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# Do environmental provisions in the free trade agreements promote green trade?

**Masudur Rahman**  
Visiting Research Fellow  
Institute of South Asian Studies- National University of  
Singapore (NUS)  
[masudrahman@nus.edu.sg](mailto:masudrahman@nus.edu.sg)



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# Structure



1. Background
2. Literature
3. Data & Methodology
4. Findings
5. Q & A

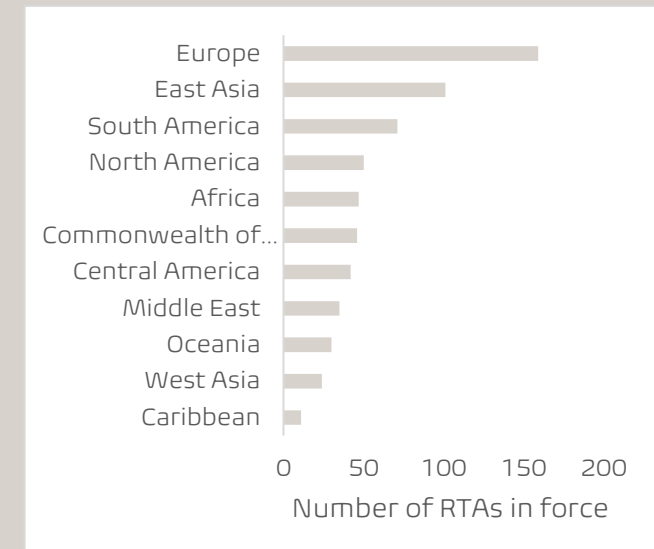
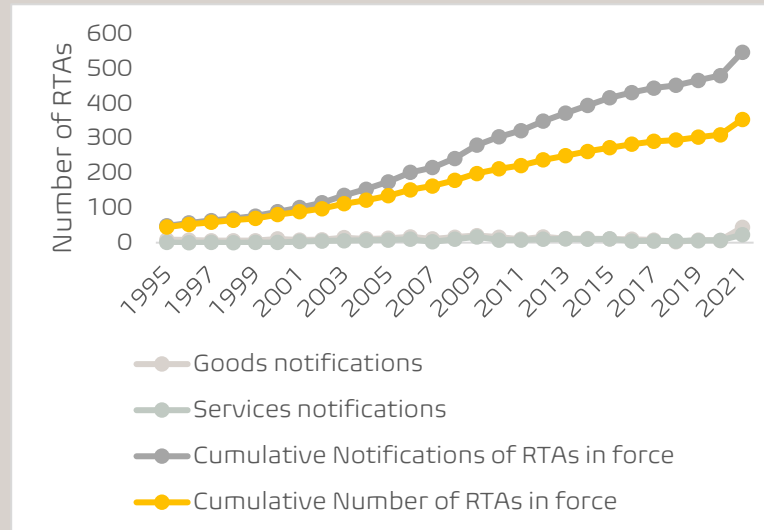
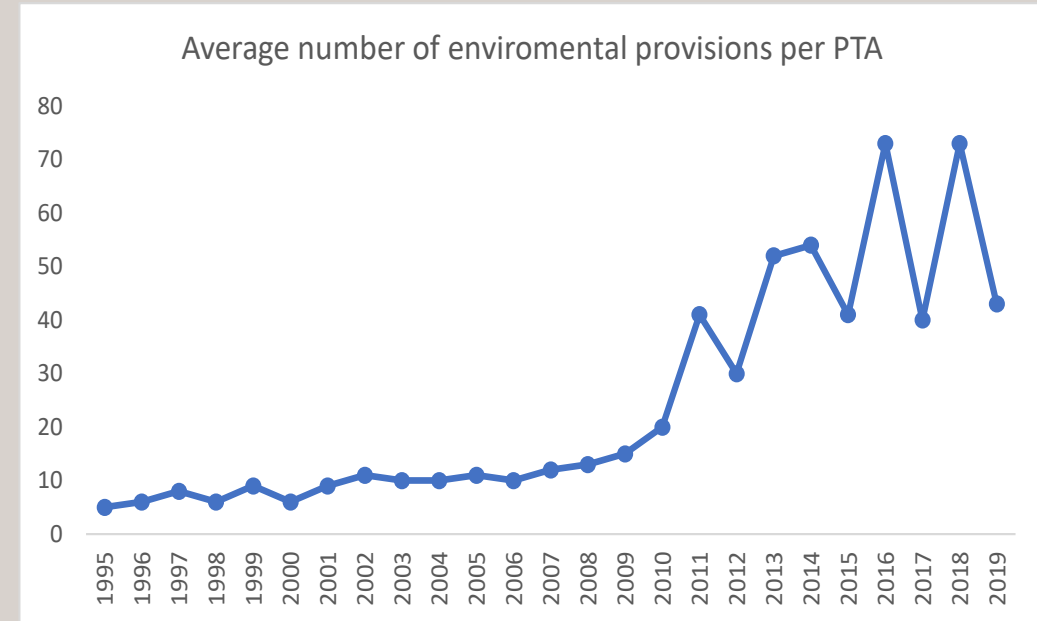
# Background

- New generation of PTA/FTAs (behind the border issues are the key)
- In 2018 each new PTA contained on an average 73 different environmental provisions.
- The economic effect of the EP are largely remained unclear
- Political (public support, environmental diplomacy etc.) and economic (regulatory level playing field) explanation for growing number of environmental provisions.



# Literature & Objective

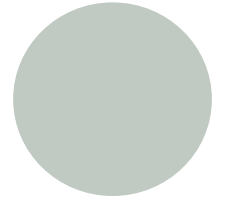
- ✓ EP has positive impact on environmental suitability-promoting domestic regulations, reduce air pollution.
- Another group, EP reduce trade, and which is against of FTA/PTA narrative
- ❖ Questions is whether EP into the FTAs exacerbate the trade off between environmental provisions and economic development.
- Clara et al., (2020) show EP can help green exports and decrease dirty exports from developing countries.





# Literature & Objective

- Motivations of incorporating EP in the FTA is ambiguous and trade impact is remained unclear in literature.
- Do environmental provisions in FTAs increase in exports of green goods?
- Do environmental provisions in FTAs decrease in exports of dirty goods?
- We tested for three different group of countries- world: developing countries, NZ





# Data

- PTA/FTAs related data
  - Trade and Environmental Database (TREND) prepared by Morin et al., (2018) which is developed by Design of Trade Agreements (DESTA) dataset (Dur et al., 2014)
  - Trade Data
  - UNCOMTRADE for bilateral exports data (1995 to 2019)
  - OECD and EUSTAT Green Goods (HS 6-digit classification)
  - Dirty goods: Three digit –Standard International Trade Classification (SITC)
  - Developing countries World Bank Classification
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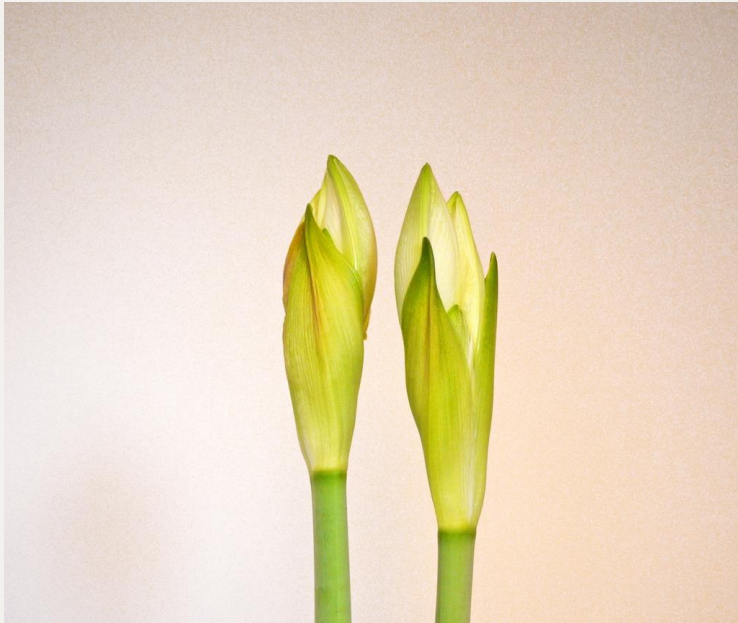
# Methodology-Gravity Model

- $SHARE_{eit} = \beta_1 * ENVPROVS_{eit} + \beta_2 * FTA_{eit} + \alpha_{ei} + \alpha_{et} + \alpha_{it} + \varepsilon_{eit}$
  - $SHARE$  ( 0 to 1)
  - $ENVPROVS$  absolute value and  $FTA/PTA$  dummy
  - $\alpha_{ei}$ ,  $\alpha_{et}$ , and  $\alpha_{it}$  Country pair, and export and importer fixed effect
  - PPML estimation also used
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# Results Discussions

Table 1

	(1)	(2)	(3)
	All countries exports	Developing Countries exports	New Zealand's exports
ENVPROVS	0 (-0.001)	0 (-0.001)	0 (-0.001)
FTAs	0.11*** (0.031)	0.08** (0.039)	0.21*** (0.043)
Exporter -Importer Fixed Effects	Yes	Yes	Yes
Exporter -Year and Importer- Year Fixed Effects	Yes	Yes	Yes
Observations	285332	178722	52122
R2	0.86	0.79	0.87





# Table 2

	(1)	(2)	(3)
	All countries exports (GREEN)	Developing Countries exports (GREEN)	New Zealand's exports (GREEN)
ENPROVS	0 -(0.001)	(0.002)* (0.001)	0.001 -(0.001)
FTAs	0.022 (0.023)	0.061** (0.027)	0.091 (0.073)
Exporter -Importer Fixed Effects	Yes	Yes	Yes
Exporter -Year and Importer- Year Fixed Effects	Yes	Yes	Yes
Observations	285332	178722	52122
R2	0.82	0.8	0.84



# Table 3



	1	2	3
	All countries exports (DIRTY)	Developing Countries exports (DIRTY)	New Zealand's exports (DIRTY)
ENPROVS	0 -0.001	0.001 -0.002	-0.002* -(0.001)
FTAs	0.022	0.061**	0.45*
Exporter -Importer Fixed Effects	0.023 Yes	(0.027) Yes	(0.13) Yes
Exporter -Year and Importer- Year Fixed Effects	Yes	Yes	Yes
Observations	285332	178772	52122
R2	0.78	0.75	0.74

# Conclusion

- We assess the environmental provisions in the FTA on trade flows at the sectoral level.
- FTA/PTA has significant impact on trade.
- Environmental provisions don't substantial limit on trade.
- Developing countries have positive impact on green trade.
- EP has no impact on NZ exports on exports in green products but decrease in dirty products.



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## Q & A

**Masudur Rahman**  
**School of Accounting Finance and Economics (SAFE)**  
**The University of Waikato &**  
**Visiting Research Fellow**  
**Institute of South Asian Studies- National University of**  
**Singapore (NUS)**  
**[masudrahman@nus.edu.sg](mailto:masudrahman@nus.edu.sg)**

