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THE HEDGE FUND INDUSTRY SINCE THE GLOBAL ECONOMIC CRISIS OF 2007-2009. HAVE GLOBAL HEDGE FUNDS *PUT THEIR MONEY WHERE THEIR MOUTH IS*?

Abstract: The hedge fund industry represents a significant and viable alternative for mainstream investment business *clientèle*, as well as a growing number of sophisticated high net worth individuals. The hedge fund *raison d'être* has been relative independence of other (more traditional) asset classes and competitive return/risk characteristics. Although the global hedge fund community is still reeling from the turmoil of 2007-2009, it is not premature for a preliminary assessment of hedge funds' performance during and post the recent global financial crisis. Early indications offer a mixed perspective. On the one hand, the hedge fund community as a whole showed considerable resilience to the global financial turmoil, on the other – its risk adjusted value creation success has been rather mediocre.

Keywords: alternative asset management, hedge fund performance and efficiency, global financial crisis of 2007-2009.

1. Hedge funds as an alternative asset manager

The notion of alternative assets has emerged amid investors' quest for effective portfolio diversification: unachievable using traditional asset classes (due to their interdependence). First off, it is helpful to systematize the alternative asset management sector which has grown to encompass several types of investment strategies. According to the Alternative Investment Management Association (AIMA 2010), the category of non-traditional instruments includes the following subsets:

– arbitrage vehicles,
– private equity/venture capital,
– commodities,
– financial derivatives and their combinations (structured finance),
– real estate,
– other assets whose returns exhibit low correlation with the stock and bond markets, cf. [AIMA 2010].

2. Hedge fund origins, definition, taxonomy and strategies

The emergence of the first modern-era hedge fund is credited to A.W. Jones, as per HedgeWorld [2010]. In 1949, A.W. Jones set up a private equity operation (unregulated by the Securities and Exchange Commission, SEC) having unprecedented leeway in constructing and managing investment exposure. A.W. Jones' hedge fund employed a fairly elaborate (by mid-20th century standards) strategy of dynamic stock picking and longing/shorting. His business concept mirrored numerous characteristics of a contemporary hedge fund. The following defining features are now typically associated with hedge fund vehicles:

- **offshore** vs. **onshore** incorporation: although a majority of hedge funds have historically been structured offshore (usually as corporations), [IFSL 2010], onshore (as limited partnerships or corporations) has seen a widening appeal (in part owing to the political and regulatory crackdown on offshore jurisdictions during the global financial crisis of 2007-2009, and sustained endeavors by onshore mutual funds' to replicate hedge fund strategies);
- **open** vs. **closed ended** status: nowadays, most hedge funds are set up as open ended entities (capable of adjusting the number of outstanding shares in line with investor supply/demand flows), although close ended undertakings are not uncommon;
- **limited transparency**: although hedge funds have substantially evolved since the mid-20th century and improved their reporting standards, the overall transparency remains limited (compared with other types of institutions), as they are not obligated by law to produce comprehensive and regular financial and operating disclosure;
- **performance based** compensation: unlike traditional asset managers (paid, in various forms, no matter what their results are), hedge funds' compensation is skewed toward success fees (pegged to a predetermined hurdle rate and oftentimes accounting for any previous losses) typically about 20%, whereas the management fees usually range within 1,0-2,0% (annually);
- **co-investment**: hedge fund managers are general partners of their funds, also committing own capital to their funds, i.e. also act as limited partners in the ventures, this combination is expected to sharpen their focus on the job;
- **elitism**: historically, hedge funds have required relatively high minimum investment thresholds and have aspired to cater to high net worth individuals (HNWIs) and sophisticated financial institutions, the dynamic growth of hedge fund assets and competition factors have popularized this investor type among high-end retail buyers;
- **absolute returns**: hedge funds aim to deliver superior risk adjusted returns unrelated to benchmarks (e.g. stock market indices), which is supposed to decouple them from correlation with traditional asset classes;

Table 1. Hedge fund styles, their underlying instruments and objectives

Name	Instruments used	Objective(s)
Convertible arbitrage	Going long of convertible bonds and shorting the underlying common stock	Generating returns from a convertible fixed income instrument and shorting the stock, while protecting the principal from market moves; a market neutral, dynamic delta hedging strategy
Dedicated short bias	Maintaining net short positions (mostly in equities and derivatives) throughout the life of a fund	Profiting from downward volatility, especially in behavioral circumstances
Emerging markets	Equity and fixed income investments in emerging markets worldwide	Usually, a long only strategy oriented toward above-average growth in emerging markets
Equity market neutral	Simultaneous longing and shorting matched equity portfolios of the same size within a country	Benefiting from market inefficiencies through beta or currency neutral investment structures oftentimes via considerable leverage
Event driven	Equity oriented investment exposure designed to capture value created by anticipated corporate actions; the most common types are: risk arbitrage, distressed securities, private equity and high yield investment	Event driven strategies based on empirical findings demonstrating systematic pricing distortions related to corporate events
• Risk arbitrage	Simultaneous longing (the target) and shorting (the acquirer) companies involved in a merger or acquisition	Systematic overpricing of merger and acquisition targets, the principal risk is deal related (should the deal fall through)
• Distressed securities	Investment in debt, equity, their hybrids or trade claims of companies in financial distress or bankruptcy	Securities of distressed companies will trade at substantial discounts and once some of turnarounds succeed the overall strategy can be rewarding
• Private equity	Investment (usually through convertible securities) in the equity of micro and small companies, which are unable/find it difficult to tap public equity markets	Exploitation of financing gaps faced by micro and small businesses, many of which ultimately turn out to be successful
• High yield	Otherwise referred to as “junk bonds”, i.e. non-investment grade corporate debt	Despite frequent bankruptcies of such corporate debtors, if sufficiently diversified, such portfolios can fetch substantial returns
Fixed income arbitrage	Investment in interest rate swaps, domestic and foreign fixed income instruments, yield curve instruments and mortgage backed securities	Betting on pricing inefficiencies between/among fixed income instruments
Global macro	Stocks, bonds, currencies, and commodities and derivatives instruments based thereon purchased in both developed and emerging markets.	Using financial instruments or derivatives as benchmarks of forecast macroeconomic performance
Long/Short equity	Equity oriented investing on both the long and short sides of the market	A speculative, directional strategy involving concentrated (long or short) positions and frequent reallocations among value, growth, small, medium and large equities purchased regionally or sectorally
Managed futures	Listed financial, commodity and currency futures worldwide	Systematic (price and market specific, often technical) and discretionary (judgmental) management of futures portfolios

Source: [HedgeWorld 2010].

- **flexible investment instruments and strategy**: hedge funds have plenty of latitude in picking investible instruments as well as strategies;
- **illiquidity**: most hedge funds, on account to exposure to a variety of asset classes (many of them hardly convertible into cash), provide lower liquidity than regular mutual funds, though their issuance and redemption, due to competitive factors, have become more frequent (e.g. quarterly) in recent years;
- **active management**: in striving to deliver competitive risk adjusted returns, hedge funds pursue active investment strategies – one of their fortes is their discretion in selecting a broad spectrum of asset classes, in seeking supreme performance hedge funds take advantage of opportunities relating to information asymmetries, investment access, due diligence and portfolio structuring [HedgeWorld 2010].

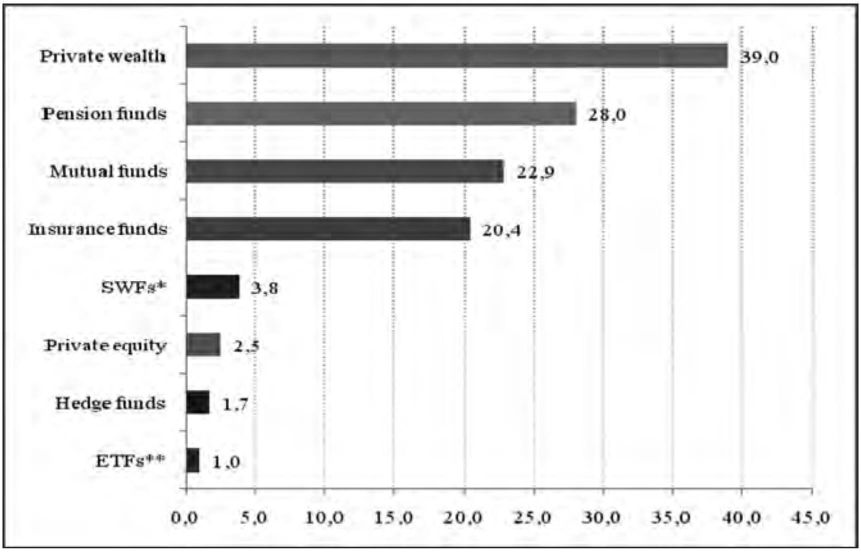
Hedge funds are often classified by their distinctive strategies, often referred to as "**styles**". The style demonstrates the gist of a hedge fund's investment philosophy and enables value based comparison with competitors. A succinct breakdown of typical hedge fund styles is outlined in Table 1.

3. Hedge funds: impact on the global economy

At year-end 2009, global hedge funds ranked among the **top ten** institutional investors worldwide by assets under management. Their global hedge fund asset base was estimated **US$1.7tr** late last year. It is noteworthy that the – highly conspicuous – impact of hedge funds on worldwide financial markets remains substantially lower (in quantitative terms) than that of most other institutional investors, such as pension, mutual and insurance funds, sovereign wealth funds (SWFs), as well as private equity players. Private wealth still represents the largest underlying category of financial resources: it is allocated to and overlaps with other types of institutional asset management shown in Fig. 1.

The global hedge fund number and assets under management have **risen logarithmically** since 2000, began to level off toward the end of the decade and staged a dramatic reversal during the global financial crisis of 2007-2009. Subsequently, as the number of active hedge funds appears to have partially rebounded from the last global financial turmoil, their assets are yet to overcome the recent erosion, as demonstrated by Fig. 2.

The hedge fund industry is a **diversified** lot – sometimes spearheaded by well established financial brands (e.g. JP Morgan), yet usually run by **investment boutiques** led by investment celebrities (e.g. Bridgewater Associates, Paulson & Co., Brevan Howard AM, Soros Fund Management, etc.). The ten largest hedge fund operations (as of January 2010) are highlighted in Fig. 3.



*SWFs: Sovereign Wealth Funds; **ETFs: Exchange Traded Funds

Fig. 1. Global fund management assets under management (in US$ trillion) by institution type at year-end 2009

Source: [TheCityUK 2010].

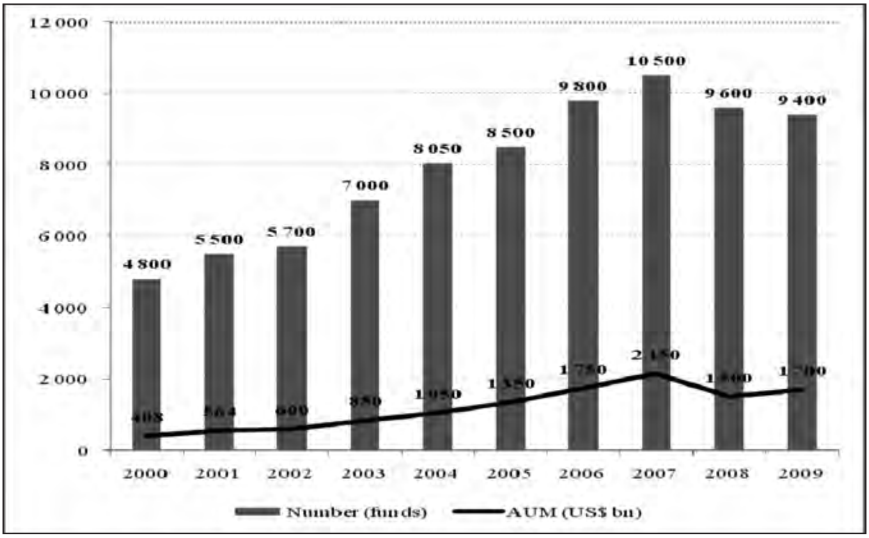


Fig. 2. The assets under management, AUM (*line*) and number of hedge funds (*bars*) globally in 2000-2009

Source: [TheCityUK 2010].

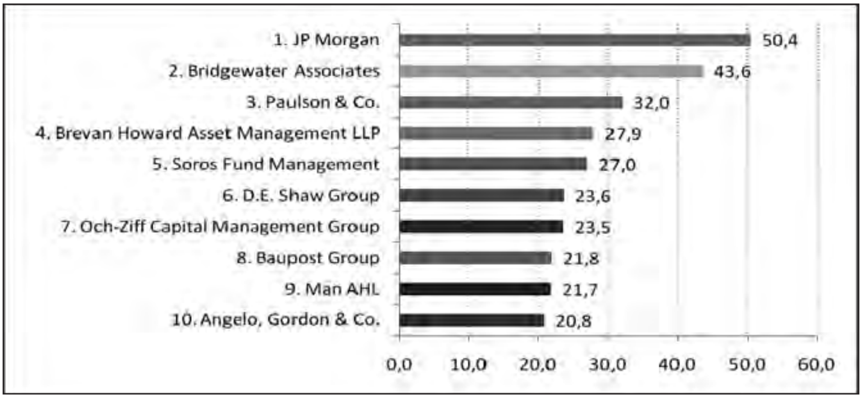


Fig. 3. Largest global hedge funds by assets under management (in US$ bn) as of January 2010

Source: [TheCityUK 2010].

Historically, the **United Stated** has been the cradle of hedge fund activity accounting for the overwhelming majority of hedge fund assets. Although US hedge funds still command a worldwide lead, hedge funds have developed in other parts of the world, notably in **Europe**, which has become a major hub in global hedge fund management (Fig. 4).

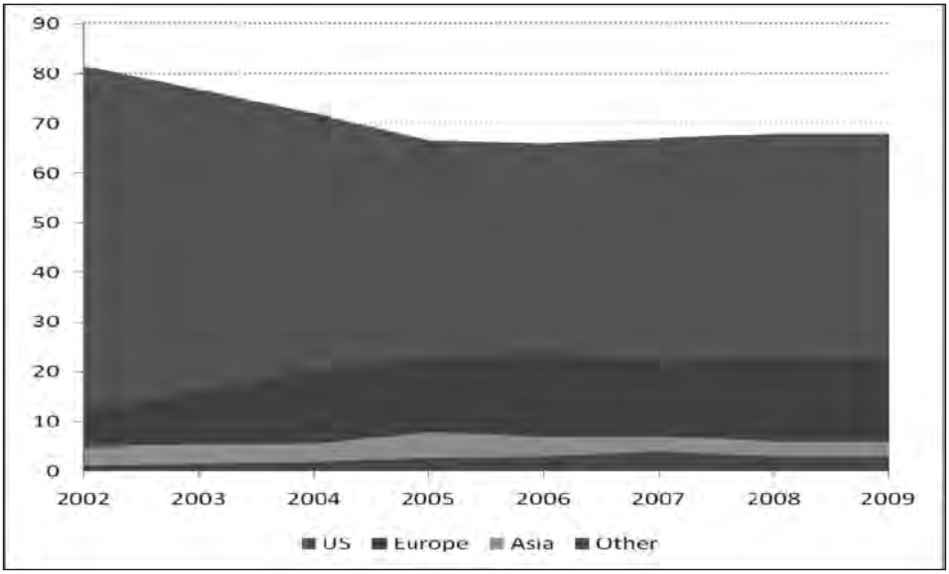


Fig. 4. Percentage share of geographic regions in global hedge fund assets under management (2002-2009)

Source: [TheCityUK 2010].

The turn of the millennium ushered in a new era in the origination of hedge fund sources. **Individuals** have gradually been outweighed by **institutional investors**, primarily funds of funds (whose formula enables a smooth and multifaceted transfer of risk exposure). Pension funds and endowments/foundations have emerged as a growing power base for hedge fund assets, the former have derived strength from the ongoing deregulation of pension fund allocation, while the latter have used hedge funds as a tax efficient entryway into actively managed resources. The evolution of global hedge fund sources in 1999-2009 has been portrayed in Fig. 5.

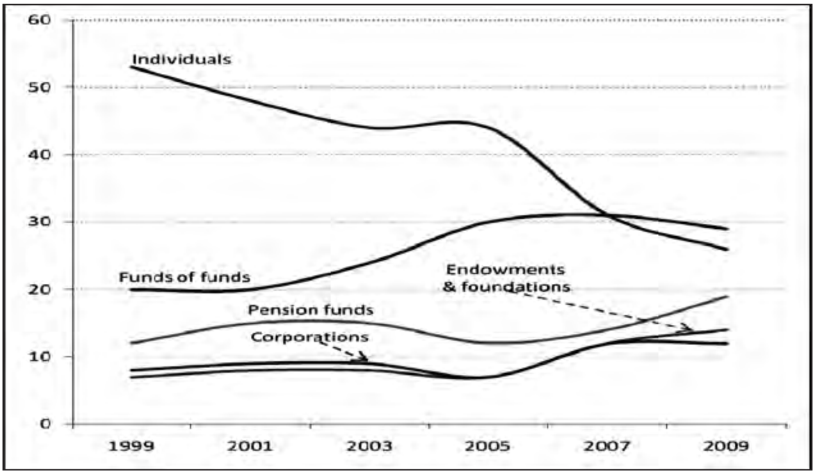


Fig. 5. Global hedge fund assets by source of capital in 1999-2009 (percentage share in the global hedge funds' total)

Source: [TheCityUK 2010].

4. Hedge funds: management efficiency amid the global financial crisis of 2007-2009 (a preliminary assessment)

The global hedge fund business was hard hit by the recent financial meltdown. A massive flight to safety (set off by a rippling risk aversion exhibited by institutional and retail investors) has resulted in a rapid **depletion** of global hedge fund **assets**, which hit bottom in 2008. Last year, the balance of global hedge fund launches and liquidations was restored and the revival has continued into 2010. A history of worldwide hedge fund expansion (measured by fund launched and liquidations) has been demonstrated by Fig. 6.

The success of global hedge funds has been mixed in the surveyed period (1998--2009). The peak of their performance (expressed in absolute terms) slightly preceded the **dot-com frenzy**, whereas it reached a nadir in 2008, posting a 13.9% drop.

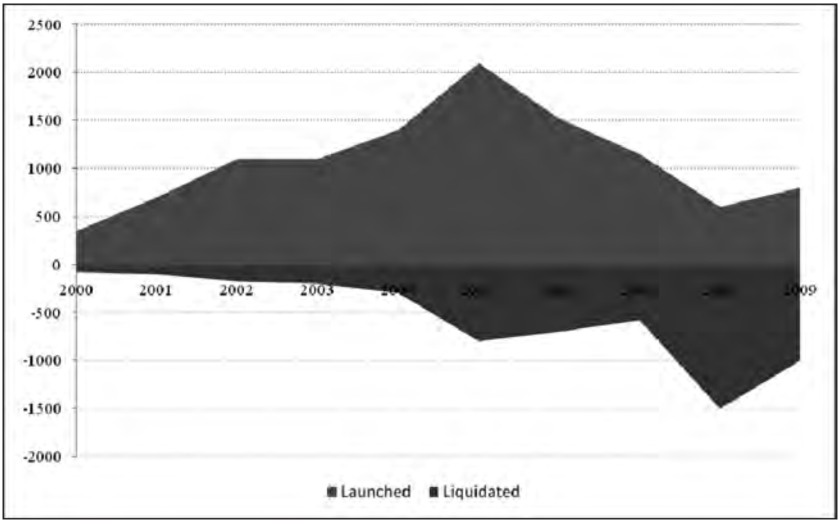


Fig. 6. Global hedge fund launches and liquidations (numbers) in 2000-2009

Source: [TheCityUK 2010].

Interestingly, global hedge funds were quick to recover from the recent crisis, their annual return for 2009 being some 19.0% in positive territory last year (Fig. 7).

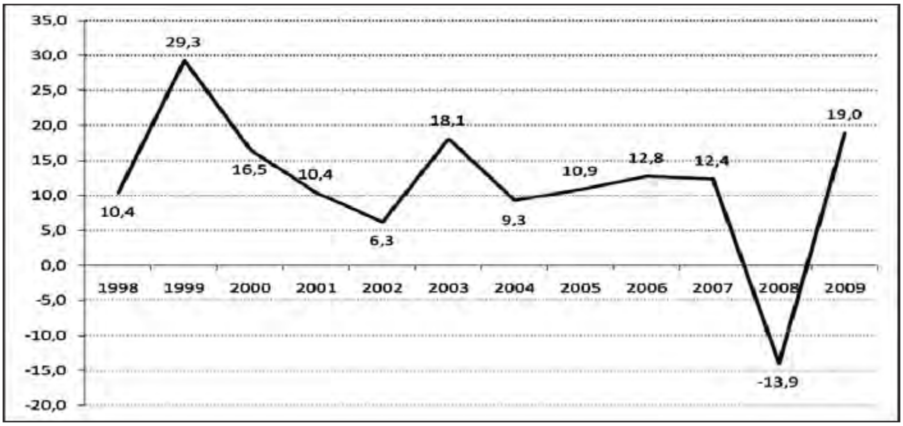


Fig. 7. Global hedge fund returns (average in %, annually) in 1998-2009

Source: [TheCityUK 2010].

Hedge fund **attrition rates** (fund closures related to all active funds) mirrored fund performance. Fund closures skyrocketed in 2008 to fall sharply in 2009, however, they have not yet attained the pre-crisis levels (Fig. 8).

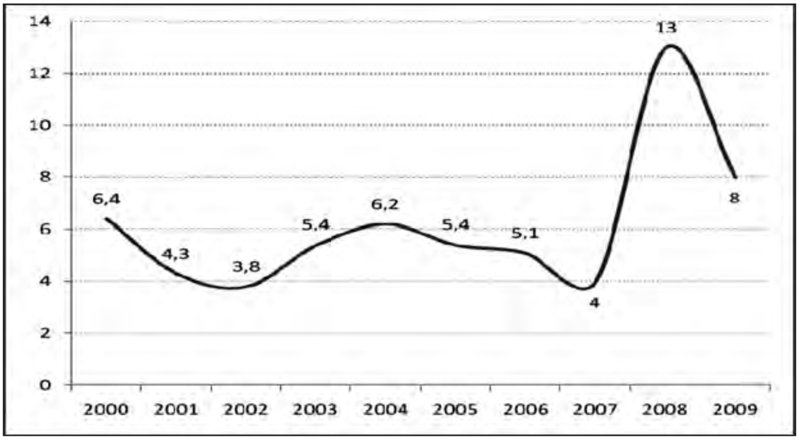


Fig. 8. Global hedge fund attrition rates (percentage share of all funds) in 2000-2009

Source: [TheCityUK 2010].

It is by far more insightful to relate global hedge performance to incurred risks. The very concept of financial risk remains controversial and by numerous accounts **risk measurement** and **management** have been systemically mishandled prior to and in the course of the global financial crisis of 2007-2009.

Mindful of such constraints, it is worth discussing the established measures of **risk adjusted performance** applicable to institutional investors (hedge funds in particular). An in-depth overview of fund management efficiency analysis tools was compiled by A. Carretta and G. Mattarocci [2005].

To be adequate in the hedge fund context, such proxies have to abstract from benchmarking used by traditional asset classes. Two yardsticks (named after their inventors) have oftentimes been employed in this context:

- **Sharpe**: A universal (cross asset) measure of fund management efficiency. To calculate it, the risk free return is subtracted from the average return of an investment portfolio over a period of time, and the result is divided by the standard deviation of the return. A strategy with a higher ratio has a higher return per unit risk than one with a lower ratio [DJCS 2010].
- **Sortino**: this ratio is a modification of the Sharpe concept but penalizes solely those returns falling below a specified target, or required rate of return, while the Sharpe ratio captures both upside and downside volatility equally. It is thus a more suitable measure of risk averse returns than the Sharpe multiple [Hedge Funds Consistency Index 2010].

Regrettably, no comprehensive coverage of aggregate downside deviation has been available for global hedge funds [Eurekahedge 2010]. Hence, the Sharpe ratio has been calculated instead to cover the global financial crisis of 2007-2009 and extend to the most recently available time period (end of October 2010). Some observers assert that owing to the survivorship, skewness, kurtosis and illiquidity biases endemic to hedge fund performance, Sharpe ratios tend to seriously overstate their results [Bacmann, Scholz 2003; Pride 2010; Thomas 2010]. The key results of the findings, based on the widely recognized and representative Dow Jones Credit Suisse Hedge Fund Indices, have been synopsized in Table 2.

Table 2. Global hedge funds' management efficiency between December 31, 2007 and October 31, 2010 (measured via Dow Jones Credit Suisse Hedge Fund Indices)

Hedge Fund Style (Type)	TR (%)	ATR (%)	AM (%)	BM (%)	WM (%)	ASD (%)	S
Hedge Fund Index (Composite)	3.08	1.08	0.12	3.81	–6.91	8.65	–0.10
Convertible Arbitrage Hedge Fund Index	9.67	3.31	0.36	6.39	–13.87	14.70	0.09
Dedicated Short Bias Hedge Fund Index	–24.58	–9.48	–0.69	10.75	–10.49	18.64	–0.61
Emerging Markets Hedge Fund Index	–2.80	–1.00	0.00	6.51	–15.02	14.30	–0.20
Equity Market Neutral Hedge Fund Index	–38.06	–15.55	–1.06	3.40	–40.46	24.84	–0.70
Event Driven Hedge Fund Index	7.08	2.44	0.23	3.95	–5.84	8.20	0.06
Event Driven Distressed Hedge Fund Index	2.98	1.04	0.11	3.89	–6.20	8.33	–0.11
Event Driven Multi–Strategy Hedge Fund Index	9.36	3.21	0.29	4.04	–6.28	8.50	0.15
Event Driven Risk Arbitrage Hedge Fund Index	12.13	4.12	0.35	2.15	–3.49	4.38	0.50
Fixed Income Arbitrage Hedge Fund Index	–0.27	–0.09	0.06	4.06	–15.47	12.67	–0.16
Global Macro Hedge Fund Index	17.99	6.01	0.51	4.30	–6.76	8.12	0.50
Long/Short Equity Hedge Fund Index	–0.56	–0.20	0.03	4.90	–7.99	10.77	–0.20
Managed Futures Hedge Fund Index	23.08	7.60	0.66	6.52	–5.25	11.15	0.51
Multi–Strategy Hedge Fund Index	1.81	0.63	0.09	4.01	–7.61	9.25	–0.14

Abbreviations used: Total Return (TR), Annualized Total Return (ATR), Average Month (AM), Best Month (BM), Worst Month (WM), Annualized Standard Deviation (ASD), Sharpe Ratio (S).

Source: calculations based on [DJCS 2010].

Oddly enough, none of the surveyed hedge fund investment styles (including those implicating dynamic asset reallocation and overt contrarianism to general market trends) has been able to near (let alone surpass) a Sharpe of 1, universally acknowledged as a fair reward/risk mix.

5. Conclusions

By most accounts, the global hedge fund industry, a significant contemporary alternative asset, has weathered the worldwide financial turmoil of 2007-2009 and since staged a speedy recovery. Beginning in 2009, numerous global hedge funds have seen spectacular returns. This accolade is marred by a more careful insight into management efficiency standards. Thanks to their peculiar character (a diversity of investment styles, unparalleled regulatory latitude and privileged access to managerial talent), hedge funds are expected to remain largely immune to volatility attributable to traditional assets and to offer consistently competitive investment performance. Despite such systemic *fortes*, none of the surveyed hedge fund styles has to date managed to deliver favorable risk adjusted returns since the commencement of the global financial crisis.

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SEKTOR FUNDUSZY ZABEZPIECZAJĄCYCH PO GLOBALNYM KRYZYSIE Z LAT 2007-2009. CZY FUNDUSZE ZABEZPIECZAJĄCE SPEŁNIŁY SWOJE ZADANIE?

Streszczenie: Sektor funduszy zabezpieczających stanowi istotną alternatywę dla głównego nurtu inwestycji biznesowych. Powodem istnienia funduszy zabezpieczających jest względna niezależność od innych klas środków trwałych (bardziej tradycyjnych) i konkurencyjność zwrotu z inwestycji do ryzyka. Chociaż fundusze zabezpieczające ucierpiały w związku z zawirowaniami 2007-2009, nie jest przedwcześnie dla wstępnej oceny ich wyników podczas ostatniego światowego kryzysu finansowego. Wstępne wyniki oferują perspektywy mieszane. Z jednej strony fundusze jako całość wykazały znaczną odporność na globalne zawirowania finansowe, z drugiej – ich zdolność tworzenia wartości dostosowanej do ryzyka była raczej niezadowalająca.