

U.S. Securities and Exchange Commission

Annual Staff Report Relating to the Use of Form PF Data



This is a report of the Staff of the U.S. Securities and Exchange Commission.

The Commission has expressed no view regarding the analysis, findings, or conclusions contained herein.

December 3, 2021

Executive Summary

Since July 2012, the Commission has collected data about hedge funds, private equity funds, and other private funds reported by certain registered investment advisers to private funds on Form PF. This collection is pursuant to amendments to the Investment Advisers Act of 1940 (“Advisers Act”), enacted in 2010, that provide that the Commission require registered investment advisers to maintain records and file reports regarding the private funds they advise, for use by the Commission and by the Financial Stability Oversight Council (“FSOC”). The Commission is the primary regulator of advisers to private funds.

Private funds and their advisers play an important role in both private and public capital markets. These funds, including hedge funds, private equity funds and liquidity funds (which operate, in certain respects, similarly to money market funds), currently have approximately \$11.7 trillion in net assets. Private funds invest in large and small businesses and use strategies that range from long-term investments in equity to rapid trading and investments in complex instruments. Their investors include individuals, institutions, governmental and private pension funds, and non-profit organizations. The economic activity of private funds is significant both to large portions of the capital markets and to many individual American investors.

Before Form PF was adopted, the Commission and other regulators had limited visibility into this economic activity. With the significant increase in private fund advisers registered with the Commission in 2012, Form PF represented an improvement in available data about private funds compared with the third party data on which the Commission would otherwise rely. Form PF data allows the Commission to better monitor and identify trends that may affect private funds, advisers and investors.

Part III of this ninth Annual Report Relating to the Use of Form PF Data highlights the uses of the Form PF Data by the Commission and Commission staff. These include:

- *Informing Commission Policy.* Commission staff uses data from Form PF to identify trends and develop analyses that deepen staff understanding of private funds, private fund advisers and the markets in which they participate, subject to a framework designed to maintain the security and confidentiality of the data. The data set resulting from Form PF has provided a better perspective of the trading strategies and other activities of private funds, and of how private funds and their advisers may be affected by market and geopolitical events. This enhances the Commission’s ability to evaluate and frame regulatory policy, inform policy discussions of private fund activity and test with evidence assertions about private fund activity.
- *Informing the Public.* Staff’s quarterly public report, *Private Funds Statistics*, provides analyses of aggregated Form PF data, including information about industry trends. Staff also uses Form PF data to conduct and publish research intended to deepen public understanding of private funds and their market activities and risks.
- *Prioritizing and Informing Examination and Enforcement Efforts.* Staff reviews and analyzes Form PF data to identify potential compliance risk areas and assist in prioritizing the use of exam and enforcement resources. Reports summarizing key information, which can be rapidly and automatically generated, expedite staff’s preparation and conduct of focused exams by helping to identify areas of inquiry.
- *Facilitating Coordination with Other Regulators.* The Commission adopted Form PF in part to obtain data that FSOC can use for the assessment of systemic risk in the U.S. financial markets. Accordingly, the Commission makes Form PF data available to FSOC through the Office of Financial Research (“OFR”) and to the Federal Reserve Board, subject to agreements regarding appropriate use of and confidentiality protections for Form PF data. Staff also uses Form PF data when coordinating with other federal regulators and international organizations in areas of mutual interest, subject to protections designed to maintain data security.

I. Introduction

Today's U.S. private fund industry, including hedge funds, private equity and other private funds, with approximately \$11.7 trillion in reported net assets as of the first quarter of 2021¹ plays an active and important role in the U.S. private and public capital markets. Important financial innovations, capital market trends, and new investment strategies and structures have emerged first among private funds and private fund advisers. As the primary U.S. regulator of advisers to private funds,² the Commission depends on robust and reliable information to inform its understanding of private funds and private fund advisers, including how private funds and advisers participate in financial markets, so that it can carry out its mission of protecting investors, maintaining fair, orderly and efficient markets and facilitating capital formation. Further, because of private funds' important role in capital markets, the Commission can better identify potential trends in the markets that it regulates by understanding new developments and trends in private funds.

Form PF and Advisers Act rule 204(b)–1, adopted by the Commission in 2011, require certain registered investment advisers to private funds (including hedge funds, private equity funds, private liquidity funds, and other private funds) to file Form PF to report information about the private funds they manage.³ Section 204(b) of the Advisers Act requires an annual report to Congress regarding how the Commission has used the Form PF data to monitor markets for the protection of investors and the integrity of the markets.⁴ This report is being submitted to Congress to satisfy that requirement.⁵

This is a report of the staff of the Commission, and the Commission has expressed no view regarding any analysis, findings, or conclusions contained herein.

¹ *Private Funds Statistics, First Calendar Quarter 2021*, Table 4, at the Appendix. Reported net assets of private funds have more than doubled since this data collection began, growing from about \$5 trillion as of the end of the first quarter of 2013. See [Private Funds Statistics, Fourth Quarter 2014](#), Table 4.

² Section 202(a)(29) defines a “private fund” as “an issuer that would be an investment company, as defined by section 3 of the Investment Company Act, but for section 3(c)(1) or 3(c)(7) of that Act.” Some investment advisers registered with the Commission are also registered with and regulated by the U.S. Commodity Futures Trading Commission as commodity pool operators (“CPOs”) or commodity trading advisers (“CTAs”). See *Reporting by Investment Advisers to Private Funds and Certain Commodity Pool Operators and Commodity Trading Advisors on Form PF*, Investment Advisers Act Release No. 3308 (Oct. 31, 2011) at n. 10 and text accompanying n. 49 [76 Fed. Reg. 71128, 71132 (Nov. 16, 2011)], <https://www.gpo.gov/fdsys/pkg/FR-2011-11-16/pdf/2011-28549.pdf> (the “Adopting Release”).

³ See *Adopting Release, supra* footnote 2; see also *Money Market Fund Reform; Amendments to Form PF*, Investment Advisers Act Release No. 3879 (July 23, 2014) [79 Fed. Reg. 47736 (Aug. 14, 2014)], <https://www.gpo.gov/fdsys/pkg/FR-2014-08-14/pdf/2014-17747.pdf> (amending certain reporting required by private liquidity funds) (the “Money Market Fund Reform Release”). <https://www.reginfo.gov/public/do/PRAOMBHistory?ombControlNumber=3235-0679>.

⁴ Advisers Act Section 204(b)(11), 15 U.S.C. § 80b-4(b)(11).

⁵ See Division of Investment Management, U.S. Securities and Exchange Commission, Annual Staff Report Relating to the Use of Form PF Data, <https://www.sec.gov/reports>.

II. Overview of Form PF and Form PF Data Management at the Commission

A. Overview of Form PF

Form PF provides the Commission information that it uses in carrying out its mission.⁶ Before Form PF was adopted, the Commission and other regulators had more limited visibility into the economic activity of private funds. With the significant increase in private fund advisers registered with the Commission in 2012, Form PF represented an improvement in available data about private funds compared with the third party data on which the Commission would otherwise rely.⁷ The data set that is generated from information reported by private fund advisers on Form PF is more reliable and complete when contrasted with private vendor databases that cover only voluntarily-provided private fund data and are not representative of the total population. The Commission adopted Form PF in part to obtain data that FSOC can use for the assessment of systemic risk in the U.S. financial markets.⁸ As required by statute, the Commission designed Form PF in consultation with FSOC.⁹

Generally, investment advisers registered (or required to be registered) with the Commission with at least \$150 million in private fund assets under management must file Form PF. Most private fund advisers file annually to report general information such as the types of private funds advised (e.g., hedge funds, private equity funds, or liquidity funds), fund size, use of borrowings and derivatives, strategy, and types of investors. Certain larger advisers provide more information on a more frequent basis, including more detailed information on particular hedge funds and liquidity funds.

B. How the Commission Secures and Manages Form PF Data

Advisers file Form PF using the Private Fund Reporting Depository (“PFRD”), an electronic filing system maintained by the Financial Industry Regulatory Authority (“FINRA”).¹⁰ Commission staff receives Form PF data via a direct feed from FINRA and maintains the data on access-controlled internal data systems. Consistent with provisions under the Advisers Act that provide heightened confidentiality protections for any proprietary information of private fund advisers submitted on Form PF,¹¹ Commission staff has implemented systems and controls designed to limit access to Form PF data and protect its confidentiality within and outside the agency. This includes limits on access to FINRA’s PFRD system and to internal data systems that contain PF Data to staff experts across the Commission who have been authorized to

⁶ Section 204(b) of the Advisers Act requires the Commission to implement recordkeeping and reporting requirements for private fund advisers as necessary and appropriate in the public interest and for the protection of investors, or for the assessment of systemic risk by FSOC. Section 204(b) was enacted as part of the Dodd- Frank Wall Street Reform and Consumer Protection Act, Public Law No. 111-203, § 404, 124 Stat. 1376 (the “Dodd-Frank Act”).

⁷ Adopting Release, *supra* footnote 2, at 71129 n. 11 (describing transition period for registration by private fund advisers that previously relied on the repealed exemption under section 203(b)(3) of the Advisers Act) and 71130 n.19 (citing FSOC 2011 Annual Report, <http://www.treasury.gov/initiatives/fsoc/Pages/annual-report.aspx>).

⁸ See note 6, *supra*.

⁹ See Advisers Act section 204(b)(3) (requires the Commission to consult with FSOC).

¹⁰ The Commission developed PFRD to implement reporting requirements on Form PF. PFRD is operated under a contract between the Commission and FINRA as an extension of the Investment Adviser Reporting Depository system used by advisers to register with the Commission on Form ADV. See Adopting Release, *supra* footnote 2, at Section II.E

¹¹ Advisers Act Section 204(b)(10), 15 U.S.C. § 80b-4(b)(10).

access the data, and processes under which any Form PF data released to the public is reviewed before release so that the data is aggregated and/or masked to avoid public disclosure of proprietary information of private fund advisers. Senior staff members from various Divisions and Offices within the Commission are members of the Form PF Steering Committee tasked with overseeing these systems and controls for access, use, and security of Form PF data. The Committee, on an ongoing basis, monitors and updates these systems and controls and meets regularly to address any new matters arising from time to time relating to the access, use and security of the Form PF data.

C. Efforts to Improve the Quality of Form PF Data

Commission staff works with filers to improve the quality of data filed on Form PF. For example:

- Staff responds to specific, factual inquiries about how to complete and file Form PF on an ongoing basis. Staff maintains a separate email address that advisers and others can use to obtain answers to questions about how to complete and file Form PF. Staff also issued and periodically updates a series of “Frequently Asked Questions” that address specific, factual questions received from advisers and other members of the public related to Form PF.¹²
- Staff regularly contacts individual filers when staff members identify anomalous and possibly erroneous data as well as possibly delinquent or missing filings. Staff works with these individual filers to determine steps for improving timeliness and accuracy of filings.
- When delinquencies persist, the staff has taken further steps to ensure that information is appropriately filed.¹³

D. Analytical Tools Using Form PF Data

Commission staff has developed various analytical tools to use Form PF data in support of its monitoring of private funds and private fund advisers, consistent with the systems and controls discussed above in Section II.B. These tools enhance staff’s ability to assess large volumes of data, streamline analysis of the data by automating certain analytical processes, and evaluate Form PF data alongside other relevant datasets. As examples, these analytical tools have enhanced the staff’s ability to:

- identify “outliers” among private funds and private fund advisers using factors such as performance, investment exposures, and liquidity;
- identify private funds based on one or more areas of policy interest, such as type of strategy, types of investments, use of derivatives, and extent of leverage;

¹² The Form PF Frequently Asked Questions (“PF FAQs”), <https://www.sec.gov/divisions/investment/pfrd/pfrdfaq.shtml>, represent the views of the staff of the Division of Investment Management. The PF FAQs are not a rule, regulation or statement of the Commission, and the Commission has neither approved nor disapproved the information therein. The public Form PF inquiry email address as well as a phone number to reach staff with questions relating to Form PF is published at <https://www.sec.gov/divisions/investment/iard/iardhelp.shtml>. See also Division of Investment Management: Electronic Filing of Form PF for Investment Advisers on PFRD (PFRD Home Page) at <https://www.sec.gov/divisions/investment/pfrd.shtml>.

¹³ The Commission announced settlement orders with 13 registered investment advisers who repeatedly failed to file Form PF providing information about the private funds that they advise. See *SEC Charges 13 Private Fund Advisers for Repeated Filing Failures*, Press Release June 1, 2018, at <https://www.sec.gov/news/press-release/2018-100>.

- monitor changes and other trends in industry exposures, asset composition, and trading activity;
- empirically test claims made in the financial press or other public sources regarding private funds and the private fund industry; and
- facilitate assessment of the operations and investment activities of private funds and private fund advisers.

III. How the Commission Uses Form PF Data

The Commission staff in the various Divisions and Offices use Form PF data in mission-focused activities, including to inform policy by identifying and monitoring private fund trends, inform the public, conduct focused exams, and pursue potential wrongdoing. Additionally, consistent with the Advisers Act, the Commission makes the Form PF database available to FSOC through OFR.¹⁴ Staff also makes the Form PF database available to the Federal Reserve Board and uses Form PF data when coordinating with other federal regulators and international organizations in areas of mutual interest involving private fund advisers, subject to appropriate protections for data security. The following provides more detail on how the Commission staff uses Form PF data.

A. Informing Commission Policy

The Commission staff analyzes Form PF data to identify trends and possible emerging risks among private funds and private fund advisers and to develop analyses that deepen the Commission's understanding of private funds, private fund advisers, and the markets in which they participate. As compared to third-party sources, Form PF provides the Commission with a broader perspective and more complete view of the financial markets in general and the private fund industry in particular. Using data collected on Form PF promotes the ability of the Commission staff to analyze information related to private fund activity, evaluate existing regulatory policies and programs directed to private fund advisers, evaluate the impact of policy choices on private funds' activities, and consider whether activities of private funds may involve any potential wrongdoing that indicates a need for regulatory action. The Commission and its staff use this insight in support of the Commission's mission to protect investors, maintain fair, orderly and efficient markets, and facilitate capital formation.

Some examples of how the Commission and staff use PF Data to inform policy are as follows:

Assess Private Funds Activities and Trends. Staff uses Form PF data to identify and monitor the activities of private funds, trends in the private funds industry and the possible effects on the broader financial markets. Through this analysis, staff may consider persistent questions and test perceptions – and in some cases, misconceptions – about the activities of private funds and the effects of these activities in the markets the Commission regulates. For example, staff uses Form PF data to assess funds' use of borrowing and leverage based on multiple metrics, including gross notional exposure to net asset value (economic leverage), long and short notional exposures, gross and net exposure by investment strategy, aggregate borrowings and posted collateral. Staff also uses Form PF data to consider liquidity trends, including funds' portfolio, investor and financing liquidity, funds' usage of derivatives and high frequency trading (among other strategies), and how private fund advisers use risk management tools such as stress tests and value at risk (VaR) reporting in the management of private funds.¹⁵

¹⁴ OFR was established under the Dodd-Frank Act to support FSOC in fulfilling FSOC's purpose and duties. See Section 152 of the Dodd-Frank Act, *supra* footnote 7.

¹⁵ Staff makes some of this analysis publicly available in *Private Funds Statistics*, its quarterly report. See Appendix and Section III.B, *infra*.

Assess Effects of Market and Geopolitical Events. Staff analyzes Form PF data to determine how private funds and private fund advisers might be affected by market and geopolitical events. Staff has assessed the exposure of private funds to various types of assets and financial markets.. This type of assessment, aggregated with other industry information that may be available to staff, facilitates development of a broader understanding of the potential effects of certain market or global events for private funds and the financial markets regulated by the Commission in which private funds participate.

Identify New Developments in Broader Financial Markets. Form PF data has the potential to capture new developments and trends among private funds and private fund advisers. This provides the Commission and staff with a window into potential new developments and trends in the broader public markets regulated by the Commission. For example, it is well-known that certain “alternative” investment strategies first offered in hedge funds have more recently been developed and modified to be offered by mutual funds.¹⁶ Staff has also used Form PF data to monitor trends in hedge fund exposures to leveraged loans and collateralized loan obligations.

Assess Effects of Rulemaking. The Commission and staff also are using information from Form PF to assess the potential impact of rulemaking proposals and analyze impacts of its rulemaking on markets and market participants. For example, data from Form PF is informing the staff in its consideration to recommend that the Commission propose amendments to Form PF.¹⁷

B. Informing the Public about the Private Fund Industry

The Commission seeks to provide the public with more transparency into and an understanding of the private funds industry by publishing aggregated information and analysis from Form PF, subject to its systems and controls designed to preserve the confidentiality of proprietary information of individual advisers. Following are two examples.

Private Funds Statistics. Since October 2015, Commission staff has published a quarterly report, *Private Funds Statistics*, which contains aggregated private fund industry statistics derived from Form PF data.¹⁸ As supplemented with new data and analysis in May 2017, and more recently in December 2020, the report includes more than 100 separate tables and figures that offer analyses of hedge fund industry practices.¹⁹ To avoid public disclosure of proprietary information of private fund advisers, the Form PF data provided in these reports is aggregated, rounded and/or masked under processes that are reviewed

¹⁶ See, e.g., FINRA, *Alternative Funds Are Not Your Typical Mutual Funds*, <http://www.finra.org/investors/alerts/alternative-funds-are-not-your-typical-mutual-funds> (describing “alternative mutual funds” as funds that seek to accomplish the fund’s objectives through non-traditional investments and trading strategies that “may bring to mind” the strategies and investments of hedge funds).

¹⁷ The Division of Investment Management is considering recommending that the Commission propose amendments to Form PF, which is included in the Regulatory Flexibility Agenda available at *Office of Management and Budget Agency Rule List – Spring 2021*, <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202104&RIN=3235-AM75> (last visited Nov. 10, 2021).

¹⁸ See *SEC Staff Publishes Private Funds Statistics Report*, Press Release (Oct. 16, 2015), <https://www.sec.gov/news/pressrelease/2015-240.html>.

¹⁹ See *SEC Staff Supplements Quarterly Private Funds Statistics*, Press Release (Dec. 10, 2020), <https://www.sec.gov/news/press-release/2020-313>; *SEC Staff Supplements Quarterly Private Funds Statistics*, Press Release (May 3, 2017), <https://www.sec.gov/news/press-release/2017-92>.

periodically for effectiveness. Information included in the reports is typically at least six months old when published. The Appendix contains the most recent report.²⁰

Private Funds Statistics is designed to enhance public understanding of the private fund industry and facilitate Commission and staff participation in meetings and discussions with industry professionals, investors, and other regulators. Statistics that are published quarterly in *Private Funds Statistics*, include, for example, statistics describing numbers and assets of private funds; the extent of private funds' borrowing and derivatives holdings; comparisons of investor, portfolio and financing liquidity; use of financial and economic leverage by certain hedge funds; and categories of investment exposures. The report also includes information about the characteristics of private liquidity funds that may facilitate comparisons with data published by staff relating to registered money market funds.²¹ Staff understands that the financial industry press monitors the release of these quarterly reports and industry participants may use the report to assist investors with investment decisions.²²

Staff Research Publications. Commission staff has used Form PF data to contribute to the Commission's and investors' understanding of the economic forces and dynamics underlying the private funds market by conducting and publishing research on various topics, such as characteristics of leverage used by hedge funds and consideration of self-reporting bias in commercial hedge fund databases. Research is aggregated and/or masked under processes that are reviewed periodically for effectiveness to avoid public disclosure of proprietary information of private fund advisers before any publication. Published staff research and white papers have used Form PF data to describe liquidity and other characteristics of certain

²⁰ Historical reports can be found at: <https://www.sec.gov/divisions/investment/private-funds-statistics.shtml>.

²¹ See Division of Investment Management, *Money Market Fund Statistics*, <https://www.sec.gov/divisions/investment/mmf-statistics.shtml>.

²² See, e.g. Finadium, "[*SEC publishes expanded analysis of hedge funds from forms PF and ADV*](#)" (Dec. 10, 2020); [Graham Bippart](#), Private Funds CFO Blog, *A CFO's 2020 Outlook* (Feb. 12, 2020), <https://www.privatefundscfo.com/a-cfos-2020-outlook-part-one-us-steadily-losing-fund-domicile-market-share/>; [Andy Jones](#), PEI Blog, *Private Equity Firms – Form PF Data* (Nov. 10, 2018), <http://blog.privateequityinfo.com/index.php/2018/11/10/private-equity-firms-form-pf-data/>; ICS Group, *Summary of the 2017 Q2 Private Fund Statistics* (Feb. 23, 2018), <https://www.i-c-solutions.net/updates/2018/02/23/2017-private-fund-statistics/>; [Marc Gorfinkle](#), SS&C Technologies, *SEC releases expanded private fund statistics* (Dec. 11, 2017), <https://www.ssctech.com/blog/sec-releases-expanded-private-fund-statistics>; [Crane Data](#), *Prime Streak Ends; Still UP 20% YTD; SEC: Private Funds Drop in Q'17* (Oct. 27, 2017), <https://cranedata.com/archives/all-articles/6890/>; [Lance Pan](#), Capital Advisors Group, *Demystifying Private Liquidity Funds: Reaffirming Advantages of Separately Management Accounts* (Mar. 14, 2017), <https://www.capitaladvisors.com/research/demystifying-private-liquidity-funds/>; [Judy Gross](#), *SEC Releases Data on Private Funds: Big Picture of US Private Fund Industry Emerges*, *Forbes* (Oct. 26, 2015), <https://www.forbes.com/sites/judygross/2015/10/26/sec-releases-data-on-private-funds-big-picture-of-us-private-fund-industry-emerges/#6b77bbb393e5>.

hedge funds.²³ Another staff white paper used Form PF data to characterize private liquidity funds and compare them to registered money market funds.²⁴

C. Assisting the Examinations and Enforcement Programs²⁵

Form PF data allows Commission staff to more efficiently prioritize its examinations and enforcement activities. Commission staff's analyses of Form PF data include risk-based analysis and monitoring initiatives that facilitate the identification of potential compliance risks and assist in prioritizing the use of exam and enforcement resources. For example, Commission staff may use Form PF data to identify private fund advisers whose activities involve areas of specific examination focus or that may present heightened compliance risks.

Before beginning an examination of an investment adviser, staff reviews applicable regulatory filings, such as Form ADV. For advisers that manage private funds, Form PF filings may also be reviewed as part of a routine pre-examination evaluation for risk identification and scoping. This review, in conjunction with other data sources, provides staff with an understanding of an adviser's current business, operations, and investment strategy as well as an analysis of how this strategy has evolved or changed over different reporting periods.

Commission staff has developed automated analyses and risk metrics that summarize and combine Form PF data with Form ADV data about an adviser's private funds and advisory business. These reports expedite staff preparation for examinations of a private fund adviser and its private funds and are designed to make exams more efficient by helping to focus areas of inquiry. These reports also assist staff in identifying potential reporting errors, compliance issues, or other issues of interest for the examination team to consider in their examination scope. Developed based on examiner insight and experiences, these reports distribute knowledge gained from exams and analysis to relevant staff on a need-to-know basis, which in turn informs monitoring programs. Generated from analytical tools that use custom code developed by staff to automate report production, these reports deliver intuitive and timely output to examiners, using the most recently filed Form PF and Form ADV data.

Commission staff also obtains and reviews Form PF information to focus its enforcement investigations, including investigations of private fund advisers. For example, Commission staff used Form PF data

²³ See George O. Aragon, A. Tolga Ergun, Mila Getmansky, and Giulio Girardi, Division of Economic Risk and Analysis, *Hedge Fund Liquidity Management* (May 17, 2017), https://www.sec.gov/dera/staff-papers/working-papers/aragon-ergun-getmansky-girardi_HF-Liquidity-Management; George O. Aragon, A. Tolga Ergun, Mila Getmansky, and Giulio Girardi, Division of Economic Risk and Analysis, *Hedge Funds: Portfolio, Investor and Financing Liquidity* (May 17, 2017), https://www.sec.gov/dera/staff-papers/white-papers/aragon-ergun-getmansky-girardi_HF-Liquidity; Aragon, George O. and Ergun, A. Tolga and Girardi, Giulio, *Hedge Fund Liquidity Management: Insights for Fund Performance and Systemic Risk Oversight* (April 22, 2021), <https://ssrn.com/abstract=3734596>. These papers report analyses using data reported on Form PF in quarterly filings from 2013 to 2017.

²⁴ See Daniel Hiltgen, Division of Economic Risk and Analysis, *Private Liquidity Funds: Characteristics and Risk Indicators* (Jan. 27, 2017), https://www.sec.gov/dera/staff-papers/white-papers/27jan17_hiltgen_private-liquidity-funds.html. The observations of the white paper indicate that, while most private liquidity funds and their parallel accounts did not formally commit to comply with the rule 2a-7 risk limits that apply to registered money market funds, the vast majority held portfolios that were consistent with those limits during the period studied.

²⁵ Because examination and enforcement matters are generally non-public, this report only summarizes generally how Form PF data has been integrated into exam and enforcement matters. See Advisers Act Section 210(b).

together with other information to identify hedge fund advisers whose reported data — such as returns, exposures, liquidity — appear inconsistent with the funds’ investment strategies or other benchmarks. These reviews have, in certain cases, led to examinations and enforcement investigations.

D. Coordination and Consultation with Other Financial Regulators

As required by statute, and as described above, the Commission adopted Form PF in part to obtain information about the operations and investment activities of private funds for FSOC to use in the assessment of systemic risk in the U.S. financial markets. The Commission has made the Form PF data available to FSOC through OFR since 2013, subject to agreements regarding appropriate use of and confidentiality protections for Form PF data. Beginning in July 2018, the Commission also makes Form PF data available to the Federal Reserve Board under agreements regarding appropriate use of and confidentiality protections for the Form PF data, which are similar to those provided under applicable agreements with OFR.

The Commission staff also uses Form PF data in its collaborations with other federal regulators on areas of mutual interest, such as on matters affecting the integrity of the financial markets and in communications with international organizations on areas of mutual interest regarding private funds and their investment advisers. For example, the staff regularly discusses information and analysis of Form PF data with OFR. The staff has also used reports of data from Form PF in connection with its participation in FSOC’s review of asset management products and activities.²⁶ Commission staff from time to time also may provide certain Form PF data to other federal regulators in connection with compliance and enforcement matters. In every instance where staff shares information with an external regulatory entity, staff seeks to limit the type and amount of data that may be shared consistent with the purpose for sharing, and the information is either subject to assurances of confidentiality or aggregated to prevent disclosure of any proprietary information of private fund advisers.

IV. Conclusion

During the past year, the Commission staff has continued to use Form PF data to enhance the Commission’s efforts to protect investors and the integrity of our markets, including through our work with other federal regulators and international organizations.

²⁶ See, e.g., *Financial Stability Oversight Council 2020 Annual Report* (updated Dec. 3, 2020), home.treasury.gov/system/files/261/FSOC2020AnnualReport.pdf. Section 4.13.5 of this report includes data from the SEC’s Private Funds Statistics in describing recent developments relating to alternative funds.

Appendix

(Private Funds Statistics, First Calendar Quarter 2021)



Division of Investment Management
Analytics Office

Private Funds Statistics

First Calendar Quarter 2021

November 1, 2021

This is a report of the Staff of the Division of Investment Management's Analytics Office of the U.S. Securities and Exchange Commission. The Commission has expressed no view regarding the analysis, findings, or conclusions contained herein.

Introduction

This report provides a summary of recent private fund industry statistics and trends, reflecting data collected through Form PF and Form ADV filings.¹ Form PF information provided in this report is aggregated, rounded, and/or masked to avoid potential disclosure of proprietary information of individual Form PF filers.

This report reflects data from Second Calendar Quarter 2019 through First Calendar Quarter 2021 as reported by Form PF filers.² Please see the Appendix for information on the categories of Form PF filers, the definitions of capitalized terms, a description of the boxplots used in several figures, as well as other technical descriptions.

The Staff continues to work with data reported on Form PF and with filers to identify and correct filing errors. Staff updates reported statistics based on amended filings and also may make certain adjustments to the statistics presented to correct what appear to be clear filing errors. Further, the Staff has employed certain assumptions in aggregating the data. Future adjustments to these methodologies and amended filings that change the underlying data could lead to changes in previously reported statistics.

If you have any questions or comments about First Calendar Quarter 2021 Private Funds Statistics, please contact:

Tim Dulaney, PhD, FRM, Tim Husson, PhD, FRM, or Trevor Tatum at FormPF@sec.gov with subject line “First Calendar Quarter 2021-Private Funds Statistics”.

¹Only SEC-registered advisers with at least \$150 million in private fund assets under management must report to the Commission on Form PF. SEC-registered investment advisers with less than \$150 million in private fund assets under management, SEC exempt reporting advisers, and state-registered investment advisers are not required to file Form PF, but report general information about the private funds they manage on Form ADV.

²The Commission began receiving Form PF filings from Large Hedge Fund Advisers in July 2012. A full data set was not received until March 2013. This report relies upon the Form PF database constructed and maintained by the Office of Research and Data Services in the Division of Economic and Risk Analysis.

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I Number of Funds and Advisers³

Table 1: Number of Funds

The “Total” row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Fund Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Private Equity Fund	13,035	13,043	14,347	14,481	14,493	14,490	15,623	15,712
Hedge Fund	9,484	9,494	9,296	9,369	9,401	9,462	9,355	9,457
Other Private Fund	4,714	4,701	4,965	4,967	4,972	4,960	5,358	5,374
Section 4 Private Equity Fund	3,932	3,932	4,394	4,405	4,405	4,408	5,266	5,291
Real Estate Fund	2,851	2,839	3,118	3,119	3,115	3,116	3,288	3,291
Qualifying Hedge Fund	1,772	1,790	1,808	1,812	1,800	1,766	1,779	1,845
Securitized Asset Fund	1,577	1,579	1,719	1,721	1,721	1,726	1,837	1,842
Venture Capital Fund	971	969	1,156	1,158	1,155	1,150	1,413	1,413
Liquidity Fund	71	71	64	63	66	68	71	72
Section 3 Liquidity Fund	43	41	42	40	44	46	52	53
Total	32,703	32,696	34,665	34,878	34,923	34,972	36,945	37,161

Table 2: Number of Advisers Advising Each Fund Type

The “Total” row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Fund Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Private Equity Fund	1,267	1,269	1,357	1,361	1,363	1,366	1,443	1,449
Hedge Fund	1,740	1,733	1,733	1,730	1,726	1,727	1,756	1,756
Other Private Fund	627	624	646	642	643	641	684	686
Section 4 Private Equity Fund	307	307	323	325	325	326	365	366
Real Estate Fund	350	349	375	375	372	373	387	387
Qualifying Hedge Fund	535	546	552	541	538	528	543	565
Securitized Asset Fund	154	154	161	160	160	161	161	161
Venture Capital Fund	134	133	153	154	153	152	176	175
Liquidity Fund	38	38	35	35	36	37	36	36
Section 3 Liquidity Fund	21	20	21	20	21	22	23	23
Total	3,159	3,152	3,236	3,237	3,237	3,234	3,366	3,371

³In this report, “Funds” means all private funds reported on Form PF and “Advisers” means all SEC-registered investment advisers that file a Form PF to report private funds. Please see Appendix E for definitions of other capitalized terms used in this report.

II Gross and Net Assets

A Aggregate Assets by Fund Type over Time

Table 3: Aggregate Private Fund Gross Asset Value (GAV) (\$ Billions)

As reported on Form PF, Question 8.

The “Total” row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Fund Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Hedge Fund	8,196	8,034	8,113	7,680	7,707	8,124	8,689	8,795
Qualifying Hedge Fund	6,690	6,588	6,647	6,260	6,334	6,744	7,014	7,111
Private Equity Fund	3,260	3,259	3,736	3,811	3,809	3,811	4,713	4,821
Section 4 Private Equity Fund	2,364	2,364	2,743	2,795	2,795	2,796	3,587	3,666
Other Private Fund	1,234	1,248	1,396	1,367	1,382	1,391	1,475	1,494
Real Estate Fund	575	575	662	666	666	666	811	810
Securitized Asset Fund	575	576	649	647	647	649	701	703
Liquidity Fund	289	295	289	295	301	322	318	306
Section 3 Liquidity Fund	285	288	284	288	297	319	315	304
Venture Capital Fund	112	112	144	144	145	150	225	222
Total	14,240	14,099	14,989	14,609	14,656	15,112	16,932	17,152

Table 4: Aggregate Private Fund Net Asset Value (NAV) (\$ Billions)

As reported on Form PF, Question 9.

The “Total” row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Fund Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Hedge Fund	4,073	4,046	4,116	3,763	4,072	4,279	4,641	4,793
Qualifying Hedge Fund	3,161	3,169	3,219	2,900	3,195	3,380	3,552	3,719
Private Equity Fund	2,896	2,895	3,305	3,374	3,373	3,374	4,160	4,263
Section 4 Private Equity Fund	2,116	2,116	2,442	2,493	2,493	2,493	3,203	3,275
Other Private Fund	1,092	1,107	1,232	1,203	1,215	1,229	1,299	1,317
Real Estate Fund	448	448	504	507	507	507	615	613
Securitized Asset Fund	172	172	205	202	202	204	213	210
Liquidity Fund	286	293	287	291	295	315	313	296
Section 3 Liquidity Fund	283	286	281	284	292	312	311	293
Venture Capital Fund	98	99	137	138	138	144	217	215
Total	9,066	9,060	9,785	9,478	9,803	10,051	11,457	11,707

Figure 1: GAV and NAV Distributions
 See Appendix C for an explanation of boxplots.
 As reported on Form PF, Questions 8 and 9.

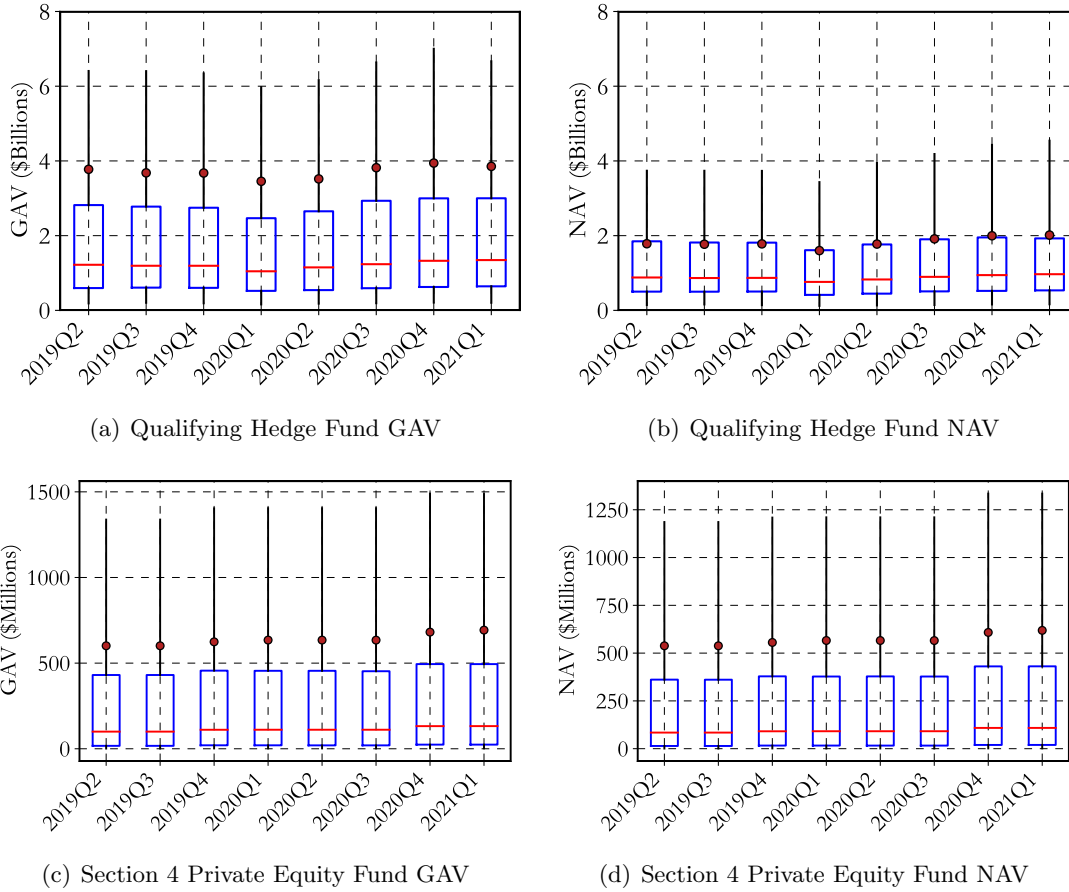
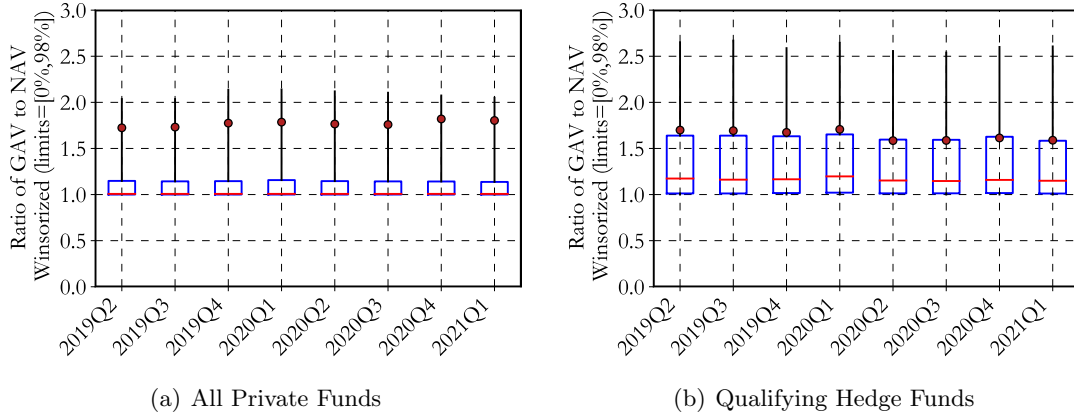


Figure 2: Ratio of GAV to NAV

See Appendix C and Appendix D for an explanation of boxplots and winsorization.
As reported on Form PF, Questions 8, 9, and 10.



B Borrowings

Table 5: Aggregate Borrowings (Percent of Aggregate GAV)
As reported on Form PF, Questions 8, 12, and 43 (Third Month).

Fund Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Securitized Asset Fund	52.1	52.2	52.5	49.0	47.7	47.5	53.6	50.2
Qualifying Hedge Fund	47.2	46.7	47.4	46.1	45.3	47.0	45.5	44.9
Hedge Fund	43.3	43.1	43.5	42.4	41.3	42.9	40.9	40.6
Real Estate Fund	14.6	14.6	14.8	14.9	14.6	14.6	13.8	13.9
Section 4 Private Equity Fund	5.2	5.2	7.3	7.3	7.3	7.3	5.1	4.9
Other Private Fund	3.4	3.4	4.5	4.8	4.7	4.8	5.0	4.9
Private Equity Fund	5.1	5.1	6.5	6.4	6.4	6.4	5.0	4.7
Venture Capital Fund	0.9	0.9	0.8	0.7	0.8	0.8	0.5	0.5
Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 3 Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Figure 3: Distribution of Total Borrowings for All Private Funds and Qualifying Hedge Funds

See Appendix C for an explanation of boxplots.
As reported on Form PF, Questions 12 and 43 (Third Month).

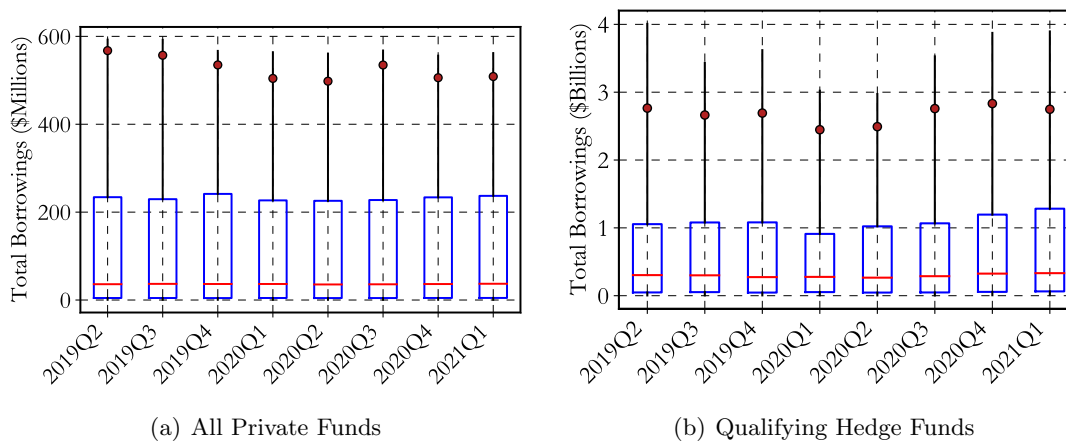
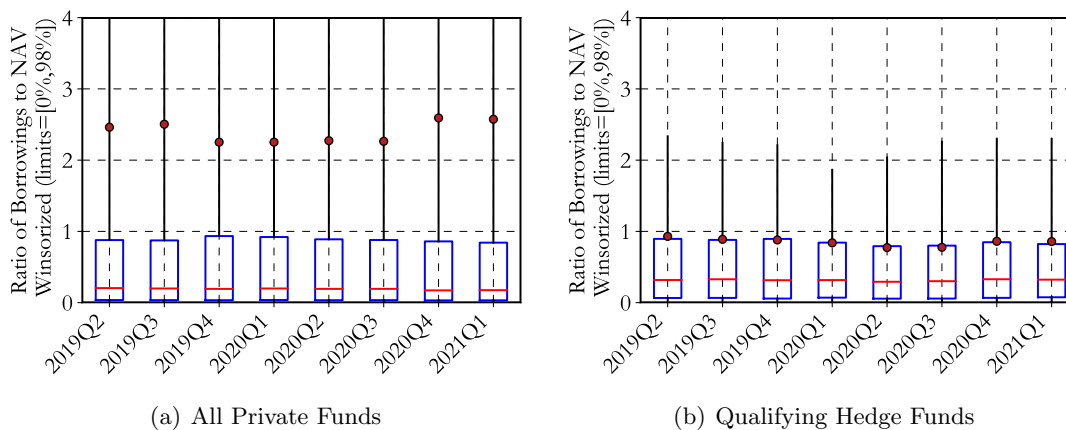


Figure 4: Ratio of Borrowings to NAV

See Appendix C and Appendix D for an explanation of boxplots and winsorization.
As reported on Form PF, Questions 9, 10, 12, and 43 (Third Month).

**Table 6: Aggregate Borrowing by Creditor Entity Type (Percent)**
As reported on Form PF, Questions 12 and 43 (Third Month).

Creditor Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
US Financial	66.0	66.2	65.7	64.9	66.7	64.9	66.4	67.3
Non-US Financial	31.4	31.2	31.0	32.3	30.7	32.7	30.3	30.0
US Non-Financial	2.2	2.3	2.4	2.6	2.5	2.4	2.3	2.4
Non-US Non-Financial	0.9	0.8	1.0	1.0	1.0	1.0	1.0	1.0

C Fair Value Hierarchy

Table 7: Assets According to Fair Value Hierarchy (\$ Billions)
As reported on Form PF, Question 14.

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Level One	3,272	3,234	3,827	3,793	3,802	3,814	4,223	4,253
Level Two	3,023	3,025	3,453	3,477	3,468	3,486	3,603	3,586
Level Three	3,475	3,469	4,060	4,112	4,117	4,127	5,076	5,175
Cost-Based	2,531	2,525	2,342	2,327	2,317	2,314	2,315	2,316

Table 8: Liabilities According to Fair Value Hierarchy (\$ Billions)
As reported on Form PF, Question 14.

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Level One	1,228	1,221	1,265	1,279	1,270	1,280	1,332	1,324
Level Two	1,056	1,046	1,015	1,050	1,042	1,049	1,165	1,144
Level Three	200	202	264	268	268	267	295	297
Cost-Based	2,102	2,097	2,223	2,229	2,219	2,220	2,060	2,071

D Parallel Managed Accounts⁴

Table 9: Number of Funds with Parallel Managed Accounts

As reported on Form PF, Question 11.

The “Total” row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Hedge Fund	648	652	614	628	610	601	597	581
Other Private Fund	504	503	505	501	500	493	478	475
Private Equity Fund	315	294	332	331	330	330	311	311
Qualifying Hedge Fund	221	227	222	232	227	221	210	199
Section 4 Private Equity Fund	112	112	136	136	135	135	103	103
Real Estate Fund	78	78	95	95	95	95	73	73
Venture Capital Fund	***	***	***	***	***	***	17	17
Liquidity Fund	14	15	12	12	11	11	***	***
Section 3 Liquidity Fund	12	12	11	11	11	11	11	11
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	1,568	1,551	1,565	1,574	1,553	1,537	1,489	1,470

Table 10: Aggregate Value in Parallel Managed Accounts (\$ Billions)

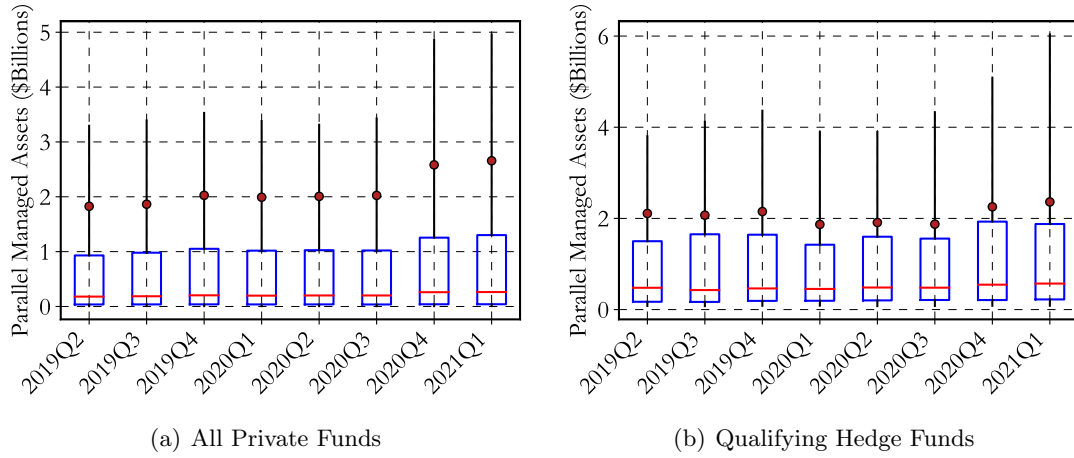
As reported on Form PF, Question 11.

The “Total” row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Hedge Fund	713	712	717	637	638	634	764	768
Other Private Fund	1,832	1,832	2,068	2,052	2,044	2,028	2,583	2,620
Private Equity Fund	48	48	58	58	58	58	98	98
Qualifying Hedge Fund	466	470	477	433	434	414	473	470
Section 4 Private Equity Fund	33	33	38	38	38	38	44	44
Real Estate Fund	5	5	10	10	10	10	7	7
Venture Capital Fund	***	***	***	***	***	***	1	1
Liquidity Fund	264	294	317	378	366	383	***	***
Section 3 Liquidity Fund	263	292	316	377	366	383	391	411
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	2,863	2,891	3,171	3,135	3,117	3,113	3,845	3,905

⁴Certain data points in the tables in this section and other sections may be masked to avoid possible disclosure of proprietary information of individual Form PF filers.

Figure 5: Parallel Managed Account Value Distributions
See Appendix C for an explanation of boxplots.
As reported on Form PF, Question 11.



III Fund Domiciles and Adviser Main Offices

Table 11: Fund Domicile (Percent of NAV)
As reported on Form PF, Question 9 and Form ADV.

All Private Funds								
Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
United States	50.5	50.5	51.2	51.4	50.9	50.4	51.0	50.9
Cayman Islands	34.8	34.6	34.5	34.1	34.6	34.9	34.2	34.1
Ireland	4.5	4.7	4.6	4.5	4.6	4.8	4.6	4.3
Luxembourg	3.0	2.9	3.1	3.1	3.1	3.1	3.7	3.7
Virgin Islands, British	1.5	1.5	1.3	1.1	1.1	1.1	1.0	1.0
Bermuda	1.1	1.2	1.1	1.1	1.1	1.0	1.0	1.0
Other	4.6	4.6	4.1	4.7	4.6	4.5	4.5	5.0
Qualifying Hedge Funds								
Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Cayman Islands	52.0	51.6	51.5	52.5	52.5	53.2	53.4	52.7
United States	34.5	34.7	35.0	34.9	35.1	34.5	34.1	34.9
Ireland	3.2	3.1	3.2	2.9	3.1	3.1	3.3	3.1
Virgin Islands, British	3.9	3.9	3.6	3.3	3.1	2.9	2.8	2.8
Luxembourg	2.7	2.7	2.7	2.6	2.4	2.6	2.8	2.7
Bermuda	1.9	2.1	2.1	2.2	2.0	1.9	1.8	1.7
Other	1.9	1.8	1.9	1.7	1.8	1.8	1.9	2.0
Section 3 Liquidity Funds								
Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Ireland	***	***	***	***	***	***	***	***
United States	30.3	26.9	22.6	25.7	24.8	23.4	26.2	28.8
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
United States	56.0	56.0	56.2	55.0	55.1	55.1	56.3	55.2
Cayman Islands	30.1	30.1	32.0	31.4	31.3	31.3	29.6	29.0
Canada	1.1	1.1	1.7	1.8	1.8	1.8	2.2	2.2
United Kingdom	2.3	2.3	1.9	1.7	1.7	1.7	1.5	1.5
Bermuda	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1
Other	9.6	9.6	7.2	9.1	9.1	9.1	9.3	11.0

Table 12: Adviser Main Office Location (Percent of NAV)
As reported on Form PF, Question 9 and Form ADV.

All Private Funds								
Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
United States	89.4	89.3	89.8	90.2	90.2	90.1	90.5	90.4
United Kingdom	6.1	6.2	5.4	5.3	5.2	5.2	4.5	4.7
Other	4.5	4.5	4.7	4.5	4.7	4.6	5.0	4.9
Qualifying Hedge Funds								
Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
United States	89.2	89.5	88.9	89.4	89.8	89.9	88.9	89.6
United Kingdom	5.7	5.4	5.4	4.9	4.5	4.3	4.7	4.4
Hong Kong	***	***	***	***	***	***	***	***
Australia	***	***	***	***	***	***	***	***
Other	2.0	2.0	2.1	2.1	2.1	1.9	2.0	1.8
Section 3 Liquidity Funds								
Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
United States	***	***	***	***	***	***	***	***
United Kingdom	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
United States	94.1	94.1	93.8	93.8	93.8	93.8	94.2	94.3
Canada	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

IV Beneficial Ownership

A All Private Funds

Table 13: Beneficial Ownership for All Private Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Private Funds	1,566	1,559	1,676	1,643	1,671	1,711	2,038	2,072
Other	1,381	1,392	1,466	1,451	1,508	1,560	1,819	1,852
State/Muni. Govt. Pension Plans	1,248	1,243	1,333	1,299	1,328	1,340	1,531	1,553
Pension Plans	1,085	1,081	1,167	1,103	1,139	1,161	1,245	1,263
U.S. Individuals	885	887	958	914	965	998	1,163	1,194
Non-Profits	902	900	993	930	990	1,017	1,140	1,167
Sov. Wealth Funds And For. Official Inst.	609	608	657	648	669	689	802	844
Insurance Companies	415	414	460	460	468	474	550	563
Non-U.S. Individuals	218	217	232	229	246	256	294	308
Unknown Non-U.S. Investors	221	223	242	230	236	258	275	268
State/Muni. Govt. Entities	130	135	171	167	170	172	189	196
Banking/Thrift Inst.	171	166	178	169	167	166	164	171
Sec-Registered Investment Companies	124	124	135	127	129	128	133	142
Broker-Dealers	109	109	114	106	112	115	111	110

**Table 14: Beneficial Ownership for All Private Funds
(Percent of Aggregate NAV)**
As reported on Form PF, Questions 9 and 16.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Private Funds	17.3	17.2	17.1	17.3	17.0	17.0	17.8	17.7
Other	15.2	15.4	15.0	15.3	15.4	15.5	15.9	15.8
State/Muni. Govt. Pension Plans	13.8	13.7	13.6	13.7	13.5	13.3	13.4	13.3
Pension Plans	12.0	11.9	11.9	11.6	11.6	11.5	10.9	10.8
U.S. Individuals	9.8	9.8	9.8	9.6	9.8	9.9	10.2	10.2
Non-Profits	9.9	9.9	10.2	9.8	10.1	10.1	9.9	10.0
Sov. Wealth Funds And For. Official Inst.	6.7	6.7	6.7	6.8	6.8	6.9	7.0	7.2
Insurance Companies	4.6	4.6	4.7	4.9	4.8	4.7	4.8	4.8
Non-U.S. Individuals	2.4	2.4	2.4	2.4	2.5	2.5	2.6	2.6
Unknown Non-U.S. Investors	2.4	2.5	2.5	2.4	2.4	2.6	2.4	2.3
State/Muni. Govt. Entities	1.4	1.5	1.8	1.8	1.7	1.7	1.6	1.7
Banking/Thrift Inst.	1.9	1.8	1.8	1.8	1.7	1.7	1.4	1.5
Sec-Registered Investment Companies	1.4	1.4	1.4	1.3	1.3	1.3	1.2	1.2
Broker-Dealers	1.2	1.2	1.2	1.1	1.1	1.1	1.0	0.9

B Qualifying Hedge Funds

Table 15: Beneficial Ownership for Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Private Funds	518	523	530	490	530	563	605	641
Non-Profits	448	445	463	409	469	493	538	560
Other	436	429	426	391	427	465	492	522
Pension Plans	426	420	431	374	406	426	455	465
U.S. Individuals	340	342	350	315	362	383	414	453
State/Muni. Govt. Pension Plans	355	365	369	329	354	366	397	409
Sov. Wealth Funds And For. Official Inst.	205	207	208	190	203	219	225	236
Insurance Companies	89	89	91	88	95	100	112	121
Non-U.S. Individuals	78	81	83	75	89	97	109	112
Unknown Non-U.S. Investors	57	57	62	53	56	60	66	63
State/Muni. Govt. Entities	44	47	49	45	49	50	53	56
Sec-Registered Investment Companies	53	54	42	35	44	45	37	40
Banking/Thrift Inst.	30	30	32	29	28	31	32	35
Broker-Dealers	79	80	81	73	78	80	17	5

Table 16: Beneficial Ownership for Qualifying Hedge Funds
(Percent of Aggregate NAV)

As reported on Form PF, Questions 9 and 16.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Private Funds	16.4	16.5	16.5	16.9	16.6	16.6	17.0	17.2
Non-Profits	14.2	14.0	14.4	14.1	14.7	14.6	15.1	15.1
Other	13.8	13.5	13.2	13.5	13.4	13.8	13.9	14.0
Pension Plans	13.5	13.2	13.4	12.9	12.7	12.6	12.8	12.5
U.S. Individuals	10.8	10.8	10.9	10.9	11.3	11.3	11.7	12.2
State/Muni. Govt. Pension Plans	11.2	11.5	11.5	11.3	11.1	10.8	11.2	11.0
Sov. Wealth Funds And For. Official Inst.	6.5	6.5	6.5	6.6	6.4	6.5	6.3	6.3
Insurance Companies	2.8	2.8	2.8	3.0	3.0	3.0	3.1	3.2
Non-U.S. Individuals	2.5	2.6	2.6	2.6	2.8	2.9	3.1	3.0
Unknown Non-U.S. Investors	1.8	1.8	1.9	1.8	1.8	1.8	1.9	1.7
State/Muni. Govt. Entities	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Sec-Registered Investment Companies	1.7	1.7	1.3	1.2	1.4	1.3	1.0	1.1
Banking/Thrift Inst.	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
Broker-Dealers	2.5	2.5	2.5	2.5	2.4	2.4	0.5	0.1

C Section 3 Liquidity Funds

Table 17: Beneficial Ownership for Section 3 Liquidity Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Other	57	74	73	74	90	92	87	80
Unknown Non-U.S. Investors	59	63	62	60	58	76	79	72
Private Funds	84	69	62	72	57	55	59	54
Sec-Registered Investment Companies	19	19	14	12	17	18	20	24
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	***	***	***	***	***	***	***	***
Insurance Companies	9	8	7	9	10	9	8	9
Pension Plans	***	***	4	***	***	5	9	7
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
Non-Profits	***	1	2	1	1	2	2	2
Non-U.S. Individuals	3	4	4	4	3	3	***	***
State/Muni. Govt. Pension Plans	***	***	***	***	***	***	1	1
U.S. Individuals	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***

Table 18: Beneficial Ownership for Section 3 Liquidity Funds
(Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Other	20.0	25.8	25.8	26.1	30.9	29.3	28.0	27.3
Unknown Non-U.S. Investors	20.8	22.1	22.1	21.1	19.9	24.2	25.5	24.5
Private Funds	29.6	24.2	22.0	25.3	19.4	17.6	18.8	18.5
Sec-Registered Investment Companies	6.7	6.8	4.8	4.4	5.8	5.8	6.5	8.1
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	***	***	***	***	***	***	***	***
Insurance Companies	3.2	2.7	2.6	3.3	3.6	2.9	2.6	3.1
Pension Plans	***	***	1.3	***	***	1.6	2.7	2.4
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
Non-Profits	***	0.3	0.6	0.4	0.4	0.6	0.7	0.8
Non-U.S. Individuals	1.1	1.2	1.3	1.5	0.9	0.8	***	***
State/Muni. Govt. Pension Plans	***	***	***	***	***	***	0.3	0.2
U.S. Individuals	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***

D Section 4 Private Equity Funds

Table 19: Beneficial Ownership for Section 4 Private Equity Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Private Funds	397	397	467	468	468	468	656	659
State/Muni. Govt. Pension Plans	454	454	514	526	526	526	652	654
Other	336	336	369	392	392	392	513	544
Sov. Wealth Funds And For. Official Inst.	244	244	278	286	285	285	361	387
Pension Plans	175	175	199	201	201	201	246	246
Insurance Companies	127	127	152	154	154	154	189	190
U.S. Individuals	117	117	132	132	132	132	186	187
Non-Profits	116	116	139	140	140	140	180	180
Non-U.S. Individuals	48	48	51	54	54	54	65	71
State/Muni. Govt. Entities	36	36	56	56	56	56	63	63
Banking/Thrift Inst.	31	31	36	37	37	37	38	38
Sec-Registered Investment Companies	17	17	28	28	28	28	27	27
Unknown Non-U.S. Investors	17	17	19	19	19	19	25	25
Broker-Dealers	1	1	1	1	1	1	3	3

Table 20: Beneficial Ownership for Section 4 Private Equity Funds
(Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Private Funds	18.8	18.8	19.1	18.8	18.8	18.8	20.5	20.1
State/Muni. Govt. Pension Plans	21.4	21.4	21.1	21.1	21.1	21.1	20.3	20.0
Other	15.9	15.9	15.1	15.7	15.7	15.7	16.0	16.6
Sov. Wealth Funds And For. Official Inst.	11.5	11.5	11.4	11.5	11.4	11.4	11.3	11.8
Pension Plans	8.3	8.3	8.2	8.1	8.1	8.1	7.7	7.5
Insurance Companies	6.0	6.0	6.2	6.2	6.2	6.2	5.9	5.8
U.S. Individuals	5.5	5.5	5.4	5.3	5.3	5.3	5.8	5.7
Non-Profits	5.5	5.5	5.7	5.6	5.6	5.6	5.6	5.5
Non-U.S. Individuals	2.3	2.3	2.1	2.2	2.2	2.2	2.0	2.2
State/Muni. Govt. Entities	1.7	1.7	2.3	2.3	2.3	2.3	2.0	1.9
Banking/Thrift Inst.	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2
Sec-Registered Investment Companies	0.8	0.8	1.1	1.1	1.1	1.1	0.8	0.8
Unknown Non-U.S. Investors	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.8
Broker-Dealers	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

E Concentration

Table 21: Weighted-Average Beneficial Ownership of Top 5 Owners (Percent)
As reported on Form PF, Questions 9 and 15.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Other Private Fund	58.1	58.6	58.6	59.0	59.1	58.4	59.6	59.3
Real Estate Fund	57.7	57.7	56.7	56.6	56.6	56.6	56.2	56.2
Hedge Fund	55.4	55.6	55.7	55.4	55.2	55.3	55.3	55.1
Venture Capital Fund	59.2	59.1	54.7	54.7	54.8	54.7	53.7	53.7
Private Equity Fund	50.8	50.8	50.5	50.5	50.5	50.5	50.2	51.1
Qualifying Hedge Fund	50.6	50.9	51.0	50.3	50.2	50.4	50.5	50.4
Liquidity Fund	52.8	49.4	46.2	49.9	47.1	44.8	44.3	45.9
Section 3 Liquidity Fund	52.2	48.4	45.2	48.9	46.7	44.4	44.1	45.7
Section 4 Private Equity Fund	44.5	44.5	45.0	45.0	44.9	44.9	45.2	46.1
Securitized Asset Fund	34.6	34.8	39.4	39.4	39.5	39.1	37.4	36.0
Total	54.0	54.0	53.7	53.7	53.6	53.5	53.3	53.6

V Derivatives

Table 22: Aggregate Derivative Value (\$ Billions)

As reported on Form PF, Questions 13 and 44 (Third Month).

The “Total” row shows the total reported, and will not equal the sum of the preceding rows, because the rows are not mutually exclusive.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Hedge Fund	12,975	13,447	12,638	11,895	10,935	13,563	13,905	14,929
Qualifying Hedge Fund	11,346	11,371	11,035	10,460	9,424	11,593	11,665	13,185
Other Private Fund	134	135	111	108	108	106	134	138
Private Equity Fund	37	37	95	96	96	97	66	66
Section 4 Private Equity Fund	31	31	37	37	37	37	34	34
Real Estate Fund	17	17	18	18	18	18	19	18
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	3	3	3	3	3	3	3	3
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	13,199	13,468	12,782	12,140	11,196	13,813	14,220	15,198

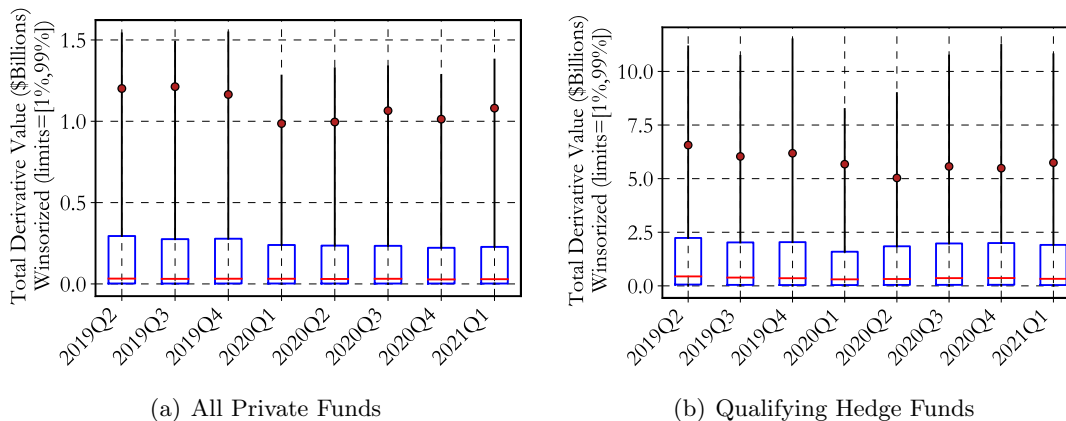
Table 23: Aggregate Derivative Value (Percent of Aggregate NAV)

As reported on Form PF, Questions 9, 13, and 44 (Third Month).

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Hedge Fund	318.6	332.3	307.0	316.1	268.5	317.0	299.6	311.5
Qualifying Hedge Fund	358.9	358.8	342.8	360.7	295.0	343.0	328.4	354.6
Other Private Fund	12.3	12.2	9.0	9.0	8.9	8.6	10.3	10.5
Private Equity Fund	1.3	1.3	2.9	2.9	2.9	2.9	1.6	1.6
Section 4 Private Equity Fund	1.5	1.5	1.5	1.5	1.5	1.5	1.1	1.0
Real Estate Fund	3.7	3.7	3.6	3.6	3.6	3.6	3.1	2.9
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	1.6	1.6	1.5	1.5	1.5	1.5	1.3	1.3
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	145.6	148.7	130.6	128.1	114.2	137.4	124.1	129.8

Figure 6: Distribution of Derivative Values

See Appendix C and Appendix D for an explanation of boxplots and winsorization.
As reported on Form PF, Questions 13 and 44 (Third Month).



VI Additional Hedge Fund Industry Information

A High Frequency Trading

Table 24: Number of Hedge Funds Using High Frequency Trading (HFT) Strategies
As reported on Form PF, Question 21.

Fraction of NAV	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
0%	8,054	8,061	7,962	8,044	8,057	8,120	8,134	8,180
Less than 100%	62	63	49	48	49	47	44	44
100% or More	8	8	10	9	8	7	6	6

Table 25: Hedge Fund Assets Managed Using HFT Strategies (\$ Billions)
As reported on Form PF, Questions 9 and 21.

Fraction of NAV	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
0%	3,975	3,940	4,023	3,663	3,953	4,158	4,514	4,657
Less than 100%	82	83	77	81	91	95	95	101
100% or More	2	2	3	2	2	2	3	4

B Industry Concentration

Table 26: Percent of Aggregate Hedge Fund Net Asset Value
Reported by Top Hedge Funds Sorted by Net Asset Value
As reported on Form PF, Questions 9 and 10.

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Top 10	7.3	7.4	7.4	7.6	7.6	7.5	7.2	7.1
Top 25	13.6	13.7	13.6	14.1	14.0	14.1	13.6	13.3
Top 50	19.9	20.0	19.7	20.2	20.2	20.5	20.0	19.5
Top 100	28.2	28.3	27.9	28.2	28.3	28.8	28.4	27.9
Top 250	42.7	42.7	42.3	42.5	42.9	43.5	43.2	42.8
Top 500	56.3	56.1	55.6	55.6	56.3	56.9	56.6	56.3

Table 27: Percent of Aggregate Hedge Fund Gross Asset Value
Reported by Top Hedge Funds Sorted by Gross Asset Value
As reported on Form PF, Questions 8 and 10.

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Top 10	16.3	15.5	15.5	17.2	15.0	15.5	15.0	14.3
Top 25	25.6	25.1	24.7	26.1	24.0	24.8	23.9	23.1
Top 50	33.9	33.7	33.5	34.8	32.7	33.6	32.8	31.7
Top 100	43.4	42.9	42.5	43.8	41.8	42.6	41.7	40.3
Top 250	56.9	56.4	55.8	56.6	55.2	56.0	55.4	54.0
Top 500	68.0	67.6	67.0	67.5	66.5	67.2	66.6	65.7

Table 28: Percent of Aggregate Hedge Fund Borrowings
Reported by Top Hedge Funds Sorted by Borrowings
As reported on Form PF, Questions 12 and 43 (Month 3).

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Top 10	35.5	34.4	35.8	38.7	35.4	35.0	33.9	33.1
Top 25	50.3	50.4	51.0	52.8	50.8	51.6	49.4	47.9
Top 50	62.4	62.3	62.8	63.9	63.1	63.4	61.7	60.1
Top 100	73.2	73.3	73.2	73.9	73.8	74.1	72.5	71.1
Top 250	85.0	84.9	84.6	84.5	84.5	85.0	84.2	83.0
Top 500	91.8	91.7	91.6	91.1	91.4	91.8	91.4	90.7

Table 29: Percent of Aggregate Hedge Fund Derivative Value
Reported by Top Hedge Funds Sorted by Derivative Value
As reported on Form PF, Questions 13 and 44 (Month 3).

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Top 10	29.4	30.8	29.2	34.2	32.9	39.7	41.4	42.3
Top 25	47.4	48.8	47.8	52.6	49.4	54.5	55.9	57.1
Top 50	60.2	61.8	60.6	65.4	62.1	66.7	67.5	68.1
Top 100	72.8	73.9	72.5	76.6	73.8	77.1	77.4	78.2
Top 250	86.4	87.2	86.7	88.3	87.3	89.2	89.2	89.3
Top 500	93.3	93.9	93.7	94.4	93.9	95.0	94.9	94.9

Table 30: Percent of Aggregate Hedge Fund Gross Notional Exposure
Reported by Top Hedge Funds Sorted by Gross Notional Exposure
As reported on Form PF, Questions 26 and 30 (Month 3).

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Top 10	28.5	29.0	29.5	33.5	32.3	36.2	36.2	37.3
Top 25	45.3	46.5	46.9	51.4	48.7	51.4	50.0	51.0
Top 50	58.3	58.8	59.1	62.6	59.8	61.9	60.7	61.2
Top 100	69.7	70.0	70.5	72.9	70.5	72.1	71.0	71.5
Top 250	83.1	83.2	83.5	84.8	83.2	84.2	83.5	83.5
Top 500	91.6	91.5	91.7	92.3	91.4	92.1	91.7	91.4

C Single-Strategy US-Domiciled Hedge Funds

Table 31: Exposures of Single-Strategy US-Domiciled Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Equity	Subtotal	512	524	562	485	547	567	617	644
	Long Bias	239	252	276	235	269	282	319	329
	Long/Short	236	234	245	207	239	251	268	289
	Market Neutral	34	36	40	40	38	33	30	25
	Short Bias	2	2	2	2	2	1	1	1
Other	Subtotal	464	466	465	433	473	482	530	553
Credit	Subtotal	91	94	98	96	98	103	119	122
	Long/Short	48	50	50	48	52	56	63	67
	Asset Based Lending	42	44	47	48	46	47	56	55
Event Driven	Subtotal	47	47	45	43	47	47	51	56
	Distressed/Restruct. Equity	30	30	30	31	32	31	34	37
	Risk Arb./Merger Arb.	10	10	10	8	11	11	12	12
		8	7	5	4	4	5	5	6
Relative Value	Subtotal	43	45	43	40	43	48	48	49
	F.I. Asset Backed	25	27	27	27	27	29	28	29
	F.I. Corp.	9	9	8	7	8	9	11	9
	F.I. Conv. Arb.	6	6	5	3	5	7	7	8
	F.I. Sov.	1	1	***	***	1	1	2	1
	Volatility Arb.	1	2	***	***	1	1	1	1
Investment in other funds	Subtotal	22	25	31	36	30	31	29	31
Macro	Subtotal	22	18	15	11	11	12	11	13
	Global Macro	19	15	12	9	8	9	8	10
	Commodity	3	3	1	2	2	2	2	2
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
Managed Futures/CTA	Subtotal	6	6	5	5	5	5	6	6
	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Total	Total	1,047	1,049	1,081	994	1,088	1,133	1,245	1,308

Table 32: Number of Single-Strategy US-Domiciled Hedge Funds
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
	Subtotal	1,053	1,055	1,013	1,007	993	1,017	1,019	1,030
Equity	Long Bias	519	524	521	511	504	522	525	533
	Long/Short	468	467	434	438	433	443	443	447
	Market Neutral	56	54	48	47	45	45	48	47
	Short Bias	16	16	17	18	18	17	11	11
	Subtotal	890	920	920	927	939	953	950	979
Other	Subtotal	285	289	297	303	313	318	354	357
Credit	Long/Short	153	155	155	159	165	168	173	175
	Asset Based Lending	134	136	146	147	151	153	184	185
	Subtotal	206	221	215	220	227	220	217	230
Event Driven	Distressed/Restruct.	145	157	153	159	165	156	151	161
	Equity	37	44	47	45	45	46	50	52
	Risk Arb./Merger Arb.	33	30	23	23	24	23	21	21
	Subtotal	153	159	151	149	160	172	174	177
Relative Value	F.I. Asset Backed	72	74	72	69	81	88	93	95
	F.I. Corp.	48	51	48	47	49	53	53	50
	F.I. Conv. Arb.	16	15	16	17	16	17	18	18
	F.I. Sov.	10	15	***	***	11	16	16	17
	Volatility Arb.	14	16	***	***	12	12	14	13
Investment in other funds	Subtotal	193	203	211	215	213	219	239	240
Macro	Subtotal	60	57	44	45	44	44	45	47
	Global Macro	38	35	24	24	22	21	24	24
	Commodity	15	15	9	14	13	13	11	13
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
	Subtotal	34	32	26	27	27	28	26	27
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Total	Total	2,707	2,730	2,683	2,717	2,742	2,771	2,797	2,861

D Single-Strategy Non-US-Domiciled Hedge Funds

Table 33: Exposures of Single-Strategy Non-US-Domiciled Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Equity	Subtotal	890	868	907	779	902	994	1,176	1,157
	Long/Short	613	595	601	512	608	670	801	777
	Long Bias	185	178	211	190	224	249	292	295
	Market Neutral	91	95	***	***	***	***	***	***
	Short Bias	1	1	***	***	***	***	***	***
Relative Value	Subtotal	355	358	359	390	377	375	408	410
	F.I. Sov.	220	222	224	248	256	252	272	274
	F.I. Asset Backed	90	91	88	99	74	76	79	80
	F.I. Corp.	17	18	19	18	24	24	29	24
	Volatility Arb.	20	19	17	16	12	12	14	17
Macro	F.I. Conv. Arb.	8	8	10	9	11	11	13	15
	Subtotal	383	390	356	351	341	432	377	380
	Global Macro	372	380	345	343	331	424	368	370
	Commodity	7	7	7	5	5	5	6	6
	Active Trading	***	***	***	***	***	***	***	***
Other	Currency	***	***	***	***	***	***	***	***
	Subtotal	507	531	553	522	531	557	608	648
Credit	Subtotal	180	183	202	206	212	220	235	248
	Long/Short	137	137	153	150	152	155	175	186
	Asset Based Lending	43	46	49	56	61	65	61	62
Event Driven	Subtotal	133	122	121	111	117	136	147	168
	Distressed/Restruct.	83	80	81	72	81	93	95	103
	Risk Arb./Merger Arb.	27	20	18	21	17	22	28	35
	Equity	23	22	21	18	19	21	24	29
Managed Futures/CTA	Subtotal	168	173	172	153	110	132	151	167
	Quantitative	***	***	***	***	***	***	***	***
Investment in other funds	Fundamental	***	***	***	***	***	***	***	***
	Subtotal	27	31	30	28	29	28	30	35
Total	Total	1,757	1,742	1,797	1,646	1,812	1,929	2,146	2,199

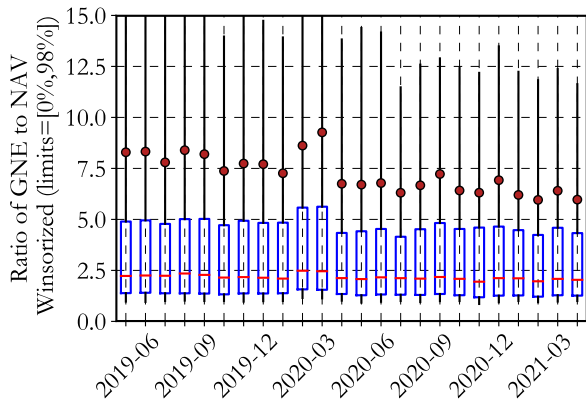
Table 34: Number of Single-Strategy Non-US-Domiciled Hedge Funds
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Equity	Subtotal	1,099	1,078	1,055	1,059	1,029	1,030	1,065	1,040
	Long/Short	644	633	623	632	620	618	630	603
	Long Bias	327	317	317	317	312	315	339	340
	Market Neutral	124	124	***	***	***	***	***	***
	Short Bias	7	7	***	***	***	***	***	***
Relative Value	Subtotal	297	291	296	303	300	297	306	305
	F.I. Sov.	54	55	57	56	58	57	60	57
	F.I. Asset Backed	131	123	130	129	134	138	151	149
	F.I. Corp.	88	85	91	97	97	94	94	92
	Volatility Arb.	37	35	34	34	28	26	26	26
	F.I. Conv. Arb.	29	29	28	27	27	26	24	27
Macro	Subtotal	254	244	214	214	207	211	210	209
	Global Macro	196	186	160	162	157	162	162	161
	Commodity	45	45	43	43	39	40	36	38
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
Other	Subtotal	776	792	785	822	805	802	829	811
Credit	Subtotal	344	337	334	333	340	345	343	343
	Long/Short	254	246	241	237	244	246	244	243
	Asset Based Lending	98	94	95	99	99	101	102	103
Event Driven	Subtotal	311	314	285	295	300	306	305	313
	Distressed/Restruct.	209	216	195	206	215	223	214	218
	Risk Arb./Merger Arb.	60	57	52	47	44	43	43	43
	Equity	71	72	75	78	74	72	77	82
Managed Futures/CTA	Subtotal	131	129	122	132	124	121	115	118
	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Investment in other funds	Subtotal	107	107	130	127	130	126	112	130
Total	Total	3,101	3,085	3,022	3,070	3,039	3,058	3,094	3,073

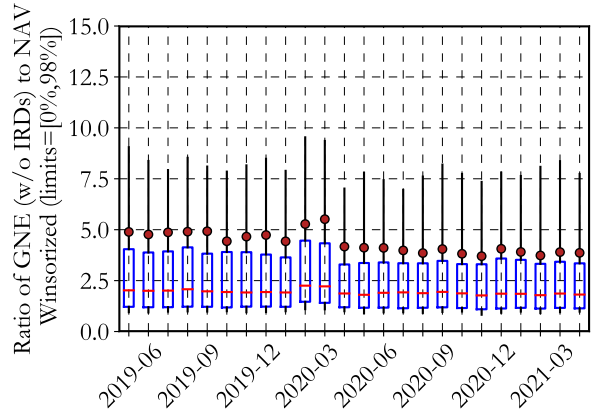
VII Information Reported by Large Hedge Fund Advisers

A Economic Leverage

Figure 7: Ratio of Hedge Fund Gross Notional Exposure to Net Asset Value
 See Appendix C and Appendix D for an explanation of boxplots and winsorization.
 As reported on Form PF, Questions 3(a) and 26.

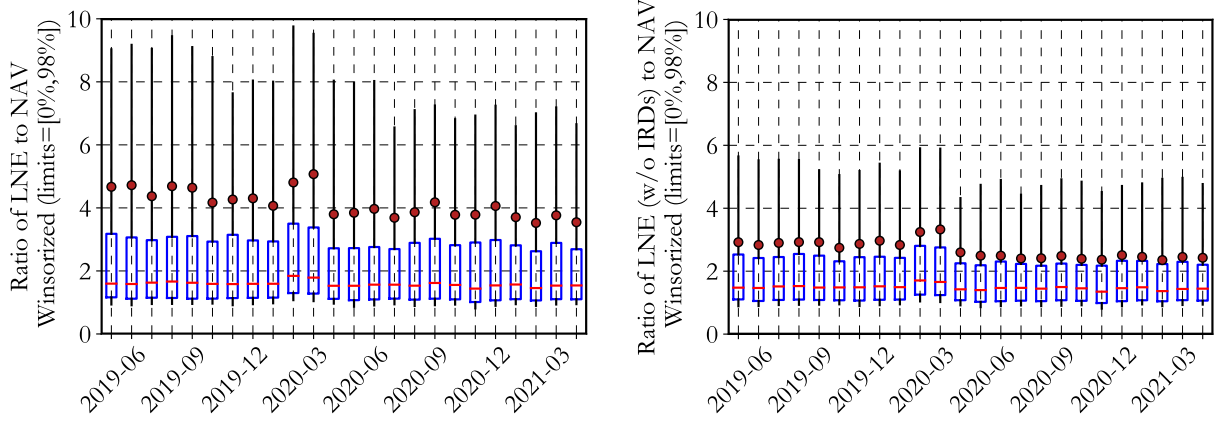


(a) Gross Exposure with Interest Rate Derivatives (IRDs)



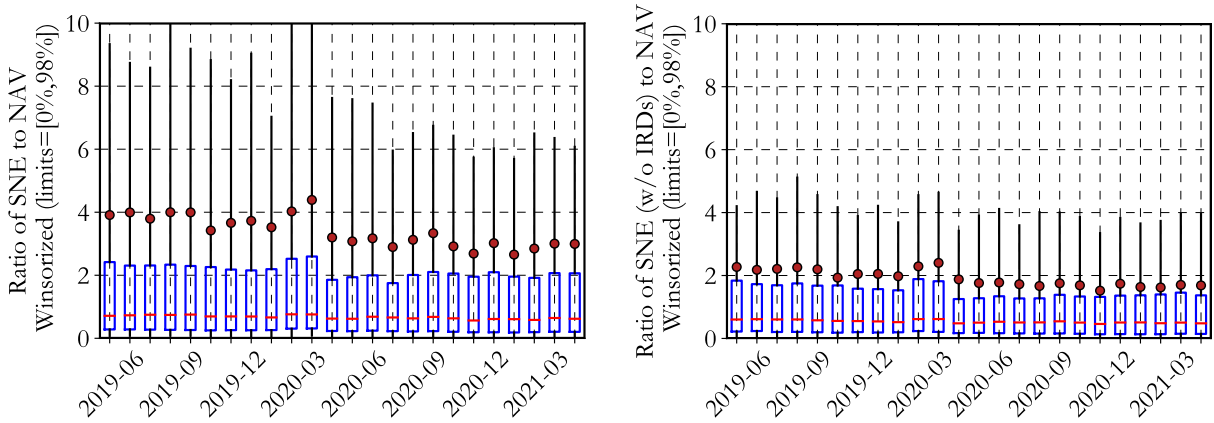
(b) Gross Exposure without IRDs

Figure 8: Ratio of Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value Distribution
 See Appendix C and Appendix D for an explanation of boxplots and winsorization.
 As reported on Form PF, Questions 3(a) and 26.



(a) Long Exposure with IRDs

(b) Long Exposure without IRDs



(c) Short Exposure with IRDs

(d) Short Exposure without IRDs

B Industry Concentration

Table 35: Large Hedge Fund Adviser Asset and Exposure Concentration
(Percent of Total Reported)
As reported on Form PF, Questions 3(a) and 26.

Month	Top 10 Advisers (NAV)	Top 20 Advisers (NAV)	Top 10 Advisers (GNE)	Top 20 Advisers (GNE)
2019-04	18.9	28.5	37.7	54.1
2019-05	18.9	28.5	37.5	54.1
2019-06	18.9	28.5	36.4	52.7
2019-07	19.3	28.8	36.8	53.9
2019-08	19.3	28.8	36.8	54.1
2019-09	19.4	28.9	37.4	54.2
2019-10	19.5	29.3	37.8	54.2
2019-11	19.5	29.3	37.4	54.2
2019-12	19.5	29.3	37.0	53.7
2020-01	19.1	29.6	38.1	55.4
2020-02	19.1	29.6	38.7	56.0
2020-03	19.1	29.6	41.1	56.7
2020-04	18.3	29.0	40.7	56.8
2020-05	18.3	29.0	40.6	56.3
2020-06	18.3	29.0	39.9	55.7
2020-07	18.4	29.1	42.1	57.2
2020-08	18.4	29.1	40.6	56.7
2020-09	18.5	29.3	40.3	56.1
2020-10	16.8	26.4	40.0	55.8
2020-11	16.8	26.4	39.3	56.3
2020-12	16.8	26.4	39.4	54.7
2021-01	16.2	26.2	40.3	55.8
2021-02	16.2	26.2	42.2	57.6
2021-03	16.2	26.2	41.5	56.0

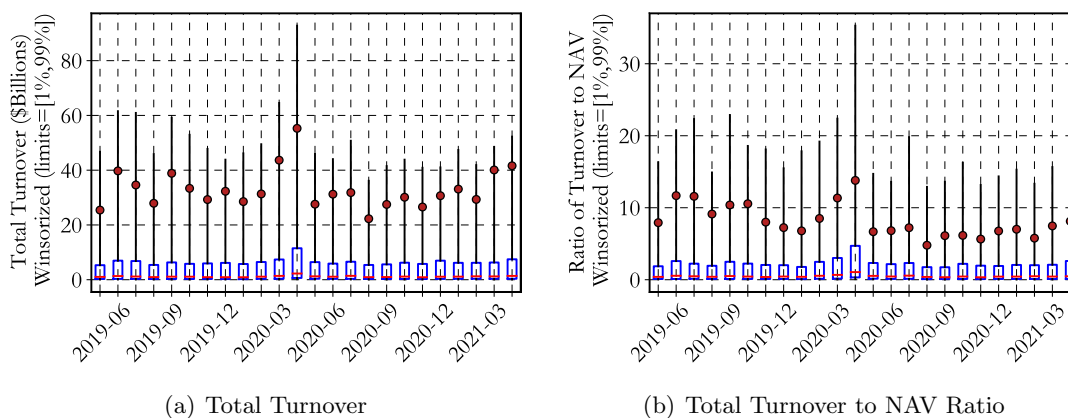
C Portfolio Turnover

Table 36: Aggregate Portfolio Turnover (\$ Billions)
As reported on Form PF, Question 27.

Month	Futures	Sov. and muni. bonds	Listed equities	Corporate bonds	Convertible bonds	Total
2019-04	9,911	3,391	2,263	127	18	15,709
2019-05	18,298	3,798	2,528	134	22	24,779
2019-06	16,327	3,832	2,188	134	25	22,506
2019-07	10,900	3,454	2,278	136	21	16,789
2019-08	15,837	4,353	2,400	116	26	22,731
2019-09	15,755	3,897	2,226	144	34	22,056
2019-10	12,744	3,627	2,566	152	19	19,108
2019-11	14,093	3,835	2,280	134	27	20,369
2019-12	13,345	3,311	2,302	95	21	19,074
2020-01	13,058	3,762	2,719	176	36	19,750
2020-02	19,136	4,578	2,916	167	31	26,829
2020-03	25,062	6,430	4,071	230	36	35,828
2020-04	9,351	4,426	2,658	226	39	16,700
2020-05	12,203	4,146	2,677	211	44	19,280
2020-06	12,862	4,003	3,201	220	51	20,337
2020-07	7,951	3,305	2,928	164	40	14,388
2020-08	10,039	3,777	2,552	165	39	16,573
2020-09	11,031	3,696	2,866	207	38	17,837
2020-10	9,339	4,086	2,756	189	44	16,413
2020-11	12,508	4,598	3,227	171	55	20,559
2020-12	17,695	4,356	2,993	125	56	25,224
2021-01	10,675	4,367	3,454	176	58	18,730
2021-02	17,631	5,493	3,460	175	63	26,823
2021-03	18,591	5,419	4,131	189	63	28,393

Figure 9: Distributions of Portfolio Turnover

See Appendix C and Appendix D for an explanation of boxplots and winsorization.
As reported on Form PF, Questions 3(a) and 27.



D Region and Country Exposure

Table 37: Large Hedge Fund Adviser Hedge Fund
Region Exposure (\$ Billions)
As reported on Form PF, Questions 3(a) and 28.

Region	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
North America	5,522	5,325	5,367	4,902	4,912	5,376	5,065	5,244
Europe EEA	1,764	1,717	1,603	1,426	1,398	1,616	1,521	1,348
Asia	840	723	759	649	665	804	793	779
Europe Other	82	82	85	92	93	125	105	289
South America	119	100	121	87	86	97	93	85
Supranational	38	68	53	42	54	35	33	45
Africa	33	29	33	30	37	40	40	34
Middle East	28	26	29	39	28	35	29	29

Table 38: Large Hedge Fund Adviser Hedge Fund
Region Exposure (Percent of Aggregate NAV)
As reported on Form PF, Questions 3(a) and 28.

Region	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
North America	156.5	153.7	150.7	150.7	138.0	142.2	129.0	127.2
Europe EEA	50.0	49.6	45.0	43.8	39.3	42.7	38.7	32.7
Asia	23.8	20.9	21.3	20.0	18.7	21.3	20.2	18.9
Europe Other	2.3	2.4	2.4	2.8	2.6	3.3	2.7	7.0
South America	3.4	2.9	3.4	2.7	2.4	2.6	2.4	2.1
Supranational	1.1	2.0	1.5	1.3	1.5	0.9	0.8	1.1
Africa	0.9	0.8	0.9	0.9	1.0	1.1	1.0	0.8
Middle East	0.8	0.8	0.8	1.2	0.8	0.9	0.7	0.7

Table 39: Large Hedge Fund Adviser Hedge Fund
Country Exposure (\$ Billions)

As reported on Form PF, Questions 3(a) and 28.

Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
United States	5,233	5,121	5,034	4,681	4,692	5,117	4,830	4,992
China (Inc. Hong Kong)	186	175	198	180	221	270	285	280
Japan	239	286	263	220	190	213	214	208
India	32	34	37	29	30	32	36	46
Brazil	46	40	50	32	33	36	38	33
Russia	11	11	14	15	17	16	18	16

Table 40: Large Hedge Fund Adviser Hedge Fund
Country Exposure (Percent of Aggregate NAV)

As reported on Form PF, Questions 3(a) and 28.

Country	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
United States	148.3	147.9	141.3	143.9	131.8	135.3	123.0	121.1
China (Inc. Hong Kong)	5.3	5.1	5.6	5.5	6.2	7.2	7.3	6.8
Japan	6.8	8.3	7.4	6.8	5.3	5.6	5.4	5.0
India	0.9	1.0	1.0	0.9	0.8	0.9	0.9	1.1
Brazil	1.3	1.2	1.4	1.0	0.9	1.0	1.0	0.8
Russia	0.3	0.3	0.4	0.5	0.5	0.4	0.5	0.4

VIII Qualifying Hedge Fund Specific Information

A Economic Leverage

Figure 10: Ratio of Qualifying Hedge Fund Gross Notional Exposure to Net Asset Value
 See Appendix C and Appendix D for an explanation of boxplots and winsorization.
 As reported on Form PF, Questions 9, 10, 26, and 30.

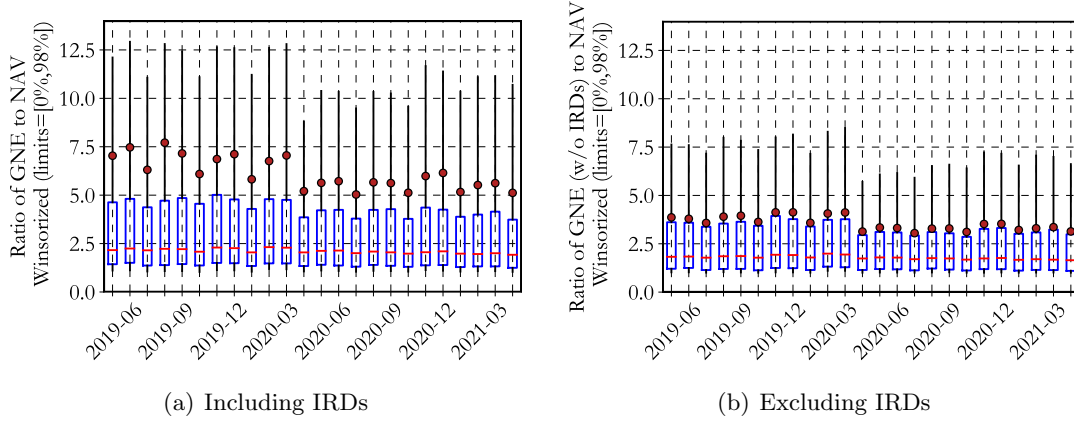
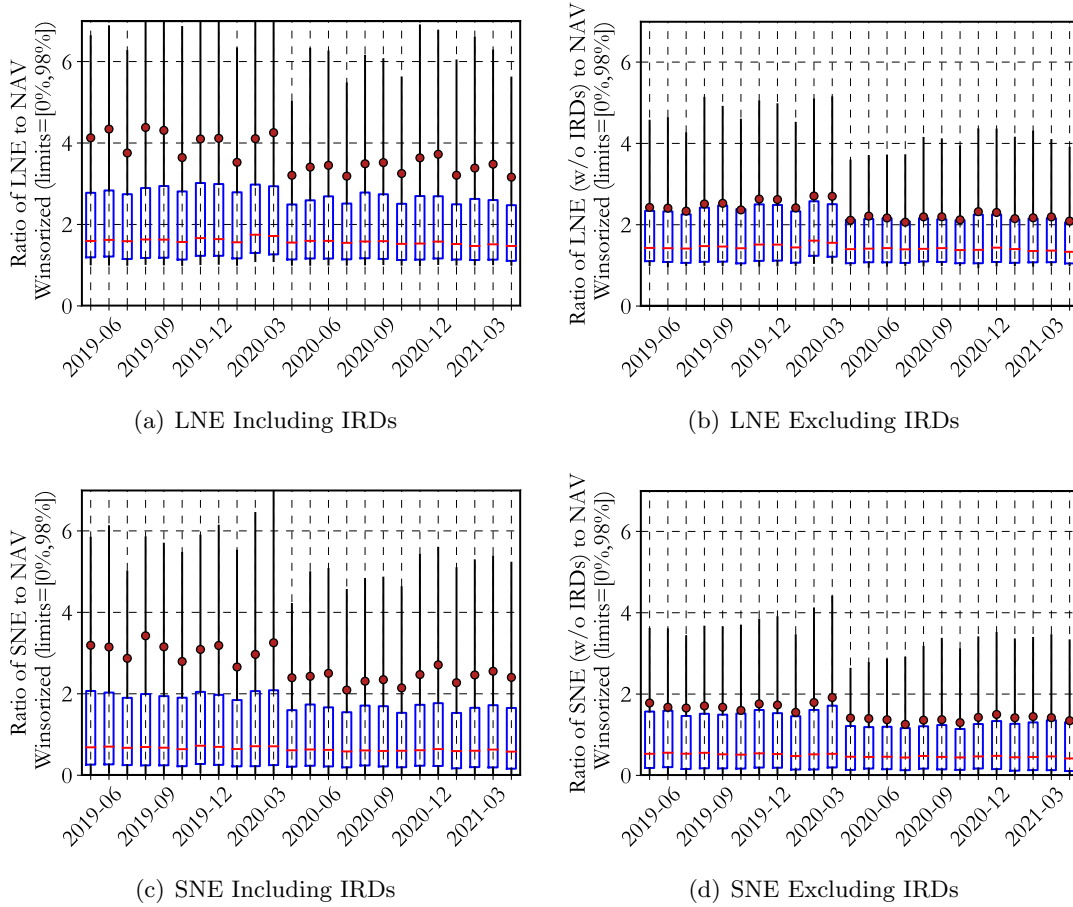


Figure 11: Ratio of Qualifying Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value

See Appendix C and Appendix D for an explanation of boxplots and winsorization.
As reported on Form PF, Questions 9, 10, 26, and 30.



B Gross Exposure by Strategy⁵

Table 41: Exposures of Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9 and 20.

Category	Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Equity	Subtotal	1,627	1,600	1,698	1,370	1,619	1,730	1,952	1,987
	Long/Short	867	833	880	713	867	957	1,090	1,114
	Long Bias	392	404	443	373	443	485	548	574
	Market Neutral	363	360	371	***	307	***	***	***
	Short Bias	5	4	3	***	1	***	***	***
Other	Subtotal	1,073	1,082	1,120	1,093	1,111	1,112	1,173	1,233
Relative Value	Subtotal	1,054	1,021	1,030	1,106	983	1,023	997	981
	F.I. Sov.	774	723	714	836	700	689	676	647
	F.I. Conv. Arb.	59	57	60	55	80	101	121	129
	F.I. Asset Backed	134	159	177	129	116	135	112	103
	F.I. Corp.	69	64	61	53	62	72	56	58
Macro	Volatility Arb.	18	19	18	32	26	26	32	43
	Subtotal	752	707	664	643	640	796	745	736
	Global Macro	666	629	578	576	572	724	680	666
	Currency	***	***	44	36	***	40	30	***
	Commodity	37	33	38	27	24	27	30	33
Credit	Active Trading	***	***	5	4	***	4	4	***
	Subtotal	314	305	315	327	358	370	393	414
	Long/Short	246	234	233	240	265	272	295	315
Event Driven	Asset Based Lending	68	71	82	87	93	98	98	98
	Subtotal	337	308	311	271	281	307	366	408
	Distressed/Restruct.	165	160	163	140	159	162	169	180
	Equity	86	78	79	65	64	71	96	116
Managed Futures/CTA	Risk Arb./Merger Arb.	86	71	69	65	59	74	101	111
	Subtotal	191	191	192	159	126	149	164	169
	Quantitative	***	***	***	157	***	145	***	***
Investment in other funds	Fundamental	***	***	***	1	***	4	***	***
	Subtotal	41	48	48	50	42	43	43	51
Total	Total	5,389	5,263	5,378	5,017	5,159	5,529	5,832	5,977

⁵Form PF Question 20 requires advisers to indicate which strategies best describe the reporting fund's strategies including a good faith estimate of the reporting fund's allocation among strategies, and provides a list of investment strategies for this purpose. Form PF does not define the investment strategies listed by Question 20.

Table 42: Exposures of Hedge Funds (Percent of NAV)
As reported on Form PF, Questions 9 and 20.

Category	Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Equity	Subtotal	51.5	50.5	52.7	47.2	50.7	51.2	55.0	53.4
	Long/Short	27.4	26.3	27.3	24.6	27.1	28.3	30.7	30.0
	Long Bias	12.4	12.7	13.8	12.9	13.9	14.4	15.4	15.4
	Market Neutral	11.5	11.3	11.5	***	9.6	***	***	***
	Short Bias	0.1	0.1	0.1	***	0.0	***	***	***
Other	Subtotal	33.9	34.1	34.8	37.7	34.8	32.9	33.0	33.1
Relative Value	Subtotal	33.3	32.2	32.0	38.1	30.8	30.3	28.1	26.4
	F.I. Sov.	24.5	22.8	22.2	28.8	21.9	20.4	19.0	17.4
	F.I. Conv. Arb.	1.9	1.8	1.9	1.9	2.5	3.0	3.4	3.5
	F.I. Asset Backed	4.2	5.0	5.5	4.5	3.6	4.0	3.2	2.8
	F.I. Corp.	2.2	2.0	1.9	1.8	1.9	2.1	1.6	1.6
	Volatility Arb.	0.6	0.6	0.6	1.1	0.8	0.8	0.9	1.2
Macro	Subtotal	23.8	22.3	20.6	22.2	20.0	23.5	21.0	19.8
	Global Macro	21.1	19.8	18.0	19.9	17.9	21.4	19.1	17.9
	Currency	***	***	1.4	1.2	***	1.2	0.8	***
	Commodity	1.2	1.0	1.2	0.9	0.8	0.8	0.9	0.9
	Active Trading	***	***	0.2	0.1	***	0.1	0.1	***
Credit	Subtotal	9.9	9.6	9.8	11.3	11.2	11.0	11.1	11.1
	Long/Short	7.8	7.4	7.2	8.3	8.3	8.0	8.3	8.5
	Asset Based Lending	2.1	2.2	2.5	3.0	2.9	2.9	2.7	2.6
Event Driven	Subtotal	10.7	9.7	9.7	9.3	8.8	9.1	10.3	11.0
	Distressed/Restruct.	5.2	5.0	5.1	4.8	5.0	4.8	4.8	4.8
	Equity	2.7	2.5	2.5	2.3	2.0	2.1	2.7	3.1
	Risk Arb./Merger Arb.	2.7	2.2	2.1	2.2	1.8	2.2	2.8	3.0
Managed Futures/CTA	Subtotal	6.0	6.0	6.0	5.5	3.9	4.4	4.6	4.5
	Quantitative	***	***	***	5.4	***	4.3	***	***
	Fundamental	***	***	***	0.1	***	0.1	***	***
Investment in other funds	Subtotal	1.3	1.5	1.5	1.7	1.3	1.3	1.2	1.4
Total	Total	170.5	166.1	167.1	173.0	161.5	163.6	164.2	160.7

C Leverage by Strategy

Table 43: Asset Weighted-Average Ratio of GAV to NAV
by Strategy

As reported on Form PF, Questions 8, 9, 10, and 20.

Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Relative Value	6.0	5.7	5.6	6.3	5.0	4.8	5.7	5.6
Macro	4.5	4.1	4.2	4.3	3.6	4.5	4.4	4.3
Multi-Strategy	2.5	1.9	2.3	2.3	2.0	2.5	3.0	3.1
Equity	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.5
Credit	1.5	1.5	1.6	1.7	1.6	1.5	1.5	1.5
Managed Futures/CTA	1.4	1.5	1.4	1.4	1.4	1.5	1.5	1.5
Event Driven	1.3	1.3	1.3	1.4	1.4	1.3	1.3	1.4
Other	1.8	1.6	1.7	1.7	1.6	1.5	1.5	1.4
Investment in other funds	1.2	3.9	1.2	1.2	1.3	1.3	1.2	1.2

Table 44: Asset Weighted-Average Ratio of GNE to NAV
by Strategy

As reported on Form PF, Questions 9, 10, 20, 26, and 30 (Third Month).

Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Macro	29.1	25.5	27.2	26.4	19.8	32.4	32.8	37.1
Relative Value	24.0	23.0	24.2	25.5	22.5	19.6	23.6	24.9
Managed Futures/CTA	19.9	19.8	18.5	14.6	17.4	20.9	19.7	19.2
Multi-Strategy	9.8	10.1	11.5	10.3	9.4	10.3	12.4	14.6
Other	4.7	4.3	4.3	4.6	4.1	3.4	3.2	3.1
Credit	2.6	2.4	2.8	3.1	2.8	2.8	2.8	3.0
Equity	3.2	3.2	3.0	2.6	2.9	2.8	2.7	2.8
Event Driven	2.0	1.9	1.9	1.9	1.8	1.8	1.9	2.0
Investment in other funds	2.4	10.3	1.9	1.8	2.0	2.0	2.1	1.9

Table 45: Asset Weighted-Average Percent of Unencumbered Cash
by Strategy

As reported on Form PF, Questions 9, 10, 20, and 33 (Third Month).

Strategy	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Macro	38.8	37.7	39.8	43.2	40.2	38.3	40.3	42.0
Managed Futures/CTA	48.5	45.2	43.4	58.6	46.1	47.7	40.4	38.7
Multi-Strategy	25.7	22.3	22.7	25.0	28.5	30.1	26.4	24.9
Relative Value	18.6	22.5	22.6	26.3	24.0	26.2	25.7	21.9
Other	18.8	17.1	14.9	16.1	16.2	13.4	12.4	12.5
Credit	6.8	7.1	7.7	8.3	7.4	7.9	9.7	9.4
Equity	9.6	10.8	9.4	15.3	10.5	8.3	7.9	8.0
Event Driven	7.2	10.0	10.4	12.3	10.0	8.0	8.5	7.5
Investment in other funds	5.8	13.0	6.6	4.7	5.1	6.0	7.2	1.1

D Investment Exposures

Table 46: Aggregate Qualifying Hedge Fund Gross Notional Exposure
by Asset Type (\$ Billions)

As reported on Form PF, Questions 26 and 30.

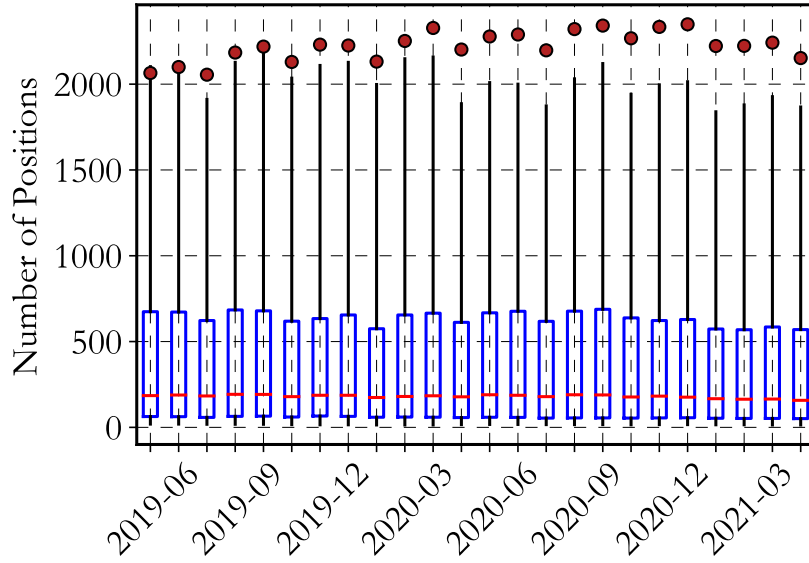
	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Interest Rate Derivatives	6,707	6,029	5,662	5,568	5,225	6,285	6,147	6,666
Foreign Exchange Derivatives	2,496	3,120	2,932	3,176	2,829	3,154	3,177	3,698
Non-Financial Listed Equities	2,101	1,995	2,123	1,547	1,937	2,134	2,484	2,537
Repurchase Agreements	1,936	1,869	1,898	1,986	1,772	2,031	1,875	1,825
U.S. Treasury Securities	2,188	2,112	2,180	1,941	1,754	1,723	1,574	1,638
Non-Financial Equity Derivatives	1,165	1,310	1,433	1,128	1,117	1,146	1,248	1,571
Sovereign Bonds - Non-U.S. G10	1,275	1,123	1,187	923	952	1,143	1,260	1,278
Credit Derivatives	717	682	651	533	485	531	582	729
Cash/Cash Equivalents - Other	448	448	445	468	393	373	391	482
Non-Financial Unlisted Equities	232	236	268	238	255	288	317	385
Commodity Derivatives	279	282	313	205	234	272	304	328
Financial Listed Equities	280	272	292	195	236	242	270	312
Sovereign Bonds - Other	277	270	286	229	269	342	321	272
Non-Financial Corporate Bonds	236	224	221	201	244	243	217	234
Leveraged Loans	152	157	166	168	181	197	202	223
Other Derivatives	274	214	403	229	197	228	226	211
Non-U.S. Currency Holdings	178	183	182	151	187	174	170	201
Cash/Cash Equivalents - Deposits	194	202	205	212	190	190	184	196
Non-Financial Convertible Bonds	79	86	90	86	117	140	174	182
MBS	222	264	295	207	236	243	205	174
Cash/Cash Equivalents - MMFs	154	161	171	209	186	169	168	173
Other Private Funds	125	121	123	113	114	122	133	145
Physical Real Estate	97	107	106	102	99	100	112	120
Other Loans (Excluding Repo)	107	99	107	100	109	117	115	118
Financial Equity Derivatives	92	98	106	82	89	86	92	97
Other	120	111	96	103	100	85	89	95
Financial Corporate Bonds	64	69	66	63	66	68	66	65
Other ABS/Structured Products	48	47	49	41	41	43	42	43
U.S. Agency and GSE Securities	42	45	43	36	35	39	42	39
CDO/CLO	44	43	42	31	35	35	33	35
Financial Unlisted Equities	21	26	24	22	22	24	26	27
U.S. State and Local Bonds	21	20	20	20	20	19	19	18
Registered Investment Companies	27	25	13	11	22	19	16	16
Financial Convertible Bonds	11	10	10	8	9	8	8	9
Physical Commodities	10	3	3	2	3	4	7	4

Table 47: Percent of Qualifying Hedge Fund Gross Notional Exposure
Representing Long Notional Exposure
As reported on Form PF, Questions 26 and 30.

	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Interest Rate Derivatives	51.7	49.7	47.8	47.9	44.4	52.4	51.4	49.6
Foreign Exchange Derivatives	54.8	59.4	58.3	57.8	60.3	58.4	58.6	58.7
Non-Financial Listed Equities	67.7	67.8	68.7	69.9	69.0	69.8	70.7	71.0
Repurchase Agreements	37.1	35.1	35.9	37.1	38.4	38.0	38.4	45.2
U.S. Treasury Securities	60.0	61.2	60.6	61.1	61.3	62.3	60.9	55.1
Non-Financial Equity Derivatives	54.3	54.4	57.8	50.9	50.6	51.1	50.8	57.1
Sovereign Bonds - Non-U.S. G10	52.3	55.2	54.4	54.5	52.4	51.9	49.7	48.5
Credit Derivatives	42.2	45.2	49.7	43.5	41.7	42.4	45.2	46.8
Cash/Cash Equivalents - Other	79.2	81.2	81.6	78.5	80.5	79.4	77.1	72.5
Non-Financial Unlisted Equities	99.8	99.8	99.9	99.9	99.8	99.1	99.8	99.7
Commodity Derivatives	59.3	58.8	64.8	61.2	64.5	68.8	70.4	68.6
Financial Listed Equities	69.9	68.9	68.7	69.8	69.5	70.3	73.4	72.5
Sovereign Bonds - Other	77.0	78.0	75.5	77.4	77.9	75.4	75.9	75.7
Non-Financial Corporate Bonds	80.9	81.0	82.1	86.9	86.4	85.4	84.7	82.2
Leveraged Loans	99.2	99.5	99.5	99.5	98.2	99.4	99.5	98.3
Other Derivatives	63.5	56.2	41.5	40.9	48.6	65.0	42.5	43.9
Non-U.S. Currency Holdings	56.3	58.3	52.9	57.1	51.2	48.9	55.1	53.2
Cash/Cash Equivalents - Deposits	69.4	64.0	61.0	73.8	70.9	72.3	73.9	72.9
Non-Financial Convertible Bonds	93.7	92.6	94.5	93.5	99.2	98.7	98.4	97.9
MBS	82.4	82.6	81.6	85.9	83.6	82.0	80.2	81.8
Cash/Cash Equivalents - MMFs	***	***	98.9	***	***	***	***	***
Other Private Funds	99.8	99.5	99.8	99.8	99.7	99.7	***	***
Physical Real Estate	***	***	***	***	***	***	***	***
Other Loans (Excluding Repo)	89.7	89.5	90.4	88.2	90.9	91.0	88.8	93.5
Financial Equity Derivatives	57.3	55.5	55.3	54.7	55.0	55.2	57.8	59.8
Other	92.2	96.1	96.3	94.3	94.4	95.0	94.9	94.6
Financial Corporate Bonds	90.4	91.6	92.0	92.7	91.5	91.5	90.0	89.7
Other ABS/Structured Products	99.3	99.3	99.3	99.7	***	99.5	99.8	94.3
U.S. Agency and GSE Securities	82.5	79.9	75.4	87.8	86.7	85.0	78.5	72.5
CDO/CLO	***	***	***	***	***	***	***	***
Financial Unlisted Equities	99.8	99.6	99.4	99.8	99.8	99.9	99.8	99.7
U.S. State and Local Bonds	99.3	***	99.5	99.1	***	***	98.4	98.3
Registered Investment Companies	97.7	98.0	97.3	96.4	92.5	97.2	***	***
Financial Convertible Bonds	95.7	96.0	95.8	96.7	96.8	97.1	97.4	97.4
Physical Commodities	99.0	97.7	***	98.9	98.8	99.1	99.2	***

E Number of Positions

Figure 12: Number of Positions Reported by Qualifying Hedge Funds
As reported on Form PF, Question 34.



F Liquidity

Table 48: Investor Liquidity for Qualifying Hedge Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 50.

Liquidation Period	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
At most 1 day	8.0	7.5	7.6	7.8	7.6	7.7	6.7	6.1
At most 7 days	13.9	13.7	13.0	12.8	13.0	13.1	10.0	9.4
At most 30 days	27.0	26.7	26.2	25.5	24.4	24.4	22.4	22.2
At most 90 days	46.2	46.7	46.0	44.3	42.7	42.5	43.5	39.6
At most 180 days	57.1	58.3	56.7	55.1	53.2	54.5	51.5	50.9
At most 365 days	70.0	69.5	68.7	67.4	66.8	65.9	64.6	63.7

Table 49: Portfolio Liquidity for Qualifying Hedge Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9, 26, 30, and 32.

Liquidation Period	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
At most 1 day	36.2	35.8	34.6	39.3	37.7	35.3	32.4	33.3
At most 7 days	59.7	58.5	56.8	59.4	58.8	56.6	54.9	54.6
At most 30 days	72.3	71.3	69.9	70.4	70.3	69.5	68.4	67.6
At most 90 days	78.5	77.7	76.2	75.7	76.2	75.7	75.0	74.1
At most 180 days	82.2	81.6	80.2	79.4	80.4	80.0	79.3	78.2
At most 365 days	86.4	85.9	85.1	83.7	84.6	84.5	84.2	83.4

Figure 13: Asset Weighted-Average Qualifying Hedge Fund
Investor and Portfolio Liquidity

As reported on Form PF, Questions 9, 26, 30, 32, and 50 as of First Calendar Quarter 2021.

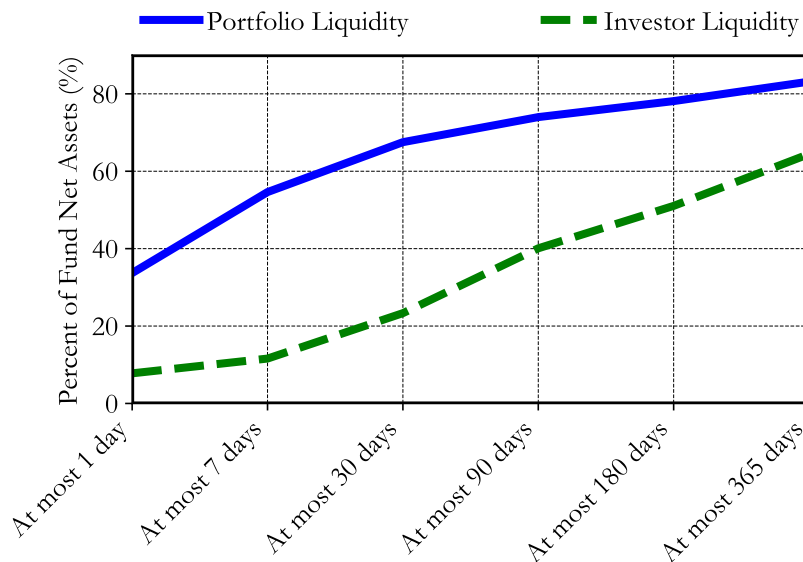
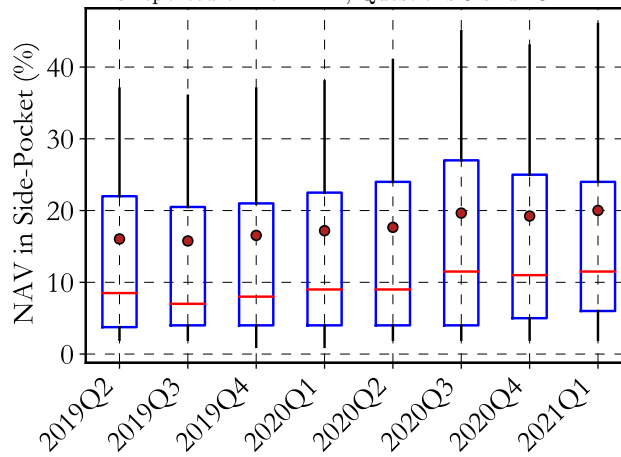


Table 50: Restrictions on Qualifying Hedge Fund Assets (\$ Billions)
As reported on Form PF, Questions 48 and 49.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
May Suspend	2,424	2,410	2,413	2,147	2,359	2,484	2,605	2,702
May Have Gates	1,512	1,487	1,546	1,381	1,514	1,601	1,726	1,801
Side-Pocketed	42	45	47	47	54	61	73	89
Gated	40	42	42	47	56	50	64	76
Suspended	16	18	15	22	18	15	20	19

Figure 14: Percentage of Qualifying Hedge Fund NAV Subject to a Side-Pocket Arrangement

See Appendix C for an explanation of boxplots.
As reported on Form PF, Questions 9 and 48.



G Borrowings

Table 51: Borrowings of Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Question 43 (Third Month).

Type	Subtype	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Secured	Subtotal	3,140	3,059	3,129	2,865	2,855	3,154	3,182	3,176
	Prime Broker	1,424	1,342	1,390	1,061	1,288	1,396	1,599	1,670
	Reverse Repo	1,287	1,316	1,289	1,365	1,151	1,310	1,180	1,026
	Other Secured	429	401	450	438	415	447	403	480
Unsecured	Subtotal	15	16	18	19	13	12	13	14
Total	Total	3,156	3,075	3,147	2,884	2,868	3,166	3,195	3,190

Table 52: Aggregate Borrowing by Creditor Entity Type (Percent)
As reported on Form PF, Question 43 (Third Month).

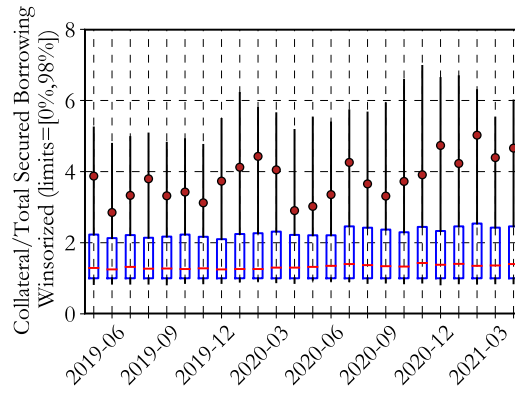
Creditor Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
US Financial	63.6	63.6	63.1	61.2	63.5	61.1	64.6	65.3
Non-US Financial	35.9	35.8	36.2	38.0	35.8	38.1	34.7	34.0
US Non-Financial	***	***	***	0.6	***	0.6	***	0.6
Non-US Non-Financial	***	***	***	0.1	***	0.1	***	0.1

Table 53: Aggregate Collateral for Secured Borrowings
of Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Question 43 (Third Month).

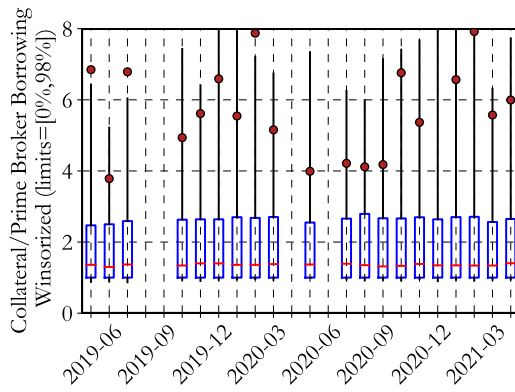
Borrowing Type	Collateral Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Prime Broker	Subtotal	1,792	1,690	1,751	1,405	1,703	1,843	2,117	2,191
	Other	1,214	1,147	1,212	952	1,174	1,281	1,500	1,530
	Cash	578	543	539	453	529	562	617	661
Reverse Repo	Subtotal	1,354	1,370	1,304	1,464	1,191	1,346	1,262	1,062
	Other	803	835	799	874	770	907	862	727
	Cash	550	535	506	590	421	439	400	335
Other Secured	Subtotal	494	482	498	510	486	513	497	594
	Other	324	339	344	351	344	379	389	434
	Cash	169	143	154	159	142	134	108	159
Total	Total	3,639	3,542	3,553	3,379	3,380	3,701	3,876	3,847

Figure 15: Ratio of Collateral Posted to Secured Borrowing for Qualifying Hedge Funds

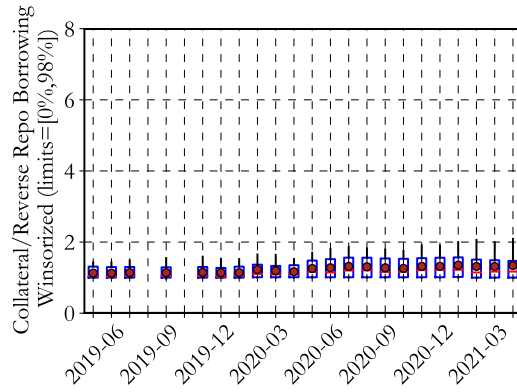
See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Question 43.



(a) Total Secured Borrowing



(b) Prime Broker Borrowing

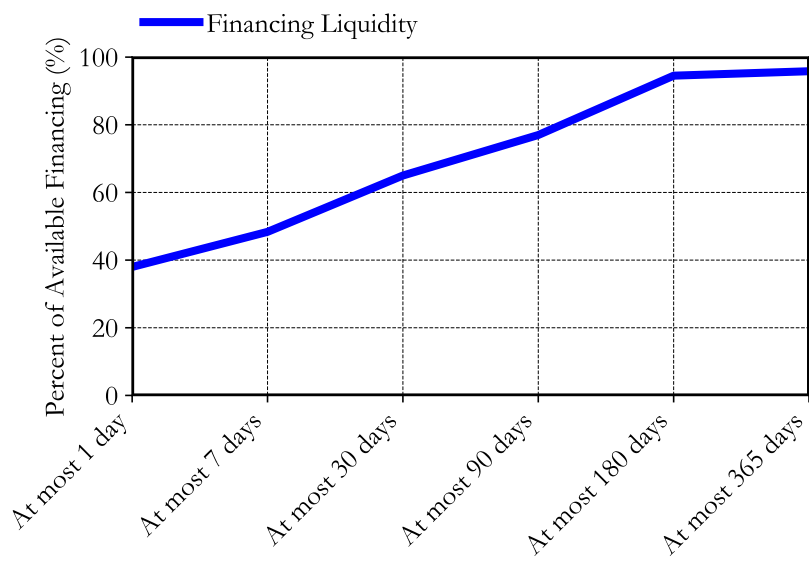


(c) Reverse Repo Borrowing

Table 54: Financing Liquidity for Qualifying Hedge Funds
(Percent of Available Financing)
As reported on Form PF, Question 46.

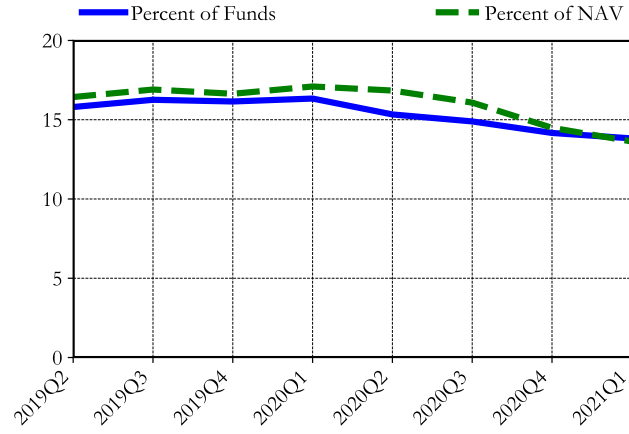
Financing Available	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
At most 1 day	34.5	39.8	29.2	37.2	39.4	39.2	27.9	38.0
At most 7 days	51.1	54.2	48.1	50.6	50.9	51.4	44.7	45.7
At most 30 days	67.9	68.8	67.2	69.9	66.5	67.4	65.3	65.1
At most 90 days	83.4	82.6	82.6	83.8	81.1	80.8	79.2	78.6
At most 180 days	95.4	95.1	94.9	94.3	94.5	94.7	94.9	94.4
At most 365 days	96.5	96.2	96.0	95.3	95.9	96.0	96.0	95.5

Figure 16: Weighted-Average Qualifying Hedge Fund
Financing Liquidity (Percent of Available Financing)
As reported on Form PF, Question 46 as of First Calendar Quarter 2021.



H Central Clearing

Figure 17: Qualifying Hedge Funds Using Central Clearing
As reported on Form PF, Question 39.



I Value-at-Risk (“VaR”) Reporting

Table 55: Number of Qualifying Hedge Funds Using VaR
As reported on Form PF, Question 40.

VaR Method	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
VaR (Any Method)	657	660	665	661	656	619	604	587
Historical Simulation	303	312	315	309	309	283	276	266
Monte Carlo Simulation	165	167	174	176	169	167	168	171
Parametric	183	177	176	172	174	168	155	151
Other	46	45	43	48	46	43	43	45
VaR Not Used	1,115	1,130	1,143	1,151	1,144	1,147	1,175	1,258

Table 56: Aggregate Qualifying Hedge Fund GAV Managed Using VaR (\$ Billions)
As reported on Form PF, Questions 8 and 40.

VaR Method	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
VaR (Any Method)	3,981	3,872	3,894	3,743	3,640	3,867	3,832	3,727
Historical Simulation	2,197	2,052	2,039	1,940	1,819	1,953	1,984	1,938
Monte Carlo Simulation	700	709	736	704	804	836	883	871
Parametric	807	805	774	713	717	744	605	604
Other	851	868	913	868	807	845	898	846
VaR Not Used	2,709	2,717	2,753	2,517	2,694	2,877	3,182	3,385

Table 57: Aggregate Qualifying Hedge Fund NAV Managed Using VaR (\$ Billions)
As reported on Form PF, Questions 9 and 40.

VaR Method	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
VaR (Any Method)	1,379	1,367	1,363	1,219	1,318	1,357	1,328	1,337
Historical Simulation	557	559	557	504	544	560	574	580
Monte Carlo Simulation	332	334	351	318	341	351	361	368
Parametric	472	450	441	372	410	421	363	360
Other	131	135	121	131	140	147	145	156
VaR Not Used	1,783	1,802	1,856	1,681	1,877	2,023	2,225	2,381

J Stress Testing and VaR

Table 58: Number of Qualifying Hedge Funds Managed Using VaR or Market Factor Change Testing (“Stress Testing”) As reported on Form PF, Questions 40 and 42.

Risk Tool Used	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Stress and VaR	579	591	588	592	589	559	546	525
Stress, No VaR	463	459	448	428	433	430	400	435
No Stress, VaR	78	69	77	69	67	60	58	62
Neither	652	671	695	723	711	717	775	823

Table 59: Aggregate Qualifying Hedge Fund GAV Managed Using VaR or Stress Testing (\$ Billions) As reported on Form PF, Questions 8, 40, and 42.

Risk Tool Used	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Stress and VaR	3,758	3,691	3,705	3,553	3,287	3,641	3,470	3,463
Stress, No VaR	1,380	1,330	1,299	1,148	1,237	1,302	1,383	1,435
No Stress, VaR	223	181	188	190	353	226	362	263
Neither	1,329	1,387	1,455	1,369	1,457	1,575	1,799	1,950

Table 60: Aggregate Qualifying Hedge Fund NAV Managed Using VaR or Stress Testing (\$ Billions) As reported on Form PF, Questions 9, 40, and 42.

Risk Tool Used	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Stress and VaR	1,240	1,254	1,239	1,108	1,178	1,226	1,172	1,187
Stress, No VaR	740	740	741	651	732	781	819	846
No Stress, VaR	139	114	124	111	140	130	156	150
Neither	1,043	1,062	1,116	1,030	1,145	1,242	1,406	1,535

K Stress Testing**Table 61:** Number of Qualifying Hedge Funds Stressing Each Market Factor
As reported on Form PF, Question 42.

Market Factor	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Equity Prices	880	891	873	858	853	827	787	779
Currency Rates	753	774	768	757	753	721	681	700
Risk Free Rates	756	761	745	733	740	708	657	659
Credit Spreads	668	676	658	647	645	623	577	567
Implied Volatilities	559	576	549	529	528	511	466	455
Commodity Prices	491	499	476	453	467	450	404	389
Bond Default Rates	286	285	266	256	266	258	229	241
ABS Default Rates	237	243	225	205	218	214	188	202

Table 62: Aggregate GAV of Qualifying Hedge Funds
Stressing Each Market Factor (\$ Billions)
As reported on Form PF, Questions 8 and 42.

Market Factor	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Equity Prices	4,418	4,330	4,348	4,097	3,833	4,355	4,342	4,380
Currency Rates	4,081	3,968	3,971	3,781	3,576	3,969	3,863	3,890
Risk Free Rates	4,468	4,344	4,290	4,089	3,828	4,177	4,008	4,128
Credit Spreads	3,687	3,620	3,644	3,502	3,107	3,557	3,458	3,479
Implied Volatilities	3,666	3,585	3,528	3,294	3,053	3,445	3,168	3,218
Commodity Prices	3,389	3,282	3,267	3,164	2,806	3,319	3,132	3,172
Bond Default Rates	1,144	1,043	984	937	876	914	872	882
ABS Default Rates	997	897	871	832	762	789	738	752

Table 63: Aggregate NAV of Qualifying Hedge Funds
Stressing Each Market Factor (\$ Billions)
As reported on Form PF, Questions 9 and 42.

Market Factor	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Equity Prices	1,757	1,778	1,758	1,549	1,688	1,782	1,761	1,808
Currency Rates	1,536	1,554	1,536	1,373	1,480	1,554	1,503	1,535
Risk Free Rates	1,514	1,527	1,492	1,332	1,429	1,479	1,398	1,490
Credit Spreads	1,337	1,352	1,327	1,170	1,257	1,320	1,234	1,253
Implied Volatilities	1,126	1,149	1,117	991	1,062	1,131	1,030	1,058
Commodity Prices	1,120	1,122	1,083	968	1,041	1,098	1,001	1,019
Bond Default Rates	424	426	392	339	396	403	376	387
ABS Default Rates	369	376	347	294	348	358	329	340

Table 64: Number of Qualifying Hedge Funds Stressing Market Factors
As reported on Form PF, Question 42.

Factors Tested	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
0	730	740	772	792	778	777	833	885
1	179	179	181	182	183	183	178	202
2	115	117	118	115	112	110	118	117
3	115	100	95	94	107	98	98	90
4	88	99	103	105	98	98	101	103
5	122	121	131	124	119	108	113	117
6	201	202	200	211	197	189	162	149
7	68	77	73	74	75	75	68	61
8	154	155	135	115	131	128	108	121

Table 65: Aggregate GAV of Qualifying Hedge Funds
Stressing Market Factors (\$ Billions)
As reported on Form PF, Questions 8 and 42.

Factors Tested	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
0	1,552	1,568	1,643	1,560	1,810	1,801	2,161	2,213
1	386	397	416	365	414	424	466	414
2	590	570	544	475	493	510	528	596
3	364	338	339	290	431	336	315	302
4	256	272	254	262	251	240	287	292
5	788	746	776	763	740	841	849	831
6	1,812	1,825	1,838	1,759	1,435	1,785	1,637	1,690
7	184	222	243	203	250	260	275	263
8	759	649	595	584	511	547	497	511

Table 66: Aggregate NAV of Qualifying Hedge Funds
Stressing Market Factors (\$ Billions)
As reported on Form PF, Questions 9 and 42.

Factors Tested	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
0	1,182	1,176	1,240	1,141	1,285	1,372	1,562	1,685
1	259	260	269	240	267	278	308	272
2	206	205	212	191	214	230	264	307
3	196	187	189	170	199	208	229	217
4	149	163	158	141	138	144	142	162
5	274	265	271	237	254	266	273	282
6	552	550	556	493	497	533	450	467
7	109	127	122	119	123	126	127	120
8	235	235	202	168	218	222	198	207

IX Section 3 Liquidity Fund Specific Information

A Liquidity

Table 67: Investor Liquidity For Section 3 Liquidity Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 64.

Liquidation Period	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
At most 1 day	75.8	75.0	73.1	75.1	72.7	72.2	72.1	71.4
At most 7 days	96.0	95.9	95.6	95.8	95.0	95.2	94.7	93.4
At most 30 days	99.6	99.7	99.7	99.7	99.1	99.1	98.6	98.0
At most 90 days	99.9	99.8	99.8	99.9	99.5	99.5	99.3	98.8
At most 180 days	100.0	99.9	99.9	99.9	99.9	99.9	99.7	99.4
At most 365 days	100.0	100.0	99.9	100.0	100.0	99.9	100.0	99.9

Table 68: Suspensions and Gates of Section 3 Liquidity Funds (\$ Billions)
As reported on Form PF, Question 63.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
May Suspend	271	272	268	268	274	296	294	271
May Have Gates	241	245	241	239	251	273	270	247
Suspended	0	0	0	0	0	0	0	0
Gated	0	0	0	0	0	0	0	0

B Portfolio Characteristics

Figure 18: Weighted-Average Maturity Reported by Section 3 Liquidity Funds
As reported on Form PF, Question 55.

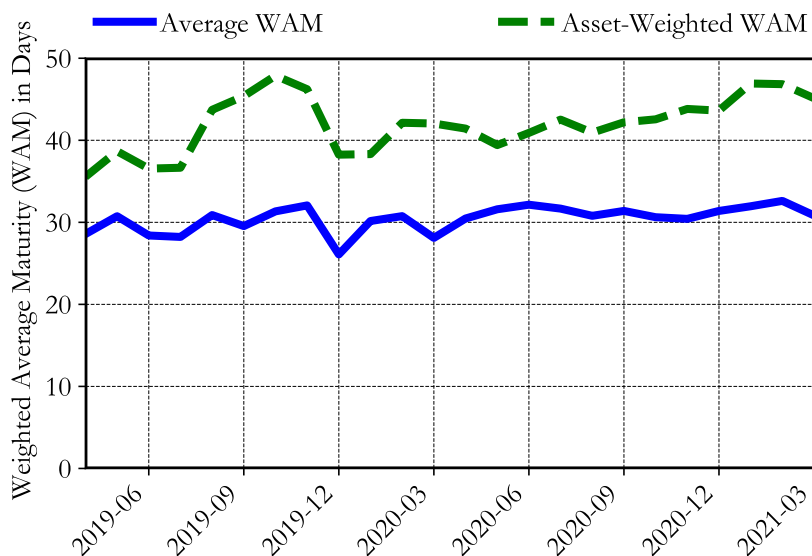


Figure 19: Weighted-Average Life Reported by Section 3 Liquidity Funds
As reported on Form PF, Question 55.

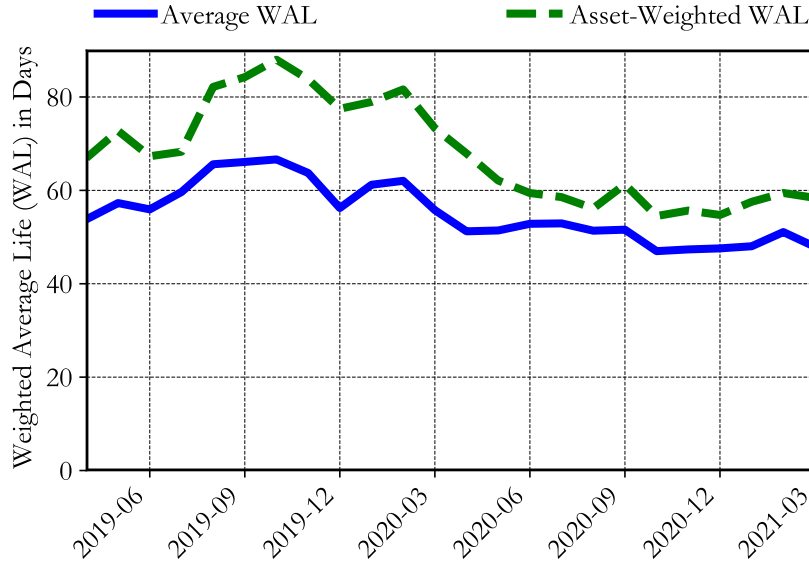


Figure 20: Seven-Day Gross Yield Reported by Section 3 Liquidity Funds
As reported on Form PF, Question 55.

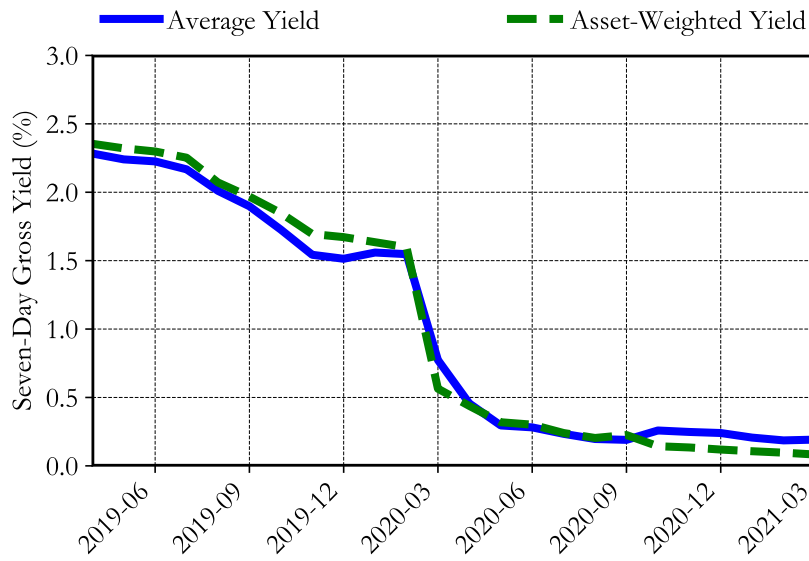


Figure 21: Ratio of Daily Liquid Assets to Net Asset Value of Section 3 Liquidity Funds
As reported on Form PF, Question 55.

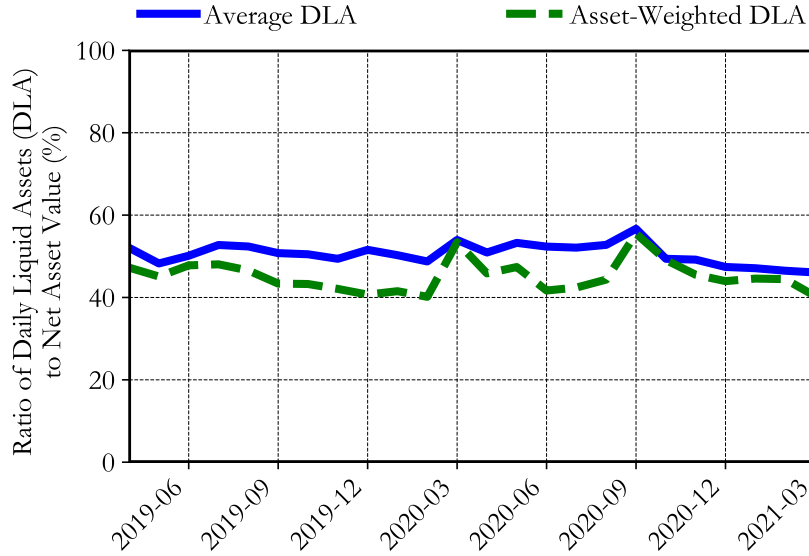
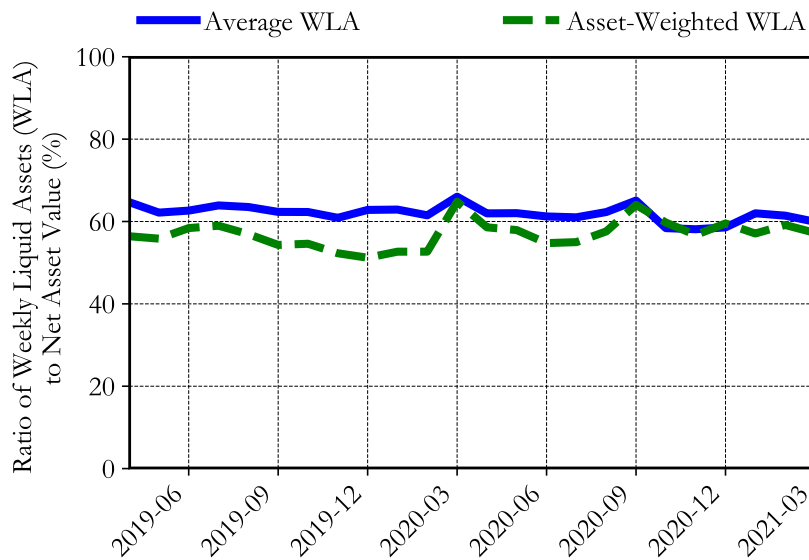


Figure 22: Ratio of Weekly Liquid Assets (WLA) to Net Asset Value of Section 3 Liquidity Funds
As reported on Form PF, Question 55.



C Rule 2a-7 Compliance

Table 69: Rule 2a-7 Compliance (Percent of Funds)

As reported on Form PF, Questions 9 and 54.

Compliance Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Credit Quality	62.8	63.4	64.3	62.5	63.6	63.0	55.8	54.7
Diversification	58.1	58.5	59.5	57.5	59.1	58.7	51.9	50.9
Maturity	58.1	58.5	59.5	57.5	59.1	58.7	51.9	50.9
Liquidity	53.5	53.7	54.8	52.5	54.5	54.3	48.1	47.2
None	37.2	36.6	35.7	37.5	36.4	37.0	44.2	45.3
Fully	48.8	48.8	50.0	47.5	50.0	50.0	44.2	43.4

Table 70: Rule 2a-7 Compliance (Percent of Aggregate NAV)

As reported on Form PF, Questions 9 and 54.

Compliance Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Credit Quality	13.8	13.8	13.1	13.4	14.1	13.5	14.0	16.7
Diversification	13.0	13.2	12.5	12.7	13.2	12.4	12.7	15.4
Maturity	13.0	13.2	12.5	12.7	13.2	12.4	12.7	15.4
Liquidity	12.8	13.0	12.3	12.4	12.9	12.1	12.5	15.1
None	86.2	86.2	86.9	86.6	85.9	86.5	86.0	83.3
Fully	10.9	11.0	10.3	10.4	10.9	10.2	10.4	13.1

D Methods of Calculating NAV

Table 71: NAV Calculation Method (Percent of Funds)

As reported on Form PF, Questions 9, 52, and 53.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Stable	74.4	75.6	73.8	75.0	72.7	73.9	73.1	75.5
Floating	25.6	24.4	26.2	25.0	27.3	26.1	26.9	24.5

Table 72: NAV Calculation Method (Percent of Aggregate NAV)

As reported on Form PF, Questions 9, 52, and 53.

Type	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1
Stable	55.7	62.2	63.9	67.7	67.4	69.4	65.7	68.1
Floating	44.3	37.8	36.1	32.3	32.6	30.6	34.3	31.9

E Aggregate Portfolio Holdings

Table 73: Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 1 of 2
As reported on Form PF, Question 63.

Product Type	2019-04	2019-05	2019-06	2019-07	2019-08	2019-09	2019-10	2019-11	2019-12	2020-01	2020-02	2020-03
U.S. Treasuries	40.9	37.5	39.5	36.6	41.3	50.2	49.8	55.3	60.0	42.4	41.1	86.1
Deposits	59.5	60.2	63.6	66.0	67.9	63.7	62.2	68.3	63.2	78.2	75.4	56.9
Commercial Paper	39.5	41.5	39.0	40.1	42.7	40.4	43.0	42.3	41.2	43.6	48.3	31.8
Other	40.2	38.1	43.3	46.6	42.3	40.7	40.5	38.7	39.2	35.9	32.0	29.6
Repo - Govt. Collateral	58.0	59.0	62.5	69.8	60.6	52.0	51.7	46.8	45.9	43.7	44.7	46.1
Asset-Backed Securities	19.7	20.6	17.7	18.2	17.3	17.4	16.9	16.2	15.5	17.0	16.5	12.9
Repo - Other Collateral	12.7	10.4	11.6	11.8	8.0	9.6	10.0	9.6	7.9	8.7	8.7	9.1
U.S. Govt. Debt	3.2	4.2	3.4	2.3	2.4	2.2	1.9	1.9	1.8	1.8	2.0	2.3
Municipal Debt	0.8	0.8	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.9

Table 74: Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 2 of 2
As reported on Form PF, Question 63.

Product Type	2020-04	2020-05	2020-06	2020-07	2020-08	2020-09	2020-10	2020-11	2020-12	2021-01	2021-02	2021-03
U.S. Treasuries	101.2	107.0	108.4	102.1	101.2	108.5	107.3	103.1	104.1	97.2	89.5	91.9
Deposits	62.2	56.2	51.8	58.9	51.9	50.9	55.1	58.0	49.5	58.6	64.8	54.9
Commercial Paper	37.5	33.4	35.8	36.8	41.7	39.3	33.1	35.2	36.0	43.4	44.1	47.4
Other	26.9	29.3	35.7	38.6	31.0	29.7	31.6	36.0	37.6	33.8	35.4	36.3
Repo - Govt. Collateral	25.2	28.1	30.7	35.0	44.4	42.3	33.0	31.7	39.0	27.7	25.8	23.9
Asset-Backed Securities	18.6	19.7	18.8	19.6	19.2	17.9	15.8	18.0	19.2	18.2	18.8	21.1
Repo - Other Collateral	9.9	12.0	14.4	15.5	15.8	16.5	17.0	19.9	17.9	18.3	17.9	13.3
U.S. Govt. Debt	2.9	2.3	2.4	2.3	1.9	2.2	1.7	1.9	1.8	1.9	1.6	1.4
Municipal Debt	1.0	1.1	1.3	1.5	1.4	1.3	0.9	0.8	0.9	0.9	0.9	1.1

X Section 4 Private Equity Fund Specific Information

A CPC Industry Concentration

Table 75: Gross Assets in CPC Industries (Percent of Total)
As reported on Form PF, Questions 8 and 77.

Type	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
Software Publishers	3.8	4.9	6.1	6.0	8.0	10.6	9.7
Electric Power Generation,...	3.8	3.7	4.1	4.2	4.5	4.3	4.8
Telecommunications Data Processing...	2.5	2.7	2.3	2.2	2.4	2.6	3.7
Data Processing, Hosting, &...	2.3	1.8	2.0	2.3	3.5	4.2	3.6
Other Financial Investment...	1.8	1.8	1.7	1.4	2.1	2.1	2.8
Other Information Services	2.1	1.9	1.8	2.0	1.7	1.9	2.5
Pharmaceutical & Medicine Mfg	1.3	1.5	1.4	1.5	2.4	2.0	2.1
Oil & Gas Extraction	7.8	5.8	6.7	6.2	4.9	3.6	1.9
Custom Computer Programming...	1.0	1.5	1.5	1.5	1.8	2.1	1.9
All Other Professional,...	0.6	0.6	0.9	0.8	1.4	1.4	1.9
Other Financial Vehicles	0.4	0.6	1.8	1.6	1.3	1.2	1.8
Insurance Agencies & Brokerages	1.0	1.0	1.2	1.1	1.0	1.1	1.5
Management, Scientific, &...	1.2	1.1	1.3	1.6	1.4	1.6	1.4
Scientific Research & Development...	0.9	1.0	0.7	1.0	1.0	1.7	1.3
Pipeline Transportation	2.6	2.4	2.2	1.9	1.8	1.7	1.3
Educational Services	1.3	1.3	1.2	1.4	1.2	1.1	1.3
Other Computer Related Services	0.4	0.5	0.9	0.9	1.0	0.8	1.2
Activities Related to Credit...	1.2	1.4	1.0	1.2	1.3	1.4	1.2

B CPC Financial Leverage

Figure 23: Distribution of Ratio of Aggregate CPC Current Liabilities to Total Liabilities of Section 4 Private Equity Funds

See Appendix C for an explanation of boxplots.
As reported on Form PF, Questions 71 and 72.

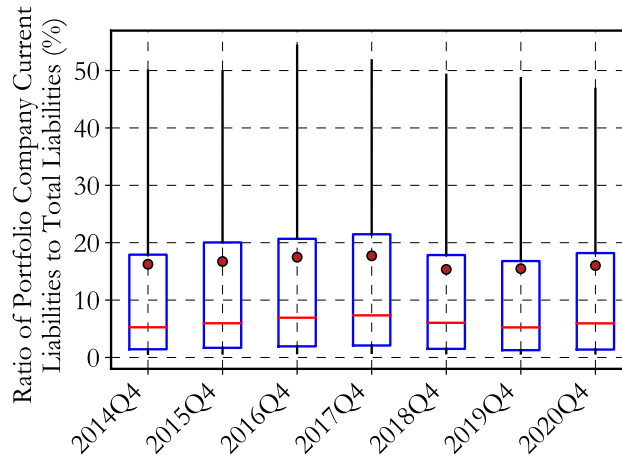
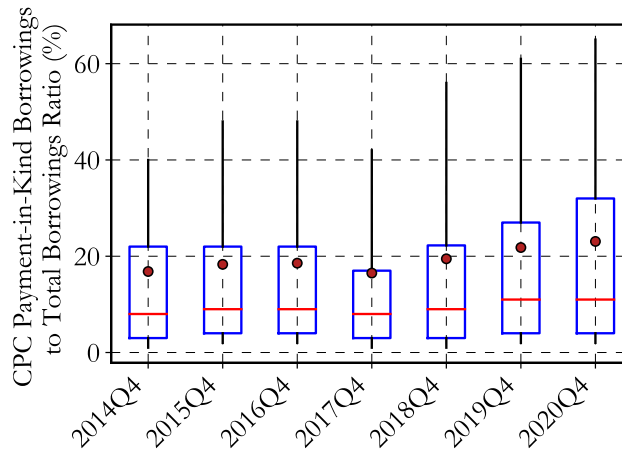


Figure 24: Distribution of CPC Payment-in-Kind or Zero Coupon Borrowings to Total Borrowings Ratio

See Appendix C for an explanation of boxplots.
As reported on Form PF, Question 73.



C CPC Investments by Region and Country

Table 76: Aggregate Gross Value of Private Equity
Investments by Region (\$ Billions)
As reported on Form PF, Questions 70 and 78.

Region	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
North America	4,506	4,132	3,942	3,961	4,211	5,163	6,633
Europe EEA	1,259	941	848	963	1,256	1,547	2,156
Asia	462	447	406	379	435	561	1,028
Europe Other	9	21	22	40	46	69	158
South America	85	58	111	184	140	149	141
Supranational	67	23	37	49	55	60	78
Middle East	12	9	15	23	16	18	44
Africa	12	12	18	14	10	15	9

Table 77: Private Equity CPC Investments by Region
(Percent of Aggregate CPC Gross Asset Value)
As reported on Form PF, Questions 70 and 78.

Region	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
North America	70.2	73.2	73.0	70.5	68.2	68.0	64.7
Europe EEA	19.6	16.7	15.7	17.1	20.3	20.4	21.0
Asia	7.2	7.9	7.5	6.8	7.0	7.4	10.0
Europe Other	0.1	0.4	0.4	0.7	0.7	0.9	1.5
South America	1.3	1.0	2.0	3.3	2.3	2.0	1.4
Supranational	1.0	0.4	0.7	0.9	0.9	0.8	0.8
Middle East	0.2	0.2	0.3	0.4	0.3	0.2	0.4
Africa	0.2	0.2	0.3	0.3	0.2	0.2	0.1

Table 78: Aggregate Gross Asset Value of Private Equity
CPC Investments by Country (\$ Billions)
As reported on Form PF, Questions 70 and 78.

Country	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
United States	4,305	3,943	3,776	3,794	4,015	4,803	6,243
Japan	98	85	79	52	52	78	283
China and Hong Kong	186	173	114	147	154	149	235
India	83	89	92	73	104	128	229
Brazil	58	41	88	131	96	93	78
Russia	2	5	4	4	2	1	1

Table 79: Private Equity CPC Investments by Country
(Percent of Aggregate CPC Gross Asset Value)
As reported on Form PF, Questions 70 and 78.

Country	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4
United States	67.1	69.9	69.9	67.6	65.1	63.3	60.9
Japan	1.5	1.5	1.5	0.9	0.8	1.0	2.8
China and Hong Kong	2.9	3.1	2.1	2.6	2.5	2.0	2.3
India	1.3	1.6	1.7	1.3	1.7	1.7	2.2
Brazil	0.9	0.7	1.6	2.3	1.6	1.2	0.8
Russia	0.0	0.1	0.1	0.1	0.0	0.0	0.0

XI Appendices

A Form PF Filer Categories

The amount of information an adviser must report and the frequency with which it must report on Form PF depends on the amount of the adviser's private fund assets and the types of private funds managed. Reporting advisers must identify the types of private funds they manage on Form PF.

1 All Private Fund Advisers

SEC-registered investment advisers with at least \$150 million in private fund assets under management are required to file Form PF. Registered investment advisers with less than \$150 million in private funds assets under management, exempt reporting advisers, and state-registered advisers report general private fund data on Form ADV, but do not file Form PF.⁶ Not all Form PF filers report on a quarterly basis. Smaller private fund advisers and all private equity fund advisers file Form PF on an annual basis, while larger hedge fund advisers and larger liquidity fund advisers file the form quarterly.⁷ As a result of the difference in reporting frequency, information in this report related to funds that are reported annually may be dated by several months.⁸

2 Large Hedge Fund Advisers

Large Hedge Fund Advisers have at least \$1.5 billion in hedge fund assets under management. A Large Hedge Fund Adviser is required to file Form PF quarterly and provide data about each hedge fund it managed during the reporting period (irrespective of the size of the fund).

Large Hedge Fund Advisers must report more information on Form PF about Qualifying Hedge Funds than other hedge funds they manage during the reporting period. A Qualifying Hedge Fund is any hedge fund advised by a Large Hedge Fund Adviser that had a NAV (individually or in combination with any feeder funds, parallel funds, and/or dependent parallel managed accounts) of at least \$500 million as of the last day of any month in the fiscal quarter immediately preceding the adviser's most recently completed fiscal quarter. This report provides information about all hedge funds reported by Large Hedge Fund Advisers, including Qualifying Hedge Funds and smaller hedge funds. This report also provides an overview of certain data reported solely for Qualifying Hedge Funds.

⁶Note that these thresholds are on a gross basis. Exempt reporting advisers are advisers that rely on the exemptions from SEC registration in Advisers Act section 203(l) for venture capital fund advisers and section 203(m) for advisers managing less than \$150 million in private fund assets in the U.S.

⁷An adviser may be a large hedge fund adviser that must file quarterly to report data about the hedge funds it manages as well as a private equity fund adviser that must file only annually to report data about the private equity funds it manages.

⁸In addition, because some Form PF filers have fiscal year ends that are not December 31, not all Form PF data is filed as of a single date.

3 Large Liquidity Fund Advisers

Large Liquidity Fund Advisers have at least \$1 billion in combined liquidity fund and money market fund assets under management. On a quarterly basis, such advisers report on Form PF data about the liquidity funds they managed during the reporting period (irrespective of the size of the fund). This report contains information about all liquidity funds reported by Large Liquidity Fund Advisers (referred to in this report as “Section 3 Liquidity Funds”).

4 Large Private Equity Fund Advisers

Large Private Equity Fund Advisers have at least a \$2 billion in private equity fund assets under management. These advisers are required to file Form PF annually in connection with the private equity funds they managed during the reporting period. Smaller Private Equity Fund Advisers must file annually as well, but provide less detail regarding the private equity funds they manage. This report provides information about private equity funds managed by Large Private Equity Fund Advisers (referred to in this report as “Section 4 Private Equity Funds”).

5 Other Private Fund Advisers

All advisers required to file Form PF that are not Large Hedge Fund Advisers or Large Liquidity Fund Advisers must file Form PF annually to report data about each private fund managed by the adviser.⁹ These “annual filing advisers” include smaller fund advisers, Large Private Equity Fund advisers, and venture capital fund advisers. Annual filers must provide specific information about each of the private funds they manage on an annual basis.

⁹This includes “other private funds,” which are private funds that do not meet the Form PF definition of hedge fund, liquidity fund, private equity fund, real estate fund, securitized asset fund, or venture capital fund.

B Handling Annual and Quarterly Data

Only a subset of filers (Large Hedge Fund Advisers and Large Liquidity Fund Advisers) are required to file Form PF quarterly; all other filings are made annually. Annual filings are typically, but not always, made at the end of the calendar year, as Form PF allows filings to be made at the end of an adviser’s fiscal year. In order to present the most complete and recent data possible, while accounting for differences in filing dates, we use the following procedure for determining which data to consider in any given quarter:

First, filings are grouped by their report date within their reported year:

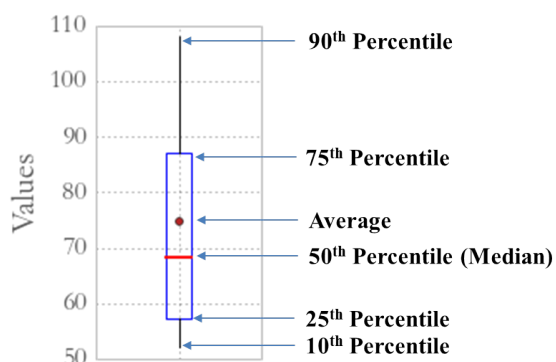
- (Q1): February 15 to May 14
- (Q2): May 15 to August 14
- (Q3): August 15 to November 14
- (Q4): November 15 to February 14

Then, responses for funds that have no information are ‘filled forward’ — essentially, copied from last reported values — up to a maximum of three quarters. Any fund that has no data four quarters after its most recent date is no longer counted or included in any calculations.¹⁰

C How to Read a Boxplot

In these figures, the boxes extend from the twenty-fifth percentile to the seventy-fifth percentile, while the levels (the dashed vertical lines) extend from the tenth to the twenty-fifth percentile as well as the seventy-fifth to the ninetieth percentile. Also shown as a red line within the box is the median (the fiftieth percentile) and the horizontal dashed line is mean of the distribution. See Figure 25 for an explanation of each feature.

Figure 25: How to Read a Boxplot



¹⁰Form PF has no requirement to inform the SEC if a fund liquidates or otherwise terminates operations. Therefore, liquidations or terminations may not be reflected on this report for up to one year after ceasing operations.

D Mitigating the Effects of Outliers

Form PF data occasionally contains spurious outliers. While Analytics Office staff actively engages in outreach to identify and correct such values, not all aberrant values have been corrected as of this writing. To reduce the effect of these outliers on the aggregate measures reported here, we have chosen to winsorize or trim some data sets.

Winsorization is a technique for reducing the effect of outliers by reducing the size of the largest and smallest values in a distribution.¹¹ For example, to calculate a 95%/5% winsorized data set, all the values above the ninety-fifth percentile are set to the value of the ninety-fifth percentile, and all the values below the fifth percentile are set to the value of the fifth percentile. Effectively, this procedure makes the very largest values smaller (but still large), and all the smallest values larger (but still small). This approach can be more effective than trimming (simply removing the largest and/or smallest values) because it does not change the number of data points and does not change the median or other percentile values within the 95%/5% range. All instances of winsorization or trimming have been noted and include the affected percentiles.

¹¹Such techniques are known as ‘robust statistics’, reviewed for example in Wilcox (2012), *Introduction to Robust Estimation & Hypothesis Testing*, 3rd Edition.

E Definitions

Included by reference are all definitions included in the glossary of Form PF.

<i>Aggregate Exposure</i>	A dollar value for long and short positions as of the last day in each month of the reporting period, by sub-asset class, including all exposure whether held physically, synthetically or through derivatives. Includes closed out and OTC forward positions that have not expired, as well as positions in side-pockets.
<i>Borrowing</i>	In Form PF, borrowings include secured borrowings, unsecured borrowings, as well as synthetic borrowings (e.g., total return swaps that meet the failed sale accounting requirements).
<i>CPC</i>	Controlled portfolio company, as defined in Form PF.
<i>Gross Notional Exposure (GNE)</i>	The gross nominal or notional value of all transactions that have been entered into but not yet settled as of the data reporting date. For contracts with variable nominal or notional principal amounts, the basis for reporting is the nominal or notional principal amounts as of the data reporting date.
<i>Hedge Fund</i>	Any private fund (other than a securitized asset fund): (a) with respect to which one or more investment advisers (or related persons of investment advisers) may be paid a performance fee or allocation calculated by taking into account unrealized gains (other than a fee or allocation the calculation of which may take into account unrealized gains solely for the purpose of reducing such fee or allocation to reflect net unrealized losses); (b) that may borrow an amount in excess of one-half of its net asset value (including any committed capital) or may have gross notional exposure in excess of twice its net asset value (including any committed capital); or (c) that may sell securities or other assets short or enter into similar transactions (other than for the purpose of hedging currency exposure or managing duration). The definition of a hedge fund for Form PF purposes also includes any commodity pool an adviser reports on Form PF.
<i>IRDs</i>	Interest rate derivatives, including foreign exchange derivatives used for either investment or hedging.
<i>Large Hedge Fund Adviser</i>	An adviser that has at least \$1.5 billion in hedge fund assets under management.

<i>Large Liquidity Fund Adviser</i>	An adviser that has at least \$1 billion in combined liquidity fund and money market fund assets under management.
<i>Large Private Equity Fund Adviser</i>	An adviser that has at least a \$2 billion in private equity fund assets under management.
<i>Parallel Managed Account</i>	An account advised by an adviser that pursues substantially the same investment objective and strategy and invests side by side in substantially the same positions as the reporting fund.
<i>Qualifying Hedge Fund</i>	A hedge fund advised by a Large Hedge Fund Adviser that has a net asset value (individually or in combination with any feeder funds, parallel funds, and/or dependent parallel managed accounts) of at least \$500 million as of the last day of any month in the fiscal quarter immediately preceding the adviser's most recently completed fiscal quarter.
<i>Section 3 Liquidity Fund</i>	A liquidity fund advised by a Large Liquidity Fund Adviser.
<i>Section 4 Private Equity Fund</i>	A private equity fund advised by a Large Private Equity Fund Adviser.
<i>Value</i>	For derivatives (other than options), "value" means gross notional value; for options, "value" means delta adjusted notional value; for all other investments and for all borrowings where the reporting fund is the creditor, "value" means market value or, where there is not a readily available market value, fair value; for borrowings where the reporting fund is the debtor, "value" means the value you report internally and to current and prospective investors.