



UNIVERSITY OF ICELAND

The Ethics and Politics of Appropriation

ITQs and Other Use Rights to Resources

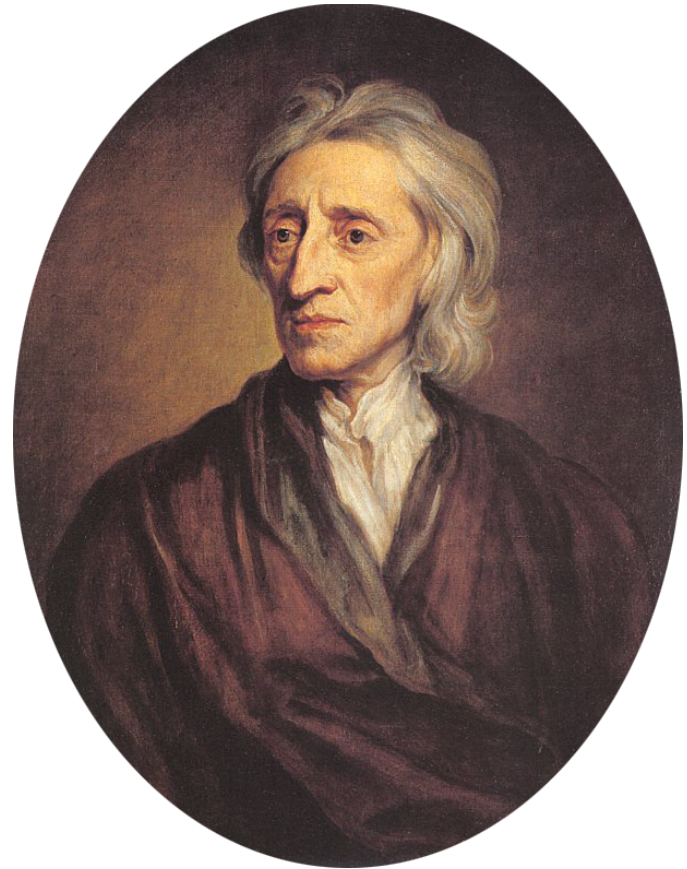
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Sociedad Nacional de Pesquería

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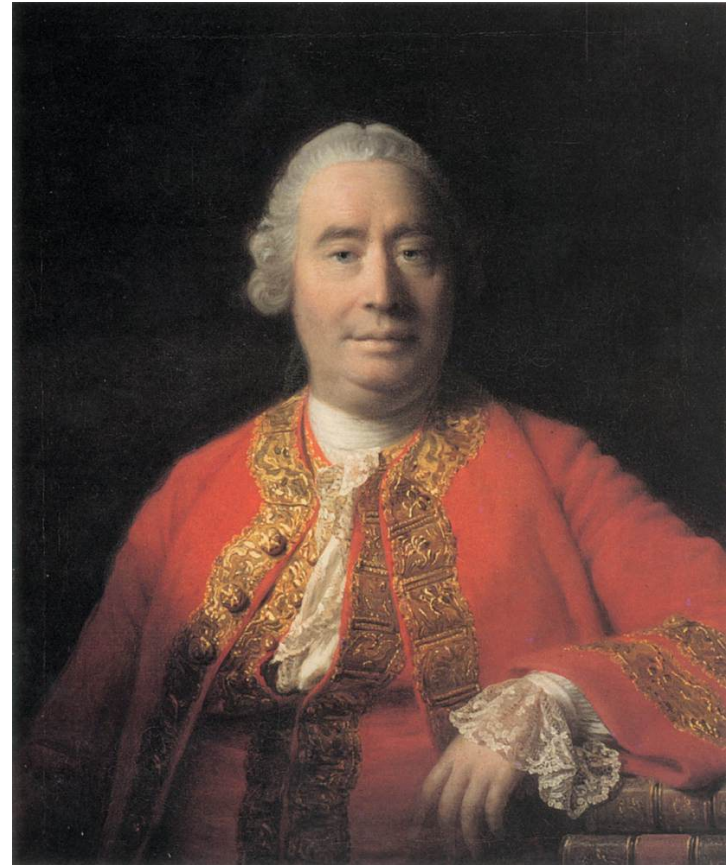
The Right to Exclude: How?

- How can people come to have rights to exclude others from use of goods?
- Locke: Because those others are not made worse off (indeed much better off)



The Right to Exclude: Why?

- Why should people have rights to exclude others from use of goods?
- Hume: Because scarce resources have to be allocated so that they can be transferred into their most efficient use



The Feasibility of Excluding

- Land can be fenced off
- Cattle can be branded
- But what about indivisible goods?
- Radio frequencies?
- Mountain pastures?
- Salmon rivers?
- Offshore fishing grounds?

Radio Frequencies in U.S.

- In 1920s, radio stations emerged, broadcasting in different locations on different frequencies
- If locations and frequencies became too close, the stations interfered with one another
- Courts were beginning to recognise individual rights of exclusion, on principle of first occupancy

Radio Spectrum Nationalised

- In 1927, Congress decided that radio spectrum should be held by the public
- After that, broadcasting rights have been allocated by government in a “beauty contest”
- Money wasted in rent-seeking, i.e. costs of acquiring broadcasting rights
- Freedom of speech reduced

Mountain Pastures in Iceland

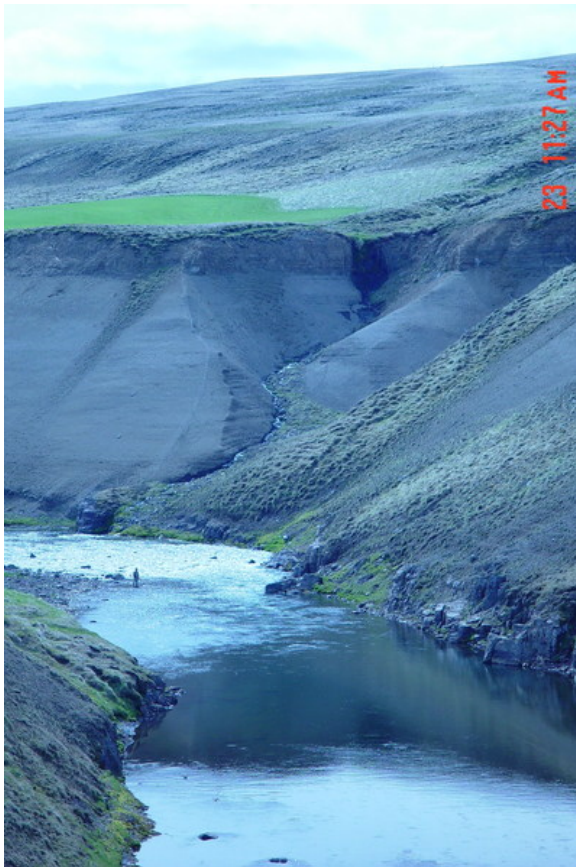


- In saga period (10th and 11th centuries) 4,000 farmers in valleys, mostly rearing sheep
- In winter, sheep were fed in barns
- In summer, sheep grazed in mountains

Grazing Rights

- Mountain pastures: held in common because fencing and monitoring costs too high
- Temptation for each farmer to keep too many sheep: benefit captured by him and cost imposed on all
- Solution: Grazing rights or “quotas” defined to each farm
- The old Icelandic Law Book: Filling the pasture, with the sheep returning as fat as possible

Salmon Rivers in Iceland



- Salmon feed in sea and travel up their natal rivers to spawn
- 20-30 riparian farmers share access
- Temptation for farmers close to sea to harvest

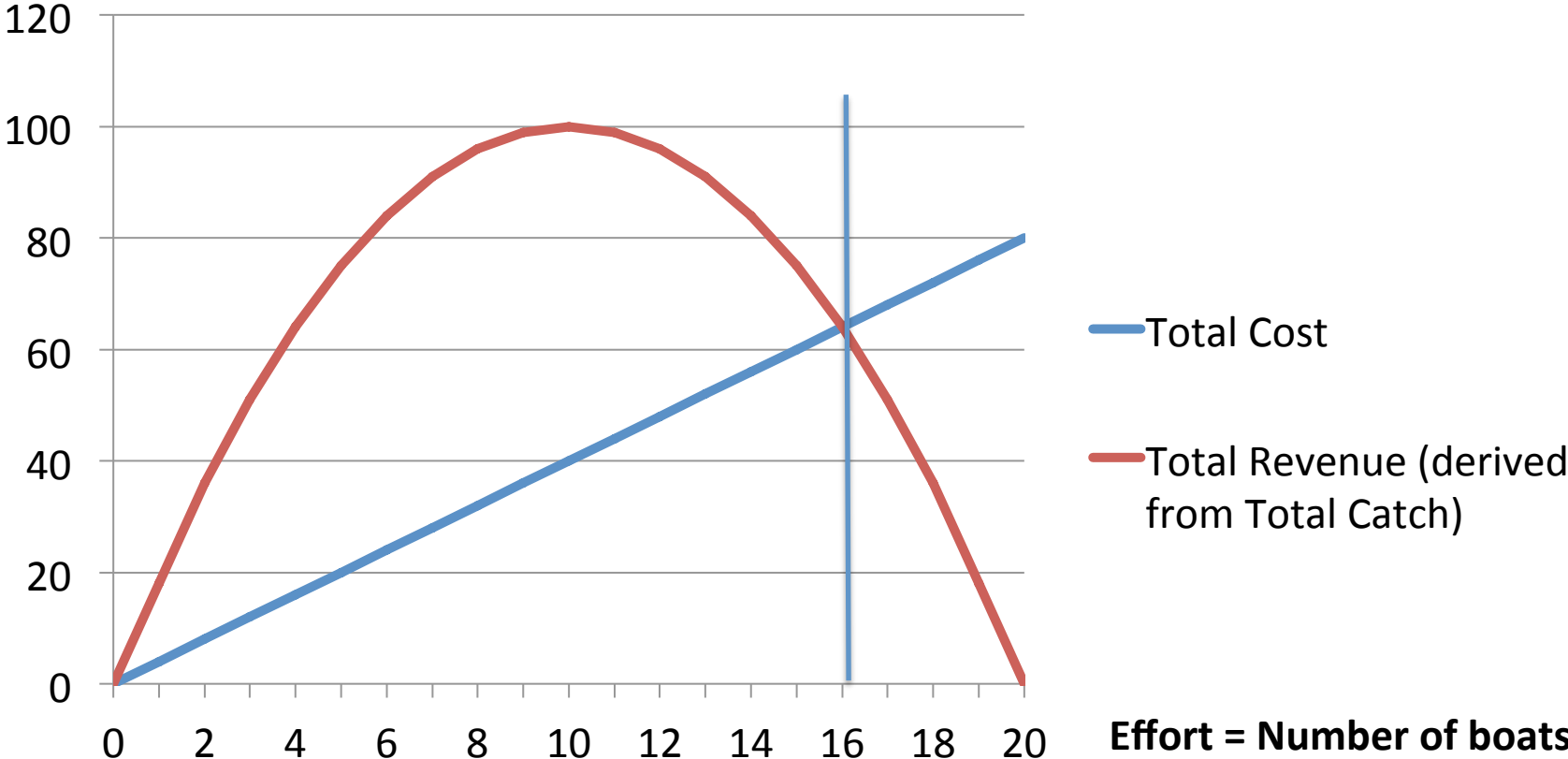
Salmon Fishing Rights

- Each riparian farmer owns a right to the use of a preset number of rods
- Together, they form fishing associations which rent the “rod rights” out to recreational fishermen
- Amounts to private property rights to a part of the salmon fish stock of the river
- Non-transferable and limited to certain gear, i.e. rods

Offshore Fisheries in Iceland

- Fishing grounds difficult to fence off
- Resource occurs on an immense scale
- Some fish stocks (e.g. herring) fugitive
- Biological overfishing: Herring stock collapsed in 1960s, and cod stock almost collapsed in 1970s
- Economic overfishing: Too many boats chasing the fish

Gordon's Model of Overfishing



Overfishing: From 8 to 16

- When access to fishing grounds free, effort (number of boats) increases until revenue goes down to nothing (total revenue equals total cost)
- Best to maximise profit (difference between revenue and cost), not catch
- In effect, 16 boats harvest what 8 boats could harvest: Rent dissipated

Iceland's EEZ since 1975



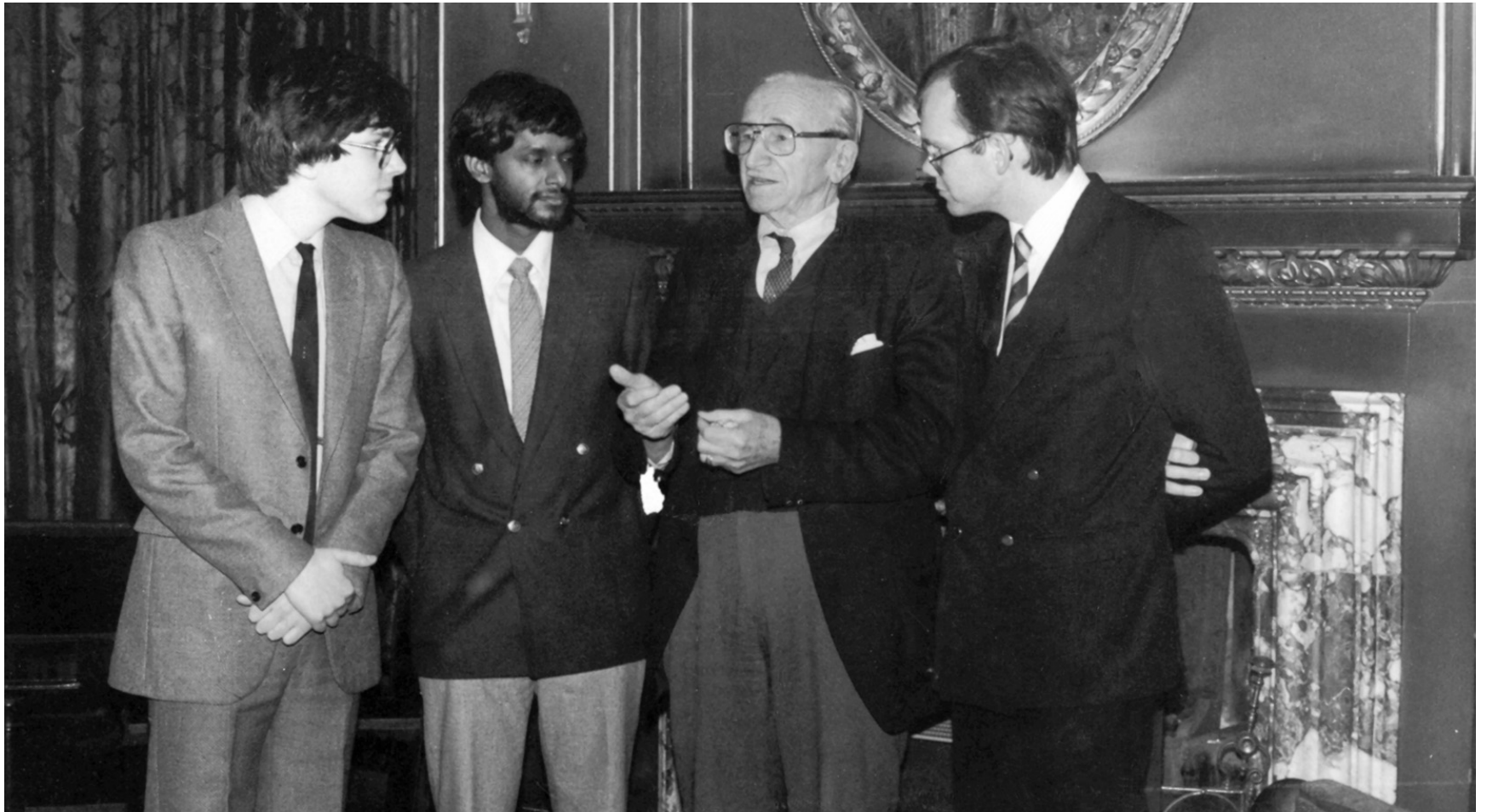
Development of ITQ System

- Effort quotas (allowable fishing days) imposed in 1977
- “Derby”: Costly race to capture as much as possible in allowable days
- Catch quotas imposed in 1983, allocated on basis of catch history
- Gradually became transferable, and system made comprehensive in 1990

My personal involvement

- In 1980, I suggested developing private use rights in fisheries
- In 1983, I published an article on this in Economic Affairs, while a postgraduate student at Oxford
- In 1990, I published a book in Icelandic supporting the ITQ system
- In 2000, I published a monograph for IEA on fisheries
- In 2015, I published a collection of papers on this

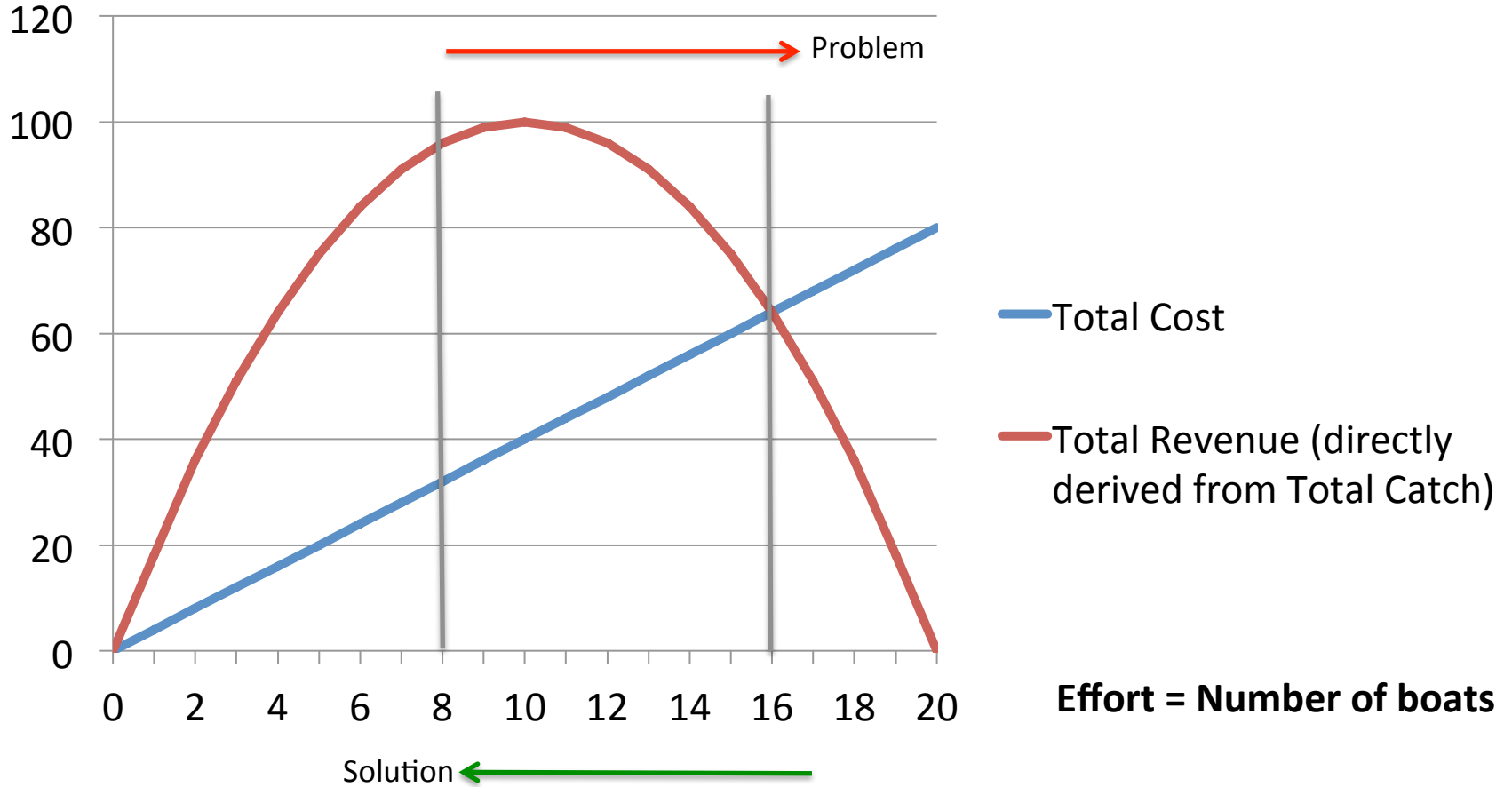
Hayek's Disciple



How ITQ System Works

- Ministry of Fisheries sets TAC, total allowable catch per season, in each fish stock
- Owners of fishing vessels hold ITQs, individual transferable quotas, i.e. rights to harvest a given % of the TAC in a fish stock
- Catches Monitored at landing

The Problem and the Solution



Efficient System

- Individual: Each bears responsibility for his own operations
- Permanent: Fishermen have long-term interest in profitability of resource
- Transferable: The 8 more efficient buy out the 8 less efficient
- Rent, previously dissipated in excessive harvesting costs, now captured

Initial Allocation by Auction?

- In theory, same result: reduction of fleet from 16 to 8
- But who would support enclosure of fishing grounds?
- And would fishermen have same interest in long-term profitability of resource?
- And would the rent be as well invested by government?

Locke v. George

- Georgism: Government should capture all resource rent, because unearned
- Locke: Some (e.g. vessel owners) can come to hold rights to exclude others from the use of goods (e.g. fish stocks), if those others are not made worse off
- Lockean Proviso met in Icelandic fisheries

Who is Made Worse Off?

- In initial allocation by auction, government much better off, 8 remaining boatowners in same position, 8 retiring boatowners in worse position
- In initial allocation on basis of catch history, government slightly better off, 8 remaining boatowners better off, 8 retiring boatowners also better off

Pareto-Optimality

- Social change Pareto-Optimal, if no-one worse off, and some or all better off
- Initial allocation by government auction not Pareto-optimal
- Initial allocation on basis of catch history Pareto-optimal: Fishermen bought out, not driven out; others only deprived of a worthless right

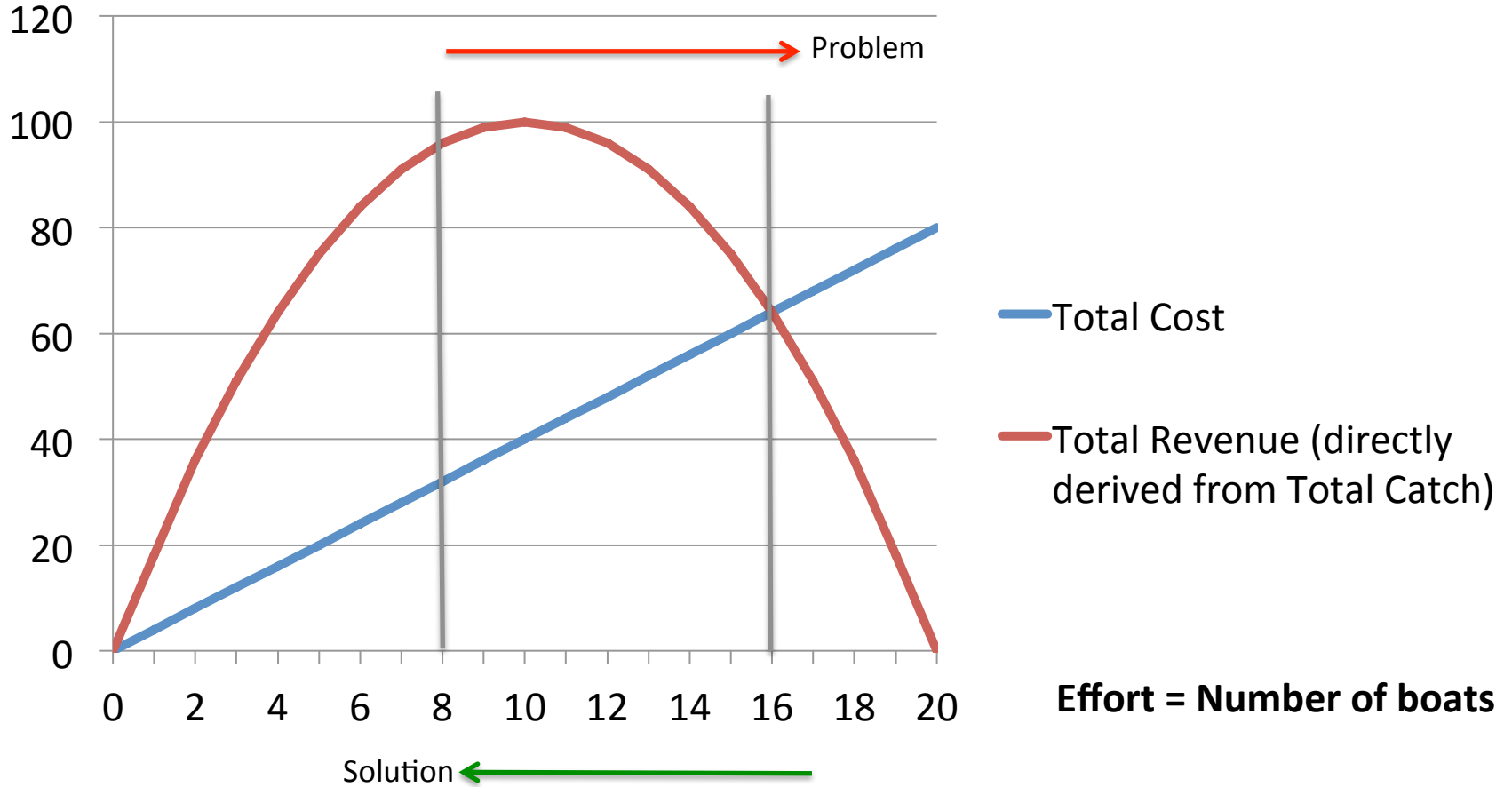
Pigou v. Coase

- Auction idea Pigovian: Pigou proposed access fees (e.g. road tolls) to eliminate harmful effects (e.g. road congestion)
- Coase: Why replace one cost (congestion or overfishing) with another one (government tax, fee or toll)?
- Better to define property rights, such as ITQs

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!



Some Similarities

- ITQs are rights to a certain use of a resource in a commons
- Similar to grazing rights in Icelandic mountain pastures
- Would have been similar to emergent broadcasting rights in U.S. (whose development was hindered by law)

Some Differences

- Broadcasting interference audible: harmful effects clear to all
- Economic overfishing invisible, and brought out by economic analysis
- Effort quotas in salmon rivers, because it is about leisure
- Catch quotas in offshore fisheries, because commercial, i.e. about minimising costs

Main Lessons

- Even if resources are non-exclusive, e.g. fishing grounds, some exclusive use rights in them can be developed
- U.S. took wrong turn by not developing broadcasting rights
- Iceland took right turn by developing fishing rights, the ITQs
- Good fences make good neighbours

However: Resentment of the Rich

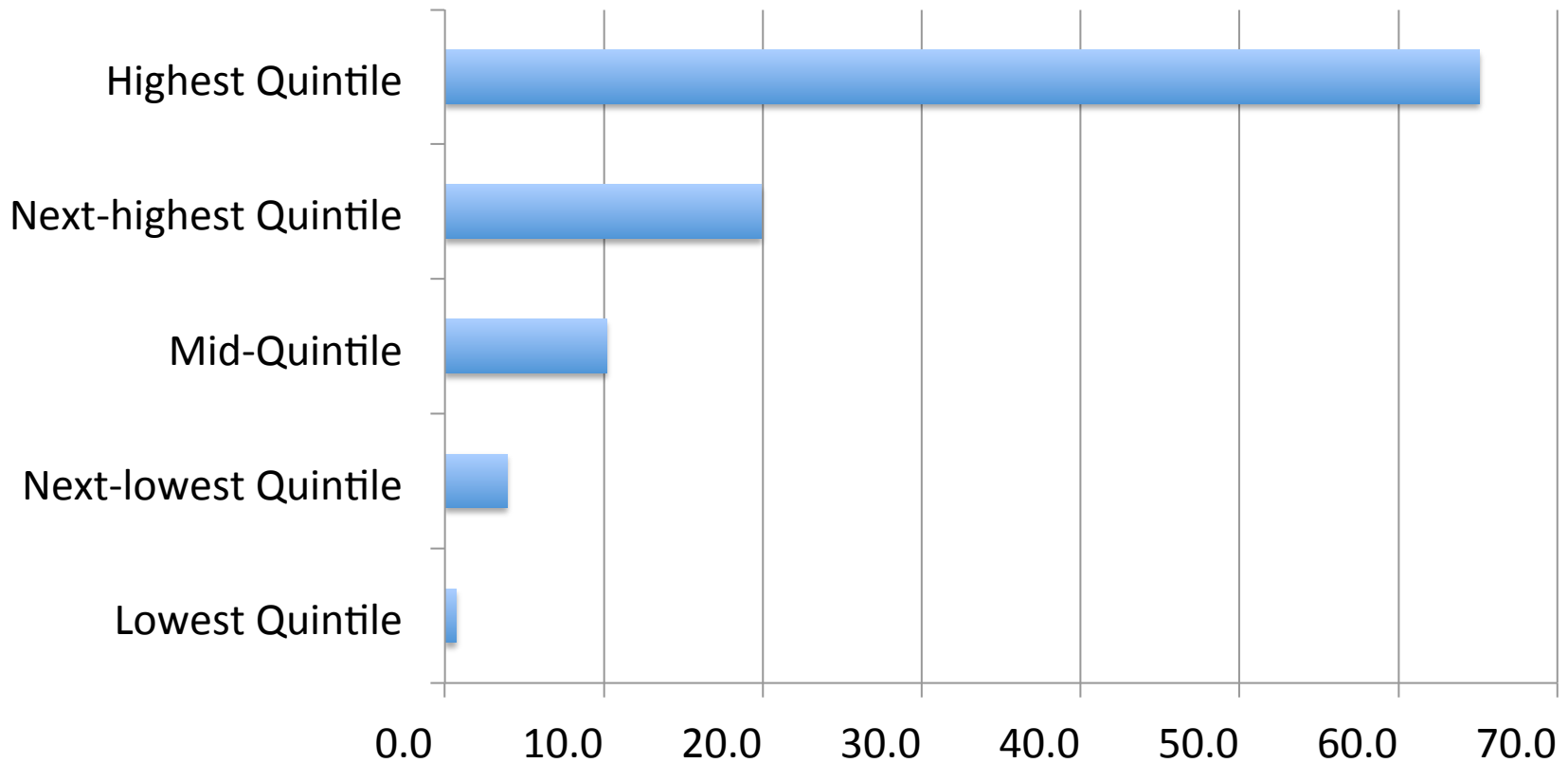
- Good fences also make rich neighbours
- Initial recipients of ITQs derive fisheries rent, sometimes substantial amounts
- Despite its success, ITQ system therefore resented in Iceland
- But better to buy people out than to drive them out
- Nobody worse offer by development of exclusive use rights (remember Locke!)

Pace Piketty: We Need the Rich

- Piketty's confiscatory taxes would become a self-fulfilling prophecy
- Immense creative powers of capitalism
- Almost unlimited possibilities of economic growth
- Capitalism needs innovators, entrepreneurs and investors
- Welfare state needs taxpayers

Sustaining the Welfare State

Proportion of US Total Tax Payments in 2000



Rand's Thought Experiment

- The rich contribute most of tax revenue
- What happens if they emigrate (as they sometimes do)?
- What happens if they choose to disappear?
Theme of Rand's *Atlas Shrugged*



Further Benefits of the Rich

- Pay for experimental process to turn luxuries into necessities
- Provide risk capital; 1,000 experiments instead of 10
- Have means to fight bureaucratic aggression and government oppression



