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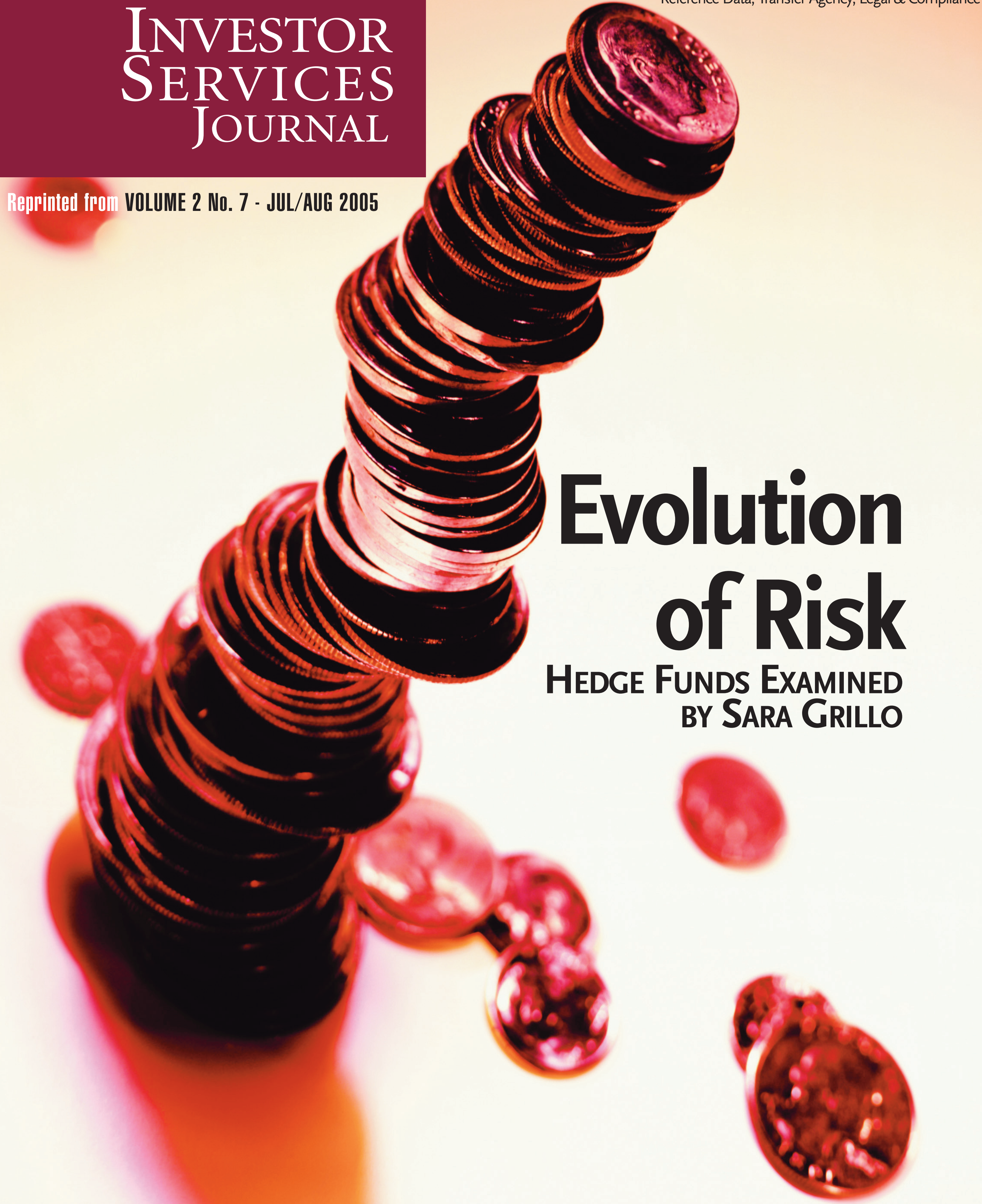

Evolution of Risk

HEDGE FUNDS EXAMINED

BY SARA GRILLO

Evolution of risk in the hedge fund industry.

by Sara Grillo

Sara Grillo

Since the first funds appeared in 1949 to the advent of hedge fund giant George Soros in 1969, the boom of the late 1990s and the bust of the early 2000s, few sectors have seen more change than the hedge fund industry. With tenfold growth over the last decade, hedge funds are becoming more than just an investment vehicle for high net worth spending money. Attitudes towards hedge fund risk are poised to change, and the evolution will have positive results for the industry. This paper will examine proposed improvements in risk measurement, as well as the consequences of risk on portfolio performance. We predict that regulatory scrutiny will be the catalyst that forces risk levels down and ultimately drives the industry toward a period of maturity. Within this more stable environment, inflows from retail and institutional investors will surge, leading to the emergence of hedge funds as a more popular investment choice amongst the investing public.

Strong Demand

The retailisation of the hedge fund industry has created a preponderance of SEC-registered 1940 Act vehicles. Many advisors are hoping to market their funds with lower investment minimums by couching the offering within a 1940 Act open-end or closed-end mutual fund vehicle. This would allow investment minimums to hover as low as $25,000, which increases distribution potential. This structural innovation is a sign of increased demand from the investing public. The most important driver of growth in the hedge fund industry will be the throttling demand from institutional investors such as pension funds and endowments. Of the $52 trillion of financial assets that exist worldwide, $25 trillion of that is institutional money. The burst tech bubble has left many defined benefit plans facing lacklustre equity returns and bulging pension benefit obligations. They look to hedge funds to come to the rescue with potentially stable returns hedged from market downturns. Experts project that institutional cash flow to the industry will increase from $60 bn to $300 bn within five years.

While hedge funds may seem fortuitously poised to capture surging institutional demand, the challenge is risk. Most pension funds do not trust or understand the hedge fund industry. In a 2003 survey of US plan sponsors conducted by Fidelity Investments, 56 per cent of plan sponsors that invest in alternative investments say they "do not understand the risks they are taking." Hedge fund and pensions are at odds in other ways; hedge funds often fail to meet a fiduciary's need for complete transparency, low management fees, seamless client service, and strong operational and risk controls. The need for transparent and understandable risk monitoring is a call that hedge funds must hear and respond to.

The Risk Obstacle

Events such as the collapse of Long Term Capital Management and the Asian currency crisis in the late 1990's have cast doubt on the integrity of the industry as a whole. The true performance of hedge funds is often obscured by the flaws in the statistical parameters that define it. As a result, due diligence in the hedge fund industry is highly qualitative and even the most trustworthy of parameters can be gamed. The articulation of risk in this dynamic industry is a virtual Christmas tree of confounding factors: lack of legal constraint, suboptimal performance reporting standards, and inadequate risk measures.

Hedge fund managers are free from many of the legal constraints that regulate other vehicles such as 1940 Act registered mutual funds. Prospectus requirements that would protect a mutual fund investor are not present, creating a virtual "black box" of investment policy. The investor must rely completely on the discretion of the manager to decide how the underlying investment schemes are weighted, or the degree of leverage. Moreover, the lack of a prospectus-defined investment allocation erodes the predictive value of any historical risk measure.

> We predict that regulatory scrutiny will be the catalyst that forces risk levels down and ultimately drives the industry toward a period of maturity.

Manager opinion can present a large risk as diversification may be compromised and allocations can change freely. The individual nature of these investments obscures trends and leads to low fund correlations across and even within categories.

Lack of performance standards detracts from reporting credibility. Indices are replete with survivorship and selection bias. Many times only the performance of surviving hedge funds is recorded. The indices that do exist, CSFB Tremont for example, can only offer data from managers who have opted to report. The Darwinian result is a possible upward bias in data measurement that could potentially skew investment performance. Industry experts hypothesise that this bias could be as much as 3 per cent annually, which is significantly misleading to a retail investor. Additionally, the surge of fund launches in the early 2000s has created a plethora of young funds, many with track records of less than four years. The performance of these funds may be skewed by lack of persistent market conditions over the period. There is a need for industry standards to eliminate these biases.

Risk metrics themselves fail to capture the true nuances of these funds and bias can plague even correctly calculated measurements. Multicollinearity may undermine diversification, particularly in a Fund of Funds where the underlying managers may be subject to common risk factors. Traditional linear measures such as VaR misstate or fail to capture this risk at all. Leverage causes non-linear exposure to risk factors, which distorts risk statistics. Moreover, intentional manipulation can occur. For example, hedge funds have figured out how to use derivatives to optimise the Sharpe Ratio. Effectively truncating the right tail of their return distribution and shifting this return to worse performing periods, they can smooth volatility while keeping total return constant. Quantitative measures such as stress testing, Monte

Carlo analysis, and VaR suffer equally as deleterious pitfalls.

Striving for Normalcy

Industry experts have recommended several risk parameters that may capture risk more accurately. One such metric, the Bernardo-Ledoit Gain-Loss Ratio, is "the ratio of the expectation of the positive portion of the returns divided by the expectation of the negative portion." This measure would be more predictive than the Sharpe Ratio because of its forward-looking nature. Others suggest weighting funds by beta, which forms a "BAVAR", or Beta and Volatility Adjusted Returns ratio. This enables "a fund that has a lower return but is uncorrelated to the market [to] be appropriately compared with a fund that achieves a higher return but is highly correlated with the market." Academics have also proposed a Conditional VaR measurement, which would express the likelihood that an expected loss would occur in an amount greater than the VaR. We should perhaps consider estimating a fund's risk by analysing its style. By evaluating the historical responses of certain style categories to common risk factors, perhaps we can reach a more accurate measure of the true risks associated with each style. We may adjust the positive bias present in flawed index data by perhaps restating index values with a 2 to 3 per cent haircut. These models would elucidate the true uncertainties of particular hedge fund investments, which would improve confidence in the asset class.

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To this end, the preponderance of confounding information in this industry has prompted increased oversight from industry watchdogs. As of October 26, 2004, the SEC has required any hedge fund with more than 14 clients to register with the SEC on a look-through basis. Funds must be in accordance with applicable requirements by February 1, 2006. Perhaps implementing a universal set of reporting metrics is a next step that regulators should take. The SEC could possibly carve out a recognised alternative investment regulation authority, or implement a standard multi-factor system for evaluating hedge fund return and risk. To take a step further, perhaps hedge funds should be held to the same prospectus requirements that mutual funds face, or even require funds to staff a dedicated risk officer which must report to an investment committee.

Many academics believe that hedge fund returns are not predictable, and that the only persistent factor in performance history is risk itself. Research conducted by Martin Herzberg and Maim Mozes articulates the notion that less risky funds persistently are more likely to outperform riskier ones in the long term. Riskier managers are likely to take large directional "bets" which may crash when the market trends reverse. Less risky funds base decisions on fundamental skill and are less correlated with markets. The role of high risk funds, Herzberg and Mozes believe, should be to diversify a portfolio rather than act as the main source of return. Aside from investment style, Herzberg and Mozes cite the other factors that affect returns such as the fund size, growth in assets under management, and length of investment history. They note that funds with shorter track records tend to exhibit higher returns than ones with longer track records. They identify the reasons to be their more experimental style, lack of controls, lack of auditing, and self-selection. Herzberg and Mozes hypothesise that funds with lower levels of assets under management tend to outperform, but this tendency fades as assets increase. Additional assets are placed in cash or must be placed with secondary managers, dragging down alpha.

Inevitable Collapse in the Long Term

Herzberg and Mozes' research would imply that risk and return levels in the hedge fund industry are headed for mean reversion as regulators catch on to hedge fund shenanigans. As the SEC requires hedge fund registration by February 2006, data vendors will be exposed to more information which they will sell to the investing public. As reporting becomes more standardised, the value of being a younger or smaller fund will erode. Informational inefficiencies will be harder to identify and exploit. We may predict that the value of size and age factors will erode, and the level of risk will emerge as the dominant factor in determining performance. Consequently, skill-focused managers will persist over bet takers, driving down volatility levels. Volatility will decrease, and the industry will segregate into broad style categories, much as the mutual fund industry has done.

This reversion to mean standards will only occur after an equilibrium point is reached. Growth in international demand will occur from privatisation of pension schemes in Europe and Asia.
Exposure to more trustworthy data will lead retail investors to feel more confident investing in hedge funds. As institutional and retail investment surges, new funds will launch. New players will enter the foray until the industry arrives at a saturation level where the capital supply is exhausted.

Market efficiency will result, with profits levelling off, eventually causing firms to merge and the weaker players to exit. The industry will bifurcate into smaller niche funds and large investment houses. This will be the ultimate maturity level at which the asset class will persist in the long term.

Conclusion

The show is not over yet. In fact, it is just beginning. As attitudes towards risk evolve, there is still plenty more room for the industry to grow. Although industry scandals have left investors reeling, scepticism will fade as industry regulation will increase transparency. Increased scrutiny by industry watchdogs will lead to the normalisation of risk and return, which will ultimately decrease the level of hedge fund volatility. As volatility levels normalise, hedge funds will become more popular with retail investors and pension funds. This surge in demand will propel the industry through its lifecycle until it reaches its ultimate maturation level. Regulatory developments and their effect on risk will be the catalyst that leads to the emergence of hedge funds as a prominent investment option amongst the investing public at large.

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References

- Bank of New York and Casey, Quirk, & Acito LLC. "Institutional Demand for Hedge Funds: New Opportunities and New Standards." September 2004.
- Bausano, Barry. "Hedge Fund Industry Outlook and Developments." Deutsche Bank AG. Talk given at NYU Stern School of Business, March 1, 2004.
- Herzberg, Martin M. and Mozes, Haim A. "The Persistence of Hedge Fund Risk: Evidence and Implications for Investors." The Journal of Alternative Investments, Fall 2003. vol. 6, no. 2 (Fall 2003): 22–42.
- Ruffel, Charles. "Why Hedge Funds Aren't Ready for US Pension Funds," Plan Sponsor Magazine, March 2004. Volume 11, Number 12.
- Till, Hilary. "Difficulties of Using Traditional Performance Measures When Applied To Hedge Funds: Risk and Transparency in the Hedge Fund Community." Premia Risk Consultancy, Inc. April 23, 2003. Obtained through FAM Global Investments website: www.famglobal.com

We at Rochdale Investment Management congratulate our colleague Sara Grillo on her prestigious award in the *Investor Services Journal* Essay Competition. Ms. Grillo is an integral member of the team of investment professionals conducting due diligence for Rochdale's alternative investment offerings.

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