Behavioral Finance:
Is it impacting the way you look at investing?

In 2006, I published a series of articles dealing with the way that various behaviors can adversely affect our investing decisions. Given all the current market volatility and negative news reporting, it seemed like good time for a refresher on these bad behaviors so that we don't get caught up in them today.

Problem: Overconfidence

Overconfidence is a behavior that tempts us to play down the risks and potential pitfalls that really should be considered before making an investment. It leads us to think that bad things only happen to someone else, not to us, or that we really are so good that the normal risks don't apply to us. In his book "The Psychology of Investing", John Nofsinger gives this great example of overconfidence:

Question: Are you a good driver? Compared with the other drivers you encounter on the road, are you above average, average, or below average? How did you answer this question? If overconfidence were not involved, then one third of you would answer above average, one third would say average, and one third would say below average. However, people are overconfident in their abilities. In one published study, 82 percent of the sampled college students rated themselves above average in driving ability. Clearly many of them are mistaken.

One of the main causes of overconfidence in people is when they feel they have greater control over the outcome. Just as in the good driver example, people feel that when they have more control over a situation, they can force the outcome to be better. This became more and more of a problem during the late 1990's as online trading became commonplace. Investors began to feel that once they were making their own investment decisions and placing the trades themselves, they had a much greater chance of success. This led in the end to some devastating consequences as highly overconfident investors took greater and greater risks simply because they felt that they were in control.

Beyond potential losses, another outcome of overconfidence is the tendency to trade excessively. Overconfident investors tend to believe their decisions will always turn out to be highly profitable; therefore they tend to ignore things like transaction costs and tax consequences. By trading excessively, some investors spent more on transaction fees and other expenses than they made through the trades. Many also forgot to factor in the costs of the capital gains taxes that would become due the next year and found themselves with large tax liability on April 15th!

Overconfident investors also tend to ignore the possibility of losing. After all, since they must be correct about their expectations, they simply don't need to consider the potential losses. But ignoring the potential losses does not make them go away. Professional investors understand that losses can and do happen. The key is to learn how to minimize those losses, and that cannot be done if they are simply ignored.

Yet another dangerous aspect of overconfidence is bad behavior being reinforced through accidental successes. During the late 1990's, it seemed that all it took to make money was to pick any small internet startup company and throw all of your money into it. Investors who took this path often invested in companies selling what was referred to as "vaporware", a product that had not yet even been fully conceived let alone profitable. When the prices for those companies rose, it reinforced the belief in those investor's minds that they had an innate ability to make good picks.

Problem: The Illusion of Knowledge

The illusion of knowledge is a behavior that leads directly to overconfidence, but deserves some individual attention itself. The illusion of knowledge is the tendency to believe that more information leads to greater accuracy in decision making. This can be a very dangerous line of thinking in today's world where the internet can provide more information than we could ever possibly hope to comprehend – and much of it dubious at best. Again, Nofsinger provides an excellent example:

…if I roll a fair, six sided die, what number do you think will come up, and how sure are you that you are right? Clearly, you can pick any number between one and six and have a one-sixth chance of being right. Now let me tell you that the last three rolls of the die have each produced the number four. I roll the die again. What number do you think will come up, and what is your chance of being right?

Different people may have a different reaction to that additional knowledge. Some may think that the number four is more likely to come up since it has so often before. Others might think that the number four has run its course and another number is due. In fact, if it is a fair die, there is no greater or lesser chance of the number four coming up than any other number each time the die is cast.

In investing, the illusion of knowledge comes from analyst opinions and reports, tips from friends or colleagues, and even internet chat rooms. It is crucial to remember that not all information provides a true and complete picture of any situation. The recent failures and bankruptcies of several high profile mortgage lenders testifies clearly to that. Most investors had no idea what they were really holding in those investments, simply because they were not given all of the facts. Many were led to believe they were buying safe, low risk securities only to find they no longer had the ability to sell them because the market for them had simply vanished.

Another source of the illusion of knowledge is in the academic world. In 1994, a group of "super investors" formed a hedge fund known as Long Term Capital Management. Lest you think I am making too much of the level of academic knowledge involved, two of the founding directors won the Nobel Prize in Economics in 1997 for their research in determining the value of stock options, known as the Black-Scholes options pricing model. These were the very men who made derivatives trading possible.

The fund did at first experience fantastic returns - almost 40% annually. But by late 1998, overconfidence on the part of these managers had led them to take massively over-leveraged positions in foreign government debt. When the Russian government defaulted on their bonds, those highly leveraged positions collapsed as well, leading to huge losses.

Eventually the Federal Reserve had to get involved, organizing a bail-out by a consortium of banks in order to avoid a wider collapse of the debt markets. All of those great minds were eventually led astray by their own knowledge and success. They failed to clearly see the risks involved in what they were doing, simply because they were supremely confident in their own abilities.

Overconfidence and the illusion of knowledge can lead us to take risks and make choices that would otherwise seem irrational. They key to avoiding those pitfalls is to ensure a disciplined, reasonable approach to investing. While we seek to get the best returns on our money, we always need to be aware that there is no way to totally eliminate risk. The key is to manage the level of risk that we take, and not to ignore it simply because we don't want it to be there. It is also critical to be sure that the sources of information we use are both credible and correct, so that we are not fooled by false knowledge.

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Last month, we took a look at the problems of Overconfidence and The Illusion of Knowledge. This month we'll look at the next two behaviors: Fear of Regret and Seeking Pride, and Mental Accounting.

Problem: Fear of Regret and Seeking Pride

This problematic behavior is actually very easy to understand but very difficult to overcome. It is human nature to avoid situations that cause us pain or regret. On the other hand, it is also human nature to seek out situations that make us feel better about ourselves.

When it comes to investing, we do exactly the same things. When we purchase a stock, we do so with an expectation that it will rise in value, giving us a positive return. However, that does not always happen. Some stocks rise, others fall, some even collapse. When those investments fall and the owner is faced with a loss, most have a tendency to hang on to the stock in the hope of a turnaround. Many investors have been caught in this trap and held those losing stocks until they were simply worthless pieces of paper.

Just the opposite can be true when it comes to those stocks that are big winners. An investor that has a big winner, especially if it moves up very quickly, will have a tendency to sell the stock at the first sign of trouble in order to lock in the gains and show just how great an investment they made.

One of the problems with this kind of thinking is the impact of taxes upon a portfolio. If you sell a stock that has gained in value, you will pay taxes on that gain (retirement accounts excluded). That tax effectively reduces the amount of the gain. Conversely, if you sell a losing stock, you get a tax credit for the loss, and that tax credit actually reduces the amount of the loss. From a purely economic standpoint then, the old Wall Street axiom makes perfect sense: "Sell your losers and let your winners ride." Unfortunately, in wanting to avoid the pain and regret of realizing a loss, many investors do exactly the opposite. This is known as the disposition effect, where investors appear to be predisposed toward selling their winners too early and holding their losers far too long.

Here is an example to help flesh this out a bit: Say an investor owns two stocks, A and B. Stock A was purchased for $850 and stock B for $1,250. Also assume that the capital gains tax rate is 20%. Time passes and the investor finds himself in need of $1,000 which he will take from this portfolio. He looks to see which stock to sell and finds that each of the two stocks is now worth exactly $1,000. Which one should he sell?

Selling stock A will yield a gain of $250, while selling stock B will yield a loss of $250. In both cases the investor would raise the $1,000 he needs. The disposition effect would predict that the investor would sell stock A instead of stock B so that he could avoid realizing the regret of the loss and capture the good feeling of having made a winning investment choice.

However, if taxes are factored into the picture, we see that stock A was definitely not the best economic choice. Selling stock A gives the investor a gain of $250, which triggers capital gains taxes of $50 for net after-tax proceeds of only $950. Selling stock B causes the investor to realize a loss of $250, but that capital loss provides him with a tax deduction that is worth $50. This equals net after-tax proceeds of $1,050, which is a much better choice.

The caveat here is that there may be other reasons to hold onto a losing position. One such reason might be if we know that the loss is indeed a temporary issue. Each investment must be viewed within the bounds of the long-term trend, and the riskiness or volatility inherent within that stock. In the end though, the axiom certainly does seem to be true: "Sell your losers and let your winners ride."

Problem: Mental Accounting

While it may sound like some kind of memory game for CPA's, mental accounting really has little to do with actual accounting. In fact, mental accounting is more closely related to the fear of regret and seeking pride. In mental accounting, the investor tends to place each investment into a separate, imaginary account. This is usually based upon the intended uses of the invested capital, the type of specific securities involved, or even the current status of the investment. For instance, an investor might set up one account for retirement savings, another for vacation savings, and another as a Christmas fund. The problem with this thinking is that it causes the investor to overlook the interactions between their investments.

In "The Psychology of Investing", John Nofsinger again offers a good example of the outcome of this thinking:

> *Consider the wealth-maximizing strategy of a tax swap. A tax swap is when an investor sells a stock with losses and purchases a similar stock. For example, suppose you own Northwest Airlines stock, which has experienced a price decline along with the entire airline industry. You could sell the Northwest stock and purchase United Airlines stock. This tax swap allows you to capture the capital loss of Northwest stock to reduce your taxes while staying invested and waiting for the airline industry to rebound.*
>
> *Why isn't the tax swap strategy used more often? Investors tend to consider the selling of the loser stock as a closing of that mental account and the buying of the similar stock as the opening of a new mental account. This causes two outcomes that affect investors. First, the interaction between these two accounts increases the investor's wealth. Second, the closing of the loser account causes regret. Investors tend to avoid the interaction between accounts; therefore, investors act to avoid regret instead of to maximize wealth.*

This is just one example of this behavior, but it does demonstrate just how we need to be aware of the big picture as we view our financial holdings. This means seeing each account as a piece of the entire portfolio. Each piece plays its own role in meeting the goals of the portfolio as a whole - that is maximizing wealth while reducing risk. By focusing only on individual mental accounts, we lose track of that big picture and begin to make choices that we would not otherwise.

Fear of Regret, Seeking Pride and Mental Accounting are behaviors that occur when we lose sight of the big picture and allow emotions to cloud our judgment. Disciplined investing means that we set forth a course of action and follow those rules in spite of emotional distractions.

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So far in this series, we have looked at the first four problematic financial behaviors. These are ways that investors behave at different times that can negatively impact their investments. This month we'll take a look at three related behaviors: Reference Point, Representativeness and Familiarity.

Problem: Reference Point

Most of us are familiar with the concept of a reference point, but in the positive sense. To illustrate, imagine you are in a rowboat and need to cross a lake. When you are rowing, you are normally facing the opposite direction from the way you are traveling, so it can be very hard to navigate. In order to keep yourself in line, you can pick a reference point on the shore that you are leaving. So long as you keep this point in the correct perspective, then you can be assured of traveling in a straight line and getting across the lake with as little difficulty as possible.

In investing, a reference point works in much the same way, but can do more to lead us astray than to the right destination. In investing, a reference point generally occurs at a high or low point in value or on a specific date. For instance, we often reference the value of an account as of the first of the year, and then speak about return from that point forward.

The problem with this occurs when we create reference points not out of particular dates, but out of highs and low price points. For example, imagine you purchased a stock in January of 2005 at $25. This stock appreciated considerably and closed out the year at a price of $50. In 2006 however, the stock fell upon harder times and dropped back to $45. Depending upon the investor's reference point this could be viewed as either an 80% gain ($25 rising to $45) or a 10% loss ($50 falling to $45). It may seem like a small issue, but having the wrong reference point could easily put the investor off-balance and cause bad trades to take place.

For instance, the 10% loss perspective could cause the investor to become unduly risk averse and lead him to become too conservative in his choices. It could also keep him from selling the investment now, choosing instead to wait for the price to climb back up once again, which it may not do. This ties in very closely to last month's topic on fear of regret and seeking pride.

Using a high or even a low price as a reference point to guide trading decisions has other ramifications as well. If an investor wants to own a stock that has just moved above its 52 week high, he may go ahead and buy the stock at that high price for fear missing the boat while it zooms even higher. The same can be said for selling a stock near its low price. Either way, the focus is taken off of the fundamentals of whether or not it is a good investment, and shifted to where prices are relative to the reference point.

Problem: Representativeness and Familiarity

Representativeness and Familiarity both work in a similar fashion. In each case, they cause investors to jump to a conclusion before all of the information and facts have been reviewed. Most times, representativeness occurs simply because of the vast amounts of information that are available to be reviewed. The brain simply cannot process all of the available data, so it takes short cuts based on past experiences or biases. A classic example of this is the following riddle:

> *A highly skilled chief surgeon is summoned to the operating room to help with an emergency. A patient was in a car accident and needs immediate surgery to save his life. The doctor rushes into the operating room and suddenly stops short, exclaiming, "I cannot operate on this person, he is my son". However, the surgeon is not the boy's father - how can this be the case?*

Those who are familiar with this riddle already know that the doctor is really the boy's mother. For most people though, a man better represents the position of a highly skilled chief surgeon. Thus, representativeness has caused our minds to jump to a conclusion without knowing all of the facts.

Familiarity is closely related to representativeness. With familiarity we allow our current knowledge of a thing or situation to influence our decisions about it. In investing, there can exist a vast difference between a good company, or one with which we are familiar, and a good investment.

Just because a company has a great product or service, and one that you know and enjoy, does not make it a great investment. The quality of the company is only one part of the puzzle. The price of the investment is the other part. There are many great companies that we can buy, but the price of those shares may or may not be justified by the fundamentals of the company itself. However, familiarity with that company can lead us into thinking that it is always a great investment, and we can make a buy or sell decision at the wrong time without all of the necessary information.

The most obvious case of both representativeness and familiarity is during a market bubble. During the dot-com boom of the late 1990's, stocks were being bought solely on the basis of familiarity with their future product and representativeness of other high tech companies that had made great money for their investors. In many cases, these companies had not even produced a product let alone generated a profit. In order to support their buy recommendations, analysts began to rate these dot-com companies on the basis of sales revenues rather than actual profits. For fear of missing out on great gains, investors made the jump into buying these stocks without having considered all of the truly relevant information.

Another example of this phenomenon is in mutual fund investing. Year after year, the funds with the best recent track record receive the highest amount of new investment inflows. However, studies have shown that subsequently these high flyers tend to underperform the losers, those with the worst recent track record, over the next 3 years by as much as 30%.

Clearly, the problem with all three of these behaviors: Reference point, representativeness, and familiarity, is that they cause us to make decisions without reviewing all of the pertinent information. Taking these short cuts can lead us to make decisions which in the end can be downright disastrous.

Warren Buffet, the well known investment guru, once compared investing to being up to bat in a baseball game. Only in his version of the game there were no strikes, only balls and hits. He asserted that the key was in having the patience to wait for exactly the right pitch, and not to swing at one because you just wanted to hit something. You always need to make sure you hit the pitch that will go the farthest, even if it means missing a few that are 'pretty good' in the process. The market will always throw you another good one if you just have the patience and focus to keep looking for it.

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In this installment of our series on problematic financial behaviors, we will take a look at the idea of Considering the Past. We'll finish this series next month as we consider the last three related items together.

Problem: Considering the Past

In looking at the study of behavioral finance, we are mainly concerned with which factors outside the financial markets affect our investing. One of the greatest external factors is that of our own memory. It is amazing to see just how different our memories of an event may be from the actual outcome of that event. That is because memory is not simply a transcription of an event, but also a recording of the emotions that event brought into our lives.

There are really two areas to deal with when our memories of the past are involved. The first is whether the event was pleasurable or painful. The second is how we feel about the outcome of prior decisions—are we proud of those decisions or are we ashamed or saddened by them?

When it comes to any event, it is the *level* of pain or pleasure that affects us most. For example, if you buy a new car and then try to sell it within the first few weeks, you will see a sizable loss due to the cost of depreciation. That would be a very painful event. However, if you buy the new car and then sell it several years later you will still lose the cost of depreciation, but it will be far less painful. Why is this? Because the loss was spread out over a longer timeframe.

The same is true with investments, and applies to pleasurable experiences as well. For instance, take a look at this example about two stocks from John Nosfinger's book, "The Psychology of Investing". The example talks about a biotechnology stock and a pharmaceutical stock that were purchased at the beginning of the year, both at the same price of $100:

> *"People feel better about experiences with a high pleasure peak and end. Consider a scenario in which the two stocks increased in price. The biotechnology stock increased to $125 over the year. The pharmaceutical stock rose dramatically to $120 at the end of the year. The memories of these events cause the investor to feel better about the pharmaceutical stock, even though it did not perform as well."*

The bottom line is many times we may make a poor choice simply because our memories fail to recall past experiences correctly. Most times, this causes us to take on excessive amounts of risk, which may well lead to disastrous consequences.

The other issue of memory concerns how we feel about an event that took place in the past.

Psychologists call this a problem with cognitive dissonance. The idea here is that we adjust our recollection of past events to match with our own perceptions of ourselves. Cognitive dissonance works something like this: We all like to believe that we are good decision makers. However, we have all made poor choices in the past that led to negative consequences. Because those poor decisions contradict our own positive self-image, our mind tends to ignore, downplay, or even forget the poor choice. In some cases we may even change our beliefs in order to be consistent with current decisions.

When it comes to our investments, we tend to reduce the impact of poor returns and accentuate good returns. By doing this, we end up overestimating both our own past returns and the potential future performance of our accounts. It is a very common occurrence for me to speak with people who consistently overestimate both the historical return for their own portfolio as well as that of the markets in general. This sets them up for disappointment on two levels. First, their recollection of their own performance may be unrealistically high and will likely never be replicated. Second, their over-estimation of the market's performance can set them up for disappointment when those lofty returns are not achieved. My job then becomes helping them revise those expectations to realistic levels that can be achieved and used to plan for the future.

This was an all too common occurrence during 2000, when the markets were just beginning their slide downward into the worst bear market since the depression. Investors still believed that the skyrocketing gains of those dot-com startups were still abundant. Even today this is happening in the real estate market as people set prices for their houses and land, yet see no interest at those levels. The pleasurable memory of rising home prices makes them want to believe it will continue to happen, even in the face of falling prices.

Memory can indeed be a tricky thing. It can make us act in ways that are detrimental to our long-term financial health. However, once we understand how it can affect us we can start to remove those inaccurate perceptions from the equation and become better investors.

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This month marks the final installment in our series on behavioral finance. The last three items in our list of problematic behaviors are what I would refer to as the three negative effects. They are the House Money Effect, the Snake Bite Effect, and the Endowment Effect. The three of them are very closely related, and so we will consider all three together.

Problem: The Three Negative Effects

Of all of the behaviors we have studied, the three negative effects are by far the most reactionary. They are born more out of instinct than anything else. What is truly amazing about these three effects is that most people who are guilty of them don't even realize it.

The first of the three is the House Money Effect. This was given its name because of the similarity in thinking to gambling. Consider a person who takes a seat at a blackjack table. He wins a few hands early on and feels very good about his luck. He pockets his original seed money and then begins to play only with his winnings, also known as the 'house money'. The problem here is that this individual begins to take risks that he never would have with his original cash. Note carefully that nothing fundamentally has really changed. All of the money is truly his and he is still sitting at the same table, but even so his behavior pattern has changed. If in the end he loses it all, he can play it off and say "It was only the house money". This type of behavior is seen quite often in investing, and it can be one of the most damaging in terms of maximizing our future wealth.

The second effect is the Snake Bite Effect. Everyone has experiences that cause them to become suddenly more cautious than they normally would. The saying "fool me once shame on you, fool me twice shame on me" is good description of this behavior pattern. An investor may put their money into a stock that, through unexpected and unanticipated circumstances, suddenly realizes a large loss. This investor now runs the risk of being overly cautious with their next investment in an effort to avoid that same feeling of loss. By doing so, they may well compound the loss by diminishing any future returns.

The third effect is known as the Endowment Effect. This effect occurs most often when someone inherits an investment, but can also occur as a result of a merger or corporate spin-off. In any case, the person receives something from an outside source, and has an unexplainable attachment to the item. Many times the attachment is due to the value that a previous owner had placed on the item. Other times, it is a result of having received something as a gift and not wanting to part with it.

It is not hard to imagine a person who receives a gift of an old car from a loved one that has died. The person who received the car may be unwilling to part with it at a reasonable price simply because of the emotional attachment to the vehicle. In the end, the person may never be able to bring themselves to sell the car, and therefore never realizes the value of it. The same can easily be true of any such gift.

In all three of these effects, the resulting problems are very similar. Each of them causes us to act in a manner very different from how we normally would. For example, the House Money Effect causes us to take on excessive risk. This can easily lead to losses that we would not otherwise have faced. The reverse is true of the Snake Bite Effect. This effect causes us to alter our behavior so that we become too cautious and thereby miss out on gains that we would otherwise have captured. The Endowment Effect is a sort of hybrid of the first two. In the end, it causes us to hold on to an asset far longer than we should and thus realize losses or forego the gains that we would otherwise have made. It is often difficult to realize just when these effects have a hold on our behavior. However, it is important to be aware of them in order to ensure we are making the correct decisions where our wealth is concerned.

Throughout this series, we have looked at different patterns of behavior that negatively impact our investment making decisions. Profitable investing is not an easy task, and in many ways it runs counter to our own nature as emotional human beings. Studying behavioral finance helps us to understand where the problems lie, and also how we can counter those limiting behaviors.