

## Heavy Clouds, No Rain

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“He looked in the sky but he looked in vain  
Heavy clouds, but no rain”

Sting

“Because the market has not dropped sharply, it will not drop sharply.”

If there is one thought that will cost investors billions in the near future, it is this one. The price action of the major US indices over the last year appears to have anesthetized investors into a lethargic state making it improbable that they will prepare their investments before the next major move. I am not talking about hundred point moves on the Dow, but thousand point moves. Why is this happening? Why is this lethargy so instinctive in our behavior?

First, let's start with the human brain and how we are wired as human beings.

Robert Prechter's book, The Wave Principal of Human Social Behavior and the New Science of Socionomics, allowed me to understand why all investors, including myself, have such a difficult time preparing for future investment opportunities and spend most of their time reviewing the most recent numbers on their quarterly statements. In his book, Prechter notes that “Dr. Paul McLean, former head of the Laboratory for Brain Evolution at the National Institute of Mental Health, has developed a great deal of evidence that suggests we have a ‘triune’ brain, one that is divided into three basic parts. The primitive part of the brain stem, called the basal ganglia, controls the impulses essential to survival. The limbic system controls emotions, and the neocortex, which is significantly developed only in humans, is the seat of reason. Thus, we actually have three connected minds: primal, emotional, and rational.”<sup>1</sup>

The basal ganglia controls the brain functions that are instinctive, such as the desire for security, the reaction to fear, the desire to acquire, the desire for pleasure, being accepted in our social circles, and even choosing our leaders. More pertinently, this area of the brain controls behaviors such as flocking, schooling, and *herding*. The limbic system is the seat of emotions and guides behavior required for self preservation. It operates independent of our reasoning capabilities, and therefore, has the capacity to generate out-of-context, affective feelings of conviction that we attach to our beliefs *regardless of whether they are true or false*.

These feelings are not isolated to the small, naïve investor, but affect the vast majority of professionals as well. Finance professor, Dr. Robert Olsen studied over 4000 corporate earnings estimates by company analyst and reached the conclusion that the greater the difficulty in forecasting earnings per share, which is a source of stress, *the more analysts' herding behavior increases*. In other words, even the “brightest” on Wall Street are prone to follow the herd.

And, what about the neocortex? It is in a far inferior position. The neocortex is involved in processing ideas and using reason. However, it is trumped by the limbic system in that the limbic system is faster, controls the amplitude, or intensity of emotions, and unfortunately has no concept of time nor learns from experience. Truly, for the afore mentioned reasons, we are not hard wired to make good investment decisions.

Since herding is a natural instinct, and money decisions are one of the most emotional charged areas to handle, then it only makes since that, without understanding the power of these instincts, investors are not even aware of their incapacity to take action to prepare for a sharply declining market. (As an aside, if you still have a hard time believing that the markets could decline sharply, read my articles, “Surfing the Tsunami” and “An Asset Allocator's Nightmare.”)

So let's examine the herding behavior in the laboratory of life through the lens of history; let's look at a period when men and women got caught up in irrational, and thus detrimental, behavior. The year was 1719. The country was France. The event would come to be known as "The Mississippi Scheme".

John Law had convinced Phillip II, Duc d'Orleans and finance minister to Louis XV, that he had a plan to save France from its downward financial spiral. He would establish the Banque Generale and, for the first time in history, issue paper money that was officially sanctioned by the government.<sup>2</sup> He went on to establish the Compagnie des Indes, which was given exclusive French trading rights for the Mississippi River, Louisiana, China, East India, and South America. Because Law continued to print more and more money, inflating France's money supply, the fiat money had a huge impact on the stock price of Compagnie des Indes, and herding moved investors into a full blown mania. Consider the following excerpt from Charles MacKay's 1841 book, Extraordinary Popular Delusions and the Madness of Crowds:

"Dukes, marquises, counts, with their duchesses, marchionesses, and countesses, waited in the streets for hours every day before Mr. Law's door to know the results [they were seeking to know if any shares had become available for purchase]. At last, to avoid the jostling of the plebian crowd, which, to the number of thousands, filled the whole thoroughfare, they took apartments in the adjoining houses, that they might be continually near the temple whence the new Plutus was diffusing wealth. Every day the value of the old shares increased, and the fresh applications, induced by the golden dreams of the whole nation, became so numerous that it was deemed advisable to create no less than three hundred thousand new shares, at five thousand livres each, in order that the regent might take advantage of the popular enthusiasm to pay off the national debt."<sup>3</sup>

The Dallas Morning News ran a front page article on August 14th called "The Price of Prosperity," where it notes Collin County ranked as one of the top twelve richest counties in the United States, "but some area residents have built a lifestyle on a tower of debt." Compare the following excesses from the article with the following comments from the year 1719.

"A Plano mom spent \$400 hiring costume characters for her 6-year-old's birthday party. They paid \$2,000 to paint a child's bedroom."<sup>4</sup>

In 1719, "The looms of the county worked with unusual activity to supply rich laces, silks, broad-cloth, and velvet, which being paid for in abundant paper (money), increased in price fourfold. The artisan who formerly gained fifteen sous per diem now gained sixty."

Back to the Dallas Morning News:

"Like models on a Monopoly board, big new homes line the streets in the Twin Creeks subdivision in Allen. Mrs. Figueroa said the couple would have bought a house with fewer rooms if only the rooms were larger. She jokes that the cat is the only one who uses the bathroom on the second floor, which also has two furnished guest bedrooms, a media center and an empty bedroom they use for storage."<sup>5</sup>

In 1719, "New houses were built in every direction; an illusory prosperity shone over the land, and so dazzled the eyes of the whole nation, that none could see the dark cloud on the horizon announcing the storm that was too rapidly approaching."<sup>6</sup>

Don't get me wrong. I love my friends and family and am aware that I am prone to herding instincts as well. It's the way we are made. We are not robots; we are humans that enjoy encouragement and acceptance.

However, when it comes to looking at some of the best minds of investing, my research continues to show the same pattern over and over again. One must allow their neocortex to override the

basal ganglia and limbic system. Or, more simply, we must be ultra logical and unemotional. John Templeton states, "To buy when others are despondently selling and to sell when others are greedily buying *requires the greatest fortitude* and pays the greatest potential reward."

This fortitude, to drive past the emotions and noise of the herd, was seen in Warren Buffet as well. "By the end of 1973, the market value of Berkshire's portfolio, which had cost a total of \$52 million, had sunk to only \$40 million. His paper losses worsened significantly in 1974. His net worth, as measured by Berkshire's prices, fell by half. Yet it seemed to dampen his spirits not at all. In the sixties, when he had been making tons of money, he had been full of fearful prophecies. Now, with his portfolio underwater, he was salivating." Buffet's painstaking preparation ultimately paid off. "By early 1986, over the last twenty-one years, Berkshire stock had multiplied 167 times, while the Dow had merely doubled."<sup>7</sup>

While we can all read this article with our minds engaged, away from the distraction and noise of Wall Street and Washington, when we meander back into the milieu of daily life, it becomes very hard to prepare for something that appears as though it will not occur. Since no one desires to see the financial and social changes that accompany a bear market, it becomes even easier to push off until tomorrow what we do not want to address today. The more times we don't make a decision to change, the more we are emotionally rewarded with the fact that so far nothing happened. Fifty point declines are met with fifty point rallies. The sky is blue. The grass is green. No rain comes.

Dr. Benoit Mandelbrot sounds a wake up call much like Buffet's investments and real losses in 1974. Without moving ahead of the rain, there is no assurance that you will avoid the effect of the deluge.

Dr. Mandelbrot, discoverer of fractal geometry, is known as one of the greatest math minds of the 20<sup>th</sup> century. While his work was not widely accepted through the 1960s and 1970s, after the crash of 1987, his work on fractals and market risk brought him to the forefront of the financial world. He has contributed greatly to Monte Carlo simulation models, which are used all over the world today.

One aspect of his work was the discovery of what he calls the Joseph and Noah Effects. Sometimes markets, like nature, reveal patterns of movement that stay within a certain range, like Joseph's seven years of preparing for the famine and seven years of living through it, as recounted in Genesis. There are other times when the data moves violently outside its normal range. These violent reactions, much like a tsunami or hurricane, are referred to as the Noah Effect.<sup>8</sup>

While we can all see the Joseph and Noah Effects in weather patterns and other life experiences, amazingly, many in the financial world still espouse theories that focus only on the Joseph Effect. They assume that changes that occur from a Noah Effect cannot be seen ahead of time, and are thus to be ignored. They reason, that since no one can time the day and hour, the season becomes unimportant as well. The focus of all numbers becomes the "average." Unfortunately, historical, real world losses are not as forgiving as the "average."

Traditional asset allocation models deal with portfolio fluctuations only within two to three standard deviations. Traditional economic models hold that for an event to occur within a deviation of two means it occurs 95% of the time while a deviation of three would reflect events that occur 98% of the time. Mandelbrot notes two problems with this line of thinking. Moves beyond 2 and 3 standard deviations occur much more frequently in the historical record than allowed for in traditional models. And additionally, these extreme moves, accounting for large percentage changes in price, occur in miniscule amounts of time. So rather than a steady flow of asset prices, we see jerky action followed by stasis.

So, how frequently have investors seen changes beyond 3 standard deviations?

Since we will more fully expound on the second half of Mandelbrot's work, for the sake of space, please allow this summation: "Prices only rarely follow the predicted normal pattern. The Brownian data shows 98% of the changes in the markets occur within three standard deviations and no changes greater than five. However the historical record shows that changes of more than five deviations happened two thousand times more often than expected. Under normal rules such an event should occur only once every seven thousand years; in fact, it happens once every three or four years. Statisticians call this a "fat tail" and it means the standard model of finance is wrong." <sup>9</sup>

So, how costly has it been to investors who ignored deviations beyond 3%, hoping that the Noah Effect will have not impact on their finances?

Let's look at three examples. First, a currency study by Citigroup in 2002 revealed a deviation of 10.7. This equated to a one-day drop of 7.92%. Traditional finance would say the odds of this happening were the equivalent of one day out of 15 billion years. To make this even more compelling, consider another study on currencies that revealed that in the 4,695 trading days from 1986 to 2003 **half** the decline of the dollar to the yen occurred in just **ten** (10) days. Put another way, half the losses occurred in .21% of the trading days. My last illustration reflects the S&P 500 during the secular bull market of the 1980's. Fully 40 percent of the positive returns from that ten year period occurred in ten days, or .5% of the time. And for the curious, let's look at the Crash of '87. This one-day event took markets to a deviation of 22. Remember, standard asset allocation models only address 2 to 3 deviations.

Are we as investors condemned to be blind sided by these Noah Effects? Is the safest way to invest in these periods to follow the crowd and buy an index or basket of indices? History and science does not support this "random walk" mentality.

If there are hundreds of logical arguments for the Noah Effect occurring in the markets today, why is it so hard to make changes now to address this issue?

The Journal of Behavioral Finance had a great article recently called "Self is not Neutral". In this piece Gao and Schmidt write, "Rationalization doesn't mean, 'acting rationally.' It means attaching desirable motives to what we have done so that we seem to act rationally. In other words, people seek justification for their behavior. Rationalization makes people feel good." <sup>11</sup>

With the millions of marketing dollars spent on teaching advisors how to help their clients "feel comfortable," is it any wonder that so many investors and advisors, surrounded by the emotional comfort of the herd and blinded by what we want to see, would ignore all the warning signs of a Noah effect until after the event costs them dearly.

My research reveals that there are a few managers and traders who have the incredible fortitude and exceptional skills to prepare ahead of an event. In so doing, they will not only be able to avoid the pains of the downturn, but will actually be positioned to profit from the Noah Effect. The good news is that there are individual and institutional platforms in place today, that purpose to profit when the next Noah Effect occurs.

In our current placid market environment, it may be tempting to dismiss this article for its "extreme views." However, a study of history and science suggests that the longer the Joseph Effect continues, the more violent the Noah Effect will be when it occurs.

As you put down this article and go back to your day-to-day life, I hope you will force yourself to override your emotions and logically consider your surroundings. Make sure you are thinking and preparing for future events and not rationalizing your ways to the "comfortable" music emanating from the Wall Street and Washington rhetoric.

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