

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.

November 3, 2020

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 \$9.7 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 eighth 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 \$9.7 trillion in reported net assets as of the fourth quarter of 2019,¹ 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, Fourth Calendar Quarter 2019*, Table 4, at the Appendix. Reported net assets of private funds have nearly 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, including, as an example, private funds' exposure to certain international markets during the recent period of market volatility in the first part of 2020. 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, staff has used data about private liquidity funds from Form PF to consider the effects of money market reform implementation¹⁷ and to monitor for potential effects in short-term financing markets. Staff's experience with Form PF informed the development of new Form N-PORT, a portfolio holdings reporting form for registered investment companies, and amendments to Form ADV filing requirements.¹⁸

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.

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 Money Market Fund Reform Release, *supra* footnote 3. The compliance date for money market reform was October 14, 2016.

¹⁸ See *Investment Company Reporting Modernization*, Investment Company Act Release No. 32314 (Oct. 13, 2016) [81 Fed. Reg. 81870 (Nov. 18, 2016)], <https://www.gpo.gov/fdsys/pkg/FR-2016-11-18/pdf/2016-25349.pdf>; *Form ADV and Investment Advisers Act Rules*, Investment Advisers Act Release No. 4509 (Aug. 25, 2016) [81 Fed. Reg. 60417 (Sept. 1, 2016)], <https://www.gpo.gov/fdsys/pkg/FR-2016-09-01/pdf/2016-20832.pdf>. See also *Investment Company Reporting Modernization Frequently Asked Questions*, updated April 27, 2018, <https://www.sec.gov/investment/investment-company-reporting-modernization-faq#n-port>; *Frequently Asked Questions on Form ADV and IARD*, <https://www.sec.gov/divisions/investment/iard/iardfaq.shtml>. The Division of Investment Management is considering recommending that the Commission propose amendments to Form PF, which is included in the agency’s Regulatory Flexibility Agenda, *Office of Management and Budget Agency Rule List – Spring 2020*, <https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202004&RIN=3235-AM75> (last visited Jul. 22, 2020).

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.¹⁹ As supplemented with new data and analysis in May 2017, the report includes 90 separate tables and figures that offer analyses of hedge fund industry practices.²⁰ 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 periodically for effectiveness. Information included in the reports is typically at least six months old when published. The Appendix contains the most recent report.²¹

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.²² 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.²³

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

¹⁹ See *SEC Staff Publishes Private Funds Statistics Report*, Press Release (Oct. 16, 2015), <https://www.sec.gov/news/pressrelease/2015-240.html>.

²⁰ See *SEC Staff Supplements Quarterly Private Funds Statistics*, Press Release (May 3, 2017), <https://www.sec.gov/news/press-release/2017-92>.

²¹ Historical reports can be found at: <https://www.sec.gov/divisions/investment/private-funds-statistics.shtml>.

²² See Division of Investment Management, *Money Market Fund Statistics*, <https://www.sec.gov/divisions/investment/mmf-statistics.shtml>.

²³ See, e.g., 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>.

research and white papers have used Form PF data to describe liquidity and other characteristics of certain hedge funds.²⁴ Another staff white paper used Form PF data to characterize private liquidity funds and compare them to registered money market funds.²⁵

C. Assisting the Examinations and Enforcement Programs²⁶

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 together with other information to identify hedge fund advisers whose reported data — such as returns,

²⁴ 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. These papers report analyses using data reported on Form PF in quarterly filings from 2013 to 2105.

²⁵ 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.

²⁶ 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).

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.²⁷ 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.

²⁷ See, e.g., *Financial Stability Oversight Council 2019 Annual Report* (updated Dec. 4, 2019), <https://home.treasury.gov/system/files/261/FSOC2019AnnualReport.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, Fourth Calendar Quarter 2019)



Division of Investment Management
Analytics Office

Private Funds Statistics

Fourth Calendar Quarter 2019

October 2, 2020

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 First Calendar Quarter 2018 through Fourth Calendar Quarter 2019 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 Fourth Calendar Quarter 2019 Private Funds Statistics, please contact:

Tim Dulaney, PhD, FRM, Tim Husson, PhD, FRM, or Trevor Tatum at FormPF@sec.gov with subject line “Fourth Calendar Quarter 2019-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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Private Equity Fund	11,601	11,621	11,630	12,784	13,013	13,027	13,035	14,314
Hedge Fund	9,194	9,307	9,382	9,204	9,399	9,496	9,505	9,294
Other Private Fund	4,608	4,581	4,587	4,898	4,755	4,716	4,703	4,963
Section 4 Private Equity Fund	3,493	3,493	3,494	3,935	3,932	3,932	3,932	4,379
Real Estate Fund	2,663	2,657	2,664	2,837	2,850	2,851	2,839	3,109
Qualifying Hedge Fund	1,772	1,806	1,818	1,827	1,794	1,784	1,803	1,821
Securitized Asset Fund	1,510	1,510	1,514	1,564	1,569	1,577	1,579	1,717
Venture Capital Fund	866	851	850	970	971	971	969	1,156
Liquidity Fund	69	68	68	73	72	72	72	65
Section 3 Liquidity Fund	46	45	45	46	45	44	42	43
Total	30,511	30,595	30,695	32,330	32,629	32,710	32,702	34,618

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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Private Equity Fund	1,154	1,155	1,158	1,256	1,264	1,266	1,268	1,353
Hedge Fund	1,736	1,739	1,739	1,751	1,744	1,741	1,734	1,731
Other Private Fund	593	589	590	627	626	628	625	644
Section 4 Private Equity Fund	296	296	296	308	307	307	307	322
Real Estate Fund	333	333	335	347	349	350	349	372
Qualifying Hedge Fund	542	550	545	553	540	536	548	554
Securitized Asset Fund	155	156	158	153	153	154	154	160
Venture Capital Fund	116	116	117	135	134	134	133	153
Liquidity Fund	39	38	38	40	39	39	39	36
Section 3 Liquidity Fund	23	22	22	23	22	22	21	22
Total	3,042	3,047	3,047	3,160	3,162	3,160	3,153	3,225

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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Hedge Fund	7,520	7,659	7,911	7,594	8,053	8,256	8,101	8,179
Qualifying Hedge Fund	6,076	6,281	6,386	6,153	6,480	6,735	6,655	6,713
Private Equity Fund	2,766	2,769	2,769	3,176	3,260	3,260	3,259	3,731
Section 4 Private Equity Fund	1,978	1,978	1,978	2,329	2,364	2,364	2,364	2,740
Other Private Fund	1,206	1,208	1,222	1,225	1,222	1,214	1,228	1,368
Real Estate Fund	505	505	505	568	574	575	575	661
Securitized Asset Fund	480	488	490	570	573	575	576	649
Liquidity Fund	291	311	314	297	292	294	300	294
Section 3 Liquidity Fund	289	307	309	292	289	290	293	289
Venture Capital Fund	82	81	82	111	112	112	112	144
Total	12,849	13,022	13,292	13,541	14,086	14,284	14,150	15,027

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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Hedge Fund	3,974	4,003	4,059	3,794	4,007	4,092	4,066	4,135
Qualifying Hedge Fund	3,106	3,151	3,188	2,968	3,127	3,180	3,189	3,238
Private Equity Fund	2,484	2,488	2,488	2,814	2,896	2,896	2,895	3,301
Section 4 Private Equity Fund	1,789	1,789	1,789	2,083	2,116	2,116	2,116	2,440
Other Private Fund	1,086	1,106	1,096	1,085	1,083	1,072	1,087	1,204
Real Estate Fund	394	394	394	443	448	448	448	503
Securitized Asset Fund	152	154	154	170	171	172	172	205
Liquidity Fund	289	309	311	295	288	292	297	292
Section 3 Liquidity Fund	287	305	306	289	285	288	291	286
Venture Capital Fund	77	76	77	99	99	98	99	137
Total	8,456	8,531	8,579	8,700	8,992	9,070	9,064	9,777

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

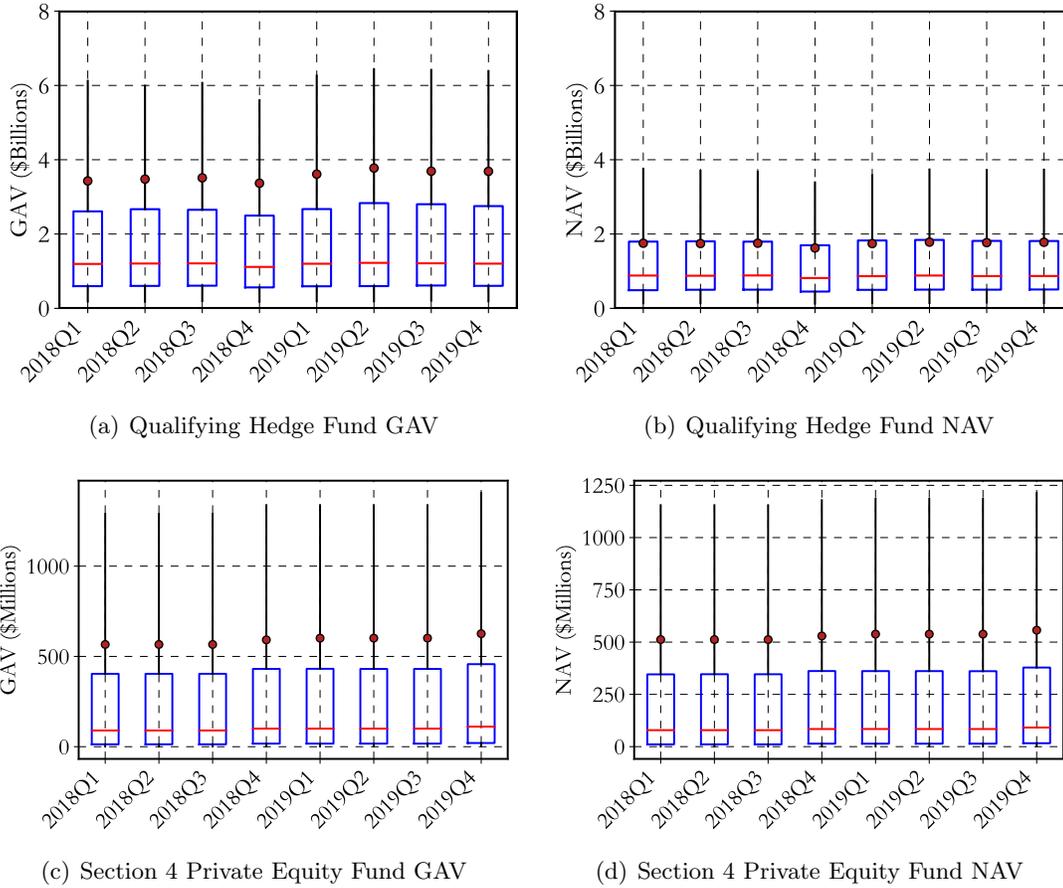
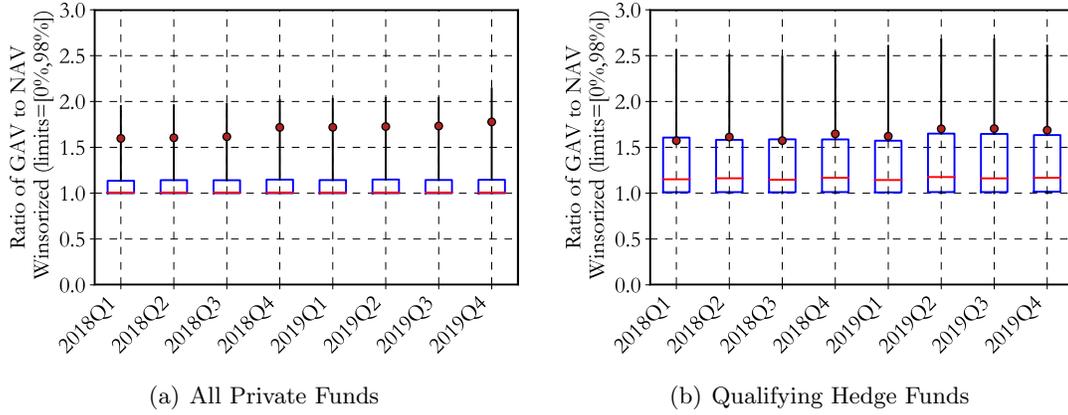


Figure 2: Ratio of GAV to NAV

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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Securitized Asset Fund	51.2	51.2	50.6	53.5	52.7	52.1	52.2	52.5
Qualifying Hedge Fund	42.9	45.0	44.5	45.1	46.7	47.2	46.7	47.4
Hedge Fund	40.4	41.6	41.3	41.6	43.0	43.3	43.1	43.5
Real Estate Fund	13.5	13.2	13.2	14.7	14.9	14.6	14.6	15.0
Section 4 Private Equity Fund	4.6	4.6	4.6	5.2	5.2	5.2	5.2	7.3
Private Equity Fund	4.9	4.9	4.9	5.3	5.1	5.1	5.1	6.5
Other Private Fund	2.7	2.7	3.0	3.5	3.4	3.5	3.5	4.6
Venture Capital Fund	0.5	0.5	0.6	0.9	0.8	0.9	0.9	0.8
Section 3 Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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).

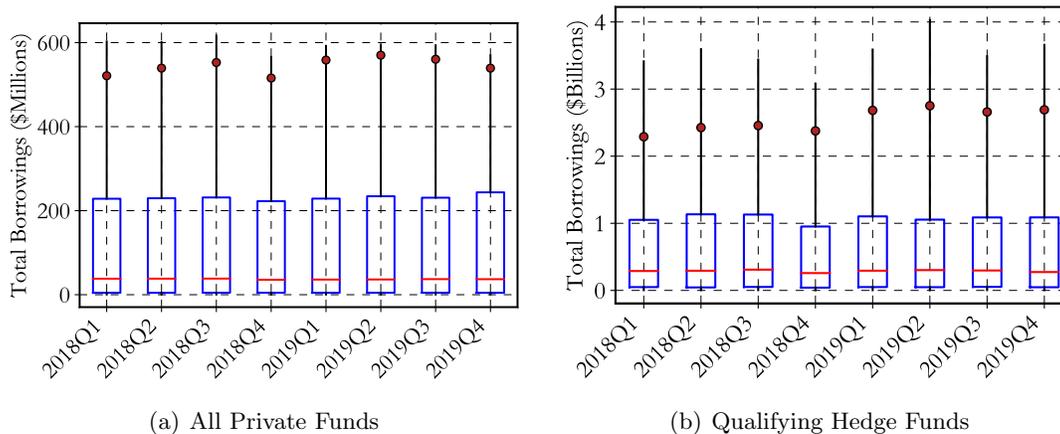
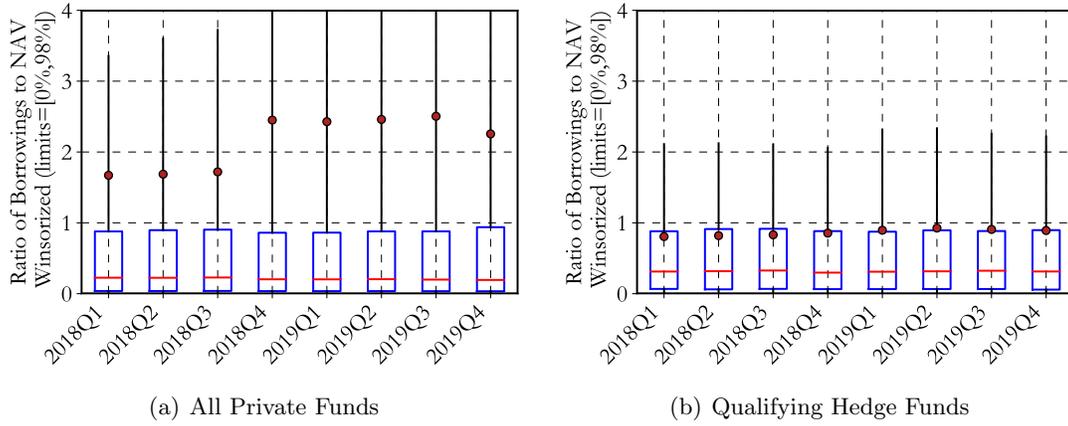


Figure 4: Ratio of Borrowings to NAV

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).



C Fair Value Hierarchy⁴

Table 6: Assets According to Fair Value Hierarchy (\$ Billions)
As reported on Form PF, Question 14.

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Level One	3,324	3,323	3,351	3,227	3,251	3,272	3,233	3,826
Level Two	2,743	2,772	2,775	2,959	2,979	3,044	3,046	3,482
Level Three	2,954	2,965	2,974	3,403	3,476	3,475	3,470	4,056
Cost-Based	2,257	2,278	2,304	2,511	2,551	2,557	2,551	2,366

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

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Level One	1,270	1,267	1,274	1,226	1,233	1,240	1,233	1,284
Level Two	881	891	903	1,015	1,030	1,067	1,057	1,033
Level Three	193	193	194	195	197	200	202	264
Cost-Based	1,487	1,497	1,503	2,084	2,104	2,115	2,110	2,231

⁴Staff periodically reviews reports and adjusts reported statistics to correct identified errors in filings. Beginning with this report, in Table 6 and Table 7, assets and liabilities reported in Question 14 are summed in absolute terms (i.e., no offsets for liabilities reported as negative). In prior reports negative signs reported in Question 14 led to offsets in the aggregation. In addition, beginning with this report, in both Table 6 and Table 7, annual values reported by quarterly filers are used for up to three quarters following an annual update. In prior reports, if quarterly filers did not update their responses to Question 14 in interim quarters, annual values were not included in the aggregate values reported in the interim quarters.

D Parallel Managed Accounts⁵

Table 8: 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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Hedge Fund	674	678	686	663	659	648	652	614
Other Private Fund	518	514	505	508	509	504	503	506
Private Equity Fund	292	290	279	315	314	315	294	331
Qualifying Hedge Fund	233	234	236	231	223	221	227	222
Section 4 Private Equity Fund	98	98	98	112	112	112	112	136
Real Estate Fund	71	71	71	68	78	78	78	95
Liquidity Fund	16	16	16	18	15	14	15	12
Section 3 Liquidity Fund	16	16	16	16	13	12	12	11
Venture Capital Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	1,585	1,583	1,571	1,581	1,584	1,568	1,551	1,565

Table 9: Aggregate Value in Parallel Managed Accounts (\$ Billions)

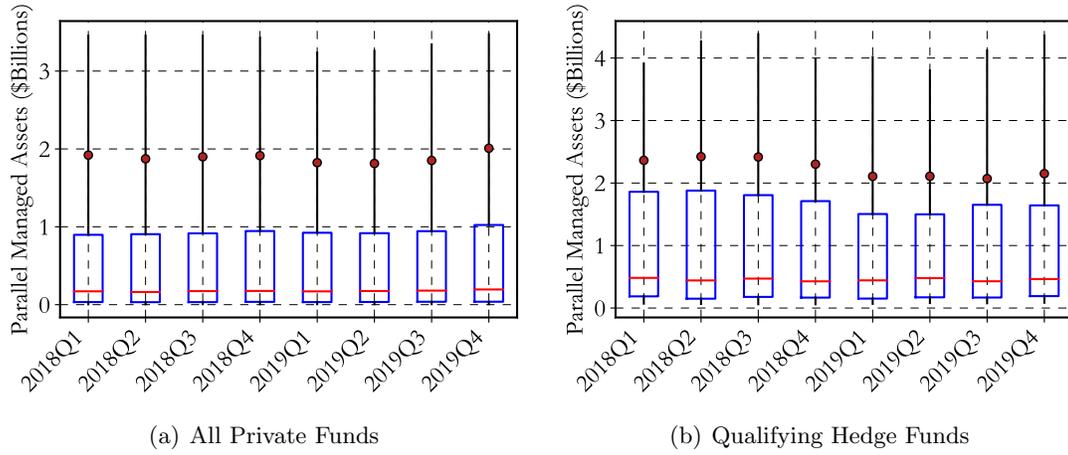
As reported on Form PF, Question 11.

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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Hedge Fund	770	769	813	770	721	713	712	717
Other Private Fund	1,869	1,799	1,763	1,821	1,822	1,812	1,812	2,041
Private Equity Fund	37	37	37	48	48	48	48	58
Qualifying Hedge Fund	551	567	570	532	470	466	470	477
Section 4 Private Equity Fund	28	28	28	33	33	33	33	38
Real Estate Fund	6	6	6	4	5	5	5	10
Liquidity Fund	361	353	364	383	293	264	294	317
Section 3 Liquidity Fund	361	353	364	382	292	263	292	316
Venture Capital Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	3,045	2,966	2,984	3,026	2,889	2,843	2,871	3,144

⁵Certain 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 10: Fund Domicile (Percent of NAV)
As reported on Form PF, Question 9 and Form ADV.

All Private Funds								
Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
United States	51.0	50.9	50.9	51.7	50.7	50.5	50.6	51.4
Cayman Islands	35.2	35.2	35.1	34.0	34.7	34.9	34.7	34.6
Ireland	4.4	4.5	4.6	4.6	4.5	4.5	4.7	4.6
Luxembourg	2.0	2.2	2.2	2.9	3.0	3.0	2.9	3.2
Virgin Islands, British	1.8	1.8	1.7	1.5	1.5	1.5	1.5	1.3
Bermuda	1.2	1.2	1.2	1.1	1.1	1.1	1.2	1.1
United Kingdom	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.0
Other	2.9	2.9	3.0	3.0	3.3	3.3	3.2	2.9

Qualifying Hedge Funds								
Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Cayman Islands	51.0	50.9	50.6	50.6	51.5	51.9	51.6	51.3
United States	35.6	35.5	35.1	35.6	34.7	34.5	34.7	35.3
Virgin Islands, British	4.4	4.4	4.2	4.1	3.9	3.9	3.9	3.6
Ireland	3.1	3.2	3.3	3.2	3.2	3.2	3.1	3.1
Luxembourg	2.0	2.4	2.7	2.6	2.7	2.7	2.7	2.7
Bermuda	1.7	1.8	1.8	2.0	1.9	1.8	2.1	2.1
Other	2.1	2.0	2.2	1.9	2.0	1.9	1.9	1.9

Section 3 Liquidity Funds								
Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Ireland	***	***	***	***	***	***	***	***
United States	35.8	36.9	36.8	32.9	30.0	29.7	26.5	22.2
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

Section 4 Private Equity Funds								
Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
United States	59.5	59.5	59.5	56.8	56.0	56.0	56.0	56.2
Cayman Islands	29.8	29.8	29.8	30.6	30.1	30.1	30.1	32.0
United Kingdom	2.9	2.9	2.9	2.3	2.3	2.3	2.3	1.9
Canada	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.7
Bermuda	1.1	1.1	1.1	1.0	0.9	0.9	0.9	1.0
Other	5.7	5.7	5.7	8.2	9.6	9.6	9.6	7.2

Table 11: Adviser Main Office Location (Percent of NAV)
As reported on Form PF, Question 9 and Form ADV.

All Private Funds								
Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
United States	88.9	88.7	88.8	89.7	89.5	89.5	89.5	90.0
United Kingdom	6.9	7.0	6.9	6.2	6.3	6.2	6.3	5.5
Other	4.3	4.3	4.3	4.1	4.2	4.2	4.2	4.5
Qualifying Hedge Funds								
Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
United States	88.4	88.7	88.6	89.0	89.0	89.2	89.4	88.8
United Kingdom	6.6	6.5	6.5	6.1	6.0	5.8	5.5	5.5
Australia	***	***	***	***	***	***	***	***
Hong Kong	***	***	***	***	***	***	***	***
Other	2.3	2.3	2.1	2.1	2.0	2.0	2.0	2.1
Section 3 Liquidity Funds								
Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
United States	***	***	***	***	***	***	***	***
United Kingdom	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
United States	94.8	94.8	94.8	94.0	94.1	94.1	94.1	93.8
Canada	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

IV Beneficial Ownership

A All Private Funds

Table 12: Beneficial Ownership for All Private Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Private Funds	1,515	1,533	1,534	1,518	1,550	1,563	1,556	1,671
Other	1,235	1,238	1,250	1,332	1,376	1,381	1,392	1,461
State/Muni. Govt. Pension Plans	1,154	1,164	1,178	1,231	1,250	1,250	1,245	1,335
Pension Plans	1,046	1,049	1,048	1,044	1,068	1,083	1,079	1,164
Non-Profits	861	869	868	849	894	902	900	993
U.S. Individuals	835	842	851	843	876	886	887	956
Sov. Wealth Funds And For. Official Inst.	540	544	544	555	604	611	609	658
Insurance Companies	352	365	373	399	412	417	416	462
Unknown Non-U.S. Investors	193	189	187	204	216	222	224	243
Non-U.S. Individuals	191	193	195	205	209	210	209	224
Banking/Thrift Inst.	161	170	172	169	171	177	172	183
State/Muni. Govt. Entities	125	129	131	122	130	132	137	173
SEC-Registered Investment Companies	133	129	127	118	126	125	125	137
Broker-Dealers	113	114	121	108	107	109	109	114

Table 13: Beneficial Ownership for All Private Funds
(Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Private Funds	17.9	18.0	17.9	17.4	17.2	17.2	17.2	17.1
Other	14.6	14.5	14.6	15.3	15.3	15.2	15.4	14.9
State/Muni. Govt. Pension Plans	13.6	13.6	13.7	14.1	13.9	13.8	13.7	13.7
Pension Plans	12.4	12.3	12.2	12.0	11.9	11.9	11.9	11.9
Non-Profits	10.2	10.2	10.1	9.8	9.9	9.9	9.9	10.2
U.S. Individuals	9.9	9.9	9.9	9.7	9.7	9.8	9.8	9.8
Sov. Wealth Funds And For. Official Inst.	6.4	6.4	6.3	6.4	6.7	6.7	6.7	6.7
Insurance Companies	4.2	4.3	4.3	4.6	4.6	4.6	4.6	4.7
Unknown Non-U.S. Investors	2.3	2.2	2.2	2.3	2.4	2.4	2.5	2.5
Non-U.S. Individuals	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3
Banking/Thrift Inst.	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9
State/Muni. Govt. Entities	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.8
SEC-Registered Investment Companies	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.4
Broker-Dealers	1.3	1.3	1.4	1.2	1.2	1.2	1.2	1.2

B Qualifying Hedge Funds

Table 14: Beneficial Ownership for Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Private Funds	514	517	526	480	508	520	525	532
Non-Profits	429	443	442	404	442	449	446	464
Pension Plans	416	415	417	399	417	428	422	433
Other	436	443	447	414	428	437	431	427
State/Muni. Govt. Pension Plans	342	342	348	343	353	357	367	371
U.S. Individuals	342	352	357	323	347	340	342	351
Sov. Wealth Funds And For. Official Inst.	193	197	195	196	198	206	208	209
Insurance Companies	78	83	91	82	89	90	89	92
Non-U.S. Individuals	76	77	79	75	79	79	83	84
Broker-Dealers	80	81	84	77	77	79	80	81
Unknown Non-U.S. Investors	55	53	53	48	57	58	57	63
State/Muni. Govt. Entities	47	49	50	39	42	45	47	49
SEC-Registered Investment Companies	66	61	59	52	54	54	55	43
Banking/Thrift Inst.	33	36	38	32	33	36	36	38

Table 15: Beneficial Ownership for Qualifying Hedge Funds
(Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Private Funds	16.5	16.4	16.5	16.2	16.3	16.4	16.4	16.4
Non-Profits	13.8	14.1	13.9	13.6	14.1	14.1	14.0	14.3
Pension Plans	13.4	13.2	13.1	13.5	13.3	13.5	13.2	13.4
Other	14.0	14.1	14.0	14.0	13.7	13.7	13.5	13.2
State/Muni. Govt. Pension Plans	11.0	10.9	10.9	11.6	11.3	11.2	11.5	11.5
U.S. Individuals	11.0	11.2	11.2	10.9	11.1	10.7	10.7	10.8
Sov. Wealth Funds And For. Official Inst.	6.2	6.2	6.1	6.6	6.3	6.5	6.5	6.5
Insurance Companies	2.5	2.6	2.9	2.8	2.8	2.8	2.8	2.8
Non-U.S. Individuals	2.4	2.5	2.5	2.5	2.5	2.5	2.6	2.6
Broker-Dealers	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5
Unknown Non-U.S. Investors	1.8	1.7	1.6	1.6	1.8	1.8	1.8	1.9
State/Muni. Govt. Entities	1.5	1.6	1.6	1.3	1.3	1.4	1.5	1.5
SEC-Registered Investment Companies	2.1	1.9	1.8	1.8	1.7	1.7	1.7	1.3
Banking/Thrift Inst.	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.2

C Section 3 Liquidity Funds

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

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Other	57	55	57	55	57	58	75	74
Unknown Non-U.S. Investors	52	52	51	54	60	60	64	63
Private Funds	94	109	105	97	84	84	69	62
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	13	17	17	***	***	***	16	***
SEC-Registered Investment Companies	24	24	23	18	19	19	19	14
Insurance Companies	9	12	12	9	10	10	8	8
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
Pension Plans	5	3	4	3	***	***	***	4
Non-U.S. Individuals	4	4	4	5	4	3	4	4
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-Profits	1	***	1	1	1	***	1	2
U.S. Individuals	***	***	***	***	***	***	***	***
State/Muni. Govt. Pension Plans	1	***	2	2	***	***	***	***

Table 17: Beneficial Ownership for Section 3 Liquidity Funds
(Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Other	19.7	17.9	18.7	19.0	20.0	20.1	25.8	25.8
Unknown Non-U.S. Investors	18.1	17.0	16.6	18.7	20.9	20.7	22.0	21.9
Private Funds	32.6	35.7	34.4	33.6	29.6	29.1	23.8	21.6
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	4.7	5.6	5.4	***	***	***	5.6	***
SEC-Registered Investment Companies	8.3	7.9	7.6	6.2	6.6	6.6	6.7	4.8
Insurance Companies	3.3	3.9	3.8	3.1	3.5	3.3	2.8	2.8
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
Pension Plans	1.7	1.1	1.2	0.9	***	***	***	1.3
Non-U.S. Individuals	1.4	1.2	1.1	1.7	1.3	1.1	1.2	1.3
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-Profits	0.5	***	0.4	0.4	0.5	***	0.4	0.8
U.S. Individuals	***	***	***	***	***	***	***	***
State/Muni. Govt. Pension Plans	0.3	***	0.6	0.6	***	***	***	***

D Section 4 Private Equity Funds

Table 18: Beneficial Ownership for Section 4 Private Equity Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
State/Muni. Govt. Pension Plans	416	416	416	454	454	454	454	514
Private Funds	356	356	356	398	397	397	397	466
Other	225	225	225	322	336	336	336	368
Sov. Wealth Funds And For. Official Inst.	203	203	203	225	244	244	244	278
Pension Plans	159	159	159	175	175	175	175	199
Insurance Companies	109	109	109	127	127	127	127	152
Non-Profits	104	104	104	116	116	116	116	139
U.S. Individuals	94	94	94	117	117	117	117	132
State/Muni. Govt. Entities	28	28	28	36	36	36	36	56
Non-U.S. Individuals	36	36	36	48	48	48	48	51
Banking/Thrift Inst.	29	29	29	31	31	31	31	36
SEC-Registered Investment Companies	16	16	16	17	17	17	17	28
Unknown Non-U.S. Investors	14	14	14	17	17	17	17	19
Broker-Dealers	1	1	1	1	1	1	1	1

Table 19: Beneficial Ownership for Section 4 Private Equity Funds
(Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
State/Muni. Govt. Pension Plans	23.3	23.3	23.3	21.8	21.4	21.4	21.4	21.1
Private Funds	19.9	19.9	19.9	19.1	18.8	18.8	18.8	19.1
Other	12.6	12.6	12.6	15.4	15.9	15.9	15.9	15.1
Sov. Wealth Funds And For. Official Inst.	11.3	11.3	11.3	10.8	11.5	11.5	11.5	11.4
Pension Plans	8.9	8.9	8.9	8.4	8.3	8.3	8.3	8.2
Insurance Companies	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.2
Non-Profits	5.8	5.8	5.8	5.6	5.5	5.5	5.5	5.7
U.S. Individuals	5.2	5.3	5.2	5.6	5.5	5.5	5.5	5.4
State/Muni. Govt. Entities	1.5	1.5	1.5	1.7	1.7	1.7	1.7	2.3
Non-U.S. Individuals	2.0	2.0	2.0	2.3	2.3	2.3	2.3	2.1
Banking/Thrift Inst.	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5
SEC-Registered Investment Companies	0.9	0.9	0.9	0.8	0.8	0.8	0.8	1.1
Unknown Non-U.S. Investors	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Broker-Dealers	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

V Derivatives

Table 20: 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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Hedge Fund	13,961	13,260	13,284	12,262	13,939	12,823	13,317	12,513
Qualifying Hedge Fund	11,849	11,184	10,046	9,485	11,078	11,196	11,258	10,926
Other Private Fund	149	148	134	132	131	128	135	111
Private Equity Fund	40	40	40	38	37	37	37	95
Section 4 Private Equity Fund	34	34	34	31	31	31	31	37
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Real Estate Fund	17	17	17	17	17	17	17	18
Securitized Asset Fund	2	2	2	3	3	3	3	3
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	14,154	13,465	13,504	12,503	14,163	13,046	13,344	12,663

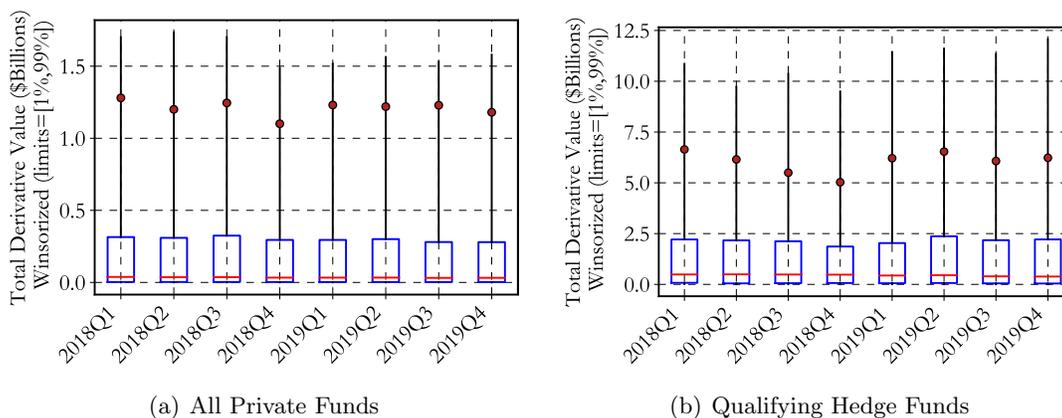
Table 21: Aggregate Derivative Value (Percent of Aggregate NAV)

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

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Hedge Fund	351.3	331.3	327.3	323.2	347.8	313.4	327.5	302.6
Qualifying Hedge Fund	381.5	354.9	315.1	319.6	354.3	352.1	353.0	337.4
Other Private Fund	13.7	13.4	12.3	12.2	12.1	11.9	12.4	9.2
Private Equity Fund	1.6	1.6	1.6	1.3	1.3	1.3	1.3	2.9
Section 4 Private Equity Fund	1.9	1.9	1.9	1.5	1.5	1.5	1.5	1.5
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Real Estate Fund	4.4	4.4	4.4	3.8	3.7	3.7	3.7	3.6
Securitized Asset Fund	1.6	1.5	1.5	1.6	1.6	1.6	1.6	1.5
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	167.4	157.8	157.4	143.7	157.5	143.8	147.2	129.5

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 High Frequency Trading

Table 22: Number of Hedge Funds Using High Frequency Trading (HFT) Strategies As reported on Form PF, Question 21.

Fraction of NAV	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
0%	7,883	7,990	8,057	7,926	7,995	8,064	8,070	7,971
Less than 100%	70	69	58	64	67	64	65	51
100% or More	11	11	11	8	8	8	8	10

Table 23: Hedge Fund Assets Managed Using HFT Strategies (\$ Billions) As reported on Form PF, Questions 9 and 21.

Fraction of NAV	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
0%	3,845	3,894	3,955	3,722	3,923	3,991	3,955	4,038
Less than 100%	46	42	43	43	84	85	87	81
100% or More	38	38	39	35	2	2	2	3

VII Hedge Fund Industry Concentration

Table 24: 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.

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Top 10	7.2	7.3	7.2	7.4	7.2	7.3	7.4	7.4
Top 25	13.3	13.5	13.5	13.5	13.4	13.5	13.6	13.6
Top 50	20.2	20.1	20.1	19.7	19.7	19.8	19.9	19.6
Top 100	28.6	28.4	28.4	27.9	28.0	28.1	28.1	27.7
Top 250	43.0	42.6	42.5	42.1	42.4	42.6	42.5	42.1
Top 500	56.4	56.0	55.9	55.6	56.1	56.1	56.0	55.5

Table 25: 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.

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Top 10	15.5	15.5	15.4	16.7	16.5	16.2	15.3	15.3
Top 25	24.2	23.8	24.4	26.0	25.7	25.4	24.9	24.5
Top 50	32.6	32.0	32.9	34.2	34.2	33.7	33.4	33.2
Top 100	41.9	41.7	42.4	43.4	43.4	43.1	42.7	42.3
Top 250	55.5	55.2	56.0	56.6	57.1	56.7	56.3	55.7
Top 500	66.9	66.7	67.2	67.6	68.1	67.9	67.5	67.0

Table 26: 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).

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Top 10	35.1	34.5	34.7	36.3	36.1	35.2	34.1	35.5
Top 25	49.1	48.3	48.4	51.3	50.9	50.0	50.0	50.5
Top 50	60.0	59.6	60.0	62.9	63.0	62.0	61.8	62.2
Top 100	71.0	70.7	71.0	73.3	73.3	72.8	73.0	72.9
Top 250	82.8	82.9	82.9	84.7	85.0	84.9	84.8	84.5
Top 500	90.4	90.6	90.6	91.6	91.9	91.7	91.7	91.6

Table 27: 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).

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Top 10	32.4	31.2	31.1	33.8	32.2	29.6	31.1	29.3
Top 25	50.3	50.2	49.2	49.9	50.2	46.9	48.4	47.3
Top 50	62.5	62.6	61.4	62.1	63.0	59.5	61.2	59.9
Top 100	74.0	73.7	73.1	73.5	74.9	72.2	73.4	71.9
Top 250	87.1	86.4	86.2	86.5	87.8	86.1	86.9	86.4
Top 500	93.8	93.3	93.2	93.2	94.0	93.2	93.9	93.7

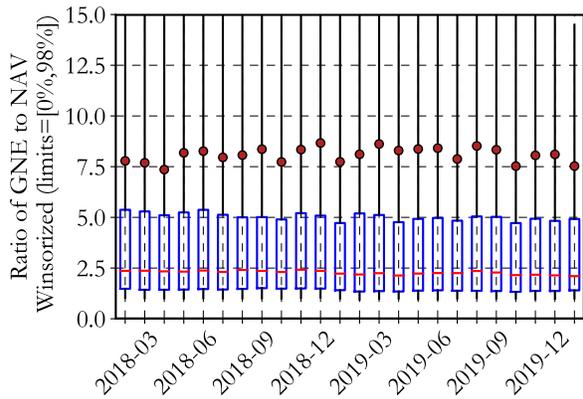
Table 28: Percent of Aggregate Hedge Fund Gross Notional Exposure
Reported by Top Hedge Funds Sorted by Gross Notional Exposure
As reported on Form PF, Questions 26 and 30 (Month 3).

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Top 10	29.8	28.8	28.3	30.6	30.3	28.6	28.9	29.2
Top 25	46.7	45.4	44.4	47.3	46.7	44.6	45.7	46.0
Top 50	59.3	58.2	57.5	59.7	59.3	57.3	57.7	58.1
Top 100	70.5	69.5	69.0	70.8	70.8	68.9	69.2	69.7
Top 250	84.1	82.8	82.5	83.7	84.0	82.7	82.8	83.1
Top 500	92.0	91.2	91.0	91.7	91.9	91.3	91.3	91.6

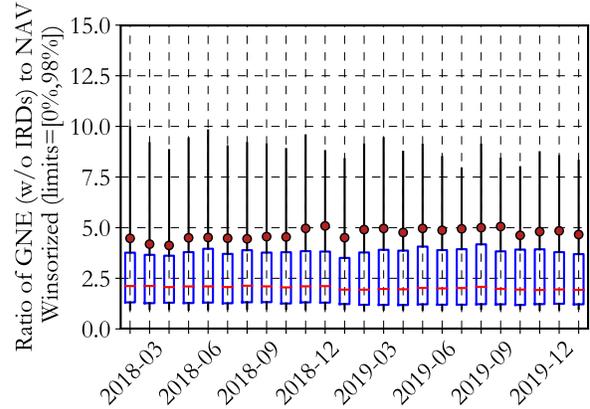
VIII Information Reported by Large Hedge Fund Advisers

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.

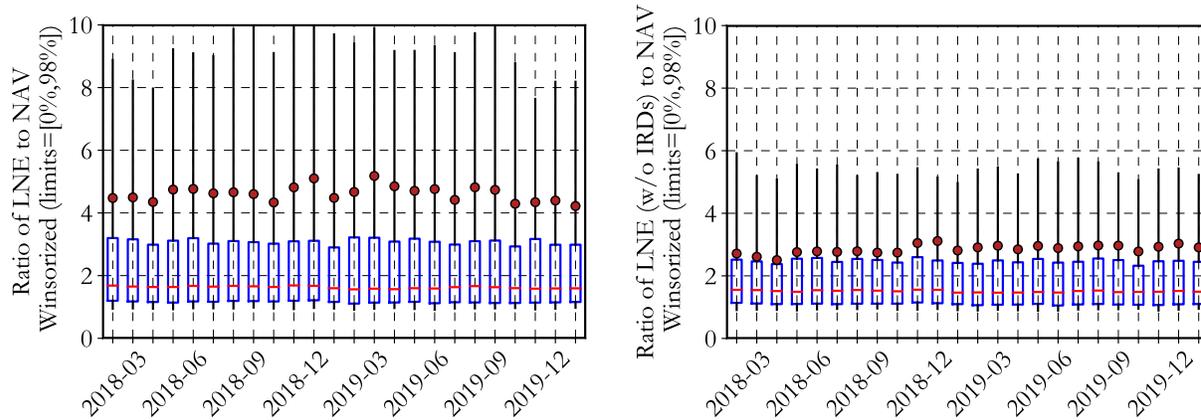


(a) Gross Exposure with Interest Rate Derivatives (IRDs)



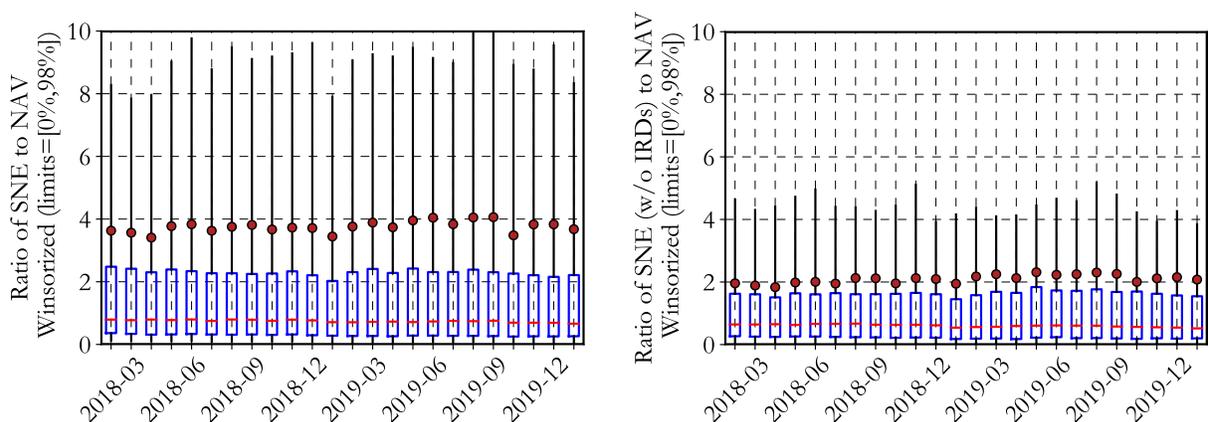
(b) Gross Exposure without IRDs

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 29: 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)
2018-01	18.4	27.7	37.5	53.6
2018-02	18.4	27.7	41.0	56.3
2018-03	18.4	27.7	40.0	55.3
2018-04	18.1	27.2	41.0	56.4
2018-05	18.1	27.2	40.3	56.0
2018-06	18.1	27.2	38.1	53.7
2018-07	18.2	27.4	35.4	51.2
2018-08	18.3	27.6	34.1	49.9
2018-09	18.3	27.6	34.4	49.6
2018-10	19.2	28.7	35.4	51.9
2018-11	19.2	28.7	36.4	52.4
2018-12	19.2	28.7	36.9	52.1
2019-01	19.0	28.5	37.4	53.2
2019-02	18.9	28.5	36.9	53.0
2019-03	18.9	28.5	36.8	53.0
2019-04	18.9	28.5	37.7	54.1
2019-05	18.9	28.5	37.4	54.1
2019-06	18.9	28.5	36.3	52.6
2019-07	19.3	28.8	36.7	53.7
2019-08	19.3	28.8	36.7	53.9
2019-09	19.4	28.9	37.3	54.0
2019-10	19.5	29.3	37.7	54.0
2019-11	19.5	29.3	37.3	54.0
2019-12	19.5	29.3	36.9	53.5

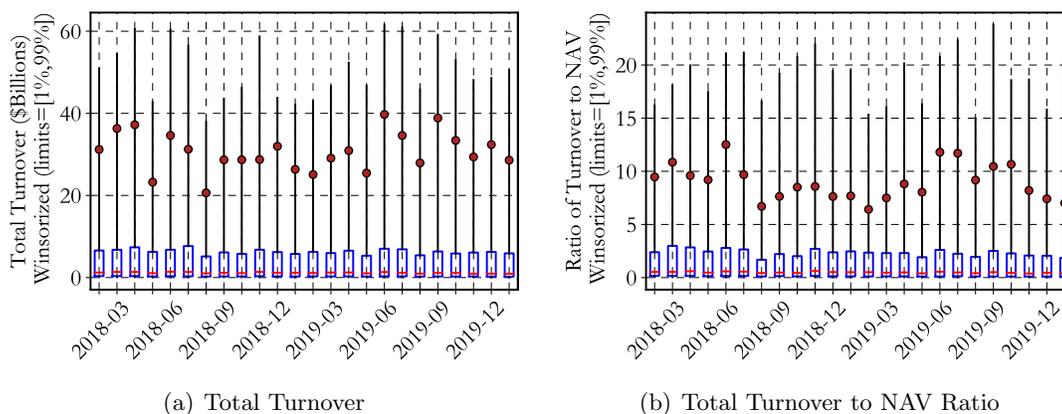
C Portfolio Turnover

Table 30: Aggregate Portfolio Turnover (\$ Billions)
As reported on Form PF, Question 27.

Month	Futures	Sov. and muni. bonds	Listed equities	Corporate bonds	Convertible bonds	Total
2018-01	16,512	3,164	2,449	142	33	22,299
2018-02	18,150	3,516	2,446	132	27	24,271
2018-03	17,329	3,238	2,273	153	33	23,027
2018-04	10,382	2,733	2,438	119	22	15,693
2018-05	15,734	3,727	2,499	132	31	22,122
2018-06	15,104	3,080	2,582	119	29	20,913
2018-07	8,108	3,178	2,272	92	17	13,668
2018-08	11,643	3,280	2,417	96	20	17,455
2018-09	12,915	2,953	2,110	114	32	18,124
2018-10	11,765	3,180	3,018	129	23	18,115
2018-11	13,470	3,214	2,576	112	20	19,393
2018-12	12,715	2,911	2,189	72	13	17,901
2019-01	9,675	3,783	2,353	159	23	15,993
2019-02	11,269	4,095	2,048	135	22	17,569
2019-03	14,103	3,779	2,295	143	27	20,347
2019-04	9,917	3,425	2,263	127	18	15,749
2019-05	18,308	3,834	2,528	134	22	24,826
2019-06	16,336	3,866	2,188	134	25	22,549
2019-07	10,905	3,490	2,278	136	21	16,830
2019-08	15,848	4,384	2,400	116	26	22,774
2019-09	15,763	3,941	2,226	144	34	22,108
2019-10	12,752	3,679	2,566	152	19	19,167
2019-11	14,105	3,876	2,280	134	27	20,422
2019-12	13,352	3,367	2,302	95	21	19,137

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

Region	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
North America	4,811	4,923	5,112	5,007	5,323	5,522	5,367	5,409
Europe EEA	1,990	1,822	1,751	1,822	1,804	1,765	1,734	1,619
Asia	735	698	678	787	844	840	734	769
South America	114	112	101	111	115	119	101	121
Europe Other	86	74	72	70	78	82	82	85
Supranational	72	59	60	66	48	38	69	54
Africa	37	33	31	29	31	33	29	33
Middle East	30	37	26	27	25	28	26	29

Table 32: Large Hedge Fund Adviser Hedge Fund
Region Exposure (Percent of Aggregate NAV)
As reported on Form PF, Questions 3(a) and 28.

Region	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
North America	140.5	141.4	147.2	153.0	154.2	156.4	154.9	151.9
Europe EEA	58.1	52.3	50.4	55.7	52.3	50.0	50.1	45.5
Asia	21.5	20.1	19.5	24.0	24.5	23.8	21.2	21.6
South America	3.3	3.2	2.9	3.4	3.3	3.4	2.9	3.4
Europe Other	2.5	2.1	2.1	2.1	2.3	2.3	2.4	2.4
Supranational	2.1	1.7	1.7	2.0	1.4	1.1	2.0	1.5
Africa	1.1	0.9	0.9	0.9	0.9	0.9	0.8	0.9
Middle East	0.9	1.1	0.7	0.8	0.7	0.8	0.8	0.8

Table 33: Large Hedge Fund Adviser Hedge Fund
Country Exposure (\$ Billions)

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

Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
United States	4,551	4,683	4,869	4,783	5,201	5,233	5,165	5,074
Japan	269	244	251	274	265	239	287	264
China (Inc. Hong Kong)	178	184	165	147	187	186	176	199
Brazil	47	50	42	40	43	46	40	50
India	38	36	36	35	36	32	34	37
Russia	16	12	11	9	9	11	11	15

Table 34: Large Hedge Fund Adviser Hedge Fund
Country Exposure (Percent of Aggregate NAV)

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

Country	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
United States	132.9	134.5	140.2	146.2	150.7	148.3	149.1	142.5
Japan	7.9	7.0	7.2	8.4	7.7	6.8	8.3	7.4
China (Inc. Hong Kong)	5.2	5.3	4.7	4.5	5.4	5.3	5.1	5.6
Brazil	1.4	1.4	1.2	1.2	1.2	1.3	1.2	1.4
India	1.1	1.0	1.0	1.1	1.0	0.9	1.0	1.0
Russia	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.4

IX 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.

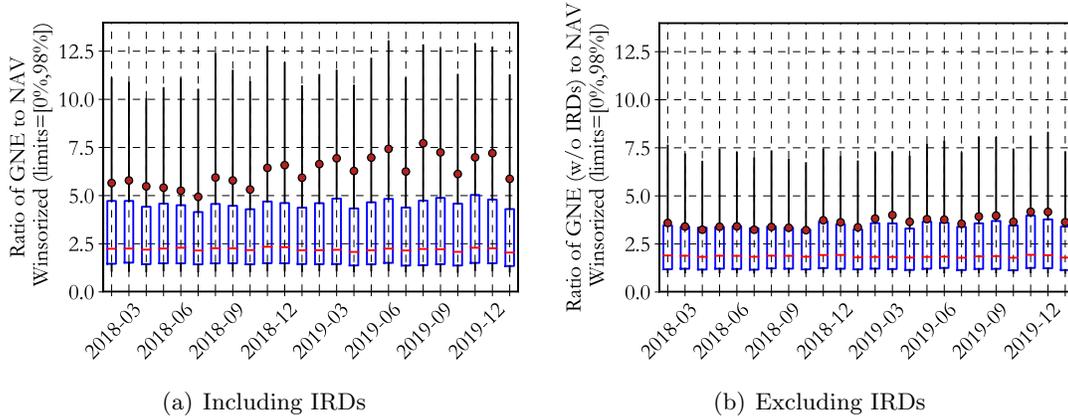
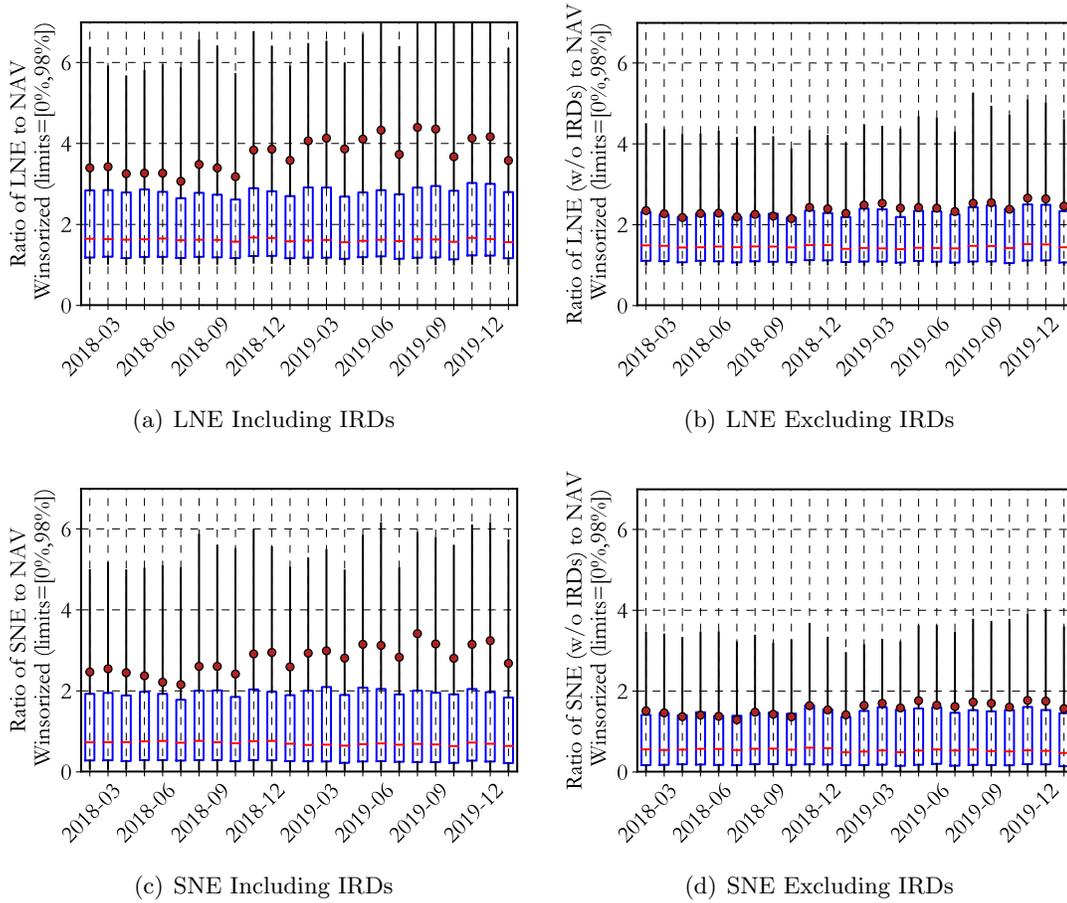


Figure 11: Ratio of Qualifying Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value

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 Strategy⁶

Table 35: Exposures of Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9 and 20.

Category	Strategy	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
	Subtotal	1,647	1,716	1,761	1,477	1,616	1,644	1,622	1,723
Equity	Long/Short	925	951	956	762	841	867	833	880
	Long Bias	372	392	414	348	384	392	404	443
	Market Neutral	342	365	383	360	386	380	381	397
	Short Bias	8	8	8	7	5	5	4	3
	Subtotal	983	984	1,005	1,013	1,038	1,088	1,098	1,134
Other	Subtotal	739	786	774	879	963	1,054	1,021	1,030
	F.I. Sov.	496	537	506	599	686	774	723	714
	F.I. Asset Backed	121	127	137	145	130	134	159	177
	F.I. Corp.	49	52	56	59	67	69	64	61
	F.I. Conv. Arb.	51	49	53	55	60	59	57	60
	Volatility Arb.	22	21	22	21	19	18	19	18
Macro	Subtotal	784	760	819	716	782	753	708	666
	Global Macro	698	670	729	627	695	666	629	579
	Currency	***	45	45	47	46	***	***	44
	Commodity	39	40	41	37	37	38	34	39
	Active Trading	***	5	4	4	4	***	***	5
Credit	Subtotal	286	297	307	321	325	314	305	315
	Long/Short	248	238	247	256	258	246	234	233
	Asset Based Lending	38	59	60	65	66	68	71	82
Event Driven	Subtotal	363	360	350	304	313	337	308	311
	Distressed/Restruct.	165	162	165	164	169	165	160	163
	Equity	97	100	98	76	80	86	78	79
	Risk Arb./Merger Arb.	101	98	88	64	64	86	71	69
	Subtotal	138	141	157	150	172	191	191	193
Managed Futures/CTA	Quantitative	136	139	***	***	***	***	***	***
	Fundamental	2	2	***	***	***	***	***	***
Investment in other funds	Subtotal	44	42	48	44	43	41	48	48
Total	Total	4,985	5,086	5,220	4,904	5,251	5,422	5,301	5,420

⁶Form 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 36: Exposures of Hedge Funds (Percent of NAV)
As reported on Form PF, Questions 9 and 20.

Category	Strategy	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
	Subtotal	53.0	54.4	55.2	49.8	51.7	51.7	50.9	53.2
Equity	Long/Short	29.8	30.2	30.0	25.7	26.9	27.3	26.1	27.2
	Long Bias	12.0	12.4	13.0	11.7	12.3	12.3	12.7	13.7
	Market Neutral	11.0	11.6	12.0	12.1	12.4	12.0	11.9	12.3
	Short Bias	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1
Other	Subtotal	31.7	31.2	31.5	34.1	33.2	34.2	34.4	35.0
	Subtotal	23.8	24.9	24.3	29.6	30.8	33.1	32.0	31.8
Relative Value	F.I. Sov.	16.0	17.0	15.9	20.2	22.0	24.3	22.7	22.0
	F.I. Asset Backed	3.9	4.0	4.3	4.9	4.2	4.2	5.0	5.5
	F.I. Corp.	1.6	1.6	1.8	2.0	2.2	2.2	2.0	1.9
	F.I. Conv. Arb.	1.6	1.6	1.7	1.9	1.9	1.9	1.8	1.8
	Volatility Arb.	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
	Subtotal	25.2	24.1	25.7	24.1	25.0	23.7	22.2	20.6
Macro	Global Macro	22.5	21.3	22.9	21.1	22.2	20.9	19.7	17.9
	Currency	***	1.4	1.4	1.6	1.5	***	***	1.3
	Commodity	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.2
	Active Trading	***	0.1	0.1	0.1	0.1	***	***	0.2
		Subtotal	9.2	9.4	9.6	10.8	10.4	9.9	9.6
Credit	Long/Short	8.0	7.6	7.7	8.6	8.3	7.7	7.3	7.2
	Asset Based Lending	1.2	1.9	1.9	2.2	2.1	2.1	2.2	2.5
		Subtotal	11.7	11.4	11.0	10.2	10.0	10.6	9.7
Event Driven	Distressed/Restruct.	5.3	5.1	5.2	5.5	5.4	5.2	5.0	5.0
	Equity	3.1	3.2	3.1	2.6	2.6	2.7	2.5	2.5
	Risk Arb./Merger Arb.	3.3	3.1	2.8	2.1	2.0	2.7	2.2	2.1
		Subtotal	4.5	4.5	4.9	5.0	5.5	6.0	6.0
Managed Futures/CTA	Quantitative	4.4	4.4	***	***	***	***	***	***
	Fundamental	0.1	0.1	***	***	***	***	***	***
Investment in other funds	Subtotal	1.4	1.3	1.5	1.5	1.4	1.3	1.5	1.5
Total	Total	160.5	161.4	163.7	165.2	167.9	170.5	166.2	167.4

C Leverage by Strategy

Table 37: Asset Weighted-Average Ratio of GAV to NAV
by Strategy

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

Strategy	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Relative Value	5.0	5.0	4.6	5.3	5.3	5.8	5.6	5.5
Macro	3.9	4.1	4.4	3.9	4.2	4.5	4.2	4.3
Multi-Strategy	2.2	2.2	2.3	2.3	2.3	2.5	1.9	2.3
Other	1.5	1.5	1.6	1.6	1.7	1.8	1.6	1.7
Equity	1.7	1.6	1.7	1.7	1.7	1.6	1.6	1.6
Credit	1.5	1.5	1.5	1.6	1.6	1.5	1.5	1.5
Managed Futures/CTA	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.4
Event Driven	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Investment in other funds	1.3	1.1	1.1	4.8	4.5	1.2	3.9	1.2

Table 38: 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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Macro	26.8	27.7	23.8	24.6	28.0	29.1	25.7	27.6
Relative Value	21.0	19.7	18.2	20.5	20.9	22.8	21.9	23.1
Managed Futures/CTA	8.4	10.5	14.0	9.7	17.9	19.9	19.8	18.5
Multi-Strategy	9.7	8.4	8.4	8.7	9.1	9.8	10.1	11.5
Other	4.7	4.1	4.4	4.2	4.4	4.7	4.3	4.3
Equity	4.0	3.3	3.6	3.5	3.6	3.3	3.3	3.1
Credit	3.3	2.9	2.8	3.3	3.2	2.6	2.4	2.8
Investment in other funds	2.6	2.4	3.6	14.8	12.0	2.4	10.3	1.9
Event Driven	2.0	1.9	1.9	1.8	1.8	2.0	1.9	1.9

Table 39: Asset Weighted-Average Percent of Unencumbered Cash
by Strategy

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

Strategy	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Managed Futures/CTA	60.6	55.5	47.5	57.4	49.9	48.5	45.2	43.4
Macro	37.0	36.4	36.8	38.3	36.5	38.8	37.6	39.7
Multi-Strategy	24.7	27.1	30.6	29.7	23.0	25.7	22.3	22.7
Relative Value	20.9	17.4	16.5	17.9	17.8	17.0	21.6	21.4
Other	18.4	18.7	19.0	17.9	18.2	18.6	16.9	14.9
Event Driven	8.0	8.6	9.6	12.2	9.9	7.3	9.9	10.3
Equity	9.7	11.6	11.4	13.5	10.6	9.6	10.7	9.3
Credit	8.3	7.0	7.3	8.2	7.3	6.8	7.1	7.8
Investment in other funds	4.2	6.6	3.6	12.8	14.5	5.8	13.0	6.6

D Investment Exposures

Table 40: Aggregate Qualifying Hedge Fund Gross Notional Exposure
by Asset Type (\$ Billions)
As reported on Form PF, Questions 26 and 30.

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Cash/Cash Equivalents	724	735	743	754	784	805	822	839
Securities - Equities	3,029	2,702	2,729	2,297	2,576	2,644	2,539	2,719
Securities - Treasuries	1,182	1,268	1,364	1,630	1,770	2,046	1,967	2,033
Securities - G10 (non-US)	1,291	1,236	1,190	1,223	1,271	1,244	1,099	1,164
Securities - Other Bonds	286	285	298	310	322	339	336	350
Securities - MBS	264	251	275	358	307	232	276	308
Securities - Corp. Bonds	263	272	277	265	300	301	294	288
Securities - Conv. Bonds	93	97	93	86	87	89	96	98
Securities - ABS (non-MBS)	79	88	87	88	93	96	94	96
Derivatives - IR	5,656	5,316	5,306	5,174	6,436	6,583	5,933	5,572
Derivatives - FX	3,735	3,235	2,447	2,252	2,376	2,452	3,078	2,896
Derivatives - Equity	1,362	1,304	1,314	1,107	1,203	1,266	1,415	1,552
Derivatives - Credit	727	682	666	727	765	714	678	650
Derivatives - Other	541	549	295	286	263	274	220	411
Derivatives - Commodity	366	380	380	286	316	309	311	345
Repurchase Agreements	1,405	1,447	1,441	1,626	1,905	1,896	1,843	1,871
Other	763	790	783	738	795	820	813	806

Table 41: Percent of Qualifying Hedge Fund Gross Notional Exposure
Representing Long Notional Exposure
As reported on Form PF, Questions 26 and 30.

	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Cash/Cash Equivalents	80.8	80.1	81.9	82.7	81.9	80.4	80.1	79.4
Securities - Equities	75.5	70.7	70.8	71.2	70.7	70.9	71.1	72.1
Securities - Treasuries	60.3	62.5	63.1	65.2	65.1	60.9	62.4	61.6
Securities - G10 (non-US)	53.0	51.9	49.9	51.8	51.9	52.3	55.2	54.4
Securities - Other Bonds	72.5	72.8	71.0	74.0	75.7	79.3	79.8	77.2
Securities - MBS	73.2	74.3	71.0	67.5	70.4	82.7	82.6	81.5
Securities - Corp. Bonds	81.9	82.6	82.9	82.4	83.0	83.0	83.6	84.4
Securities - Conv. Bonds	88.1	88.0	87.8	86.4	94.2	94.0	92.9	94.9
Securities - ABS (non-MBS)	98.2	95.5	95.0	96.8	97.1	95.6	96.4	96.5
Derivatives - IR	51.3	52.2	49.5	51.2	52.6	52.0	50.2	48.2
Derivatives - FX	56.8	53.5	55.6	54.7	55.1	54.8	59.6	58.4
Derivatives - Equity	51.5	51.6	52.2	51.1	52.9	54.5	54.5	57.5
Derivatives - Credit	44.7	45.3	45.2	41.4	43.0	42.1	44.9	49.6
Derivatives - Other	45.2	41.6	32.8	63.2	67.8	63.5	56.1	42.1
Derivatives - Commodity	65.8	62.7	59.6	56.5	58.3	59.4	59.0	64.2
Repurchase Agreements	51.9	47.7	47.9	42.9	39.8	37.6	35.9	36.7
Other	88.9	88.2	88.0	89.4	87.6	87.5	88.2	85.9

E Liquidity

Table 42: Investor Liquidity for Qualifying Hedge Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 50.

Liquidation Period	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
At most 1 day	8.9	9.0	8.8	8.4	8.5	8.1	7.6	7.7
At most 7 days	15.4	15.2	14.9	14.8	14.5	14.0	13.8	13.1
At most 30 days	30.0	27.8	27.8	27.8	29.2	27.3	27.0	26.5
At most 90 days	48.9	47.5	47.9	50.2	47.9	46.4	47.0	46.3
At most 180 days	60.3	58.8	61.2	58.4	58.5	57.4	58.5	56.9
At most 365 days	74.1	73.5	73.7	71.8	70.8	70.2	69.7	68.9

Table 43: Portfolio Liquidity for Qualifying Hedge Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9, 26, 30, and 32.

Liquidation Period	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
At most 1 day	38.8	38.9	38.6	39.3	36.9	36.3	35.9	34.8
At most 7 days	62.1	62.1	61.9	61.2	60.2	59.9	58.7	57.0
At most 30 days	75.0	74.9	74.9	73.6	73.0	72.5	71.4	70.1
At most 90 days	81.4	81.2	80.8	79.4	79.0	78.6	77.8	76.4
At most 180 days	84.8	84.7	84.2	82.9	82.7	82.3	81.7	80.3
At most 365 days	88.7	88.9	88.2	86.8	86.7	86.5	86.0	85.2

Figure 12: Asset Weighted-Average Qualifying Hedge Fund Investor and Portfolio Liquidity

As reported on Form PF, Questions 9, 26, 30, 32, and 50 as of Fourth Calendar Quarter 2019.

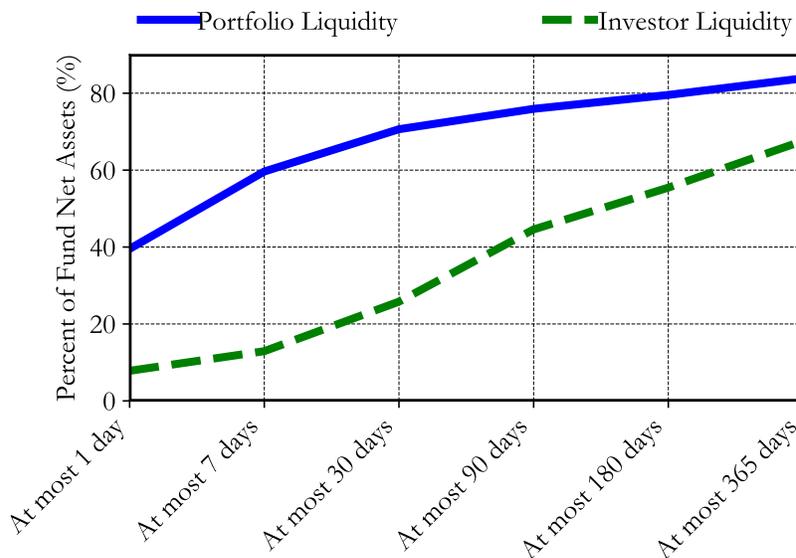
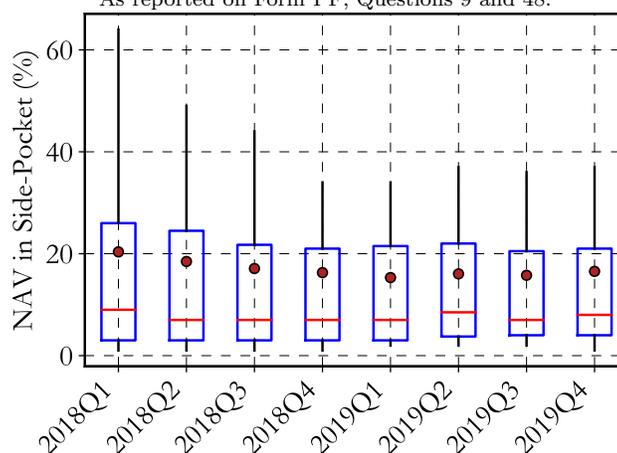


Table 44: Restrictions on Qualifying Hedge Fund Assets (\$ Billions)
As reported on Form PF, Questions 48 and 49.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
May Suspend	2,411	2,431	2,470	2,266	2,396	2,441	2,427	2,430
May Have Gates	1,459	1,489	1,512	1,402	1,488	1,519	1,494	1,553
Gated	39	32	34	40	39	40	42	42
Side-Pocketed	42	41	39	42	42	42	45	47
Suspended	***	13	12	19	17	16	18	15

Figure 13: 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.



F Borrowings

Table 45: Borrowings of Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Question 43 (Third Month).

Type	Subtype	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Secured	Subtotal	2,592	2,813	2,830	2,757	3,016	3,158	3,089	3,163
	Reverse Repo	780	894	862	1,081	1,202	1,291	1,330	1,302
	Prime Broker	1,418	1,527	1,591	1,289	1,412	1,438	1,358	1,410
	Other Secured	394	392	377	387	401	429	401	450
Unsecured	Subtotal	14	14	12	12	13	15	16	18
Total	Total	2,606	2,827	2,842	2,769	3,028	3,173	3,104	3,180

Table 46: Aggregate Borrowing by Creditor Entity Type (Percent)
As reported on Form PF, Question 43 (Third Month).

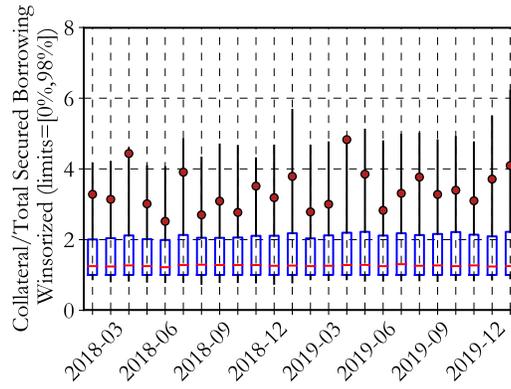
Creditor Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
US Financial	60.5	63.3	63.6	63.0	63.1	63.5	63.6	63.0
Non-US Financial	39.1	36.3	36.1	36.5	36.5	35.9	35.9	36.4
US Non-Financial	***	***	***	***	***	***	***	***
Non-US Non-Financial	***	***	***	***	***	***	***	***

**Table 47: Aggregate Collateral for Secured Borrowings
of Qualifying Hedge Funds (\$ Billions)**
As reported on Form PF, Question 43 (Third Month).

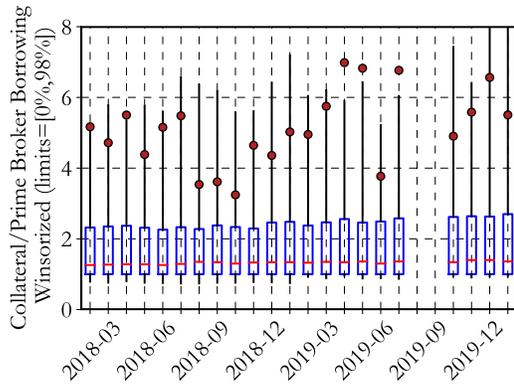
Borrowing Type	Collateral Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Reverse Repo	Subtotal	781	909	885	1,121	1,250	1,355	1,371	1,305
	Other	513	569	573	702	766	804	836	800
	Cash	268	340	312	420	484	550	535	506
Prime Broker	Subtotal	1,751	1,841	2,148	1,597	1,723	1,806	1,706	1,771
	Other	1,225	1,272	1,557	1,067	1,158	1,222	1,157	1,222
	Cash	526	569	591	530	565	584	549	549
Other Secured	Subtotal	447	468	436	443	456	494	482	498
	Other	296	308	298	278	297	324	339	344
	Cash	152	159	138	165	160	169	143	154
Total	Total	2,979	3,217	3,468	3,162	3,429	3,654	3,559	3,574

Figure 14: Ratio of Collateral Posted to Secured Borrowing for Qualifying Hedge Funds

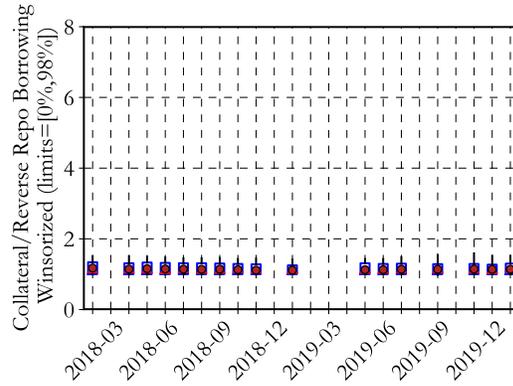
See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Question 43.



(a) Total Secured Borrowing



(b) Prime Broker Borrowing

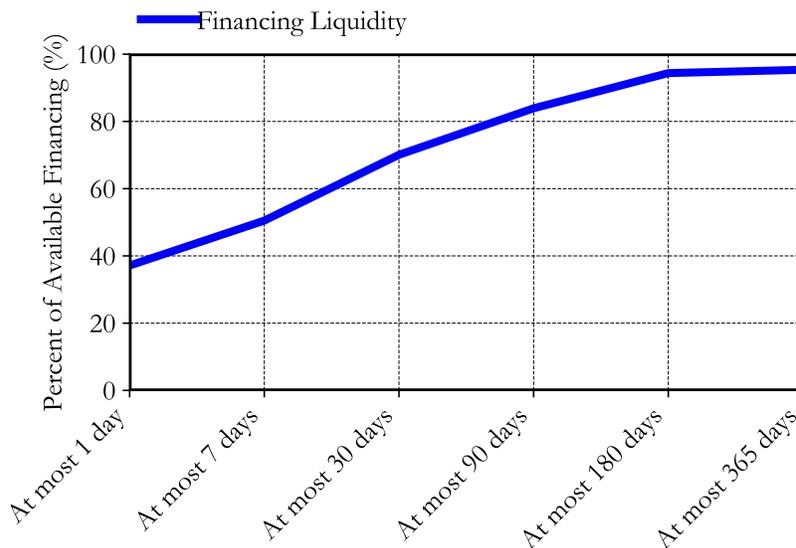


(c) Reverse Repo Borrowing

Table 48: Financing Liquidity for Qualifying Hedge Funds
(Percent of Available Financing)
As reported on Form PF, Question 46.

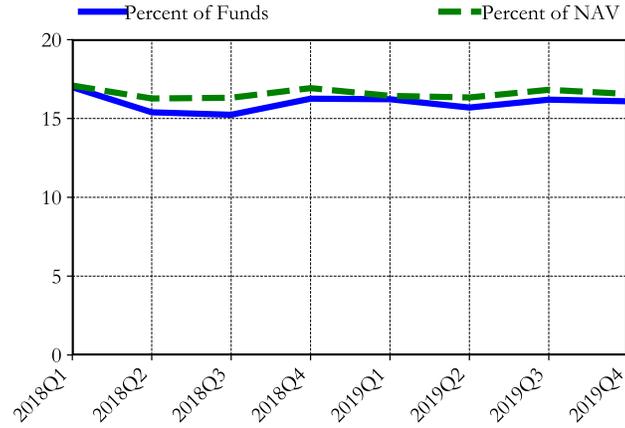
Financing Available	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
At most 1 day	31.6	32.9	35.8	30.0	34.7	34.5	39.7	29.1
At most 7 days	51.5	52.7	51.8	50.2	51.4	51.0	54.1	47.9
At most 30 days	64.9	66.7	66.0	68.6	68.6	68.0	68.9	67.4
At most 90 days	80.6	80.6	79.9	82.8	82.7	83.5	82.7	82.8
At most 180 days	95.8	95.8	96.0	95.7	95.7	95.4	95.1	94.9
At most 365 days	96.9	97.1	97.2	96.8	96.7	96.5	96.2	96.0

Figure 15: Weighted-Average Qualifying Hedge Fund
Financing Liquidity (Percent of Available Financing)
As reported on Form PF, Question 46 as of Fourth Calendar Quarter 2019.



G Central Clearing

Figure 16: Qualifying Hedge Funds Using Central Clearing
As reported on Form PF, Question 39.



H Value-at-Risk (“VaR”) Reporting

Table 49: Number of Qualifying Hedge Funds Using VaR
As reported on Form PF, Question 40.

VaR Method	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
VaR (Any Method)	660	672	682	684	676	665	668	673
Historical Simulation	286	287	298	303	297	305	314	317
Parametric	185	193	194	189	191	189	183	182
Monte Carlo Simulation	175	178	182	186	183	165	167	174
Other	51	52	52	49	45	46	45	43
VaR Not Used	1,112	1,134	1,136	1,143	1,118	1,119	1,135	1,148

Table 50: Aggregate Qualifying Hedge Fund GAV Managed Using VaR (\$ Billions)
As reported on Form PF, Questions 8 and 40.

VaR Method	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
VaR (Any Method)	3,661	3,779	3,841	3,652	3,887	4,021	3,914	3,938
Historical Simulation	1,969	2,027	2,017	1,954	2,104	2,212	2,071	2,062
Parametric	817	837	842	801	817	831	829	797
Monte Carlo Simulation	854	838	670	617	683	700	709	736
Other	496	522	759	742	833	851	868	913
VaR Not Used	2,415	2,502	2,546	2,502	2,592	2,714	2,741	2,775

Table 51: Aggregate Qualifying Hedge Fund NAV Managed Using VaR (\$ Billions)
As reported on Form PF, Questions 9 and 40.

VaR Method	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
VaR (Any Method)	1,423	1,430	1,434	1,324	1,385	1,393	1,382	1,378
Historical Simulation	580	570	575	524	547	561	563	560
Parametric	494	500	496	460	475	482	461	452
Monte Carlo Simulation	375	379	353	337	345	332	334	351
Other	91	96	130	114	128	131	135	121
VaR Not Used	1,683	1,721	1,754	1,643	1,742	1,787	1,807	1,861

I Stress Testing and VaR

Table 52: 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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Stress and VaR	593	599	613	606	588	587	599	596
Stress, No VaR	494	490	496	486	453	463	459	448
No Stress, VaR	67	73	69	78	88	78	69	77
Neither	618	644	640	657	665	656	676	700

Table 53: 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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Stress and VaR	3,499	3,612	3,675	3,496	3,684	3,798	3,733	3,750
Stress, No VaR	1,269	1,294	1,300	1,322	1,322	1,380	1,330	1,299
No Stress, VaR	162	168	165	155	203	223	181	188
Neither	1,146	1,208	1,246	1,180	1,270	1,334	1,412	1,476

Table 54: 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	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Stress and VaR	1,313	1,318	1,320	1,222	1,255	1,254	1,268	1,254
Stress, No VaR	746	745	757	704	728	740	740	741
No Stress, VaR	110	112	114	103	129	139	114	124
Neither	938	977	998	939	1,014	1,048	1,068	1,120

X Section 3 Liquidity Fund Specific Information

A Liquidity

Table 55: Investor Liquidity For Section 3 Liquidity Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 64.

Liquidation Period	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
At most 1 day	78.9	79.1	78.8	77.9	77.9	76.2	75.5	73.6
At most 7 days	95.5	96.1	96.0	95.9	95.9	96.1	95.9	95.7
At most 30 days	99.7	99.7	99.5	99.4	99.5	99.6	99.7	99.7
At most 90 days	99.9	99.9	99.8	99.8	99.9	99.9	99.8	99.8
At most 180 days	99.9	100.0	99.9	99.9	100.0	100.0	99.9	99.9
At most 365 days	100.0	100.0	100.0	99.9	100.0	100.0	100.0	99.9

Table 56: Suspensions and Gates of Section 3 Liquidity Funds (\$ Billions)
As reported on Form PF, Question 63.

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
May Suspend	269	284	291	278	273	276	277	273
May Have Gates	232	245	255	243	237	241	245	241
Suspended	0	0	0	0	0	0	0	0
Gated	0	0	0	0	0	0	0	0

B Portfolio Characteristics

Figure 17: Weighted-Average Maturity Reported by Section 3 Liquidity Funds
As reported on Form PF, Question 55.

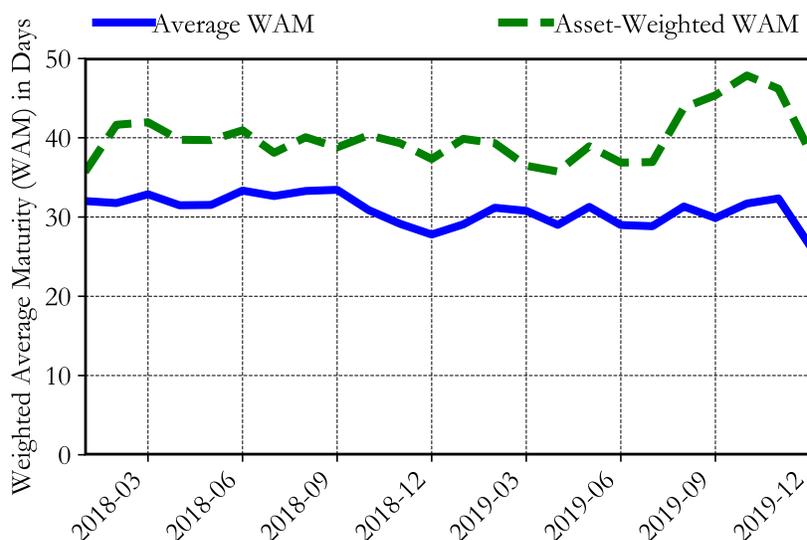


Figure 18: Weighted-Average Life Reported by Section 3 Liquidity Funds
As reported on Form PF, Question 55.

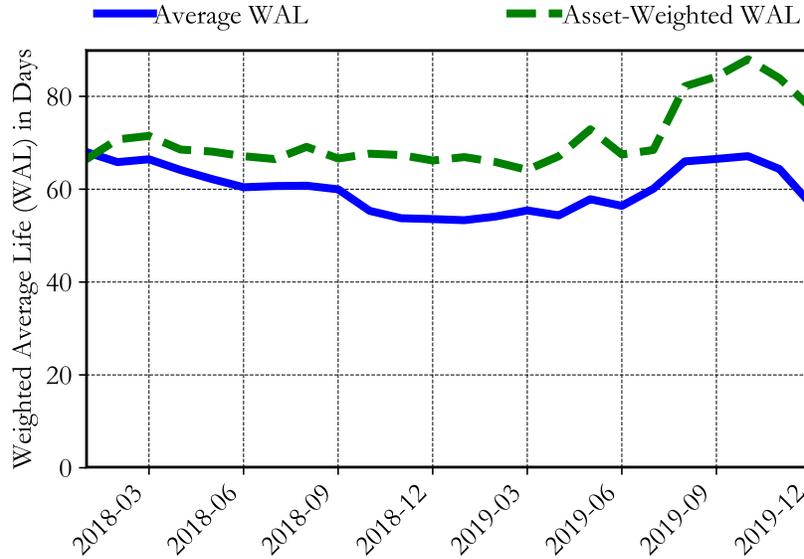


Figure 19: Seven-Day Gross Yield Reported by Section 3 Liquidity Funds
As reported on Form PF, Question 55.

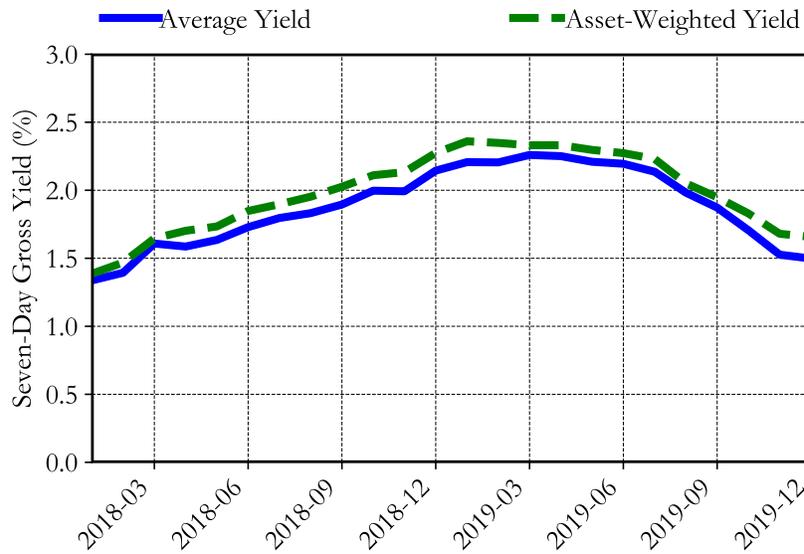


Figure 20: Ratio of Daily Liquid Assets to Net Asset Value of Section 3 Liquidity Funds
As reported on Form PF, Question 55.

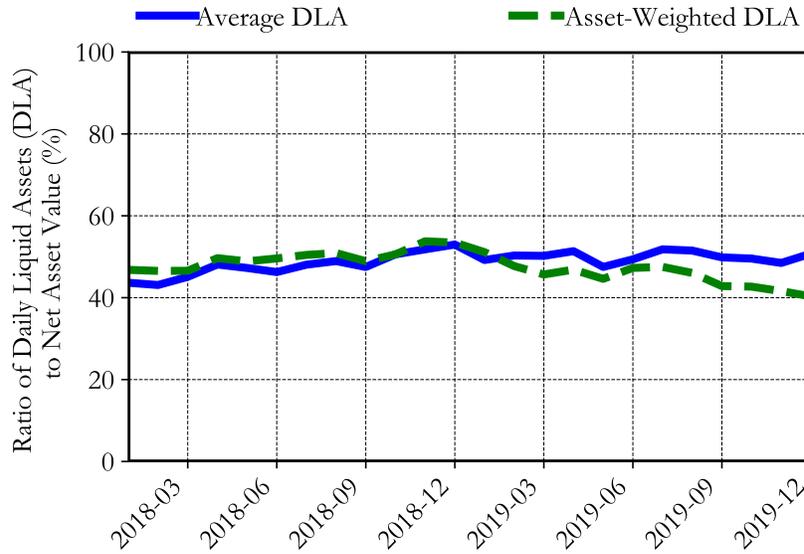
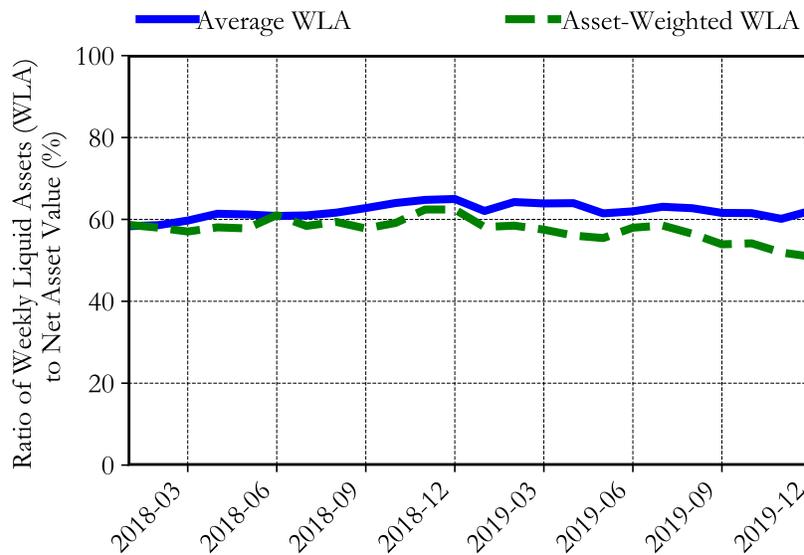


Figure 21: Ratio of Weekly Liquid Assets (WLA) to Net Asset Value of Section 3 Liquidity Funds
As reported on Form PF, Question 55.



C Rule 2a-7 Compliance

Table 57: Rule 2a-7 Compliance (Percent of Funds)

As reported on Form PF, Questions 9 and 54.

Compliance Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Credit Quality	58.7	60.0	60.0	60.9	60.0	61.4	61.9	62.8
Diversification	54.3	55.6	55.6	56.5	55.6	56.8	57.1	58.1
Maturity	54.3	55.6	55.6	56.5	55.6	56.8	57.1	58.1
Liquidity	50.0	51.1	51.1	52.2	51.1	52.3	52.4	53.5
Fully	45.7	46.7	46.7	47.8	46.7	47.7	47.6	48.8
None	41.3	40.0	40.0	39.1	40.0	38.6	38.1	37.2

Table 58: Rule 2a-7 Compliance (Percent of Aggregate NAV)

As reported on Form PF, Questions 9 and 54.

Compliance Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Credit Quality	15.9	14.6	14.5	13.4	13.8	13.6	13.6	12.9
Diversification	14.9	13.7	13.5	12.4	12.7	12.8	13.0	12.3
Maturity	14.9	13.7	13.5	12.4	12.7	12.8	13.0	12.3
Liquidity	14.5	13.4	13.3	12.2	12.5	12.6	12.8	12.1
Fully	12.7	11.7	11.5	10.3	10.5	10.8	10.9	10.1
None	84.1	85.4	85.5	86.6	86.2	86.4	86.4	87.1

D Methods of Calculating NAV

Table 59: NAV Calculation Method (Percent of Funds)

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

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Stable	80.4	80.0	77.8	78.3	80.0	75.0	76.2	74.4
Floating	19.6	20.0	22.2	21.7	20.0	25.0	23.8	25.6

Table 60: NAV Calculation Method (Percent of Aggregate NAV)

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

Type	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4
Stable	70.3	68.4	68.0	70.9	74.4	56.5	62.9	64.6
Floating	29.7	31.6	32.0	29.1	25.6	43.5	37.1	35.4

E Aggregate Portfolio Holdings

Table 61: Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 1 of 2
As reported on Form PF, Question 63.

Product Type	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12
Deposits	72.3	69.3	54.3	64.2	60.8	64.6	61.5	59.0	64.1	59.5	60.7	54.2
U.S. Treasuries	54.2	54.2	60.9	56.7	54.5	61.9	53.3	54.5	53.6	51.4	57.2	60.3
Repo - Govt. Collateral	37.3	30.5	34.2	40.6	39.0	35.1	43.9	45.3	44.8	49.3	49.9	48.3
Commercial Paper	42.9	41.2	42.2	42.6	44.1	42.8	50.5	47.0	45.7	46.8	46.5	41.1
Other	48.7	47.5	45.1	45.8	48.1	48.6	47.3	49.9	47.9	47.2	42.7	46.4
Asset-Backed Securities	21.7	21.3	21.4	21.9	22.6	23.1	21.9	22.0	20.2	21.8	22.7	22.4
Repo - Other Collateral	16.8	16.8	15.8	17.1	19.7	16.2	17.6	17.2	17.8	15.6	14.1	14.3
U.S. Govt. Debt	4.8	5.6	5.4	4.6	5.2	5.7	5.1	4.5	4.8	3.5	3.1	3.2
Municipal Debt	0.9	1.0	1.0	1.2	1.0	1.1	1.0	1.0	1.2	0.9	0.9	0.9

Table 62: Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 2 of 2
As reported on Form PF, Question 63.

Product Type	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06	2019-07	2019-08	2019-09	2019-10	2019-11	2019-12
Deposits	55.0	58.5	57.6	61.7	62.3	65.8	67.5	70.1	66.1	64.7	70.6	65.6
U.S. Treasuries	45.1	46.2	48.9	40.9	37.5	39.5	36.6	41.3	50.2	49.8	55.3	60.0
Repo - Govt. Collateral	58.0	57.6	48.4	58.0	59.0	62.4	69.8	60.6	52.0	51.7	46.8	45.9
Commercial Paper	43.9	40.4	37.8	40.2	42.0	39.6	40.0	43.2	40.8	43.6	42.6	41.8
Other	48.5	45.4	45.4	41.2	39.2	44.4	47.4	43.6	41.9	41.7	39.9	40.1
Asset-Backed Securities	24.4	21.9	20.8	20.3	21.4	18.6	18.3	18.1	18.3	17.9	17.3	16.5
Repo - Other Collateral	16.8	13.4	12.9	12.7	10.6	11.9	11.4	8.0	9.6	10.0	9.6	8.2
U.S. Govt. Debt	2.9	3.5	4.4	3.2	4.2	3.4	2.3	2.4	2.2	1.9	1.9	1.8
Municipal Debt	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.7	0.7	0.7

XI Section 4 Private Equity Fund Specific Information

A CPC Industry Concentration

Table 63: Gross Assets in CPC Industries (Percent of Total)
As reported on Form PF, Questions 8 and 77.

Type	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4
Software Publishers	2.8	3.8	4.9	6.1	6.0	8.0	10.6
Electric Power Generation,...	3.8	3.8	3.7	4.1	4.2	4.5	4.3
Data Processing, Hosting, &...	2.9	2.3	1.8	2.0	2.3	3.5	4.2
Oil & Gas Extraction	7.9	7.8	5.8	6.7	6.2	4.9	3.6
Telecommunications Data Processing...	2.6	2.5	2.7	2.3	2.2	2.4	2.6
Custom Computer Programming...	0.9	1.0	1.5	1.5	1.5	1.8	2.1
Other Financial Investment...	2.0	1.8	1.8	1.7	1.4	2.1	2.1
Pharmaceutical & Medicine Mfg	1.0	1.3	1.5	1.4	1.5	2.4	2.0
Other Information Services	2.0	2.1	1.9	1.8	2.0	1.7	1.9
Pipeline Transportation	2.4	2.6	2.4	2.2	1.9	1.8	1.7
Scientific Research & Development...	0.9	0.9	1.0	0.7	1.0	1.0	1.7
Management, Scientific, &...	1.0	1.2	1.1	1.3	1.6	1.4	1.6
Activities Related to Credit...	1.2	1.2	1.4	1.0	1.2	1.3	1.4
All Other Professional,...	0.4	0.6	0.6	0.9	0.8	1.4	1.4
Other Financial Vehicles	0.4	0.4	0.6	1.8	1.6	1.3	1.2
Lessors of Nonresidential Buildings	0.8	0.8	0.8	0.7	0.7	0.6	1.1
Insurance Agencies & Brokerages	0.9	1.0	1.0	1.2	1.1	1.0	1.1
Educational Services	1.4	1.3	1.3	1.2	1.4	1.2	1.1

B CPC Financial Leverage

Figure 22: 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.

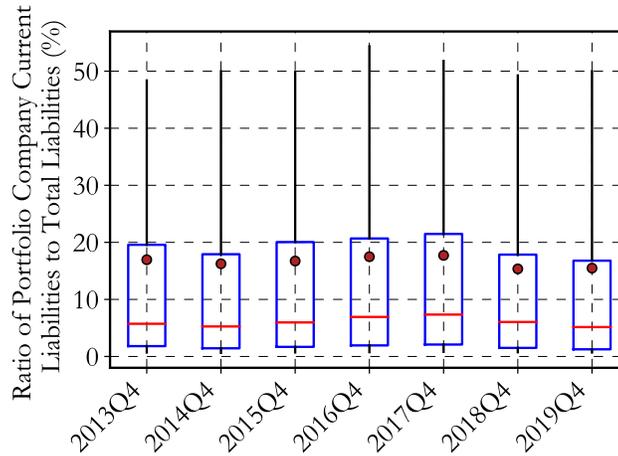
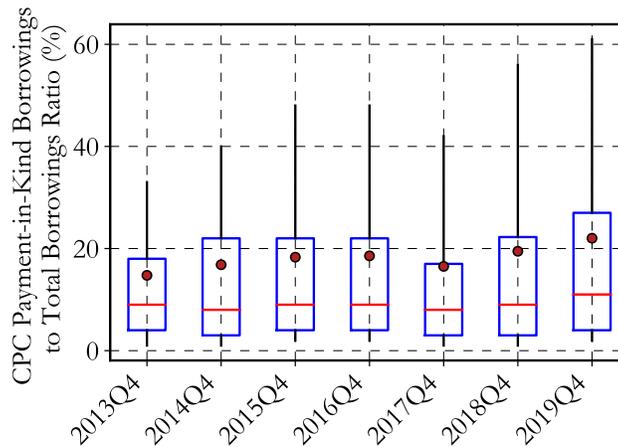


Figure 23: Distribution of CPC Payment-in-Kind or Zero Coupon Borrowings to Total Borrowings Ratio

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



C CPC Investments by Region and Country

Table 64: Aggregate Gross Value of Private Equity
Investments by Region (\$ Billions)
As reported on Form PF, Questions 70 and 78.

Region	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4
North America	5,249	4,506	4,132	3,942	3,961	4,211	5,162
Europe EEA	1,432	1,259	941	848	963	1,256	1,547
Asia	445	462	447	406	379	435	561
South America	75	85	58	111	184	140	149
Europe Other	25	9	21	22	40	46	69
Supranational	65	67	23	37	49	55	60
Middle East	8	12	9	15	23	16	18
Africa	21	12	12	18	14	10	15

Table 65: Private Equity CPC Investments by Region
(Percent of Aggregate CPC Gross Asset Value)
As reported on Form PF, Questions 70 and 78.

Region	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4
North America	71.7	70.2	73.2	73.0	70.5	68.2	68.0
Europe EEA	19.6	19.6	16.7	15.7	17.1	20.3	20.4
Asia	6.1	7.2	7.9	7.5	6.8	7.0	7.4
South America	1.0	1.3	1.0	2.0	3.3	2.3	2.0
Europe Other	0.3	0.1	0.4	0.4	0.7	0.7	0.9
Supranational	0.9	1.0	0.4	0.7	0.9	0.9	0.8
Middle East	0.1	0.2	0.2	0.3	0.4	0.3	0.2
Africa	0.3	0.2	0.2	0.3	0.3	0.2	0.2

Table 66: Aggregate Gross Asset Value of Private Equity
CPC Investments by Country (\$ Billions)
As reported on Form PF, Questions 70 and 78.

Country	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4
United States	5,002	4,305	3,943	3,776	3,794	4,015	4,801
China and Hong Kong	171	186	173	114	147	154	149
India	63	83	89	92	73	104	128
Brazil	45	58	41	88	131	96	93
Japan	108	98	85	79	52	52	78
Russia	3	2	5	4	4	2	1

Table 67: Private Equity CPC Investments by Country
(Percent of Aggregate CPC Gross Asset Value)
As reported on Form PF, Questions 70 and 78.

Country	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4
United States	68.3	67.1	69.9	69.9	67.6	65.1	63.2
China and Hong Kong	2.3	2.9	3.1	2.1	2.6	2.5	2.0
India	0.9	1.3	1.6	1.7	1.3	1.7	1.7
Brazil	0.6	0.9	0.7	1.6	2.3	1.6	1.2
Japan	1.5	1.5	1.5	1.5	0.9	0.8	1.0
Russia	0.0	0.0	0.1	0.1	0.1	0.0	0.0

XII 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.⁷ 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.⁸ 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.⁹

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.

⁷Note 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.

⁸An 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.

⁹In 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.¹⁰ 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.

¹⁰This 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:

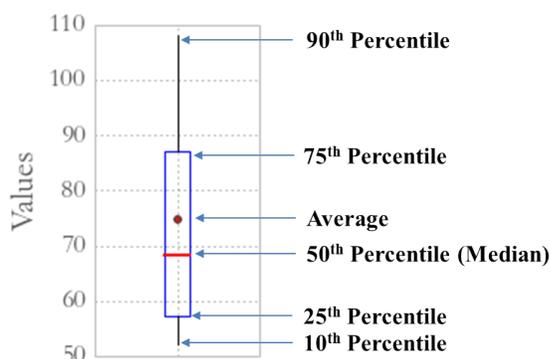
- (Q1): February 15 to May 14
- (Q2): May 15 to August 14
- (Q3): August 15 to November 14
- (Q4): November 15 to February 14

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.¹¹

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 24 for an explanation of each feature.

Figure 24: How to Read a Boxplot



¹¹Form 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.¹² 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.

¹²Such 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.