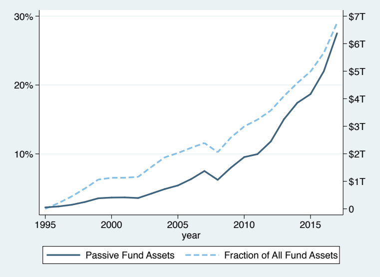
Do Index Funds Monitor?

Davidson Heath, Daniele Macciocchi, Roni Michaely, and Matthew Ringgenberg

Q Group Fall 2022 Seminar
September 2022

The Rise of Index Investing

- Amount of capital allocated to index funds has grown
- Index funds now largest blockholders of many U.S. firms



- All sorts of *interesting* claims:
  - "Passive Investing Is Worse Than Marxism" – AllianceBernstein
  - Passive funds cause firms to remove dual class shares – Appel et al. (2016)
- **Implications for corporate governance are not clear**

We examine the governance impact of index investing

- My work examines the impact of index investing in two papers:
    1. Cash flow rights (Coles, Heath, & Ringgenberg (JFE 2022))
    2. Control rights (Heath, Macciocchi, Michaely, & Ringgenberg (RFS 2021))

- **Today, I'll focus on control rights:** Do index funds monitor differently than active funds?

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     - Voting

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     - Voting
     - Exit
     - Engagement
  2. The consequences for corporate governance

Results Preview: index funds monitor less than active funds

1. **Index funds tend to side with firm management**
   - More likely than active funds to vote with management on contentious governance issues
   - Little evidence they engage
   - Results hold for summary stats, OLS, HDFE, Heckman
2. **Index fund ownership is associated with worse corporate governance**
   - Lower pay-performance sensitivity
   - Slightly lower board independence
   - Zero effects on other governance measures

1. Background
2. Methodology
   - Data
   - Research Design
3. Results
   - Ownership
   - Voting
   - Exit
   - Engagement
   - Cash Flow Rights
4. Conclusion

Conceptual Framework: Should index funds monitor?

Theoretically, what should we expect?

- Principal-agent theories argue that long-term investors with large positions have strong incentives to monitor (e.g. Shleifer & Vishny 1986)
  - Index funds are the largest blockholders of most U.S. corporations ((Bebchuk and Hirst, 2019)
  - Since they can hardly exit – more incentive to monitor through their voice (Fisch et al. 2018)

Conceptual Framework: Should index funds monitor?

- Counterpoint: Index funds have weak incentives to monitor:
  - Hold large number of stocks → limited resources *pro rata*
    - Average 22 stewardship personnel on 17,849 stocks worldwide
  - Low benefits from improving governance
    - Not compensated for alpha!
    - Could be indirect compensation (Lewellen^2 2020)
  - Free-rider problem (Bebchuk et al. 2017)

Heated debate in the empirical literature

1. Boone & White (2015), Appel, Gormley & Keim (2016), Crane, Michenaud & Weston (2016), others:
   - More index funds ownership → better governance
     - More independent directors, disclosure, dividends
     - Less poison pills and dual class shares
   - Index funds are "Closet Activists"
2. Schmidt & Fahlenbrach (2017), Brav et al. (2019):
   - More index funds ownership → worse governance
     - Worse M&A, less independent directors
     - Negative returns on appointment of directors
     - Index funds side with managers in proxy contests

- **How do these effects occur?**

1. Background
2. Methodology
   - Data
   - Research Design
3. Results
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Data from CRSP, Russell, and ISS

- Data from 2004 to 2018
- We merge Russell membership with the CRSP mutual fund database
  - "Index funds" are those with fund flag "D" (both open-ended index mutual funds and ETFs)
  - All others are "Active funds"

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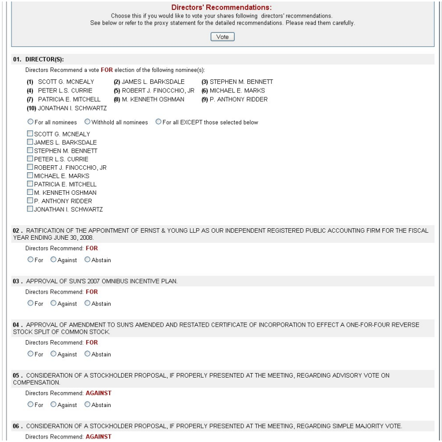
    - All others are "Active funds"
- Finally, we add proxy voting from ISS


Directors' Recommendations:
Choose this if you would like to vote your shares following directors' recommendations.
See below or refer to the proxy statement for the detailed recommendations. Please read them carefully.
Vote

01. DIRECTOR(S):
Directors Recommend a vote FOR election of the following nominee(s):
(1) SCOTT G. MCNEALY (2) JAMES L. BARKSDALE (3) STEPHEN M. BENNETT
(4) PETER L.S. CURRIE (5) ROBERT J. FINOCCHIO, JR (6) MICHAEL E. MARKS
(7) PATRICIA E. MITCHELL (8) M. KENNETH OSHMAN (9) P. ANTHONY RIDDER
(10) JONATHAN I. SCHWARTZ
For all nominees Withhold all nominees For all EXCEPT those selected below
SCOTT G. MCNEALY
JAMES L. BARKSDALE
STEPHEN M. BENNETT
PETER L.S. CURRIE
ROBERT J. FINOCCHIO, JR
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M. KENNETH OSHMAN
P. ANTHONY RIDDER
JONATHAN I. SCHWARTZ

02 . RATIFICATION OF THE APPOINTMENT OF ERNST & YOUNG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING JUNE 30, 2008.
Directors Recommend: FOR
For Against Abstain

03 . APPROVAL OF SUN'S 2007 OMNIBUS INCENTIVE PLAN.
Directors Recommend: FOR
For Against Abstain

04 . APPROVAL OF AMENDMENT TO SUN'S AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A ONE-FOR-FOUR REVERSE STOCK SPLIT OF COMMON STOCK.
Directors Recommend: FOR
For Against Abstain

05 . CONSIDERATION OF A STOCKHOLDER PROPOSAL, IF PROPERLY PRESENTED AT THE MEETING, REGARDING ADVISORY VOTE ON COMPENSATION.
Directors Recommend: AGAINST
For Against Abstain

06 . CONSIDERATION OF A STOCKHOLDER PROPOSAL, IF PROPERLY PRESENTED AT THE MEETING, REGARDING SIMPLE MAJORITY VOTE.
Directors Recommend: AGAINST

Identifying the Effect of Index Investing

Problem – Fund holdings are endogenous for several reasons:

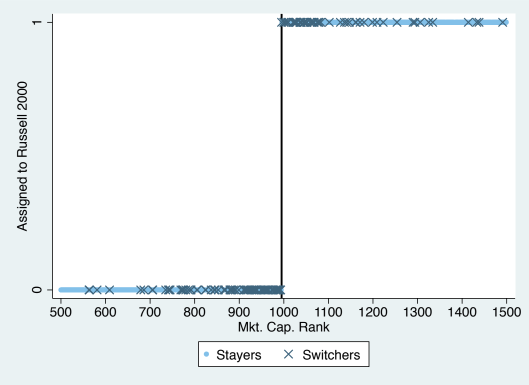
1. Firm characteristics jointly affect ownership and governance
2. Different firm policies attract different types of investors
3. We never observe voting or exit if a fund *chooses* not to hold a firm (*selection bias*)

Solution

- (1) & (2): We use panel regressions with HD fixed effects
- (3): We implement a Heckman model that exploits plausibly random allocation to funds to firms generated by Russell Index reconstitution

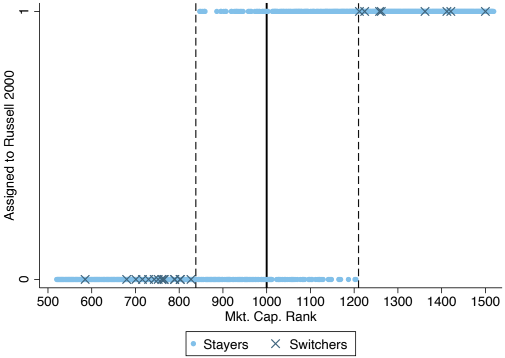
Overview of our Russell methodology

We compare firms that switched Russell indexes to firms that *almost* switched



2006

Overview of our Russell methodology



2007

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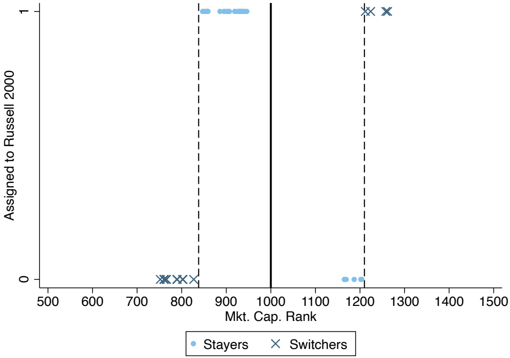
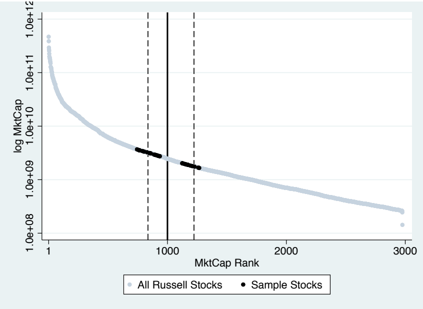


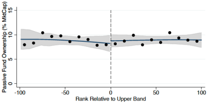
2007 Cohorts

Overview of our Russell methodology

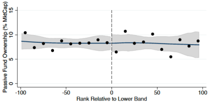
- Bottom line: we compare firms that are similar in every way EXCEPT index assignment



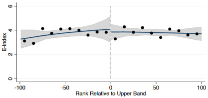
Balance Tests



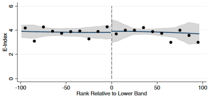
(a) Pretreatment index fund ownership, Upper band



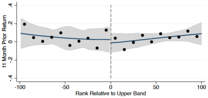
(b) Pretreatment index fund ownership, Lower band



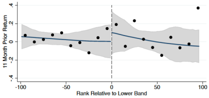
(c) Pretreatment E-Index, Upper band



(d) Pretreatment E-Index, Lower band



(e) Pretreatment stock returns, Upper band



(f) Pretreatment stock returns, Lower band

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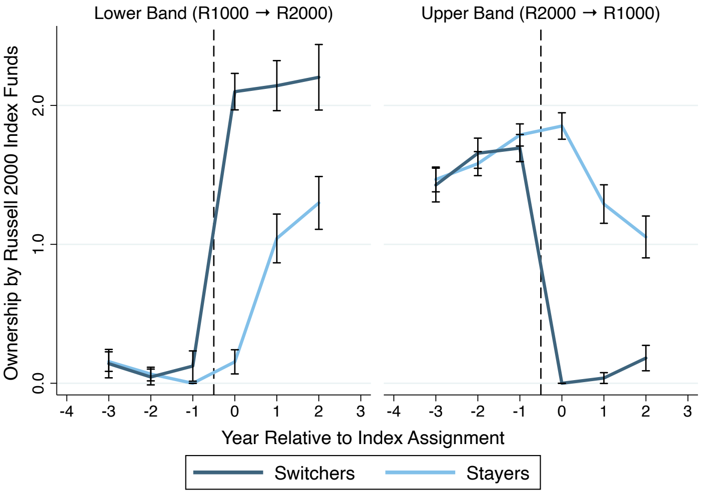
Index Assignment Changes Index Fund Ownership

- First step: Index assignment matters
- Stocks that switch to the R2000 (R1000) experience a sizeable increase (decrease) in index fund ownership
- And offsetting changes in active fund ownership

	Dependent Variable = Ownership (Percentage points of Market Capitalization) by:				
	$IndexOwn_{jt}^{R2000}$ (1)	$IndexOwn_{jt}^{R1000}$ (2)	$IndexOwn_{jt}^{All}$ (3)	$ActiveOwn_{jt}$ (4)	$OtherOwn_{jt}$ (5)
$R1000 \rightarrow R2000_j \times PostAssignment_t$	1.72*** (0.14)	-0.21*** (0.02)	1.31*** (0.35)	-2.21** (0.75)	0.89 (0.89)
$R2000 \rightarrow R1000_j \times PostAssignment_t$	-1.63*** (0.08)	0.22*** (0.01)	-1.20*** (0.25)	1.60** (0.57)	-0.40 (0.68)
Observations	4,649	4,649	4,649	4,649	4,649
Adjusted R^2	0.510	0.528	0.841	0.705	0.738
Year FE	Yes	Yes	Yes	Yes	Yes
Firm × Cohort FE	Yes	Yes	Yes	Yes	Yes

Graph of Ownership Supports our Identification



Does Index Fund Ownership Affect Governance?

- Index membership changes firm ownership by index funds
- So what? Does this matter?
- Theory suggests separation of ownership and control leads to agency conflicts (Berle and Means 1932)

– Adam Smith, *The Wealth of Nations*

"The directors of such [joint-stock] companies, however, being the managers rather of other people's money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own...."

- **We examine voice and exit behavior**

Simple summary stats for voting

Management Recommends	ISS Recommends	Index Funds Vote Yes	No	Abstain	DNV	Active Funds Vote Yes	No	Abstain	DNV	Difference PctYes	N
All		89.8%	6.7%	3.3%	0.2%	88.9%	7.6%	3.1%	0.4%	0.9%	27,297,366
Consensus											
Yes	Yes	94.9%	3.7%	1.4%	0.1%	95.2%	3.3%	1.2%	0.3%	-0.4%	24,293,163
No	No	5.1%	82.7%	9.9%	2.3%	5.4%	82.9%	10.1%	1.6%	-0.3%	398,666
Contentious											
Yes	No	53.4%	20.1%	24.7%	1.8%	43.9%	24.9%	28.7%	2.5%	9.5%	1,761,341
No	Yes	43.1%	51.3%	5.5%	0.1%	47.2%	46.8%	5.7%	0.3%	-4.1%	844,196

- On **consensus** agenda items, no difference in voting
- Everyone agrees what to do, no costly monitoring is necessary

Simple summary stats for voting

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- On **contentious** agenda items, index funds are significantly more likely than active funds to vote with firm management
- Results may make agency conflicts worse...

Summary Stats $\Longrightarrow$ Voting Differences

1. On **consensus** items, no difference in voting
2. On **contentious** items, index funds are more likely to vote with managers
   - From a principal-agent perspective, this means index funds cede power to managers
   - Anecdotal evidence supports this finding

Vanguard Prospectus (2018)

"We will give substantial weight to the recommendations of the company's board, absent guidelines or other specific facts that would support a vote against management."

Interpretation

- Consensus votes: Everybody agrees
- Contentious votes: Both active and index funds can:
    1. Actively do their own research
    2. Passively vote with management **or** ISS
- Either strategy in (2) seems equally passive
    - Iliev et al. (2018): Index funds do much less research on their portfolio firms than active funds
    - Del Guercio et al. (2008): Voting contra management is **costly**
    - Bebchuk et al. (2017): ... More costly for index funds
- **Voting with management is "more passive" than voting with ISS**

Index funds vote with firm management

- Of course, there are endogeneity concerns...
  - We add high dimensional fixed effects (HDFEs) that sweep out variation by firm, year, and **firm-by-year**:

	Dependent Variable = *VotedWithMgmt*			
	(1)	(2)	(3)	(4)
$IndexFund_i$	0.101***	0.102***	0.102***	0.103***
	(0.024)	(0.023)	(0.024)	(0.023)
$ExpenseRatio_{it} \times$		-0.286***		-0.288***
$IndexFund_i$		(0.062)		(0.061)
$ExpenseRatio_{it} \times$		-0.022		-0.024
$ActiveFund_i$		(0.036)		(0.035)
Observations	2,601,806	2,601,806	2,601,605	2,601,605
Adjusted R^2	0.061	0.072	0.105	0.116
Firm FE	Yes	Yes	No	No
Year FE	Yes	Yes	No	No
Firm × Year FE	No	No	Yes	Yes

- Index funds ∼10% more likely to vote with management
  - Stronger effect for low-fee index funds

Split by the type of agenda item

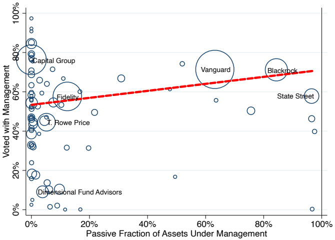
- **How do index funds vote when it matters?**

	Dependent Variable = *VotedWithMgmt*			
Vote Type =	Board of Directors	Compensation	Disclosure	Entrenchment
	(1)	(2)	(3)	(4)
$IndexFund_i$	0.110***	0.113***	0.063**	0.048***
	(0.027)	(0.031)	(0.032)	(0.017)
Observations	1,428,041	35,131	122,322	80,766
Adjusted R^2	0.108	0.049	0.019	0.125
Firm × Year FE	Yes	Yes	Yes	Yes

- Same result across different types of agenda items
  - **Difficult to argue that helping managers entrench themselves is the right thing to do**
  - Largest voting gap is on managerial compensation

Voting results are clear

- Index funds 10% more likely to vote with firm management on contentious governance issues
- Same conclusion at the fund-family level:



- It follows that, for Index Funds:
  1. The benefit of monitoring is low and the cost is positive
  2. Disagreeing with managers adds additional costs
  3. Thus they are more likely to cede power to firms' managers

Other Monitoring Channels

- Funds may use other means to affect governance:
  1. They could sell their position (**exit**)
  2. They could meet with firm managers (**engagement**)
- We examine these other channels

(1) Exit Channel: index funds rarely exit

- In theory, funds can exit if governance is bad ("the wall street walk")
- No surprise, we find index funds exit less
  - Index funds are between 17.5% and 13.1% less likely to exit a position than active funds are
  - Moreover, index funds are *less* likely to exit after *losing* a vote the previous year

(2) Engagement Channel: Little evidence they engage

- Possible that index funds engage with firm managers to get good governance
  - Then, vote with managers because they already convinced managers to put the items they wanted on ballot
- We examine engagement in three ways:
  1. Management vs. shareholder proposals
  2. Changes in the "supply" of agenda items
  3. 13D vs. 13G filings

Voting: Management versus shareholder proposals

	Contentious Management Proposals			Contentious Shareholder Proposals		
	VotedYes	*VotedNo*	*Abstained*	*VotedYes*	*VotedNo*	*Abstained*
	(1)	(2)	(3)	(4)	(5)	(6)
$IndexFund_i$	0.117***	-0.043***	-0.068***	-0.067***	0.069***	0.001
	(0.028)	(0.011)	(0.018)	(0.023)	(0.022)	(0.008)
Observations	1,738,780	1,738,780	1,738,780	862,819	862,819	862,819
Adjusted R^2	0.106	0.355	0.298	0.118	0.093	0.105
Firm $\times$ Year FE	Yes	Yes	Yes	Yes	Yes	Yes

- If index funds engage, expect them to agree more on contentious management proposals (results = they do)
- But would *not* expect this to hold for contentious shareholder proposals (and yet it does!)
- Results inconsistent with index funds engaging behind the scenes

Changes in the Supply of Agenda Items

	Management Proposals			Shareholder Proposals		
	Number Contentious (1)	*Fraction Contentious* (2)	*Fraction Passed* (3)	*Number Contentious* (4)	*Fraction Contentious* (5)	*Fraction Passed* (6)
$R1000 \rightarrow R2000_j \times PostAssignment_t$	-0.14	-0.01	-0.00	0.22	0.08	-0.17*
	(0.16)	(0.01)	(0.01)	(0.32)	(0.11)	(0.09)
$R2000 \rightarrow R1000_j \times PostAssignment_t$	0.01	0.00	-0.00	0.24	0.10	-0.06
	(0.10)	(0.01)	(0.01)	(0.27)	(0.19)	(0.12)
Observations	4,137	4,137	4,137	198	198	198
Adjusted R^2	0.425	0.443	0.130	0.161	0.208	0.517
Firm × Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

- Recall: Index switching changes index fund holdings, yet we see:
  - *Zero change* to agenda items at the annual meeting
  - *Fewer* shareholder proposals pass with more index funds ownership
- Results show index funds not engaging behind the scenes

Blockholding Disclosures: Schedule 13D versus 13G

	Dependent Variable = Filed 13D		
	(1)	(2)	(3)
FracAUMPassive$_{jt}$	-1.00**	-0.91**	-1.03**
	(0.46)	(0.44)	(0.47)
	[-24%]	[-22%]	[-25%]
logAUM$_{jt}$		-0.042	
		(0.038)	
numFilings$_{jt}$			0.00032
			(0.00025)
Model	Probit	Probit	Probit
Observations	1,070	1,070	1,070
Pseudo R^2	0.012	0.015	0.014

- Blockholding disclosure via form 13D signals intent to engage (recorded at the fund-family level)
- Subsample analysis suggests index funds **never** file 13D
- Index funds do not *intend* to engage

Consequences for Corporate Governance

- Perhaps this is all just unimportant
- Vast majority of items are uncontentious; Vast majority of items are decided by a $>10\%$ margin
    - Yet "No" votes are still a signal (Blackrock 2020)
- What are the effects, if any, on:
    1. Managerial incentives
    2. Corporate governance

Managerial Incentives & Compensation

	(1) LogPPS	(2) LogTotalComp	(3) EquityFractionComp	(4) GldnPara	(5) CEOTurnover
$R1000 \rightarrow R2000_j \times$	-0.43***	0.56***	-0.06**	0.00	-0.06
$PostAssignment_t$	(0.11)	(0.08)	(0.02)	(0.03)	(0.05)
$R2000 \rightarrow R1000_j \times$	0.27**	-0.41***	0.03**	0.02	0.02
$PostAssignment_t$	(0.10)	(0.06)	(0.01)	(0.02)	(0.02)
Observations	3,445	3,219	3,138	2,592	3,923
Adjusted R^2	0.630	0.815	0.629	0.698	0.020
Firm $\times$ Cohort FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes

- We find large changes in managerial incentives
- Index fund holdings $\uparrow$; Pay-for-performance $\downarrow$; Total comp $\uparrow$
    - And vice versa

Consequences for Corporate Governance

	(1) BoardIndep	(2) E-Index	(3) PoisonPill	(4) Supermaj	(5) LimSpecMeet	(6) WrtnConsent	(7) DualClass
$R1000 \rightarrow R2000_j \times PostAssignment_t$	-0.03***	-0.07	-0.06	-0.01	-0.00	-0.05	0.00
	(0.01)	(0.08)	(0.05)	(0.01)	(0.02)	(0.03)	(0.00)
$R2000 \rightarrow R1000_j \times PostAssignment_t$	0.00	0.05	-0.01	0.01	0.00	0.06	-0.01
	(0.01)	(0.06)	(0.04)	(0.02)	(0.03)	(0.03)	(0.01)
Observations	2,613	2,592	2,592	2,592	2,592	2,592	2,592
Adjusted R^2	0.712	0.830	0.720	0.720	0.801	0.778	0.938
Firm $\times$ Cohort FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

- We find zero or slight negative effects on governance
  - 3 years after treatment

Other Paper: indexing does not impede capital allocation

A one slide overview of Coles, Heath, and Ringgenberg (JFE 2022)

- Index investors do not do stock research (they free riding)
- Does this negative affect price informativeness in the economy and/or markets?
- We show theoretically and empirically the answer is "no"
  - Theoretically, we add index investors to Grossman and Stiglitz model
  - Because investors CHOOSE to be active whenever it is profitable, rise of index investing does not affect price informativeness
  - Our empirical tests confirm this
- We highlight logical contradiction: if passive investing made prices less efficient, it would give incentive for some investors to switch back to being active

Conclusion: Passive funds are (more) passive monitors

- We examine many things and ALL results point to the same conclusion
- On average, index funds are **weaker monitors** than active funds
    1. Index funds more likely to vote with management
    2. Index funds less likely to exit
    3. No evidence that index funds engage