

BEHAVIORAL FINANCE

A RATIONAL APPROACH TO IMPROVING YOUR CURRENCY HEDGING POLICY

What do you get when you combine the human brain, consisting of one hundred billion neurons, with a simple game of price prediction where there are only three possible outcomes: prices go up, down or stay the same? The answer should be easy, right?

The simple truth is that humans have an amazing capacity for reasoning, memory, action, feelings and emotions. But capacity alone does not ensure that we will develop the proper “shortcuts” or biases to employ every day in predictive scenarios. In some cases, these biases come hardwired in our brains and work against us when it comes to predicting market movements. This is where Behavioral Finance, the study of how humans interact with markets, can provide some insight.

For decades, market participants have created investment policy statements that define the circumstances, objectives, constraints and policies for interacting with financial markets. However, these policy statements failed to protect investors against what former Fed Chairman Greenspan characterized as the “irrational exuberance” that caused the dot com bust. As a result, investors around the world now incorporate concepts from Behavioral Finance into their investment policy statements. If you conduct business in the global marketplace, you may be interested to know how these concepts can be applied to your currency hedge policy to make it more disciplined.

COGNITIVE AND EMOTIONAL ERRORS

Whether you like to walk on the sunny side of the street rather than the shady side — or you prefer Coke® over Pepsi® — you and everyone else has biases. It is these biases that are the basis for common errors when we apply them in financial markets, and they often result in financial loss.

For the purpose of our discussion, we will focus on two common categories of errors.

Cognitive errors by definition stem from basic statistical, information-processing or memory errors. In other words, cognitive errors are a result of reasoning based on faulty thinking.

Emotional errors arise from spontaneous mental states that do not occur through conscious effort. To use laymen’s terms, they are instinctive or “gut” errors.

WHAT BIASES DO I HAVE?

Whether you are creating an investment policy statement with your wealth advisor or you are establishing a hedge policy with one of PNC’s foreign exchange consultants, the first step in the process is to understand what biases you might exhibit. For the purpose of this exercise, we begin with a few questions to uncover common emotional and cognitive errors that result from these biases. Follow along by finding your own answers to these sets of questions:

- A. How difficult was it to predict the dot com bubble, the housing bubble, the downgrade of the U.S. long-term debt rating? Did you invest your own personal money?

- B.** Suppose you have the chance to enter a \$1,000,000 jackpot lottery for free and are given the choice to select your own numbers or have them drawn randomly by a computer. Which would you choose? If the option to choose your own numbers costs 25 cents extra while the other option was still free, would you pay extra for the control?
- C.** Have you ever held on to a stock until it was worthless? Have you ever sold a stock and then watched it soar in price? Have you ever postponed implementing a currency hedge because you felt the rate was not favorable? Have you ever regretted implementing a hedge because the rate improved after you locked it in?

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THE RESULTS PLEASE

In reality, Behavioral Finance has identified more than twenty errors in these scenarios. These limited examples highlight the salient characteristics of the two categories of biases.

Example A is classic hindsight bias; a cognitive error in which knowing the outcome exerts tremendous pressure on memory, resulting in guilt and perhaps a reaction similar to “I should have known that — it was so obvious.”

Example B is a bit more involved because it contains both types of errors. The first part is cognitive because mathematically the two options have the same probability of outcome, no matter which you chose. What makes this example so dangerous is that an emotional error called “illusion of control” reinforces the belief that you can tilt the insurmountable odds in your favor simply by selecting your own numbers.

Example C represents an emotional error stemming from what is called loss aversion bias. It causes us to hold on to “losers” longer or delay a hedge for fear that executing it will lock in a loss. It also causes us to sell “winners” too early for fear that we will lose the gain; or that we regret implementing a hedge for fear that we lost the opportunity for a gain.

CURRENCY HEDGE POLICY

Some companies may debate the value of instituting a formal hedge policy. But the fact is, any company that does business internationally is acting upon a de facto policy, one that is vulnerable to the biases of its employees as they buy and sell on the spot market.

These companies can either accept the biases of their employees or manage them.

Cognitive errors are usually corrected. If the error stems from improper statistics, a narrow scope of information or an incorrect mathematical calculation, empirical or concrete evidence is needed. For instance, a mathematical analysis can be performed to show that executing hedges on a periodic basis, i.e., dollar cost averaging, often results in better hedge performance compared to a one-time lump sum hedge performed once a year. To avoid the cognitive errors stemming from belief perseverance (example A above), access to market data and historical commentary is needed to properly document the actual circumstances leading up to the final decision.

Companies often choose to manage rather than correct emotional errors because they are more persistent. The goal is to find a balance between the needs of the company and any emotional biases to limit negative outcomes.

Some tactics used to accomplish this include calculating and adjusting exposure levels as well as implementing triggers for decisions. The timing of when to revise a hedge policy is also important. Whenever possible, it should be done when all parties involved are in their most “rational” state.

The process can be managed by an outside consultant and may include other officers of the company or the board of directors to allow for perspective-building. This approach promotes buy-in to mitigate the potential for irrational scrutiny after implementation. All of this should be done with the goal of producing a prescriptive rather than a reactive solution.

Conducting business in global markets can be a stressful aspect of a company's treasury operations. Hourly newsfeeds of ever-changing economic and political events can leave daily decision-makers at a loss, which can lead to erratic hedge execution. By developing a well-thought-out hedge policy, a company can help guard against financial loss due to errors caused by biases inherent in all decision-making.

PNC provides the resources and support to help companies develop an appropriate hedge policy in order to manage the complex business of foreign exchange. For more information, please contact your Foreign Exchange Specialist at 800-723-9106.

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