# 1. Introduction

‘The $2.8 trillion industry is strewed with tales of managers who, after shutting down large funds, re-launched only to limp along or close again. Undaunted, veteran stock pickers Michael Karsch and Adam Weiss plan to launch new funds less than two years after closing their old firms’ (Chung 2015).

A hedge fund can be broadly defined[[1]](#footnote-1) as ‘a general, non-legal term used to describe private, unregistered investment pools that traditionally have been limited to sophisticated, wealthy investors’ (SEC 2003). The fundamental question in hedge fund literature and investors’ mind alike is whether hedge fund managers are able to deliver to persistent superior returns. Investment in a hedge fund is tantamount to a pure bet on a hedge fund manager’s skill to identify profit opportunities.

Hedge fund is one of the fastest growing sector in the finance industry. Total asset under management (AUM) in the hedge fund industry was USD2.85 trillion as of fourth quarter of 2014 (Hedge Fund Research 2015), corresponding to an approximate annual growth rate of 22% from 1997 to 2014 (Barclay Hedge 2015). The tremendous growth is in part attributable to new hedge fund launches, which totalled 1,040 in 2014 (Hedge Fund Research 2015).

The attractiveness of the hedge fund industry has been driven primarily by an important competitive advantage, freedom from government regulation. This has granted hedge fund managers flexibility to employ a diverse set of investment strategies and charge high fees. The standard 2 and 20 fee structure[[2]](#footnote-2) for hedge fund managers is regarded as one of the key drivers of their high absolute returns (Ineichen 2003). Reasonably, regulatory advantage and attractive financial incentives may entice high-skilled (or mediocre-skilled) fund managers to the hedge fund industry. In this vein, there has been an increasing flight of fund managers entering the hedge fund industry (Cici, Gibson and Moussawi 2010, Deuskar et al. 2010, Kostovetsky 2009, Nohel, Wang and Zheng 2010).

Nonetheless, alongside the tremendous growth, the hedge fund industry also suffers from high attrition rates[[3]](#footnote-3). Annual attrition rate of hedge funds averages astonishing at 12% and peaked at 31% during the recent 2008 Global Financial Crisis (Xu, Liu and Loviscek 2011), compared to a 1% average in mutual funds (Getmansky 2012). The risk of investment loss may be accentuated by the use of leverage and speculation that magnifies both potential gain and loss from an investment (Lo 2008). The failure of several high profile hedge funds that incurred catastrophic loses and closed is well-documented, inter alia, Long Term Capital Management in 2000, Amaranth in 2006, two Bear Stearns in 2007 and Atticus Global in 2009. A typical hedge fund has an average life of five years or less (Amin and Kat 2003, Brown, Goetzmann and Park 2001, Gregoriou 2002).

The attractiveness of the hedge fund industry may continue to attract fund managers, however, in light of the notorious attrition rate, little is known about the performance of former hedge fund managers who returned to their hedge fund career. Therefore, this study aims to analyse the performance of re-launched hedge funds and managers globally. To the best of our knowledge, the existing literature has not examined the issue of such re-launched hedge funds. In this study, we define a re-launched hedge fund as a hedge fund launched by a former hedge fund manager who returned to the hedge fund career by launching new fund(s). Likewise, a re-launched manager is a manager who have instances of such re-launched fund(s).

This study contributes to the existing literature in several ways. Firstly, we fill the void in existing literature and examine the performance of re-launched hedge fund and managers. Secondly, this study contributes to the growing literature on the attributions of hedge fund performances.

# 2. Institutional Background

## 2.1 Regulation and Disclosure

Hedge funds regulatory environment differs globally. In general, hedge funds are far less regulated and are exempted from numerous regulatory controls that strictly govern the mutual fund industry. Funds domicile in the United States that fall under the definition of ‘investment advisers’ are required to register with SEC under the *Investment Advisers Act of 1940* (U.S.) s 203. However, hedge funds are able to gain such exemptions by managing funds with less than $150 million in AUM or qualify as a foreign private adviser[[4]](#footnote-4) under the *Investment Advisers Act of 1940* (U.S.) s 202 (Shadab 2013).

Hedge funds are also subjected to the *Investment Company Act of 1940* that limits a fund’s use of leverage, short sales and derivatives transaction (Brown and Goetzmann 2003). To qualify for such exemptions, hedge funds limit their investor base to not more than 100 investors or only offer to ‘qualified investors[[5]](#footnote-5)’; and restrict from public offerings (Shadab 2013).

Therefore, hedge funds self-report their information to commercial database providers to cater to the informational needs of existing or prospective investors; and self-marketing purposes (Aiken, Clifford and Ellis 2013). With hindsight, such opacity often questions the completeness and integrity of hedge fund data.

## 2.2 Investment Strategy

Due to less stringent disclosure requirements, hedge fund managers are able implement investment strategies that are distinctively different from more regulated investment vehicles like mutual funds. They have considerable freedom to implement speculative investment strategies like leverage, short-sell, arbitrage and use of derivatives (Brooks and Kat 2002). This contrast sharply with traditional non-leveraged, long-only investment strategies of mutual funds (Amin and Kat 2003).

## 2.3 Fee Structure

Hedge funds are uniquely characterised by their asymmetrical incentive fee structure. A typical hedge fund imposes a fixed annual management fee ranging from 1-2% of assets under management; and an incentive fee ranging from 15-25% of excess return over a designated hurdle rate[[6]](#footnote-6) or high-water mark[[7]](#footnote-7) (Edwards and Caglayan 2001). A high-water mark is a typical feature of a hedge fund fee structure, whereby incentive fees are earned only on new profits and not on profits recovering previous losses (Agarwal, Daniel and Naik 2009).

The compensation structure typical of hedge funds attracts high-skilled professionals and induces stronger financial motivation to perform well (Agarwal, Daniel and Naik 2009, Edwards and Caglayan 2001). On the other hand, the high-water mark feature encourages risk-taking in managers (Goetzmann, Ingersoll and Ross 2003) and induces higher probabilities of fund closures when hedge funds are under their high-water mark (Ray 2011). In a similar vein, Hodder and Jackwerth (2007) also postulate that hedge fund managers that are under high-water mark may optimally choose to close their funds and re-start a new hedge fund with a new high-water mark.

# 3. Literature Review

## 3.1 Early Studies

In the asset management field, the hedge fund industry was considered in its infancy up until the 1990s. Qualitative and quantitative information about these funds were not widely available to the general public until a surge of academic research interest on hedge funds in the late 1990s, with Brown, Goetzmann and Ibbotson (1999), Fung and Hsieh (1997a), Liang (1999), Schneeweis and Spurgin (1998) among others; shedding insights on the risk-return profile of hedge funds.

## 3.2 Performance Measures

An extensive literature exists in identifying sources of risks that can explained hedge fund returns; and attributing the unexplained portion to a manager’s skill or alpha[[8]](#footnote-8). The conventional performance measure begins with Sharpe (1964), who proposed using a single market factor in explaining returns using Capital Asset Pricing Model (CAPM). The model was subsequently extended by Fama and French (1993), who proposed a three-factor model to explain returns in terms of market, size and book-to-market factors. Carhart (1997) extended Fama and French’s (1993) model with an additional momentum factor from Jegadeesh and Titman (1993).

However, for hedge fund performance measurement in particular, Fung and Hsieh (1997a) were among the first to understand that common risk factors may be insufficient in explaining hedge fund returns. This is because conventional models of performance measures rest on the assumptions of homogenous underlying assets and a dominant buy-and-hold investment strategy. In contrast, hedge funds are characterised by their dynamic investment styles and high-levered positions. Therefore, Fung and Hsieh (1997a) identified five prevailing investment strategies in hedge funds and proposed an augmented version of Sharpe (1992) model. Agarwal and Naik (2000a, 2004), Fung and Hsieh (1999, 2000, 2001) concluded that hedge funds have non-linear dynamic trading strategies that generate option-like returns. Conclusively, their models propose that hedge fund returns can be explained using conventional asset returns and option-based strategy returns. Building on this, Fung and Hsieh (2002, 2004) identified a set of primitive trend-following asset-based style factors using lookback straddles[[9]](#footnote-9) and proposed seven asset-based style factors. This parsimonious asset-based style factor model can explain up to 80% of the variation in global hedge fund portfolio returns (Fung and Hsieh 2004); and has rapidly become the de facto standard of hedge fund performance measurement[[10]](#footnote-10). In their recent work, this model has been extended to incorporate emerging markets and has shown its significance (Edelman et al. 2012).

Numerous studies have also proposed several other non-conventional risk factors; and confirmed that an important part of hedge fund returns can be explained by exposure to these factors (Bacmann and Scholz 2003, Capocci and Hübner 2004, Jagannathan, Malakhov and Novikov 2010, Ranaldo and Favre 2005, Schneeweis, Kazemi and Martin 2003).

In our study, we control for hedge fund systematic risk exposures and ultimately, establish whether there are any significant managers’ skill or alpha that are left unexplained.

## 3.3 Performance and its Persistence

The central question of investment management literatures and in investors’ minds alike is whether fund managers are able to deliver persistent superior performance or alpha. Particularly for the hedge fund industry, this question becomes even more relevant since most hedge funds justify their high fees by their ability to deliver absolute positive returns (Fung and Hsieh 2006). While conventionally, fund performance (for example, mutual fund) is typically measured against a market index, hedge fund performance is measured in a risk-adjusted basis over the risk free rate (Fung et al. 2008).

Ackermann, McEnally and Ravenscraft (1999) were among the pioneers to study and tackle this issue of hedge fund performance. They found that hedge funds outperform mutual funds but not market indices. In a similar vein, an extensive range of literature emerged, concluding that hedge funds do outperform (Agarwal and Naik 2000b, Ammann, Huber and Schmid 2010, Brown, Goetzmann and Ibbotson 1999, Capocci and Hubner 2004, Edwards and Caglayan 2001, Harri and Brorsen 2004, Jagannathan, Malakhov and Novikov 2010 Kosowki, Naik and Teo 2007, Manser and Schmid 2009). Whereas, Díez de los Rios and Garcia (2011) found that hedge fund outperformance is strategy dependent.

Hedge fund performance typically persists over a short-term horizon of not more than a year (Agarwal and Naik 2000b, Bares, Gibson and Gyger 2003, Harri and Brorsen 2004, Baquero, ter Horst and Verbeek 2005, Boyson 2008, Kosowski, Naik and Teo 2007, Manser and Schmid 2009). Whereas, others have found a longer persistence horizon of up to three years (Ammann, Huber and Schmid 2010, Jagannathan, Malakhov and Novikov 2010); while up to five years for emerging hedge funds (Aggarwal and Jorion 2010). Contrarily, Brown, Goetzmann and Ibbotson (1999), Brown and Goetzmann 2003, Kat and Menexe (2003) found limited evidence of performance persistence in hedge funds using simple returns however.

These studies conclude that hedge fund managers’ skill are indeed present, up to a certain extent, in hedge funds. As such, measuring hedge fund managers’ performance becomes an interesting problem as it can be interpreted as their investment skills.

## 3.4 Performance beyond Risks

The unexplained portion of returns represents a hedge fund manager skill or alpha and distinguishes his or her edge over the rest. The source of alpha can be attributed to a stock picking skill (Griffin and Xu 2009), market-timing ability (Billio, Getmansky and Pelizzon 2009, Brunnermeier and Nagel 2004), risk-picking ability (Jaegar and Wagner 2005), option selectivity skill, volatility timing skill (Aragon and Martin 2012), distinctive strategy (Sun, Wang and Zheng 2011), education or work experience (Li, Zhao and Zhang 2011).

Moreover, high-skilled professionals may eventually be attracted to the hedge fund industry due to the regulatory advantage and financial motivations. Evidently, there is an increasing flight of top-performing young mutual fund managers to the hedge fund industry (Kostovetsky 2009). There is also a growing interest in side-by-side management, where a fund manager simultaneously manages mutual funds and hedge funds (Cici, Gibson and Moussawi 2010, Nohel, Wang and Zheng 2010). In a similar vein, Deuskar et al. (2010) analysed a group of mutual fund managers that joined the hedge funds industry. They found that slightly more than half managed hedge funds side-by-side while the rest completely joined the hedge fund industry and was apparent among poor performing managers as well.

However, little is known on the performance of former hedge fund managers who returned to their hedge fund career.

# 4. Hypothesis Development

In the literature review, we discuss both theoretical and empirical findings pointing to the issue of hedge fund performance attributions and its persistence. We continue to adopt the extant literature in developing the hypotheses in this section.

Our primary conjecture is that re-launched hedge fund managers benefit from skills and knowledge from their former experiences. Consistent with prior findings, there is a positive relationship between both sector specific and related industry work experiences in fund management; and performance (Papageorgiou, Parwada and Tan 2011).

Our next supposition is that re-launched managers obtain some beneficial information while they are away from the industry; which drives their return. As hedge fund managers are re-entering the market again, we conjecture that they have strategies or techniques that they are informative about. Consistent with prior literature, hedge funds with confidential positions have higher performances, suggesting that they have private information that are undisclosed (Agarwal et al. 2013, Aragon, Hertzel and Shi 2013).

Moreover, re-launched managers may also have strong motivations to perform for career and reputational concerns[[11]](#footnote-11); and also to gain investors’ trust once again especially if previous funds were closed due to poor performance[[12]](#footnote-12). These have relevance in the principal-agent theory (see Rees 1985). Trust is an indispensable feature in this principal-agent relationship; and is especially relevant for hedge funds since they are well-characterised for their secrecy in investment process (Brown, Goetzmann and Liang 2012).

These lead to our first hypothesis:

H1 = Re-launched hedge funds outperform their prior ones on average.

Moreover, Aggarwal and Jorion (2010) have found that newly established funds and managers outperform in their early years as compared to the more established funds. Nonetheless, they also found that performance tends to deteriorate thereafter. Closely based on their finding, our supposition is that re-launched hedge fund managers have an investment idea that they are able to exploit in their initial years that may dissipate in their later years.

Glode and Green (2011) presents a slightly different view. They argue that the source of superior returns may not be entirely attributable to a fund manager’s intrinsic abilities and skills, but rather, are also attributable fund managers being informative of strategies and techniques that they can expropriate and exploit. While a priori, it is unclear whether manager’s skill comes from an innate ability to process or access the information, our main conjecture is that re-launched managers have private information that generate their superior returns.

This lead to our second hypothesis:

H2 = Re-launched hedge funds outperform in their initial years and deteriorate in their performance during later years.

# 5. Data

## 5.1 Data Description

This study uses data obtained from Lipper Tremont Advisory Shareholder Services (TASS). TASS is a New York-based advisory and information service that maintains a large database of 19,210 global hedge funds over the period from 1977 to 2014. TASS reports each fund’s inception date, performance end date, monthly net-of-fees returns, minimum investments, fees, size, age, investment region and style; and fund manager’s profile. TASS reports two separate databases, ‘live’ and ‘graveyard’ funds. Funds are categorised as graveyard when they stopped reporting and TASS starts maintaining graveyard funds since 1994.

## 5.2 Data Biases

It is important to consider three major types of biases that may occur within the hedge fund dataset. Firstly, voluntary disclosure induces a self-selection bias and the sample of funds may not be representative of the hedge fund universe (Fung and Hsieh 2000). It has been argued that while poor performing funds have little incentive to report, top performing funds are less likely to report as well since they are closed to new investment (Fung and Hsieh 1997b). Empirically, we can assume self-selection bias will not alter our results since the effect is negligible (Agarwal, Fos and Jiang 2013, Baquero, ter Horst and Verbeek 2005).

Secondly, when the sample of funds used is based only on surviving funds, there is a survivorship bias as the returns are naturally biased upwards (Brown et al. 1992, Malkiel and Saha 2005). In this study, we ameliorate survivorship bias by analysing a sample of both live and graveyard funds.

Thirdly, hedge fund data is susceptible to backfill bias. This bias overestimates hedge fund returns as backfilling is naturally done when past performances contributes to positive performance track record of a hedge fund (Fung and Hsieh 2000). The average backfill period is approximately 12 months (Fung and Hsieh 2000) and we adopt the common academic practice by dropping the first 12 months of return data to attenuate this bias (Kosowski, Naik and Teo 2007, Teo 2009).

## 5.3 Sample Selection

We match each fund manager (identified by a unique personal ID) and the funds (identified by a unique product reference) that the same fund manager manages. Then, we identify re-launched managers who have a duration gap from the fund’s inception data and performance end date. We first defined a re-launched fund when there is a duration gap between prior fund(s) and subsequent fund(s) according to the funds that the same manager manages. This narrows down to an initial sample to 357 funds.

To illustrate, suppose a hedge fund manager (personal ID: 100) ended a fund (product reference: 1847) in 31/5/2001 and started a new fund (product reference: 35777) in 1/1/2003. We define this new fund as a re-launched fund. The duration gap is denoted as the difference between the two time periods (i.e. 31/5/2001 and 1/1/2003).

|  |  |  |  |
| --- | --- | --- | --- |
| **Person ID** | **Product Reference** | **Inception Date** | **Performance End Date** |
| 100 | 1847 | 3/2/1997 | 31/5/2001 |
| 100 | 35777 | 1/1/2003 | 31/5/2010 |

Secondly, we exclude funds with less than 24 months of consecutive observations. Thirdly, we refine the duration gap to be at least 6 months and exclude managers with less than 6 months of duration gap. We assume 6 months is a reasonable time gap and also to preserve the sample size in this study. Fourthly, we exclude funds prior to 1994 to ameliorate survivorship bias as data prior to 1994 from TASS excludes graveyard funds. Finally, our fund universe comprises of 177 funds and 65 re-launched managers which spans a period of 20 years from 1994 to 2013.

While the sample of re-launched managers may be a small fraction of the hedge fund universe, we are able to address an important issue regarding the performance of re-launched hedge fund managers globally that to the best of our knowledge, was not studied in existing literature.

# 6. Research Design

To test the hypothesis of whether re-launched funds outperform their prior ones, our variable of interest is the alpha of hedge funds. We model the returns of each hedge fund using the factor model developed by Fung and Hsieh (2001, 2004) as follows:

, (1)

where = 1, … , n funds, is the monthly return on fund in excess of the one-month T-bill return, is the abnormal return of fund , is the S&P 500 return minus the risk-free rate, is the Russell 2000 minus S&P 500 return[[13]](#footnote-13), is the yield spread of the U.S. 10-year Treasury bond, is the change in spread of Moody’s BAA bond, is the bond PTFS, is the currency PTFS, is the commodities PTFS, where PTFS is a primitive trend-following strategy of a lookback straddle.

To ensure the robustness of our results to economic regimes, we control for fixed time effects by taking the difference of and the average of all other hedge funds with returns that goes in parallel with as follows:

, (2)

where .

Then, we use the pooled OLS regression as follows:

(3)

where and is derived using (1) and (2).

1. There is generally no agreed-upon definition of a hedge fund – in a SEC roundtable discussion on hedge funds, 14 possible definitions are considered (SEC 2003). [↑](#footnote-ref-1)
2. 2% management fee plus 20% performance fee. [↑](#footnote-ref-2)
3. The death rate of hedge funds, which is defined as the ratio of all funds exiting a specific database in a given year to the total number of funds at the beginning of the year. [↑](#footnote-ref-3)
4. [↑](#footnote-ref-4)
5. Any individual who owns at least $5 million in investments (*Investment Company Act* of 1940 (U.S.) s 2) [↑](#footnote-ref-5)
6. The minimum return necessary for a fund manager to start collecting incentive fees. The hurdle rate may be a fixed percentage or tied to a benchmark rate such as Libor or the one-year Treasury bill rate plus a spread (AIMA 2015). [↑](#footnote-ref-6)
7. The maximum share value for each investor since his or her investment in the fund. [↑](#footnote-ref-7)
8. A numerical value indicating a manager’s risk-adjusted excess rate of return relative to a benchmark. [↑](#footnote-ref-8)
9. A combination of lookback call option and lookback put option. The owner of a lookback call option has the right to buy the underlying asset at the lowest price over the life of the option. A lookback put option allows the owner to sell at the highest price. [↑](#footnote-ref-9)
10. 663 citations solely in Google Scholar attest to its widespread use. [↑](#footnote-ref-10)
11. A manager’s desire to keep current job or fear of ruining his or her reputation induces the manager to behave in the best interest of investors (see Fama 1980). [↑](#footnote-ref-11)
12. It has been argued that the main reason for fund closure is poor performance (Gregoriou 2002, Malkiel and Saha 2005). [↑](#footnote-ref-12)
13. The original seven-factor model presented in Fung and Hsieh (2001, 2004) contains Wilshire indices, which ceased publication in December 2006. Hsieh (2012) recommends using the Russell 2000 index instead. [↑](#footnote-ref-13)