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## **Mental Accounting**

**THERE IS A GROWING FIELD** of research examining the linkage between psychology and financial decision-making. I find this topic interesting as it applies to: all of us on a personal level, business decision makers and investors. We are confronted every day with numerous decisions involving money and most of the time we probably make rational decisions. There are however, times when our decision making process may be altered in a negative way by our psychological temperament. By recognizing potential areas that could bias both our own thinking and that of others, we can better understand our thought process, potentially explain strange observations, and ultimately make better financial decisions.

**FRAMING** — A question can often be presented or "framed" in one way that creates the feeling of a potential gain or in another way that imparts a feeling of potential loss. The way in which the question is framed can change how we view the situation and how we respond. People react differently when confronted with a decision involving a prospective gain versus one involving a loss.

**RISK AVERSION** — People are risk averse when faced with a situation involving a neutral or positive outcome. When given a choice between a sure gain (no risk) and a chance of a higher gain or nothing (some risk), most people will choose the sure gain. For example, what would you choose given the following? **a.** A sure gain of \$85,000, or

**b.** An 85% chance of receiving \$100,000 and a 15% chance of receiving nothing.

Most people choose the no risk option (a) even though in both cases the mathematical expected gain of \$85,000 is the same.

**LOSS AVERSION** — On the other hand people are loss averse, that is, they are willing to take on risk, when they are faced with a high probability of a loss. Changing the previous example around, what would you choose given the following? **c.** A sure loss of \$85,000, or

**d.** An 85% chance of losing \$100,0000 and a 15% chance of losing nothing.

Most people will choose the risky option (d) even though the mathematical expected loss is the same in both cases.

**MENTAL ACCOUNTING** — People tend to allocate money into different mental accounts and they do not combine the outcome. Ask yourself the following questions from a study done by Amos Tversky, a researcher in this field:

1. Imagine that you have paid \$20 for a movie ticket. When you get to the theatre you discover that you have lost the ticket.

Would you pay \$20 for another ticket?

2. Imagine that you have decided to see a movie that costs \$20 per ticket. As you arrive at the theatre, you discover that you have lost a \$20 bill. Would you pay \$20 for a ticket to the movie?

Tversky's study found that 46% of respondents answered yes in the first case compared with 88% in the second. In both cases the outcome is the same—you are out of pocket \$40 to see the movie. The rational for the different responses can be analyzed by considering that once a theatre ticket has been bought, then mentally the theatre account is down \$20. To purchase another ticket would put the theatre account down \$40. A \$20 bill, however, comes out of a general cash mental account and the loss can be allocated to any number of mental accounts.

There are several areas where investment decision-making is often affected by these psychological effects. Learning to recognize them and knowing how to deal with them should prove financially worthwhile.

1. Investors often choose to hang onto stocks when they have a paper loss even though the chance of the stock recovering to what they paid is low. Rather than accepting a sure loss they want to gamble on potentially recovering their investment. Transferring money from the paper loss mental account to the realized loss mental account is painful. Convince yourself that a paper loss is the same as a realized loss. Mentally reset the reference point from the purchase price to the current price and evaluate whether another investment would be a better use of that capital.

2. Investors that focus on the possibility of a short-term loss instead of looking at the potential for the investment over the longer term are often paralyzed into doing nothing or making overly conservative investments. By having and following an asset allocation plan, it is easier to stay focused on achieving long-term objectives.

3. Investors will often treat individual investments or investment accounts as separate mental accounts without looking at the overall picture. Looking at a portfolio as a whole rather than as individual securities is more important when evaluating its risk and return characteristics.

There are several other areas of investor psychology including overconfidence, regret and cognitive errors that will be discussed in future articles.