High Seas Fisheries Management

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Co-PI GEF-FAO-ABNJ Project on Deep Water Fisheries Rights Based Management
Co-PI IATTC Capacity Management Project

Purpose

- Current thinking on high seas fisheries management projects for IATTC and GEF-ABNJ-FAO deep-water fisheries.
  - With Ross Shotten and Santiago Bucaram
- Looking for feedback!

1. Key Challenges…(1)

- 1. Trans-boundary resource stocks lead to multiple jurisdictions
  - Focus upon ABNJ and EEZs
  - States have sovereignty & underlying unit of governance
- 2. Multilateral cooperation and/or coordination required
- 3. Multilateral cooperation is voluntary & self-enforcing
  - Due to State sovereignty

1. Key Challenges…(2)

- 4. Open access (free entry) under LOS shifting to weak common property through RFMOs.
- RFMOs now experimenting with nascent forms of stronger management & rights & incentive-based management
- Both t-RFMOs and deep-water RFMOs

1. Key Challenges…(3)

- 5. Rights of catch/effort/capacity/habitat impact comprised of two rights:
  - Flag State and catch/effort/capacity/habitat impact right
  - In contrast to national waters without Flag State

1. Key Challenges…(4)

- 6. Allocating rights of TACs/TAEs and access/catch/effort/capacity/habitat impact
- Allocated first to States and then to firms
- Duration of allocation
  - Important to management type and success
  - Critical for this talk

1. Key Challenges…(5)

- 7. Challenge typically compounded by overcapacity
- How to remove it under allocations of different strength and duration and different management measures?

1. Key Challenges…(6)

- 8. Stronger and more comprehensive management measures
- Property versus use rights
- Alternative to property rights is credit systems
  - Quotas/limits versus “rights”
  - Murky distinction between use right & quotas/limits

1. Key Changes….(7)

- 9. Accommodating new entrants
  - States and vessels
- 10. Accommodating small island and coastal developing states

2. What Economic Net Benefits Should Be Considered?

- Net benefits from lower or optimum capacity and satisfying TACs/TAEs.
  - Biggest gains are higher profits from lower fixed costs
  - Compared to inter-vessel efficiencies
- But must include additional costs of MCS, enforcement, data collection, & stock assessments

3. Allocation of TACs/TAEs, Rights, and Capacity

- The key issue: allocation of sufficient duration for capacity reduction & planning (investment)
- If sufficiently long duration, then:
  - Public buybacks and/or private purchases of rights/quotas/limits are profitable
  - Internal company restructuring to reduce vessels
    - Most high seas firms are multi-vessel & capital intensive
  - Inter-company trade
  - Companies come together to consolidate vessels and share profits

4. Credit Systems…(1)

- Two Types:
- (1) First Type: *Cap-and-Trade*
- Gives flexibility through trade & consolidation
- Set total cap and allocate quota/limit to firms
- Then firms trade unused quota/limit (= credit) inside & outside of the firm and/or carry forward to next time period
- Limited (“short”) duration of allocation

4. Credit Systems…(2)

- (1) First Type: *Cap-and-Trade*
- Unanswered questions:
- (i) Sufficiently increased profitability to outweigh additional costs of MCS, enforcement, population assessment, etc.?

4. Credit Systems…(3)

- (1) First Type*: Cap-and-Trade*
- (ii) Sufficient potential to incentivize reductions in capacity?
  - Allocation duration too short for public buybacks & most private purchases
  - Will multi-vessel firms consolidate quotas/limits among fewer vessels?
  - Will multiple firms come together and share profits?
  - Experience:
    - Pacific hake for target catch and Alaskan pollock for bycatch
    - Increased profitability chiefly comes from lower fixed costs of fewer vessels but also lower operating costs

4. Credit Systems…(4)

- (2) Second Type: *Penalty-and-Reward*
- Keep reserve of catch/effort and give as reward for vessels meeting objectives and penalize when don't
- Previously in Scottish cod target and bycatch fisheries
- Potential for deposit-refund system with FADs

5. Catch or Effort?

- Not clear yet which approach creates greater net economic benefits of profits
  - when include additional costs of MCS, enforcement, data collection, and stock assessments and stock assessment risk

6. Key Unresolved Questions…(1)

- What is impact of duration of allocations upon capacity, net benefits, alternative management?
- What is impact upon net benefits & alternatives when considering all additional costs of MCS, enforcement, data collection, stock assessments and assessment risks?
- Are long-term allocations of TACs/TAEs sufficient to resolve overcapacity?
  - States resolve internally
- Are property rights necessary additional step?

6. Key Unresolved Questions…(2)

- If not property rights and long duration allocations (TACs/TAEs, rights), then credit systems?
- Do extended time-area closures give higher net benefits than credit systems?

6. Key Unresolved Questions…(3)

- Can credit systems provide intermediate step to rights-based management?
- When no overcapacity, are credit systems (with TAC/TAE allocations) sufficient?
- Catch versus effort when including all costs?
- How to accommodate new entrants?
- How to accommodate small island and coastal developing country states?

Thanks! Questions?