

U.S. Securities and Exchange Commission

Annual Staff Report Relating to the Use of Form PF Data



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

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

December 14, 2018

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 more than \$8 trillion in net assets. Although private fund assets are still less than one half of the total assets of registered investment companies, they represent a much higher proportion of total registered and unregistered investment fund assets than in past decades. 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 sixth 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 more than \$8 trillion in reported net assets as of the fourth quarter of 2017,¹ 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 Fund Statistics*, Table 4, at the Appendix.

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”). The Commission recently solicited public comment on the collection of information requirements of Form PF, and the Office of Management and Budget (“OMB”) approved the continuation of the collection without change pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et. seq.) (the “PRA”). See *Proposed Collection of Information, Comment Request*, 83 Fed. Reg. 1278 (Jan. 10, 2018); OMB, Office of Information and Regulatory Affairs, OMB Control Number History, <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

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).

data systems that contain PF Data to staff experts across the Commission who have been authorized to 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;

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>.

- 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;
- 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

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.

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

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 their exposure to certain international markets. This type of assessment, aggregated with other industry information that may be available to staff, facilitates development of a broader understanding of the potential effects of certain market or global events for private funds and the financial markets regulated by the Commission in which private funds participate.

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

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 recent 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.

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

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>.

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 uses 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. This 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. Recently published staff research and white papers use Form PF data to describe liquidity and other

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., 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>; Sheeraz Raza, *SEC Data From Form PF Reveals Interesting Hedge Fund Trends* (Oct. 16, 2015), <https://www.valuewalk.com/2015/10/sec-data-from-form-pf-reveals-interesting-hedge-fund-trends/>; 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>.

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 the Commission 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 uses Form PF data to identify as potential examination candidates those 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. More recently, 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 consults with OFR to share information and analysis of Form PF data. As a result of this information sharing, OFR has generated publications regarding its monitoring of systemic risks in the U.S. financial markets. 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 and staff has provided the Financial Stability Board (“FSB”) with certain aggregated and anonymized Form PF data related to an FSB work stream. 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 2017 Annual Report* (Dec. 14, 2017), https://www.treasury.gov/initiatives/fsoc/studies-reports/Documents/FSOC_2017_Annual_Report.pdf. Section 4.13.5 of this report includes certain aggregated data from Form PF in describing recent developments relating to alternative funds.

Appendix

(Private Funds Statistics, Fourth Calendar Quarter 2017)



Division of Investment Management
Analytics Office

Private Funds Statistics

Fourth Calendar Quarter 2017

August 2, 2018

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 2016 through Fourth Calendar Quarter 2017 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 2017 Private Funds Statistics, please contact:

Tim Dulaney, PhD, FRM or Tim Husson, PhD, FRM at FormPF@sec.gov with subject line “Fourth Calendar Quarter 2017-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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Private Equity Fund	9,714	9,725	9,752	10,364	10,382	10,362	10,272	11,460
Hedge Fund	8,920	8,928	8,994	8,927	9,082	9,123	9,156	9,007
Other Private Fund	4,099	4,125	4,116	4,438	4,462	4,484	4,442	4,512
Section 4 Private Equity Fund	2,740	2,742	2,747	3,002	3,006	3,009	2,989	3,480
Real Estate Fund	2,102	2,100	2,117	2,447	2,445	2,443	2,434	2,632
Qualifying Hedge Fund	1,599	1,608	1,620	1,652	1,674	1,720	1,722	1,803
Securitized Asset Fund	1,421	1,418	1,417	1,451	1,463	1,475	1,477	1,504
Venture Capital Fund	635	646	651	761	759	769	755	846
Liquidity Fund	64	66	67	69	70	69	69	70
Section 3 Liquidity Fund	36	37	36	44	45	47	46	48
Total	26,955	27,008	27,114	28,457	28,663	28,725	28,605	30,031

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Private Equity Fund	1,025	1,025	1,024	1,092	1,095	1,091	1,088	1,132
Hedge Fund	1,694	1,688	1,685	1,687	1,686	1,687	1,687	1,722
Other Private Fund	564	567	568	580	578	578	574	579
Section 4 Private Equity Fund	243	243	243	248	250	250	247	292
Real Estate Fund	294	292	294	312	314	312	311	322
Qualifying Hedge Fund	525	525	516	531	527	534	535	551
Securitized Asset Fund	157	156	154	149	151	153	154	155
Venture Capital Fund	97	98	100	109	109	110	109	113
Liquidity Fund	37	37	37	39	39	38	38	39
Section 3 Liquidity Fund	19	19	19	24	24	24	23	25
Total	2,844	2,839	2,836	2,914	2,916	2,917	2,916	2,997

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Hedge Fund	6,162	6,329	6,464	6,408	6,704	6,895	7,219	7,274
Qualifying Hedge Fund	4,992	5,102	5,246	5,218	5,494	5,716	5,892	5,903
Private Equity Fund	2,060	2,063	2,064	2,318	2,326	2,323	2,310	2,722
Section 4 Private Equity Fund	1,472	1,472	1,472	1,645	1,648	1,648	1,641	1,941
Other Private Fund	973	978	981	1,066	1,077	1,088	1,060	1,186
Real Estate Fund	410	410	411	436	436	433	432	499
Securitized Asset Fund	420	420	420	448	449	454	453	485
Liquidity Fund	273	287	292	293	282	276	282	291
Section 3 Liquidity Fund	247	258	249	274	267	273	279	289
Venture Capital Fund	55	56	55	64	64	64	63	80
Total	10,352	10,542	10,688	11,032	11,338	11,533	11,818	12,537

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Hedge Fund	3,407	3,436	3,496	3,493	3,611	3,669	3,791	3,891
Qualifying Hedge Fund	2,655	2,670	2,740	2,744	2,829	2,901	2,995	3,060
Private Equity Fund	1,884	1,886	1,887	2,075	2,084	2,082	2,069	2,438
Section 4 Private Equity Fund	1,377	1,377	1,377	1,492	1,496	1,496	1,489	1,754
Other Private Fund	872	877	882	977	987	994	970	1,072
Real Estate Fund	326	326	327	341	342	340	339	391
Securitized Asset Fund	138	138	140	141	141	145	144	152
Liquidity Fund	272	285	290	292	281	275	280	291
Section 3 Liquidity Fund	246	256	247	273	265	272	278	288
Venture Capital Fund	52	53	52	61	61	62	60	76
Total	6,951	7,000	7,074	7,380	7,506	7,566	7,653	8,310

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

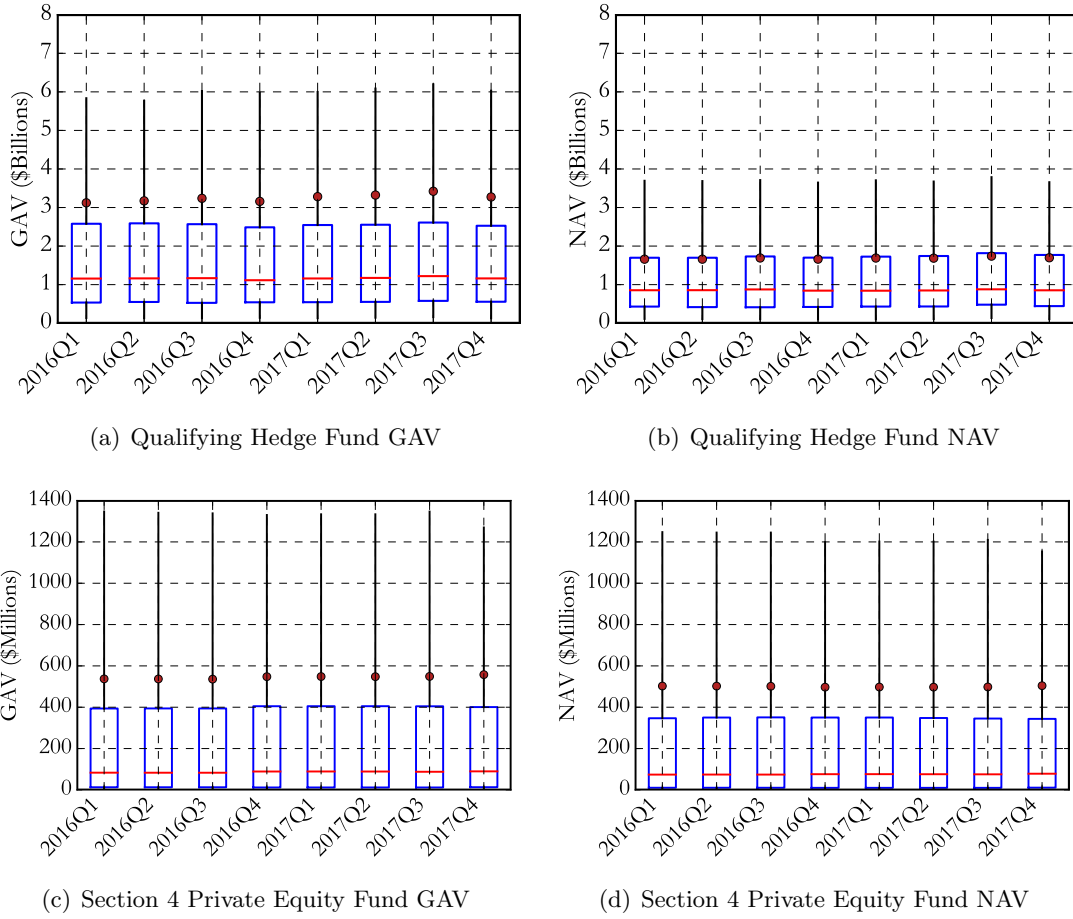
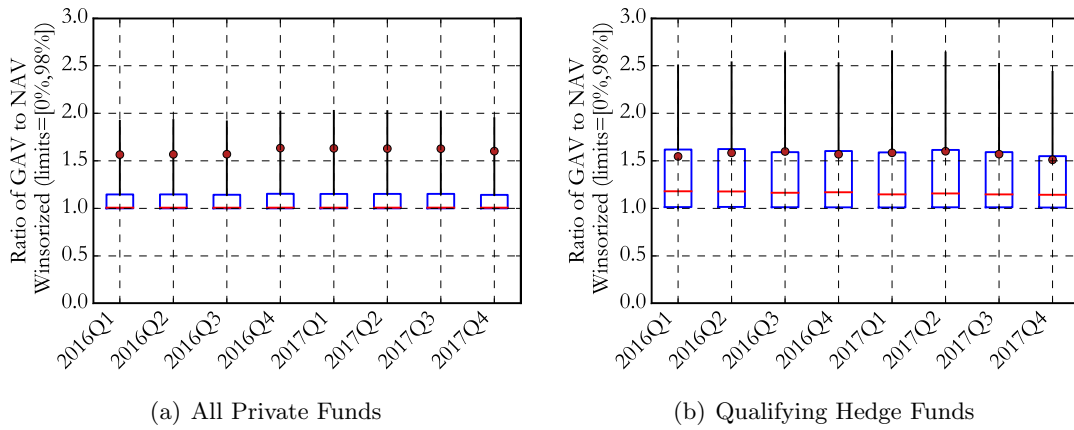


Figure 2: Ratio of GAV to NAV

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Securitized Asset Fund	48.9	48.7	48.4	50.7	49.5	48.8	48.4	51.9
Qualifying Hedge Fund	39.1	38.2	39.9	39.7	41.0	42.0	41.6	41.3
Hedge Fund	36.8	36.3	38.1	37.3	38.4	39.1	39.4	39.1
Real Estate Fund	13.2	13.2	13.2	13.9	12.9	12.7	12.8	13.2
Private Equity Fund	4.8	4.9	4.9	5.1	5.0	5.0	5.0	5.2
Section 4 Private Equity Fund	3.4	3.4	3.4	4.0	4.0	4.0	4.1	4.6
Other Private Fund	2.2	2.2	2.1	2.8	2.7	2.7	2.7	2.1
Venture Capital Fund	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6
Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 3 Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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

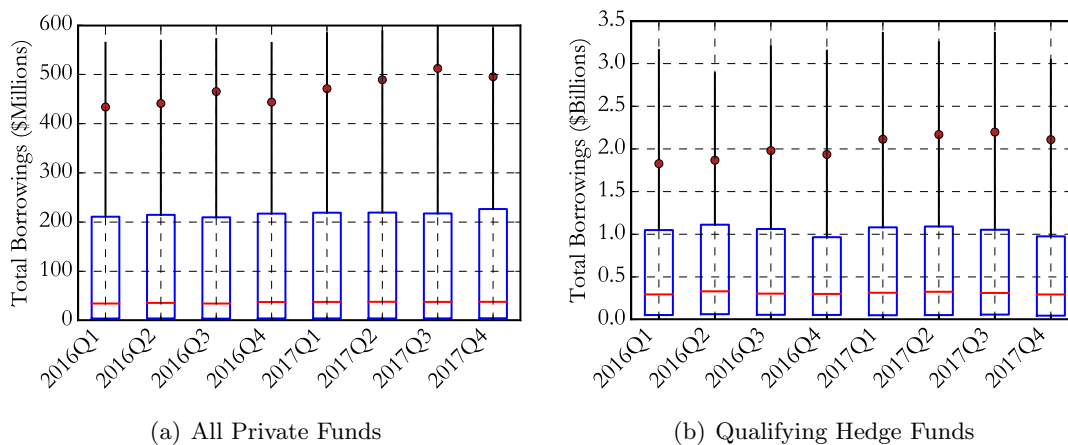
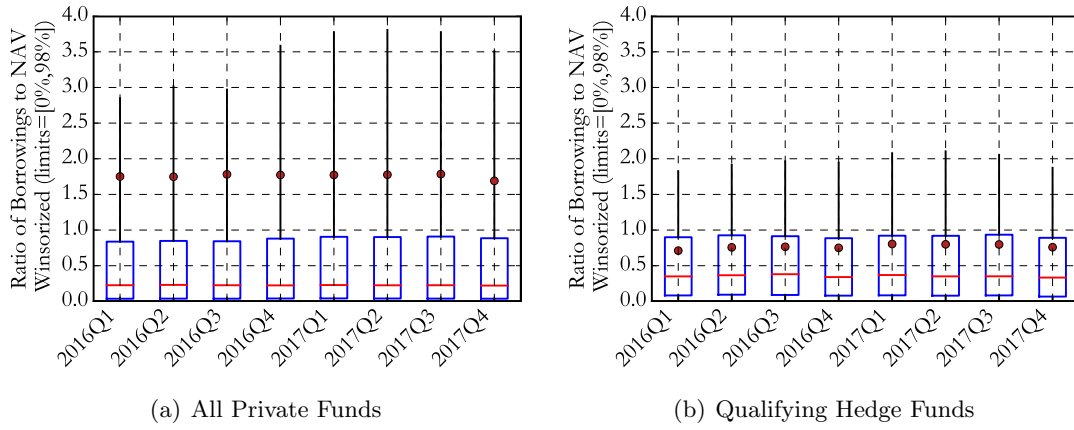


Figure 4: Ratio of Borrowings to NAV

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



C Fair Value Hierarchy

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

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Level One	2,481	2,464	2,485	2,877	2,585	2,578	2,562	3,274
Level Two	2,140	2,070	2,063	2,544	2,201	2,186	2,231	2,764
Level Three	2,271	2,265	2,263	2,594	2,512	2,512	2,506	2,887
Cost-Based	1,581	1,539	1,537	1,972	1,691	1,723	1,731	2,240

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

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Level One	668	680	677	519	664	661	665	662
Level Two	476	424	427	417	462	451	455	608
Level Three	111	108	107	142	136	140	137	172
Cost-Based	673	694	695	464	659	654	660	487

D Parallel Managed Accounts⁴

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Hedge Fund	696	699	696	664	654	661	668	664
Other Private Fund	408	406	409	482	498	497	495	508
Private Equity Fund	252	252	251	239	240	239	273	293
Qualifying Hedge Fund	234	237	233	233	224	220	227	238
Section 4 Private Equity Fund	82	82	82	88	88	88	88	98
Real Estate Fund	52	52	52	77	77	77	77	72
Liquidity Fund	16	14	15	15	16	16	16	16
Section 3 Liquidity Fund	15	14	15	15	16	16	16	16
Venture Capital Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	1,459	1,458	1,458	1,517	1,525	1,530	1,568	1,567

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

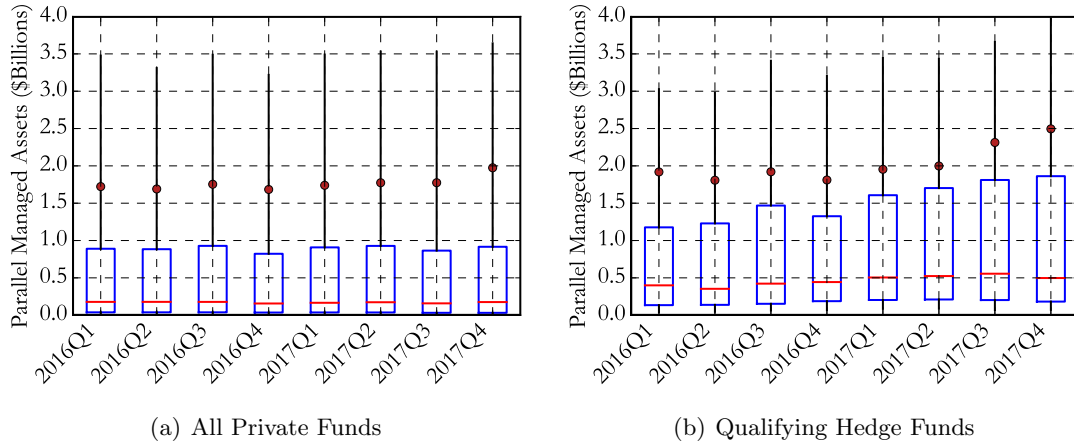
As reported on Form PF, Question 11.

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Hedge Fund	633	619	651	629	666	680	714	827
Other Private Fund	1,296	1,278	1,332	1,400	1,438	1,489	1,508	1,863
Private Equity Fund	96	96	96	29	29	28	28	37
Qualifying Hedge Fund	449	428	448	422	438	440	525	594
Section 4 Private Equity Fund	19	19	19	22	22	22	22	28
Real Estate Fund	11	11	11	6	6	6	6	6
Liquidity Fund	321	305	312	309	333	330	345	359
Section 3 Liquidity Fund	316	305	312	309	333	330	345	359
Venture Capital Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	2,513	2,465	2,557	2,555	2,653	2,714	2,782	3,094

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

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



III Fund Domiciles and Adviser Main Offices

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

All Private Funds								
Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
United States	50.8	50.7	50.8	51.3	51.4	51.4	51.0	51.3
Cayman Islands	37.3	37.2	37.1	36.4	36.4	36.4	36.7	35.5
Ireland	3.8	3.9	3.9	4.3	4.2	4.2	4.3	4.5
Luxembourg	1.3	1.5	1.5	1.4	1.5	1.6	1.6	1.9
Virgin Islands, British	2.4	2.3	2.3	2.2	2.2	2.0	2.0	1.8
United Kingdom	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3
Bermuda	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.2
Other	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.6

Qualifying Hedge Funds								
Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Cayman Islands	54.6	54.4	53.7	52.9	52.7	52.5	51.8	51.3
United States	32.7	33.1	33.8	34.3	34.6	35.0	35.3	35.7
Virgin Islands, British	5.7	5.7	5.5	5.5	5.3	5.0	4.8	4.5
Ireland	2.6	2.5	2.6	2.7	2.7	2.7	2.8	2.9
Luxembourg	1.2	1.2	1.3	1.3	1.3	1.5	1.7	1.9
Bermuda	1.4	1.4	1.4	1.8	1.7	1.7	1.7	1.6
Other	1.8	1.7	1.7	1.7	1.7	1.6	1.9	2.0

Section 3 Liquidity Funds								
Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Ireland	***	***	***	***	***	***	***	***
United States	36.5	34.2	34.1	33.1	33.9	36.8	34.7	35.1
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

Section 4 Private Equity Funds								
Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
United States	62.0	62.0	62.0	63.8	63.8	63.8	63.7	60.7
Cayman Islands	30.3	30.3	30.3	29.5	29.4	29.4	29.5	30.4
United Kingdom	2.6	2.6	2.6	1.9	1.9	1.9	2.0	2.7
Bermuda	1.3	1.3	1.3	1.1	1.1	1.1	1.1	1.0
Canada	1.2	1.2	1.2	0.9	0.9	0.9	0.9	1.0
Other	2.6	2.6	2.7	2.9	2.9	2.9	2.9	4.1

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

All Private Funds								
Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
United States	89.5	89.6	89.6	90.1	89.3	89.0	88.8	89.4
United Kingdom	6.6	6.6	6.6	6.2	6.5	6.8	6.9	6.5
Other	3.9	3.9	3.7	3.8	4.1	4.2	4.3	4.1
Qualifying Hedge Funds								
Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
United States	89.3	89.5	89.4	89.6	89.4	89.3	88.9	88.5
United Kingdom	5.7	5.6	5.7	5.7	5.9	6.3	6.4	6.7
Australia	***	***	***	***	***	***	***	***
Hong Kong	***	***	***	***	***	***	***	***
Other	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.2
Section 3 Liquidity Funds								
Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
United States	58.4	59.4	64.1	62.5	64.2	64.1	63.0	62.8
United Kingdom	***	***	***	***	***	***	***	***
France	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
United States	97.2	97.2	97.2	95.1	95.1	95.1	95.1	94.8
Canada	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

IV Beneficial Ownership

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Private Funds	1,328	1,324	1,324	1,342	1,356	1,372	1,372	1,491
Other	883	895	920	976	997	1,011	1,039	1,188
State/Muni. Govt. Pension Plans	912	920	935	1,009	1,029	1,033	1,048	1,153
Pension Plans	882	894	909	948	958	967	973	1,037
Non-Profits	705	704	724	749	770	778	790	848
U.S. Individuals	768	771	778	773	786	789	798	816
Sov. Wealth Funds and For. Official Inst.	382	386	387	429	438	443	444	514
Insurance Companies	274	276	275	305	310	312	314	348
Unknown Non-U.S. Investors	163	171	170	187	187	186	189	194
Non-U.S. Individuals	196	199	199	198	198	185	183	187
Banking/Thrift Inst.	144	149	145	136	140	142	146	159
SEC-Registered Investment Companies	123	121	119	125	127	129	137	138
State/Muni. Govt. Entities	87	89	90	100	105	107	108	122
Broker-Dealers	107	104	97	102	104	107	111	112

Table 13: Beneficial Ownership for All Private Funds
(Percent of Aggregate NAV)

As reported on Form PF, Questions 9 and 16.

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Private Funds	19.1	18.9	18.7	18.2	18.1	18.1	17.9	17.9
Other	12.7	12.8	13.0	13.2	13.3	13.4	13.6	14.3
State/Muni. Govt. Pension Plans	13.1	13.1	13.2	13.7	13.7	13.7	13.7	13.9
Pension Plans	12.7	12.8	12.9	12.8	12.8	12.8	12.7	12.5
Non-Profits	10.1	10.1	10.2	10.2	10.3	10.3	10.3	10.2
U.S. Individuals	11.0	11.0	11.0	10.5	10.5	10.4	10.4	9.8
Sov. Wealth Funds and For. Official Inst.	5.5	5.5	5.5	5.8	5.8	5.9	5.8	6.2
Insurance Companies	3.9	3.9	3.9	4.1	4.1	4.1	4.1	4.2
Unknown Non-U.S. Investors	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.3
Non-U.S. Individuals	2.8	2.8	2.8	2.7	2.6	2.5	2.4	2.3
Banking/Thrift Inst.	2.1	2.1	2.1	1.8	1.9	1.9	1.9	1.9
SEC-Registered Investment Companies	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.7
State/Muni. Govt. Entities	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5
Broker-Dealers	1.5	1.5	1.4	1.4	1.4	1.4	1.5	1.3

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Private Funds	513	509	504	490	495	505	510	505
Non-Profits	363	359	380	383	395	405	418	428
Pension Plans	347	352	364	369	379	387	399	414
Other	323	333	356	356	375	386	410	409
State/Muni. Govt. Pension Plans	272	278	291	304	310	314	331	352
U.S. Individuals	305	308	319	318	324	331	340	345
Sov. Wealth Funds and For. Official Inst.	137	136	140	143	152	158	160	166
Broker-Dealers	77	76	69	68	72	75	79	79
Insurance Companies	64	65	65	67	70	73	74	78
SEC-Registered Investment Companies	77	76	75	71	70	70	74	74
Non-U.S. Individuals	64	65	66	65	68	68	70	74
Unknown Non-U.S. Investors	48	46	46	41	45	52	56	58
State/Muni. Govt. Entities	31	32	33	35	41	42	42	42
Banking/Thrift Inst.	30	33	30	29	31	33	33	35

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Private Funds	19.3	19.1	18.4	17.9	17.5	17.4	17.0	16.5
Non-Profits	13.7	13.4	13.9	13.9	14.0	13.9	13.9	14.0
Pension Plans	13.1	13.2	13.3	13.5	13.4	13.3	13.3	13.5
Other	12.2	12.5	13.0	13.0	13.3	13.3	13.7	13.4
State/Muni. Govt. Pension Plans	10.2	10.4	10.6	11.1	11.0	10.8	11.0	11.5
U.S. Individuals	11.5	11.5	11.7	11.6	11.5	11.4	11.3	11.3
Sov. Wealth Funds and For. Official Inst.	5.1	5.1	5.1	5.2	5.4	5.4	5.3	5.4
Broker-Dealers	2.9	2.8	2.5	2.5	2.5	2.6	2.6	2.6
Insurance Companies	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
SEC-Registered Investment Companies	2.9	2.9	2.7	2.6	2.5	2.4	2.5	2.4
Non-U.S. Individuals	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.4
Unknown Non-U.S. Investors	1.8	1.7	1.7	1.5	1.6	1.8	1.9	1.9
State/Muni. Govt. Entities	1.2	1.2	1.2	1.3	1.4	1.4	1.4	1.4
Banking/Thrift Inst.	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Private Funds	79	79	80	81	75	89	83	96
Other	38	38	40	52	51	51	51	55
Unknown Non-U.S. Investors	***	***	60	65	60	52	55	53
SEC-Registered Investment Companies	17	17	18	16	18	21	24	23
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	***	***	***	10	***	12	***	***
Insurance Companies	7	8	8	9	9	9	10	9
Pension Plans	5	5	***	5	5	5	5	5
Sov. Wealth Funds and For. Official Inst.	***	***	***	***	***	***	***	***
Non-U.S. Individuals	17	17	4	4	4	4	4	4
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-Profits	***	***	***	1	2	2	2	2
State/Muni. Govt. Pension Plans	***	***	***	1	1	1	1	1
U.S. Individuals	***	***	***	***	***	***	***	***

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Private Funds	32.2	30.9	32.3	29.6	28.3	32.6	30.0	33.3
Other	15.5	14.7	16.2	19.2	19.3	18.7	18.5	19.1
Unknown Non-U.S. Investors	***	***	24.2	23.7	22.7	19.2	19.9	18.4
SEC-Registered Investment Companies	7.1	6.5	7.1	5.9	6.9	7.6	8.6	7.8
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	***	***	***	3.6	***	4.3	***	***
Insurance Companies	2.9	3.3	3.2	3.3	3.4	3.3	3.7	3.0
Pension Plans	1.9	1.8	***	1.7	1.8	1.8	1.9	1.8
Sov. Wealth Funds and For. Official Inst.	***	***	***	***	***	***	***	***
Non-U.S. Individuals	6.9	6.8	1.6	1.4	1.5	1.5	1.4	1.3
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-Profits	***	***	***	0.5	0.6	0.6	0.6	0.5
State/Muni. Govt. Pension Plans	***	***	***	0.4	0.6	0.4	0.4	0.4
U.S. Individuals	***	***	***	***	***	***	***	***

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
State/Muni. Govt. Pension Plans	326	326	326	366	366	366	366	415
Private Funds	270	270	270	283	285	284	284	353
Other	140	140	140	162	162	161	161	212
Sov. Wealth Funds and For. Official Inst.	132	132	131	153	154	154	153	186
Pension Plans	138	137	138	142	142	142	139	159
Insurance Companies	84	84	84	94	94	94	94	109
Non-Profits	87	87	87	92	92	92	90	104
U.S. Individuals	95	95	95	88	88	88	88	94
Non-U.S. Individuals	35	35	35	34	34	34	34	36
Banking/Thrift Inst.	32	32	32	31	31	31	31	29
State/Muni. Govt. Entities	19	19	19	22	22	22	22	28
SEC-Registered Investment Companies	5	5	5	12	12	12	12	16
Unknown Non-U.S. Investors	15	15	15	14	14	14	13	14
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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
State/Muni. Govt. Pension Plans	23.7	23.7	23.6	24.5	24.5	24.5	24.6	23.6
Private Funds	19.6	19.6	19.6	19.0	19.0	19.0	19.1	20.1
Other	10.2	10.2	10.2	10.8	10.8	10.8	10.8	12.1
Sov. Wealth Funds and For. Official Inst.	9.6	9.6	9.5	10.3	10.3	10.3	10.3	10.6
Pension Plans	10.0	10.0	10.0	9.5	9.5	9.5	9.4	9.1
Insurance Companies	6.1	6.1	6.1	6.3	6.3	6.3	6.3	6.2
Non-Profits	6.3	6.3	6.3	6.1	6.1	6.2	6.1	5.9
U.S. Individuals	6.9	6.9	6.9	5.9	5.9	5.9	5.9	5.3
Non-U.S. Individuals	2.5	2.6	2.5	2.3	2.3	2.3	2.3	2.1
Banking/Thrift Inst.	2.3	2.3	2.3	2.0	2.0	2.0	2.1	1.7
State/Muni. Govt. Entities	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.6
SEC-Registered Investment Companies	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.9
Unknown Non-U.S. Investors	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.8
Broker-Dealers	0.0	0.0	0.0	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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Hedge Fund	9,181	9,363	9,400	9,192	10,249	10,166	11,447	12,472
Qualifying Hedge Fund	8,028	8,073	8,207	7,919	8,833	8,832	9,661	10,468
Other Private Fund	98	96	97	112	108	108	108	146
Private Equity Fund	54	54	53	38	38	38	38	39
Section 4 Private Equity Fund	42	42	42	35	35	34	34	33
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Real Estate Fund	21	21	21	16	16	16	16	17
Securitized Asset Fund	11	11	10	14	14	14	13	3
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	9,367	9,499	9,546	9,393	10,397	10,395	11,649	12,666

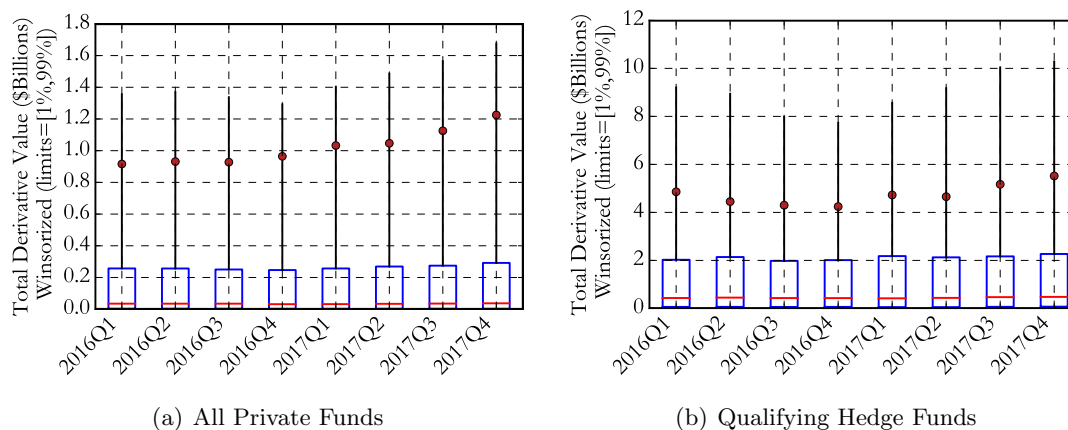
Table 21: Aggregate Derivative Value (Percent of Aggregate NAV)

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Hedge Fund	269.5	272.5	268.9	263.1	283.8	277.1	301.9	320.5
Qualifying Hedge Fund	302.4	302.3	299.5	288.6	312.3	304.4	322.5	342.1
Other Private Fund	11.2	10.9	11.0	11.4	10.9	10.8	11.2	13.6
Private Equity Fund	2.8	2.8	2.8	1.8	1.8	1.8	1.8	1.6
Section 4 Private Equity Fund	3.1	3.1	3.1	2.3	2.3	2.3	2.3	1.9
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Real Estate Fund	6.6	6.6	6.6	4.8	4.8	4.7	4.8	4.4
Securitized Asset Fund	7.9	7.7	7.4	9.8	9.8	9.4	9.2	1.7
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	134.8	135.7	134.9	127.3	138.5	137.4	152.2	152.4

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
0%	7,466	7,489	7,534	7,495	7,624	7,669	7,697	7,745
Less than 100%	63	64	70	62	62	66	63	42
100% or More	9	10	9	11	12	11	12	12

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

Fraction of NAV	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
0%	3,287	3,323	3,379	3,379	3,497	3,562	3,663	3,780
Less than 100%	84	83	84	78	79	78	43	41
100% or More	2	2	2	2	3	3	37	37

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.

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Top 10	7.9	7.8	7.9	7.9	7.7	7.7	7.5	7.4
Top 25	13.7	13.6	13.8	13.7	13.3	13.5	13.2	13.2
Top 50	20.5	20.4	20.6	20.5	20.2	20.2	20.0	20.0
Top 100	29.2	29.1	29.2	29.0	28.6	28.5	28.4	28.5
Top 250	44.3	44.1	44.2	44.1	43.7	43.4	43.4	43.1
Top 500	57.9	57.6	57.7	57.5	57.0	56.9	56.8	56.4

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.

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Top 10	15.0	15.0	14.4	14.7	14.6	14.9	15.4	15.1
Top 25	23.3	23.6	22.9	23.2	23.5	23.1	24.1	23.7
Top 50	30.5	31.2	31.2	31.4	32.0	31.5	32.5	31.9
Top 100	40.0	40.8	41.0	41.0	41.5	41.3	42.2	41.4
Top 250	54.4	54.9	55.2	55.0	55.2	55.2	56.0	55.4
Top 500	66.4	66.7	66.9	66.8	66.8	66.9	67.5	66.7

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).

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Top 10	32.7	32.7	32.8	31.5	31.9	33.3	35.0	34.5
Top 25	43.9	45.3	45.5	44.4	45.1	46.2	47.5	47.5
Top 50	54.5	56.0	56.5	56.1	56.7	57.4	58.7	59.0
Top 100	66.3	67.5	68.6	68.5	68.8	69.2	70.2	70.9
Top 250	80.6	80.6	81.7	81.6	81.5	81.8	82.6	82.6
Top 500	89.5	89.5	90.2	90.0	89.9	90.1	90.5	90.3

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).

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Top 10	31.5	34.5	36.9	34.7	34.1	32.2	32.4	31.8
Top 25	47.2	48.7	50.5	48.5	48.0	46.4	49.1	47.6
Top 50	60.0	60.7	61.3	60.1	60.5	59.1	61.3	60.4
Top 100	71.8	72.2	73.1	73.0	73.2	71.8	73.4	73.0
Top 250	85.5	85.7	86.1	86.1	86.3	85.8	86.4	86.2
Top 500	92.8	92.9	93.2	93.3	93.2	92.7	93.3	93.2

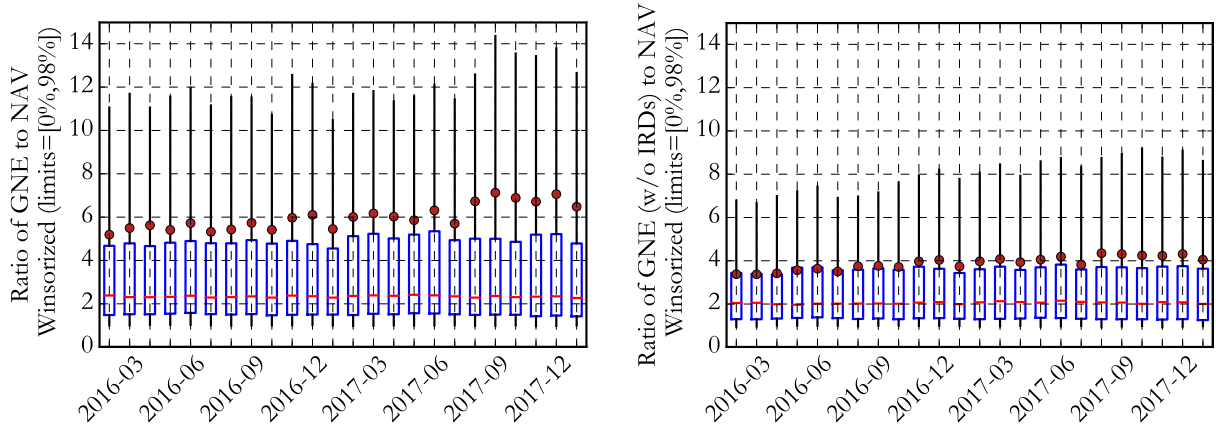
Table 28: Percent of Aggregate Hedge Fund Gross Notional Exposure
Reported by Top Hedge Funds Sorted by Gross Notional Exposure
As reported on Form PF, Questions 26 and 30 (Month 3).

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Top 10	28.6	31.5	32.6	31.6	30.9	30.2	30.2	29.8
Top 25	42.6	44.0	45.3	45.4	44.5	43.2	44.9	44.4
Top 50	54.7	55.0	56.3	56.8	56.6	55.4	56.9	56.5
Top 100	66.5	66.9	67.4	68.6	68.8	67.6	68.6	68.7
Top 250	81.2	81.3	81.5	82.2	82.5	81.9	82.5	82.8
Top 500	91.1	90.8	90.8	91.2	91.3	90.7	91.1	91.3

VIII Information Reported by Large Hedge Fund Advisers

A Economic Leverage

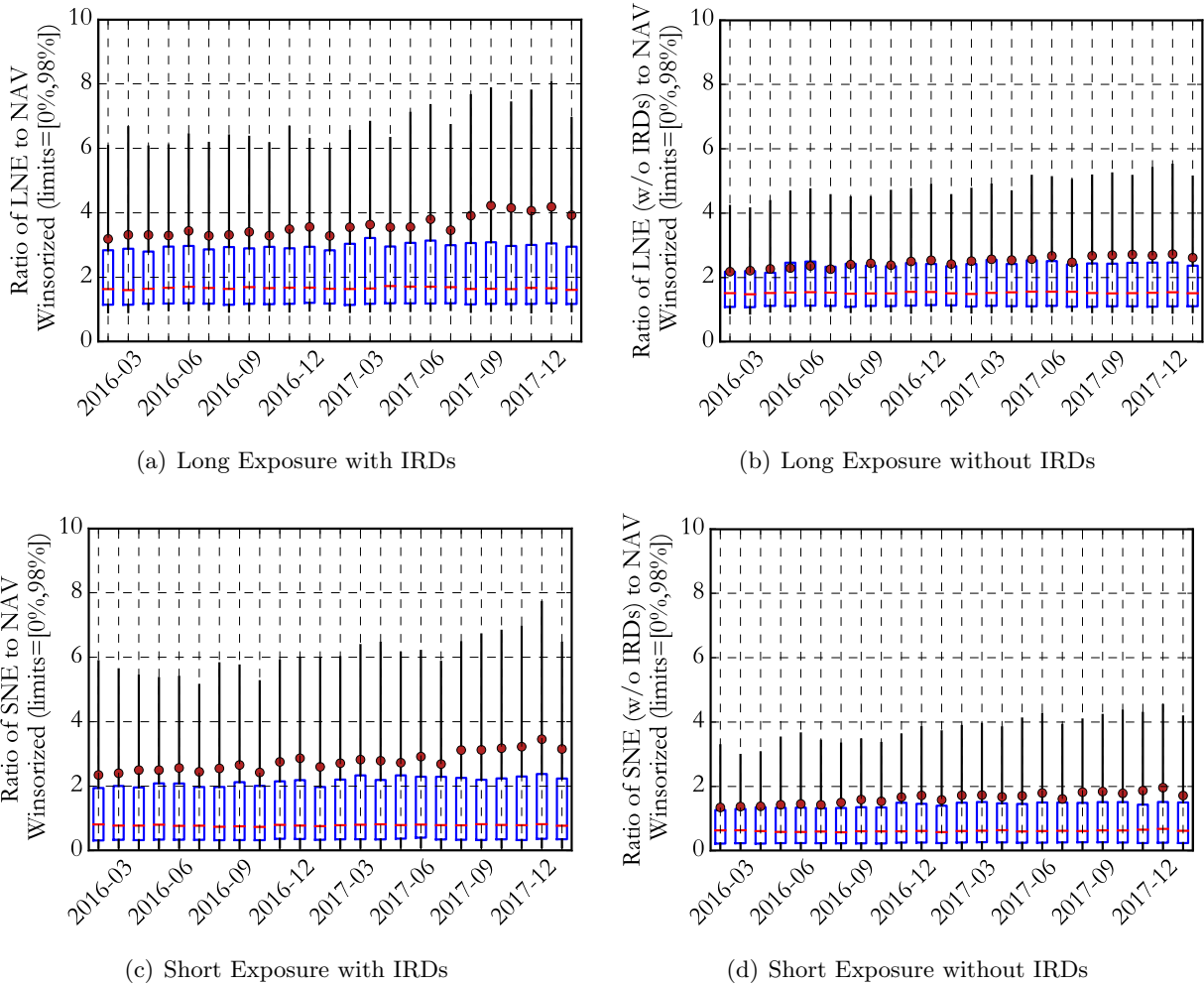
Figure 7: Ratio of Hedge Fund Gross Notional Exposure to Net Asset Value
 See Appendix C and Appendix D for an explanation of boxplots and winsorization.
 As reported on Form PF, Questions 3(a) and 26.



(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.



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)
2016-01	17.6	27.5	35.8	50.0
2016-02	17.4	27.3	38.2	51.4
2016-03	17.4	27.3	35.9	49.1
2016-04	17.9	27.8	37.4	51.2
2016-05	18.0	28.0	38.2	51.7
2016-06	18.0	28.0	37.1	51.0
2016-07	18.0	27.9	38.1	52.4
2016-08	18.0	27.9	38.9	52.8
2016-09	18.0	27.9	38.7	52.8
2016-10	18.1	27.9	39.6	53.2
2016-11	18.1	27.9	40.0	53.4
2016-12	18.1	27.9	36.8	50.8
2017-01	18.6	28.2	38.4	52.2
2017-02	18.6	28.2	39.0	52.8
2017-03	18.6	28.2	37.3	51.1
2017-04	18.5	28.1	36.1	50.1
2017-05	18.5	28.1	36.5	50.5
2017-06	18.5	28.1	36.3	50.5
2017-07	18.6	28.1	36.6	51.1
2017-08	18.6	28.1	37.4	52.5
2017-09	18.6	28.1	36.2	50.8
2017-10	18.4	27.8	36.0	51.3
2017-11	18.4	27.7	36.3	52.0
2017-12	18.5	27.8	36.6	51.9

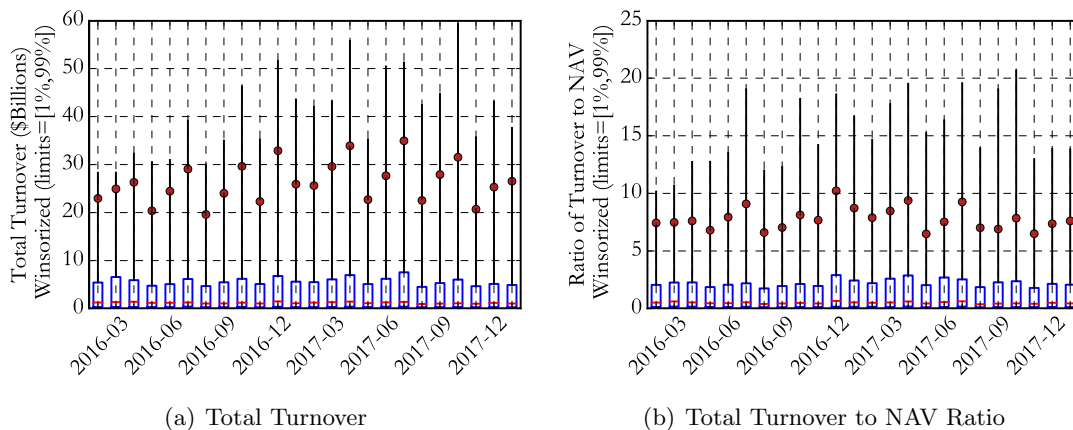
C Portfolio Turnover

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
2016-01	8,762	2,265	2,190	110	15	13,342
2016-02	10,272	2,439	2,239	101	15	15,065
2016-03	11,639	2,104	2,036	119	18	15,916
2016-04	8,476	2,073	1,972	111	22	12,653
2016-05	9,577	2,588	1,969	110	17	14,261
2016-06	12,915	2,793	2,108	99	21	17,936
2016-07	7,649	2,346	1,824	89	14	11,921
2016-08	9,564	2,515	1,874	90	19	14,062
2016-09	11,718	3,114	1,937	104	20	16,894
2016-10	8,570	2,434	1,887	97	24	13,013
2016-11	13,406	3,481	2,235	95	19	19,236
2016-12	11,117	2,265	1,785	70	17	15,255
2017-01	11,430	2,596	1,855	123	20	16,025
2017-02	12,332	2,750	1,869	105	21	17,078
2017-03	14,741	2,735	2,043	125	25	19,669
2017-04	11,035	1,992	1,846	85	16	14,975
2017-05	12,042	3,001	2,189	131	25	17,387
2017-06	17,107	2,963	2,187	115	23	22,395
2017-07	11,207	2,673	2,099	101	17	16,098
2017-08	10,895	2,932	2,385	92	21	16,325
2017-09	13,554	2,997	2,260	109	24	18,944
2017-10	8,837	2,646	2,222	107	29	13,840
2017-11	10,447	2,857	2,400	210	25	15,941
2017-12	13,442	2,459	2,082	70	15	18,068

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
North America	3,879	3,943	4,106	4,077	4,406	4,500	5,089	4,526
Europe EEA	1,216	1,198	1,219	1,223	1,709	1,669	1,708	1,660
Asia	619	601	611	531	596	600	713	673
South America	101	91	91	87	95	102	108	133
Europe Other	61	62	67	64	80	78	77	91
Supranational	30	30	33	46	60	68	67	75
Africa	21	21	19	18	19	23	24	31
Middle East	22	22	20	18	20	23	23	26

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
North America	134.1	136.4	138.4	136.3	141.7	142.9	155.9	135.6
Europe EEA	42.1	41.4	41.1	40.9	55.0	53.0	52.3	49.7
Asia	21.4	20.8	20.6	17.7	19.2	19.0	21.8	20.2
South America	3.5	3.2	3.1	2.9	3.1	3.2	3.3	4.0
Europe Other	2.1	2.1	2.3	2.1	2.6	2.5	2.4	2.7
Supranational	1.0	1.0	1.1	1.5	1.9	2.2	2.0	2.2
Africa	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.9
Middle East	0.8	0.8	0.7	0.6	0.6	0.7	0.7	0.8

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

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

Country	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
United States	3,638	3,659	3,920	3,866	4,182	4,246	4,824	4,312
Japan	290	264	263	219	231	229	233	245
China (Inc. Hong Kong)	139	129	136	129	130	144	152	164
Brazil	42	35	36	37	40	42	45	60
India	28	30	35	30	32	35	37	47
Russia	11	13	15	14	17	13	16	18

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
United States	125.8	126.5	132.1	129.3	134.5	134.9	147.8	129.1
Japan	10.0	9.1	8.9	7.3	7.4	7.3	7.1	7.3
China (Inc. Hong Kong)	4.8	4.4	4.6	4.3	4.2	4.6	4.7	4.9
Brazil	1.4	1.2	1.2	1.2	1.3	1.3	1.4	1.8
India	1.0	1.0	1.2	1.0	1.0	1.1	1.1	1.4
Russia	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5

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.

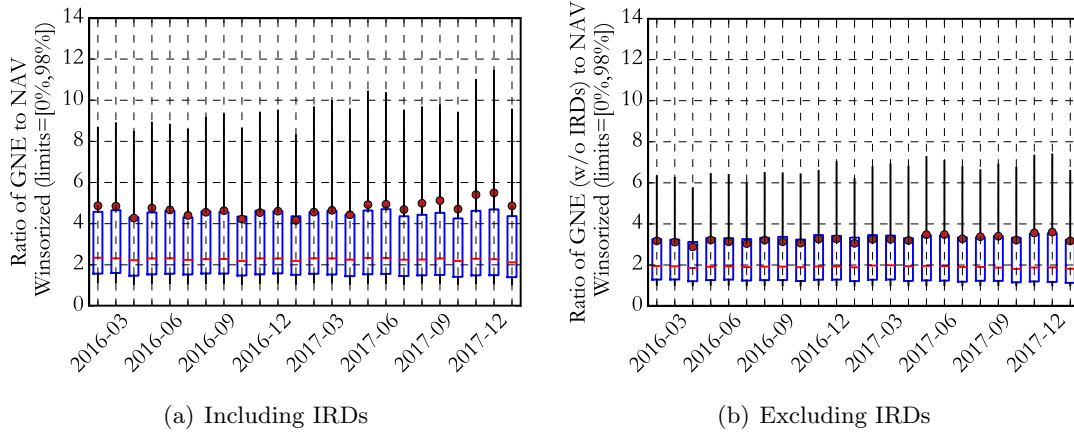
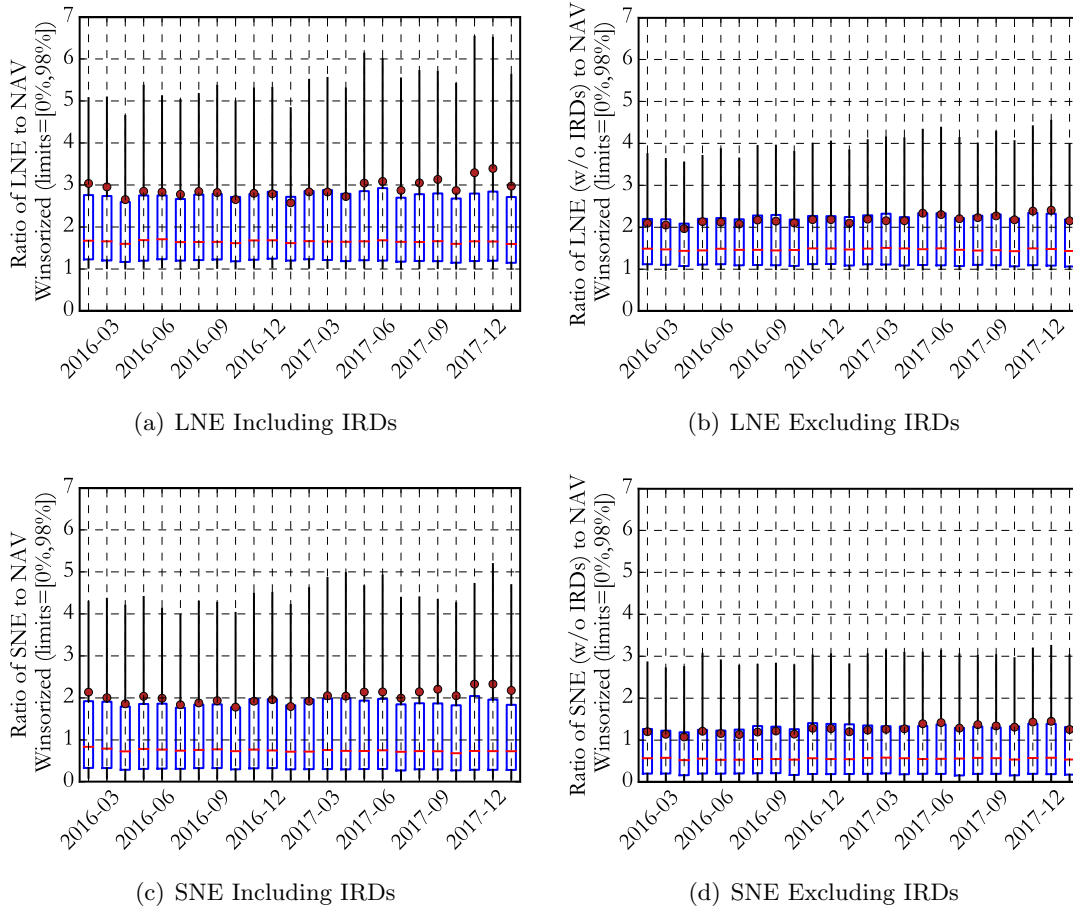


Figure 11: Ratio of Qualifying Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value

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 Strategy⁵

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

Category	Strategy	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
	Subtotal	1,360	1,367	1,431	1,408	1,495	1,560	1,646	1,677
Equity	Long/Short	865	850	878	841	880	906	926	945
	Long Bias	268	274	284	288	310	330	369	371
	Market Neutral	221	237	265	273	***	***	***	***
	Short Bias	5	6	5	6	***	***	***	***
	Subtotal	812	828	837	851	884	940	974	1,006
Other	Subtotal	784	781	763	701	717	784	851	760
Relative Value	F.I. Sov.	547	541	517	469	488	541	601	518
	F.I. Asset Backed	127	128	129	123	115	120	119	119
	F.I. Conv. Arb.	38	35	38	39	44	47	49	50
	F.I. Corp.	45	42	43	41	41	48	50	46
	Volatility Arb.	28	34	36	28	30	29	31	27
	Subtotal	555	595	668	697	702	661	709	671
Macro	Global Macro	486	523	599	614	621	579	626	586
	Currency	***	***	***	***	44	***	***	***
	Commodity	33	35	34	38	35	35	38	40
	Active Trading	***	***	***	***	3	***	***	***
	Subtotal	358	325	335	324	342	353	359	353
Event Driven	Distressed/Restruct.	170	166	172	173	172	167	170	167
	Equity	97	85	91	80	94	100	100	101
	Risk Arb./Merger Arb.	92	75	72	71	77	86	89	86
	Subtotal	356	363	267	274	283	285	289	287
Credit	Long/Short	316	328	227	231	240	240	240	235
	Asset Based Lending	40	35	40	43	43	45	49	51
	Subtotal	98	115	123	124	140	147	145	152
Managed Futures/CTA	Quantitative	***	109	***	***	131	144	143	149
	Fundamental	***	6	***	***	9	3	2	3
Investment in other funds	Subtotal	40	42	42	43	42	48	49	49
Total	Total	4,363	4,417	4,467	4,421	4,606	4,777	5,023	4,954

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

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

Category	Strategy	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
	Subtotal	51.2	51.2	52.2	51.3	52.9	53.8	55.0	54.8
Equity	Long/Short	32.6	31.8	32.1	30.7	31.1	31.2	30.9	30.9
	Long Bias	10.1	10.3	10.3	10.5	11.0	11.4	12.3	12.1
	Market Neutral	8.3	8.9	9.7	10.0	***	***	***	***
	Short Bias	0.2	0.2	0.2	0.2	***	***	***	***
Other	Subtotal	30.6	31.0	30.6	31.0	31.3	32.4	32.5	32.9
	Subtotal	29.5	29.3	27.9	25.5	25.3	27.0	28.4	24.8
Relative Value	F.I. Sov.	20.6	20.3	18.9	17.1	17.2	18.6	20.1	16.9
	F.I. Asset Backed	4.8	4.8	4.7	4.5	4.0	4.1	4.0	3.9
	F.I. Conv. Arb.	1.4	1.3	1.4	1.4	1.6	1.6	1.7	1.6
	F.I. Corp.	1.7	1.6	1.6	1.5	1.4	1.6	1.7	1.5
	Volatility Arb.	1.1	1.3	1.3	1.0	1.1	1.0	1.1	0.9
	Subtotal	20.9	22.3	24.4	25.4	24.8	22.8	23.7	21.9
Macro	Global Macro	18.3	19.6	21.9	22.4	21.9	20.0	20.9	19.2
	Currency	***	***	***	***	1.6	***	***	***
	Commodity	1.2	1.3	1.3	1.4	1.2	1.2	1.3	1.3
	Active Trading	***	***	***	***	0.1	***	***	***
	Subtotal	13.5	12.2	12.2	11.8	12.1	12.2	12.0	11.5
Event Driven	Distressed/Restruct.	6.4	6.2	6.3	6.3	6.1	5.8	5.7	5.4
	Equity	3.6	3.2	3.3	2.9	3.3	3.4	3.3	3.3
	Risk Arb./Merger Arb.	3.4	2.8	2.6	2.6	2.7	3.0	3.0	2.8
	Subtotal	13.4	13.6	9.7	10.0	10.0	9.8	9.7	9.4
Credit	Long/Short	11.9	12.3	8.3	8.4	8.5	8.3	8.0	7.7
	Asset Based Lending	1.5	1.3	1.5	1.6	1.5	1.6	1.6	1.7
	Subtotal	3.7	4.3	4.5	4.5	4.9	5.1	4.9	5.0
Managed Futures/CTA	Quantitative	***	4.1	***	***	4.6	5.0	4.8	4.9
	Fundamental	***	0.2	***	***	0.3	0.1	0.1	0.1
Investment in other funds	Subtotal	1.5	1.6	1.5	1.6	1.5	1.6	1.6	1.6
Total	Total	164.4	165.4	163.0	161.1	162.8	164.7	167.7	161.9

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Relative Value	4.5	4.7	4.2	4.1	4.6	5.1	5.1	4.7
Macro	2.8	3.1	3.1	3.2	3.6	3.5	3.8	3.6
Multi-Strategy	1.9	1.8	2.4	2.4	2.3	2.2	2.3	2.2
Other	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7
Equity	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Credit	1.5	1.5	1.6	1.5	1.6	1.6	1.5	1.5
Event Driven	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3
Managed Futures/CTA	1.2	1.2	1.2	1.2	1.2	1.9	1.2	1.2
Investment in other funds	1.1	1.1	1.1	1.1	1.1	1.0	***	1.0

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Macro	14.7	14.6	11.2	13.3	16.4	17.5	19.9	21.9
Relative Value	16.1	16.9	16.9	16.4	19.1	17.7	18.7	18.4
Managed Futures/CTA	9.8	7.3	8.2	7.3	8.0	9.5	8.4	10.0
Multi-Strategy	7.0	7.1	11.0	10.1	8.0	7.9	9.0	8.6
Other	4.1	4.5	4.6	4.7	5.0	5.3	5.4	5.4
Credit	4.1	4.0	2.9	2.7	3.3	3.0	3.1	3.2
Equity	3.4	3.2	3.1	3.1	3.2	3.2	3.2	3.2
Event Driven	2.1	2.1	2.0	2.0	2.2	2.0	2.0	2.0
Investment in other funds	1.9	1.4	1.5	1.4	1.7	1.6	***	1.7

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Managed Futures/CTA	57.7	68.3	68.8	67.7	65.5	61.2	59.0	58.0
Macro	44.0	42.8	40.9	40.0	36.6	39.0	38.6	38.5
Multi-Strategy	25.5	26.4	26.9	28.1	25.5	22.4	24.9	24.8
Other	24.5	26.5	26.8	25.6	21.5	20.6	21.3	21.0
Relative Value	27.8	27.2	21.6	22.5	22.7	20.4	21.5	19.8
Equity	13.0	13.9	11.2	12.3	10.6	11.5	9.7	10.2
Credit	12.0	14.1	10.9	11.7	9.8	10.9	9.9	9.8
Event Driven	10.0	12.0	11.6	11.5	8.0	11.1	10.0	9.7
Investment in other funds	10.3	8.4	6.2	5.5	3.4	6.2	***	9.4

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.

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Cash/Cash Equivalents	723	734	694	675	681	684	691	686
Securities - Equities	2,049	2,000	2,139	2,116	2,302	2,396	2,522	2,602
Securities - G10 (non-US)	744	723	797	972	1,033	1,056	1,159	1,202
Securities - Treasuries	1,002	1,059	1,116	1,140	1,145	1,108	1,157	1,159
Securities - MBS	237	250	258	227	246	241	254	266
Securities - Other Bonds	209	234	213	196	209	240	270	261
Securities - Corp. Bonds	250	246	252	252	268	269	259	254
Securities - Conv. Bonds	67	63	71	69	82	89	82	82
Securities - ABS (non-MBS)	79	73	76	76	75	77	75	78
Derivatives - IR	3,566	3,645	3,759	3,546	4,170	3,846	4,148	4,483
Derivatives - FX	2,640	2,581	2,478	2,442	2,649	2,726	3,070	3,360
Derivatives - Equity	953	1,005	1,081	1,115	1,195	1,228	1,297	1,369
Derivatives - Credit	732	608	630	598	640	687	805	720
Derivatives - Other	133	120	138	137	144	286	280	460
Derivatives - Commodity	246	290	307	325	330	332	369	379
Repurchase Agreements	1,045	1,060	1,113	1,156	1,314	1,398	1,373	1,304
Other	642	648	669	679	701	731	780	755

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

	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Cash/Cash Equivalents	87.0	88.1	87.3	86.9	85.0	86.9	88.1	86.0
Securities - Equities	69.3	69.2	69.8	70.1	70.2	70.0	70.3	71.8
Securities - G10 (non-US)	56.6	55.5	53.4	49.6	49.2	50.0	50.0	50.2
Securities - Treasuries	69.6	66.8	66.6	68.1	65.3	63.2	62.3	62.9
Securities - MBS	78.7	76.6	74.7	76.0	74.1	73.6	71.9	71.2
Securities - Other Bonds	74.8	71.6	78.0	75.4	78.1	78.3	71.5	74.4
Securities - Corp. Bonds	80.3	80.9	82.9	81.7	80.9	79.9	81.2	81.5
Securities - Conv. Bonds	93.3	95.2	95.5	95.2	95.2	95.6	94.1	93.4
Securities - ABS (non-MBS)	99.1	99.4	99.0	98.7	98.0	98.0	96.7	96.8
Derivatives - IR	49.6	50.8	52.8	51.0	48.3	47.2	47.7	49.4
Derivatives - FX	50.4	52.5	51.7	48.5	50.8	50.1	49.7	47.1
Derivatives - Equity	53.4	55.0	55.3	55.1	56.2	55.5	56.8	57.6
Derivatives - Credit	46.0	44.4	47.3	48.2	47.1	47.6	47.2	47.5
Derivatives - Other	57.0	58.2	60.2	58.6	62.6	55.2	53.2	53.1
Derivatives - Commodity	59.3	62.2	63.4	63.4	64.2	58.8	64.0	64.4
Repurchase Agreements	43.3	43.4	45.3	48.7	50.0	49.4	51.6	51.9
Other	90.5	90.5	89.6	89.0	87.8	90.3	86.7	89.2

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
At most 1 day	7.8	8.0	8.3	8.2	8.4	8.4	8.5	8.8
At most 7 days	14.0	14.1	14.4	14.1	14.5	14.6	14.8	15.2
At most 30 days	27.5	27.3	26.5	26.6	28.6	27.2	27.7	28.2
At most 90 days	47.1	46.8	47.3	49.7	47.7	46.8	48.4	51.1
At most 180 days	60.4	60.1	61.9	58.9	59.8	59.5	61.8	60.1
At most 365 days	75.3	75.6	74.7	74.2	74.2	74.0	73.7	74.0

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
At most 1 day	41.6	41.6	40.1	40.1	38.3	38.6	38.0	38.7
At most 7 days	65.7	65.1	63.9	63.4	61.6	62.4	61.9	62.7
At most 30 days	78.5	78.0	77.3	76.7	76.1	76.5	76.1	76.3
At most 90 days	84.6	84.1	83.8	83.1	82.2	82.6	82.4	82.6
At most 180 days	88.0	87.8	87.3	86.4	85.8	86.2	85.9	86.2
At most 365 days	91.4	91.2	90.7	89.8	89.6	89.8	89.3	89.6

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 2017.

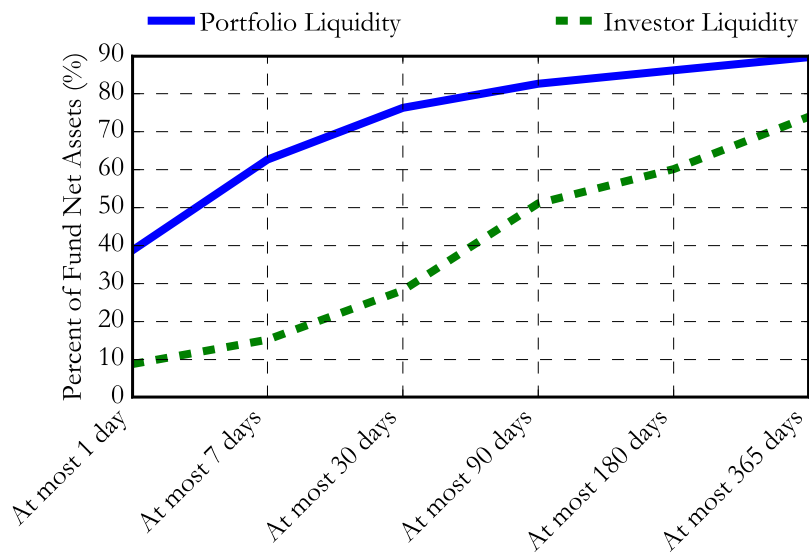
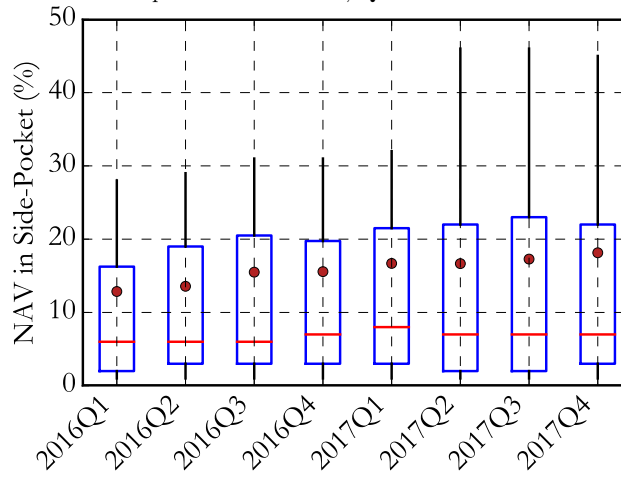


Table 44: Restrictions on Qualifying Hedge Fund Assets (\$ Billions)
As reported on Form PF, Questions 48 and 49.

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
May Suspend	2,122	2,141	2,180	2,154	2,222	2,275	2,338	2,376
May Have Gates	1,289	1,307	1,330	1,290	1,338	1,362	1,396	1,409
Side-Pocketed	38	37	38	38	39	38	39	39
Gated	29	27	30	27	27	28	30	38
Suspended	14	16	16	19	27	27	22	17

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
	Subtotal	1,942	1,939	2,079	2,057	2,239	2,391	2,437	2,419
Secured	Prime Broker	977	980	1,084	1,087	1,186	1,265	1,371	1,379
	Reverse Repo	696	692	729	675	739	795	721	685
	Other Secured	269	267	267	295	313	331	345	356
Unsecured	Subtotal	10	9	11	12	14	11	12	14
Total	Total	1,952	1,948	2,090	2,069	2,253	2,402	2,448	2,433

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

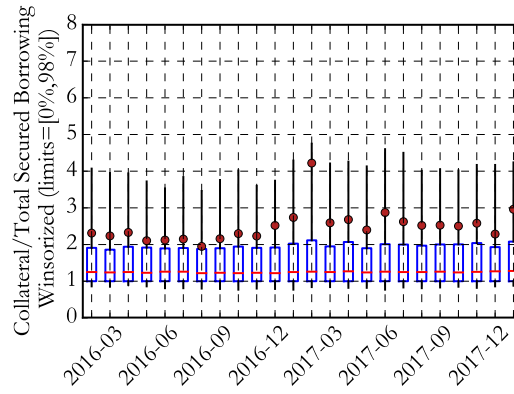
Creditor Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
US Financial	62.8	62.3	64.7	63.2	61.2	61.1	61.4	61.7
Non-US Financial	36.7	37.3	34.8	36.3	38.4	38.5	38.3	37.9
US Non-Financial	0.4	0.3	0.3	0.3	***	0.3	***	***
Non-US Non-Financial	0.1	0.1	0.2	0.1	***	0.1	***	***

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

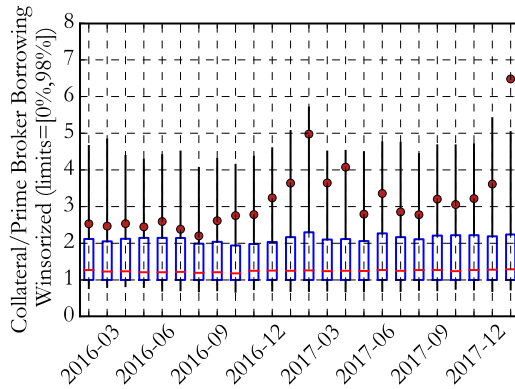
Borrowing Type	Collateral Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
	Subtotal	1,253	1,229	1,339	1,334	1,467	1,545	1,674	1,686
Prime Broker	Other	801	776	861	857	949	1,022	1,151	1,183
	Cash	452	454	478	477	518	522	523	503
	Subtotal	718	711	774	691	783	786	734	718
Reverse Repo	Other	547	518	574	451	517	506	478	455
	Cash	171	194	200	241	266	281	256	263
	Subtotal	320	308	312	349	384	407	423	426
Other Secured	Other	240	230	236	210	254	251	265	262
	Cash	79	78	77	139	130	156	158	165
Total	Total	2,291	2,249	2,426	2,375	2,634	2,738	2,831	2,830

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

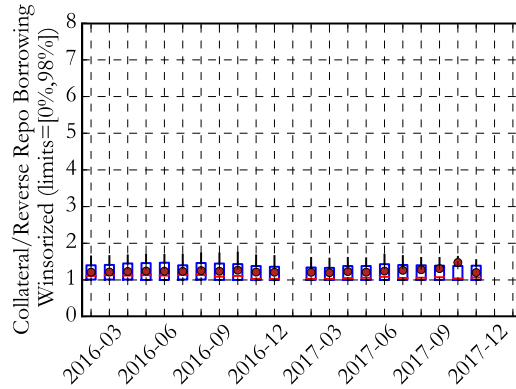
See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Question 43.



(a) Total Secured Borrowing



(b) Prime Broker Borrowing

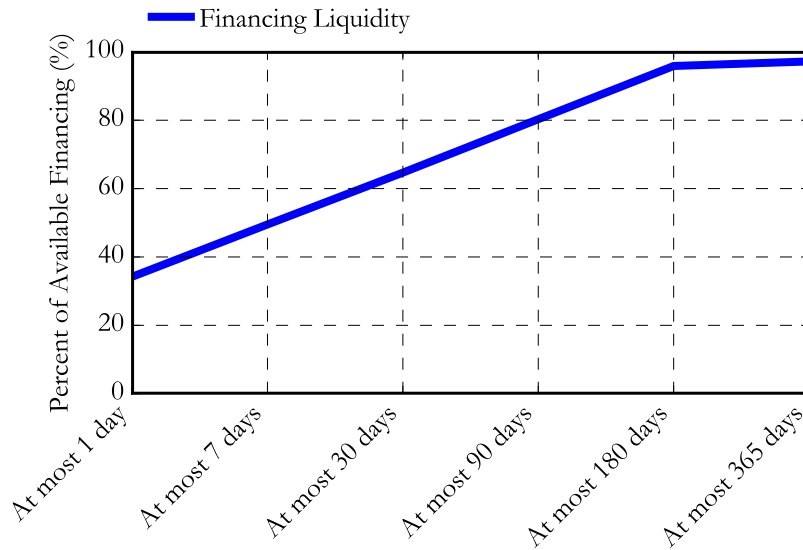


(c) Reverse Repo Borrowing

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

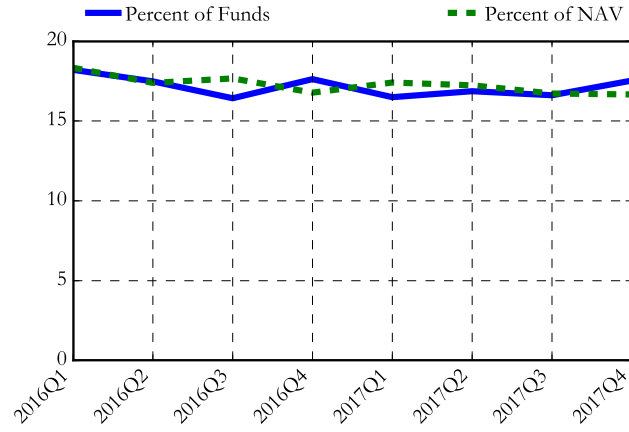
Financing Available	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
At most 1 day	43.3	43.5	37.1	35.8	36.3	34.6	35.3	34.2
At most 7 days	52.7	52.8	53.6	48.1	52.9	53.3	51.7	49.5
At most 30 days	66.5	65.8	65.2	64.0	65.0	65.3	64.0	64.7
At most 90 days	81.8	81.7	80.8	81.0	80.2	80.8	79.2	80.3
At most 180 days	96.1	95.9	96.0	95.9	95.9	96.1	95.9	95.9
At most 365 days	97.6	97.4	97.5	97.3	97.3	97.4	97.3	97.2

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 2017.



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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
VaR (Any Method)	622	626	623	631	640	652	652	666
Historical Simulation	240	237	239	234	238	249	271	278
Parametric	192	190	193	196	190	190	186	193
Monte Carlo Simulation	196	188	186	196	202	207	190	188
Other	38	41	46	42	44	45	43	48
VaR Not Used	977	982	997	1,021	1,034	1,068	1,070	1,137

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

VaR Method	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
VaR (Any Method)	3,079	3,205	3,269	3,225	3,428	3,516	3,624	3,587
Historical Simulation	1,602	1,688	1,762	1,700	1,829	1,798	1,900	1,882
Parametric	729	756	746	731	737	760	767	806
Monte Carlo Simulation	648	628	642	645	862	947	940	846
Other	317	321	344	373	425	457	489	524
VaR Not Used	1,913	1,898	1,977	1,994	2,066	2,201	2,268	2,316

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

VaR Method	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
VaR (Any Method)	1,270	1,293	1,310	1,303	1,345	1,377	1,406	1,411
Historical Simulation	463	483	501	479	491	504	561	562
Parametric	457	449	462	459	465	474	477	490
Monte Carlo Simulation	346	336	342	352	403	424	394	386
Other	88	90	94	94	95	94	94	93
VaR Not Used	1,385	1,378	1,430	1,441	1,484	1,524	1,589	1,649

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Stress and VaR	538	545	548	555	548	558	558	592
Stress, No VaR	444	454	447	453	451	457	467	498
No Stress, VaR	84	81	75	76	92	94	94	74
Neither	533	528	550	568	583	611	603	639

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Stress and VaR	2,861	3,001	3,090	3,045	3,189	3,244	3,388	3,426
Stress, No VaR	1,011	1,008	1,030	1,001	1,076	1,114	1,178	1,190
No Stress, VaR	218	204	179	179	240	271	236	160
Neither	902	890	948	993	990	1,086	1,089	1,126

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Stress and VaR	1,144	1,162	1,193	1,185	1,199	1,230	1,248	1,302
Stress, No VaR	669	666	666	661	683	673	712	736
No Stress, VaR	125	131	117	117	146	147	158	108
Neither	717	712	763	780	801	850	877	914

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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
At most 1 day	81.2	77.4	80.1	80.9	78.0	79.6	79.1	80.5
At most 7 days	96.0	96.0	98.3	97.3	95.5	95.2	95.5	95.5
At most 30 days	99.7	99.7	99.9	99.6	99.7	99.5	99.5	99.5
At most 90 days	100.0	100.0	100.0	99.8	100.0	99.8	99.7	99.7
At most 180 days	100.0	100.0	100.0	99.9	100.0	99.9	99.8	99.8
At most 365 days	100.0	100.0	100.0	100.0	100.0	99.9	99.9	99.9

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
May Suspend	232	241	232	253	246	255	261	273
May Have Gates	200	207	199	220	215	224	227	237
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.

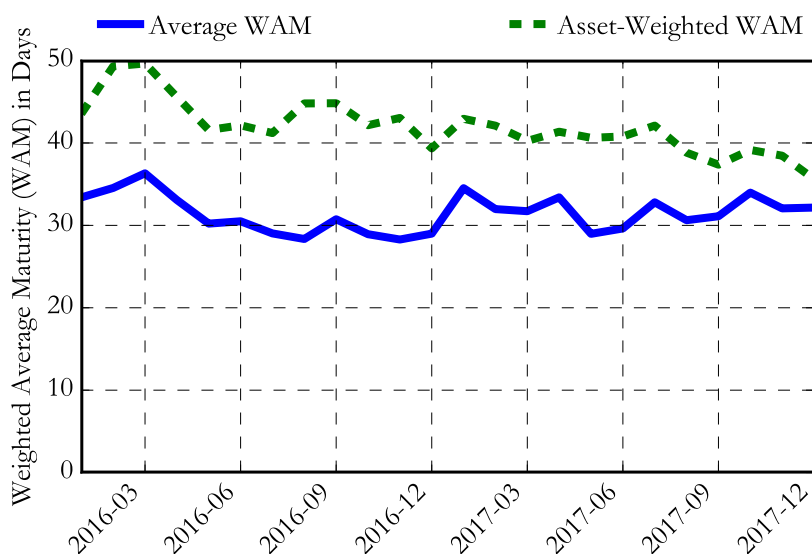


Figure 18: Weighted-Average Life Reported by Section 3 Liquidity Funds
As reported on Form PF, Question 55.

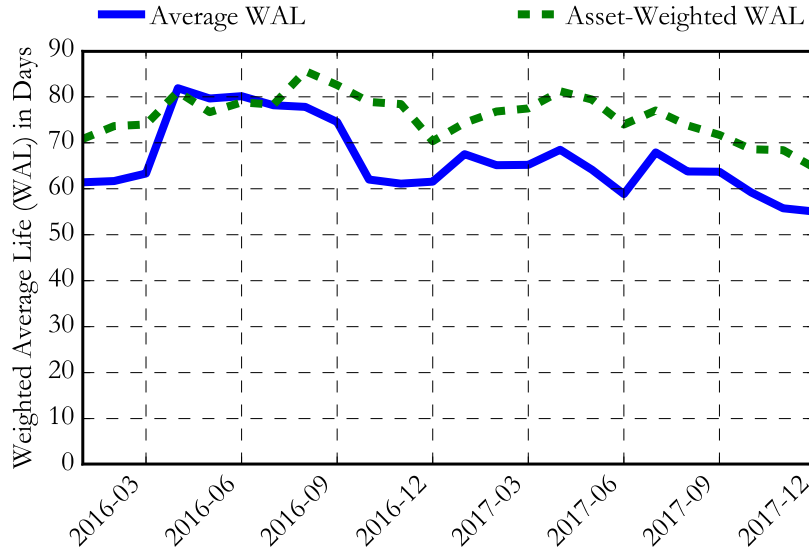


Figure 19: Seven-Day Gross Yield Reported by Section 3 Liquidity Funds
As reported on Form PF, Question 55.

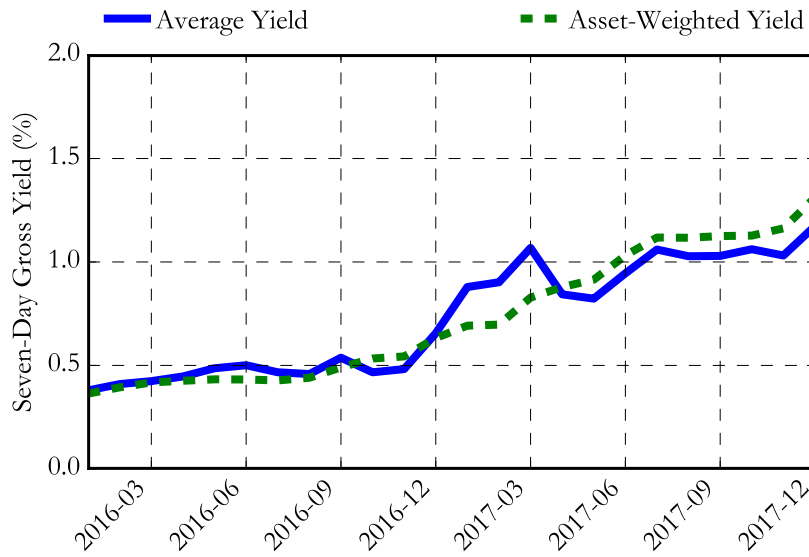


Figure 20: Ratio of Daily Liquid Assets to Net Asset Value of Section 3 Liquidity Funds
As reported on Form PF, Question 55.

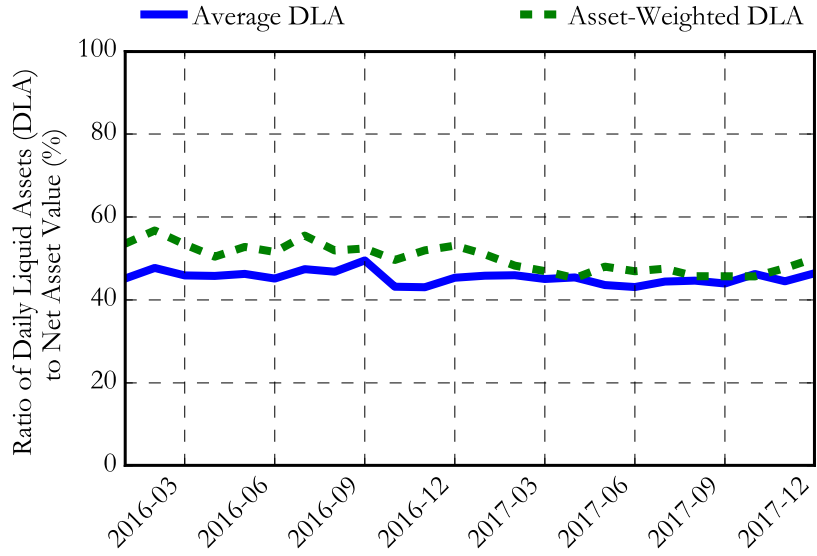
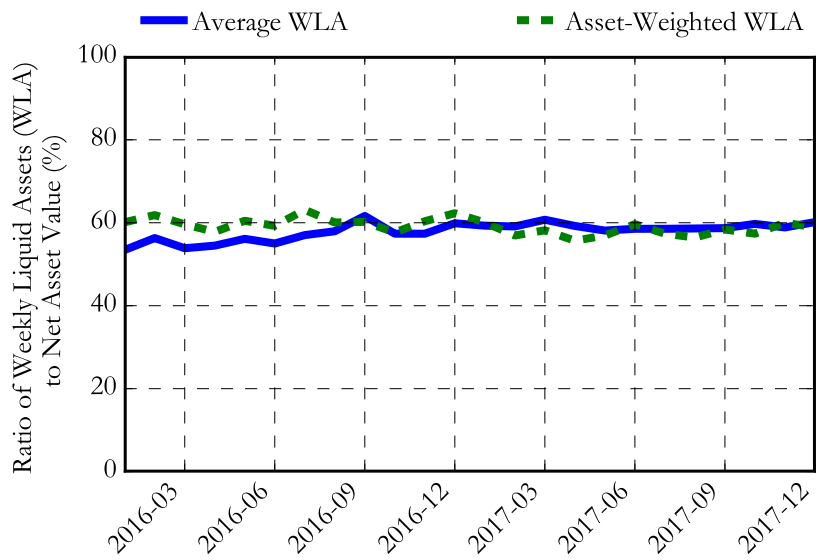


Figure 21: Ratio of Weekly Liquid Assets (WLA) to Net Asset Value of Section 3 Liquidity Funds
As reported on Form PF, Question 55.



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	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Credit Quality	61.1	64.9	61.1	59.1	57.8	59.6	56.5	56.2
Diversification	58.3	62.2	58.3	56.8	55.6	55.3	52.2	52.1
Liquidity	52.8	54.1	55.6	56.8	55.6	55.3	52.2	52.1
Maturity	58.3	62.2	58.3	56.8	55.6	55.3	52.2	52.1
Fully	47.2	48.6	50.0	50.0	48.9	48.9	45.7	45.8
None	36.1	32.4	36.1	38.6	40.0	38.3	41.3	41.7

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

As reported on Form PF, Questions 9 and 54.

Compliance Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Credit Quality	16.2	17.9	13.5	14.4	15.5	15.9	15.9	14.7
Diversification	16.2	17.9	13.5	13.8	14.9	14.9	14.9	13.7
Liquidity	10.8	11.3	12.2	13.6	14.8	14.7	15.0	13.7
Maturity	16.0	17.7	13.5	13.6	14.8	14.7	15.0	13.7
Fully	10.0	10.4	11.0	11.8	12.8	12.8	12.8	11.8
None	83.6	82.0	86.1	85.5	84.3	84.0	83.9	85.2

D Methods of Calculating NAV

Table 59: NAV Calculation Method (Percent of Funds)

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Stable	***	***	***	81.8	80.0	78.7	78.3	79.2
Floating	***	***	***	18.2	20.0	21.3	21.7	20.8

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

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

Type	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Stable	***	***	***	69.9	71.4	68.3	70.2	69.1
Floating	***	***	***	30.1	28.6	31.7	29.8	30.9

E Aggregate Portfolio Holdings

Table 61: Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 1 of 2
As reported on Form PF, Question 56.

Product Type	2016Q1
U.S. Treasuries	79.7
Other	39.2
Deposits	32.6
Repo - Govt. Collateral	30.9
Commercial Paper	22.8
Asset-Backed Securities	12.8
Repo - Other Collateral	***
U.S. Govt. Debt	5.5
Municipal Debt	***

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

Product Type	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03
Deposits	51.1	57.5	55.3	58.6	55.5	55.3	62.8	67.5	73.3	77.6	76.5	75.0
U.S. Treasuries	66.8	67.1	69.9	70.3	67.2	64.8	66.2	71.5	73.4	65.8	69.1	64.2
Other	24.0	28.0	30.4	29.3	31.6	33.7	31.1	30.7	42.4	63.8	61.9	53.7
Commercial Paper	28.0	26.6	25.5	27.1	26.0	26.9	36.3	35.6	38.8	40.4	43.1	45.5
Repo - Other Collateral	***	***	***	***	***	6.4	11.4	14.9	15.5	33.1	30.4	30.3
Repo - Govt. Collateral	42.8	40.8	35.6	36.6	41.7	35.9	52.4	47.3	37.2	31.2	26.3	24.2
Asset-Backed Securities	12.8	14.0	16.8	19.0	20.2	22.8	24.5	24.3	24.0	25.9	23.8	23.6
U.S. Govt. Debt	4.4	4.2	5.2	5.9	5.0	5.9	5.3	4.2	4.2	4.1	3.9	4.9
Municipal Debt	***	***	***	***	***	1.1	6.1	4.7	3.0	2.5	2.1	0.8

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

Product Type	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12
Deposits	82.0	81.4	77.3	83.5	83.2	79.7	83.0	83.6	73.2
U.S. Treasuries	66.1	62.8	57.5	61.5	56.6	55.3	61.1	66.4	69.0
Other	55.2	66.4	67.2	62.8	60.6	62.1	57.1	55.7	64.7
Commercial Paper	40.5	44.8	41.3	45.9	45.1	45.2	48.2	47.7	41.8
Repo - Other Collateral	41.1	46.4	35.4	38.6	46.6	48.8	40.0	36.8	32.0
Repo - Govt. Collateral	26.4	34.9	34.8	32.7	30.9	32.5	38.6	36.7	29.6
Asset-Backed Securities	26.7	25.2	21.3	22.0	21.8	23.9	22.6	21.7	20.6
U.S. Govt. Debt	5.0	5.3	6.0	4.5	4.0	5.8	5.5	5.8	5.9
Municipal Debt	1.5	1.6	1.1	1.3	1.1	1.1	1.1	1.1	0.9

XI Section 4 Private Equity Fund Specific Information

A CPC Industry Concentration

Table 64: Gross Assets in CPC Industries (Percent of Total)
As reported on Form PF, Questions 8 and 77.

Type	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4
Oil & Gas Extraction	7.9	7.8	5.8	6.7	6.2
Software Publishers	2.8	3.8	4.9	6.1	6.0
Electric Power Generation, Transmission & Distribution	3.8	3.8	3.7	4.1	4.2
Data Processing, Hosting, & Related Services	2.9	2.3	1.8	2.0	2.3
Telecommunications Data Processing Services	2.6	2.5	2.7	2.3	2.2
Other Information Services	2.0	2.1	1.9	1.8	2.0
Pipeline Transportation	2.4	2.6	2.4	2.2	1.9
Other Financial Vehicles	0.4	0.4	0.6	1.8	1.6
Management, Scientific, & Technical Consulting Services	1.0	1.2	1.1	1.3	1.6
Pharmaceutical & Medicine Mfg	1.0	1.3	1.5	1.4	1.5
Custom Computer Programming Services	0.9	1.0	1.5	1.5	1.5
Educational Services	1.4	1.3	1.3	1.2	1.4
Other Financial Investment Activities	2.0	1.8	1.8	1.7	1.4
Investigation & Security Services	0.5	0.5	0.7	1.2	1.4
Activities Related to Credit Intermediation	1.2	1.2	1.4	1.0	1.2
Other Insurance Related Activities	0.9	1.0	1.0	2.0	1.2
Utility System Construction	0.4	0.5	0.8	0.8	1.2
Insurance Agencies & Brokerages	0.9	1.0	1.0	1.2	1.1
Natural Gas Distribution	0.5	0.4	0.6	0.7	1.0
Support Activities for Mining	1.3	1.6	1.2	1.0	1.0
Fruit & Vegetable Preserving & Specialty Food Mfg	0.2	0.1	0.0	0.1	1.0

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.

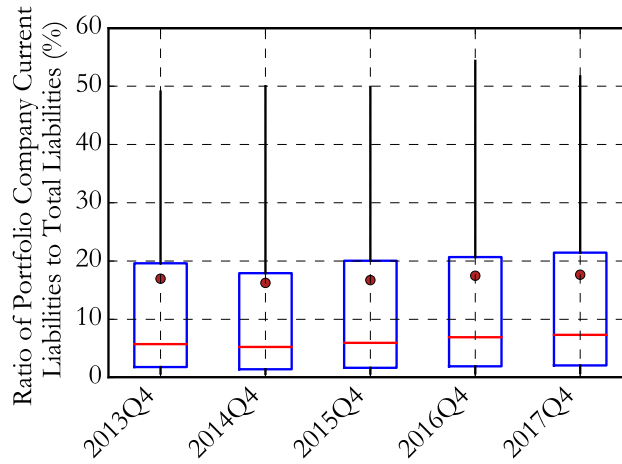
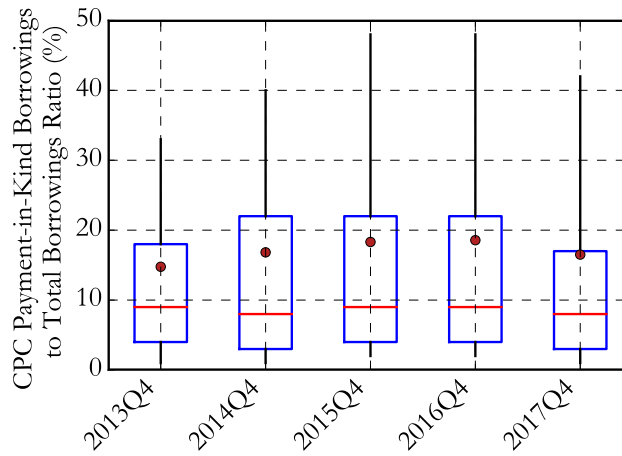


Figure 23: Distribution of CPC Payment-in-Kind or Zero Coupon Borrowings to Total Borrowings Ratio

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



C CPC Investments by Region and Country

Table 65: 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
North America	5,279	4,506	4,132	3,942	4,274
Europe EEA	1,423	1,259	941	848	1,543
Asia	571	462	447	406	379
South America	75	85	58	111	258
Europe Other	25	9	21	22	98
Supranational	65	67	23	37	49
Middle East	8	12	9	15	23
Africa	20	12	12	18	14

Table 66: 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
North America	70.7	70.2	73.2	73.0	64.4
Europe EEA	19.1	19.6	16.7	15.7	23.2
Asia	7.6	7.2	7.9	7.5	5.7
South America	1.0	1.3	1.0	2.0	3.9
Europe Other	0.3	0.1	0.4	0.4	1.5
Supranational	0.9	1.0	0.4	0.7	0.7
Middle East	0.1	0.2	0.2	0.3	0.3
Africa	0.3	0.2	0.2	0.3	0.2

Table 67: 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
United States	5,039	4,305	3,943	3,776	3,794
China and Hong Kong	171	186	173	114	147
Brazil	45	58	41	88	131
India	63	83	89	92	73
Japan	233	98	85	79	52
Russia	3	2	5	4	4

Table 68: 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
United States	67.5	67.1	69.9	69.9	57.1
China and Hong Kong	2.3	2.9	3.1	2.1	2.2
Brazil	0.6	0.9	0.7	1.6	2.0
India	0.8	1.3	1.6	1.7	1.1
Japan	3.1	1.5	1.5	1.5	0.8
Russia	0.0	0.0	0.1	0.1	0.1

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.⁶ Not all Form PF filers report on a quarterly basis. Smaller private fund advisers and all private equity fund advisers file Form PF on an annual basis, while larger hedge fund advisers and larger liquidity fund advisers file the form quarterly.⁷ As a result of the difference in reporting frequency, information in this report related to funds that are reported annually may be dated by several months.⁸

2 Large Hedge Fund Advisers

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

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

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

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

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

3 Large Liquidity Fund Advisers

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

4 Large Private Equity Fund Advisers

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

5 Other Private Fund Advisers

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

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

B Handling Annual and Quarterly Data

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

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

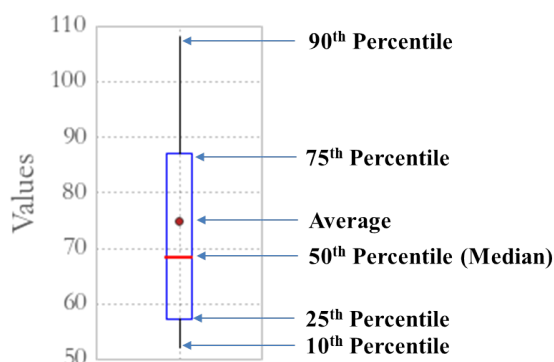
- (Q1): February 15 to May 14
- (Q2): May 15 to August 14
- (Q3): August 15 to November 14
- (Q4): November 15 to February 14

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

C How to Read a Boxplot

In these figures, the boxes extend from the twenty-fifth percentile to the seventy-fifth percentile, while the levels (the dashed vertical lines) extend from the tenth to the twenty-fifth percentile as well as the seventy-fifth to the ninetieth percentile. Also shown as a red line within the box is the median (the fiftieth percentile) and the horizontal dashed line is mean of the distribution. See Figure 24 for an explanation of each feature.

Figure 24: How to Read a Boxplot



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

D Mitigating the Effects of Outliers

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

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

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

E Definitions

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

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

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