



## Optimal Behaviour

### Issue 3: Don't Panic!<sup>1</sup>

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#### Abstract

In turbulent times like these, it is easy to over-react. So it's important to understand how our natural psychological reaction to bad news can incline us towards short-term responses that damage our long-term investment objectives. We have surveyed 2,300 affluent individuals about how they reacted to volatile markets. The results show that investors fall into three distinct groups.

- Just under half (48%) are **Barbell Investors**, who would on average *increase* the risk in their portfolio as volatility rises. However, they also increase their cash holdings – giving their risk profile a 'barbell' shape.
- Most of the remainder (40%) are **Vigilant Investors**, who both reduce risk and dramatically increase the time they spend analysing their portfolio.
- The smallest group (12%) are **Avoiders**, who decrease the risk of their portfolio, but instead of monitoring the market, largely turn their backs on it altogether.

From existing psychological research, we know that almost all investors are prone to some behavioural biases in falling markets. These include:

- **Loss aversion:** we feel the pain of a loss of £100 far more than the pleasure of a gain of the same size – so we react much more strongly to falling markets than rising.
- **Disposition effect:** for the same reason, we tend to hold onto losing investments much longer than winning ones.
- **Ostrich effect:** we pay less overall attention to our portfolios in falling markets.

In volatile times, the dangers of these responses are much greater. We react emotionally and frame our decisions far too narrowly, averting the short-term worst case – but without considering whether this worst case is even relevant to our true long-run investment objectives.

The three best principles for avoiding a 'knee-jerk' response are as follows:

- **Keep your focus on the long term.**
- **Look forward not backward.**
- **Practise inaction as a response to turbulence.**

#### If you can keep your head...

Times of turbulence seem to demand action rather than inaction. But when the markets are careering around wildly (last week, as I write this), it is difficult to know what the appropriate action might be. Should the individual investor retreat into cash? Or sit tight? Is a rapidly falling market a signal to cut your losses, or an opportunity to invest cheaply?

Lacking 20/20 foresight, it will always be impossible to make this call with any certainty, but we can recognise how our natural psychological responses to bad news and turmoil may incline us towards short-term responses that are detrimental to our long-run investment objectives – regardless of where the markets go in the short to medium term. Without being able to predict where markets are heading, there are nonetheless valuable principles that can stop us from overreacting to things that have already happened in the markets.

This issue of *Optimal Behaviour* will take a rigorous look at data from our new global survey of investor attitudes that show how individuals expect to change their investments in times of increased volatility. It will examine the general behavioural tendencies to which we are all prone to in falling markets. Finally, it will ask what principles investors *should* follow in such times.

#### Good intentions

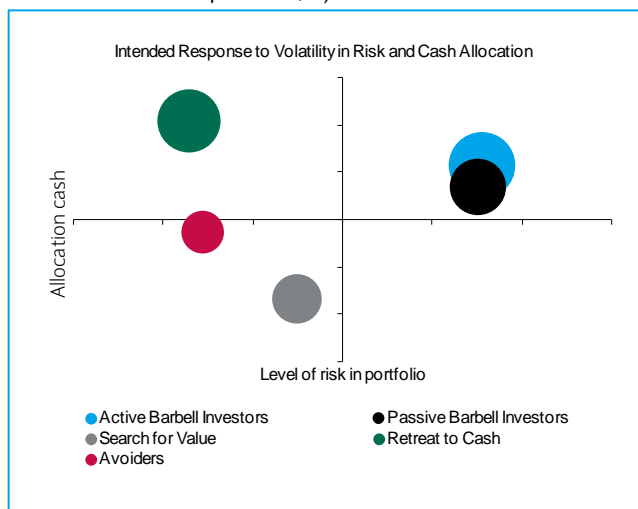
In a recent global study of investment attitudes<sup>2</sup>, we asked 2,300 affluent and wealthy individuals around the world what changes they would make to their investment behaviour and portfolios in periods of economic volatility. In the results we see a wide range of individual behaviour: for example, 32% say they would decrease the level of risk in the portfolio whilst 35% would increase risk levels. At the same time 48% would increase the allocation to cash in the portfolio whereas 20% would decrease it. Overall, only 14% intend to make no change to either risk levels or the cash allocation. Superficially this looks like investors divide into three groups: those that retreat to safety; those that respond to volatility opportunistically rather than cautiously;

<sup>1</sup>With apologies to Douglas Adams

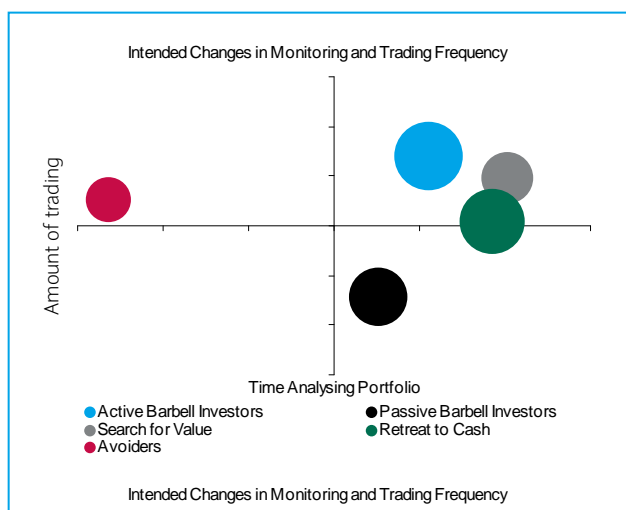
<sup>2</sup>Survey conducted in conjunction with the Economist Intelligence Unit. Further findings can be found in *Barclays Wealth Insights*, volume 6, *Breaking the Mould: A Question of Personality*.

and those that do nothing. However, a closer look at the data shows a great deal more complexity: for example, fully 16% of respondents say they will both increase their cash allocation, *and* increase the portfolio risk level.

We used statistical analysis to reveal the most important investor types and understand the characteristics of these groups. The analysis revealed five distinct groups, which are quite different from the intuitive three groups mentioned above. There is simply no identifiable group of investors that would intend to do nothing in a period of economic volatility. Neither is there a group who would systematically increase the risk across their whole portfolio. The figure below shows the average intentions of each of these groups on these two important questions: would they increase or decrease a) the level of risk in their portfolio, b) the allocation to cash?



The first two groups both increase risk in their portfolios *and* increase their allocation to cash. The other three groups all reduce risk, but differ in their response to the cash allocation. We can get a lot more insight into how these investors react to uncertainty by looking at the responses of these groups in two more aspects of investment behaviour: c) the time they spend analysing their portfolio and d) the frequency of trading.



**Group 1 – Barbell Investors (48%):** Groups 1a and 1b are those who would on average *increase* the risk in their portfolio. However, they *also* increase the allocation to cash of the portfolio, giving the portfolio more of a barbell shape with regard to risk characteristics. This group seeks to segregate their portfolio, increasing protection and stability

on the one hand, but simultaneously looking for opportunities to benefit from the volatility.

- **1a – Active Barbell Investors (28%):** This group tends to be younger on average than the overall population and they display higher risk tolerance and composure in the face of uncertainty. They look actively for aggressive opportunities with part of their portfolio allocated to risky investments, moving the rest into cash. They are under-represented amongst the affluent (below £1 million) and ultra-high net worth (above £30 million) groups but over-represented in the group with assets between £1 million to £10 million. They tend to associate status with business success and are strongly focussed on the absolute value of their own investments, rather than worrying how they are doing relative to the markets.
- **1b – Passive Barbell Investors (20%):** This group increases risk as strongly as 1a, but don't increase cash by as much. The primary difference is that they strongly reduce trading frequency, the only group to do so. They have a much lower than average awareness of how their investments perform against each other, but tend to assess performance against the local stock market. They are less likely than average to consider staying ahead of inflation as an important investment objective.

**Group 2 – Vigilant Investors (40%):** Groups 2a and 2b both reduce risk and dramatically increase the time spent analysing the portfolio. The primary difference is in their cash allocations...

- **2a – Search for Value (15%):** This group reduces risk somewhat, but also considerably reduces their cash allocation and increases trading frequency. They are exploiting the volatility more systematically than the barbell investors, using the opportunity to move out of cash and into considered but good value investments. They are much more likely than average to change their strategy or advisors if their portfolio performed badly for even a short period. They are slightly older and less likely to be male than the average respondent.
- **2b – Retreat to Cash (25%):** The most predominantly male group shows the most classical response to uncertainty. They are slightly lower risk takers in general with a greater focus on investing for income and, particularly, retirement rather than for enjoyment of risk. Unlike group 1b, they have a higher than average awareness of how their investments are doing against each other; they believe that their success is due to factors in their control; feel comfortable making financial decisions; and more than any group say they prefer to participate in market ups and downs rather than receive more consistent annual returns. And yet they retreat most strongly into cash, whilst monitoring their investments avidly. Interestingly, this group is far more likely than any other to say that the media is one of their most important sources of investment advice.

**Group 3 – Avoiders (12%):** The smallest of the groups, these investors also decrease the risk of their portfolio, but instead of monitoring, they largely turn their backs on the market altogether. This is the least sophisticated group of investors, who are generally uninterested in investing: they are significantly older on average, with a slightly higher proportion of women; they are less likely than other groups to say that they have any particular objectives or motivations

from investing; they are very uncomfortable making financial decisions and do not associate status with business success; they are also less likely to use investment advice from any source. They would prefer to receive consistent annual returns than participate in the market. They are also somewhat more likely to fall into the affluent or super-rich extremes of our sample rather than the £1 million to £30 million range. Oh, and they're much more likely to believe that unfortunate events occur because of bad luck.

## Staring down the slope

Of course these groups indicate what investors say they will do ahead of time. When markets do start dropping, our actual responses are frequently very different. When markets decline, investors respond in a number of different ways. However, as with our reactions to many unpleasant situations, the first reaction is frequently one of denial. A ubiquitous and very well studied phenomenon in the psychology of decision making is **loss aversion** – essentially the fact that we feel the pain of losses far more than we feel pleasure from a gain of the same size. A vast amount of research funding has gone into determining that, on average, this is true by a factor of about two: the pain of a £100 loss looms about twice as large in our psyche as the pleasure of £100 gain<sup>3</sup>. This aversion to losses naturally influences our behaviour when our portfolios start to lose money.

One of the most ubiquitous of these influences is the **disposition effect**<sup>4</sup> – the overwhelming evidence is that investors have a strong tendency to hold on to losing investments and to sell winning ones. Turning a paper loss into a real loss hurts because of loss aversion, but locking in profit is a generally pleasant experience. The trouble is that this means investors on average get out of winning investments too early, and hold on to losing investments far too long.

Another well studied phenomenon, dubbed the '**ostrich effect**'<sup>5</sup>, is when investors 'put their heads in the sand' and pay less attention to their portfolios when markets are falling to shield themselves from bad news. This too leads to inaction in the early stages of falling markets. This is a widely exhibited behavioural pattern, and not just limited to the small set of uninterested Group 3 investors above.

<sup>3</sup>Actually 2.25 (for those who prefer greater levels of spurious accuracy). Tversky, A. and D. Kahneman (1992). "Advances in prospect theory: cumulative representation of uncertainty." *Journal of Risk and Uncertainty* 5: 297-323.

<sup>4</sup>Shefrin, H. M. and M. Statman (1985). "The disposition to sell winners too early and ride losers too long: Theory and evidence." *Journal of Finance* 40(3): 777-790.

<sup>5</sup>Karlsson, N., G. F. Loewenstein, et al. (2007). "The 'Ostrich Effect': Selective Attention to Information about Investments." *Working Paper*.

## When the dam bursts

If the market as a whole is dropping, this avoidance behaviour and reluctance to sell results in lower trading volumes and therefore an under-reaction to true asset values. This, of course, only stores up trouble for later if the fundamentals continue to decline.

Eventually, if the bad news keeps coming in, only the genuinely uninterested can stay ostriches. At some point the dam bursts and the weight of opinion swings. A reluctance to realise losses can become desperation to exit investments before things get any worse, an effect which can rapidly draw more and more investors into the herd. Because individual investors have been in denial, by the time the reality becomes impossible to ignore and the 'overreaction' phase starts, prices can drop fast and it is usually too late to make a rational decision to retreat into safe assets without already incurring a substantial loss of value. In this situation the vast majority of investors turn into our **Retreat to Cash** group above and in doing so they invariably sell near the bottom of the cycle.

The reverse psychological tendency operates when markets are going up. Many investors are nervous about the markets after a period of intense volatility and significant declines so when things start picking up again they are at their most uncertain, preferring to wait and see. Unfortunately the comfort to invest comes only gradually until the balance of opinion is positive... at which point the cascade effect of investors entering the market once again causes overreaction relative to true value. It is an unfortunate reality of human psychology that our most natural investment pattern is to buy high and sell low.

## Time in the market, not market timing

So when we face periods of extreme uncertainty and large market declines, as we have this month, is following our natural response to cut our losses wrong? After all, at any point in the decline we have no reason to be sure that markets won't plummet even more. Perhaps getting out is the best solution, even if it means taking a loss?

This way of thinking reflects the way that high volatility and uncertainty can exacerbate the tension between our rational long-term investment objectives and our short-term 'emotional time horizon'. This tension is always present and leads us to over-monitor our portfolios, perceive more risk in investments than actually exists over an appropriate time horizon, and often make knee-jerk decisions to mollify our short-term selves that are detrimental to our long-run selves and objectives. In volatile times, the dangers of this happening are much greater. We react emotionally and frame our decisions far too narrowly, averting the short-term worst case, but without considering whether this worst case is even relevant to our true long-run investment objectives.

There is no magic solution for the right response to extreme periods in the market, but there are a few principles that can help you avoid the wrong knee-jerk response:

**Principle 1: Keep your focus on the long term:** When we react to sharp market declines we may protect ourselves against the risk of additional declines in the short term. But in the long term frame we generally just succeed in selling at a low. For a rational long-term investor, the short-term risk of a further decline after an already precipitous drop is inconsequential compared to the likely impact on long-term portfolio value of exiting the market at the bottom. Always try to keep in mind your true, long-term investment objectives and avoid overreacting to the short-term environment.

It is worth looking at some long-term market data to illustrate this point. Examining monthly returns on the FTSE 100 since 1962, we find that the market made gains 60% of the time and losses 40% of the time, with the average loss about the same magnitude as the average gain. Looking instead at performance over a more appropriate five-year investment horizon reveals that only 15% of five-year periods have resulted in a loss, and the average loss is only 20% of the average gain. Myopic thinking causes us to perceive a higher proportion of losses than exist for our long-term objectives. Coupled with loss aversion, this leads to extremely low levels of risk tolerance inappropriate to our investment goals<sup>6</sup>.

**Principle 2: Look forward not backward:** The fact that your portfolio has just dropped in value is unfortunate, but not the most relevant information for your investment decisions now. The important consideration is how you expect your investments to perform in the future. Assuming you were happy holding these investments before the markets dropped, ask yourself if the long-term outlook has really changed that significantly. Focus on your current situation – the relevant reference point is your current investment value and not the prices before the market dropped – there is nothing you can do about the past, so think forward not backward. The investments you hold are now cheaper than they were before, relative to their long-run value.

The relevant question is: do I truly believe that the market correction has eliminated the long-run value of these investments, even from their new low price?

**Principle 3: Practise inaction as a response to turbulence:** Do less than you're inclined to do! It is natural to want to react to extreme events, and our survey data don't reveal any group that simply intends to ride out the uncertainty. And

<sup>6</sup>Benartzi, S. and R. H. Thaler (1995). "Myopic loss aversion and the equity premium puzzle." *Quarterly Journal of Economics* 110(1): 73-92.

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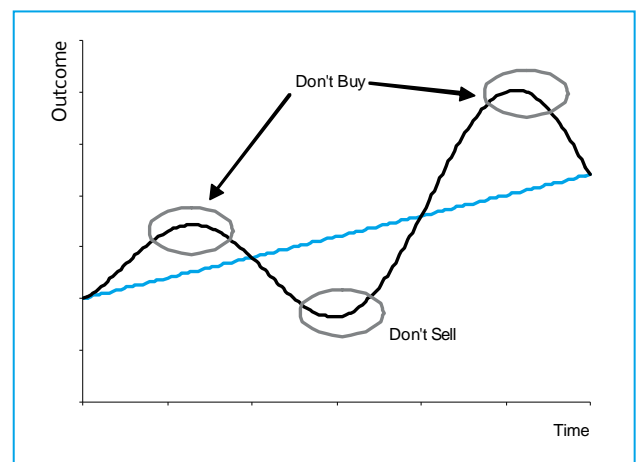
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yet, given our natural tendency towards herd behaviour, short-term thinking, and buying high and selling low, a Zen-like indifference may frequently be the best response. In turbulent times it is far more important to prevent yourself from getting things completely wrong than it is to try and get things precisely right.

It is always difficult to time the market, so instead the figure below offers a much less ambitious but more important strategy: break the cycle of buy high, sell low, and stop yourself from overreacting to things that have already happened and are now behind you. Rather than trying to buy at the bottom and sell at the top, your first priority should be to get in the market for the long term, and then just avoid getting it completely wrong.

So, when the markets have been going up for quite a while, stop buying. And when they fall dramatically, don't sell. You don't need a crystal ball because rather than acting based on future predictions, you're just preventing yourself from acting using actual observation of the recent past.



Once you follow those basics you'll already have dramatically improved your long-term investment returns relative to those who haven't. Beyond that, if you really want to be more active in your investment, then try to follow the stated intentions of two of the groups above, using volatile times to seek opportunities. Depending on your temperament, this can either be achieved by taking a more cautious systemic approach using your whole portfolio like our *Search for Value* group, or through a barbell approach using a cash pot to provide protection for a more aggressive investment pot like our *Active Barbell Investors*.

**But first, think long-term, think ahead, and avoid the knee-jerk response.**