

What Can Latin America Learn From the S.E. Asia Economic “Miracle”?

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ITIF: Who We Are

The Information Technology and Innovation Foundation is a think tank at the cutting edge of designing innovation policies and exploring how innovation drives boost growth and competitiveness. ITIF focuses on:

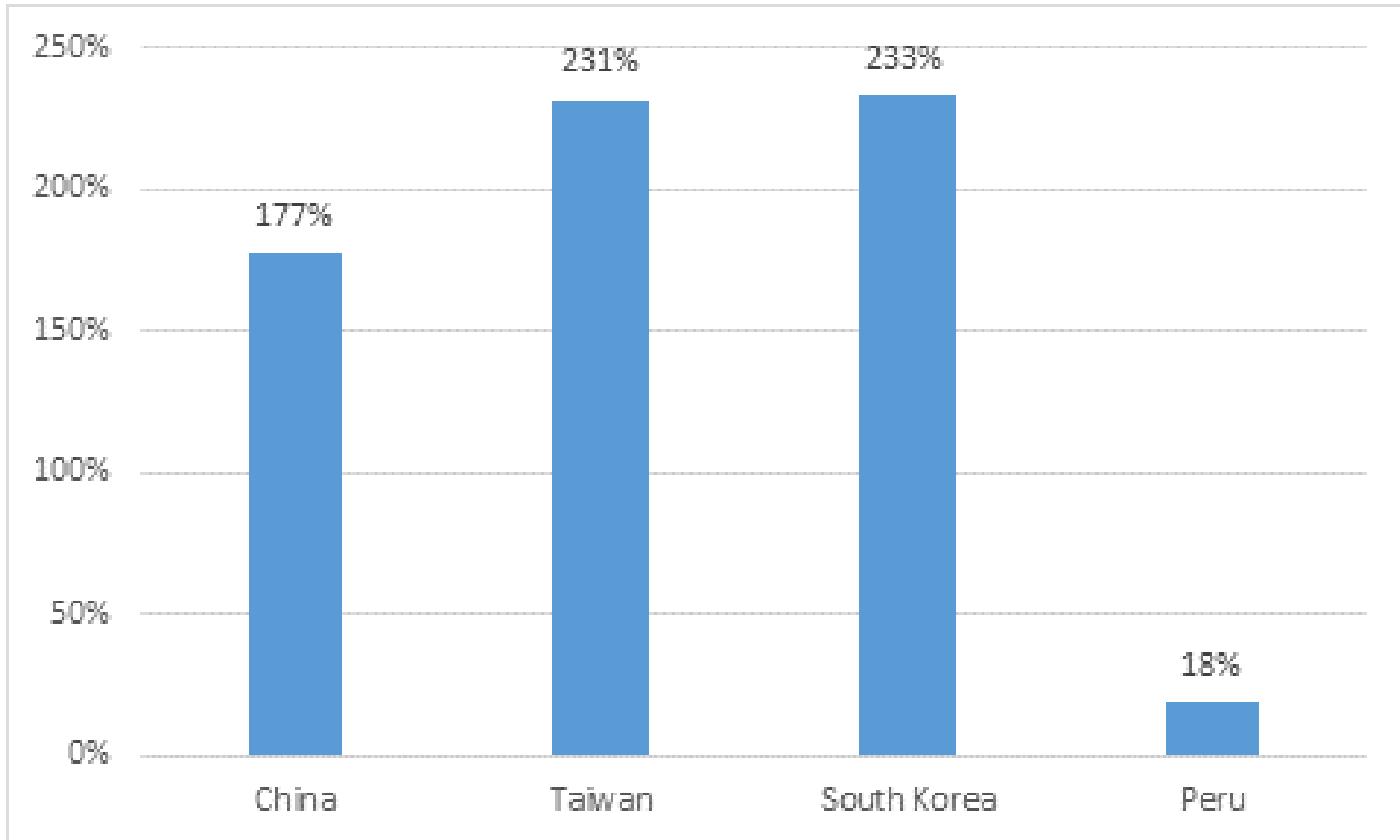
- Innovation processes, policy, and metrics,
- Internet, big data and ICT policy,
- Tech, productivity, and jobs,
- Science and tech policy, and
- Innovation and trade policy.

Rapid S.E. Asian Growth



Rapid S.E. Asian Growth

GDP Growth (1978-1994)



What Was the Asian Tiger's Goal?

- Shift to high value-added tradable production (heavy industry and then tech)

- Through export-led growth (the opposite of import substitution)

What Was Their Strategy?

- To increase firm size for learning and scale economies
- To be a “fast follower” & not about “new-to-world innovation”
- Attack low margin production that the leaders wouldn't defend and then use that to gradually work their way up the value chain



Asian Tiger Tactics: Exporters

- Subsidized exports (exchange rates, forced savings and directed low interest rates; subsidized loans and grants, limited entry and allowed cartels, kept domestic prices high; export assistance offices)
- Limited imports (exchange rates, tariffs, informal pressures to buy domestic, limited government procurement)
- But were open to capital goods imports (tried to keep capital goods prices low)

Asian Tiger Tactics: Technology

- Focused on acquiring foreign knowledge
- Supported tech institutes:
 - **Taiwan:** China Productivity Center, Industrial Technology Research Institute
 - **Korea:** Korean Productivity Center; Korean Industrial Research Institute
- Scientist and engineering training
- R&D support: for research universities and applied research. (Korean R&D was 450 times higher in 1978 than in 1999)
- Tightly linked R&D strategy to needs of key industries
- Technical extension and support services

MNC Strategy

- Some focused on domestic firms (Korea, Taiwan, Japan)
- Others focused on attracting MNC FDI (China, Singapore)

The Special Case of China

China's vast and growing market gives it unique leverage:

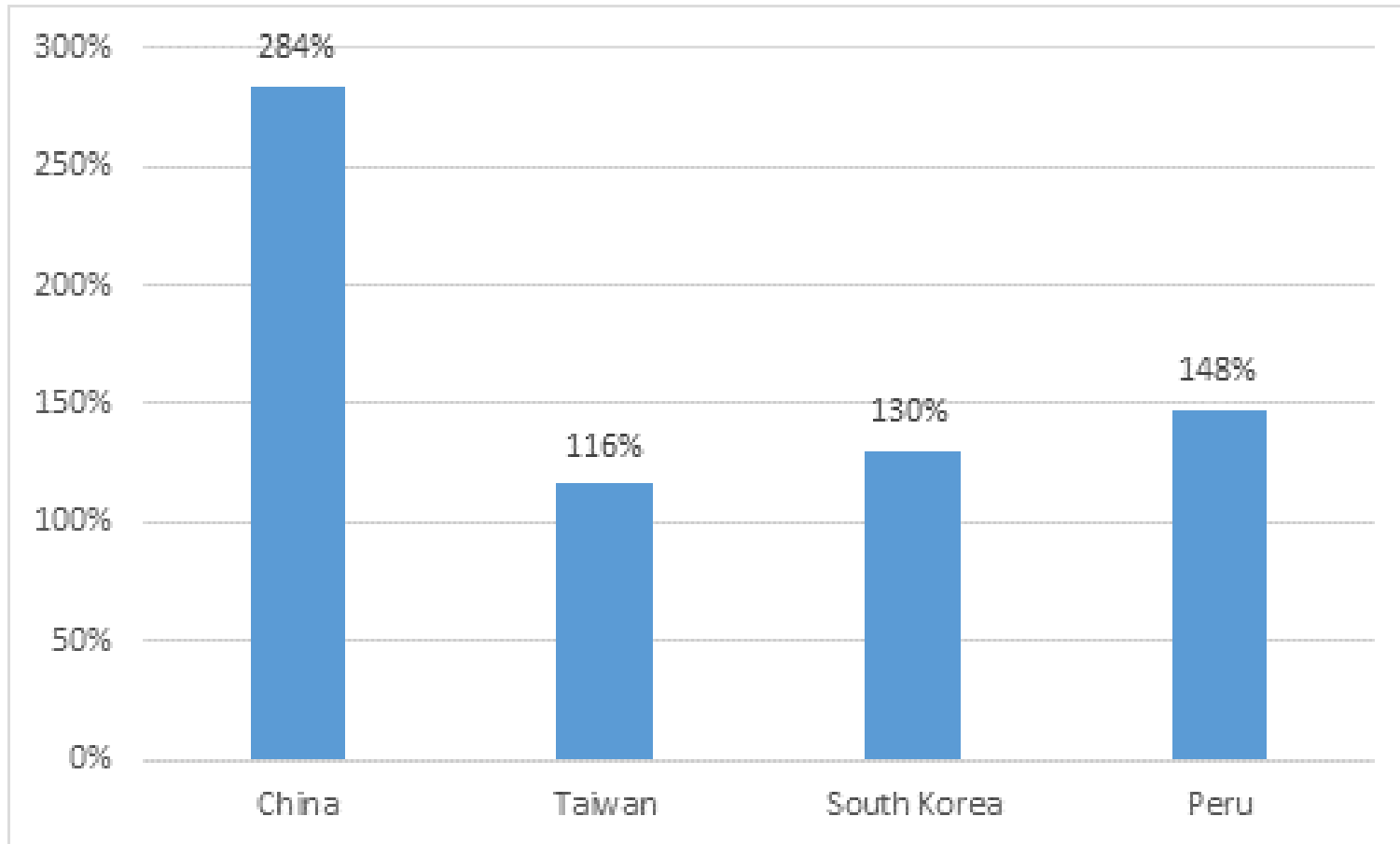
- A weapon to force investment and technology transfer
- Immunity to MNC investment pull-out allows it to engage in mercantilist behaviors
- Strategy shifted from MNC attraction to indigenous innovation

Is the Strategy Replicable for Latin America?

- Overcapacity in heavy industry (26% in steel globally)
- Regional tech supply chains already established.
- Global capital markets (harder to suppress interest rates and force savings)
- Do not have labor cost advantage to build from

Is It the Right Strategy for Latin America?

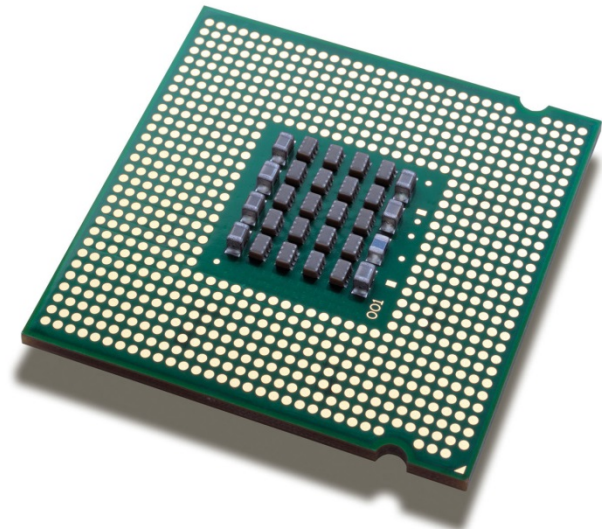
1995-2015



East Asian “Dual Economy”

- Japan’s productivity levels compared to U.S.
 - Retail 49%
 - Construction 40%
 - Food-processing 33%
- Korean annual productivity growth (2000 to 2009)
 - Agriculture 5.4%
 - Manufacturing 6.5 %
 - Transport, storage and communications (0.3%)
 - Finance, real estate and business services (-0.3%)
 - Korean service sector productivity is just 45% of manufacturing levels, compared with an OECD average of 86%
 - 87% of Korean jobs are in small business (firms with less than 300 workers) (44% in U.S.)

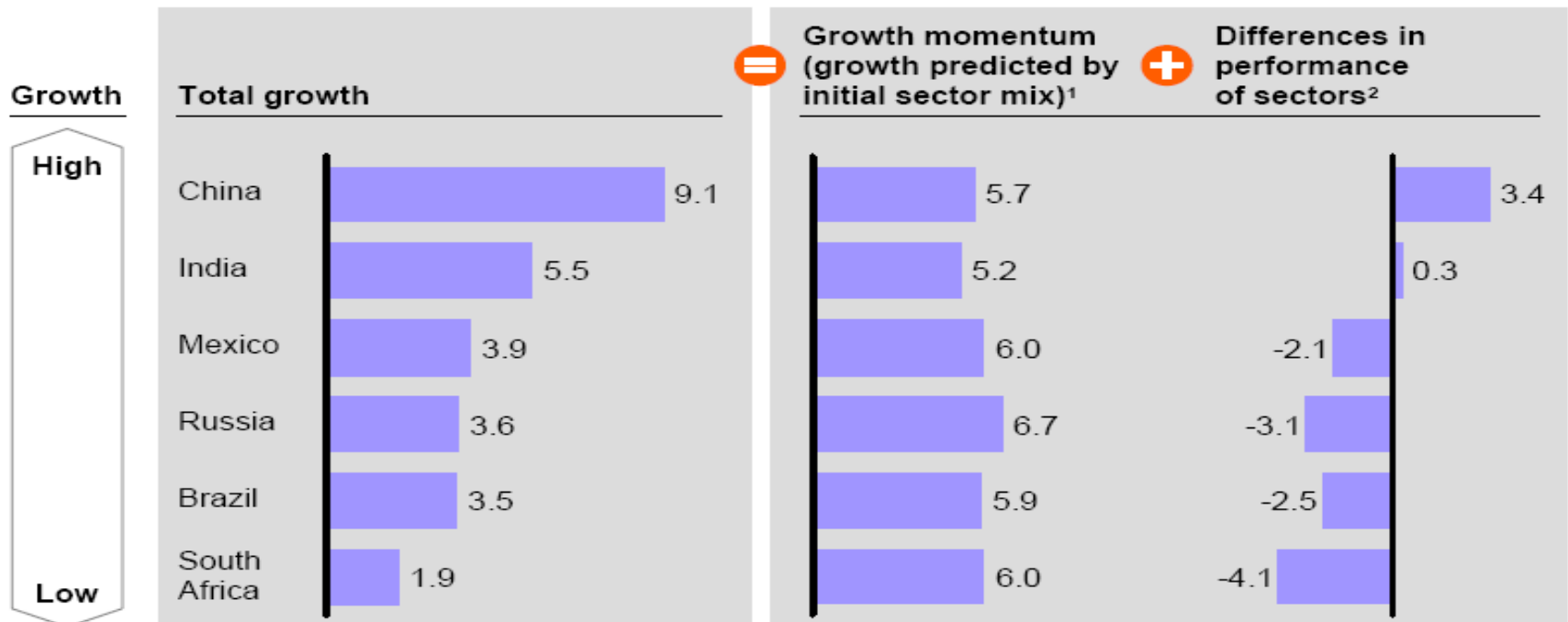
Is the Shift Strategy the Right One?



Growth Within Sectors Matters Most

Sector performance matters more than sector mix in developing countries as well.

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

Is it Better to Cook the Tech, or Eat it?

- Over 80% of benefits from ICT in the U.S. are related to its use by organizations, rather than its production by the ICT industry

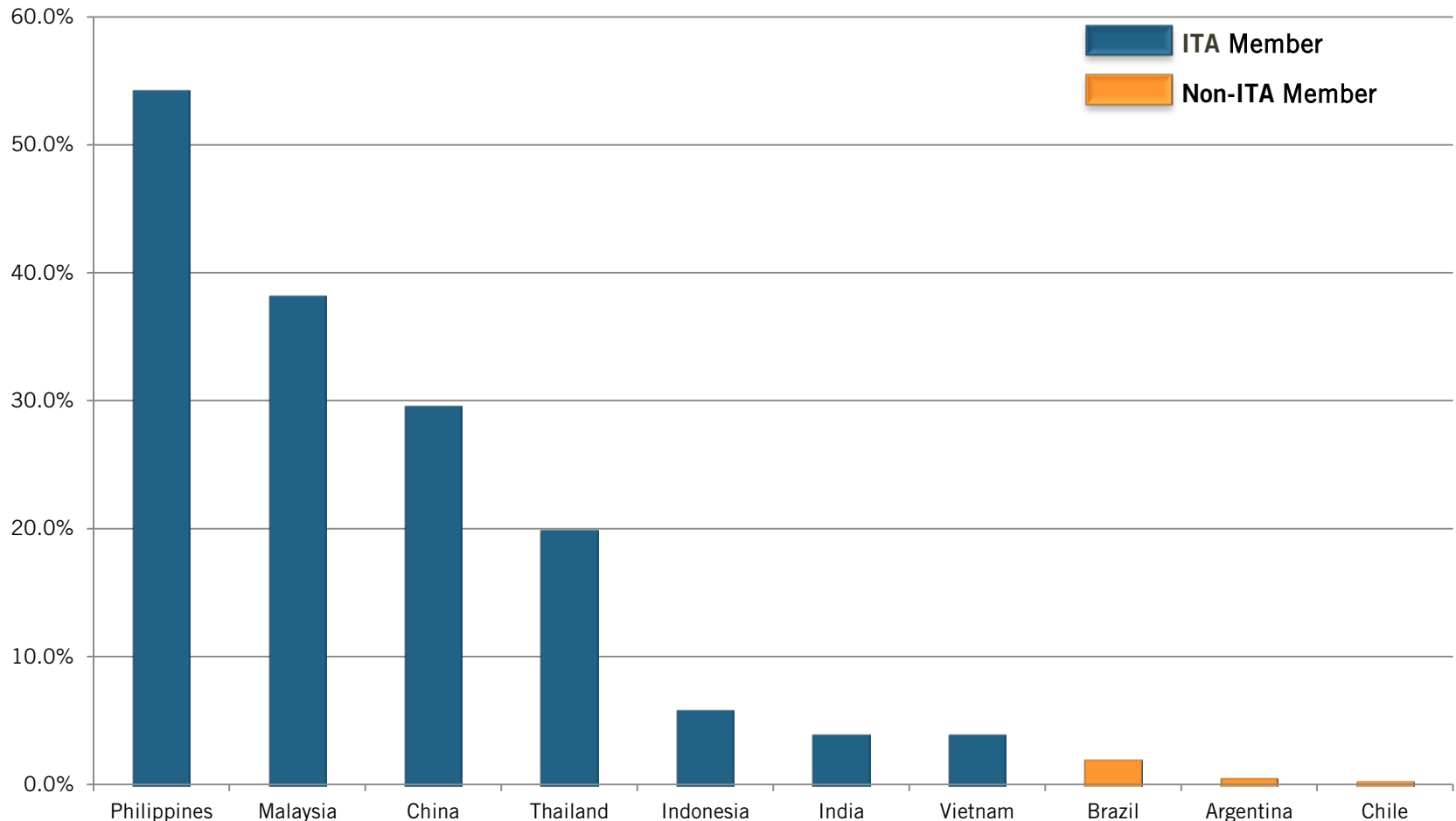


What to Do?

- Be open to trade and investment, especially in capital goods industries

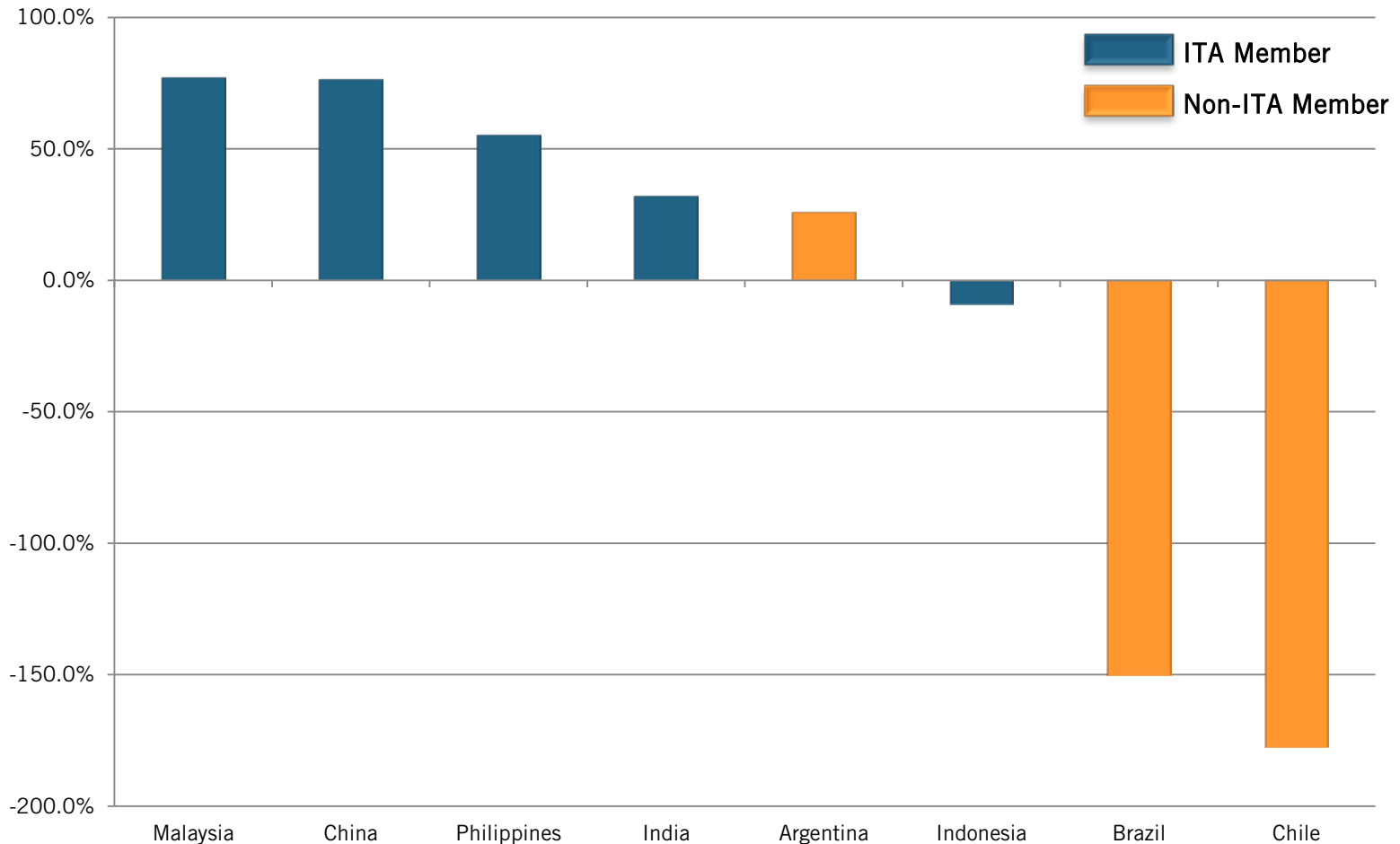
ITA Expansion Benefits Developing Countries

ICT Goods Exports as Percentage of Total Goods Exports, 2009



ITA Expansion Benefits Developing Countries

Change in ICT Services Exports as % of Country's Services Exports, 1996-2010



What to Do?

- Be open to trade and investment, especially in capital goods industries
- **Specialize**
- **Support STEM**
- **Provide incentives for universities to work with industry**

ICT Development vs. Deployment Policy Matrix

	Supports “Silicon Valley”	Hurts “Silicon Valley”
Supports ICT Economy	<ul style="list-style-type: none"> • Tax incentives for ICT adoption • ICT skills development • Open data policies • Tax incentives for ICT adoption • Broadband deployment support • More spectrum • Digital literacy policies • E-government, including e-procurement • Digital transformation strategies (transportation, health care, etc.) • Support ICT platforms (mobile payments, digital signatures, etc.) • Digital Single Markets 	
Hurts ICT Economy	<ul style="list-style-type: none"> • ICT Tariffs • Data center localization requirements • Local content requirements • Procurement preferences for domestic companies 	<ul style="list-style-type: none"> • ICT Taxes • Cross Border Data Flow Limits • Labor market regulations • Product market regulations (e.g., ban on Uber) • Strict privacy regulations • Limits on FDI • Small business preferences

Thank You!

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