



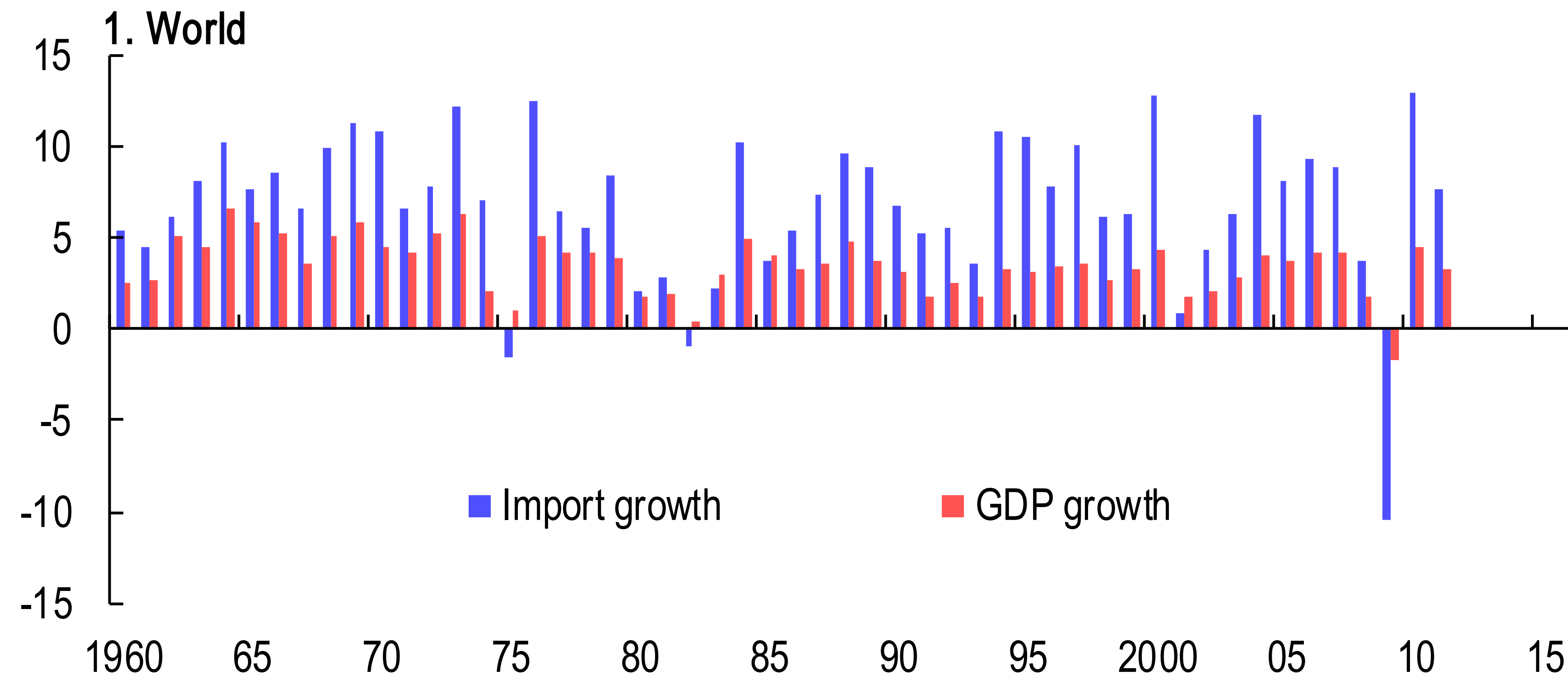
# Global Trade: What's Behind the Slowdown?

*Aqib Aslam, Emine Boz, Eugenio Cerutti, Marcos Poplawski-Ribeiro, and Petia Topalova with support from Ava Hong, Hao Jiang, Olivia Ma, Rachel Szymanski, and Hong Yang.*



# Motivation

## World Real Trade and GDP Growth in Historical Perspective (Percent)

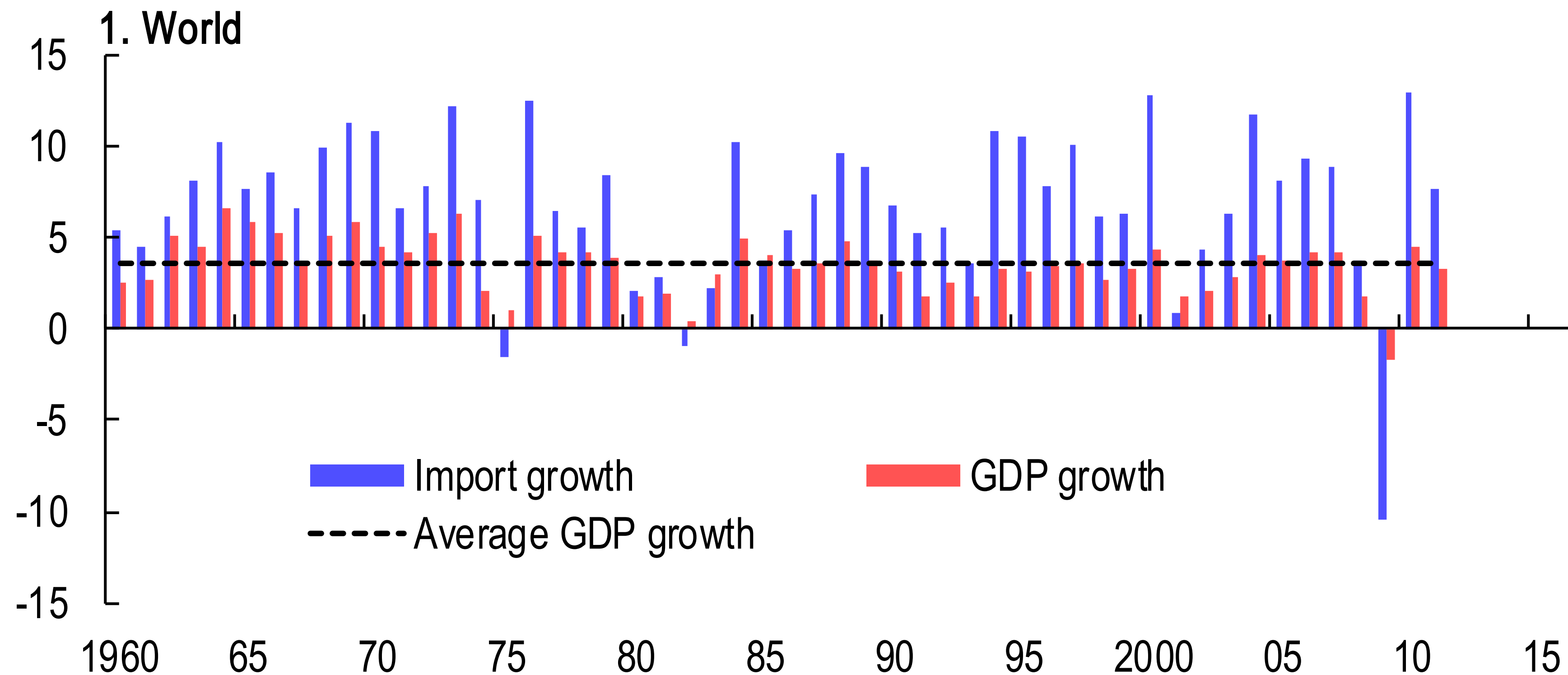


Sources: IMF staff calculations.

Note: Imports include goods and services.

# Motivation

## World Real Trade and GDP Growth in Historical Perspective (Percent)

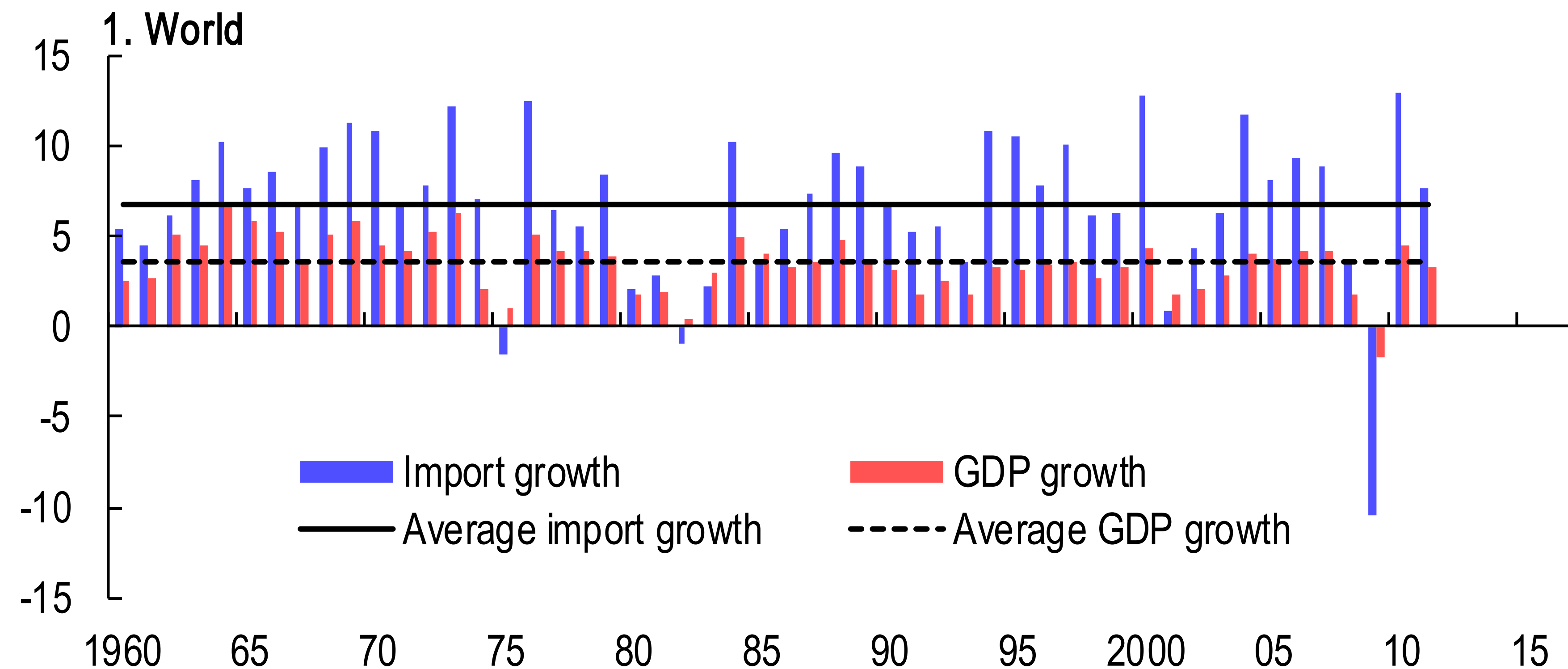


Sources: IMF staff calculations.

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# Motivation

## World Real Trade and GDP Growth in Historical Perspective (Percent)



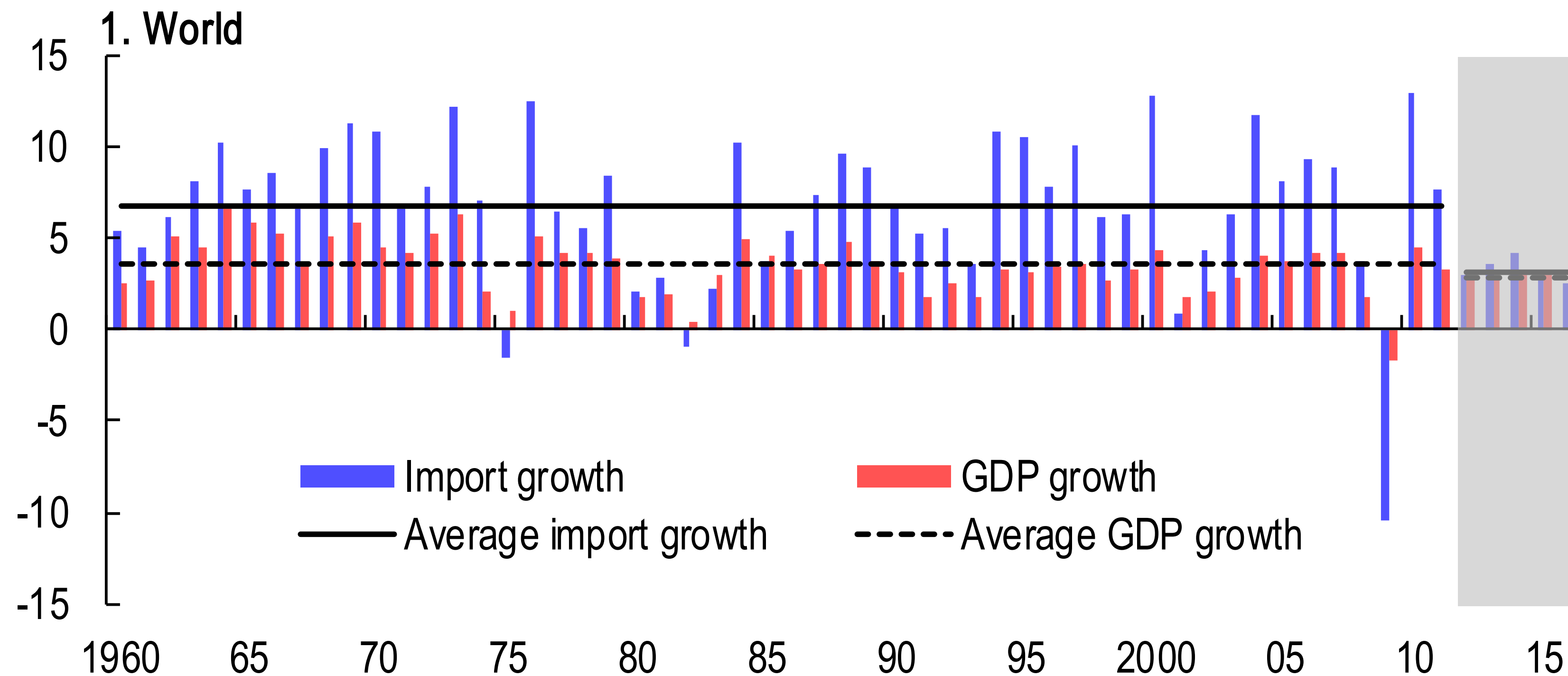
Sources: IMF staff calculations.

Note: Imports include goods and services.



# Motivation

## World Real Trade and GDP Growth in Historical Perspective (Percent)



Sources: IMF staff calculations.

Note: Imports include goods and services.

# Outline

- How widespread is the slowdown?
- What are its drivers?
  - How much of the slowdown is a symptom of the weak recovery and shifts in the composition of economic activity?
  - What role have other factors played?
- What are its policy implications?

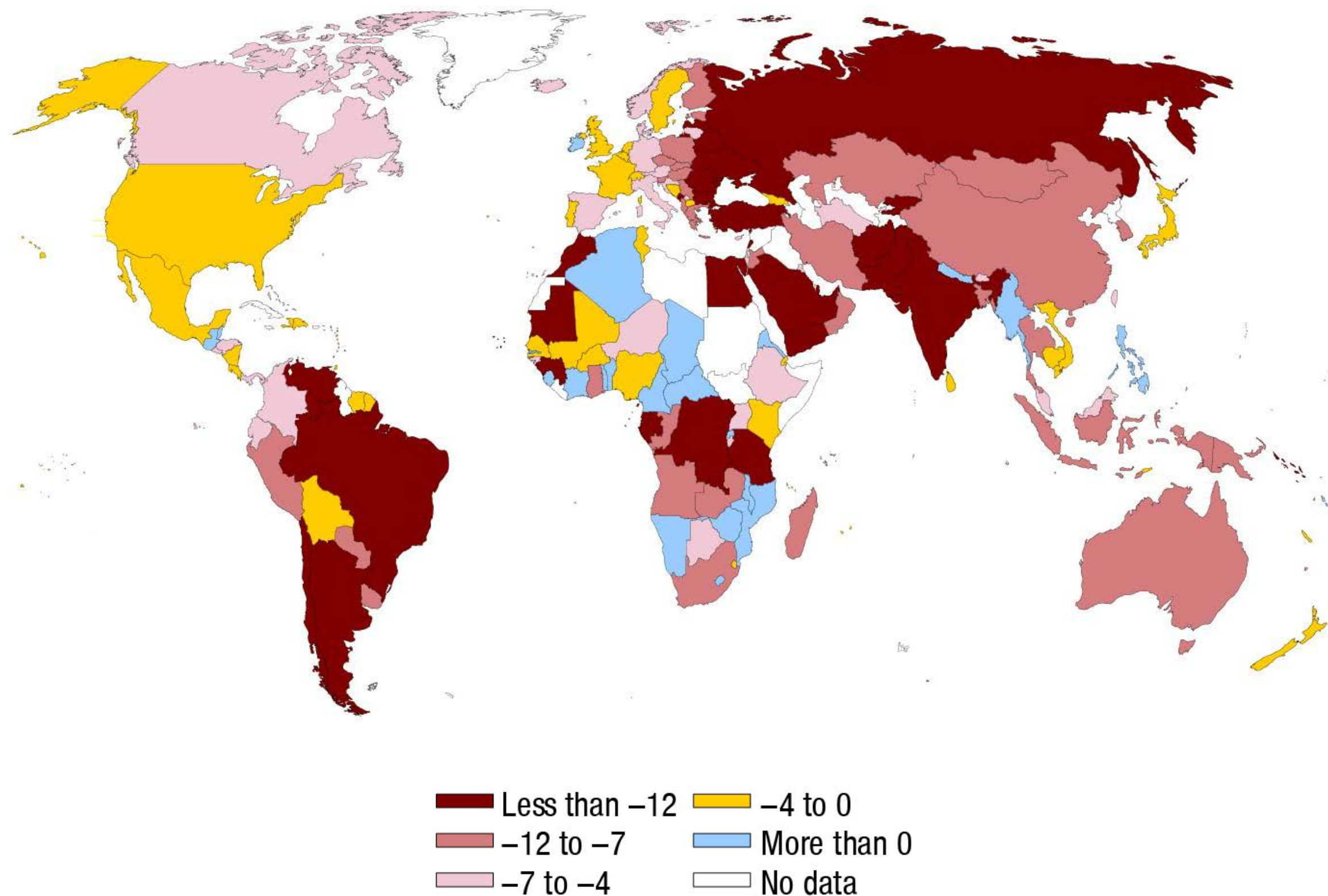
**HOW WIDESPREAD IS THE SLOWDOWN?**



# Slowdown in real trade growth is widespread across countries and products

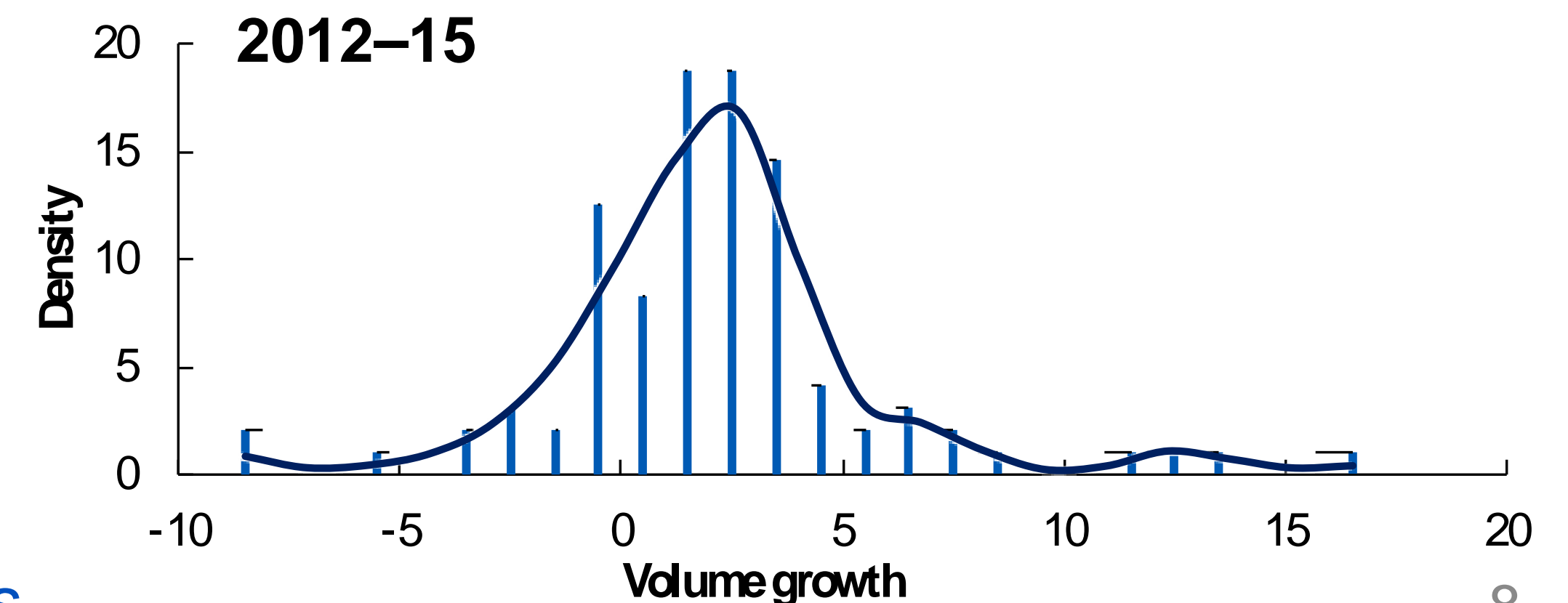
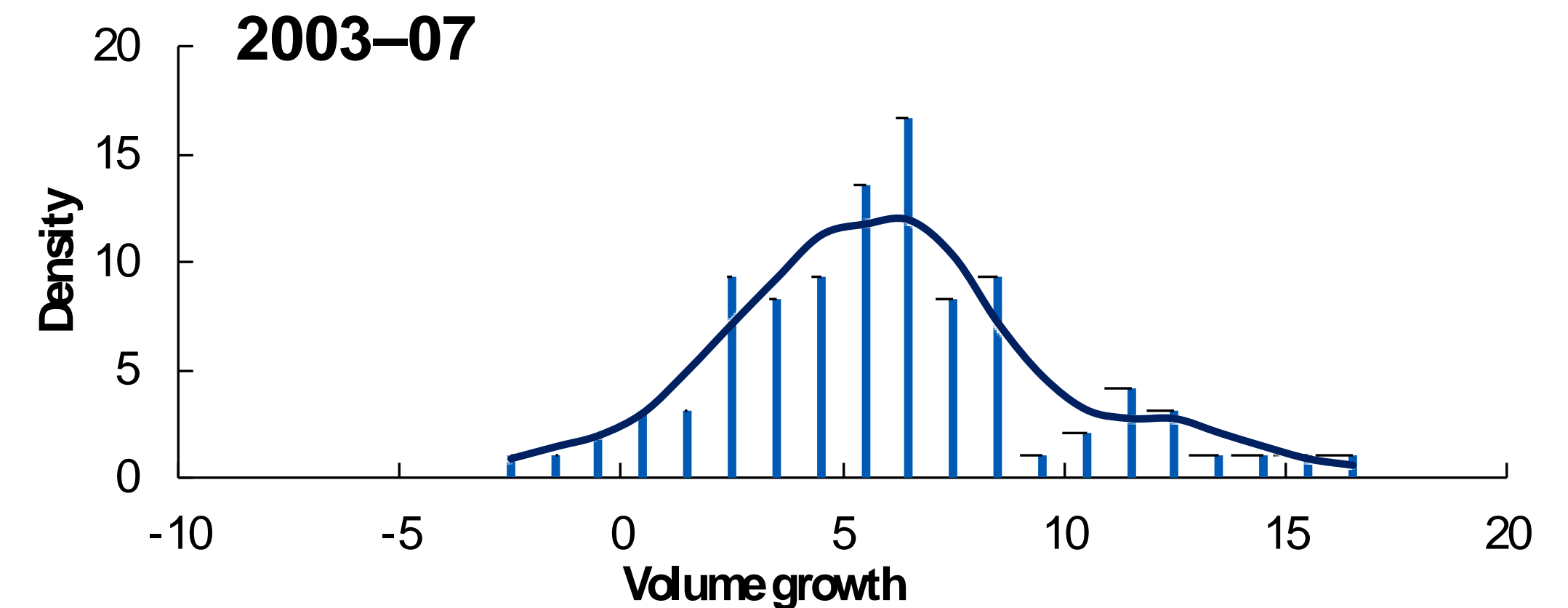
## Average Real Import Growth

(Percentage points; difference between 2003–07 less 2012–15)



## Distribution of Average Real Import Growth across Products

(Percent)



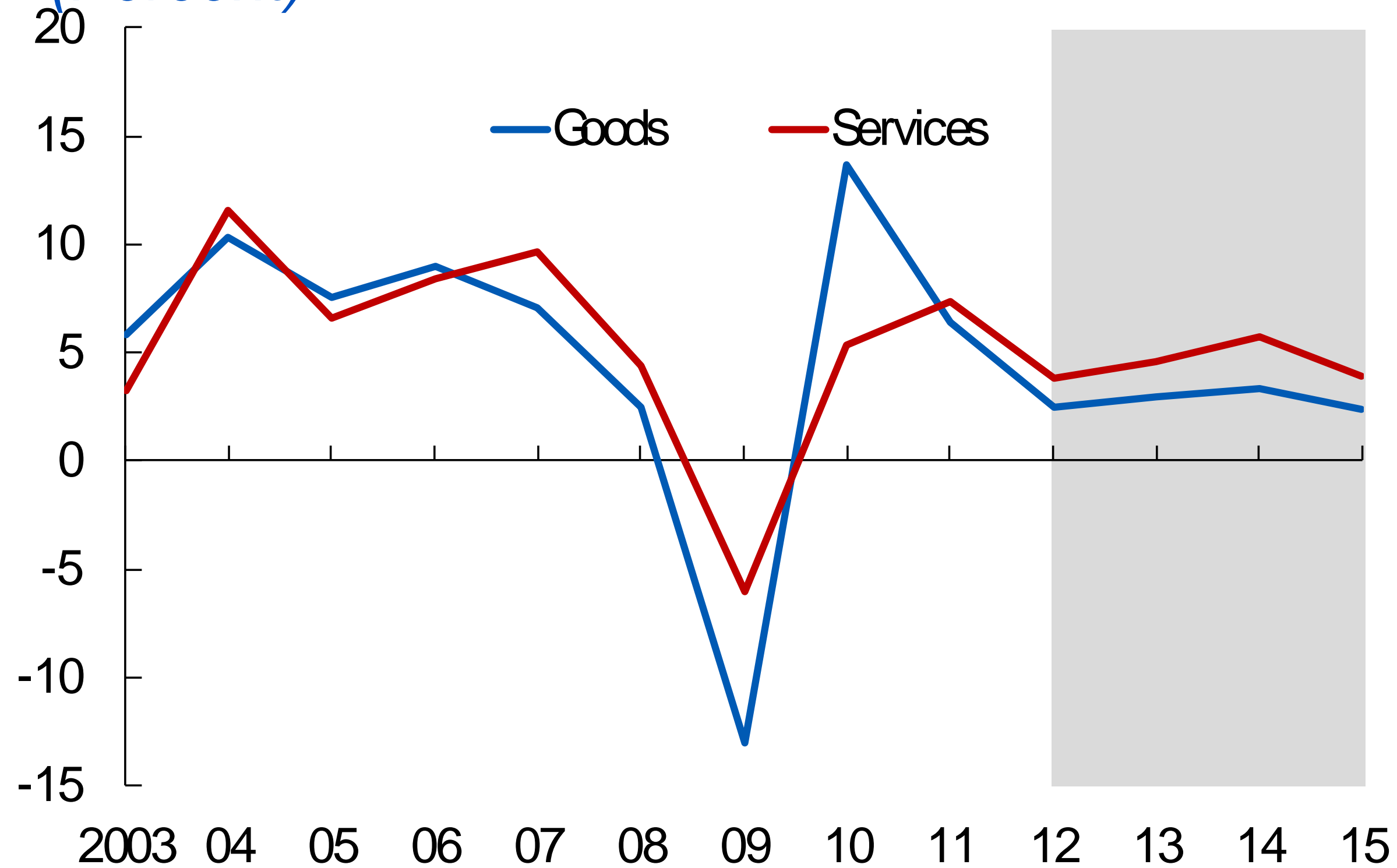
Sources: United Nations Comtrade; and IMF staff calculations.



# Services trade is more resilient than goods trade; among goods, capital goods slowed down the most.

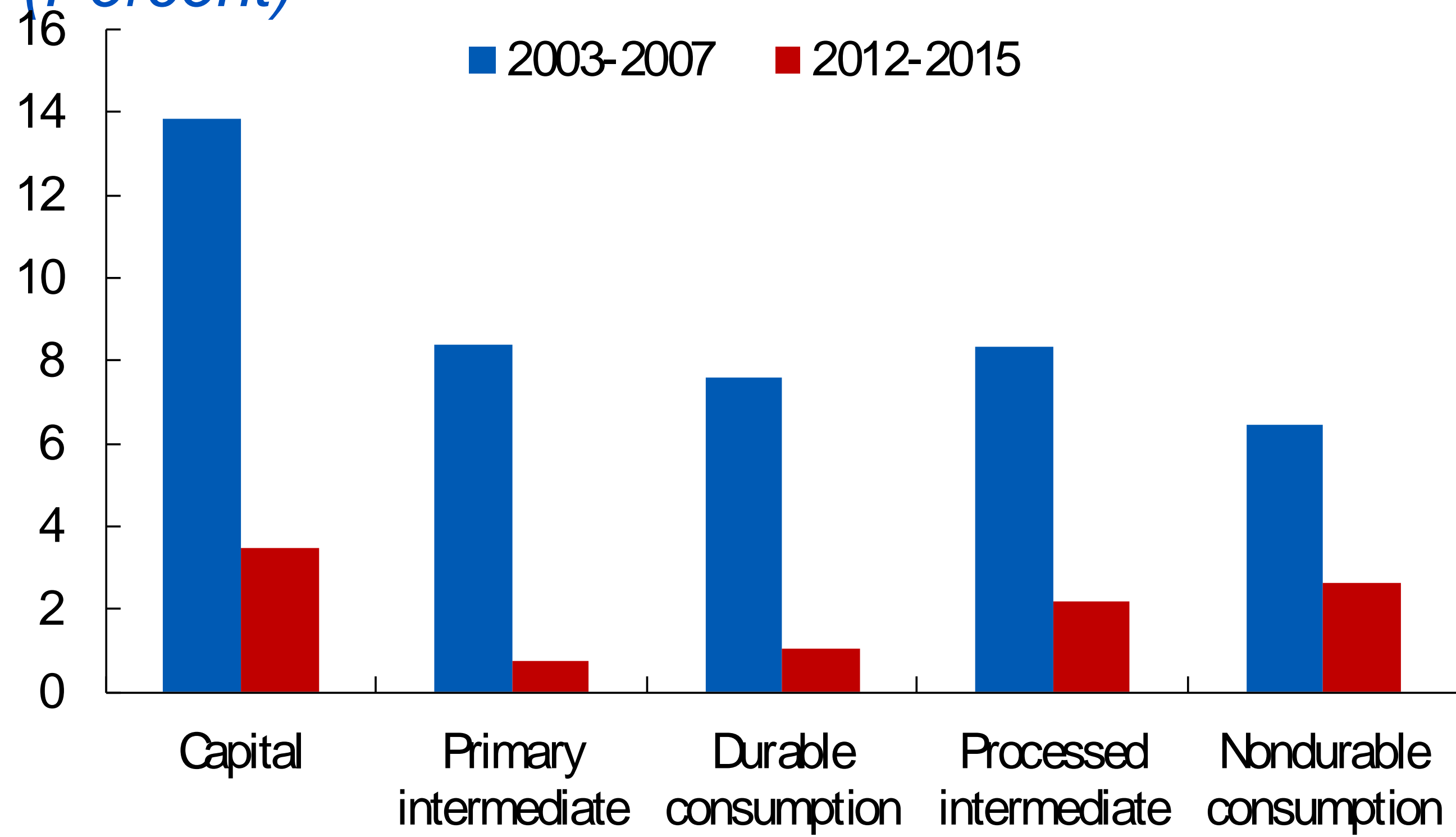
## World Real Goods and Services Import Growth

(Percent)



## Real Goods Import Growth of Different Product Groups<sup>1</sup>

(Percent)



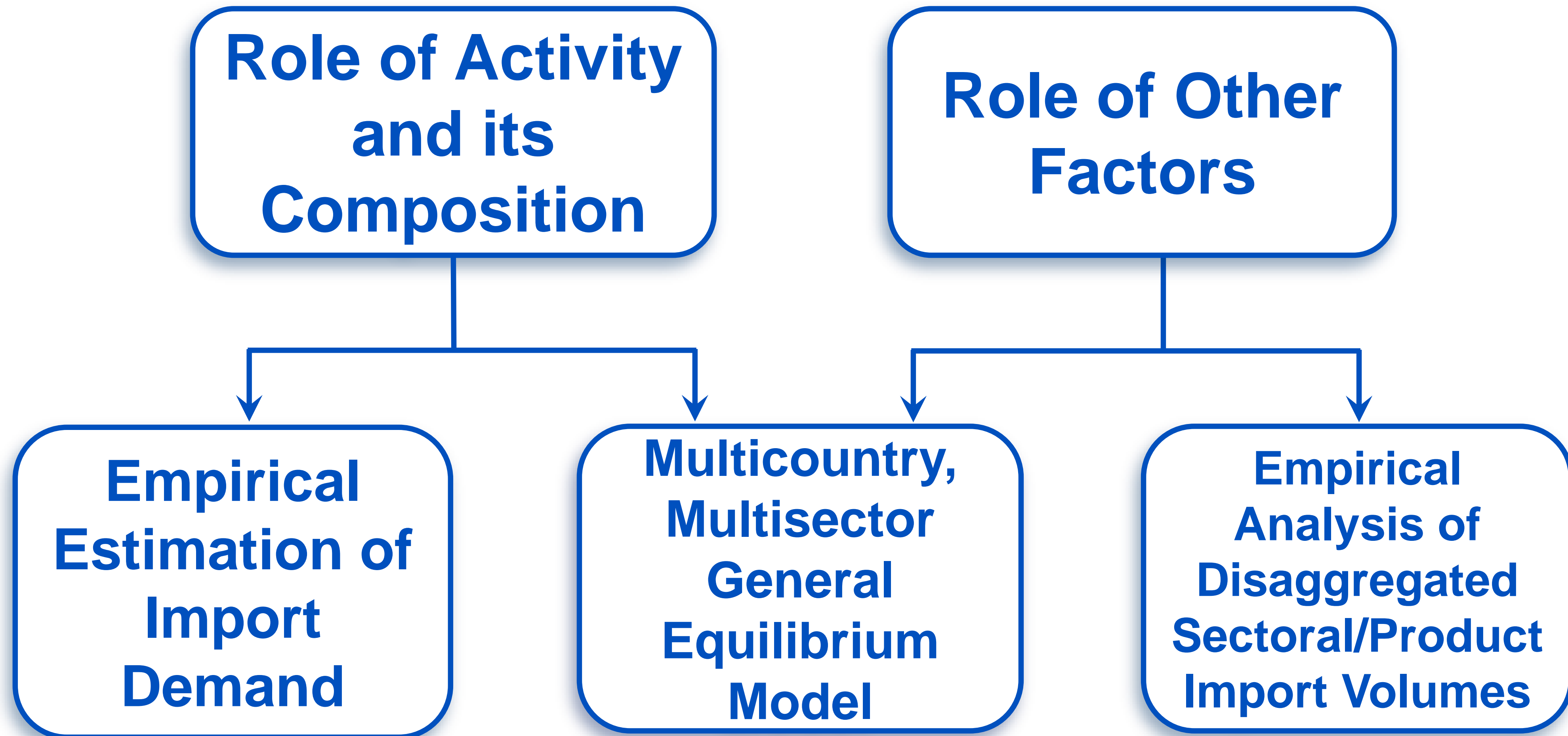
Sources: United Nations Comtrade; and IMF staff calculations.

<sup>1</sup>Computed using import volume indices constructed from quantity and value trade data at HS 6-digit level for 52 economies.

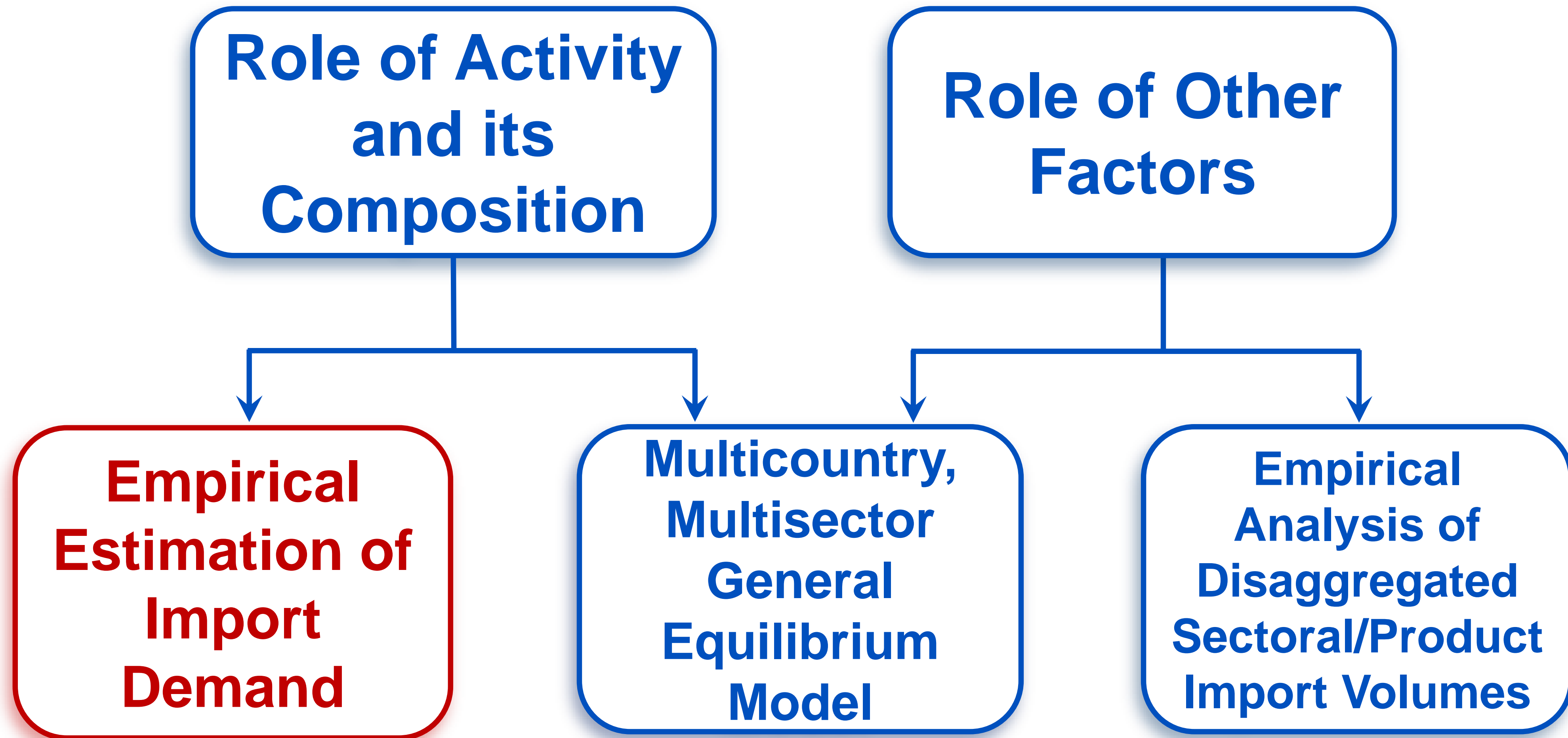
**WHAT ARE ITS DRIVERS?**



# Research Design



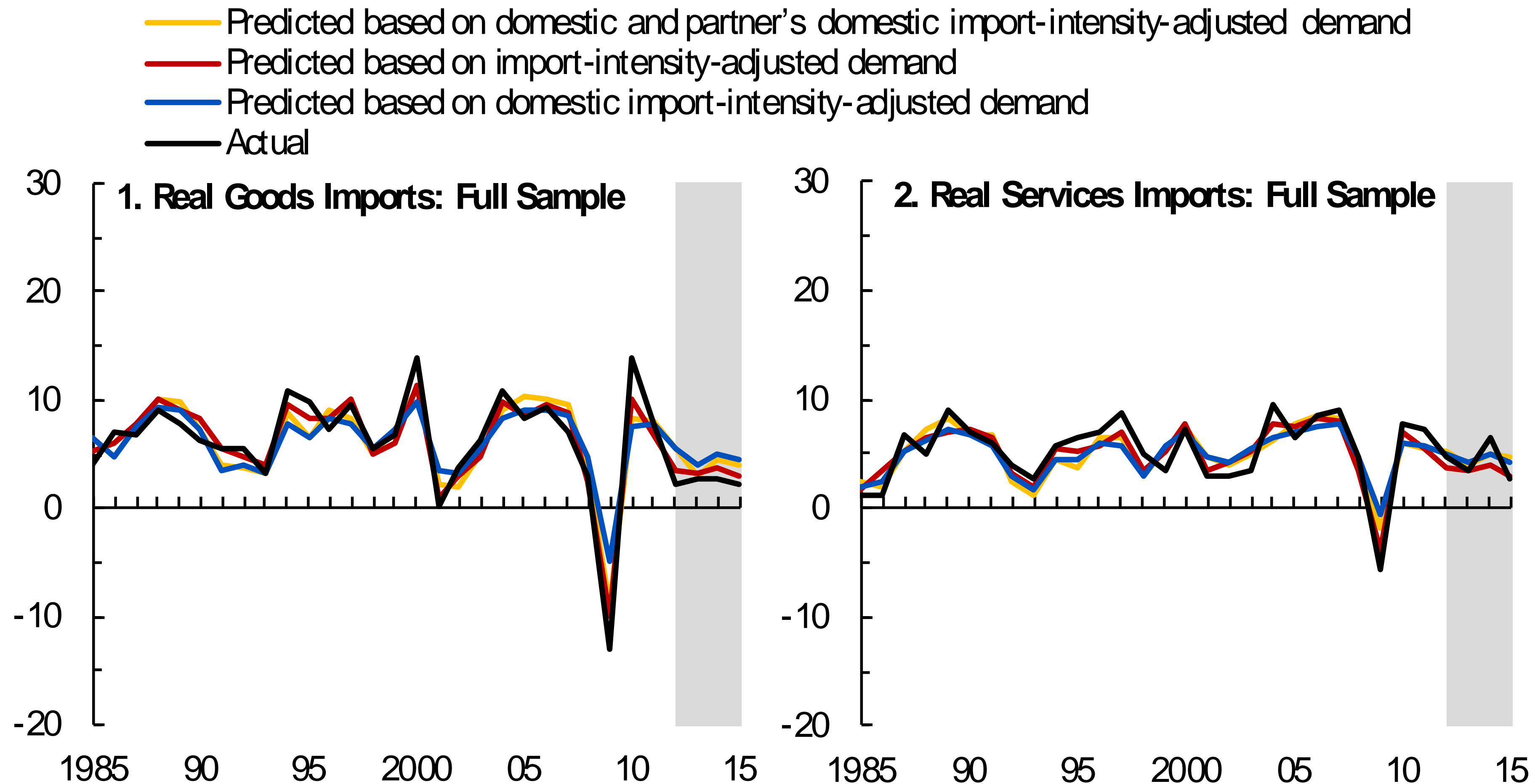
# Research Design





# Actual import growth post-2012 is consistently lower than predicted by empirical import demand models...

## Actual and Predicted Evolution of Real Import Growth (Percent)

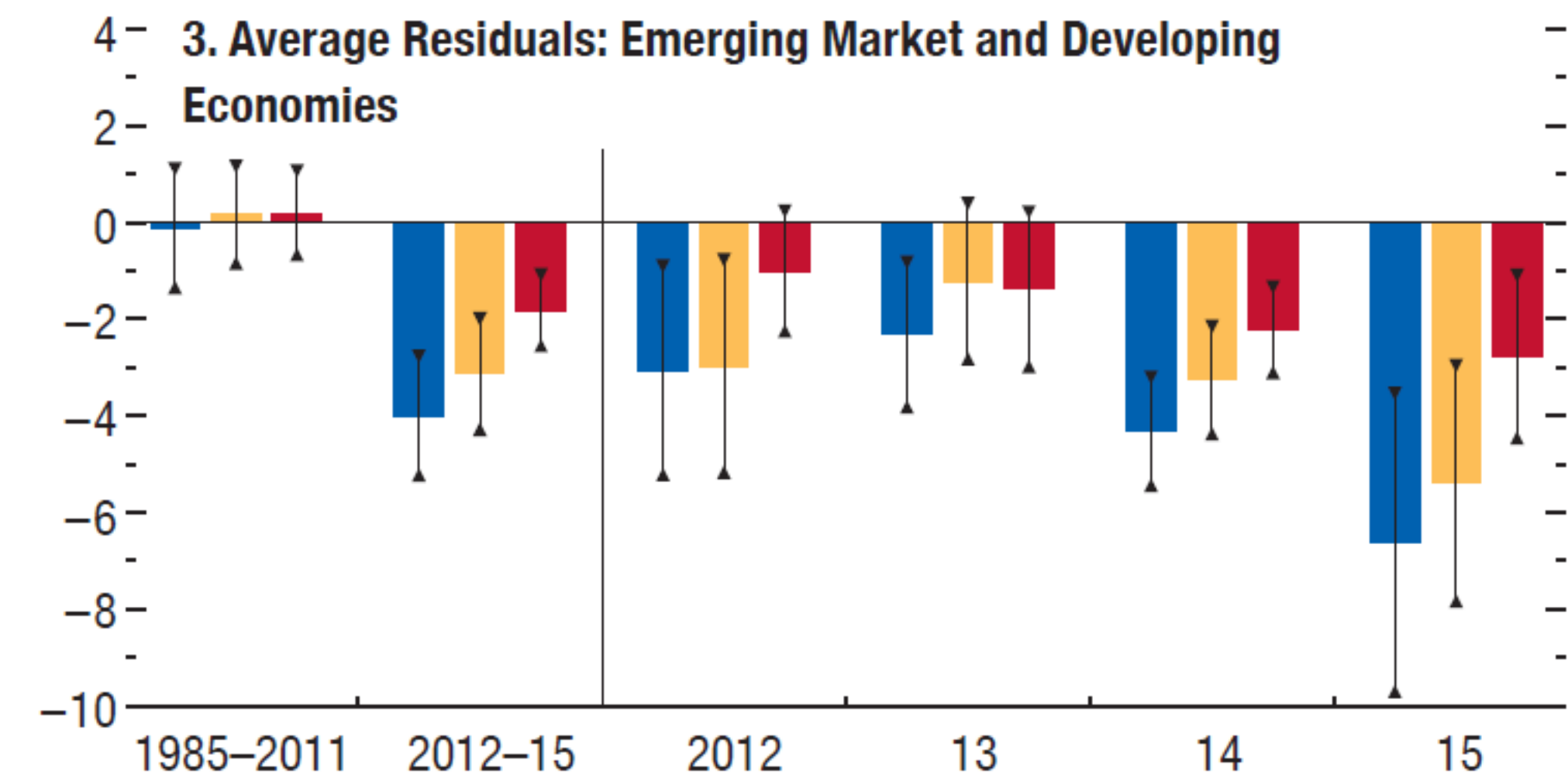
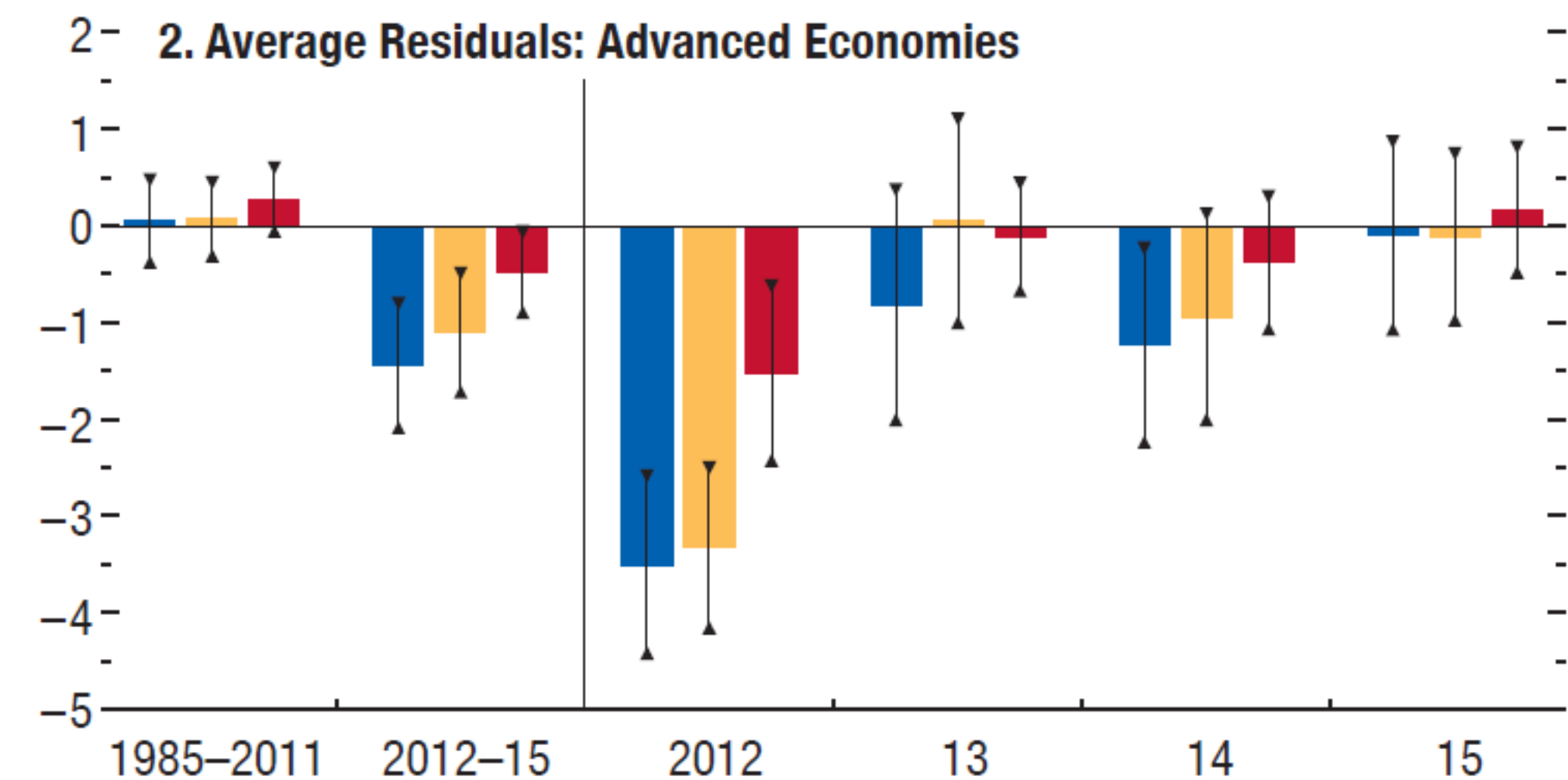
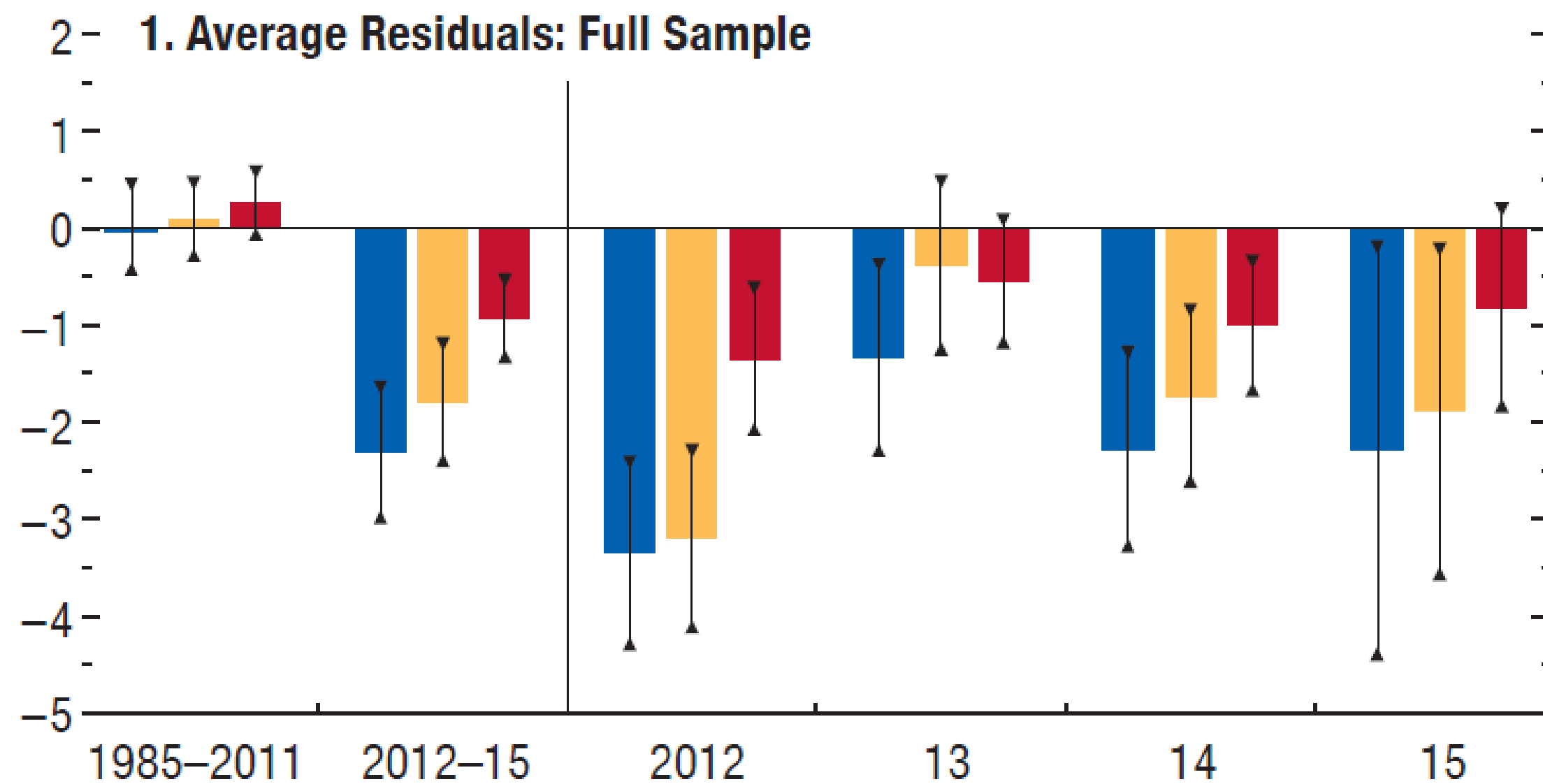


Source: IMF staff calculations.

...but “missing” trade is small relative to total decline.

## Difference between Actual and Predicted Growth of Real Goods Import (Percent)

- Predicted based on domestic import-intensity-adjusted demand
- Predicted based on import-intensity-adjusted demand
- Predicted based on domestic and partners' domestic import-intensity-adjusted demand



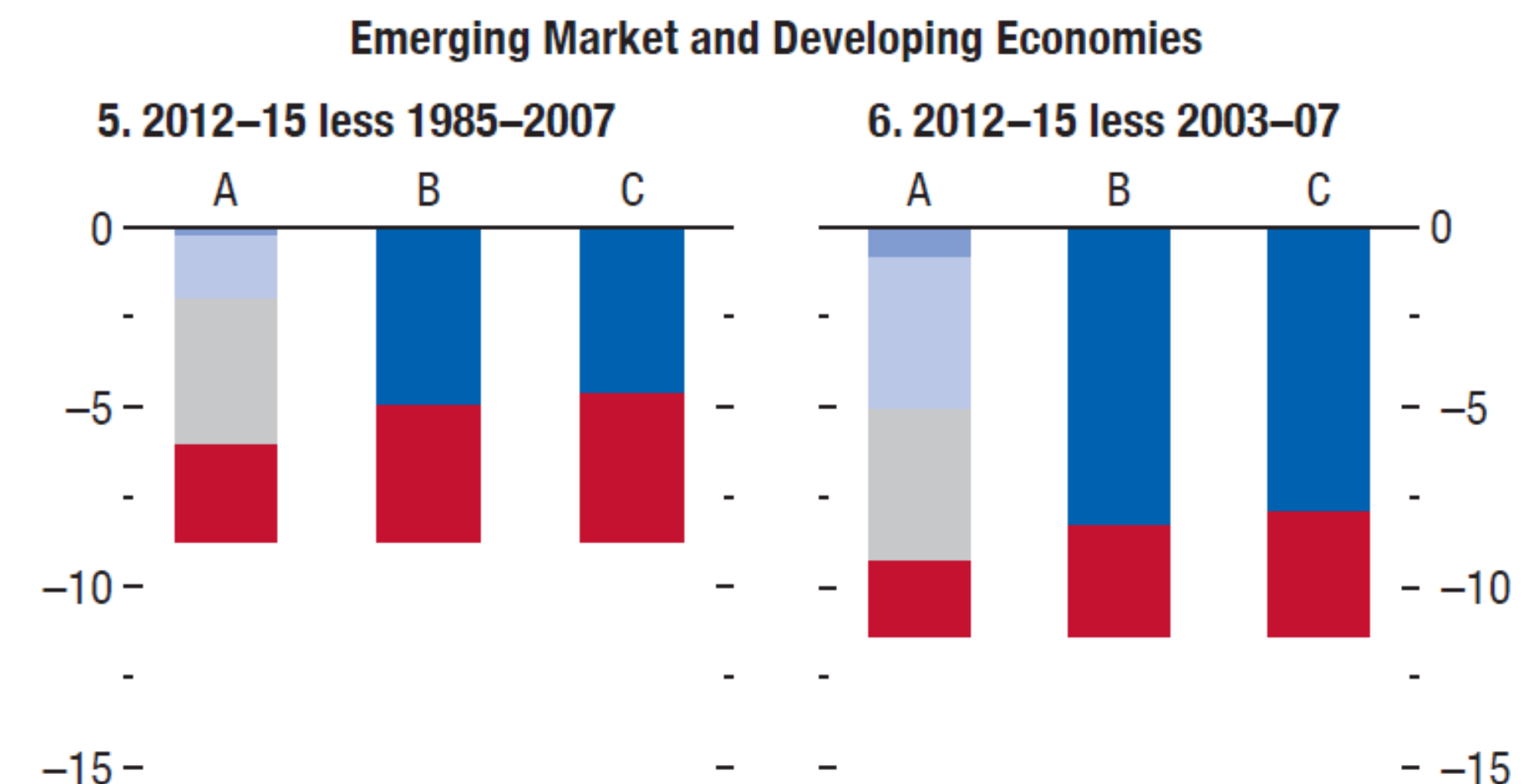
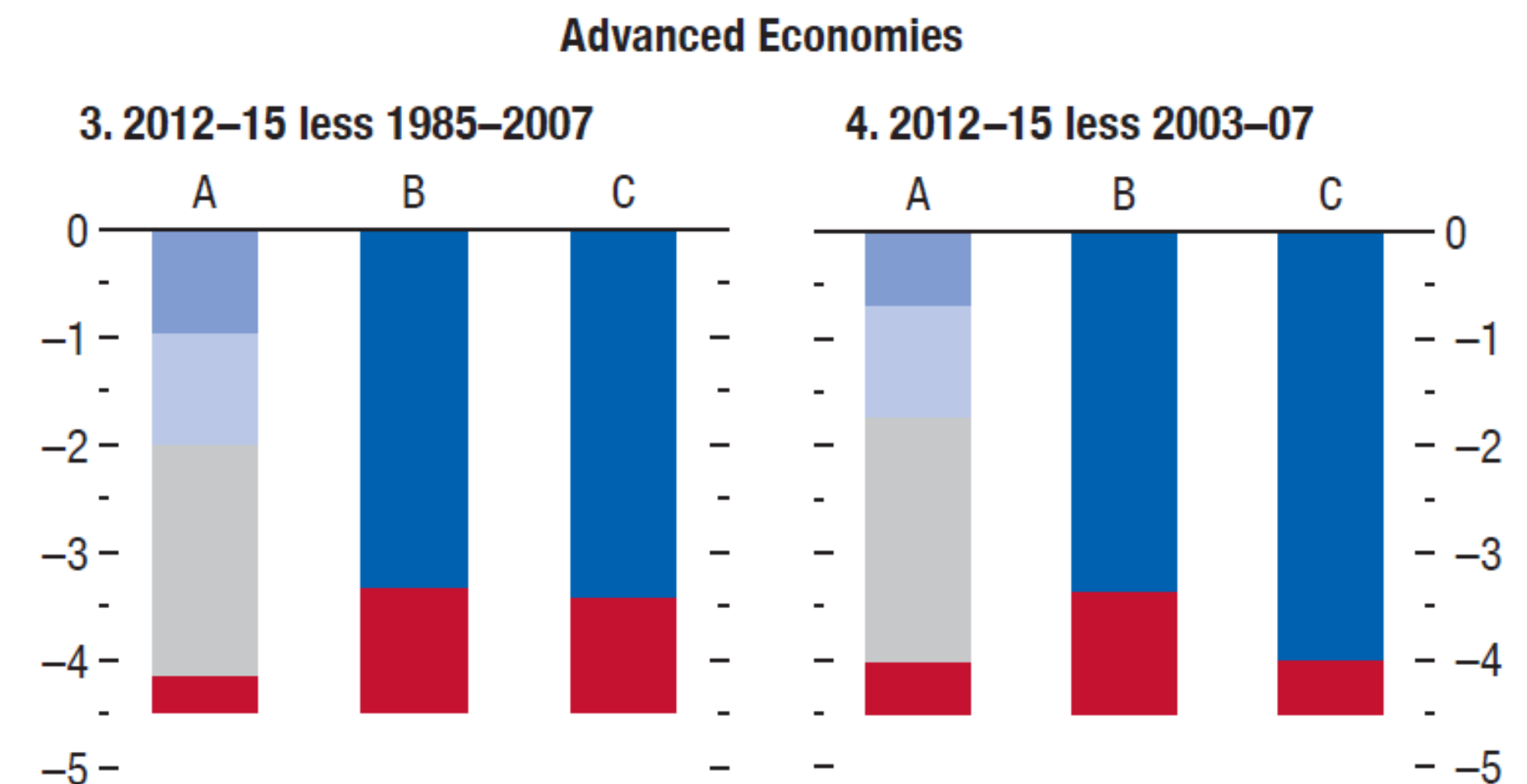
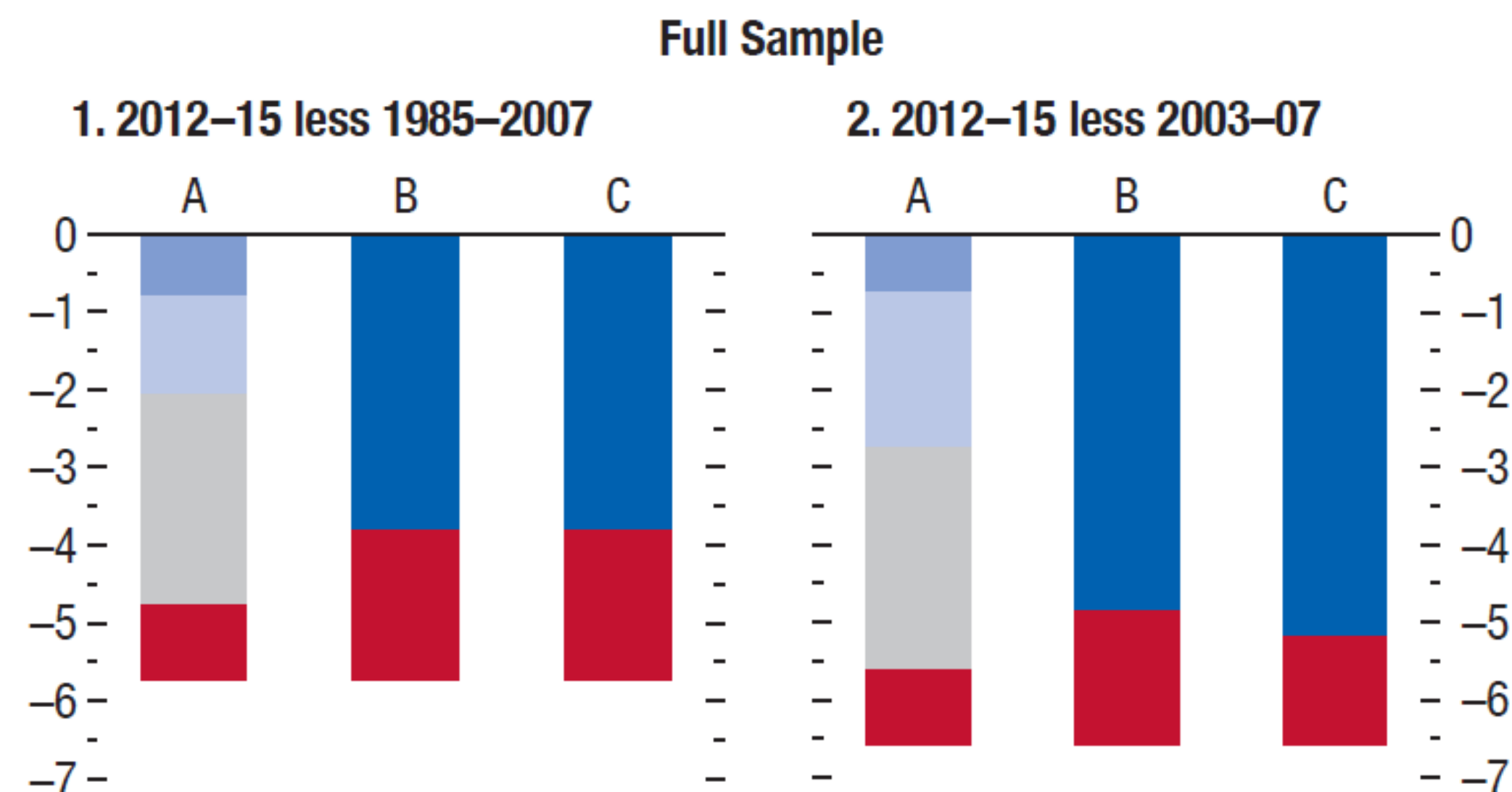


# Three-fourths of the slowdown can be attributed to the weakness in domestic absorption.

## Decomposing the Slowdown in Real Goods Import Growth

(Per

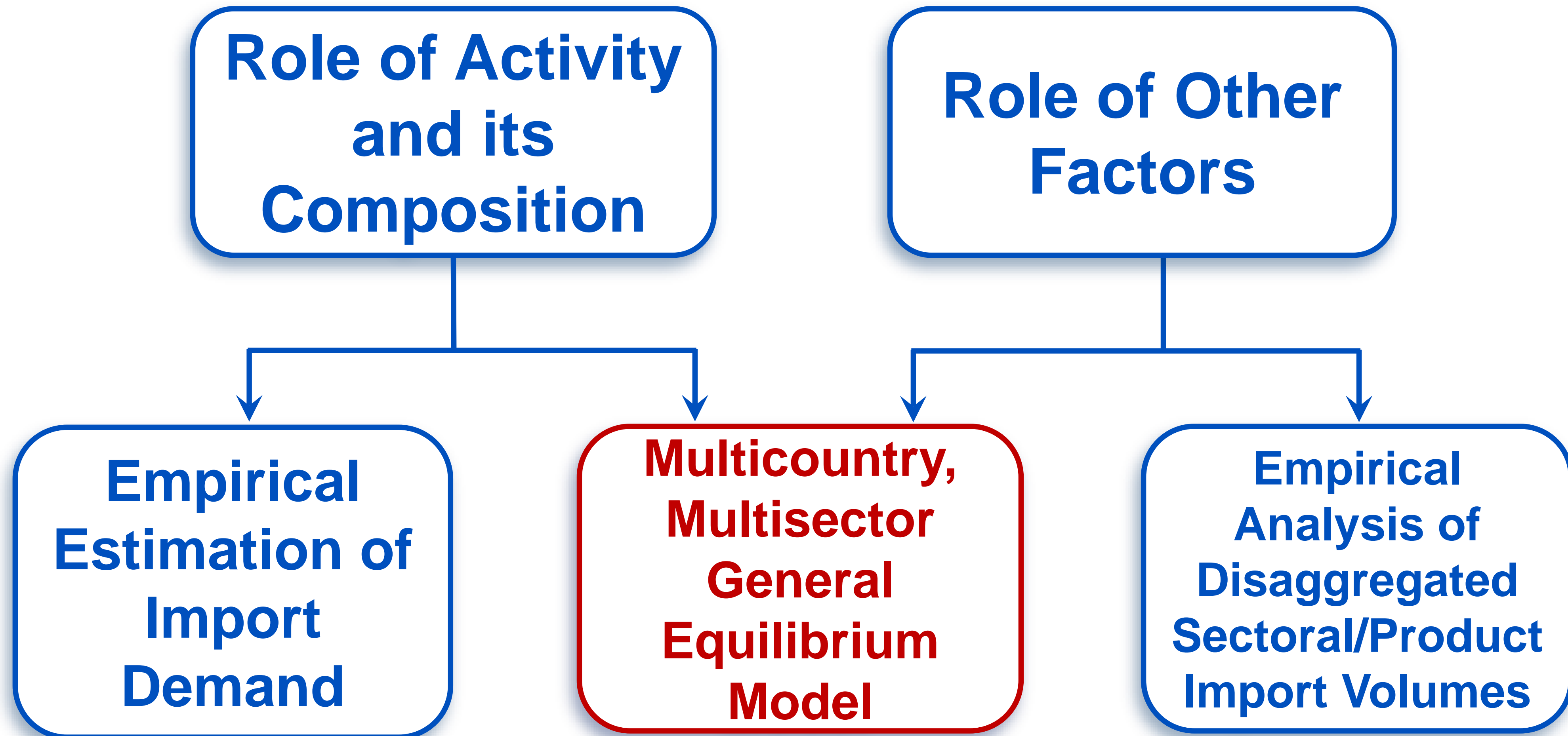
- Predicted by consumption and relative prices
- Predicted by investment
- Predicted by exports
- Predicted by own and partners' domestic import-intensity-adjusted demand
- Unpredicted



Source: IMF staff calculations.

Note: Bar A decomposes the difference in average real goods import growth between the two periods into portions predicted by consumption and relative prices, investment, exports, and an un unpredicted residual. Bar B apportions the component predicted by exports into what can and cannot be predicted by domestic demand from trading partners, using an iterative procedure. Bar C decomposes the difference into the sum of domestic demand and external demand predicted by trading partners' domestic demand.

# Research Design



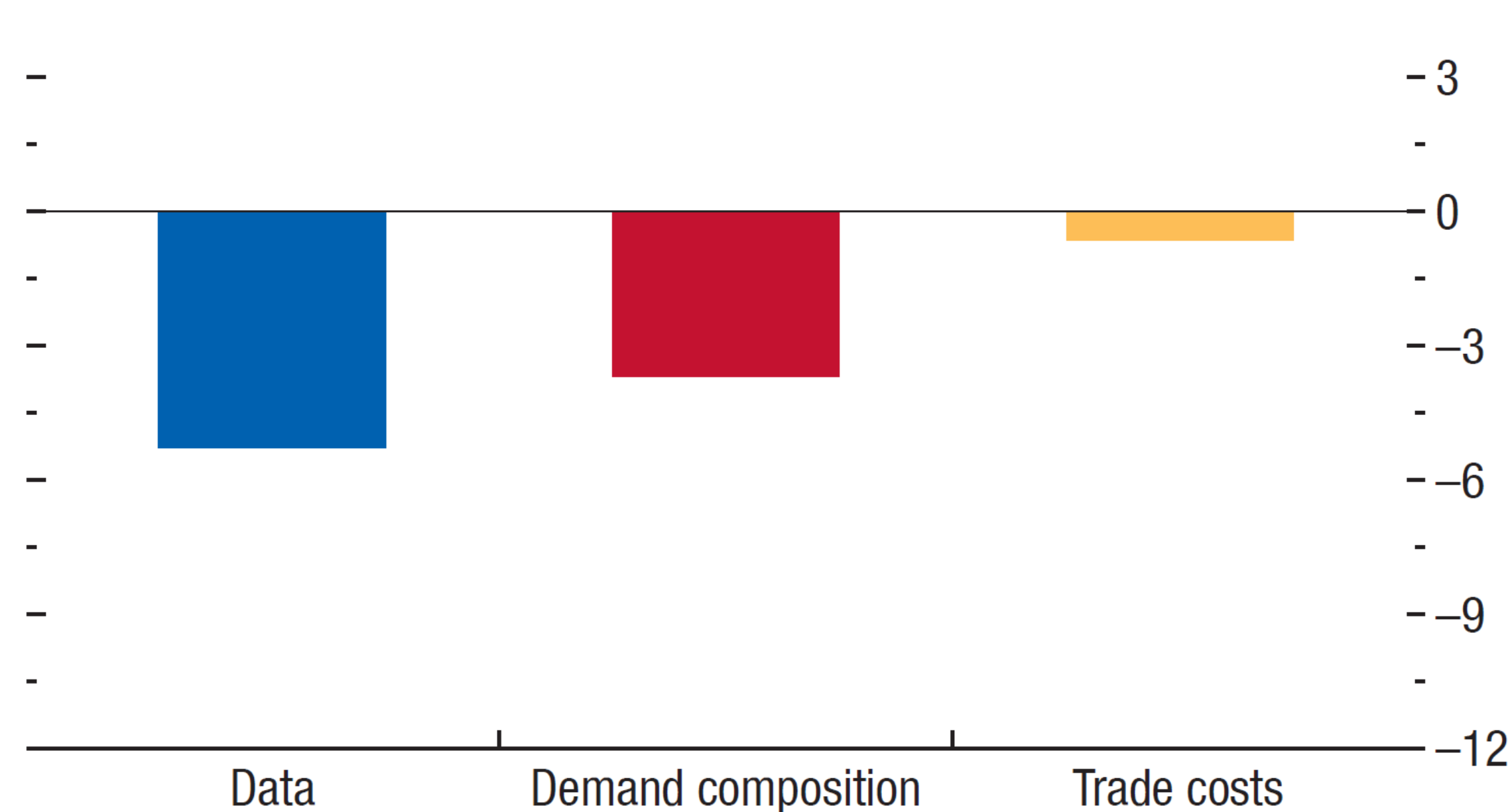


# Shifts in demand composition account for most of the slowdown but trade costs are important in EMDEs.

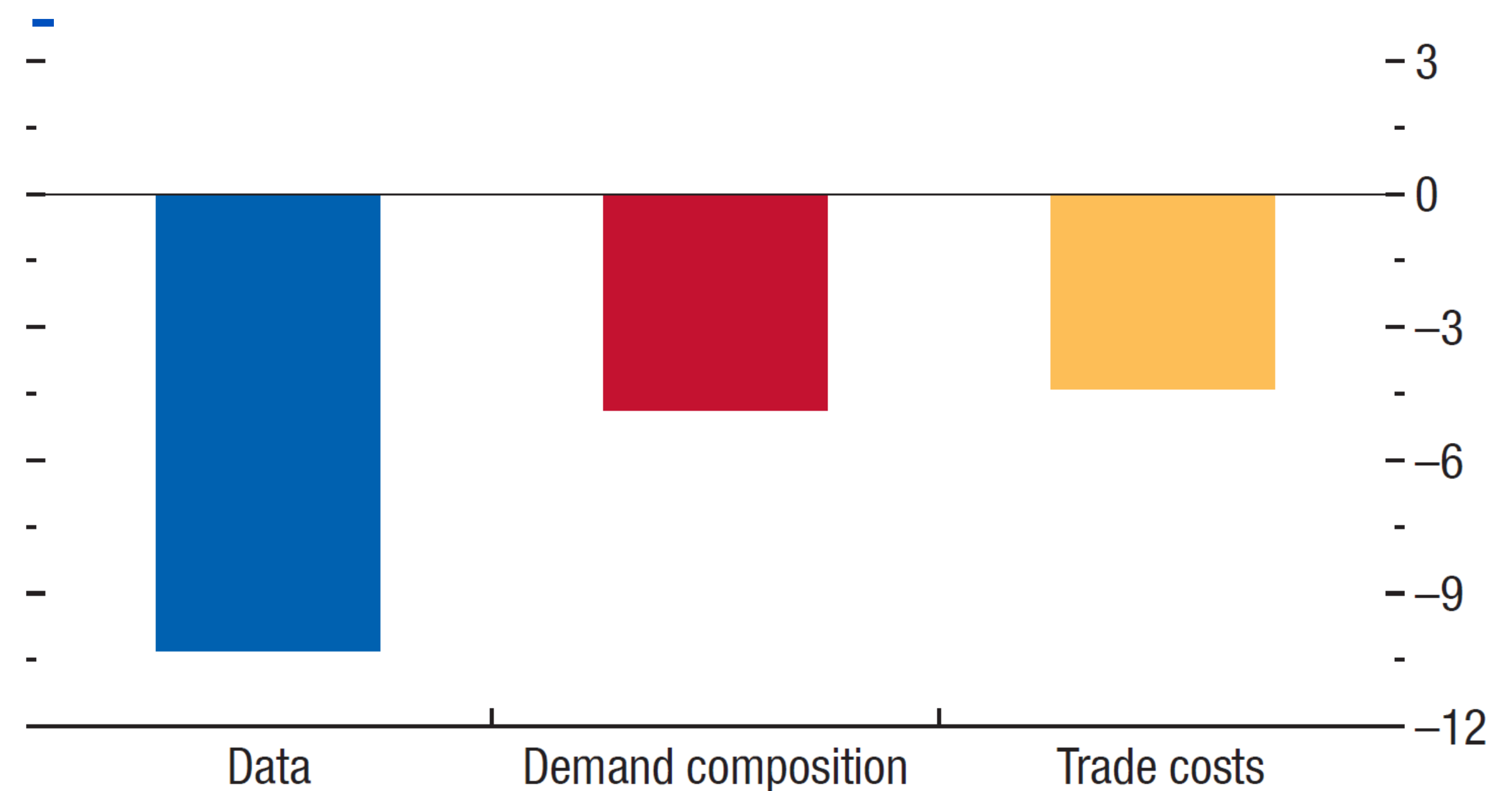
## Change in the Gross Growth of Nominal Imports-to-GDP Ratio between 2012-15 and 2003-07

*(Percentage Points)*

### Advanced Economies



### Emerging Market and Developing

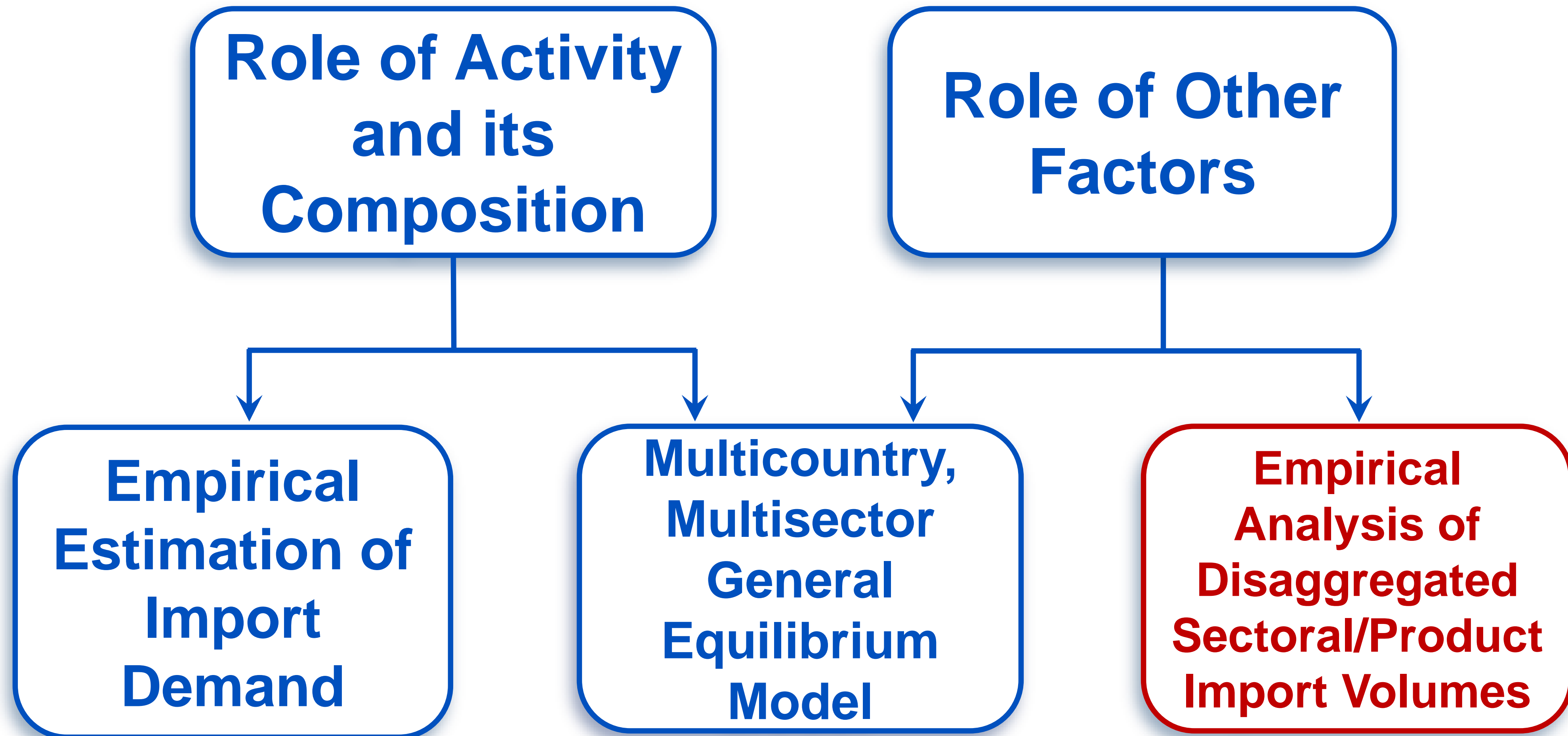


# Role of Weak Recovery and Shifts in the Composition of Demand

- Import demand estimation and the structural general equilibrium model deliver consistent messages.
  - Slowdown reflects largely, but not entirely, the weakness of the overall economic environment and compositional shifts in aggregate activity.
  - Demand composition shifts played a larger role in the slowdown in AEs' trade, relative to EMDEs.
  - There is a role for other factors, including trade costs.

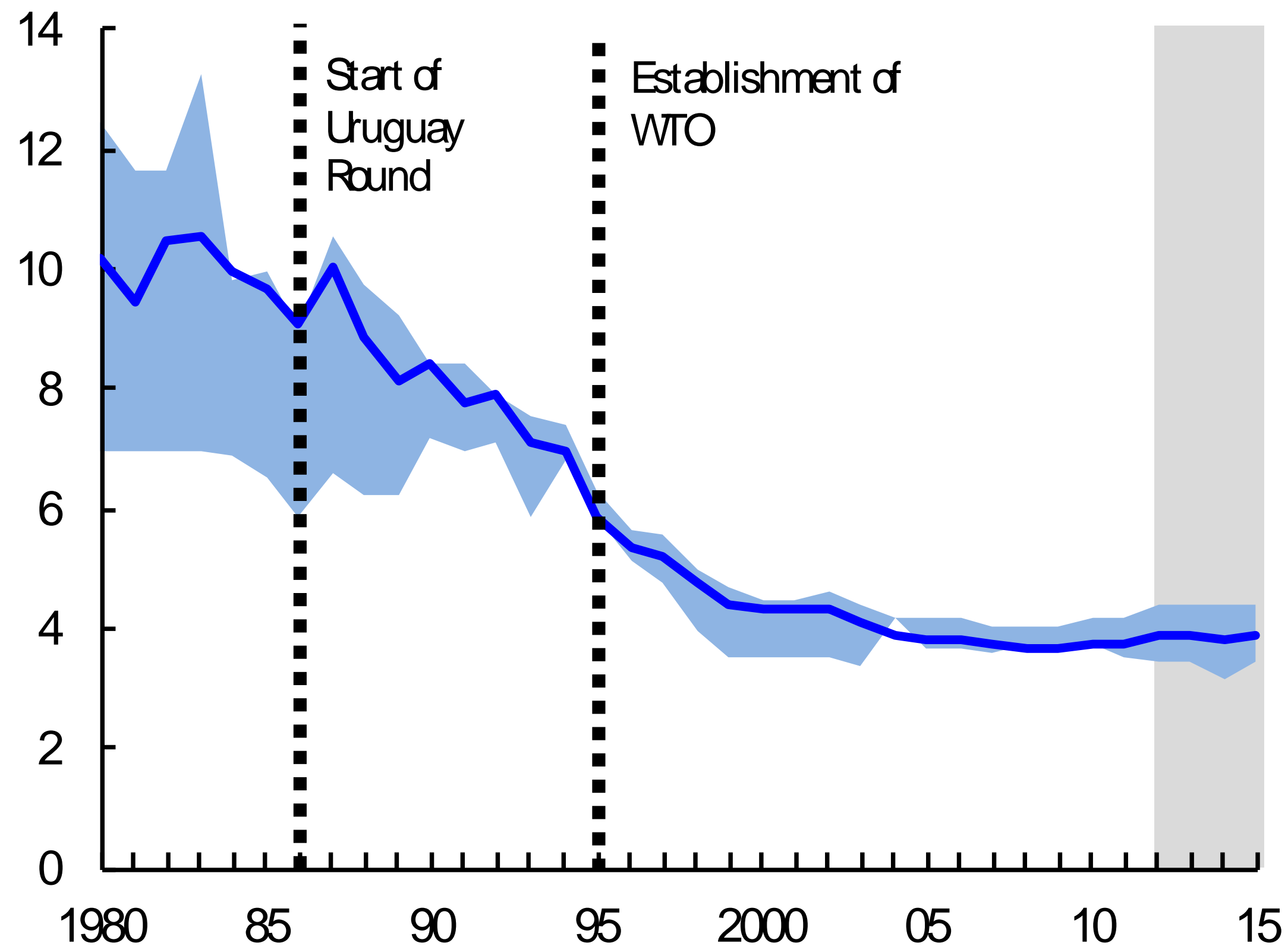


# Research Design

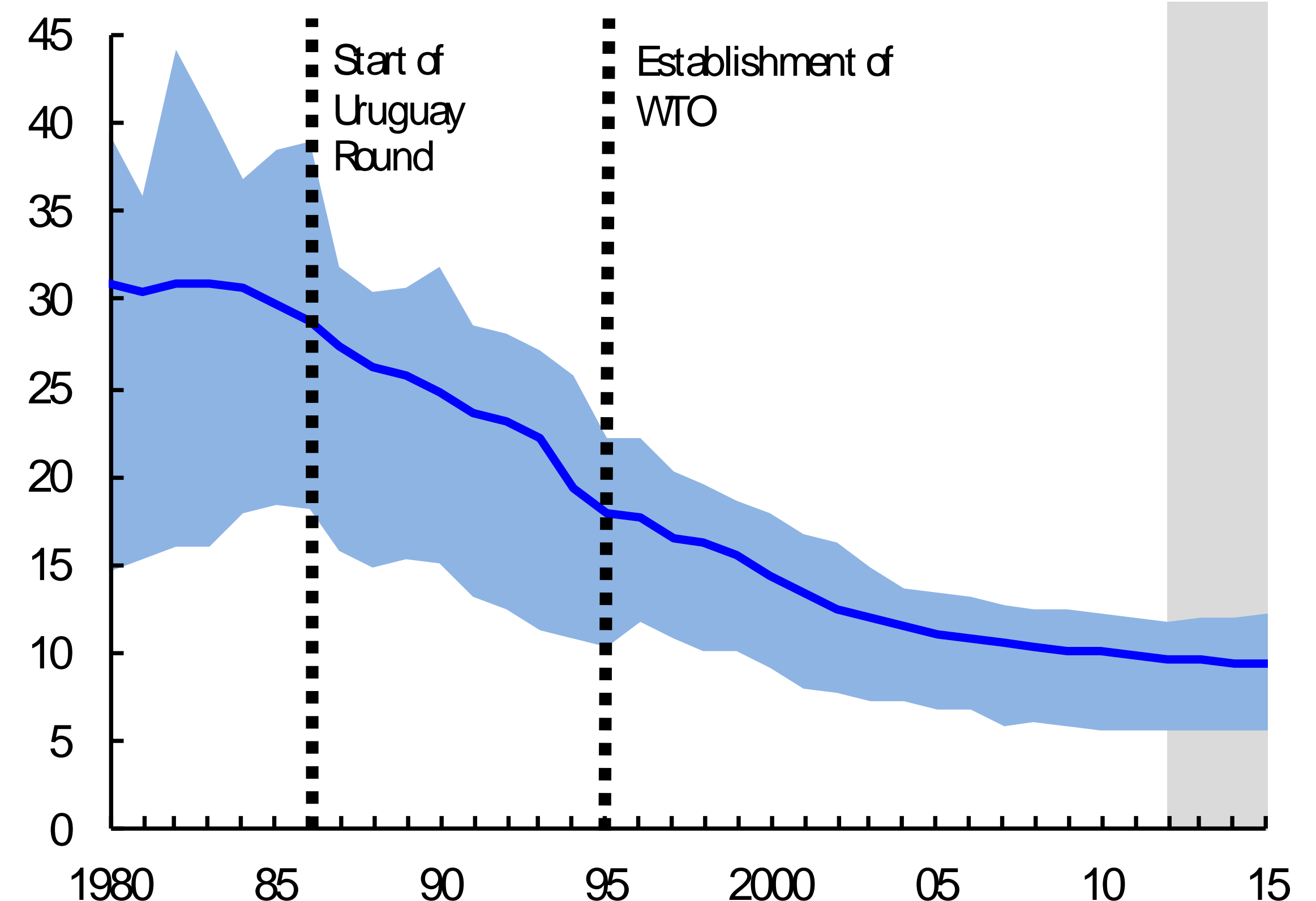


# Trade liberalization slowed down, and there are signs that protectionism is on the rise.

**Tariffs in Advanced Economies**  
*(Percent; simple average)*



**Tariffs in Emerging Market and Developing Economies**  
*(Percent; simple average)*

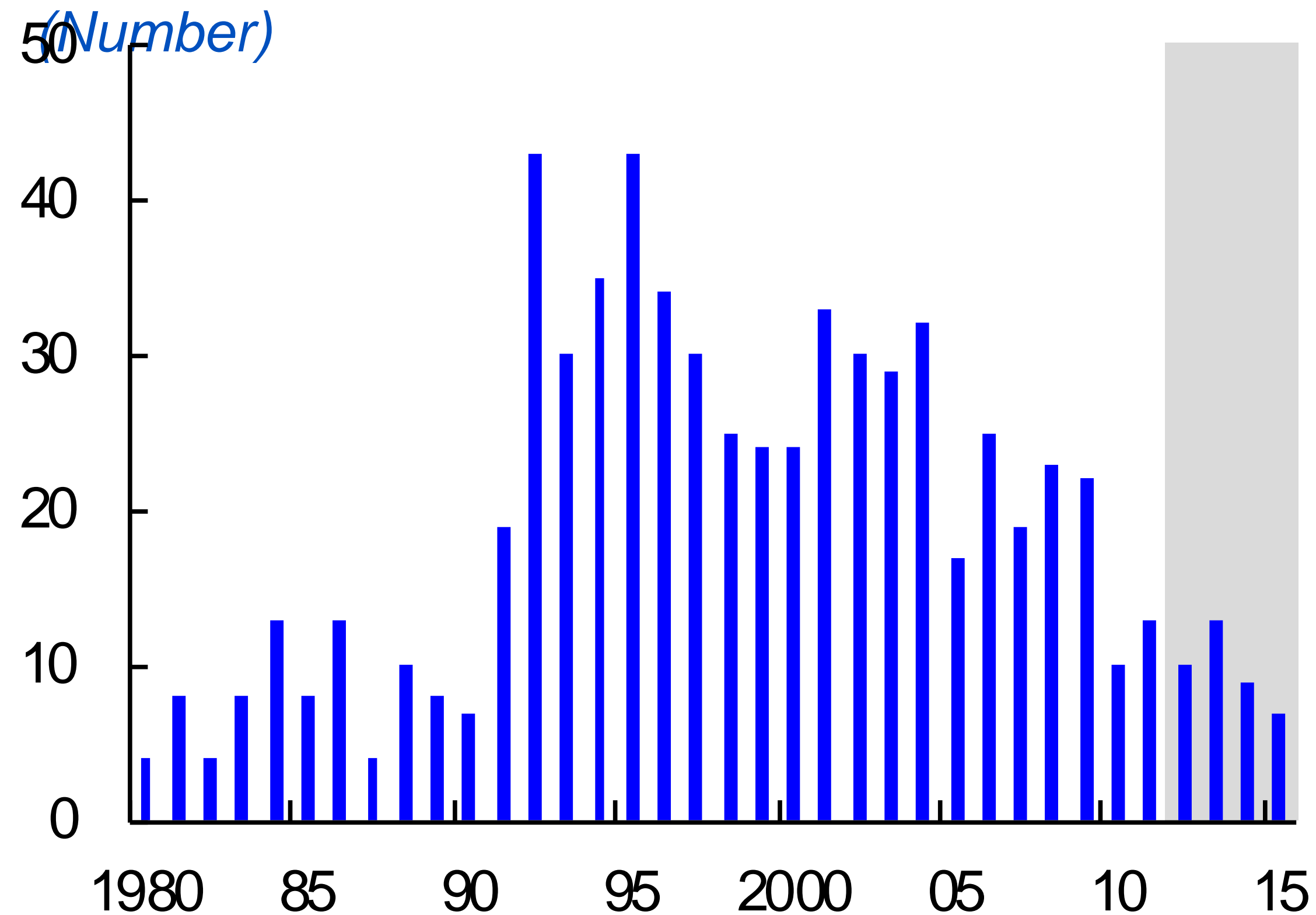


Sources: United Nations Conference on Trade and Development Trade Analysis and Information System; World Trade Organization Tariff Download Facility; and IMF staff calculations.

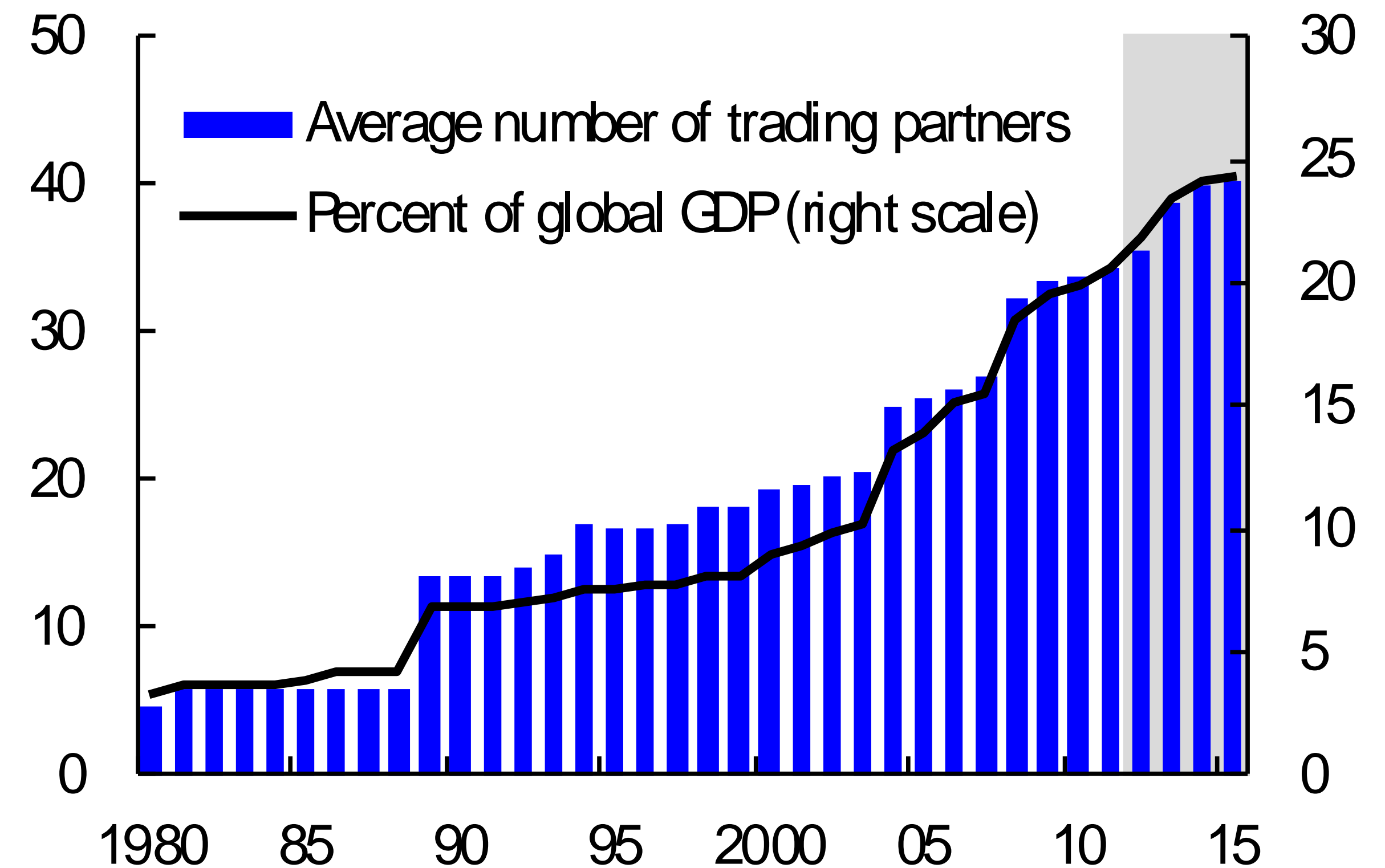


# Trade liberalization slowed down, and there are signs that protectionism is on the rise.

## Free Trade Agreements by Year of Signature



## Free Trade Agreements Coverage

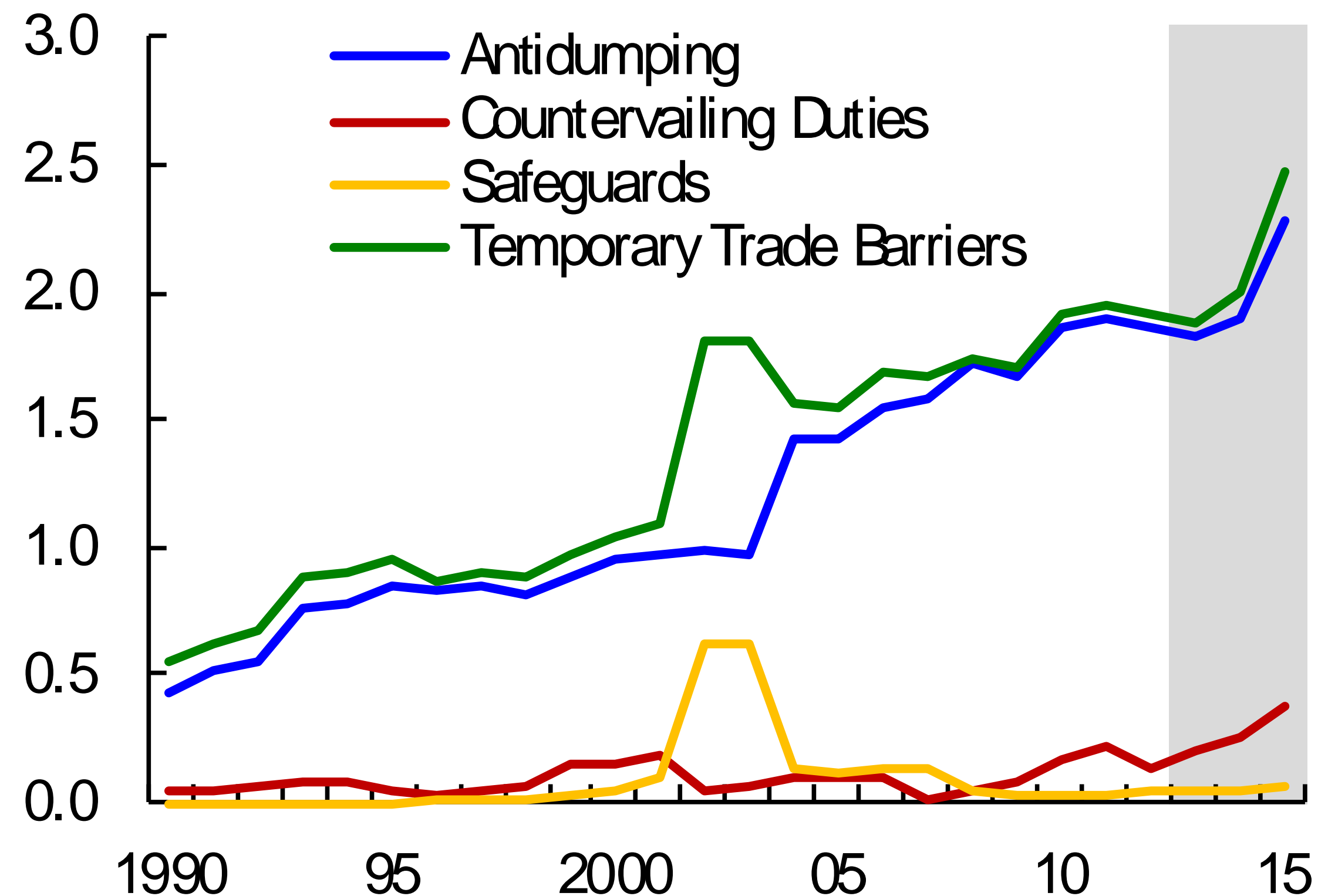


Sources: Design of Trade Agreements database; World Trade Organization Regional Trade Agreements database; and IMF staff calculations.

# Trade liberalization slowed down, and there are signs that protectionism is on the rise.

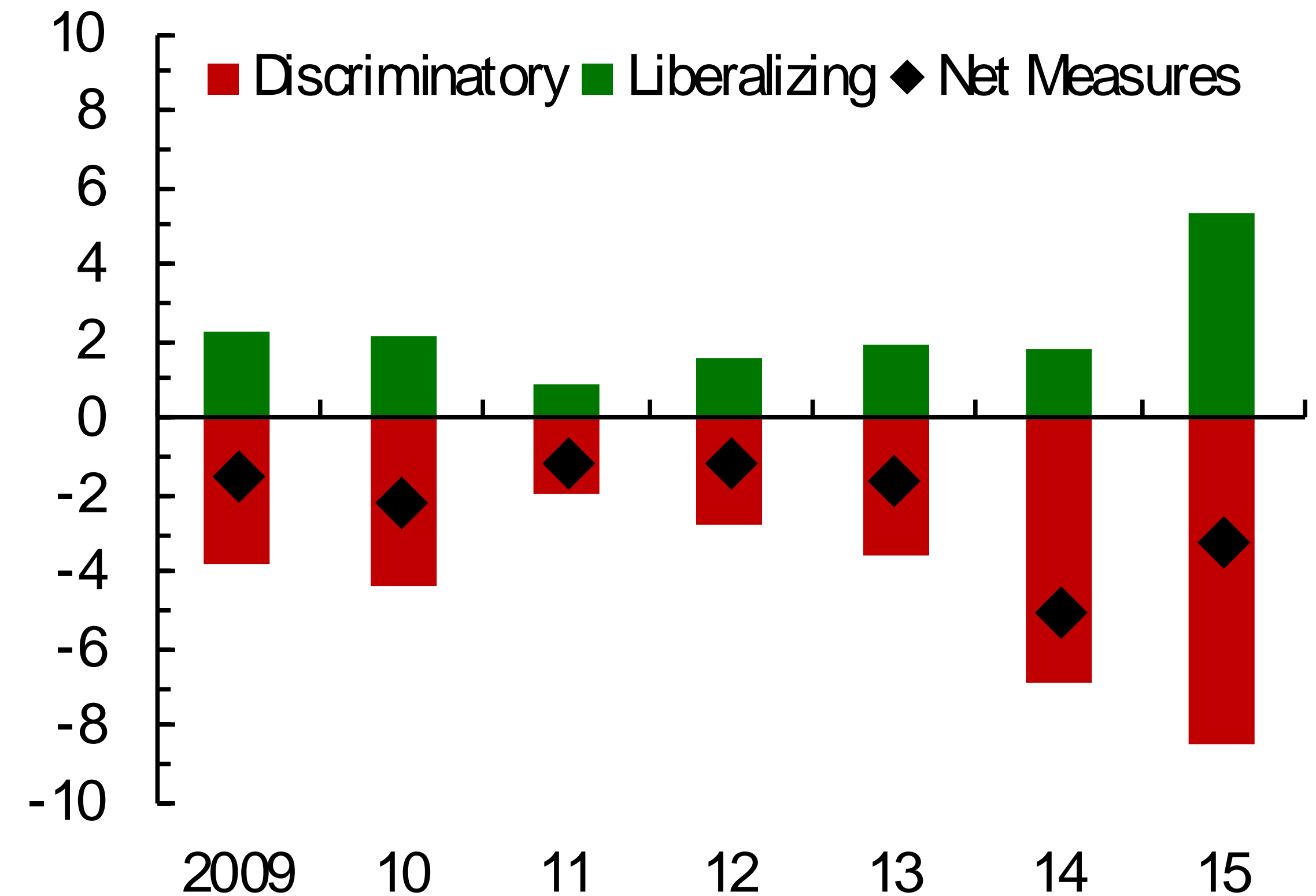
## Temporary Trade Barriers

*(Percent of products)*



## Measures Implemented

*(Number of products, thousands)*



Sources: Bown 2016; Global Trade Alert database; World Bank Temporary Trade Barriers database; and IMF staff calculations.



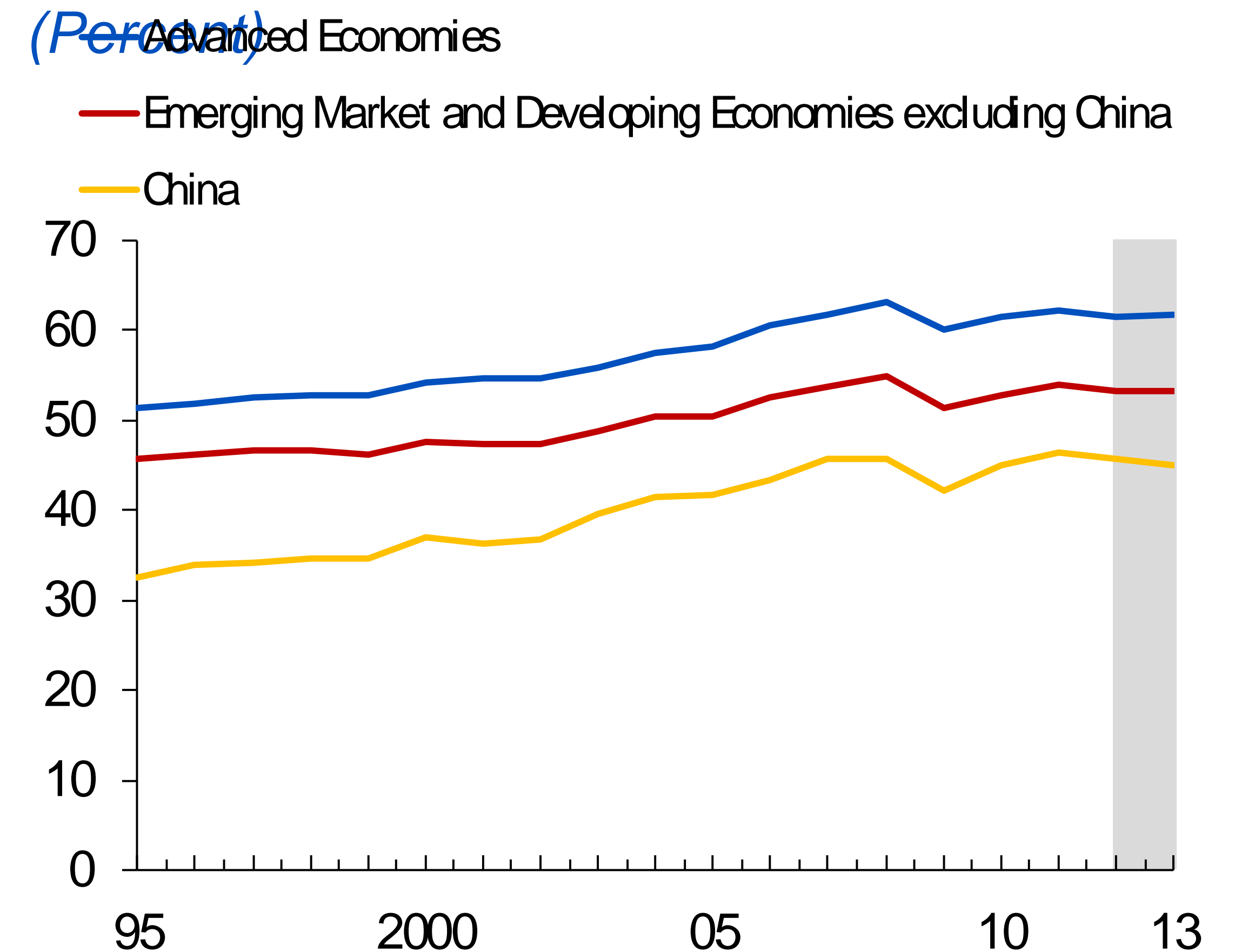
# Participation in global value chains plateaued.

$$GVC \text{ Participation} = \frac{DVX + FVA}{Gross \text{ Exports}}$$

**DVX** (export perspective) = exported domestic value added that enters as an intermediate input in the value added exported by other countries.

**FVA** (import perspective) = (foreign) value added that has been generated abroad and imported.

## The Evolution of Global Value Chain Participation

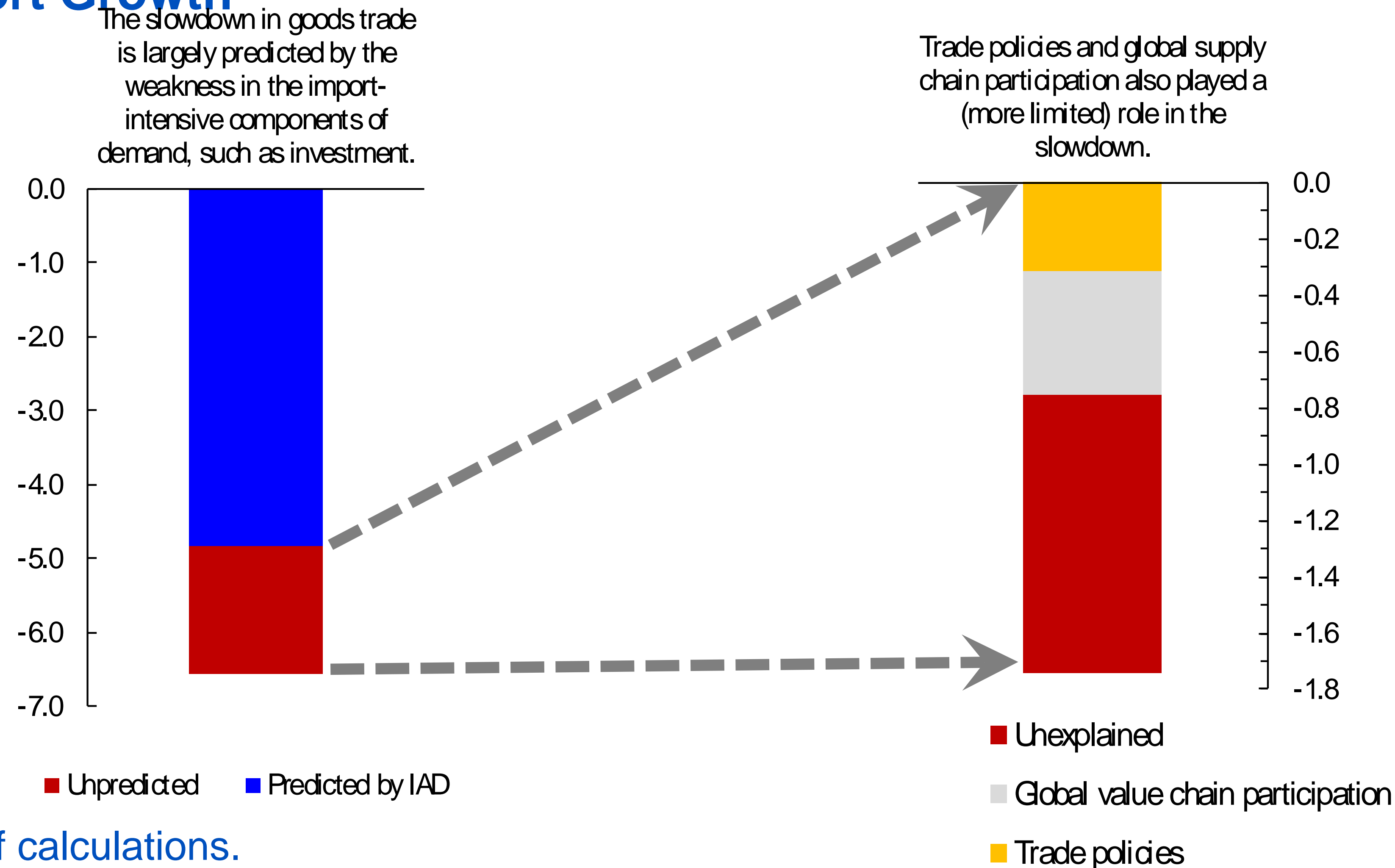


Sources: Eora Multi-Region Input-Output database;  
and IMF staff calculations.

# These factors are weighing on trade growth, although their quantitative contribution is limited.

## Contribution of Trade Policies and Global Value Chains to the Slowdown in Real Goods Import Growth

(Percent)





# OUTLOOK AND POLICY IMPLICATIONS

# What do our findings mean for the outlook for global trade?

- Slow global trade will likely persist in the medium term as long as global activity and investment remain weak.
- Even when activity gathers momentum, trade is unlikely to return to the growth rates seen before the financial crisis.
  - Pre-crisis period was characterized by unusually high investment growth in EMDEs.
  - Global value chains developed rapidly.



# Keeping the Wheels of Trade in Motion

- Policies to boost economic growth, especially investment, can also help trade recover.
- But the role of trade policy should not be underestimated.
  - Protectionist measures have contributed to the slowdown at the margin and should be avoided so as not to exacerbate the slowdown.
  - Reviving trade liberalization process and reducing man-made trade costs will help.
- The appropriate policy response to the decline in GVC growth is less clear-cut (“natural” or man-made)?
- Policies must be accompanied by measures to mitigate the adjustment costs associated with greater trade integration.
  - Benefits can be shared more widely and a stronger case can be made to an increasingly skeptical public.





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