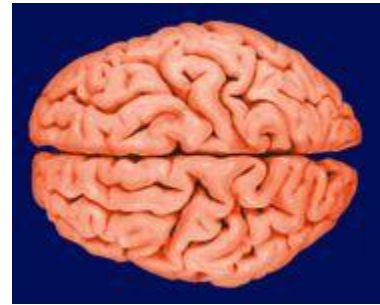


“A strapless dress worn by a beautiful woman and the stock market have a lot in common—it’s not always clear what keeps either of them up.”

- Anonymous



Psychologists have found that when people are successful (in holding up a dress or doing well in the stock market), they are prone to believe that success is due to their own attributes, rather than any outside factor. When these same people fail, they tend to believe it is due to forces beyond their control (gravity or an oil price shock), rather than their own lack of talent.

This trait is called self-attribution. Over-confidence contributes importantly to this human characteristic. Recent research suggests an underlying organic cause. If we understand it, we have the potential to control it. This means better management of our financial life when it is adversely influenced by overconfidence (for example, please see Part I).

The pertinent research involves epilepsy patients. Let me explain. Patients with severe seizures that spread from one side of the brain to the other seek treatment, for obvious reasons. An important therapy is to cut the corpus collusum that joins the two hemispheres. This disconnects the right and left brain. Then, the localized seizure that starts in one hemisphere can't spread to the other. A patient who has this procedure is called a split brain. Since this operation is performed for severe epilepsy, there are a number of patients available to volunteer for psychological studies.

This is how it works. We know that when information is flashed to the left visual field only, it is interpreted in the right cerebral hemisphere. The reverse is also true. Normally, the two hemispheres communicate via the corpus collosum, and each half knows the information that the other has received. However, in the split-brain patient, the two cerebral hemispheres can't communicate. Therefore, the right cerebral hemisphere doesn't know the message the left cerebral hemisphere received, and vice versa.

This leads to a natural experiment based on the fact that the left brain is the primary speech area and the right brain performs primarily visual spatial function. If the right side of the brain in a split-brain patient is asked to “take a walk,” (using a written message flashed only to the left visual field) the person will get up and start to walk. The right side of the brain can't respond verbally when it is instructed visually, but it can initiate non-verbal action.

If the split-brain patient who is walking is asked, “Why are you walking?” he will make up an answer using his left speech area. It might be “Oh, I need a drink.” In other words, the left brain does not know that the right brain was asked to walk. Nevertheless, it “makes up” a reason for the person to be walking. Another explanation, other than “I need a drink” could be offered just

as well. For example, the person could have just said, “I don’t know.” In other words, the left brain fills in fictitious information to explain whatever action the person is performing from the right brain instruction.

How can information from split-brain patients be transferred to normal individuals who exhibit imprudent behavior in the stock market? Because we too fill in stories to feel good when we think we should know, but don’t. We have to do this to maintain control of our self-image. This is a form of protection. It is even adaptive. If we don’t feel good about ourselves, we will feel miserable, and could even perish because we can’t protect ourselves. Rather than suffer these nasty consequences, we use our left hemisphere interpreter. Dr Michael Gazzaniga, director of the program in cognitive neuroscience at Dartmouth College, calls it the “spin doctor.”

Gazzaniga wrote a book entitled, *The Mind’s Past*. In it, he says, the brain “cooks up” an explanation when we don’t have one. “The left brain provides our personal narrative for why we feel and do the things we do,” he wrote in *The Mind’s Past*. “We need something that expands the actual facts of our experience into an ongoing narrative, the self-image we have been building in our mind for years.

“The spin-doctoring that goes on keeps us believing we are good people, that we are in control and mean to do good. Even though, as in the split-brain patient, feelings and actions are precipitated by a brain system operating outside the left brain’s realm of knowledge, the left brain provides the string that ties events together and makes actions or moods appear to be directed, meaningful, and purposeful.”

How does this relate to financial decisions? Overconfidence can be fed by our inner spin-doctor. That doctor fills in details for our self-image protection, which may be in conflict with accuracy. Nowhere is this more disastrous than when investment decisions are being made. A disconnect between what we “cook up” and financial facts may lead to unwise monetary decisions. That, in turn, can lead to losses.

Next in Part III: How to make this understanding work to financial advantage.