

Psychology and Personal Finance

Investment Mistakes

Overview

Investment Mistakes

- Active management
- Excessive extrapolation
- Trading too much
- Disposition effect
- Naïve diversification
- Familiarity bias
- Myopic loss aversion
- Regret aversion
- Money illusion
- Neglecting Fees
- Taxes
- Housing
- Human capital

Active Management

Investing In Mutual Funds

- \$4 trillion in domestic equity mutual funds
- 90% of funds actively managed
- Only 8% of funds managed to outperform the S&P 500 over a 10 year period

Sources: Avramov, et al (2006), Wermers (2000), <http://www.efmoody.com/investments/pastperformance.html>

Beat The Market

With an audience of 1,000 portfolio managers, the likelihood of at least one manager “accidentally” outperforming the market eight years in a row is ...

98%

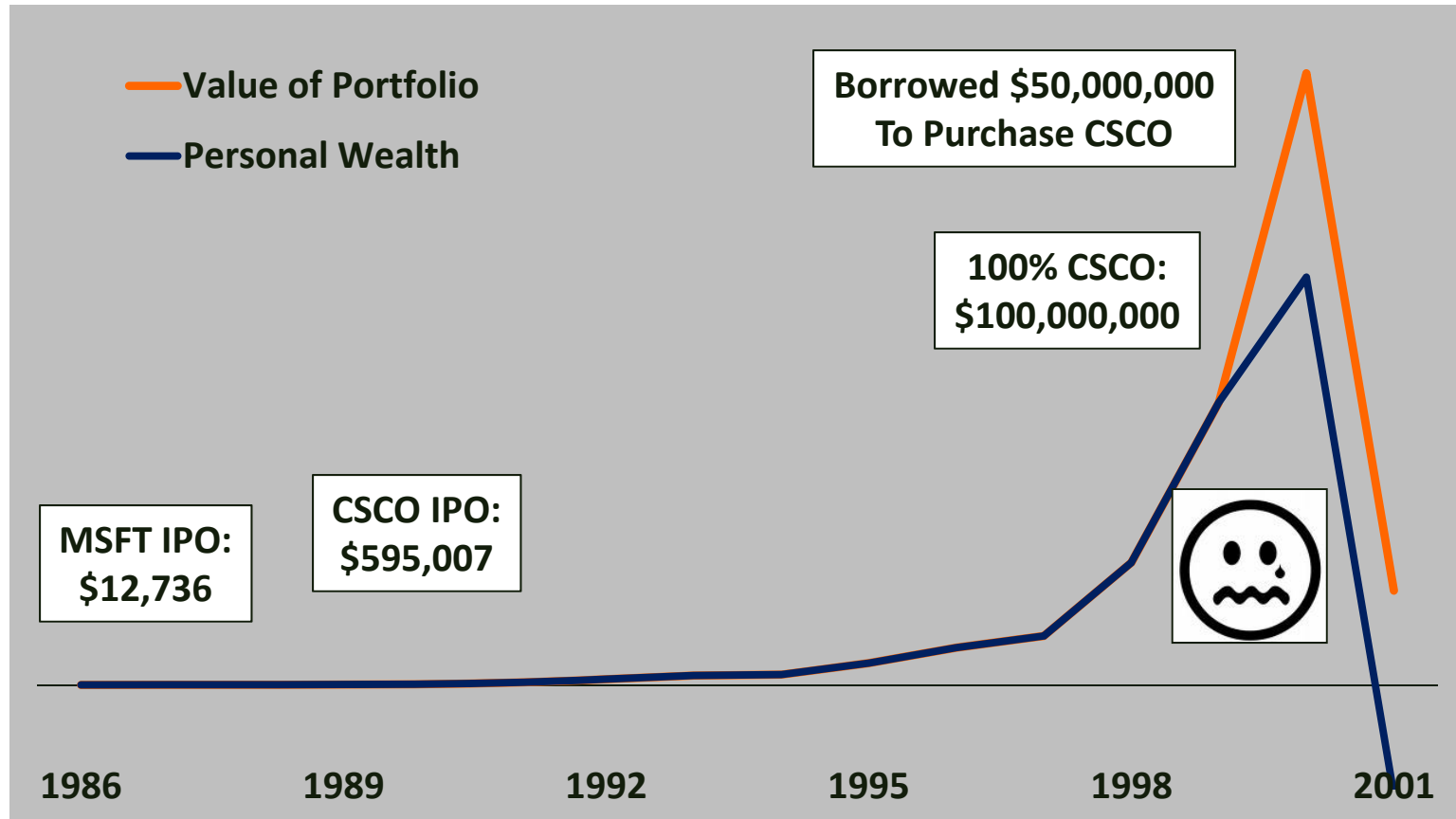
What We've Learned (So Far)

Investment Mistakes

- Active management

Excessive Extrapolation

Mr. R's Wild Ride



Neither Past Performance Nor the Back Mirror Will Predict The Future



What We've Learned (So Far)

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- Excessive extrapolation

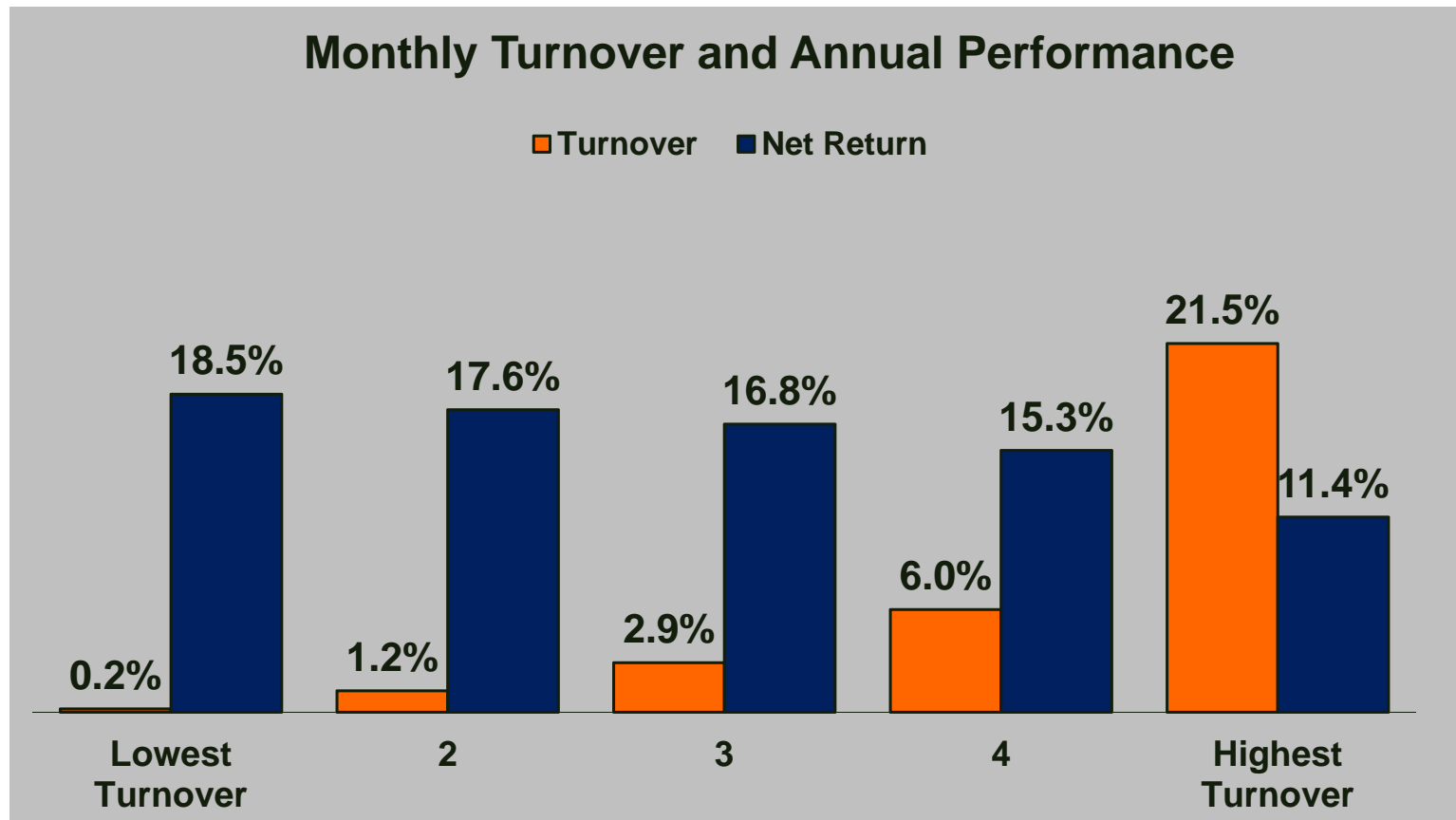
Trading Too Much

Investors Seem To Trade A Lot

- Individual investors have an annual turnover of 75% in their brokerage accounts.
- Similar turnover data are observed for mutual funds and the total NYSE.
- Are investors informed or just overconfident?

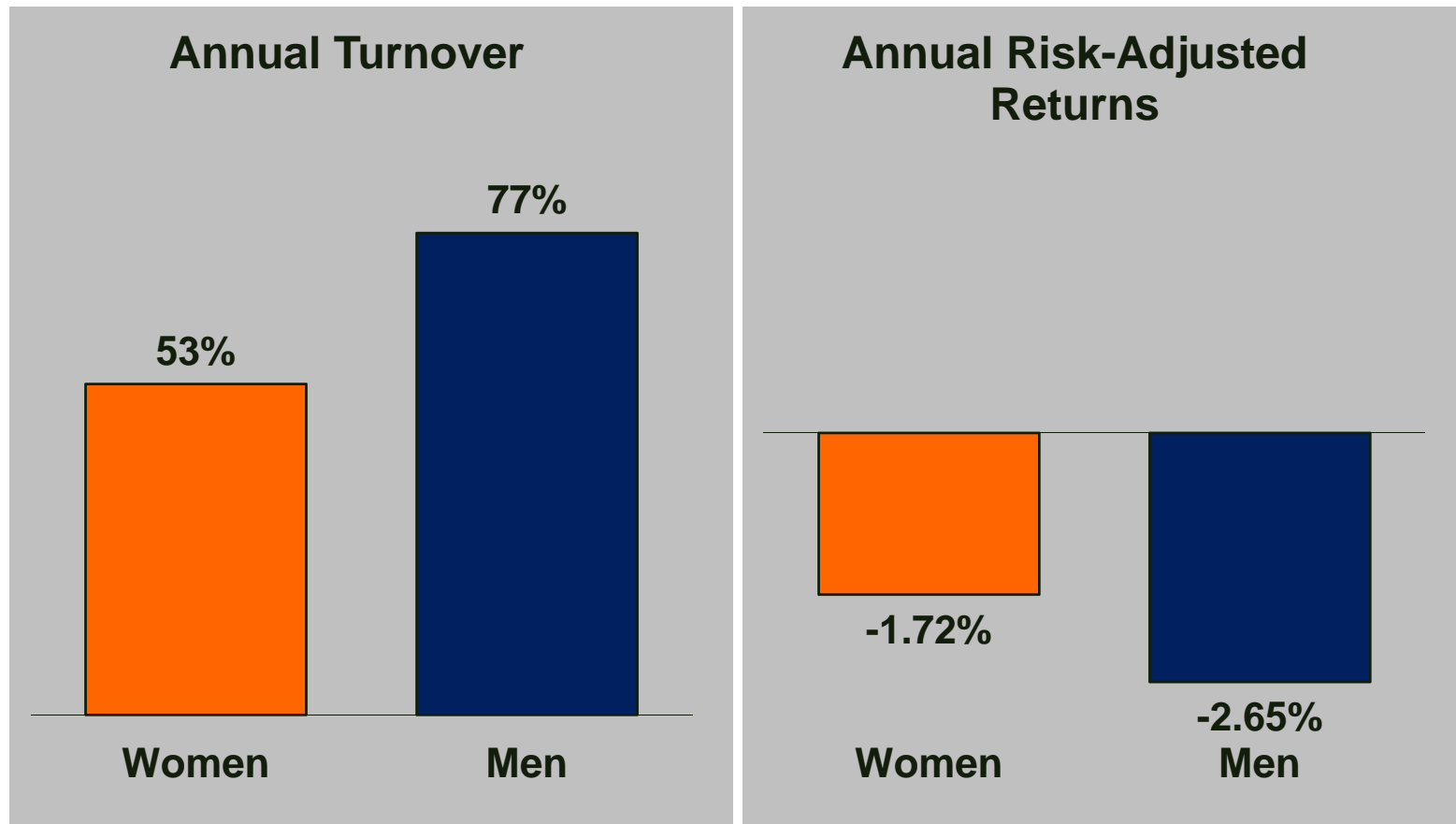
Sources: Barber and Odean (2002); Cahart (1997)

Trading Can Be Hazardous To Your Wealth



Source: Barber and Odean (2000)

Men Trade (And Lose) More Than Women



Source: Barber and Odean (2001)

Those Who Speed Also Trade More



Source: Grinblatt and Keloharju (2007)

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Disposition Effect

Question:

You bought 1,000 shares of stock A (\$50/share)
and 1,000 shares of stock B (\$100 /share)

After a few periods, your stocks are now worth:

Stock A: \$50k → \$75k

Stock B: \$100k → \$75k

You now need \$75k to buy a house –
what would you sell?

Disposition Effect

For most of the year, on average, a stock that is up in value is 60% more likely to be sold than one that is down in value

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Naïve Diversification

Diversification Experiment With Halloween Trick-Or-Treaters

Case 1: Pick 1 Candy From Each of 2 Houses



Case 2: Pick 2 Candies From 1 House



48% Diversified

100% Diversified

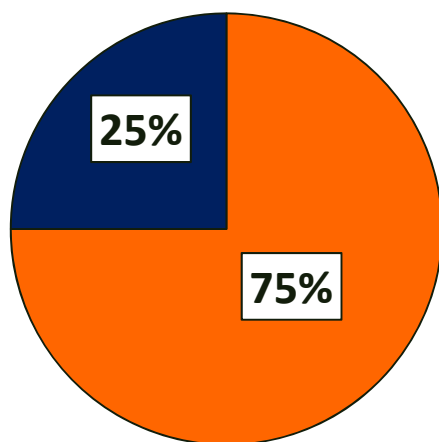
Source: Loewenstein, et al (1995)

Diversification

TWA Pilots offered:

5 stock funds

1 fixed income fund

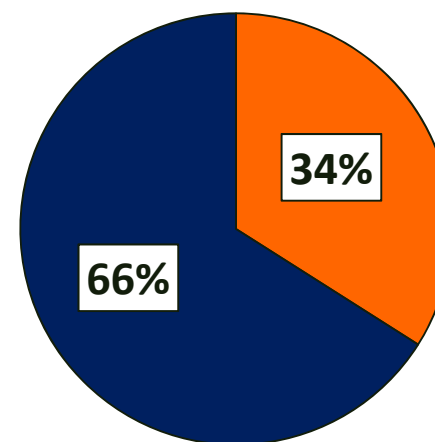


UC Employees offered:

1 stock fund

4 fixed income funds

■ Stock
■ Fixed
Income



Source: Benartzi and Thaler (2001)

What We've Learned (So Far)

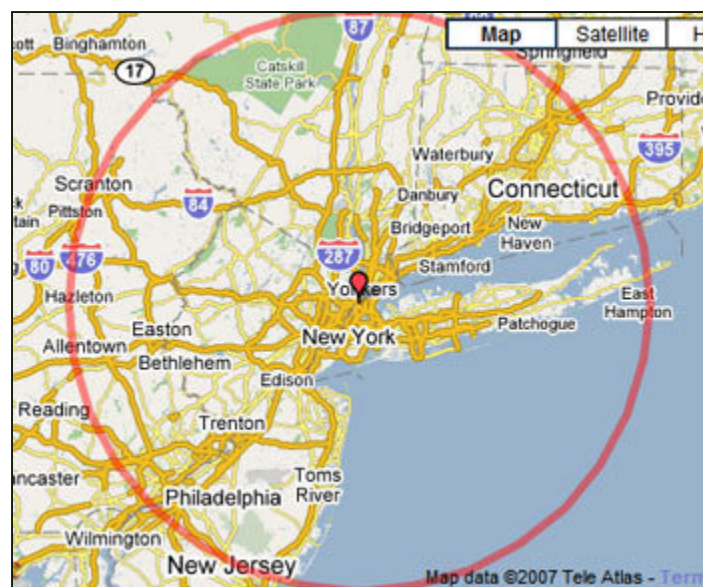
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Familiarity / Home Bias

Familiarity Bias

A typical money manager's portfolio consists of firms that are located 100 miles closer to the manager's office than the average US firm

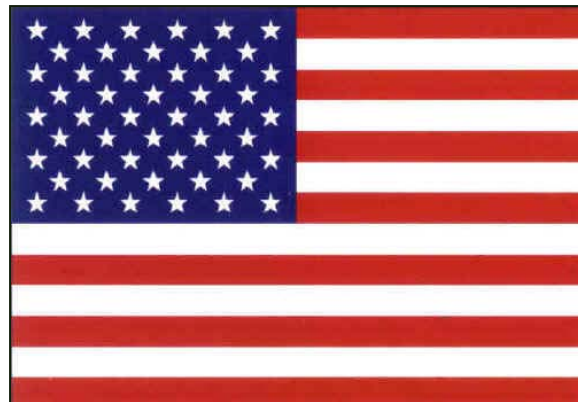


Source: Coval, et al (1999)

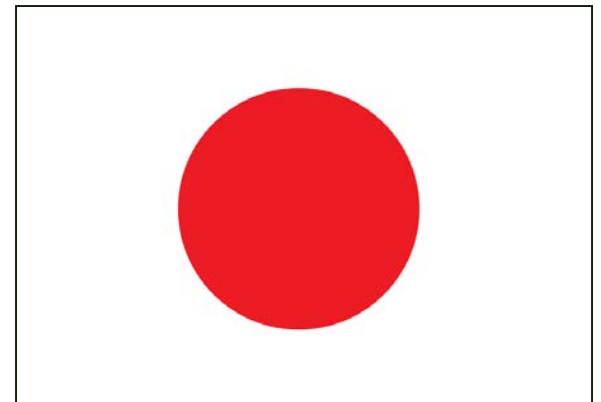
Home Investment Percentages From Around The World



82%



94%



98%

Source: Howell, et al (1990)

Let's Go To The Races!

- Conquistador Cielo, winner of the 1982 Belmont Stakes, raced most of his career on the East Coast.
- East Coast racing fans knew him well, but West Coast fans didn't.

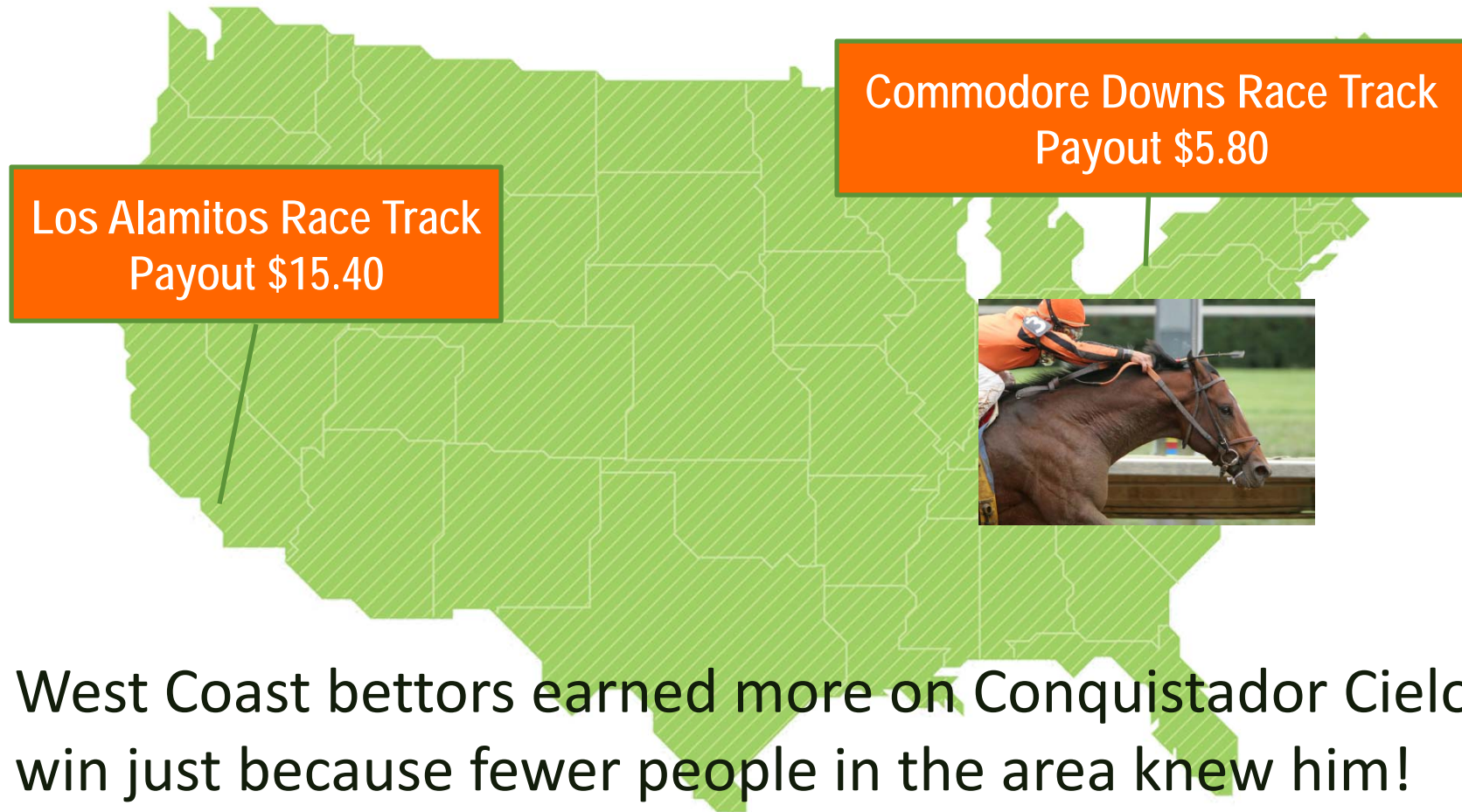


Cross Track Betting

- Consider cross-track betting: Bettors can place a wager at their local track on a race run elsewhere.
- If you could place a bet on Conquistador Cielo before the Belmont, would you pick an East Coast track or a West Coast track?



And The Winner Is...



West Coast bettors earned more on Conquistador Cielo's win just because fewer people in the area knew him!

Source: Hausch and Ziemba (1990)

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Myopic Loss Aversion

Question:

Consider the following bet:

I flip a coin – either you win \$200 or you lose \$100. Are you willing to play it for real money right now?

Why Do People Reject The Bet?

- Samuelson's bet is a great investment, since you "invest" \$100 and you either lose it or get \$300 back
- And, there is really no "risk" in losing \$100 (other than explaining to your spouse)
- Yet, most people reject the bet - Why?

The Bet Is Unattractive To Loss Averse Investors

- Losses loom larger than gains
- The pain of a loss is twice the pleasure of a gain
- We simply hate to lose, even small amounts

Source: Kahneman and Tversky (1979)

Question:





Now, what if we play 2 rounds
of the Samuelson bet?

Playing & Watching Short-Term Losses

First Round	Second Round	Hedonic Experience
+200	+200	
+200	-100	
-100	+200	
-100	-100	

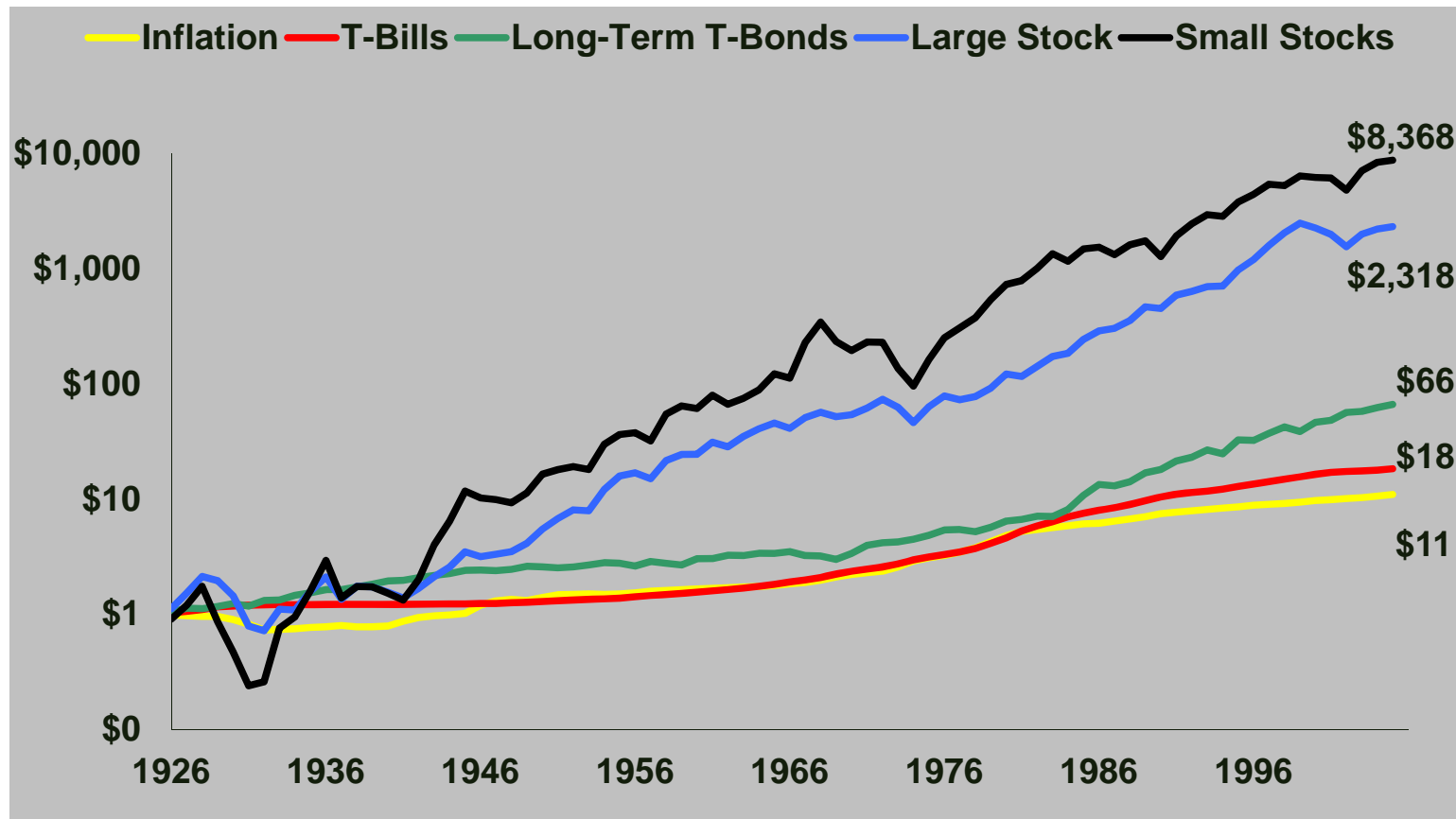
Source: Benartzi and Thaler (1995)

Playing & Watching The Aggregate Outcome

First Round	Second Round	Total	Hedonic Experience
?	?	+400	
?	?	+100	
?	?	+100	
?	?	-200	

Source: Benartzi and Thaler (1995)

Why Do Long Term Investors Hold Bonds?



Source: Benartzi and Thaler (1995)

Answer:

Because investors are loss averse and myopic

They tend to pay too much attention to short-term losses, even when they invest for the long-run

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Regret Aversion

Harry Markowitz

“I should have computed the historical covariances of the asset classes and drawn an efficient frontier.”



Source: Money (1998)

Instead ... “I split my contributions fifty-fifty between bonds and equities...”

My intention was to minimize my future regret.”

Money Illusion

Question:

Would you rather purchase a 10 year TIPS (Treasury Inflation-Protected Security) or a 10 year nominal treasury bond?

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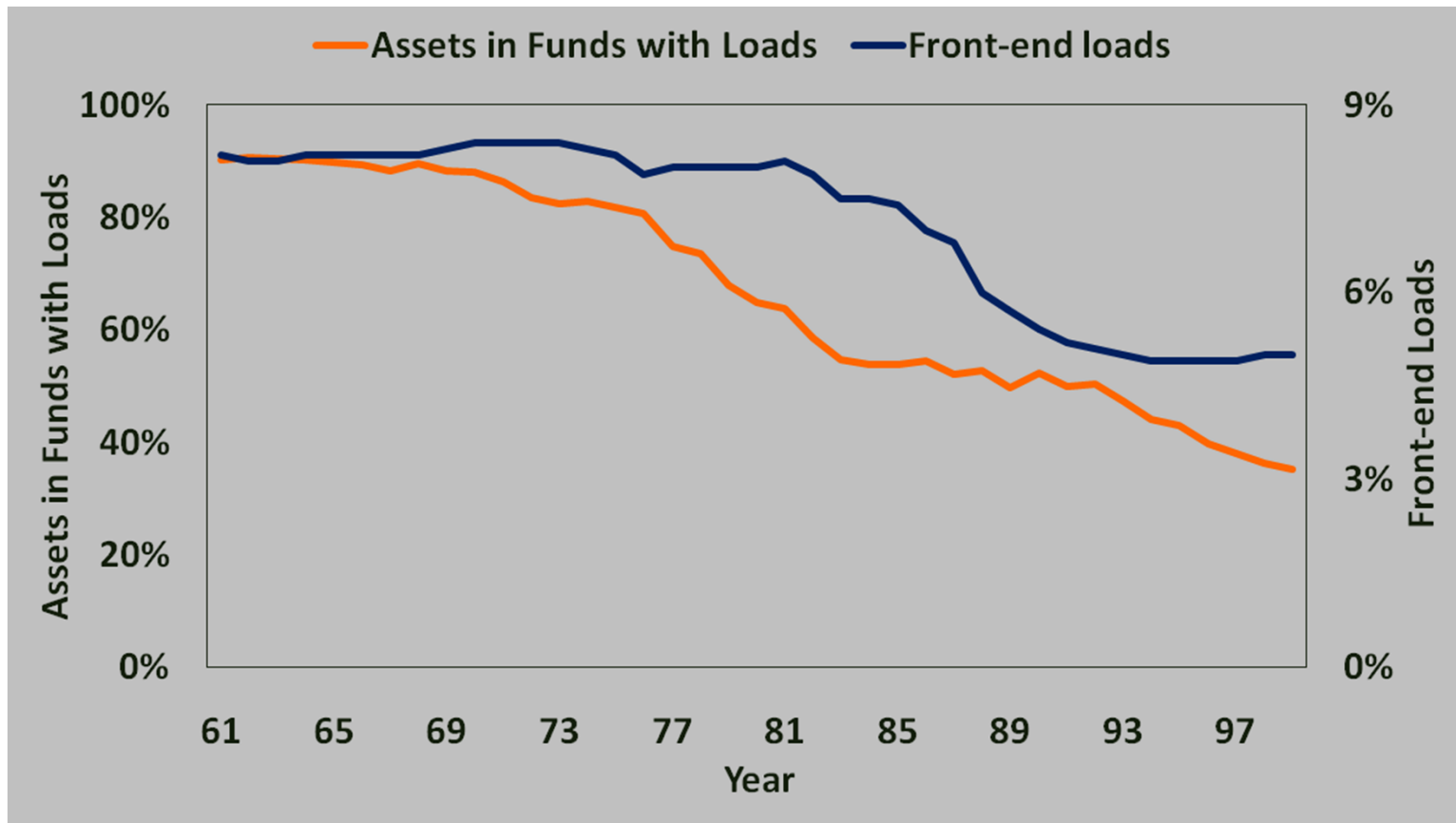
Neglecting Fees

Question:

If you to pay an additional 1% annual fee on your account, how much less would it be worth 30 years down the road?

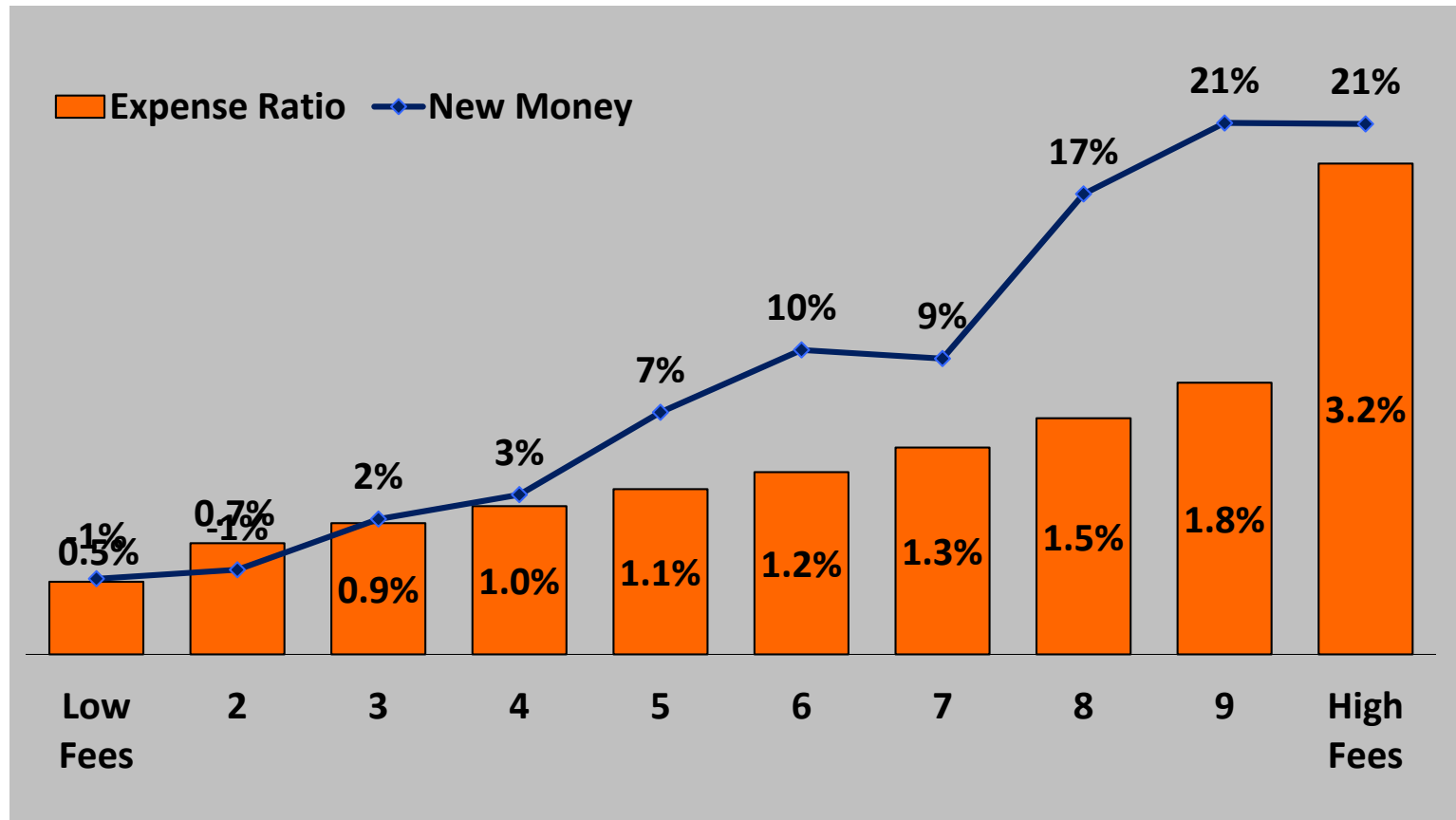
~ 30%!

Front-End Loads & The Percentage Of Assets In Funds With Loads



Source: Barber et al (2005)

Fund Flows – Expense Ratio & New Money



Source: Barber et al (2005)

Research On Fees

- Less than 20 percent of mutual fund holders could give an estimate of their fees
- Only one in five state employees realized the effect of fees
- However, investors *are* sensitive to obvious expenses

Sources: Alexander et al (1998), Benartzi (2008), Barber et al (2005)

What Do Investors Understand About Fees?

- Investors are sensitive to front-end load fees from mutual funds...
- ...but less so to operating expenses
- Expenses that remain out of sight are likely to remain out of mind

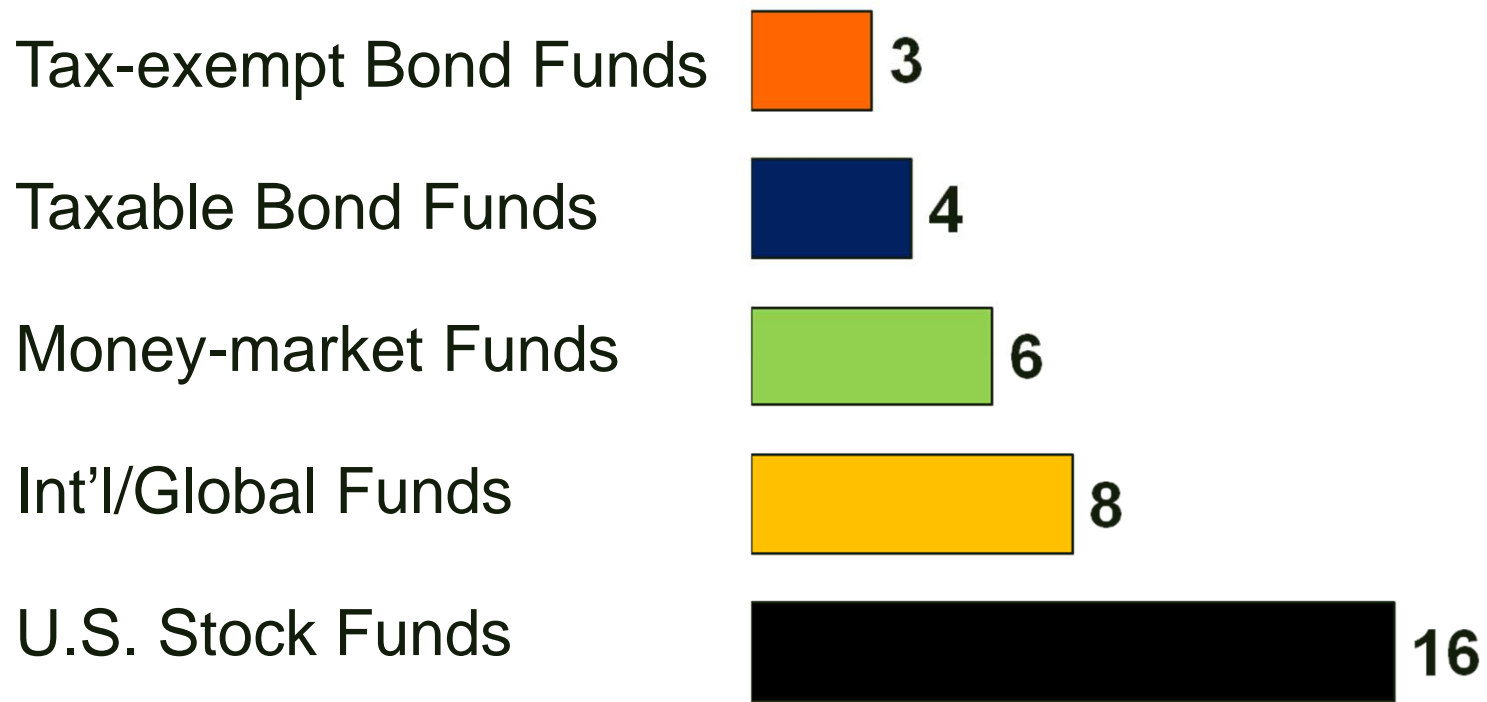
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Taxes

What's Weird With This Portfolio?



Source: Wall Street Journal (1997)

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Housing

Class Discussion

What factors are there when deciding whether to buy or rent a house?

What are the possible behavioral blind-spots?

Buy Vs. Rent

Buy a \$500,000 condo:

+\$35,000 interest

+\$ 6,000 property tax

+\$ 5,000 own maintenance

+\$ 3,000 home association

+\$ 1,000 insurance

-\$15,000 tax deductions

\$35,000 per year



Rent for \$2,000/mo:

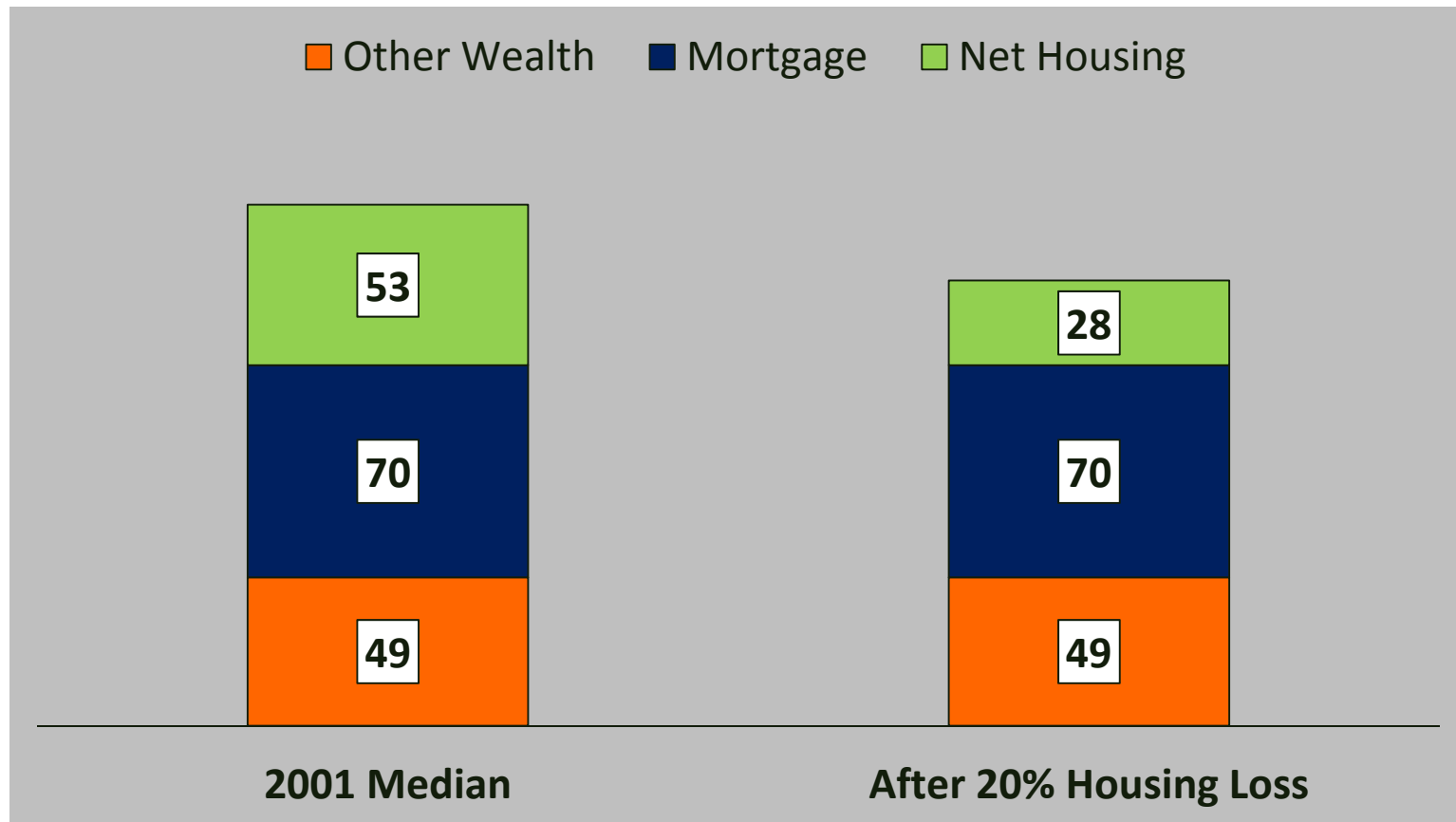
+\$24,000 rent



\$24,000 per year

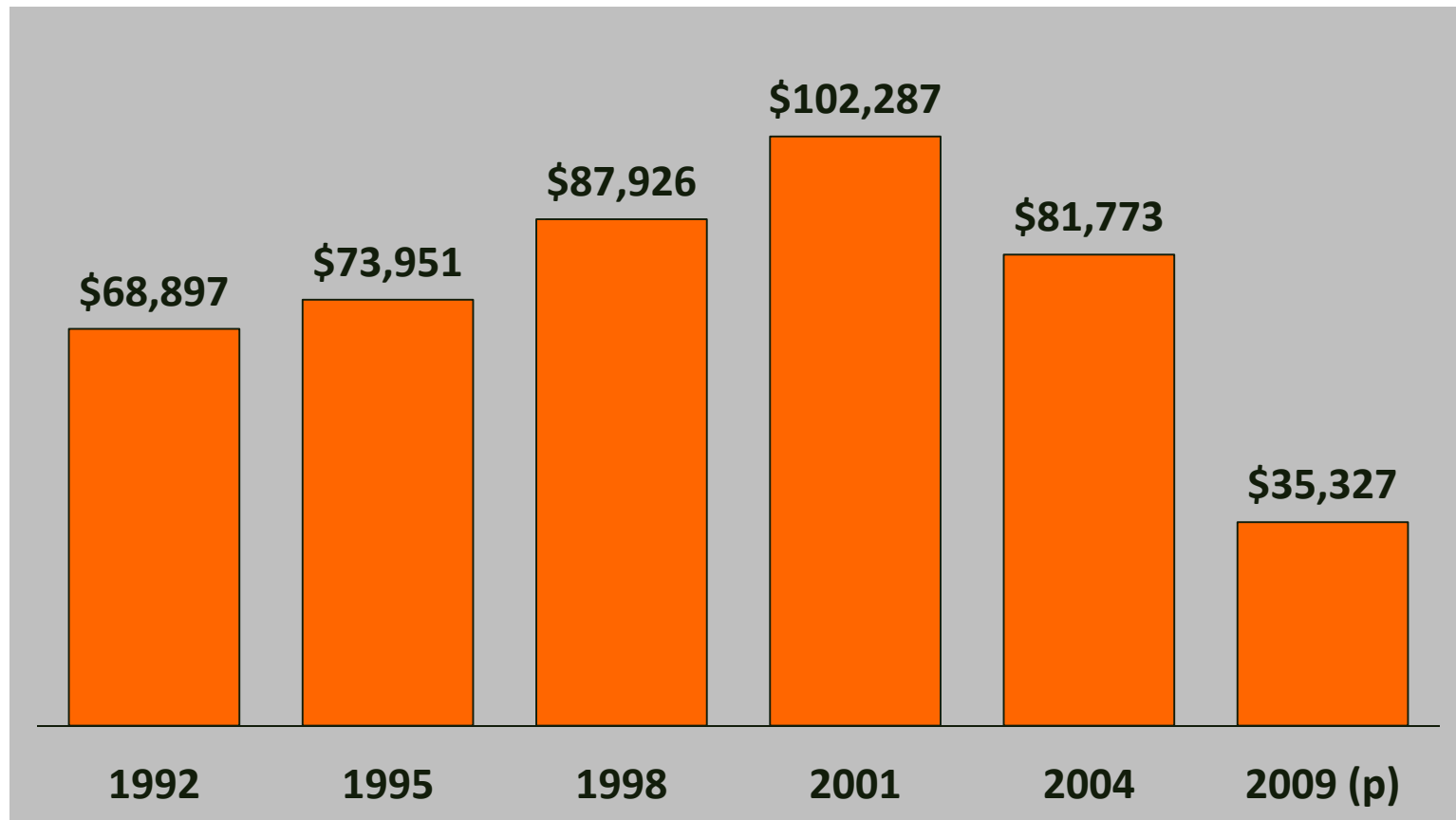
[To Run the Housing Calculator - Click Here](#)

In 2001, Median Homeowners Had (In \$k):



Source: http://goliath.ecnext.com/coms2/gi_0199-5060503/Evaluating-the-risk-of-housing.html#abstract

Median Wealth For Households Age 35 – 44 (In 2008 Dollars)



Source: Baker, et al (2008)

Housing & Emotion



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Human Capital

Human Influence

When choosing a college major:

1. Students are more likely to choose a major when peers have made the same choice
2. Following peers diverts students from majors where they have an ability advantage
3. Over time, these students were found to have had lower grades, lower starting salaries, and lower job satisfaction

The Dog Walker



And ...



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