



Issue 4: Optimists

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Summary

The past year has been one of the most tumultuous in financial history. We have experienced some of the largest losses and gains in financial market history - and these movements have revealed behavioural tendencies undetectable in more placid settings.

When we refer to a person as being “bullish” or “bearish” on an investment, we generally mean they believe it will rise or fall. This usually implies the person has researched the prospects of the investment, and come to some sort of conclusion. However, it may also be that some people are consistently more “bullish” or “bearish” than others, regardless of the asset in question or point in the market cycle.

Using data derived from a unique collaboration with Barclays Stockbrokers¹, we are able to reveal what drove individuals’ expectations at different points over the last year. You may well have formed many similar expectations in relation to your own investments.

This allows us to view how each investor’s views change through the volatile financial environment, and more interestingly, how they *do not* change.

Our key findings are that:

1. Everyone’s expectations are affected by common factors, i.e., a general change in market sentiment;
2. But individuals are consistently optimistic and pessimistic relative to one another;
3. This optimism affects our investing decisions. Pessimists tend to miss out on rallies due to conservatism, whilst optimists may become “irrationally exuberant” during them.

A second opinion, from a friend or advisor, could help reduce the negative effects of these personal biases, and improve behaviour.

It’s nature and nurture

Behaviour is a mix of who we are, and what environment we are in. The friend who is comfortable taking financial risks may be a very careful driver, and the friend who drives recklessly may avoid financial risk entirely. How personality interacts with the environment to produce our behaviour is one of the most intriguing questions in behavioural finance today.

The past year has seen extremely high levels of volatility and, while this environment has not been good for investors’ nerves, it has been a wonderful laboratory for studying those nerves. These extreme swings let us observe how market movements affect investor expectations. We have been especially well-placed to explore these movements, as we began a quarterly [survey panel with Barclays Stockbrokers’ clients](#)¹ in September of 2008, just before the collapse of Lehman Brothers and AIG.

From then until this September the panel’s sentiment has moved widely from one quarter to the next. While all members’ expectations varied dramatically depending upon the financial environment, members were fairly consistently optimistic or pessimistic *relative* to one another. This implies that while everyone was affected by similar environmental factors, each member’s personality influenced their outlook as much, if not more than market news.

This gives us strong evidence that investor behaviour reflects not just beliefs about the future, but also each investor’s personality. If we are to understand how individuals form their beliefs about future market movements, we need to understand both what is happening in the markets and the individual’s personal bullishness or bearishness.

¹http://www.barclayswealth.com/files/BSL_Trader_Panel_Profile.pdf

Context

Every quarter (i.e. three months), starting in September 2008, we surveyed the same group of active Barclays Stockbrokers clients regarding their expectations for the next quarter. Specifically, we asked respondents for: *Your best estimate of the return on the UK stock market (FTSE All-Share) at the end of the next three months.*

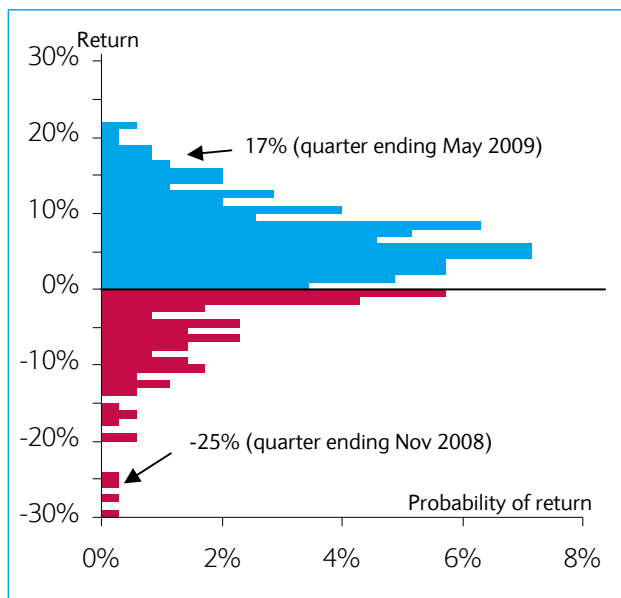
We also asked respondents for their extreme market views every quarter – that is, the highest and lowest return the individual thought was reasonably possible. For the low estimate respondents were told:

Your low estimate should be a surprisingly low return, meaning you're 95% confident that the return on the FTSE won't be lower than it.

The opposite question was asked for the high estimate. So for each respondent we have a) a low estimate, b) a best estimate, and c) a high estimate.

First, we can put the panel's expectations into context using historical data to indicate what a usual (or unusual) change is. Figure 1 depicts the distribution of three-month returns of the FTSE All-Share from January 1980 to 1 June 2009.

Figure 1 – Historical 3-month FTSE All-Share returns, 1980-2009



We can now compare the panel's estimates with history and explore patterns which appear stable through time. As a caveat, let's remember that the past year has been one of the most volatile in history. Between September 2008 and September 2009 the FTSE All-Share exhibited extreme swings, exemplified by the -25% quarterly return to November. On the upside, a three-month position in the FTSE All-Share ending in May 2009 would have returned 17%. Only

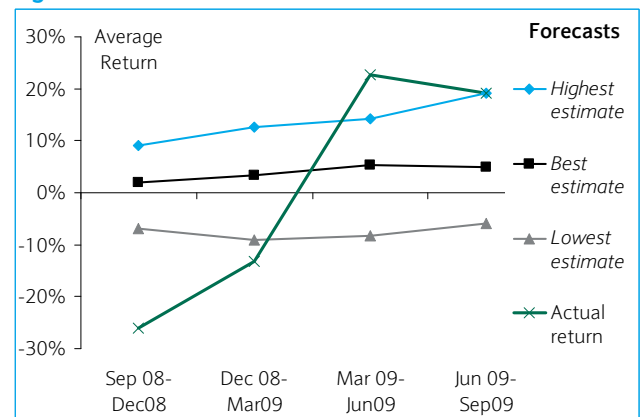
seven out of 349 quarters have been better in our covered period.

Assessing the panel's accuracy in this environment is akin to testing an archer in a hurricane – we should expect relatively low accuracy. Reflecting these conditions, the panel's estimates have moved significantly from one quarter to the next.

Upheaval unforeseen...

In Figure 2 we compare the panel's three-month-forward-looking estimates to actual outcomes, so "Sept08 - Dec08" compares the panel's estimates from September 2008 to the actual outcome in December 2008. In September 2008 the average *best estimate* of the return on the FTSE All-Share for the coming December was 1.9%, the average *highest estimate* was 9.1%, and the average *lowest estimate* was -6.7%. The panel's average *best estimate* for the return over the coming three months increased to 3.3% in December, and 5.4% in March 2009.

Figure 2 – Panel estimates and realised return

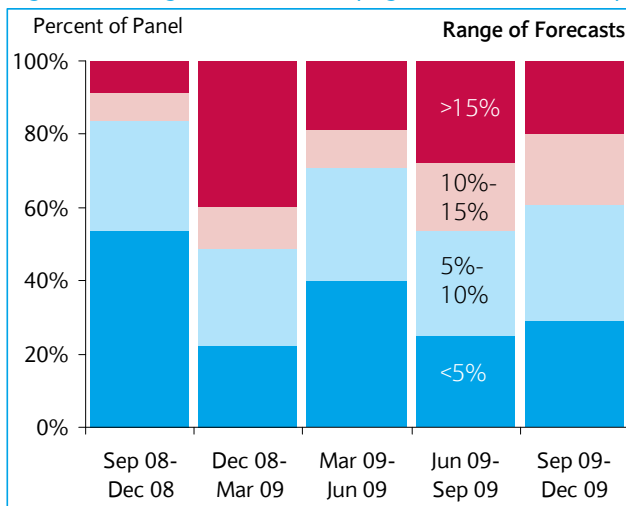


The green line depicts the return that actually occurred. From September 2008 to December 2008 the FTSE All-Share returned -26%, which falls into the bottom 1% of historical three-month returns. The panel (as a whole) has consistently underestimated the *magnitude* of the returns which actually occurred in the following three months – each actual outcome is either above or below the panel's estimated high or lows. This is not surprising – the past year has been unusually volatile, and an underestimation of this volatility is to be expected.

But known unknowns

Using the *highest* and *lowest* estimates, we can show the *range* of potential returns forecast by each member of the panel – a measure of the uncertainty they foresaw. For example, in Figure 3 we can see that in September 2008 investors were relatively sure of their forecasts: over 50% had a range of less than 5% between their highest and lowest forecasts; and less than one fifth had a range of greater than 15%.

Figure 3: Range of estimates (highest minus lowest)

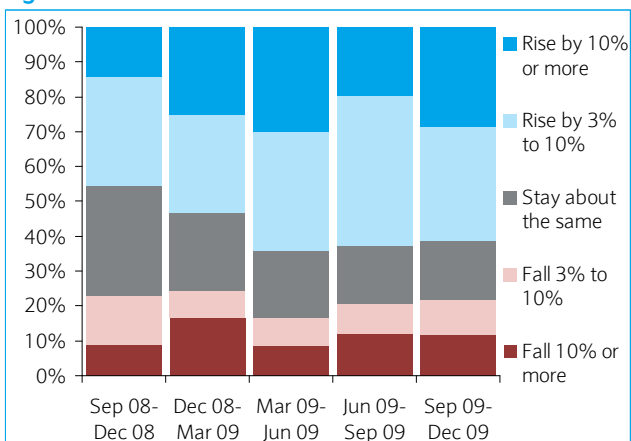


Uncertainty was highest in December 2008, when 51% of the panel had a range of at least 10 percentage points between their *highest* and *lowest* estimates. Thus, while the panel did not agree on the direction the move would take, they felt it would be large – a very uncertain view of future indeed.

Absolutely dynamic...

We can also use the *best (middle) estimates* (Figure 4) to paint an interesting portrait of general sentiment through the year. In September 2008, 15% of the panel was bullish (dark blue), rising to 25% in December and 30% in March. The bearish (dark red) percentage of the panel was highest in December 2008 and September of 2009.

Figure 4 – Best Estimates of FTSE All-Share return



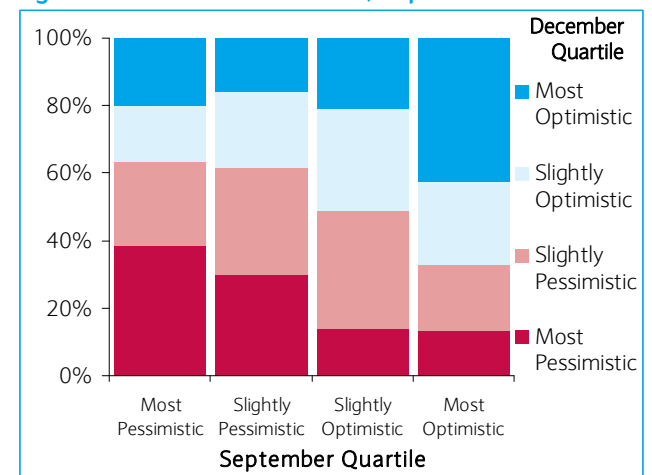
Yet relatively stable

The results above show that the panel's estimates of future market performance over the past year have been sensitive to the environment. But the question remains – does personality play any role in our estimates? The answer is yes.

The panel's estimates have moved quite a bit from round to round. *But individuals' relative optimism has not.*

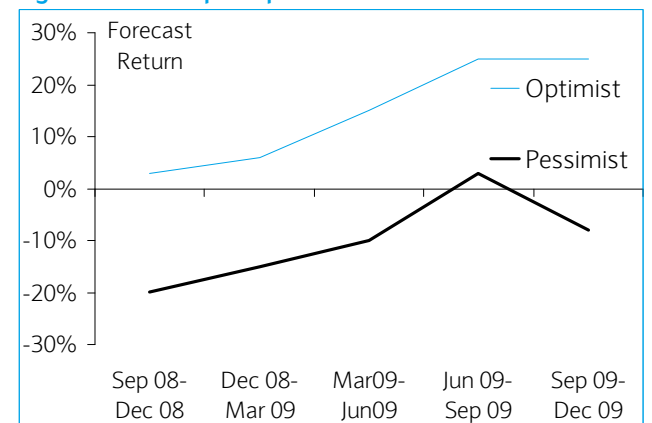
Figure 5 details this pattern by dividing members into four equally-sized groups (quartiles) from the first round, and showing their quartile in the second round. Of those who were most optimistic in the first round, a full 45% were also in the "most optimistic" in the second. Statistical test confirm this is a stable pattern.

Figure 5 – Persistence of rank, Sept 2008-Dec 2008



As a result of this personality influence, the forecasts of individual panel members move up and down depending on market circumstances, but tend stay in the same position relative to each other. Figure 6 displays how an actual optimist and pessimist have moved relative to one another over the course of the panel.

Figure 6 – Example Optimist and Pessimist

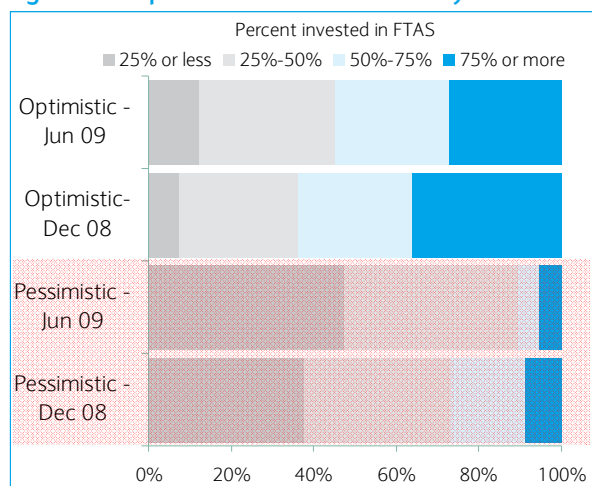


Investing through rose-tinted eyes

Does this optimistic or pessimistic disposition affect our investing behaviour? Indeed it does.

Each quarter we also surveyed how much of a hypothetical £100,000 each panel member would invest in the FTSE All-share index, as opposed to holding in cash. Figure 7 compares the percentage invested in the index by the most optimistic and pessimistic panel members, and comparing December 2008 (at the depth of the crisis) to June 2009 (after considerable rally).

Figure 7 – Optimism and the market cycle



Comparing the top two lines to the bottom two, we can see that optimists consistently invested much more in the index than pessimists did, regardless of point in the market cycle. Even more interestingly, the optimists were even more bullish in December 2008 than they were in June 2009. Conversely, the pessimists were even more pessimistic in June 2009 than in December 2008. It seems rather than offsetting the market cycle, personal optimism (or pessimism) amplifies our view of the market cycle.

The implication is that optimists may take on too much risk at the top of the market, and pessimists may take on too little at the bottom.

Two heads are better

If our personality can so strongly affect our investing behaviour, then improving our investment decisions may require using others to counter-balance our biases. The implication of the work above is that during crises and bear markets, optimists may maintain too sunny an outlook, leading them to buy in at the top of the market. Pessimists conversely may miss out on rallies because they require much more positive news to increase their forecasts.

Recent experimental research gives us a potential solution – get a second opinion and use this as well as your own.² This is especially important if you have a tendency to be quite optimistic (or pessimistic), as a second opinion is unlikely to be as optimistic or pessimistic as your own.

The second opinion from a friend or investment professional, especially if they are of the opposite disposition to you, will reduce the extreme biases². Their opinion will likely differ from yours, and the combination of the two opinions will often be more accurate than any single estimate alone. This technique explicitly helps us individually benefit from the “wisdom of crowds”.³

² Cheung S.L., Palan, S. (2009). 2009: Two Heads Are Less Bubbly Than One: Team Decision-Making in an Experimental Asset Market, SSRN Working Paper #1497713.

³ Surowiecki, J. *The Wisdom of Crowds: Why the Many Are Smarter Than the Few* (new edition), Abacus, 2005.

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