

The Human Brain – are we programmed for investment success?

2007 was a tumultuous year for world capital markets; the first run on a British bank in over 100 years, oil prices touching \$100 a barrel and gold nudging \$850 per ounce, both all time highs. These factors combined with the current economic uncertainty, could provoke investors into making substantial changes to their portfolios in the hope of either avoiding future losses, or picking future investment winners. With such ideas in mind, it seems an ideal opportunity to consider how investors' decision making processes drive their investment outcomes.

“The investor's chief problem - and even his worst enemy - is likely to be himself”

Benjamin Graham

The figures in Table 1 provide damning evidence of the impact that investor behaviour can have on investment returns. This important study¹ covered the returns from 600 equity mutual funds (the US equivalent to unit trusts) in the United States over the twenty year period from 1983 to 2003.

Table 1: Comparison of returns earned by the stockmarket, mutual funds and fund investors

| Measure | Annual Return | Growth of \$1 |
|---------------------------------------|----------------------|----------------------|
| Stock Market Return | 13.00% | \$11.50 |
| Average Equity Fund Return | 10.30% | \$7.10 |
| Estimated Equity Fund Investor Return | 7.90% | \$4.57 |

The US stockmarket, measured by the S & P 500 index, returned 13% per annum over this period, but the average equity fund only returned 10.30% per annum. The worse news is that the average investor earned only 7.90% per annum. How can this be? The 2.4% per annum discrepancy illustrates the negative impact of investors' 'market timing' and 'stock selection' mistakes. The average fund investor could have improved their investment return by 64% simply by investing in the broad stockmarket and holding this portfolio throughout the ups and downs, rather than switching between fund managers and asset classes in the vain hope of greater returns. The impact of such an increased return is magnified when returns are compounded over time; a 13% annual return would have provided 151% more in money terms after 20 years than the final amount earned by the 7.90% investor.

Why do individual investors consistently earn such poor returns?

Research has identified key traits that predispose humans to make poor decisions, particularly in complicated situations or where uncertainty is present. In the investment world these behavioural foibles regularly lead to repeated mistakes, causing considerable long-term damage to our financial wellbeing. The nature of the financial services industry encourages and reinforces the natural behavioural biases of humans, amateurs and professionals alike (the average equity fund manager has not exactly set the world alight based upon the figures in Table 1). Here are some examples of how we reduce our investment returns by letting emotions dominate the investment decision making process:

Overconfidence – Studies show that the majority of people believe that they are above average drivers, parents, business managers or investors. Some people must be clearly be overestimating their ability as we cannot all be above average. Although beneficial in many aspects of life, overconfidence in investment markets is a major cause of poor performance. We overestimate our knowledge and ability, underestimate risks, and exaggerate our ability to control events. This drives us to believe that we can select successful

¹ Bogle, J.C. 2005. "The Mutual Fund Industry Sixty Years Later: For Better or Worse?" Financial Analysts Journal 61(1)

investments. How likely is it that an amateur investor, by reading the business pages of their newspaper or Investors Chronicle, can select shares that will beat professional investors, who have access to virtually unlimited research and analytical software? Professionals tend to exhibit even greater overconfidence in their own abilities, as they have more theories, experience, research and data which they overweight the importance of. Overconfidence in professional investment managers often leads to 'overtrading' of a portfolio, as managers think they can spot undervalued shares. The median UK equity unit trust in 2006² had a portfolio turnover rate of 58%, giving an average holding period of each portfolio constituent of just 20 months – not exactly long-term.

Studies have also shown that men tend to be more overconfident than women. In their study, Odean and Barber³ found that "men trade 45% more than women and earn annual risk-adjusted net returns that are 1.4% less than those earned by women".

Fooled by Randomness – We see patterns in random sequences of events and believe that we can control or successfully predict the outcomes of future random events. We have a tendency to ascribe success to skill and expertise, even when the task is completely random such as coin tossing - "An early, fairly consistent pattern of successes leads to skill attribution, which in turn leads subjects to expect future successes"⁴. Paradoxically we attribute losses to external forces beyond our control or bad luck. Remember, a broken clock is always right twice a day. In the same fashion, an investment manager can have made some successful past investments purely because of good fortune.

Regret avoidance - We find admitting failure very hard, and are therefore reluctant to realize losses. We are far more likely to sell investments which have performed well than those which would show a loss. We cling to investments waiting for them to 'break even' regardless of their future investment potential when compared to other options. Ask yourself this question "Would I buy this investment again?" If not, why are you continuing to own it? Professionals also succumb to this behaviour occasionally causing disastrous results. Nick Leeson, who bought about the collapse of Barings Bank, made greater and greater purchases of the same loss-making investments hoping that the investment would eventually rebound. With this 'doubling-down' he further increased his risk rather than accepting his losses and moving on.

Mental accounting – Often leading on from regret avoidance; we tend to remember our good investments and forget our bad ones. This is problematic because we focus on the elements of our portfolio which have done well, rather than the overall performance of our portfolio. How many times have you heard someone tell you how well they did on a certain investment? Contrast this with how often you hear someone tell you how much they lost on a speculative share punt. More often than not you will hear "I'm breaking even" or "I'm doing quite well". Unfortunately most investors don't know how bad their actual overall performance is, particularly when taking into account the risks they are taking. Remember, the higher the risks the return the return should be.

Myopic loss aversion – This is where we focus excessively on short-term risks at the expense of long-term outcomes. Imagine that you are saving for your retirement in 20 years. In year five your diversified portfolio suffers a fall in value of 30%, which prompts you to change the investments to reduce the risks so as to expect only a maximum future fall of 10% in a year. However, by reducing your short-term risk you are reducing your long-term expected return. This trade-off could result in a 3% per annum drop in the long-term expected rate of return. If so, then your retirement portfolio would be worth 50% less after 20 years than your original portfolio. Investors become too focused on short term 'pain' at the expense of long-term gain. Thaler⁵ found that investor's sensitivity to fluctuations increased the more often they

² Lipper Fitzrovia. 2006. "Benchmarking UK Portfolio Turnover"

³ Odean, T. and Barber, B. 2001. "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment" *Journal of Economics* 116(1)

⁴ Langer, E.J. and Roth, J. 1975. "Heads I Win, Tails It's Chance: The Illusion of Control as a Function of the Sequence of Outcomes in a Purely Chance Task" *Journal of Personality and Social Psychology* 32

⁵ Benartzi, S., and Thaler, R. 1995. "Myopic Loss Aversion and the Equity Premium Puzzle" MIT Press, *Quarterly Journal of Economics*, 110 (1) February: 73-92

examine their investments, thus inducing greater conservatism due this 'myopic' focus on risk. In fact, he found that the average investor's risk horizon was approximately one year, and losses are weighed twice as heavily as gains.

Sentimentality - Humans show a marked tendency to become emotionally attached to their belongings. This sentimentality means that we are less willing to sell items unless the price is significantly higher than the current open-market value. This particularly applies to physical belongings, but also occurs with investments such as inherited share portfolios or shares in companies that we work for. It seems this bias is particularly powerful in amateur investors.

Following the herd - Our natural social tendency to follow the herd has been illustrated throughout history by numerous investing manias, such as the South Sea and dotcom bubbles. These appeared to offer continually higher returns sucking more and more investors in, before the inevitable collapse in prices happens. Most investors extrapolate good past performance into continued good future performance and poor performance into continued future losses. This overweighting of recent data is particularly problematic as most asset classes tend to 'revert to the mean' over the long-term. This means that a sustained period of high returns is more likely to be followed by a period of lower returns and vice versa. Investors are hit hardest if they follow the classic practice of waiting too long to invest because of anxiety, then buying at higher prices but selling out when prices are falling due to fear of losses. Taking the opposite path of investing when the outlook is bleakest takes considerable 'emotional' strength, but leads to significantly better long-term results. Significantly, most investors, even if they can see the logic of such a strategy cannot overcome the power of their emotions and follow such a 'contrarian' approach.

All that glitters – We pick stocks and investments that grab our attention, and assign too much importance to news or events which receive considerable media attention. We invest in the latest investment 'fad' whether it's dotcom shares, gold or esoteric commodities purely because we are constantly bombarded by the media. The flip side is that we neglect unfashionable investments whose prices become depressed and therefore offer higher future returns. Throughout the dotcom boom 'old economy' stocks with solid assets and earnings became friendless as everyone wanted to own the latest start-up internet company, which offered neither asset backing, earnings nor profits.

Entertainment – We are constantly drawn to investments which offer the opportunity to make big gains. Unfortunately these exciting 'long-shots' have a very low probability of success, whereas dull established companies attract too little capital, causing prices to be depressed. It's for this reason that so many investors avoid 'boring' index funds. If you want excitement, then the 4.15 at Aintree should be your port of call, not your long-term investment portfolio.

Greed – How often does the allure of exceptional returns tempt us into an action, even though we know it is excessively risky? Greed drives us to trade too often as we lurch from one hot tip to the next. It makes us invest at too late a stage as we chase the excess returns earned by early stage investors. We invest without sufficient due diligence as our minds are clouded by the incredible returns on offer. Managing greed is exceptionally hard, as the scores of investors caught out by financial scams, get rich quick schemes and stock-tipping newsletters inevitably learn after significant losses.

Conclusion

The modern capital markets have grown inordinately complex. You only have to pick up the money section of a paper or magazine and you are bombarded with the latest 'must-have' investments, seductively marketed by firms' intent on greater sales. In reality, the complexity and choice simply adds to investor confusion and offers more opportunities for investors to make poor investment decisions. This leads investors to either follow a haphazard approach to investing, or to do nothing and stick with what they currently have. Neither approach is likely to optimal results. Investors would be wise to remember the words of one of the greatest long-term investors, Warren Buffet:

“To invest successfully over a lifetime does not require a stratospheric IQ, unusual business insights, or inside information. What’s needed is a sound intellectual framework for making decisions and the ability to keep emotions from corroding that framework.”

The human behavioural biases outlined in this paper, unless identified, acknowledged and held in check, will corrode your investment returns and future wealth as surely as rust eats away at iron. The figures in Table 1 provide compelling evidence of this corrosion and the subsequent long-term failure of the majority of both professional and amateur investors.

Collins Ward has a three pronged approach to wealth management, which not only provides ‘corrosion’ protection, but targets superior long-term returns.

1. Our clearly defined investment philosophy is the product of sound fundamental reasoning, a thorough understanding of modern capital markets and detailed empirical research. Our robust investment framework is built using scientific modelling techniques, trading efficiency, cost minimisation along with a healthy dose of common sense. We focus on making investments and taking risks which are adequately compensated and avoiding those which provide no expected return.
2. We employ the power of diversification across asset classes, geographical sectors and investment style to help reduce short-term volatility. Diversification is one of the few ‘free lunches’ in the investment world, as it reduces risk without reducing your expected return.
3. By following a rebalancing policy, whereby we bring your portfolio allocations back in line with the strategic long-term allocation, means there is an inbuilt ‘sell high and buy low’ strategy. We trim winning holdings and top up losing investments.

So, the next time that our clients read that Chilean gold futures are the hottest investment prospect, they won’t think twice about bypassing this ‘exciting’ opportunity. Not only will their long-term investment returns improve, but they’ll spend less time worrying about their portfolios and be free to concentrate on what they enjoy in life.

You can read more about the intricacies of wealth management in our regular column, [The Intelligent Investor](#). For further information contact Christian Ward via christian.ward@collinsward.com or at either office.

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