PCI

PRIVATE CLIENT INDICES

Prospect Theory In Practice

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The concept of loss aversion is certainly the most significant contribution of psychology to behavioural economics. Daniel Kahneman

The Theory

Economic theory used to suggest that individuals would always act rationally, seeking to maximise their utility (ie enjoyment) through their decision making. All that was needed to ensure the best possible outcome was data. Daniel Kahneman and Amos Tversky challenge that conventional wisdom by developing Prospect Theory, an idea that recognises that actions can be influenced by emotions as well as evidence. The central proposition of Prospect Theory is that people do not value losses and gains equally. Rather people are loss averse. Kahneman suggested that faced with a 50:50 game of chance, the average person will only willingly play the game if the possibility of losing £10 is counterbalanced by the chance of winning at least £20. Fear of loss motivates people about twice as much as greed.

Investors are no different, something that most discretionary investment managers understand very clearly judging by their standard pitch language. Over the last couple of decades it is rare that I have attended a pitch where each manager did not at some point in their presentation state that "whilst we may not keep pace with the markets during bull markets, we will protect your capital during bear markets". That is of course what, according to Prospect Theory, private client investors want to hear. Yes, they wish their discretionary investment manager to make money for them when financial markets are doing well. But, more than that, they want their investment manager to avoid losses during difficult times. It is loss aversion that drives private client investors to ask their manager to do what feels like the impossible: deliver strong relative returns during bull markets and deliver capital protection during bear markets.

The Test

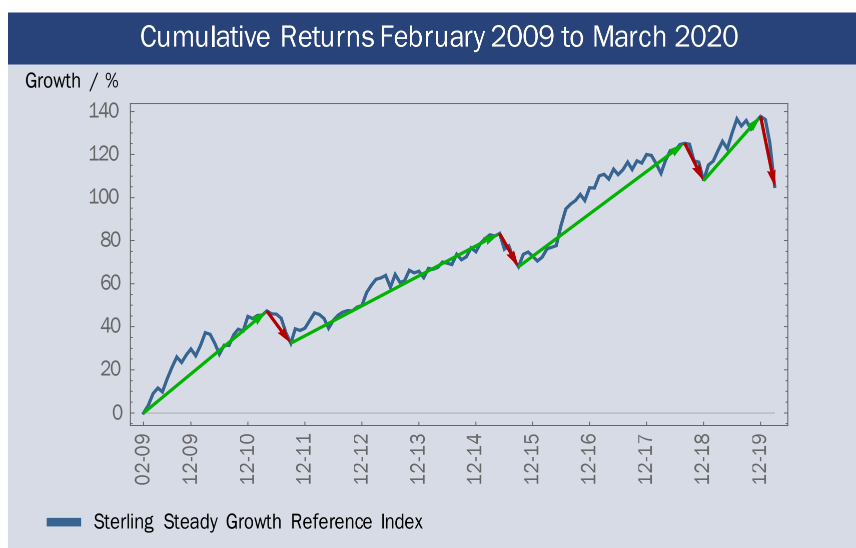
Following the sharp downturn in global equity and corporate bond markets in Q1 2020 caused by the COVID-19 pandemic and subsequent widespread lockdowns across the world, we have investigated whether discretionary investment managers have been able to make good on their promises of providing capital protection during times of financial market turmoil.

The risk category selected for conducting the investigation was the ARC Sterling Steady Growth PCI universe which, as at the end of March 2020, comprised circa 77,000 portfolios run by 63 different investment managers.

To provide an independent performance reference index against which manager performance can be compared, a composite of exchange traded funds was created that has broadly mimicked the performance of the ARC Sterling Steady Growth PCI. That composite was as follows:

GBP 1 Month Cash	5%	db x-trackers FTSE All-Share	20%
iShares Core UK Gilts	10%	iShares Core MSCI World	35%
iShares Core Corporate Bond	10%	IShares MSCI Emerging Markets	5%
UBS ETFS plc HFRX Hedged GBP	10%	iShares Diversified Commodity Swap	5%

The period selected for analysis was from February 2009 (the start of recovery from the global financial crisis) to March 2020 (thus far, the bottom of the pandemic bear market). This period was then divided into bull market phases and bear market phases as indicated on the chart below.



Combining each of the four bull market phases shown in green on the chart above, the upside capture ratio was calculated for each investment manager versus the reference index. By way of example, if the reference index rose by 10% during these bull market phases and the manager performance was 11%, then the upside capture ratio was 1.1.

This process was then repeated for the four bear market phases combined, as shown in red on the chart above, in order to calculate the downside capture ratio. Thus, if the reference index fell by 10% during these bear market phases and the manager performance was 9%, then the downside capture ratio was 0.9.

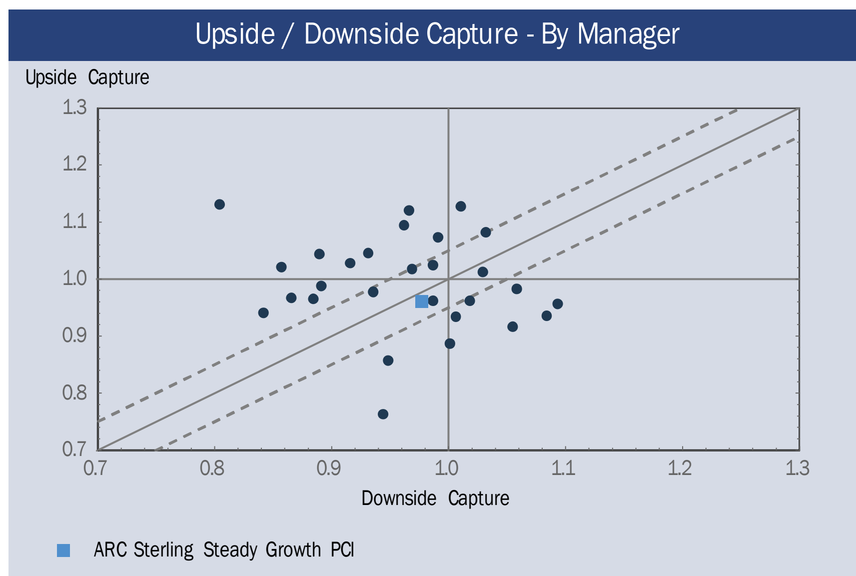
If discretionary investment managers have delivered on their promises, the upside capture ratio would need to be a bigger number than the downside capture ratio. So what do the results reveal?

The Practice

If discretionary investment managers merely delivered performance in line with the financial markets, it might be expected that the upside/downside capture ratio would be equal to one. In other words an upside capture ratio of, say, 0.9 would be associated with a downside capture ratio of 0.9. The performance of the manager would be in equal proportion whether markets were trending up or going down. For the purposes of this analysis we defined “equal” as being an upside/downside capture ratio in the range 0.95 – 1.05.

Those managers with upside/downside capture ratios greater than 1.05, it can be said that they have delivered on their promises of offering greater downside protection than an index-tracking strategy. For those managers with upside/downside capture ratios less than 0.95, investing in an index-tracking strategy would have been preferable.

Within the ARC Sterling Steady Growth PCI Universe, there are 28 discretionary investment managers with continuous performance track records covering the eleven years being analysed. The results are set out in the chart below.



The solid grey line going from the bottom left corner to the top right hand corner sets out points where the upside downside capture ratio is one. The two dotted grey lines either side create a corridor where, for the purposes of this analysis, a manager can be considered as having performed in a similar fashion to an index-tracking strategy. This corridor is occupied by just 5 managers.

However, the chart reveals that 14 managers (50%) delivered material downside protection to their investors. This is supported by the fact that discretionary investment managers on average delivered an upside/downside capture ratio of 1.04.

The Conclusion

Discretionary investment managers understand that private clients do not value gains and losses equally. Loss aversion is a strong impulse for most of their clients. Therefore, they offer reassurance to their clients that they will deliver greater downside protection than an index-tracking strategy can provide.

The evidence over the last eleven years suggests that, on average, they succeed in this endeavour, albeit only at the margin. However, it is clear that by picking the right discretionary manager it is possible to enjoy strong downside protection without compromising the upside potential. Daniel Kahneman suggested that *"It's a wonderful thing to be optimistic. It keeps you healthy and it keeps you resilient."* In promising downside protection, discretionary investment managers are helping investors overcome their loss aversion and invest more rationally. The fact that, on average, they keep that promise is an added bonus!

For further information:
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A full list of Data Contributors to ARC PCI is available at www.suggestus.com