The Rationales of Hedge Fund Regulation

1.1 Introduction to Hedge Funds

In the last decennium, there have been many changes in the asset management industry, the last year representing a critical point for the hedge fund industry. Thus, important hedge funds shut down,\(^1\) meanwhile other managers decided in favor of mergers.\(^2\) There were also managers who acquired other firms.\(^3\) These changes were dictated by different reasons, as we shall see below. Indexation and also fee constrain have forced mutual funds to advance brand new models of investment strategies which used to be dictated in the past by hedge funds. A main characteristic of the last decade is that numerous corporate investors are currently choosing an inactive investing manner.\(^4\) Another feature, observed mainly in the United States, refers to the fact that hedge funds’ investment discretion

\(^1\) See New York-based Hoplite Capital Management and also London-based Arrowgrass Capital Partners.

\(^2\) See in this vein the case of Nordea Asset Management, part of Helsinki-based financial services group Nordea, forced to close one fund for reducing operational costs and afterwards, to merge the capital into another fund.

\(^3\) See the case of Sabre Fund Management bought by Trium Capital (a London-based alternative asset manager).

\(^4\) Lewis, C. M. (2016). Liquid alternative mutual funds: An asset class that expands opportunities for diversification (Working Paper). Vanderbilt University Owen Graduate School of Management.
was strongly reduced by the requirements that were imposed lately, such as new registration and other reporting requests, all these measures having as main aim the increase of transparency. In addition, Brexit and everything referring to it that is still unknown to investors, also impact the industry. Also, adding value is becoming more difficult for hedge fund managers and investors, since the market is defined through both strong equity and bond markets. These changes are constantly challenging hedge funds industry, raising doubts and unanswerable inquiries for investors concerning the future of hedge funds.

According to Barclay Hedge, and their Global Hedge Fund Database as of March 26, 2020, currently, the situation can be found in Table 1.1.

Figure 1.1 illustrates the global hedge funds managers percentage according to their domicile, as of March 26, 2020.

All tendencies noticed above are reflected in the growth of the hedge funds’ AUM, as seen in Fig. 1.2. Thus, after the crisis, the growth of AUM for hedge funds was constant, but it has however reached 8.4% yearly in comparison to a rate of 20.3%, registered between 2000 and 2010. Therefore, even if hedge funds are on a growing tendency, this last 10 years were characterized by difficulties. Additionally, their liquidations grew very much in comparison to the years before the financial crisis.

If it were also to examine launches of hedge funds as compared to liquidations, “between 2012 and 2018, new hedge fund launches outpaced liquidations. But, as the industry has grown, the number of fund launches has trailed liquidations. Just 529 hedge funds and CTAs launched in

| Table 1.1  | The global hedge funds databases as of March 2020 |
|------------|--------------------------------------------------|
| Number of reporting funds | 7091 |
| Number of reporting management companies | 1982 |
| Number of funds added in previous month | 116 |
| Managers domiciled in United States | 57.62% |
| Managers domiciled in Europe | 24.32% |
| Managers domiciled in Caribbean | 15.74% |
| Managers domiciled in Rest of World | 2.32% |
| % of Funds with February Returns | 94.43% |
| % of Funds with January Returns | 99.01% |

*Source* BarclayHedge (2020a)
Fig. 1.1 Global hedge funds managers as of March 26, 2020 according to their domicile (Source BarclayHedge 2020a)

Fig. 1.2 Assets under management in the global hedge fund industry (Source BarclayHedge 2020b)
2019, fewer than half the number (1169) that launched in 2018.”\(^5\) On one hand, the reasons for these are that, some of liquidations occurred due to high fees and low performance\(^6\) in the last period. On the other hand, the global hedge fund landscape seems saturated, particularly if we consider the major trends which defined the industry last year: “consolidation and investor concerns over market volatility growing focus on ethical investment and the higher costs of starting a fund amid increasing regulation – all while maintaining performance.”\(^7\)

### 1.2 The Worldwide Total Size of the Hedge Funds Industry

The world’s total size of the industry remains yet uncertain. Even though regulators have been paying increased attention and have been constantly adjusting regulation concerning hedge funds since LTCM’s failure in 1998, the total size of this industry is yet questionable. As Barth et al. (2020) assess in their research paper “The Hedge Fund Industry Is Bigger (and Has Performed Better) Than You Think,” “the potential data gaps in hedge fund activities are not confined to questions of size; the extent to which hedge fund performance and investor flows have been comprehensively measured is similarly uncertain.”\(^8\)

Of course, there are several reliable estimates regarding the size of hedge funds, but their ambiguity resides in the fact that, until recently, there were limited regulatory data collections on hedge fund activities. In this respect, the most accurate data on the industry are provided by Hedge Fund Research (HFR) and Lipper TASS. Even these databases collect their information from funds on an essentially voluntary basis,

---

\(^5\) Prequin. (2020). *Global hedge fund report.* https://www.prequin.com/insights/global-reports/2020-prequin-global-hedge-fund-report. Accessed 20 June 2020.

\(^6\) McCahery, J. A., & de Roode, Al. (2019). *The lost decade for hedge funds: Three threats* (TILEC Discussion Paper No. DP2019-027. Working Paper No. 486/2019). European Corporate Governance Institute—Law. SSRN: https://ssrn.com/abstract=3501551. Accessed 20 June 2020.

\(^7\) Prequin. (2020). *Global hedge fund report.* https://www.prequin.com/insights/global-reports/2020-prequin-global-hedge-fund-report. Accessed 20 June 2020.

\(^8\) Barth, D., Joenvaara, J., Kauppi, M., & Wermers, R. R. (2020). *The hedge fund industry is bigger (and has performed better) than you think* (Working Paper 20-01). Office of Financial Research. https://ssrn.com/abstract=3544181. Accessed 20 June 2020.
the biggest hedge funds usually choosing not to list in these databases.\(^9\) This idea is also supported by Cary who underlines that, “access to transparency likewise depends on the bargaining power of investors as hedge fund advisers are not obligated to provide any such information to investors.”\(^{10}\) Contemporary regulation both in Europe and the United States try to fill this gap, still, data are not complete because of a lack of jurisdictional overlap. We mention in this respect the differences in these data. According to Eurekahedge the world total size of the industry is around 2.33 trillion US dollars.\(^{11}\) Meanwhile, HFR estimates around 3.21 trillion US dollars. Also, eVestment estimates 3.31 trillion US dollars, while Barclay Hedge as the total AUM industry at USD 3.54 trillion. Also, Preqin estimates the industry at USD 3.55 trillion.\(^{12}\) As seen above, most of these estimates are between USD 3.0 and 3.55 trillion.\(^{13}\) The biggest estimates come from the SEC, around USD 3.89 trillion.\(^{14}\)

Indeed, scholars generally rely on hedge fund indices in the evaluation of their performance, which in itself raises various limitations, because, as already observed above, “these indices rely on hedge funds that are self-reporting because these entities are not required to disclose returns pursuant to any regulatory mandate.”\(^{15}\)

---

9 Edelman, D., Fung, W., & Hsieh, D. A. (2013). Exploring uncharted territories of the hedge fund Industry: Empirical characteristics of mega hedge fund firms. *Journal of Financial Economics, 109*(3), 734–758.

10 Shelby, C. M. (2019). How did we get here? Dissecting the hedge fund conundrum through an institutional theory lens. *Bus Law, 74*(3), 735–787.

11 Eureka. (2019). The Eureka hedge report April 2019. https://static1.squarespace.com/static/5a02fa72bdf200aa6a54edd9/t/5cc1449515f00dc796a5b6f/1556169910440/Eureka+Hedge+Report_Apr-2019.pdf. Accessed 12 June 2020.

12 These estimates are for 2017. Eurekahedge offers estimated for the third quarter, meanwhile the other estimates are for the fourth quarter.

13 https://www.evestment.com/news/2020-begins-with-allocations-into-hedge-funds/, on 12.06.2020.

14 See SEC. (2017). SEC’s private fund statistics. US Securities and Exchange Commission. https://www.sec.gov/divisions/investment/private-funds-statistics/private-funds-statistics-2017-q4.pdf. Accessed 12 June 2020.

15 Shelby, C. M. (2019). How did we get here? Dissecting the hedge fund conundrum through an institutional theory lens. *Bus Law, 74*(3), 735–787.
1.3 RATIONALES OF FINANCIAL REGULATION APPLICABLE TO HEDGE FUNDS

The vast literature\textsuperscript{16} on the issue suggests that there are three objectives that provide the rationale for financial regulation in general and for hedge fund regulation in particular. These objectives are: (a) protection of investors, (b) promotion of market integrity, but also (c) preservation of financial stability.\textsuperscript{17}

As remarked by various observers, such as Sander Van Berkel, Peter Cartwright, Niamh Moloney, Phoebus Athanassiou, the above-mentioned aims are connected and they overlap, in certain regards. For instance, the provision and insurance of fair, efficient, and transparent markets need some requirements, which are also used for investor protection and mitigation of systemic risk. Similarly, some of the systemic risk mitigation measures afford investor protection.\textsuperscript{18}

Consequently, capital flows to hedge funds in various countries are influenced by the strength and the enforcement of investor protection laws in these countries. All the above-mentioned principles are being addressed in the current chapter, in relation to the apparent validity of their application to hedge funds, not only within European borders, but also outside Europe. Further on, the chapter makes a clear organization of the different sets of regulation applicable to hedge funds aiming to protect investors, market integrity, and financial system stability.

\textsuperscript{16}Athanassiou, Ph. (2009). Hedge fund regulation in the EU: Current trends and future prospects. The Netherlands: Wolters Kluwer; Aragon, G. O., Nanda, V. K., & Zhao, H. (2019). Investor protection and capital fragility: Evidence from hedge funds around the world. https://ssrn.com/abstract=3207064 or http://dx.doi.org/10.2139/ssrn.3207064. Accessed 1 July 2020.

\textsuperscript{17}Van Berkel, S. (2008). Should hedge funds be regulated? Journal of Banking Regulation, 9, 196–223. https://doi.org/10.1057/jbr.2008.10; Cartwright, P. (2004). Banks, consumers and regulation (pp. 30–42). London: Hart Publishing; Moloney, N. (2006). EC securities regulation. New York: Oxford University Press; Farrell, D. (2018). Increasing investor protection through improving hedge fund valuation. St. John’s Law Review, 92(1), 149–172.

\textsuperscript{18}IOSCO. (2003). Objectives and Principles of Securities Regulation: 5. These are by no means the only regulatory rationales: the case for regulating financial markets also rests on a number of additional grounds including particularly, the need to ensure correct competitiveness for the financial intermediation industry.
1.3.1 Investor Protection as Rationale of Hedge Fund Regulation

Investor protection concerns the strand of regulatory attention directed toward making sure that investors’ interests are conducted against market failure or unfavorable behavior within institutions possessing investors’ funds. Non-compliance to “investor rights” may have so far-reaching results that the investor protection-based law has consistently featured among the main components of most capital market regulatory schemes, with national arrangements differing from one another only in terms of pointing out the specific investments that best suit them, based on the information that product providers are mandated to disclose by law.\(^\text{19}\) This evidence is also supported by Aragon et al. (2019), who conclude that, “in countries with weak investor protection, poor fund performance exposes investors to a greater risk of fraud and legal jeopardy, thus triggering a larger outflow of capital.”\(^\text{20}\)

There are some factors that turned the protection of investors into one of the most visible objectives pursued by financial market supervisors and lawmakers worldwide.\(^\text{21}\) Among these, one needs to mention: the

---

\(^{19}\) Edwards differentiates between top-down and bottom-up investor protection regimes, of which the former is based on the exhaustive authorisation of the available investment products, while the latter is disclosure based, relying on rules requiring product vendors to explain the features of their products, their risks and returns, allowing investors the freedom to determine whether these are suitable for them (Edwards, F. R. (2006). Hedge fund and investor protection regulation. Federal Reserve Bank of Atlanta Economic Review, 91(4), 35–48).

\(^{20}\) Aragon, G. O., Nanda, V. K., & Zhao, H. (2019). Investor protection and capital fragility: Evidence from hedge funds around the world. https://ssrn.com/abstract=3207064 or http://dx.doi.org/10.2139/ssrn.3207064. Accessed 1 July 2020.

\(^{21}\) The importance of investor protection as a ground for financial regulation is reflected both in the statutory objectives of several of the EU Member States’ financial market supervisory authorities, including the FSA (FSMA 2000, sections 2(2)(c) and 5), and in the score of investor protection-oriented Community legislative measures adopted in recent years. See Garcia, G., & Prast, H. (2003). Depositor and investor protection in the EU and the Netherlands: A brief history. Netherlands Central Bank Research Series Supervision (discontinued) 54. Netherlands Central Bank, Directorate Supervision.
noneconomic\textsuperscript{22} paternal\textsuperscript{23} basis of many of the current financial market regulatory frameworks, the public desire for outer (governmental) regulation, together with the supervision of private self-regulation (mainly in crucial times of crisis), the prejudicial economic results emerging from the “loss of investor confidence in the aftermath of market failures,”\textsuperscript{24} but also from the high amount of empirical proof or researches stating that there is a causal connection between tighter investor protection regulation and financial market increase.\textsuperscript{25} This is even more relevant in the context of “institutional investment vehicles,” where, as Franklin Edwards emphasized, investor protection represents the top-priority goal of public policy underlying regulation.\textsuperscript{26} 

Many aspects need to be considered regarding the meaning of hedge fund-specific legal transparency requirements for the investor protection-related data. This is because there is a lack of a realistic comprehension by (several) investors (mainly less-experienced ones) of hedge fund investment strategies and imminent conflict of interests that emerge between managers of the fund and individuals investing capital in it. This is to be performed even in the EU Member States where hedge fund-specific legal transparency requirements are applied.

\textsuperscript{22} Academics often distinguish between the economic and social rationales for external regulation. The conceptual difficulty of differentiating between the two may serve little practical purpose: measures justified on social grounds (e.g. consumer protection) may also improve the functioning of markets and vice versa (Ramsay, I. (1995). Consumer credit law, distributive justice and the welfare state. Oxford Journal of Legal Studies, 15(2), 177–197 (1995). https://doi.org/10.1093/ojls/15.2.177).

\textsuperscript{23} Cartwright, P. (2004). Op. Cit., pp. 19–22. For the classical statement of paternalism as a legal concept see Dworkin, G. (1971). Paternalism. In R. Wasserstrom (Ed.), Morality and the law (pp. 107–126). Belmont: Wadsworth Pub. Co.

\textsuperscript{24} Davies, H. (1999). Financial regulation: Why bother? Mimeo, society of Business Economists lecture, London.

\textsuperscript{25} Financial markets appear to perform better where adequate investor protection conditions prevail (La Porta, R., et al. (1997). Legal determinants of external finance. Journal of Finance, 52(3), 1131–1150 (1997). https://doi.org/10.1111/j.1540-6261.1997.tb02727.x). Empirical evidence also links consumer protection guarantees with greater external financing opportunities (La Porta, R., et al. (1999). Corporate ownership around the world. Journal of Finance, 54(2), 471–517. https://doi.org/10.1111/0022-1082.00115).

\textsuperscript{26} Edwards, F. R. (1999). Hedge funds and the collapse of long-term capital management. The Journal of Economic Prospectives, 13(2), 189–210.
One must consider the case of single-manager hedge funds regulation based on investor protection rights claiming that this premise is highly unrealistic and that the existence of relevant barriers might go a long path to approaching whatever legitimate investors risks a realistic regulator might have wanted to keep against in this area. Following the example of the US hedge fund situation, despite the huge dimension and the absolute relevance of its onshore industry (which surpasses by far the European industry), the compulsory transparency actions aiming to protect the investor were not considered necessary. This impressive “exempted status” that the American hedge funds take advantage relies on the general apprehension that the so-called “accredited” (also known under the name of qualified) investors, who owned most of the hedge funds industry established somewhere on the Atlantic shore, tend to be highly sophisticated and therefore they afford to make professional investment options and bear their costs. This makes the protection through regulations pointless. Meanwhile, retail investors are protected by the very fact that they are denied the access to hedge funds.

However, in some cases, qualified investors may need protective guaranty as well, where there is an objective leverage deficiency in setting up their investing conditions and in assessing their risk outline. The promoters of transparency regulations inspired by investor protection still have to prove that real investor transparency safeguards can be implemented. They have to identify the costs and benefits and their practical purpose, taking into consideration the complex framework of hedge fund strategies and the flexibility of their investments capable of making sound

---

27 Spangler, Timothy et al. (2010). Op. Cit., p. 23.

28 Paredes, T. A. (2006). On the decision to regulate hedge funds: The SEC’s regulatory philosophy, style and mission. University of Illinois Law Review, 5, 975–1036. It is nevertheless interesting to note that the SEC’s rationale for adopting Rule 203 (b)(3)-2, requiring the registration, by 1 February 2006, as investment advisers (within the meaning of the Investment Advisors Act of 1940) of most hedge fund managers was inter alia motivated by the need to protect investors in hedge funds and to enhance the Commission’s ability to protect our nation’s securities markets in the face of the industry’s retailisation and of the growing incidence of fraud amongst hedge fund managers (SEC. 17 CFR Parts 275 and 279. Release No. IA-2333 (File No. S7-30-04). https://www.sec.gov/rules/final/ia-2333.htm. Accessed 12 June 2020).

29 SEC. (2003). Implications of the Growth of Hedge Funds, Staff Report, 47. For a more systematic discussion see McVea, H. (2007). Hedge funds and the new regulatory agenda. Legal Studies, 27(4), 709–739. https://doi.org/10.1111/j.1748-121x.2007.0069.x.
antique even the most comprehensive, mandatory investor transparency data in a *de facto* short period.\(^{30}\)

In addition, good incentives are offered to hedge fund investors to gather the necessary information for their self-protection. If they assess the information to be inadequate, they have all the rights and power to withdraw their assets and redeem their investments (with the exception, maybe, of an extremely long “lock-up” time).\(^{31}\)

Public concerns have been expressed as additional grounds for investor protection-based regulation, regarding the major increase of capital allocations of *institutional* investors in alternative investment products. All the above represent legitimate concerns attributed *inter alia* to the indirect retail investor exposure produced by the organizational investor allotments. However, the fact that hedge fund regulation is justified or not by these concerns is a different matter.\(^{32}\)

Despite the numerical increase of organizational investors who assign parts of their own liquid assets to hedge funds (they can do this either directly or indirectly, by means of the FoHF\(^{33}\)), increasing pension funds into an international hedge fund industry major financial suppliers, institutional investor allocations to hedge funds continued to be limited and did not change lately.

Without damaging the quantitative dimension of recent institutional investor interest in hedge fund investments, at first glance, it seems that however useful the inclusion in the regulatory arsenal of basic conflict of interest prevention safeguards might be, a feasible solution for the investor protection connected concerns brought about by institutional investor allotments to hedge funds stands in their own hands. There

---

\(^{30}\) The MWGED, composed of the Basel Committee, the IOSCO, the International Association of Insurance Supervisors and the Committee on the Global Financial System, presented recommendations on enhancing disclosure practices by financial institutions and hedge funds in April 2001 (MWGED. (2001). Final Report of the Multidisciplinary Working Group on Enhanced Disclosure, Report). The moment when the Joint Forum tried to follow up in 2003 on the implementation status of its 2001 recommendations it was unable to publish its findings as it could not secure cooperation from a sufficient number of hedge funds (Basel Committee on Banking Supervision (2004). The Joint Forum, Final Disclosure in the Banking, Insurance and Securities Sectors: Issues and Analysis. [https://www.bis.org/publ/joint08.htm](https://www.bis.org/publ/joint08.htm). Accessed 20 June 2020).

\(^{31}\) Spangler, T., & Scholer, K. (2010). Op. Cit., p. 27.

\(^{32}\) Spangler, T., & Scholer, K. (2010). Op. Cit., p. 27.

\(^{33}\) Funds of Hedge Funds.
is a very relevant conflict of interests between pension fund managers, who are ready to take risks in order to increase their funds’ returns (and their own compensation, too) and their beneficiaries, who have an interest in funds, adopting more conservative investment policies. This is an effective institutional oversight and governance mechanism to rectify the noticed conflict of interest arising between the managers of a fund and its beneficiaries.  

This contrast is more an issue for pension fund regulation (or, more properly, for the enforcement of existing pension fund-related corporate governance rules) than it is for hedge fund regulation. As Franklin Edwards has competently observed “… hedge funds are not the source of this conflict, only its latest manifestation.” If the problem is more relevant to the relationship between pension fund managers (as agents) and beneficiaries (as principals), then the appropriate answer is in terms of tighter institutional investor governance, so that fund beneficiaries may control fund managers more efficiently.

Lately, the focus has been on increasing investor protection in direct relation to improving hedge fund valuation, particularly because an accurate valuation appears as critical on several grounds. Thus, on the one hand, measuring and reporting the performance of hedge funds to investors is done according to the changes over time of the fair value of their assets. Nowadays, investors carefully track a fund’s performance in order to make accurate decisions of whether keeping or not their capital with the fund, meanwhile when investing in a new fund, they also analyze

---

34 Spangler, T., & Scholer, K. (2010). A practitioner’s guide to alternative investment funds (p. 30). City & Financial Publishing.

35 Edwards, F. (2006). Op. Cit., p. 47.

36 Hoffmann, B., & Paetzmann, K. (2018). Investor protection, valuation methods and the German alternative funds industry. Journal of Risk Finance, 19(2), 174–189. https://doi.org/10.1108/jrf-06-2017-0101.

37 Maxey, D. (2014, February 4). If a security isn’t trading, what is it really worth? The Wall Street Journal. https://www.wsj.com/articles/sec-looking-at-how-alternative-funds-value-investments-1391096281?tesla=y. Accessed 12 June 2020.
its past performance\textsuperscript{38} before making a decision of investing or not with the fund.\textsuperscript{39}

On the other hand, “hedge fund managers are compensated based on the net asset valuation and the performance of the fund.”\textsuperscript{40} Still, many conflicts of interest may rise from this form of compensation making it possible for managers to stimulate marking up the fund’s valuation with the main purpose of increasing their compensation\textsuperscript{41} However, standardization and supervision of valuation for hedge funds are insufficient, which makes it problematic for investors to follow and set side by side fund valuations.

More recently, the second iteration of the EU’s Markets in Financial Instruments Directive (MiFID II) came into being on January 3, 2018, having as initial objective to strengthen investor protection and improve the functioning of financial markets by making them more efficient, resilient, and transparent.\textsuperscript{42} This transparency into buying and selling activities across all the major asset classes in the capital markets industry stands as a major factor, although MiFID II has not been universally welcomed. From time to time, the European Securities and Markets Authority (ESMA) updates its Questions and Answers on the implementation of investor protection topics under the Market in Financial Instruments Directive and Regulation (MiFID II/MiFIR). The purpose of the MiFID II/MiFIR investor protection Q&As is to promote common supervisory approaches and practices in the application of MiFID II

\textsuperscript{38}It is true that past performance of funds are not trustable data of future results, but in spite of this, investors carefully scrutinize fund’s past performance especially when investing their capital. Soe, A. M., & Poirier, R. (2018). \textit{Does past performance matter? The persistence scorecard.} https://www.spglobal.com/en/research-insights/articles/does-past-performance-matter-the-persistence-scorecard. Accessed 12 June 2020.

\textsuperscript{39}AIMA. (2013). AIMA’s Guide to Sound Practices for Hedge Fund Valuation 45, at 17. “From the [i]nvestor’s perspective, fair valuation is the foundation on which analysis of the portfolio’s performance and volatility of returns is based… [A]n [i]nvestor would normally expect that the amount of cash paid to take an equity interest in the portfolio and the amount of cash received on withdrawal of an equity interest is based on a formal and fair valuation of the portfolio’s assets and liabilities.”

\textsuperscript{40}Sklar, R. (2009). Hedges or thickets: Protecting investors from hedge fund managers’ conflicts of interest. \textit{Fordham Law Review}, 77(6), 3251–3323.

\textsuperscript{41}Idem at 3269.

\textsuperscript{42}Gortsos, C. (2018). \textit{Stricto sensu investor protection under the MiFID II: A systematic overview of Articles 24–30}. Newcastle upon Tyne: Cambridge Scholars Publishing.
and MiFIR. This stands as a proof that strengthening the protection of investors is of major interest for regulators.\textsuperscript{43}

As Lannoo Karel states “generally speaking, the new conduct rules deal with soft rules on the behavior of market participants and hard rules prohibiting distortive practices.”\textsuperscript{44} This opinion is supported also by Bordellini, who states when referring to US regulatory framework that “although Dodd-Frank includes among its legislative purposes the protection of consumers from abusive financial services practices, its new provisions do not seem to be able to achieve this result.”\textsuperscript{45}

\subsection*{1.3.2 Market Integrity and Hedge Fund Fraud as Rationales for Hedge Fund Regulation}

The protection of market integrity represents the second aspect of regulatory interest in the field of financial investments.\textsuperscript{46} This occurs as one major determinant concerning each investor’s capability to transact the business he/she manages in a transparent, fair background, and in the absence of discrimination, manipulative market conduct, secret agreements, and different abusive conducts.\textsuperscript{47} In this vein, financial market misconduct of hedge fund managers is seen “as being very costly to financial markets and, thus, is an active area of scholarly study.”\textsuperscript{48} At

\textsuperscript{43}Gillet, R., Ligot, St., & Firouzi, H. (2017). The challenges and implications of the Markets in Financial Instruments Directive (MiFID) and of its revision (MiFID II, MiFIR) on the efficiency of financial markets. In R. Douady, C. Goulet, & P. C. Pradier (Eds.), \textit{Financial regulation in the EU} (pp. 151–198). London: Palgrave Macmillan.

\textsuperscript{44}Lannoo, K. (2017). \textit{MiFID II and the new market conduct rules for financial intermediaries: Will complexity bring transparency?} ECMI Policy Brief. European Capital Markets Institute. https://www.ceps.eu/wp-content/uploads/2017/05/ECMI%20PB%20No%2024%20KL_MarketConductRules.pdf. Accessed 12 July 2020.

\textsuperscript{45}Bordellini, M. (2017). From systemic risk to financial scandals: The shortcomings of US hedge fund regulation. \textit{Brooklyn Journal of Corporate, Financial & Commercial Law}, \textit{11}, 417. https://brooklynworks.brooklaw.edu/bjcfcl/vol11/iss2/6. Accessed 15 June 2020.

\textsuperscript{46}Shelby, C. M. (2016). Are hedge funds still private? Exploring publicness in the face of incoherency. \textit{SMU Law Review}, \textit{69}(2), 405–452.

\textsuperscript{47}Athanassiou, Ph. (2009). \textit{Hedge fund regulation in the EU: Current trends and future prospects}. The Netherlands: Wolters Kluwer.

\textsuperscript{48}Dimmock, S. G., & Gerken, W. (2016). Regulatory oversight and return misreporting by hedge funds. \textit{Review of Finance}, \textit{20}(2), 795–821. https://doi.org/10.1093/rof/rof025.
the same time, another aspect which raised important questions among academicians\textsuperscript{49} is whether “hedge fund managers fraudulently manipulate their performance results.”\textsuperscript{50} Considering the structure and requests of reporting for hedge funds, they are perceived by the financial market as rather opaque investment instruments, thus decreasing the efficiency in their pricing and reported performance.\textsuperscript{51} According to Patton et al., “as informational asymmetries between investors and the managers of their investments increase,”\textsuperscript{52} there is a deterioration in terms of trust between these two parties. Due to this aspect, important debates emerged concerning “whether hedge fund managers intentionally smooth their performance results to deceive investors, whether this smoothing behavior is more a result of the opaque and illiquid nature of the underlying assets contained within these funds or whether there are other explanations for this performance smoothing.”\textsuperscript{53}

One cannot underestimate the ramifications of market integrity infringements. Factors like the misuse of insider information, “the misvaluation of complex instruments” or the predilection manifested by brokers toward specific funds may reduce the investors’ confidence but may also lead to the deterring of the business, since either “\textit{bona fide} investors” are deprived of their money or their costs are increased. This can have a knock-on effect on market activity.\textsuperscript{54} Also, loosening regulation can lead to “unintended consequences related to compromising market integrity and exposing investors to undue risk.”\textsuperscript{55} According to Professor Shelby, “hedge funds can still pose a systemic threat to the

\textsuperscript{49}Aragon, G. O., & Nanda, V. (2017). Strategic delays and clustering in hedge fund reported returns. \textit{Journal of Financial and Quantitative Analysis}, 52(1), 1–35.

\textsuperscript{50}Smith, Z. Al., & Mumtaz, M. Z. (2017). Hedge fund managers and deceit: Is the accusation of performance manipulation valid? \textit{Chinese Management Studies}, 11(3), 387–414 (2017). https://doi.org/10.1108/cms-02-2017-0035.

\textsuperscript{51}Aragon, G. O., & Nanda, V. (2017). Strategic delays and clustering in hedge fund reported returns. \textit{Journal of Financial and Quantitative Analysis} 52,(1): 1–35.

\textsuperscript{52}Patton, A., Ramadorai, T., & Stratfield, M. (2013). Change you can believe in? Hedge fund data revisions. \textit{Journal of Finance}, 70(3), 963–999.

\textsuperscript{53}Jorion, P., & Schwartz, C. (2014). Are hedge fund managers systematically misreporting? Or not? \textit{Journal of Financial Economics}, 111, 311–27.

\textsuperscript{54}Rydge, J., & Comerton-Forde, C. (2004, September 7). The Importance of market integrity. An analysis of ASX self-regulation.

\textsuperscript{55}Shelby, C. M. (2019). How did we get here? Dissecting the hedge fund conundrum through an institutional theory lens. \textit{Bus Law}, 74(3), 735–787.
economy” and therefore, “enhancing transparency to hedge fund counterparts and investors can decrease systemic risk by empowering such market participants to better protect themselves against risk.”

As the economic relevance of these results might be significant and wide-ranging, financial market regulators have issued and enforced scores that are inspired from market integrity norms, which focus on the interdiction of insider exchanging together with market manipulation, on management of business problems, as well as on the governance together with fiduciary assignments of financial intermediaries. Resources and initiatives of regulated markets also contribute to maintain market integrity.

The need to make sure that hedge funds cannot control or manipulate markets is, undoubtedly, pertinent. The suggestion that market integrity breaches are widespread to the hedge fund industry is nevertheless, misleading. Some of the real issues across markets are insider information, wrongful appraisals regarding either profit or loss (or both), and the incomplete exchange records. These tend to be mainly concentrated in the hedge fund industry and consequently, need to be removed from other, tighter regulated industries. Recently, due to all the above-mentioned problems encountered in the hedge funds industry, this industry has become overregulated, which makes even more stringent the necessity to truly determinate and comprehend hedge funds’ performance and dynamic before certifying that managers tend to dishonestly manipulate their performance results.

Hedge funds have undoubtedly highlighted some shortcomings in the existing market integrity protective framework and their operation has added to the urgency of revising monitoring mechanisms. However, literature states that the occurrence of “insider trading and market manipulation” within hedge fund managers tends to be extravagantly prominent lately if we consider recent US cases which have resulted in convictions

56 Shelby, C. M. (2017). Closing the hedge fund loophole: The SEC as the primary regulator of systemic risk. B.C.L. Review, 58(2), 639–701.

57 Edwards, F. (2006). Op. Cit., p. 47.

58 Edwards, F. (2006). Op. Cit., p. 47.

59 Smith, Z. A., & Mumtaz, M. Z. (2017). Hedge fund managers and deceit: Is the accusation of performance manipulation valid? Chinese Management Studies, 11(3), 387–414. https://doi.org/10.1108/cms-02-2017-0035, on 15.06.2020.
and have shown a clear involvement in market manipulation and insider dealing of hedge funds.\textsuperscript{60}

Also, it seems less probable that hedge funds could include the market integrity threat that some appear to believe that they do, if only because, despite the higher incidence, among hedge funds of more concentrated portfolios, a large part of them are not that powerful so that to manipulate prices.

The large hedge funds managers’ tendency for manipulative behavior toward the markets cannot be assumed to be stronger than that of other financial market professionals to do so. This is both because the generous financial rewards received by the hedge fund administrators capable of generating abusive behavior represent no monopoly of this industry, but also because hedge fund managers cannot simply and spontaneously be expected to appreciate their prestige to a lesser extent than their counterparts from other financial organizations.\textsuperscript{61}

Also, it is worth remembering that laws like those governing insider trading, notifiable holdings, and share registers are already implemented to all market participants, especially to hedge funds and their managers. This means that hedge fund-specific market integrity issues can be solved using common tools such as those applied to fraud or collusion in the banking or securities field, despite the relative difficulty of providing, in the case of hedge funds, evidence to substantiate unlawful conduct, due to the insufficient transparency or regulation within the sector and the complexity of its trading strategies.\textsuperscript{62}

Regarding specifically hedge funds, dealings in tools accepted to enlist in regulated markets in the EU, these would fall under the MAD,\textsuperscript{63} regardless of the inexistence of homogenous hedge fund regulation framework in other respects, they would be subjected squarely to the Community law security guarantee together with their managers and

\textsuperscript{60}SEC v. Rajaratnam. (2012). SEC v. Rajaratnam 622 F.3d 159, 188 (2d Cir. 2010). https://www.courtlistener.com/opinion/176129/sec-v-rajaratnam/. Accessed 12 June 2020.

\textsuperscript{61}Smith, Z. Al., & Mumtaz, M. Z. (2017). Hedge fund managers and deceit: Is the accusation of performance manipulation valid? Chinese Management Studies, 11(3), 387–414. https://doi.org/10.1108/cms-02-2017-0035, on 15.06.2020.

\textsuperscript{62}Spangler, T., & Scholer, K. (2010). A practitioner’s guide to alternative investment funds (2nd ed., p. 32). London: Sweet & Maxwell.

\textsuperscript{63}Market Abuse Directive.
would be conditioned by very much alike conformity responsibilities just like the other industry participants, *inter alia* regarding market manipulation.64

The solution of market integrity problems raised by hedge fund market activities should be searched in: (a) the effective implementation of the existing rules rather than in the introduction of new ones, devised with hedge funds and their operations in mind and (b) the investors’ accomplishment of the regular due diligence checklist suggested by sound investing procedures and constant precaution.65

Due to the financial crisis, systemic risk and its importance for stability and economy have been reviewed.66 Nevertheless, neither systemic risk, nor the intentions to mitigate are new. Academic reviews67 confirm that hedge funds can transmit risk to the financial system, which prompted specific measures, particularly after the financial crisis, in order to mitigate part of these risks. Thus, when referring to hedge funds, systemic risk, and financial stability, it appears that during the last decade, “hedge funds themselves have adjusted their business models, and international regulations, such as the Financial Stability Board’s derivative reforms, have limited the risks that hedge funds pose to the financial system.”68 In this respect, many researches pointed out that “hedge funds could create and transmit systemic risk given their respective freedoms to trade in derivatives and carry unlimited leverage.”69 However, scholars focused mainly on the manner in which regulations can “be updated to regulate the growing threat of systemic risk, and many such solutions have sought to navigate how the fractured nature of our regulatory system

---

64 Directive (EC) 2003/6, [2003] OJ L 96/16.
65 FSA. (2005). *Hedge funds: A discussion of risk and regulatory engagement.* Financial Services Authority (Discussion Paper 05/4, 54); and McVea, H. (2007). Hedge funds and the new regulatory agenda. *Legal Studies*, 27(4): 709–739. https://doi.org/10.1111/j.1748-121x.2007.00069.x.
66 Hilary, J. A. (2014). Putting the ‘Financial Stability’ in Financial Stability Oversight Council. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2485949. Accessed 12 June 2020.
67 Kenny, F., & Mallaburn, D. (2017). Hedge funds and their prime brokers: developments since the financial crisis. *Bank of England Quarterly Bulletin Q4*, 1–12.
68 Idem.
69 Shelby, C. M. (2017). Closing the hedge fund loophole: The SEC as the primary regulator of systemic risk. *B.C.L. Review*, 58(2), 639–701.
could effectively regulate the blurred distinctions between hedge funds
and banks.”  

This is the main reason why quite a lot of the reform recommenda-
tions underline this need for macroprudential orientation of classical
micro-prudential regimes. Otherwise said, such new regulatory regimes
would not only focus on the solvency and other elements (in banking
CAMEL) of commercial banks and other individual financial institutions
(micro-prudential), but would also take into consideration the impact of
financial institutions’ activities on the financial system and real economy
(macroprudential).  

In addition, one should take into consideration that at least some of
the abuses associated with “hedge funds” imply leaks of internal informa-
tion attributable to investment banks, making the receiving hedge fund
managers “accomplices rather than the chief offenders.”  

After the financial crisis, all financial newspapers pointed fingers toward hedge funds, although the crisis must not be attributed to the hedge funds sector. Thus, the role and the effect of hedge funds on the crises raised opposing academic views. They may have contributed to spread the chaos on the financial market, but they are not the ones to blame. In the aftermath of the financial crisis, all international organizations called for more regulation toward the shadow banking sector. Only if hedge funds continue to rely on investment banks for data related to market conditions and for the purpose of placing their trades, the “front running” threat to market integrity often associated to these funds is still unapproachable, except through the wider use of electronic trading which becomes accessible only in the context of assets, when trade depends on exchanges.  

---

70 Shelby, C. M. (2019). How did we get here? Dissecting the hedge fund conundrum through an institutional theory lens. *Bus Law, 74*(3), 735–787.

71 McVea, H. (2007). Op. Cit., pp. 725–727.

72 Mallaby, S. (2007). Op. Cit., p. 95.

73 Stoforos, Ch., Degiannakis, St., & Palaskas, Th. (2017). Hedge fund returns under crisis scenarios: A holistic approach. *Research in International Business and Finance, 42*, 1196–207. https://doi.org/10.1016/j.ribaf.2017.07.056.

74 Front running—i.e. the practice of trading ahead of a large buy or sell order placed by an institution or a mutual fund—is something that hedge fund managers can only do if they receive inside information form executing brokers who are probably more to blame than the hedge funds themselves for front-running.

75 Eichengreen, B. (1999). The regulator’s dilemma: Hedge funds in the international financial architecture. *International Finance, 2*(3), 411–440. Hildebrand commented that,
1.3.3 Financial Stability as Rationale for Hedge Fund Regulation

More than ten years after the financial crisis, the long shadow it has cast has started to fade. Most post-crisis prudential policies have already been decided, financial stability being one major issue in this respect. Thus, the protection of the financial system stability, by means of ongoing systemic risk mitigation represents the third major motivation concerning financial market regulation and its primary objective, as some commentators, such as Phoebus Athanassiou, would say.

Generally, active industry participants like hedge funds offer advantages for securities industries through liquidity promotion, but also through performance. In addition, they can be relevant for financial new products and for the reshuffle of fiscal risk. Nevertheless, there are several funds, which just like various highly leveraged organizations can throw into confusion or even worse, rupture every financial markets operation. Hedge funds were indeed considered causative of excessive but also, at certain times, turbulent industry processes emerging within vulnerable financial systems. Many academic researchers considered that hedge funds did not have a major significance for the propagation of the financial market crises during the last several years. Thus, Dixon et al. (2012) analyze the measure in which HFs contributed to the increase of systemic risk and also to the 2009 financial crisis, concluding that although HFs can contribute to systemic risk, they “are not the primary cause of the financial crisis.”

in the interests of ensuring anonymity and avoiding front-running, the largest hedge funds should be made to deal with several prime brokers and that higher Chinese Walls should be erected between the prime brokers’ proprietary trading and execution desks (Hildebrand, P. M. (2007). Hedge funds and prime broker dealers: Steps towards a best practice proposal. Banque de France Financial Stability Review, 10, 67–76).

Athanassiou, Ph. (2009). Op. Cit., p. 64.

Idem.

Brown, J., et al. (1998). Hedge funds and the Asian currency crisis of 1997 (NBER Working Paper No. 6427). https://doi.org/10.3386/w6427.

Ibid.

Dixon, L., Clancy, N., & Kumar, K. B. (2012). Hedge funds and systemic risk. Rand Corporation.

Kalak, I., Azevedo, A., & Hudson, R. (2016). Reviewing the hedge funds literature II: Hedge funds’ returns and risk management characteristics. International Review of Financial Analysis, 48, 55–66. https://doi.org/10.1016/j.irfa.2016.09.006.
“Systemic risk” is an ambiguous concept of particular major importance to the financial stability rationale. This term has been clearly defined as the occurrence ability of one crucial systemic event leading to several connected failures within financial entities, capable to adversely affect most operations of financial markets as systems (and not at the level of each of their participants). This capacity may also lead to the deterioration of the real economy by, inter alia, the abruption of payments, the collapse of financial markets, the insufficiency of credit supply (market liquidity) and, ultimately, the occurrence of conditions favorable to deflation and recession.

A report to the G 20 by the IMF, BIS, and FSB describes the systemic risk concept in terms of “the disruption to the flow of financial services as (a) generated by a distortion of all parts of the financial system; and (b) capable of causing serious negative consequences for the real economy.”

The following definition of “systemic events” was provided: situations in which “...shocks to one part of the financial system lead to shocks elsewhere, impinging in turn upon the stability of the real economy.” Emphasizing the role of a loss for the real economy as a key feature of the economic crisis concept, the CRMPG identified a financial event, which differed from a “systemic event” according to whether or not its consequences entail significant damages which hit not only financial systems but also real economies. They defined the term as a drop occurring within

82 De Bandt, O., Hartmann, P. (2002). Systemic risk: A survey. In C. Goodhart & G. Illing (Eds.), Financial crisis, contagion and the lender of last resort: A book of readings (pp. 11–28). London: Oxford University Press, p. 11.
83 Danielsson, Jon et al. Op. Cit., pp. 538–539.
84 International Monetary Fund.
85 Bank for International Settlements.
86 Financial Stability Board.
87 IMF, BIS, & FSB (2009). Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations, at 5–6.
88 Bordo, M. D. et al. (1998). Real versus pseudo-international systemic risk: Some lessons from history. Review of Pacific Basin Financial Markets and Policies, 1(1), 31–58. https://doi.org/10.1142/s0219091598000053.
89 Counterparty Risk Management Policy Group.
90 CRMPG II. (2005). Toward greater financial stability: A private sector perspective. Report 5. http://www.crmpolicygroup.org/. Accessed 15 June 2020.
productive investments, subsequent to the decrease in credit provisions, and the loss of balance as far as the financial, but also economic activities are concerned.\textsuperscript{91}

Some aspects were considered very important in terms of financial stability: recurring financial crises during the last two decades, in association with the progressive liberalization ("deregulation") and increasing integration and interdependence of global capital markets. These have progressively shifted the focus of the contemporary regulatory policy debate from micro-prudential (investor-related) to macroprudential (systemic stability-related) issues.

One of the most important lessons to be learnt from the economic depression consists of the fact that previous financial regulation took exaggerated measures to preserve the integrity of private corporations, while it reduced the interdependence between financial organizations, not focusing at all on what this interdependence really symbolized in terms of systematic security. Essential causes creating systematic insecurity imply: "counterparty risk, the risk of default on the part of counterparties to OTC transactions, and fire-sale risk."\textsuperscript{92} Indeed, many post-crisis scholarly researches have confirmed that systemic risk can be enhanced by hedge funds. As a consequence, international authorities, among which we mention the Financial Stability Board ("FSB") and the International Organization of Securities Commissions ("IOSCO") support the opinion that hedge funds "could in fact enhance systemic risk irrespective of the existing regulations over counterparties and OTC derivatives."\textsuperscript{93} In this respect, the FSB and IOSCO stated in a consultation paper that: "[T] it is still possible for an investment fund to become highly leveraged through derivatives that are not centrally-cleared, particularly if margining practices for the non-centrally cleared derivatives are inadequate. Hence

\textsuperscript{91}National Research Council. (2007). \textit{New Directions for understanding systemic risk: A report on a conference cosponsored by the Federal Reserve Bank of New York and the National Academy of Sciences}. Washington, DC: The National Academies Press. https://doi.org/10.17226/11914.

\textsuperscript{92}Goddard, J., et al. (2009). The financial crisis in Europe: Evolution, policy responses and lessons for the future. \textit{Journal of Financial Regulation and Compliance}, 17(4), 362–380. https://doi.org/10.1108/13581980911004352.

\textsuperscript{93}Shelby, C. M. (2017). Closing the hedge fund loophole: The SEC as the primary regulator of systemic risk. \textit{B.C.L. Review}, 58(2), 639–701.
leverage constitutes a central component in the analysis of the counter-party channel, particularly for those funds that are not subject to any restrictions and may build up significant leverage positions (e.g. private funds).”

As a consequence of the need for financial stability, both European and US regulatory bodies carefully scrutinized the shadow banking system during the last decade, and especially unregulated hedge funds in direct connection to international systemic risk. According to Mhalla et al. (2020), this “preoccupation stems from the high probability that these funds suffer extreme losses, which in turn would cause funds’ closures, fire-sale of assets, and eventually, financial distress of systemically important institutions.” The current turmoils regarding the repo market clearly exhibit the role that hedge funds play with regard to financial stability, as well as the change of trading activities involving systemic risks from commercial banks to hedge funds. According to Mhalla et al. (2020), “combined with their intense lobbying efforts to escape regulations, this highlights the need to define improved regulatory policies.”

It was Brunnermeier et al. (2009) who have asserted the measurement of systemic risks with a variable named CoVaR. This is composed of “the value at risk” (VaR) of financial entities depending on other entities which are at risk. A growth of CoVaR relative to VaR reveals

---

94 Financial Stability Board. (2015). Consultative Document (2nd): Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions 33. https://www.fsb.org/2015/03/assessment-methodologies-for-identifying-non-bank-non-insurer-global-systemically-important-financial-institutions/. Accessed 15 June 2020.

95 Mhalla, L., Hambuckers, J., & Lambert, M. (2020). Extremal connectedness and systemic risk of hedge funds. https://ssrn.com/abstract=3519295 or http://dx.doi.org/10.2139/ssrn.3519295. Accessed 12 June 2020.

96 Financial Times. (2019, January 19). Hedge fund leverage risk comes under scrutiny. Financial Times. https://www.ft.com/content/156023df-0c22-3945-aad0-6140113a9ee6. Accessed 15 June 2020.

97 Mhalla, L., Hambuckers, J., & Lambert, M. (2020). Extremal connectedness and systemic risk of hedge funds. https://ssrn.com/abstract=3519295 or http://dx.doi.org/10.2139/ssrn.3519295. Accessed 12 June 2020.
the growth in systemic risks.\textsuperscript{98} Another group\textsuperscript{99} proposes that credit institutions receive the authority to oversee systemic security. This delegation completes the already enforced responsibilities regarding inflation constancy and (for instance, if one refers to “the US Federal Reserve”) unemployment mitigation. Several issues must be considered in terms of supervising: the analysis of data and information collection regarding the asset positions, but also risk vulnerability in a standardized form enabling the contrast between entities; the public issue of information, subjected to periodic intervals which provide a balance between disclosure and transparency goals, but also rightful concerns regarding financial innovative techniques, and proprietary business models protection; and last but not least, the elaboration of a yearly report on systemic security and risk.\textsuperscript{100}

Hedge fund operations and entities also need to have financial stability, as this is the main reason for their coming under the spotlight in much the same way as the other financial market participants because of the fact that their operations might have undermining effects. The other way around, comparing a hedge fund with an investment credit institution, the first one is probably by far the most changing of comparable leverage because it may fight the whole financial market by means of its strong advantages.

When addressing the systemic stability risk usually generated by hedge funds, the main scenario considered by policy makers is failure. Instead of the downfall of an individual large fund, the collapse of several funds might be more credible and pertinent; regardless of their form or features, breaking down during the same period, disseminating confusion and alarm throughout the economy, and involving systemic risk. The former situation described is called “contagion.” The issues directly related to the latter consist of “liquidity risk” (the request of cutting loose investments after some important deficit), “risk to counterparties,” and “herding” (possibly unsuccessful various funds investing in similar areas). Concerns regarding the fact that market might fail from contagion are mainly hypothetical. Lately, a plethora of academic studies on hedge funds address

\textsuperscript{98}Brunnermeier, M., & Cheridito, P. (2019). Measuring and allocating systemic risk. \textit{Risks}, 7(2), 46. https://doi.org/10.3390/risks7020046, p. 31.

\textsuperscript{99}Squam Lake Working Group on Financial Regulation.

\textsuperscript{100}Hedge Funds. (1999). \textit{Leverage, and the lessons of long-term capital management}. Op. Cit.
systemic risk directly,\textsuperscript{101} but neither of them concludes the gravity of the threat, nor even provides a definitive measure or assessment. As Bodellini underlines, “hedge funds have demonstrated that they can pose and spread systemic risk across the financial markets, and that their managers can use them to commit fraud and misappropriation of fund assets.”\textsuperscript{102} According to him, the regulation in force nowadays seems inconsistent and largely inappropriate to prevent and face systemic risks of hedge funds.

The previously mentioned so-called “direct” channel which can result in systemic contagion has also an “indirect” channel. This channel represents another way for hedge funds to affect financial stability, characterized by: “…a forced hedge fund liquidation [that] exacerbates market volatility and reduces liquidity in key markets (especially where the hedge fund under threat was the prime provider of liquidity).” Systemic correlations between asset classes increase in times of stress and market movements amplified by the potential for herding.\textsuperscript{103}

The transmission mechanisms of systemic risk are one of the issues debated in an article by Professor Rosa Lastra\textsuperscript{104} describing how “the channels of contagion or transmission mechanisms can be classified into at least four categories […]: a) the inter-bank, inter-institution, inter-instrument channel; b) the payment systems channel; c) the information channel; and d) the psychological channel.”\textsuperscript{105} These transmission channels contribute to disseminate the systemic risk across the financial markets globally. As Professor Lastra explains, “what makes a crisis of a systemic nature is not so much the trigger event (\textit{causa proxima}), but these transmission mechanisms, domestically and internationally. If the

\textsuperscript{101} Bodellini, M. (2017). From systemic risk to financial scandals: The shortcomings of US hedge fund regulation. \textit{Brooklyn Journal of Corporate, Financial \& Commercial Law, 11}, 417. https://brooklynworks.brooklaw.edu/bjcfcl/vol11/iss2/6. Accessed 15 June 2020.

\textsuperscript{102} Idem.

\textsuperscript{103} King, M. R., & Maier, P. (2007). \textit{Hedge funds and financial stability: The state of the debate} (Discussion Paper 9). Bank of Canada. https://www.bankofcanada.ca/2007/09/discussion-paper-2007-9/. Accessed 12 July 2020.

\textsuperscript{104} See Lastra, R. M. (2011a). Systemic risk, SIFIs and financial stability. \textit{Capital Markets Law Journal, 6}(2), 197–213.

\textsuperscript{105} Lastra, R. M. (2011a). Op. Cit., pp. 197–213.
linkages are strong, the potential for systemic instability increases. If the connections are weak, there is less of a threat of systemic risk.”

The systemic implications of the industry’s operation and its potential to generate, precipitate or propagate systemically relevant shocks include three main reasons which have recently stepped forward. These are: (a) the public prominence hedge fund failure experiences starting with 1998 and the possibility that they reoccur within the next future, (b) the ongoing increase of the hedge funds’ segments of the asset management industry, together with the insufficiency of accessible data for the public reported in their balance sheets, but also the quite recent decrease of the industry profits in conjunction with (c) the function and impact of hedge funds within the credit risk transfer markets. This does not consider these guaranteed concerns and the relevance of hedge fund late developments for the determination of the applicability of the systemic stability rationale of financial regulation to hedge funds.

The financial crisis of 2007–2009 has led to an increase in regulation regarding hedge funds. All international organizations pointed the fingers toward the shadow-banking sector as being the one to blame for the recent financial crisis. For the reasons illustrated above, hedge funds were not to blame, as they spread systemic risk, but they did not create it. Thus, two major arguments support this affirmation. On the one hand, they were not involved in the forming of the toxic securities at the center of the crisis since they had nothing to do with nonconforming mortgages, as their repackage into securities, the bundle of these securities along with other securities as collateral for yet other securities, have provided a rating to the structured credit securities or have distributed

---

106 Lastra, R. M. (2011a). Op. Cit., pp. 197–213.

107 These are by no means the only ones. A paper highlights the following reasons for concerns over the external effects of hedge funds: the risk that hedge funds might be a source of market vulnerability because of their use of high-risk strategies or the deterioration of the quality of investment managers following an increase in transactions and a reduction in profit opportunities; the risk that hedge funds might trigger steep price fluctuations, especially in low liquidity markets, and that prime brokers’ counterparty-risk-management standards for hedge funds are lowered as the prime brokerage business becomes more competitive; and the concern that the emergence of risks will go undetected because of the constraints imposed by quantitative data and secondary related information of hedge funds and the limitations of available analytical methods (Bank of Japan (2006) Recent Developments in Hedge Funds, 48).
the above-mentioned securities. On the other hand, there were many others that bought the high yield bearing subprime-backed securities and among these one can find: pension and mutual funds, insurance corporations, as well as European and Asian banks, all having been similarly convinced into buying them. It is the view of the author of this book thinks that an increase of regulation towards the hedge fund sector will not be the right answer for the shadow-banking problem. Hedge funds should be more regulated, but according to certain criteria, more transparency and disclosure should be asked to hedge fund managers bearing in mind that the risk of overregulation is high. Private investors will find alternative ways to invest their money. An example of this statement belongs to the renowned George Soros, who has decided to gradually diminish his hedge fund on claims that in the aftermath of “the Dodd-Frank Act” there is too much regulation affecting the hedge fund sector in the United States. What Soros did was to give back money to his investors and establish a family office. According to the new “provisions of the Dodd-Frank Act” in the United States, a family office will not incur the risk of being supervised by the Federal Reserve as the large hedge funds currently may incur this risk in the event of being considered a systemically important financial institution.

Issues involving systemic stability produced a major regulatory impact to date and are likely to provide an ongoing focus of regulatory attention with the increase of financial risks within the banking sector. However, regulatory authorities must carefully consider that stricter regulation implies more constraints for the hedge funds industry and consequently limit the number of services provided. Regulators should consider adjusting the tolerance parameter, in order to reach “the right level of stringency for an optimal balance between financial stability and

108 Kirchgaessner, S., & Sender, H. (2008, November 13). Hedge fund chiefs blame the system for financial crisis. Financial Times. www.ft.com/cms/s/0/0f8c0216-b193-11dd-b97a-0000779fd18c.html#axzz1hB5fGiqm. Accessed 12 July 2020.

109 Shadab, H. (2008, November 13). Hedge funds and the financial market. In Testimony before the House Committee on Oversight and Government Reform. Washington, DC. http://mercatus.org/publication/hedge-funds-and-financial-market. Accessed 15 June 2020.

110 See Chapter 6 on Regulation of hedge funds in US.

111 Market transparency, deposit insurance, capital adequacy and bank failure resolution regulatory measures, to name a few, are premised (at least to an extent) on financial stability considerations as a justification for financial market regulation.
enough flexibility for the financial sector to operate efficiently.”\textsuperscript{112} This has to be achieved in an iterative process in which the regulator fine-tunes the tolerance parameter and monitors the response from the financial sector and the effects on the rest of the economy.

### 1.4 Regulatory Response at International Level

In 1999, in the United States, immediately after the 1998 LTCM collapse, “the President’s Working Group on Financial Markets” (which has become the Financial Stability Oversight Council) released an initial study.\textsuperscript{113} The Working Group issued subsequent premises, but also guidance on private pools of capital starting with 2007.\textsuperscript{114} “The Basel Committee” had released its first study on credit institution and “Highly Leveraged Institutions” (HLIs) in 1999 with a support paper on sound practices and a follow-up paper in January 2000.\textsuperscript{115} IOSCO issued an initial paper in November 1999, comparing work of the Basel Committee with a joint Basel/IOSCO report in 2001.\textsuperscript{116} IOSCO issued subsequent surveys in 2006 and 2007 on hedge funds.\textsuperscript{117}

\textsuperscript{112} Brunnermeier, M., & Cheridito, P. (2019). Measuring and allocating systemic risk. \textit{Risks}, 7(2), 46. https://doi.org/10.3390/risks7020046.

\textsuperscript{113} PWG. (1999). Hedge funds, leverage and the lessons of long term capital management. In \textit{Report of the President’s Working Group on Financial Markets}. https://www.treasury.gov/press-center/press-releases/Pages/report3097.aspx. Accessed 20 June 2020.

\textsuperscript{114} PWG. (2007). Principles and guidelines regarding private pools of capital. President’s Working Group on Financial Markets. https://www.treasury.gov/press-center/press-releases/Pages/hp272.aspx. Accessed 20 June 2020.

\textsuperscript{115} Several articles and reports need to be consulted: Basel Committee on Banking Supervision (1999a). Banks’ Interaction with Highly Leveraged Institutions; and Basel Committee on Banking Supervision (1999b). Sound Practices for Banks’ Interactions with Highly Leveraged Institutions. See also Basel Committee on Banking Supervision (2000). Banks’ Interaction with Highly Leveraged Institutions: Implementation of the Basel Committee’s Sound Practices Paper.

\textsuperscript{116} Basel Committee and IOSCO (2001). Review of Issues Relating to Highly Leveraged Institutions.

\textsuperscript{117} Several articles and reports need to be consulted: IOSCO, The Regulatory Environment for Hedge Funds: A Survey and Comparison, 2006; and IOSCO (2008). Report on Funds of Hedge Funds—Final Report. International Organization of Securities Commissions. https://www.iosco.org/library/pubdocs/pdf/IOSCOPD276.pdf. Accessed 15 August 2020.
“Banking Supervision Committee” (BSC)\textsuperscript{118} issued a separate paper on the vulnerability of EU credit institutions “to hedge funds.”\textsuperscript{119}

Similarly, the “Financial Stability Board” (FSB) issued an important document on HLIs in 2000, which was updated seven years later. The 2000 report was mainly concerned with systemic risk and leverage following the collapse of LTCM in 1998.\textsuperscript{120} The FSB recommended mainly a market discipline rather than a direct regulation based approach. Specific recommendations were made on risk management, oversight, disclosure, and surveillance.\textsuperscript{121}

While the 2007 report accepted that substantial improvements had been made in prudential supervision and risk management capacity, a number of changes had arisen within the hedge fund system a short time ago, while further specific factors increased the threat of systemic exposure. Summing up, after the collapse of Long-Term Capital Management L.P. it became obvious that hedge funds can lead to the appearance of risks and therefore shatter the financial stability “due to their close relationship with large and complex financial institutions (LCFIs), especially commercial and investment banks.”\textsuperscript{122} These aspects are still forcing regulators to date, to increase the control of hedge fund activities.\textsuperscript{123} Another instrument which may offer positive response to controlling risks posed by hedge funds is their indirect regulation by “constraining their counterparties is often considered to be the most effective mechanism.”\textsuperscript{124}

\textsuperscript{118} Of the European System of Central Banks (ESCB).
\textsuperscript{119} European Central Bank. (2005). Large EU Banks' Exposures to Hedge Funds.
\textsuperscript{120} Financial Stability Forum. (2000). Report of the Working Group on Highly Leveraged Institutions.
\textsuperscript{121} Eight specific recommendations were made concerning; (a) stronger counter party risk management; (b) stronger risk management by hedge funds; (c) enhanced regulatory oversight of credit providers; (d) greater risk sensitivity in credit institution capital adequacy regulations; (e) sustaining industry progress (f) building a firmer infrastructure; (i) enhanced national supervision of financial market activities; and (j) good practice recommendations for foreign exchange trading.
\textsuperscript{122} Bowe, M., Kolokolova, O., & Yu, L. (2019). The Volcker rule and the hedge fund liquidity circle. http://dx.doi.org/10.2139/ssrn.3486305. Accessed 15 June 2020.
\textsuperscript{123} Kaal, W. A., & Krause, T. A. (2016). Hedge funds and systematic risk. Handbook on hedge funds. http://dx.doi.org/10.2139/ssrn.2748096.
\textsuperscript{124} Nabilou, H., & Pacces, A. M. (2015). The hedge fund regulation dilemma: Direct vs. indirect regulation. William and Mary Business Law Review, 6(1), 183–236.
After the 2008 depression, the discoveries related to Madoff Ponzi scheme and the discoveries regarding plenty of declared frauds brought to trial by SEC,\textsuperscript{125} it is not difficult at all to comprehend the active, increasing the attention of regulators, legislators, and investors. While the industry press and academic literature have well-covered some specific features of the Madoff saga, it is of no use to observe that those alleged operational risks and their evaluation have been and continue to be a major item within the hedge funds sector. At the same time, after more than a decade, “Ponzi schemes and the courts efforts to address them and to recover funds for defrauded investors continue.”\textsuperscript{126}

Regulation of hedge funds apart from straighter reinforcement for existing laws will progress in the directions presented in Fig. 1.3.

In this respect, primary legislators and regulators need to continue to directly address hedge fund regulations. “The Dodd-Frank Act” for the United States and the AIFMD II\textsuperscript{127} for Europe continue to adopt more uptight regulations on hedge fund industry.

Other national and industry initiatives have also been continued. The FCA replaced the FSA, in charge of the maintenance and supervision of the UK financial and banking industry.\textsuperscript{128} These processes and measures are implemented through the fact that the FCA makes sure that the pertinent markets function in a suitable manner, offering an appropriate degree

\textsuperscript{125}Lidstone, H. K. (2019, January 9). *Bernie Madoff after ten years; recent Ponzi scheme cases, and the Uniform Fraudulent Transactions Act*. https://ssrn.com/abstract=3313045 or http://dx.doi.org/10.2139/ssrn.3313045. Accessed 15 June 2020.

\textsuperscript{126}Idem.

\textsuperscript{127}Following the March 2018 European Commission proposal to amend the Alternative Investment Fund Managers Directive (“AIFMD”) to provide for a uniform regime for “pre-marketing” of alternative investment funds (“AIFs”) across the European Union (“EU”) an agreement has now been reached on the text to be implemented. A two-year national implementation period began on 2 August 2019 for the Directive to be fully transposed from 2 August 2021.

\textsuperscript{128}The Financial Services Act 2012 (2012). c. 21 (‘FSA12’), ss 6(1A) to (1T) (Amendments of Financial Services and Markets Act 2000) pt 1A, ss 1A—1T; Scheds 1ZA to Financial Services and Markets Act 2000, c. 8 (FSMA2000).
of consumer safety,\textsuperscript{129} maintaining and enhancing the stability\textsuperscript{130} of the financial system in the United Kingdom, at the same time stimulating

\textsuperscript{129}Ibid., ss 1 B(3)(a), and 1C.

\textsuperscript{130}Stability is a matter for the Bank of England: Bank of England Act 1998, c. 11 (BEA98), ss 2A, 2B, 2C, 2D, and pt 1A; the Prudential Regulation Authority that has succeeded a role to stability- The Financial Services Act 2012, c. 21 (‘FSA12’), ss 6(1A) to (1T) (Amendments of Financial Services and Markets Act 2000), ss 2B, 2O, and 2J. Stability— the Banking Act 2009, c. 1 (‘BA09’), ss 1, 4; The Banking (Special Provisions) Act 2008 (2008) c. 2 has largely been replaced by the Banking Act 2009, ss 1, and 11-13 (Stabilisation Options); For Integrity—The Financial Services Act 2012, ss 1(3)(b), and 1 D.
competition\textsuperscript{131} for the consumers’ advantages.\textsuperscript{132} Another attribution of the FCA consists in supervising the manner in which undertakings by authorized financial institutions occur, monitoring that the regulations are respected and correctly enforced, concerning possible lawbreaker firms.\textsuperscript{133}

Both new authorities orchestrate their efforts. Thus, there are certain contexts, when the PRA can, in the case when it is appropriate, to require the FCA to stop exercising its authority in issues regarding bankruptcy or regulations concerning a PRA-approved entity.\textsuperscript{134} Also, this can occur if the PRA considers that, exercising its’ authority may endanger UK’s security concerning the financial system, or may conduct to the collapse of a PRA-approved institution, so that the entire British banking and financial system can be damaged.\textsuperscript{135} Actually, both the FCA and the PRA cooperate with the Bank of England, in order to ease the bank’s mission concerning the preservation of financial stability. This subject will be further addressed in Chapter 4.

The IMF\textsuperscript{136} argued in its April 2020 GFSR with direct reference to asset managers that “regulators should ensure that risk management frameworks are being applied in a robust and effective manner. Regulators should support the availability of the widest possible set of liquidity management tools (such as gates/deferred redemptions, swing pricing) and encourage fund managers to make full use of the available tools where it would be in the interests of unitholders to do so.”\textsuperscript{137} According to this report, authorities must carefully monitor fund managers and help them solve their difficulties concerning “obtaining timely and reliable valuations.”\textsuperscript{138} At the same time, IMF advices them to “monitor developments and seek to provide clarity to fund managers on their expectations,

\textsuperscript{131} The Financial Services Act 2012, s 1(3)(c).
\textsuperscript{132} Kovas, A. (2014). Understanding the financial conduct authority—A guide for senior managers. Leicestershire: Troubador Publishing.
\textsuperscript{133} FSMA2000, pt 6, s 73.
\textsuperscript{134} The Financial Services Act 2012, c. 21, pt 4.
\textsuperscript{135} Ibid., s 74; see, FSMA2000, sched 1ZB.
\textsuperscript{136} International Monetary Fund. (2020). Global financial stability report: Markets in the time of COVID-19, Chapter 1, p. 26.
\textsuperscript{137} Idem.
\textsuperscript{138} Idem.
including on the circumstances in which use of liquidity management tools, including a (temporary) suspension of redemptions, may become appropriate.”139

As far as financial markets and their stability, the IMF report focuses on the use of appropriate definitions, good communication, efficient and well-calibrated measures. It also refers to the authorities’ obligation to carefully consider the adoption of temporary restrictions,140 and their possible negative impact on liquidity and price discovery, the final aim of authorities being to make sure that they are justified in the measures they take by the increase of market confidence and of financial stability. This IMF also advises that these restrictions must be taken for short periods of time and “implemented within a predictable and reliable framework.”141

The interconnectedness issue among financial system players is to be addressed mainly through broader macroprudential coverage, and reinforcement of the capital and liquidity requirements for the global banking industry. As the financial crisis was caused not by the lack of capital, but rather by a liquidity crisis induced by concerns about asset quality and transparency, the “Basel Committee on Banking Supervision” (BCBS) developed enhanced risk-weighted capital adequacy standards (the “Basel III” framework). To strengthen the resilience of banks to loan losses, hybrid “Tier 1” capital is to be phased out for more conventional forms of permanent equity capital (that is common shares and retained earnings). More capital will be needed for contingent calls on capital arising from derivative instruments. Additionally, the capital adequacy framework will incorporate a non-risk weighted (or “simple”) leverage ratio intended to identify leverage buildup from any gaming of the capital adequacy rules, and minimum liquidity standards (both short and long-term coverage ratios). Considerable attention was paid to pro-cyclicality in bank lending and provisioning practices. In December 2017, BCBS published one last report concerning Basel III regulations: Basel III: Finalizing post-crisis reforms,142 aiming at reducing excessive variability of risk-weighted assets

139 Idem.
140 Such as the use of short selling.
141 International Monetary Fund. (2020). Global financial stability report: Markets in the time of COVID-19, Chapter 1, p. 26.
142 Basel Committee on Banking Supervision (2017). Bank for International Settlements. Basel III: Finalising post-crisis reforms. https://www.bis.org/bcbs/publ/d424.pdf. Accessed 15 June 2020.
through the introduction of “transitional arrangements to implement
the new standards to ensure an orderly and timely implementation by
jurisdictions and adjustment by banks.”\textsuperscript{143}

At the inaugural 2008 summit of the “Group of Twenty,” leaders
called for the development of best practices to enhance transparency, both
at market and counterparty levels, for hedge funds and other systemi-
cally significant financial institutions. The G-20’s subsequent declaration
on the 2nd of April 2009 also favored increased regulatory over-
sight for hedge funds, and for other private capital pools to improve
investor protection but also systemic risks management.\textsuperscript{144} In this respect,
IOSCO’s Technical Committee was established in November 2008 and
released its final report outlining six principles for regulation of hedge
funds in June 2009.\textsuperscript{145} In response to G20’s declaration of 2009, IOSCO
started publishing, every two years, a report on hedge funds. This
year, IOSCO published its Report on the Fifth IOSCO Hedge Funds
Survey,\textsuperscript{146} gathering information as on September 30, 2018. This survey
provides insight into the hedge funds industry at an international level,
“making it an integral part of IOSCO’s policy work in the investment
management sector,”\textsuperscript{147} focusing on “the markets in which hedge funds
operate, their trading activities, leverage, funding and counterparty infor-
mation,”\textsuperscript{148} in this manner, IOSCO supporting the G20 initiative for risk
mitigating connected with hedge funds.

Among other international initiatives aiming at understanding and
monitoring risks in the hedge fund sector, we also mention Financial
Stability Board (FSB) Policy Recommendations to Address Structural
Vulnerabilities from Asset Management Activities. These recommen-
dations published in January 2017 were addressing structural vulnerabilities
having to do with asset management activities. One of the central points

\textsuperscript{143} Idem, p. 2.
\textsuperscript{144} Excerpt from Declaration Summit on Financial Markets and the World Economy,
Action Plan to Implement Principles of Reform, G-20, 15 November 2008.
\textsuperscript{145} For further details see IOSCO Final Report 2009.
\textsuperscript{146} IOSCO. (2020). Report on the fifth IOSCO hedge funds survey. Final Report.
International Organization of Securities Commissions. https://www.iosco.org/library/
pubdocs/pdf/IOSCOPD653.pdf. Accessed 17 June 2020.
\textsuperscript{147} Idem.
\textsuperscript{148} Bank of England. (2017). Hedge funds and their prime brokers: Developments since
the financial crisis. Quarterly Bulletin Q4, p. 7.
of the report was leverage, seen as the most important vulnerability in the hedge funds industry. Two major risks were underlined by these recommendations, which require policy response:

a. “the lack of consistent and available data on leverage; and
b. wide variation in limits imposed on financial and synthetic leverage across jurisdictions.”

In this vein, the FSB proposed to regulatory bodies (conducted by IOSCO) that before the end of 2018, they should “identify and/or develop consistent measures of leverage in funds, to facilitate more meaningful monitoring of leverage.”

It remains to be seen whether future solution will take the form of mere regulatory reforms, such as adaptations to and reinforcement of the current framework while respecting the existing principles, or regulatory revolution, eventually necessary changes to the current regulations. In any case, whatever the legal form and details of the new supervisory approach, all actors involved will have to make one compromise or another, and they have to manifest a willingness to find rapid solutions to the obvious political difficulties that any attempt to move in the direction of more integrated supervision and more shared powers at the Community level can be expected to entail.

1.5 Concluding Remarks

While the current regulatory environment appears more settled compared to the recent past, regulators across the world continue to set high expectations intended to maintain a strong, resilient financial sector through hedge fund firms having robust financial and operational resilience, supported by strong risk management and compliance capabilities. In our view, this may provide an opportunity for leading financial firms to pivot from having to build frameworks to reflect a barrage of new regulations to optimising through taking advantage of new technologies and operating models.

149 Idem, p. 7.
150 Idem, p. 7.
This chapter groups and illustrates different sets of regulations applicable to hedge funds aiming the protection of investors, the market integrity, and the financial system stability.

The relevance of economic activities regulation can only be highlighted if the process takes into account the risks of market failure, which can be limited by regulation without excessively interfering with the associated legitimate advantages. The decision-making process implies whether (and the manner in which) certain given economic activities are supposed to be regulated. During this process, one must also assess not only its risks and advantages, how they correspond to one or more of the financial regulation rationales, but also whether there is any empirical evidence and a wider, *lato sensu* “philosophical” disagreement regarding the regulation.

Disagreement evidently exists; the question is where does it emerge from? According to analyses performed throughout this chapter, this emerges mainly from the highly ambiguous role of hedge funds in the financial crisis. Following the crash of LTCM in 1998, many dealer-banks requested overall collateralization of hedge fund undertakings. In agreement with this, hedge funds used to be less levered as compared to credit institutions. Afterward, the collapse of significant hedge funds, among which one can mention Amaranth in 2006, and the major redemptions by investors during but also after the crisis, which did not lead to systemic problems. Furthermore, hedge funds have fewer assets and less leverage as compared to credit institutions. This could diminish the probability that hedge funds might be a causal agent of any future crisis, such as the current pandemic one. In the absence of the systemic risk threat and of an exact delineation of social externalities brought about by hedge funds, the aim of direct hedge fund regulation is not so clear. However, in the light of the above-mentioned events, requests for a tighter regulation start to make sense, as the supervisors started to face four major issues: investors’ protection, transparency, market integrity, and risk mitigation.

Regarding the financial crisis, the author does not attribute it to the hedge funds. However, the blame belongs to hedge funds in terms of their involvement and responsibility during the crisis, having turned into a whim for the problems that affect many issues regarding financial markets. International regulators examined hedge funds closely and to a great extent, and consequently implemented, alongside other measures, registration requests, limitations on leverage, and increasing disclosure and transparency for protecting investors.
So far, there has been harsh criticism regarding the new regulation in the Dodd-Frank Act due to the fact that it is reactive, but also narrow-minded. Similar criticisms emerged also about the AIFMD Directive. As already seen, scholars have suggested a wide range of possible solutions to address the concerns in the debate on hedge funds and hedge fund regulation. Some favor regulatory arbitrage as a measure against systemic failure. Other scholars state that the pre-Dodd-Frank Act approach dealing with allowing advisers to voluntarily register would be the most effective in this respect, proposing an approach based on trust that would let funds having previously earned general trust from the public to develop on the grounds of that trust, with less or no interference of regulation.

The author argues that this debate on the most suitable type of hedge fund regulation appears to be very controversial. The shift of the criteria dealing with hedge fund investments, the appointment of one self-regulatory authority, the application of higher disclosure criteria to counterparties, and the increase of leverage limitation as well as of the transparency disclosure are some of the recommendations discussed in this chapter. The author continues her argumentation as regarding the benefit of fees from hedge funds, regulation of hedge fund creditors, and the moderation of the mutual funds regulation for the increase of the competitiveness between hedge funds.

Thus, the author states that hedge funds regulators worldwide face an increasing dichotomy. The major concern of the regulators is the investors’ protection in conjunction with making sure that the industry is operating properly. With this in mind, regulators try not to tightly regulate the industry while tailoring measures and recommendations for avoiding systemic risks.

One very frequently mentioned argument of individuals against each type of external intervention in the industry processes is that not all types of regulation are compatible with the hedge fund industry’s basic role and characteristics. This is the main reason to presume that regulation would be bound to affect negatively their development and performance, not in terms of the imminent growth in compliance costs entailed by its introduction.

Other often cited argument opposing to regulation of the industry consists of the fact that normative compulsion might dissuade hedge funds or their managers from locating in the EU, forcing them to leave Europe in order to find locations that are more “favorable.” In the event
that this might happen, the argument further develops as follows: regula-
tory arbitrage would be reinforced and the sector’s effective supervision
diminished. Finally, the argument continues as regulating the industry
would not serve a meaningful function, as the purpose of each norma-
tive initiative would prove unsuccessful in covering offshore hedge fund
jurisdictions, regardless of the “extraterritorial” nature of its consequence.

On the other side, a professor experienced in financial law notes that:
“We should also beware of the excesses of regulation and the dangers of
overregulating a given sector or type of institutions, creating incentives
for businesses to move outside the regulatory framework. Any regulatory
perimeter brings its own shadows and loopholes.”\textsuperscript{151}

Considering the arguments stated above in this chapter, hedge fund
regulation appears not only as a necessity, but also as a wise issue. From
the author’s point of view, moderation, and good sense should prevail,
and therefore, nothing would come to indicate that this kind of imple-
mentation could prove unfeasible. There is one major aspect that should
not be overseen: it is likely that moderation or sound judgment would
not prevail within these funds structure in two cases. The first one is if
this emerging chance to eventually implement harmonized norms applic-
cable to onshore hedge funds had been offered as a consequence of
an important European or global financial crisis a priori their opera-
tion. The second is if its norms had not been the result of observation
but rather, the outcome of extreme hurry, together with urgency in the
aftermath of the disorderly unwinding of the positions of one or more
hedge funds. Moreover, the regulatory process could become a scape-
goat to the caprices of political tensions, together with the vagaries of
public perceptions regarding the image of ideal hedge fund regulatory
overview.\textsuperscript{152}

Current efforts that aim to regulate hedge funds through their regis-
tration with regulators together with requesting disclosure of pertinent
data might aid minimizing moral hazard, social externalities, and systemic
risk that the hedge fund industry is generating, making all the efforts

\textsuperscript{151} Lastra, R. M. (2011b, March 23). \textit{The quest for international financial regulation}. Inaugural Lecture presented at Charterhouse Square.

\textsuperscript{152} ...restructuring in response to a regulatory failure is probably the weakest ground
for reform’ (Carmichael, Jeffrey, Australia’s Approach to Regulatory Reform in Carmichel,
J., et al. (2004). \textit{Aligning financial supervisory structures with countries’ needs} (p. 95). Washington: WBI Learning Resources.
to improve investor protection. So far, hedge funds’ involvement in the ongoing financial crisis is still not clear. In this respect, dissymmetric hedge fund regulation emerging from the Dodd-Frank Act together with the AIFM Directive becomes in the author’s perspective disadvantageous and even undermining, this requiring a global regulation of hedge funds with major attention on investor protection.

From a global point of view, the AIFM Directive might develop incentives for regulatory arbitrage, might lead to retaliatory action by states from outside the EU and might lead to the achievement of an appropriate level of investor protection. In the long term, this might prove counterproductive for the competitiveness of the EU alternative investment community in conjunction with financial markets in Europe, while keeping an adequate standard of protection of investors’ interests. In this regard, the author considers that investors would benefit in terms of protection from the AIFM Directive mainly because of the disclosure and operational requirements that it stipulates. Thus, this disclosure would not only provide investors with up-to-date material data about their funds, but, at the same time, would also offer features of the potential conflicts of interests and risk factors the investors could be subjected to.

In the Dodd-Frank Act, the SEC received the authorization from the Congress to adopt norms in order to interpret the exemptions for hedge funds. The SEC needs to use its discretion to provide the vital-needed guiding. In the author’s opinion, many of the regulatory dilemmas in the AIFM Directive, but also in the Dodd-Frank Act might have been prevented or even entirely avoided if the Basel Committee had introduced a fee for credit institutions’ lending exposure to hedge funds. Basel III capital requests that credit institutions implement a fee for banks’ assets according to their systemic risk contribution. The Basel III measure for hedge fund lending exposure could have been associated with a focus on the exposure of credit institutions to complex financial products. This might prove of great benefit in addressing the connection between market failure in terms of financial instruments, and in augmenting the significance of hedge funds within the market for financial instruments.

Due to these reasons, the author acknowledges the cross-border nature of the hedge funds sector and therefore the need to create a harmonized international hedge funds regulation regime. This is exactly what the MiFID II is planning to do. In October 2019 the European Securities and Markets Authority (ESMA) updated its Questions and Answers (Q&As) regarding transparency issues under MiFID II. These Q&As aim
to promote common supervisory approaches and practices in the application of MiFID II, and provide responses to questions posed by the general public and market participants relating to hedge funds transparency, investor protection, and market structures issues. Not only will these be updated on an ongoing basis, but authorities in some of the biggest European countries—United Kingdom, Germany, France, and Italy—are assessing the impact and success of MiFID II. Brussels is believed to be considering changes to standards. What is constant is the requirement to be compliant with MiFID II.

As a concluding remark, the governments, central banks, but also every regulating authority need to choose between the effectiveness of a regulation, on the one hand and the price implied in complying with it, on the other hand. As far as the hedge funds sector is concerned, an investment area careful to watchdogs after decades of being unregulated, regulators will have to convince fund managers that a continuous free in/out data flow, together with open communication are of major importance, and that active intervention will occur if market stability and investor protection are at risk.

Therefore, the greatest challenge that regulators will have to face is finding an ideal suitable manner to increase compliance in conjunction with investors’ protection without forcing hedge fund managers to move to unregulated jurisdictions.

In the author’s opinion, the trend towards the new architecture of financial regulation has three similar ways with important different characteristics referring to the US, the UK, particularly in the Brexit context, and the EU financial regulatory frameworks.

**References**

AIMA. (2013). AIMA’s guide to sound practices for hedge fund valuation. Alternative Investment Management Association. [https://www.aima.org/sound-practices/guides-to-sound-practices.html](https://www.aima.org/sound-practices/guides-to-sound-practices.html). Accessed 1 July 2020.

Aragon, G. O., & Nanda, V. (2017). Strategic delays and clustering in hedge fund reported returns. *Journal of Financial and Quantitative Analysis, 52*(1), 1–35.

Aragon, G. O., Nanda, V. K., Zhao, H. (2019). Investor protection and capital fragility: Evidence from hedge funds around the world. [https://ssrn.com/abstract=3207064](https://ssrn.com/abstract=3207064) or [http://dx.doi.org/10.2139/ssrn.3207064](http://dx.doi.org/10.2139/ssrn.3207064). Accessed 1 July 2020.
Athanassiou, Ph. (2009). *Hedge fund regulation in the EU: Current trends and future prospects*. The Netherlands: Wolters Kluwer.

Bank of England. (2017). Hedge funds and their prime brokers: Developments since the financial crisis. *Quarterly Bulletin Q4*. https://www.bankofengland.co.uk/quarterly-bulletin/2017/q4/hedge-funds-and-their-prime-brokers-developments-since-the-financial-crisis. Accessed 12 June 2020.

Bank of Japan. (2006). *Recent developments in hedge funds*. https://www.boj.or.jp/en/research/brp/ron_2006/ron0606a.htm/. Accessed 12 June 2020.

BarclayHedge. (2020a). *Global hedge fund database*. https://www.barclayhedge.com/databases/global-database. Accessed 12 June 2020.

BarclayHedge. (2020b). *Hedge fund industry: Assets under management—Historical growth of assets*. https://www.barclayhedge.com/solutions/assets-under-management/hedge-fund-assets-under-management/hedge-fund-industry. Accessed 12 June 2020.

Barth, D., Joenvaara, J., Kauppila, M., & Wermers, R. R. (2020). *The hedge fund industry is bigger (and has performed better) than you think* (Working Paper 20-01). Office of Financial Research. https://ssrn.com/abstract=3544181. Accessed 20 June 2020.

Basel Committee on Banking Supervision. (1999a). *Banks’ interaction with highly leveraged institutions*. https://www.bis.org/publ/bcbs45.htm. Accessed 20 June 2020.

Basel Committee on Banking Supervision. (1999b). *Sound practices for banks’ interactions with highly leveraged institutions*. https://www.bis.org/publ/bcbs46.htm. Accessed 20 June 2020.

Basel Committee on Banking Supervision. (2000). *Banks’ interaction with highly leveraged institutions: Implementation of the Basel committee’s sound practices paper*. https://www.bis.org/publ/bcbs68.htm. Accessed 20 June 2020.

Basel Committee on Banking Supervision. (2004). *The joint forum, final disclosure in the banking, insurance and securities sectors: Issues and analysis*. https://www.bis.org/publ/joint08.htm. Accessed 20 June 2020.

Basel Committee on Banking Supervision. (2017). *Bank for international settlements*. Basel III: Finalising post-crisis reforms. https://www.bis.org/bcbs/publ/d424.pdf. Accessed 15 June 2020.

Basel Committee & IOSCO. (2001). Review of issues relating to highly leveraged institutions. Basel Committee on Banking Supervision and the International Organization of Securities Commissions (IOSCO). https://www.bis.org/publ/bcbs79.htm. Accessed 20 June 2020.

Bodellini, M. (2017). From systemic risk to financial scandals: The shortcomings of US hedge fund regulation. *Brooklyn Journal of Corporate, Financial & Commercial Law, 11*, 417. https://brooklynworks.brooklaw.edu/bjcfcl/vol11/iss2/6. Accessed 15 June 2020.
Bordo, M. D., et al. (1998). Real versus pseudo-international systemic risk: Some lessons from history. *Review of Pacific Basin Financial Markets and Policies*, 1(1), 31–58. https://doi.org/10.1142/s0219091598000053.

Bowe, M., Kolokolova, O., & Yu, L. (2019). *The Volcker rule and the hedge fund liquidity circle*. http://dx.doi.org/10.2139/ssrn.3486305. Accessed 15 June 2020.

Brown, J., et al. (1998). *Hedge funds and the Asian currency crisis of 1997* (NBER Working Paper No. 6427). https://doi.org/10.3386/w6427.

Brunnermeier, M., & Cheridito, P. (2019). Measuring and allocating systemic risk. *Risks*, 7(2), 46. https://doi.org/10.3390/risks7020046.

Brunnermeier, M., et al. (2009). *The fundamental principles of financial regulation*. International Centre for Monetary and Banking Studies. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwi_kb64_vHqAhUvA2MBHbo4DjwQFjABegQIAxAB&url=https%3A%2F%2Fcepr.org%2Fsites%2Fdefault%2Ffiles%2Fgeneva_reports%2FGenevaP197.pdf&usg=AOvVaw0LdcNJGiwnJbLU0DIGDY6V. Accessed 15 June 2020.

Carmichel, J., et al. (2004). *Aligning financial supervisory structures with countries’ needs*. Washington: WBI Learning Resources.

Cartwright, P. (2004). *Banks, consumers and regulation*. London: Hart Publishing.

CRMPG II. (2005). Toward greater financial stability: A private sector perspective. Report 5. http://www.crmpolicygroup.org/. Accessed 15 June 2020.

Davies, H. (1999). Financial regulation: Why bother? Mimeo, society of business economists lecture. London. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiwAhVnpo7rAhVnpo7rAhVXOQFjAAegQ1BBA&url=https%3A%2F%2Fwww.fep.up.pt%2Fdisciplinas%2Fpaf924%2FPGAF%2FTexto_2_David_Llewellyn.pdf&usg=AOvVaw1wZ9UCGtdUeXXcxd4psZC. Accessed 15 June 2020.

De Bandt, O., & Hartmann, P. (2002). Systemic Risk: A Survey. In C. Goodhart & G. Illing (Eds.), *Financial crisis, contagion and the lender of last resort: A book of readings* (pp. 11–28). London: Oxford University Press.

Dimmock, S. G., & Gerken, W. (2016). Regulatory oversight and return misreporting by hedge funds. *Review of Finance*, 20(2), 795–821. https://doi.org/10.1093/rof/rfv025.

Dixon, L., Clancy, N., & Kumar, K. B. (2012). *Hedge funds and systemic risk*. Rand Corporation. https://www.rand.org/pubs/monographs/MG1236.html. Accessed 12 July 2020.

Directive (EC) 2003/6, [2003] OJ L 96/16.

Dworkin, G. (1971). Paternalism. In R. Wasserstrom (Ed.), *Morality and the law*. Belmont: Wadsworth Pub. Co.
Edelman, D., Fung, W., & Hsieh, D. A. (2013). Exploring uncharted territories of the hedge fund industry: Empirical characteristics of mega hedge fund firms. Journal of Financial Economics, 109(3), 734–758.

Edwards, F. R. (1999). Hedge funds and the collapse of long-term capital management. The Journal of Economic Prospectives, 13(2), 189–210.

Edwards, F. R. (2006). Hedge fund and investor protection regulation. Federal Reserve Bank of Atlanta Economic Review, 91(4), 35–48.

Eichengreen, B. (1999). The regulator’s dilemma: Hedge funds in the international financial architecture. International Finance, 2(3), 411–440.

Eureka. (2019). The Eureka hedge report April 2019. https://static1.squarespace.com/static/5a02fa72bff200aa6a54edd9/t/5cc1449515fccc0de796a5b6f/1556169910440/Eureka+Hedge+Report_Apr-2019.pdf. Accessed 12 June 2020.

European Central Bank. (2005). Large EU banks’ exposures to hedge funds. https://www.ecb.europa.eu/press/pr/date/2005/html/pr051125_1.en.html. Accessed 12 June 2020.

Farrell, D. (2018). Increasing investor protection through improving hedge fund valuation. St. John’s Law Review, 92(1), 149–172.

Financial Stability Board. (2015). Consultative document (2nd): Assessment methodologies for identifying non-bank non-insurer global systemically important financial institutions, 33. https://www.fsb.org/2015/03/assessment-methodologies-for-identifying-non-bank-non-insurer-global-systemically-important-financial-institutions/. Accessed 15 June 2020.

Financial Stability Forum. (2000). Report of the working group on highly leveraged institutions. https://www.fsb.org/2000/04/r_0004a/. Accessed 15 June 2020.

Financial Times. (2019, January 19). Hedge fund leverage risk comes under scrutiny. Financial Times. https://www.ft.com/content/156023df-0c22-3945-aad0-6140113a9ee6. Accessed 15 June 2020.

FSA. (2005). Hedge funds: A discussion of risk and regulatory engagement. Financial Services Authority (Discussion Paper 05/4, 54). https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj5kZPfy_rAhUpD2MBHesWCMEQFjAAegQIARAB&url=https%3A%2F%2Fuk.practicallaw.thomsonreuters.com%2F8-200-9311&usg=AOvVaw3Io1B8JB1NtxMi4RqHwbU4. Accessed 15 June 2020.

Garcia, G., & Prast, H. (2003). Depositor and investor protection in the EU and the Netherlands: A brief history. Netherlands Central Bank Research Series Supervision (discontinued) 54. Netherlands Central Bank, Directorate Supervision. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiQk4v8yr_rAhW1DmMBHfppBDwQFjAAegQIAxAB&url=https%3A%2F%2Fideas.repec.org%2Fp%2Fdnb%2Fressup%2F54.html&usg=AOvVaw0-qhvc4XsokA1LfDO2RMH0. Accessed 15 June 2020.
Gillet, R., Ligot, St., & Firouzi, H. (2017). The challenges and implications of the Markets in Financial Instruments Directive (MiFID) and of its revision (MiFID II, MiFIR) on the efficiency of financial markets. In R. Douady, C. Goulet, & P. C. Pradier (Eds.), Financial Regulation in the EU (pp. 151–198). London: Palgrave Macmillan.

Goddard, J., et al. (2009). The financial crisis in Europe: Evolution, policy responses and lessons for the future. Journal of Financial Regulation and Compliance, 17(4), 362–380. https://doi.org/10.1108/1358198091104352.

Gortos, C. (2018). Stricto sensu investor protection under the MiFID II: A systematic overview of Articles 24–30. Newcastle upon Tyne: Cambridge Scholars Publishing.

Hilary, J. A. (2014). Putting the ‘financial stability’ in financial stability oversight council. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2485949. Accessed 12 June 2020.

Hildebrand, P. M. (2007). Hedge funds and prime broker dealers: Steps towards a best practice proposal. Banque de France Financial Stability Review, 10, 67–76.

Hoffmann, B., & Paetzmann, K. (2018). Investor protection, valuation methods and the German alternative funds industry. Journal of Risk Finance, 19(2), 174–189. https://doi.org/10.1108/jrf-06-2017-0101.

IMF, BIS, & FSB. (2009). Guidance to assess the systemic importance of financial institutions, markets and instruments: Initial considerations. Report to the G-20 Finance Ministers and Central Bank Governors. Financial Stability Board, International Monetary Fund, Bank for International Settlements. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiWtN-z9o_rAhXRyaQKHQiXBdEQFjAAegQIBRAB&url=https%3A%2F%2Fwww.imf.org%2Fexternal%2Fpdf%2Ffsr%2F2009%2F0109.pdf&usg=AOvVaw0xlMldT2IFHTMJUfIn-VaS. Accessed 15 June 2020.

International Monetary Fund. (2020). Global financial stability report: Markets in the time of COVID-19, Chapter 1. https://www.imf.org/-/media/Files/Publications/GFSR/2020/April/English/text.ashx?la=en. Accessed 15 June 2020.

IOSCO. (2003). Objectives and principles of securities regulation. International Organization of Securities Commissions. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjxw8Oj-Y_rAhWF_qQKHYkXDLEQFjAFegQIBBAB&url=https%3A%2F%2Fwww.legco.gov.hk%2Fyrb%2Fyr04-05%2Fenglish%2Fpanels%2Fpanels%2Fpapers%2Fpdf%a0217cb1-880-9e.pdf&usg=AOvVaw3eFJc6fhdvH9dHGqByEHcN. Accessed 17 June 2020.
IOSCO. (2008). *Report on funds of hedge funds—Final report*. International Organization of Securities Commissions. https://www.iosco.org/library/publicdocs/pdf/IOSCOPD276.pdf. Accessed 15 August 2020.

IOSCO. (2020). *Report on the fifth IOSCO hedge funds survey: Final report*. International Organization of Securities Commissions. https://www.iosco.org/library/publicdocs/pdf/IOSCOPD653.pdf. Accessed 17 June 2020.

Jorion, P., & Schwartz, C. (2014). Are hedge fund managers systematically misreporting? Or not? *Journal of Financial Economics, 111*, 311–327.

Kaal, W. A., & Krause, T. A. (2016). Hedge funds and systematic risk. *Handbook on Hedge Funds*. https://doi.org/10.2139/ssrn.2748096.

Kaal, W. A. (2019). *Indirect regulation of hedge funds*. Oxford Handbook of Hedge Funds. https://ssrn.com/abstract=3405660. Accessed 15 June 2020.

Kalak, I., Azevedo, A., & Hudson, R. (2016). Reviewing the hedge funds literature II: Hedge funds’ returns and risk management characteristics. *International Review of Financial Analysis, 48*, 55–66. https://doi.org/10.1016/j.irfa.2016.09.006.

Kenny, F., & Mallaburn, D. (2017). Hedge funds and their prime brokers: Developments since the financial crisis. *Bank of England Quarterly Bulletin, Q4*, 1–12.

King, M. R., & Maier, P. (2007). *Hedge funds and financial stability: The state of the debate* (Discussion Paper 9). Bank of Canada. https://www.bankofcanada.ca/2007/09/discussion-paper-2007-9/. Accessed 12 July 2020.

Kirchgaessner, S., & Sender, H. (2008, November 13). Hedge fund chiefs blame the system for financial crisis. *Financial Times*. www.ft.com/cms/s/0/0f8c0216-b193-11dd-b97a-0000779fd18c.html#axzz1hB5fGiqm. Accessed 12 July 2020.

Kovas, A. (2014). *Understanding the financial conduct authority—A guide for senior managers*. Leicestershire: Troubador Publishing.

La Porta, R., et al. (1997). Legal determinants of external finance. *Journal of Finance, 52*(3), 1131–1150. https://doi.org/10.1111/j.1540-6261.1997.tb02727.x.

La Porta, R., et al. (1999). Corporate ownership around the world. *Journal of Finance, 54*(2), 471–517. https://doi.org/10.1111/0022-1082.00115.

Lannoo, K. (2017). *MiFID II and the new market conduct rules for financial intermediaries: Will complexity bring transparency?* ECMI Policy Brief. European Capital Markets Institute. https://www.ceps.eu/wp-content/uploads/2017/05/ECMI%20PB%20No%2024%20KL_MarketConductRules.pdf. Accessed 12 July 2020.

Lastra, R. M. (2011a). Systemic risk, SIFIs and financial stability. *Capital Markets Law Journal, 6*(2), 197–213.

Lastra, R. M. (2011b, March 23). *The quest for international financial regulation*. Inaugural Lecture presented at Charterhouse Square.
Lewis, C. M. (2016). *Liquid alternative mutual funds: An asset class that expands opportunities for diversification* (Working Paper). https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj3IoL065LrAhXUN8AKHcQ4DF8QFjAAegQIBRAB&url=https%3A%2F%2Fwww.sec.gov%2Fcomments%2Fs7-24-15%2Fs72415-96.pdf&usg=AOvVaw13ZlRZSPR882Oag7Oy7Uit. Accessed 12 July 2020.

Lidstone, H. K. (2019, January 9). *Bernie Madoff after ten years; recent Ponzi scheme cases, and the Uniform Fraudulent Transactions Act*. https://ssrn.com/abstract=3313045 or http://dx.doi.org/10.2139/ssrn.3313045. Accessed 15 June 2020.

Maxey, D. (2014, February 4). If a security isn’t trading, what is it really worth? *The Wall Street Journal*. https://www.wsj.com/articles/sec-looking-at-how-alternative-funds-value-investments-1391096281?tesla=y. Accessed 12 June 2020.

McCahery, J. A., & de Roode, Al. (2019). *The lost decade for hedge funds: Three threats* (TILEC Discussion Paper No. DP2019-027. Working Paper No. 486/2019). European Corporate Governance Institute – Law. SSRN: https://ssrn.com/abstract=3501551. Accessed 20 June 2020.

McVea, H. (2007). Hedge funds and the new regulatory agenda. *Legal Studies*, 27(4), 709–739 (2007). https://doi.org/10.1111/j.1748-121x.2007.0069.x.

Mhalla, L., Hambuckers, J., & Lambert, M. (2020). *Extremal connectedness and systemic risk of hedge funds*. https://ssrn.com/abstract=3519295 or http://dx.doi.org/10.2139/ssrn.3519295. Accessed 12 June 2020.

Moloney, N. (2006). *EC securities regulation*. New York: Oxford University Press.

Nabilou, H., & Pacces, A. M. (2015). The hedge fund regulation dilemma: Direct vs. indirect regulation. *William and Mary Business Law Review*, 6(1), 183–236.

National Research Council. (2007). *New directions for understanding systemic risk: A report on a conference cosponsored by the Federal Reserve Bank of New York and the National Academy of Sciences*. Washington, DC: The National Academies Press. https://doi.org/10.17226/11914.

Paredes, T. A. (2006). On the decision to regulate hedge funds: The SEC’s regulatory philosophy, style and mission. *University of Illinois Law Review*, 5, 975–1036.

Patton, A., Ramadorai, T., & Stratfield, M. (2013). Change you can believe in? Hedge fund data revisions. *Journal of Finance*, 70(3), 963–999.

Preqin. (2020). *Global hedge fund report*. https://www.preqin.com/insights/global-reports/2020-preqin-global-hedge-fund-report. Accessed 20 June 2020.
PWG. (1999). Hedge funds, leverage and the lessons of long term capital management. In Report of the President’s Working Group on Financial Markets. https://www.treasury.gov/press-center/press-releases/Pages/report3097.aspx. Accessed 20 June 2020.

PWG. (2007). Principles and guidelines regarding private pools of capital. President’s Working Group on Financial Markets. https://www.treasury.gov/press-center/press-releases/Pages/hp272.aspx. Accessed 20 June 2020.

Ramsay, I. (1995). Consumer credit law, distributive justice and the welfare state. Oxford Journal of Legal Studies, 15(2), 177–197. https://doi.org/10.1093/ojls/15.2.177.

Rydge, J., & Comerton-Forde, C. (2004). The importance of market integrity: An analysis of ASX self-regulation. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiVndKB8pLrAhVxoVwKHZwrC21QFj/AbegQlBBAB&url=http%3A%2F%2Fciteseerx.ist.psu.edu%2Fviewer%2Fdownload%3Fdoi%3D10.1.1.175.4322%26rep%3Drep1%26type%3Dpdf&usg=AOvVaw2dARyVn2Q4rdqayt8SNK3. Accessed 20 June 2020.

SEC. (2003). Implications of the growth of hedge funds. Staff Report 47. US Securities and Exchange Commission. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiViVndKB8pLrAhVxOvKbKzQ/CWGMFTydKP. Accessed 20 June 2020.

SEC v. Rajaratnam. (2012). SEC v. Rajaratnam 622 F.3d 159, 188 (2d Cir. 2010). https://www.courtlistener.com/opinion/176129/sec-v-rajaratnam/. Accessed 12 June 2020.

SEC. (2017). SEC’s private fund statistics. US Securities and Exchange Commission. https://www.sec.gov/divisions/investment/private-funds-statistics/private-funds-statistics-2017-q4.pdf. Accessed 12 June 2020.

SEC. 17 CFR Parts 275 and 279. Release No. IA-2333 (File No. S7-30-04). https://www.sec.gov/rules/final/ia-2333.htm. Accessed 12 June 2020.

Shadab, H. (2008, November 13). Hedge funds and the financial market. In Testimony before the House Committee on Oversight and Government Reform. Washington, DC. http://mercatus.org/publication/hedge-funds-and-financial-market. Accessed 15 June 2020.

Shelby, C. M. (2016). Are hedge funds still private? Exploring publicness in the face of incoherence. SMU Law Review, 69(2), 405–452.

Shelby, C. M. (2017). Closing the hedge fund loophole: The SEC as the primary regulator of systemic risk. B.C.L. Review, 58(2), 639–701.

Shelby, C. M. (2019). How did we get here? Dissecting the hedge fund conundrum through an institutional theory lens. Bus Law, 74(3), 735–787.

Sklar, R. (2009). Hedges or thickets: Protecting investors from hedge fund managers’ conflicts of interest. Fordham Law Review, 77(6), 3251–3323.
Smith, Z. Al., & Mumtaz, M. Z. (2017). Hedge fund managers and deceit: Is the accusation of performance manipulation valid? *Chinese Management Studies, 11*(3), 387–414. https://doi.org/10.1108/cms-02-2017-0035.

Soc, A. M., & Poirier, R. (2018). *Does past performance matter? The persistence scorecard.* https://www.spglobal.com/en/research-insights/articles/does-past-performance-matter-the-persistence-scorecard. Accessed 12 June 2020.

Spangler, T., & Scholer, K. (2010). *A practitioner’s guide to alternative investment funds* (2nd ed.). London: Sweet & Maxwell.

Stoforos, Ch., Degiannakis, St., & Palaskas, Th. (2017). Hedge fund returns under crisis scenarios: A holistic approach. *Research in International Business and Finance, 42,* 1196–1207. https://doi.org/10.1016/j.ribaf.2017.07.056.

Van Berkel, S. (2008). Should hedge funds be regulated? *Journal of Banking Regulation, 9,* 196–223. https://doi.org/10.1057/jbr.2008.https://doi.org/10.s.