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 sub-national 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)
Correlates of services employment
Who works in services? Gender; urban/rural residence; age cohorts; migration status; education and occupation (13 African economies)

Baccini et al., 2021, Services, Jobs, and Economic Development in Africa
Structural transformation at occupational level: shift towards intangibles

(13 African economies; Duernecker & Herrendorf, 2020 classification)
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 Silec, 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 2021/02’.

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

Hoekman, Sanfilippo and Ticku (2022)
Sectoral employment shares and worker characteristics, Rwanda

National labor force survey

Hoekman, Sanfilippo and Ticku (2022)
Rwanda: firm productivity and service intensity: a negative association

Based on bilateral VAT transactions data and PAYE and CIT information

Hoekman, Sanfilippo and Ticku (2022)
Productivity: services input intensity, firm size & imports (Rwanda)

Hoekman, Sanfilippo and Ticku (2022)
Trade in ‘invisibles’ growing faster than merchandise

Increase in global bandwidth (ITU)
Diversification into services brings benefits – but also risks

Rwanda: COVID-19 job losses (2020)

National Labor Force survey
Much of trade in services is in mode 2 – tourism/business travel

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

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

Correlation between Exports of Info. Services and Data Centres

Coeff: 0.57, *** p<0.01, R2: 0.35

Van der Marel, 2021
### B-to-C E-commerce indicators

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

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

<table>
<thead>
<tr>
<th>World</th>
<th>Fixed broadband 2.3%</th>
<th>Mobile broadband data-only 1.2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>18.6%</td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td>4.4%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Arab States</td>
<td>2.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>1.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>CIS</td>
<td>1.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Europe</td>
<td>1.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Developed</td>
<td>1.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Developing</td>
<td>4.4%</td>
<td></td>
</tr>
<tr>
<td>LDCs</td>
<td>2.0%</td>
<td>6.1%</td>
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<tr>
<td>LLDCs</td>
<td>2.6%</td>
<td>7.5%</td>
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<tr>
<td>SIDS</td>
<td>2.7%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Source: ITU

UNCTAD, Digital Economy Report (2022)
Embodied services trade remains a major channel for exports (2019)

- 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

Hoekman and Sanfilippo, 2022
Map greenfield FDI & firms in WB enterprise surveys

Projects and Firms locations

Projects and Firms locations - West Africa

FDI
- Projects
- WBES
- Firms

Hoekman and Sanfilippo, 2022

Geocoding through OpenCage's API
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.

<table>
<thead>
<tr>
<th></th>
<th>Manufacturing firms</th>
<th>Services firms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Backward FDI Linkages</td>
<td>Backward FDI Linkages</td>
</tr>
<tr>
<td>Difference</td>
<td>0.439</td>
<td>0.542</td>
</tr>
<tr>
<td>p-value</td>
<td>0.007</td>
<td>0.017</td>
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<tr>
<td>Forward FDI Linkages</td>
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<tr>
<td>Difference</td>
<td>0.437</td>
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<tr>
<td>p-value</td>
<td>0.007</td>
<td>0.089</td>
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<tr>
<td>Horizontal FDI Linkages</td>
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<td></td>
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<tr>
<td>Difference</td>
<td>0.331</td>
<td>0.0699</td>
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<tr>
<td>p-value</td>
<td>0.002</td>
<td>0.62</td>
</tr>
</tbody>
</table>
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)

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

Liberalization mainly in trade facilitation-related activities
Digital trade regulation

Most and least restrictive countries (2018)

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

ECIPE, 2018

EUI & UNECA, 2021
Digital Trade Integration Project

The Digital Trade Integration (DTI) project aims to increase transparency on digital trade restrictions. We are constructing a dataset of digital trade restrictions and an index on digital trade integration, which will be released in the coming months. Our methodology is based on international best practices on how to regulate digital trade and leverages the cross-disciplinary exchange between the CIVICA partners.

Main output

- Open Dataset: The dataset contains information about digital trade policies in a transparent and open format. The areas covered will include tariffs and trade defense, public procurement, telecom infrastructure, foreign investment, IPRs, domestic and cross-border data policies, intermediate liability, content access, quantitative trade restrictions, standards, and online sales.
- Index: The index is based on the data of the database. It allows for comparison between countries and increases transparency of digital trade policies in the global economy.

Mission

The dataset and index will inform deliberation on the design, implementation, and reform of relevant state interventions, their cross-border effects, and international cooperation. The data will cover around 90 selected countries, with the objective to include more countries on a regular basis to become a global index.

Team

With UNECA, ESCAP, ECLAC, DCO, TIISA, ECIPE & CIVICA university network

Project leader: Martina Ferracane
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