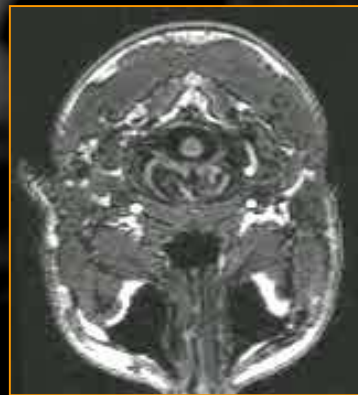


Inside the Investor's Brain: The Power of Mind Over Money

AAll Silicon Valley
Sunnyvale, CA
January 9, 2010



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Managing Director
MarketPsy Capital LLC (Asset Management)
MarketPsych LLC (Investor Training)

Clinical Stories

- Janet
 - Commodities Trader
 - Grinding losses
 - Stress
 - Stuck Thinking
- Ramon
 - Portfolio Manager
 - Relationship difficulties
 - Performance dropped by half
 - Sadness and Overtrading

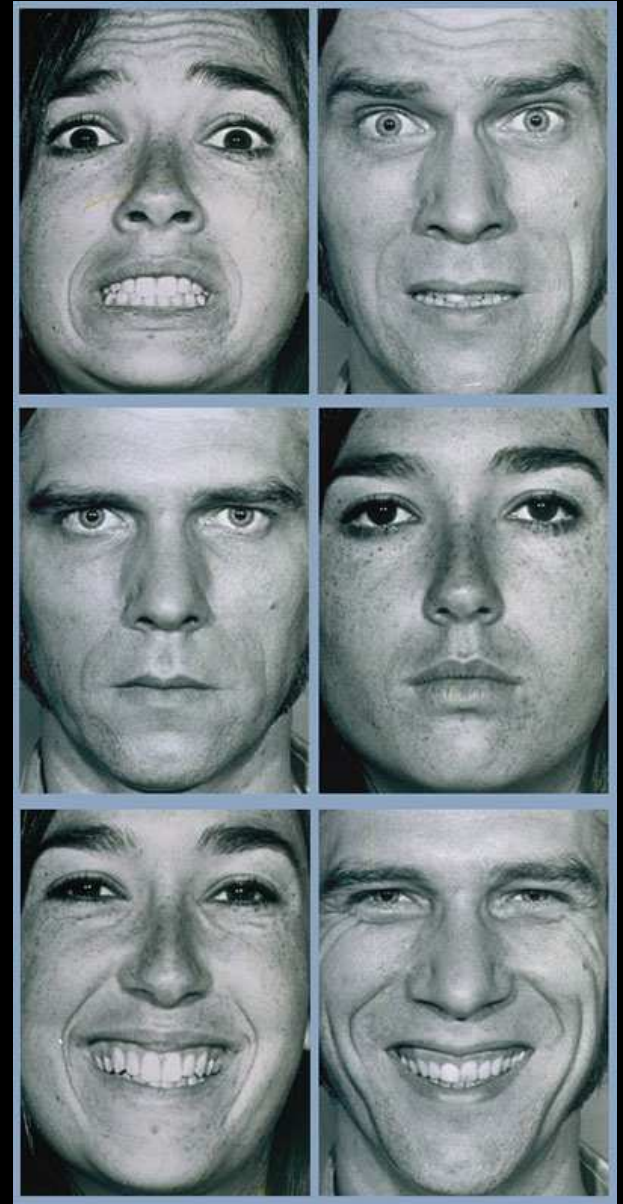


Lessons

- Deep emotions drive our financial decisions.
- We are usually unaware of these emotions.
- There are tools we can use to improve our emotional self-awareness and performance.
- Observing (and investing against) group emotion can improve our own results.

Emotions are Usually Unconscious

- EXPERIMENT (Trujillo et al, 2007)
 - People shown fearful or angry faces took less risk in a gambling experiment.
 - Happy face increased risk-taking.
 - Afterwards subjects denied that the faces had affected their judgment.
 - Due to denial they could never learn to correct for the effect.
 - **So what can we do about this?**



“Animal Spirits”

- Length of night, temperature, sunshine, and magnetism affect mood and behavior.

The Below Measurably Predict Stock Prices:

- Sunshine and cloud cover
- Daylight savings time and length of night
- Temperature
- Lunar Effects
- Wind Speed & Cloud Cover
- Geomagnetic Storms

What Are The Most Expensive Psychological Investment Mistakes?

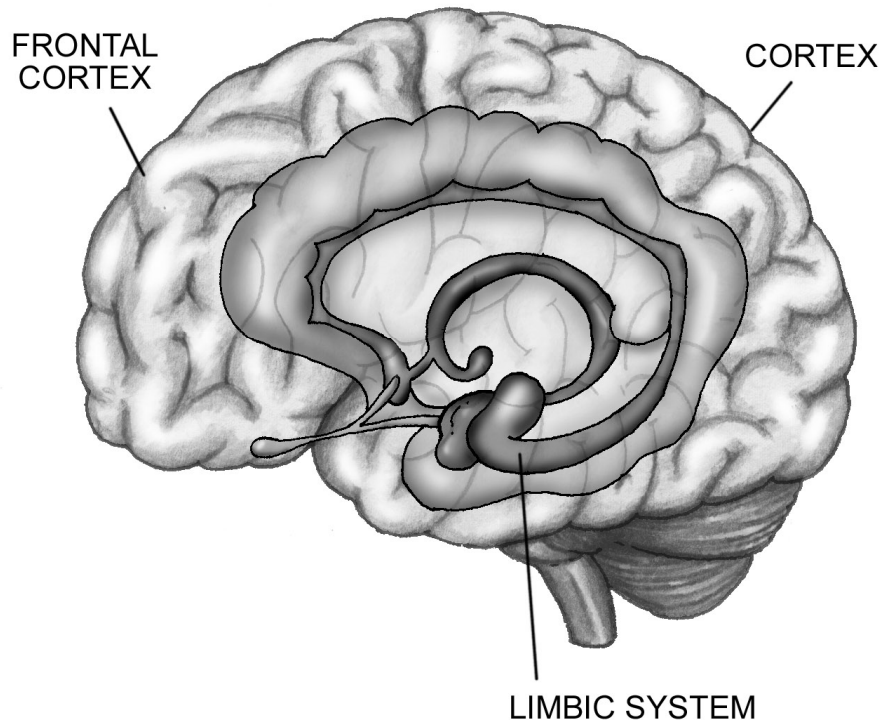
- Holding Losers Too Long (to avoid pain).
 - “Rogue Traders” ALL do this.
- Chasing Hot Performers (excitement).
- Lacking Risk Management (overconfidence).
 - Lack of stops or other sell discipline.
 - Lack of deliberate or scaled buying.
- Cutting Winners Short (anxiety).
- These are all a result of emotional impulses overriding self-discipline.

Warren Buffett says:

- *"Success in investing doesn't correlate with I.Q. once you're above the level of 25. Once you have ordinary intelligence, what you need is the temperament to control the urges that get other people into trouble in investing."*

The Brain

- The brain's structure explains most market cycles.
- Frontal Cortex
 - Executive function
 - Judgment
- Subcortex: Limbic system
 - Emotions
 - Drives
 - Desires



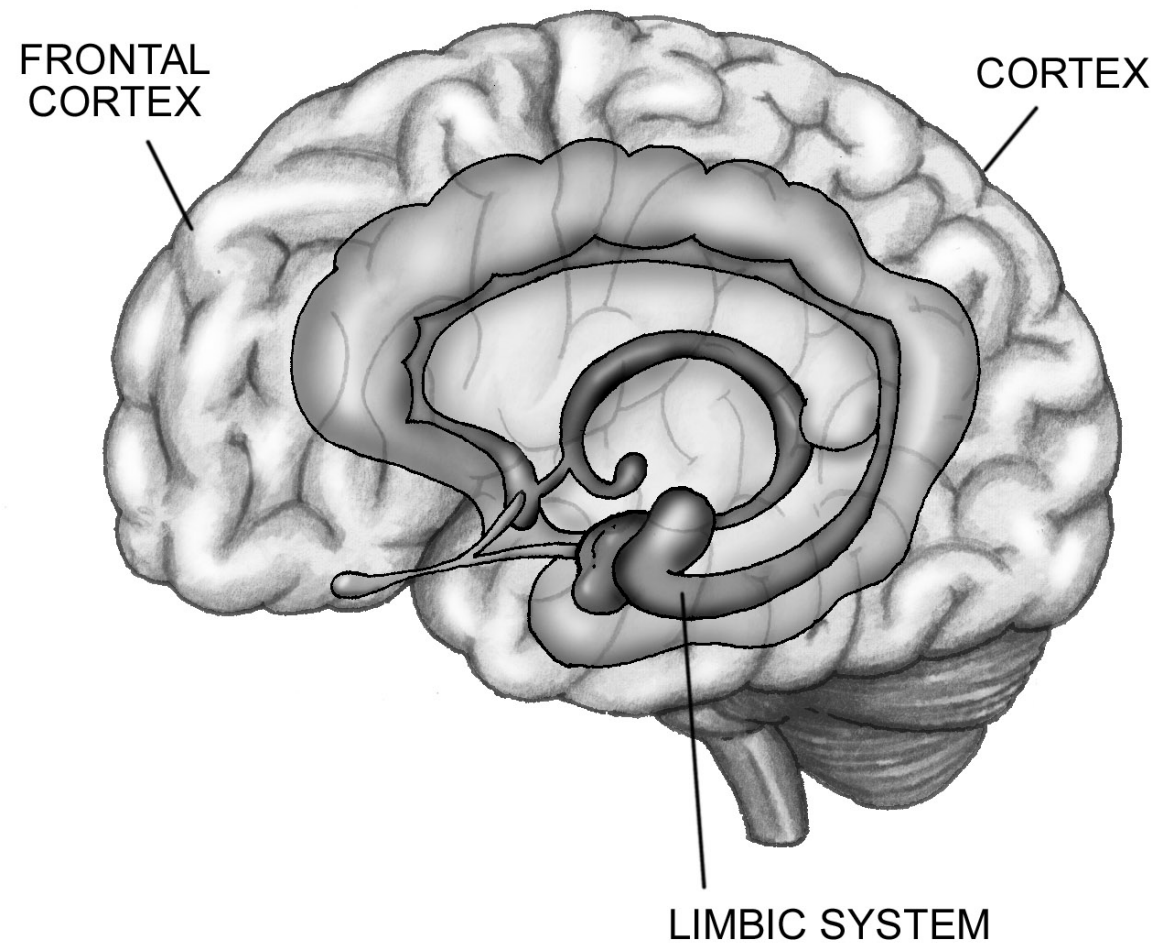
"X-ray" view through the brain

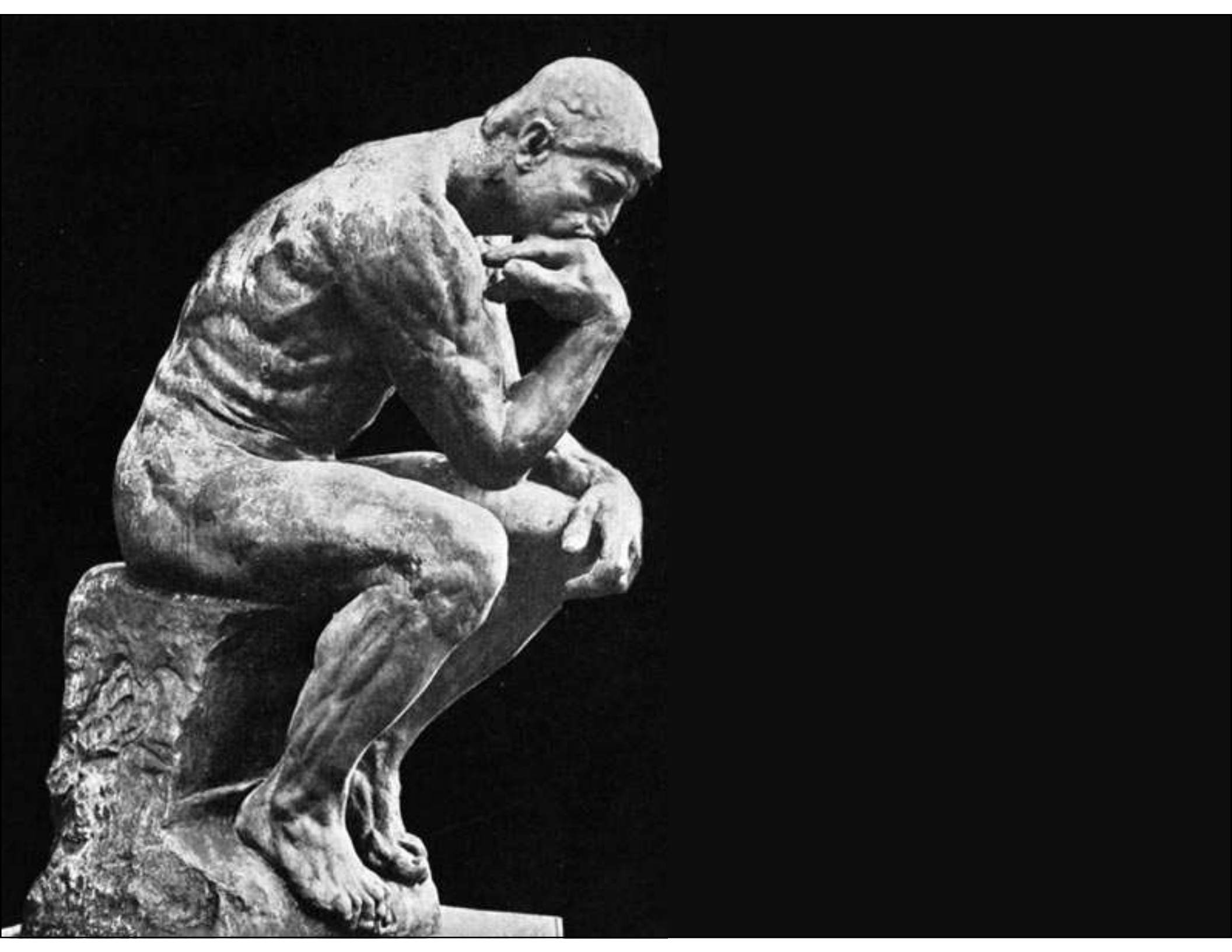
FRONTAL CORTEX

EXECUTIVE FUNCTION

PLANNING

IMPULSE-CONTROL





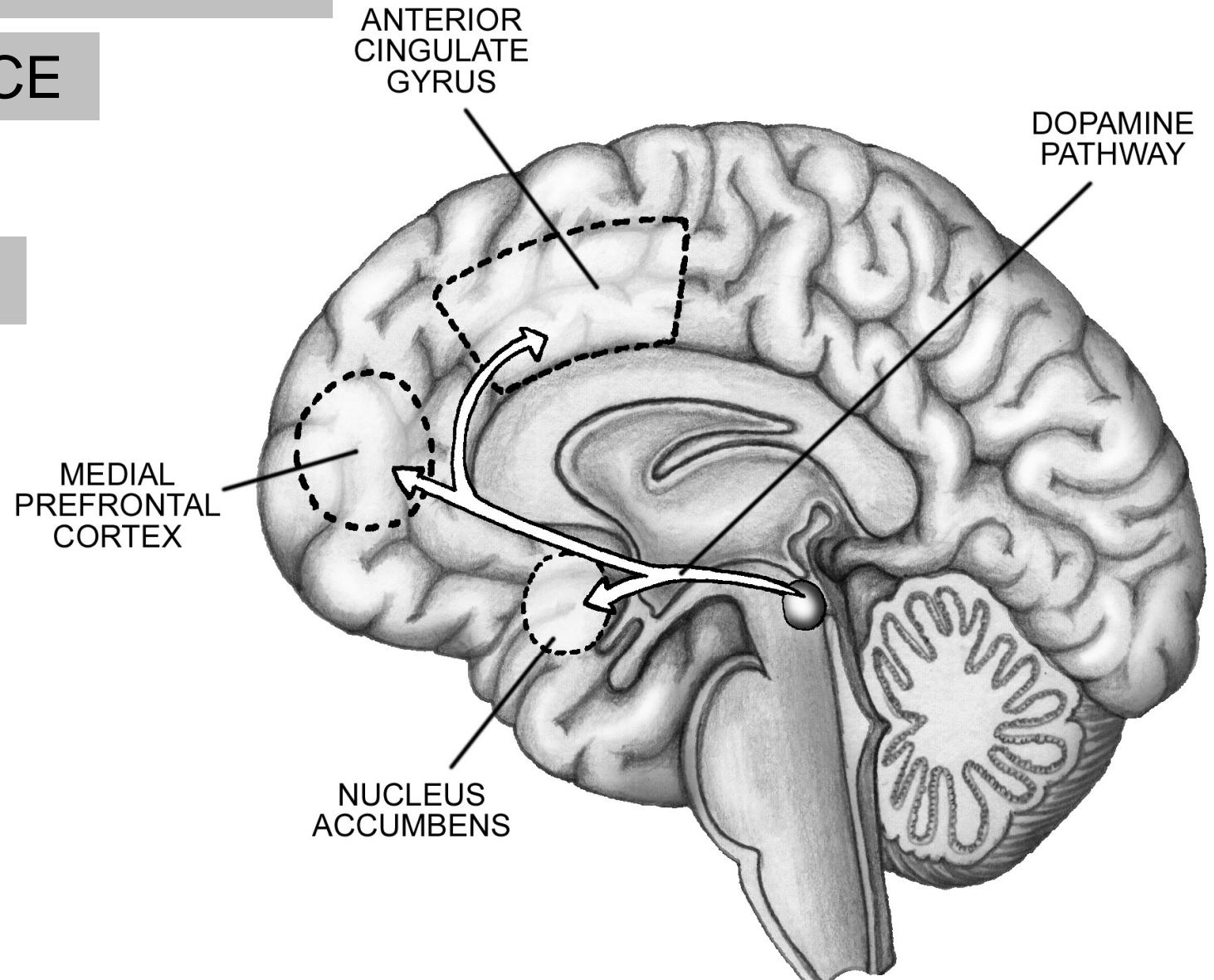
REWARD SYSTEM

EXCITED MOTIVATION

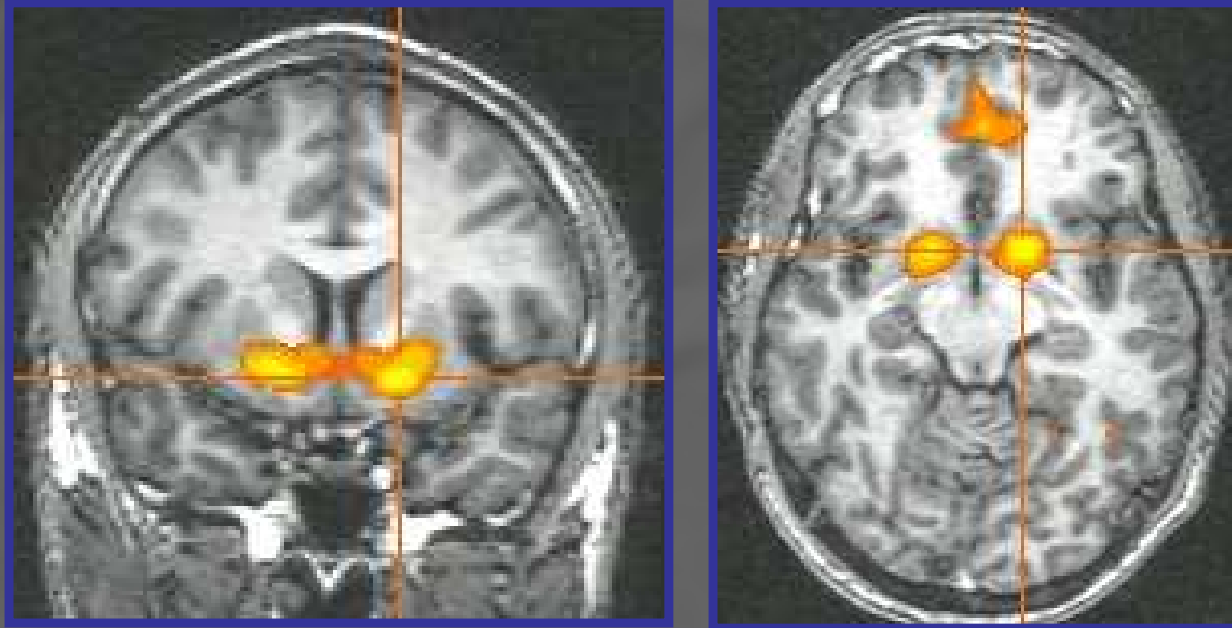
CONFIDENCE

DESIRE

DOPAMINE



TAKING TOO MUCH RISK



- Most investors take too much risk when their reward systems are highly activated.
- Recent profits, expecting large gains, and seeing others profit excessively activates the reward system
- Feelings of confidence, satisfaction, and desire

Kuhnen and Knutson, 2005.

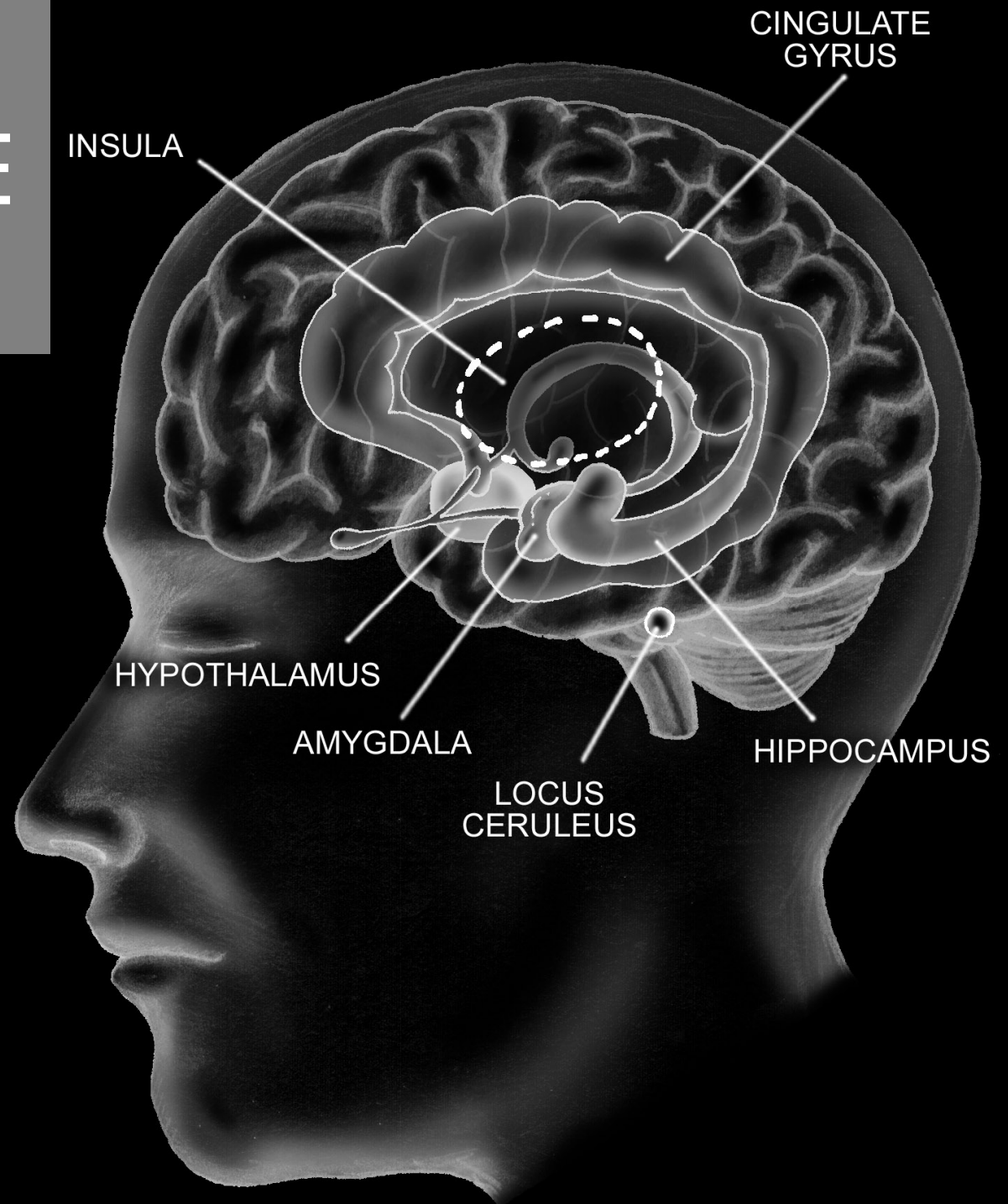
LOSS AVOIDANCE SYSTEM

THREAT
PERCEPTION

MEMORIES
OF LOSS

FEAR

SEROTONIN





TAKING TOO LITTLE RISK

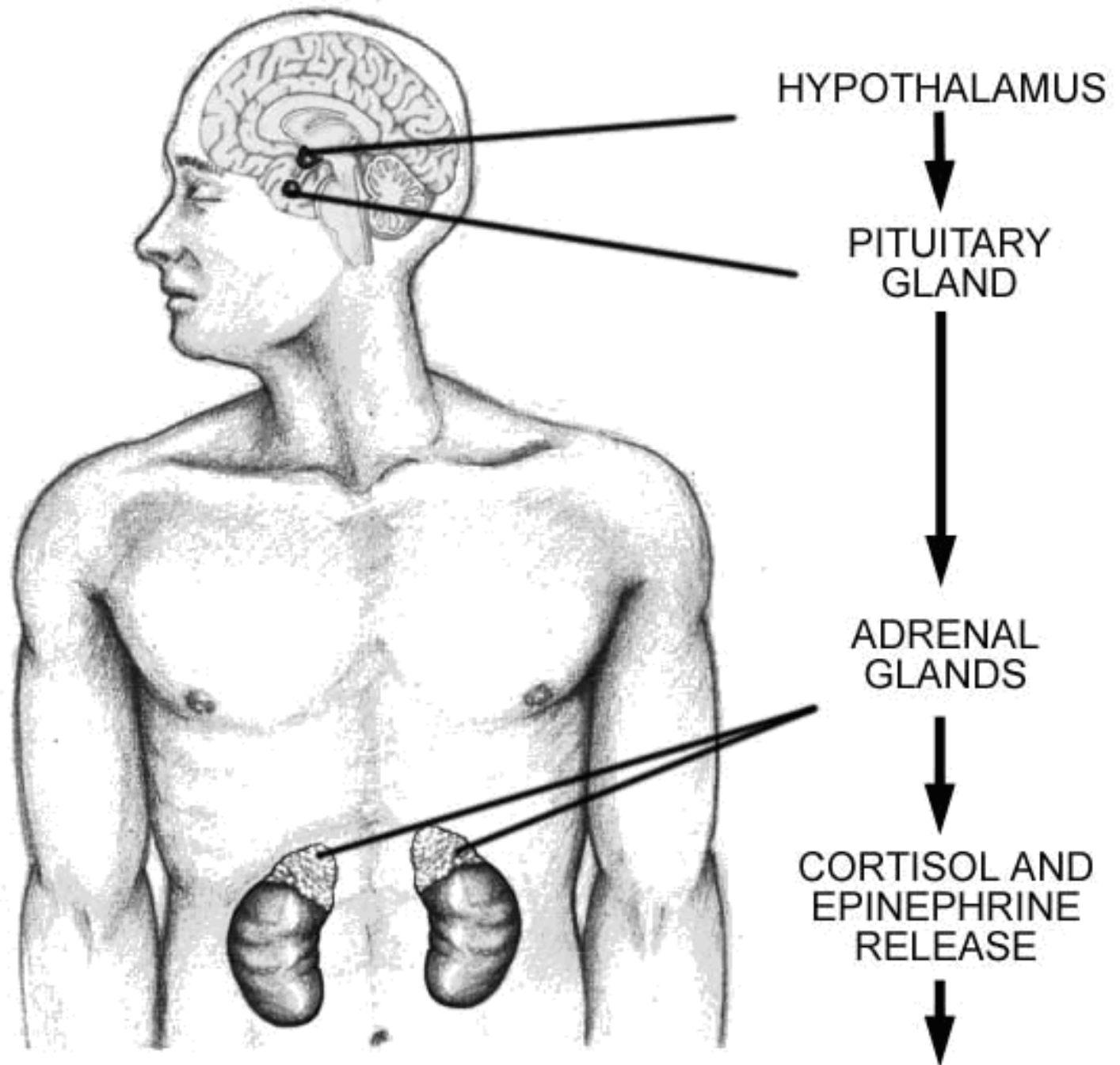


- Investors take too little risk when loss system activated (leaving money on the table)
- Activated by recent losses or *potential* losses
- Feelings of disgust, fear, pain, and withdrawal

GENES AND PERSONALITY

GENES	ABNORMAL VARIANT	PERSONALITY TRAIT
Serotonin transporter 5-HTTLPR (s/s allele)	Anxiety and depression sensitivity, and take 28% less investment risk.	Low Emotional Stability (Neuroticism)
Dopamine D4 receptor (7-repeat allele carriers)	Novelty and sensation seeking, and take 25% more investment risk.	High Extraversion

Stress
System:
“Traders
Age in
Dog-
Years”



Warren Buffett says:

- *"We simply attempt to be fearful when others are greedy and to be greedy only when others are fearful."*

Sometimes We Can Be TOO Rational

NASDAQ WEEKLY CHART 1995-2002

NASDAQ Weekly —

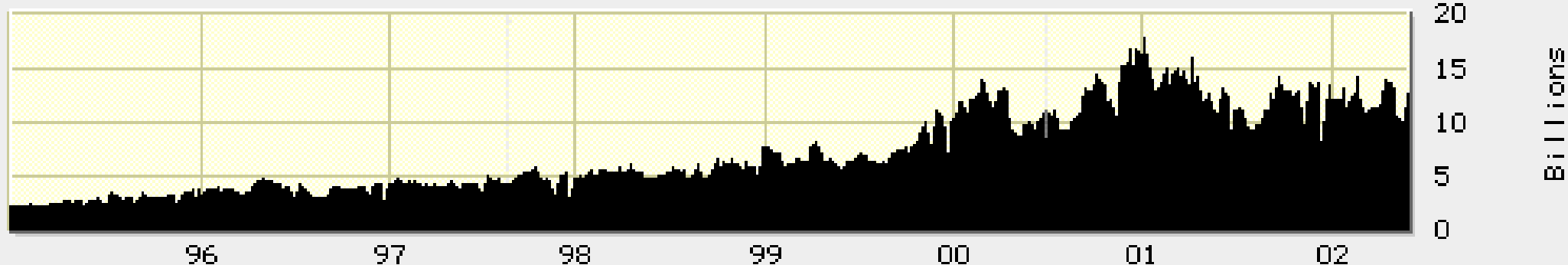
6/08/02

“Irrational Exuberance” Speech



Volume —

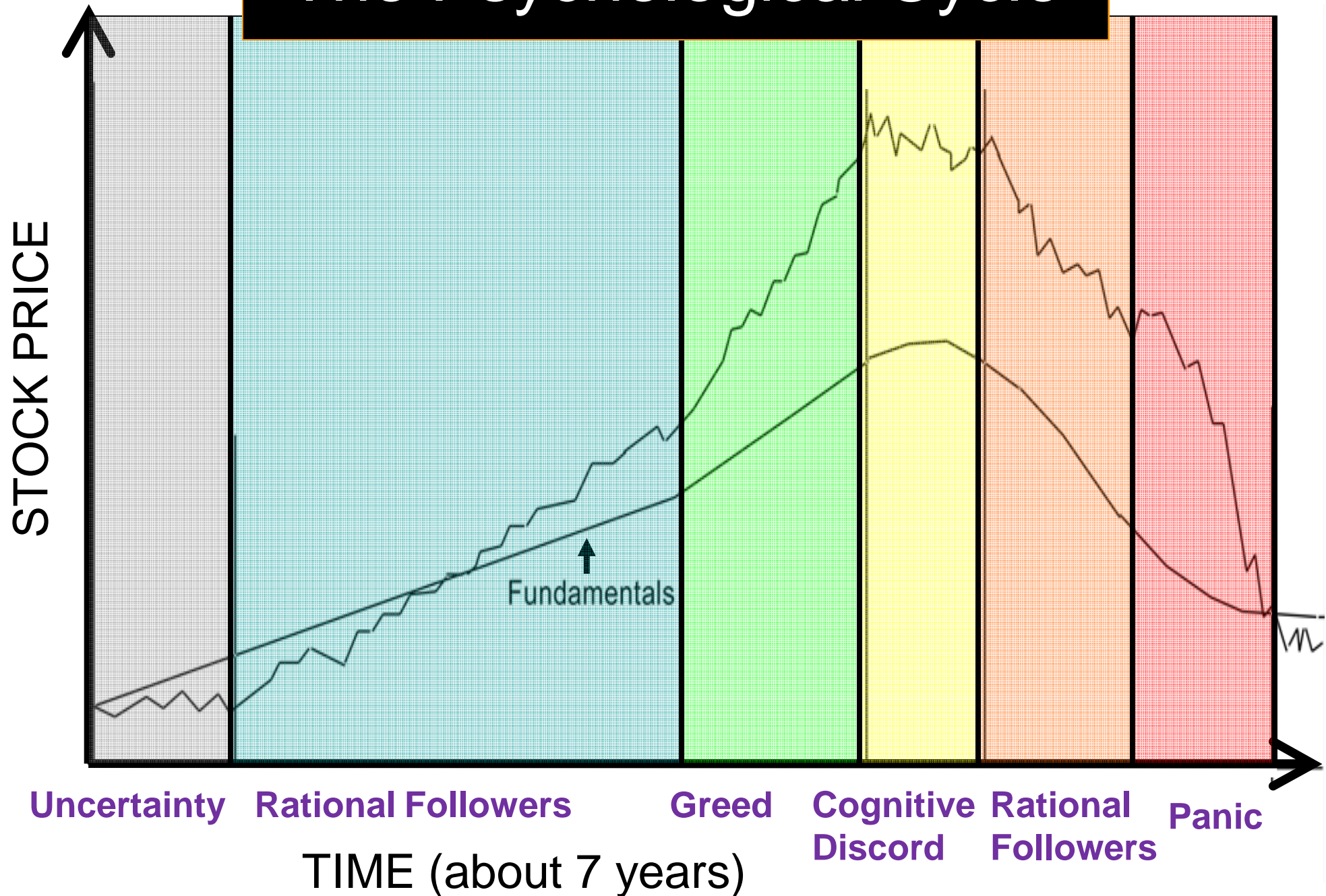
©BigCharts.com



Being Rational in an Irrational Market

- There is a psychological cycle in most securities.
- This cycle is driven by investors' reactions to fundamentals, prices, and emotions (a feedback loop).
- By understanding how the mind works, you can better position yourself in the cycle.

The Psychological Cycle



LANGUAGE IN THE NEWS

- “Green Shoots”
“Bull market”
- Media stimulates emotion & thus acts on our common biology.
- Can it drive investment behavior and cycles?



The MarketPsy Process



FINANCIAL
TIMES



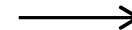
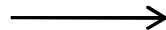
Other
Sources

1) Identify
Online
Financial
Text

2) Download
Text

3) Identify
Predictive
Sentiment
in Text

4) Generate
Trading
Signals

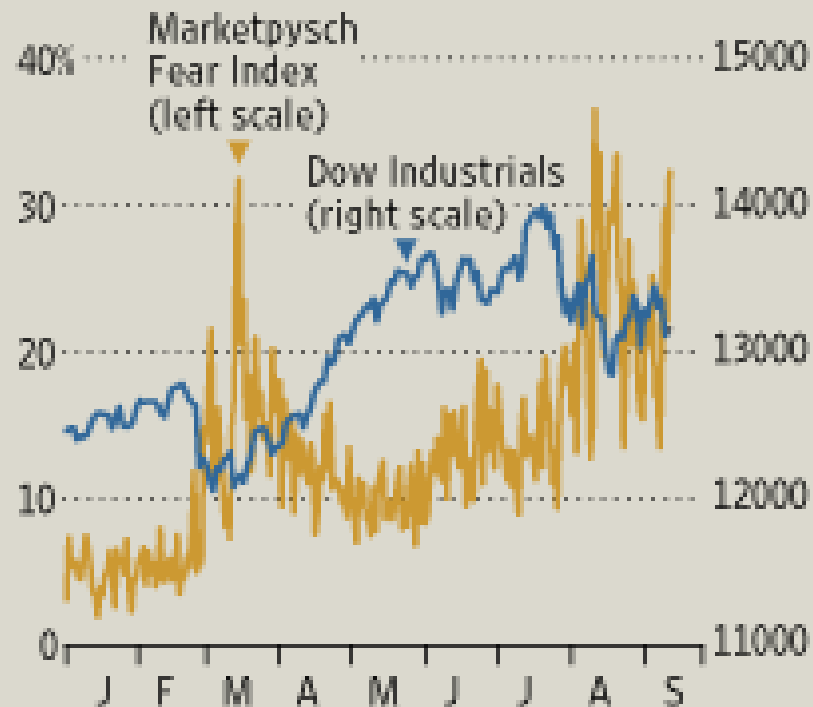


CVX	2.12	BUY
MO	3.82	SELL
T	7.12	HOLD

The MarketPsych Fear Index

Measuring Fear

The Marketpsych Index measures the percentage of financial news coverage that reflects investors' use of fearful words such as 'worry' and 'anxiety.'



Sources: Marketpsych.com; WSJ Market Data Group

Fear Index vs. SPY
Jan 2007 to Jan 2010

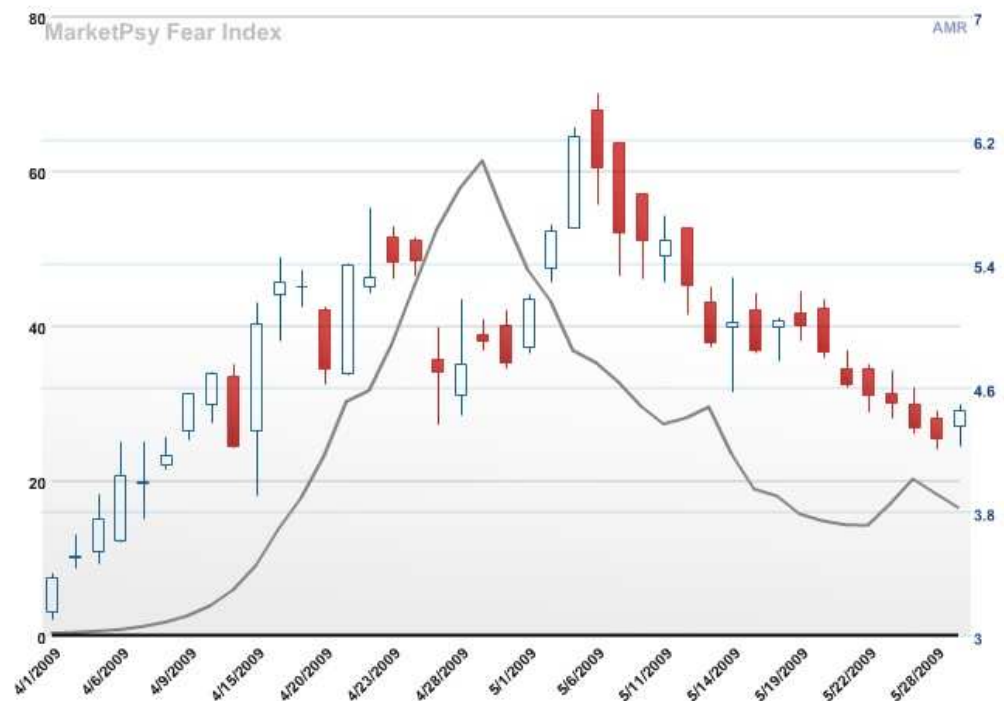


Fear Index vs. SPY 1996 to 2010



Trade Example: Buying American Airlines (AMR) During the Swine Flu Scare.

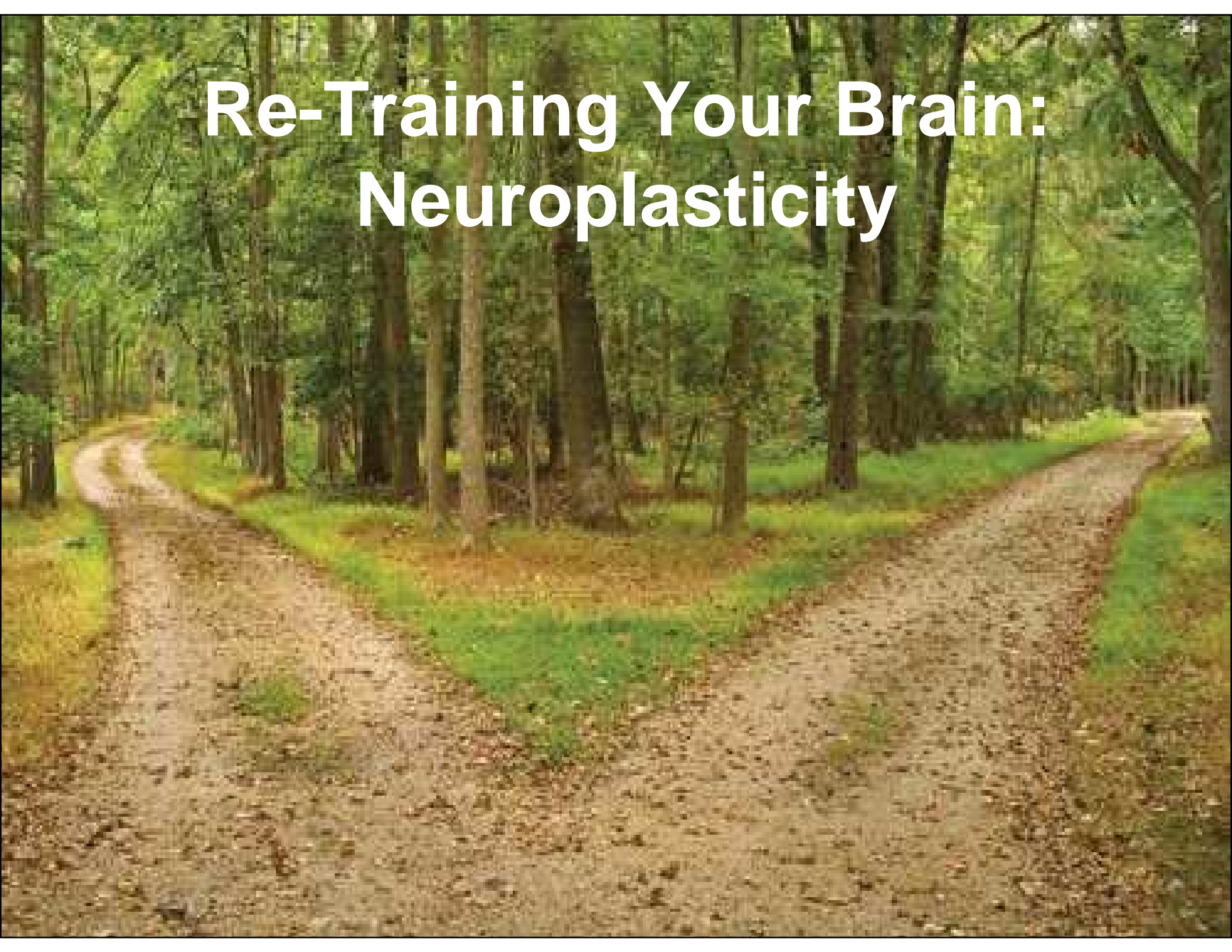
- I. 4/25/09: WHO director declares a formal “public health emergency of international concern” regarding the “Swine Flu”.
- II. Anxiety rises in AMR online stock message boards about reduced travel (see grey line).
- III. 4/27/09: WHO raises pandemic alert level to Phase 4.
- IV. 4/30/09: MarketPsy bought AMR at \$4.81/share,
- V. 5/6/09: MarketPsy sold AMR at \$5.95/share.



Managing the Mind



Re-Training Your Brain: Neuroplasticity



Neural Pathways

*“I took the road less traveled by, and that
has made all the difference.”*

– Robert Frost,
The Road Not Taken

Managing Stress



- **Acute:**

- Remember the big picture.
- Get centered in faith / spirituality / mystery.
- Use deep breathing for relaxation (1-2-3).
- Tell jokes, play games, watch a comedy.
- Exercise / muscle relaxation.
- Take action to stop the stressor.

- **Chronic:**

- Remove the stressor.
- Take a long vacation.
- Build healthy habits: play, exercise, & diet.

Letting go.



Take time to reflect daily.



Daily Gratitude List

**Remember,
things could
always be
worse.**



TMI: Too Much Information

- Limit your information input:
 - How many data points do you really need to make a stock purchase or sale decision? 4?
 - The financial media unconsciously biases you.
- Use a workable discipline with risk management controls that are pre-set.
 - During stress you can't inhibit impulses adequately.
 - Your risk management should be rule-based and easily enforced.

Becoming a “Switch-Thinker”

- Observe how your feelings drive your thoughts.
- Know your personality and propensities.
- Learn to re-frame “crisis” as “opportunity” and be suspicious of extreme optimism and pessimism.
- Use a workable discipline.
- Use a coach or mentor to keep you on track:
 - Your “emotional shock absorber.”
 - Keeps you centered on your long term plan.
 - Helps you remain accountable to yourself.
- Re-center on your long-term goals and dreams when times are tough.

Keep Healthy Routines



Summary

- **Two brain systems dominate our thoughts and feelings: “reward approach” and “loss avoidance.”**
- **Personality and genetic tests correlate with these systems’ baselines.**
- **The financial and media information we absorb activates these two brain systems.**
- **High activations lead to investment mistakes.**
- **Stress reduces impulse-control.**
- **We need a workable strategy, with enforcement, to prevent mistakes.**



More Information:

- Email Sign-Up in back of room
- Book: *“Inside the Investor’s Brain”*
(Richard Peterson)
- Coaching (Richard Friesen) and Genetic Testing
RFriesen@MarketPsych.com
- Free Investor Self-Tests:
www.MarketPsych.com
- Market Psychological Intelligence to launch March ‘09
Free Research and Trading Recommendations:
www.MarketPsyOps.com
- Asset Management:
www.MarketPsy.com