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International Shipping: Impacts of MBI & The search for a global but differentiated policy

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MBI = Market Based Instruments

Contents

- Context
- Options to reflect Common But Differentiated Responsibilities
- Global policies: benefits and impacts
- ‘Annex I only’ policies – how to differentiate?

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UNFCCC vs IMO?

- UNFCCC: ‘Common but differentiated responsibilities and capabilities’ (CBDR)
- IMO: ‘Flag neutrality’; ‘No more favourable treatment of ships’
- Need to reconcile creatively

Global policies with differentiated use of revenue

- Sectoral approach – onus on participants not Parties
- Total revenues potentially **$10-$45** billion annually
- Revenues could be used for both adaptation and a variety of mitigation objectives. Below is ONE POSSIBILITY:

Total revenue	**42%**	**Adaptation**	**32%**	**LDCs**
			8%	**SIDs**
			60%	**Other developing countries and EITs**
	42%	**Mitigation**	**50%**	**REDD**
			50%	**JI/CDM**
	16%	**Technology**	**50%**	**Short-term technology transfer**
			50%	**Long-term R&D**

Source: IMERS, proposed by Andre Stochniol (2008)

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- … such that benefits to ALL groups of developing countries outweigh costs:

Country group	Share of revenue payment	Share of revenue receipts
Developed Countries	**59%**	**5%**
Economies in Transition (without Russia)	**2%**	**3%**
BRIC	**16%**	**30%**
Least Developed Countries	**1%**	**15%**
Developing States	**1%**	**4%**
Other Developing Countries	**22%**	**44%**

Source: IMERS, proposed by Andre Stochniol (2008)

Impacts on demand

- **All emissions** @ $30 t/CO2 =>
  - 4-8% increased transport costs (HFO = $700/t);
  - 6-12% increased transport costs (HFO = $450/t);

    (Assumption: Fuel costs ~ 30 to 60% of overall transport costs)
  - **<1% increased cost of shipped goods**

    (Assumption: Transport costs ~ 4 to 10% total prices)
  - 1-2% reduction in demand, relative to
  - >3% annual forecast growth

    (Assumption: price elasticity ~ -0.25)

Food price increases

- Estimates using FAO data for islands most dependent on imported food:

Country	Increase in costs of food imports (% of food import values)		
	US$ 10 / tonne of CO_2	**US$ 30 / tonne of CO_2**	US$ 50 / tonne of CO_2
Sao Tome and Principe	0.12 - 0.21%	0.37 - 0.62%	0.62 - 1.03%
Cape Verde	0.06 - 0.10%	0.18 - 0.30%	0.30 - 0.50%
Tonga	0.11 - 0.18%	0.33 - 0.55%	0.55 - 0.91%
Dominica	0.04 - 0.06%	0.11 - 0.18%	0.18 - 0.30%
Samoa	0.11 - 0.18%	0.32 - 0.53%	0.53 - 0.88%
Saint Lucia	0.01 - 0.02%	0.03 - 0.06%	0.06 - 0.09%

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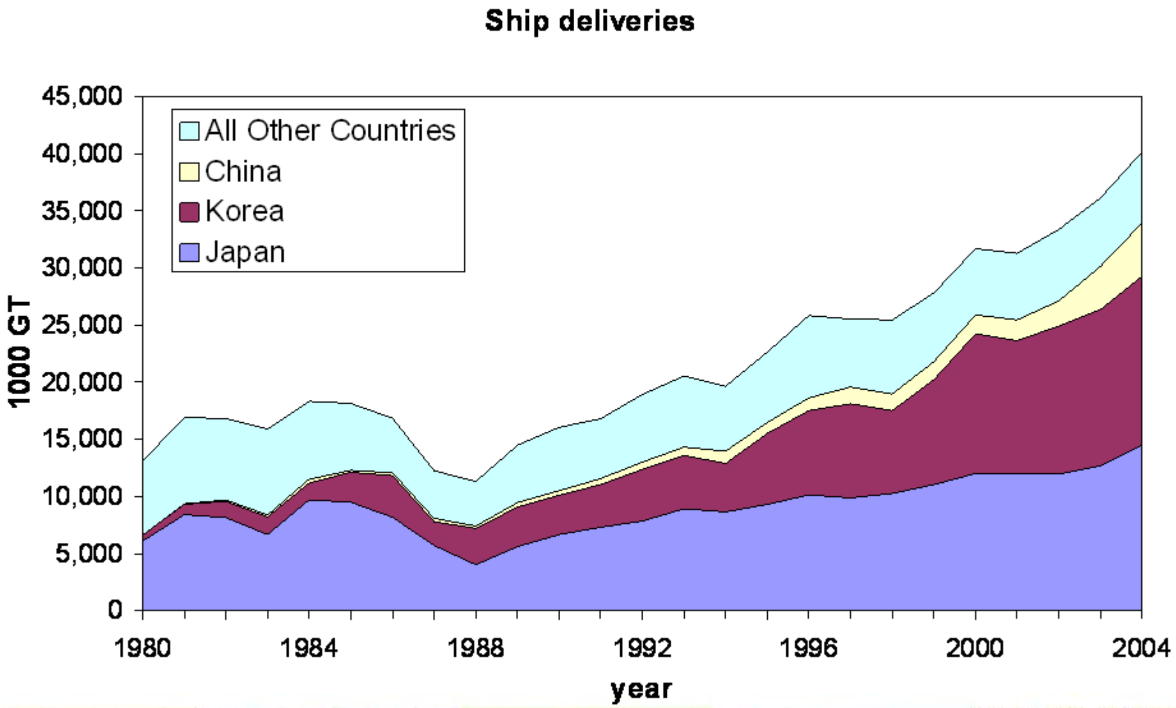
Tourism

- May have small impact on price of cruise holidays
- Own price elasticity of demand for tourism is low (-0.4 to -0.8)
- Cross-elasticities higher (ie choice between destinations / modes of travel)
- Slight shift possible, unless other modes included

Shipbuilding

- Including shipping is likely to have a positive effect on demand for shipyard services



- Potentially benefiting two non Annex I countries

Source: Lloyds register

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De minimis thresholds

- By ship size:
  - Smaller ships generally serve less developed countries
  - Potential to exempt *some* trade in partly developed countries
  - A few examples
    - > 3000 GT exempts Cook Islands and other SIDS
    - > 7000 GT exempts Bangladesh
  - More work needed!

‘Annex I’ policies: differentiation options

- Flag
- Owner / Effective Control
- Route
- **Share of Imports**

- By flag
  - – 77% ship non Annex I – inequitable
  - – evasion extremely simple
  - – violates IMO principles

- By owner:
  - – c. 65% Annex I - currently equitable, but
  - – evasion relatively simple => inequitable outcome
  - – violates IMO principles

- By route
  - Routes to Annex I ports: circa 60% total emissions (57.9% goods unloaded by weight)
  - administratively feasible (existing bunker delivery notes),
  - respects IMO principles, BUT
  - evasion (eg N African port call *en route to EU)* may be attractive at carbon prices of ~$30/tCO2

Share of Imports*

- **Global** (as per IMO) but **Differentiated** (as per UNFCCC)
- Policy can be based on cargo imported
  - Applies to **all ships**, irrespective of flag or nationality
- Only two destinations are defined:
  - Annex I countries, and
  - Non-Annex I countries
- Destinations are treated as per climate change regime in force. Currently it means:
  - Annex I destinations are included fully (100%)
  - Non-Annex I destinations are not included

*Proposal by A. Stochniol (2008)

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Share of Imports
(#2 of 2)

- A ship transporting goods to both Annex I **and** non-Annex I countries is partially included
  - It is included in proportion to the **ship's share of goods unloaded in Annex I** countries
    - Destined to Annex I for transhipments
  - This means that only the Annex I share of ship's CO_2 emissions is in scope
- Worldwide, the Annex-I share of unloaded goods is 60%
  - Therefore on day one of a scheme driven by such a policy 60% of maritime emissions will be covered.

Advantages

“Global but Differentiated”

- Three major advantages of the proposed policy:
  - It will deliver on the nine principles proposed at the MEPC 57
  - It is compliant with the current and future climate change regimes
  - Environmental results will be very high as the goal may be more ambitious as it applies to Annex I only

- **Global but Differentiated policy is both viable** and needed for a maritime market-based GHG scheme:
  - Importantly, it does not prescribe a specific instrument
  - Instead, it will enable identification of the most appropriate scheme by **unlocking the current impasse**!

Thank you!

Tight Maritime GHG Roadmap to Copenhagen