

Environmental Externalities and Coasean Exchange

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INDIANA UNIVERSITY

FEBRUARY 10, 2016

The Adorables!



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Environmental Externalities and Coasean Exchange: Presentation Overview

My Aims:

- Describe criticisms of the open access literature by Elinor Ostrom and especially Ronald Coase.
- Augment Coase's transaction costs with those of lobbying politicians and the bureaucracy.
- Argue that interest groups, politicians, and agency officials do not bear full social costs.
 - This results in a 2nd, neglected externality source beyond market failure—*government failure*.
 - Vincent Ostrom provides critical guidance on bureaucracy.
- Examine the response to Coase's arguments, particularly with cap & trade schemes.
- - Conclude with recommendations for further research.

Environmental Externalities and Coasean Exchange: The Literature

By 1960s: Growing concern about open access or the common pool.

Negative Externalities when parties do not bear full costs of their actions.

- Depleted fisheries, rapid draw down of oil pools, aquifers.
- Overgrazing, deforestation, air and water pollution.
- General concern about depletion of resources, over population.

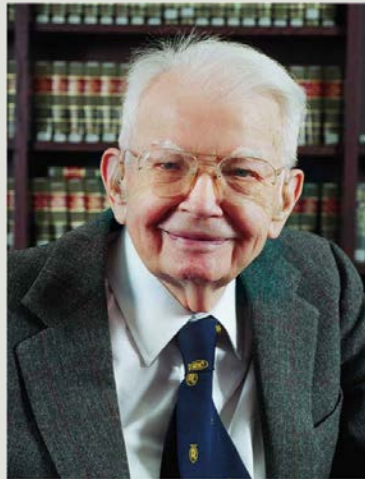
Academic and Policy Response: Tax or regulation.

- Failed to recognize differential incentives of users, existing arrangements.
- Costly. Often failed.

Environmental Externalities and Coasean Exchange: Intellectual Basis

Criticism of standard approaches.

- Ronald Coase, 1991 Nobel Prize.
- Oliver Williamson, 2009 Nobel Prize.
- Elinor Ostrom, 2009 Nobel Prize.



Environmental Externalities and Coasean Exchange: Coase's Criticism

Ronald Coase's (1960) iconic examples were environmental ones:

- Noise Pollution.
- Straying Cattle.
- Factory Air Pollution.
- Railroad Sparks.

Market Failure.

Environmental Externalities and Coasean Exchange: Coase's Criticism

Coase critical:

- Reciprocal nature of environmental problem.
- Standard approaches implicitly assign a property right.
 - This “right” (implied in “Polluter Pays”) can make society *worse off*.
 - Remedy may be more costly than problem.
- Goal of maximizing social welfare.
- Clear benchmarks, comparisons of alternative remedies, transaction costs.

Environmental Externalities and Coasean Exchange: Coase's Criticism

“Coasean” Academic and policy response:

- Emphasize assignment or recognition of property rights.
- Cap and trade—assign use rights; share in total allowable.

Two key points missing:

- **A.** In environmental policy there is another source of “social cost:” *government failure*.
- **B.** Cap and trade market design fails to fully define property rights.

Environmental Externalities and Coasean Exchange: Another Source of Externality

- A. Transaction costs with Coasean exchange and regulation/tax policies.
Interest group lobbying and response of politicians and agency officials.
- Politicians/agency officials do not bear the full social costs of their action.
 - Too much or too little environmental regulation.
 - *Government failure.*
 - Symmetrical with market failure.

Environmental Externalities and Coasean Exchange: Another Source of Externality

Welfare effects depend on:

- Competitive interest groups.
- Broad representation (unorganized citizens vs special interests).
- Limited literature on the political response to interest group demands and how that blends with aggregate social welfare.

Environmental Externalities and Coasean Exchange: Another Source of Externality

How do administrative agencies respond?

- Know even less about the motivation and reaction of agencies.
- How do their actions blend with aggregate social welfare?



Environmental Externalities and Coasean Exchange: Another Source of Externality

Potential for two sources of loss in common pool resources

- Market failure.
- Government failure.

Which is the larger and how to respond to the first without encountering a more costly second?

Environmental Externalities and Coasean Exchange: Cap and Trade Transaction Costs

- B.** Limited attention to the property right in cap and trade scheme.
- Exchange constraints.
 - Limits on the use right as property—fisheries and pollution permits.

Why?

Performance implications.

Environmental Externalities and Coasean Exchange: Fisheries



Environmental Externalities and Coasean Exchange: Fisheries

Benefits of cap and trade:

- Longer seasons.
- Fewer vessels.
- Higher valued harvests.
- Stock maintenance.

Yet, catch shares or ITQs remain controversial, limited, and weakly defined.

- 7% of world fisheries, 26% of total catch with shares.
- US and Canada severely restrict exchange.
- US and Canada: share is not a compensable property right; revocable any time.

Environmental Externalities and Coasean Exchange: Tradable Emission Permits



Environmental Externalities and Coasean Exchange: Tradable Emission Permits

Emissions Permits Trading Programs

- Early adoption in US and elsewhere.
- SO₂ market illustrated gains.
- SO₂ market collapse via EPA administrative.
- \$3 billion in banked permits stranded.
- More broadly.
- Not secure property rights and not compensable.
- Auction funds used to subsidize competitors.
- Trading limited in some cases, not bankable in some cases.
- Low prices in EUETS, RGGI, AB32.

Environmental Externalities and Coasean Exchange: Cap and Trade

Common elements:

- Insecure property rights.
- Subject to arbitrary regulatory action.
- Trading limits.
- Short time horizons.
- Subsidize competitors.

Little attention in literature or policy to how market design affects environmental/resource outcomes. Social welfare.

Why are these constraints adopted? Interest group politics? Agency incentives?

Environmental Externalities and Coasean Exchange: Conclusion

Coase and the Ostroms: Comparative institutional analysis to maximize social welfare.

- Compare relative transaction costs of alternative solutions.
- Compare institutional options.
- Examine the underlying political bargaining behind policies and incentives of politicians and agency officials in response.

Thank you Lin and Vincent for your inspiration,
humanity, and intellectual legacy

