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Zarządzanie finansami firm – teoria i praktyka

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Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu
Wrocław 2013

Redaktor Wydawnictwa: Jadwiga Marcinek

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Korektor: Barbara Cibis

Łamanie: Adam Dębski

Projekt okładki: Beata Dębska

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Wrocław 2013

ISSN 1899-3192

ISBN 978-83-7695-359-5

Wersja pierwotna: publikacja drukowana

Druk: Drukarnia TOTEM

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PERFORMANCE RELATED COMPENSATION FACTORS IN THE ACTIVITY OF GLOBAL HEDGE FUNDS

Summary: Performance related compensation (skewed toward the attainment of predefined target rates) is a critical incentive attracting and retaining talent by the hedge fund industry. The hedge fund community is still recovering from the recent global and regional crises that have put hedge fund managers' skills to a veritable test of ingenuity and endurance. Hedge funds' basic emoluments did not substantially deviate from those of other forms of institutional investment where compensation mechanisms are more conservative. Prolonged failure to reap performance related benefits is likely to alter the business philosophies and allocation policies of most hedge funds, especially in light of mounting operating and competitive pressures. In particular, scale related factors might stifle innovation embodied by hedge fund startups.

Keywords: hedge funds, performance, incentives, compensation, systemic stability

1. Introduction

Hedge funds have emerged and consolidated as an innovative subset of institutional asset management and have been increasingly reliant on attracting, retaining and motivating high-caliber managerial talent. Most research studies focused on hedge fund performance and regulatory initiatives following the last global financial crisis have centered on hedge funds' interaction within the global financial system.

This paper examines endogenous factors affecting hedge funds' performance and sustainability. The findings appear to demonstrate that hedge funds' overemphasis on performance related compensation (combined with lackluster absolute or benchmarked returns) is likely to result in more aggressive styles and policies to be adopted by numerous funds and in erecting barriers to entry for new fund launches. Such (potentially destabilizing) future outcomes should alert financial industry policymakers and regulators.

2. Hedge fund definition, evolution and performance

Hedge funds are **collective investment** schemes that “aim to meet high targeted returns (absolute returns) using aggressive trading strategies, often across several asset classes” [FT Lexicon 2012], cf.: [Webster 2012; UBS 2012].

Hedge funds are usually branded as **alternative asset managers**, cf. [Wiśniewski 2011]. As such, they are expected to offer returns uncorrelated with those fetched by traditional assets (e.g. equities and fixed income instruments) – a claim revisited subsequently in this paper. Such a characteristic should, in theory, enhance the diversification and (risk adjusted) efficiency of general investment portfolios, cf. [Bacmann, Gawron 2004]. In view of a myriad of investment strategies (styles), privileged access to managerial brainpower and state-of-the-art technical infrastructure, as well as (generally) lower regulatory or fiscal impediments, hedge funds should remain fairly immune to cyclicality (represented by other asset classes). In reality, hedge fund activity (measured by the number of funds in operation as well as assets under management, AuM) has contracted substantially since the onslaught of the global financial crisis of 2007-2009 and is still recovering to pre-crisis levels, mimicking the supply/demand flows relative to traditional investments (Figure 1).

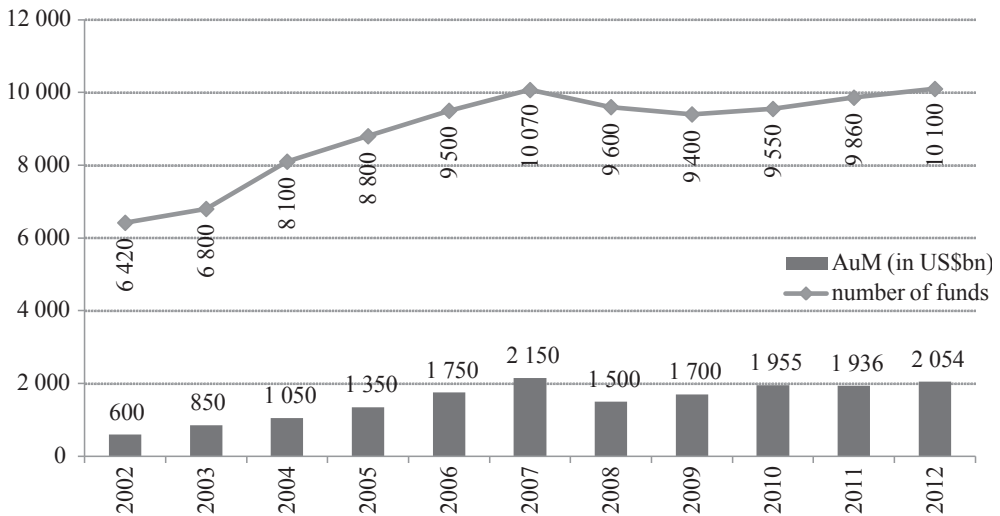


Figure 1. Evolution of global hedge fund activity: number of funds and assets under management (in US\$bn) in 2002-2012

Source: [Maslakovic 2013].

As evidenced by Figure 2, in 2002-2012 global hedge funds’ returns displayed remarkable correlation (e.g. the Pearson product-moment correlation coefficient at 0.91) with the broad index of U.S. stockmarket listed equity (the Standard & Poor’s

500, S&P 500). Such a striking level of commonality between active (hedge funds) and passive (indexed) returns attests to a rather unimaginative practical employment of diverse investment strategies by most global hedge funds, despite pretensions of unorthodox thinking contained in most investor relevant disclosure. A slightly redeeming feature is the visibly lower drawdown of hedge fund performance at the bottom of the last global financial crisis (in 2008).

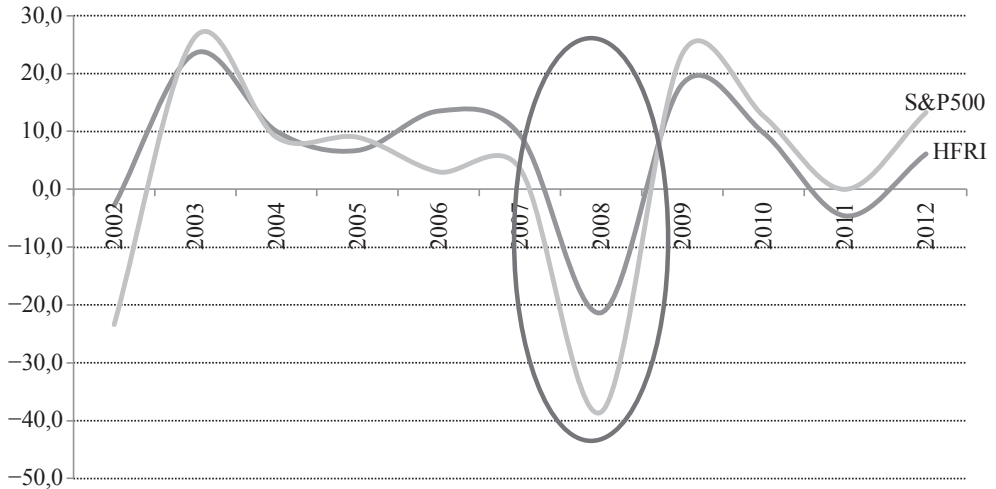
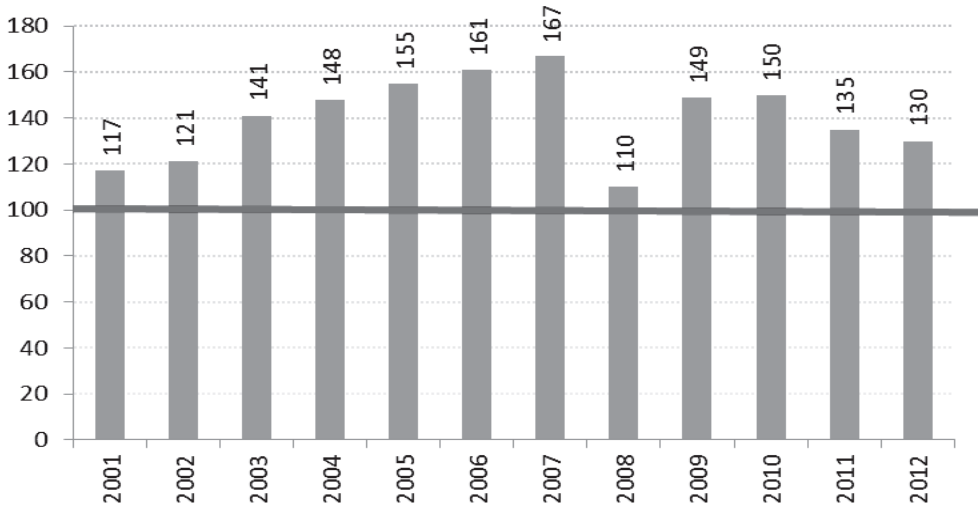


Figure 2. Annual percentage performance (year over year) of global hedge funds (plotted against S&P 500 index returns) in 2002-2012. The dotted line shows both returns at the bottom of the last global financial crisis.

Source: [Maslakovic 2013].

The use of financial leverage (a.k.a. gearing), broadly viewed as a systemic risk for the hedge fund universe [FSA 2011], quantified here as gross market exposure as a percentage of AuM (at year-end), mirrored return patterns throughout 2001-2012. It consistently hovered above the 100% threshold, remaining fairly modest by historic standards, cf. [U.S. Treasury 1999], and spiking (to 167%) in the runup to the global financial depression (Figure 3).

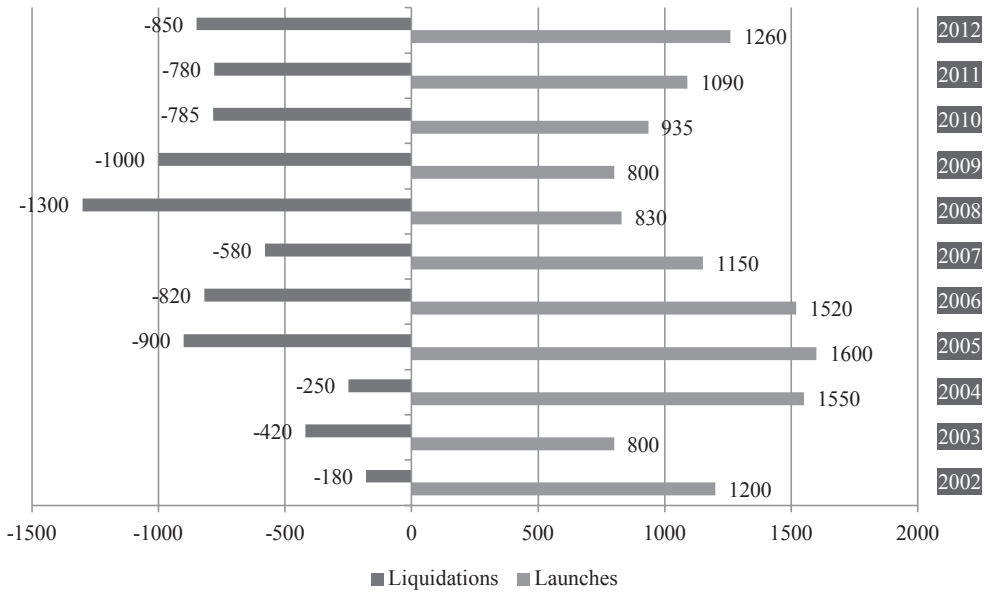
Figure 4 offers a glimpse into the interplay between global hedge funds' launches and liquidations. Evidently, the global hedge fund industry is now operating at a positive net balance (backed by a generally improved investment outlook). Due to constraints illustrated throughout this paper, the industry is yet to meet the peak of its activity from before the last global economic turmoil.



Note: financial leverage calculated as gross market exposure (as a percentage of AuM).

Figure 3. Global hedge funds' use of financial leverage (gearing) in 2001-2012

Source: [Maslakovic 2013].

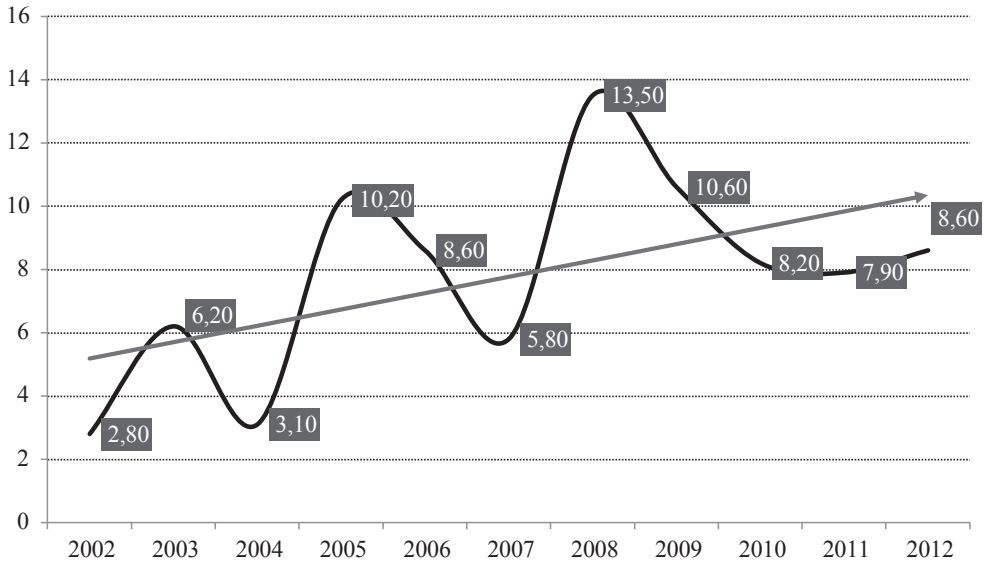


Note: financial leverage calculated as gross market exposure (as a percentage of AuM).

Figure 4. Global hedge funds' liquidations and launches in 2002-2012

Source: [Maslakovic 2013].

Such a harsh business environment led to massive fund closures. As Figure 5 demonstrates, one witnessed a consistent, decade-long trend toward increased attrition among global hedge funds. For reasons highlighted later on in this paper, launching and operating hedge funds has since become an unprecedentedly daunting task.



Note: financial leverage calculated as gross market exposure (as a percentage of AuM).

Figure 5. Global hedge funds' percentage attrition rates (relative to all active funds) in 2002-2011

Source: [Maslakovic 2013].

3. Hedge fund compensation: uniqueness, structure and implications

While the calculation of fixed fees by hedge funds does not substantially differ from other types of collective investment vehicles, hedge funds' particular focus on performance oriented incentives, combined with co-investment by their managers (virtually nonexistent in most other types of institutional investment), are distinctive features of the hedge fund and private equity businesses (Table 1).

Historically, hedge funds charged investors the following average levies (as per the commonly known as the "two-and-twenty" rule):

- a 2% flat management fee (off the total assets under management)
- and
- a 20% success fee (applicable to any returns in excess of a predetermined rate (commonly referred to as the target/hurdle/minimum rate).

Table 1. Compensation mechanisms in collective investment schemes

Name	Fixed (elements)	Performance related (elements)
Pension Funds (PFs)	yes (front-end loads, back-end loads and management fees)	usually no
Mutual Funds (MFs)	yes (front-end loads, back-end loads and management fees)	usually no
Sovereign Wealth Funds (SWFs)	yes	limited (varied from fund to fund)
Private Equity Funds (PE)	yes (payable annually by limited partners to the fund manager)	usually yes (carried interest, hurdle rates applicable)
Exchange Traded Funds (ETFs)	yes (front-end loads, back-end loads and management fees)	no
Hedge Funds (HFs)	yes (management fees)	yes (performance fees, hurdle rates applicable)
Insurance Funds (IFs)	yes (front-end loads, back-end loads and management fees)	limited (fund specific)

Source: own elaboration based on data from: [Pensions Institute 2012; Morningstar 2012; SWF Institute 2012; EVCA 2012; Morgan McKinley 2012; The ETF Institute 2012; Insurance Information Institute 2012].

Occasionally, fee structures tended to respond to fund specific supply/demand factors and reflected their managers' performance records, professional visibility, fund styles and other (broader) competitiveness drivers.

The target (hurdle/minimum) rate used for calculating performance related compensation is usually negotiable between a fund and a client. In practice, the following methods have been applied [Eurekahedge 2012]:

- benchmark: commonly a predefined rate accounting for fund and client specific expectations as to the opportunity cost of capital (often in the double digit range);
- high watermark: before performance related compensation is paid to the hedge fund manager, they will have to demonstrate that they have consistently outperformed all historical returns.

As highlighted in Appendix 1, such a mechanism of compensation is coming under increased pressure due to technical, competitive and scale related factors. In contemporary practice, the highest empirical management fee level amounts to 1.76% (for franchise, i.e. large institutions).

Poor performance records in the hedge fund business undermined their appeal relative to other segments of institutional management. According to survey based empirical data compiled in Appendices 2-5 [Morgan McKinley 2012], the average basic remuneration of hedge fund professionals (in various positions) in 2011 did not ostensibly outstrip their opposite numbers in other segments of institutional management.

Such a combination of motivation factors is likely to result in several tendencies throughout the hedge fund industry:

- more fund closures: given lofty salary expectations and high costs incurred by hedge fund managers and their primary focus on performance related incentives, if the target rates are not met, many funds will end up going out of business;
- creative and aggressive reporting: mediocre past performance and dim salary prospects might induce certain hedge fund managers to resort to creative and aggressive reporting in order to boost returns to the extent which helps them attain their targets;
- manager migration: hedge funds managers' skills and experience (commonly regarded as relatively sophisticated) can be employed in other segments of the institutional management sector: prolonged periods of sluggish earnings and salary growth will cause the most talented and experienced managers to seek jobs outside the hedge fund universe;
- over-aggressiveness: the emphasis of hedge fund compensation on performance related factors might cause some managers to favor over-aggressive allocation strategies (including but not limited to the excessive use of financial leverage);
- litigation: as the attainment of target rates becomes increasingly precarious and the financial stability of numerous hedge funds rather questionable, fund managers and their clients will be more inclined to resort to litigation (especially in borderline cases);
- judicial arbitrage: contrary to many expectations, more rigorous regulation of hedge fund activity (e.g. via the Alternative Investment Fund Managers Directive, AIFMD and the Dodd-Frank Wall Street Reform Act) is likely to force many funds out of their home jurisdictions (i.e. Europe and the U.S., respectively) offshore, thereby reducing the roles played by Europe and the U.S. in global institutional management, cf. [Kamal 2012];
- barriers to entry and to fund innovation: as nascent hedge funds are finding it more and more difficult to cover operating expenses and attain the critical mass needed to break even (currently estimated at US\$300m of AuM), launching startups has become highly problematic, especially against a backdrop of lackluster investment performance by most historical funds and their managers.

4. Hedge fund compensation structures: the broader setting

The aforementioned characteristics of the recent activity of global hedge funds coincide with broader systemic transformations in institutional management. The most significant changes can be summed up as:

- rising correlations among asset classes and individual investments: the cornerstone of successful (risk adjusted) investment by hedge funds is exploiting market inefficiencies via complex (often synthetic) trading strategies: as interdependence among asset classes and individual instruments is growing (partly due to

- intense automated/algorithmic trading as well as the unprecedented spread of exchange traded and index funds), the daily job of an average hedge fund manager has become by far more challenging, cf. [Sullivan, Xiong 2011];
- politics: inferior performance shown by most global hedge funds can (in part) be blamed for the European sovereign debt crisis and other politically induced events – while many hedge fund managers overtly claim to be able to identify and tap investment potential existing in such occurrences, capitalizing them into solid returns can be highly difficult;
 - behaviorisms: contemporary institutional management is riddled with behavioral and emotional reflexes and anomalies, which make any rationally based investment decisions (including those assisted by state-of-the-art quantitative and qualitative modeling) increasingly dependent on volatility (whose patterns are harder than ever to project);
 - compliance rigors: regulatory reforms enacted in the wake of the last global financial crisis and aimed at more transparency among alternative asset managers have led to higher commitments to personnel, time and reporting – translating into additional operating costs.

5. Conclusions

The sustained underperformance of numerous global hedge funds is sending a ripple effect across the entire industry. Over-reliance of most hedge funds and their managers on performance related incentives will force many of them out of business, prompt them to adopt more aggressive strategies and/or reporting standards or migrate out of the industry. Regulatory measures applied to hedge funds in the wake of the global financial and European sovereign debt crises have so far concentrated on transparency and capital adequacy routines. By far more scrutiny will have to be directed at the impact of remuneration lopsided toward performance related incentives on the sustainability of the hedge fund industry and its socioeconomic environment. This, coupled with management charges trailing operating costs, will further polarize the industry: consolidating the position of leading institutions and limiting the entry of new funds.

Literature

- Backman J.M., Gawron G., *Fat Tail Risk in Portfolios of Hedge Funds and Traditional Investments*, RMF Investment Management (A Member of the Man Group), Zurich 2004.
- City Prime Finance, Business Expense Benchmark Survey, 2013.
- Eurekahedge, <http://www.eurekahedge.com/>, 2012.
- EVCA (European Private Equity & Venture Capital Association), <http://www.evca.eu/default.aspx>, 2012.

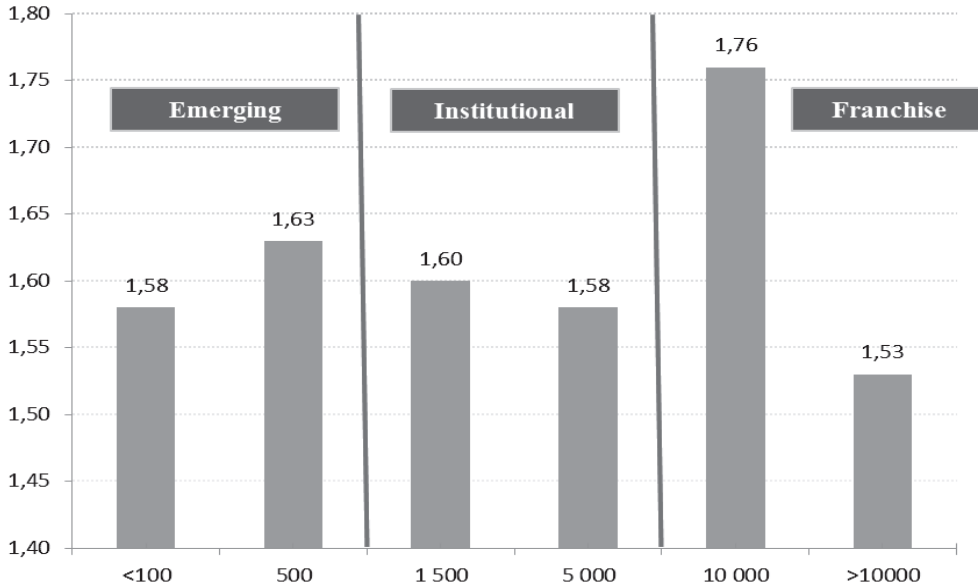
- Financial Times Lexicon, <http://lexicon.ft.com/Term?term=hedge-funds>, 2012.
- FSA (Financial Services Authority), *Assessing the Possible Sources of Systemic Risk from Hedge Funds. A Report on the Findings of the Hedge Fund Survey and Hedge Fund as Counterparty Survey*, London 2011.
- HFR (Hedge Fund Research), *The 2011 GLOCAP Hedge Fund Compensation Report*, Chicago, 2012.
- Insurance Information Institute, <http://www.iii.org/>, 2012.
- Kamal S., *Hedge Fund Regulation and the EU Directive*, Benjamin N. Cardozo School of Law, National Law School of India University (NLSIU), Bangalore, India 2012.
- Maslakovic M., *Hedge Funds, Financial Markets Series*, The City UK (sponsored by Jersey Finance), London 2013.
- Morgan McKinley Salary Survey – Financial Services, London 2012.
- Morningstar, <http://www.morningstar.com/>, 2012.
- Pensions Institute, <http://www.pensions-institute.org/>, 2012.
- Sullivan R.N., Xiong J.X., *How index trading increases market vulnerability*, “Financial Analysts Journal” (forthcoming in 2012), electronic version as of 2011.
- SWF Institute, <http://www.swfinstitute.org/>, 2012.
- The ETF Institute, <http://www.theetfinstitute.org/>, 2012.
- U.S. Treasury, *Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management*, Washington 1999.
- UBS Dictionary of Banking, http://www.ubs.com/global/en/DictionaryOfBanking.html?querystring=hedge+fund&_charset=UTF-8, 2012.
- Webster’s Dictionary, <http://www.merriam-webster.com/dictionary/hedge%20fund>, 2012.
- Wiśniewski P., *The Hedge Fund Industry since the Global Financial Crisis of 2007-2009. Have Global Hedge Funds Put Their Money Where Their Mouth Is?*, Research Papers of Wrocław University of Economics no. 158, Wrocław 2011.

CZYNNIKI WYNAGRODZEŃ UZALEŻNIONYCH OD WYNIKÓW ZARZĄDZANIA W DZIAŁALNOŚCI GLOBALNYCH FUNDUSZY HEDGINGOWYCH

Streszczenie: Wynagrodzenie uzależnione od wyników inwestycyjnych (tj. osiągnięcia ustalonych stóp zwrotu) stanowi zasadniczy czynnik atrakcyjności i stabilności zatrudnienia wśród funduszy hedgingowych. Segment ten wciąż stara się uporać ze schedą po ostatnich kryzysach, które poddały umiejętności zarządzających prawdziwemu testowi nieszablonowości i determinacji. Zasadnicze uposażenia pracowników funduszy hedgingowych nie odbiegały znacznie od innych instytucji bankowości inwestycyjnej, w których mechanizmy motywacyjne są bardziej statyczne. Trwała niezdolność funduszy hedgingowych do uzyskiwania wynagrodzeń opartych na wynikach inwestycyjnych (przy wzroście kosztów operacyjnych oraz konkurencji) przyczyni się do zmiany filozofii i polityki alokacyjnej tych podmiotów. W szczególności czynniki skali mogą hamować rozwój młodych, innowacyjnych funduszy.

Słowa kluczowe: fundusze hedgingowe, wyniki inwestycyjne, czynniki motywacyjne, wynagrodzenia, stabilność systemowa.

Appendix 1. Relationship between global hedge fund types and sizes (AuM in US\$m): horizontal, and management fees (in%): vertical in 2013



Note: the emerging, institutional and franchise hedge fund classes are based on the empirical distribution of hedge fund assets under management (not by formal classification).

Source: [City Prime Finance 2013].

Appendix 2. Average basic salaries (per annum) for City hedge fund professionals in 2011 (in GBP'000)

Department/Role (years of industry experience)	Analyst (0-2)	AVP (2-5)	VP (5-7)	Director (7-10)	MD (10+)
Fund/Portfolio Manager	35-40	40-60	60-80	80-120	120+
Client Portfolio Manager/Investment Specialist/ Product Specialist	35-42	42-65	65-75	75-100	100-130
Equity Research Analyst	30-40	40-60	60-80	80-110	110-130
Economist/Investment Strategist	28-37	37-55	55-70	70-110	110-150
Portfolio Construction	32-41	41-55	55-70	70-85	85-100
Trader	25-37	37-50	50-70	70-90	90-110
Product Development	35-40	40-55	55-75	75-100	95-120
Sales/Business Development	25-32	32-50	50-75	70-100	100+

Note: Assistant Vice President (AVP), Vice President (VP), Managing Director (MD).

Source: [Morgan McKinley 2012].

Appendix 3. Average basic salaries (per annum) for City asset management professionals in 2011 (in GBP'000)

Department/Role (years of industry experience)	Analyst (0-2)	AVP (2-5)	VP (5-7)	Director (7-10)	MD (10+)
Fund/Portfolio Manager	40-50	50-65	65-100	100-130	130+
Client Portfolio Manager/Investment Specialist/Product Specialist	40-47	47-65	65-95	95-110	110+
Research Analyst	35-45	45-65	65-95	90-120	120+
Investment Analyst (Fund of Funds)	30-42	42-60	60-80	75-110	110+
Investment Strategist/Economist	30-40	40-55	55-80	80-120	120+
Trader/Dealer	35-40	40-55	55-80	80-110	110+
Product Development	35-40	40-55	55-80	80-110	110+
Sales/Business Development	28-35	35-50	50-80	80-120	120+

Note: Assistant Vice President (AVP), Vice President (VP), Managing Director (MD).

Source: [Morgan McKinley 2012].

Appendix 4. Average basic salaries (per annum) for City corporate finance professionals in 2011 (in GBP'000)

Department/Role (years of industry experience)				
Level	Analyst	Associate	VP	Director
1	40-50	70-80	100-120	135-200
2	45-55	80-95	110-130	
3	50-63	90-100	120-140	

Note: Vice President (VP). Note: typically, in corporate finance there is one level of directorial positions.

Source: [Morgan McKinley 2012].

Appendix 5. Average basic salaries (per annum) for City private banking professionals in 2011 (in GBP'000)

Department/Role (of industry experience)	Analyst (0-2)	AVP (2-5)	VP (5-7)	Director (7-10)	MD (10+)
Private Banking	30-45	45-75	75-110	100-150	120+
Fund/Portfolio Manager	35-40	40-65	65-85	85-110	110-130
Investment Advisor/Consultant	30-42	42-60	60-80	80-120	120+
Product Specialist	30-40	40-65	65-85	85-100	100+
Research Analyst	30-42	42-55	55-70	70-80	80-100
Investment Analyst (Fund of Funds)	30-42	42-55	50-65	65-75	75-90
Investment Strategist/Economist	30-35	35-45	47-54	55-65	75-90
Trader/Dealer	35-40	40-48	48-65	65-90	90+
Sales/Business Development	35-42	42-55	60-75	75-100	100+
Product Development	35-42	42-55	55-80	80-100	100-120

Note: Assistant Vice President (AVP), Vice President (VP), Managing Director MD).

Source: [Morgan McKinley 2012].