

January 22, 2015

## *The Indian Economy at a Crossroads*

### Presenters:

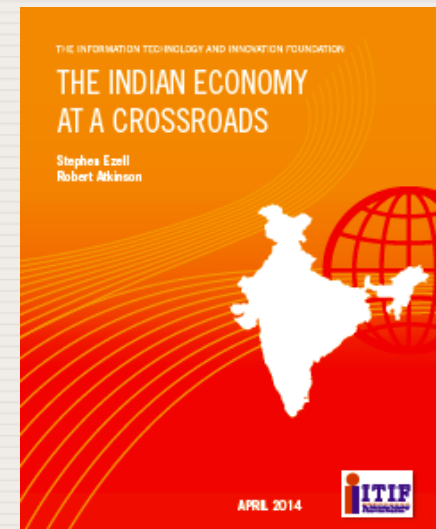
**Sunjoy Joshi**, Director, ORF

**Rob Atkinson**, President, ITIF

**Stephen Ezell**, Senior Analyst, ITIF

**Arvind Gupta**, Convenor, BJP Information Tech. Cell

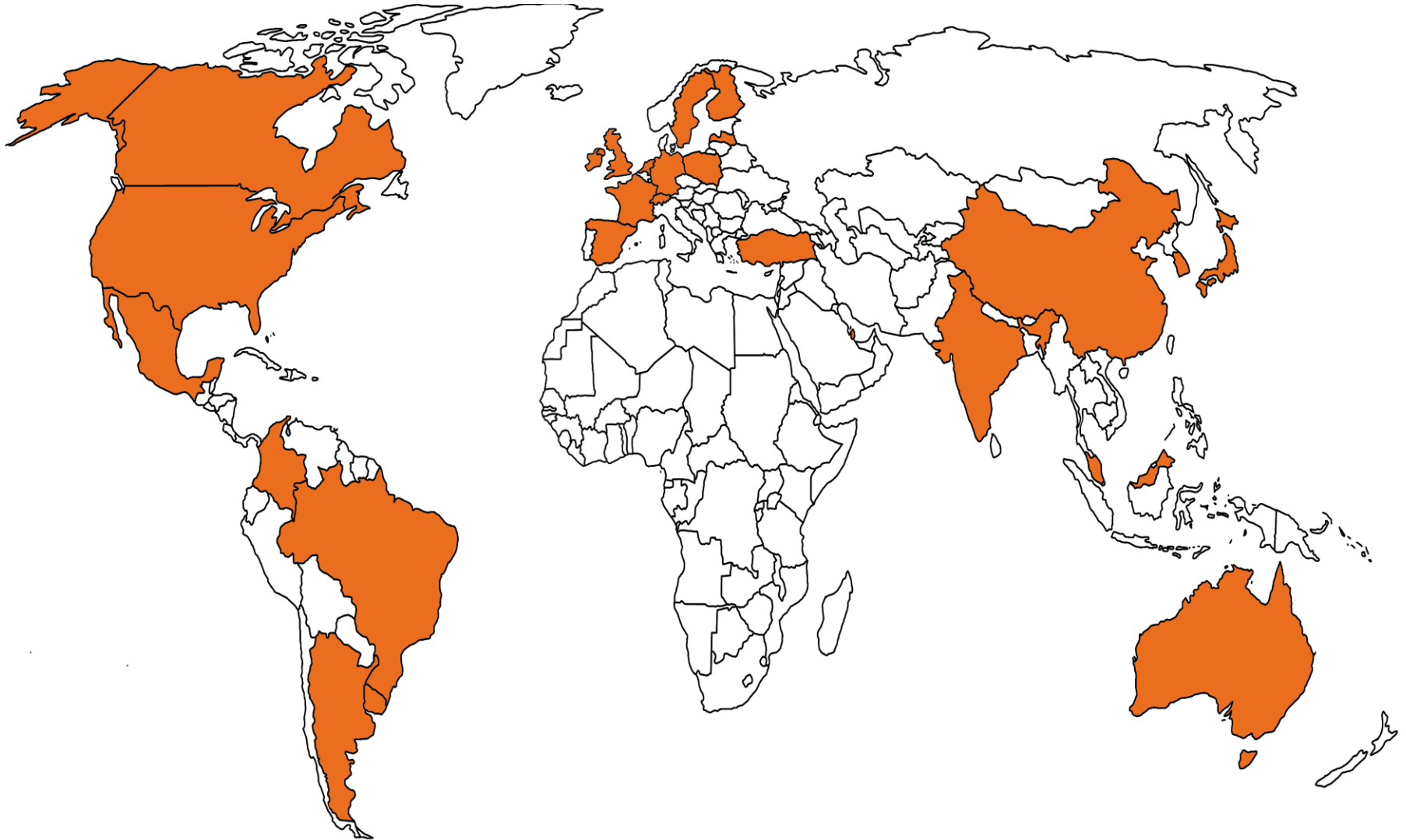
**Anupam Khanna**, Chief Economist, NASSCOM



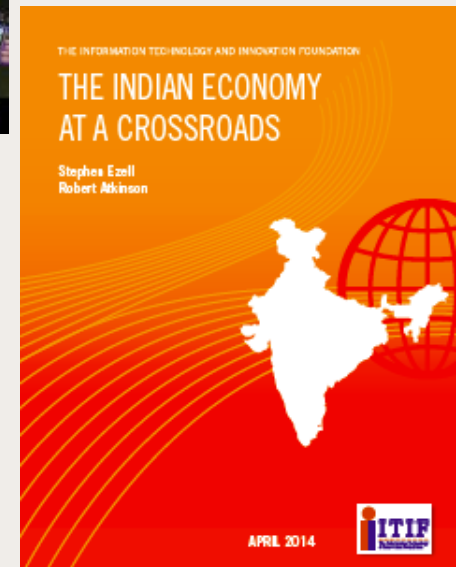
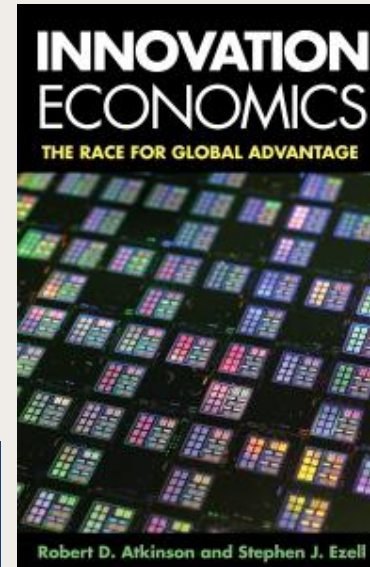
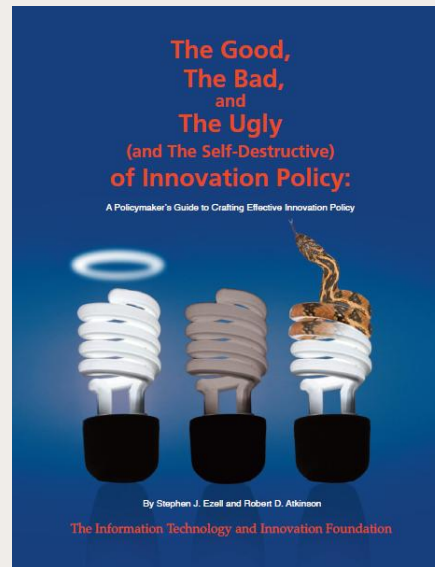
**The Information Technology & Innovation Foundation** is a Washington, D.C.-based think tank at the cutting edge of designing innovation policies and exploring how technological innovation boosts economic growth and improves quality of life in nations around the world. ITIF focuses on:

- Innovation processes, policies, and metrics,
- Internet, big data and ICT policy,
- IT, innovation and economic growth,
- Science and tech policy, and
- Innovation and trade policy.

## ■ ITIF Global Engagement



# Selected ITIF Work on Innovation in Emerging Markets



# ■ Today's Presentation

1

**The Case for Innovation- and Productivity-Based Growth**

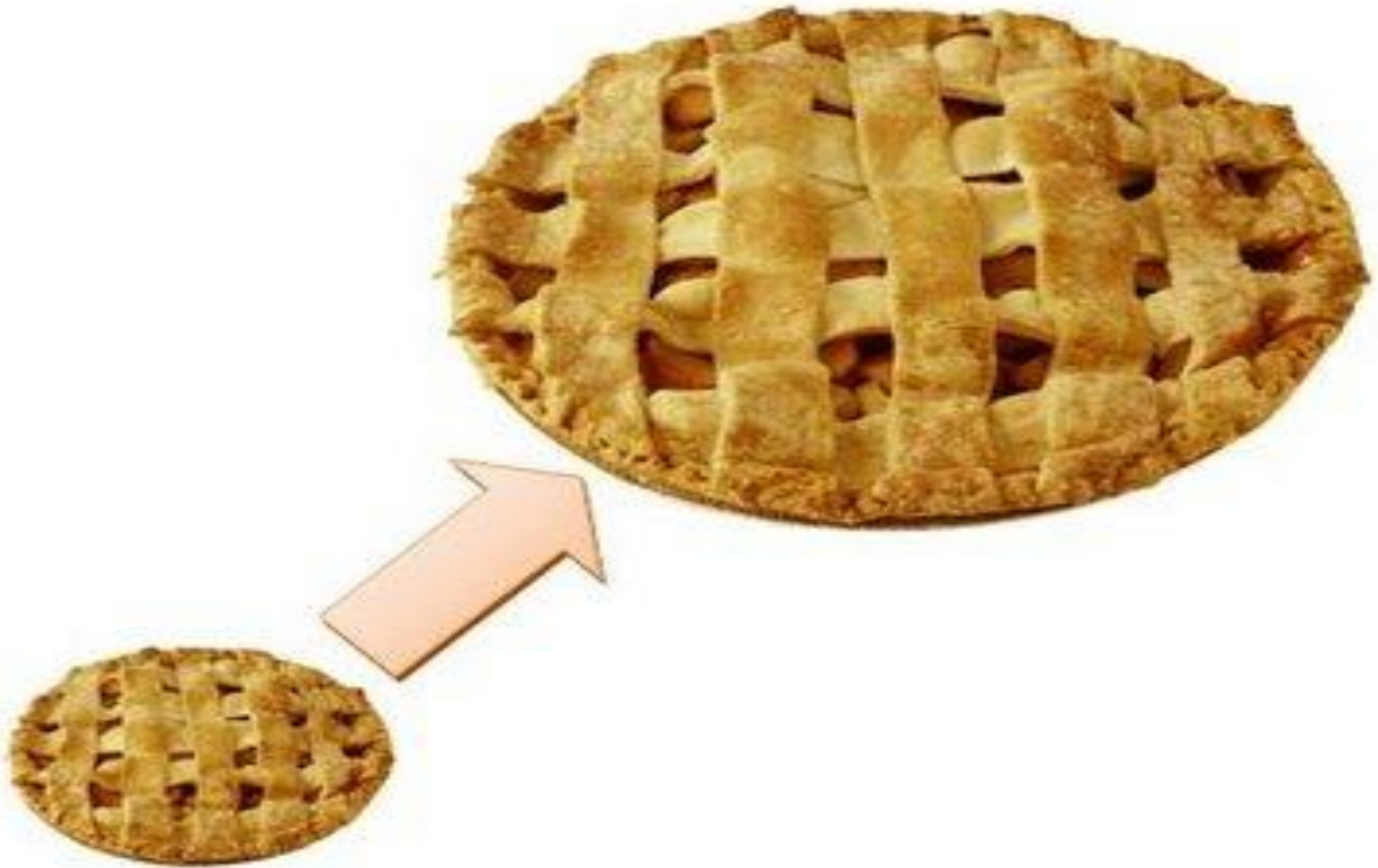
2

**Driving an Effective Indian Economic Growth Strategy**

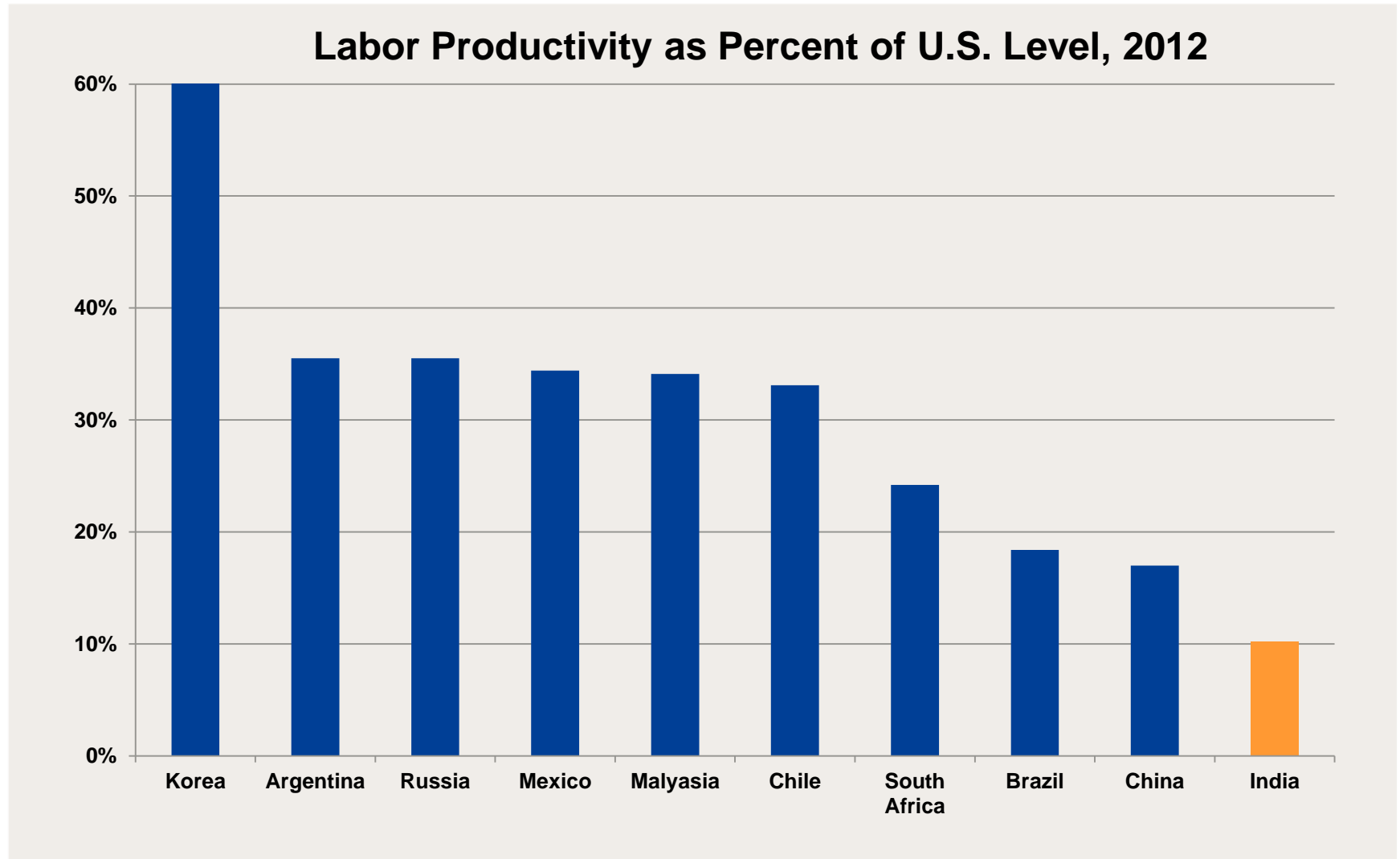
3

**Responding to Potential Concerns**

# ■ Productivity Grows the Pie

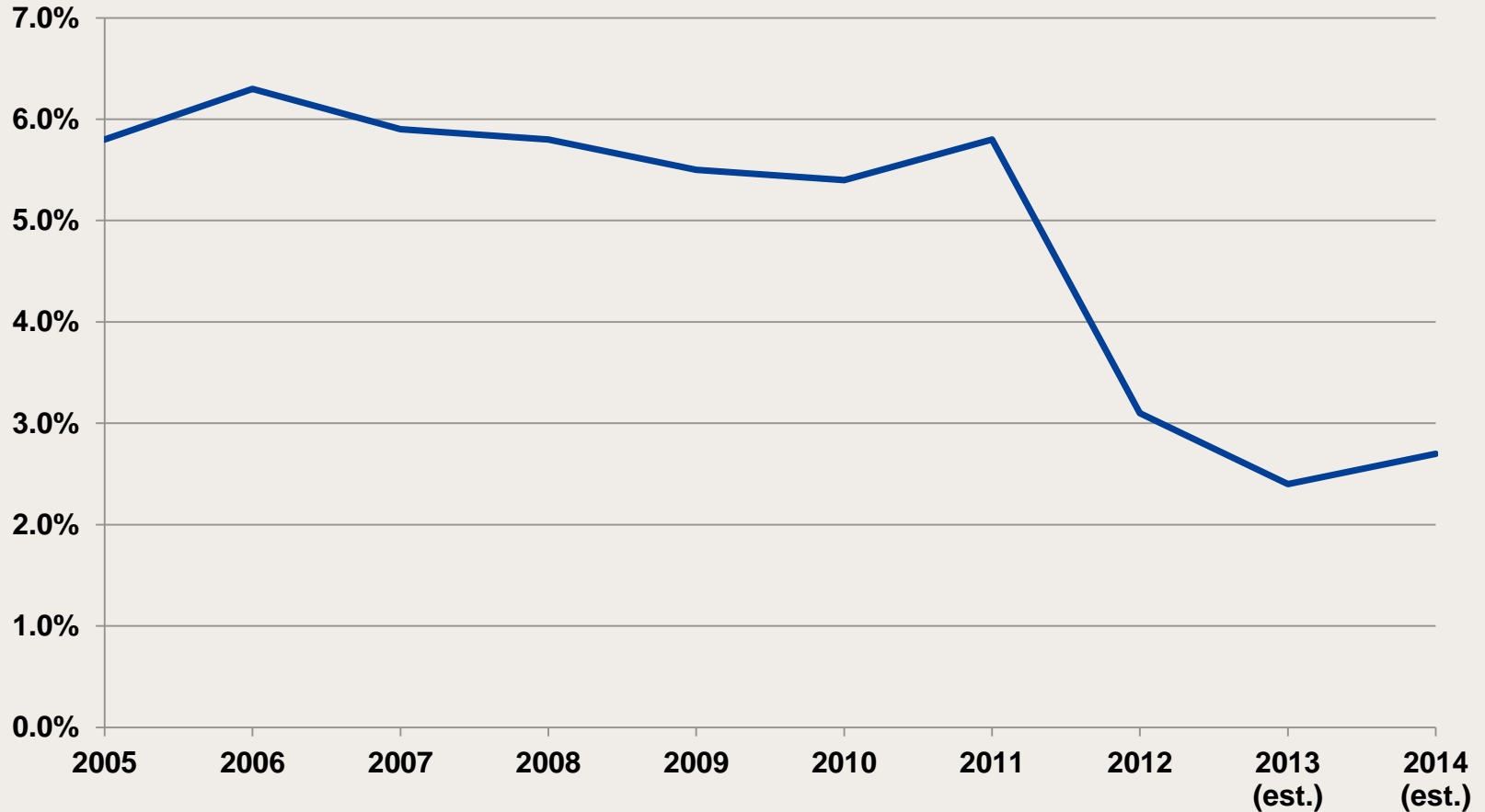


## ■ But Indian Productivity Is Below Its Peers



## ■ And Productivity Growth Has Recently Lagged

Average Annual Indian Labor Productivity Growth, 2005-2014



Source: The Conference Board



# Where Does Productivity Growth Come From?:

- The Better Use of Tools



# ■ Today's Better Tools Are Largely ICT Tools



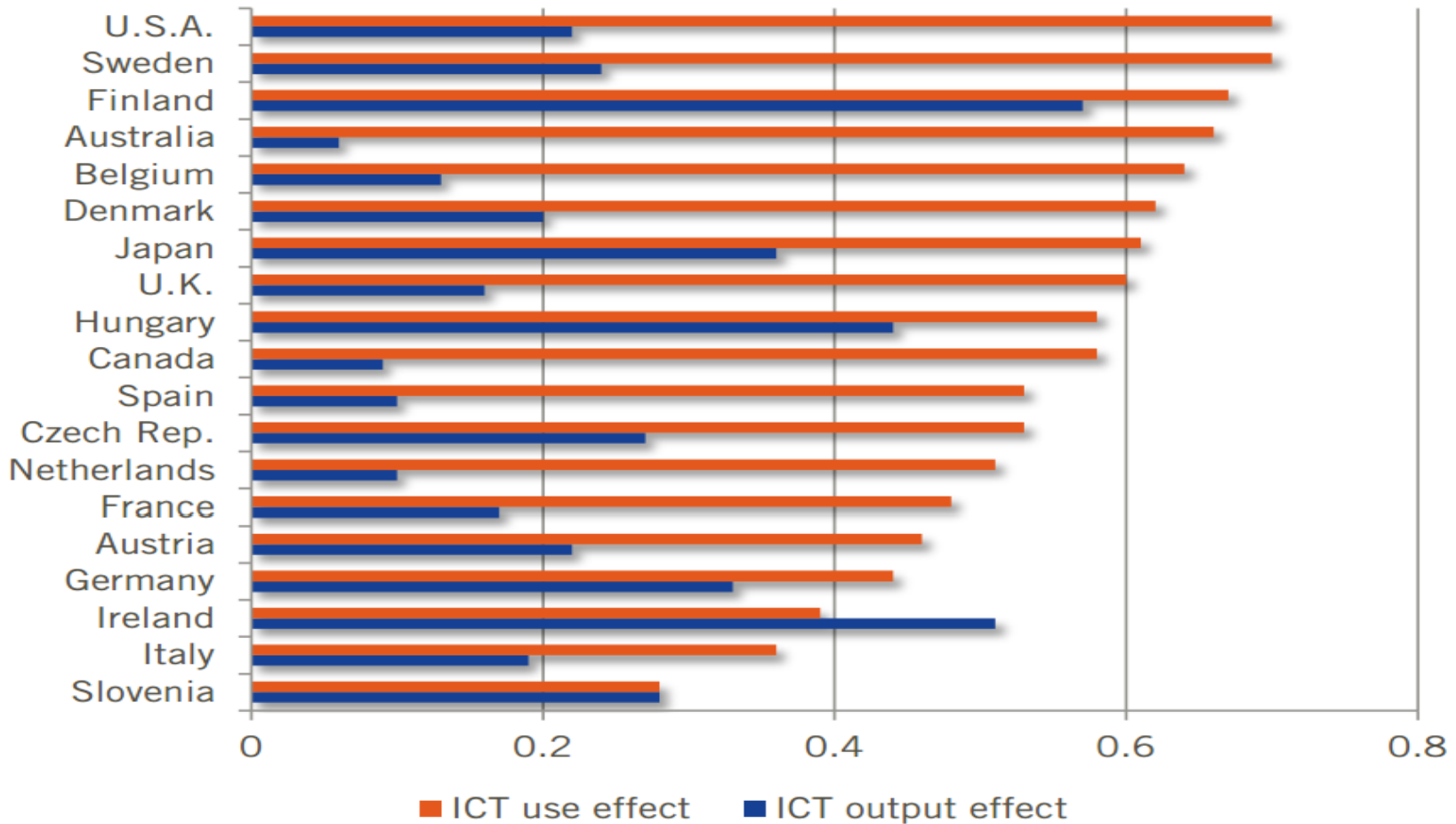


# What's More Important: ■ Making or Using ICT Tools?

- Over 80 percent of the benefits from ICT in the United States are related to its use by organizations, rather than its production by the ICT industry.



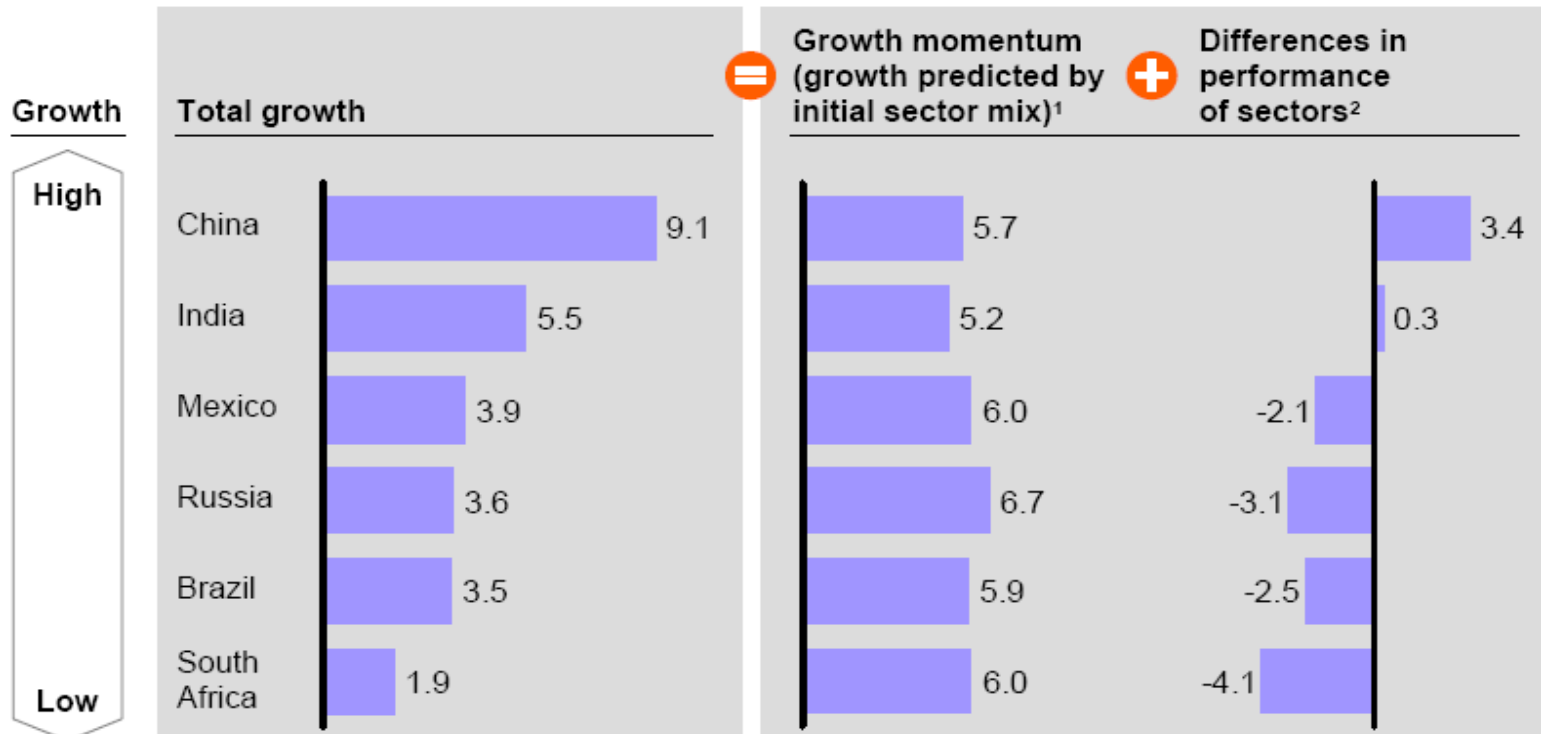
# And in Most Other Nations



▪2000 to latest year, percentage points per annum - Source: *Economic Modelling* 29, no. 5 (2012)

## Sector performance matters more than sector mix in developing countries

Contribution to total value added, 1995–2005  
Compound annual growth rate, %



1 Country growth rate calculated as if all sectors would have grown with the sector-specific growth rate average across all developing countries.

2 Actual country growth minus growth momentum of initial sector mix.

SOURCE: Global Insight; McKinsey Global Institute analysis

# The Way To Boost Living Standards Is *Not* To ■ Subsidize “Tool Building”...

- The Chinese government set a goal for the value-added of “strategic emerging industries” to reach 15 percent of overall GDP by 2020 and is investing the equivalent of 35 to 45 trillion rupees.
- Success would yield a one-time productivity boost of just 14 percent, the equivalent of 14-18 months of Chinese economic growth.

## ■ It's To Keep Tool Prices Low

- For every \$1 of tariffs India applied to imported computers, the country lost \$1.30 due to lost spillover effects. Same effects would be expected with domestic content restrictions. (Kaushik and Singh, 2004)
- For every 1 percent drop in price in ICT products, there is a 1.5 percent increase in demand. (Gurbaxani, 2003)

## ■ Keep Tool Prices Low Through...

- ICT investment incentives,
- Ample spectrum and no reserve prices for spectrum auctions,
- VAT and excise tax exemptions,
- No duplicate certification requirements,
- No excess taxes on telecommunications services (e.g., “Clean India” tax),
- Rational and limited e-waste policies, and
- No trade barriers on ICTs (zero tariffs, no localization requirements, etc.)

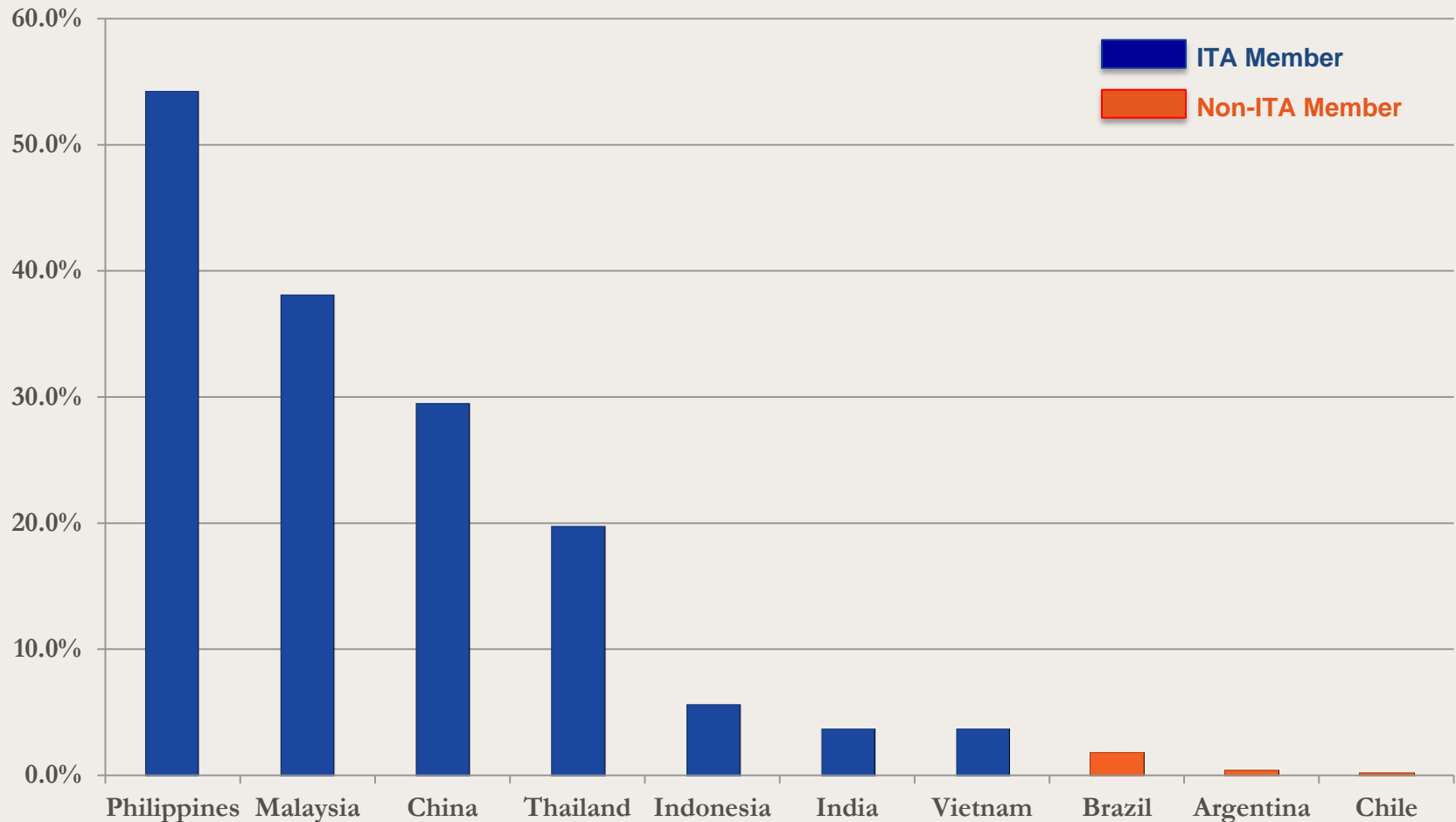


# Trade Distorting Measures Keep Tool ■ Prices High

- Trade-distorting measures placed on ICT products do not create a competitive domestic hardware industry
- But they do limit adoption of ICT by keeping prices high. This makes downstream IT-using firms/sectors (e.g., retail, banking, logistics, agriculture) less competitive and productive.

# Eliminating ICT Tariffs Enable Participation in Global Value Chains

ICT Goods Exports as Percentage of Total Goods Exports, 2009



# When it Comes to Trade Measures:

- **ICTs Are Not Chickens**



## ■ Today's Presentation

1

**The Case for Innovation- and Productivity-Based Growth**

2

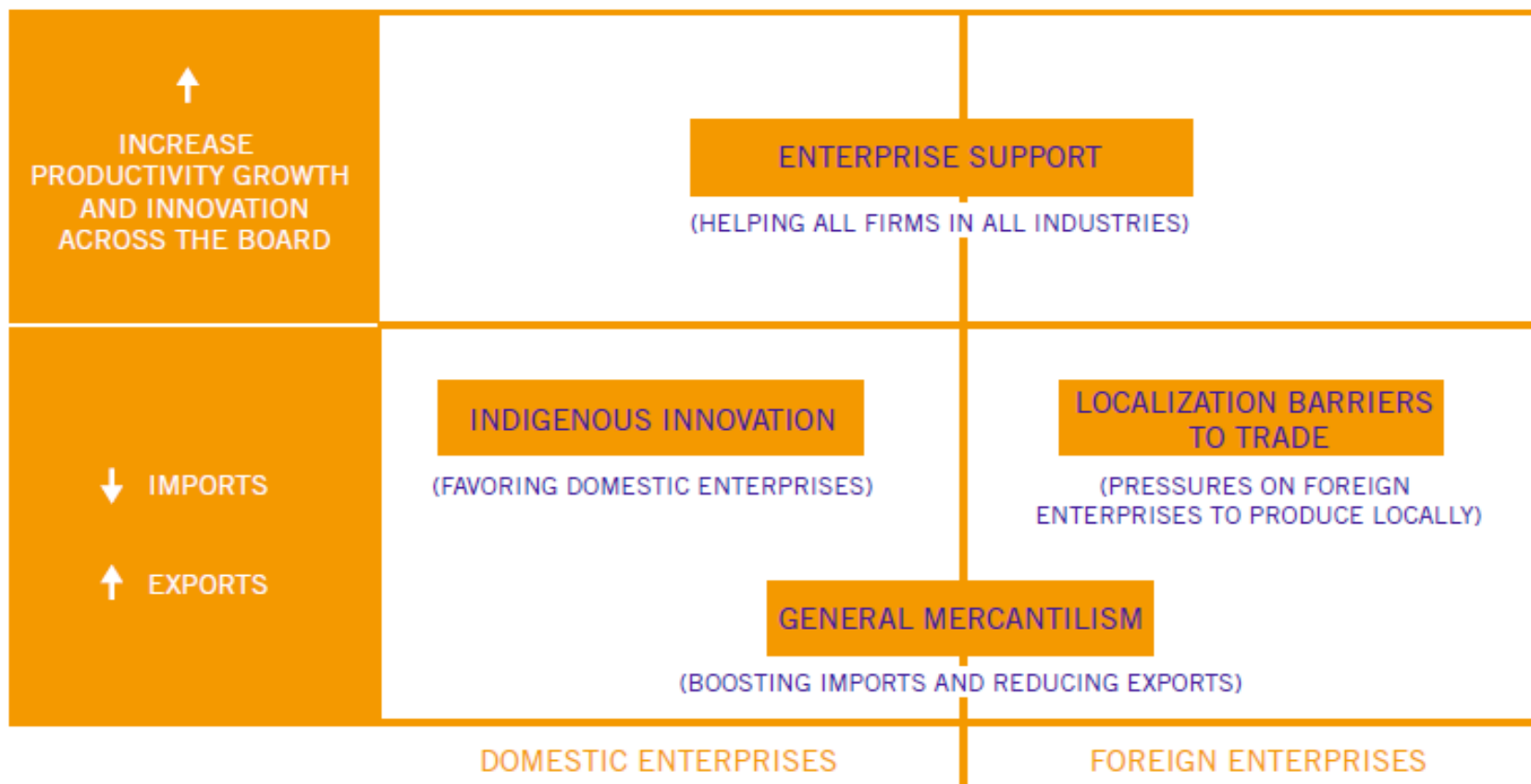
**Driving an Effective Indian Economic Growth Strategy**

3

**Responding to Potential Concerns**

# Contextualizing Countries' Economic Development Strategies

## A MATRIX FOR UNDERSTANDING GLOBAL ECONOMIC DEVELOPMENT POLICIES



# Three Idealized Types of Manufacturing Strategies

**1) Make most in your country, sell most to world**



**2) Make most in your country and sell most in your country**



**3) Specialize in making some things in your country and selling them locally and around the world; buy the rest.**



# Get the Economic Growth Policy Pyramid Right



**KEY FRAMEWORK CONDITIONS**

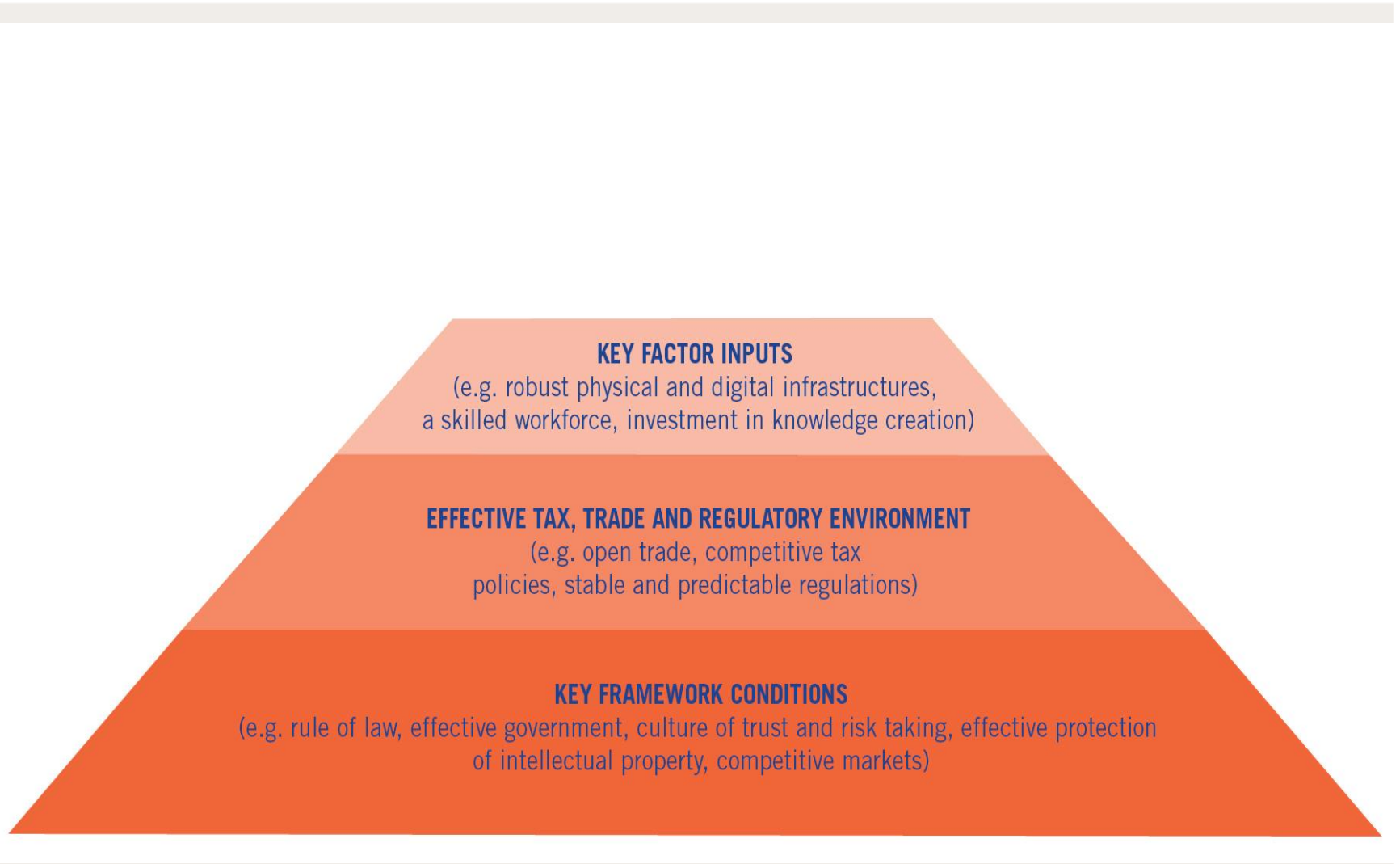
(e.g. rule of law, effective government, culture of trust and risk taking, effective protection of intellectual property, competitive markets)

# Get the Economic Growth Policy Pyramid Right

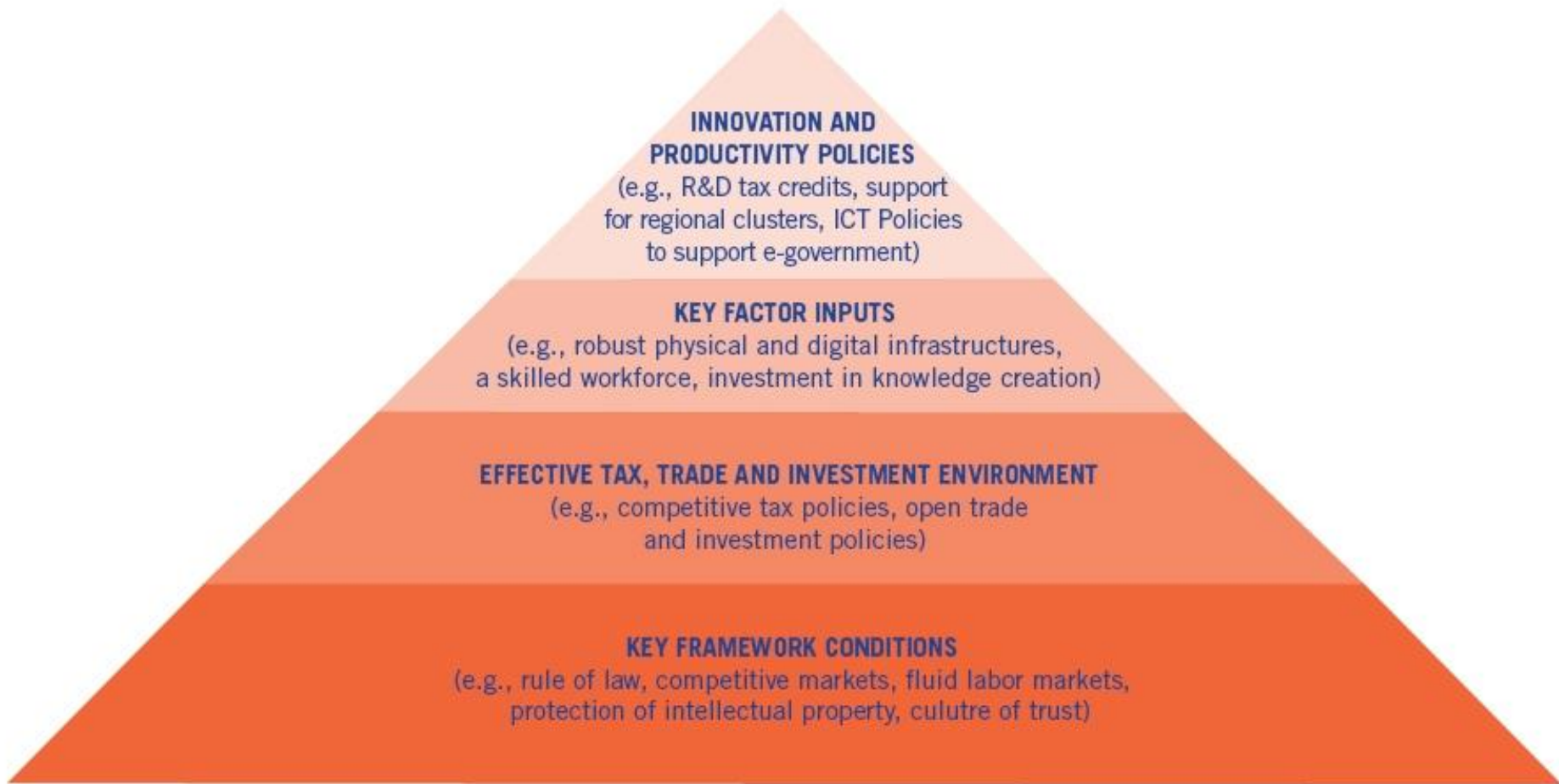




# Get the Economic Growth Policy Pyramid Right



# Get the Economic Growth Policy Pyramid Right



## ■ Key Tenets of Revitalized Economic Growth

1. Recognize the centrality of ICT, especially the use of ICT in enterprises, and enable global access to best-in-class ICT products and services.
  - Repeal the modified Preferential Market Access (PMA) policy.
  - Replace proprietary conformity assessment regulations on ICT products with a policy that accepts reports from reputable international laboratories.
  - Repeal the inverted duty structure for ICT inputs while signing on to ITA 2.

## ■ Key Tenets of Revitalized Economic Growth

2. Play an attraction, not a compulsion, game by making India the location of choice for multi-national investment.

- Reform labor market laws to allow greater labor market flexibility.
- Implement “single window clearance” to streamline the 70-odd clearances investors currently need into a single form.
- Allocate additional resources to intellectual property rights enforcement.
- Allow 100% foreign ownership in more industries, including accounting, banking, legal services, life sciences, and retail trade.

## ■ Play an Attraction, not a Compulsion, Strategy

### Attraction Strategy

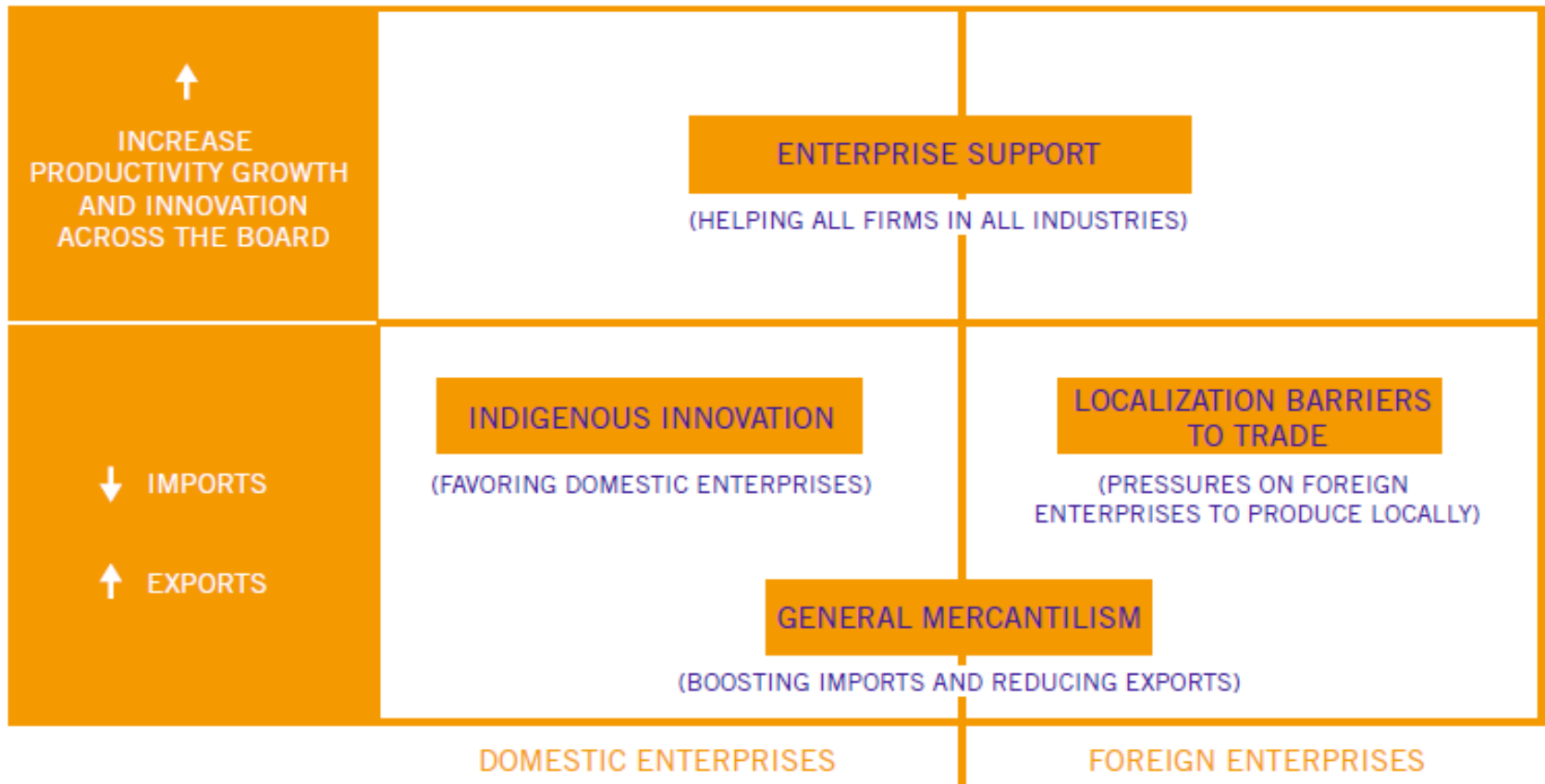
1. Predictable policymaking
2. Investment incentives
3. Highly skilled workforce
4. Robust infrastructure
5. Reasonable tax structure
6. Protection of IPRs
7. No use of compulsory policies

### Compulsion Strategy

1. Local content requirements
2. Data localization policies
3. Onerous certification requirements
4. Forced JV/tech transfer reqs.
5. Compulsory licensing
6. Forced offsets
7. High tariffs (in part to force domestic production)

# ■ Contextualizing Countries' Economic Development Strategies

## A MATRIX FOR UNDERSTANDING GLOBAL ECONOMIC DEVELOPMENT POLICIES



## ■ Many Nations Are Embracing Enterprise-Support Policies

- Web-Based New Firm Registration (Chile, Portugal)
- Collaborative R&D Tax Credits (France, S. Korea)
- Innovation Vouchers (Netherlands, Canada, Austria)
- Applied Research Institutes (German, Taiwan)
- Equity in new start ups in incubators (Taiwan)
- Apprenticeships (Germany, Switzerland)
- Performance-based University Funding (Finland, Sweden)
- Universal School Vouchers (Sweden)
- Local Government IT-Automation (Denmark)
- Cluster-based Higher Ed (Montreal's Pharma Tech program)
- Research Parks (Panama, China)

## ■ Today's Presentation

1

**The Case for Innovation and Productivity-Based Growth**

2

**Driving an Effective Indian Economic Growth Strategy**

3

**Responding to Potential Concerns**



## Potential Concern:

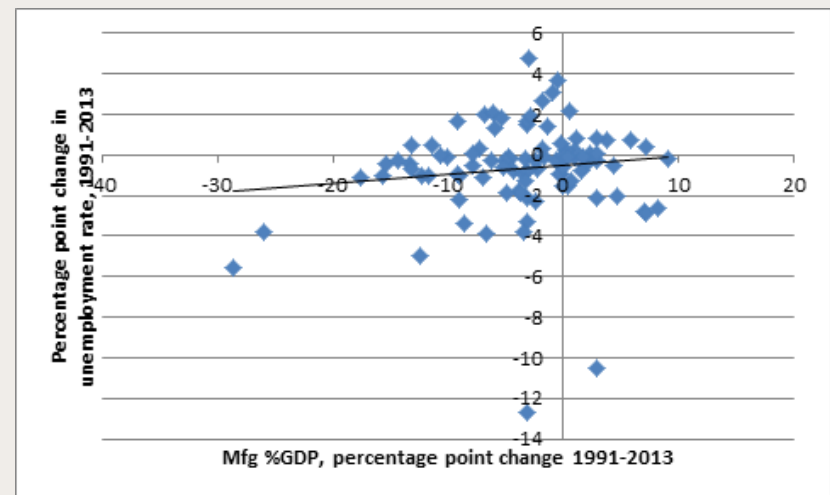
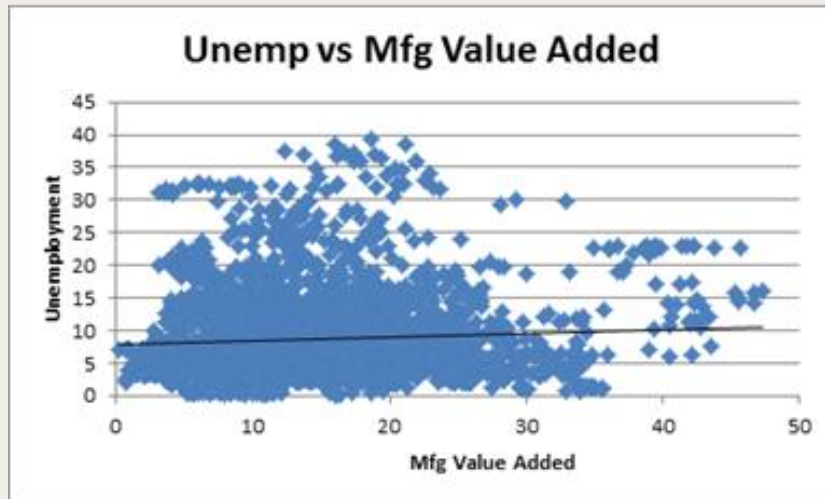
### ■ Aren't Trade Surpluses Needed for Job Growth?

- **Reality:** Trade balances have little relationship to unemployment rates.
- Among large nations (<50 million people) the correlation between the trade surplus and unemployment rate is  $-.09$ .

## Potential Concern:

### ■ Isn't Manufacturing Needed for Job Growth?

- **Reality:** There is actually a slightly negative correlation between a nation's unemployment rate and share of GDP in manufacturing.



## Potential Concern:

### ■ Won't Improved Productivity Cost Jobs?

- **Reality:** higher productivity leads to more, not fewer, jobs.
- In a study of the relationship between productivity and employment in developing economies, the United Nations Industrial Development Organization (UNIDO) finds that “productivity is the key to employment growth.”
- A 2005 World Bank survey of over 20,000 businesses in about 50 low-middle income countries found that firms using IT have faster sales and employment growth and also higher productivity.

<sup>1</sup> Anders Isaksson, Thiam Hee Ng, and Ghislain Robyn, *Productivity in Developing Countries: Trends and Policies* (Vienna: UNIDO, 2005), 139

# Thank You!

**Robert Atkinson**  
[ratkinson@itif.org](mailto:ratkinson@itif.org)

**Stephen Ezell**  
[sezell@itif.org](mailto:sezell@itif.org)

## Follow ITIF:



[facebook.com/innovationpolicy](https://facebook.com/innovationpolicy)



[www.youtube.com/techpolicy](http://www.youtube.com/techpolicy)



[www.itif.org](http://www.itif.org)



[@itifdc](https://twitter.com/itifdc)

