



# Brain Power!

## Use Behavioral Science to Make Better Investment Decisions



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# Agenda

- Predicting the Markets
- Why Our Brains Aren't So Smart at Investing
- Women vs. Men – Who Invests Better?
- Diversification – How we can overcome our brains
- Getting Help



# Can We Predict The Investment Markets?



# The Randomness of Returns

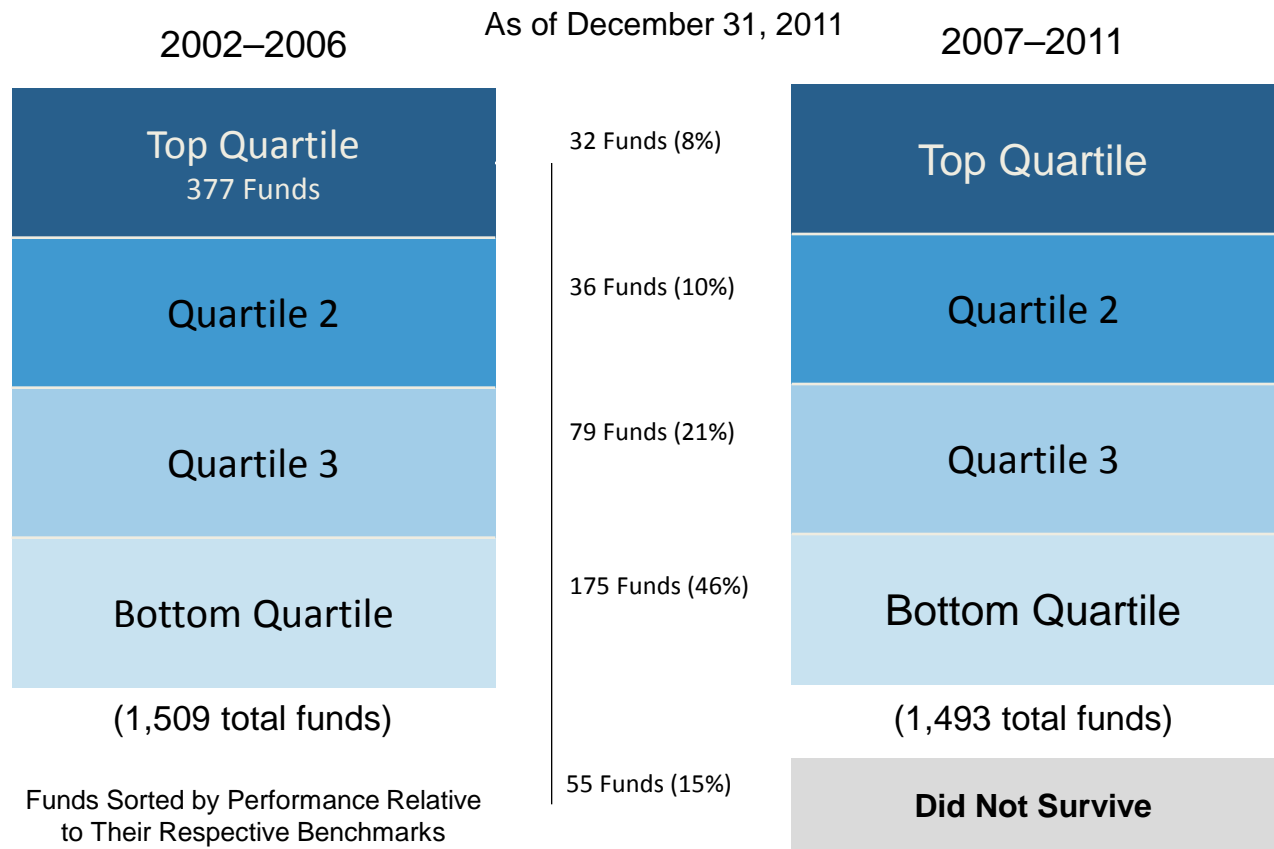
## Annual Return (%)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Highest Return</b>	36.94	28.58	66.41	31.04	40.59	7.62	74.48	35.14	34.54	35.97	39.78	8.83	79.02	34.59	9.37
	33.75	23.11	33.01	8.96	18.04	5.11	69.18	33.16	24.13	32.99	8.16	6.60	70.19	29.53	3.38
	33.36	11.95	30.16	8.28	12.35	3.82	66.79	32.11	22.63	32.59	8.04	4.75	51.48	28.07	2.31
	25.79	10.24	28.41	7.33	8.44	3.58	60.25	30.58	15.10	27.54	6.35	-37.00	47.81	20.79	2.11
	19.66	9.69	21.51	4.01	7.28	3.39	57.81	27.33	13.82	26.32	6.31	-38.64	47.02	20.17	0.57
	7.27	8.41	21.04	-2.01	6.44	-2.85	56.28	25.95	9.70	21.87	6.24	-39.20	44.83	19.30	-5.38
	7.12	7.75	6.99	-3.08	-2.37	-6.00	36.43	19.15	5.61	21.70	5.95	-42.54	37.51	19.20	-10.78
	5.93	5.91	4.37	-6.40	-2.71	-11.72	36.18	17.74	4.91	17.08	5.49	-44.49	28.46	15.06	-15.12
	0.39	-2.33	4.04	-9.10	-6.48	-13.84	28.69	10.88	4.45	15.80	-2.61	-45.12	26.46	13.32	-15.59
	-11.59	-10.04	3.55	-12.26	-11.89	-19.87	2.04	2.65	3.08	4.32	-12.24	-47.11	2.29	3.73	-17.05
	-14.55	-17.01	1.90	-12.26	-15.41	-22.10	1.95	1.35	2.36	4.09	-17.55	-53.14	0.80	1.99	-18.17
<b>Lowest Return</b>	-15.12	-25.34	-2.58	-30.61	-16.75	-30.28	1.47	0.83	1.34	3.75	-18.38	-53.18	0.19	0.83	-19.90

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
US Large Cap	33.36	28.58	21.04	-9.10	-11.89	-22.10	28.69	10.88	4.91	15.80	5.49	-37.00	26.46	15.06	2.11
US Large Cap Value	33.75	11.95	6.99	-6.40	-2.71	-30.28	36.43	17.74	9.70	21.87	-12.24	-53.14	37.51	20.17	-19.90
US Small Cap	25.79	-2.33	28.41	-12.26	18.04	-19.87	57.81	19.15	5.61	17.08	-2.61	-38.64	47.02	29.53	-5.38
US Small Cap Value	36.94	-10.04	4.37	-3.08	40.59	-11.72	74.48	27.33	4.45	21.70	-18.38	-44.49	70.19	34.59	-10.78
US Real Estate	19.66	-17.01	-2.58	31.04	12.35	3.58	36.18	33.16	13.82	35.97	-17.55	-39.20	28.46	28.07	9.37
International Large Cap Value	0.39	23.11	33.01	4.01	-15.41	-13.84	69.18	30.58	15.10	32.99	6.35	-45.12	51.48	13.32	-17.05
International Small Cap	-14.55	10.24	30.16	-12.26	-16.75	-2.85	60.25	32.11	22.63	26.32	8.04	-47.11	44.83	20.79	-15.59
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Emerging Markets	-11.59	-25.34	66.41	-30.61	-2.37	-6.00	56.28	25.95	34.54	32.59	39.78	-53.18	79.02	19.20	-18.17
One-Year US Fixed	5.93	5.91	4.04	7.33	7.28	3.39	1.47	0.83	2.36	4.32	5.95	4.75	0.80	0.83	0.57
Five-Year US Government Fixed	7.12	7.75	1.90	8.96	8.44	7.62	2.04	1.35	1.34	3.75	8.16	8.83	0.19	3.73	3.38
Five-Year Global Fixed	7.27	8.41	3.55	8.28	6.44	5.11	1.95	2.65	3.08	4.09	6.31	6.60	2.29	1.99	2.31

In US dollars. US Large Cap is the S&P 500 Index, provided by Standard & Poor's Index Services Group. US value (ex utilities) and US Small Cap data provided by Fama/French. US Real Estate is the Dow Jones US Select REIT Index, provided by Dow Jones Indexes. International Value data provided by Fama/French from Bloomberg and MSCI securities data. International Small Cap data compiled by Dimensional from Bloomberg, StyleResearch, London Business School, and Nomura Securities data. International Small Cap Value data compiled by Dimensional from Bloomberg and StyleResearch securities data. Emerging Markets is the MSCI Emerging Markets Index (gross dividends), copyright MSCI 2012, all rights reserved; see MSCI disclosure page for additional information. One-Year US Fixed is the BofA Merrill Lynch One-Year US Treasury Note Index, used with permission; copyright 2012 Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved. Five-Year US Government Fixed is the Barclays Capital Treasury Bond Index 1-5 Years, formerly Lehman Brothers, provided by Barclays Bank PLC. Five-Year Global Fixed is the Citigroup World Government Bond Index 1-5 Years (hedged), copyright 2012 by Citigroup. Indexes are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results.

# Subsequent Performance of Top 25% of US Equity Funds



The left column represents all US equity funds in the CRSP Mutual Fund Database with a complete return history for 2002–2006. The funds are sorted by performance relative to their benchmarks. Funds in the top quartile are then tracked and directed to their subsequent performance quartiles in the following 5-year period (2007–2011), or to the “Did Not Survive” category. Quartiles in the following period reflect all funds with a complete return history. Percentages may not total 100% due to rounding.

Source: CRSP Survivor-Bias-Free US Mutual Fund Database.

# Our Economic Cycle

## Peak

Investors feel comfortable in the markets and tend to put their money in at this point.

## Recession

Investors are getting uneasy, but many stay in the markets for a while.



## Expansion

Investors don't want to get into the markets until they see sustained evidence of a recovery.

## Trough

Investors can't take the pain of losses any longer. This is where they typically sell.

# Why Our Brains Make it Hard to Be Good Investors





# Investor Behavior

**For the twenty years ending 12/31/2010 the S&P 500 Index averaged 9.14%/year. The average equity fund investor earned a market return of only 3.83%/year.\***

## *Why?*

- Many studies show that when the stock market goes up, investors pour money into equity mutual funds.
- This is like going to Nordstrom when they mark UP the shoes by 50%.
- Chasing trends and focusing on what's happening right this minute leads to emotional, short term trading.

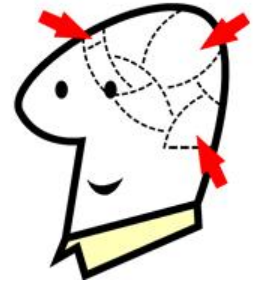


\*Dalbar, Inc.





## My amygdala made me do it!\*



- There is a wild animal deep in your brain, and it is importantly related to your investment decisions.
- It has a less than familiar name, at least to non-physicians--the amygdala.
- Early in evolution, these responses were protective for the reptile or bird. Either fleeing the physical threat, or fighting it ,was preferable to doing nothing and surely suffering harm.
- Another non-physical threat is stock market performance. We know a poor performance in this area can jeopardize our financial health.
- Fear is triggered under these circumstances. A visceral response occurs that causes discomfort and can even lead to panic. Stock can be sold hastily, without thought, because of this reaction.

\*Shirley M.  
Mueller, © 2003,  
IBJ Corp.

# Women vs. Men – Who Invests Better?



# Men

## **Are good at:**

- Using a competitive spirit to move out of their comfort zone.
- Being willing to risk a loss to achieve longer term gain.
- Making big decisions without dithering on the details.

## **Could use some work:**

- Using competition to make decisions based on winning, not what's best for them personally.
- Being patient with a long term plan.
- Asking deeper questions before making decisions.





# Women

## Are good at:

- Women are better in touch with their emotions. They stop and think about what is motivating them before making decisions.
- Keeping an eye on risk with relation to return.
- Shopping for the best fit and price.



## Could use some work:

- Women feel insecure about not knowing enough to be an expert in something. This fear can stop forward movement in life and investing.
- Analysis paralysis: trying to know everything before making a decision.
- Can be too conservative, leading to less growth in the long term.



# Investment Costs

## What You Can't Control About Your Finances:

- Stock/Bond Market Returns
- Interest Rates
- European Debt Crises
- Federal Reserve Policy
- And much, much more!

## What You Can Control About Your Finances:

- How much you save
- How much you spend
- Diversification
- Your reactions media hype
- COSTS!!!



If you saved \$4,000/year for the next 20 years earning a 6% average annual return, paying 1% extra in investment fees could cost you \$15,000!



## Creating the Wo-Man-Vestor: The perfect investor

### **Take the things Men do well:**

- That “Just Do It!” attitude
- Willingness to take risk
- Ability to move forward on incomplete information.

### **Add Women’s strengths:**

- Don’t worry about beating your neighbor.
- Stick with your well-researched plan.
- Look for fair pricing before you buy.



# Using Diversification Against Our Brains' Bad Habits





## It May Not Feel Like It, But Diversification Has Worked

**Diversification is meant to reduce your risk in certain types of investments (US Stock Market or Foreign Bonds).**

**During a crisis, risk of the entire financial system short-circuiting can hurt even a diversified portfolio.**

- The Standard & Poor's 500 index returned just 1.4% a year on average between January 1, 2001 and Nov.30, 2011.
- Investors who created a diversified portfolio, containing among other things a 40% weighting in bonds, saw an average annual return of 5.7% during that same period.







# Having a Plan Helps Guard Against Our Amygdala

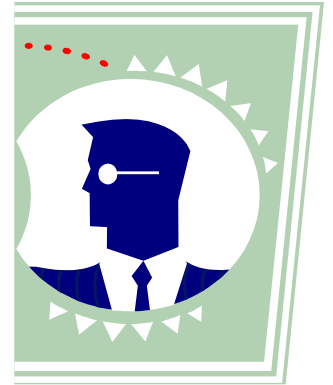
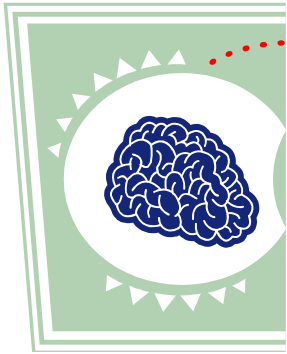
Step 1:  
Create Your Asset Allocation



Step 2:  
Pick Investments for Each Asset Class



Step 3:  
Monitor & Rebalance Yearly





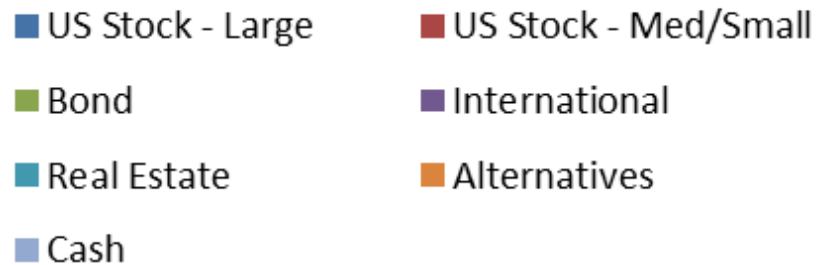
## Step 1: Asset Allocation

**Asset Allocation:** What percentage of your money will you put in different areas of the investment market.

### Different Areas:

- Stocks
- Bonds
- Cash
- International
- Real Estate
- Commodities

### Sample Asset Allocation





## Step 2: Pick the Investments for Each Asset Class

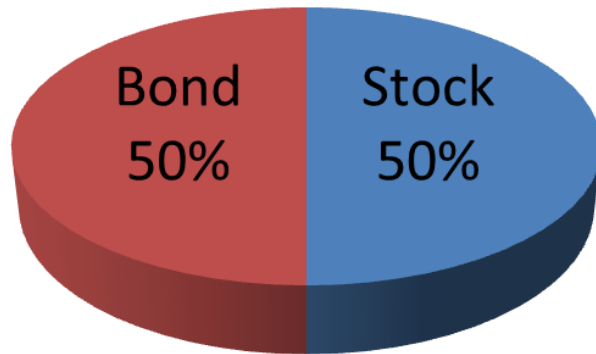
### Things to Shop For:

- Performance relative to similar other investments (i.e. compare US Large Company funds against other US Large Company funds, not US Bond funds.)
- Risk relative to other similar investments. Look for how the investment did in bad years relative to other funds in its category.
- Costs of the investment. Look for low expense ratios and no-load funds.

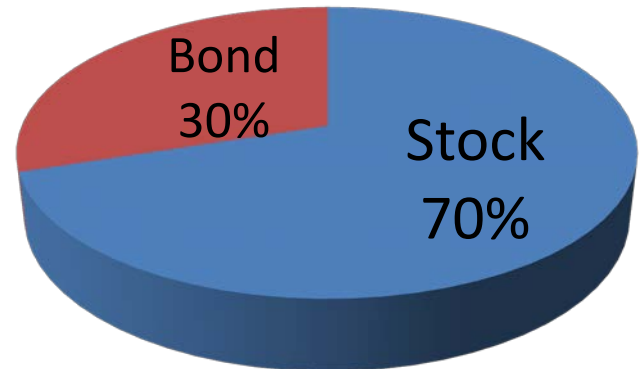


## Step 3: Monitor and Rebalance

Year 1



Year 2



**Action:**

Sell 20% Stocks and use the proceeds to buy more Bonds

**Result:**

Sell high (stocks have gone up) and buy low (buy bonds when on sale).

# Target Date Funds

- Target Date Funds are buckets containing many mutual funds invested to a specific target retirement year.
- The farther out the Target Year, the more risky the portfolio. For example, a 2040 fund will be more aggressive than a 2020 fund.
- The manager of the Target Date Fund watches your investment mix and keeps it aligned to your time horizon.
- The mix of investments automatically gets less risky as you get closer to retirement.





# How to Use Target Retirement Date Funds

**Target Date Funds are diversified baskets of mutual funds invested to a specific target retirement year.**

**Target Date funds do the investment work that we should do ourselves.**

## **Pros:**

- You can pick just one investment and all of the diversification is taken care of for you.
- The manager of the fund mix adjusts the funds quarterly to stay on track for your risk profile.



## **Cons:**

- May be more aggressive for retirees than they think.
- Can't specify what part of the fund to withdraw from (cash vs. stock funds)

**Tip: Target Date funds are great for the growing years. For retirement income, you may want to get the help of an advisor for a more specific withdrawal plan.**

# Getting Help





# How to Access Your Account

## Your MPP Provider: Wells Fargo

- [www.wellsfargo.com/retirementplan](http://www.wellsfargo.com/retirementplan)
- 800-728-3123 for one on one help
- Access your account to:
  - View your account balance
  - Change your investment elections

## Strategies, LLC is the Investment Advisor for your plan.

- 1-800-276-8952 for investment help on the MPP
- Strategies can give investment advice, but we cannot make changes to your account.

