COMMITTEE ON CAPITAL MARKETS REGULATION

A Competitive Analysis of the U.S. Hedge Fund Market

May 2023

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A Competitive Analysis of the U.S. Hedge Fund Market

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Introduction

This is the second of two reports by the Committee on Capital Markets Regulation (the "Committee") that assesses the competitiveness of the U.S. private funds market and the SEC's rationale for imposing greater restrictions on that market with its February 2022 proposed rulemaking (the "Proposed Rule") [1] in the name of enhancing competition. The first report (the "Private Equity Report")[2] addresses the private equity segment of the U.S. private funds market. In this report, we address the hedge fund segment of the market. As we noted in the Private Equity Report, the SEC has expressed serious concern with respect to a purported lack of competition in the U.S. private funds market as well as asserted that the Proposed Rule would benefit investors by increasing competition in this market.[3] Furthermore, SEC Chair Gensler has frequently asserted a need for greater competition in the private funds market and repeatedly stated that increasing competition in the U.S. private funds market is one of the primary objectives of the Proposed Rule. He has further asserted that enhancing competition is a basis for the SEC's authority to regulate private markets including the U.S. private funds market.[4]

Part I and Part II of this report examine the competitiveness of the U.S. hedge fund market using a methodology grounded in the academic literature and the methods U.S. government agencies use to assess competition under antitrust law. We describe this methodology in greater detail in Appendix A. Part I finds that the concentration of the hedge fund industry is very low, well below the threshold that the Federal Trade Commission and Department of Justice (the "Agencies") consider to be unconcentrated for purposes of antitrust analyses. Moreover, the number of hedge fund advisers and funds is steadily growing, thus increasing the supply of investment opportunities available to investors. Part I also evaluates the range of investment strategies offered by U.S. hedge funds, because firms compete by innovating and offering more differentiated products. Part I finds that the range of investment strategies available to hedge fund investors has remained highly diverse. Finally, Part I evaluates barriers to entry in the hedge fund industry, finding that barriers to entry are low as evidenced by the substantial number of advisers that enter and exit the marketplace each year.

Part II specifically analyzes price and quality competition in the U.S. hedge fund market with a focus on the gross fees charged by hedge fund advisers and hedge fund net-of-fee performance. It finds that the Proposed Rule's evaluation of hedge fund fees focuses narrowly on fragmented and anecdotal evidence while omitting empirical evidence that hedge fund fees vary across funds and advisers in response to competitive pressures. This evidence belies the Proposed Rule's and Chair Gensler's suggestions that hedge fund fees have remained static over time and across funds and

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[1] SECURITIES & EXCHANGE COMMISSION ["SEC"], *Private Fund Advisers; Documentation of Registered Investment Adviser Compliance Reviews*, 87 FED. REG. 16,866 (Mar. 24, 2022), https://www.federalregister.gov/documents/2022/03/24/2022-03212/private-fundadvisers-documentation-of-registered-investment-adviser-compliance-reviews [the "Proposed Rule"].

[2] COMMITTEE ON CAPITAL MARKETS REGULATION, A COMPETITIVE ANALYSIS OF THE U.S. PRIVATE EQUITY FUND MARKET (2023) https://capmktsreg.org/wp-content/uploads/2023/04/CCMR-Private-Equity-Funds-Competition-Analysis-04.11.20231.pdf.

[3] *Id*. at 16,956.

[4] Chair Gary Gensler, SEC, *"Competition and the Two SECs" – Remarks Before the SIFMA Annual Meeting* (Oct. 24, 2022), https://www.sec.gov/news/speech/gensler-sifma-speech-102422.

are not subject to competitive pressures. Part II then reviews the empirical evidence showing that hedge funds provide investors with excess risk-adjusted net-of-fee returns and portfolio diversification benefits, which further evidences the extent of price and quality competition in the U.S. hedge fund market. Part I and Part II conclude that the hedge fund market is competitive and is growing increasingly competitive.

Part III analyzes the potential effects of the Proposed Rule on the competitiveness of the U.S. hedge fund market. We incorporate by reference the equivalent analysis contained in the Private Equity Report and explain how similar negative competitive effects of the Proposed Rule will manifest in the U.S. hedge fund market.

The Committee therefore concludes that the Proposed Rule operates from the false premise that the U.S. hedge fund market is uncompetitive and that the Proposed Rule is in fact likely to reduce competition in the hedge fund market and consequently decrease the number and array of investment opportunities available to investors.

Part I: Competitiveness in the U.S. Hedge Fund Market

1. Hedge Fund Adviser Industry Concentration

Data on industry concentration indicate that the hedge fund advisory market exhibits a very low degree of concentration. More specifically, the Herfindahl-Hirschman Index ("HHI") for hedge fund advisers as measured by assets under management is and has been for the past decade well below the threshold that the Agencies consider to be a concentrated marketplace. As illustrated in **Figure 1** on the next page, over the ten-year period from 2013 through 2022, the HHI for hedge fund advisers averaged 71.3, less than five percent of the Agencies' threshold of 1500 for an *unconcentrated* marketplace and less than five percent of the average HHI for other industries within the U.S economy. This would place the hedge fund industry within the lowest decile of HHIs of industry sectors for public companies organized by standard industrial classification codes.[5]

The dramatically higher concentration within other industries suggests that the SEC's focus on competition in hedge fund advisory markets is misplaced. For example, four firms hold approximately 67% of the domestic U.S. airline market,[6] and a single firm holds approximately 90% of the domestic U.S. search engine market.[7]

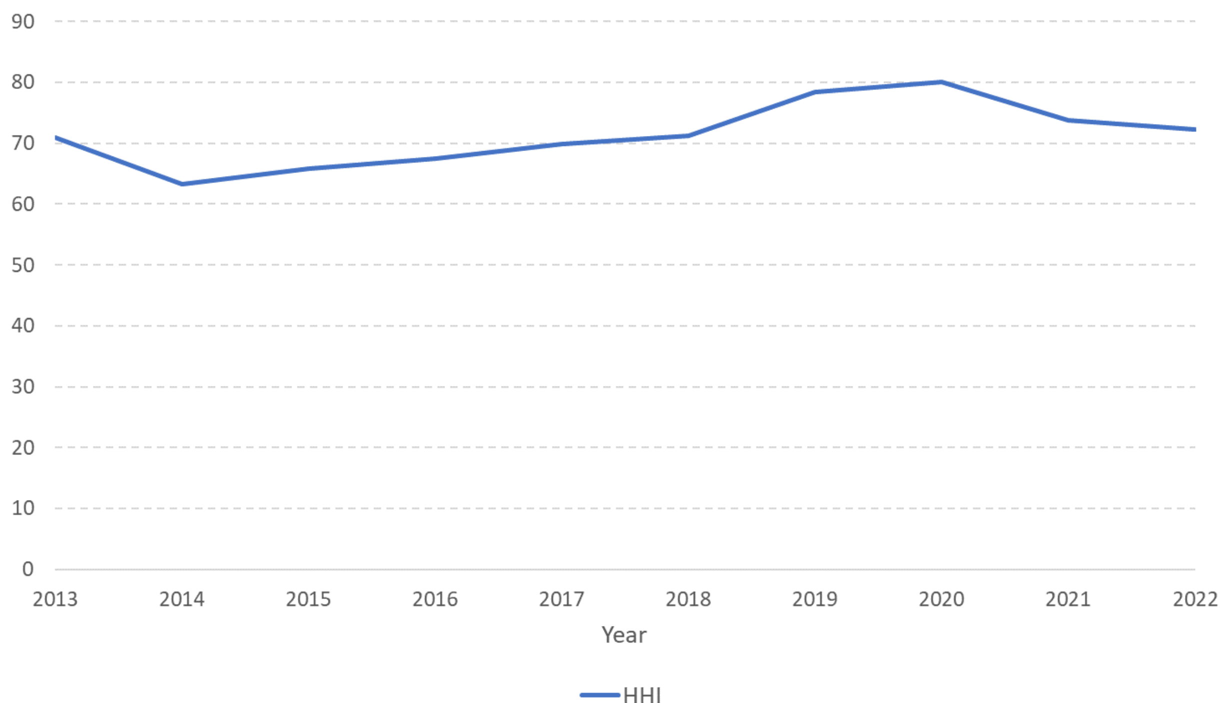
In addition, SEC data indicates that the average HHI for mutual funds advisers across the same 2013-2022 period was 1,300, over thirteen times the figure for hedge fund advisers.

[5] HHI for public companies was calculated using financial statement sales revenue data for the years 2013-2021, inclusive, from Computstat. S&P GLOBAL MARKET INTELLIGENCE, COMPUSTAT FINANCIALS. https://www.marketplace.spglobal.com/en/datasets/compustat-financials-(8).

[6] UNITED STATES DEPARTMENT OF TRANSPORTATION, Bureau of Transportation Statistics, https://www.transtats.bts.gov/ (last visited Apr. 6, 2023).

[7] STATCOUNTER, Search Engine Market Share United States of America, https://gs.statcounter.com/search-engine-market-share/all/united-states-of-america (last visited Apr. 6, 2023).

Figure 1: HHI for Hedge Fund Advisers[8]



Additional SEC data corroborate the view that the U.S. hedge fund market is highly unconcentrated. More specifically, they show that the largest hedge fund advisers and hedge funds possess relatively small shares of the hedge fund market and have not significantly increased their market shares over recent years. As shown in **Figure 2** on the following page, the *combined* market share of the largest five hedge fund advisers has remained below 6% throughout the last decade, even though these advisers increased their assets under management in absolute terms. In addition, **Figure 3** on the following page shows that over the past five years, the combined market share of the ten largest U.S. hedge funds has remained below 20% of total assets under management for all U.S. hedge funds and the combined market share of the 100 largest hedge funds has remained below 50% of that total. By comparison, the average market share of the largest *four* firms across all industries in the U.S. in 2017 was 35%,[9] while the average market share of the largest four firms in the depository credit institution sector was approximately 40%.[10]

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[8] Figure 1 is based on Form ADV filings by advisers with more than $150 million in assets under management. Form ADV filings disclose gross assets for each hedge fund and we aggregate gross assets for all hedge funds managed by the same adviser to determine total hedge fund gross assets for each adviser. We then calculate the HHI for advisers to hedge funds each year based on the total gross asset value of all hedge funds each year.

[9] ROBERT KULICK & ANDREW CARD, NERA, US CHAMBER OF COMMERCE, INDUSTRIAL CONCENTRATION IN THE UNITED STATES: 2002-2017 (2022), https://www.uschamber.com/assets/documents/Final-Industrial-Concentration-Paper.pdf.

[10] Francisco Covas & Paul Calem, Bank Policy Institute, Five Important Facts about the Competitiveness of the U.S. Banking Industry (Feb. 24, 2022), https://bpi.com/five-important-facts-about-the-competitiveness-of-the-u-s-banking-industry/#_ftnref7.

Figure 2: Total Assets Under Management of the Largest 5 Hedge Fund Advisers, Including as Percentage of Total Hedge Fund Assets Under Management[11]

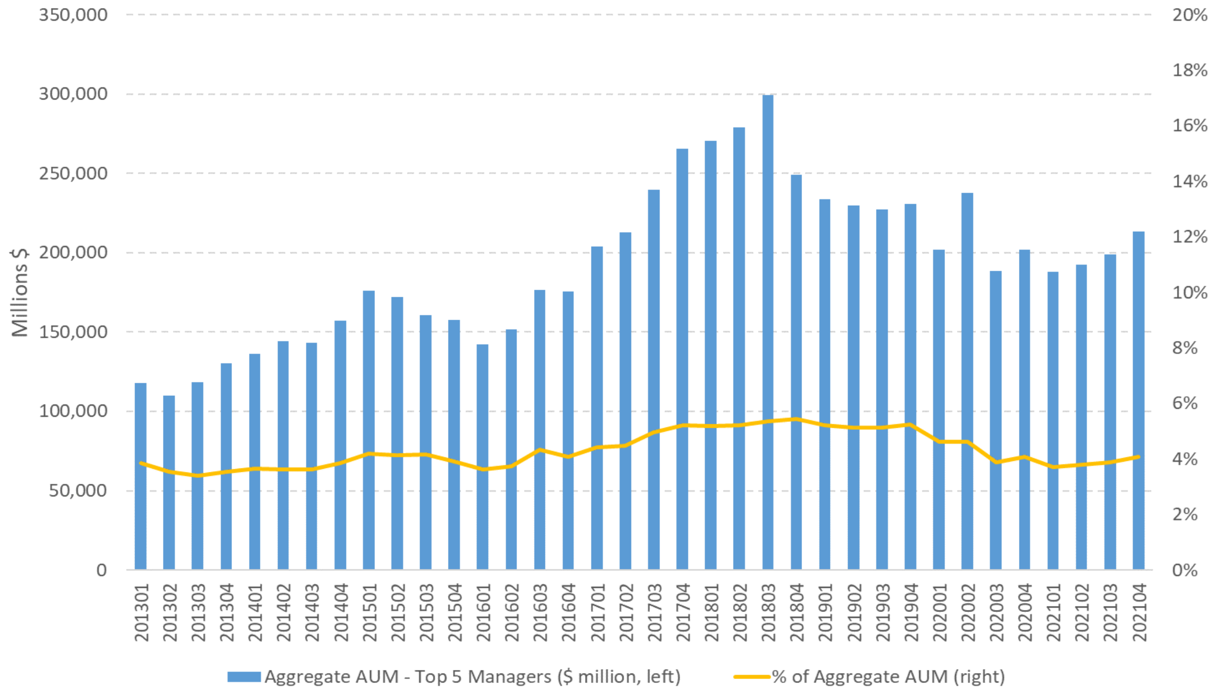
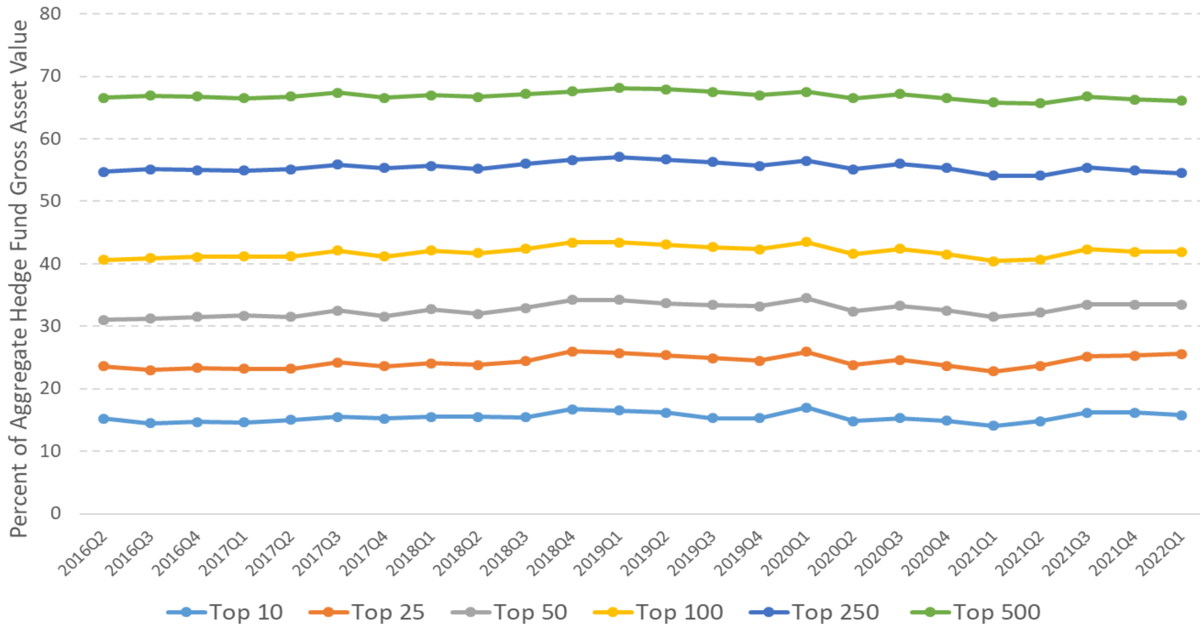


Figure 3: Percentage of Aggregate Hedge Fund Gross Asset Value Reported by Largest Hedge Funds[12]



[11] SEC Private Funds Statistics.
[12] *Id.*

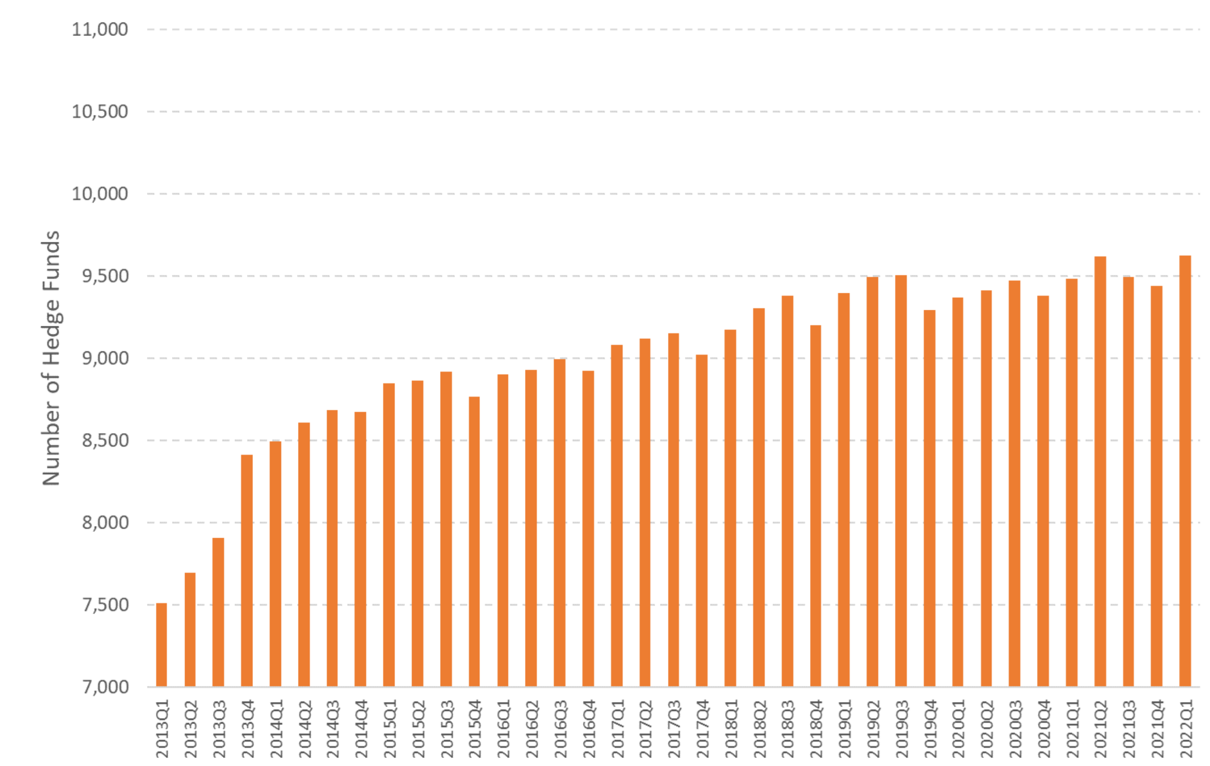
2. Quantity of Hedge Fund Advisory Services.

SEC data show that the number of hedge funds and the number of hedge fund advisers in the U.S. market have both increased significantly over the past 10 years. These trends indicate that hedge fund investors are able to select from an increasingly greater number of advisers and funds. A greater aggregate quantity of service and greater quantity of service providers are indicators of an increasingly competitive market.

a. Number of Hedge Funds

As shown in Figure 4, the total number of hedge funds increased from 7,512 as of Q1 2013 to 9,628 as of Q1 2022.

Figure 4: Number of Hedge Funds[13]

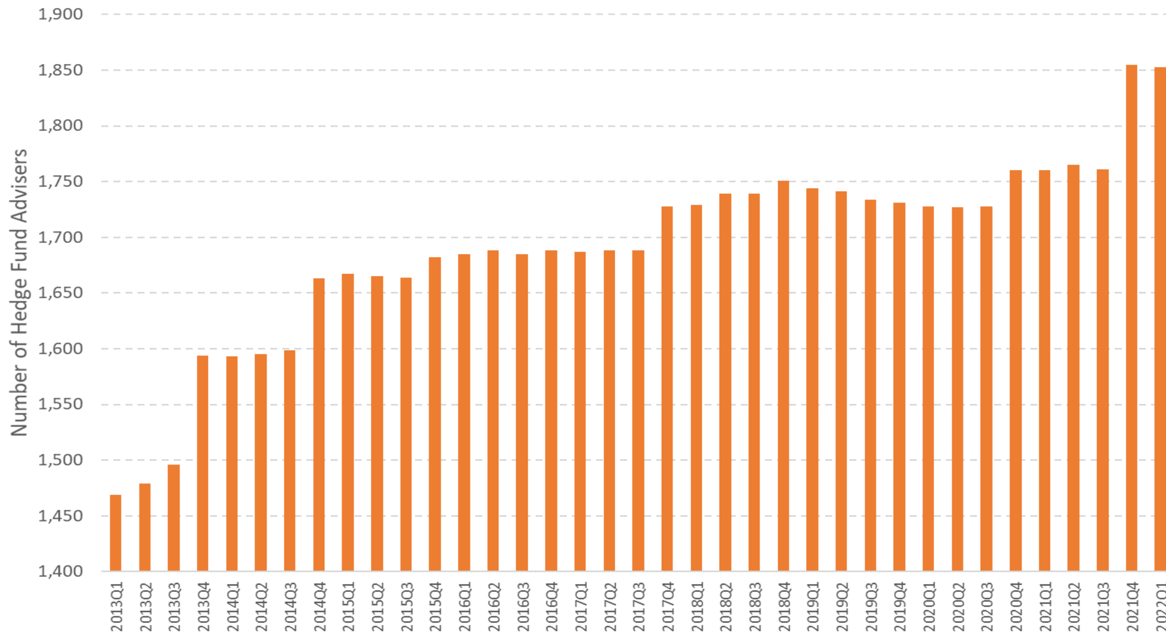


b. Number of hedge fund advisers

As shown in Figure 5 on the next page, from Q1 2013 to Q1 2022, the number of hedge fund advisers increased from 1,469 in Q1 2013 to 1,853 in Q1 2022.

[13] *Id*.

Figure 5: Number of Hedge Fund Advisers[14]



Moreover, the growth in the aggregate number of funds was not driven by the largest advisers creating more funds. If that were the case, one would observe increasing industry concentration as measured by HHI. Instead, Figure 1 above shows that the HHI of hedge funds advisers did not increase over the 2013-2022 period.

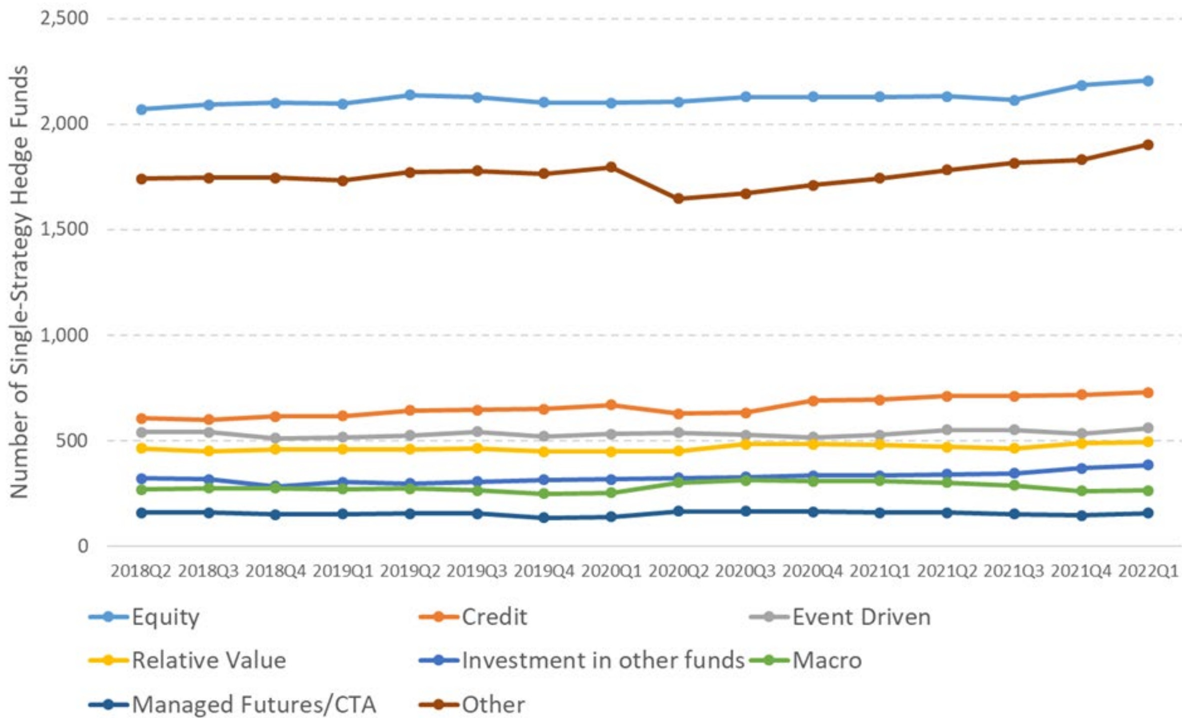
3. Variety of Hedge Fund Advisory Services

SEC data show that hedge fund investors have provided access to a broad variety of investment strategies over the prior decade. A variety of differentiated services is another indicator of a competitive market.

Figure 7 on the next page shows that over the four-year period from Q2 2018 through Q1 2022 the number of single strategy hedge funds, which consistently accounted for approximately 75% of total hedge funds reporting to the SEC, either increased or remained roughly constant within each of the eight principal strategy types tracked by the SEC.

[14] *Id*. Step changes in the number of advisers, which tend to occur between the Q3 and Q4 periods, are likely due to the prevalence of December 31 year ends. Advisers are required to file Form ADV within 90 days of the end of their fiscal year. SEC, Form ADV Instructions, https://www.sec.gov/files/formadv.pdf.

Figure 7: Number of Single-Strategy Hedge Funds by Strategy Group[15]

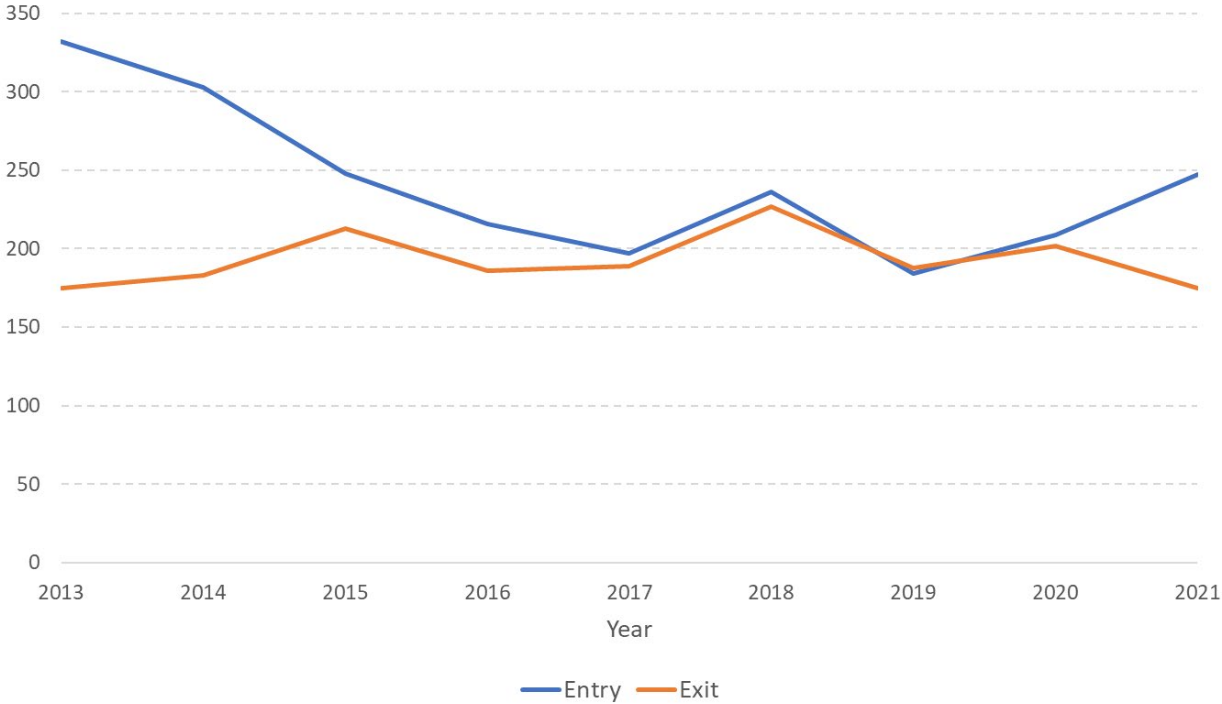


4. Barriers to Entry into the Hedge Fund Industry

The consistent growth in the number of U.S. hedge fund advisers evidenced in Figure 4 above suggests that barriers to entry into the U.S. hedge fund market are low. An analysis of the number of hedge fund advisers entering and exiting the market each year from 2013 through 2021 corroborates this view. These data points are not directly reported in public sources. Therefore, to estimate these figures we analyzed SEC Form ADV filings by hedge fund advisers and identified advisers that either began or ceased filing in each such year. Figure 8 on the following page depicts the results: Not only were there at least 150 new entrants to the market each year from 2023 through 2021, but there were also at least 150 advisers that exited the market each such year. The growth in the aggregate number of advisers depicted in Figure 4 thus underestimates the extent of new entrants to the market, since the effect of the addition of these new entrants is partially offset by those advisers that exit. Figure 8 also shows that the growth in the aggregate number of advisers is not merely the result of new advisers entering the market and remaining there because of inertia. Instead, Figure 8 indicates that advisers that cannot effectively compete tend to exit the market and they are replaced by new entrants.

[15] *Id.* In this case of this Figure 7, data are only available with respect to years after 2017.

Figure 8: Hedge fund advisers total annual industry entry and exit.



Part II: Price and Quality Competition in the U.S. Hedge Fund Market

Two of the primary means by which service providers compete are by reducing the price for a given quality of service ("price competition") and by increasing the quality of service for a given price ("quality competition").

Subpart 1 first addresses the data on hedge fund gross fees. We show that the Proposed Rule's assessment of gross hedge fund advisory fees and fee-related market practices is based on a small and unrepresentative sample of the available evidence. A significant body of empirical evidence that the Proposed Rule ignores shows that gross fees and fee-related practices for hedge funds reflect a competitive marketplace.

Subpart 2 then evaluates hedge fund net-of-fee performance to assess price and quality competition. In the context of investment management services, it is common to look to net-of-fee returns to determine the competitiveness of prices and service quality,[16] because an increase in nominal fees may be offset by higher gross returns and vice versa. Hedge fund performance is commonly measured by the extent to which the adviser achieves excess risk-adjusted returns (i.e., "alpha"). Although the data on hedge fund performance is mixed, various analyses of performance data show that hedge fund advisers have provided investors with alpha net of fees. If the market for hedge fund advisory services were uncompetitive, one would instead expect gross fees to increase to offset these superior risk-adjusted returns. Instead, the evidence of superior risk-adjusted performance suggests that hedge fund advisers are charging prices that are low relative to the value that they are providing to investors, which evidences the existence of a competitive marketplace. We also describe the evidence that hedge funds provide diversification benefits to their investors by reducing the systematic risk of investors' portfolios. The Proposed Rule entirely ignores this evidence and its implications for the competitiveness of the U.S. hedge fund market.

Subpart 3 then introduces further evidence of increasingly high demand for hedge fund advisory services. This evidence shows that institutional and other investors, despite having no obligation to invest in hedge funds, have continued to select hedge funds from among the many investment offerings available, and thus further substantiates the high degree of price and quality competition in the hedge fund market.

1. Hedge Fund Adviser Gross Fees

The Proposed Rule asserts that hedge fund management fees are typically 1.4% per year and that performance-based compensation for hedge fund advisers is typically 16.4% of fund profits, "approximately consistent with private equity fees."[17] It also asserts more generally that "private fund adviser fees may currently total in the hundreds of billions of dollars per year."[18] The Proposed Rule speculates that these fees may not be commensurate with the level of service that advisers deliver, and that these fees are relatively fixed and thus unresponsive to competitive

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[16] *See, e.g.,* Coates, *supra* note 61 at 7.

[17] Proposing Release at 16,940, citing Leslie Picker, *Two and Twenty is Long Dead: Hedge Fund Fees Fall Further Below Onetime Industry Standard*, CNBC, https://www.cnbc.com/2021/06/28/two-andtwenty-is-long-dead-hedge-fund-fees-fall-furtherbelow-one-time-industry-standard.html.

[18] *Id*. at 16,956.

pressures.[19] These assertions however fail to consider the empirical evidence on hedge fund fees indicating that fees in the U.S. hedge fund market are the product of a highly competitive marketplace and have been declining over time.

For example, Agarwal & Ray (2012) analyzed fee and performance data for a sample of 3,814 hedge funds over a three-year period.[20] They found that hedge funds "respond symmetrically to past performance by increasing the incentive fees following good performance and decreasing the incentive fee following poor performance."[21] They also find that "[c]ompetitive forces in the hedge fund industry . . . drive the fee changes as funds which deviate from the average fees within their investment style tend to change their fees towards the average."[22]

Deuskar et al. (2013) drew similar conclusions from their analysis of performance and fee data for a sample of 2,622 hedge funds across seven years.[23] They found that "[i]n contrast to the perception of a common 2/20 fee structure" there are "considerable cross-sectional and time series variations in hedge fund fees."[24] They also conclude that "management fees are dynamically adjusted in response to past fund performance" and more specifically that funds that increase management fees more aggressively "experience a bigger drop in subsequent money inflows and are more likely to maintain their good performance."[25] Fee levels thus change in response to market beliefs about managerial ability based on past performance.[26]

In addition, industry data that the Proposal itself cites indicate that the average hedge fund management and incentive fees have in fact been lower than the commonly cited 2% and 20% figures for over a decade.[27] What the Proposal does not note is that these same data also show that fees levels have been declining during that time: The average management fees declined from 1.55% in 2008 to 1.4% as of 2020 and the average incentive fee declined from 19.3% in 2008 to 16.4% in 2020.[28]

We note as well that the nominal percentage of a performance fee does not represent an amount that the adviser is guaranteed to receive. Instead, incentive fees are commonly structured so that the adviser earns no fee in a given year unless the adviser achieves a positive rate of return for the

[19] Proposing Release at 16,940.

[20] Vikas Agarwal & Sugata Ray, *Determinants and Implications of Fee Changes in the Hedge Fund Industry* 14 (2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2024362.

[21] *Id.* at 30.

[22] *Id.* at 2.

[23] Prachi Deuskar et al., *The Dynamics of Hedge Fund Fees* at 31 (2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1659275.

[24] *Id.* at 15.

[25] *Id*. at 3.

[26] *Id*.

[27] Proposing Release at 16,940, n. 265, citing Leslie Picker, *Two and Twenty Is Long Dead. Hedge Fund Fees Fall Further Below Onetime Industry Standard* CNBC (Jun. 28, 2021), https://www.cnbc.com/2021/06/28/two-and-twenty-is-long-dead-hedge-fund-fees-fall-further-below-one-time-industry-standard.html; *see also* HEDGEWEEK, *Hedge Fund Launches on the Up Heading into 2023* (Mar. 31, 2023), https://www.hedgeweek.com/2023/03/31/320065/hedge-fund-launches-heading-2023.

[28] Picker, *supra* note 27.

fund that exceeds a threshold level *and* makes up for performance in prior years that was either negative or insufficiently positive to meet the threshold.[29]

These findings undermine the view that hedge fund fees remain static over time and across advisers. In fact, fees respond to information about adviser performance, such that better performing advisers can charge higher fees because of the greater demand for their services.

2. Hedge Fund Net Performance & Diversification Benefits

The Proposed Rule claims that "[t]here can be substantial variation in the fees private fund advisers charge for similar services and performances."[30] To support this assertion with respect to hedge funds it cites a lone study that reportedly finds that for "a sample of hedge fund advisers, management fees [ranged] from less than .5 percent to over 2 percent and incentive fees [ranged] from less than 5 percent to over 20 percent, with no detectible difference in performance by funds with different management fees and only modest evidence of higher incentive fees yielding higher returns."[31] The Proposed Rule also casts doubt on the reliability of public data on hedge fund performance, because hedge funds can "choose whether and when to make their performance results publicly available," implying that these data may therefore overstate fund performance.[32]

The Proposed Rule then suggests that its proposed restrictions will remedy this purported lack of price and quality competition.

However, a meaningful assessment of price competition across a market that comprises $5 trillion in net assets cannot be based on unsubstantiated assertions and a lone study. While the data on hedge fund performance is mixed, there is empirical evidence that publicly available hedge fund performance data *underestimates* hedge fund performance, and that hedge funds have on average provided excess risk-adjusted returns, which the literature refers to as "alpha," and provided diversification benefits by reducing the systematic risk of investors' portfolios. The Proposed Rule does not consider the relevance of this evidence in assessing the competitiveness of the current U.S. hedge fund market.

In the most recent and comprehensive of these analyses, Yang et al. (2022)[33] conducted a meta-analysis of 74 studies of hedge fund performance and found that the average measured monthly alpha was 0.36%, which corresponds to 4.32% per annum.[34] They also found an absence of

[29] *See, e.g.*, MANAGED FUNDS ASSOCIATION, *How Hedge Funds Are Structured* (2016), https://www.managedfunds.org/wp-content/uploads/2016/06/06.09.16-How-HFs-are-Structured.pdf.
[30] Proposing Release at 16,940.
[31] *Id.* citing Tarun Ramadorai & Michael Streatfield, *Money for Nothing? Understanding Variation in Reported Hedge Fund Fees*, Paris December 2012 Finance Meeting EUROFIDAI–AFFI Paper, (March 28, 2011), https://ssrn.com/abstract=1798628.
[32] Proposing Release at 16,941, citing Philippe Jorion & Christopher Schwarz, *The Fix Is In: Properly Backing Out Backfill Bias*, 32 (12) THE SOCIETY FOR FINANCIAL STUDIES 5048–5099 (Dec. 2019) and Nickolay Gantchev, *The Costs of Shareholder Activism: Evidence From A Sequential Decision Model*, 107 JOURNAL OF FINANCIAL ECONOMICS 610–631 (2013).
[33] Fan Yang et al., *Hedge Fund Performance: A Quantitative Survey* (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4151821.
[34] *Id.* at 24.

significant positive bias in reporting of hedge fund performance,[35] which contradicts the Proposed Rule's suggestion that hedge fund performance is overstated. In fact, the authors note that their findings suggest that "[s]ome very successful hedge funds may avoid reporting to the databases to prevent disclosing clues about their proprietary trading strategies."[36] The publicly available data on hedge fund performance may thus *underestimate* performance. This evidence of abnormal risk-adjusted returns is particularly remarkable because, as the authors note, "[h]edge funds typically make their investments in financial markets that are rather competitive and where investors have strong incentives to quickly eliminate any mispricing."[37] The analysis also note certain other features of the competitive land scape in hedge fund markets, noting that "competition is intensive . . . within the hedge fund industry" and that "[l]ight regulation implies relatively low barriers to entry."[38] Hedge funds can also introduce competition into "previously oligopolistic market segments such as fixed-income arbitrage that used to be the domain of investment banks."[39]

Barth et al. (2021)[40] analyzed performance data from a sample of hedge funds drawn from private hedge fund information vendors supplemented by SEC filings. The analysis concludes that the returns of funds that report voluntarily to public databases are "significantly lower" than the returns of funds that report only on mandatory regulatory filings, both in the aggregate and with respect to "nearly every" subcategory of hedge fund strategy.[41] Moreover, their results suggest that the difference in average returns between these two groups is driven "entirely by alpha" – in other words, advisers did not achieve these better returns simply by taking more risks.[42]

Numerous other studies over a broad time period make similar findings as to the superior risk-adjusted returns of hedge funds. For example, Agarwal & Naik (2000) found that "a combination of alternative investments and passive indexing provides significantly better risk-return tradeoff than passively investing in the different asset classes [and] that the hedge fund strategies outperform the benchmark by a range of 6% to 15% per year." [43] Ibbotson et al. (2011) analyzed hedge fund returns over the 1995-2009 period and found that alphas were positive over year from during the 1999-2009 decade, including during the financial crisis.[44] Kosowski et al. (2007) concluded that hedge fund outperformance "cannot be explained by luck," and persists year-over-

[35] *Id*. at 8.
[36] *Id.* at 24.
[37] *Id*. at 13.
[38] *Id*.
[39] Yang et al. *supra* note 33 at 15.
[40] Barth et al. *The Hedge Fund Industry Is Bigger (And Has Performed Better) Than You Think* (2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3544181.
[41] *Id*.
[42] *Id.*
[43] Vikas Agarwal & Narayan Y. Naik, *On Taking the 'Alternative' Route: Risks, Rewards, Style and Performance Persistence of Hedge Funds* 2(4) THE JOURNAL OF ALTERNATIVE INVESTMENTS 6 (2000), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=150388.
[44] Roger G. Ibbotson et al., *The ABCs of Hedge Funds: Alphas, Betas, and Costs* 67(1) FINANCIAL ANALYSTS JOURNAL (2011), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1745104.

year.[45] Fung & Hsieh (2004) found that even after considering seven separate risk factors hedge funds generate "positive alphas for the full sample period."[46]

Hedge funds also provide investors with valuable diversification benefits. As Yang et. al. (2022) notes, "[h]edge funds can . . . act as investment strategy innovators [and] benefit from being a counterparty to transactions when more conventional investment entities are obliged due to regulation to divest distressed assets." Kooli (2007)[47] found incorporating hedge fund investments into various sample portfolios reduced the risk of those portfolios and provided diversification benefits to investors. Agarwal & Naik (2005)[48] and Lhabitant & Learned (2002) draw similar conclusions.[49]

The Proposed Rule completely ignores this body of evidence, which indicates that hedge fund fees are a product of the valuable investment performance and diversification benefits that hedge fund managers provide and thus that the levels of price and quality competition in the U.S. hedge fund market are high.

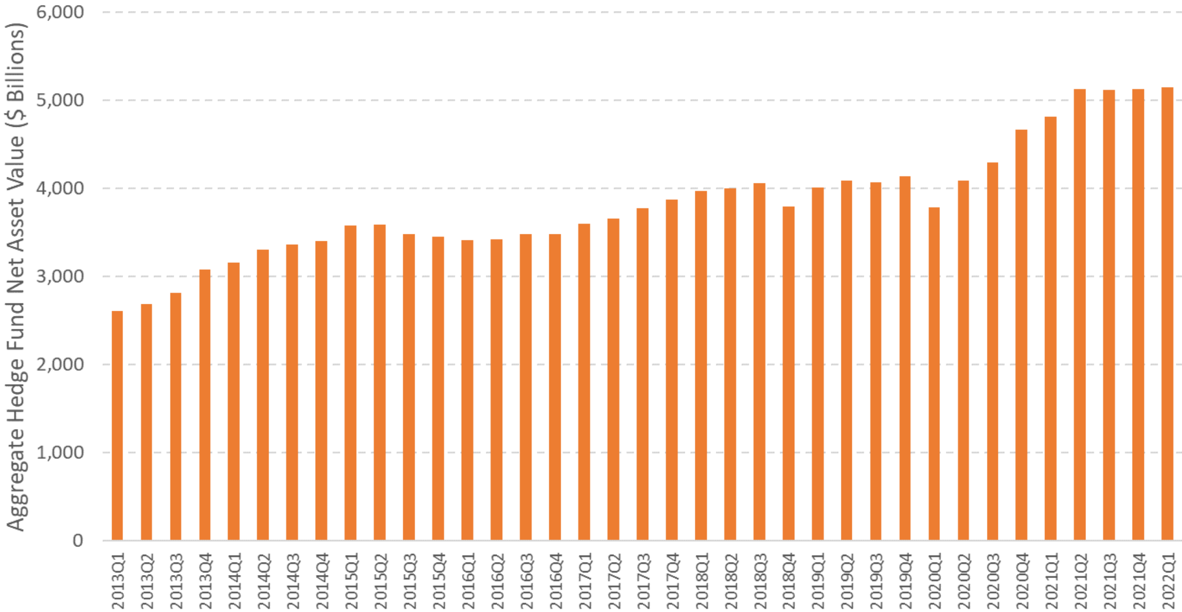
3. Demand for Hedge Fund Advisory Services

The degree of price competition and the quality of service in the hedge fund market can also be inferred from the extent of investor demand for such services. Investors in U.S. markets, institutional and otherwise, are under no obligation to invest in hedge funds and there is a wide variety of alternative investment offerings available, including separately managed accounts, private equity funds, and publicly offered mutual funds. If service quality in the hedge fund market were low relative to price, investors would likely withdraw capital from hedge funds over time in favor of more competitive alternatives, which are similarly plentiful. To the contrary however, investors have committed increasingly greater amounts of capital to hedge funds over the past decade, indicating that demand for hedge fund advisory services continues to be high, and in turn that price competition and service quality remain high.

Aggregate net assets under management for hedge funds have increased significantly over the past decade. Net assets measures fund assets reduced by fund liabilities,[50] and thus measures the amount that investors have contributed to hedge funds. Figure 9 on the following page shows that total hedge fund net assets increased from $2.61 trillion in Q1 2013 to $5.15 trillion in Q1 2022.

[45] Robert Kosowski et al., *Do Hedge Funds Deliver Alpha? A Bayesian and Bootstrap Analysis* 84(1) JOURNAL OF FINANCIAL ECONOMICS 229 (2007), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1974581.
[46] William Fung & David A. Hsieh, *Hedge Fund Benchmarks: A Risk-Based Approach* 60(5) Financial Analysts Journal 65 (2004), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=614512.
[47] Maher Kooli, *The Diversification Benefits of Hedge Funds and Funds of Hedge Funds* (2007), https://link.springer.com/article/10.1057/palgrave.dutr.1850053.
[48] Vikas Agarwal & Narayan Y. Naik, *Hedge Funds* 1(2) FOUNDATIONS AND TRENDS IN FINANCE 103 (2005), http://dx.doi.org/10.1561/0500000002.
[49] Francois Lhabitant & Michelle Learned, *Hedge Fund Diversification, How Much is Enough?* (2002), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=322400.
[50] PREQIN, Hedge Funds - Industry Definitions, https://www.preqin.com/academy/industry-definitions/hedge-funds-definitions (last visited Apr. 4, 2023).

Figure 9: Aggregate Hedge Fund Net Asset Value[51]



[51] *Id.*

Part III: The Effect of the Proposed Rule on Competitiveness in the U.S. Hedge Fund Market

In our Private Equity Report we analyzed the SEC's competition-based rationale for three of the Proposed Rule's prohibitions: (1) the prohibition on preferential redemption terms (the "Preferential Redemption Prohibition"),[52] (2) the prohibition on certain exculpation and indemnification terms (the "Indemnification Prohibition"),[53] and (3) the prohibition on charging certain compliance expenses to funds (the "Expense Prohibition").[54]

These three prohibitions would apply equally to hedge funds and their advisers. We summarize them briefly here:

- The Preferential Redemption Prohibition would prohibit a hedge fund adviser from granting an investor in the hedge fund or in a substantially similar pool of assets the ability to redeem its interest on terms that the adviser reasonably expects to have a material, negative effect on other investors in that fund.
- The Indemnification Prohibition would prohibit a hedge fund adviser from seeking reimbursement, indemnification, exculpation, or limitation of its liability by the fund or its investors for a breach of fiduciary duty, willful misfeasance, bad faith, negligence, or recklessness in providing services to the fund.
- The Expense Prohibition would prohibit a hedge fund adviser from charging fees or expenses associated with an examination or investigation of the adviser or its related persons by any governmental or regulatory authority, as well as regulatory and compliance fees and expenses of the adviser or its related persons.

A full description of these prohibitions is in the Committee's comment letter on the Proposed Rule.[55]

The Private Equity Report then found that the SEC's rationale for imposing these prohibitions in the name of increasing competition in the U.S. private equity fund market were invalid. The Proposed Rule applies the same rationales for imposing these prohibitions with respect to the U.S. hedge fund market and they are equally as invalid in this context.

We showed that these prohibitions would in fact reduce competition in the U.S. private equity fund market. The prohibitions would produce similar negative effects in the U.S. hedge fund market. We identify 9 discrete negative effects on competition below and organize them into three broad categories. Each of these effects is discussed in greater detail in the Private Equity Report and we highlight here how they would apply with equal or enhanced force in the U.S. hedge fund market.

1) **Increasing Compliance Costs**: The three prohibitions would increase compliance costs for U.S. hedge fund advisers by, for example, requiring additional legal analysis of

[52] Proposed Rule § 275.211(h)(2)–3(a)(1).
[53] *Id.* § 275.211(h)(2)–1(a)(5).
[54] *Id.* § 275.211(h)(2)–1(a)(2)-(3).
[55] COMMITTEE ON CAPITAL MARKETS REGULATION, Comment Letter Re. the Proposed Rule (Apr. 25, 2022), https://www.sec.gov/comments/s7-03-22/s70322-20126557-287195.pdf.

investor-specific redemption provisions and fee provisions, and requiring advisers to carry additional liability insurance. They would thereby:

a. *Reduce the supply of hedge fund investment opportunities*: The economic literature shows clearly that increasing supplier costs reduces the quantity of the service supplied. Hedge fund advisers can thus be expected to scale back their fund offerings or exit the marketplace.

b. *Result in lower net returns for hedge fund investors*: An exogenous increase to costs also reduces the extent to which suppliers in a competitive market can compete by lowering their prices while still earning a profit, such that some portion of the increased cost is passed on to customers in the form of higher prices. The portion of such costs that are passed on to consumers generally increases in highly competitive markets.[56] Thus much of the burden of higher compliance costs will simply be passed on to hedge fund investors via higher fees, thus reducing their net returns.

c. *Increase barriers to entry for U.S. hedge fund advisers:* New firms entering a marketplace are typically smaller than incumbent firms and thus benefit from fewer economies of scale in absorbing the impact of an exogenous increase in compliance costs. As a result, one can expect higher compliance costs to increase barriers to entry for new hedge fund advisers.

d. *Increase industry concentration in the U.S. hedge fund market:* As increased costs cause existing hedge fund advisers to scale back offerings or exit the marketplace and reduce the rate of entry of new advisers, the extent of industry concentration in the hedge fund market can be expected to increase.

2) **Constraining Fund Terms**: The three prohibitions would constrain fund terms by, for example, prohibiting investors and advisers from negotiating the sharing of certain categories of fees and expenses via fully disclosed contractual provisions and prohibiting the provision of bespoke redemption rights. In doing so, the prohibitions will:

a. *Increase fees:* By prohibiting advisers and investors from negotiating the explicit and transparent sharing of certain fees and expenses, these fees and expenses are likely to be rolled into generic management fees. The Proposal itself acknowledges that the fees that it seeks to prohibit will likely be rolled into generic management or advisory fees.[57] The empirical literature demonstrates that such "bundling" is

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[56] RBB ECONOMICS, COST PASS-THROUGH: THEORY, MEASUREMENT, AND POTENTIAL POLICY IMPLICATIONS (2014), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/320912/Cost_Pass-Through_Report.pdf.
[57] Proposing Release at 16,922, n. 157.

associated with higher fees than transparent pricing and is therefore likely to increase the aggregate amount of fees, and thereby reduce investors' net returns.[58]

b. *Result in fewer innovative, diversification enhancing investment strategies:* The Indemnification Prohibition would prohibit advisers and investors from appropriately managing and allocating the legal liability risks associated with the inherent uncertainty of investment strategies by prohibiting indemnification against both gross and ordinary negligence. This will make it less likely that advisers will offer fund innovative investment strategies, where such risks may be higher. This effect is of particular relevance to hedge funds where one of the primary benefits to investors is the ability to gain economic exposure to asset classes that are unavailable through other means and to achieve better portfolio diversification by obtaining exposure to investment risks that are uncorrelated with the broader market.

c. *Constrain portfolio liquidity:* By prohibiting the provision of differential liquidity terms to investors, funds may in some cases be required to provide more frequent withdrawal rights to a broader set of investors and thus to hold more liquid assets as part of their investment strategies in a manner that is inconsistent with the optimal investment strategy of the fund.

d. *Increase barriers to entry and industry concentration:* The Preferential Redemption Prohibition and Indemnification Prohibition will disproportionately affect newer and smaller advisers, beyond increased compliance costs. For example, new advisers with shorter performance histories may rely more on offering unique redemption terms to attract investors. Smaller advisers may also rely more on indemnification and limitation of liability provisions, because a liability suit is more likely to threaten the continued operation of a smaller adviser. The result of these prohibitions will thus likely be to increase the proportion of the market share possessed by larger advisers, thereby increasing industry concentration.

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[58] Howell E. Jackson & Jeffery Zhang, The Economics of Soft Dollars: A Review of the Literature and New Evidence from the Implementation of MiFID II REVIEW OF BANKING & FINANCIAL LAW (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3673470; ASHBY MONK & RAJIV SHARMA, RE-INTERMEDIATING INVESTMENT MANAGEMENT (2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2625303.

Conclusion

This report has examined the Proposed Rule and Chair Gensler's claims that the U.S. hedge fund market is not competitive and that the Proposed Rule would enhance competition in the U.S. hedge fund market.

In Part I and Part II, our analysis of quantitative measures of each of the principal metrics by which industry competition is commonly assessed show that the U.S. hedge market is highly competitive and is growing increasingly competitive. We analyzed in depth the evidence of price competition in the U.S. hedge market with a focus on the gross fees and net investment performance. Contrary to what the Proposed Rule suggests, there is meaningful evidence that hedge fund gross fees are responsive to competitive pressures. The Proposed Rule also fails to consider empirical evidence that U.S. hedge funds' net-of-fee performance has provided investors with excess risk-adjusted returns and diversification benefits.

In Part III, we explained how three of the Proposed Rule's restrictions would reduce competition in the U.S. hedge fund market including by reducing net-of-fee investor returns, reducing the variety of investment strategies available to investors, and increasing barriers to entry.

The Committee therefore concludes that the U.S. hedge fund market is highly competitive and, rather than further enhance competition, the Proposed Rule would reduce competition in the U.S. hedge fund market.

Appendix A: Overview of Methodology

We assess the competitiveness of the U.S. hedge fund market with reference to five factors commonly used in the empirical literature and by U.S. government agencies to assess the competitiveness of a marketplace.[59]

1. Industry concentration among hedge funds and advisers, as measured by:
    a. The Herfindahl-Hirschman Index for hedge fund advisers, including as compared to other industries
    b. The percentage of total hedge fund assets held by the largest funds and the advisers with the largest assets under management

Industry concentration is a commonly used measure for the competitiveness of a marketplace because to the extent a market is dominated by relatively few firms – that is, the market is highly concentrated – firms may have fewer incentives to lower price, increase production, improve efficiency, or innovate.[60]

2. The quantity of hedge fund advisory service providers, as measured by:
    a. The number of hedge funds
    b. The number of hedge fund advisers

The quantity of a service, including the number of service providers, is a measure of competitiveness because a greater number of providers gives more choices to consumers, increases the likelihood of competitive pricing, and reduces the likelihood of collusion and price fixing.[61]

3. The variety of hedge fund advisory services as measured by the range of investment strategies pursued by hedge funds

Service variety is used as a measure of competitiveness because one of the ways in which firms compete is by innovating and offering more differentiated products.[62]

4. Barriers to entry in the hedge fund industry, as measured by:
    a. The number of advisers that enter and exit the market each year
    b. The net increase in the number of hedge funds available to investors each year

The relative ease or difficulty with which new suppliers can enter an industry is one of the determinants of competition because it affects the potential for new providers to exert competitive pressure on existing suppliers through, for example, innovation or price competition.[63]

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[59] DEPARTMENT OF JUSTICE, FEDERAL TRADE COMMISSION, HORIZONTAL MERGER GUIDELINES (2010), https://www.justice.gov/atr/horizontal-merger-guidelines-08192010 ["Agency Merger Guidelines"].

[60] *See, e.g.*, OECD, Market Concentration, https://www.oecd.org/daf/competition/market-concentration.htm#:~:text=Market%20concentration%20measures%20the%20extent,for%20the%20intensity%20of%20competition (last visited Jan. 3, 2023).

[61] John C. Coates & Glenn Hubbard, *Competition in the Mutual Fund Industry: Evidence and Implications for Policy*, 33 J. CORP. L. 151 (2007), https://hls.harvard.edu/bibliography/competition-in-the-mutual-fund-industry-evidence-and-implications-for-policy/.

[62] Agency Merger Guidelines.

[63] *Id.* at 15.

5. Price and service quality competition

Lowering prices and increasing service quality are two of the primary mechanisms by which firms compete and a downward trend in prices or upward trend in service quality are strong indicators of competitiveness.[64]

In the context of investment management services, it is common to look to net-of-fee returns to determine the competitiveness of prices and service quality, [65] because an increase in nominal fees may be offset by higher gross returns and vice versa. The value of an investment opportunity can also be linked to the portfolio diversification it offers. However, in its assessment of the competitiveness of the hedge fund market, the Proposed Rule focuses on gross fees. In Part II we therefore assess price and service quality competition in the hedge fund market with reference to both gross fees and net-of-fees fund performance as well as portfolio diversification.

Increasing demand also suggests that advisers are offering high-quality services at competitive prices. We therefore measure demand for hedge fund advisory services by looking to assets under management by such advisers.

Data sources and existing literature

To assess each of the above factors, we rely primarily on publicly available SEC data. We have analyzed and synthesized this raw SEC data and presented it in the charts displayed in this report. These data points are supplemented with data from academic studies and industry analyses.

Our focus is on changes to the above metrics over the 9-year period from 2013 through 2021, as this is the most recent period for which our sources provide comprehensive data. In some cases, longer or shorter periods are considered where data for additional or more limited years is available.

The factors that we consider are consistent with the Horizontal Merger Guidelines ("the Guidelines") that the Agencies use to assess the effect of a proposed horizontal merger on the competitiveness of an industry under federal antitrust law. Although the Agencies caution that the evaluation of a merger is a "fact-specific process" using a "range of analytical tools" rather than a "uniform application of a single methodology,"[66] the Guidelines identify the important principles relevant to their analysis. The Guidelines indicate that the Agencies consider whether the merger may result in "reduced product quality, reduced product variety, reduced service, or diminished innovation."[67] They also indicate that the Agencies consider industry concentration, as measured by the Herfindahl-Hirschman Index ("HHI") and barriers to entry, as indicated by the ease and frequency with which new firms enter the market.[68]

The HHI is equal to the sum of the squares of firms' market shares. The resulting number can be stated as a corresponding percentage that expresses the weighted average market share among

[64] *Id.* Coates, *supra* note 61 at 7.
[65] *See, e.g.,* Coates, *supra* note 61 at 7.
[66] Agency Merger Guidelines.
[67] *Id*.
[68] *Id*.

firms.[69] The closer the number is to 10,000, the more concentrated is the marketplace. For example, if a single firm possesses a 100% market share, the HHI for that market is 10,000 (100^2), indicating that the weighted average market share of firms in that industry is 100%. If 10 firms each possess 10% of the market, the HHI is 1,000 ($10^2 * 10$), indicating that the weighted average market share is 10%. If two firms possess 25% market shares and a single firm possesses the remaining 50%, the HHI is 3750 ($25^2 + 25^2 + 50^2$), indicating a weighted average market share of 37.5%.

The Agencies generally consider an HHI of less than 1,500 (15%) to indicate an unconcentrated marketplace, an HHI of 1,500 to 2,500 (15%-25%) to be a moderately concentrated marketplace, and an HHI of 2,500 (25%) or greater to be a highly concentrated marketplace.[70]

Our framework is also consistent with the factors considered in the empirical literature examining competition in the public investment fund industry, including Khorana and Servaes (2004)[71] (measuring competition with reference to growth of total assets under management, variety of funds offered, average adviser market share), Coates and Hubbard (2007)[72] (measuring competition with reference to net fund performance, industry concentration, rate of entrance of new funds), and Khorana and Servaes (2011)[73] (linking increased adviser market share to higher performance, lower fees, wider variety of offerings, and frequency of new fund offerings).

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[69] *Id.*
[70] *Id.*
[71] Ajay Khorana & Henri Servaes, *Conflicts of Interest and Competition in the Mutual Fund Industry* (2004), https://ssrn.com/abstract=240596.
[72] Coates & Hubbard, *supra* note 61.
[73] Ajay Khorana & Henri Servaes, *What Drives Market Share in the Mutual Fund Industry?* 16(1) REVIEW OF FINANCE 81 (2011), https://academic.oup.com/rof/article/16/1/81/1594066.

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