

Services in the India-EU Free Trade Agreement

Hildegunn Kyvik Nordås^{1 2 3}

¹School of Economics
Örebro University

²Norwegian Institute of International Affairs

³Council on Economic Policies

TPRF webinar July 2023

Outline

- 1 Background and motivation
- 2 Contribution to the literature
- 3 Data
- 4 The model
- 5 Methodology
- 6 Scenarios
- 7 Results
- 8 Concluding remarks

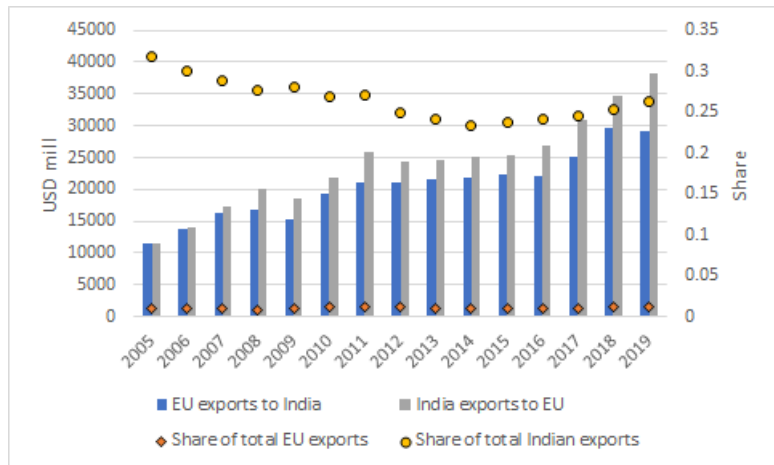
Background and motivation

- EU and India resumed their FTA negotiations in June 2022
- Services are of key interest to both parties
- The digital transformation of services requires new approaches
- EU and India both aim for setting global standards for the regulation of the digital economy, including AI
- With little appetite for new, deep FTAs, the EU-India agreement could set an example for 21st century agreements
- Upfront impact assessment of FTAs is widely used
- Making a methodology contribution on how to use the OECD STRI for impact assessment of FTAs

Contribution to the literature

- A first estimate of the impact of the proposed EU - India FTA on services trade flows between the parties and globally.
- Computes counterfactual, directional, bilateral trade cost indexes for EU-India services trade, using the proposed FTA text and the OECD STRI which captures the parties' currently applied trade policy measures.
- Identifies areas where the proposed FTA text, if implemented, would require changes in laws and regulations in each EU country and India.
- Introduce to the services trade literature the most recent techniques from empirical gravity research, including directional, bilateral trade costs and variation in internal trade costs across countries.

Services trade between EU and India



Data

- The OECD STRI database
- The CEPII gravity database
- the OECD/WTO BATIS database
- the OECD/WTO Trade in value added database
- FTA dummy regressions: 66 countries, 19 years; STRI regressions: 50 countries, 5 years

The Model - structural gravity

$$X_{ij} = \left(\frac{t_{ij}}{\Pi_i P_j} \right)^{(1-\sigma)} Y_i E_j \quad (1)$$

$$P_j^{1-\sigma} = \sum_i \left(\frac{t_{ij}}{\Pi_i} \right)^{(1-\sigma)} Y_i \quad (2)$$

$$\Pi_i^{1-\sigma} = \sum_j \left(\frac{t_{ij}}{P_j} \right)^{(1-\sigma)} E_j \quad (3)$$

$$p_j = \frac{Y_j^{\frac{1}{1-\sigma}}}{\gamma_j \Pi_j} \quad (4)$$

Methodology

- Create counterfactual scenarios by using:
 - ▶ a counterfactual FTA dummy
 - ▶ the STRI simulator: change measures where the draft FTA text is different from applied policies.
- Run a full general equilibrium gravity model with the counterfactual FTA dummy and bilateral STRIs

$$X_{ij} = \exp [\hat{\alpha} t_{ij}^c + \nu_i^c + \lambda_j^c] + \epsilon_{ij}^c \quad (5)$$

$$\hat{P}_j = \frac{E_j}{E_0} \exp(-\hat{\lambda}_j) \quad (6)$$

$$\hat{\Pi}_i = E_0 Y_i \exp(-\hat{\nu}_i) \quad (7)$$

$$X_{ij}^c = \frac{\left(t_{ij}^{1-\sigma}\right)^c Y_i^c E_j^c}{t_{ij}^{1-\sigma} Y_i E_j} \frac{\Pi_i^{1-\sigma} P_j^{1-\sigma}}{\left(\Pi_i^{1-\sigma}\right)^c \left(P_j^{1-\sigma}\right)^c} X_{ij} \quad (8)$$

The STRI simulator

Telecommunication



for

India



compared to

Choose a country



x India edited

0.315

Share This

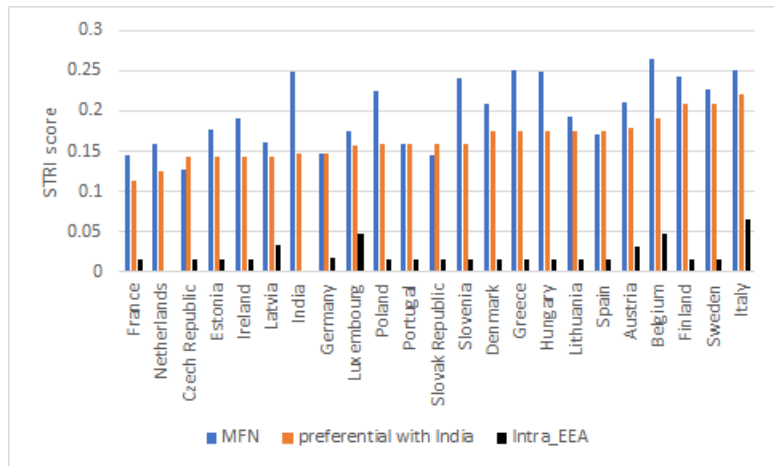
India

0.334

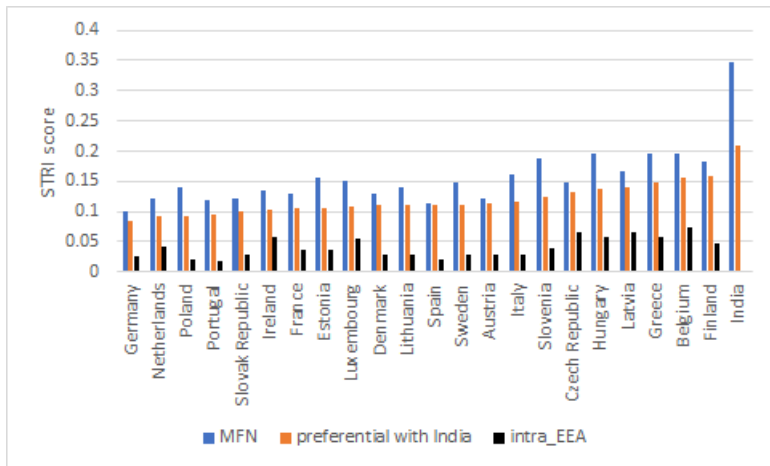
Download

Telecommunication measures	Search a measure	Search	Cancel	Answers	Scores	Values
▼ tc.1 Restrictions on foreign entry					16 → 14	0.154 → 0.134
1.1.1 Foreign equity restrictions: maximum foreign equity share allowed (%) (fixed) ⬆️				Exactly 100% ▼	0	0
1.1.1 Foreign equity restrictions: maximum foreign equity share allowed (%) (mobile) ⬆️				Exactly 100% ▼	0	0
1.1.3 There are limits to the proportion of shares that can be acquired by foreign investors in publicly-controlled firms ⬆️				<input checked="" type="radio"/> Yes <input type="radio"/> No	1	0.01
1.2.1 Legal form: only joint ventures are allowed (fixed) ⬆️				<input type="radio"/> Yes <input checked="" type="radio"/> No	0	0
1.2.1 Legal form: only joint ventures are allowed (mobile) ⬆️				<input type="radio"/> Yes <input checked="" type="radio"/> No	0	0
1.2.8 Legal form: other restrictions ⬆️				<input type="radio"/> Yes <input checked="" type="radio"/> No	0	0
1.4.1 Board of directors: majority must be nationals ⬆️				<input type="radio"/> Yes <input checked="" type="radio"/> No	1 → 0	0.01 → 0
1.4.2 Board of directors: majority must be residents ⬆️				<input type="radio"/> Yes <input checked="" type="radio"/> No	1 → 0	0.01 → 0
1.4.3 Board of directors: at least one must be national ⬆️				<input checked="" type="radio"/> Yes <input type="radio"/> No	1	0.01
1.4.4 Board of directors: at least one must be resident ⬆️				<input checked="" type="radio"/> Yes <input type="radio"/> No	1	0.01

Counterfactual policy scenarios - computer services



Counterfactual policy scenarios - telecommunications



Structural gravity regressions with STRIs

Table: Structural gravity, total services, STRI

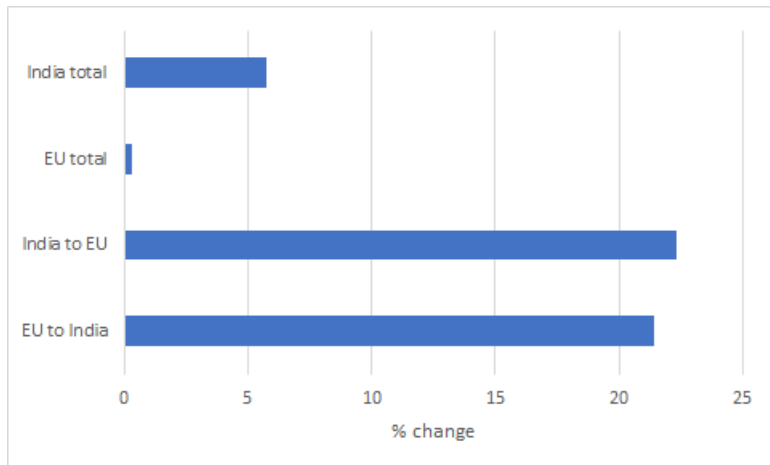
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	FTA only	CR	CS	FS BNK	FS INS	TC	TR MAR
Ln distance	-0.312*** (-7.52)	-0.278*** (-6.22)	-0.284*** (-6.44)	-0.294*** (-7.22)	-0.300*** (-7.37)	-0.275*** (-6.33)	-0.259*** (-6.38)
Contiguous	0.184 (1.75)	0.233* (2.25)	0.213 (1.94)	0.190 (1.75)	0.232* (2.45)	0.123 (1.03)	0.227* (2.04)
Common language	0.892*** (8.11)	0.856*** (7.87)	0.876*** (7.65)	0.898*** (7.69)	0.846*** (8.74)	0.858*** (6.37)	0.910*** (7.82)
External	-5.135*** (-23.15)	-4.931*** (-17.74)	-5.194*** (-20.95)	-5.286*** (-25.46)	-4.554*** (-19.56)	-5.598*** (-23.87)	-6.042*** (-42.87)
FTA	0.140 (1.51)	0.0729 (0.75)	0.106 (1.09)	0.0948 (1.00)	0.203* (2.28)	0.148 (1.47)	0.122 (1.29)
Both EU	0.357** (3.13)	0.648*** (6.41)	0.521*** (4.95)	0.591*** (6.52)	0.226* (2.25)	0.743*** (8.16)	0.786*** (9.17)
STRI		-3.001*** (-5.21)	-5.244*** (-5.88)	-3.806*** (-5.36)	-3.023*** (-5.67)	-9.038*** (-8.35)	-1.638** (-2.82)
Pseudo R^2	0.996	0.996	0.996	0.996	0.996	0.997	0.997
N	14950	14950	14950	14950	14950	13156	14950

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Notes Robust standard errors are clustered on country pairs. All regressions are with country-year fixed effects. The STRI coefficients reported in the last row are for the sector indicated in the column heading: Courier services (CR), computer services (CS), commercial banking (FS BNK), insurance (FS INS), telecommunications (TC) and maritime transport (TR)

Results - FTA dummy, change in exports



Results from using the counterfactual STRI

Table: Full general equilibrium, impact of EU-India FTA

	All (1)	Financial (2)	Communications (3)	All with Brexit (4)
Total exports, EU	1.18	0.46	0.28	-10.95
Total exports, India	25.09	5.57	3.48	25.07
Exports from EU to India	114.47	179.74	97.15	91.94
Exports from India to EU	51.18	19.20	9.96	36.72
Intra-EU trade	0.02	-0.26	-0.13	-19.28
India's exports to third countries	-2.82	-0.81	-0.61	-2.66
India's imports from third countries	-3.38	-0.81	-0.73	-3.14
Real output, EU	0.01	0.01	0.01	-17.78
Real output, India	0.21	0.16	0.11	0.21

Notes: The table reports % changes compared to the baseline for total services (column 1), financial services (column 2), communications services (column 3), and total services with Brexit (column 4). Explanatory variables are bilateral, directional STRIs for the services sector indicated by the column head. In the Brexit scenario, the UK is part of EU in the baseline figures, but not in the counterfactual.

Concluding remarks

- The paper demonstrates how the STRI simulator can be used for impact analysis of FTAs
- The results highlight the importance of open and well-regulated markets in telecommunications for services trade
- The EU India FTA could be an example for RTAs between countries at different levels of income.
- A limitation is that mode 3 is not included in the analysis