

# *The Psychology of Fund and Manager Selection*

**Alistair Byrne, CFA**

Senior Lecturer in Finance  
University of Edinburgh

11 May 2008



# Research questions

- Many individuals invest in funds rather than directly in stocks (e.g., in 401(k) plans)
- Institutional investors such as pension plan sponsors choose funds or hire external fund managers
- How can we characterize their decisions?
- What role do behavioural biases play?

# Presentation outline

- Retail fund selection and asset allocation
  - Evidence on decision making in 401(k) plans
  - Evidence on mutual fund flows
- Manager hiring and firing decisions by plan sponsors
- Group and committee decision making
- Concluding remarks and questions

# Decision making in 401(k) plans

- Members of 401(k) and other defined contribution pension plans typically face a number of choices:
  - If and when to join the plan
  - How much to contribute
  - How to invest the contributions
  - How to take the benefits at retirement
- These are high stakes decisions, often taken without face-to-face, personalized advice
- The behavioural biases of members interact with design choices made by plan providers

# The path of least resistance

- Evidence suggests most plan members' 'choices' are driven by inertia (for example, Choi et al. 2002)
- Low take-up rates as employees don't enroll
  - Opt-out arrangements increase take-up markedly
- Many members stick at default contribution rates
  - Which may be too low to achieve desired pensions
- The use of default funds is also an issue

# Default funds and inertia

- Where a default fund exists, typically in excess of 80% of members invest in it
- Many members will passively accept the default without considering if it is appropriate for them
- In the U.S., many defaults are money market funds
  - New QDIA regulations are encouraging alternatives
  - Managed, target date, and lifecycle funds suggested
- In the U.K., equity index funds are most common
  - Funds usually have some kind of lifecycle overlay
  - See Byrne et al. (*Financial Analysts Journal*, 2007) for a discussion

# Fund choice in 401(k) plans

- Where members do make fund choices, they may not do so on an informed basis
- Benartzi and Thaler (2002) show that members have very weak investment preferences
  - Members prefer the risk and return of the average portfolio to the one they have chosen themselves
  - This suggests that investor autonomy is *“not worth much”*
- Iyengar et al. (2004) show that wide fund choice confuses employees and reduces plan take-up rates

# Naïve diversification

- Benartzi and Thaler (2001) show evidence that members follow a  $1/n$  naïve diversification heuristic
  - Members allocate equally to the 'n' fund choices available
  - Hence, the fund menu drives member asset allocation
- Huberman and Jiang (2006) show that where n is large, members follow an adjusted  $1/n$  strategy
  - Most choose 3 or 4 funds and allocate equally to them
- But, DeMiguel et al. (*Review of Financial Studies*, 2008) show  $1/n$  approaches often outperform optimised portfolios!

# Company stock in 401(k) plans

- Other members fail to diversify, investing their contributions in their employer's stock
- This can be explained by:
  - Naïve extrapolation of past performance (Benartzi, 2001)
  - Familiarity bias (Huberman, 2001)
- In the U.K., high allocations to employer stock are not permitted
- But, similar biases may lead U.K. plan members to concentrate their investment in property

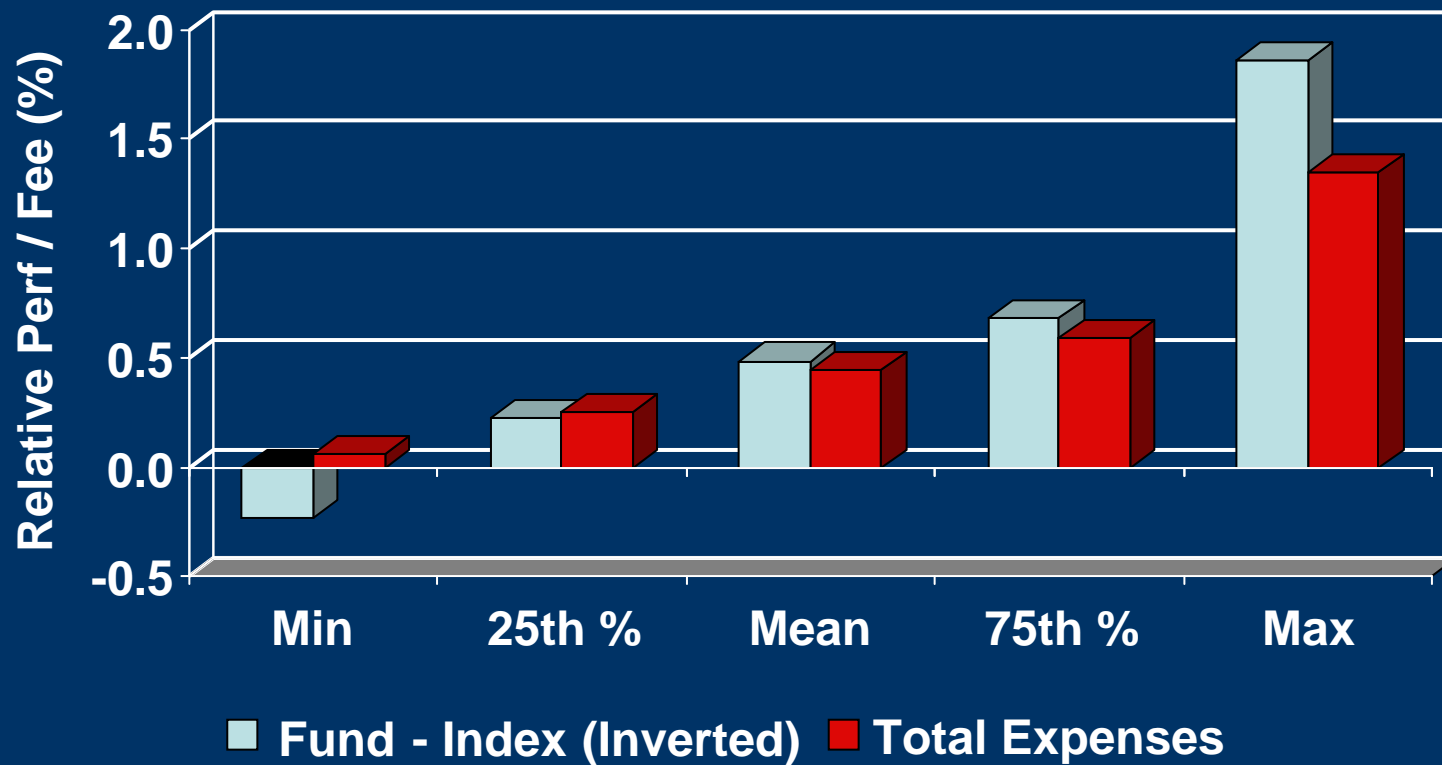
# ***Mutual Fund Flows***

# If you can't get simple things right...

- Index funds are simple things
  - You pay a fee for a fund that tracks the chosen index
  - You want accurate tracking and low fees
- Elton et al. (2004) show that fees and expenses vary significantly across S&P 500 index funds
  - Low fee funds outperform high fee funds, net of charges
  - These performance differentials are predictable

# Index fund selection

Elton et al. (2004) Summary Data



# Index fund selection

- Cash flows are only weakly related to performance
  - 30% flow difference between 25th and 75th percentiles of performance
- Many investors buy expensive index funds
  - Do investors pay for service differentials?
  - Elton et al. control for a service proxy
- Is this due to agency conflicts, like sales commission?
- What role do behavioural biases play?

# Out of sight, out of mind...

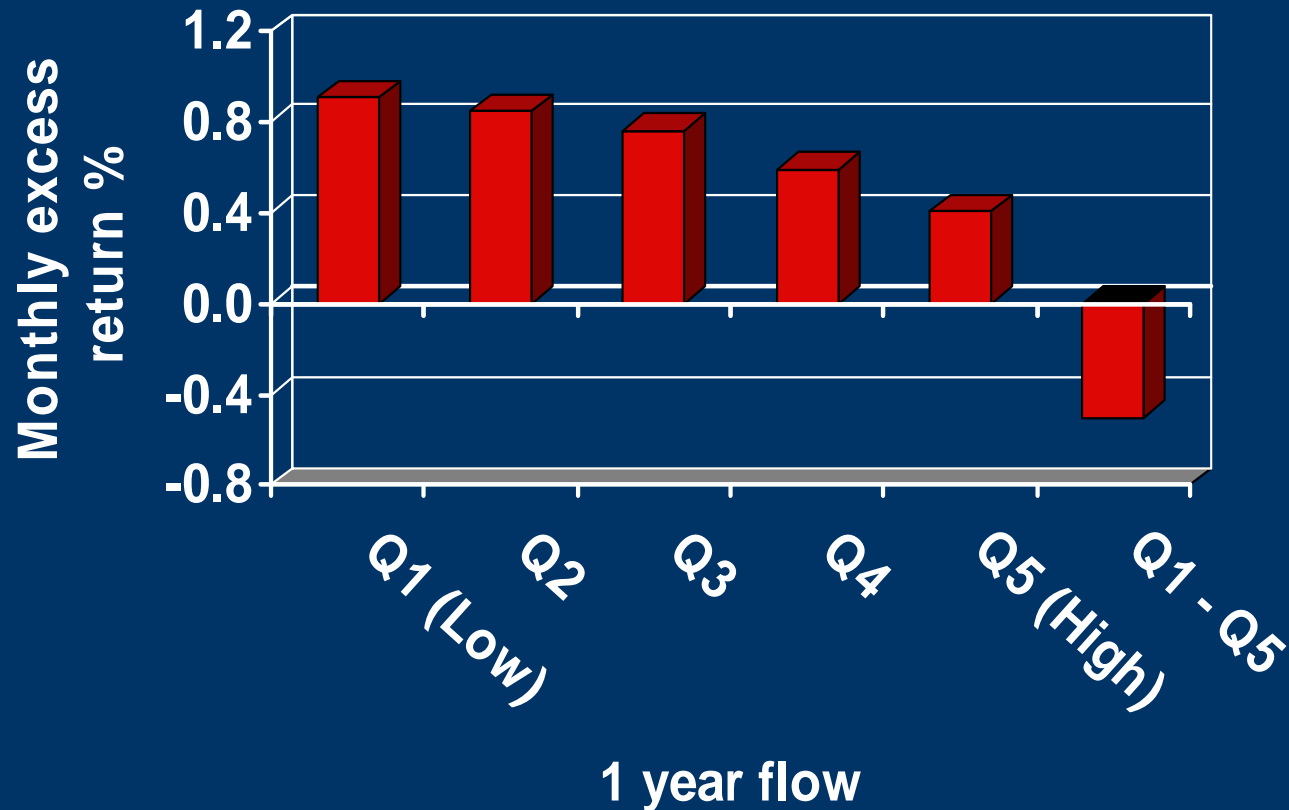
- Barber et al. (2005) argue that mutual fund purchases are driven by attention-grabbing information
- Front-end sales loads are salient
  - Sales loads have a negative impact on fund flows
  - Over time, sales loads have come down
- Other operating charges are not salient
  - There is no relation between these charges and fund flows
  - Over time, operating charges have risen

# Dumb money

- Mutual fund flows are related to investor sentiment
- Frazzini and Lamont (2008) characterize mutual fund flows as “*dumb money*”
- Retail investors direct money to funds which invest in stocks with low future returns
- Retail investors, on average, lose money in fund switches
- Firms exploit this by issuing stock when they are in favour

# Dumb money

Performance sorted by flow



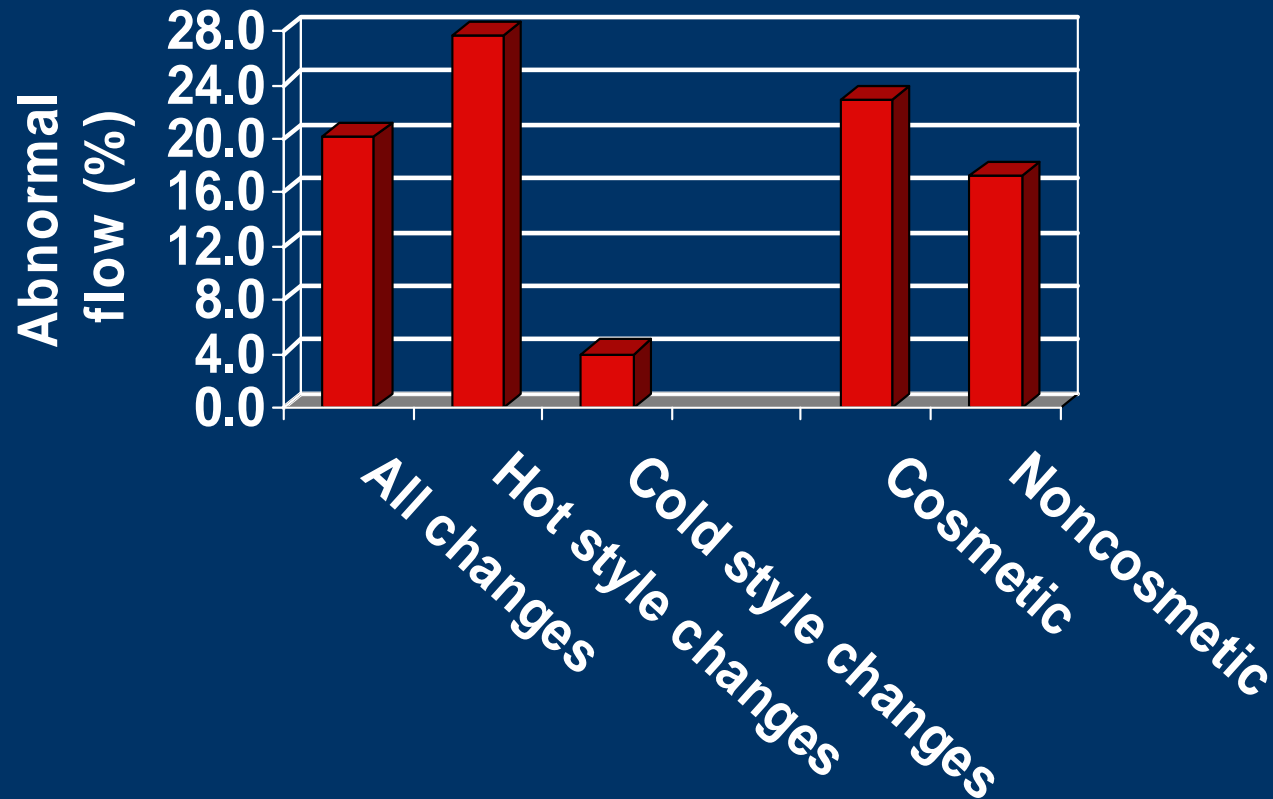
Source: Frazzini and Lamont (*Journal of Financial Economics*, 2008) Analysis of performance of stocks sorted on the basis of mutual fund flows into those stocks. Monthly excess returns.

# Changing names

- Mutual fund investors chase 'hot' investment styles
- Cooper et al. (2005) show that funds that change their name to reflect a hot style experience increased inflows
- There is no subsequent improvement in performance
- The increase in flow is not sensitive to whether or not the fund's holdings are consistent with the style implied by the name
- This is a similar story to that of 'dotcom' stocks

# Changing names

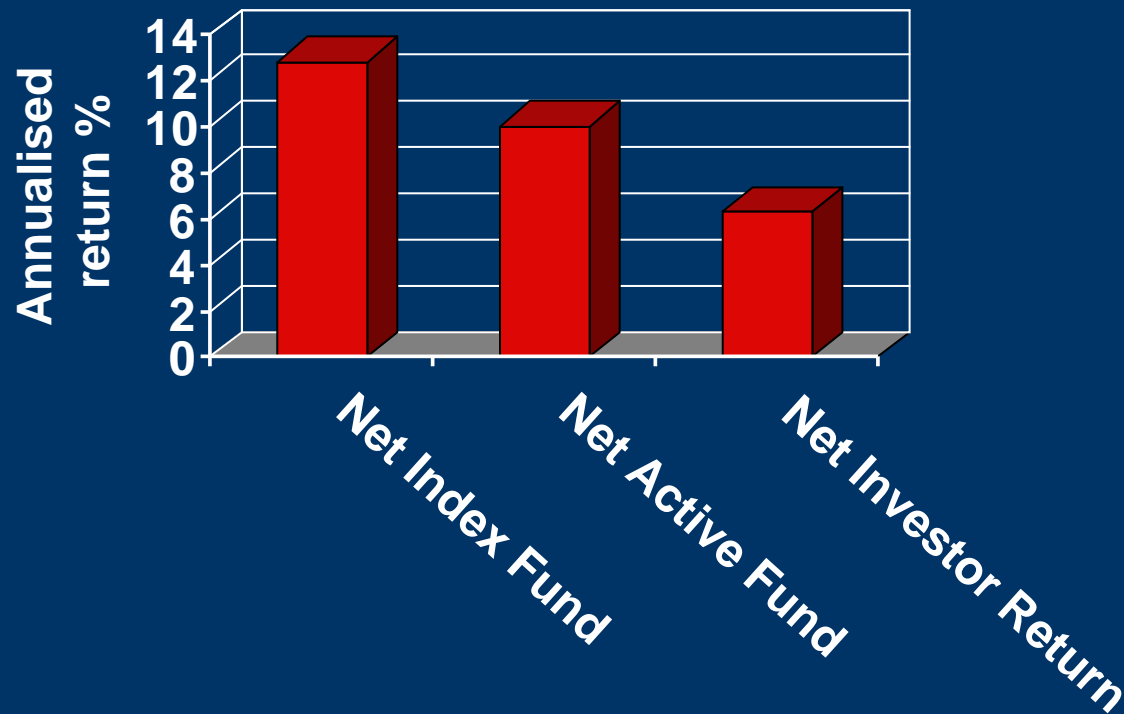
12 mth abnormal fund flow



Source: Cooper et al. (*Journal of Finance*, 2005) Analysis of abnormal fund flow into mutual funds that change name. Abnormal flows adjust for performance, size, and marketing expenses.

# Humble arithmetic

## U.S. Equity Active and Index Funds 1983–2003



Source: Bogle, J. (2005) 'The relentless rules of humble arithmetic' *Financial Analysts Journal*, November/December, pp22-35

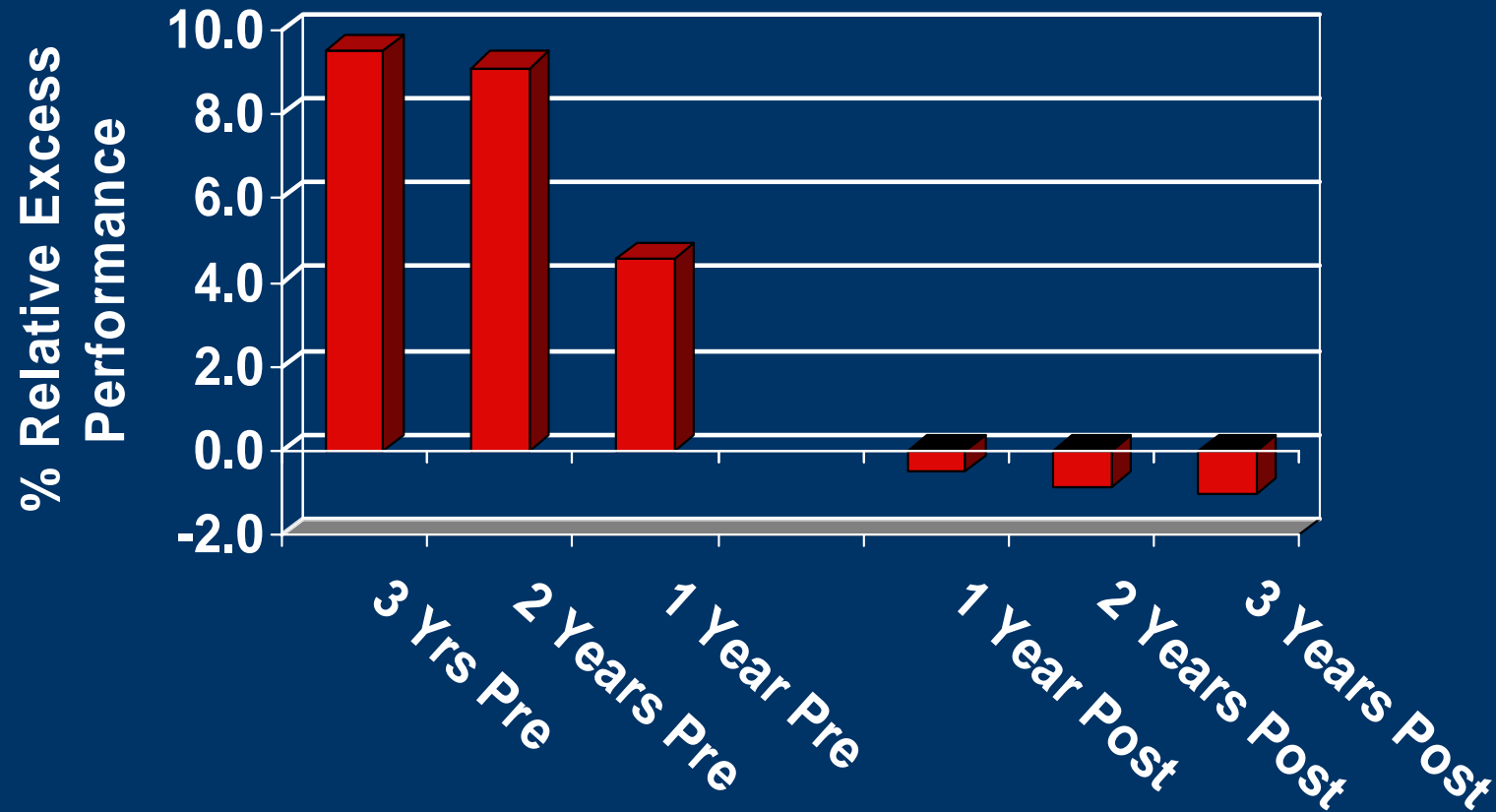
# ***Institutional Investors***

# Institutional investors

- Pension plans and endowments typically hire external managers for their assets
- Individual and group behavioural biases may be at play in making these decisions
- There is evidence of value destruction in hiring and firing decisions from both the U.S. and the U.K.

# U.S. manager selection decisions

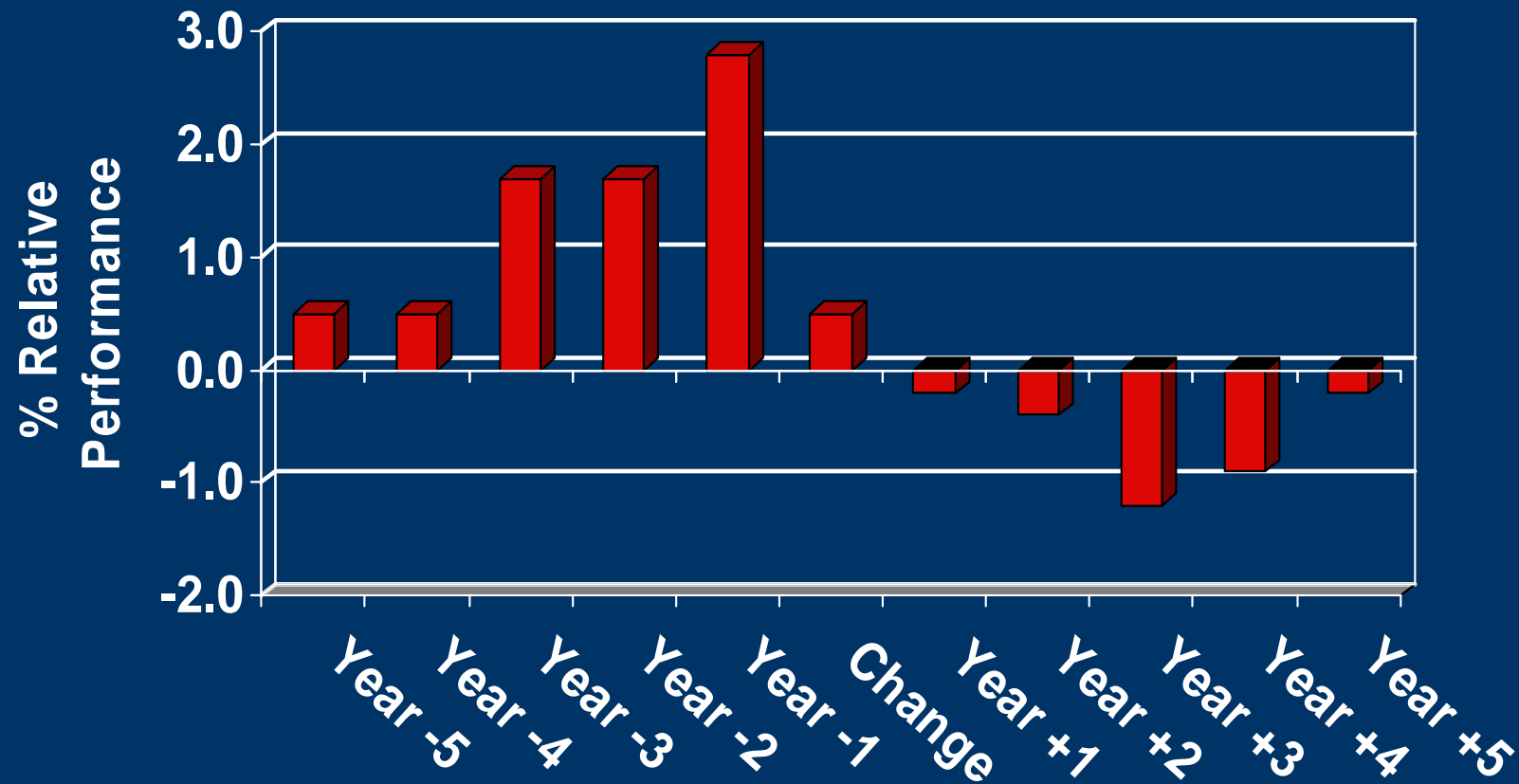
Hired Manager relative to Fired Manager



Source: Goyal and Wahal (*Journal of Finance*, 2008) Analysis of 412 'round trip' manager change decisions by U.S. pension funds over the period 1996 to 2003. Returns are not annualised.

# U.K. manager selection decisions

Hired Manager relative to Fired Manager



Source: WM Company (2001) Analysis of 89 'round trip' manager change decisions by U.K. pension funds over the period 1988 to 2000. A 2005 update shows broadly similar results.

# Manager selection decisions

- A behavioural interpretation of the manager selection data would suggest that trustees and sponsors:
  - Are overconfident in their ability to identify winning managers
  - Naïvely extrapolate past performance records
  - Use the representativeness heuristic that managers with strong recent performance are likely to do well in future
  - Seek to avoid the potential regret of hiring or retaining underperforming managers who continue to underperform

# Group decision making

- Many decisions in institutional asset management, e.g., manager selection, are made by committees
- Well run committees harness different skills and experiences to make effective decisions
- But, committees may exacerbate individual decision making biases and introduce some new ones
- Wood (2006) provides a comprehensive discussion

# Group decision making

- Committees may be:
  - Insufficiently diverse in terms of membership
  - Overconfident in their abilities
- Committee members may face pressure to conform
- Confirmation bias may lead committees to seek information that supports their priors
  - Conflicting information (and members) are marginalized
- Wood argues the chair has a key role to play
  - Ensuring diversity of membership and thought

# Concluding remarks

- In asset pricing, arbitrage can keep markets efficient in the face of trading by investors with biases
- In fund and manager selection, arbitrage has no role
  - Education and advice are required to protect investors
- Knowledge of these biases can help you design products that appeal to your clients
- Behavioural biases may be news to economists
  - Marketing people have known about them for years!

# *References*

This presentation is based on material from the Research Foundation of CFA Institute literature review “Behavioral Finance: Theories and Evidence” by Alistair Byrne, CFA and Mike Brooks.

References in this presentation can be found in the review.

<http://www.cfapubs.org/loi/rflr>

## ***Contact Information***

Alistair Byrne, CFA

Senior Lecturer in Finance

University of Edinburgh

Phone +44-131-651-5045

E-mail [alistair.byrne@ed.ac.uk](mailto:alistair.byrne@ed.ac.uk)

<http://www.man.ed.ac.uk>