INTERNATIONAL PERSPECTIVES ON COMMERCIAL AND FINANCIAL LAW

01

Alternative Investment Funds as Potential Catalysts in the Realization of Systemic Risk in Financial Markets

An Analysis of the Current Regulatory Framework in Europe Focusing on Hedge Funds and Private Equity Funds

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2.4 Funds

2.4.1 Defining Funds

One specific subcategory of alternative investments, namely funds, can be described as a collectively invested pool of capital. This concept of the fund is described in greater detail below. This thesis is principally focused on the regulation of funds; therefore, the following section is of particular importance.

A fund in the general sense is principally understood to be a pool of assets which is collected from individual investors in order to be invested as a portfolio in various financial assets.[56] Legislators in the European Union use the term 'collective investment undertaking', which roughly corresponds to the term 'fund'. According to EU official publications, collective investment undertakings are defined as 'investment vehicles that pool investors' capital and invest that capital collectively through a portfolio of financial instruments such as stocks, bonds and other securities'.[57] In the context of this thesis, the terms 'collective investment undertakings' and 'fund' will be used interchangeably.

2.4.2 Open-Ended vs Closed-Ended Funds

Funds can be subdivided into two different forms. These two types are essential for the analysis of legal aspects relating to funds.[58] The differentiation factor between the two types of funds is related to the frequency of redemption of investors' funds. Depending on when and how often redemption of invested capital is permitted in a particular fund, it is placed in one of the two categories. In addition to this core differentiation factor, the life-span of a fund might be a further indicator of which category a fund falls into. For open-ended funds, restrictions on redemptions and the frequency of redemption that is permitted at the discretion of the investor will be shorter than in closed-ended funds. In an open-ended fund, the purchase and redemption can be so short as to be almost continuous, while closed-ended fund structures may impose redemption gates of up to several years. In ad-

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56 Matthew Hudson, *Funds: Private Equity, Hedge and All Core Structures* (Wiley 2014) 2ff.

57 See European Union, 'European Venture Capital Funds' (*European Union Law Repository,* 2019) <https://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX%3A32013R0345> accessed 31 August 2020.

58 See AIFMD recitals 6 and 34. See also ELTIF art 23(3)(b),

dition, the life-cycle of a closed-ended fund will usually be limited, and the fund will be liquidated and the cash equivalent of its value paid out at the conclusion of a specific predetermined time span. Open-ended funds, on the other hand, might have unlimited lives and even see adjustments in size. Withdrawals by investors in such a fund are financed through realizing some of the fund's assets.[59]

As a general rule, open-ended structures are suitable for funds investing in small, highly liquid assets, while funds investing in illiquid assets with long investment horizons benefit from closed-ended structures. Accordingly, though this rule does not always hold true, closed-ended funds might be associated more directly with opaque and illiquid alternative investments, and open-ended funds with liquid assets in more traditional markets. To provide an example from both ends of the spectrum for the two types of funds, a private equity buyout fund might have redemption rights limited to the end of the fund's life, and therefore offer no redemption rights prior to the final payout. One example at the time of writing would be Blackstone's BAAF fund ('Blackstone Alternative Alpha Fund'), where the prospectus states that 'The Fund is a closed-end investment company, and therefore no Investor will have the right to require the Fund to redeem its Shares'.[60] By contrast, an open-ended ETF[61] may see investors purchase and redeem their shares in the open market. Such a fund's shares would hence be extremely liquid and would permit the entry and exit of an investor almost at will. The investor will generally receive a price at or close to the NAV of the fund.[62] An example of this would be the Vanguard S&P 500 ETF. The summary prospectus of this fund states the following:

> The Fund's ETF Shares are listed for trading on NYSE Arca and are bought and sold on the secondary market at market prices. Although it is expected that the market price of an ETF Share typically will approximate

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59 David P Stowell, *Investment Banks, Hedge Funds, and Private Equity* (3rd edn, Academic Press 2018) 260–261, 321; Ang (n 37) 523–525; Hudson (n 56) 6; Anson, Fabozzi and Jones (n 38) 243–247.

60 See Blackstone, 'Blackstone Alternative Alpha Fund' (Prospectus for BAAF fund, Blackstone, 21 September 2018) 71 <www.blackstone.com/docs/default-source/fund-documents/baam/baaf/baaf-i/baaf-9-4-18-sticker-7-31-18-prospectus2> accessed 26 August 2020.

61 Exchange-traded fund, a fund that has its shares listed on an exchange. See eg David J Abner, *The ETF Handbook: How to Value and Trade Exchange Traded Funds* (2nd edn, Wiley 2016).

62 See Vanguard, 'Vanguard S&P 500 ETF' (Summary Prospectus, Vanguard, 2020) <https://personal.vanguard.com/pub/Pdf/p968.pdf> accessed 22 August 2020.

its net asset value (NAV), there may be times when the market price and the NAV differ significantly.[63]

Table 2f below provides an overview of the characteristics of open-ended and closed-ended fund structures side-by-side to allow a direct comparison between the two.

2.4.3 Table 2f: Characteristics of Open-Ended and Closed-Ended Funds[64]

Type	Investment	Assets
Open-ended	Fund's life is indefinite. The overwhelming majority of assets in the fund can be realized over a relatively short period of time.	Usually large number of small and highly liquid assets. Size of assets usually can be easily adjusted to accommodate withdrawals and investments.
	Shares/units of the fund can be redeemed by investors at any time during the fund's life cycle. Price of fund's units or shares will be determined daily, based on the net asset value (NAV) of the assets held by the fund.	New investments by investors are invested in additional assets, and withdrawals are financed through the realization of the fund's assets. Examples of open-ended funds include: ETFs, UCITS funds, or index funds. Many hedge funds will also be structured as open-ended funds, but might include certain redemption gates or restrictions, which only permit redemptions at certain specific intervals.

63 ibid 2–3.

64 Hudson (n 56) 6.

Type	Investment	Assets
Closed-ended	Fund's life generally finite. After the end of the fund's life, the fund is wound up, and its assets are paid out to investors. Limits placed on investment and withdrawal possibilities of investors during the life of the fund. Structure is generally illiquid.	Assets will usually be held for a certain length of time. Frequently, a larger number of larger, less liquid assets will be held. Examples of this would be: venture capital, private equity, or real estate funds.

2.4.4 Collective vs Discretionary Fund Management

2.4.4.1 The Two Broad Types of Asset Management

Asset Management can be divided into two main types: discretionary and collective asset management. Discretionary asset management involves managing a client's portfolio, both professional and retail clients, according to a mandate that the manager and the client have agreed upon. Discretionary asset management, where each portfolio of the individual client is managed, is fundamentally different from collective asset management. In collective asset management, a fund of pooled assets of a number of clients is managed as part of one portfolio and/or following one specific strategy. The management of this pool is conducted according to specified asset-allocation parameters and risk levels.[65] Fund management generally falls into the second category. Discretionary asset management in the EU is part of the investment services regime and is governed by the 2014 Markets in Financial Instruments Directive II (MiFID II)[66] and the Markets in Financial Instruments Regulation (MiFIR)[67] regime.[68] While under certain circumstances collective fund management may be subject to provisions contained in this regime, the main reg-

65 Niamh Moloney, *EU Securities and Financial Markets Regulation* (3rd edn, OUP 2014) 194.

66 See Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU [2014] OJ L173/349, recitals 74, 75.

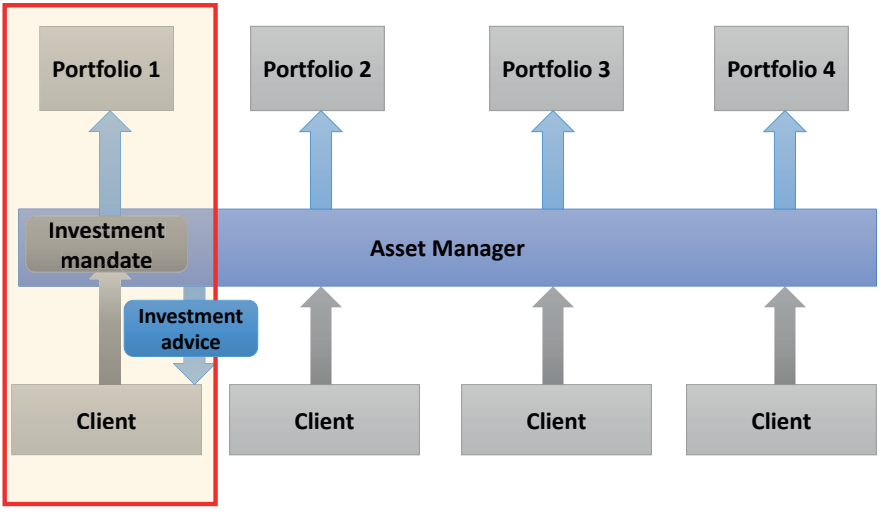
67 Regulation (EU) 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012 [2014] OJ L173/84.

68 See Moloney (n 65) 195.

ulation relating to collective asset management is contained in other legislation described in the following chapters.[69]

2.4.4.2 Figure 2g: Discretionary vs Collective Asset Management[70]

Discretionary fund management:

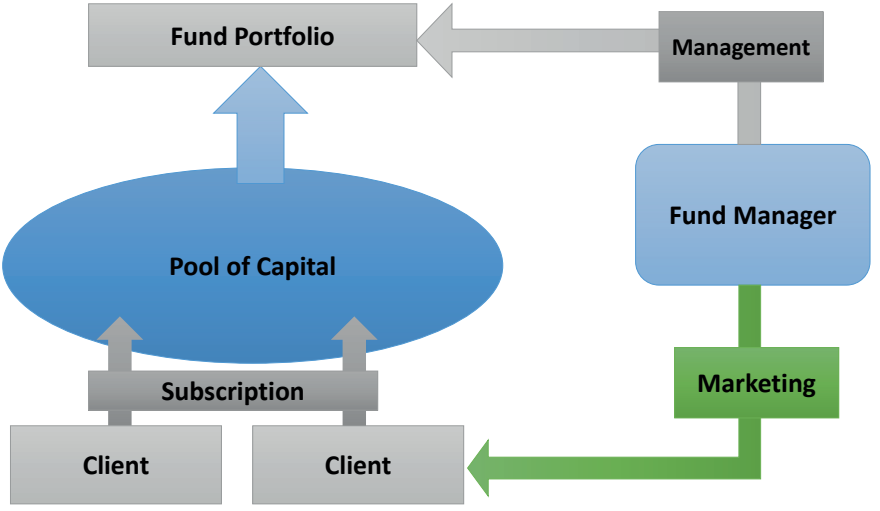


In discretionary asset management, the asset manager will have a direct relationship with each individual client, generally in the form of an investment mandate. He or she may provide investment advice and involve the client in investment decisions.

[69] See chapters 4 and 5.

[70] Author's own.

Collective fund management:



Collective asset management involves a client subscribing, ie paying in to, a pool of capital, which will be invested in total into the components of a portfolio. The management company will market the fund to potential clients and will make investment and management decisions for the entire pool of capital. The client's influence is limited to fund selection prior to investing, and whether and when (subject to redemption conditions) to invest or redeem his or her shares in the pool of capital.

2.4.4.3 Active vs Passive Fund Management

2.4.4.3.1 Active and Passive Management

A further fundamental differentiation in the realm of asset management concerns the activity of managing assets. Put in the simplest of terms, there are two broad approaches on how to manage assets: active and passive.

Passive fund management entails no direct involvement in investment decisions beyond the initial setting up of a fund. A passive fund will typically have its capital invested in assets whose composition mirrors an index. The passive fund generates returns by relying on movements of this index. If the replicated index or benchmark moves up in value, the passive fund will generate returns. The only invest-

ment activity of a passive fund will be the allocation of additional capital to the same composition of assets, and rebalancing activities to keep the fund's performance and investments as close to the chosen index as possible.[71] Fees are typically lower for passive funds than for active funds, as there is no active involvement in investment decisions.[72] The passively managed fund provides an investor with a diversification benefit and exposure to the index it is replicating, usually for a relatively small management fee. The movements of a passive fund, and those of the underlying index, are referred to as 'beta'. Beta returns are the returns that can be gained from broader market movements.[73] A passive fund is therefore a vehicle that enables the investor to tether himself to the fortunes of the market (or index) as a whole and profit from positive movements, or beta returns.

Active management can be thought of as any strategy that is based on algorithmic decision-making in order to generate returns. Historically, using inputs and decisions by humans would have been the approach that differentiated active management from passive management, but this is no longer the case. Any rule-based approach to investing where returns are generated through fund allocation can be

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71 William F Sharpe, 'The Arithmetic of Active Management' (1991) 47 Financial Analysts Journal 7, 8.

72 Eric H Sorensen, Keith L Miller and Vele Samak, 'Allocating between Active and Passive Management' (1998) 54 Financial Analysts Journal 18, 18.

73 The beta of a stock, for example, refers to its market risk or systematic risk. Beta can be defined through its relationship with the excess return of a stock. The excess return of a stock, r_i, corresponds to the difference between the return of said stock and the risk-free rate, as well as the market premium, r_m: $r_i = \alpha_i + \beta_i r_m + \varepsilon_i$ where α_i is Jensen's alpha and ε_i an error term that corresponds to an unexplained return. Jensen's alpha, which will appear again in the section below, represents the ability of a fund manager or analyst to increase returns through successfully predicting the future prices of securities while concurrently minimizing risk. See Raymond Théoret, 'Beta', *Encyclopedia of Alternative Investments* (CRC Press 2008); Michael C Jensen, 'The Performance of Mutual Funds in the Period 1945–1964' (1968) 23 The Journal of finance 389 <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6261.1968.tb00815.x/full> accessed 24 November 2016. Another way of defining beta is as the ratio of the covariance of an asset's return with the market return to the variance of the market return. Expressing this in quantitative terms looks like this: $\beta_{iM} = \frac{cov(R_i,R_M)}{\sigma^2(R_M)}$, where R_i is the return of the asset and R_M is the return of the market. For clarity: $\sigma^2(R_M)$ in this context is the variance of the market return mentioned above. See eg Eugene F Fama and Kenneth R French, 'The Capital Asset Pricing Model: Theory and Evidence' (2004) 18 Journal of economic perspectives 25. For an overview of the Capital Asset Pricing Model, which provides the foundation for these concepts, see William F Sharpe, 'Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk' (1964) 19 The Journal of Finance 425.

considered active management, even if the entity taking action in actuality may consist of one or more computers following instructions written in code. Whether a human fund manager makes decisions with his brain as a 'biological processor', or a silicon-derived processing unit of a computer makes algorithmic decisions, ultimately makes no conceptual difference.[74] A classic example of an active fund management strategy is 'stock picking' where a manager will attempt to invest in equities that are presumed to perform better than a specific benchmark. Many hedge funds are actively managed.[75] Fees for active funds will typically be higher than fees for passive funds, as operational costs are higher for the manager, mainly due to the continuous involvement and additional effort needed to pursue active strategies. The returns actively managed funds generate can be divided into two categories, beta and alpha returns. Beta returns are the same returns an investor receives by exposing himself to the movements of the broader market. Alpha returns, by contrast, are superior returns the active manager generates through his own skill (or luck) that are above the return a simple investment in the market would have offered.[76] As an example, a skilled stock picker could select a number of stocks that would perform better than the market as a whole. The returns of this investment, meaning the result of choosing these specific stocks over others, could be partially due to the movement of the market as a whole (which presumably would have led to a higher value of the stocks picked regardless), and partially due to the performance of the specific stocks.[77]

Hybrid forms of active and passive investments exist as well. The most prominent of these is what is referred to as 'smart beta'. Smart beta funds are usually funds of funds that seek to profit from superior returns generated by actively managed funds, while simultaneously gaining some of the diversification and cost benefits of passive funds. Whether smart beta can actually generate superior returns after fees to investors than either passive or active fund managers can, has not conclu-

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74 Jussi Keppo and Antti Petajisto, 'What Is the True Cost of Active Management? A Comparison of Hedge Funds and Mutual Funds' (2014) 17 Journal of Alternative Investments 9, 9ff <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=98721636&site=ehost-live> accessed 30 November 2016.

75 Stowell (n 59) 245–246.

76 Chambers and others (n 41) 18–19; Andrew W Lo, *Adaptive Markets: Financial Evolution at the Speed of Thought* (Princeton University Press 2017) 244–246; Jaeger and Pease (n 43) 5, 12, 17–18.

77 See Frederick P Schadler and Stanley G Eakins, 'Merrill Lynch's Focus Stock Picks: A Test of Analysts' Stock Picking Ability' [2001] Quarterly Journal of Business and Economics 17, 17–19. See also Jensen (n 73). See also fn 73.

sively been determined, but represents an interesting intersection of the two approaches to investing.[78]

2.4.4.3.2 Returns of Active and Passive Fund Management after Fees

The essential question any investor will ask when considering whether to invest in passively or actively managed funds, is whether an active fund can offer superior risk-adjusted performance after fees. As mentioned above, active funds generally charge higher fees, so to become attractive to investors, actively managed funds need to outperform passive funds to a degree where the higher returns cover the difference in fees and in addition generate an attractive return superior to that offered by a passively managed fund. Alternatively, an actively managed fund could offer lower returns but also lower risk overall, but again this differential would need to be sufficiently large to warrant higher fees. In essence, this means actively managed funds must be able to offer superior risk-adjusted returns *after fees* to investors that passively managed funds cannot compete with. A closer comparison of passive and active fund management reveals that actively managed funds as a collective slightly outperform passive funds, but that within the industry there are significant performance differences between individual funds. On the lower end of the distribution are funds that tend to underperform. A second portion of the market is grouped around the median with most funds performing slightly worse or better than comparable passively managed funds. Lastly, there is a small number of funds that significantly outperform the market and their passively managed peers. Generating superior and uncorrelated returns on a consistent basis while managing tail risks efficiently appears therefore to be an art a miniscule minority of fund managers within the industry have been able to master.[79]

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[78] For an overview of the performance of smart beta funds, see Christoph Buxtorf, 'Analysis of Smart Beta ETFs' (Msc thesis, University of Zurich 2016). The thesis comes to the conclusion, that as a whole, the risk-adjusted return profiles of smart beta ETFs are not consistently superior to more conventional passive funds.

[79] The fundamental difficulty in explaining hedge fund returns lies in reconciling evidence pointing toward financial markets being efficient in the sense of the efficient market hypothesis. Generally, depending on the specific market in question, financial markets are considered to be either weak-form (usually emerging markets) or semi-strong efficient, meaning they are seen as not perfectly efficient, but relatively close. Hence, an active strategy like those employed by hedge funds would only have limited possibilities to generate superior returns or alpha, assuming that markets are close to being perfectly efficient. Markets that are weak-form efficient offer more opportunities to exploit imperfections and irrational pricing, as the process of generating superior

returns generally becomes increasingly difficult the more efficient a market becomes. Hedge funds thus are faced with two obstacles they must overcome in order to be able to offer superior performance after fees. They must be able to 'beat the market' to a degree where they can 'make up' for higher fees they charge vis-à-vis passive funds, and they must also be capable of exploiting market inefficiencies and mispricings in such a manner that they can post superior performance compared to their 'dumb', that is their passive, counterparts. Beating an index in relatively efficient markets and compensating for higher fees in addition to this is what justifies the existence of the hedge fund industry. If hedge funds cannot offer this, they essentially are rent-seeking and inefficient in their behavior, as they overcharge investors for beta returns and also do not contribute to the efficiency of markets, but are to be classified as 'noise' generating participants. For an overview of the efficient market hypothesis and an extensive discussion thereof, see generally Eugene F Fama, 'Efficient Capital Markets: A Review of Theory and Empirical Work' (1970) 25 The journal of Finance 383. See also JS Jordan, 'On the Efficient Markets Hypothesis' (1983) 51 Econometrica 1325. See also Emanuel Derman, *Models. Behaving. Badly.: Why Confusing Illusion with Reality Can Lead to Disaster, on Wall Street and in Life* (Simon and Schuster 2011). For an overview of semi-strong market efficiency, see eg Senarath Dharmasena and David Bessler, 'Weak-Form Efficiency Vs Semi-Strong Form Efficiency in Price Discovery: An Application to International Black Tea Markets' (2004) 6 Sri Lankan Journal of Agricultural Economics 1; George Norman, *Semi-Strong Form Efficient Market Hypothesis* (Edward Elgar Publishing Limited 2014); Martin Gross, 'A Semi-Strong Test of the Efficiency of the Aluminum and Copper Markets at the LME' (1988) 8 The Journal of Futures Markets 67. For examples of weak-form market efficiency (from emerging markets), see eg R Ayodeji Olowe, 'Weak Form Efficiency of the Nigerian Stock Market: Further Evidence' (1999) 11 African development review 54; Martin Miles Laurence, Francis Cai and Sun Qian, 'Weak-Form Efficiency and Causality Tests in Chinese Stock Markets' (1997) 1 Multinational Finance Journal 291. The literature is divided as to whether hedge funds can generate superior returns after fees. For examples of recent studies examining hedge fund returns, see eg Turan G Bali, Stephen J Brown and Mustafa O Caglayan, 'Macroeconomic Risk and Hedge Fund Returns' (2014) 114 Journal of Financial Economics 1, 18. The authors of this paper find that hedge funds do generate superior returns or alpha. See also Ronnie Sadka, 'Liquidity Risk and the Cross-Section of Hedge-Fund Returns' (2010) 98 Journal of Financial Economics 54, 69–71. The author of this paper finds that hedge funds can generate slightly superior risk-adjusted returns compared to the broader market, but discuss difficulties in measuring hedge fund returns and whether some hedge fund alpha returns might actually be beta returns. See also Jaeger and Pease (n 43) 93ff, 147–148. The authors of this book also find that hedge funds offer superior returns, but discuss the possibility that some funds may be selling 'alpha' to investors, ie charging corresponding fees, when the bulk of their returns might in fact consist of alternative beta returns. See also Stowell (n 59) 251ff. Papers that find that hedge funds offer lower returns while taking disproportionate risk, ie take on excess risk to generate their returns include Burton G Malkiel and Atanu Saha, 'Hedge Funds: Risk and Return'

From the investor's standpoint, investing in an actively managed fund and receiving superior returns is therefore highly dependent on which fund or funds are invested in. In essence, the investor able to determine which funds will generate returns that cover higher fees and still outperform comparable passively managed funds while limiting risk will ultimately profit from investing in actively managed funds. For all other investors, investments in actively managed funds most likely will end up being a very expensive undertaking. There is an entire industry devoted to fund selection: the funds of funds industry. Funds of funds permit investments in portfolios of funds, providing both a selection and a diversification benefit. The performance of funds of funds is also debated, however, which ultimately results in a similar dilemma for an investor. The investor must identify successful funds of funds in order to receive a superior return on his investment. Again, the question becomes whether an investor can select the correct fund to invest in.[80]

It becomes evident from the descriptions above that investing in actively managed funds, whether these are hedge funds or other investment funds, does not guarantee superior returns. Significant informational asymmetries between investor and

(2005) 61 Financial analysts journal 80, 87 <www.cfapubs.org/doi/abs/10.2469/faj.v61.n6.2775> accessed 24 November 2016. See also John M Griffin and Jin Xu, 'How Smart Are the Smart Guys? A Unique View from Hedge Fund Stock Holdings' (2009) 22 The Review of Financial Studies 2531. The findings of this paper are that most hedge fund managers do not exhibit superior skill in picking stocks when compared to mutual funds, which would indicate that their returns cannot be due to pure 'alpha'. See also Ilia D Dichev and Gwen Yu, 'Higher Risk, Lower Returns: What Hedge Fund Investors Really Earn' (2011) 100 Journal of Financial Economics 248. The authors of this paper find that the real alpha of most hedge funds is close to zero. See also Stephen J Brown, William N Goetzmann and Roger G Ibbotson, 'Offshore Hedge Funds: Survival and Performance 1989–1995' (1997) NBER Working Paper 5909, National Bureau of Economic Research <https://archive.nyu.edu/bitstream/2451/26856/2/wpa98011.pdf> accessed 31 August 2020. The authors find that also historically, hedge fund managers did not appear to exhibit superior skill and that the industry was (and is) characterized by a very high attrition rate. A survey of slightly less recent papers on hedge fund returns, where the reader can find much additional empirical work on hedge fund performance, can be found with Walter Géhin, 'A Survey of the Literature on Hedge Fund Performance' (2004) EDHEC Working Paper, EDHEC Risk Institute <https://ssrn.com/abstract=626441> accessed 31 August 2020. See also Stowell (n 59) 232–328. The interested reader can also find multiple hedge fund indices where the current performance of hedge funds can be examined. These indices are by definition incomplete and may not correct for various biases in the data, such as survivorship bias.

80 Stowell (n 59) 328, 359–360.

manager exist, which generally will make deliberate successful fund selection by the investor difficult.

2.5 Private Equity

2.5.1 Introduction

As has been described above,[81] private equity investments constitute an essential category of alternative investments. The strategies of private equity funds differ from those of most hedge funds and other, more conventional investment fund structures, due to the differing risk-return profiles of private markets compared to their public counterparts. This fundamental difference in the composition of the portfolio of a typical private equity fund versus funds that are invested in more liquid assets mandates a different regulatory response. The systemic relevance of private equity funds is also dependent on their fundamental strategies, which warrants a closer examination of the activities of private equity funds and companies. The following sections provide an overview of private equity and establish the basic argument as to why regulating this industry in much the same way as other alternative investment funds, and especially hedge funds, are regulated is suboptimal and leads to a distortion of the industry's approach to investing.

2.5.2 A (Very) Brief History of Private Equity

The origins of private equity can be traced back to the family offices of the late nineteenth and early twentieth century in the United States. These family offices managed the wealth of various prominent families, among them the Rockefellers and the Vanderbilts, investing in and advising various enterprises.[82] These families eventually hired outsiders to manage their investments. From this process, private equity emerged, though it was not until shortly after the Second World War that the first private equity firm was formed. This occurred in 1946, when the American Research and Development Corporation (ARD) was founded as the first private equity firm in history.[83] The founders included Georges Doriot, a Professor

81 See section 2.3.2.

82 Josh Lerner, Felda Hardymon and Ann Learmon, *Venture Capital & Private Equity: A Casebook* (5th edn, Wiley 2012) 1–2.

83 ibid 2.