Why Divest? The Political and Informational Roles of Institutions in Asset Stranding

Murray Carlson, Adlai Fisher, and Ali Lazrak
University of British Columbia
Sauder School of Business

ESEM 2023
Barcelona
July 19, 2023

Motivation: Divestment and the Green Transition

- Focal point of finance literature on divestment is cost-of-capital channel (Heinkel, Kraus, and Zechner, 2001)

Motivation: Divestment and the Green Transition

- Focal point of finance literature on divestment is cost-of-capital channel (Heinkel, Kraus, and Zechner, 2001)
  - Quantitative effect of divestment is small (Berk and van Binsbergen, 2021)

Motivation: Divestment and the Green Transition

- Focal point of finance literature on divestment is cost-of-capital channel (Heinkel, Kraus, and Zechner, 2001)
  - Quantitative effect of divestment is small (Berk and van Binsbergen, 2021)
  - Voice in corporate governance also argues against divestment (Broccardo, Hart, and Zingales, 2020)

Motivation: Divestment and the Green Transition

- Focal point of finance literature on divestment is cost-of-capital channel (Heinkel, Kraus, and Zechner, 2001)
  - Quantitative effect of divestment is small (Berk and van Binsbergen, 2021)
  - Voice in corporate governance also argues against divestment (Broccardo, Hart, and Zingales, 2020)
- Globally, $1,500$ institutions with assets that total \$$40tn$ had committed to divestment of fossil fuel stocks as of March 2022
  - E.g., universities, churches, pension funds, governments, corporations, philanthropic endowments

Motivation: Divestment and the Green Transition

- Focal point of finance literature on divestment is cost-of-capital channel (Heinkel, Kraus, and Zechner, 2001)
  - Quantitative effect of divestment is small (Berk and van Binsbergen, 2021)
  - Voice in corporate governance also argues against divestment (Broccardo, Hart, and Zingales, 2020)
- Globally, $1,500$ institutions with assets that total \$40*tn* had committed to divestment of fossil fuel stocks as of March 2022
  - E.g., universities, churches, pension funds, governments, corporations, philanthropic endowments
- **Key point:** Divestment has a political angle

Political angle on divestment

- Political foundation: Institutions

Political angle on divestment

- Political foundation: Institutions
  - Divestment is a collective decision in an institution with stakeholders who disagree on the harm (externality)

Political angle on divestment

- Political foundation: Institutions
  - Divestment is a collective decision in an institution with stakeholders who disagree on the harm (externality)
  - The process of deliberation within the institution produces some information on the externality

Political angle on divestment

- Political foundation: Institutions
  - Divestment is a collective decision in an institution with stakeholders who disagree on the harm (externality)
  - The process of deliberation within the institution produces some information on the externality
- Political implications: Divestment changes the incentives to vote on future contentious pro-environmental regulations

Political angle on divestment

- Political foundation: Institutions
  - Divestment is a collective decision in an institution with stakeholders who disagree on the harm (externality)
  - The process of deliberation within the institution produces some information on the externality
- Political implications: Divestment changes the incentives to vote on future contentious pro-environmental regulations
  - Political channel: Citizens who divest are more likely to vote in favor of pro-environmental regulations

Political angle on divestment

- Political foundation: Institutions
  - Divestment is a collective decision in an institution with stakeholders who disagree on the harm (externality)
  - The process of deliberation within the institution produces some information on the externality
- Political implications: Divestment changes the incentives to vote on future contentious pro-environmental regulations
  - Political channel: Citizens who divest are more likely to vote in favor of pro-environmental regulations
  - Informational channel Divestment may reveal to citizens from outside the institution the information produced by the institution

Political angle on divestment

- Political foundation: Institutions
  - Divestment is a collective decision in an institution with stakeholders who disagree on the harm (externality)
  - The process of deliberation within the institution produces some information on the externality
- Political implications: Divestment changes the incentives to vote on future contentious pro-environmental regulations
  - Political channel: Citizens who divest are more likely to vote in favor of pro-environmental regulations
  - Informational channel Divestment may reveal to citizens from outside the institution the information produced by the institution

Regulation: Vote to Strand a Harmful Asset

- Strand = regulate out of use (milder versions: taxes, caps, ...)
- Harmful Asset = externality causing, e.g., climate change

Regulation: Vote to Strand a Harmful Asset

- Strand = regulate out of use (milder versions: taxes, caps, ...)
- Harmful Asset = externality causing, e.g., climate change
- Widespread agreement on social planner solutions (e.g., carbon tax), but difficulties in implementation due to political failures:

Regulation: Vote to Strand a Harmful Asset

- Strand = regulate out of use (milder versions: taxes, caps, ...)
- Harmful Asset = externality causing, e.g., climate change
- Widespread agreement on social planner solutions (e.g., carbon tax), but difficulties in implementation due to political failures:
  - Tragedy of the commons between national governments (Hardin, 1968)
  - Voters ignorance (Downs, 1957)
  - Failures associated to political representation
    - Policy commitment impossibility due to election cycles etc. (Rogoff, 1990)
    - Policy gridlock (Binder, 2003).
    - Rent seeking (Tullock, 1967)

Regulation: Vote to Strand a Harmful Asset

- Strand = regulate out of use (milder versions: taxes, caps, ...)

- Harmful Asset = externality causing, e.g., climate change

- Widespread agreement on social planner solutions (e.g., carbon tax), but difficulties in implementation due to political failures:
  - Tragedy of the commons between national governments (Hardin, 1968)
  - Voters ignorance (Downs, 1957)
  - Failures associated to political representation
    - Policy commitment impossibility due to election cycles etc. (Rogoff, 1990)
    - Policy gridlock (Binder, 2003).
    - Rent seeking (Tullock, 1967)

- Divestment is not just noise/taste because it mitigates political failures: voter ignorance, policy gridlock and, tragedy of commons.

Interaction of divestment and stranding decisions

- **Stranding ($t = 2$)**
  - A unit mass of all citizen vote based on supermajority ($\boldsymbol{\kappa} > 1/2$)
  - Supermajority captures policy gridlock and tragedy of commons
  - After observing the asset's cash flow, citizens face tradeoffs between
    - Economic gains from operation of harmful asset
    - Utility loss from harmful asset externalities (heterogeneous)

Interaction of divestment and stranding decisions

- **Stranding ($t = 2$)**
  - A unit mass of all citizen vote based on supermajority ($\boldsymbol{\kappa} > 1/2$)
  - Supermajority captures policy gridlock and tragedy of commons
  - After observing the asset's cash flow, citizens face tradeoffs between
    - Economic gains from operation of harmful asset
    - Utility loss from harmful asset externalities (heterogeneous)

- **Divestment ($t = 1$)**: Institutional decision
  - Only *Institutional stakeholders* of mass $\boldsymbol{\delta} \in [0,\ 1/2]$, vote based on simple majority
  - *Institutional stakeholders* derive utility from the institution's value
  - Institutional deliberations produce information on the externality (signal with precision $\boldsymbol{\lambda} \in [1/2,\ 1]$)
  - Stakeholders anticipate the impact of their action on the strand vote

Interaction of divestment and stranding decisions

- **Stranding ($t = 2$)**
  - A unit mass of all citizen vote based on supermajority ($\boldsymbol{\kappa} > 1/2$)
  - Supermajority captures policy gridlock and tragedy of commons
  - After observing the asset's cash flow, citizens face tradeoffs between
    - Economic gains from operation of harmful asset
    - Utility loss from harmful asset externalities (heterogeneous)

- **Divestment ($t = 1$)**: Institutional decision
  - Only *Institutional stakeholders* of mass $\boldsymbol{\delta} \in [0,\ 1/2]$, vote based on simple majority
  - *Institutional stakeholders* derive utility from the institution's value
  - Institutional deliberations produce information on the externality (signal with precision $\boldsymbol{\lambda} \in [1/2,\ 1]$)
  - Stakeholders anticipate the impact of their action on the strand vote

- Implications of divestment:
  - **Political channel:** Eliminate institutional ownership of harmful asset, converting stakeholders to strand supporters.
  - **Informational channel:** Potentially conveys information, altering financial market prices and tradeoff calculus of non-stakeholders

Literature

- Carbon Transition Risk (Bolton and Kaczperczyk, 2021, 2022): We offer a formal channel through which institutional divestment drives carbon transition risk, political and regulatory non-neutrality of divestment.
- Political Economy of Green Transitions (Besley and Persson, 2023): Institutional divestment strengthens "green values" by severing economic ties of institutional stakeholders to harmful asset, provides stable group of committed voters for green transition.
- Voice through Divestment (Becht, Pajuste, and Toniolo, 2023): Finds evidence of divestment announcement effects, as in our theory. We provide a formal grounding for political and information channels complementary to their "narrative" interpretation.
- Feedback effects from financial prices to real decisions (Bond, Edmans, and Goldstein, 2012): In our theory financial prices, driven by divestment, impact political outcomes: voting and regulation.

Assumptions

- Endowments:
  - Uniform economic interest in harmful asset to match uniform voting rights

Assumptions

- Endowments:
  - Uniform economic interest in harmful asset to match uniform voting rights
- Trading:
  - Competitive, risk-neutral, rational-expectations pricing (trivial trading)

Assumptions

- Endowments:
  - Uniform economic interest in harmful asset to match uniform voting rights
- Trading:
  - Competitive, risk-neutral, rational-expectations pricing (trivial trading)
  - Institutional stakeholders do not trade on private information: professors and priests are not moving prices by shorting oil stocks after gleaning information from institutional deliberations

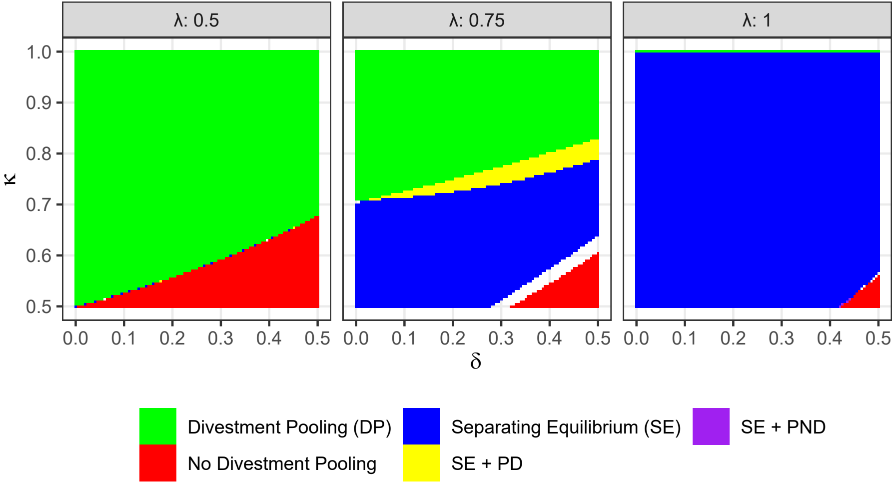
Assumptions

- Endowments:
  - Uniform economic interest in harmful asset to match uniform voting rights
- Trading:
  - Competitive, risk-neutral, rational-expectations pricing (trivial trading)
  - Institutional stakeholders do not trade on private information: professors and priests are not moving prices by shorting oil stocks after gleaning information from institutional deliberations
  - Divested securities are sold to foreign non voting buyers (explore alternative assumptions)
- Voting
  - Continuum of forward looking voters
  - Heterogeneity is stakeholders harm is the same as the general population
  - **Sincere voting:** although no voter is pivotal, each votes as if she were a dictator
- Join determination of political outcome and market outcome: **Pure Bayesian equilibrium**

Tensions in the divestment decision

- The median stakeholder wants to divest when :
  - Divestment weakens the supermajority rule and make it closer to the preferred majority rule
  - When the information revelation necessitates divestment as a signal
- The median stakeholders rejects divestment when
  - Divestment weakens the supermajority rule and make it more distant from the preferred majority rule
  - When the information revelation necessitates to reject divestment as a signal
- An equilibrium resolving these tensions may or may not exist: It depends on the values of $(\delta, \lambda, \kappa)$
- Equilibria in pure strategies can be of the pooling type or separating type

Equilibrium Existence



Extensions

- Domestic Repurchase
- Continuous signal (partially revealing equilibrium)

Conclusion

- Divestment is not politically neutral: changes incentives of citizens to vote for stranding/regulation
- Our model shows the flip side of concentrated shareholdings and lobbying: loss of broad-based economic stakes in harmful asset weakens political support
- Divestment should be understood as an institutional phenomenon with political and informational implications
- Feedback of financial prices: To political outcomes and regulation!