



UNIVERSITY OF ICELAND

# The Ethics and Politics of Appropriation

## ITQs and Other Use Rights to Resources

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# The Problem

- Men born free, but everywhere affected by activities of others
- If those activities harmful, then a case for rules constraining people
- Preferably, those rules should be negotiated rather than imposed upon people
- In a world of scarcity, many incompatible economic activities
- “Good fences make good neighbours”

# The Tragedy of the Commons



# Grazing in Icelandic mountains

- Iceland settled 874–930 AD; settlers claimed land and created farms in valleys
- In mountains, fencing too costly, but land there used for sheep grazing in summer
- Tragedy of commons: by driving too many sheep up into mountains, a farmer derived whole benefit, while loss suffered by whole community
- Solution: Grazing rights, quotas belonging to each farm (Eggertsson)

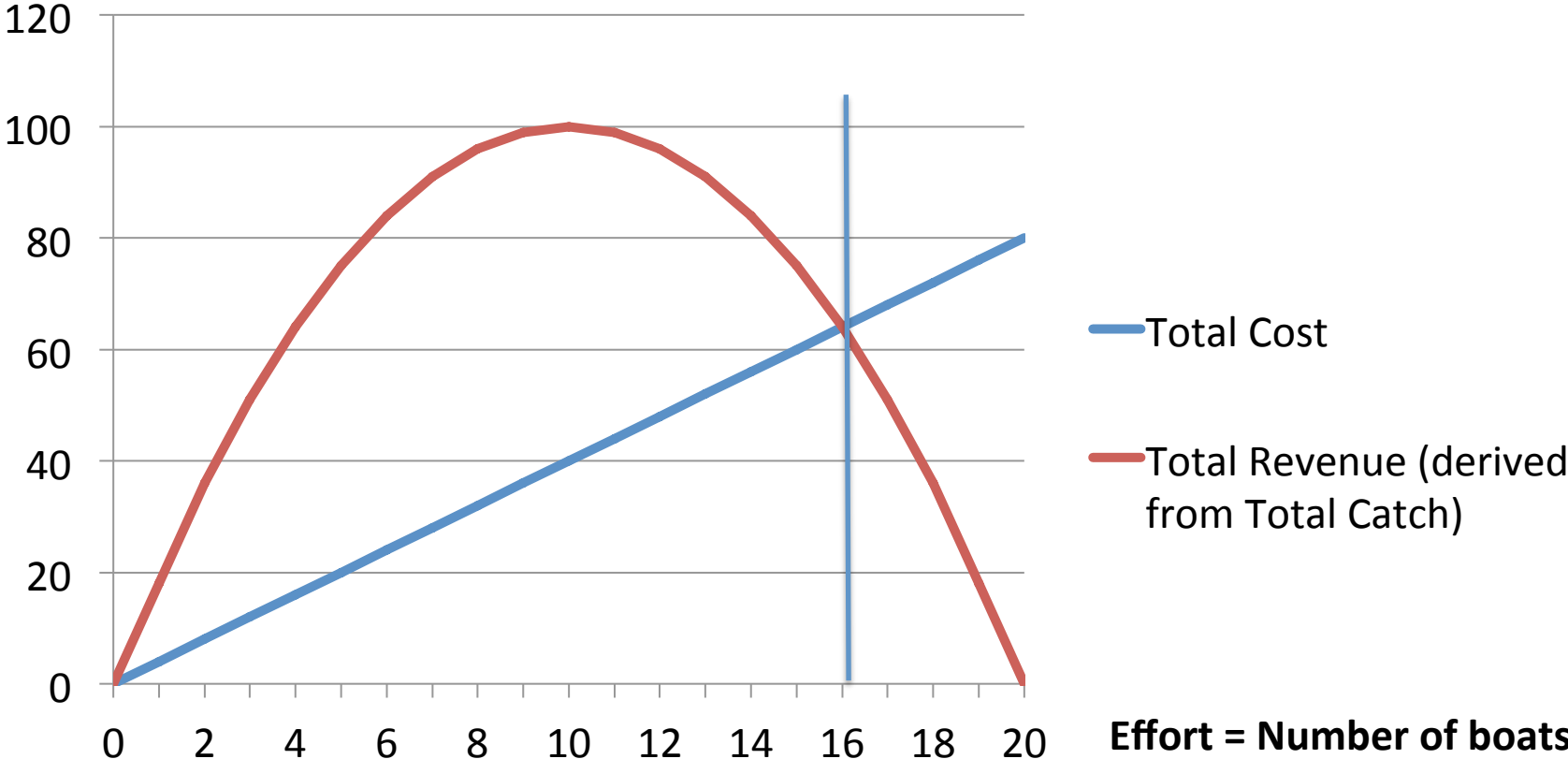
# Fishing salmon in rivers

- Each valley had a river, often with salmon
- Temptation of each farmer to overfish, to detriment of whole community
- Solution: Fishing rights, quotas, belonging to each farm
- Nowadays: Each farm a given number of fishing rods per day per season, in effect effort quotas
- Not efficient in one sense, but efficient in another sense: Point of salmon fisheries not maximisation of profit, but of leisure outdoors

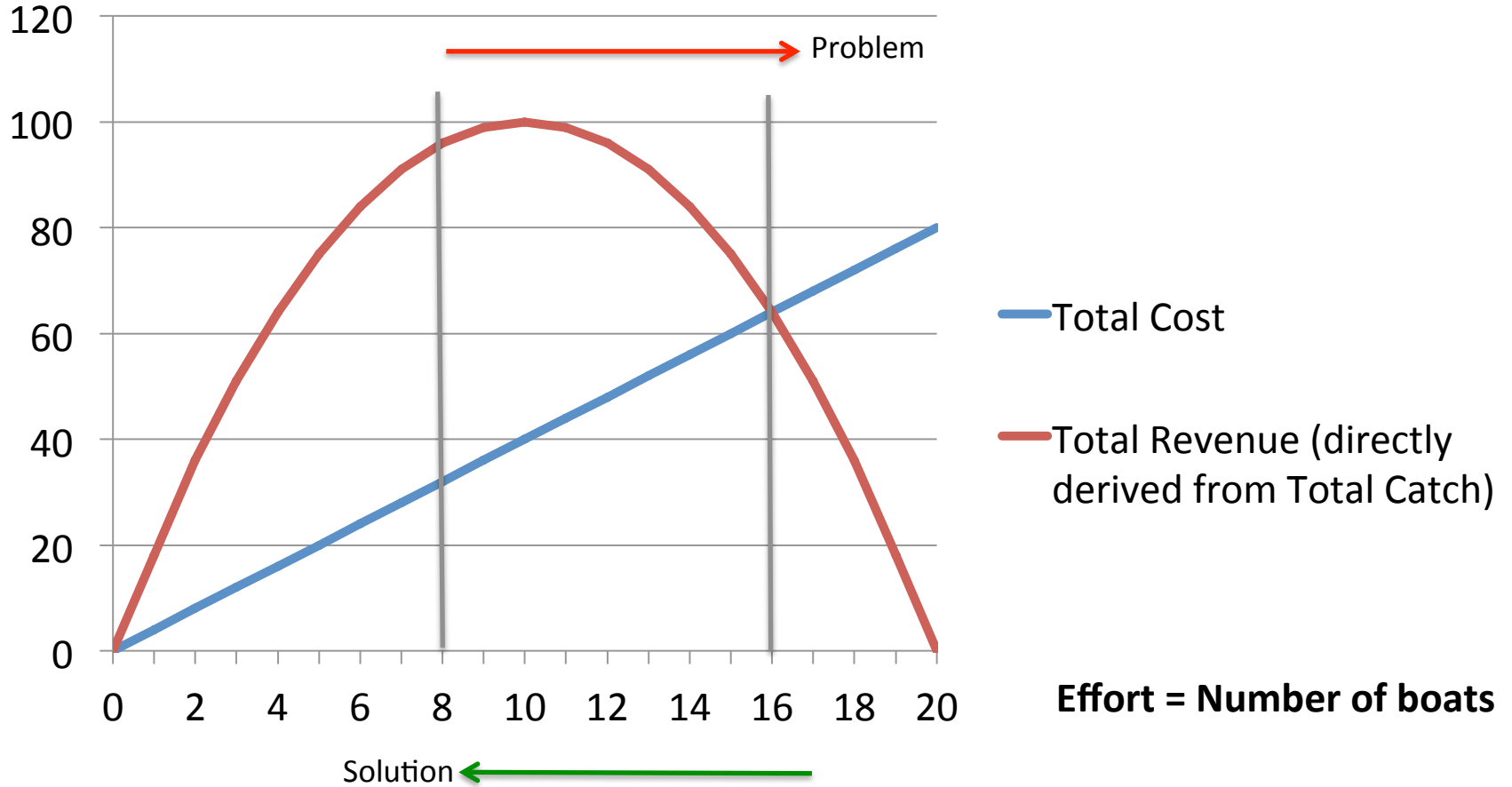
# Harvesting fish offshore

- In absence of clearly defined rights, quotas: economic overfishing
- Boats added until profit goes down to zero
- Solution: Individual transferable quotas held by boats (i.e. boat owners)
- ITQs: shares of total allowable catch over season
- Ensures minimisation of cost; consequently, maximisation of profit (Arnason)

# Gordon's Model of Overfishing



# The Problem and the Solution





# Two Solutions

- Market solution (Coase): Give transferable quotas to boats on basis of catch history (grandfathering)
- End result: 8 more efficient buy out 8 less efficient
- Government solution (Pigou): Auction off quotas to boats
- End result: 8 more efficient buy quotas, 8 less efficient leave fishery
- Not identical solutions!

# Different Solutions

- Initial allocation on basis of catch history: 8 boat-owners bought out, not driven out
- Initial allocation on basis of ability to pay government in auction: 8 boat-owners driven out, not bought out
- Coase's solution Pareto-optimal: Nobody worse off
- Pigou's solution not Pareto-optimal: 8 less efficient much worse off, boats, equipment, human capital worthless

# Pigovian Analysis Incorrect

- Overfishing classic example of harmful effects of economic activities: fishermen impose costs on one another, tragedy of commons
- Coase's solution: fishermen cease to impose costs on one another, resource priced, people negotiate themselves out of a problem
- Pigou's solution: one harmful effect (auction cost for 8 more efficient, loss of livelihood for 8 less efficient) replaces another (excessive harvesting cost for all)

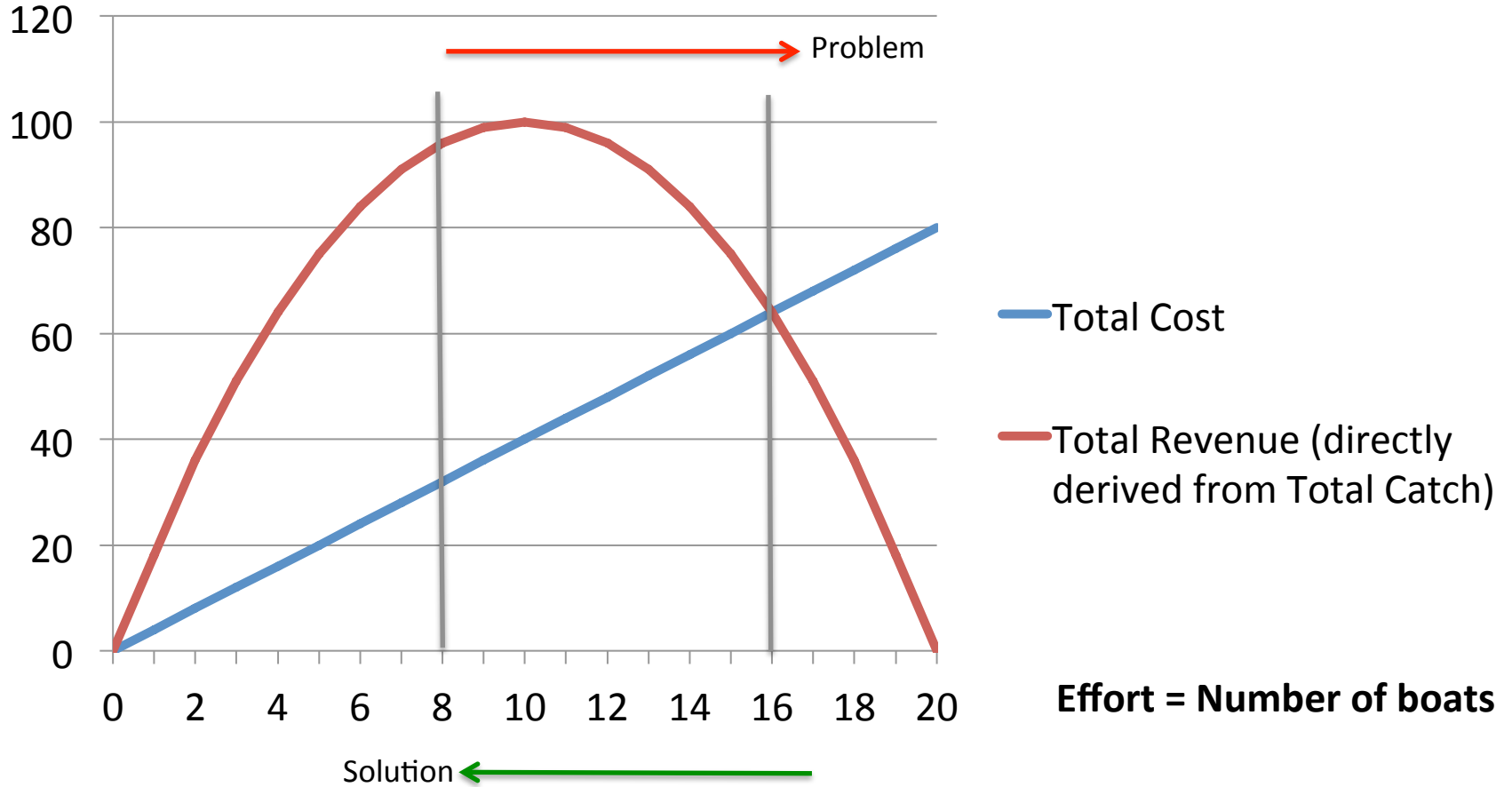
# Ethically and Politically Wrong

- Ethically wrong because 8 less efficient have their frame of reference suddenly removed, their reasonable expectations of past completely disregarded
- Politically wrong because community of 16 boat owners will never accept a solution whereby 8 are driven out; impossible in a democracy
- Economically wrong also, because government tenants will not guard fish stocks as carefully as owners of use rights, e.g. setting of TACs

# Pigovian Analysis Misses the Point

- Free society purposeless, not pointless
- Point: to find laws by which individuals can accommodate themselves to one another
- Only one group bearing cost of open access: owners of capital in fisheries
- No “present” or transfer of value: Rather, development of right to create wealth where it previously had been dissipated
- Enclosing fisheries commons: Which right taken away? The right to run a fishing firm at zero profit: Worthless right; no harm in removing it

# Remember Gordon's Model!



# Whale Dispute



# Relevant Facts

- 44,000 Minke whales and 26,000 Fin whales in Icelandic waters
- Only a small amount harvested
- Eat 6 million tonnes of seafood, including 1.5 million tonnes of fish; the Icelanders harvest 1.5 million tonnes of fish
- Two possibilities: whales eat from man, or whales find and process food which man has been unable to find and process



# Economic Analysis of Whaling

- Gordon's 1955 model in *Journal of Political Economy*: exclusive use rights solve problem
- Colin Clark in *Science* 1973: no, because whale rate of growth lower than social discount rate
- Grafton, Kompas and Hilborn in *Science* 2007: Clark not correct, because cost rises for effort unit
- Costello, Gerber and Gaines in *Nature* 2011: defining exclusive use rights to whales

# Ethical Considerations

- Preservation or conservation?
- Whale preservationists conducted campaigns against Icelandic companies unrelated to the whaling company: shot “innocent bystander”
- Now they impose costs on Icelandic fishermen and whalers
- Similar to you driving “your” cows into my meadow to graze there, but refusing to compensate for it
- Whale preservationists deny people ample, healthy, nutritious food which whales provide

# Mackarel Dispute



# Relevant facts

- Mackarel not charismatic megafauna like whale, but tasty food, much in demand
- Because of sea warming, migrated from EU waters to Icelandic waters; 30% of stock there
- Able predator, eating krill, crustaceans, small fish, growing rapidly, gaining weight
- Like a Biblical “plague of locusts” (grasshoppers)
- EU doesn’t want Icelanders to harvest more than a small proportion of mackarel stock; threatens trade sanctions

# Ethical Considerations

- EU not exemplary in fisheries conservation, witness CFP
- EU wants to “graze” mackarel in Icelandic “meadows”, but not to allow Icelanders to benefit from it
- Case of harmful effect of economic activities
- Only fair solution by negotiation
- Always same choice: Coercion or contract?  
Visible fist of government or invisible hand of free market

