How can the financial sector be a productive force in climate change mitigation?

The role of public policy makers and private sector innovation

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A structural issue requires a structural solution
The financial sector and climate change mitigation

- “Greenhouse gas (GHG) emissions are externalities and represent the biggest market failure the world has seen”
  - Stern, AER 2008.

- How does the financial sector work? Separate between structural and marginal issues.

- How can we alter the decision making process in current and future corporations?
  - Finance is not about amounts of capital needed it is about how to allocate the capital.
Finance is about valuation and allocation of capital

- Make clean (dirty) technology development and use more (less) valuable and thus channel more (less) capital toward these projects.

- Asset valuation and decision making in corporations are carried out using this formula:

\[ NPV = CF_0 + \frac{CF_1}{(1 + r_1)} + \frac{CF_2}{(1 + r_2)^2} + \ldots + \frac{CF_N}{(1 + r_N)^N} = \sum_{n=0}^{N} \frac{CF_n}{(1 + r_n)^n} \]

- Taxes and subsidies affect cash flows (outside financial sector).

- Risk etc. affect cost of capital (financial sector).
Private sector initiatives

• “Sustainable finance” solutions:
  • Corporate social responsibility (CSR).
  • Environment, Social and Governance (ESG).
  • Green bonds.
    • Represent 0.2% of the bond market.

• Are these solutions targeting the structural issue?
How can we affect cash flow generation

- We should be taxing dirty production and subsidizing clean.

- **Fossil fuel:**
  - Subsidies of between $300 billion to $5 trillion per year globally depending on measurement.
  - Carbon tax revenues a little under $30 billion per year.

- **Renewable energy:**
  - Global annual investment around $300 billion.
  - $>90\%$ from private sources.
    - $93\%$ of private capital stays within the country of origin.
... and

- Thank you for your attention!