

Rights-Based Management: Efficiency Gains, Ecological Impacts, and Distributional Effects

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Today's Objective

- Overview
 - What are impacts of rights-based management in fisheries?
 - Economic Impacts / Who Wins?
 - Ecological Effects?
- Impacts of Property Right Security
- Impact of Policy Uncertainty
- Distribution and Free Allocation
- A Note on Taxation

Economics of Property Rights

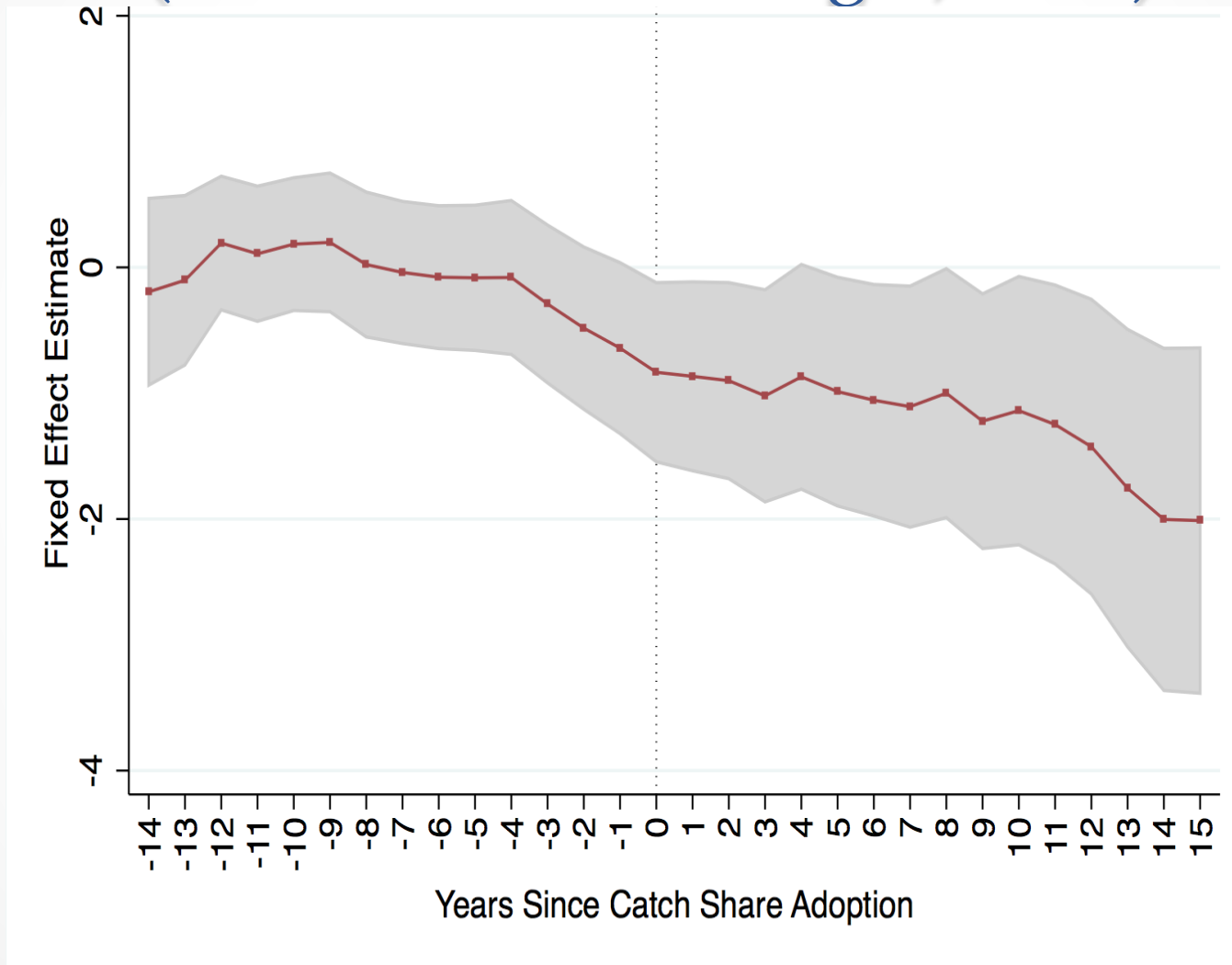
- “Bundle of Sticks”
 - Right to Use, Right to Benefit, Exclusivity, Free Transferability
 - See the works of Prof. Ragnar Arnason
- Literature points to huge gains due to ITQs
 - Allocative efficiency
 - Technical efficiency
- Strong rights
 - create incentives to reduce waste
 - create incentive for “long run” planning
 - create significant value
 - are *good* for conservation

Ecological Impacts

- Strong property rights align economic and environmental interests
- Resource user has a vested interest in the health of the fishery
- No more lobbying for overexploitation
- Good for conservation

Impact of ITQs on Exploitation

(Costello and Grainger, 2014)



“Imperfect” Rights

- Infringing on the property right decreases the resource's value
 - Could view as *increasing* the effective discount rate (Grainger and Costello, 2014a)
- Limits on use
- Limits on exclusivity
- Limits on divisibility
- Limits on transferability
 - (limits on permanent trades/consolidation caps)

“Imperfect” Rights Cont...

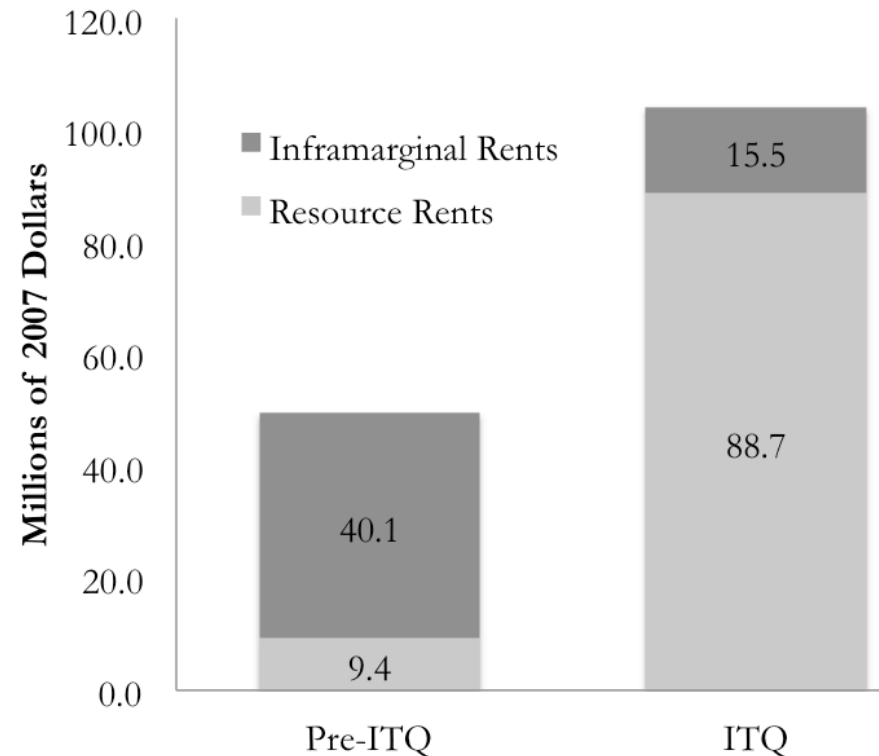
- **Policy Uncertainty**
- a **basic principle** in economics
 - Policy uncertainty (affecting costs) causes delayed investment
 - Uncertainty about property right
 - Introducing uncertainty about *security* of the right
 - *Proposals* to introduce taxes
 - Policy uncertainty decreases the value from the resource

Distributional Impacts

- The allocation of rights impacts the distribution of income
- Absent transaction costs, the efficient outcome is independent of the initial allocation
 - The initial allocation here has already been made.
- Free allocation of ITQs
 - Dynamic efficiency argument (Arnason et al.)
 - Some required for Pareto-improving policy
 - Without free allocation, some resource users would prefer regulated open access (Grainger and Costello, 2014b)
 - Otherwise some may favor an inefficient policy (Libecap and Johnson; Karpoff; others)

Rents Under ITQs are Capitalized

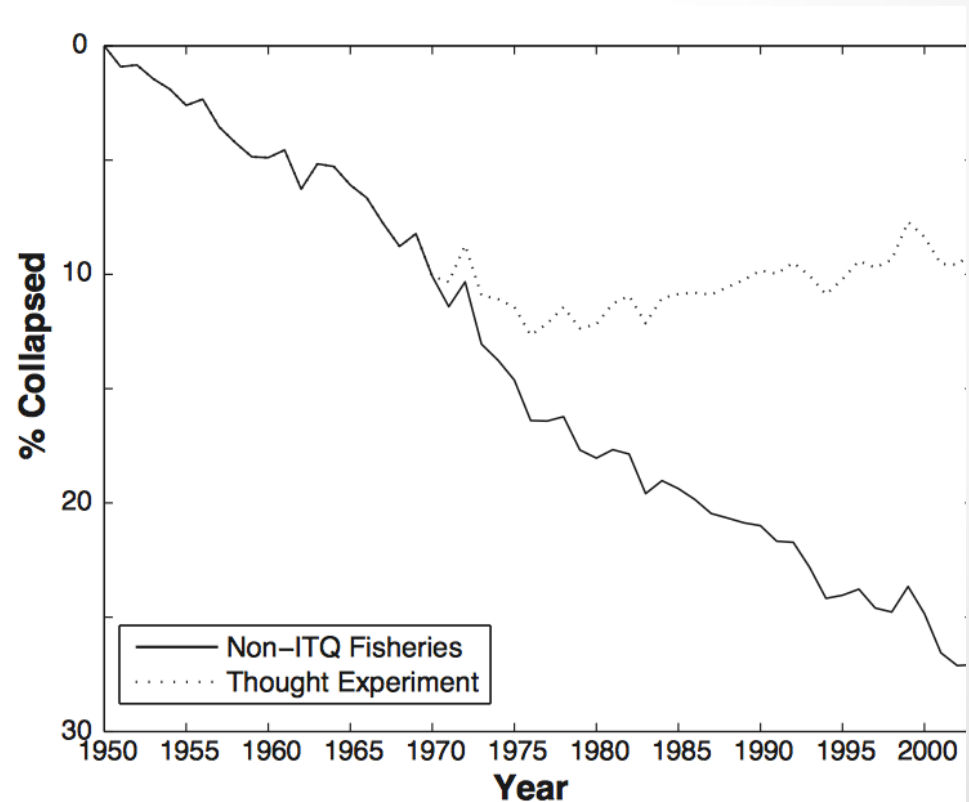
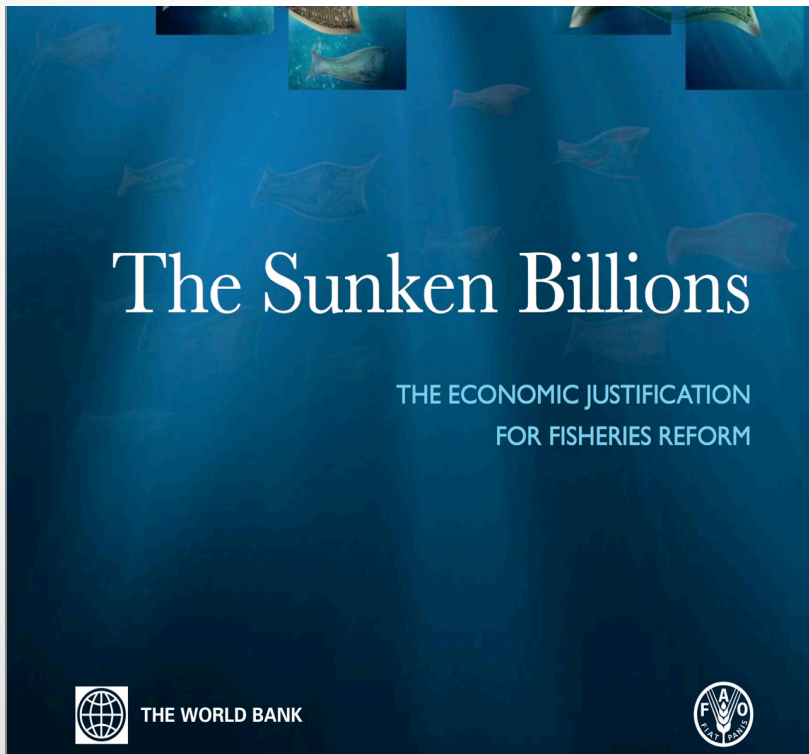
- Rights lead to *big* increases in the resource's value.
- Free allocation is needed for ITQs to be welfare-improving for everyone.



A Note on Taxing Rents

- Rents are created by fishing firms innovating
 - Cost reductions
 - Timing and marketing
- Without strong rights, value disappears
- Under standard regulation (elsewhere)
 - Overcapitalization
 - Rent dissipation
 - Lobbying for overharvest
- Literature urges some caution (e.g. Johnson, 1995)

Putting Iceland's Success in Context



Moving Forward

- Iceland's ITQ system has been a huge success
 - Strong property rights create value, promote investment in resource
- Policy recommendations:
 - Maintain strong property rights
 - If anything, increase efficiency by reducing transaction costs!
 - Reduce policy uncertainty