### MULTI-YEAR EXPERT MEETING ON

# Trade, Services and Development

9th session

4-6 July 2022, Hybrid (online and Palais des Nations, Room XVII), 2.30-4.30 p.m. CEST

Opening plenary session. Keynote: Linking trade in services and economic diversification

**Trade, Services and Development** 

Mr. Bernard Hoekman, Professor, Director, Global Economics, Robert Schuman Centre for Advanced Studies, European University Institute, Italy

\*The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.





## Trade, Services & Development

Bernard Hoekman
European University Institute and CEPR

UNCTAD Multi-Year Expert Meeting on Trade, Services and Development

Geneva (online) July 4, 2022

#### Services as an engine of jobs/growth

- Sustainable development and growth looking forward largely depends on innovation and productivity in services (60+% of GDP)
  - Digitalization and technological change making services more tradable
  - Services as a means towards a less carbon intensive economy
    - Additive manufacturing; work-from-home; ICT/real-time geo-localized data tools; etc.
- Implication: less scope for manufacturing exports and GVC-driven development?
- Two views:
  - 'Pre-mature deindustrialization': ↓ scope for scale economies and productivity growth
  - 'Industries without smokestacks' can drive growth in low & middle-income countries
- New technologies foster extensive margin growth and scalability of services production (Newfarmer et al., 2018; Hsieh & Rossi-Hansberg, 2019; Eckert, Ganapati & Walsh, 2020)
- Consumer services-led growth Fan, Peters & Zilibotti, 2021 (on India)

#### Plan of talk

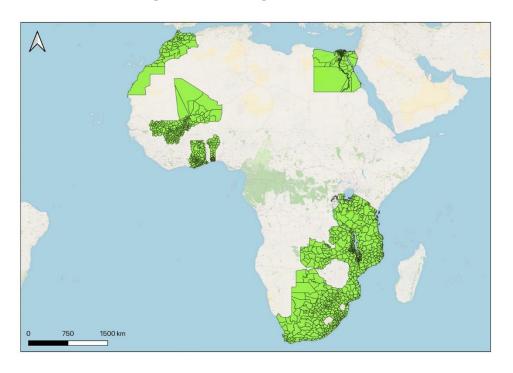
- Evidence (and sources of data) on structural transformation using Africa as example, based on recent research at EUI
  - Cross-country
  - Country-specific example
- Trade in services and structural transformation
  - Mode 1 (digital labor platforms) vs. Mode 3 FDI in services
- Services trade policies
- Digital trade policies (ongoing global project @EUI with many partners)
- Some implications/questions for diagnostic toolkits and policy analysis

#### Census data shows shift to services occurring in all regions

#### Example: Africa

- Use data from IPUMS International, for all African countries for which at least two consecutive censuses include industry classification of employment;
- 1,546 unique administrative units
- 3,846 observations covering about 60 million individuals from 1982-2013
- Sample account for 31.1% and 44.1% of Africa's population and GDP

https://international.ipums.org/international/



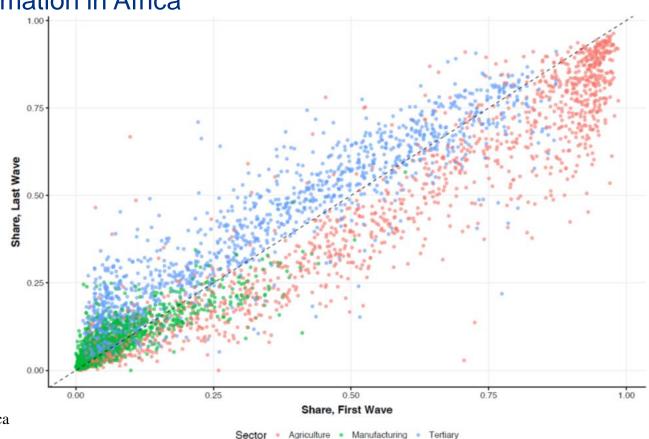
Baccini et al, 2021, Services, Jobs, and Economic Development in Africa

#### Structural transformation in Africa

Employment shares in agriculture, manufacturing and tertiary sector at subnational level, thirteen African economies

(Benin, Botswana, Egypt, Ghana, Malawi, Mali, Mauritius, Morocco, Mozambique, Rwanda, South Africa, Tanzania and Zambia)

Baccini et al, 2021, Services, Jobs, and Economic Development in Africa

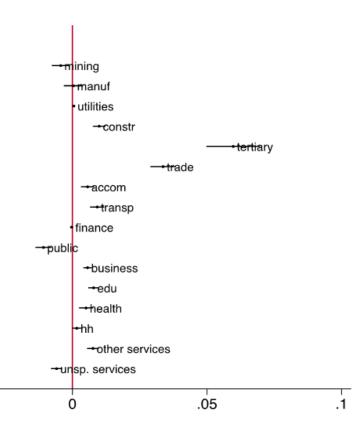


#### Post 2000 time trends across sectors

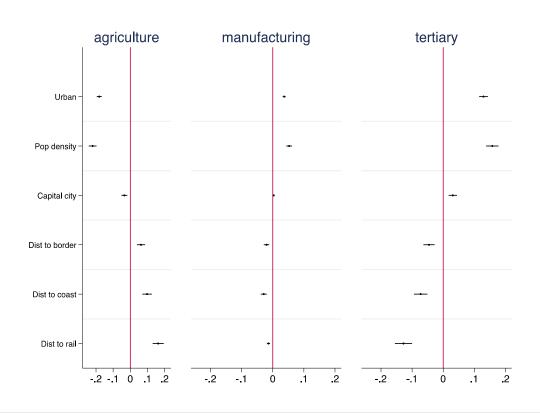
- Link employment shares to a time trend (before/after 2000)
- Controlling for administrative units, population and per capita nightlight (and their squares)

-.1

-.05



# Correlates of services employment

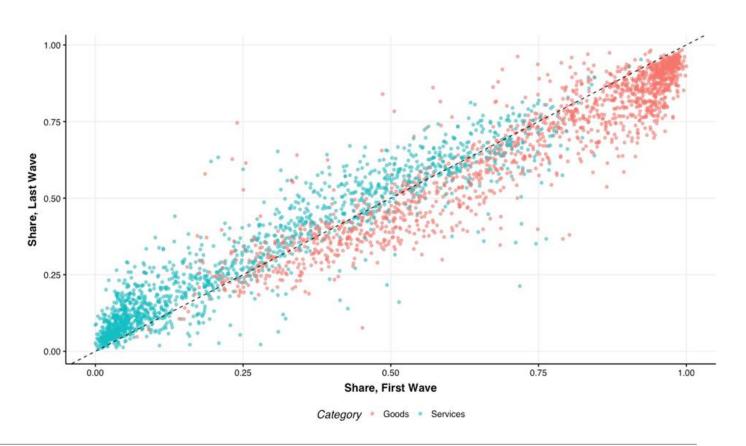


# Who works in services? Gender; urban/rural residence; age cohorts; migration status; education and occupation (13 African economies)



Structural transformation at occupational level: shift towards intangibles

(13 African economies; Duernecker & Herrendorf, 2020 classification)





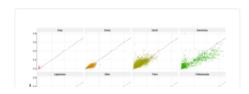
ROBERT SCHUMAN CENTRE

#### Services, Jobs and Economic Development in Africa – Online appendix

This page hosts the online appendix for the article 'Services, Jobs and Economic Development in Africa' by Leonardo Baccini, Matteo Fiorini, Bernard Hoekman and Marco Sanfilippo. This online appendix showcases graphs and maps on sectoral and occupational dynamics in Africa over available census waves in the IPUMS International database. It also includes a note for replicating the data cleaning procedure. This appendix was originally developed by Lorenzo Sileci, a Research Associate at the EUI Robert Schuman Centre for Advanced Studies (Global Governance Programme), and PhD Student in Environmental Economics at the London School of Economics and Political Science (LSE). If you use the graphs, please cite us as 'Baccini, L., Fiorini, M., Hoekman, B. and Sanfilippo, M. (2021) Services, Jobs and Economic Development in Africa, EUI RSC Working Paper 2021/82'.



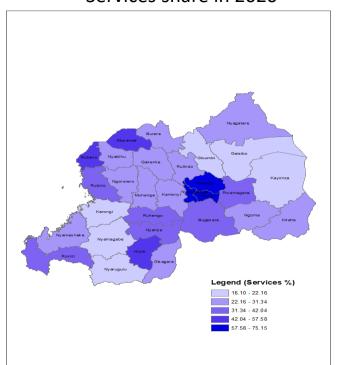




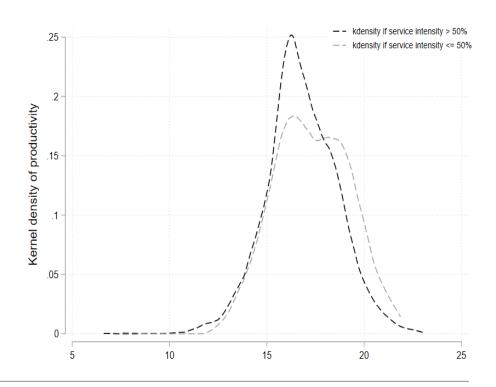
https://globalgovernanceprogramme.eui.eu/services-and-economic-development-in-africa-online-appendix/

#### Geographical distribution of services employment & productivity (Rwanda)

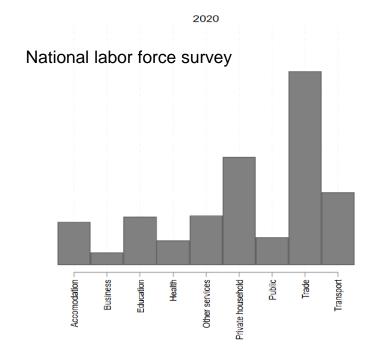
#### Services share in 2020

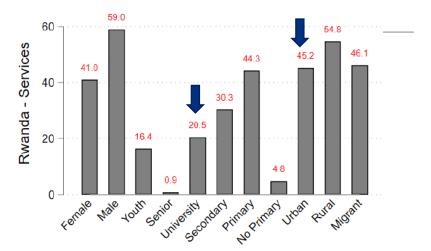


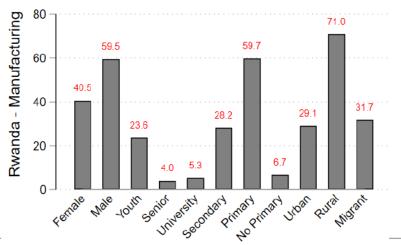
#### Productivity and service intensity



# Sectoral employment shares and worker characteristics, Rwanda

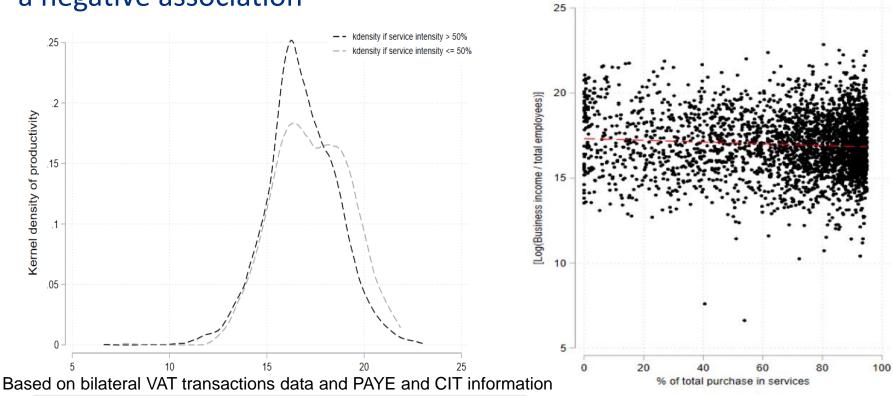






Rwanda: firm productivity and service intensity:

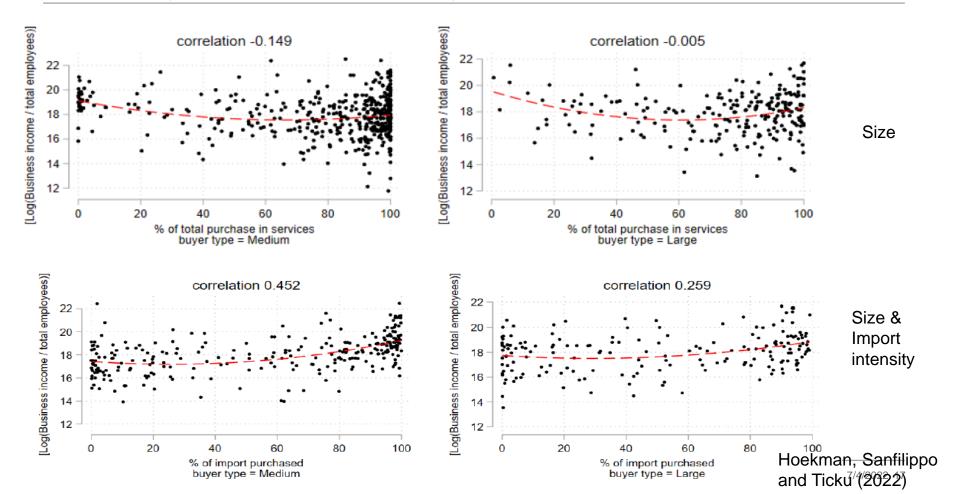
a negative association



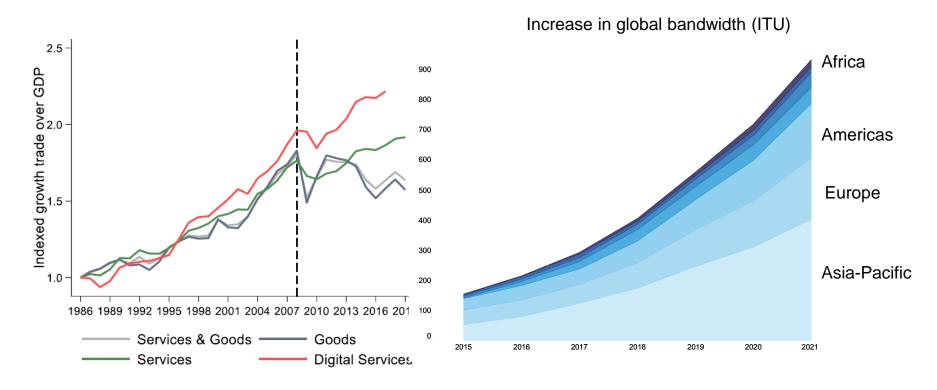
correlation -0.074

Hoekman, Sanfilippo and Ticku7(2022)

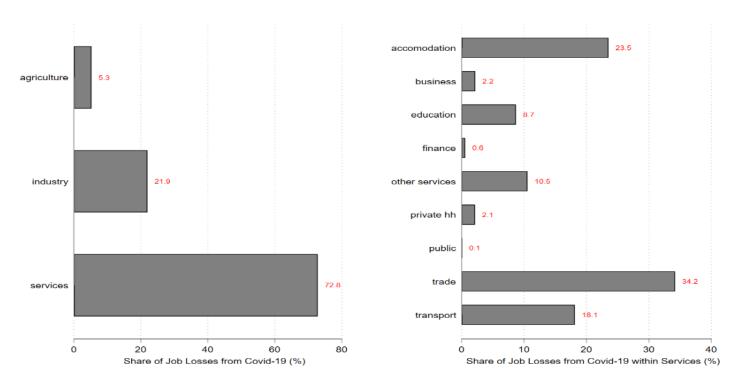
## Productivity: services input intensity, firm size & imports (Rwanda)



# Trade in 'invisibles' growing faster than merchandise

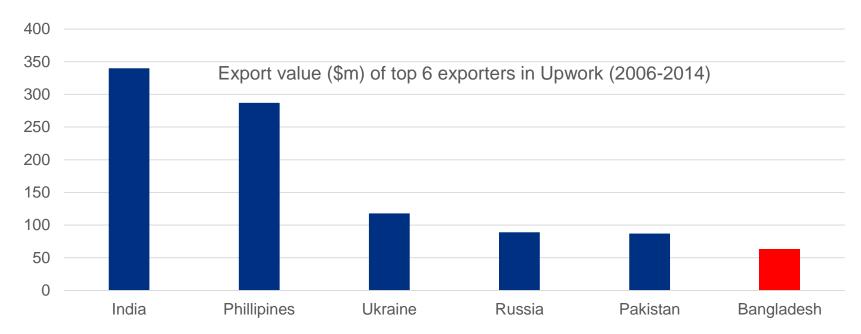


# Diversification into services brings benefits – but also risks Rwanda: COVID-19 job losses (2020)



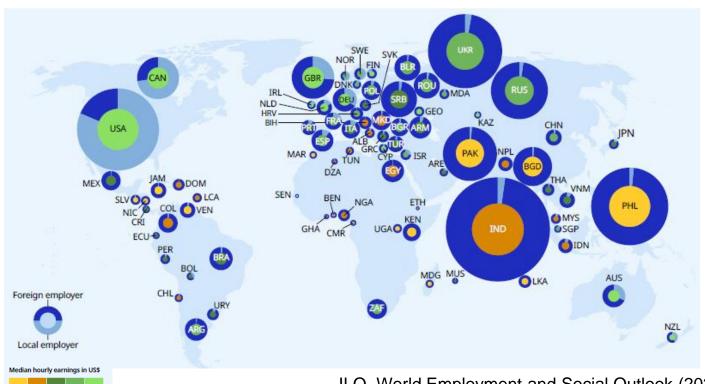
#### Much of trade in services is in mode 2 – tourism/business travel

Digitalization permits diversification: Mode 1 increasingly a substitute for Mode 4



Source: Horton et al. (2018). Digital Labor Market and Global Talent Flows)

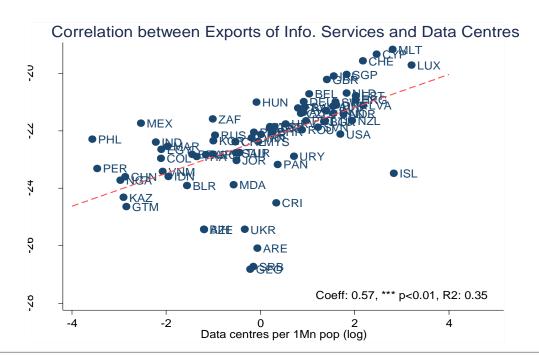
# Outsourcing of tasks on digital labor platforms, 2019



ILO, World Employment and Social Outlook (2021)

#### Dependent on access to/cost of infrastructure

#### Data centres and digital services trade



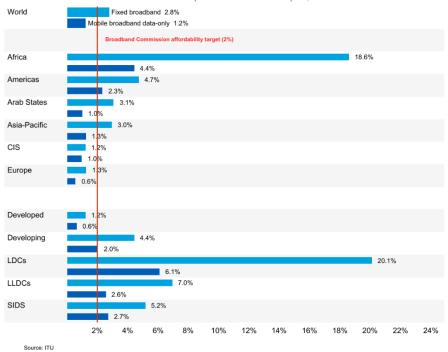
#### B-to-C E-commerce indicators

Groups, by region and level of development	Share of individuals using the Internet	Share of individuals with a bank account	Secure Internet servers (normalized,	UPU postal reliability score (2019 or	2020 Index value	2019 Index value (2018 data)
	(2019 or latest)	(15+, 2017)	2019)	latest)		
Africa	30	40	28	21	30	31
East, South and Southeast Asia	<b>5</b> 7	60	54	<del>5</del> 8	57	58
Latin America and the Caribbean	64	53	50	29	49	48
Western Asia	77	58	45	50	58	59
Transition economies	71	58	60	59	62	63
Developed economies	88	93	84	80	86	87
World	60	60	53	47	55	55

#### UNCTAD, Digital Economy Report (2022)

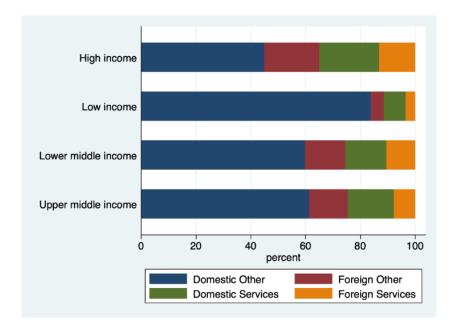
#### Broadband price 2020 (% of GNI p.c.)

#### Fixed-broadband and mobile-data basket prices as a % of GNI p.c., 2020



#### Embodied services trade remains a major channel for exports (2019)

MRIOs: TiVA; WIOD; EORA datasets

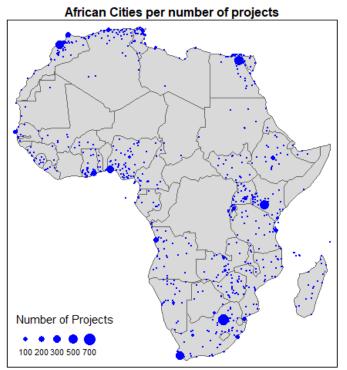


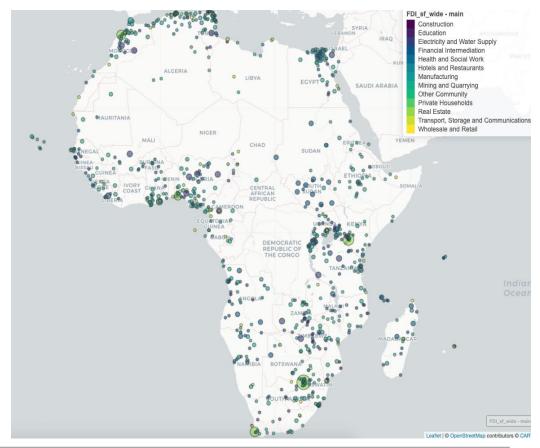
- Denominator = gross exports of goods.
- "Other" = goods + non-commercial services (education, public administration, etc.)
- "Services" = commercial services:
  - Construction
  - Finance
  - Hotels & restaurants
  - Maintenance & repair
  - Post & telecom
  - Retail
  - Transport
  - Wholesale
- General pattern across income group is not too surprising
  - Exception? Compare UMI vs. LMI.
- Embodied services trade everywhere primarily draws on domestic sourcing, but more pronounced in lower income countries.

Source: Ben Shepherd (2021)

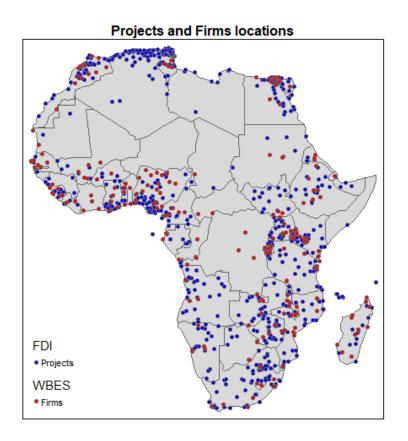
# Mode 3 and FDI as a diversification/services growth channel

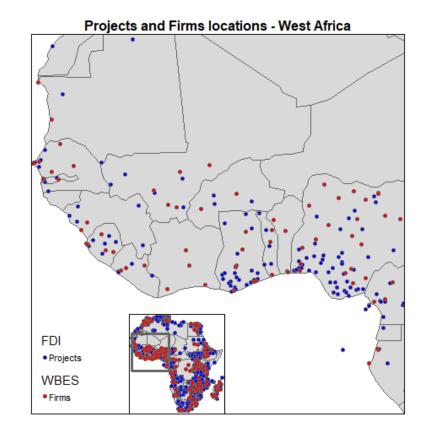
fdiMarkets: # of greenfield projects at city level





# Map greenfield FDI & firms in WB enterprise surveys





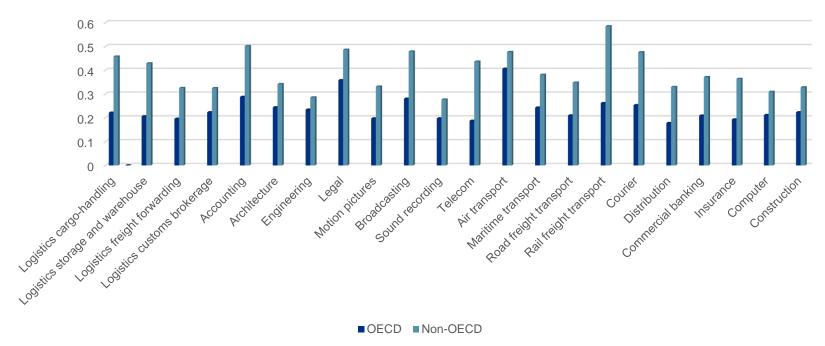
# Labor productivity of firms in Africa & proximity to greenfield FDI

Regressions include a dummy for firm size (small, medium, large), the age of the firm, region-sector and country-year fixed effects. Standard errors clustered at the sector-industry level in parentheses

#### **Manufacturing firms** Backward FDI Linkages Difference 0.439 0.007 p-value Forward FDI Linkages Difference 0.437 p-value 0.007 Horizontal FDI Linkages Difference 0.331 p-value 0.002 **Services firms** Backward FDI Linkages Difference 0.542 p-value 0.017 Forward FDI Linkages Difference 0.35 0.089 p-value Horizontal FDI Linkages 0.0699 Difference p-value 0.62

## Services trade policies

STRI, OECD vs. selected Non-OECD, 2020

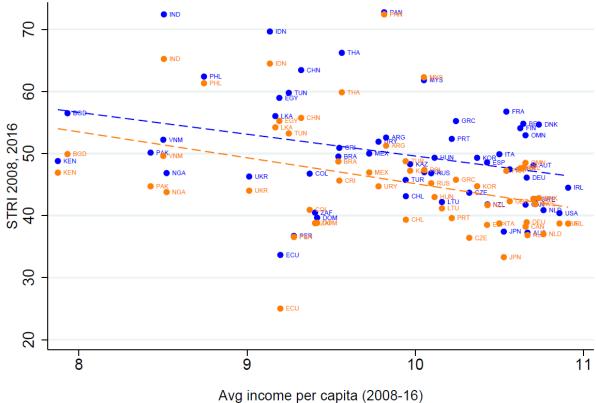


Note: limited coverage of developing countries; little time series information

# Trends:

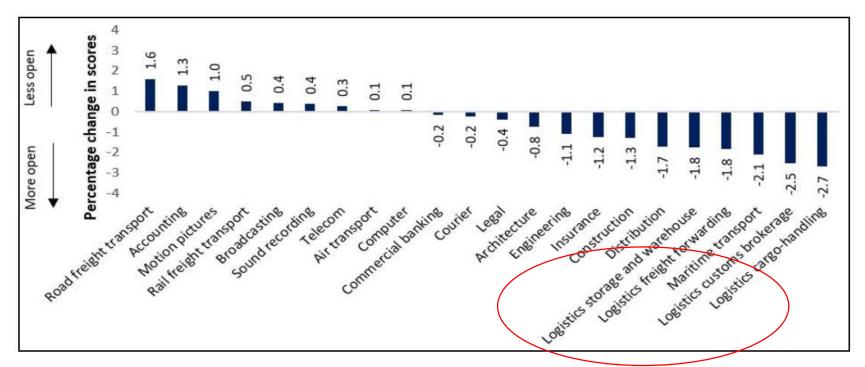
STRI 2008 vs. **STRI 2016** 

(World Bank/WTO)



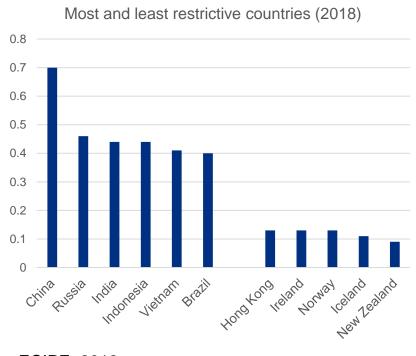
Borchert et al. (2020) Policy Research Working Paper No. 9265, World Bank.

## STRI (OECD): changes over 2016-20, APEC economies

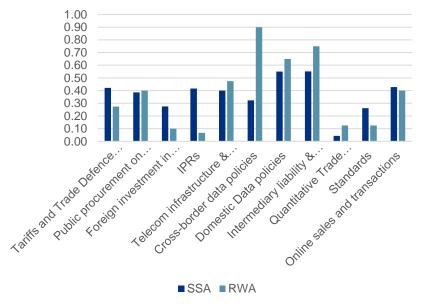


Liberalization mainly in trade facilitation-related activities

### Digital trade regulation

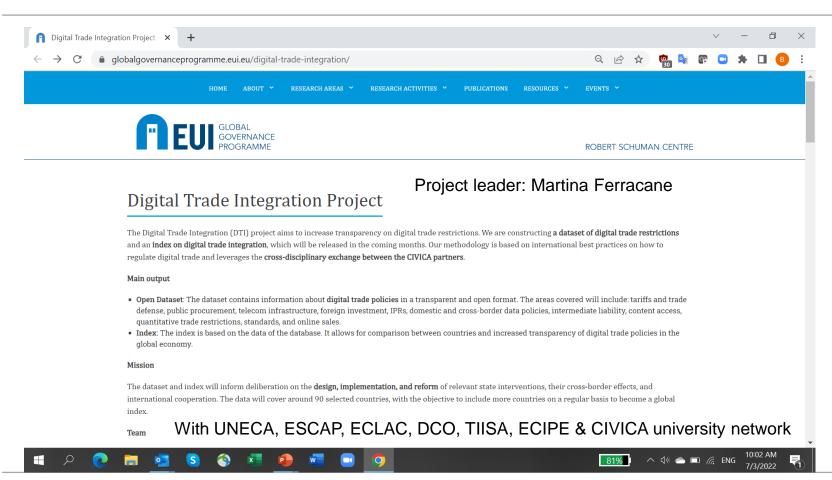


DTRI, Rwanda vs. sample of 22 other sub-Saharan countries (UNECA)



**ECIPE**, 2018

**EUI & UNECA, 2021** 



# What are the effects of services and digital policies on trade?

- How do STRIs and DTRIs interact? Complements? Substitutes?
  - Discriminatory measures vs. nondiscriminatory regulation (national treatment)
    - E.g., data privacy; consumer protection; digital taxation
- Potential impacts of cooperation to attenuate trade costs and improve effectiveness of regulation
  - Traditional trade agreements
  - Unilateral equivalence rulings (e.g., EU data adequacy decisions)
  - Digital regulation agreements
  - Open plurilateral agreements (DEPA; e-commerce in WTO?)

# Some implications for work program for diagnostics & analysis

- Supporting services trade calls for reforms that comprise a mix of liberalization (removing discrimination) and regulatory reforms
  - How to design these? Sequencing? What needs to be done as a package?
  - Calls for analysis of interaction between services trade policies, digital regulation and economic governance variables
  - Necessary condition: up-to-date panel information on services & digital policies.... (viz. EUI et al. project on digital – more partners very welcome!)
- Case studies/value chain analyses that 'unpack' policy sources of trade costs
   goods and services
- Consider alternative mechanisms for sectoral or mode-specific international cooperation on digital regulation
  - Within or as a complement or alternative to trade agreements