

DATA AND STATISTICS FOR ANALYZING TRADE IN SERVICES

And its applications to World Bank country work



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How are services traded?

	Percentage of world services trade
<ul style="list-style-type: none">• Mode 1: Cross-border – services supplied from the territory of one Member into the territory of another, e.g. software services through e-mail to another country	25 – 30
<ul style="list-style-type: none">• Mode 2: Consumption abroad – services supplied in the territory of one Member to the consumers of another, e.g. education services in another country	10 – 15
<ul style="list-style-type: none">• Mode 3: Commercial presence – services supplied through type of business or professional establishment of one Member in the territory of another, e.g. FDI (2/3 services; Hoekman 1996)	55 – 60
<ul style="list-style-type: none">• Mode 4: Presence of natural persons – services supplied by nationals of one Member in the territory of another, e.g. doctors moving to foreign country to temporarily provide their service	less than 5

Source: Magdeleine and Maurer 2008

Challenges with measuring *services trade flows*

- Intangible nature of services
- Limited capacity of national statistics agencies
- Dispersed data sources
 - Mode 1: BoP
 - Mode 2: BoP
 - Mode 3: FATS / BoP
 - Mode 4: BoP (remittances)

 - Tourism: Tourism Satellite Account
 - Health Services: National Health Account

A variety of data sources are used for World Bank analyses on services trade

- Services trade with the world
 - World Bank *World Development Indicators*
 - UNCTAD *Data on Trade in Services*
 - IMF *Balance of Payments Statistics Yearbook*
- Bilateral services trade
 - World Bank *Trade in Services Database*
- Value added services trade
 - OECD/WTO *Trade in Value Added Database*
 - World Bank *Export of Value Added Database*
 - Country input-output tables
- Commercial presence
 - Foreign Affiliates Trade Statistics
 - Foreign Direct Investment proxies

Measuring services trade with the world

- Based on countries' Balance of Payments components
 - Exports and imports of modes 1 and 2
 - Annual (sometimes quarterly) time series
 - Available for most countries worldwide

UNCTAD Data on Trade in Services

- 1980-current
- Total services and 11 services categories

World Bank *World Development Indicators*

- Services in GDP and employment (1960-current)
- Services trade (2005-current): total services and 5 services categories
- Collected from IMF *Balance of Payments Statistics Yearbook*

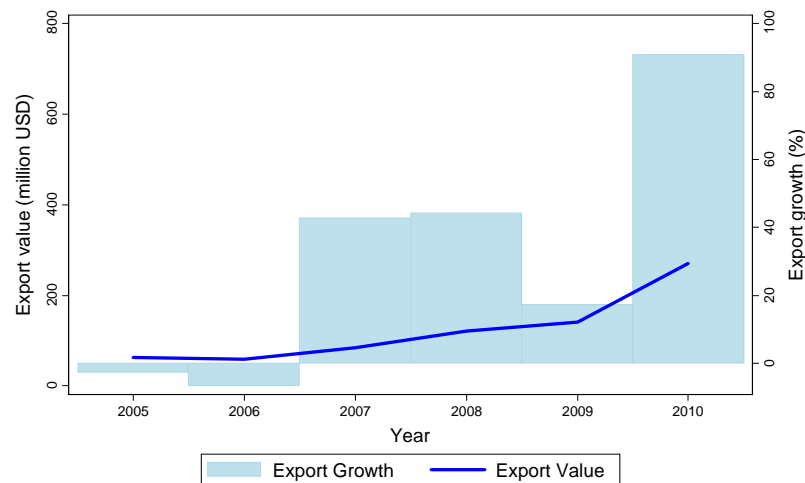
Example: Burkina Faso DTIS update

Can services be an untapped opportunity for export diversification and growth in Burkina Faso?

- Burkina Faso's recent export performance in services has been one of the most dynamic in the sub-region
- But exports grew from a low base, and Burkina Faso's services export sector continues to be one of the least developed in the region

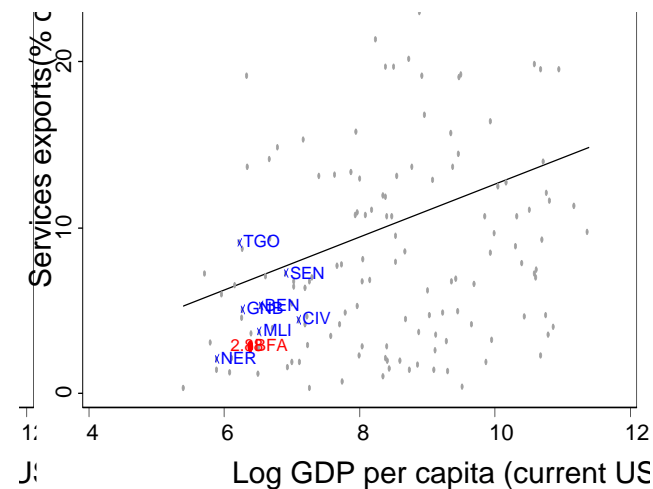
Services export growth and values

Burkina Faso, 2005-10



Source: UNCTAD.

Services export-to-GDP ratio



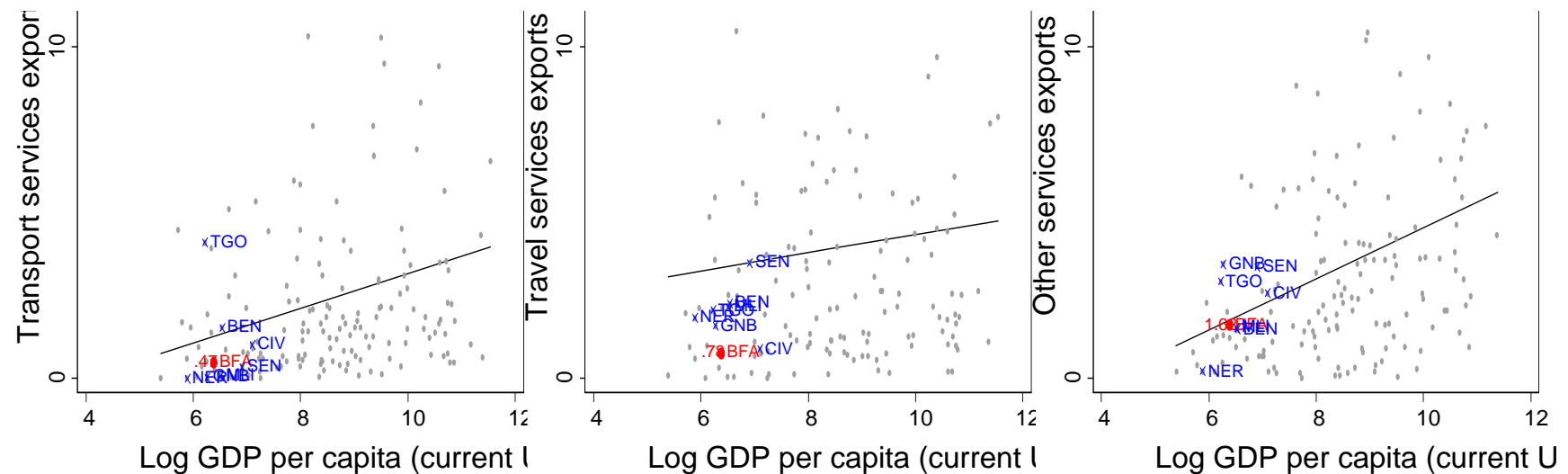
Source: World Bank *WDI*.

Example: Burkina Faso DTIS update, cont.

- Exports of transport and travel services as a share of GDP are below expected levels and below other countries in the region
- Impediments to services trade was important to understanding this result

Transport, travel and OCS export-to-GDP ratio

2010



Source: World Bank *WDI*.

Measuring bilateral services trade

World Bank *Trade in Services Database*

- Provides a ‘global’ picture of bilateral trade in services for developed and developing countries
 - Developed by T&C with Francois et al. (2013)
 - Consolidates multiple sources of bilateral trade data on services (UN, Eurostat, OECD) and global trade data (IMF)
 - Applies mirror techniques to capture North-South trade (South-South remains largely unreported)
 - Cross-border trade and consumption abroad (modes 1 and 2)
 - Reported across sectors (BOP codes), economies (195) and years (1981-2010)

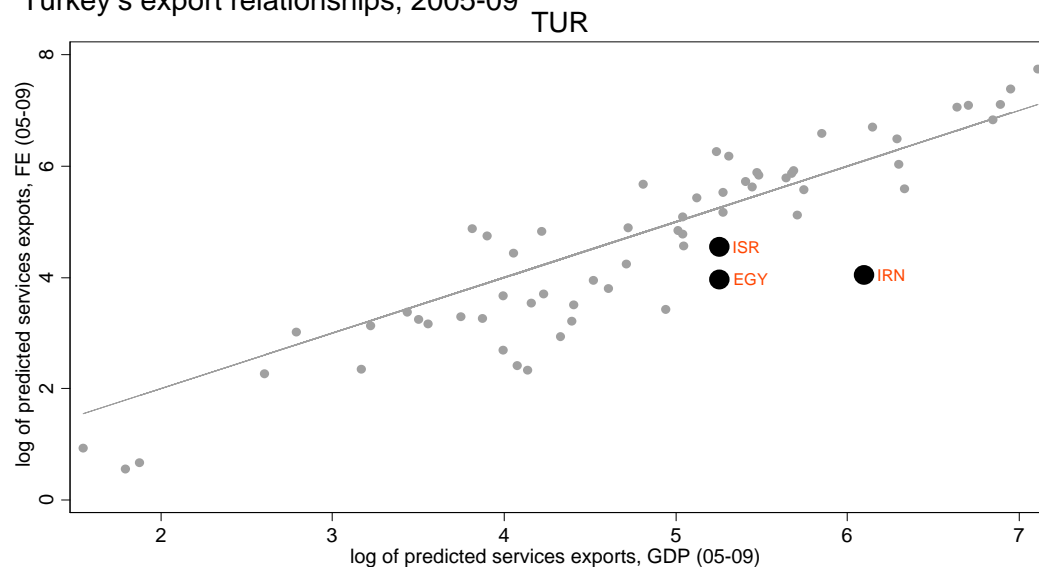
Example: Turkey-Mashreq

What potential linkages and complementarities in services trade exist between Turkey and Mashreq countries?

- Using a variety of indicators, the evidence on whether scope exists for increased integration of these countries through services trade is limited
- Although some countries in the region are found to under trade, most countries' current export levels to Turkey are above or close to expected given structural trade determinants

Benchmarking bilateral trade using a gravity model

Turkey's export relationships, 2005-09



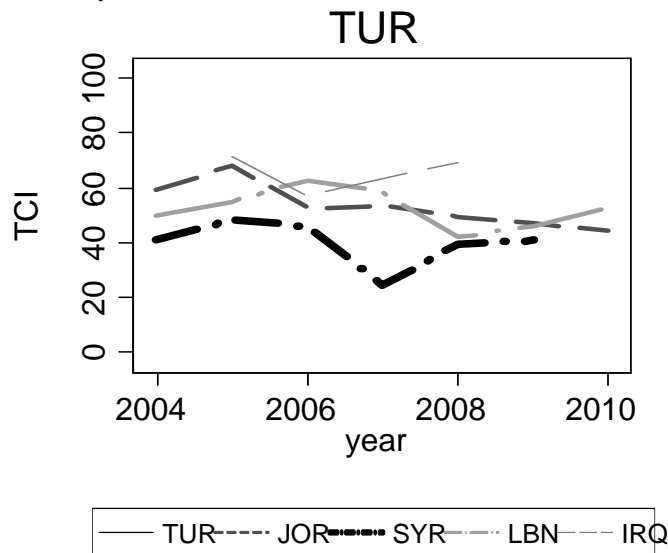
9 Source: World Bank TSD.

Example: Turkey-Mashreq, cont.

- Indexes of trade complementarity have been steady or falling and many of these countries have revealed comparative advantages in the same services sectors (transport and travel)
- This composition of services exports is losing global foreign demand and in addition services are being exported to destinations with low growth

Trade complementarity index

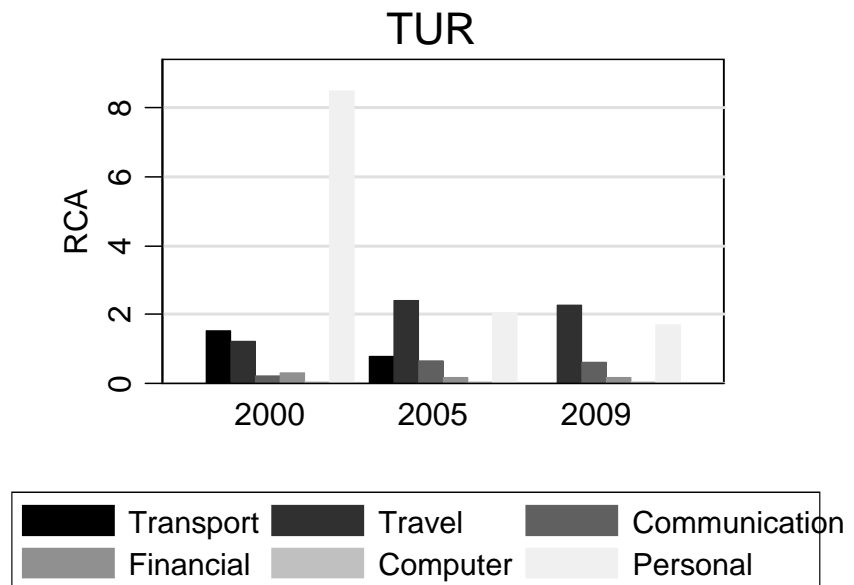
Turkey



Source: World Bank TSD.

Revealed comparative advantage

Turkey



Source: World Bank TSD.

Measuring value added services trade

World Bank *Export of Value Added Database*

- Measure value added exports of services and the linkages with other export sectors
 - Developed by T&C with Francois et al. (2013)
 - Based on input-output tables from GTAP
 - Measures gross, direct and indirect value added exports based on backwards versus forward linkages
 - Reported across 27 sectors (9 commercial services, 3 primary and 14 manufacturing), economies (118) and years (1992-2011)

OECD/WTO *Trade in Value Added Database*

- 66 countries, 5 services categories, 1995-2009
- (New release soon with updated years, more countries and disaggregated services sectors)
- Includes additional indicators such as foreign and re-imported value added in exports based on the OECD's own input-output tables

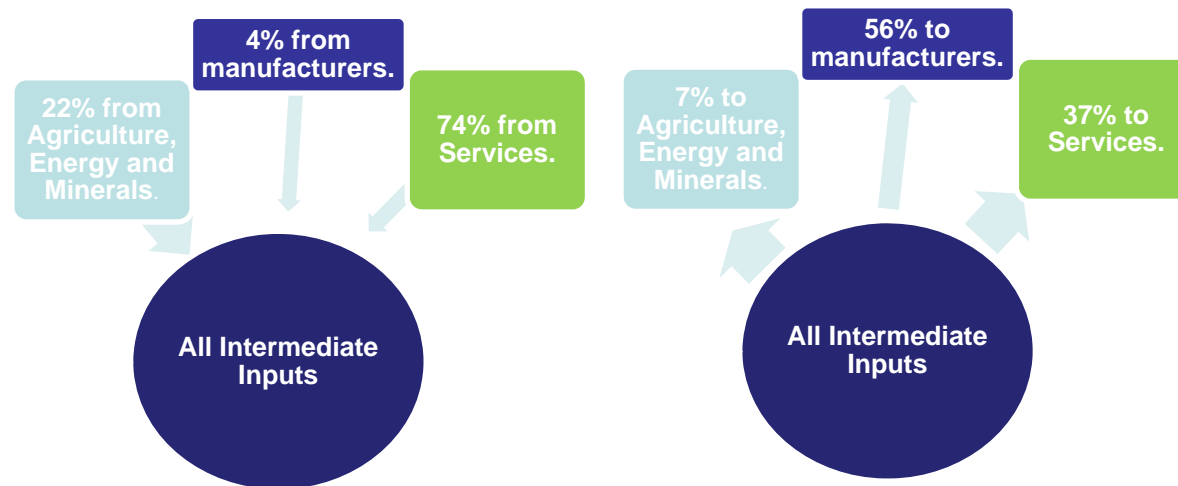
Example: Ethiopia services-manufacturing linkages

Is insufficient services provision in Ethiopia a constraining factor to manufacturing exports?

- Services are an important supplier of inputs into Ethiopia's domestic economy
- The services and manufacturing sectors in Ethiopia are more intensely linked than most countries in the world

Inputs into and from productive sectors

Ethiopia, 2011



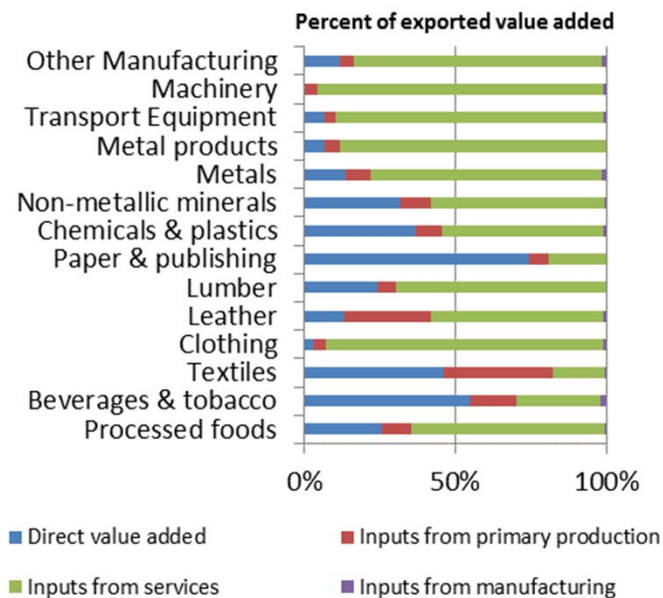
Source: World Bank *EVA Database*.

Example: Ethiopia services-manufacturing linkages, cont.

- The structure of manufacturing helps explain the strong interconnectedness of services and manufacturing in Ethiopia, concentrated in low-value-added activities
- The structure of the services sector in Ethiopia may also be a constraining factor for manufacturing, concentrated in distribution and trade services

Composition of exported value added across manufacturing sectors

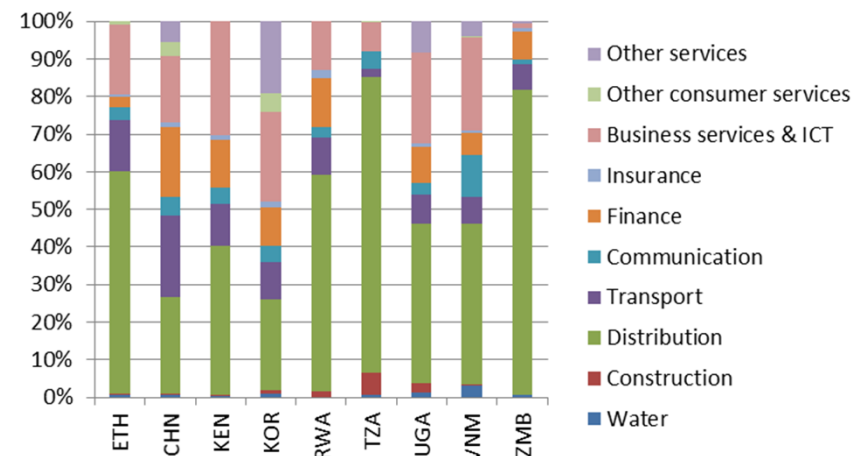
Ethiopia, 2011



Source: World Bank *EVA Database*.

Composition of domestic services inputs into manufacturing production

2011



Source: World Bank *EVA Database*.

Poor data available to other modes of services supply

Commercial Presence

- FATS - Foreign Affiliates Trade Statistics
 - measures “trade in services” by foreign firms
 - Available mostly for OECD countries
- FDI
 - Captures cross-border capital flows in the services sector
 - proxy for sales of foreign services providers

Presence of Natural Persons

- No specific data source
- Remittances sometimes used as proxy -but poor substitute. Includes:
 - personal transfers: all current transfers from resident to nonresident households
 - compensation of employees: can further inform importance of Mode 4 in the country, but does not reflect value of services sale

In practice, analysis for Modes 3 and 4 constrained by these data limitations.

Challenges of measuring *restrictions* to services trade

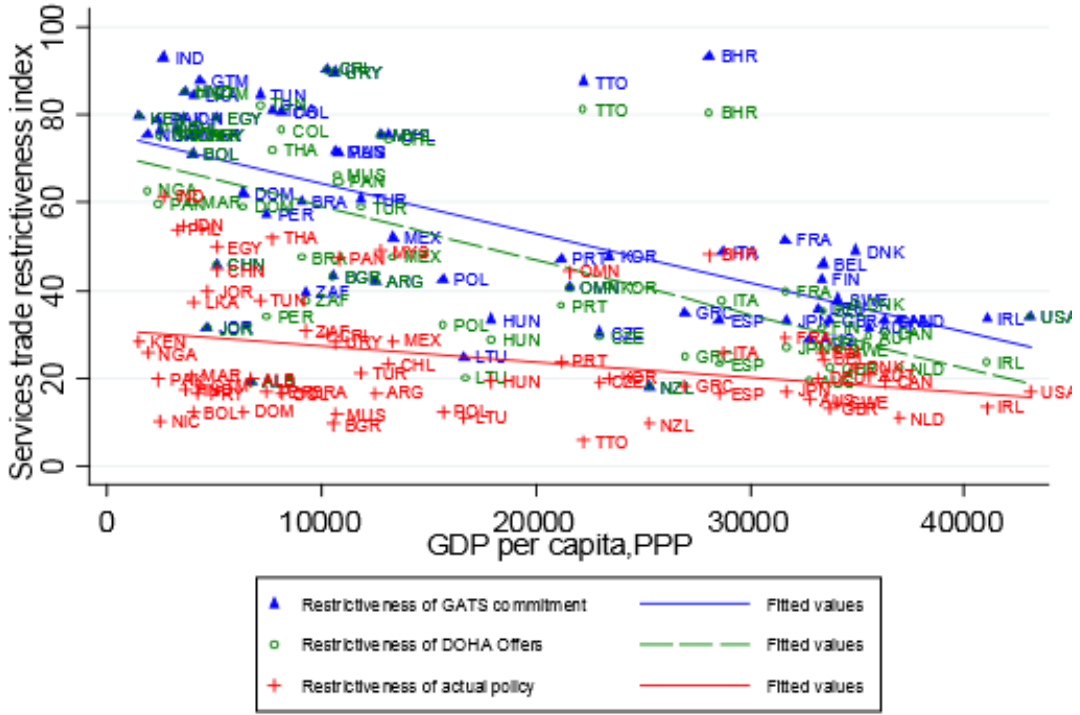
- Measuring legal and regulatory restrictions
- Regulation / protection behind the border
 - Captured by GATS disciplines on Market Access, National Treatment, Domestic regulation
 - Examples: licensing procedures, price regulation
- Regulation in trade in services can respond to market failures and other legitimate policy concerns
 - Information asymmetries in financial and professional services
 - Anti-competitive practices by incumbents in telecom services
 - Zoning policies in urban / historical areas
- Harder to quantify than tariffs
- Information available from
 - Regulatory databases (WTO iTip, WB STRIs, OECD STRIs)
 - Schedules of commitments / reservations lists
 - Field-work (RASTI, surveys)

WB STRI

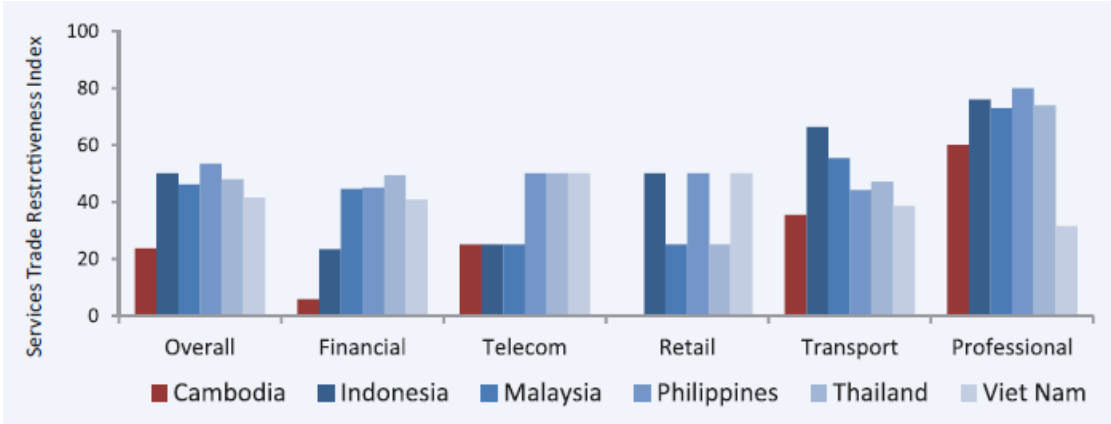
- 102 countries:
 - 78 developing countries
- Policy dimensions covered:
 - Barriers to foreign entry and ownership
 - Licensing requirements
 - Restrictions on operations
 - Regulatory environment
- Focus is on measures that discriminate against foreign services and service providers;
 - but we also cover certain non - discriminatory measures which significantly affect trade

Sectors/Sub-sectors	Mode 1	Mode 3	Mode 4
Banking			
Bank lending	x	x	
Deposit acceptance	x	x	
Insurance			
Automobile insurance	x	x	
Life insurance	x	x	
Reinsurance	x	x	
Telecom			
Fixed-line		x	
Mobile		x	
Retailing			
Retail distribution		x	
Transport			
Air passenger domestic		x	
Air passenger international	x	x	
Maritime shipping international	x	x	
Maritime auxiliary services		x	
Road trucking		x	
Railway freight		x	
Professional Services			
Accounting	x	x	x
Auditing	x	x	x
Legal advice foreign law	x	x	x
Legal advice dom law		x	x
Court representation		x	x

Comparing Services Restrictiveness



STRI for 61 countries, excluding Qatar and 31 countries that did not submit offers



Regulatory Assessment of Services Trade (RASTI)

- Fieldwork-based, country-specific analysis
- focus on both regulation and governance
- capture formal measures and de facto practices

step 1 -- restrictions

- **mapping regulation**
 - horizontal regulations affecting a wide range of sectors
 - specific regulations affecting a sector, subsector, or an activity
- **assessing governance framework** in light of international best practices
 - institutional setting
 - regulatory procedures

step 2 –impact

- **assessing the impact of regulations** in market structure, prices, quality, and access

step 3 -alternatives

- **proposing alternative regulations**
 - assessing feasibility of alternatives regulations and institutional arrangements

regulatory mapping: typology of measures

	quantitative	qualitative
establishment	<ul style="list-style-type: none"> • Monopoly / exclusive service suppliers • Numerical restrictions • Zoning / Geographical restrictions • Limitations to foreign equity • Economic Needs Tests • Authorization / permit (non-qualified) 	<ul style="list-style-type: none"> • Licensing on <ul style="list-style-type: none"> ○ Qualifications / Education ○ Experience ○ Technical capacity • Nationality / residency of services • Residency • Track record requirements • Requirement to subscribe to association • Approval of mergers and acquisitions • Form of establishment • Prohibition • Minimum capital requirements
operation	<ul style="list-style-type: none"> • Numerical restrictions on <ul style="list-style-type: none"> ○ transaction ○ operations / output ○ employees ○ repatriation of funds ○ duration of license / divestment ○ hours of operations • Screen / performance quotas • Performance requirements 	<ul style="list-style-type: none"> • Nationality / residency of managers, boards of directors • Land Ownership • Discriminatory Taxation • Access to Subsidies • Knowledge Transfer • Advertising limitations • Rules on anti-competitive behavior • Limitations on distribution channels • Limitations on pricing • Limitations on transfer of funds • Type of shares owned by foreigners • Performance requirements • Import permits • Access to government contracts

Source: authors



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Thank you