Excessive FUM Destroys Active Asset Management Firms

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The ability to generate excess returns after fees above a benchmark (alpha) requires an exceptional investment framework that is executed in a consistent, disciplined manner. A common way for successful funds management businesses to fail is by running products over optimal funds under management (FUM) levels. This action results in the significant reduction or disappearance of long-term alpha after fees. In effect, clients suffer from materially lower or poor alpha generation after fees while the owners of the asset management business benefit from higher short-term profits but end up risking the long-term sustainability of the business.

No organisation can serve two masters

Funds management businesses that are marketing and sales led, rather than research and alpha focused, are likely to impede long-term alpha generation by allowing excessive fund inflows. In successful organisations, there can only be one culture and set of values and beliefs. If the leadership is sales and marketing led, the value proposition to clients in the form of alpha generation is likely to suffer because FUM inflows and new product generation will be the dominant culture.

Short-termism, greed, and other behavioural problems

Human greed and short-termism are very effective ways to reduce the value proposition to clients and damage or destroy the long-term value of an active asset management business. Alpha centric funds management businesses, that are research driven and investment led, are more likely to be disciplined around capacity management and restrain FUM below their optimal levels.

An optimum level of assets under management exists where you have the scale to invest in research and other administrative support (often referred to as economies of scale) while having the ability to invest easily in a wide opportunity set (often referred to as the investment universe). Fund managers also need scale to be relevant to various market participants including brokers, management teams, boards, potential clients, and potential investment team members. However, going past your optimum FUM level results in diminishing relative, risk adjusted returns. In effect, taking more risk for less alpha.

There are significant diseconomies of scale in the active asset management business if FUM increases materially above optimum levels. Chen, Hong, Huang and Kubik (2004)[1] investigate extensive data (from 1969 to 1999) on U.S. equity funds and find that fund size erodes performance in most instances. This finding is consistent with an earlier study by Indro, Jiang, Hu and Lee (1999)[2] who comment on the adversity of diminishing marginal returns as a fund begins to exceed its optimal size.

As your level of assets increases, the size of your investment opportunity set decreases. In the end, your investable universe reduces to only the largest listed companies. These are typically more mature, average, 'old world' businesses that do not have the ability to expand market share to organically grow their sales. Equity investing is about long-term compounding returns and typically you need to invest with companies relatively early in their life cycle to benefit from their higher rates

[1] Chen, J., Hong, H., Huang, M. and Kubik, J., 2004. Does Fund Size Erode Mutual Fund Performance? The Role of Liquidity and Organization. American Economic Review, 94(5), pp.1276-1302.

[2] Daniel C. Indro, Christine X. Jiang, Michael Y. Hu & Wayne Y. Lee (1999) Mutual Fund Performance: Does Fund Size Matter? Financial Analysts Journal, 55:3, 74-87, DOI: 10.2469/faj.v55.n3.2274

of annual earnings per share (EPS) growth. These are the businesses that eventually turn into established blue-chip companies. **If you are too successful at marketing and the FUM levels move significantly above the optimal capacity of the product, then even a sound investment philosophy and process will fail.**

Too much FUM increases execution costs and reduces flexibility (often referred to as diseconomies in trading) as it is harder to allocate larger amounts of money at the same rate across the same investment universe. Even if the manager can carefully avoid any price impacts in either buying or selling, liquidity risks increase as the assets under management rise. That is, it takes longer to exit a position as days to trade increase and the consequences of any investment mistakes are amplified. Perold and Salomon (1991)[3] suggest the diseconomies of scale in active management are a result of the increased costs from larger transactions. FUM that is above optimal levels results in an increase in unexecuted trades. This additional trading related cost is often referred to as the implementation shortfall.

Active asset managers that are successful in growing their assets under management must eventually either restrict their FUM below estimated capacity levels and/or adjust their investment process. **Common adjustments to investment processes include increasing the number of stocks held, buying companies that are more liquid (which are typically higher market capitalisation stocks) or normalising the portfolio weights of holdings to minimise the level of portfolio turnover and resulting market impact.** For example, Chan, Faff, Gallagher and Looi (2009)[4] found that larger fund size is associated with more securities, less small stocks, lower bet sizes and less trading.

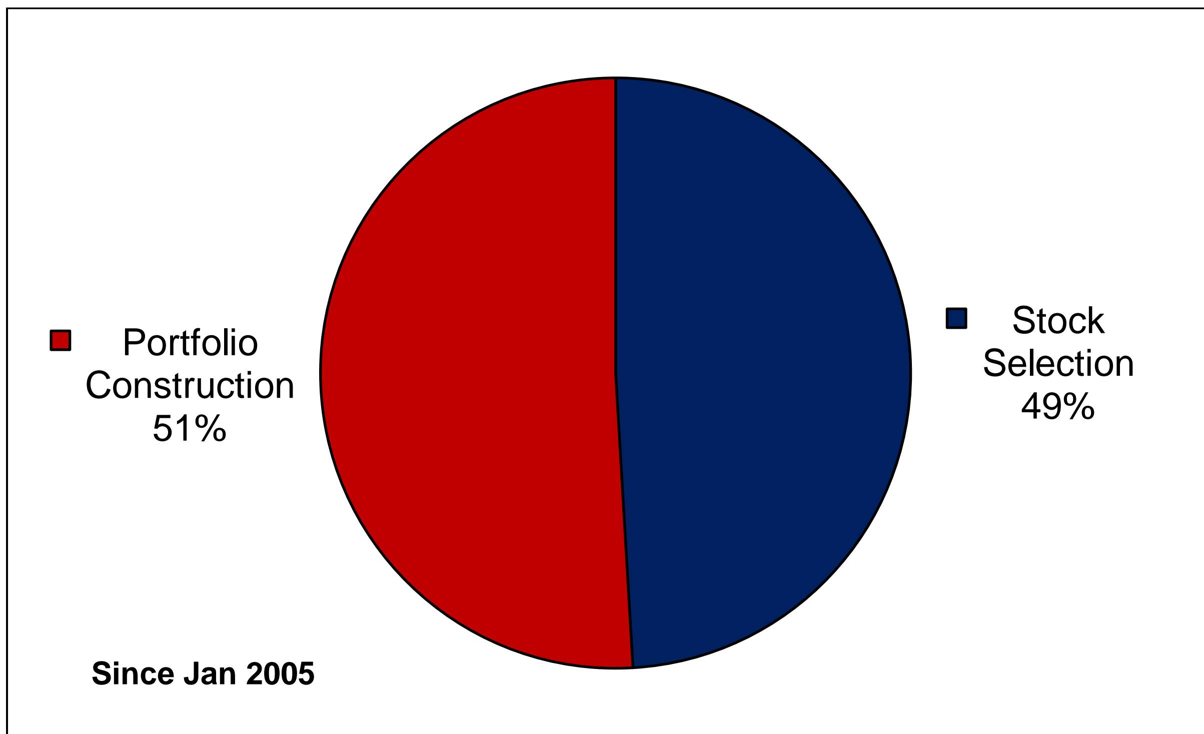
Large FUM levels that are above capacity inhibit effective portfolio management (often referred to as diseconomies in portfolio construction). Portfolio management should be a significant driver of alpha, as active managers should be able to take advantage of non-fundamental share price moves relative to a stock's intrinsic value. All things being equal, a lower share price should result in a higher forecast internal rate of return (IRR) and higher portfolio weight for that stock.

Over the past 15 years, the alpha within Hyperion's Australian Growth Companies composite can be attributed as 51% to portfolio management and 49% to stock selection. Thus, effective portfolio management (or setting the right weights at the right time) has effectively doubled the alpha achieved. If FUM becomes too great to move actual stock weights towards their target weights easily through buying or selling, then a valuable source of alpha is reduced.

[3] Perold, A., & Salomon, R. 1991. The Right Amount of Assets Under Management. *Financial Analysts Journal*, 47(3): 31-39.

[4] Chan, H., Faff, R., Gallagher, D. and Looi, A., 2009. Fund Size, Transaction Costs and Performance: Size Matters! Australian Journal of Management, 34(1), pp.73-96.

Figure 1: Split in Hyperion's domestic cumulative alpha



Source: Hyperion

A common way to absorb too much FUM is to spread it over a larger number of stocks. Typically, the more FUM a manager accepts above optimal levels, the more stocks a manager includes in their portfolios. Based on a study of U.S. mutual funds from 1992 to 2000, Shawky and Smith (2005)[5] concluded that when net fund flows are positive, managers tend to add new stock positions and when net fund flows are negative, managers tend to reduce the number of positions.

Once **adequate diversification** has been achieved through an optimal number of stocks, there is little benefit in introducing more stocks into a portfolio. In fact, we believe, adding too many stocks reduces the quality and increases the underlying fundamental business risk of a portfolio. In effect, a collection of elite businesses with low fundamental risk are diluted with a collection of lower quality businesses with higher embedded fundamental risk. For example, companies with relatively lower earnings growth, more debt on the balance sheet or weaker competitive positions may be added to the portfolio. If too many stocks, particularly large liquid stocks, are added to a portfolio, its characteristics and performance will move closer to mirroring that of the relevant benchmark. In this scenario the potential alpha reduces towards zero.

Petajisto (2013)[6] comments on the benefits to active stock selection in achieving outperformance. The report finds that funds which are "closet-indexers" essentially match the index performance and deliver underperformance after fees. Active share and tracking error are used as measures to provide evidence that mutual funds that are the most active stock pickers generate outperformance – an implication of retaining optimal fund size and mitigating inflows. These patterns held throughout the GFC and despite this, closet indexing is a strategy that has increased in popularity since 2007.

[5] Shawky, H. and Smith, D., 2005. Optimal Number of Stock Holdings in Mutual Fund Portfolios Based on Market Performance. The Financial Review, 40(4), pp.481-495.
[6] Petajisto, A. 2013. Active Share and Mutual Fund Performance. *Financial Analysts Journal*, 69(4): 73-93.

Another way to deploy too much FUM is to buy more liquid companies, typically with higher market capitalisations. Usually, these businesses are mature, average quality companies with 'efficient' balance sheets. Often their returns are driven by capital allocation such as share buybacks or dividends rather than capital appreciation. They are generally at the end rather than the start of their life cycle. We believe, successful long-term investing is primarily about allocating capital to stocks that can produce long-term compounding returns driven by attractive levels sustained growth across sales, earnings and positive cash flows. The probability of finding these in the largest market capitalisation stocks is generally low.

Furthermore, if asset gathering is the primary focus of an asset management business, then marketing becomes more important culturally than alpha generation. When FUM levels become large and beyond the ability of the investment process to be implemented successfully, because of high impact costs and ownership levels, then the fund management business has the following choices:

1) hand back money;

2) allow the ownership of key stocks to increase;

3) add more lower quality companies with higher fundamental risk and lower return profiles; and/or

4) amend the investment process.

Many asset management businesses will choose to amend the investment process. As discussed, this normally involves increasing the number of stocks held in the portfolio. This allows the fund manager to manage more FUM with lower market impact, but it may result in lower capital allocations to key stocks and dilute the alpha generated from the process. Effectively, investment thresholds are being lowered.

A study conducted into mutual funds performance by Vidal-Garcca and Vidal (2016)[7] further suggested the negative effect of increases to FUM on performance. Diseconomies of scale led to small funds outperforming large funds. This study used a sample of 16,085 active equity funds domiciled in 35 countries around the world to confirm the diminishing returns of scale and evidence of lower stock picking ability in larger funds. The evolution of a typical fund is as follows: smaller funds deliver higher returns, outperformance attracts cash inflows, increases to FUM result in diseconomies of scale and consequently decreases the probability of outperformance.

Hyperion has always been obsessed with managing optimal fund levels carefully as one of our core values is being "alpha focussed". We believe we are comfortably below capacity levels as shown by declining domestic aggregate ownership levels over the past five years.

[7] Vidal-Garcia, J., & Vidal, M. 2016. Short-Term Performance and Mutual Fund Size. *SSRN Electronic Journal*. https://ssrn.com/abstract=2801930.

Figure 2: Hyperion aggregate domestic stock ownership levels

Source: Hyperion

We know Hyperion only exists because clients believe that we can generate future excess investment returns over the long term. We are not prepared to risk under-performance from managing too much FUM despite the lure of higher short-term operating profits.

"No long-term alpha, no Hyperion."

Mark Arnold (CIO) and Jason Orthman (Deputy CIO)

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