

# How Joining the ITA Spurs Economic Growth in Developing Nations

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# About ITIF

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- One of the world's top science and tech policy think tanks
- Formulates and promotes policy solutions that accelerate innovation and boost productivity to spur growth, opportunity, and progress
- Focuses on a host of issues at the intersection of technology innovation and public policy:
  - Innovation processes, policy, and metrics
  - Science policy related to economic growth
  - E-commerce, e-government, e-voting, e-health
  - IT and economic productivity
  - Innovation and trade policy

# Today's Presentation

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- 1 ICTs Drive Developing Country Economic Growth
- 2 How ITA Participation Benefits Developing Countries
- 3 Modeling Economic and Tariff Impact of ITA Accession

# ICTs Strongest Growth Drivers in Developing Countries

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- The accumulation of ICT capital accounted for 20 percent of total global economic growth between 1995 and 2014.
- “ICTs contributed approximately one-quarter of GDP growth to many developing countries from 2000-2010.”
  - Richard Heeks, Oxford University
- ICTs have been responsible for 25% of Kenya’s economic growth since 2000.



# ICTs Have an Outsized Impact on Productivity

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ICT is “super capital” that has a much larger impact on productivity than other forms of capital.

- ICT has 3 to 7 times more impact on firm productivity than non-IT capital.
- ICT workers contribute significantly more to productivity than non-IT workers.





# It's Better to “Consume” Than “Produce” the Tech

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- Over 90% of the economic benefits from ICT are related to its use by organizations and consumers, rather than its production by tech firms.



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# How Joining the ITA Spurs Growth in Developing Nations

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1. Boosts Productivity and Innovation
2. Supports ICT Services Sectors and Exports
3. Spurs Participation in ICT Global Value Chains
4. Enhances Competitiveness of Domestic Manufacturers

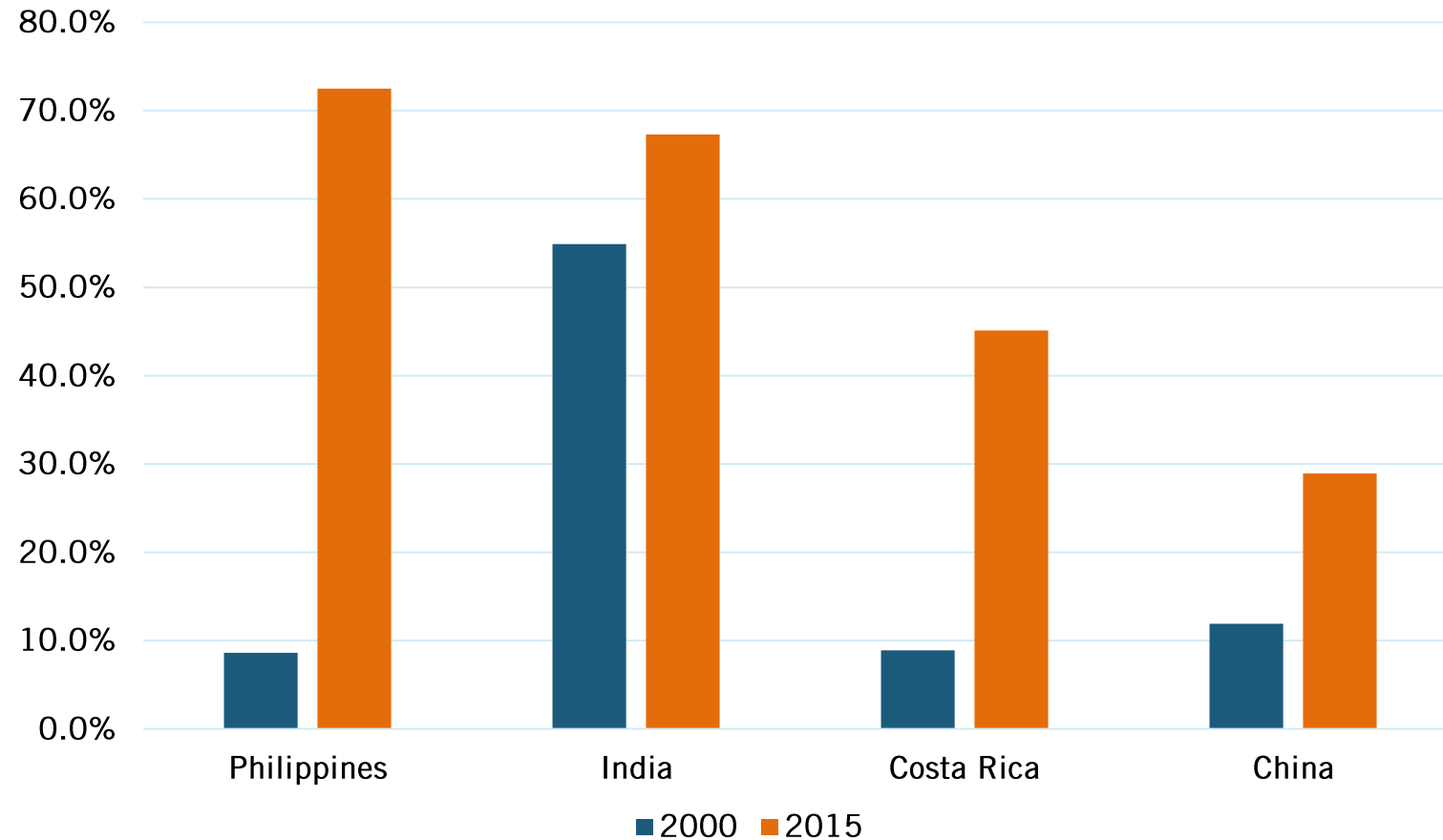


# 1. ICT a Key Driver of Developing Country Innovation



## 2. ITA Facilitates ICT Services Industry and Exports

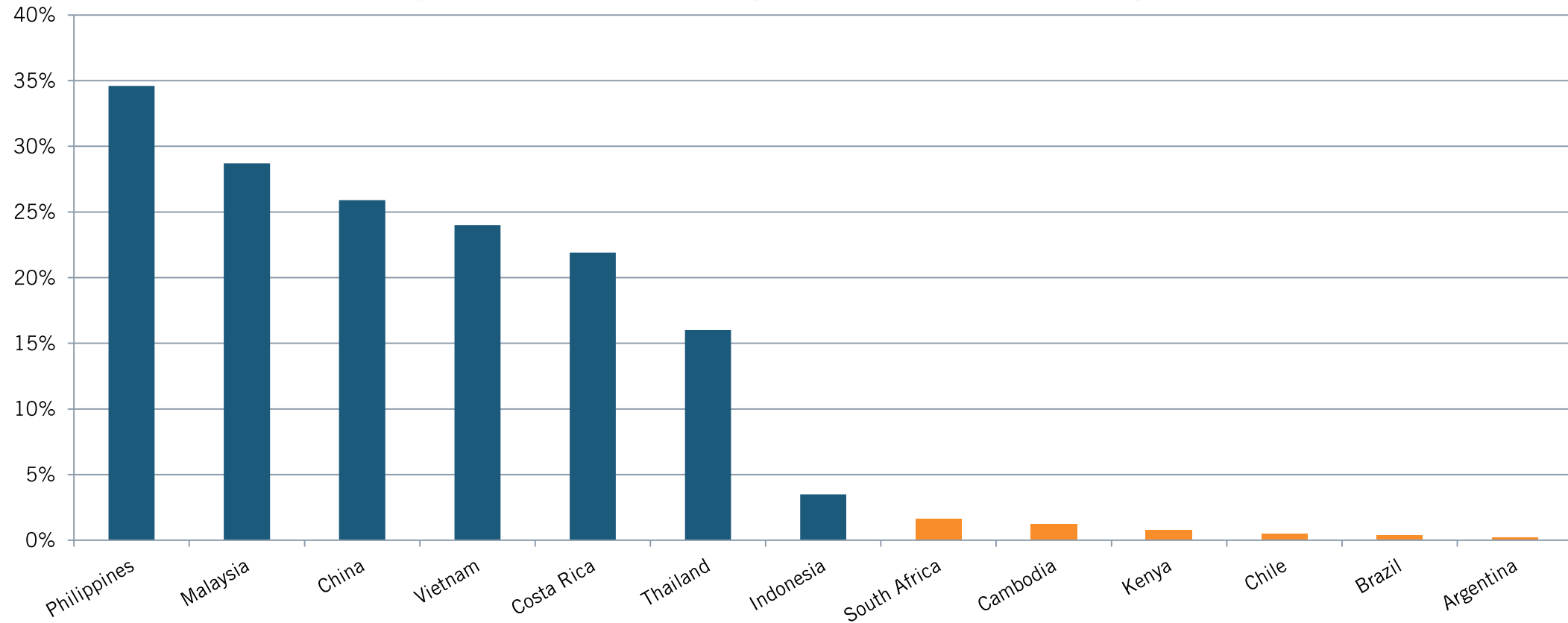
ICT Services Exports as Percentage of Total Services Exports



Source: World Bank

### 3. ITA Facilitates Participation in ICT GVCs

ICT Exports as Percentage of Total Goods Exports, 2014

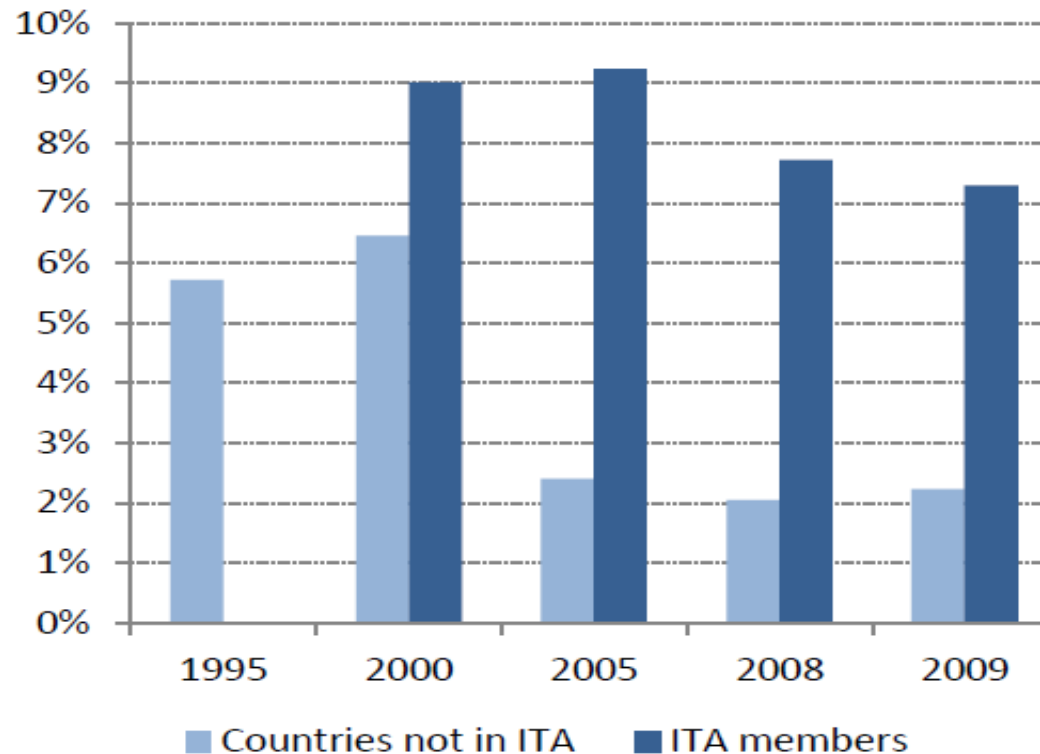


Source: World Bank

### 3. ITA Facilitates Participation in ICT Global Value Chains

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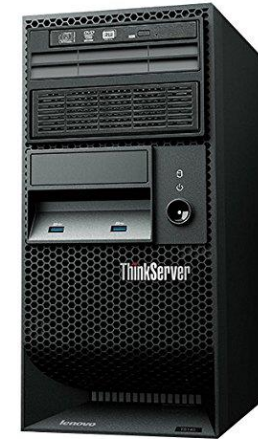
Membership and Participation in ICT GVCs



Source: OECD, *Implications of Global Value Chains for Trade, Investment, Development, and Jobs*, 2013

## 4. ITA Benefits Manufacturers That Use ICTs as Inputs

- E.g., Over 50% of semiconductors imported into China are inputs into re-exported products.





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# How Joining the ITA Spurs Growth in Developing Nations



## How Joining the Information Technology Agreement Spurs Growth in Developing Nations

BY STEPHEN J. EZELL AND J. JOHN WU | MAY 2017

*By reducing costs, the ITA leads to increased use of ICT goods, which spurs productivity and economic growth in signatory nations, while deepening their enterprises' participation in global value chains.*

Implemented in 1996, the Information Technology Agreement (ITA) has played a pivotal role in facilitating global trade in information and communications technology (ICT) products. Under the ITA, 82 signatory countries have agreed to fully eliminate tariffs on hundreds of ICT products. By reducing their costs, the ITA leads to increased use of ICT goods, which spurs productivity and economic growth in signatory nations, while deepening their enterprises' participation in global value chains (GVCs) for the production of ICT goods and services. Recognizing these benefits, 53 nations agreed in December 2015 to reduce tariffs on an additional 201 ICT tariff lines (including hundreds of products, parts, and components) as part of an expanded list of goods covered by the ITA. Yet, despite its proven benefits, some developing countries have remained on the sidelines of the initial ITA and its recent expansion. In this report, ITIF analyzes the effects of six developing nations—Argentina, Cambodia, Chile, Kenya, Pakistan, and South Africa—joining the original ITA as well as its recent expansion. It finds that doing so will boost economic growth for each of these countries, while generating tax revenues from new economic growth in the 10th year following accession that more than offset tariff losses for two of the six nations, while recovering most tariff losses for another three.

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# Conceptual Framework for Economic Model

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Eliminating tariffs lowers ICT prices.



Lower ICT prices stimulate increased ICT consumption.

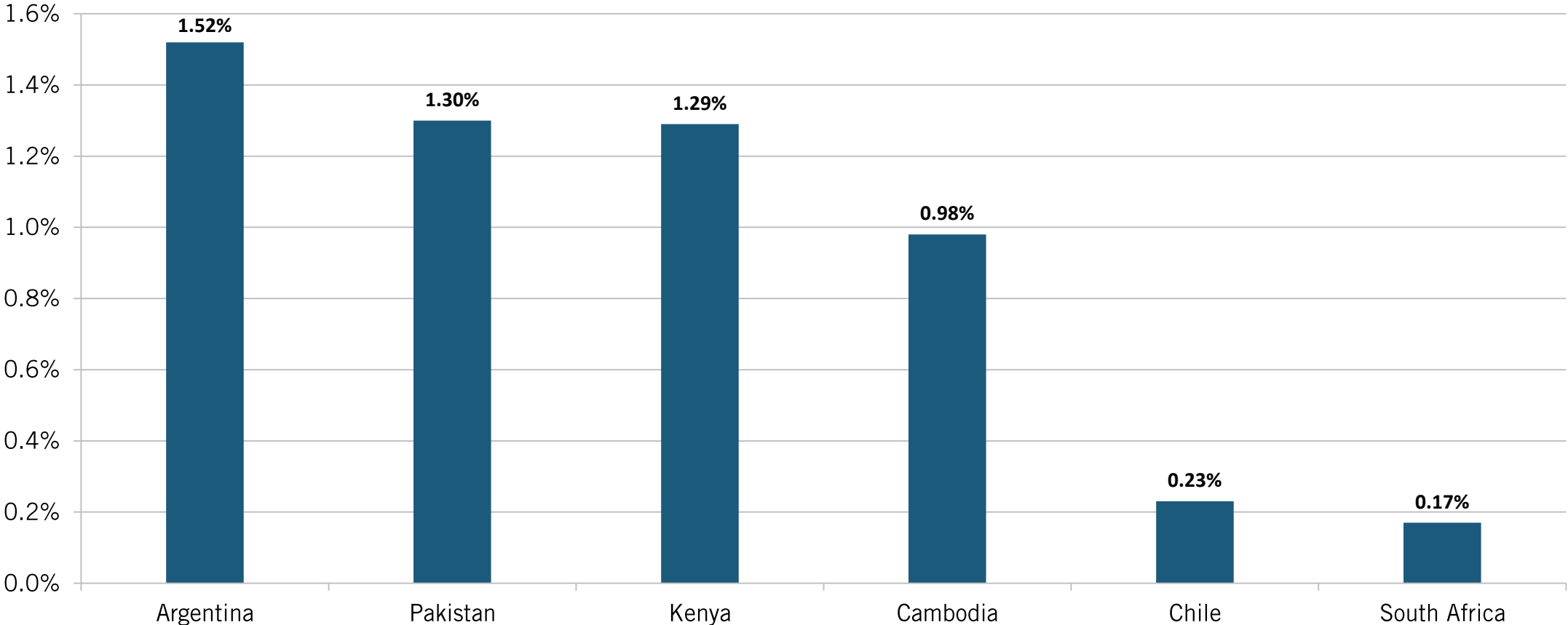


Greater ICT consumption increases ICT capital stock, leading to increased productivity, and thus, economic growth.



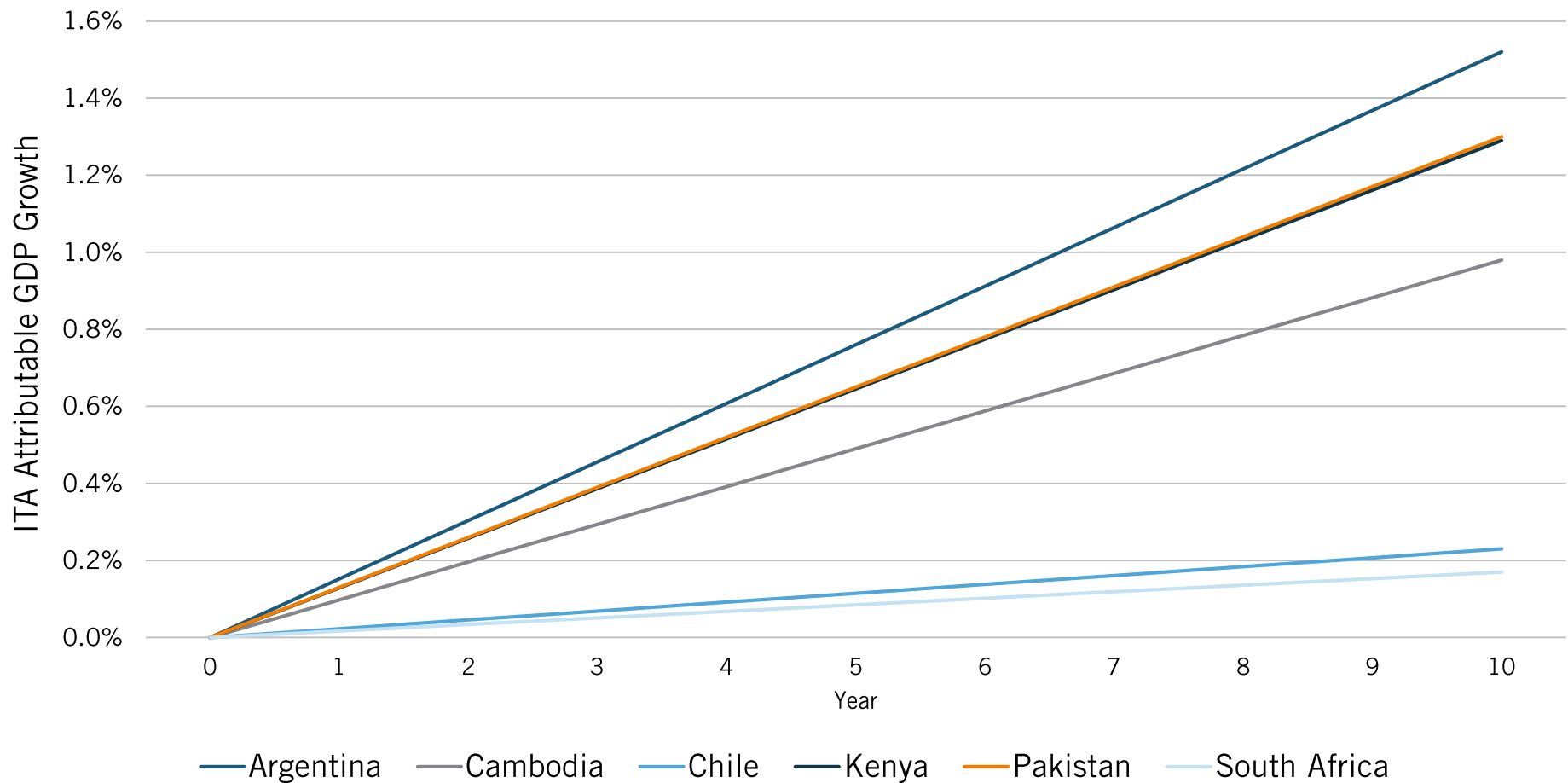
Increased economic growth produces tax revenues replacing tariff income forgone.

# Economic Growth After 10 Years of ITA Membership



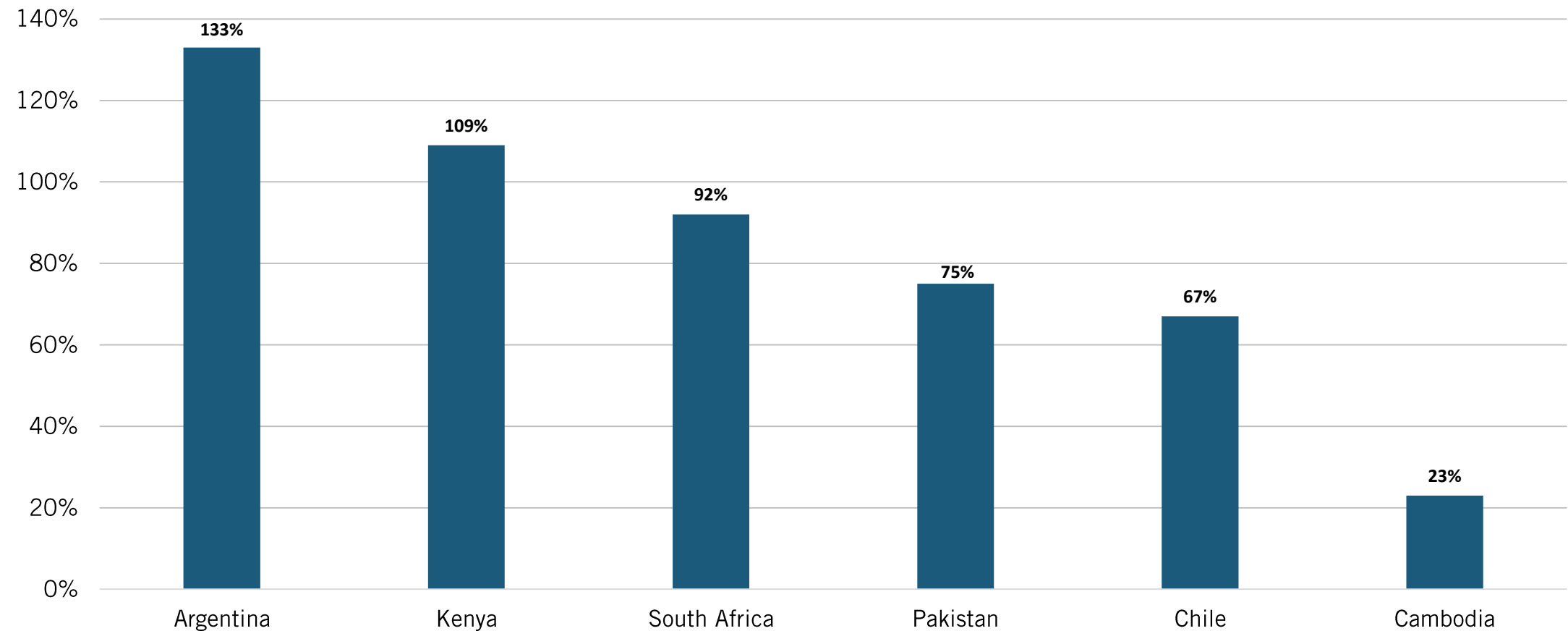
Source: ITIF, *How Joining the Information Technology Agreement Spurs Economic Growth in Developing Nations*

# Long-Run Economic Projections from ITA Accession



Source: ITIF, *How Joining the Information Technology Agreement Spurs Economic Growth in Developing Nations*

# Recovery of Foregone Tariffs After 10 Years



Source: ITIF, *How Joining the Information Technology Agreement Spurs Economic Growth in Developing Nations*

# Thank You!

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