Attracting Flows by Attracting Big Clients:
Conflict of Interest & Mutual Fund Portfolio Choice

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Motivation

- Fraction of retirement account assets invested in mutual funds is large and growing
  - ~ 60% of inflows in '04 from DC Plans and IRAs
  - Pension Protection Act '06 ⇒ lots more coming
- Raises interesting questions about how mutual fund families compete for firm 401(k) assets
  - **Obvious considerations:** fees, past and expected returns, whether family's funds span set of investment objectives
  - **Less obvious:** **take large position in firm's equity**
- Distorting fund portfolios to earn 401(k) business ⇒ **(potential)** conflict between **Family** and its **Investors**

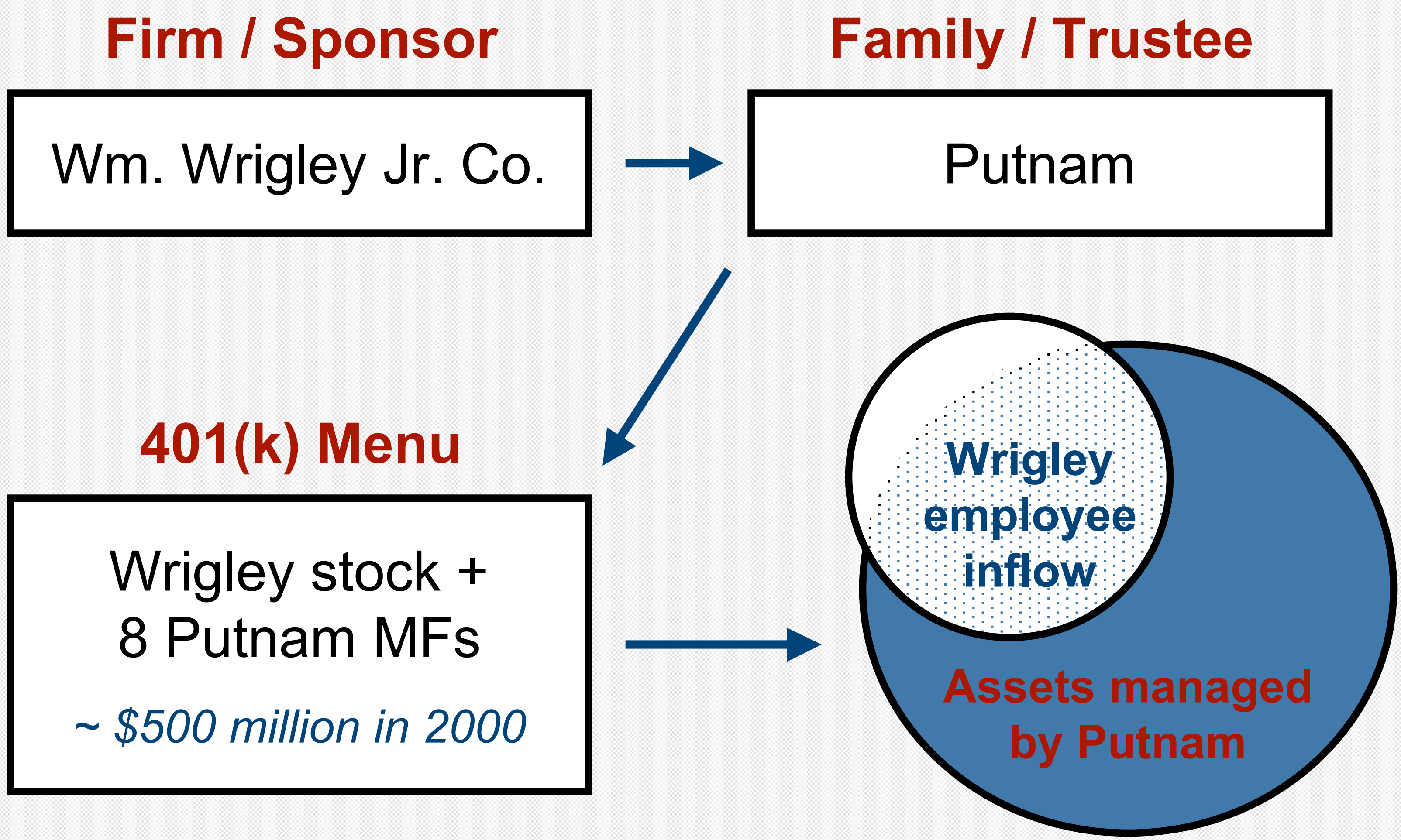
Literature Review

- Flow literature tends to focus on factors that influence retail (direct + broker) flows
  - **Past returns:** Ippolito ‘92, Chevalier & Ellison ‘97
  - **Fees:** Sirri & Tufano ‘98, Barber, Odean, Zheng ‘05
  - **Media & Advertising:** Sirri & Tufano ‘98, **Reuter & Zitzewitz ‘06**, Gallaher, Kaniel, Starks ‘06
- **In this paper, inflow = new 401(k) assets**
- Relates to existing evidence fund families are willing to increase TNA at expense of existing shareholders
  - Market timing and late trading (Zitzewitz ‘03 & ‘06, etc.)
  - Favoritism (Gaspar, Massa, Matos ‘06, etc.)
  - Original use of 12b-1 fees

Literature Review (2)

- Relates, more generally, to evidence that business relationships influence behavior of financial institutions
  - Analyst recommendations (Michaely & Womack '99)
  - IPO allocations to mutual fund families (**Reuter '06**)
  - Pro-advertiser bias in personal finance magazines (**Reuter & Zitzewitz '06**)
  - Voting behavior of mutual fund families seeking 401(k) business (Davis & Kim '06)

Consider Market for 401(k)



Who Benefits?

- **Trustee** benefits from management fees on additional (sticky) assets under management
- *Hypothesis:* In turn, **Trustee** agrees to buy and hold additional shares of **Sponsor's** equity
- How does this **"overweighting"** benefit the **Sponsor?**
  - Increases fraction of shares in "hands friendly to management"
    ⇒ helps with proxy voting (Davis and Kim '06)
    ⇒ takeover defense (Rauh '06)
  - Short-term price pressure when **Trustee** builds its position **[?]**
  - **Trustees** holds/buys reduce downward price pressure following negative shocks **[?]**

Conflict of Interest?

- **Authors' Main Hypothesis**

  "Mutual fund families distort their portfolio allocations in order to secure being trustees for companies with large 401(k) plans"

- **Novel idea… but is this a conflict of interest?**

- Conflict of Interest ⇒ four things must be true
  - **Trustee** has legal obligation to its **Investors**
  - **Trustee** overweights **Sponsor's** equity
  - **Sponsor** benefits from overweighting
  - **Investors** harmed by overweighting

True

Authors' Best Evidence

Table 1

401(k) Plan Data

- **Number** | **Sample / Restriction**

Number	Sample / Restriction
2500+	Form 11-K and 5500, 1993-2003
1537	Nonfinancial firms in CRSP/Compustat
899	Report mutual fund family as **Trustee**

- Typical plan has average TNA of $553 million
- Annually: 392 plans with TNA of **$178 billion**
- I'd like to know more about plan sponsors
  - How do 899 **Sponsor** firms compare to typical CRSP firm in terms of size, industry, exchange, and institutional ownership?
  - What about 638 plans without **Families** as **Trustees**? Who are their **Trustees?** Predict ones that file 13F overweight **Sponsor's** equity too? If not, why don't these firms also pick **Families** as **Trustees**?

Table 2

13F Family Holdings Data

Number	Sample / Restriction
251	**Families** belong to set of 100 largest mutual fund families at least one quarter, '93 - '03
197	Non-Trustees
54	**Trustee** for one or more 401(k) plan

- Trustee families are **much** larger ($30 vs. $9 billion)
- Analyze holdings of 899 **Sponsors** by 251 **Families**
- Two issues related to holdings data
  - If 54 **Trustees** are the only families able to serve 401(k) market ⇒ estimate specification excluding Non-Trustees
  - 13F lumps mutual funds together with separate accounts, etc. ⇒ cannot determine which investors the overweighting harms

Empirical Strategy

- **General Specification**
  - $Holding_{fst} = \alpha + \delta TrusteeDummy_{fst} + \Gamma Controls_{fst} + \varepsilon_{fst}$
    - **f** is family
    - **s** is sponsor
    - **t** is calendar quarter
  - Restricted to quarterly holdings of 899 sponsor stocks by 251 families between 1993 and 2003
  - Pooled regressions include family & time FEs and standard errors cluster on sponsor; report F-M regressions too
  - Control for family's investment in same style and industry
- **H_0: No distortion $\Rightarrow$ $\delta = 0$**
  H_A: Overweighting $\Rightarrow$ $\delta > 0$

Table 3

Univariate Evidence – Levels

- **Two measures of holdings**

  % TNA — sponsor's equity as % family's TNA
  *(relevant measure for **Family**; **Family** size invariant)*

  % Company — sponsor's equity as % shares outstanding
  *(relevant measure for **Sponsor** but not size invariant)*

- **Both yield results consistent with overweighting**

	Trustees	Non-Trustees	Raw Difference	Industry Matched Difference	Style Matched Difference
% TNA	0.17	0.09	**0.08*** **	**0.07*** **	**0.07*** **
% Company	2.19	0.78	**1.41*** **	**0.66*** **	**0.62*** **

  - *Extra 0.66% translates into an extra $41 million in holdings*

Tables 4 & 5

Multivariate Evidence

- LHS is *% Company*
  - Trustee dummy is positive & statistically significant ⇒ **Trustees hold extra 53.7%** *($64.4 million)*
- Results consistent with relative bargaining power
  - Trustee dummy x Family TNA is negative & stat. sign. ⇒ **Overweighting greater for small families** *(1 sd = -$25.4m)*
  - Trustee dummy x 401(k) TNA is positive & stat. sign. ⇒ **Overweighting greater for larger plans** *(1 sd = $16.4m)*
- Results not consistent with superior information
  - Trustee dummy x Future Returns is indistinguishable from 0
- What if you restrict test to holdings of the 54 Trustee families?
- Cross-family differences in propensity to overweight?
  - Expect Putnam and Strong (“the fund scandal families”) to overweight more than Vanguard

Figure 1

Changes in Trustees

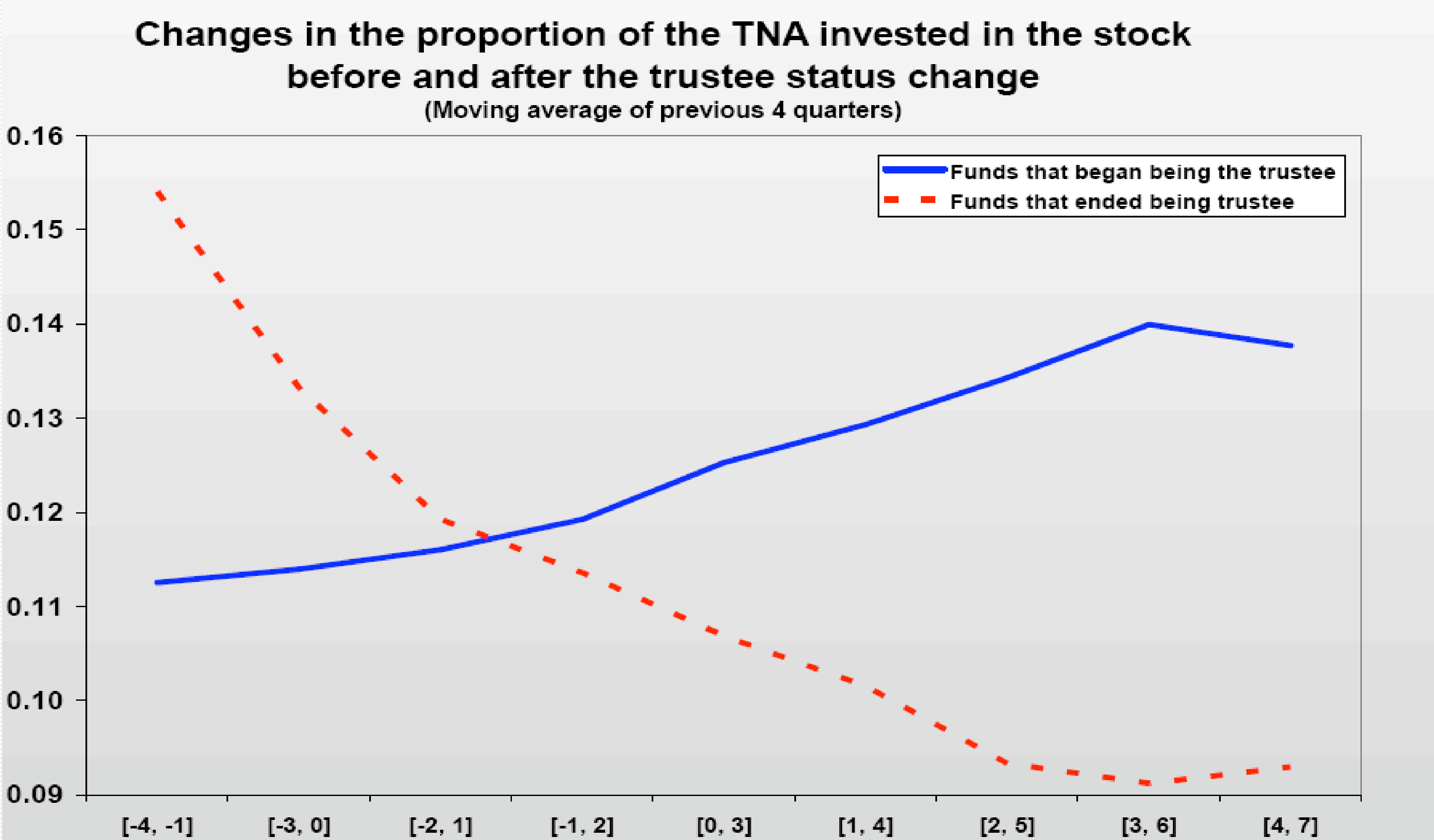


Figure 1 & Table 6

Changes in Trustees

- "The changing of trustee gives a more precise experiment to measure the effect of being trustee on portfolio choice"
  - Only **58** trustee changes occur during sample period
  - Figure 1 provides univariate evidence *% TNA* rises when **Trustee** relationship begins and falls when relationship ends
    - **Suggests no net benefit when changing trustees**
  - Signs on coefficients in multivariate regressions are predicted but some are of marginal significance
- **Alternative?** What if Trustee becomes custodian of equity held within 401(k) plan by Sponsor employees?
  - Footnote 3 claims this is unlikely… but I'd like to see that magnitudes of increases and decreases are inconsistent with this alternative

Table 7

Trustees & Negative Shocks

- Best test of the "overweighting" hypothesis
- Consider two types of negative shocks
  - **Families** (including **Trustee**) collectively sell more than 1% of **Sponsor's** shares outstanding *(~10% of the time)*
  - Earnings announcements with negative CAR
  - **Trustee** interaction terms imply **Trustee** is net <u>buyer</u> during quarters with both types of negative shocks
- Very interesting patterns but two questions remain
  - How much do **Sponsors** benefit from overweighting?
  - How much are **Trustees'** investors harmed by overweighting?

Benefits to Sponsors?

- More shares in hands “friendly to management”
  - Will going from 0.78% to 1.44% of shares out. swing a proxy vote?
  - Lacking direct evidence on outcomes that benefit **Sponsors**, is there anecdotal evidence that **Sponsors** actively seek overweighting?
- Upward price pressure when **Trustee** builds position?
  - Old Trustee sells when new Trustee buys ⇒ one time benefit
- **Trustees** reduce downward price pressure following negative shocks by holding or buying **Sponsor** stock
  - Given size of holdings, seems like a small, short-lived benefit
  - Evidence of more overweighting at firms that would benefit more?
    - 899 using **Families** have more stock comp. than other 638?
    - Any evidence that overweighting correlated with insider sales?

Tables 8 & 9

Costs to Investors?

- **Table 8:** When **Families** are selling lots of shares, **Trustees'** returns for providing liquidity are at best zero
- **Table 9:** Overweighting ⇒ deviation from optimal Sharpe ratio
  - Cost depends on where **Trustee** puts extra **Sponsor** stock
    - ♣ Dump in one fund ⇒ estimated cost of **0.23%** per year
    - ♣ Spread across funds ⇒ only **0.03%** per year per fund
    - ♣ ~ 2x larger when small family serves large 401(k) plan
  - Ideally, study performance of "overweighted" funds relative peers
  - What is opportunity cost of overweighting / what is underweighted?
  - If overweighting restricted to separate account that serves 401(k) ⇒ *conflict between **Sponsor** and its employees but not other investors*
- How much would alternatives cost?
  - Third-party administrator plus consultant (who may favor funds with high past return and high fees!) can cost upwards of 0.20% per year

Author’s Conclusion Slide

- Consistent with our hypothesis, we find that
  - Trustee status affects families portfolio allocation (overweighting)
  - Overweighting is more severe for big plans & small families
  - Overweighting is not result of superior information
  - Some evidence that families increase (decrease) position when become (end being) trustees
  - Trustees buy/hold stock at times of price pressure
- Overweighting produces significant cost to investors
- Problem worsens as 401(k) plans grow in use and size
  - Pension Protection Act of 2006 has the potential to create large inflows from DB to DC plans $\Rightarrow$ **intensifies need to address this conflict of interest**

My Conclusion Slide

- Paper reflects lots of data work and thoughtful analysis
- Novel idea to ask whether desire to manage 401(k) assets creates conflict of interest within fund families
- 95% sold on fact **Trustees** overweight **Sponsor** equity
- Much less sold on economic significance of benefits to **Sponsors** or, more importantly, costs to **Investors**
- Bit uncomfortable with call for independent **Trustees**
  - "This could greatly reduce the overweighting behavior currently seen by ostensibly ridding the relationship of its embedded, and unneeded, conflict of interest."
  - Independent trustees will bring new conflicts $\Rightarrow$ good news for researchers and independent trustees but not obvious it will be good news for investors