

# Leveraging Foreign Garbage: Developing Democracies in the Global Waste Trade

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Photo credit: AFP and South China Morning Post

# Garbage Protectionism

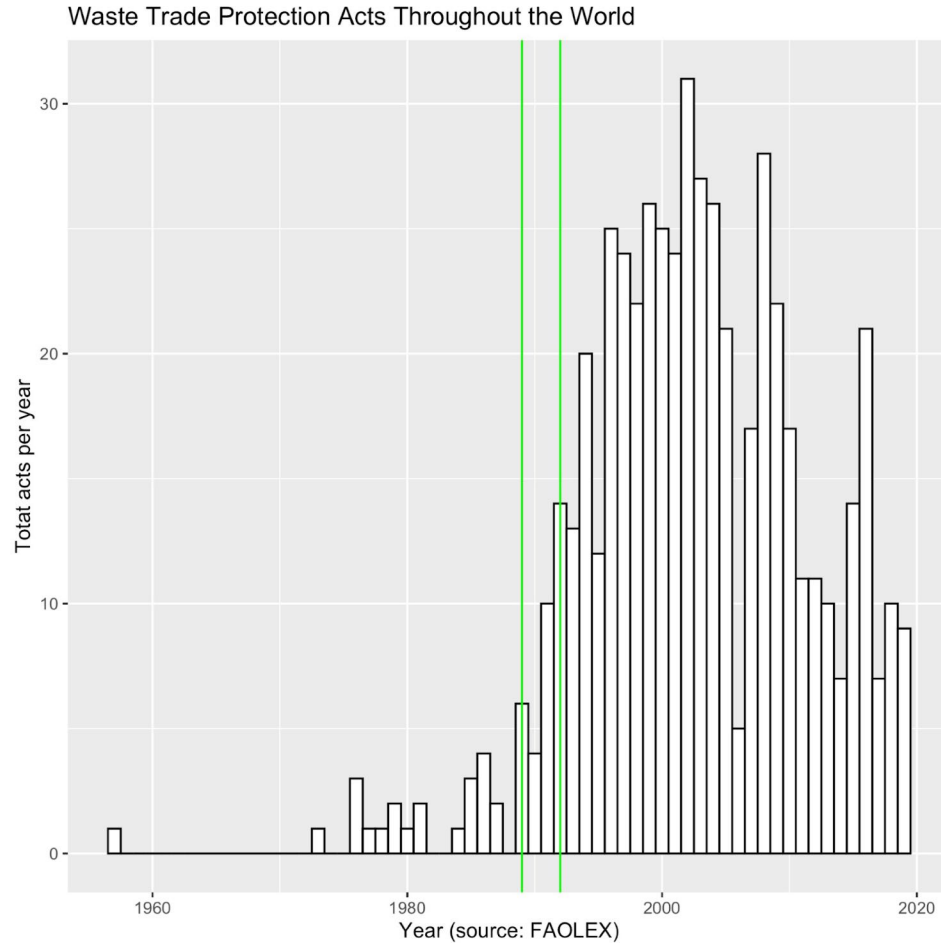
- 2017: China bans plastic waste imports, starting a cascading set of bans as trade diverts throughout the region. US recycling and waste management systems buckled.
- **1970-2019: 541 import restrictions on waste imports by 115 countries.**
  - Romania 1992: Ban all imports except “useable wastes.”
  - China 2003: E-waste only permitted at certain ports of entry.
  - South Africa 2019: “No person shall import waste from a developed country.”
  - Domestic restrictions both over- and under-shoot international standards

# Garbage Protectionism

Data collection:  
FAOLEX (UN Food and  
Agriculture Organization  
database of national policy)

UT Austin “Weaponizing  
Waste” team of 12  
undergraduate coders in two  
waves (IPD research lab)

**541** waste trade protectionist  
actions for **115** countries  
(ex:



*Context: Basel Convention on the Control of Transboundary Movements of  
Hazardous Waste. Now 180 members (no United States)  
(lines = signing and in force)*

# (Truly) Garbage Definitions

- Severe shortcomings in international trade statistics
  - Range of six-digit HTS codes under debate (ex: OECD uses two different sets)
  - E-waste is often traded under product categories for working, new electronics
  - Definitions do not make clear the recyclable (positive value) and end-of-life (negative value) components
- Consistent reporting gap: *More exports than imports*
  - Annual average USD 6.45 billion, in (roughly) USD 200 billion market
  - Lost at sea + obvious underreporting among importing nations
- Non-transparency as a feature, not a bug
  - Transparent Basel Convention product definitions mean exporters/importers know what HTS categories to avoid
  - Who wants to admit to importing (or exporting for that matter) foreigners' garbage?

# Garbage Text Analysis: Definitions as NTBs

Data collection: Corpus of text from member-states' Basel Convention annual reports specifying waste definitions (2001-2009)

Implication (for further tests): Definitions as non-tariff barriers (NTBs) that should follow empirical evidence based on national regulatory actions

*Plot interpretation: Variation over time (and within-countries) in frequency of key words in official definitions*

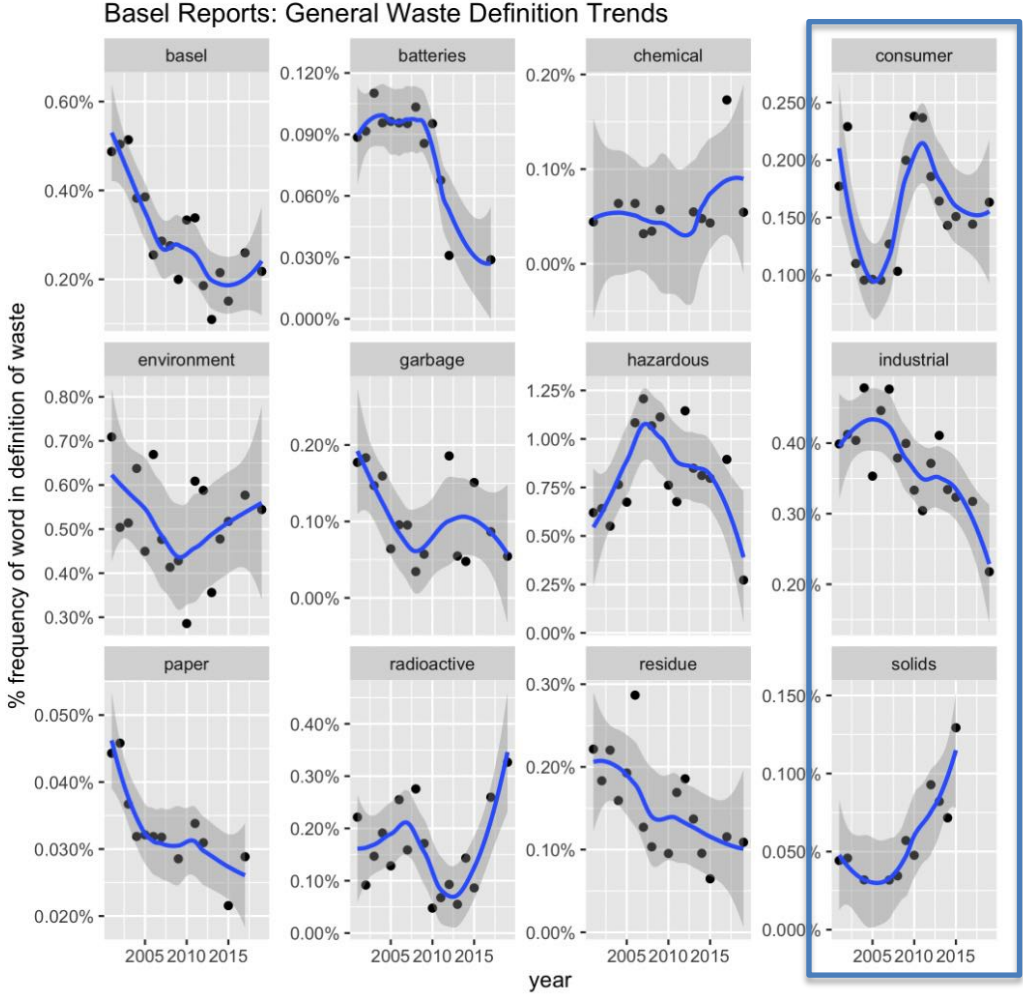
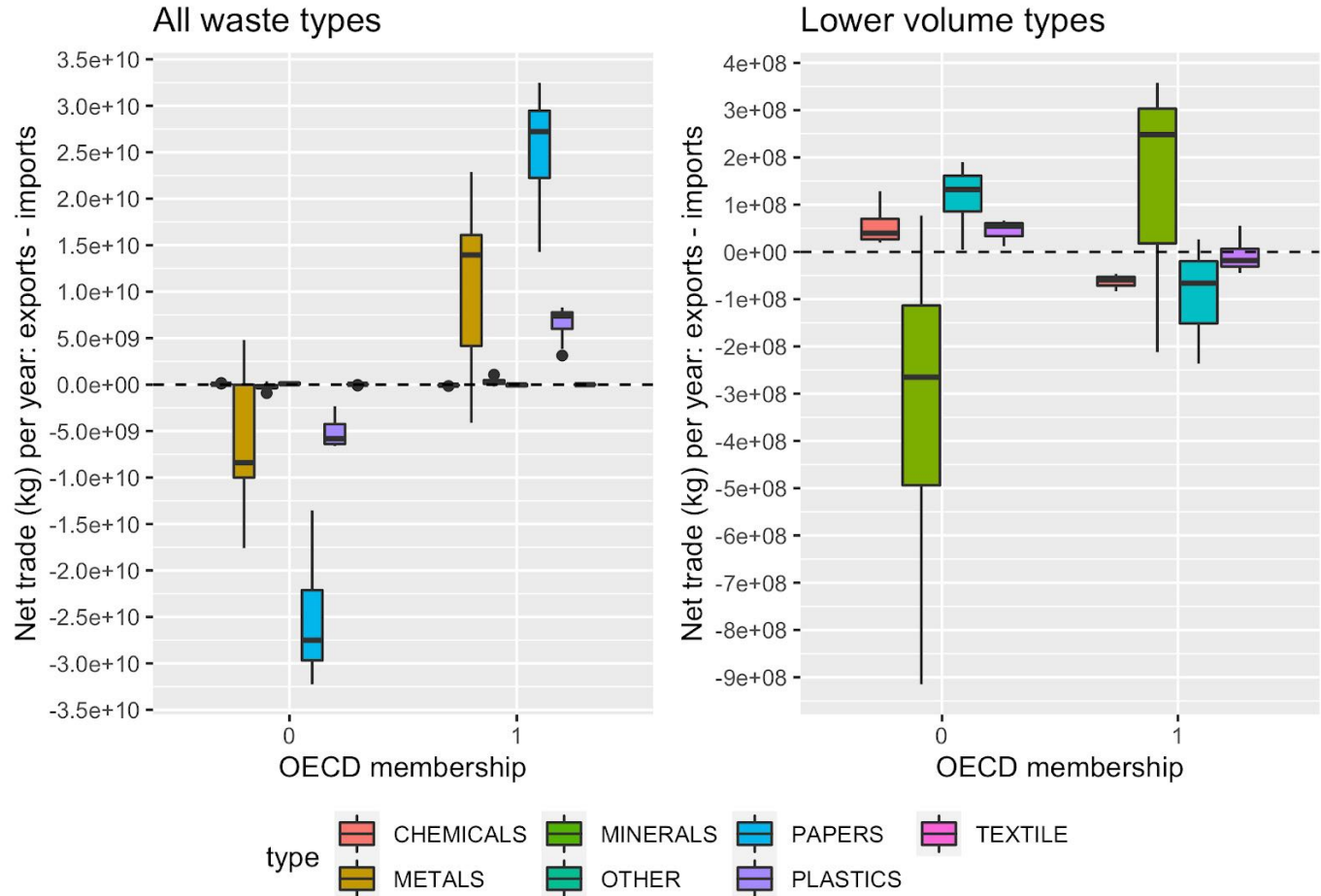


Figure 4: Frequency of terms occurring in all member countries' annual Basel Convention reports from 2011-2019 (field 2a\_notes on form). Due to report availability 2016 and 2018 are not included.

# Garbage Trade Data

OECD: net importers of categories with more recyclable components

Non-OECD: net importers of categories with more end-of-life components



# Garbage Theory

- Developing countries have monopsony power, especially in the dirtiest (normative and otherwise) markets for end-of-life waste
  - Implication for timing: Bans come in waves after market leader (here, China) implements a ban and reallocates monopsony power
- Domestic democratic responsiveness
  - Globalization-as-exploitation evidence
  - Lobbying pushback in developed country exporters unlikely
  - Implication for preferences: Even pro-trade constituencies reasonably differentiate between garbage and other tradeable goods
- Taken together: Democracies with monopsony power are more likely to implement waste trade import restrictions

# Garbage Hypotheses

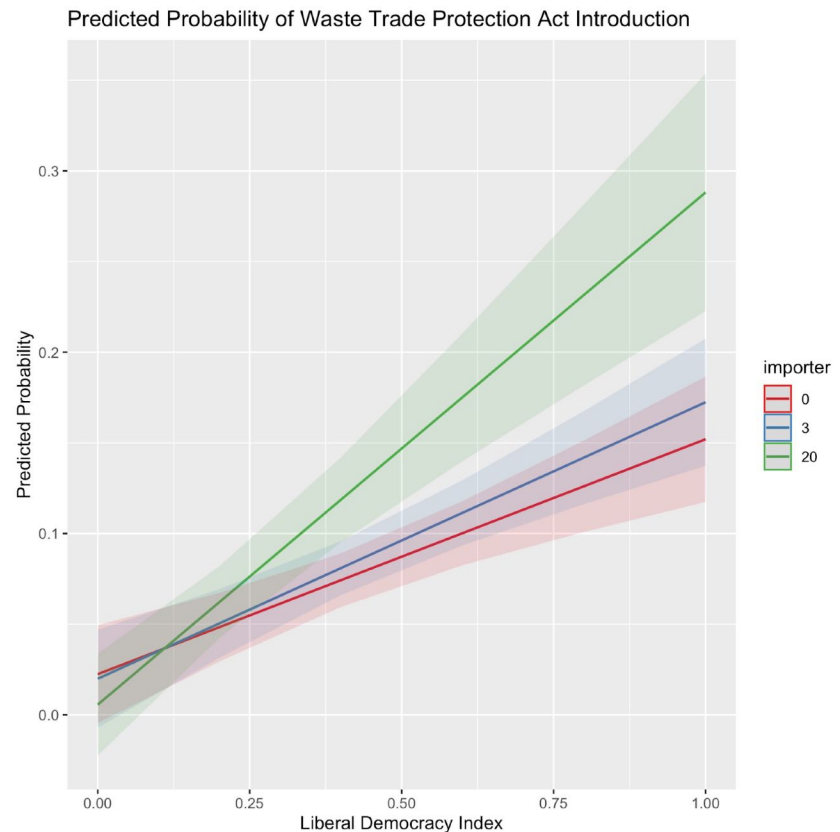
- ***Hypothesis 1:*** More waste trade restrictions should occur following a Chinese waste trade restriction.
  - Not only about normative trends or activist efforts
- ***Hypothesis 2:*** Democracies are more likely to set waste trade restrictions than non-democracies.
  - Not just a rise-of-China story
  - Implication (for future tests): Non-democracies with characteristics privileging responsiveness also more likely



# Garbage Empirical Evidence

- **Hypothesis 3:** Among all democracies, net waste-importing democracies are more likely to implement waste trade restrictions than net waste-exporting democracies.
  - Not explained by environmental Kuznets curve in developed countries
  - Implication (for future tests): Aggregate effect of democracies with monopsonist power across disgusting product categories

*Plot interpretation: Most liberal democracies (x-axis) with the highest volume of net imports (green line) are more likely to implement restrictions in a country-year*



# Garbage Conclusions

- Developing countries can leverage monopsony power while also while also reaping domestic political rewards via democratic responsiveness.
  - Embarrassing exports/imports undermine traditional pro-trade lobbying and the role of pro-trade individual preferences
  - Not only a story of developed country environmentalism or Chinese foreign policy
  - Implications for further developed country leverage in foreign policy via issue linkage (see Nigeria first-mover bans on e-waste imports in context of contentious EU negotiations, 2011)
  - Developed country policies endogenous to developing countries as regulatory first-movers
- Unintended implications? Should the first two words of the mantra "reduce, reuse, recycle" take hold, and monopsony power in the garbage trade lose relevance, one effect could be to weaken the power of developing countries to use that position for democratic ends.

To continue the conversation:

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