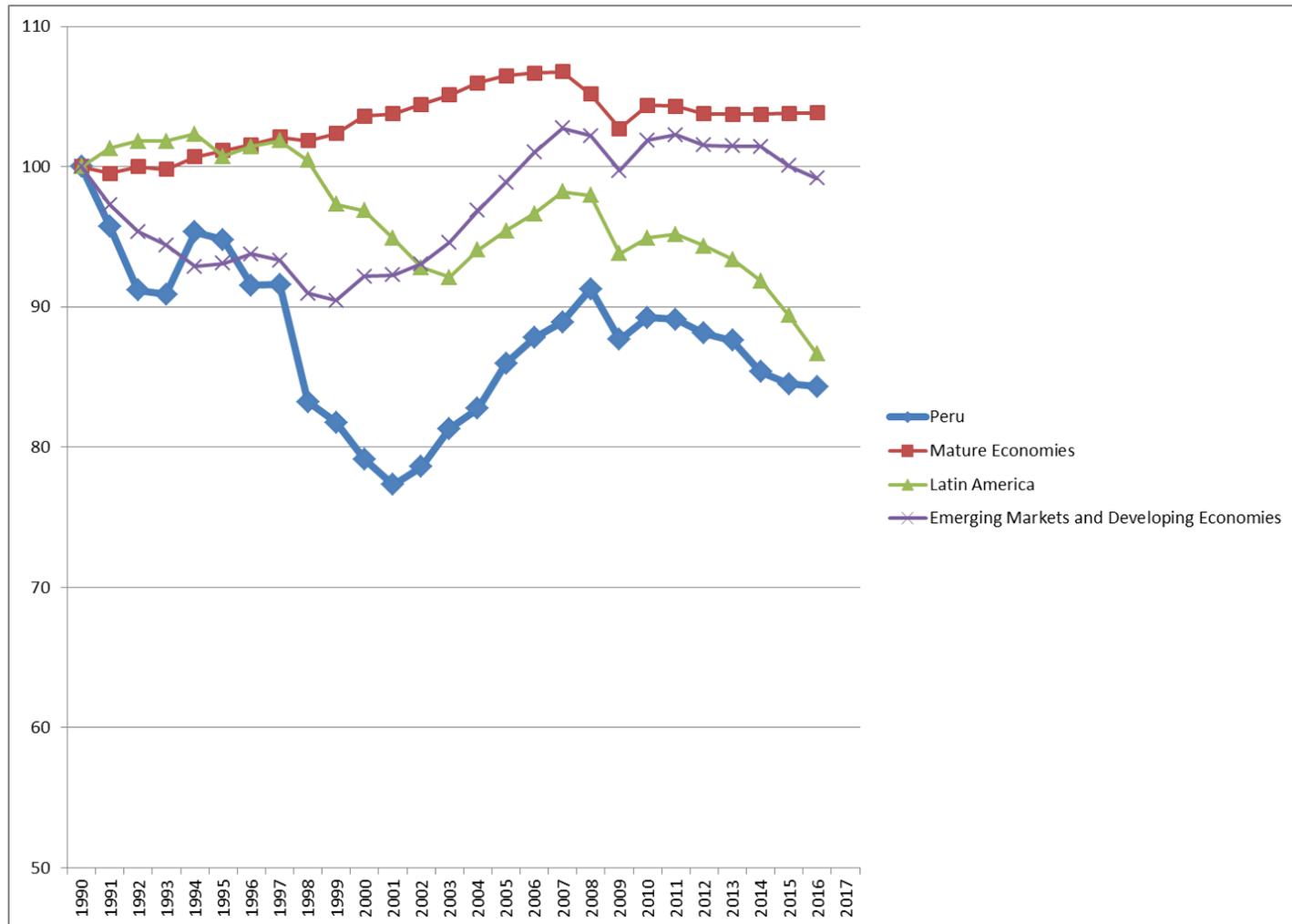
+ total factor productivity (TFP) growth  
(an amalgam of increased efficiency in  
resource use and technological progress)

# Peru in comparative perspective: labor productivity growth



Note: All data on labor productivity and its sources are from Conference Board, Total Economy Database.

# Peru in comparative perspective: TFP growth



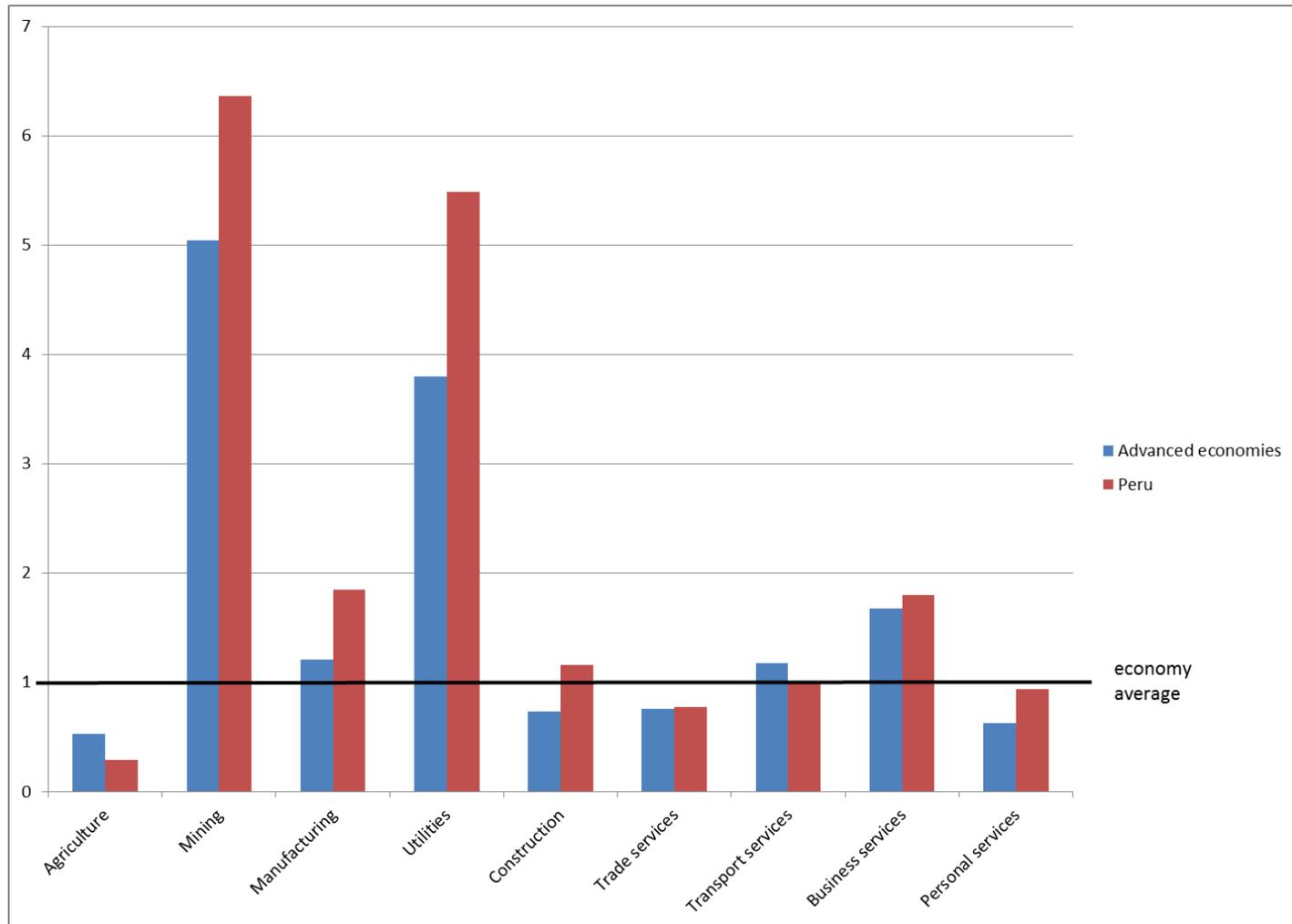
# Where does productivity come from?

- Advanced countries:
  - technological innovation, R&D, new products and processes
- Developing countries:
  - adoption and adaptation of existing technologies
  - structural change
    - creation (or expansion) of industries that exist elsewhere but are new to country
    - movement of resources (labor) from traditional to modern activities
      - from traditional agriculture to modern industry and services
      - from informal to formal activities

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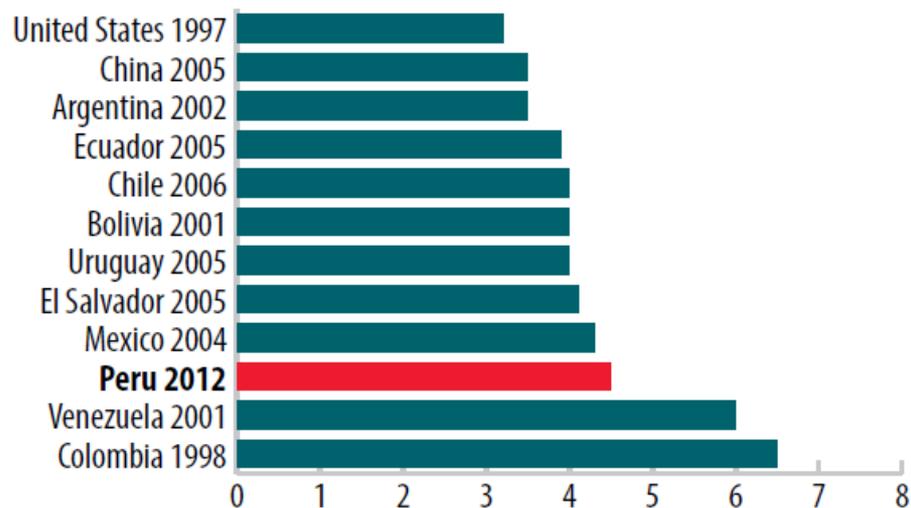
# Labor productivity gaps across sectors



# Labor productivity gaps among firms

**Figure 24. There are large differences in productivity levels across firms in Peru**

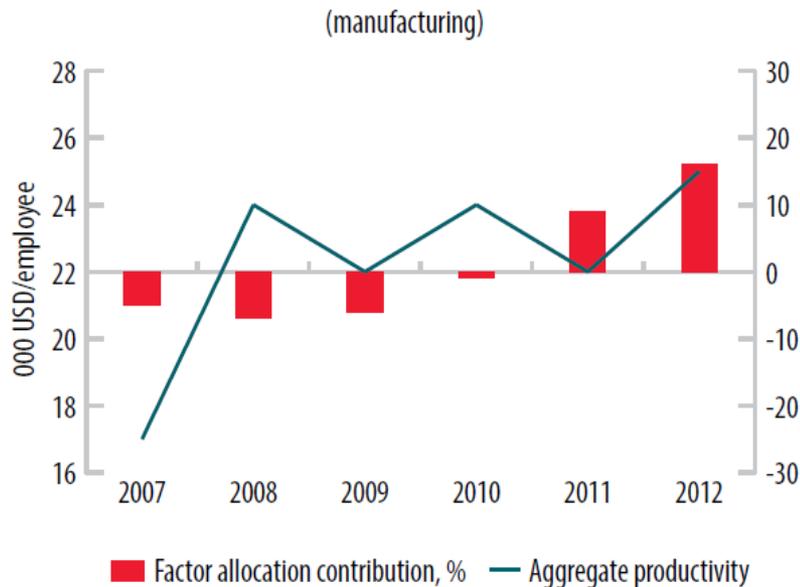
(percentage difference in productivity between the 90th and 10th percentile of the productivity distribution)



*Source:* Peru data are from a background paper prepared for this report by Iacovone and Tran (2015); data for other countries are from Inter-American Development Bank (2010).

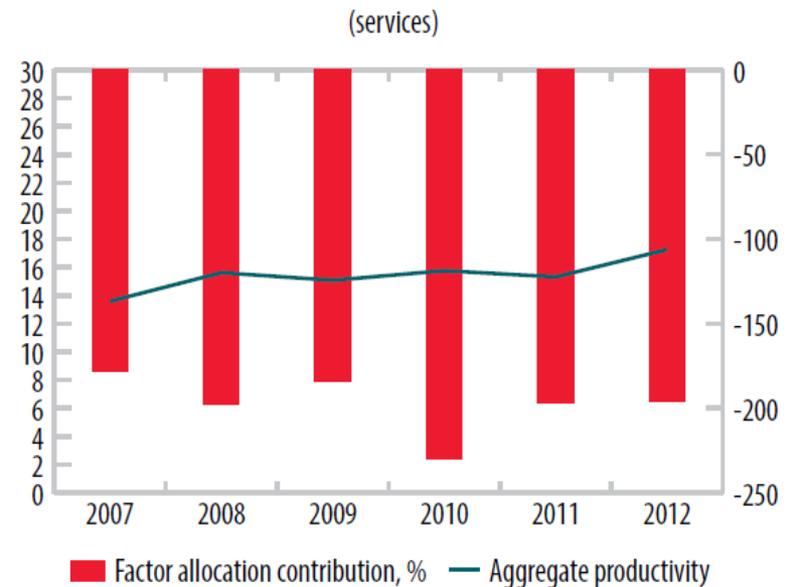
# Labor and capital move to more productive firms in manufacturing, but not in services

**Figure 29. Allocation of factors in manufacturing has improved, boosting productivity growth**



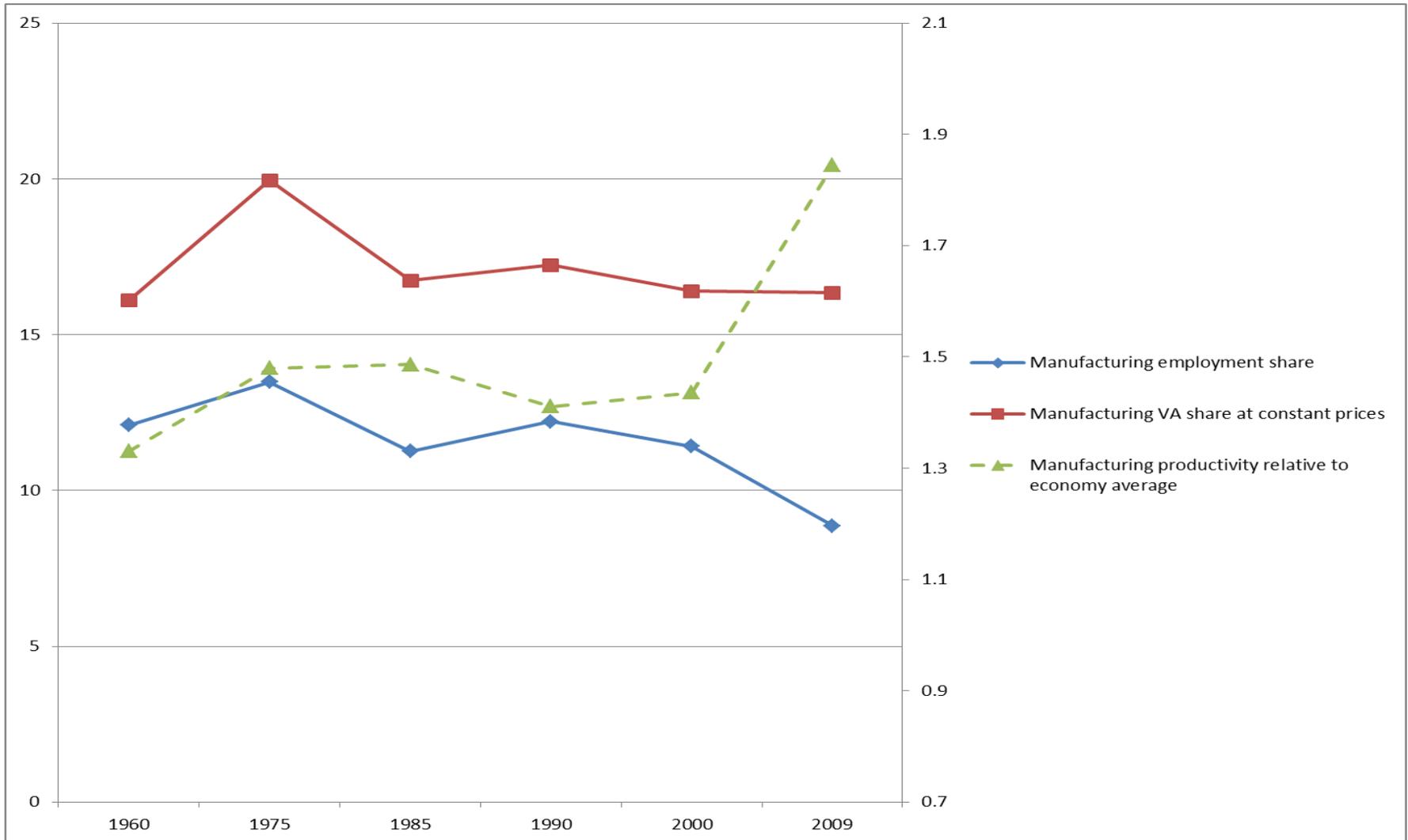
Source: Authors' calculations: Background paper prepared for this report by Iacovone and Tran (2015), based on Annual Economic Survey (Encuesta Económica Anual, EEA) by INEI.

**Figure 30. Services have seen no improvement in allocation, dragging down aggregate productivity growth**

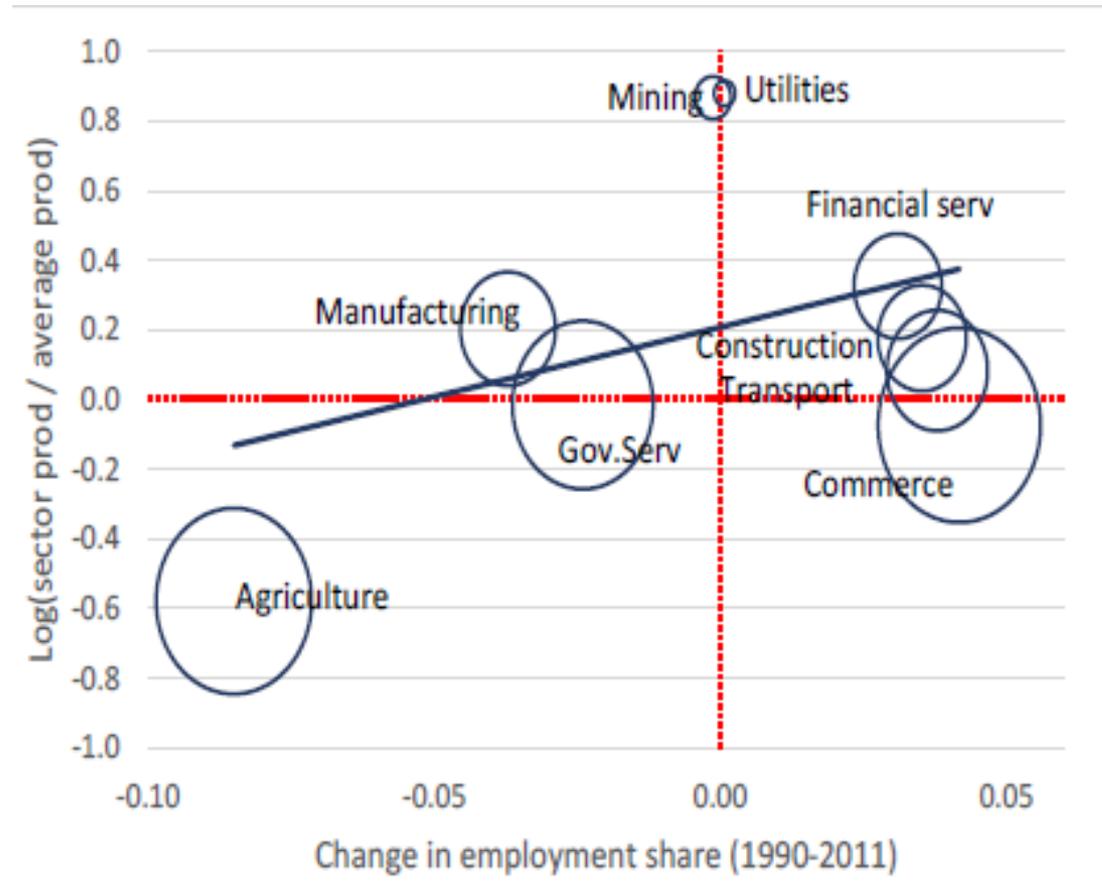


Source: Authors' calculations: Background paper prepared for this report by Iacovone and Tran (2015), based on Annual Economic Survey (Encuesta Económica Anual, EEA) by INEI.

# De-industrialization despite a more productive manufacturing



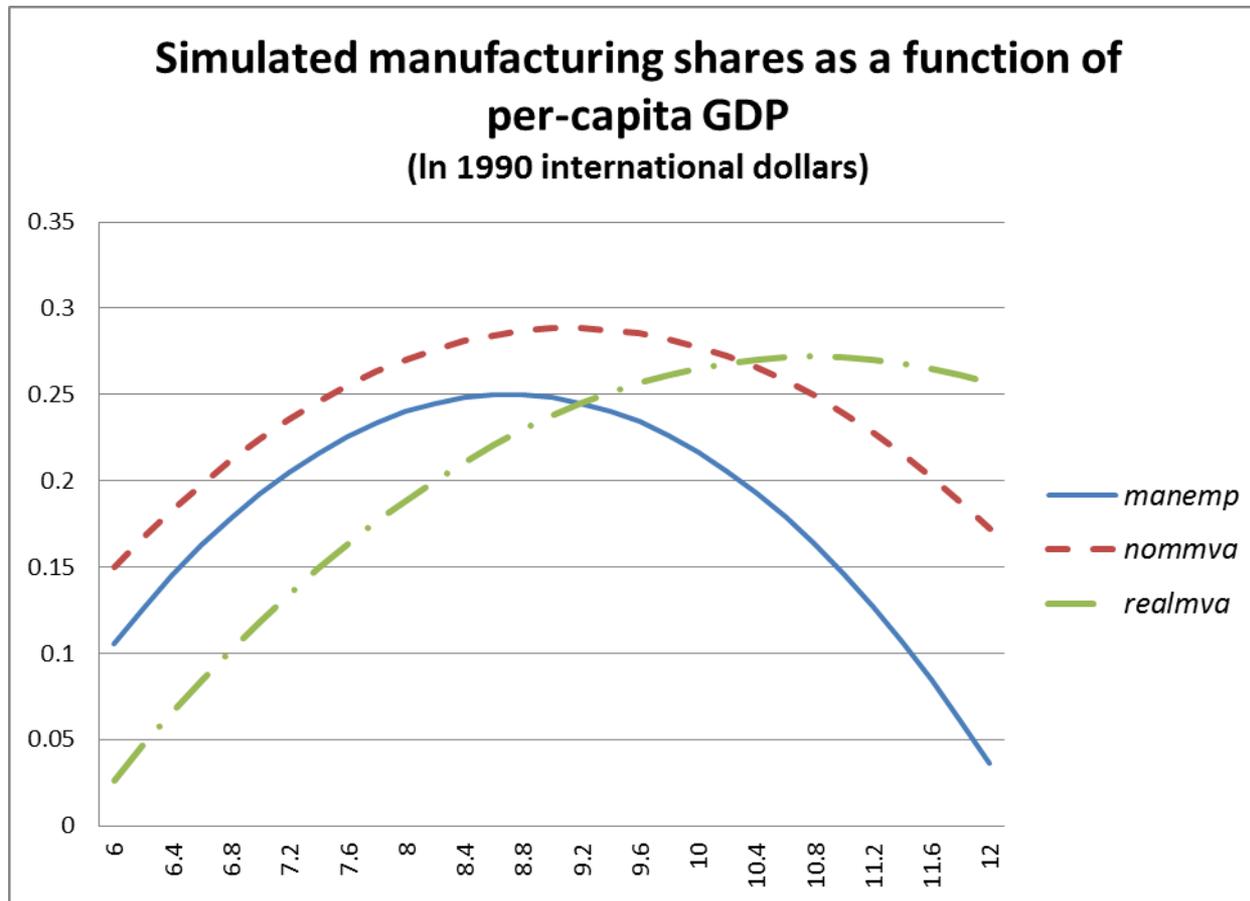
# Employment has moved to services



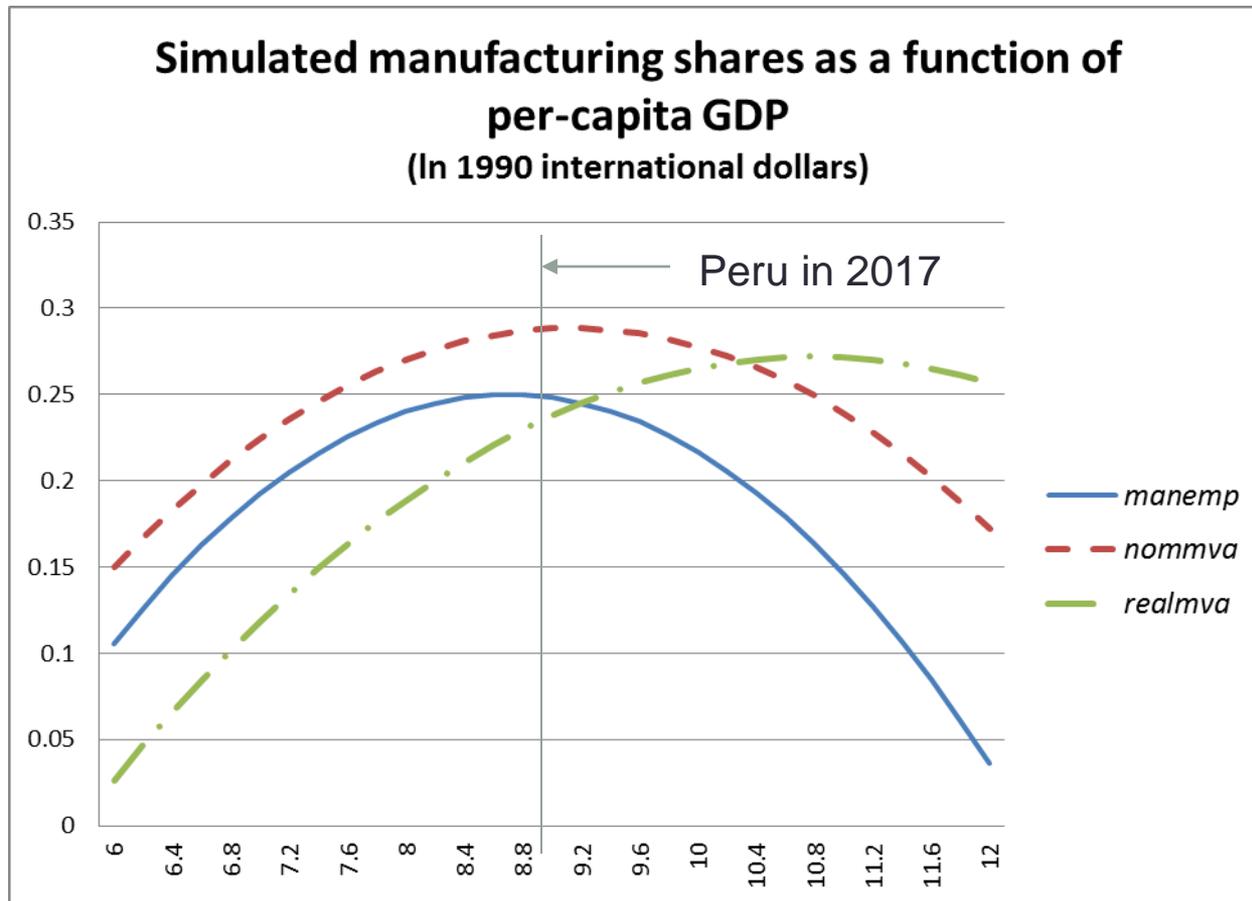
# Can de-industrialization be reversed?

- The global context: not very favorable
- This is not a new (or temporary) phenomenon, but a secular one
  - due to technology, global competition, and demand shifts

# The manufacturing curve: how manufacturing evolves over the course of development

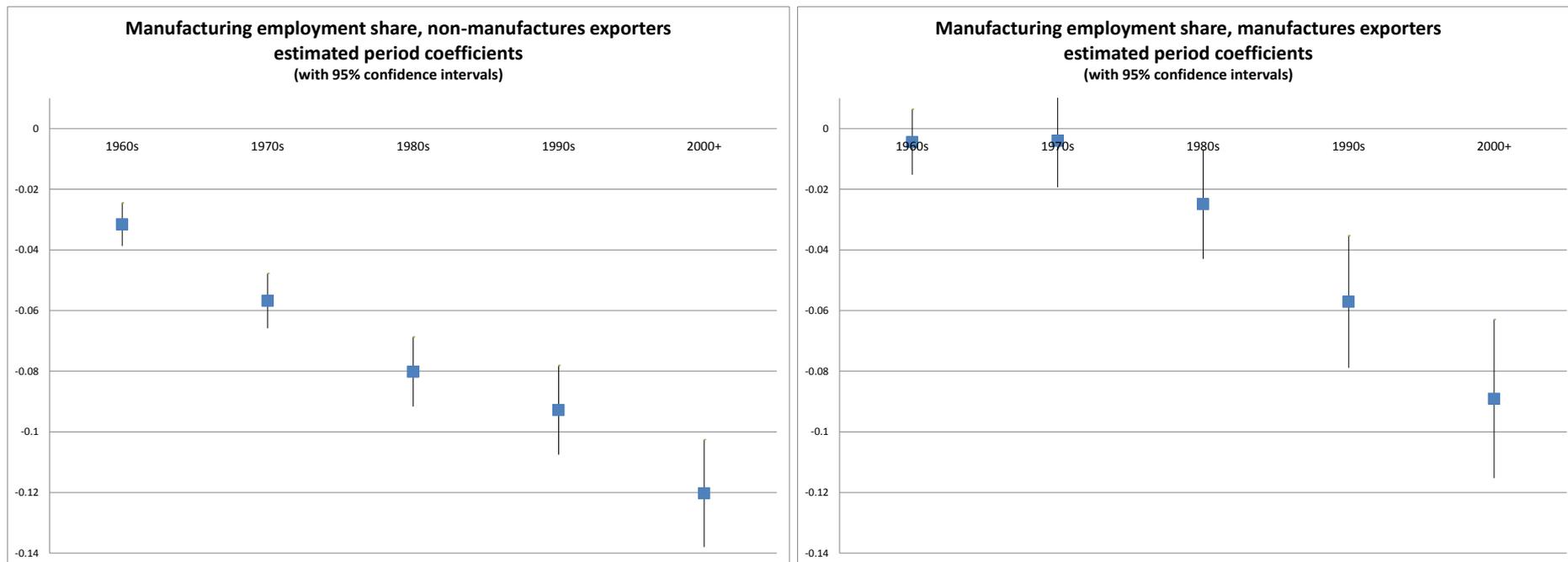


# Peru is at or past the turning point



# Moreover, manufacturing has been trending down everywhere at a rapid clip over long term

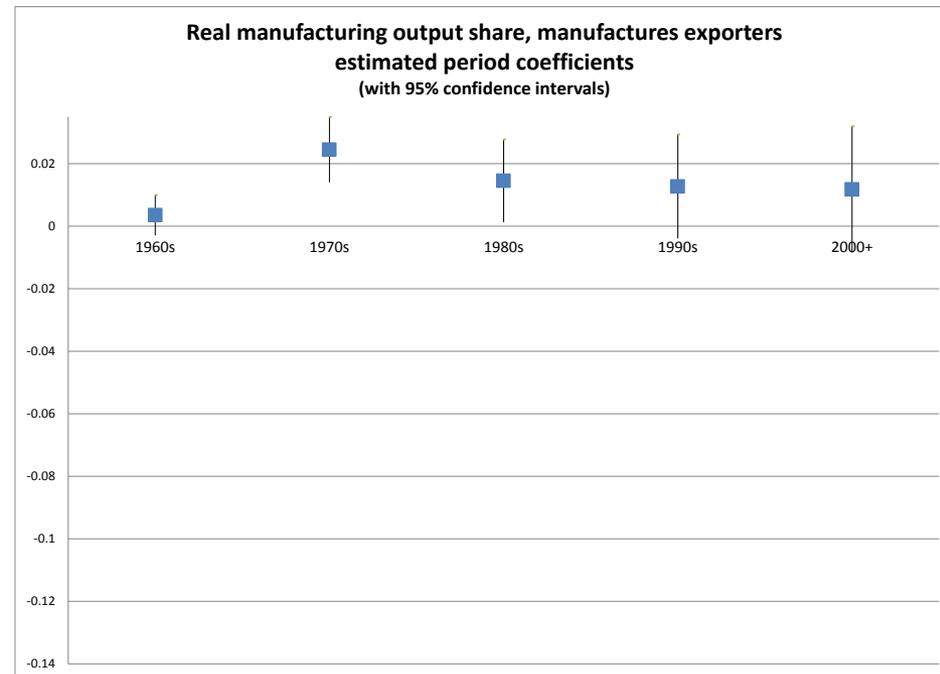
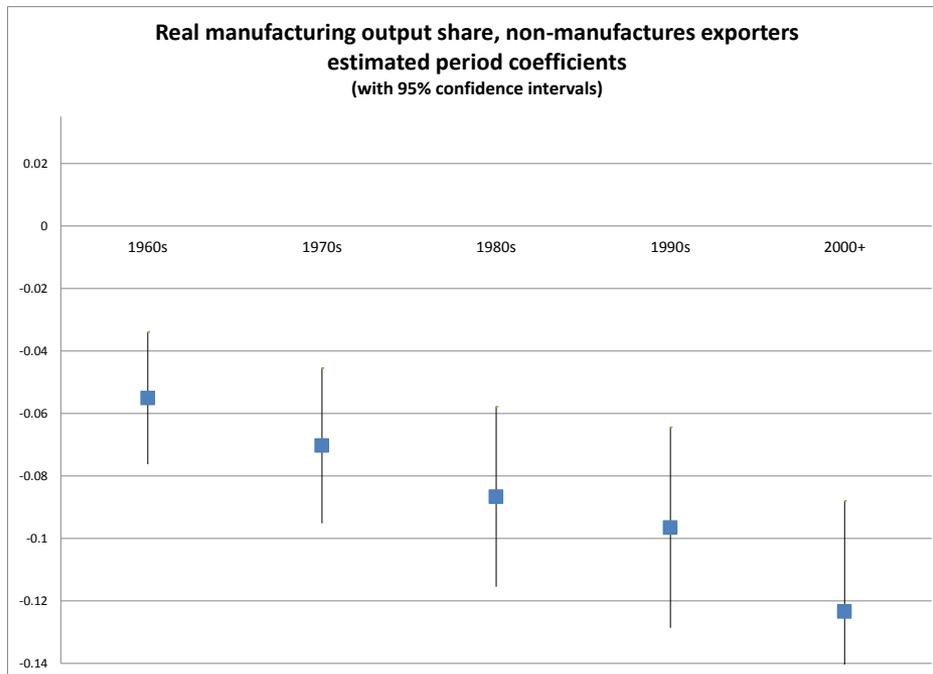
## Employment



Estimated coefficients on decade dummies from a regression where manufacturing shares are regressed on income, population (and their squares), country fixed effects, and period dummies

# Except for output shares in a handful of manufacturing exporters

## Output



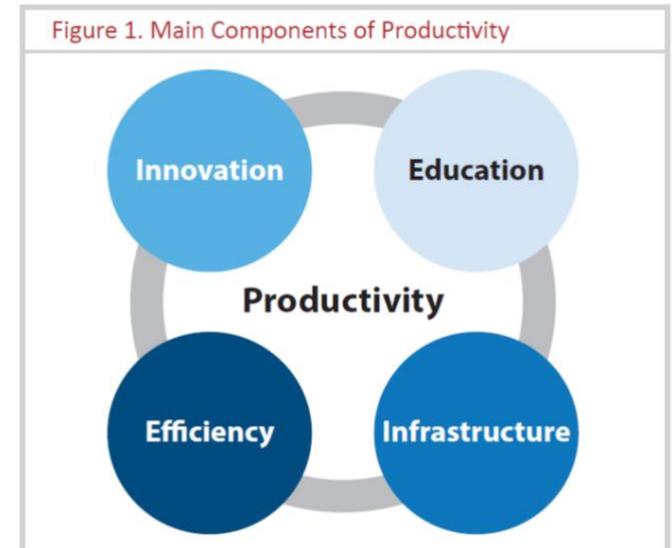
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# Intermediate conclusions and implications

- The most productive parts of the economy (tradables, agribusiness, mining) unable to grow sufficiently to absorb workers from traditional agriculture and informality
- Usual remedy for this problem: rapid industrialization
- Peru is unlikely to re-industrialize
  - premature de-industrialization is a secular, global phenomenon
- Focus of productivist policies has to shift to services and non-tradables
- Integrate most productive parts of the economy with the less productive segments
  - across multiple divides: spatial, size, export-orientation, formality
- Much, much harder: no blueprint exists

# Standard remedies for improving productivity

- Increase innovation
  - enhance market competition, R&D spending, human capital, non-traditional agriculture
- Improve education
  - spending on education, teacher training
- Enhance infrastructure
  - roads, ports, energy
- Improve governance
  - better regulation, courts, administration
- ...



Source: World Bank (2016)

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- Improve governance
  - better regulation, courts, administration
- A long laundry list of demanding tasks
  - like saying, “if you want to become Sweden, look like Sweden...”
  - not helpful since country needs to generate productive jobs for today’s workforce and with today’s institutional capabilities

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- **Not very well targeted**
  - problems and obstacles tend to be highly specific to industries

# Setting priorities: two styles of policy

- General purpose, top-down, presumptive
  - focus on deregulation and cutting red tape
  - comparative benchmarking to identify areas of underperformance (using WEF, WB. etc, indicators)
  - government agencies as providers of a package of predetermined services
    - skills training, credit, tax exemptions (free trade zones), marketing/promotion assistance, free-trade agreements,...
- Problem-driven, experimental, interactive
  - ask what's blocking new activities from emerging, modern firms from expanding
    - address specific obstacles
    - monitor
    - revise as needed
  - government agencies as problem solvers for private sector
- Different requirements for how public and private sectors should organize themselves

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# The new “productive” policy mindset

- Move away from traditional industrial policy pre-designated sectoral priorities and incentives
- Think of productive policy as a process of strategic collaboration between private and public sectors
  - learning: what are the constraints faced by firms in different activities?
  - experimenting: what are the best ways of removing/compensating for the constraints?
  - coordinating: are all relevant branches of govt around the table and on board?
  - monitoring and evaluation: how well are we doing?
  - revising: does the learning get incorporated into new policies?
- government’s relationship to firms: neither arms’ length, nor captured
- firms’ responsibility: developing plans of action that are in line with public objectives (e.g., employment expansion)
- public accountability through clear set of objectives, assignment of political responsibility, transparency and public communication

# Policies for domestic productive integration: general illustrations

- Promote backward integration of modern, productive firms
  - technology dissemination to suppliers (including services)
- Competitive provision of customized services for medium-sized firms
  - in return for monitoring, evaluation, employment commitments
- Publicly funded, professionally managed venture fund(s)
  - to invest in potential clusters with clear social/economic objectives
- Public-private sectoral roundtables to identify and remove specific obstacles

# Peruvian illustrations

- Initiatives in **agribusiness** since 1990s: public investment in irrigation, relaxing land use restrictions, reduced corporate tax rate, labor flexibility
  - ⇒ diversification into nontraditional fruits and vegetables
- *Mesas Ejecutivas*: working groups with private & public actors organized around a production sector to identify a “list of bottlenecks that affect productivity ... and focus on removing those with the understanding that much will be learned during execution” (Ghezzi 2106)
  - Iterated problem solving; deadlock kicked to ministerial level
    - “your problems,” versus “my problems”
  - critical: ability of private sector to identify root problems specific to their domain, beyond generic ones (“too much bureaucracy,” “high taxes,” “energy prices,” ...)
  - Some early successes in forestry, aquaculture
    - streamlined registration, better financing, reduced lags in permits

# Can the success be replicated elsewhere, or is agribusiness special?

- latent comparative advantage
  - land, sun, cheap energy, temperate climate
- social capital and entrepreneurship
  - e.g., role of “visionary producers” and the regional Ica Producers’ Association (IPA) in the development of asparagus cluster
  - perhaps facilitated by experience in providing public inputs (e.g. phytosanitary standards, logistics of cold storage)
- ease of creating special policy regimes in agriculture
  - e.g., corporate taxation, labor rules
- advanced technologies travel easier in agriculture than in manufacturing
  - complements are sun and soil rather than skills
- WTO regime/trade agreements provide fewer constraints on policy autonomy in agriculture than in industry

# Concluding remarks

- Last 30 years have reinforced the lesson that globalization is not a development strategy
  - a lesson that could have been avoided by learning from positive examples elsewhere
- But new global context also means policy lessons of the past are less relevant going forward
- Economy-wide structural change remains critical challenge
  - from traditional, low-productivity firms to modern, larger firms
- But will need to focus less on manufacturing and tradables, and more on services and non-tradables
- Importance of pragmatic, non-doctrinaire, experimental policies
  - institutionalized dialog/collaboration between public and private sectors still key