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Are fund managers poor sellers?
Presenting empirical evidence of the Disposition Effect

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Executive summary:

- Contrary to conventional wisdom, fund managers don't run their winners and cut their losers. They do the opposite and it hurts performance.
- In fact we have found, using our proprietary tool *Trading P&L*, that poor selling negatively impacts returns on average by 94 basis points p.a.
- To some extent this is offset by favourable buying skills which contribute 47 basis points p.a., but it is clearly not enough to fully offset the losses from the sales.
- This is explained as the Disposition Effect in Behavioural Finance literature which shows that investors tend to lose more money when selling than by chance alone.
- The theory and our empirical results support our general hypothesis (see BPS Review: 01) that managers have skill, but that it often fails to translate into superior performance as it is offset by a series of predictable and observable shortcomings. *In this case poor selling.*

An overview of the Disposition Effect

The Disposition Effect was first identified in 1985 and relates to the propensity of investors to lose more money when selling than they would be expected to do by chance alone. Academic studies up to now have primarily focussed on data from individual investors across a wide range of asset classes. Now, using the extensive Inalytics' database of transaction level data, we can investigate whether this bias is also evident in professional managers.

The Behavioural Finance literature explains this lack of skill when selling in terms of 'prospect theory' and 'mental accounting'. These two factors look at the psychological and behavioural challenges that investors face.

Prospect theory centres on the different attitudes to risk when investors are either looking at profits or losses. Consider the following examples where you are asked to make a choice.

(a) Between a guaranteed profit of \$300, or an 80% chance of a \$400 profit and 20% chance of winning nothing.

Most people opt for the guaranteed \$300 rather than take the chance of a higher expected profit (\$320=80% x \$400).

(b) Between a guaranteed loss of \$300, or an 80% chance of a \$400 loss and a 20% chance of losing nothing.

In this scenario, most people prefer to run the risk of losing a higher amount (expected loss of \$320=80% x \$400) than to take a guaranteed loss.

Prospect theory, in summary, suggests that investors are risk averse when looking at profits but tend to be risk takers when confronted with losses.

Mental accounting points out that investors view each position within a portfolio as an entirely separate item and treat them in an inconsistent manner. In particular, investors tend to bucket 'winners' and 'losers' separately and the chances of something being sold increases simply if they have made a 'profit' on the investment. Consequently it is hardly surprising that potential winners are sold too early and poor performers are retained because they are showing a loss, particularly if the latter involves feelings of regret and loss.

These two observations clearly relate to each other, and go a long way to explain some of the investment decisions we see on a regular basis, which often result in investors selling their winners too early and holding on to losers too long.

Inalytics observations and explanations

It is a common place observation that the typical fund manager tends to be an optimist and feels most comfortable when looking for the opportunities that will do well. This tendency has a number of observable consequences.

It means that the majority of a fund manager's energy and time is taken up researching the 'Next Big Thing' and that selling simply becomes a cash raising exercise. Consequently it's hardly surprising that the decision on what to sell becomes influenced by these behavioural factors rather than the fundamentals.

We have also noticed that good sellers are a rare breed and tend not to fit in with the identikit fund manager. They tend to be cynical, pessimistic and always looking for the hidden problem lurking behind the next corner. As a result they don't tend to 'fit' and not surprisingly there isn't an abundance of individuals with these skills. Yet those with the ability to sell are highly valuable members of any investment team.

Analytics' empirical research

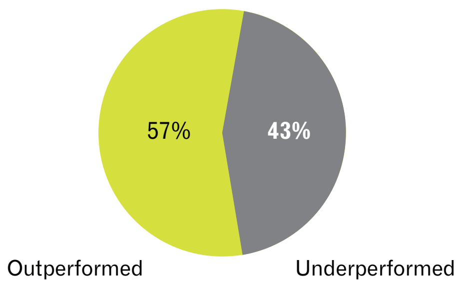
In order to test the hypotheses in the Behavioural Finance literature and our own observations we have turned to Inalytics' extensive database of institutional investment decisions.

Rather than use the entire database we first removed any biases that may have arisen from the self selection of portfolios by our fund manager clients. Consequently we only used trades provided by our pension fund clients. This amounted to 45,000 individual trades and represents a broad spread in terms of industry, region, and benchmark. The data was taken from December 2003 to September 2006.

Do institutional investors sell their winners?

We first investigated whether the majority of stocks being sold had in fact been the winners or, contrary to the literature, whether investors were being disciplined by running the winners and systematically weeding out the losers.

On examination of the client database we found that 57%, a clear majority, of stocks that had been sold had outperformed over the previous 12 months. This result certainly underlines the Disposition Effect, namely that fund managers tend to sell their winners.



Percentage of time the sales out- or under-performed in previous 12 months

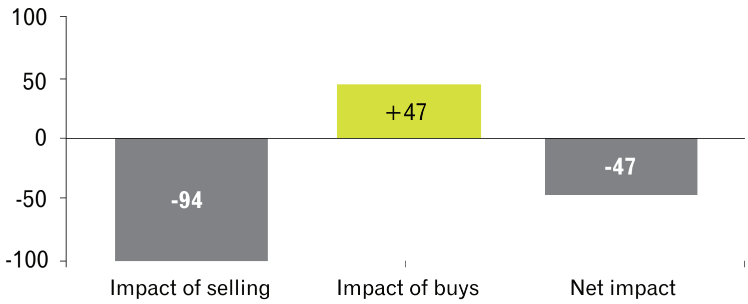
We then investigated the shorter term performance of the stocks to see if there is an added dimension to this phenomenon.

Curiously we found that the average performance turns negative in the month prior to the sale. This could suggest that short term momentum is being used as a proxy for research and to oversimplify the sell decision-making process.

Looking forward: impact on performance

Having found evidence supporting the thesis of the Disposition Effect, we then examined what impact it has on performance.

To do this we used our proprietary tool *Trading P&L*, which calculates the impact of every purchase and sale on the performance of the portfolio. The methodology borrows techniques for monitoring an investment bank's proprietary trading desk and adapts the results to the world of performance measurement and basis points contributions.



Performance impact of buys and sells

We found that the stocks sold impacted negatively on performance by a highly significant 94 basis points per annum. This observation represents a major step forward in our understanding of the skills set (or not) of the average fund manager, and provides empirical evidence of the impact that poor selling has on the performance of the portfolio.

Consistent with our views that fund managers tend to be better buyers than sellers we found that the buys added value (47 bps per annum). However it was not enough to offset the losses from the sales.

For the first time, using *Trading P&L*, we have been able to quantify the value destruction that trading generates. On an annualised basis, the performance impact from poor selling decisions has been a sizeable 47 basis points greater than the benefit created through good purchases.

Conclusion

This confirms our general hypothesis (see BPS Review: 01) that managers have skill, but that it often fails to translate into superior performance as it is offset by a series of predictable and observable shortcomings. *In this case poor selling.*

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