

Principles of Economics
When Competitive Markets Cannot Work
Optimally

Non-Excludibility: Introduction

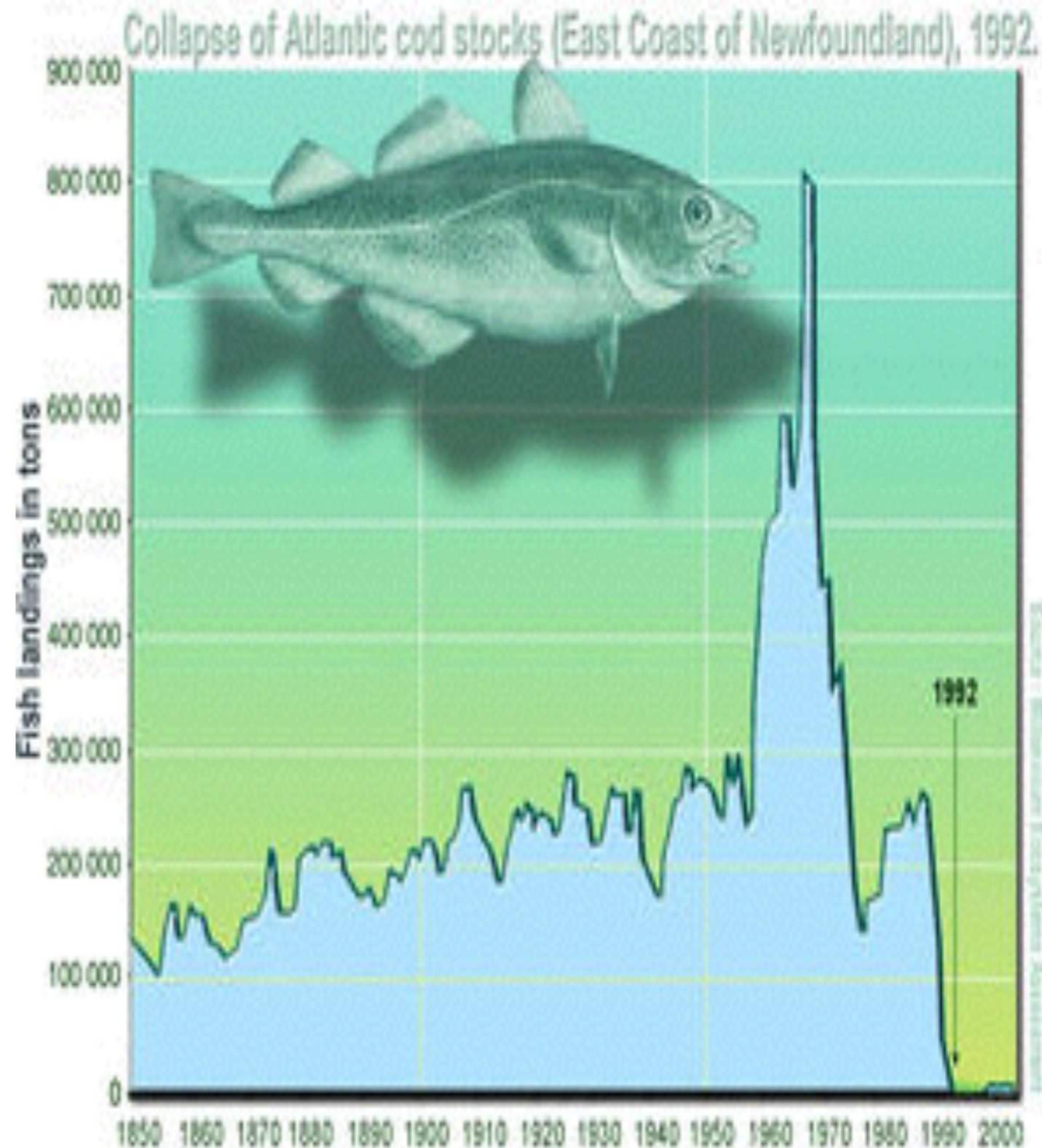
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Non-Excludibility

- When you cannot keep other people from making use of and deriving utility from your stuff...
- Thus you cannot charge them a price for it...
- And there is no incentive for you to produce, **or safeguard...**

Non-Excludibility II

- When you cannot keep other people from making use of and deriving utility from your stuff...
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Fixes for Non-Excludibility

- When you cannot keep other people from making use of and deriving utility from your stuff...
 - Thus you cannot charge them a price for it...
 - And there is no incentive for you to produce, **or safeguard...**
- Fixes for non-excludibility
 - Strengthen **legal property rights...**
 - Locks, keys, etc. to make the non-excludible excludible...
 - Sell some ancillary service (i.e., eyeballs)...
 - Use market power to compensate
 - Monopolist and near-monopolist incentives to engage in R&D

Non-Excludibility Has a Close Relationship with Non-Rivalry

- **A. Rival, Excludible**

- Competitive market rules
 - (save for maldistribution, miscalculation, adverse selection)

- **B. Rival, Non-Excludible**

- Externalities
- Resource depletion as canonical case

- **C. Non-Rival, Excludible**

- “Natural monopoly” as canonical case

- **D. Non-Rival, Non-Excludible**

- “Pure public good”
- Public provision
- But also:
 - ancillary services/advertising supported
 - market power can help

In Fact, There Are a Bunch of Links Among a Quadrivium of Market Failure Devils...

- Non-rival + excludible —> monopoly and market power
 - In fact, it is hard to see how there can be market power without increasing returns *somewhere...*
 - Without increasing return somewhere, markets are *contestable* hence *competitive...*
 - And without non-rivalry somewhere, there are no increasing returns...
- Rival + non-excludible —> externality and resource depletion
 - In fact, if things are excludible then there are no externalities, are there — at least not if property rights are appropriately allocated

But the Trivium Remains to One Side

- Maldistribution
- Miscalculation
- Adverse selection

The Four Rivalry-Excludibility Boxes...

- We have done (A) to death...
- We have done a lot of (C)
- We have done (B)—but there would be more to do in the way of resource management and resource depletion if we had time
- There are three things to do with (D):
 - The theory of public goods
 - The theory of ancillary service-supported markets
 - How market power can help

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