Buybacks in Fisheries

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Workshop on Rights-Based Management and Buybacks in International Tuna Fisheries La Jolla, 5-9 May

Source of Material

- Literature review
- International buyback workshop at UCSD
  - Case studies
    - Many by current attendees
  - Overview papers
    - Several by current attendees
- Curtis, R. and D. Squires, editors, *Fisheries Buybacks*, Blackwell Publishing, 2007
- Squires, D., J. Joseph, and T. Groves. 2006. “Buybacks in Transnational Fisheries,” *Pacific Economic Bulletin* 21(3): 63-74.
- Allen, R., J. Joseph, D. Squires. 2008. Background paper to workshop.

Organization

- What is a Buyback?
- Why Buybacks?
- Buybacks as a Transition
- Success Requires Addressing These Issues
- Buybacks in Transnational Fisheries
- Key Program Features
- Buyback Prices and Markets
- In Sum

What is a Buyback?

- Buyback programs can purchase:
  - vessel
  - license or access right
  - other use rights (e.g. ITQs)
  - gear
  - any combination.

Why Buybacks?

- Five broad purposes:
- 1. overcapacity and economic inefficiency
- 2. overfishing
- 3. distributional issues and income transfer
- 4. transition from open access to rights-based management
- 5. ecological and biodiversity issues

Why Buybacks?

- In *short run*, can reduce capacity and fishing mortality and raise profitability.

Why Buybacks? (2)

- Alone, are *not* the *long-term* solution to excess capacity.
- Alone, do not address incentives to over-invest and over-fish.
- Because don't alter underlying lack of well-defined property rights.

Buybacks as a Transition

- Work best as transition to more rationalized fishery
  - New Zealand, Australia, U.S. Pacific coast
- Facilitate more rapid adjustment towards long-run rights-based management.
- May be only tractable approach to remove fishing capacity in some cases
  - Especially in transnational fisheries
  - Provide opportunities for have-nots.

Buybacks as a Transition (2)

- When fishery is more profitable, increased cooperation follows
  - Remaining more positive, committed
- Smaller numbers of remaining fishers also increases cooperation
- Remaining fishers are those most committed

A Cautionary Tale

- If solely buybacks without strong rights-based management, fishing effort and capacity increase with increased profitability
- Locked into on-going battle of buybacks and expanding capacity and effort

A Cautionary Tale (2)

- Limited entry is critical precondition before buybacks
- Otherwise, vessels enter the fishery and defeat purpose.

In Sum, Success Requires Addressing:

1. Long-term objective of rights-based management
2. Entry and reentry into fishery
3. New investment in remaining vessels
    1. Including by those bought out using buybacks as financing
4. Fishing more by remaining vessels
    - Especially low activity vessels
5. Technological change
    - Increases effort, capacity
6. Spillover effects onto other fisheries

Buybacks in Transnational Fisheries

Unique Issues

- Two examples: Italian drift gillnet for swordfish and OPRT for tuna longline.
- Unilateral buybacks by individual states are ineffective.
  - Issue of free entry into fishery
  - Problem of free-riding by non-participants
  - Italian swordfish
- Multilateral buybacks with limited entry is best
  - OPRT longline

Coastal and Distant-Water States

- Provisions for expansion of economic activities by coastal states
- Montreal and Kyoto Protocols have same issues with developing and developed states
- North Pacific Fur Seal Treaty had same issue between pelagic and land-based sealing nations
- Montreal, Kyoto, Fur Seal Treaty all use side payments to address asymmetries between nations

Coastal and Distant-Water States (2)

- Forms of side payments to coastal states
  - Provide room and funds for expansion
  - Buyback loans and repayments by all used to finance coastal state expansion or transfer of existing vessels
  - Decommission greater capacity from DWFNs
  - Assess DWFNs at a greater rate than coastal states to finance buybacks
  - Technology transfer

Financing

- Some combination of:
- 1. Industry (e.g.landings tax or license fees)
- 2. Governments
  - Correct for past policy failures
  - Ecological (public good) reasons beyond capacity issue
- 3. International institutions
  - Can provide initial loan and financing
  - Otherwise, difficult to amass initial financing

Financing (2)

- 4. Recreational fishers
- 5. NGOs (public goods like biodiversity conservation)
- Public loans mean that the public bears the risk of the loan.
- Public or industry financing creates a debt that is a collective rather than individual responsibility.

Different Sectors of Fishery

- No one-size-fits-all buyback for fishery with multiple sectors
  - E.g. dolphin fishing, FAD fishing, longline and purse seine, coastal states and DWFNs
- Can target buybacks by methods of fishing or other criteria.

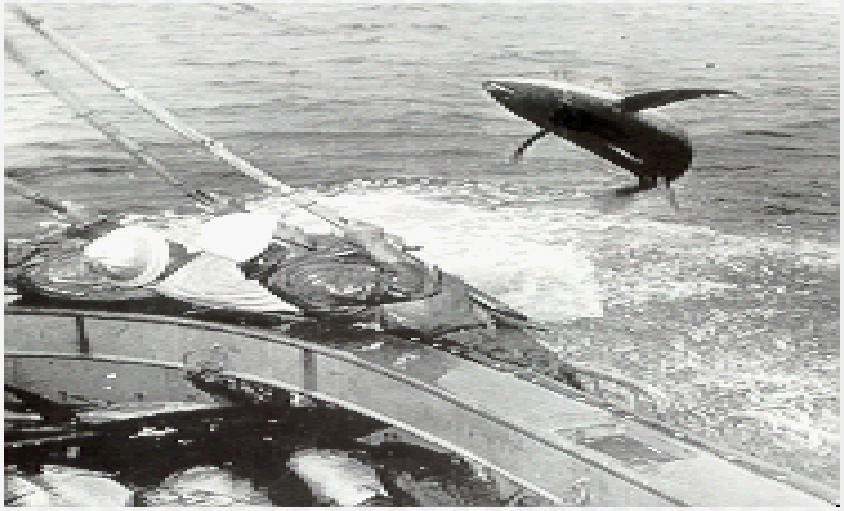
Ecological and Biodiversity Conservation Issues

- Capacity issue extends beyond simply capacity relative to tuna stocks.
- Instead, capacity extends to catch of all species, including bycatch
  - from sets on drifting objects
  - from sets on dolphins

Key Program Features

Industry Leadership

- Critical and should lead.



Purchase Vessels or Licenses?

- If buy back license or right only, vessel free to fish elsewhere
- If buy back vessel but not permit, can buy another vessel (unless restricted)
- If buy back both, buyback price includes values of two assets

How Many Vessels or Rights to Purchase?

- Many programs must buy out a lot of vessels or rights of access due to latent capacity (low activity vessels).
- Can be costly.

What Happens to Vessels?

- Scrap or not?
- Restrict their use in another fishery?
- Sell to help finance program?
- Export to another fishery or country?

Supplementary Regulations?

- Limit inputs?
- One or more dimensions of vessel size and engine power?
- Gear?
- Fishing time or days at sea?
- Freeze technological innovations?

Multiple or Single Round of Buybacks?

- Usually in multiple rounds
  - Due to budget limits
- Advantages related to learning as gain more information and experience
- But costs can rise over time

Buyback Prices and Markets

Reverse auctions vs. buyback authority providing fixed offer price

Reverse Auctions

- Single bid, reverse, discriminatory auctions are most common form of buyback auction.
- Asset (vessel, gear, license) owner submits a sale offer (bid)
- Buyback authority ranks or orders bids on the basis of some metric
  - E.g. highest to lowest offer price per unit of capacity
- Authority purchases the lowest, next lowest, etc. bid until the budget is exhausted.

Reverse Auctions (2)

- Bids can be optionally compared to a reserve price, purchasing those falling below.

  - Insures winning bids satisfy pre-established objectives and reduces incentives for collusion.

Fixed Buyback Prices

- Authority extends fixed offer price
  - E.g. on basis of existing second-hand market
- Seller of asset accepts or rejects the price.
- Fixed price can be set in terms of the asset, e.g. the entire vessel, or in terms of a metric or weight aimed at a more precise goal, such as price per cubic well capacity.

Auctions vs. Fixed Prices

- Advantages of Reverse Auctions
  - More information is available to the authority
  - Generally more cost-effective at removing capacity
  - Does not require the authority to set the price beforehand rather than the asset owners through competitive bidding.

Costs

- Buyback price has two components:
- 1. Value of vessel
- 2. Value of permit
  - Place on RVR, which gives right of access and participation
- Value as capitalized asset varies with profitability of fishery

In Sum

- Opportunity to reduce capacity, change incentives, restructure fishery, and prepare way for rights-based management
- Critical precondition of limited entry
- Transnational setting requires:
  - multilateral rather than unilateral approach
  - international and coordinated source of financing

In Sum (2)

- *Not a panacea by themselves*
- Most effective when serve as *transition* to rights-based management
- Not long-term answer because of continued investment and technical progress
- Otherwise requires on-going buyback and input controls
- Can be expensive, especially if many low activity vessels and permits and as fishery becomes more profitable