The Wall Street Walk when Blockholders Compete for Flows

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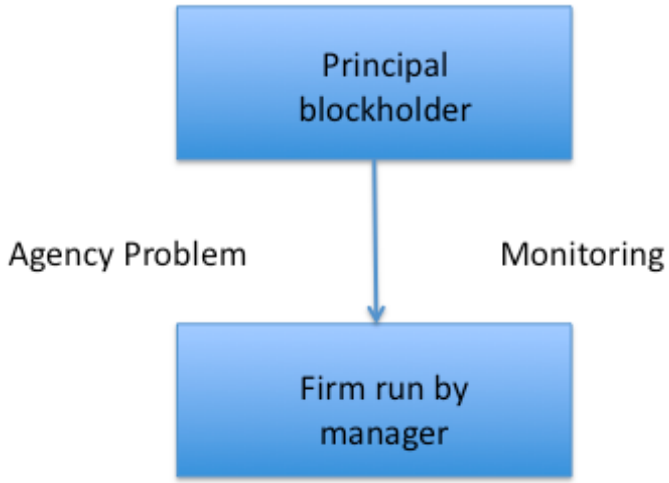
The Wall Street Walk

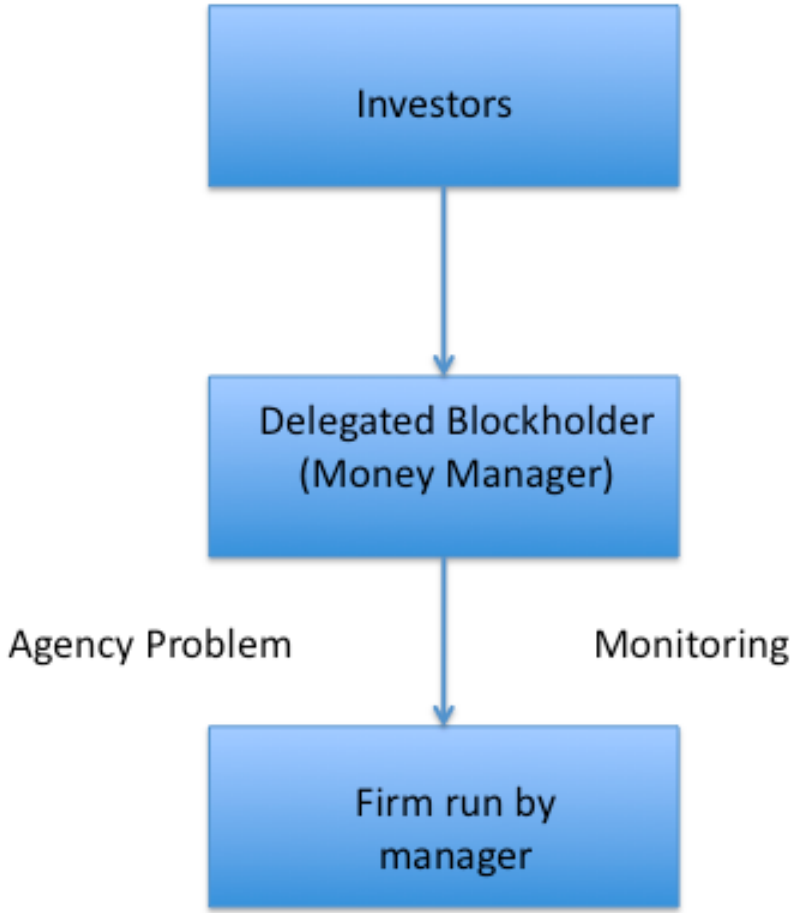
- Blockholders in public corporations who are dissatisfied with management can sell their blocks—the "Wall Street Walk".
- Theoretical literature starting with Admati and Pfleiderer (2009, RFS) and Edmans (2009, JF) argues: Wall Street Walk can be an effective form of governance.
  - Block sale will depress the stock price, punishing management.
  - Faced with a *credible* threat of exit, management will be reluctant to misbehave.
- Admati-Pfleiderer argument for credibility of threat:
  - When blockholders observe managers acting suboptimally, it is in their own best interest to exit early before information about the manager's actions becomes public.
  - This makes exit a credible threat.

This literature models blockholders as principals

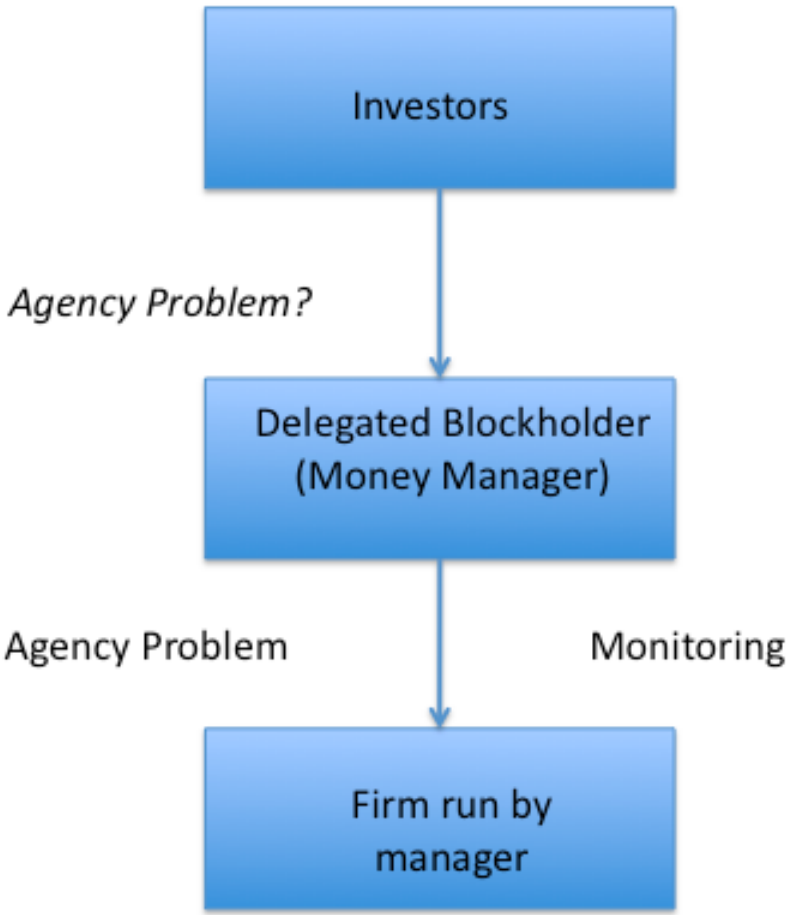


- Many blockholders are agents: money managers.
  - Gopalan (2008): Almost 60% of NYSE-listed firms had a $\geq$ 5% institutional block.
  - Davis-Yoo (2003): Mutual fund families own significant blocks in most large US corporations.
  - Brav et al (2008), Becht et al (2009, 2010), Armour-Cheffins (2010): Hedge funds hold blocks in many companies.

Delegated blockholding: A double-layered structure?



Agency problems in blockholder monitoring?



Regulators are concerned

EU Corporate Governance Framework Green Paper (2011)

"It appears that the way asset managers' performance is evaluated... encourages asset managers to seek short-term benefits... The Commission believes that short-term incentives... probably has an impact on shareholder apathy."

- One well-documented source of short-termism: *short-term performance-chasing by investors* (Brown-Harlow-Starks JF 1996, Chevalier-Ellison JPE 1997; Agarwal-Daniel-Naik JF 2009, Lim-Sensoy-Weisback 2013 etc).
- Funds' response to performance chasing has been shown to be relevant for financial markets (theoretically and empirically): Trading strategies, prices, returns (e.g. Dasgupta-Prat-Verardo RFS 2011, Guerrieri-Kondor AER 2012).
- But no parallel work on corporate governance.

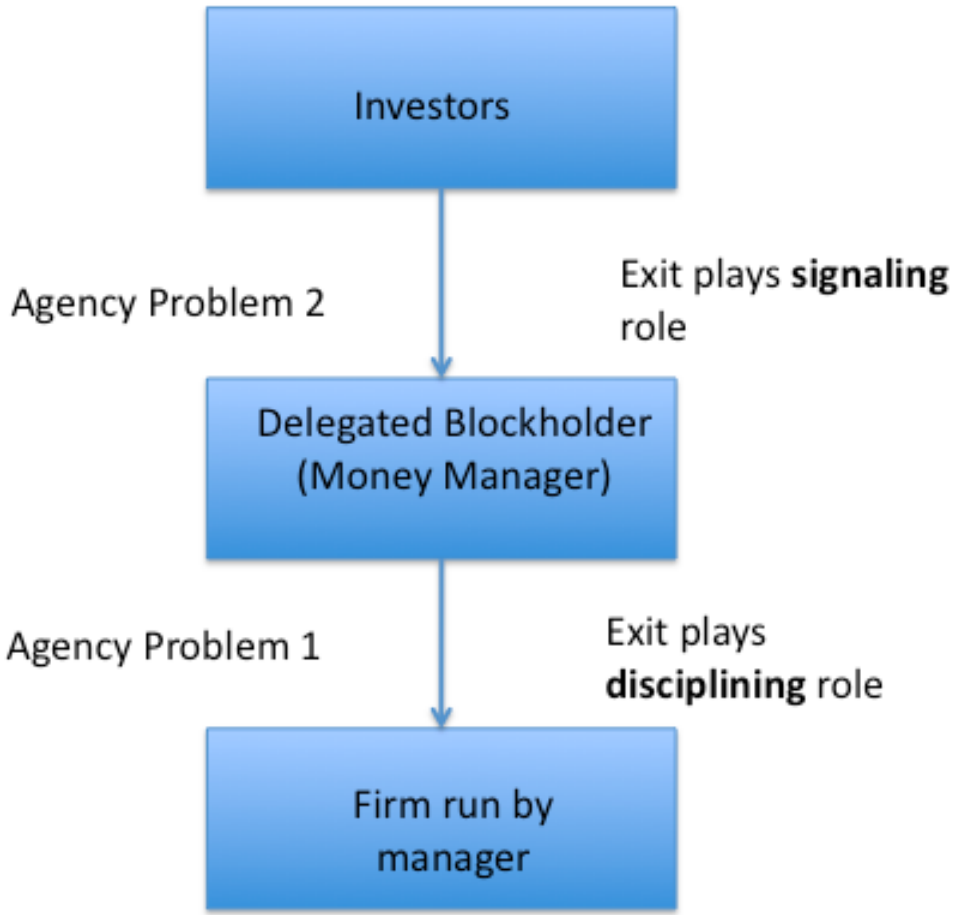
This paper

- *Key question:* How does the presence of short-term flow-performance relationships affect the ability of delegated blockholders to govern via the threat of exit?
- *Summary of central argument*:
  1. When funds differ in stock selection skill, exit may be informative about the fund manager's skill and thus affect investor flows.
  2. This signalling role of exit impairs its disciplinary potential.
  3. Perverse signalling effect operates through both linear assets-under-management (AUM) fees and convex performance fees ("carry"): The two parts of 2 & 20 contracts.
  4. Offsetting incentives arise from the degree to which the fund manager self-invests in her fund.
  5. Whether a money manager can successfully govern via the threat of exit depends on the degree to which she has skin in the game.

How flow motivations affect exit incentives

- For exit to be an effective governance device, it must lower block prices (derived in the model).
- A block liquidation that lowers prices should have a measurable impact on fund's portfolio return in that period.
- Lowering of returns is observed by investors $\longrightarrow$ Lowers perception of fund's ability (derived in the model) $\longrightarrow$ Outflows.
- This discourages exit for two reasons:
  - AUM: Loss of flow reduces fund size, and thus reduces AUM fee.
  - Carry: Exiting lowers current portfolio value reducing *current* carry, and (endogenous) outflow reduces fund size, restricting access to investment, reducing *future* carry.

Back to the picture



Applied Implications: Mutual Funds and Hedge Funds

- Mutual funds charge AUM fees, but no carry (regulation). Do not self-invest in their funds.
- Hedge funds charge AUM fees and carry, but self-invest significantly.
- Combination of qualitative results and "calibrated" examples suggest that:
  - Mutual funds will not be able to use the threat of exit to govern...
  - ... but hedge funds will.
- Empirical literature provides evidence consistent with this.
- Model extension incorporating active monitoring: Threat of exit supports voice. So:
  - Mutual funds will be silent...
  - but hedge funds will be vocal.
- Theoretical support for significant empirical literature on institutional "voice".

The Governance Problem

- Measure 1 continuum of firms run by managers (M).
- $t = 0, 1, 2$.
- Measure $A \in (0, 1)$ of firms are "bad": moral hazard problem
  - $t = 0$: M chooses $a \in \{0, 1\}$.
  - If $a = 0$ firm value at $t = 2$ is $v_H > 0$.
  - If $a = 1$, firm value is $v_L = v_H - \Delta v$ for some $\Delta v \in (0, v_H)$, but M gets private benefit $\tilde{\beta} \sim F$, (only observed by M).
- M paid a linear combination of $t = 1$ and $t = 2$ market prices: $\omega_1 P_1 + \omega_2 P_2$.
- Prices are set by a competitive risk-neutral market maker who observes order flow.
- At $t = 1$ market is noisy: Trade may also occur for liquidity reasons, so MM faces an inference problem.
- At $t = 2$ price is fully efficient.
- Measure $1 - A$ firms? Same but $a \in \{0\}$. "Good firms". Only play background role.
- Only other asset: Index asset with gross return 1.

Benchmark 1: No blockholders

- Suppose firm is owned by many small passive direct shareholders.
- They can't acquire private information about M's actions.
- Thus the price of the firm at $t = 1$ is insensitive to M's choice of action.
- M compares payoffs:
  - $a = 0 : \omega_1 P_1 + \omega_2 v_H$ with
  - $a = 1 : \beta + \omega_1 P_1 + \omega_2 v_L$
- M chooses $a = 1$ if and only if $\beta > \omega_2 \Delta v =: \beta_{No-L}$.

Benchmark 2: A Rich Private Blockholder

Admati-Pfleiderer (2009) Main Result

- Now: owners include risk-neutral blockholder (L).
- L observes M's $t = 0$ action; able to sell her stake in the firm at $t = 1$.
- P_1 affected by L's trade.
- *Admati-Pfleiderer Proposition 1:* In unique equilibrium, L chooses to sell iff M chooses $a = 1$.
- Intuition: Noise in $t = 1$ market $\Rightarrow$ value from sale at $t = 1$ $>$ value from sale at $t = 2$.
- Now, M compares payoffs:
  - $a = 0 : \omega_1 P_1 + \omega_2 v_H$ with
  - $a = 1 : \beta + \omega_1 \widehat{P}_1 + \omega_2 v_L$ **where** $\widehat{P}_1 < P_1$.
- Implication: M chooses $a = 1$ iff $\beta > \beta_L > \beta_{No-L} = \omega_2 \Delta v$.

Delegated Blockholders I

Basics

- Blockholder = delegated portfolio manager: Fund (F).
- Continuum of F of equal measure to that of firms. Each financed by (distinct) continuum of small investors (I).
- F and I complementary: I without F and F without I can only invest in the index asset.
- Each F holds a block in one firm.
- Initial financing of the block: Fraction $\alpha \in [0, 1)$ directly financed by F (self-investment). Remainder is financed by I of measure $1 - \alpha$. Self-investment is locked into F.
- F can observe M's $t = 0$ action and can choose to exit at $t = 1$.
- F may be hit by (iid) liquidity shock at $t = 1$ with probability $\theta \in (0, 1)$ which forces her to sell at $t = 1$ and shut down after earning fees and paying investors.

Delegated Blockholders II

Ability differences across blockholders

- F adds value for I by being good stock picker: Able funds can choose better firms to hold blocks in.
  - Good F (measure γ_F) hold blocks in good firms with probability $\gamma_M^G \in (0, 1]$.
  - Bad F (measure $1 - \gamma_F$) do so with probability $\gamma_M^B \in (0, \gamma_M^G)$.
- For consistency $A = 1 - \left[\gamma_F \gamma_M^G + (1 - \gamma_F)\, \gamma_M^B\right]$.
- At $t = 1$ F with money to manage have access to new investment opportunities:
  - Good F can generate gross returns $R_G > 1$ at $t = 2$ per dollar invested between $t = 1$ and $t = 2$.
  - Bad F can generate gross returns $R_B < 1$ at $t = 2$ per dollar invested between $t = 1$ and $t = 2$.

Delegated Blockholders III

Endogenous replacement by investors

- Each I at $t = 0$ is matched to a F who holds a block on his behalf.
- I does not know the type of the F that he is matched to.
- At $t = 1$ I can update about F's type by observing the value of the F's portfolio.
- Each I also observes the portfolio values of all other F and can make all relevant inferences.
- After such observation, I may either retain or fire his fund. If he fires, may then invest in one or more alternative F or invest in the index asset.

Delegated Blockholders IV

Fees and Payoffs

- An I who invests i_t at date t in a F which gets I_t total investment at t is entitled to a date $t+1$ payoff of $\frac{i_t}{I_t} V_{t+1}$ where V_{t+1} represents the date $t+1$ market value of the investment I_t.
- Fees are "two and twenty":F receiving a total investment of I_t at date t receives an AUM fee of wI_t at t and also a carry of $\phi \left[V_{t+1} - I_t\right]^+$ at $t+1$ where $[x]^+ := \max\{x, 0\}$.
- Each I pays fees in proportion to his investment in the F.

The Failure of Governance via Exit: The Result

Proposition: For R_G and γ_M^G sufficiently large and for any $w \in [0,1)$ and $\phi \in [0,1)$ there exists $\bar{\alpha}(\Theta, w, \phi) \in (0,1)$ such that for all $\alpha < \bar{\alpha}(\Theta, w, \phi)$ it cannot be an equilibrium for any fund to choose to sell if and only if $a = 1$.

- Structure of argument:
  1. Establish conditions under which, if F sells block at $t = 1$ if and only if she observes M choose $a = 1$, then I retains F at $t = 1$ if and only if F has not sold at $t = 1$.
  2. Establish conditions under which, such a retention strategy on the part of I induces F *not* to sell at $t = 1$ even if she has observed that M has chosen $a = 1$.
  3. (1) and (2) jointly establish conditions under which it is impossible for F to sell (in equilibrium) at $t = 1$ if and only if she observes $a = 1$.

Intuition I: Performance Chasing

- F's incentives must be understood in the context of I's behaviour: Investors chase performance.
- When $\gamma_{\mathrm{M}}^{\mathrm{G}}$ is sufficiently higher than $\gamma_{\mathrm{M}}^{\mathrm{B}}$, good F are sufficiently more likely to invest in good firms. This means:
  1. When an I infers from $t = 1$ returns that his F exited, he realizes that his F is sufficiently likely to be bad.
  2. Then, this F can at best generate returns for I that are achievable by I himself.
- I rationally fires funds that exit and reallocates his capital to one or more funds that do *not* exit.
- When I infers from $t = 1$ returns his fund did *not* exit, he rationally infers that F is significantly more likely to be good. R_{G} high $\Rightarrow$ Retain F.

Intuition II: 2 and 20 contracts

- Earning a fraction of AUM ($w > 0$) creates an incentive for F to maximize size.
- F that exit lose flow because they are fired by their I and do not receive any inflow from other I at $t = 1$.
- F that do not exit not only retain their initial I but also receive *additional* inflow from the original I of funds that have exited.
- Carry ($\phi > 0$) also discourages exit. Not exiting allows F to (temporarily) enjoy a higher portfolio value which results in a higher $t = 1$ carry. Of course, this will lead to a lowered block value at $t = 2$, leading to *losses* for F on the block position if retained. But carry only applies to the positive part of profits!
- Performance chasing exacerbates this: Exiting leads to a loss of clients, eliminating (in addition to current carry) the opportunity to earn future carry.
- Offsetting incentives: Self investment α!

Mutual Funds I

- ICA of 1940 prohibits mutual funds from charging asymmetric performance fees.
- So, mutual funds almost universally charge only flat assets-under-management fees.
- Mutual funds are motivated purely by a combination of their assets under management fee, $w > 0$, and by managerial self-investment, $\alpha \geq 0$, if any.
  - Former gives rise to flow-motivations.
  - Latter endows direct profit-motivations.
  - Relative size of w vs α determines the relative degree of flow motivation.
- Khorana, Servaes, and Wedge (2007, JFE) document that:
  - 57% of mutual fund managers have no self-investment: Purely flow motivated.
  - Average self-investment in those funds that are not purely flow motivated is 0.04% of AUM.

Mutual Funds II

- About half of mutual funds are *purely* flow motivated ($\alpha = 0$) and that the average mutual fund is *principally* flow motivated ($\alpha \sim 10^{-4}$).
- Theoretical result applies immediately to purely flow motivated mutual funds.
- For those funds that are not purely flow motivated, simple calculations based on our model suggest that for $\alpha \sim 10^{-4}$ funds will not exit for any feasible set of parameters.
- Our calculations are *conservative*: In our calculations we fix $\alpha = 0.01$, two orders of magnitude larger than the average self-investment of non-purely flow motivated managers.

Couldn't exit be a good signal of ability?

- In our model exit is a negative signal, because stock selection ability distinguishes G from B.
- Conceivable to construct models in which funds differ in ability to observe the actions of managers.
- Then: possible for exit to be a *positive* signal, because it signals to investors that F knows that M is misbehaving.
- The flow motivation of F would again interfere with effective exit:
  - If exit is a good signal, a flow-motivated F would exit excessively, i.e., would exit not because the M had misbehaved but because they wished to attract or retain flows.
  - Breaks precise link between the action of M and exit; Makes exit less effective in governance.
- This model is worked out in detail in the appendix.

Hedge funds

- Hedge funds charge both AUM fees and carried interest. Less likely to exit?
- But fund managers are GPs in limited partnerships. Self-invest significantly! More likely to exit?
- First we show:

Proposition: For R_G and γ_M^G sufficiently large and for any $w \in [0,1)$ and $\phi \in [0,1)$ there exists $\alpha'(\Theta, w, \phi) \in (0,1)$ such that for all $\alpha > \alpha'(\Theta, w, \phi)$, there is an equilibrium in which
(i) Each investor chooses to fire his fund if she sells at $t = 1$ and retains her otherwise;
(ii) The fund chooses to sell at $t = 1$ whenever the manager chooses $a = 1$.

- Choose realistic α (10% of AUM) and check whether hedge funds exit.
- We find that hedge funds do exit when average talent is high (limiting flow motivations) and for illiquid stocks (limiting flows).

Empirical Evidence on Exit and Fund Managers?

- Parrino, Sias, and Starks (1993, JF) first to empirically investigate exit.
- Use CDA/Spectrum classification of institutions (Bank Trusts, Insurance Companies, Independent Investment Advisors, Investment Companies, and Others). Find that in 1982-1993, investment companies used exit less than bank trusts.
- A mutual fund usually classified as an investment company by CDA.
- Broadly consistent: Mutual funds are likely to face more performance-chasing by clients and have lower proprietary ownership than bank trusts.
- Edmans, Fang, and Zur (2013, RFS) provide evidence that hedge funds successfully use exit.

Exit, Voice, and Compensation

- Larger empirical literature on blockholder voice $\Rightarrow$ Incorporating voice may enhance empirical relevance.
- How do voice and exit interact?
- Existing literature (e.g. Kahn and Winton 1998, Maug 1998): Exit and Voice are substitutes.
- We go back to Hirschman (1970): "Chances for voice to function effectively...are strengthened if voice is backed up by the threat of exit."
- Question: Can the threat of exit support voice? If so, how do our empirical predictions on blockholder compensation and exit translate into empirical predictions on blockholder compensation and voice?

Exit, Voice, and Compensation I

- *Augment model*: If F recognizes that threat of exit alone cannot discipline management, can propose changes in business strategy: Formulating proposal costs e to F.
- Manager may accept or reject proposal. If accepted, manager chooses $a = 0$ and receives added payoff $\rho \in (0, \beta_L - \omega_2 \Delta v)$.
- e is sunk when manager accepts or rejects.

Proposition: For γ_M^G and R_G large enough and e small enough, for $\beta \in [\beta_L, \beta_L + \rho]$:

1. For $\alpha > \alpha'(\Theta, w, \phi)$, there exists an equilibrium in which funds successfully use voice to prevent the perverse action (and thus avoid exit).
2. For $\alpha < \widehat{\alpha}(\Theta, w, \phi, 0)$, there exists an equilibrium in which funds do not use voice.

$\widehat{\alpha}(\Theta, w, \phi, 0) = \lim_{\epsilon \to 0} \widehat{\alpha}(\Theta, w, \phi, \epsilon)$ where $\widehat{\alpha}(\Theta, w, \phi, \epsilon)$ and $\alpha'(\Theta, w, \phi)$ are defined in Propositions 4 and 5 of the paper.

Exit, Voice, and Compensation II

Implication:

1. There exist equilibria of the model which jointly identify a class of firms for which the threat of exit and voice are complementary in generating good governance.
2. For these firms funds successfully use (costly) voice only if they can credibly threaten exit.
3. Accordingly, for these firms, high α funds use voice while low α funds do not.

Empirics on Compensation and Voice

- Evidence that hedge funds produce gains to shareholders of target companies by using voice: Brav et al (2008 JF), Klein and Zur (2009 JF), Becht et al (2010).
- In contrast, mutual funds do not use voice much: Kahan and Rock (2007) Gillan and Starks (2007).
- Edmans, Fang, and Zur (2012) study sample of 101 activist hedge funds and find that hedge funds are effective at both exit and voice.

Conclusion

- We show that the incentive structure of fund managers' compensation may affect their ability to govern via the threat of exit when they are blockholders.
- Principally flow-motivated managers will be less effective in using exit to govern than profit-motivated ones.
- Relevant because:
  1. A lot of blockholders are money managers and a lot of money managers are principally flow-motivated.
  2. A lot of institutional blockholders, particularly the flow-motivated ones, seem to be silent.
- We provide empirical predictions in the cross-section of funds.
- Our results suggest that it may be desirable to investigate the corporate governance implications of the delegation of portfolio management.