

Recent Developments in Behavioral Finance

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**The Individual Finance and Insurance Decisions
(IFID) Centre**

**Investor's problem:
Choose portfolio of assets.**

- Estimate probabilities (i.e., risks and rewards)
- Match with own preferences, i.e., choose.

Estimating Probabilities

- It happened to me.
- It happened to my friends.
- I can easily remember it happening.
- It happened recently.
- I can easily imagine how it could happen.

Habits of Individual Investors

- Trade too often.
- Hold on to losers.
- Chase the action.

When All Traders Are Above Average

(Odean, 1998, *Journal of Finance*)

- Trade more.
- Earn less.
- Underdiversify.
- Volatility increases.
- Market depth increases.

Do Investors Trade Too Much?

Odean, 1999, *American Economic Review*

Average Returns Following Purchases and Sales

	4 Months Later	1 Year Later	2 Years Later
Stocks Bought			
Minus	-1.45	-3.22	-3.57
Stocks Sold			

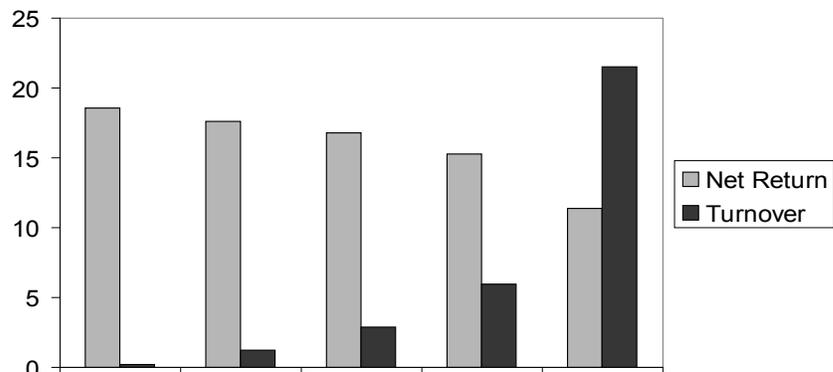
Excluding Non-Speculative Trades

Average Returns Following Speculative Purchases and Sales

	4 Months Later	1 Year Later	2 Years Later
Stocks Bought Minus Stocks Sold	-2.46	-5.07	-8.61

Trading is Hazardous to Your Wealth

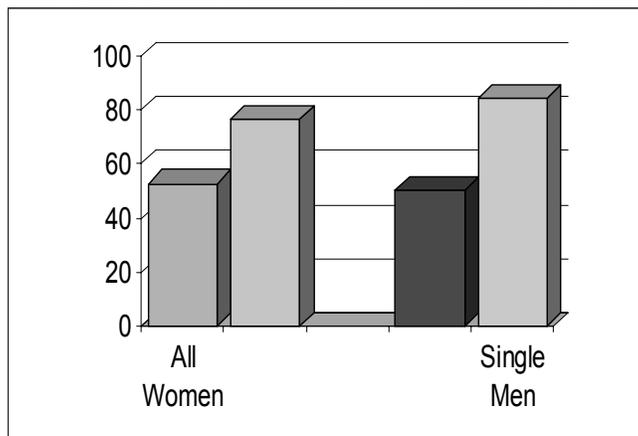
Barber and Odean, 2000, *Journal of Finance*



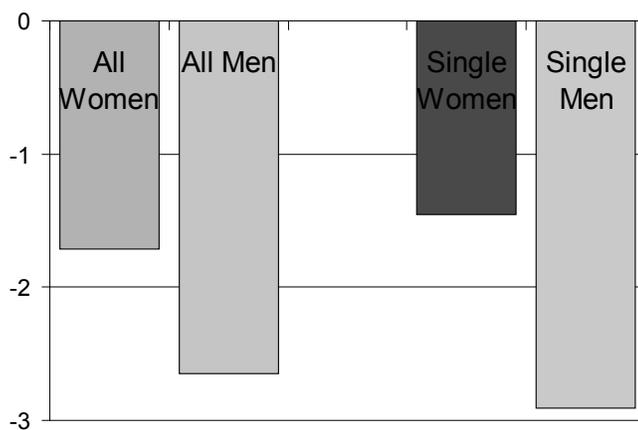
Boys will be Boys

Barber and Odean, 2001, *Quarterly Journal of Economics*,

Percent Annual Turnover



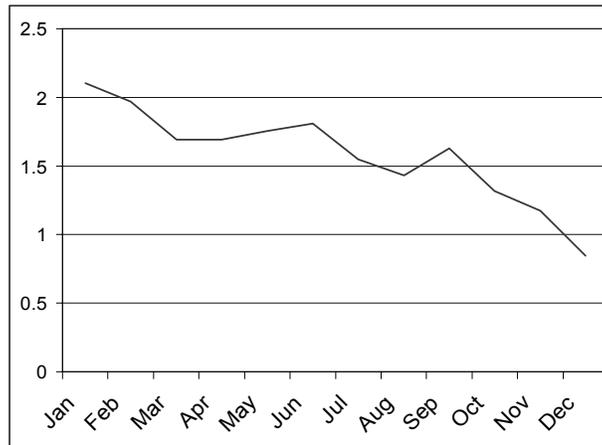
“Own Benchmark” Annual Net Returns



Don't gamble ...

Are Investors Reluctant to Realize Their Losses?

Journal of Finance, 1998



Proportion of Gains Realized / Proportion of Losses Realized

All that Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors

- Thousands of stocks.
- Bounded rationality and processing ability.
- Limit search to stocks that catch attention.
- Investors buy stocks that catch their attention.

Individuals (vs.) Institutions

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Buying<ul style="list-style-type: none">– Big search problem, bounded rationality
• Selling<ul style="list-style-type: none">– No search problem<ul style="list-style-type: none">• Small portfolios• Few short sales | <ul style="list-style-type: none">• Buying<ul style="list-style-type: none">– Big search problem, but many resources<ul style="list-style-type: none">• Time to consider more stocks• Computers to filter choice set• Rules to determine or limit decision; e.g., sector specific search, specific P/E or growth criteria
• Selling<ul style="list-style-type: none">– Potential search problem<ul style="list-style-type: none">• Large portfolio from which to sell• More likely to sell short than individuals |
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How do individual investors solve the search problem?

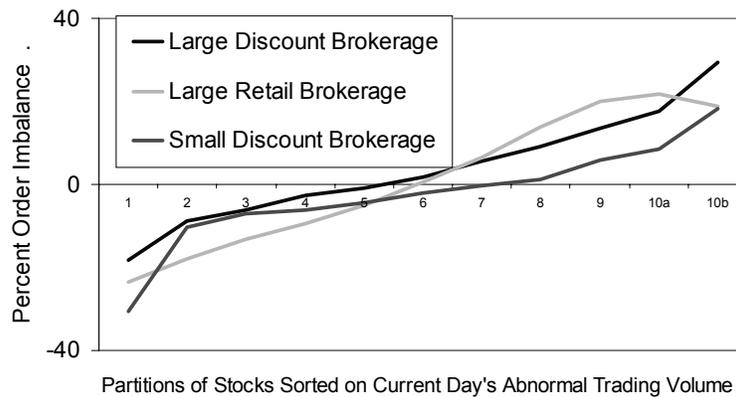
- They “limit” search to stock that catch their attention.
- Investors don’t buy everything that catches their attention.
- But, mostly, they buy only stocks that do.
 - Contrarian
 - Trend chaser

When do stocks attract **ATTENTION**?

- Abnormal volume
- Extreme price moves
- News

Abnormal Volume Sort Individuals

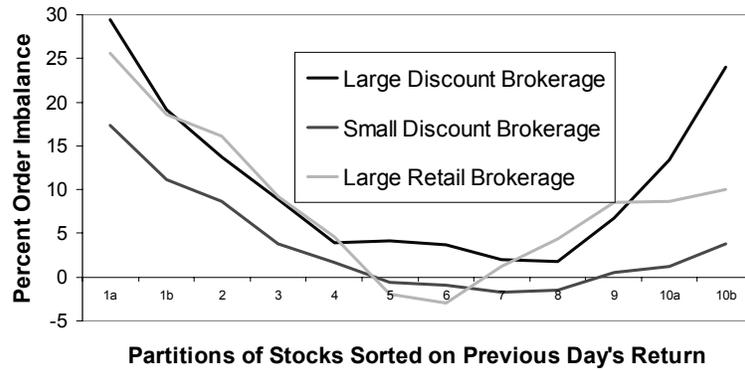
Imbalance by number of trades



Institutions

Return Sort Individuals

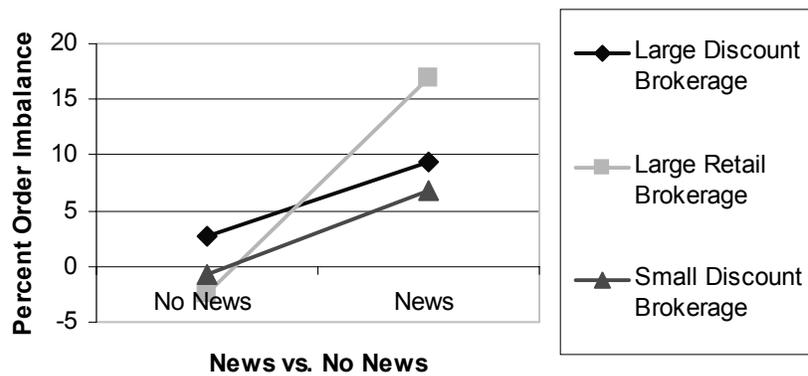
Imbalance by number of trades



Institutions

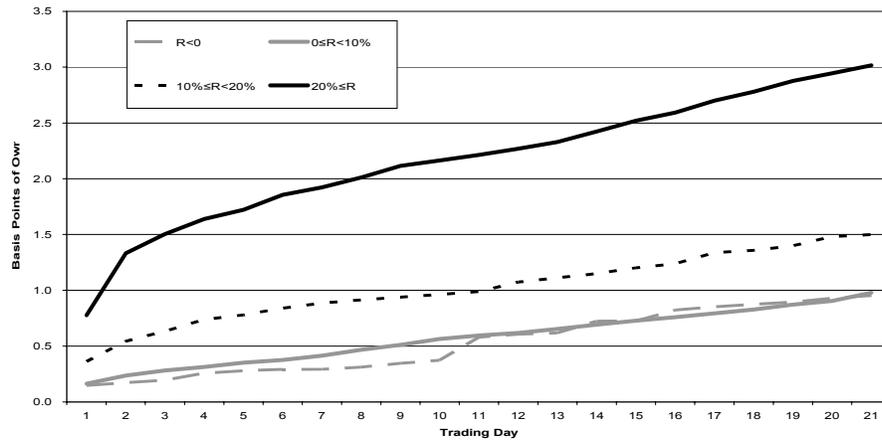
No News vs. News

Order imbalance by number of trades



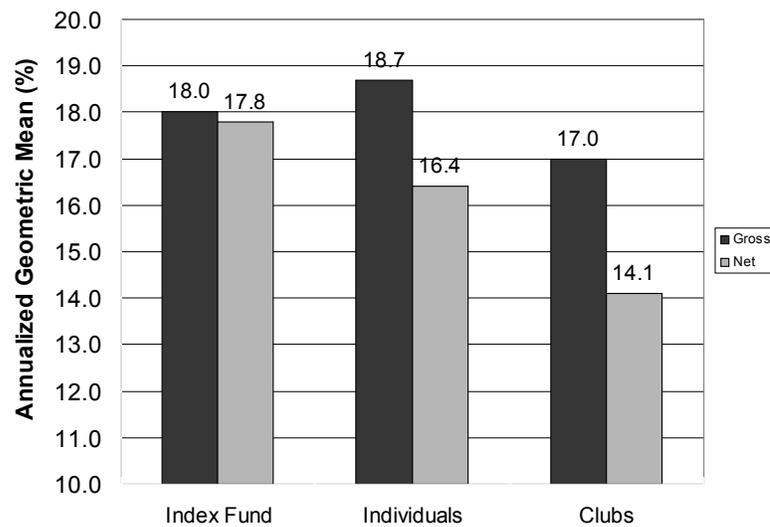
The Queen ...

Cumulative Mean Net Purchases of IPOs by Underpricing Category in First Month Following Offer

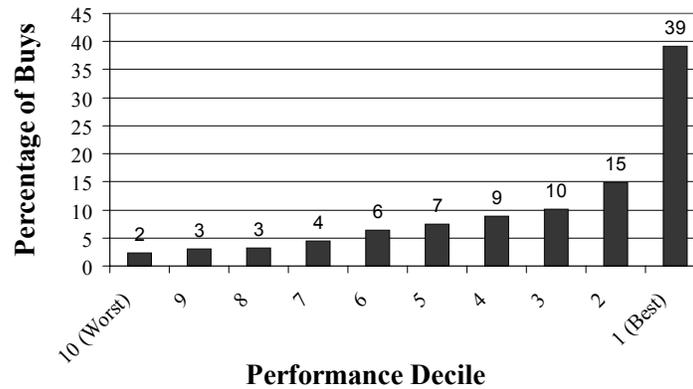


Too Many Cooks Spoil the Profits

Barber & Odean, 2000, *Financial Analysts Journal*



Mutual Funds: Money Pours into *Last Year's Winners*



Online Investors: Do the Slow Die First?

Barber and Odean, 2000

- 1,607 “early” online investors (1991-1996).
- Size-matched counterparts

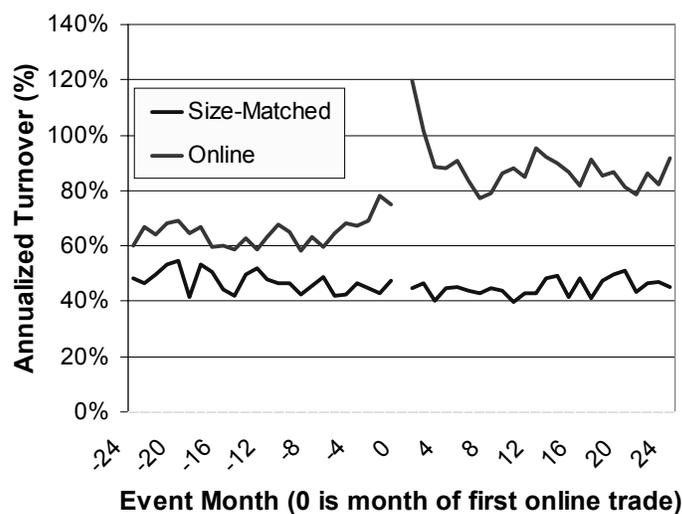
Investors who go online:

- Perform well before going online.
- Accelerate trading after going online.
- Trade more speculatively after going online,
- Perform poorly after going online.

Frictions and Self-Control

- No chocolate chip cookies in my cupboard.

Turnover



Can the biases of individual investors affect asset prices?

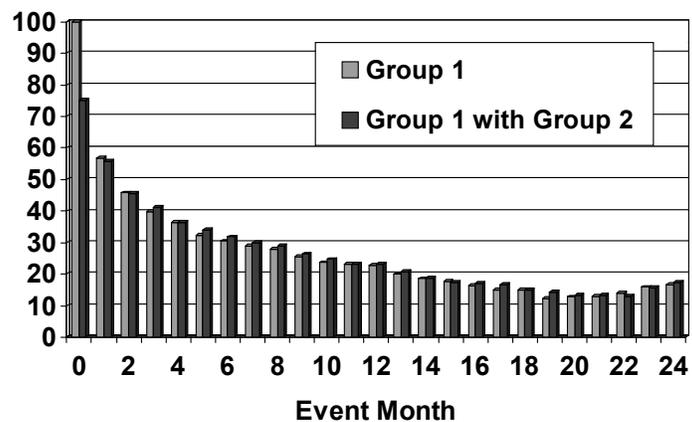
- Limits of Arbitrage
- Systematic buying and selling
 - Across investors
 - Over time

Correlation of % Buys in Month t with % Buys in Month $t+L$

Horizon (L):	Group 1 with Group 1	Group 2 with Group 2	Group 1 with Group 2
0	100.0%	100.0%	75.1%
1	56.7	58.6	55.8
2	45.8	46.4	45.5
3	39.8	40.8	41.1
4	36.5	34.9	36.5

Large Retail Brokerage

Evolution of Correlations (Retail) (Table 2)



Household Investments in Equity Markets has Grown

- In 1975, 31% of household financial assets in equities and mutual funds.
- In 1998, 61% of household financial assets in equities and mutual funds.

Many Investors are Inexperienced

- 1995-1998, number of households investing directly in stock grew by over 30%.

New Investors Learn What is Expected of them and What to Expect from...

- Friends and family.
- Financial advisors.
- Books, magazines articles, and news reports.
- And advertising.

Investing Advice from Television Commercials

Barber, Elsbach, & Odean (2002)

- Analyzed 500 television brokerage commercials from 1990s
- Rated for advice, mood, and images encouraging overconfidence, and illusion of control
- Trend during 90s toward more humor, less sound advice, and overconfidence

Mood and Investing

- Good mood:
 - more spontaneous
 - more creative
 - less critical decision making.
- Serious mood:
 - Less spontaneous,
 - more analytical,
 - more critical decision making.
 - Elsbach and Barr (1999); Schwarz (1999).
- Online ads: Trading is fun.

Traditional Investment Advice

- Invest for the long run.
- Buy and hold.
- Diversity.
- Control trading costs.
- Pay attention to taxes.

Percent of All Brokerage Commercials Containing Selected Messages: 1990-2000

	Subperiods		t-statistic for differences in subperiods
	1990- 1995	1996- 2000	
Sound financial advice	2.65%	3.17%	1.34
Unsound financial advice	2.65%	5.01%	1.63
Overconfidence	9.73%	24.01%	4.10
Illusion of control	2.65%	10.82%	3.04
Positive mood	12.39%	32.98%	5.11
Serious Mood	67.26%	45.65%	-5.29

What Investors Learn from Ads

- **You** are in control.
- Data = expertise.
- Trading is easy; anybody can do it.
- Trading is fun & exciting.
- Opportunities may arise at any moment.
Be vigilant; trade quickly and actively.

<http://faculty.haas.berkeley.edu/odean>