Investors behaving badly

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How badly?

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> Any individual who is not professionally occupied in the financial services industry (and even most of those who are) and who in any way attempts to actively manage an investment portfolio is probably suffering from overconfidence. [...] Such people — again, probably you — should simply divide their money among several index mutual funds and turn off CNBC.

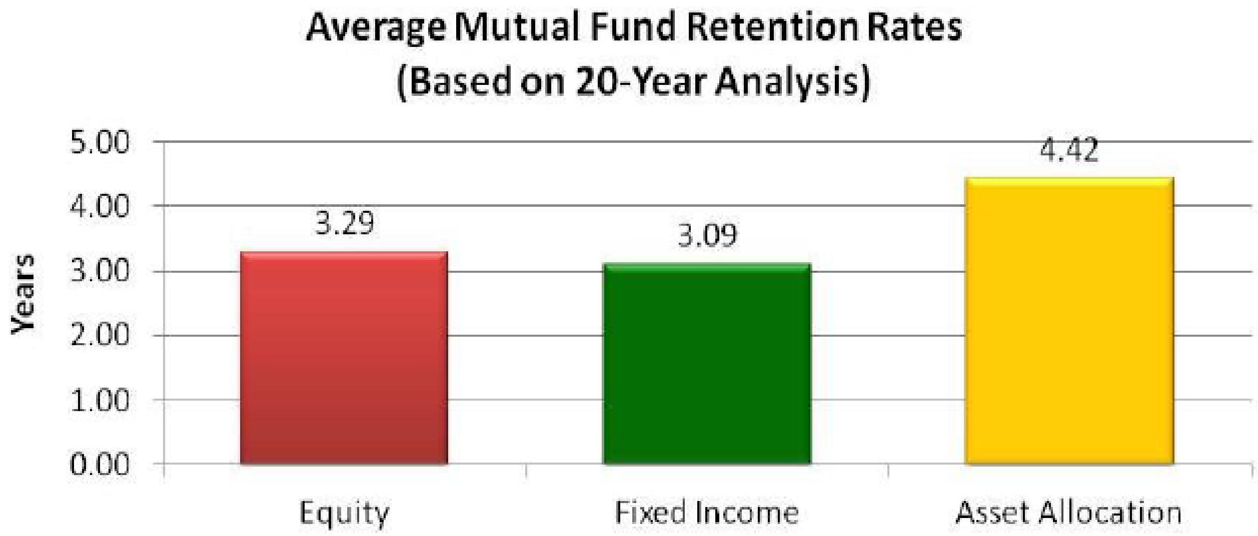
Overcoming the cost of being human

(or, The pursuit of anxiety-adjusted returns)

BARCLAYS

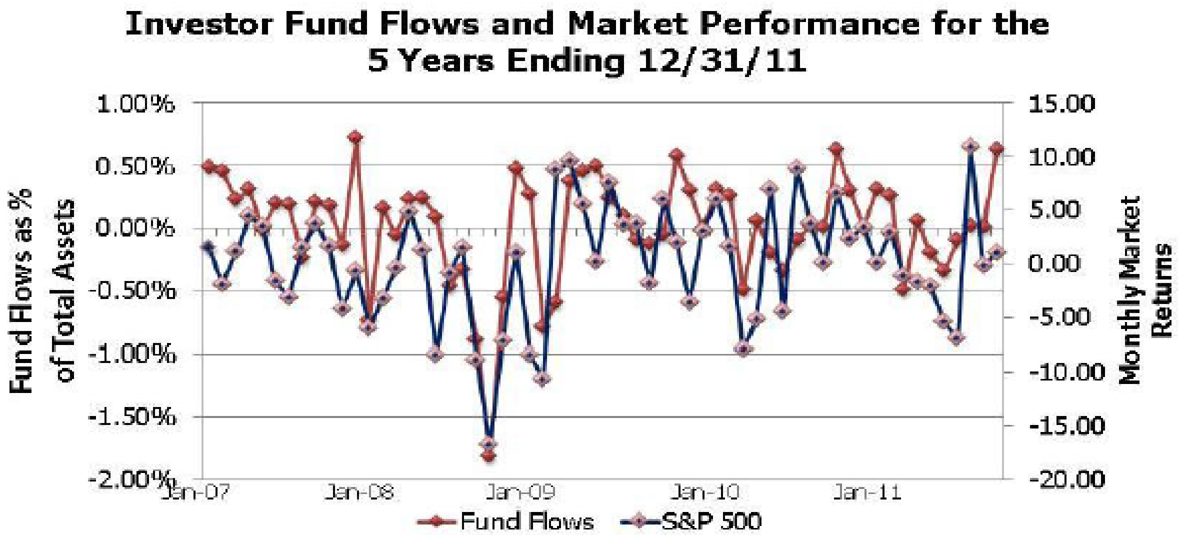
Our innate need for emotional comfort is estimated to cost the average investor around 2–3% per year in foregone returns.[1] For many, the figure is much higher. This shortfall – referred to as the *behaviour gap* – stems from the fact that the financial decisions that are optimal for the long term are often very uncomfortable to live with in the short term.

How badly?



Source: Dalbar

How badly?



Source: Dalbar

How badly?

Annualized Investor Return vs Benchmark

	Avg. Equity Investor	S&P 500	Difference	Avg. Fixed Income Investor	Barclays Aggregate Bond Index	Difference
20 Year	4,25%	8,21%	-3,96%	0,98%	6,34%	-5,36%
10 Year	6,05%	7,10%	-1,05%	1,17%	5,18%	-4,01%
5 Year	-0,84%	1,66%	-2,50%	1,64%	5,95%	-4,31%
3 Year	7,63%	10,87%	-3,24%	2,85%	6,19%	-3,34%
12 months	15,56%	15,98%	-0,42%	4,68%	4,21%	0,47%

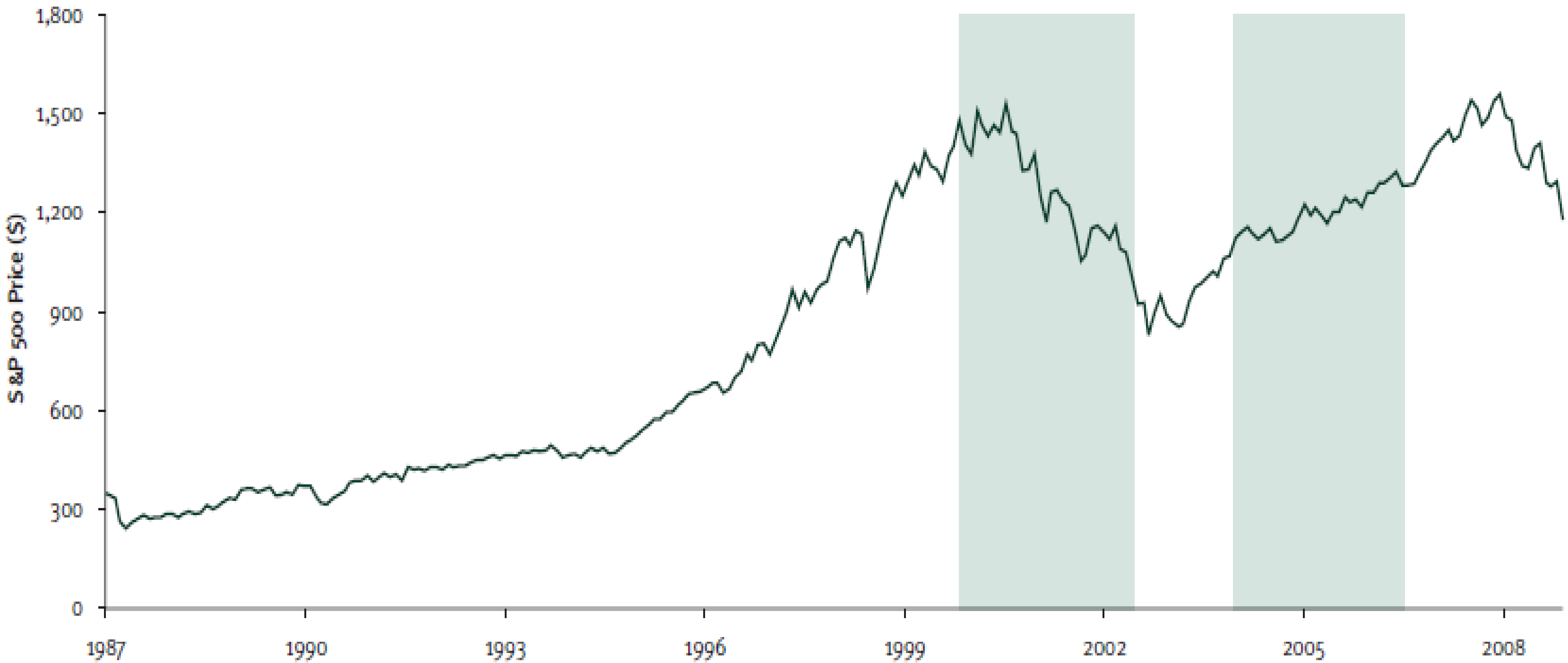
Source: DALBAR

Sentiment cycle

Figure 2: Investor Sentiment and the Business Cycle

Sentiment cycle

Figure 6: Winning Combination: Sell on 67% Bullish; Buy on 50% Bearish. Improvement Over Buy-and-Hold: + 46.68%



Source: Standard & Poor's, American Association of Individual Investors

While these specific sentiment levels apply only to the historical data used in the experiment, a key takeaway of this exercise is that the more profitable of the simulated strategies were those that bought equities when sentiment levels were bearish (indicating greater perceived risk) and sold when they were bullish.

Gentlemen prefer....

Rev Financ Stud. Author manuscript; available in PMC 2011 April 1. PMCID: PMC2872995
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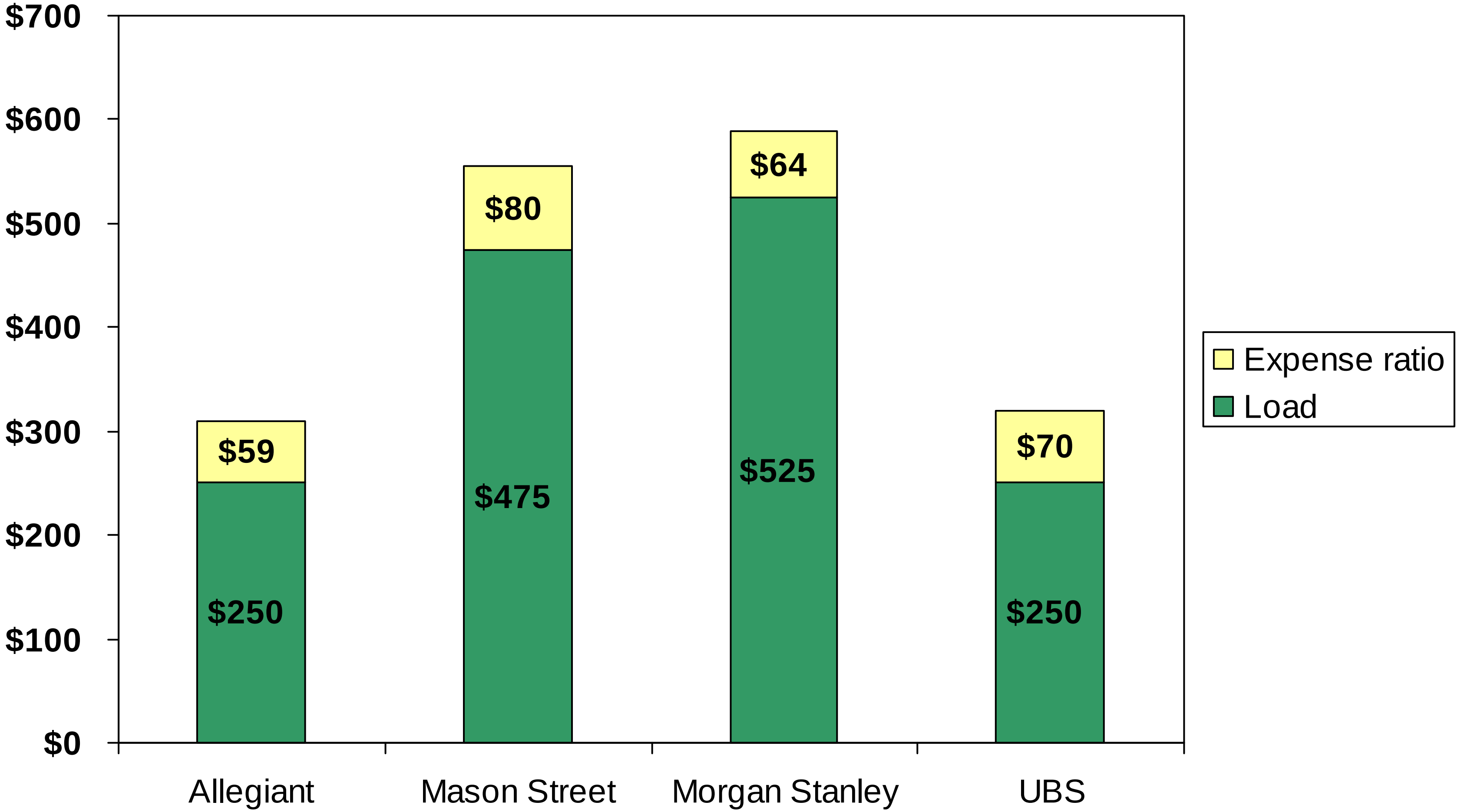
Rev Financ Stud. 2010 April 1; 23(4): 1405–1432.
doi: 10.1093/rfs/hhp097

Why Does the Law of One Price Fail? An Experiment on Index Mutual Funds[*]

James J. Choi, David Laibson, and Brigitte C. Madrian

- Subjects allocate $10,000 among four funds
- Eliminate variation in pre-fee returns
  – Choose among S&P 500 index funds
- Unbundle services from returns
  – *Experimenters* pay out portfolio returns, so no access to investment company services

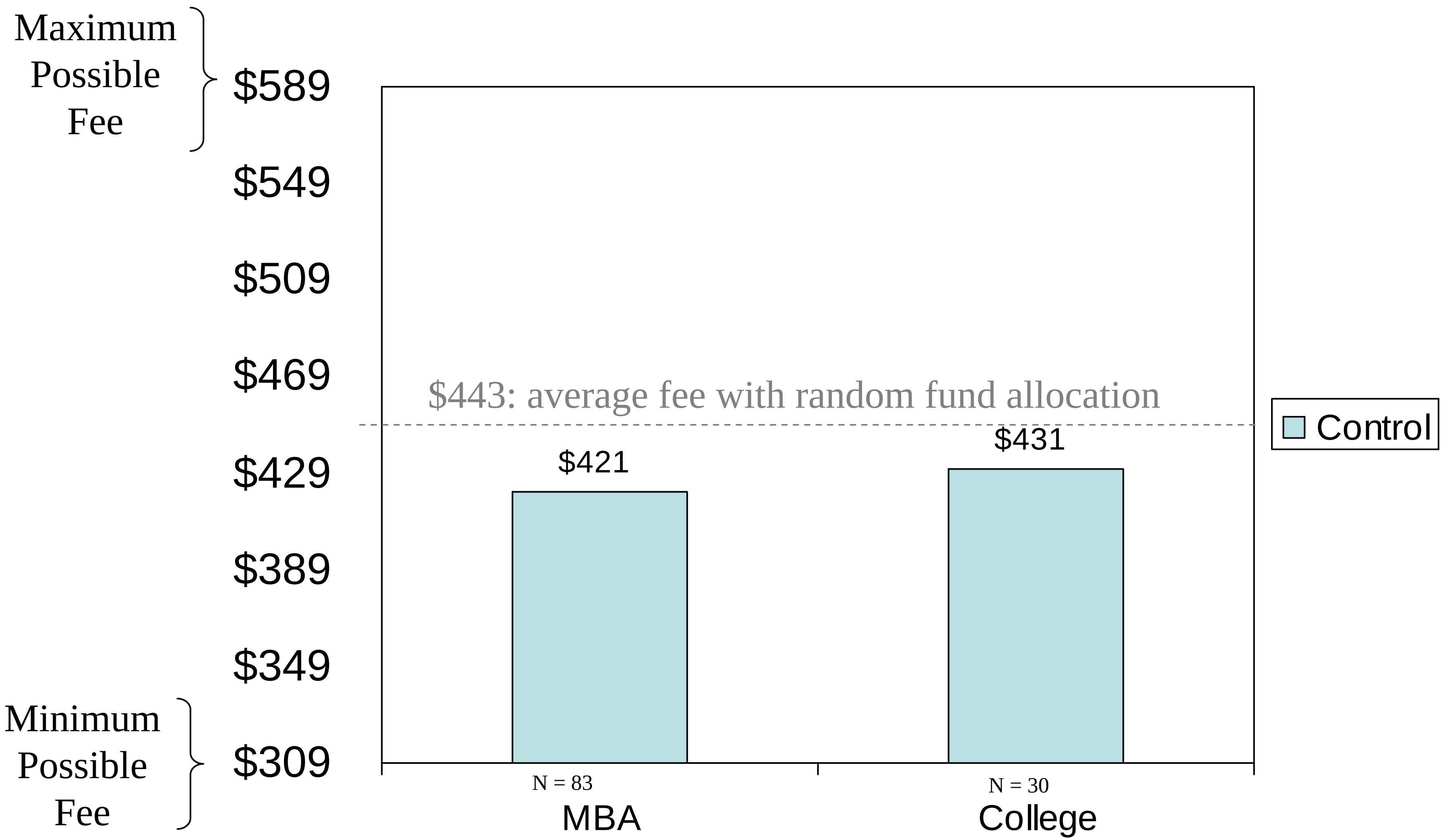
Gentlemen prefer…..



Experimental conditions

- Control
  - Subjects receive only four prospectuses
  - Prospectuses are often the only information investors receive from companies
- Fees transparency treatment
  - Eliminate search costs by *also* distributing fee summary sheet (repeats information in prospectus)
- Returns treatment
  - Highlight extraneous information by distributing summary of funds' annualized returns since *inception* (repeats information in prospectus)

Gentlemen prefer…high fees!!!



6% of MBA Controls put all funds in minimum-fee fund

0% of College Controls put all funds in minimum-fee fund

Ranking of factor importance

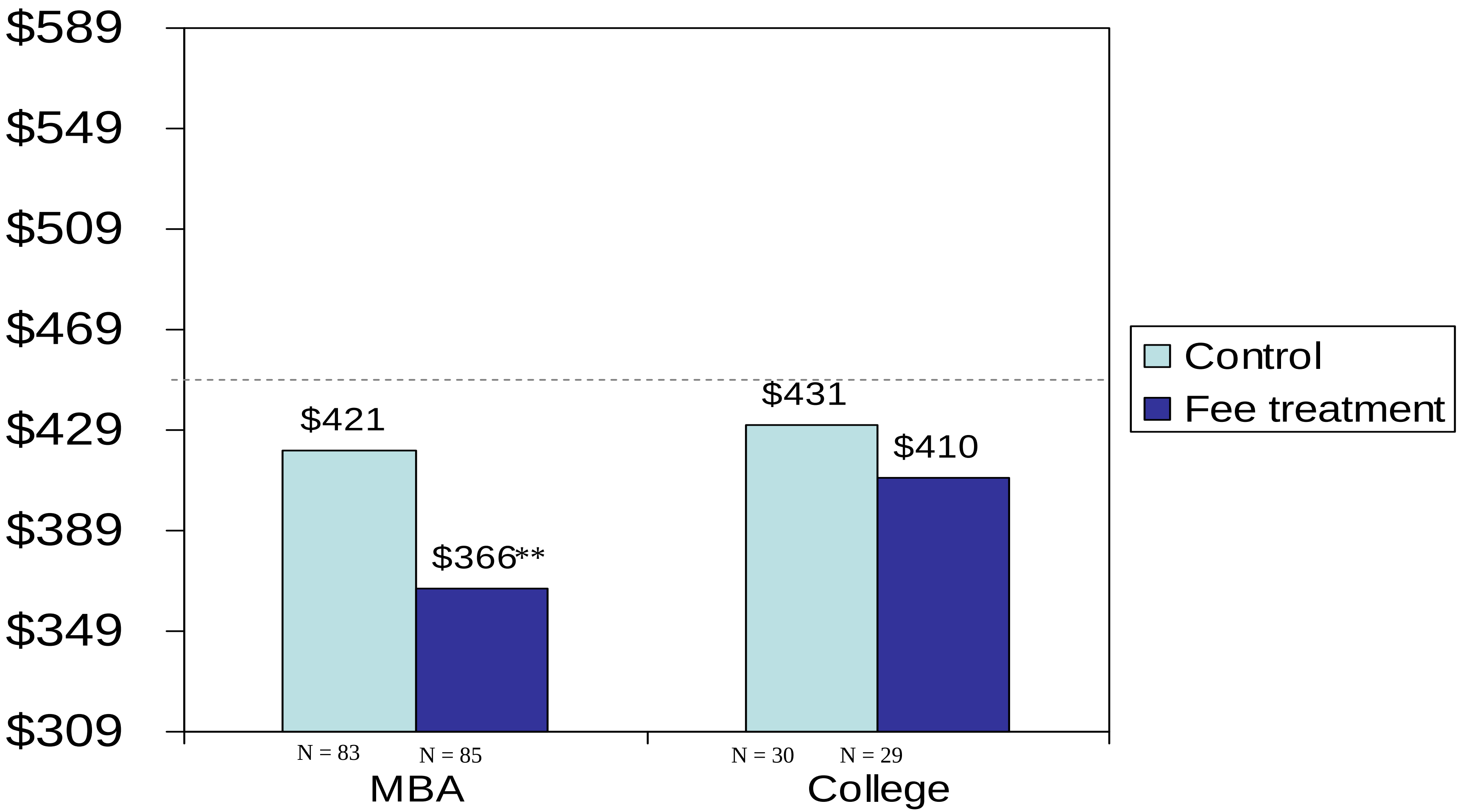
<u>MBA controls</u>

1. Fees
2. 1-year performance
3. Performance since inception
4. Investment objectives
5. Desire to diversify among funds
6. Brand recognition
7. Performance over different horizon
8. Past experience with fund companies
9. Quality of prospectus
10. Customer service of fund
11. Minimum opening balance

<u>College controls</u>

1. 1-year performance
2. Performance since inception
3. Desire to diversify among funds
4. Investment objectives
5. Quality of prospectus
6. Performance over different horizon
7. Brand recognition
8. Fees
9. Customer service of fund
10. Minimum opening balance
11. Past experience with fund companies

Gentlemen prefer…high fees!!!



19% of MBA treatment put all funds in minimum-fee fund

10% of College treatment put all funds in minimum-fee fund

Ranking of factor importance

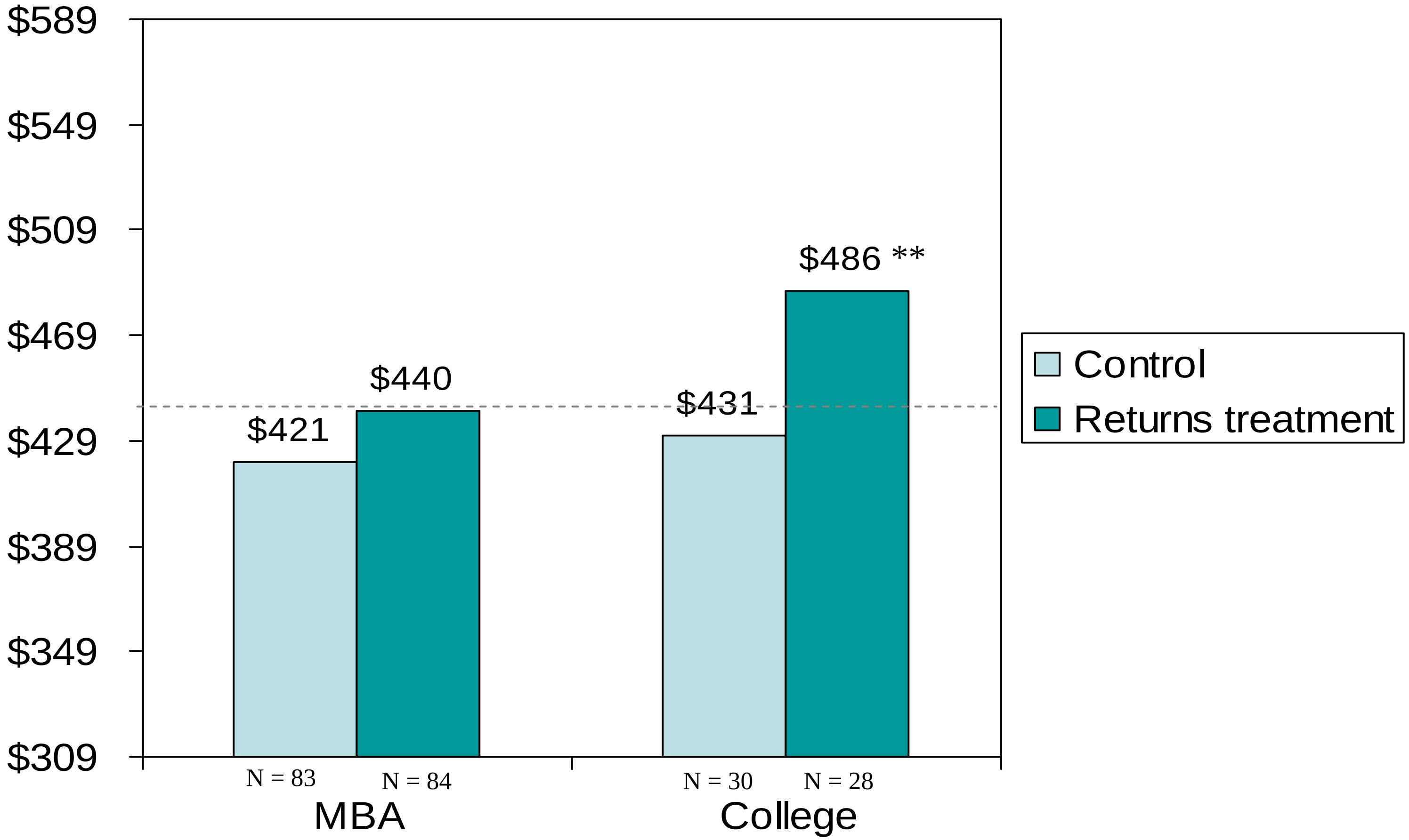
MBA fee treatment
1. Fees
2. 1-year performance
3. Performance since inception

MBA controls
1. Fees
2. 1-year performance
3. Performance since inception

College fee treatment
1. Fees
2. 1-year performance
3. Performance since inception

College controls
1. 1-year performance
2. Performance since inception
3. Desire to diversify among funds

Gentlemen prefer…historical retuns!!!



Ranking of factor importance

<u>MBA return treatment</u>

1. 1-year performance
2. Performance since inception
3. Fees

<u>MBA controls</u>

1. Fees
2. 1-year performance
3. Performance since inception

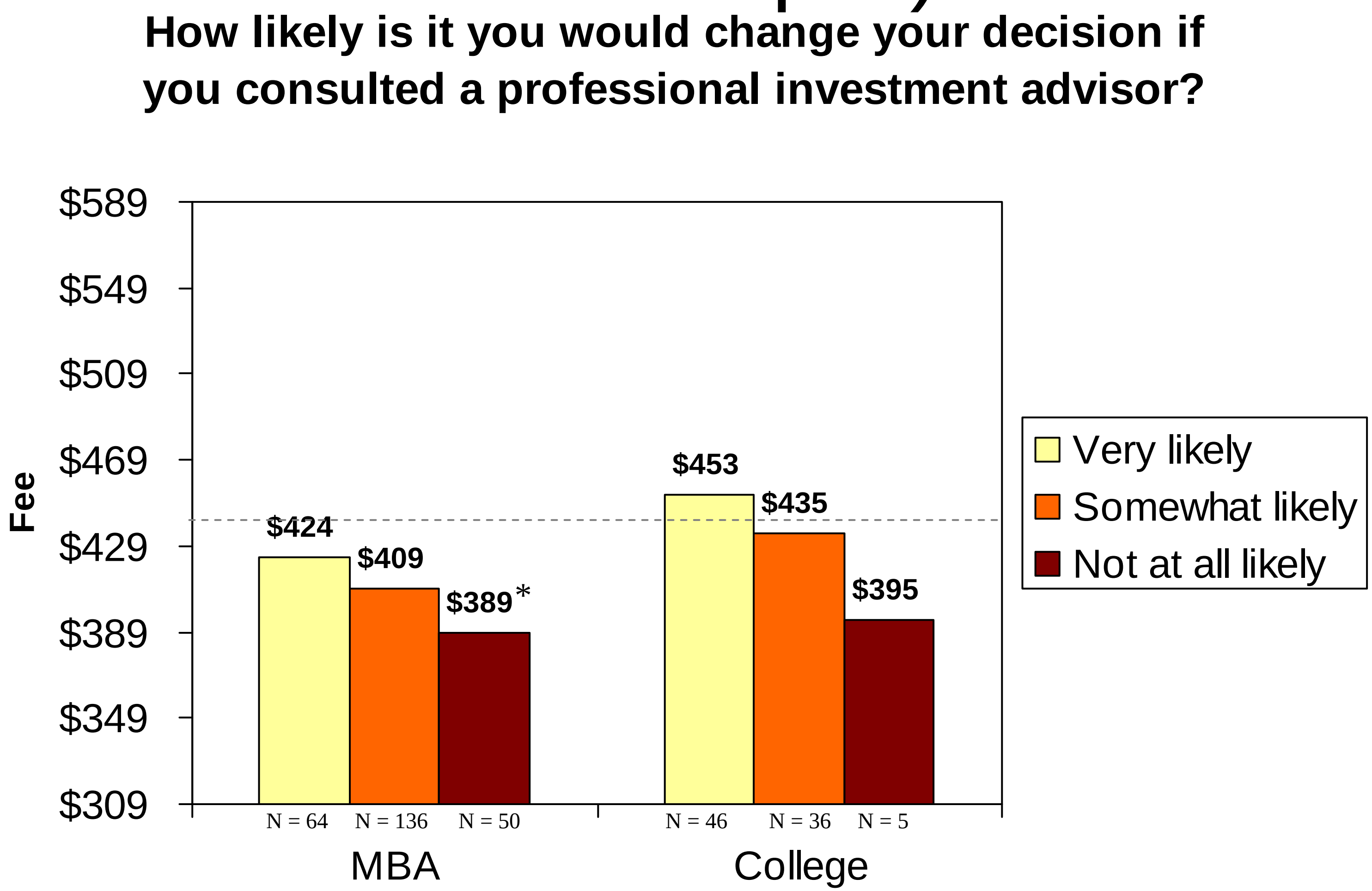
<u>College return treatment</u>

1. Performance since inception
2. 1-year performance
3. Desire to diversify among funds

<u>College controls</u>

1. 1-year performance
2. Performance since inception
3. Desire to diversify among funds

Lack of confidence and fees (all revealed preferences are not created equal)



t-tests: MBA 1 vs. 2, p=0.2013; MBA 1 vs. 3, p=0.0479;
College 1 vs. 2, p=0.2864; College 1 vs. 3, p=0.3335

Fees

- There is arguably an even simpler explanation for why people ignore fees, which is that fees seem very small.
- They are presented in terms of fractions of a percent, rather than in dollar amounts, and, in order to estimate their true cost, people must have a sense of how compound interest works over many years

The (deadly) seven sins of fund investors

- ✓ Narrow framing
  - ❑ Making decisions without considering all implications
- ✓ Disposition effect
  - ❑ Tendency to sell winners too early and hold loser too long
- ✓ Optimism (overconfidence)
  - ❑ Belief that good things happen to me and bad things happen to others...so I can trade a lot
- ✓ Familiarity or (local bias)
  - ❑ Seeking to reduce risk, investing into the backgarden
- ✓ Lottery stock preference
  - ❑ Preference for investment with low price, high idiosyncratic volatility and skewness
- ✓ Inattention to earning news
- ✓ Inattention to macroeconomic news
  - ❑ Tendency to ignore potentially relevant economic news

Fund Investors' identikit

Gambler

He scores high on Disposition Effect, Narrow Framing, and, especially, Lottery Stocks Preference.
Gambler represents individuals who are less likely to use mutual funds, tend to select high expense funds, are more likely to trend-chase, and suffer significantly inferior mutual fund portfolio performance as a consequence. Gambler employs mutual funds less than he probably should, but, when he does, he makes poor use of them

Fund Investors' identikit

Smart

He displays negative loadings on several behavioral biases

Smart stereotype is more likely to use mutual funds, more likely to use funds with low expense ratios or loads, less likely to trend-chase, and enjoys significantly positive mutual fund performance

Fund Investors’ identikit

WANTED

Overconfident

He has a large positive loading on Overconfidence , lottery stock preference and local bias

Overconfident is a poor decision-maker. He avoids participation in mutual funds and trend-chases to an even greater degree than Gambler, and also tends to select high expense, high load, and high turnover funds.

Fund Investors’ identikit

WANTED

Narrow framer

He scores high on narrow framing and disposition effect

Narrow Framer’s mutual fund participation is about as bad as Gambler’s, though not as bad as Overconfident’s. Small holdings of mutual funds, selection of high expense funds, trend-chasing, and consequent poor performance

Fund Investors’ identikit

WANTED

Mature

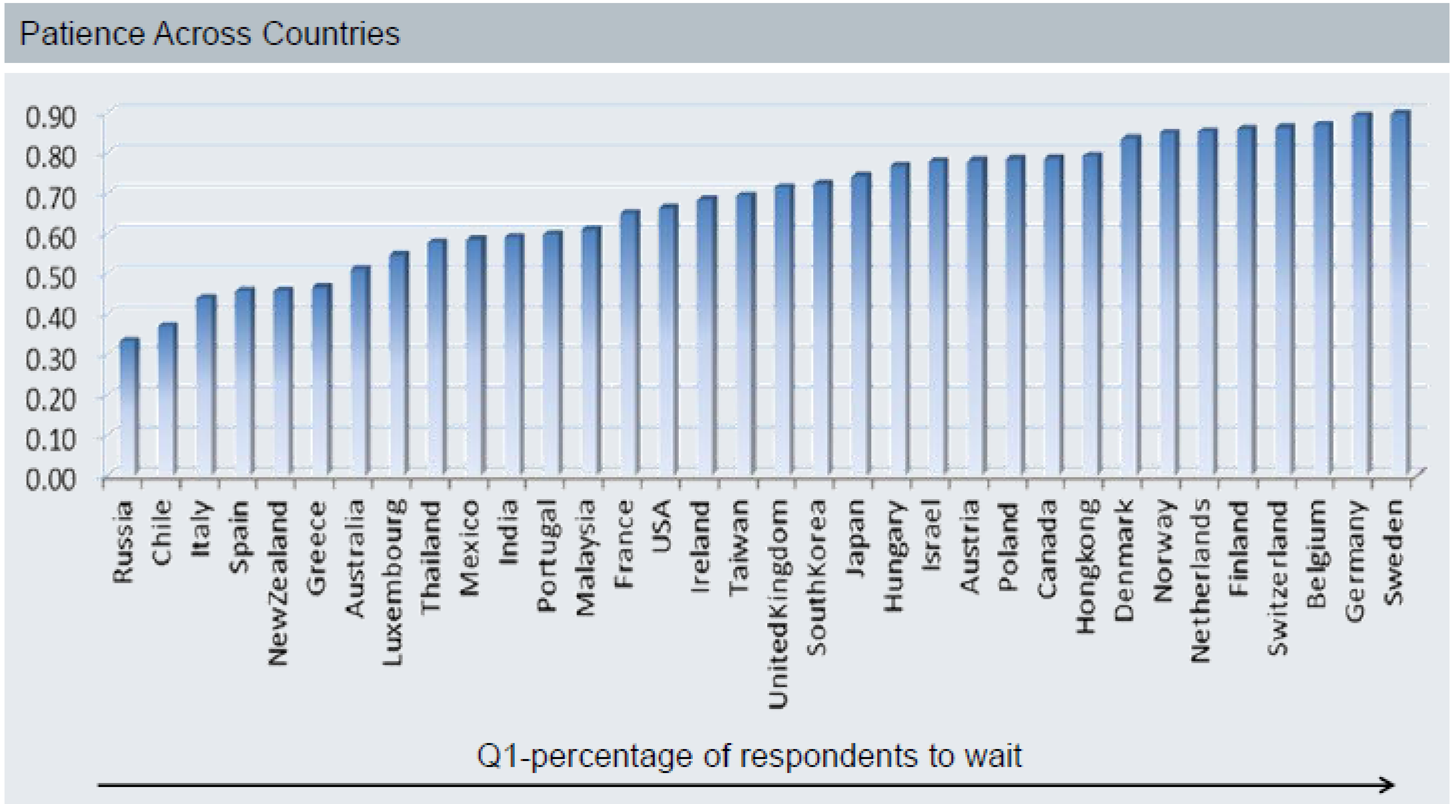
He has negative loading on behavioral biases.

Mature participates and holds mutual funds to a greater extent than other stereotypes, and avoids high-expense funds and trend-chasing to an even greater extent than “Smart”, while his performance is not as good

Fund Investors' identikit

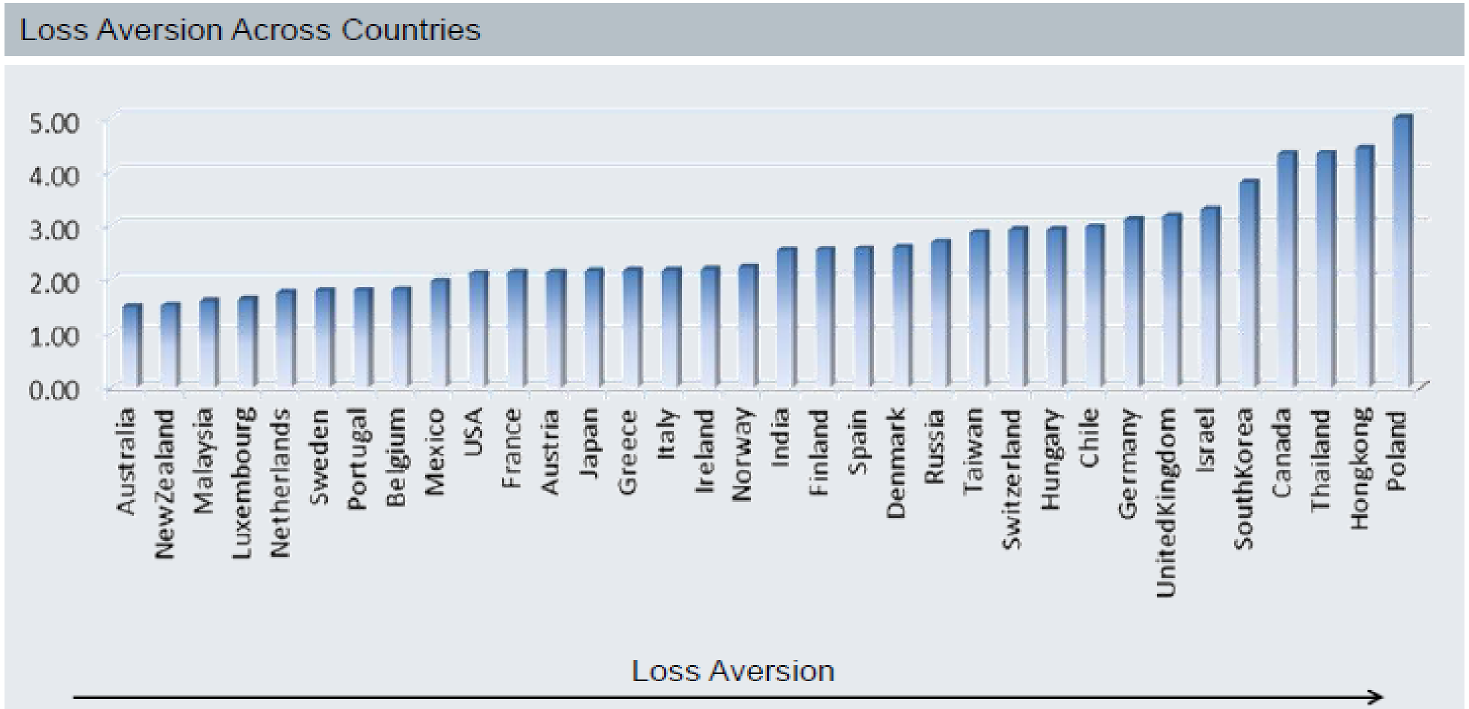
- Behavioral biases are important in driving investors into high front end load funds.
- Investors who are more behaviorally-biased on any of several dimensions or do not pay attention to salient news are more likely to display poor mutual fund investment decisions
- Behavioral proxies detect poor decision-making skills that reduce portfolio performance
- Gambler, Overconfident, and Narrow Framer score negatively on both index fund participation and holdings.
  - Their lack of interest in these funds is consistent with a pattern of bad decision-making in their use of other funds and individual stocks

An anthropological perspective



Source: Hens, Caliskan (2013)

An anthropological perspective



Source: Hens, Caliskan (2013)

An anthropological perspective

Regression on Flow(t)	Intercept	Return(t)	Loss Aversion	Patience
Coefficients	-0.226	0.0999	0.177	0.209
t-statistics	-0.605	4.898	1.992	0.365

Regression on Flow(t)	Intercept	Return(t)	Loss Aversion	Return(t)* Loss Aversion	Patience
Coefficients	-0.16	0.055	0.150	6.724	0.212
t-stat	-0.341	0.771	1.23	2.175	0.384

Regression on Flow(t)²	Intercept	R(t)²	log(Patience)	R(t)²*Loss Aversion²
Coefficients	5.326	-0.130	-7.658	0.031
t-statistics	2.791	-1.875	-2.040	2.472

Source: Hens, Caliskan (2013)

Thank you for your attention!

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