

# Trade Actions (BTAs)

- Large literature on law and economic effects (leakage and competitiveness)
- Economic effects mainly focused on US and EU
- Our analysis is more global and focuses on key analytical distinction relating to trade actions: whether based on carbon content in domestic production or in imports

# Recent Initiatives

- Boxer-Kerry: “Consistent with WTO obligations” and take account of (free) emission allowances
- Waxman-Markey has two key provisions
  - Free allowances to selected sectors
  - Emissions purchase requirements on importers
- Free allowances: either pure transfer with little impact on marginal production decision or a production subsidy based on carbon content in domestic production
  - Emission purchase requirements on importers: Pure border tax adjustment but unclear whether based on carbon content in domestic production, or more likely, on content in imports
  - In EU, situation is more fluid: Sarkozy and Lord Turner are considering BTAs based on carbon content in imports

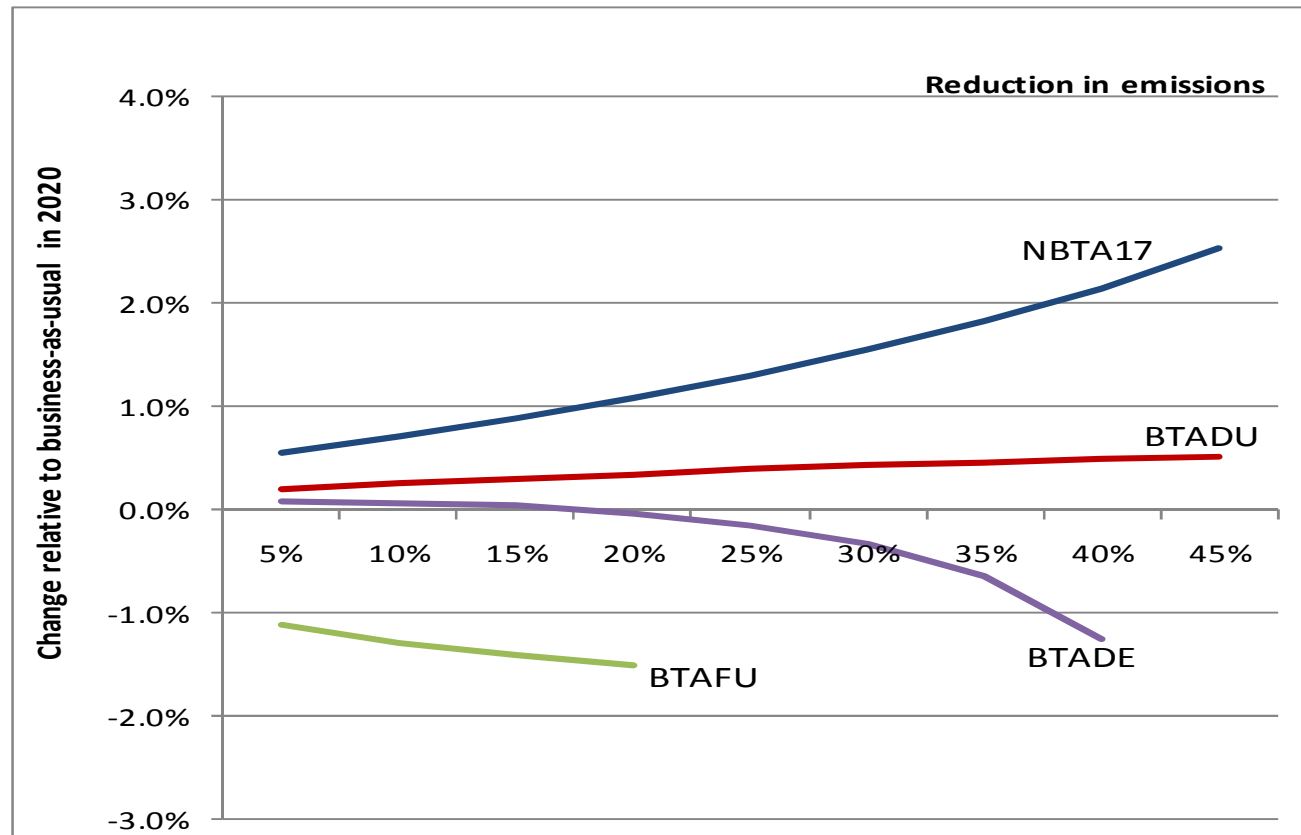
# The tariff implications of alternative forms of trade policy action

Table 5. Additional Tariff on Exports by Origin

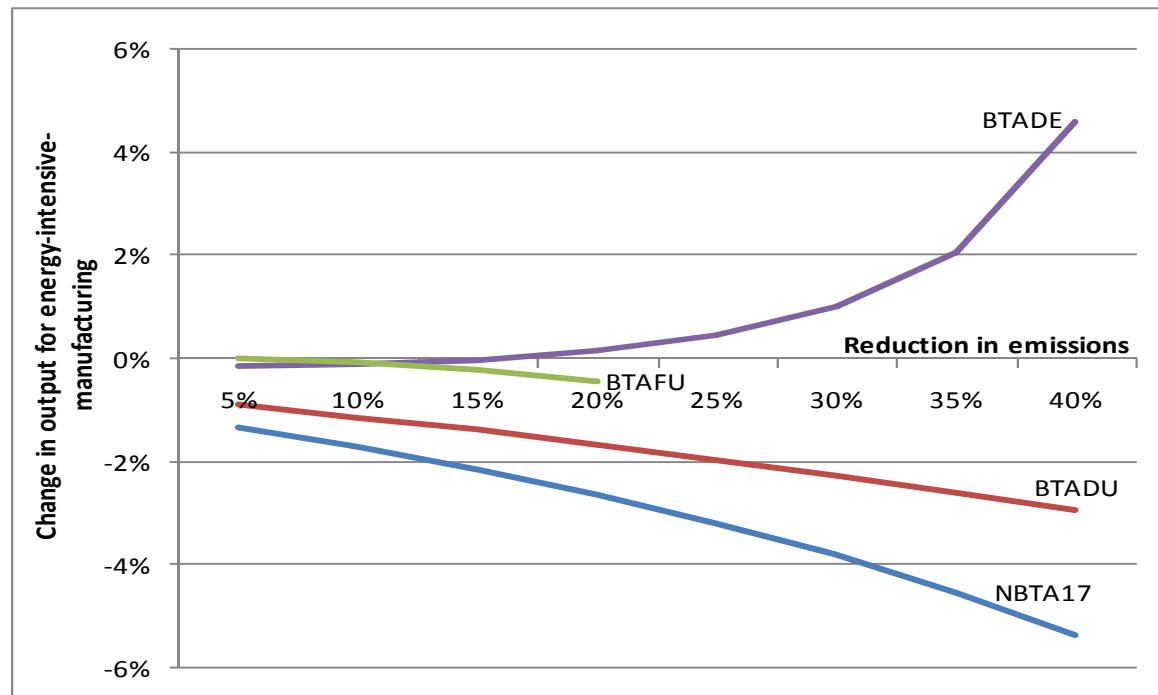
	BTADU		BTADR		BTAFU		BTAFR	
	All manufacturing	Energy-intensive manufacturing	All manufacturing	Energy-intensive manufacturing	All manufacturing	Energy-intensive manufacturing	All manufacturing	Energy-intensive manufacturing
Rest of High Income	3.2%	5.8%	0.7%	5.9%	5.1%	8.7%	1.1%	9.2%
Brazil	4.4%	7.1%	2.1%	7.2%	5.8%	9.9%	2.9%	10.4%
China	3.1%	6.2%	0.6%	6.3%	26.1%	42.7%	0.5%	44.6%
India	3.5%	6.8%	1.0%	6.9%	20.3%	28.5%	1.1%	29.8%
Russia	5.2%	6.5%	4.2%	6.6%	35.3%	40.0%	6.7%	42.0%
Rest of East Asia	3.1%	5.7%	0.7%	5.7%	9.5%	14.8%	1.1%	15.6%
Rest of South Asia	3.0%	5.7%	0.3%	5.8%	10.3%	39.2%	0.2%	41.0%
Rest of ECA	4.1%	6.7%	2.2%	6.8%	23.5%	39.7%	2.2%	42.3%
Middle East and North Africa	3.2%	6.3%	0.7%	6.4%	16.6%	30.4%	0.7%	32.0%
Sub-Saharan Africa	3.9%	6.6%	1.9%	6.7%	10.9%	19.0%	3.0%	20.1%
Rest of LAC	4.2%	7.6%	1.3%	7.8%	6.6%	11.8%	1.8%	12.3%

Notes: **NBTAI17**: Industrial countries alone reduce emissions by 17% and take no trade policy action; **BTADU**: Industrial countries alone reduce emissions by 17% and impose tariffs on all merchandise imports based on carbon content in domestic production; **BTADR**: Industrial countries alone reduce emissions by 17% and impose tariffs on energy-intensive manufacturing imports based on carbon content in domestic production; **BTAFU**: Industrial countries alone reduce emissions by 17% and impose tariffs on all merchandise imports based on carbon content in imports; **BTAFR**: Industrial countries alone reduce emissions by 17% and impose tariffs on energy-intensive manufacturing imports based on carbon content in imports

# Impact of Unilateral Emissions Reductions by Industrial Countries on Emissions of Low and Middle Income Countries( % change: relative to BAU in 2020)

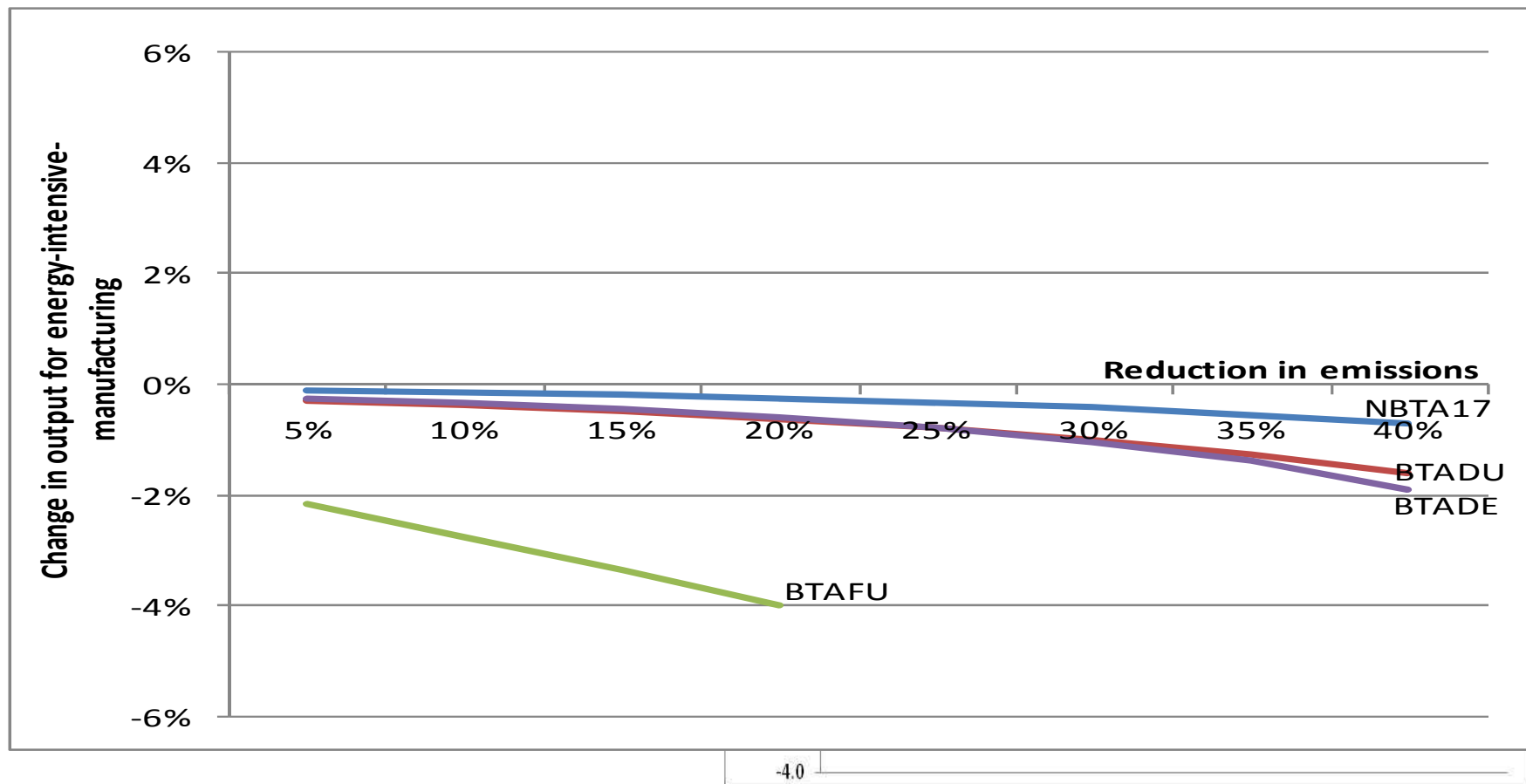


# Impact of Unilateral Emissions Reductions and Trade Action by Industrial Countries on their Output of Energy-Intensive Manufacturing



( % change: relative to 2005 for emissions reductions; and relative to BAU in 2020 for output)

# Impact of Unilateral Emissions Reductions and Trade Action by Industrial Countries on China's manufacturing output



(% change: relative to 2005 for emissions reductions; and relative to BAU in 2020 for exports)

# Trade Actions: Key Finding and Conclusions

- Unilateral reductions will have:
  - Modest leakage effects
  - Significant competitiveness effects in energy-intensive sectors in US and EU
- BTAs based on carbon content in domestic production (BTAFD) could:
  - address competitiveness concerns
  - have a small trade impact on partners
  - be easier to implement and less prone to abuse
- BTAs based on carbon content in imports, if imposed in all sectors (BTAFU), could have serious trade effects on developing countries
  - Tariffs over 20% for China and India
  - Manufacturing export declines of close to one-fifth for these countries
  - Manufacturing output declines of close to 3.5%
- BTAs based on carbon content in imports, *if imposed only on carbon-intensive sectors* (BTAFR), do not have serious trade effects
- US seems to be moving in direction of BTAFR
- In any future negotiations, developing countries should seek international rules against BTAFUs while allowing ideally BTAFR (or even BTAD) as a safety valve