

June 2008

## Asset Class Returns

May 31, 2008 (YTD)

	2005	2006	2007	Last 10 yrs.	YTD 2008
<b>Bonds (%)</b>					
One-year	2.3	4.8	5.2	4.1	1.2
Five-Year	1.7	3.9	5.2	5.1	0.0
Intermediate	1.6	3.6	9.5	6.4	1.2
Long-term	6.6	1.7	9.2	7.0	-1.0
<b>U.S. stocks (%)</b>					
Large Market	4.9	15.7	5.4	5.8	-3.9
Large Value	10.2	20.2	-2.8	8.9	0.4
Small Market	6.1	16.6	-3.1	9.0	-2.3
Small Micro	5.7	16.2	-5.2	10.6	-4.8
Small Value	7.8	21.5	-10.8	11.5	-0.4
Real Estate	13.2	35.3	-18.7	10.8	8.5
<b>International stocks (%)</b>					
Large Market	13.5	24.9	12.5	8.6	-1.1
Large Value	15.3	34.1	10.2	13.0	-4.1
Small Market	22.0	24.9	5.6	14.3	-0.6
Small Value	23.2	28.4	3.0	16.2	0.1
Emerg. Mkts.	29.9	29.2	36.0	16.0	-1.7

## Descriptions of Indexes

Short-term bonds	DFA One-Year Fixed Income fund
Five-Year bonds	DFA Five-Year Global Fixed
Intermediate bonds	DFA Intermed. Gov't Bond fund
Long-term bonds	Vanguard Long-term U.S.Treas.
U.S. Large Market	DFA US Large Co. fund
U.S. Large Value	DFA Large Cap Value fund
U.S. Small Micro	DFA US Micro Cap fund
U.S. Small Market	DFA US Small Cap fund
U.S. Small Value	DFA US Small Value fund
Real Estate	DFA Real Estate Securities fund
Int'l Large Market	DFA Large Cap Int'l fund
Int'l Large Value	DFA Int'l Value fund
Int'l Small Market	DFA Int'l Small Company fund
Int'l Small Value	DFA Int'l Small Cap Value fund
Emerging Markets	DFA Emerging Markets fund

"Last 10 yrs." returns are ended 12/31/07.

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## The Drugs of Investing: They're In Your Head

Phil Jonckheer, Equius Partners

*The quality of our expectations determines the quality of our action.*

—Andre Godin

## What's Happening?

At Equius Partners, we are aware that many people are concerned about the economy and the recent performance of their portfolios. Adding to that concern are economists, the media and political banter that exaggerate the negative aspects of our country's conditions. That being said, there is no doubt that the stock markets have not performed well recently.

We always have maintained an optimistic view at Equius and encourage our clients not to be unduly influenced by either reports on the economy or short-term swings in the market. We base our decisions and investment choices on the indisputable research of how asset classes behave over time. Now there is enlightening research into the human component of why people behave the way they do and how asset class investing can promote peace of mind. Literally. These studies are about our minds and reveal that certain chemicals produced in our brains dramatically influence our actions, increasing our pleasure and decreasing our discomfort as we make investment choices.

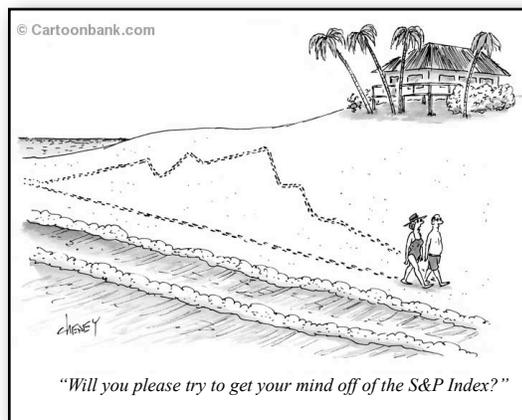
## Why Forecasting Is Fun: It's Addictive

Every action we take is a result of a forecast – whether that forecast is done consciously or unconsciously. Forecasts, in turn, result from extrapolations taken from trends, patterns and/or perceived associations. Those extrapolations are our attempts at making sense of our chaotic world. Making predictions about the markets, it turns out, feels good to people. Really good.

What researchers have found is that there is a part of the brain, the nucleus accumbens, which plays an active role in our search for patterns of information from which predictions are made.<sup>1</sup> The nucleus accumbens, in fact, creates patterns even when they don't exist. It's responsible for our feelings of hope and euphoria.

This part of the brain is driven by dopamine—the chemical that scientists believe produces our feelings of hope and euphoria. Brains are addicted to the stuff and therefore people get addicted too. When scientists insert electrodes into nucleus accumbens of rats, those rodents press levers that deliver jolts to that region of their brains until they collapse from exhaustion.<sup>2</sup>

Dopamine plays a role in financial decisions as well: it is the chemical that gives people a wonderfully warm feeling when they make predictions under circumstances that are risky and uncertain.<sup>3</sup> Dr. Brian Knutson at Stanford University demonstrated this by subjecting students to risky bets and studying how their brains responded to those trades. The students' dopamine levels increased before they engaged in the gambles. No one can take this dopamine secretion (which



is felt as the anticipation of pleasure) away from us.<sup>4</sup> It is for this reason that forecasting methods persist even if they are wrong. What matters is that we get rewarded now (thank you dopamine) even if the prediction does not come true—and the more challenging the forecast, the more dopamine is secreted. Some researchers have reported that a brain engaged in such forecasting “cannot be distinguished from a brain that is high on drugs or sex.”<sup>5</sup>

This natural and powerful craving for dopamine could explain the public’s addiction to the continuous stream of forecasts. Physiologically it feels great to immerse oneself in the noise (investment pornography?!) of those predictions and take stabs at making sense of the chaos regardless of whether or not those forecasts prove correct. No wonder brokers make so much money.

### What Hurts

Just as dopamine fuels euphoria in the nucleus accumbens part of our brain, the neurotransmitters of serotonin and nor-epinephrine (or noradrenaline) flow through the anterior insula part of our brain when we’re fearful or anxious. Therefore, when making investment decisions (or any choice for that matter), our brains are engaged in sorting through signals that will dictate the amount of pleasure or angst we feel guiding us to experiences where pleasure is increased and discomfort is decreased—not necessarily places where investment returns are optimized. People who have a natural proclivity to higher activity in the anterior insula were significantly less likely to make an investment in a security that had lost money, even when the odds were good that a profit would be made. Dr. Knutson concludes, “Such people might sell impulsively when the markets turn against them.”

Therefore, investors who are naturally inclined to be anxious (a function of their brains’ chemical makeup) could force themselves to suddenly exit a prudent investment plan and compromise their wealth in order to satisfy a powerful psychological urge.

Research by Andrew Lo and Dmitry Repin at MIT supports the notion of how traders’ impulsive behavior in time of stress can lead to sub-optimal investment decisions. Their studies indicate that in periods of increased market volatility, traders experience increasing amounts of angst, forcing those stress transmitters to do their work of creating more stress. They found that the more emotional traders produced the worst investment results. Interestingly, traders that had the least emotional activity also produced poor results. Traders who produced the best relative results exhibited more balanced emotions. These conclusions were corroborated by research conducted by a team of researchers from Stanford University, Carnegie Mellon University and the University of Iowa. Their studies suggest that in order to be a more successful investor it would be important to have balance in one’s emotions and resist the siren call of dopamine (pleasure) or the warnings of serotonin (angst).<sup>6</sup>

### What Works

The above research helps us understand that the investment world is an environment ideal for triggering chemicals in our brains that create euphoric and anxious states. In those moments of glee or angst investment decisions can be made that compromise wealth. The chemical neurotransmitters that affect

our brains are extremely powerful forces. This research contradicts the conventional thinking about emotions and investing captured in the statement by Alan Greenberg, the Chair of Bear Stearns’ Executive Committee, who insisted, “There’s smarts, there’s guts and there’s instincts. The other stuff (behavioral, neuro, whatever they call it) is horsesh#@.” As it turns out, Bear Stearns itself has now redefined manure on Wall Street.

In light of what we’ve learned through neuroscience, we offer the following steps to support a more balanced way of investing (and, by implication, a process less influenced by our natural addictions):

- **Reaffirm Your Portfolio’s Asset Allocation After A Vacation From The Media and Markets**

The thrill felt when reacting to a movement in the markets can be extremely pleasurable and ultimately addictive. The action taken in that state, however, can be harmful to your financial health. Let your decisions come forth from a more emotionally stable state and base them on meaningful events in your life, not meaningless (but highly seductive) market movements.

- **Understand Your Emotions So They Do Not Trap You**

In our previous *Asset Class* Newsletter we spoke about the Hedonic Treadmill that puts people on loops where each new level of happiness becomes the new prosaic average. In this newsletter we see that it’s difficult to avoid the emotions triggered by the forecasts we must make continuously that can easily put us on that Hedonic Treadmill. To avoid unconscious patterns of unproductive behavior and destructive decisions, get to know what events trigger your emotional reactions and track whether past decisions were affected more by biases or thoughtful reflection.

- **Let Your Emotions Run Wild When They Can Be Of Enormous Value**

Instead of letting those emotions guide us about investment decisions, let those emotions fly and guide us when engaged in activities that encourage meaningful satisfying states such as: watching and playing sports, socializing and spending time with family, being grateful, establishing reasonable personal goals, and engaging in charitable pursuits.

As always, we invite you to call us to reaffirm your investment plans, the quality of your expectations and the balance in your wealth.

<sup>1</sup> Dr. Helmut Henschel, “Investing Is All In The Mind,” *Professional Investor*, September 2006.

<sup>2</sup> W.L. Whitters and P. Jones-Whitter, “Human Sexuality – A Biological Perspective,” New York, Van Nostrand

<sup>3</sup> Dr. Helmut Henschel, “Investing Is All In The Mind,” *Professional Investor*, September 2006.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Baba Shiv, George Loewenstein, Antoine Bechara, Hanna Damasio and Antonio Damasio, “Investment Behavior and the Negative Side of Emotion,” *Psychological Science*, Vol 16, No. 6, 2005