Investing in Fishery Recovery

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- Current status and trends in global fisheries
- A case for investing in fishery recovery?
- Country-level upside
- Institutional roadblocks & solutions

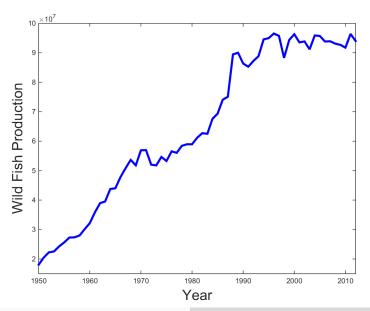
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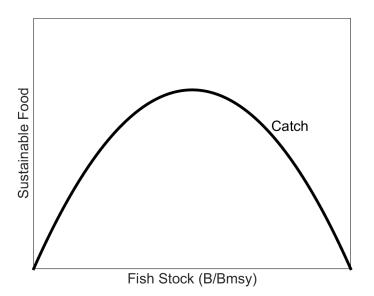
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Global wild fish production

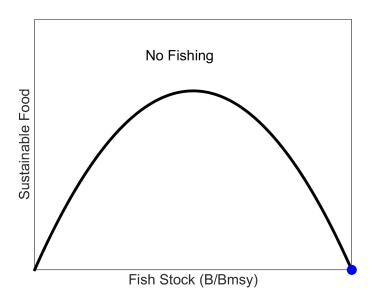




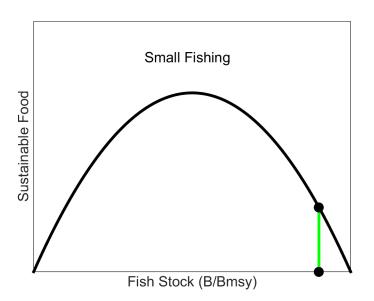
Biology: fish growth



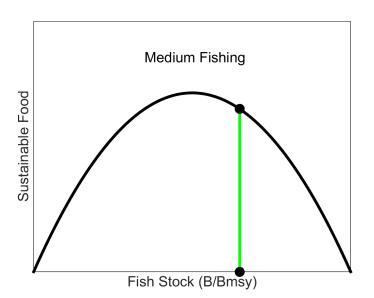
Fishery status: 1800



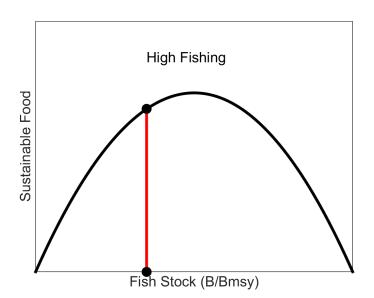
Bioeconomics: low fishing



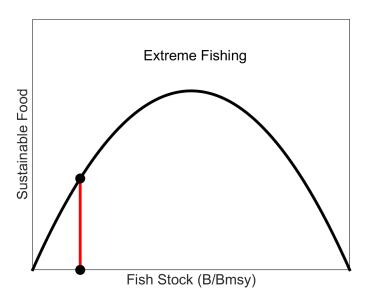
Bioeconomics: medium fishing



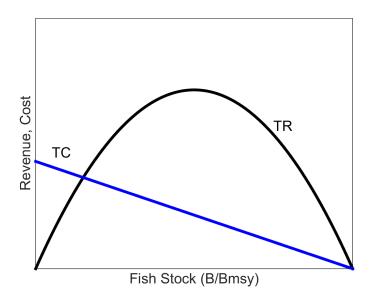
Bioeconomics: over-fishing



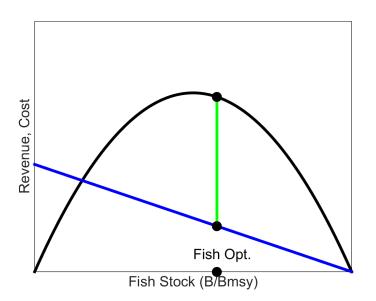
Bioeconomics: extreme over-fishing



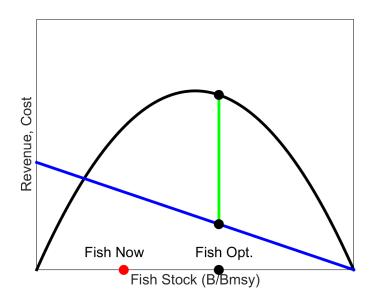
Bioeconomics: revenue & costs



Bioeconomics: optimal condition

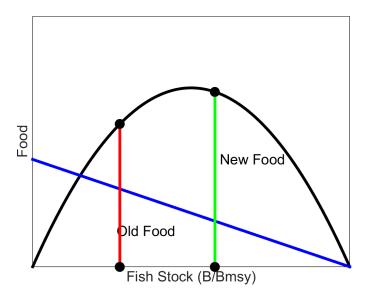


Bioeconomics: current condition

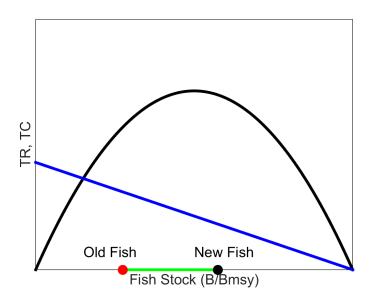




Food upside

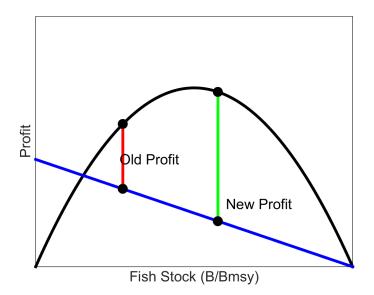


Fish upside

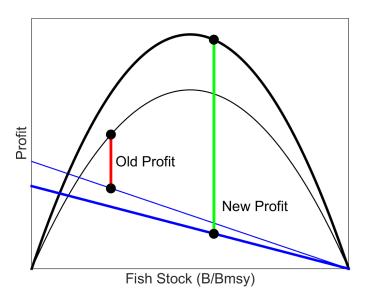




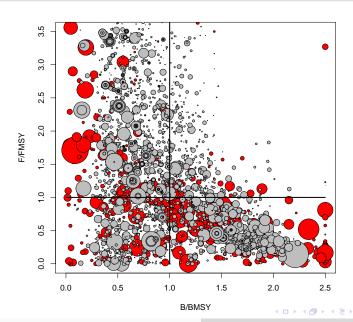
Profit upside



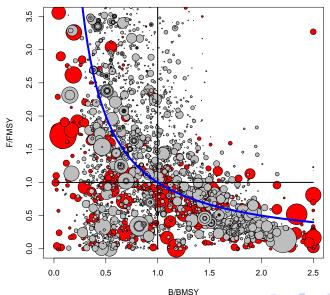
Institutional reforms



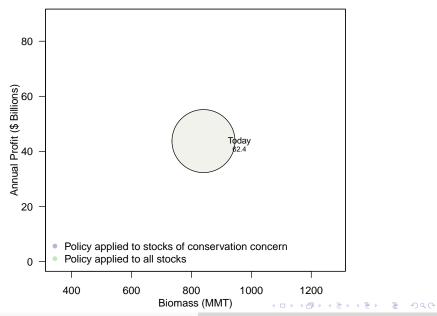
Current status of global fisheries



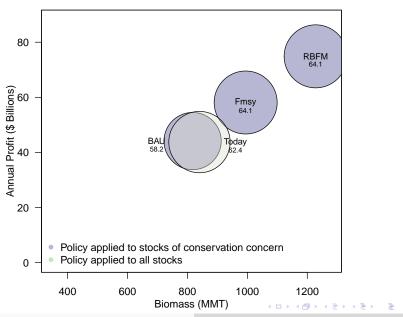
Current status: Can harvest increase?



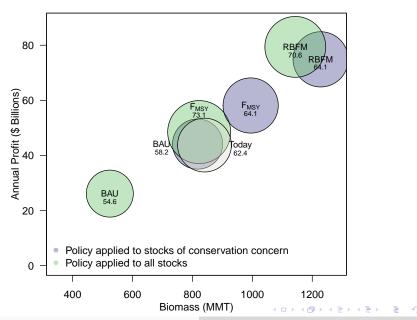
Global investment opportunity: Today



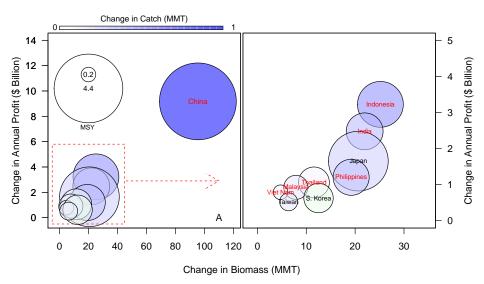
Global investment opportunity: 2050 (at-risk)



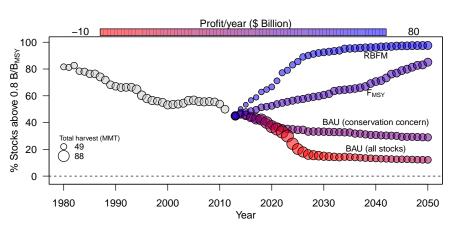
Global investment opportunity: 2050 (all stocks)



Opportunities by country



Timing of effects



The key question

If the upside is so massive, why don't we see more investment?

Institutional barriers

- Fishery recovery: short-term loss for long-term gain
- Investing in fishery recovery requires:
 - Securitizing future benefits tap future benefits
 - May require some for of de facto or de jure property rights
 - Examples:
 - Formal ITQs, TURFs, Cooperatives
 - Market power
 - Informal institutions that enclose the fishery
 - Information on investment opportunity
 - Risk profiles and financial tools for managing it
- If these exist, then expect investment to flow (e.g. ITQ)



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- Provide analysis of upside
- Help analyze risk (environmental, political, economic)
- Design portfolios and other instruments to de-risk

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