

Hedge Funds and Unconscious Fantasy*

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Abstract:

We help to explain the rapid growth in aggregate hedge fund assets under management until June 2008 followed by their collapse in terms of the conflicting emotions such investment vehicles evoke. Specifically, we describe how some high-profile hedge funds were transformed in the minds of investors, into objects of fascination and desire, with their unconscious representation dominating their original investment purpose as providers of investment returns less correlated with more traditional asset classes. Based on a psychoanalytic interpretation of financial markets, and dot.com mania in particular, we show how hedge fund investors' search for "phantastic objects" and the associated excitement of being invested in them can become dominant, resulting in risk being ignored.

JEL Classifications: G01, G12, G19, G28

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Hedge Funds and Unconscious Fantasy

Introduction

Hedge fund assets under management grew at the rate of 25% per annum from 1990 to June 2008, peaking at almost \$2 trillion, and with the industry then consisting of no fewer than 10,000 hedge funds and funds of hedge funds (HFR, 2008). In the following six months, assets under management collapsed by almost a third following negative investment returns, associated investor withdrawals, and fund closures.

This paper helps explain the rise and fall in hedge fund assets under management by addressing, among other factors, the unconscious needs and beliefs of market participants. We describe how some high-profile hedge funds were transformed, in the minds of investors, into objects of excitement and desire, with their unconscious representation dominating their original investment purpose. We argue this has had major ramifications across the whole industry. We hypothesize that the fascination with such investment vehicles and associated unrealistic expectations and wishful thinking can be explained in terms of the collective psyche of market participants and their “unconscious fantasies.”¹

Specifically, we describe how hedge funds came to assume a very different meaning in the investor’s unconscious reality to how they are viewed in modern finance theory as providers of investment returns less correlated with more traditional asset classes. Based on a psychoanalytic reading of financial markets, we explain how before the hedge fund “bubble” burst, the excitement of investing in what hedge funds seemed to represent became divorced from the anxiety associated with the potential consequences of taking excessive investment risk. Against this backdrop of collective

euphoria, all such doubts were dismissed or rationalized away (Tuckett, 2009).

However, any such euphoric state is likely to be unsustainable, leading to widespread denial, anger, blame and panic when reality ultimately intrudes. The emotional trajectory experienced by market participants in this process is a common feature of most asset-pricing bubbles (Kindleberger and Aliber, 2005:47-50). We argue that the recent growth and decline of hedge funds followed a similar trajectory. Hedge funds can be easily represented in the minds of market participants as “phantastic objects” i.e. mental representations of something (or someone) which fulfil an individual’s “deepest desires to have exactly what she wants exactly when she wants it” (Tuckett and Taffler, 2008). This is because of the financial innovations that many of them claim to represent, the potential opaqueness of their investment strategies, their often exclusive nature, and the way many of their managers and returns are reported on in the financial media.

In this paper, we draw parallels between hedge funds as phantastic objects and investors’ perceptions of dot.com stocks both during dot.com mania, and after the bubble burst. We suggest many hedge fund investors became emotionally involved with their investments in a similar way, with associated unrealistic expectations and unintended consequences. In particular, we demonstrate the anger and blame felt by investors who have again had to relinquish their unconscious desires, and to acknowledge that hedge funds are, after all, just like any other investment vehicle, playing an appropriate but non-phantastic role in a diversified investment portfolio. Finally, we argue that almost any type of investment has the potential to become phantastic in the investor’s unconscious. It is therefore important to

properly understand the role of emotions and the unconscious in investment decision-making.

Hedge Funds

There is no universally accepted definition of what a hedge fund is. The Alternative Investment Management Association (AIMA) itself stresses their absolute return focus, using a definition based on Ineichen (2003): “A hedge fund constitutes an investment program whereby the managers or partners seek absolute returns by exploiting investment opportunities while protecting principal from potential financial loss.” Similarly, Ackermann, McEnally, and Ravenscraft (1999) define hedge funds as investment vehicles with features including “a largely unregulated organizational structure, flexible investment strategies, relatively sophisticated investors, substantial managerial investment, and strong managerial incentives.”

Essentially, being largely unregulated, hedge funds are able to undertake a wider range of activities than, for example, mutual funds, and are open to a limited number of typically wealthy individual investors or institutions. Investment processes are determined by each fund’s particular strategy and investment approach which may change from time to time. Their investable universe can, in some cases, be viewed as just that – the universe – ranging from conventional equities and bonds to commodities, currencies, and financial instruments etc.

A significant risk associated with investing in hedge funds is the information asymmetry between managers and clients. Akerlof (1970) shows that in certain markets, such as that of second-hand cars or “lemons”, there is an incentive for some sellers to promote poor quality products leading to a reduction in the average quality of goods supplied, since the return for selling high quality products accrues to the entire group rather than to the individual

seller. A similar type of information asymmetry may potentially be observed in the market for hedge funds, since hedge funds’ past performance figures are rarely disclosed to the public, and investors are likely to have difficulty interpreting them due to their complexity. In addition, hedge fund managers are unconstrained, and in some notable cases, reluctant to disclose their investment rationale for proprietary reason or to maintain a “mystique”. This amplifies the risk associated with the underlying information asymmetry, and prevents properly constituted hedge funds and their managers from being recognized as such.

However, hedge funds play an undeniably important role in the management of diversified investment portfolios (Stulz, 2007). Llam (1999) shows both aggressive and conservative investors can improve the risk-adjusted returns of their portfolios by including hedge funds. Modigliani (1999) demonstrates once hedge funds are combined with the S&P 500, the resultant Sharpe ratio is higher in all possible combinations than that of the benchmark itself. Schneeweis, Spurgin, and Karavas (2000) also show the risk-adjusted return of a traditional portfolio can be increased by adding hedge funds and managed futures.

Nevertheless, measuring the performance of hedge funds is difficult. Kosowski, Naik, and Teo (2007) point out, first, how top performers are drawn from a large pool of hedge funds which increases the potential for some managers to do particularly well by chance. Second, hedge fund returns typically are not normally distributed due to their dynamic trading strategies, use of derivatives, and the nature of the markets they invest in. Third, benchmarking hedge fund returns against their peers is difficult and can lead to model misspecification. Fourth, return series are often short, and, finally, hedge fund holdings are highly confidential and rarely available to researchers for performance measurement purposes. Black (2009)

emphasizes that hedge funds are not required by law to report their returns to any single database, nor even to regulators. Fung and Hsieh (2009) report that both poor and top performance figures are particularly unlikely to be submitted to hedge fund databases. Foster and Young (2007) also show that it is extremely difficult for investors to tell “whether a given series of excess returns was generated by superior skill, by mere luck, or by duplicity.”

However, there does appear to be evidence that a significant percentage of hedge fund managers are able to earn superior returns through their investment ability. For example, Ibbotson and Chen (2006) find that even after correcting for such data biases as survivorship and backfill, alphas are significantly positive. In addition, several authors (e.g. Baks, Metrick, and Wachter, 2001; Stambaugh, 2003; Kosowski et al., 2007) demonstrate top hedge fund performance cannot be explained by luck and is persistent at annual horizons. Jagannathan, Malakhov, and Novikov (2006) even show performance persistence spills over into the next three-year period.

On the other hand, authors like Malkiel and Saha (2005) and Gregoriou (2006) argue hedge fund returns may be lower than is commonly supposed. Also, Chan et al. (2006) demonstrate a hedge fund manager may be able to report strong and consistent returns over 96 months but still be at risk of sudden (market-independent) implosion. Similarly, Stulz (2007) comments that “hedge funds may have strategies that yield payoffs similar to those of a company selling earthquake insurance ... [and thus] will have a significant positive alpha - until the quake hits.” Indeed, the lack of consistent results across various studies further confirms the difficulties and biases inherent in the measurement and evaluation of hedge fund performance and the real contribution of hedge fund managers.

Investors and the “Magical” Appeal of Hedge Funds

In this paper, we suggest that the remarkable growth in hedge fund assets under management between 1990 and June 2008, and their subsequent collapse over the following six months, may be explained both by their versatility as investment vehicles, as well as how they were perceived in the minds of investors. On the one hand, hedge funds are viewed as promising higher returns through the often sophisticated and wide range of investment strategies and asset classes available to them, including flexibility in short-selling, and using leverage and derivatives. We suggest this implicit promise of wealth can become a key driver of investors’ fascination with hedge funds. On the other hand, hedge funds tend to have “fat tails” to their return distribution. In this context, Gregoriou (2006:139) points out how the asymmetry and fat tails in hedge fund return distributions can further enhance their appeal to investors: “If the tails are fat, the investor can expect a more thrilling investment ride.” In addition, since hedge funds can be subject to style drift, investors can imagine them to be whatever they want to believe.

Another distinctive feature of hedge funds is that a number of prominent funds are run by enormously wealthy managers celebrated by the financial media. It is a basic human need to always search for champions that can be cherished and identified with. “Star” hedge fund managers, particularly when portrayed in exaggerated and unrealistic ways, can become represented in the minds of market participants as investment gods or gurus, further disconnecting investors from the underlying anxiety about the possibility of loss.

Hedge funds’ exclusivity also contributes to their magical appeal. Being accredited to invest in a high-profile hedge fund represents membership of an exclusive, elite society of rich and sophisticated individuals. Lowenstein

(2000:24) describes the hedge fund mania associated with Long Term Capital Management (LTCM) with the observation that “hedge funds became symbols of the richest and the best.” Investment in hedge funds in the 1990s enjoyed a similar status:

“The real appeal of hedge funds, however, was financial snobbery. Investing with one of these titans meant membership in a discreet, truly exclusive private club. Imagine the cachet that came from standing at a reception in Midtown Manhattan in the '90s and listening to other people discuss their mutual funds, dot-com investments, and stock options, and being able to quietly murmur that your money was invested with Soros” (Farrell, 2002).

Even back in the 1960s bull market, hedge funds were similarly perceived:

“Exclusivity and secrecy were crucial to hedge funds from the first. As with the old pools, partnership in a hedge fund, and particularly in ‘the’ hedge fund, was like membership in a highly desirable club. It certified one’s affluence while attesting to one’s astuteness... The hedge funds of 1965, then were Wall Street’s last bastions of secrecy, mystery, exclusivity and privilege” (Brooks, 1999:144).

The role of the investment environment in the transformation of hedge funds to magical and immensely attractive vehicles must also be highlighted. A psychoanalytic reading of dot.com mania demonstrates that investors are always searching for exceptional returns with no downside (Tuckett and Taffler, 2008). Highly leveraged hedge fund structures became attractive in the post-2000 investment environment of low interest rates and abundant capital (Geithner, 2008). Hence, many investors “split off” the underlying risk from the excitement of the potential to earn extraordinary returns.²

The Theory of the Phantastic Object in the Context of Hedge Funds

The concept of phantasy derives mostly from the writings of Freud (1911), and Klein (1975). In his paper ‘Formulations on the two principles of mental functioning’, Freud defines phantasy as a “wish-fulfilling activity that can arise when an instinctual wish is frustrated”. Klein (1975:290), however, regards phantasy as more central and argues that phantasies are not only the constituents of dreams but of all forms of thought and activity. She suggests the whole of an individual’s psychic life is dominated by phantasies originating from the earliest stages of emotional development:

“Infantile feelings and phantasies leave, as it were, their imprints on the mind, imprints that do not fade away but get stored up, remain active, and exert a continuous and powerful influence on the emotional and intellectual life of the individual.”

The term “object” in psychoanalysis refers to the mental image of something in the real world, i.e., objective reality. As the object points to the image rather than the thing itself, multiple versions of the same object can exist in the minds of different individuals. The phantastic object is thus defined as “a mental representation of something (or someone) which in an imagined scene fulfils the protagonist’s deepest desires to have exactly what she wants exactly when she wants it” (Tuckett and Taffler, 2008). Hence, when discussing phantastic objects, the term “phantasy” suggests the potential of the object for transforming into an exceptionally exciting and desirable mental image. The thrill, and sometimes, euphoria associated with a successful investment may be explained by the unconscious functioning of the phantastic object; be it a winning stock, a top-performing mutual fund, or, as in our case, a celebrated hedge fund.

Individuals are more susceptible to the phantastic object when a particular sense of

reality dominates their thinking. According to Klein (1975) and Bion (1961), people make decisions in one of the two basic oscillating states of mind, the depressive (D) state of mind and the paranoid-schizoid (PS) state of mind. In the D state, we see ourselves and the others more or less as we are, both good and bad. In the PS state of mind, the psychic pain of dealing with undesirable reality is avoided by mentally splitting off the good from the bad.³ The unconscious search for the phantastic object triumphs over “realistic” judgments when a PS state of mind dominates. In such settings, hedge funds can readily transform into investment vehicles that promise, much like Aladdin’s lamp, to fulfil their investors’ deepest unconscious desires. As in the case of dot.com mania, when firms adding a dot.com suffix to their names enjoyed an immediate increase in stock price of around 60% (Cooper, Dimitrov, and Rau, 2001), many investment funds call themselves hedge funds to attract more investors, while their strategies look more like long-only mutual funds (Griffin and Xu, 2009). In addition, there has recently been rapid growth in mutual funds mimicking hedge fund strategies, which, as Agarwal, Boyson, and Naik (2009) show, underperform hedge funds although they outperform traditional mutual funds.

Importantly, once an investor comes to “believe” that a particular hedge fund can earn exceptional returns, he is likely to repress any doubts associated with investing in it. Hence, in the investor’s unconscious search for the phantastic object, the hedge fund’s main purpose may well be hijacked. When the excitement of investing in the phantastic object takes over, the normal capacity to judge risk breaks down, unless sufficiently large losses literally wake the investor up from his reverie.

Information processing takes on a different purpose when a phantastic object is unconsciously believed to exist. The phantastic

object “appears to offer the opportunity to break the rules of usual life and so turn ‘normal’ reality on its head” (Tuckett and Taffler, 2008), which creates the impression that what was previously considered impossible can, in fact, happen after all. In this respect, there are interesting parallels between hedge funds and internet stocks in the late 1990s. Taffler and Tuckett (2005) describe what happened in the dot.com bubble:

“Conventional firm valuation models based on discountable future cash flows and/or earnings broke down not just in the absence of meaningful historic accounting numbers and realistic forecasts but, crucially, because of the unconscious psychic meanings dot.com stocks possessed as phantastic objects.”

Likewise, some hedge funds may be viewed as latter day dot.com stocks with their innovative investment strategies, implicit promise of exceptional returns, and media portrayal of their managers, as changing the rules of business (Taffler and Tuckett, 2005). The anxiety associated with investment risk is thus split off from the excitement, and the underlying reality is similarly suspended. In such settings, market participants essentially become a “basic-assumption group” that share the same strong belief in the phantastic object. Individuals in a basic assumption group do not think for themselves; they rather operate in a particular sense of reality, a PS state of mind, which blocks any attempt to think clearly and independently. By collectively engaging in groupthink (Janis, 1982), basic-assumption group members adopt unconscious defences against anxiety. Their activities, however chaotic, are given a certain cohesion “if they spring from basic assumptions common to all the group” (Bion, 1961:146).

Infatuation with the phantastic object accompanies wishful thinking, and it is important to recognize that any investment in a phantastic object must eventually lead to

disappointment. Hedge fund managers may be driven to take uncalculated risks due to investors' demand for magic in the form of extraordinary returns.⁴ In fact, the real problem may be "not [so much] out-of-control hedge fund managers, but rather overaggressive marketing and overeager investors" (Cramer, 2006).

The psychoanalytically informed theory of the phantastic object can also explain why, despite the level of competition in the market, hedge fund fees (commonly 2% of assets and 20% of profits) remained so high for so long prior to the global financial crisis.⁵ Once hedge funds become phantastic objects in the minds of investors, they and their managers are consequently deemed infallible, and hence, immensely valuable. Just as one would not wish to have one's heart operated on by a surgeon who competes on price, so one is not likely to invest with a cut-price hedge fund manager. Not surprisingly, investors are less willing to pay the same fee levels once the promise of returns is no longer phantastic (Mackintosh, 2009).

When reality finally intrudes, investors feel cheated and the once dominant feeling of desire for the phantastic object changes to anger and blame. The blame emanating from investors is rarely directed towards themselves; instead it is projected outwards at their hedge fund managers, and more generally at hedge funds as an investment class with all their associated elements of marketing, including the media that helped to spread the investment phantasy. Conversely, hedge fund managers tend to blame overeager investors, regulators, rating agencies and the financial system as a whole (Sender and Kirchaessner, 2008). This culture of blame is intertwined with a hatred of reality which, as Bion (1961) points out, destroys the functions of perception such that objective, external reality cannot be appropriately acknowledged. When investors in a PS state of mind are eventually let down, this is inevitably associated with the

avoidance of feelings of guilt and shame and the wish to learn from the experience, which would be the appropriate emotional response in a D state of mind.

Hedge Funds and Their Managers in the Media: Spreading the Phantasy

The exciting depiction of hedge funds in the media as money-making machines and their managers as financial alchemists plays a key role in their transformation into phantastic objects. Through disseminating cover stories which are often "new, complex, always rather vague and appear clever" (Tuckett, 2009), the media can help eliminate any legitimate doubts that investors might initially have about the phantastic object, and thus further spread the phantasy. Furthermore, hedge funds' potential to deliver spectacular performance, as well as the distinctive features of some hedge fund managers, have contributed to a keen interest in the individuals running these investment vehicles. Indeed, the media often treat high-performing and exceptionally rich hedge fund managers as celebrities which, in turn, attracts more investors to hedge funds through unconscious identification and the expectation of earning similar exceptional returns.⁶

Media portrayal of hedge funds in the form of movies and TV broadcasts can further consolidate this phantasy element. Many such programs depict very rich and glamorous investment managers (often of hedge funds) who can virtually get anything or anyone they wish for, conveying a sense of their omnipotence to the audience.⁷ The depiction of hedge funds and the people associated with them in the press involves similar themes. The media coverage of the Noel sisters, the five daughters of Walter Noel, the founder of Fairfield Greenwich Group - one of Madoff's main feeder funds investing \$7.3 billion with him and earning \$500 million in the process (Henriques, 2009) - provides a good example.⁸

Despite the secrecy of many hedge funds, there is often little reticence about the wealth of their managers. According to the annual survey by *Alpha* magazine, the world's 25 highest-earning hedge fund managers in 2008 earned an average \$464 million each, down from the \$892 million apiece of the equivalent but different top 25 managers in 2007. Furthermore, it is not only the exceptional wealth of some hedge fund managers that attracts attention, but also how it is displayed and reported on. Again consider the case of the Noel family:

"The Noels own several mansions, among which are a luxurious apartment in New York and a house in Southampton. In Connecticut they live in Greenwich, a town known as the "richest per capita town in the world"... Heirs of J.P. Morgan and John Rockefeller live there and property there costs between 15 and 30 million dollars" (Stewart, 2002).

Ironically, the personal lifestyles of hedge fund managers may often be more carefully scrutinized than their investment strategies. For example, they are often well represented in the wedding announcements of *The New York Times* (Anderson, 2005). The hedge fund industry's unofficial 2006 Annual Conference, Hedgestock, which took place at a stately home just north of London with the slogan "Peace, Love and Higher Returns" consciously sought to appropriate the trappings of the generation of Woodstock (Timmons, 2006). Similarly, in a 2007 charity fund-raising dinner hosted by Arpad Busson, a high-profile hedge fund manager, Bill Clinton flew in to make a speech, and the celebrity guest list included the likes of popular music icons Madonna and Prince, top fashion designer Valentino, and British actress Liz Hurley (Cadwalladr, 2007):

"Arpad Busson, for example, who manages £5bn through his company EIM, dated Farrah Fawcett [actress] before having two children by Elle Macpherson [model and actress] (they recently parted), while Nat Rothschild, of Atticus Capital, the 46th richest person on this

year's Sunday Times Rich List, has dated Petrina Khashoggi [model], Ivanka Trump [model] and Natalie Portman [actress], and is good friends with Roman Abramovich [the Russian oligarch and owner of Chelsea Football Club]. According to Tatler, Busson is the seventh 'most wanted man at a party', while Rothschild is 'Britain's most eligible bachelor'."

Phrases like "masters of the new universe", "this generation's robber barons", and "Delphic oracles of finance" were often used to describe hedge fund managers before June 2008 (Anderson and Creswell, 2007; Niederhoffer, 1998). Such exaggerated media portrayal of some hedge fund managers as omnipotent and omniscient beings is prototypical of the phantastic object and serves to further dismiss any anxiety related to investing with them. For example, James Simons, the president of Renaissance Technologies, and number one in *Alpha's* list of 25 highest-earning hedge fund managers in 2008, is described in a *Financial Times* article as "the most successful hedge fund manager ever... does just about everything a little differently... a prize-winning mathematician and former code-breaking cryptologist... the king of the quants... spent \$600 million on computers... [has] an army of PhD's ranging from astrophysics to linguistics" (White, 2007). Kenneth Griffin of Citadel Investment Group, placed second in 2006 and fifth in 2007 in the same annual ranking, was similarly praised as "whiz kid, wunderkind, the next Warren Buffet" ever since he began his career in trading (Story, 2009).⁹

Another example, an eight-page *Business Week* cover story describes Philip Falcone, the co-founder of Harbinger Capital Partners who ranked fourth in *Alpha's* list in 2007, as "the Midas of Misery" belonging to a group of vulture investors with "more clout and more imagination... [who] just might kick-start the economy" (Thornton, 2008).¹⁰ A similarly eloquent tone and admiring language is used in

Fortune's nine-page hagiography of Ken Heebner, a widely-acclaimed hedge fund manager:

“Spend some time with [him] and it becomes clear why. His brain is wired differently. His ideas come faster, his focus is more intense, and his ability to sift through massive quantities of information and zero in on what matters is downright spooky... Basically, he's the last of the gunslingers - a go-anywhere manager who can be investing in left-for-dead US value stocks one day and red-hot Brazilian growth stocks the next” (Birger, 2008).

Eulogizing high-performing hedge fund managers in this way only helps to consolidate the investment phantasy. In the case of Heebner, after producing an unmatched record of outperformance, including a gain of 80% in 2007, his main fund (CGM Focus) fell by over 50% in the second half of 2008, and a further 13% in the first half of 2009 (Stein, 2009).

Hedge funds are also marketed to potential investors in a variety of attractive and enticing ways that trigger the unconscious need for belonging to an exclusive group. Within this context, it is not surprising that hedge funds can bear singular names like *Dragonback*, *Eclectica*, *Richland*, *Matador*, *Maverick*, *Helios* (the ancient Greek god of the sun), *Farallon* (radioactive islands) and *Cerberus* (three-headed mythological creature) among others.

Hedge Funds and the Intrusion of Reality

The bursting of financial bubbles is not driven by the emergence of new information, rather by the fact that “what people have always known becomes salient in such a way that it can no longer be ignored” (Tuckett, 2009). Once reality intrudes, a strikingly different series of emotions is triggered, which highlights the prototypical emotional reactions to the intrusion of the real world.

With the unfolding of the credit crisis and the drying up of liquidity in financial markets in 2008, hedge fund returns collapsed, which, together with investor withdrawals, forced many funds out of business. As hedge fund closures and implosions increased, so did the blame-driven accusations against almost all parties involved, partly fuelled by comments from politicians, regulators and investment bankers who held hedge funds accountable for the disruptions witnessed in the financial sector. A strong denial of reality, a universal search for scapegoats, and an abundance of anger and blame was a common thread in the range of reactions by investors, hedge fund managers, regulators, and the public.

Denial is an immediate defence mechanism that allows the individual to “avoid awareness of some painful aspect of reality and so diminish anxiety or other unpleasant affects” (Moore and Fine, 1990:50). Such denials of one's involvement with reality are often intertwined with blame and projection, a process whereby “a personally unacceptable impulse or idea is attributed to the external world” (ibid). When the belief in the existence of the phantastic object is confronted with objective reality, denial can be of the reality itself or of any personal involvement with it.

An abundance of blaming others, in the absence of any self-blame, is commonly observed upon the intrusion of reality. For example, in the US Congress Hearing on hedge funds, George Soros, ranked fourth in 2008 in *Alpha's* list of 25 highest-earning hedge fund managers, blamed “the financial system itself” for the credit crisis (Soros, 2008). John Paulson, ranked first in 2007, and second in 2008 in the same annual ranking, showed no embarrassment in his testimony by claiming his wealth reflected returns to investors (Paulson, 2008).¹¹ Likewise, Philip Falcone emphasized he had tried hard to earn his wealth and had not always been fabulously rich:

“By 1994, I was so ‘financially challenged’ that the power in my apartment was shut off because I could not afford to pay the electricity bill. That experience, as painful as it was, stayed with me over the years... It is important for the committee and the public to know that not everyone who runs a hedge fund was born on 5th Avenue – that is the beauty of America” (Falcone, 2008).

At the same hearing, James Simons blamed the SEC, the Fed, and credit rating agencies in particular, arguing they did not warn early enough of the dangers ahead:

“There is much blame to be shared: the SEC and perhaps the Federal Reserve for taking such a hands-off position... the players all along the chain of creation and distribution of the paper, each of whom should have blown a whistle rather than passing the problem on to the next guy; and finally, and in my opinion the most culpable, the rating agencies, which failed in their duty and allowed sows’ ears to be sold as silk purses” (Simons, 2008).

A study of letters to investors written by hedge fund managers to explain their unsatisfactory performance provides further evidence of blame by revealing common patterns. They usually open with a brief apology, then move swiftly on to blame other market factors, while working on emotions as well as creating a feeling of human warmth and optimism in the process (Kellaway, 2008). Arguably, the abundance of anger and blame expressed in such letters is consistent with what happens when the phantastic object eventually has to confront reality.

The Madoff Fraud: The *Perfect Phantastic Object*

The \$65 million fraud by Bernie Madoff – who did not actually claim to run a hedge fund, but used feeder funds that were mostly hedge funds or funds of hedge funds – clearly illustrates the seductiveness and power of the phantastic object. Firstly, Madoff successfully exploited

investors’ unconscious search for the investment phantasy by showcasing the exclusivity of his funds. Investment with Madoff was by invitation only and considered a great privilege. He would usually emphasize that his funds were closed, which made potential investors even more eager to get in. Investors were “hypnotized by the perceived exclusivity of investing with Madoff and believed that not investing would be foolish” (Arvedlund, 2009:85). Occasionally, Madoff would admit some individuals, claiming “they came from the same world or were related through an uncle of his accountant” (Sender, 2008a). One of Madoff’s closest investors describes how being initially rejected made investors more willing to part with their money:

“In November, I invited a friend and longtime Madoff investor to dinner and literally begged him to get me in. He listened politely, then shook his head slowly. ‘Forget it’, he said. Bernie was closed; Bernie had a multimillion dollar minimum; Bernie didn’t need my money. His discouraging response only made me want Bernie all the more” (Seal, 2009).

Secondly, the language used by Madoff to describe his business and his stated investment strategy (the “split-strike conversion” strategy) further enhanced his phantastic image of an omnipotent fund manager. While there was no detailed explanation of what he was doing, Madoff’s use of such terminology led to plenty of discussion in internet forums and elsewhere about how it worked and how to replicate it (Caldwell, 2009).

Thirdly, Madoff’s extraordinary returns as well as his reputation in the industry and personal attributes allowed him to enjoy a “perceived edge” with both friends and investors. His close friends always had a high opinion of him – one even referring to him as “the most honorable, smart person” – while his investors described him as pleasant and charming (Seal, 2009), and “the benchmark for investors seeking stable returns” (Sender, 2008b). His longtime secretary

thought there was “a mystique about him – the money, the power, the legend” (Seal and Squillari, 2009). All this, together with Madoff’s background and charitable donations, his history of Nasdaq chairmanship, and the SEC’s continued approval of his operations, served as cover-ups that led people to trust Madoff as a fund manager. It was not just Madoff who became a phantastic figure, but also the managers of the main feeder funds who invested heavily with him, and who effectively opened the door for more investors to enjoy the privilege of being invested with Madoff.

Fourthly, the strength of the Madoff phantasy was such that any attempt to disassociate with it became futile. True Madoff believers increasingly referred to him as “the miracle worker” and wished to see him living happily and well as they felt he deserved it (Seal, 2009). Very little effort was made to question Madoff’s investment methods. Even Madoff’s largest investors such as Fairfield Greenwich view themselves equally as victims in his fraud (Fairfield Greenwich Group, 2009), despite having apparently failed to notice red flags or reportedly perform required due diligence (Efrati, 2009). However, Madoff investors could easily have discovered the fraudulent nature of the returns series by performing operational due diligence or quantitative analysis (Gregoriou and Lhabitant, 2008; Bernard and Boyle, 2009; Clauss, Roncalli and Weisang, 2009).

The Madoff case illustrates how belief in the phantastic object can lead to such basic-assumption group pressure that individuals wishing to warn others against the phantasy are repeatedly ignored, or accused of just not “getting it”. Harry Markopolos attempted many times to warn regulators about the potential Ponzi scheme being orchestrated by Madoff, but no one, including the SEC, took appropriate action (Chung, 2009). Likewise, a 2001 article appearing in a hedge fund publication wondered

how Madoff’s strategy worked by raising some key concerns:

“Skeptics who express a mixture of amazement, fascination and curiosity about the program wonder, first, about the relative complete lack of volatility in the reported monthly returns. But among other things, they also marvel at the seemingly astonishing ability to time the market and move to cash in the underlying securities before market conditions turn negative; and the related ability to buy and sell the underlying stocks without noticeably affecting the market” (Ocrant, 2001).

However, the desirability of investing with Madoff was so strong that any signs of doubt were inevitably repressed. Only when reality intruded on December 11 2008, did his investors recognize how they had been caught up in phantasy.¹²

Discussion

Investment is always associated with excitement (Taffler and Tuckett, 2010), and the search for excitement is a universal human need. In volatile markets, when hedge fund strategies are considered more effective, this excitement is heightened. On this basis, it is not only the intrinsic nature of hedge funds as alternative investment vehicles that explains the apparent investor fascination with them, but also the excitement generated by investing in these vehicles. Hedge funds’ exclusivity and perceived secrecy, the wide dispersion and skew in their investment returns, and the often exaggerated media portrayal of their managers and their performance also contribute to such sentiments. Hedge funds as phantastic objects can therefore become a source of emotional attachment for all investors. Not only wealthy individual investors, but also prudent and sophisticated institutional investors can be susceptible to the unconscious lure of the phantastic object and basic-assumption group phantasy, as the long list of victims in the

Madoff fraud demonstrates. There is thus a need for all investors to be protected against their unconscious search for phantastic objects.

The implicit “caveat emptor” philosophy adopted by some hedge funds where their investors are deemed responsible for the consequences of investing in them, even if not appropriate for them, is problematic. What is needed instead is the establishment of “suitability regulations” that correlate “investor suitability with hedge fund risk exposure by implementing investor suitability standards” (Kaal, 2009). Well-enforced suitability regulations in this spirit may appear paternalistic, but, if appropriately designed, can eventually serve to protect investors from themselves and others (Statman, 2009). By tagging risky hedge funds with sufficient “health warnings” in this manner, investors may be less likely to get carried away in phantasy.

Currently, investing in hedge funds in the US is restricted to “accredited investors” who are defined as such under Regulation D of the Federal Securities Law on the basis of their net worth and annual income.¹³ This legislation, which has not been revised since 1933, wrongly assumes that wealth is a fundamental proxy for investors’ knowledge, sophistication, and understanding of underlying investment risks. Instead, hedge fund investors’ basic understanding of such risks needs to be evaluated before they are permitted to invest in funds whose business methods are sometimes difficult to grasp even by financial experts. Mandatory transparent disclosure of investment risks, which seems anathema to many hedge funds, would therefore be insufficient. As Statman (2009) points out, mandatory disclosure on its own might keep most of us “economically healthy” most of the time, but what is needed is “the economic equivalent of mandatory immunization to prevent the carelessness of some from infecting us all.”

Hedge fund administrators are particularly susceptible to moral hazard, having the ability and, in principle, the incentive, to overvalue their portfolios, and avoid reporting losses to attract and retain investors (Pool and Bollen, 2009). Studying a comprehensive sample of hedge fund due diligence reports, Brown et al. (2009) show that hedge funds frequently misrepresent past legal and regulatory problems. However the costs of commissioning such reports are inhibitive for smaller investors. In an environment of information asymmetry, commitment to appropriate ethical guidelines is essential. The CFA Institute Code of Ethics and Standards of Professional Conduct is particularly relevant in this regard, stressing, as it does, that “members and candidates must not knowingly make any misrepresentations relating to investment analysis, recommendations, actions, or other professional activities.”

In the post-Madoff era, it is clear that even the most respected firms “should not get a pass on appropriate checks and balances and investors should not have to tolerate manager silence and obfuscation” (CFA, 2008). Had there been stricter regulations in force governing professional conduct in the hedge fund industry, Madoff, for example, could not have so easily orchestrated a fraud of such dramatic proportions. However, it is also important not to forget that the regulators as humans are, in theory, susceptible to the same range of phantasies as investors. Soros (2008) claims that regulators base their decisions “on a distorted view of reality just as much as market participants, perhaps even more so because regulators are not only human but also bureaucratic and subject to political influences.” The SEC’s inability to detect the Madoff fraud is plausible evidence in this regard. Langevoort (2009) describes how journalists and authors have searched for popular sense-making narratives to explain this inability, and thereby resorted to simple hero-villain characterizations

while failing to capture the more complex underlying reality.

It is, however, important to observe that the transformation of investment vehicles into phantastic objects is not exclusive to hedge funds. In fact, risks posed by phantastic objects go beyond financial markets. All technological innovations, whether of a financial nature or not, can become phantastic as they run the risk of “temporarily exceeding our ability to use those technologies wisely” (Lo, 2008). Tuckett and Taffler (2008) point out how:

“Whether it was South Sea or Internet stock, tulip bulbs, railways, joint-stock companies in the 1920s, or junk bonds in the 1980s, in each case there was patchy excitement about an innovation leading to growing excitement, leading to manic or euphoric excitement, then turning to panic and finally resulting in blame.”

We emphasize that most hedge funds and funds of hedge funds are properly constituted investment vehicles with appropriate risk controls and exercising proper due diligence. Hedge funds also have an important role in diversified investment portfolios in line with finance theory and research evidence. However, the excitement, wishful thinking, and idealization which is part of the transformation of hedge funds or any other investment vehicles into phantastic objects, accompanied by a lack of prudential regulation, inevitably leads investors, however sophisticated, towards splitting off the associated risk and anxiety with undesirable consequences for all parties involved.

Notes

¹ Unconscious fantasy is hereinafter referred to as “phantasy”, in order to differentiate it from fantasies in the vernacular sense of consciously constructed daydreams or wishful thinking (Moore and Fine, 1990:74-76).

² “Splitting off” is the mental process that separates different experiences thereby avoiding anxieties that accompany their synthesis (Moore and Fine, 1990:183-184).

³ “A D state involves giving up the feeling that one is all-powerful and all-knowing... feeling a certain amount of regret about the consequences of past actions, and a potential anticipatory feeling of depressive anxiety or guilt when contemplating potentially repeating past actions which led to failure or suffering. In a PS state, all such feelings are evaded by evacuating them from awareness” (Tuckett and Taffler, 2008).

⁴ For example, Chincarini (2008) shows how traders of Amaranth, one of the largest hedge fund failures in history with \$6 billion total loss in around a week, continued to engage in highly risky trades by splitting off the risk of market conditions reversing sharply because of the pressures to earn exceptional returns.

⁵ French (2008) shows that between 2000 and 2007, the typical investor in US equity-related hedge fund paid an annual combined fee of 3.7% of assets under management and 5.5% in fund-of-hedge funds.

⁶ It seems that even Congress members are not immune from viewing top-performing hedge fund managers in a similar way, as the respectful, gentle, and soft questions asked during the House of Representatives “Hearing on Hedge Funds and Financial Markets” on Nov 13 2008 imply. Hearing transcripts are available at <http://oversight.house.gov/story.asp?ID=2271>.

⁷ Interestingly, this character is often single and sought after throughout the story. Some examples include high-grossing movies like *Wall Street*, *Pretty Woman*, *Bonfire of the Vanities*, and TV shows like *Dirty Sexy Money*, *Bull*, *Cashmere Mafia*, and *Insanely Rich*.

⁸ With three of their husbands being partners in Fairfield and another running a hedge fund of his own, they were showcased in newspaper and magazine articles with glossy photographs as the

perfect girls who happen to be “well educated [Harvard, Yale, Brown, Georgetown] and well married, and raising a pack of well-behaved, multi-lingual children...” (Stewart, 2002).

⁹ While Simon’s flagship Medallion fund made a phenomenal 80% return (160% before fees) in 2008, it has been closed since 2002 to outsiders who can only invest in his two other funds, both of which lost money in 2008 (Zuckerman, Strasburg, and Lattman, 2009). As for Griffin, he lost \$2 billion in 2008 and so dropped out of *Alpha’s* list of 25 highest-earning hedge fund managers in the same year.

¹⁰ Following heavy investment losses, Harbinger Capital Partners was managing only \$8 billion in September 2009, down 70% from its peak of \$26 billion a year earlier (*Forbes*, 2009). However, Falcone was still ranked as number 158 in the *Forbes* list of 400 Richest Americans in 2009 with wealth of \$2 billion.

¹¹ Paulson is also ranked number 33 in *Forbes* list of 400 Richest Americans in 2009, with wealth of \$6.8 billion that includes \$3.5 billion earned in 2007 through successfully betting against US housing market.

¹² The unconscious irony of Madoff’s favourite sculpture, the 4ft rubber screw behind his desk where he met investors (Seal and Squillari, 2009), can be viewed in this context.

¹³ According to the Federal Securities Law (Rule 501 of Regulation D), an individual accredited investor is defined as any natural person whose individual net worth, or joint net worth with that person’s spouse, at the time of purchase exceeds \$1,000,000; or any natural person who has an individual income in excess of \$200,000, or joint income with that person’s spouse in excess of \$300,000, in each of the two most recent years and has a reasonable expectation of reaching the same income level in the current year.

References

Ackermann, C., McEnally, R., Ravenscraft, D., 1999. “The Performance of Hedge Funds: Risk, Return and Incentives.” *The Journal of Finance*, vol. LIV, no. 3.

Agarwal, V., Boyson, N, M., Naik, N, Y., 2009. “Hedge Funds for Retail Investors? An Examination of Hedged

Mutual Funds.” *Journal of Financial and Quantitative Analysis*, vol. 44, no. 2 (April):273-305.

Akerlof, G., 1970. “The Market for ‘Lemons’: Quality Uncertainty and Market Mechanism.” *The Quarterly Journal of Economics*, vol. 84, no. 3 (August):488-500.

Anderson, J. 2005. “If I Only Had a Hedge Fund.” *New York Times* (March 27).

Anderson, J., Creswell, J. 2007. “Hedge Fund Managers Leading in Race for Riches.” *New York Times* (April 23).

Arvedlund, E., 2009. *Madoff, The Man Who Stole \$65 Billion*. London: Penguin Books.

Baks, K., Metrick, A., Wachter, J., 2001. “Should Investors Avoid All Actively Managed Mutual Funds? A Study in Bayesian Performance Evaluation.” *Journal of Finance*, 56: 45-85.

Bernard, C., Boyle, P. 2009. “Mr. Madoff’s Amazing Returns: An Analysis of The Split-strike Conversion Strategy.” Available at SSRN: <http://ssrn.com/abstract=1371320>.

Bion, W.R. 1961. *Experiences in Groups*. New York: Basic Books.

Birger, J. 2008. “America’s Hottest Investor.” *Fortune* (May 27).

Black, K. H., 2009. “Investing in Hedge Funds: A Survey.” *The Research Foundation of CFA Institute Literature Review*, (April).

Brooks, J., 1999. *The Go-Go Years: The Drama and Crashing Finale of Wall Street’s Bullish 60s*. Wiley Investment Classics.

Brown, S., J., Goetzmann, W., N., Liang, B., Schwatz, C., 2009. “Trust and delegation.” Available at SSRN: <http://ssrn.com/abstract=1456414>.

Cadwalladr, C. 2007. “Close to the Hedge”, *The Observer* (July 29).

Caldwell, C. 2009. “Bernie Madoff’s Life of Make-Believe.” *Financial Times* (March 13).

CFA Institute Press Release, 2008. “Madoff Scandal Reinforces Need for Hedge Fund Ethics Code.” available at www.cfainstitute.org/aboutus/press/release/08releases/20081218_01.html.

Chan, N., Getmansky, M., Haas, S., Lo, A., 2006. “Systematic Risk and Hedge Funds”, In *The Risks of*

Financial Institutions, ed. Mark Carey and Rene M. Stulz, 235-330. Chicago: University of Chicago Press.

Chincarini, L., B., 2008. "A Case Study on Risk Management: Lessons from the Collapse of Amaranth Advisors L.L.C." *Journal of Applied Finance*, vol. 18, no. 1.

Chung, J., 2009. "SEC's Failures on Madoff Highlighted." *Financial Times* (September 3).

Clauss, P., Roncalli, T., Weisang, G., 2009. "Risk Management Lessons from Madoff Fraud", Available at SSRN: <http://ssrn.com/abstract=1358086>.

Cooper M., J., Dimitrov, O., Rau, P., R., 2001. "A Rose.com by Any Other Name." *Journal of Finance*, 56(6):2371-88.

Cramer, J. J. 2006. "After Amaranth", *New York Magazine* (October 2).

Efrati, A. 2009. "Fairfield Hit with Lawsuit Over Madoff." *Wall Street Journal* (May 19).

Fairfield Greenwich Group, 2009. "Fairfield Greenwich Group Rejects Massachusetts Accusations." available at www.fggus.com, accessed April 29.

Falcone, P., A. 2008. Statement before the US House Committee on Oversight and Government Reform, November 13.

Farrell, C. 2002. "Before You Jump into a Hedge Fund." *Business Week* (May 17).

Forbes List of 400 Richest Americans in 2009 (Sep 30), available at http://www.forbes.com/2009/09/30/forbes-400-gates-buffett-wealth-rich-list-09_land.html.

Foster, D. P., Young, H. P., 2007. "The Hedge Fund Game: Incentives, Excess Returns, and Piggy-backing.", *University of Oxford Department of Economics Working Paper #378*.

Freud, S., 1911. "Formulations Regarding the Two Principles of Mental Functioning." *The Standard Edition of The Complete Psychological Works of Sigmund Freud*, 12: 213-26. London: Hogarth.

French, K. R., 2008. "Presidential Address: The Cost of Active Trading." *Journal of Finance*, vol. 63, no. 4. :1537-1573.

Fung, W., Hsieh, D., 2009. "Measurement Biases in Hedge Fund Performance Data: an Update." *Financial Analysts Journal*, vol. 65, no. 3.

Geithner, T. F. 2008. "Systemic Risk and Financial Markets." *Testimony before the House Committee on Financial Services*, July 24.

Gregoriou, G., 2006. *Funds of Hedge Funds: Performance, Assessment, Diversification, and Statistical Properties*, Butterworth-Heinemann.

Gregoriou, G., Lhabitant, F., 2008. "Madoff: A Riot of Red Flags." Available at SSRN: <http://ssrn.com/abstract=1335639>.

Griffin, J., Xu, J., 2009. "How Smart Are the Smart Guys? A Unique View from Hedge Fund Stock Holdings." *The Review of Financial Studies*, vol. 22, no. 7.

Hedge Fund Research, 2008. *Year-end Report*, available at www.hedgefundresearch.com.

Henriques, D. B. 2009. "Trustee Sues Hedge Funds Over Losses to Madoff." *New York Times* (May 18).

Ibbotson R.G., Chen, P., 2006. "Sources of Hedge Fund Returns: Alphas, Betas and Costs." *Yale ICF Working Paper no. 05-17*, Yale School of Management.

Ineichen, A. M., 2003. *Absolute Returns – Risk and Opportunities of Hedge Fund Investing*. New York: John Wiley & Sons.

Jagannathan, R., Malakhov, A., Novikov, D., 2006. "Do Hot Hands Persist Among Hedge Fund Managers? An Empirical Evaluation." *National Bureau of Economic Research Working Paper W12015*.

Janis, I. L., 1982. *Groupthink*. 2nd ed. Boston, MA: Houghton Mifflin.

Kaal, W. 2009. "Hedge Fund Valuation - Retailization, Regulation and Investor Suitability", *Forthcoming 28 Annual Review Banking & Finance*. Abstract available at <http://ssrn.com/abstract=1428387>.

Kellaway, L. 2008. "Go Short on Letters to Investors." *Financial Times* (November 2).

Klein, M. 1975. *Love, Guilt and Reparation, and Other Works: 1921-1945*, London: Karnac Books.

Kindleberger, C. P., Aliber, R. Z., 2005. *Manias, Panics, and Crashes*. 5th ed. New York: Palgrave Macmillan.

Kosowski, R., Naik N. Y., Teo, M., 2007. "Do Hedge Funds Deliver Alpha? A Bayesian and Bootstrap Analysis." *Journal of Financial Economics*, vol. 84, issue 1:229-264.

Langevoort, D. C., 2009. "The SEC and the Madoff Scandal: Three Narratives in Search of a Story." *Georgetown Law Faculty Working Papers*, available at SSRN: <http://ssrn.com/abstract=1475433>

- Llam, R. M., 1999. "Portfolios of Alternative Assets: Why not 100% Hedge Funds?" *The Journal of Investing*, vol. 8, no. 4:87-97.
- Lo, A. 2008. *Statement before the US House Committee on Oversight and Government Reform*, November 13.
- Lowenstein, R., 2000. *When Genius Failed: the Rise and Fall of Long-Term Capital Management*, Random House.
- Mackintosh, J. 2009. "Hedge Fund Investors Have a Great Chance to Cut Fees." *Financial Times* (February 2).
- Malkiel B. G., Saha, A., 2005. "Hedge Funds: Risk and Return." *Financial Analysts Journal*, vol. 61, no. 6:80-88.
- Modigliani, L., 1999. "Quantitative Aspects of Analyzing Risk – Are Hedge Funds Worth It?" in: Lake, R. A. (ed.): *Evaluating and Implementing Hedge Fund Strategies*, 2nd ed., London, p. 326-329.
- Moore, B., E., Fine, B., D. 1990. *Psychoanalytic Terms and Concepts*. The American Psychoanalytic Association.
- Niederhoffer, V. 1998. *The Education of a Speculator*. John Wiley and Sons.
- Ocrant, M., 2001. "Madoff Tops Charts; Skeptics Ask How." *MAR/Hedge (RIP)*, no. 89, May.
- Paulson, J. 2008. *Statement before the US House Committee on Oversight and Government Reform*, November 13.
- Pool, V. K., Bollen, N. P. B. 2009. "Do Hedge Fund Managers Misreport Returns? Evidence from the Pooled Distribution." *Journal of Finance*, vol. 64: Issue 5 (October).
- Schneeweis, T., Spurgin, R., Karavas, V., 2000. "Alternative Investments in the Institutional Portfolio." *Alternative Investment Management Association (AIMA)*.
- Seal, M. 2009. "Madoff's world", *Vanity Fair* (April).
- Seal, M., Squillari, E. 2009. "Hello, Madoff!", *Vanity Fair* (June).
- Sender, H. 2008a. "Members of the 'Club' Who Won the Allegiance of Colleagues", *Financial Times* (December 13).
- Sender, H. 2008b. "Madoff Had Perceived Edge in the Markets", *Financial Times* (December 22).
- Sender, H., Kirchgaessner, S. 2008. "Top Hedge Fund Chiefs Blame the System for Crisis." *Financial Times* (November 14).
- Simons, J. 2008. *Statement before the US House Committee on Oversight and Government Reform*, November 13.
- Soros, G. 2008. *Statement before the US House Committee on Oversight and Government Reform*, November 13.
- Stambaugh, R., 2003. "Inference About Survivors", Wharton School, *University of Pennsylvania Working Paper*.
- Statmen, M., 2009. "Regulating Financial Markets: Protecting Us from Ourselves and Others", *Financial Analysts Journal*, vol. 65, no. 3: 22-31.
- Stein, C. 2009. "Heebner Slumps for Second Year on Losses by Insurers, Wal-Mart", *Bloomberg.com* (July 13).
- Stewart, K. 2002. "Golden in Greenwich", *Vanity Fair* (October).
- Story, L. 2009. "Hedge Funds Unhinged", *New York Times* (January 18).
- Stulz, R., 2007. "Hedge Funds: Past, Present, and Future", *Journal of Economic Perspectives*, vol. 21, no. 2:175-194.
- Taffler, R., J., Tuckett, D., 2005. "A Psychoanalytic Interpretation of Dot.com Stock Valuations", Available at SSRN: <http://ssrn.com/abstract=67663>.
- Taffler, R., J., Tuckett, D., "Emotional Finance: the Role of the Unconscious in Financial Decisions", in Baker, K. H., Nofsinger, J. R. (2010). *Behavioral Finance*. eds. John Wiley & Sons Inc (forthcoming) Chapter 5.
- Thornton, E. 2008. "The Midas of Misery", *Business Week* (April 24).
- Timmons, H. 2006. "Peace, Love and Hedge Funds", *International Herald Tribune* (June 9).
- Tuckett, D., 2009. "Addressing the Psychology of Financial Markets", *The Institute for Public Policy Research Working Paper*, available at www.ippr.org/tomorrowscapitalism.
- Tuckett, D., Taffler, R., J., 2008 "Phantastic Objects and the Financial Market's Sense of Reality: A Psychoanalytic Contribution to the Understanding of Stock Market Instability", *International Journal of Psychoanalysis*, 89:389-412.
- White, B. 2007. "The Billion Dollar Boffin", *Financial Times* (April 27).
- Zuckerman, G., Strasburg, J., Lattman, P. 2009. "Renaissance Waives Fees on Fund That Gave Up 12%." *Wall Street Journal* (January 5).