

## Hedge fund managed accounts – is the debate on the right track?

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### Summary

The debate over the use of managed accounts<sup>1</sup> within the hedge fund industry rumbles on and looks set to run for a good while yet. The managed account bulls point out the enhanced transparency, control and governance this approach offers. The naysayers on the other hand argue that there are a number negatives to the managed account approach to investing in hedge funds.

This paper will not try and cover the whole range of these arguments but will focus on one of the key battlegrounds: the notion that managed accounts can have a material tracking error<sup>2</sup> and performance lag<sup>3</sup> when compared to the flagship fund<sup>4</sup>. More fuel was recently heaped on this fire by the release of a paper by Olympia Capital Management ("OCM") entitled Managed Accounts and Tracking Error Risk<sup>5</sup>. This paper presented an in-depth quantitative analysis of a data set extracted from 5 of the existing managed account platforms and concluded that the tracking error risk means investors would need to accept increased volatility and reduced performance from a managed account vis-a-vis the flagship fund ie. a lower risk-adjusted return.

Whilst we do not dispute the actual quantitative analysis on the specific data set carried out by OCM this paper seeks to add additional analysis to further the debate. We argue the following three key points:

1. The existence of a tracking error in itself may not actually be a negative for any party, including the investor. The critical factor is not the mere existence of a tracking error but the reasons it is present. This paper presents analysis showing that a notable proportion of an identified tracking error could simply be due to differences in performance fee structure.
2. A statistical analysis was carried out looking at the influence of changing the performance fee calculation methodology. We found that relatively subtle changes to this calculation could alter the observed Sharpe Ratio<sup>6</sup> by around 15%. Managed accounts tend to lose the cosmetic benefit of a volatility reduction induced by quarterly or annual performance fee calculation (relative to the monthly gross trading returns) commonly seen in the flagship funds.
3. Any identified performance lag in the existing available managed account data needs to be considered in a holistic way and may not be universally applicable to all managed account environments. It is entirely possible that a material proportion of the identified performance lags are specific to the data set chosen. The results are likely to be significantly influenced by a range of factors, not least by the likely number of small managed accounts in the sample.

We conclude that some managed accounts may have a tracking error, a performance lag, or both but their true causes and likely impact needs thorough evaluation and careful categorisation. We reject the notion that all managed accounts will de-facto suffer from reduced risk-adjusted returns relative to the flagship fund but do accept that some may. The devil is very clearly in the detail when looking at this area.

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<sup>1</sup> Managed accounts are an alternative way to access hedge fund investments. They are a segregated account managed by the fund manager with a portfolio that mirrors their main/flagship fund. Essentially the fund manager's role is reduced to trade selection, execution, portfolio construction and risk management with the remaining functions such as legal, valuation and collateral management carried out by the investor or the investor's agent.

<sup>2</sup> Normally defined as the sample standard deviation of the difference in monthly performance between the managed account and the flagship fund

<sup>3</sup> Generally defined as the under or outperformance of the managed account relative to the flagship fund

<sup>4</sup> The flagship fund run by the fund manager that the managed account is expected to track

<sup>5</sup> Managed Accounts and Tracking Error Risk, Olympia Capital Management, September 2009

<sup>6</sup> The Shape Ratio is one indicator of risk adjusted return. An increase in the Sharpe Ratio is normally believed to be associated with an increase in the risk-adjusted return.

## **Introduction**

There is currently significant interest and debate surrounding the use of managed accounts for allocating to hedge funds. This is clearly in response to a number of the negative events that hit the industry in 2008 including the Madoff affair and the gating of numerous funds. Managed accounts offer an investor a number of benefits including increased transparency, control and governance over their portfolios. This paper will not attempt to discuss these matters as they have been covered at length in other forums. This paper will discuss the performance differences between managed accounts and the flagship funds they track.

## **Setting the Scene**

A recent paper published by OCM entitled Managed Accounts and Tracking Error Risk highlighted some interesting statistical findings. The paper analysed the performance of a range of managed accounts taken from 5 well-established managed account platforms. The performance of these 143 managed accounts was then compared to the performance of the flagship hedge funds that these accounts were tracking (or traded pari passu to the fund in legal parlance). The paper found that there was a notable tracking error (median of 3.0% per annum) and performance drag (median of 1.8% per annum) between the managed accounts and the flagship hedge funds they were replicating. The conclusion was then drawn that the tracking error risk means investors would need to accept increased volatility and reduced performance from a managed account vis-a-vis the flagship fund. Whilst this conclusion is one interpretation of the data there are a number of other factors to consider when evaluating this issue.

## **Tracking errors: are they always a problem?**

The tracking error between a managed account and the flagship fund is something every managed account investor and operator is used to monitoring. The fact that a tracking error exists is not always a cause for concern but the reason for the tracking error is of far more importance.

One cause of tracking error can be timing differences. The importance of timing differences was highlighted to me a number of years ago when I was asked to take a look at the year-end annual performance ranking of a mutual fund. The fund manager believed their performance put them a long way up their peer group but an official peer group ranking put them a long way down. How could this be, it was surely the same data set? However, the data sets were based on valuations at different times in the same day and the movements in FX rates had moved the fund's performance a fair way down the peer group. The same issue can exist for managed accounts. There may be differences in the valuation process, methodology and timing when comparing the managed account to the flagship fund. Generally, this is not something to be concerned about unless there is a fundamental problem with the administration or valuation process of the managed account. In fact, with more illiquid

strategies it may even highlight what some authors have described as “performance smoothing” on the part of the flagship fund.

There may also be legitimate differences in monthly performance due to portfolio composition. Very few allocators would try to argue they have invested in a manager purely based on the quantitative characteristics of the flagship hedge fund. Most allocators invest because, amongst other things, they believe the manager has an edge in their investment process and the flagship fund is simply a reflection of this investment process. If the managed account is also a reflection of this investment process, it is not instantly a problem if the portfolio composition is not identical. I have even come across instances where one or more of a manager’s best ideas ended up solely in a managed account because the flagship was too big for these size-limited trades to have a meaningful impact. I have also come across quant managers who optimise and trade each account separately because they see no reason to create excess trading (ie. extra cost) in a managed account simply to mirror the flagship. In these instances, there is a judgement to be made as to whether these differences are positives or negatives. These differences in portfolio composition will lead to tracking error between the managed account and the flagship fund but not necessarily long-term underperformance.

### **Who moved my performance fee accrual?**

Differences in performance fee methodology (eg. weekly vs monthly vs annual) between the managed account and the flagship fund can also create a tracking error. This is because performance fees may be accrued and paid at different times even though the gross trading performance of the managed account and the flagship fund are identical<sup>7</sup>. In order to illustrate the impact of this we have performed a series of Monte Carlo simulations<sup>8</sup> on a hypothetical data set of fund returns<sup>9</sup> and compared the difference between monthly performance fee accrual and crystallisation<sup>10</sup> and annual crystallisation with monthly accrual<sup>11</sup>. See table below:

Data Set	Mean annualised volatility (%)	Median annualised volatility (%)
Gross Return Data	9.9	9.8
Monthly crystallisation	9.2	9.1
Annual crystallisation	8.6	8.5

<sup>7</sup> In order to offer increased liquidity on a managed account it is generally required to operate a different performance fee calculation from the flagship fund. The flagship may have quarterly or annual performance fee crystallisation. As an example, a weekly liquid managed account may well have weekly performance fee crystallisation or at least some variant of it.

<sup>8</sup> Definition: Monte Carlo simulation - A method that estimates possible outcomes from a set of random variables by simulating a process a large number of times and observing the outcomes. Source: [www.bridgefieldgroup.com](http://www.bridgefieldgroup.com)

<sup>9</sup> Input data set: 500 randomly generated, 3 year, monthly return, gross of fees, data series using MS Excel. Consolidated data set was targeted to have average annual volatility of 10% and a net Sharpe Ratio of approximately 1.

<sup>10</sup> Performance fees of 20% are accrued in the fund accounts and charged on a monthly basis. A high watermark methodology has been assumed along with a 1.5% management fee.

<sup>11</sup> Performance fees of 20% are accrued in the fund accounts on a monthly basis but are only paid on an annual basis. A high watermark methodology has been assumed along with a 1.5% management fee.

The tracking error was also calculated between the monthly and annual data sets. In this simulation the tracking error had a mean value of 1.1% even though the underlying data set's gross returns were exactly the same. The only difference was in the performance fee calculation.

If one believes that volatility is a valid risk measure then this illustrates the perverse effect that performance fees can have – they can cosmetically reduce risk by around 15%! A performance fee that is crystallised over multiple periods essentially acts as a performance smoother due to the performance fee accrual lopping 20% off the up months and giving it back in the down months. In general, managed account platforms lose this benefit relative to the flagship funds.

In this analysis the Sharpe Ratio for the annual performance fee data set was 15% higher than that of the monthly performance fee data set.

The key point is that differences in performance fee calculation can create a tracking error even though the underlying portfolio performance is identical. If this analysis is compared to the findings from the OCM paper mentioned previously (median tracking error of 3.0%) then it is quite possible to argue that a material proportion of the tracking error identified could be due to differences in performance fee methodology.

### **Do my fixed fees look big in this?**

A key point to consider when looking at historical data on managed accounts is the impact that fixed fees can have on the performance of a smaller managed account. If a data set is not adjusted for the size of accounts or limited to accounts of a larger size it is likely that the small-account/fixed fee drag impact could skew the overall results.

It is no secret that many of the managed accounts on the various platforms have been pretty small at certain points in time. Most managed accounts, just like hedge funds, are legally structured as funds. Funds have various set-up and operating costs of which some are fixed costs (\$xxx per month) and some are variable (xx Bps per annum of AUM). Fixed costs can have a material impact on overall account performance at small sizes. Experience suggests that a single account could easily have a fixed fee load of \$100,000 per annum to cover directors' fees, audit fees and the likely minimum account fee demanded by the fund administrator. On a \$10 million account these fees will then be a 1% per annum performance drag. Once the managed account reaches \$100 million then the impact of these fixed fees drops to a mere 10 basis points.

### **Who can find the complete data set?**

There are essentially two types of managed account operation:

- 1) Managed account platforms offering an aggregation type arrangement whereby many small lots of assets are packaged up into one large managed account
- 2) Proprietary institutional managed accounts whereby one large investor has a managed account containing only their assets

The characteristics of these two environments are quite different so this will lead to quite different structures, operational requirements, asset flows and critically fees. By and large, the data sets for type 1 managed accounts are in the public domain (or can at least be identified and found) but the data sets for type 2 are generally hard to track down.

Given the likely data sets available at present it is not clear that all types of managed account, and for that matter the various managed account platforms, can be grouped together. It is even less clear that conclusions can be drawn on the performance of managed accounts as a whole from a single aggregated data set of the existing managed account platforms.

### **Conclusions**

Whilst quantitative analysis of the current managed account platform data sets does appear to show a notable tracking error risk coupled with long term performance drag there are a number of caveats to this analysis. Whilst there clearly are tracking errors between managed accounts and flagship funds they are not necessarily always a problem. There are a number of factors that can create a tracking error that are unlikely to lead to long-term underperformance or any other problems. However, there are instances where a tracking error may be indicating a bigger issue so they should always be investigated and reviewed thoroughly.

We conclude that some managed accounts may have a tracking error, a performance lag, or both but their true causes and likely impact needs thorough evaluation and careful categorisation. We reject the notion that all managed accounts will de-facto suffer from reduced risk-adjusted returns relative to the flagship fund but do accept that some may.

### **Tomlinson Investment Consulting: Hedge Fund Managed Account Specialists**

We are a specialist company focused on helping our clients to build, develop and improve hedge fund managed account investment portfolios, structures and their associated businesses. We have a background in fund management and have in-depth hands-on experience of building and running fund of managed account businesses. Our key areas of expertise are:

- Evaluation of the benefits, limitations and costs of introducing managed accounts
- Specification, development and ongoing management of managed account businesses
- RFP and selection of partners including analysis of 3<sup>rd</sup> party managed account platforms
- Advice in relation to manager selection, portfolio construction and risk management processes

### **Richard Tomlinson - Biography**

Richard has extensive experience of running investment strategies executed through managed accounts. This experience includes all aspects of the creation and management of a proprietary managed account platform.

From 2004 to 2008 Richard was Head of Multi-Strategy Products and a member of the senior management team at Old Mutual Asset Managers (UK). Richard headed the team that established the multi-strategy desk and developed it into a dedicated fund of managed accounts business. The desk adopted a market neutral philosophy with a portfolio of internal and external managers. All portfolios were constructed using a proprietary managed account platform.

From 2002 to 2004, he worked for GNI Fund Management, one of the early players in the hedge fund managed account business.

Early in his career, Richard was a management consultant, firstly in an internal role at The NEC Group in Birmingham and then at Sextant Ltd, a management consultancy specialising in economic planning and funding for event centres worldwide.

Richard has a Masters degree in Engineering from Cambridge University.

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