# Investing in Fishery Recovery 

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## Goals for this talk

- Current status and trends in global fisheries
- A case for investing in fishery recovery?
© Country-level upside
- Institutional roadblocks \& solutions
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(2) A case for investing in fishery recovery?
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## Global wild fish production



Biology: fish growth


Fish Stock (B/Bmsy)

Fishery status: 1800


Fish Stock (B/Bmsy)

## Bioeconomics: low fishing



Fish Stock (B/Bmsy)

## Bioeconomics: medium fishing



Fish Stock (B/Bmsy)

Bioeconomics: over-fishing


Fish Stock (B/Bmsy)

## Bioeconomics: extreme over-fishing



Fish Stock (B/Bmsy)

Bioeconomics: revenue \& costs


Fish Stock (B/Bmsy)

Bioeconomics: optimal condition


Bioeconomics: current condition




## Profit upside



Fish Stock (B/Bmsy)


Fish Stock (B/Bmsy)

## 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



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)
( Help match institutions with fisheries to facilitate investment
(2) Provide analysis of upside
(3) Help analyze risk (environmental, political, economic)
(4) Design portfolios and other instruments to de-risk


## What can economists do?

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