What Drives Market Share in the Mutual Fund Industry & The Costs and Benefits of Performance Fees in Mutual Funds

Henri Servaes
Richard Brealey Professor of Corporate Governance & Professor of Finance, London Business School
Research Fellow, Centre for Economic Policy Research
Research Associate, European Corporate Governance Institute
Background

- Academic for 30 years
- Universities
  - University of Chicago
  - University of North Carolina
  - Duke University
  - Katholieke Universiteit Leuven
  - London Business School (since 1998)
- Industry:
- Consulting & Executive Education
  - JP Morgan Chase, Deutsche Bank, Anglo American, Bertelsmann, Suez, PWC, Mars, BG Group, Barclays Capital, Freshfields, Continental
Research

- Corporate Finance

- Fund Industry:
  - Explaining the size of the mutual fund industry around the world, *Journal of Financial Economics*, 2005
  - What drives market share in the mutual fund industry, *Review of Finance* 2012
  - The costs and benefits of performance fees in mutual funds, *Working paper* 2018
What drives market share in the mutual fund industry?, with Ajay Khorana

• Goal of this research: understand how fund management companies compete

• Unit of observation: Fund complex, not the fund

• Focus on market share: culmination of all competitive pressures in the industry:
  • Price and product policies of fund management companies
  • Response of consumers to these policies

• Note:
  • We are not saying that market share is the goal by itself
  • But it is a useful statistic
Observation that prompted us to look into this

Market shares

- Fidelity
- Dreyfus
- Vanguard
- Putnam

1976 vs 2009
How the US fund industry has changed

Assets under management ($ millions)

- 1976
- 1984
- 1992
- 2000
- 2009

2,000,000
4,000,000
6,000,000
8,000,000
10,000,000
12,000,000
How the US fund industry changed

Number of complexes

134 201 424 743 584
How the US fund industry changed
How the US fund industry changed

Number of funds

- Average number of funds per complex
- Median number of funds per complex
How the US fund industry changed

Number of objectives

- Avg number of objectives per complex
- Median number of objectives per complex
How the US fund industry changed

**Fund starts**

- Average number of funds started per family
- Median number of funds started per family
How the US fund industry changed

Market share of top 5 complexes
How the US fund industry changed

![Graph showing the change in average and median expenses from 1976 to 2009. The graph indicates a general increase in expenses over the years, with both average and median expenses incl. loads showing a similar trend.]
Observations

• Industry is maturing

• Less innovation

• Complexes are not getting broader in terms of objectives, although they are still starting new funds

• Top 5 complexes maintain their market share

• Average price is not coming down?
Regulatory interest in fees & legal action

• Eliot Spitzer was after fund fees: Alliance Capital agreed to cut management fees by 20%

• Baker vs American Century lawsuit: alleging excessive management fees
Questions

• How do firms compete in this market – which strategies have been successful?

• We build a model of market share as a function of
  • Market share in previous year
  • Elements of price competition
  • Non-price competition – product differentiation

• If mutual funds were like a commodity, you would expect prices to come down and the product to be very homogeneous
  ➔ This is clearly not the case
Price competition – What do we study?

• Total shareholder costs: Expense ratio + $\frac{1}{7}$th of loads

• Splits of total shareholder costs:
  • Front-end load
  • Back-end load
  • Expenses
  • 12-b1 fees

• Do firms pass along economies of scale to investors?
  • For each fund family, we estimate a model of total shareholder costs as a function of fund size, time, and the objectives of the fund
  • If the sign on size is negative, we say that economies of scale are passed on to investors
Price competition

• Residual (unexpected) expenses:

  • Estimate a model of expenses as a function of:
    • Fund Size
    • Fund Turnover
    • Investment objectives

  • Do this on a yearly basis

  • Use the model to predict expenses

  • Take actual expenses minus predicted expenses
Price competition

• If market share is sensitive to fees, is the sensitivity the same along the entire fee range?

• Fees are computed as value-weighted objective adjusted fees across all funds in the complex
Performance

• Excess returns:
  • Computed as the weighted average for the entire complex over all funds
  • Adjusted for the performance of other funds in the same investment objective

• Morningstar ratings

• Presence of a fund in the top 5% of its objective
Example: if a family has two objectives with 75% of assets in one and 25% in the other, the Herfindahl index is:

$$0.75^2 + 0.25^2 = 0.625$$
Innovation

• Number of funds started:
  • We allow the effect to marginal effect of additional starts to decline (and even reduce overall market share)

• Number of funds started in an objective as a fraction of number of existing funds

• Differentiation:
  • How different is the new offering from all existing offerings in the market
  • Stock funds:
    • P/B ratio
    • Earnings growth
    • Median market cap
  • Bond funds:
    • Average price
    • Maturity
    • Coupon rate
Other

• Turnover

• Experience
What we do?

We analyse these factors for all US mutual fund complexes from 1976 to 2009
What matters? Price is important

Price distribution

lowest 25% median 75% highest

-19% market share
Passing on economies of scale

17% market share
Conclusion on price competition

Price competition is effective

There is no need for more fee disclosures

There is no need for explicit regulation of fund fees
What matters? Performance is important

Performance distribution

lowest 25% median 75% highest

+4.7% market share
Winner takes all

Just having one fund in the top 5% of its category increases market share the following year by 47%
Innovation

Just opening one new fund increases market share by 8.6%

The effect tapers off
Others

More funds = higher market share

More experience = higher market share

More turnover = lower market share

Focus does not matter much
These effects are fairly similar across Equity, Balanced, Bonds, and Money market funds.
Breaking up expenses

12b-1 fees

+10% market share
Breaking up expenses

Front-end loads

lowest 25% median 75% highest

+5.5% market share

Only works for small complexes
Breaking up expenses

Back-end loads

- lowest
- 25%
- median
- 75%
- highest

+2.2% market share
Innovation in detail

• The more the new funds are different from all existing offerings in terms of their characteristics, the larger the effect on market share

 ➔ A difference of 1 standard deviation increases market share by 4%

• The effect tapers off

• Starting funds in a crowded segment has a smaller marginal effect
Simple measures of performance

+34% market share
Asymmetry in response to fees

Top half expenses
-19% Market share

Bottom half expenses
-4% Market share
Conclusion

• Competition works
• Price is not everything
  • Consumers seem less sensitive to prices when they are ‘reasonable’
• No need to mandate more price disclosures or regulate prices

• This does not imply that customers should not pay attention to fees
Questions
The costs and benefits of performance fees in mutual funds, with Kari Sigurdsson

Renewed regulatory interest in performance fees
• FT Jul 8, 2017

Fund manager performance fees under attack
• FT Nov 16, 2017

EU regulator to probe fund performance fees
Probe by the European Securities and Markets Authority comes as a growing number of asset managers implement fee structures that are closely aligned with performance
Renewed interest from the public

Fidelity’s new structure
Fidelity is not typical

- Asymmetric performance fees are more typical
Performance Fees: An Idea Whose Time Has Come
Regulators’ worries

Risk taking

Lack of transparency: allows for abuse
13 Transparency of fees and charges

In this section we provide a summary of the responses and our final recommendations on the single all-in fee and alternative solutions, disclosure of fees and charges for investors and risk-free box profits.

We have considered how some of our concerns in this area may be addressed by upcoming regulation. We propose to:

- improve the way firms communicate fund charges and their impact, particularly in ongoing communications to retail investors, including supporting the single all-in fee being brought in by MiFID II
- encourage increased transparency and standardisation of costs and charges information for institutional investors
- consult on requiring firms to return any risk-free box profits to the fund
- consult on rules so that performance fees are only permitted above the fund’s most ambitious target and consider whether further policy action on performance fees is appropriate
Theoretical benefits

• Steeper incentives will lead fund managers to perform better

• Steeper incentives will allow the fund management company to attract better managers
Evidence

Very little
What we do

Gather detailed data on performance fee contracts of all equity European mutual funds (EU + Norway + Switzerland) over the period 2001-2011 and answer 3 broad questions

Do Performance Fee (PF) funds perform better?

Do PF funds have lower expenses?

Do PF funds take more risk?
The verdict

The Good: Risk Taking

• We find no evidence that PF funds have higher return volatility than non-PF funds

• We do find that they take more active risk – they deviate more from their Morningstar benchmarks
The Bad: Net performance

Performance fee funds underperform similar non-performance fee funds by about 50-60 bps per year
Maybe there are inherent differences in managerial quality

Even if we look at the same manager running both a PF fund and a non-PF fund during the same year, we find this result

What is going on?
The devil is in the detail: 3 contractual features matter

**The benchmark**
- The target that needs to be achieved before performance fees are paid

**The hurdle**
- An additional lower target that needs to be achieved before performance fees are paid
- Used to prevent performance fees being paid for negative returns

**The high water mark**
- A previous high that needs to be achieved before performance fees can be paid
- Prevents performance fees from being paid twice for the same performance
Underperformance is concentrated in two groups of PF funds

1. Funds that do not set a specific benchmark against which performance is measured

These funds get paid a performance fees for beating a (low) hurdle if it exists at all
Underperformance is concentrated in two groups of PF funds

2. Funds that set a benchmark that is easy to beat and not aligned with their underlying investment objective

The worst performing funds set a benchmark that is 3% per year lower compared to other funds
Expenses

• PF funds have expense ratios – which include the performance fees themselves – that are 30-40 bps higher than non-PF funds

  • This difference is even larger – up to 100 bps – in funds without a performance fee benchmark

• No evidence that PF funds have lower management fees
The Ugly

• PF funds are more likely to remove HWMs when their NAV < HWM

• PF funds are more likely to reduce the length of HWMs when their NAV < HWM

• PF funds are more likely to drop the performance benchmark when prior returns have been below that benchmark

• PF funds are more likely to reduce the hurdle when prior returns are lower
Conclusion

• There is nothing wrong with charging performance fees per se

• But funds should set a reasonable benchmark against which performance should be assessed

• Funds should not change the rules of the game while it is being played
Questions
Contact details

Henri Servaes
London Business School
Sussex Place – Regent’s Park
London NW1 4SA
United Kingdom
+44 (0) 20 7000 8268
hservaes@london.edu
faculty.london.edu/hservaes