

# 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.

October 16, 2017

## Executive Summary

Beginning in 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”). During the five years since the Form PF data was first received, the Commission staff has implemented programs designed to collect, secure, and analyze this data for use in support of the Commission’s investor protection and market monitoring missions. Today, the staff uses Form PF data in important mission-focused activities, including in conducting examinations, in identifying and monitoring private fund industry trends, in informing policymaking, and in pursuing potential wrongdoing. This bolsters the Commission’s commitment to investor protection and market integrity through enhanced data management and analytics capabilities that better support market monitoring, risk identification, uncovering misconduct, and informing policymaking. The following activities are highlighted in this fifth Annual Report Relating to the Use of Form PF Data.

- *Managing Form PF Data and Improving Its Quality.* Form PF data is maintained on an internal database for which access has been granted to a limited number of identified Commission employees, subject to systems and controls designed to protect the confidentiality of proprietary information of private fund advisers. Staff works to improve data quality by responding to filer inquiries and conducting outreach to filers.
- *Industry Monitoring Using Analytical Toolsets.* Commission staff analyzes Form PF data to identify trends and possible emerging risks in the private fund industry and develop analyses from Form PF data that deepen staff understanding of private funds and private fund advisers. Consistent with formal policies and procedures governing the access, use, and security of Form PF data, staff has developed a variety of analytical tools that combine Form PF data with other Commission databases to support the Commission’s monitoring and analysis activities.
- *Informing the Public.* Staff recently augmented its quarterly public report, *Private Funds Statistics*, with new analyses of Form PF data, including new aggregated information about private liquidity funds and the use of leverage by hedge funds. The most recent report is included in the Appendix. Staff also uses Form PF data to conduct research that is intended to deepen public understanding of private funds and their market activities and risks.
- *Targeting and Expediting Exams and Enforcement.* Staff reviews and analyzes Form PF data to identify potential compliance risk areas and prioritize the use of exam and enforcement resources. “Flag reports,” which can be rapidly and automatically generated using internally developed code and metrics, expedite staff’s preparation and conduct of exams by summarizing key information from Form PF and identifying potential reporting errors, compliance issues, and other issues of interest.
- *Supporting Rulemaking.* Commission staff’s experience implementing Form PF requirements and managing the data continues to inform proposed and final rulemakings, including recent amendments to Form ADV filing requirements and the development of new Form N-PORT for registered investment companies.
- *Coordination with Other Regulators.* The Commission adopted Form PF in part to obtain, on behalf of FSOC, data that FSOC can use to monitor 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”), 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 involving private fund advisers, subject to protections designed to maintain data security.

## I. Introduction

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.<sup>1</sup> Section 204(b) of the Advisers Act requires the Commission to report to Congress annually regarding how the Commission has used the Form PF data to monitor markets for the protection of investors and the integrity of the markets.<sup>2</sup> This report is being submitted to Congress to satisfy that requirement. 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.

## II. Background

The Commission adopted Form PF in part to obtain, on behalf of FSOC, data that FSOC can use to monitor systemic risk in the U.S. financial markets. As required by statute, Form PF was designed by the Commission in consultation with FSOC and provides the Commission and FSOC with information about the operations and investment activities of private funds.<sup>3</sup> Generally, Form PF must be filed by investment advisers registered (or required to be registered) with the Commission with at least \$150 million in private fund assets under management. Most private fund advisers file Form PF annually to report general information such as the types of private funds advised (e.g., hedge funds, private equity, 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.

Consistent with provisions under the Advisers Act that provide for the confidentiality of any proprietary information of private fund advisers submitted on Form PF,<sup>4</sup> Commission staff has implemented systems and controls designed to limit access to Form PF data and protect its confidentiality within and outside the agency.<sup>5</sup> This includes procedures under which any Form PF data released to the public is reviewed

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<sup>1</sup> *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) [76 Fed. Reg. 71128 (Nov. 16, 2011)], available at <https://www.gpo.gov/fdsys/pkg/FR-2011-11-16/pdf/2011-28549.pdf> (the “Adopting Release”); 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)], available at <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”).

<sup>2</sup> Advisers Act Section 204(b)(11), 15 U.S.C. § 80b-4(b)(11).

<sup>3</sup> Section 204(b) of the Advisers Act requires the Commission to implement recordkeeping and reporting requirements for private fund advisers to assist FSOC in monitoring systemic risk and for the Commission’s use for the protection of investors and the integrity of the markets. 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”).

<sup>4</sup> Advisers Act Section 204(b)(10), 15 U.S.C. § 80b-4(b)(10).

<sup>5</sup> To implement the reporting requirements, the Commission developed an electronic filing system, the Private Fund Reporting Depository (“PFRD”), through which advisers submit information required by Form PF. PFRD

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, controls, and procedures for access, use, and security of Form PF data.

### **III. How the Commission Uses Form PF Data**

The Commission staff uses Form PF data to monitor the financial markets and in relevant regulatory and investor protection programs. Consistent with the Advisers Act, the Commission makes the Form PF database available to FSOC through OFR.<sup>6</sup> Staff also 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. Managing Form PF Data and Improving Its Quality***

Commission staff receives Form PF data via a direct feed from FINRA. Staff maintains the data on an internal Form PF database that may be accessed and queried by staff experts across the Commission who have been authorized to access the data, consistent with formal policies and procedures governing the access, use, and security of Form PF data. Commission staff continues to work to improve the quality of data filed on Form PF by responding to inquiries from filers and contacting individual filers when staff members identify anomalous and possibly erroneous data. Staff may request amended reporting to correct materially inaccurate data.

#### ***B. Building Tools to Analyze Form PF Data and Monitor the Private Fund Industry***

The Commission's staff analyzes Form PF data to identify trends and possible emerging risks in the private fund industry and develop analyses that deepen the Commission's understanding of the private fund industry. The staff also analyzes Form PF data to determine how private funds and private fund advisers might be affected by market and geopolitical events.

Consistent with the policies and procedures discussed in Section III.A, Commission staff has internally developed diverse analytical tools to analyze Form PF data in support of private fund industry monitoring. These tools enhance staff's ability to assess large volumes of data and streamline analysis of the data by automating certain analytical processes.

Analytical tools developed by staff can, for example, identify "outliers" among private funds and private fund advisers, based on various factors including performance, investment exposures, and liquidity. The tools also include analyses that identify private funds based on one or more areas of policy interest, such

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is operated under a contract with the Financial Industry Regulatory Authority ("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 1, at Section II.E.

<sup>6</sup> 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 3.

as type of strategy, types of investments, use of derivatives, and extent of leverage. These tools also facilitate assessment of the operations and investment activities of private funds and private fund advisers reporting on Form PF.

### ***C. Informing the Public about the Private Fund Industry***

Since October 2015, Commission staff has published a quarterly report, *Private Funds Statistics*, which contains highly-aggregated private fund industry statistics derived from Form PF data. *Private Funds Statistics* is designed to enhance public understanding of the private fund industry and facilitate Commission staff participation in meetings and discussions with industry professionals, investors, and other regulators. The reports include, for example, statistics describing numbers and assets of private funds, the extent of private funds' borrowing, derivatives holdings, and portfolio liquidity. Recently, the staff augmented this report with new statistics derived from aggregated Form PF data that provide additional information about hedge fund industry practices, including use of financial and economic leverage as well as types of investment exposures.<sup>7</sup> In addition, new information about the characteristics of private liquidity funds may facilitate comparisons with data published by staff relating to registered money market funds.<sup>8</sup> The most recent report can be found in the Appendix. To date, nine quarterly reports, including accessible versions, have been produced.<sup>9</sup>

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 research on various topics, such as characteristics of leverage used by hedge funds and consideration of self-reporting bias in commercial hedge fund databases. For example, a recently published staff white paper uses Form PF data to characterize private liquidity funds and compares them to registered money market funds.<sup>10</sup>

### ***D. Assisting the Examinations and Enforcement Programs<sup>11</sup>***

Commission staff's analyses of Form PF data include risk-based analysis and monitoring initiatives that facilitate staff efforts to allocate limited exam resources efficiently in setting objectives and priorities for examinations of private fund advisers. For example, Commission staff uses Form PF data to identify as

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<sup>7</sup> See SEC Staff Supplements *Quarterly Private Funds Statistics* (May 3, 2017), available at <https://www.sec.gov/news/press-release/2017-92>.

<sup>8</sup> See Division of Investment Management, *Money Market Fund Statistics*, available at <https://www.sec.gov/divisions/investment/mmf-statistics.shtml>.

<sup>9</sup> Historical reports can be found at: <https://www.sec.gov/divisions/investment/private-funds-statistics.shtml>.

<sup>10</sup> See Daniel Hiltgen, Division of Economic Risk and Analysis, *Private Liquidity Funds: Characteristics and Risk Indicators* (Jan. 27, 2017), available at [https://www.sec.gov/dera/staff-papers/white-papers/27jan17\\_hiltgen\\_private-liquidity-funds.html](https://www.sec.gov/dera/staff-papers/white-papers/27jan17_hiltgen_private-liquidity-funds.html). The findings 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.

<sup>11</sup> 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).

potential examination candidates those private fund advisers whose activities involve areas of specific examination focus or that may present heightened compliance risks.

Before a private fund adviser examination begins, the staff generally reviews the adviser's Form PF and ADV filings as part of a routine pre-examination evaluation. 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.

Commission staff has developed automated analyses known as "flag reports" that summarize and combine key Form PF data with Form ADV data about an adviser's private funds and advisory business. These reports are designed to assist staff in identifying potential reporting errors, compliance issues, or other issues of interest (i.e., "flags") for the examination team to consider. 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. These reports are generated using custom code developed internally by staff to automate report production and deliver intuitive and timely output to examiners, using the most recently filed Form ADV data. The flag reports are designed to expedite staff preparation for examinations of a private fund adviser and its private funds and to help maximize the usefulness of those exams for other Commission initiatives.

Commission staff also obtains and reviews Form PF information of certain advisers in connection with 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 that reported returns that appeared inconsistent with the funds' investment strategies or other benchmarks. These reviews have, in certain cases, led to examinations and enforcement investigations.

### ***E. Supporting Rulemaking***

Commission staff's experience with Form PF has informed proposed and final Commission rulemakings, including the development of new Form N-PORT, a portfolio holdings reporting form for registered investment companies, and revisions to Form ADV.<sup>12</sup> For example, Commission staff's experience with the types and quality of data submitted on Form PF, as well as questions received from filers about reporting on Form PF, informed the staff's recommendations to the Commission about the types of reporting recently adopted by the Commission on new Form N-PORT and amendments to Form ADV. Form PF data has also improved the Commission's ability to analyze the impact of its rulemaking on markets and market participants. For example, during staff's analysis of the effects of money market reform implementation,<sup>13</sup> staff used Form PF data about private liquidity funds to help monitor for potential effects in short-term financing markets.

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<sup>12</sup> See *Investment Company Reporting Modernization*, Investment Company Act Release No. 32314 (Oct. 13, 2016) [81 Fed. Reg. 81870 (Nov. 18, 2016)], available at <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)], available at <https://www.gpo.gov/fdsys/pkg/FR-2016-09-01/pdf/2016-20832.pdf>.

<sup>13</sup> Money Market Fund Reform Release, *supra* footnote 1. The compliance date for money market reform was October 14, 2016.

#### ***F. Coordination and Consultation with Other Financial Regulators***

As required by statute, and as described above, the Commission adopted Form PF in part to obtain, on behalf of FSOC, data for FSOC to use in monitoring systemic risk in the U.S. financial markets, and the Commission has made the Form PF database available to FSOC through OFR since 2013, subject to agreements regarding appropriate use of and confidentiality protections for Form PF data.

The Commission's staff also uses Form PF data in its collaborations with other federal regulators on matters affecting the integrity of the markets and in communications with international organizations on areas of mutual interest regarding private funds and their investment advisers. For example, staff has used reports of data from Form PF in connection with participation in FSOC's review of asset management products and activities.<sup>14</sup> Additionally, staff has provided the Financial Stability Board ("FSB") with certain aggregated and anonymized Form PF data related to an FSB work stream. Commission staff is also considering the extent to which it is appropriate to make the data more directly available to other federal regulators. In any instance where the staff shares information with an external regulatory entity, it is either subject to assurances of confidentiality or aggregated to avoid disclosure of any proprietary information.

#### **IV. Conclusion**

During the past year, the Commission's staff has continued to use Form PF data for the protection of investors and the integrity of the markets in a variety of different ways across the agency, including for risk monitoring, to inform policy and regulation, in its examinations and investigations of private fund advisers, in working with other federal regulators and international organizations in areas of mutual interest concerning private funds and their investment advisers, and in research about private funds. Staff's use of Form PF data reflects enhancements to the Commission's data management and analytics capabilities that facilitate use of the data to identify and assess markets and market risks, identify potential reporting, compliance, and other issues of interest, and inform policy.

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<sup>14</sup> See, e.g., *Remarks by Deputy Assistant Secretary Jonah Crane at a Meeting of the Financial Stability Oversight Council* (Nov. 16, 2016), available at <https://www.treasury.gov/press-center/press-releases/Pages/jl0612.aspx>; *Financial Stability Oversight Council Releases Statement on Review of Asset Management Products and Activities* (Apr. 18, 2016), available at <https://www.treasury.gov/press-center/press-releases/Pages/jl0431.aspx>.

## **Appendix**

(Private Funds Statistics, Fourth Calendar Quarter 2016)



Division of Investment Management  
Risk and Examinations Office

# Private Funds Statistics

Fourth Calendar Quarter 2016

July 7, 2017

This is a report of the Staff of the Division of Investment Management's Risk and Examinations Office (REO) 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.<sup>1</sup> 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 2015 through Fourth Calendar Quarter 2016 as reported by Form PF filers.<sup>2</sup> 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.

**Form PF is still a relatively new reporting requirement for advisers to private funds. The Staff continues to work with the data and filers to identify and correct filing errors. In some instances, the Staff has made adjustments to the summary statistics presented here to correct what appear to be clear filing errors. In addition, the Staff has employed certain assumptions in aggregating the data. Future adjustments to these methodologies could lead to changes in reported statistics.**

**If you have any questions or comments about Fourth Calendar Quarter 2016 Private Funds Statistics, please contact:**

Tim Dulaney, PhD, FRM or Tim Husson, PhD, FRM at FormPF@sec.gov with subject line “Fourth Calendar Quarter 2016-Private Funds Statistics”.

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<sup>1</sup>Only 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.

<sup>2</sup>The 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 Advisers<sup>3</sup>

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Private Equity Fund	8,300	8,332	8,250	9,638	9,700	9,711	9,738	10,305
Hedge Fund	8,849	8,848	8,905	8,771	8,899	8,900	8,957	8,877
Other Private Fund	4,181	4,201	4,198	4,128	4,099	4,125	4,117	4,414
Section 4 Private Equity Fund	2,389	2,388	2,362	2,733	2,739	2,741	2,746	2,999
Real Estate Fund	1,800	1,801	1,806	2,056	2,093	2,091	2,108	2,420
Qualifying Hedge Fund	1,560	1,592	1,624	1,639	1,596	1,607	1,616	1,649
Securitized Asset Fund	1,345	1,347	1,349	1,406	1,421	1,418	1,417	1,451
Venture Capital Fund	505	506	508	636	635	646	651	754
Liquidity Fund	68	68	67	65	64	66	67	69
Section 3 Liquidity Fund	42	42	40	41	36	37	36	44
<b>Total</b>	25,048	25,103	25,083	26,700	26,911	26,957	27,055	28,290

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Private Equity Fund	922	924	923	1,015	1,017	1,017	1,016	1,076
Hedge Fund	1,669	1,667	1,665	1,687	1,690	1,684	1,679	1,677
Other Private Fund	557	558	557	570	561	564	565	571
Section 4 Private Equity Fund	208	208	208	241	242	242	242	247
Real Estate Fund	263	264	265	288	290	288	290	305
Qualifying Hedge Fund	525	528	537	535	525	525	515	531
Securitized Asset Fund	154	154	154	155	157	156	154	149
Venture Capital Fund	85	85	86	97	97	98	100	108
Liquidity Fund	35	35	34	37	37	37	37	39
Section 3 Liquidity Fund	22	22	21	21	19	19	19	24
<b>Total</b>	2,722	2,724	2,720	2,828	2,829	2,824	2,819	2,878

<sup>3</sup>In 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Hedge Fund	6,428	6,347	6,241	6,066	6,156	6,321	6,456	6,398
Qualifying Hedge Fund	5,312	5,278	5,193	4,988	4,989	5,099	5,240	5,214
Private Equity Fund	1,882	1,884	1,844	2,057	2,058	2,060	2,062	2,307
Section 4 Private Equity Fund	1,351	1,350	1,336	1,471	1,472	1,472	1,472	1,644
Other Private Fund	980	984	974	978	974	979	983	1,065
Securitized Asset Fund	382	384	382	416	420	420	420	448
Real Estate Fund	352	352	353	397	405	405	407	434
Liquidity Fund	289	265	274	286	273	287	292	293
Section 3 Liquidity Fund	287	263	267	283	247	258	249	274
Venture Capital Fund	39	39	39	55	55	56	55	62
<b>Total</b>	10,352	10,255	10,107	10,255	10,340	10,528	10,675	11,008

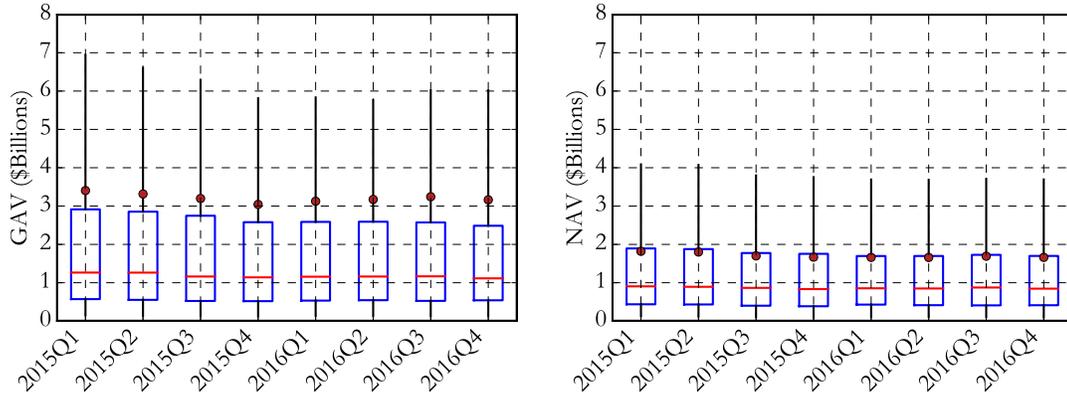
**Table 4:** Aggregate Private Fund Net Asset Value (NAV) (\$ Billions)

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.

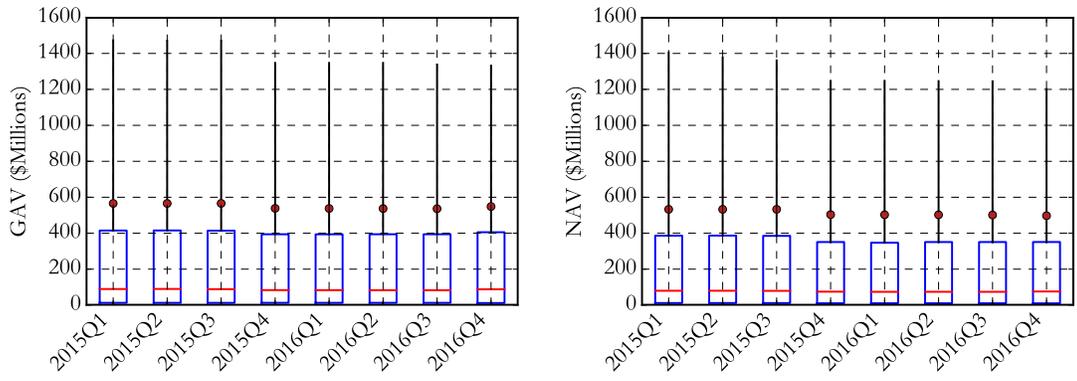
Fund Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Hedge Fund	3,578	3,588	3,475	3,452	3,402	3,429	3,488	3,484
Qualifying Hedge Fund	2,838	2,867	2,761	2,734	2,651	2,667	2,734	2,740
Private Equity Fund	1,741	1,742	1,704	1,882	1,881	1,883	1,884	2,064
Section 4 Private Equity Fund	1,273	1,272	1,258	1,376	1,377	1,377	1,377	1,492
Other Private Fund	878	880	871	876	873	878	883	973
Securitized Asset Fund	115	116	116	135	138	138	140	141
Real Estate Fund	280	280	281	319	323	323	324	339
Liquidity Fund	286	264	274	285	272	285	290	292
Section 3 Liquidity Fund	284	262	267	282	246	256	247	273
Venture Capital Fund	37	37	37	52	52	53	52	59
<b>Total</b>	6,916	6,908	6,758	7,001	6,940	6,988	7,061	7,354

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



(a) Qualifying Hedge Fund GAV

(b) Qualifying Hedge Fund NAV

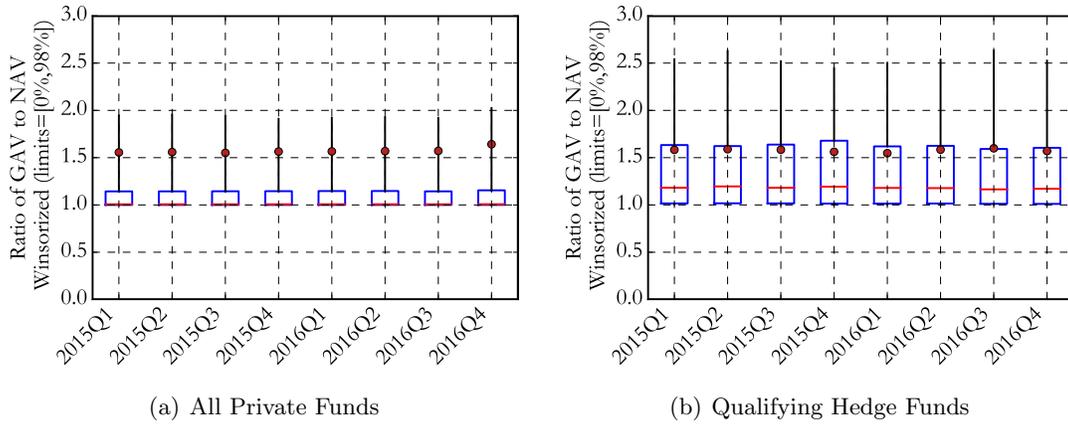


(c) Section 4 Private Equity Fund GAV

(d) Section 4 Private Equity Fund NAV

**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.



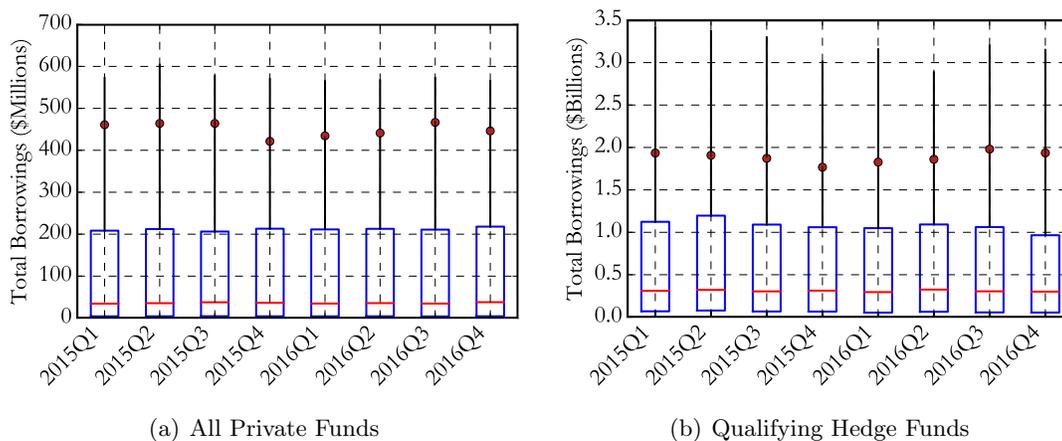
## B Borrowings

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

Fund Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Securitized Asset Fund	46.6	46.5	46.3	50.7	48.9	48.7	48.4	50.7
Qualifying Hedge Fund	38.1	38.8	39.2	38.2	39.2	38.2	39.9	39.7
Hedge Fund	35.4	36.1	36.5	35.7	36.8	36.2	38.1	37.3
Real Estate Fund	13.3	13.3	13.3	13.3	13.4	13.4	13.3	14.0
Private Equity Fund	3.9	4.0	4.0	4.8	4.8	4.9	4.9	5.1
Section 4 Private Equity Fund	2.3	2.3	2.3	3.4	3.4	3.4	3.4	4.0
Other Private Fund	2.9	2.8	2.8	2.3	2.2	2.2	2.1	2.8
Venture Capital Fund	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4
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

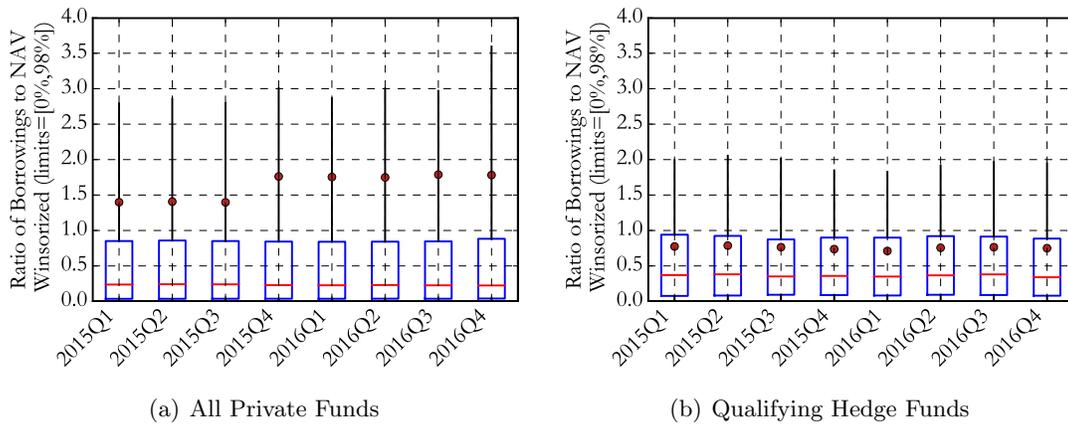
**Figure 3:** Distribution of Total Borrowings for All Private Funds and Qualifying Hedge Funds

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.

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Level One	2,377	2,356	2,299	2,746	2,478	2,462	2,482	2,874
Level Two	2,313	2,353	2,359	2,451	2,140	2,071	2,064	2,541
Level Three	2,152	2,161	2,144	2,337	2,265	2,258	2,256	2,585
Cost-Based	1,250	1,254	1,239	1,749	1,580	1,538	1,536	1,969

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

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Level One	632	614	605	628	668	680	677	520
Level Two	461	491	498	335	476	424	428	417
Level Three	74	79	89	110	111	107	106	142
Cost-Based	578	574	563	492	672	693	694	464

## D Parallel Managed Accounts<sup>4</sup>

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Hedge Fund	717	702	709	698	692	695	690	658
Other Private Fund	388	391	386	409	411	409	412	482
Private Equity Fund	207	210	208	249	249	249	248	236
Qualifying Hedge Fund	233	246	246	246	233	235	232	232
Section 4 Private Equity Fund	63	63	63	82	82	82	82	88
Real Estate Fund	51	51	51	49	52	52	52	77
Securitized Asset Fund	***	***	***	***	***	***	***	***
Liquidity Fund	17	17	15	14	16	14	15	15
Section 3 Liquidity Fund	15	15	12	13	15	14	15	15
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	1,415	1,406	1,404	1,454	1,455	1,454	1,452	1,508

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

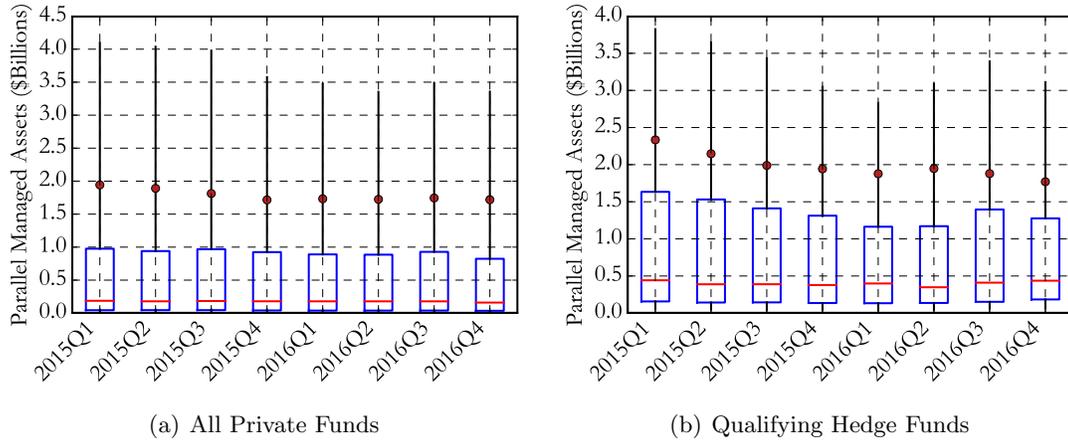
As reported on Form PF, Question 11.

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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Hedge Fund	771	698	665	654	612	632	598	576
Other Private Fund	1,413	1,411	1,399	1,329	1,325	1,307	1,361	1,491
Private Equity Fund	94	94	94	96	96	96	96	28
Qualifying Hedge Fund	544	528	489	478	437	458	436	411
Section 4 Private Equity Fund	16	16	16	19	19	19	19	22
Real Estate Fund	11	11	11	10	11	11	11	6
Securitized Asset Fund	***	***	***	***	***	***	***	***
Liquidity Fund	363	347	278	250	321	305	312	309
Section 3 Liquidity Fund	359	343	271	245	316	305	312	309
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	2,750	2,659	2,544	2,495	2,521	2,507	2,533	2,592

<sup>4</sup>Certain 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
United States	49.3	49.4	49.4	50.1	50.8	50.7	50.8	51.3
Cayman Islands	37.9	38.0	38.0	37.8	37.4	37.3	37.2	36.4
Ireland	4.6	4.6	4.6	3.9	3.8	3.9	3.9	4.3
Virgin Islands, British	2.8	2.7	2.6	2.3	2.4	2.3	2.3	2.2
Luxembourg	1.2	1.2	1.2	1.3	1.3	1.5	1.5	1.4
Bermuda	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.3
United Kingdom	1.0	1.0	1.1	1.0	1.0	1.1	1.1	1.1
Other	2.0	1.9	1.9	2.2	2.1	2.1	2.1	2.1

Qualifying Hedge Funds								
Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Cayman Islands	55.9	55.6	55.6	55.8	54.7	54.5	53.9	53.1
United States	31.2	31.5	31.4	31.9	32.6	32.9	33.6	34.1
Virgin Islands, British	6.2	6.0	6.0	5.4	5.7	5.7	5.5	5.5
Ireland	2.2	2.4	2.5	2.5	2.6	2.5	2.6	2.7
Bermuda	1.4	1.4	1.5	1.5	1.4	1.4	1.4	1.8
Luxembourg	1.2	1.2	1.1	1.2	1.2	1.2	1.3	1.3
Other	1.8	1.8	1.9	1.9	1.8	1.7	1.7	1.7

Section 3 Liquidity Funds								
Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Ireland	***	***	***	***	***	***	***	***
United States	32.8	32.1	32.2	35.0	36.5	34.2	34.1	33.1
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

Section 4 Private Equity Funds								
Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
United States	63.4	63.5	63.2	62.3	62.3	62.3	62.3	63.9
Cayman Islands	30.7	30.6	30.9	30.0	30.0	30.0	30.0	29.3
United Kingdom	2.4	2.4	2.4	2.5	2.6	2.6	2.6	1.9
Bermuda	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.1
Canada	1.3	1.3	1.3	1.2	1.2	1.2	1.2	0.9
Other	1.2	1.2	1.2	2.6	2.6	2.6	2.6	2.9

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

<b>All Private Funds</b>								
Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
United States	89.6	89.5	89.4	89.8	89.5	89.5	89.7	90.1
United Kingdom	6.4	6.4	6.6	6.4	6.6	6.6	6.6	6.2
Other	4.0	4.1	4.0	3.8	3.9	3.9	3.7	3.7
<b>Qualifying Hedge Funds</b>								
Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
United States	90.4	90.1	90.1	89.1	89.3	89.5	89.3	89.6
United Kingdom	4.9	4.9	5.1	5.6	5.7	5.6	5.7	5.7
Hong Kong	***	***	***	***	***	***	***	***
Australia	***	***	***	***	***	***	***	***
Other	2.4	2.5	2.4	2.6	2.5	2.4	2.4	2.3
<b>Section 3 Liquidity Funds</b>								
Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
United States	65.6	64.0	64.9	57.4	58.4	59.4	64.1	62.5
United Kingdom	***	***	***	***	***	***	***	***
France	***	***	***	***	***	***	***	***
<b>Section 4 Private Equity Funds</b>								
Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
United States	97.8	97.8	97.7	97.2	97.2	97.2	97.2	95.1
Canada	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

## IV Beneficial Ownership

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Private Funds	1,376	1,372	1,343	1,358	1,325	1,320	1,319	1,334
State/Muni. Govt. Pension Plans	868	872	854	895	909	917	932	1,007
Other	777	790	770	897	882	895	919	975
Pension Plans	885	891	867	890	881	892	908	945
U.S. Individuals	759	761	743	759	767	769	777	768
Non-Profits	714	710	689	710	705	703	723	743
Sov. Wealth Funds and For. Official Inst.	363	362	363	382	381	385	386	429
Insurance Companies	268	268	264	278	274	276	275	304
Non-U.S. Individuals	212	205	204	201	197	199	200	197
Unknown Non-U.S. Investors	189	180	180	169	163	171	170	186
Banking/Thrift Inst.	148	149	143	147	144	149	145	137
SEC-Registered Investment Companies	123	118	110	106	123	120	119	125
Broker-Dealers	116	113	113	112	107	104	97	102
State/Muni. Govt. Entities	93	92	92	99	87	89	90	99

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Private Funds	19.9	19.9	19.9	19.4	19.1	18.9	18.7	18.1
State/Muni. Govt. Pension Plans	12.5	12.6	12.6	12.8	13.1	13.1	13.2	13.7
Other	11.2	11.4	11.4	12.8	12.7	12.8	13.0	13.3
Pension Plans	12.8	12.9	12.8	12.7	12.7	12.8	12.9	12.9
U.S. Individuals	11.0	11.0	11.0	10.8	11.0	11.0	11.0	10.4
Non-Profits	10.3	10.3	10.2	10.1	10.2	10.1	10.2	10.1
Sov. Wealth Funds and For. Official Inst.	5.3	5.2	5.4	5.5	5.5	5.5	5.5	5.8
Insurance Companies	3.9	3.9	3.9	4.0	3.9	4.0	3.9	4.1
Non-U.S. Individuals	3.1	3.0	3.0	2.9	2.8	2.8	2.8	2.7
Unknown Non-U.S. Investors	2.7	2.6	2.7	2.4	2.3	2.5	2.4	2.5
Banking/Thrift Inst.	2.1	2.2	2.1	2.1	2.1	2.1	2.1	1.9
SEC-Registered Investment Companies	1.8	1.7	1.6	1.5	1.8	1.7	1.7	1.7
Broker-Dealers	1.7	1.6	1.7	1.6	1.5	1.5	1.4	1.4
State/Muni. Govt. Entities	1.3	1.3	1.4	1.4	1.2	1.3	1.3	1.3

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Private Funds	581	583	556	548	511	508	501	487
Non-Profits	379	382	370	370	363	358	378	383
Pension Plans	366	374	361	358	347	352	364	369
Other	322	340	328	334	323	333	356	356
U.S. Individuals	340	341	324	316	305	308	319	318
State/Muni. Govt. Pension Plans	264	269	261	265	272	278	291	304
Sov. Wealth Funds and For. Official Inst.	134	134	134	136	137	136	140	143
SEC-Registered Investment Companies	81	76	69	63	77	76	75	71
Broker-Dealers	91	90	86	83	77	76	69	68
Insurance Companies	68	68	67	68	64	65	65	67
Non-U.S. Individuals	71	70	67	66	64	65	66	65
Unknown Non-U.S. Investors	56	57	55	50	48	46	46	41
State/Muni. Govt. Entities	44	44	44	42	31	32	33	35
Banking/Thrift Inst.	38	37	35	31	30	32	30	28

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Private Funds	20.5	20.3	20.1	20.0	19.3	19.0	18.3	17.8
Non-Profits	13.4	13.3	13.4	13.5	13.7	13.4	13.8	14.0
Pension Plans	12.9	13.0	13.1	13.1	13.1	13.2	13.3	13.5
Other	11.4	11.9	11.9	12.2	12.2	12.5	13.0	13.0
U.S. Individuals	12.0	11.9	11.7	11.6	11.5	11.5	11.7	11.6
State/Muni. Govt. Pension Plans	9.3	9.4	9.4	9.7	10.3	10.4	10.7	11.1
Sov. Wealth Funds and For. Official Inst.	4.7	4.7	4.9	5.0	5.2	5.1	5.1	5.2
SEC-Registered Investment Companies	2.9	2.6	2.5	2.3	2.9	2.9	2.7	2.6
Broker-Dealers	3.2	3.1	3.1	3.0	2.9	2.9	2.5	2.5
Insurance Companies	2.4	2.4	2.4	2.5	2.4	2.4	2.4	2.4
Non-U.S. Individuals	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Unknown Non-U.S. Investors	2.0	2.0	2.0	1.8	1.8	1.7	1.7	1.5
State/Muni. Govt. Entities	1.6	1.5	1.6	1.5	1.2	1.2	1.2	1.3
Banking/Thrift Inst.	1.3	1.3	1.3	1.1	1.1	1.2	1.1	1.0

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Private Funds	86	77	86	82	79	79	80	81
Unknown Non-U.S. Investors	44	36	43	45	***	***	60	65
Other	45	44	42	51	38	38	40	52
Broker-Dealers	***	***	***	***	***	***	***	***
SEC-Registered Investment Companies	17	17	13	16	17	17	18	16
Banking/Thrift Inst.	***	***	***	***	***	***	***	10
Insurance Companies	9	9	8	8	7	8	8	9
Pension Plans	6	5	6	5	5	5	***	5
Non-U.S. Individuals	35	31	29	28	17	17	4	4
Sov. Wealth Funds and For. Official Inst.	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-Profits	***	***	***	***	***	***	***	1
State/Muni. Govt. Pension Plans	***	***	***	***	***	***	***	1
U.S. Individuals	0	0	***	***	***	***	***	***

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Private Funds	30.5	29.5	32.2	29.0	32.2	30.8	32.3	29.6
Unknown Non-U.S. Investors	15.6	13.6	16.1	15.8	***	***	24.2	23.7
Other	15.7	16.9	15.8	17.9	15.5	14.7	16.2	19.2
Broker-Dealers	***	***	***	***	***	***	***	***
SEC-Registered Investment Companies	5.9	6.5	4.7	5.8	7.1	6.6	7.1	5.9
Banking/Thrift Inst.	***	***	***	***	***	***	***	3.6
Insurance Companies	3.2	3.3	3.0	2.9	2.9	3.3	3.2	3.3
Pension Plans	2.0	2.0	2.1	1.9	1.9	1.8	***	1.7
Non-U.S. Individuals	12.3	11.7	10.8	10.0	6.9	6.8	1.6	1.4
Sov. Wealth Funds and For. Official Inst.	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-Profits	***	***	***	***	***	***	***	0.5
State/Muni. Govt. Pension Plans	***	***	***	***	***	***	***	0.4
U.S. Individuals	0.0	0.0	***	***	***	***	***	***

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
State/Muni. Govt. Pension Plans	300	300	296	325	326	326	326	365
Private Funds	278	277	276	270	270	270	270	283
Other	110	110	108	140	140	140	140	162
Sov. Wealth Funds and For. Official Inst.	124	124	123	132	132	132	131	153
Pension Plans	123	123	119	137	138	137	138	141
Insurance Companies	76	76	75	84	84	84	84	94
Non-Profits	80	80	79	87	87	87	86	92
U.S. Individuals	79	79	79	95	95	95	95	88
Non-U.S. Individuals	32	32	32	35	35	35	35	34
Banking/Thrift Inst.	35	35	35	32	32	32	32	31
State/Muni. Govt. Entities	16	16	16	19	19	19	19	22
Unknown Non-U.S. Investors	11	11	11	15	15	15	15	14
SEC-Registered Investment Companies	2	2	2	5	5	5	5	12
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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
State/Muni. Govt. Pension Plans	23.6	23.6	23.5	23.7	23.7	23.7	23.6	24.5
Private Funds	21.8	21.8	21.9	19.6	19.6	19.6	19.6	19.0
Other	8.6	8.7	8.6	10.2	10.2	10.2	10.2	10.8
Sov. Wealth Funds and For. Official Inst.	9.7	9.7	9.8	9.6	9.6	9.6	9.6	10.3
Pension Plans	9.7	9.7	9.4	10.0	10.0	10.0	10.0	9.5
Insurance Companies	5.9	5.9	6.0	6.1	6.1	6.1	6.1	6.3
Non-Profits	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.1
U.S. Individuals	6.2	6.2	6.2	6.9	6.9	6.9	6.9	5.9
Non-U.S. Individuals	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.3
Banking/Thrift Inst.	2.8	2.8	2.8	2.3	2.3	2.3	2.3	2.1
State/Muni. Govt. Entities	1.2	1.2	1.2	1.4	1.4	1.4	1.4	1.5
Unknown Non-U.S. Investors	0.9	0.9	0.9	1.1	1.1	1.1	1.1	0.9
SEC-Registered Investment Companies	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.8
Broker-Dealers	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1

## V Derivatives

**Table 20:** Aggregate Derivative Notional (\$ 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Hedge Fund	14,463	13,798	14,044	12,974	13,926	14,143	15,738	15,771
Qualifying Hedge Fund	13,123	12,550	12,785	11,852	12,716	12,816	14,471	14,434
Other Private Fund	121	106	107	103	103	103	106	115
Private Equity Fund	69	71	73	54	54	54	53	38
Section 4 Private Equity Fund	60	60	60	42	42	42	42	35
Real Estate Fund	13	13	13	21	21	21	21	16
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	29	29	28	12	11	11	10	14
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	<b>14,679</b>	<b>14,018</b>	<b>14,265</b>	<b>13,163</b>	<b>14,111</b>	<b>14,332</b>	<b>15,930</b>	<b>15,966</b>

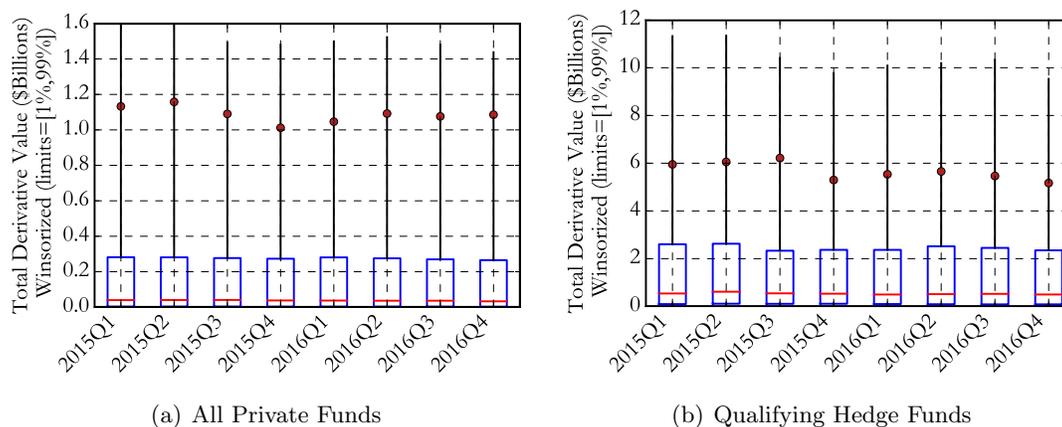
**Table 21:** Aggregate Derivative Notional (Percent of Aggregate NAV)

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Hedge Fund	404.2	384.5	404.1	375.8	409.4	412.5	451.2	452.6
Qualifying Hedge Fund	462.4	437.8	463.1	433.6	479.6	480.6	529.3	526.8
Other Private Fund	13.7	12.1	12.3	11.8	11.8	11.8	12.0	11.8
Private Equity Fund	4.0	4.1	4.3	2.9	2.9	2.8	2.8	1.8
Section 4 Private Equity Fund	4.7	4.7	4.7	3.1	3.1	3.1	3.1	2.3
Real Estate Fund	4.6	4.6	4.6	6.7	6.7	6.7	6.6	4.8
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	25.5	25.1	24.6	8.6	8.2	7.7	7.4	9.8
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	<b>212.3</b>	<b>202.9</b>	<b>211.1</b>	<b>188.0</b>	<b>203.3</b>	<b>205.1</b>	<b>225.6</b>	<b>217.1</b>

**Figure 6:** Distribution of Derivative Notional 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
0%	7,323	7,342	7,407	7,375	7,452	7,468	7,505	7,458
Less than 100%	39	39	33	40	63	64	70	62
100% or More	28	27	13	11	9	10	9	11

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

Fraction of NAV	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
0%	3,470	3,479	3,363	3,335	3,282	3,316	3,372	3,372
Less than 100%	41	43	43	77	84	83	84	78
100% or More	34	36	34	2	2	2	2	2

## 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.

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Top 10	8.4	8.1	8.0	7.9	7.9	7.8	7.9	8.0
Top 25	14.4	14.4	14.1	14.1	13.7	13.6	13.8	13.8
Top 50	20.8	20.9	20.6	20.8	20.5	20.4	20.6	20.5
Top 100	29.8	29.8	29.3	29.5	29.2	29.2	29.2	29.1
Top 250	45.4	45.4	44.7	44.8	44.4	44.2	44.3	44.2
Top 500	59.4	59.2	58.5	58.5	57.9	57.7	57.7	57.6

**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.

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Top 10	14.6	13.5	14.6	13.5	15.1	15.1	14.4	14.7
Top 25	23.1	21.7	23.1	21.4	23.3	23.6	22.9	23.2
Top 50	30.4	29.3	30.4	28.8	30.5	31.3	31.2	31.4
Top 100	40.0	39.1	40.0	38.9	40.1	40.8	41.1	41.1
Top 250	55.2	54.4	54.8	53.8	54.4	55.0	55.3	55.1
Top 500	67.6	67.0	67.2	66.1	66.5	66.8	67.0	66.9

**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).

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Top 10	32.7	31.4	32.6	30.6	32.7	32.8	32.8	31.6
Top 25	43.5	42.3	43.4	41.1	43.9	45.4	45.5	44.5
Top 50	54.2	53.3	54.6	52.4	54.5	56.2	56.6	56.2
Top 100	66.3	65.3	66.5	65.0	66.3	67.7	68.7	68.5
Top 250	81.1	80.3	81.1	79.8	80.6	80.8	81.8	81.7
Top 500	90.1	89.8	90.1	89.2	89.5	89.6	90.2	90.1

**Table 27:** Percent of Aggregate Hedge Fund Derivative Notional Value  
Reported by Top Hedge Funds Sorted by Derivative Notional Value  
As reported on Form PF, Questions 13 and 44 (Month 3).

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Top 10	47.1	45.2	45.9	47.4	49.1	49.2	55.8	54.9
Top 25	60.3	58.5	61.0	60.1	61.5	61.9	66.7	66.5
Top 50	70.4	68.4	71.0	69.8	71.0	70.9	74.4	74.4
Top 100	79.9	78.6	80.1	78.8	79.7	80.0	82.3	82.7
Top 250	89.8	89.2	89.9	89.2	89.7	89.8	91.1	91.3
Top 500	95.1	94.8	95.1	94.8	95.1	95.1	95.8	95.9

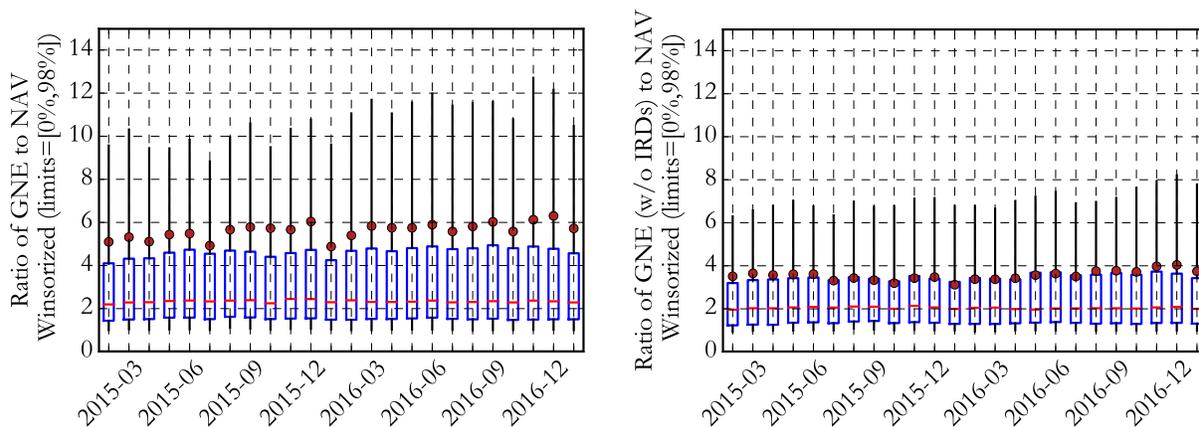
**Table 28:** Percent of Aggregate Hedge Fund Gross Notional Exposure  
Reported by Top Hedge Funds Sorted by Gross Notional Exposure  
As reported on Form PF, Questions 26 and 30 (Month 3).

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Top 10	27.0	27.4	28.5	29.4	32.7	33.2	37.5	38.2
Top 25	41.8	41.7	44.8	43.3	46.4	45.9	49.8	51.2
Top 50	53.9	53.1	56.3	55.0	57.9	56.7	59.9	61.6
Top 100	66.2	65.2	67.6	66.7	68.9	68.2	70.3	72.2
Top 250	81.4	80.7	81.9	81.5	82.7	82.2	83.2	84.3
Top 500	91.2	90.8	91.3	91.2	91.8	91.3	91.7	92.3

## VIII Information Reported by Large Hedge Fund Advisers

### A Economic Leverage

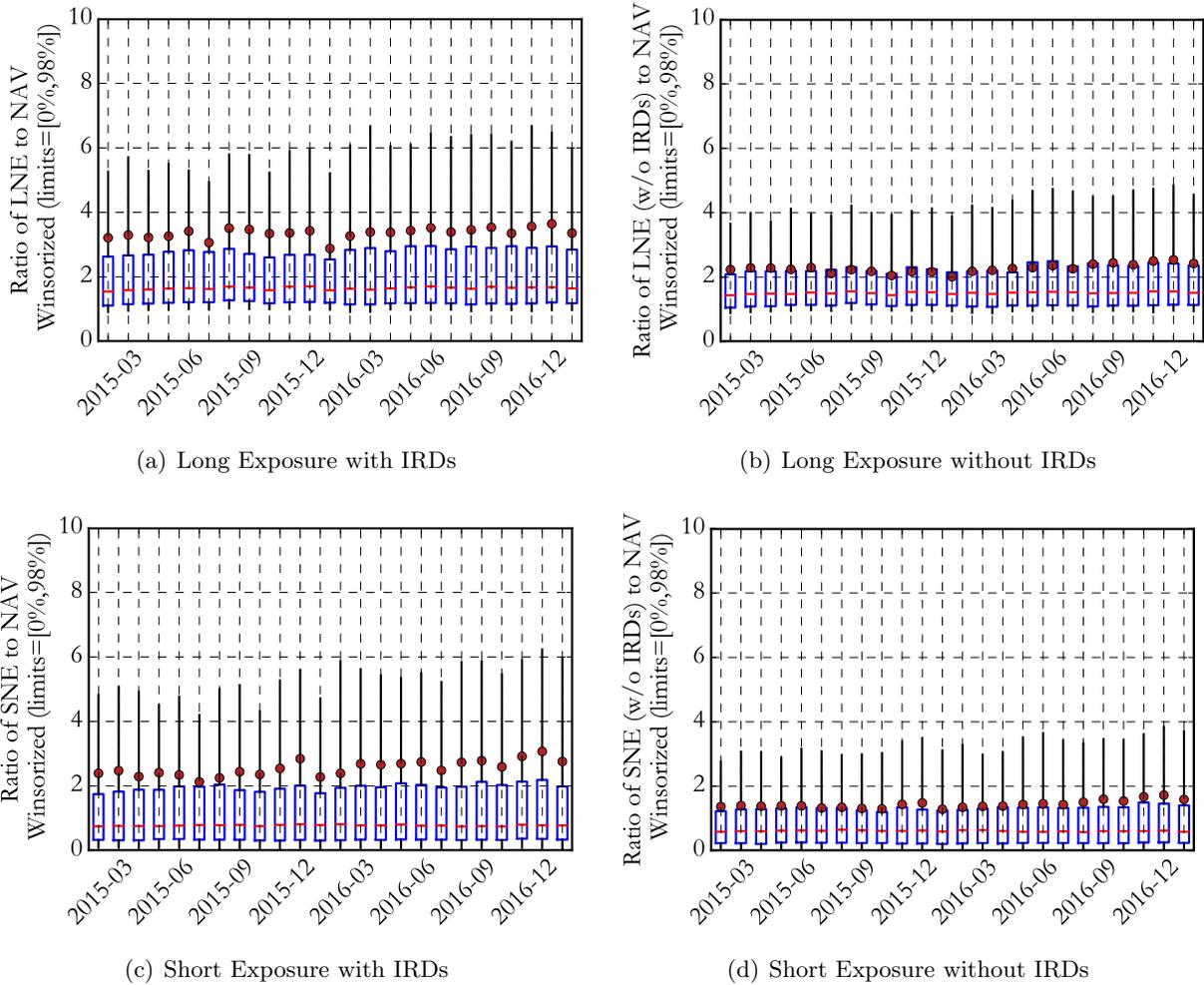
**Figure 7:** Ratio of Hedge Fund Gross Notional Exposure to Net Asset Value  
 See Appendix C and Appendix D for an explanation of boxplots and winsorization.  
 As reported on Form PF, Questions 3(a) and 26.



(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)
2015-01	17.3	26.8	40.0	53.1
2015-02	17.2	26.7	40.1	53.2
2015-03	17.2	26.7	37.9	51.8
2015-04	17.5	26.8	37.8	52.3
2015-05	17.5	26.8	39.0	53.0
2015-06	17.5	26.8	37.2	51.6
2015-07	16.9	26.6	39.4	53.7
2015-08	16.9	26.6	40.1	54.0
2015-09	16.9	26.6	39.9	54.4
2015-10	17.1	26.8	40.6	54.7
2015-11	17.1	26.8	41.5	55.7
2015-12	17.2	26.9	37.0	51.3
2016-01	17.6	27.5	39.5	53.2
2016-02	17.4	27.3	41.6	54.5
2016-03	17.4	27.3	38.6	51.6
2016-04	17.9	27.8	39.3	53.2
2016-05	18.0	28.0	40.3	53.8
2016-06	18.0	28.0	38.0	52.1
2016-07	18.0	27.9	41.0	55.0
2016-08	18.0	27.9	42.0	55.7
2016-09	18.0	27.9	42.1	55.8
2016-10	18.1	27.9	44.6	57.2
2016-11	18.1	27.9	45.5	58.3
2016-12	18.2	28.0	42.4	55.4

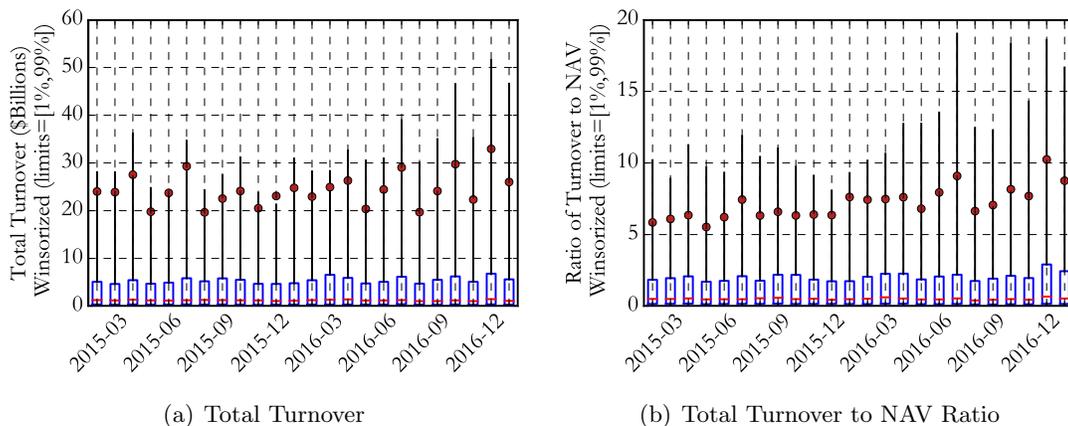
### C Portfolio Turnover

**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
2015-01	9,726	2,339	1,812	92	17	13,987
2015-02	10,042	2,304	1,712	109	23	14,191
2015-03	11,429	2,375	1,858	124	25	15,810
2015-04	7,521	2,673	1,993	112	23	12,321
2015-05	9,177	2,460	1,916	104	23	13,679
2015-06	12,231	2,837	1,957	90	22	17,136
2015-07	8,270	2,035	2,112	99	15	12,531
2015-08	10,121	2,293	2,103	74	14	14,605
2015-09	10,025	2,437	1,876	91	17	14,446
2015-10	7,499	2,200	7,583	100	20	17,403
2015-11	8,896	2,136	6,658	85	16	17,792
2015-12	9,844	2,046	7,098	70	19	19,077
2016-01	8,762	2,264	2,190	110	15	13,341
2016-02	10,272	2,441	2,239	101	15	15,066
2016-03	11,639	2,105	2,036	119	18	15,917
2016-04	8,478	2,070	1,973	111	22	12,654
2016-05	9,578	2,585	1,967	109	17	14,256
2016-06	12,912	2,792	2,107	99	21	17,931
2016-07	7,647	2,346	1,823	89	14	11,919
2016-08	9,563	2,514	1,874	90	19	14,060
2016-09	11,717	3,111	1,937	104	20	16,889
2016-10	8,569	2,433	1,880	97	24	13,003
2016-11	13,406	3,481	2,230	95	19	19,230
2016-12	11,117	2,265	1,785	70	17	15,254

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
North America	3,969	3,965	3,867	3,767	3,878	3,944	4,110	4,082
Europe EEA	1,234	1,197	1,186	1,095	1,216	1,197	1,219	1,222
Asia	605	611	575	578	619	600	611	530
South America	86	91	95	90	101	91	91	87
Europe Other	73	73	69	66	61	62	67	64
Supranational	41	34	35	33	30	30	33	46
Middle East	17	16	18	23	22	21	20	18
Africa	24	19	22	21	21	20	19	18

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
North America	131.6	130.5	132.2	129.0	134.2	136.5	138.6	136.6
Europe EEA	40.9	39.4	40.5	37.5	42.1	41.4	41.1	40.9
Asia	20.0	20.1	19.7	19.8	21.4	20.8	20.6	17.8
South America	2.9	3.0	3.2	3.1	3.5	3.2	3.1	2.9
Europe Other	2.4	2.4	2.4	2.3	2.1	2.2	2.3	2.1
Supranational	1.4	1.1	1.2	1.1	1.0	1.0	1.1	1.5
Middle East	0.6	0.5	0.6	0.8	0.8	0.7	0.7	0.6
Africa	0.8	0.6	0.8	0.7	0.7	0.7	0.6	0.6

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

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

Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
United States	3,762	3,786	3,680	3,597	3,637	3,660	3,923	3,871
Japan	230	254	250	259	290	263	263	218
China (Inc. Hong Kong)	149	161	138	145	139	128	136	129
Brazil	41	39	45	41	42	35	36	37
India	33	33	31	30	28	30	35	30
Russia	9	9	7	8	11	13	15	14

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

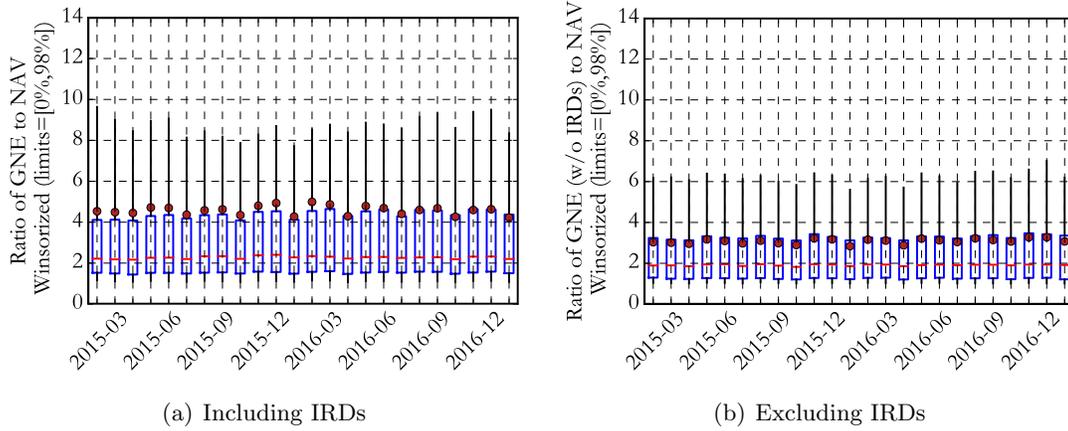
As reported on Form PF, Questions 3(a) and 28.

Country	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
United States	124.7	124.6	125.8	123.2	125.8	126.7	132.3	129.5
Japan	7.6	8.3	8.5	8.9	10.0	9.1	8.9	7.3
China (Inc. Hong Kong)	5.0	5.3	4.7	5.0	4.8	4.4	4.6	4.3
Brazil	1.4	1.3	1.5	1.4	1.4	1.2	1.2	1.2
India	1.1	1.1	1.0	1.0	1.0	1.0	1.2	1.0
Russia	0.3	0.3	0.2	0.3	0.4	0.4	0.5	0.5

## IX Qualifying Hedge Fund Specific Information

### A Economic Leverage

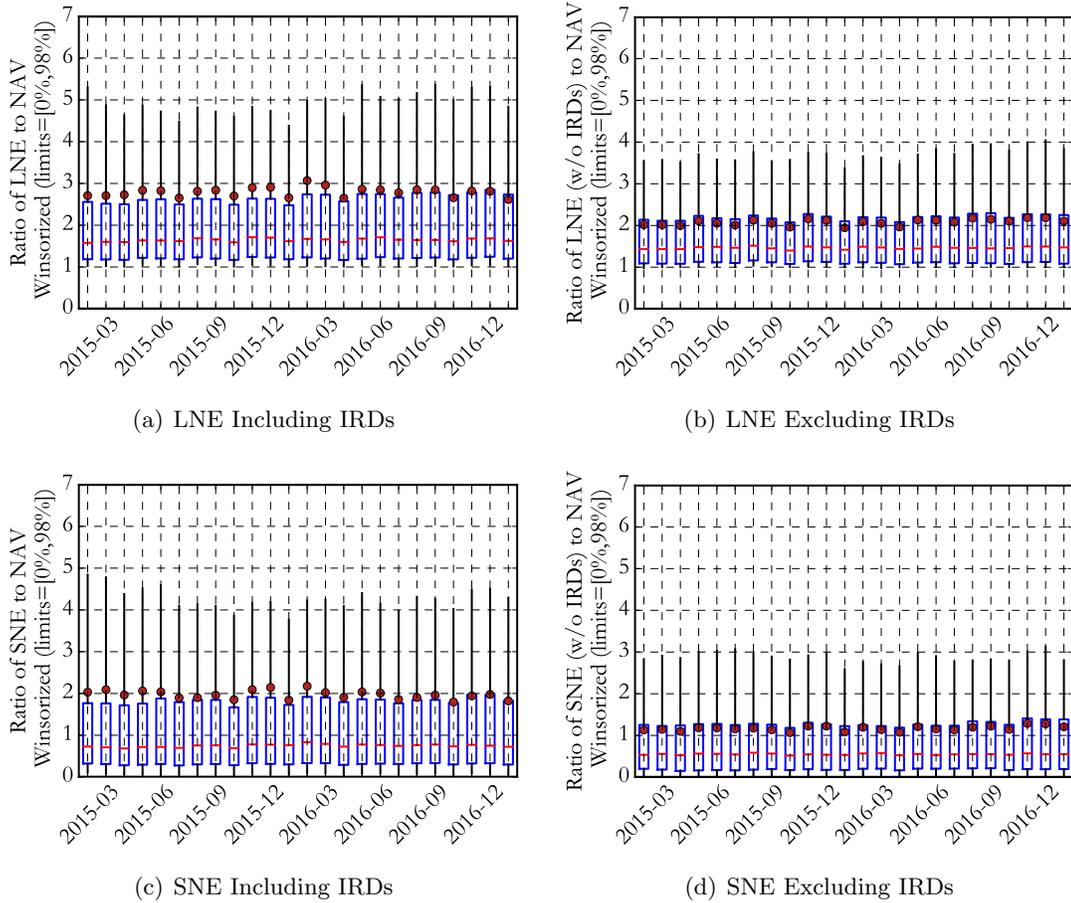
**Figure 10:** Ratio of Qualifying Hedge Fund Gross Notional Exposure to Net Asset Value  
 See Appendix C and Appendix D for an explanation of boxplots and winsorization.  
 As reported on Form PF, Questions 9, 10, 26, and 30.



**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 Strategy<sup>5</sup>****Table 35: Exposures of Hedge Funds (\$ Billions)**  
As reported on Form PF, Questions 9 and 20.

Category	Strategy	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
	Subtotal	1,609	1,646	1,558	1,528	1,407	1,421	1,490	1,461
Equity	Long/Short	983	1,005	936	926	867	853	881	843
	Market Neutral	***	349	348	317	266	288	321	324
	Long Bias	265	285	268	278	268	273	284	288
	Short Bias	***	7	6	6	5	6	5	6
	Subtotal	764	755	745	735	811	826	835	849
Other	Subtotal	476	515	559	546	559	601	674	704
	Global Macro	380	440	485	474	486	523	599	614
	Currency	48	32	33	34	***	***	***	***
	Commodity	47	43	38	36	35	38	37	42
	Active Trading	1	1	2	2	***	***	***	***
Relative Value	Subtotal	842	787	782	722	785	783	765	703
	F.I. Sov.	578	524	536	491	548	542	518	470
	F.I. Asset Backed	139	144	139	129	127	129	130	124
	F.I. Corp.	53	49	45	41	45	42	43	41
	F.I. Conv. Arb.	50	48	39	38	38	35	38	39
	Volatility Arb.	21	23	24	23	28	34	36	28
Event Driven	Subtotal	417	430	386	377	361	327	337	325
	Distressed/Restruct.	185	182	179	173	172	166	173	174
	Equity	150	151	126	111	97	85	92	80
	Risk Arb./Merger Arb.	82	97	81	93	92	76	73	71
Credit	Subtotal	291	302	285	277	355	362	265	272
	Long/Short	261	270	250	247	314	326	225	229
	Asset Based Lending	29	33	35	30	41	36	40	43
Managed Futures/CTA	Subtotal	96	91	94	98	106	123	132	130
	Quantitative	***	***	***	***	***	117	***	***
	Fundamental	***	***	***	***	***	6	***	***
Investment in other funds	Subtotal	50	49	48	45	40	42	41	43
<b>Total</b>	<b>Total</b>	4,544	4,576	4,458	4,327	4,424	4,484	4,539	4,487

<sup>5</sup>Form 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
	Subtotal	53.7	55.6	54.4	53.9	51.0	51.4	52.3	51.2
Equity	Long/Short	32.8	33.9	32.7	32.7	31.4	30.9	30.9	29.5
	Market Neutral	***	11.8	12.2	11.2	9.6	10.4	11.3	11.3
	Long Bias	8.8	9.6	9.4	9.8	9.7	9.9	10.0	10.1
	Short Bias	***	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other	Subtotal	25.5	25.5	26.0	25.9	29.4	29.8	29.3	29.7
	Subtotal	15.9	17.4	19.5	19.2	20.3	21.7	23.6	24.7
Macro	Global Macro	12.7	14.9	16.9	16.7	17.6	18.9	21.0	21.5
	Currency	1.6	1.1	1.2	1.2	***	***	***	***
	Commodity	1.6	1.4	1.3	1.3	1.3	1.4	1.3	1.5
	Active Trading	0.0	0.0	0.1	0.1	***	***	***	***
	Subtotal	28.1	26.6	27.3	25.5	28.5	28.3	26.9	24.6
Relative Value	F.I. Sov.	19.3	17.7	18.7	17.3	19.9	19.6	18.2	16.5
	F.I. Asset Backed	4.6	4.8	4.8	4.6	4.6	4.7	4.5	4.3
	F.I. Corp.	1.8	1.7	1.6	1.4	1.6	1.5	1.5	1.5
	F.I. Conv. Arb.	1.7	1.6	1.4	1.3	1.4	1.3	1.3	1.4
	Volatility Arb.	0.7	0.8	0.8	0.8	1.0	1.2	1.3	1.0
	Subtotal	13.9	14.5	13.5	13.3	13.1	11.8	11.8	11.4
Event Driven	Distressed/Restruct.	6.2	6.1	6.3	6.1	6.2	6.0	6.1	6.1
	Equity	5.0	5.1	4.4	3.9	3.5	3.1	3.2	2.8
	Risk Arb./Merger Arb.	2.7	3.3	2.8	3.3	3.4	2.7	2.5	2.5
	Subtotal	9.7	10.2	10.0	9.8	12.9	13.1	9.3	9.5
Credit	Long/Short	8.7	9.1	8.7	8.7	11.4	11.8	7.9	8.0
	Asset Based Lending	1.0	1.1	1.2	1.1	1.5	1.3	1.4	1.5
	Subtotal	3.2	3.1	3.3	3.5	3.8	4.5	4.6	4.5
Managed Futures/CTA	Quantitative	***	***	***	***	***	4.2	***	***
	Fundamental	***	***	***	***	***	0.2	***	***
Investment in other funds	Subtotal	1.7	1.7	1.7	1.6	1.4	1.5	1.5	1.5
<b>Total</b>	<b>Total</b>	151.7	154.5	155.6	152.7	160.4	162.1	159.3	157.1

## 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Relative Value	4.9	4.2	4.6	4.3	4.5	4.8	4.1	4.1
Macro	2.3	2.2	2.5	2.5	2.8	3.1	3.1	3.2
Multi-Strategy	1.8	2.4	2.2	1.7	1.9	1.8	2.4	2.4
Equity	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Other	1.5	1.3	1.6	1.5	1.6	1.6	1.6	1.6
Credit	1.7	1.6	1.6	1.6	1.5	1.5	1.6	1.5
Event Driven	1.3	1.4	1.4	1.4	1.4	1.4	1.3	1.3
Managed Futures/CTA	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Investment in other funds	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Macro	15.7	15.8	17.3	16.7	20.0	17.0	17.5	22.2
Relative Value	15.7	13.4	15.3	15.0	16.2	17.1	16.8	16.5
Multi-Strategy	5.6	7.7	7.3	6.0	6.9	7.1	11.0	10.1
Managed Futures/CTA	7.8	10.2	13.5	10.6	9.6	7.2	8.0	7.3
Other	3.6	3.0	3.8	3.8	4.1	4.5	4.6	4.7
Equity	3.2	3.2	3.1	3.2	3.4	3.1	3.1	3.1
Credit	5.6	5.3	4.9	4.1	4.1	4.1	2.9	2.7
Event Driven	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0
Investment in other funds	1.7	1.7	1.4	1.5	1.9	1.4	1.5	1.4

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Managed Futures/CTA	52.6	64.0	57.5	68.6	57.2	68.1	68.7	67.7
Macro	46.7	45.4	45.4	44.7	44.0	42.8	40.9	40.0
Multi-Strategy	23.1	24.4	28.7	26.3	25.6	26.4	26.9	28.1
Other	27.0	25.3	25.6	24.9	24.6	26.5	26.8	25.8
Relative Value	20.9	23.3	22.0	27.1	27.8	27.3	21.3	22.3
Equity	10.7	11.7	12.0	13.1	13.1	13.9	11.2	12.4
Credit	14.1	14.4	13.2	14.0	12.0	14.3	11.1	11.9
Event Driven	9.3	8.6	8.6	10.8	10.0	11.9	11.7	11.8
Investment in other funds	19.7	18.8	17.7	12.1	10.3	7.7	6.2	5.5

## 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.

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Cash/Cash Equivalents	680	677	684	701	717	729	692	674
Securities - Equities	2,231	2,328	2,136	2,161	2,039	2,000	2,136	2,118
Securities - Treasuries	1,034	1,034	1,054	939	999	1,058	1,115	1,139
Securities - G10 (non-US)	810	759	712	690	735	722	796	972
Securities - Corp. Bonds	270	261	249	236	245	242	251	251
Securities - MBS	248	265	279	250	237	250	258	227
Securities - Other Bonds	215	201	209	206	208	233	212	195
Securities - ABS (non-MBS)	82	88	90	82	79	73	76	75
Securities - Conv. Bonds	82	79	105	64	67	64	71	69
Derivatives - IR	3,558	3,656	4,002	3,935	4,571	4,207	5,146	5,475
Derivatives - FX	2,796	2,518	2,586	2,366	2,632	2,565	2,473	2,439
Derivatives - Equity	979	1,023	871	883	947	1,007	1,081	1,115
Derivatives - Credit	859	841	773	681	718	596	624	592
Derivatives - Commodity	263	268	221	212	246	289	307	325
Derivatives - Other	142	146	137	123	133	118	138	137
Repurchase Agreements	1,046	1,038	1,101	961	1,032	1,060	1,113	1,156
Other	695	649	659	614	642	649	666	675

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

	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Cash/Cash Equivalents	88.2	87.4	88.3	88.7	87.0	88.3	87.2	86.9
Securities - Equities	70.6	71.2	70.2	69.8	69.3	69.2	69.7	70.0
Securities - Treasuries	70.7	72.4	72.4	71.5	69.6	66.8	66.7	68.1
Securities - G10 (non-US)	54.3	52.6	58.2	55.9	56.5	55.5	53.4	49.7
Securities - Corp. Bonds	84.5	84.6	83.3	81.4	80.6	80.8	82.6	81.5
Securities - MBS	81.2	78.9	77.2	79.3	78.7	76.5	74.7	76.0
Securities - Other Bonds	75.4	73.8	74.3	70.8	74.9	71.5	77.9	75.3
Securities - ABS (non-MBS)	99.1	99.1	99.3	99.1	99.1	99.4	99.0	98.7
Securities - Conv. Bonds	95.3	94.6	96.2	94.7	93.3	95.2	95.5	95.2
Derivatives - IR	48.5	47.9	50.9	51.6	51.6	54.5	52.0	50.7
Derivatives - FX	48.6	48.2	49.4	48.5	50.4	52.5	51.7	48.5
Derivatives - Equity	55.9	55.2	51.3	53.2	53.5	54.9	55.2	55.2
Derivatives - Credit	44.2	44.1	41.9	43.9	46.0	44.7	47.3	48.1
Derivatives - Commodity	57.2	56.8	55.1	52.8	59.3	62.2	63.4	63.4
Derivatives - Other	59.1	57.2	58.1	53.5	57.1	59.8	60.2	58.6
Repurchase Agreements	46.6	45.0	43.1	44.3	43.3	43.4	45.3	48.7
Other	86.8	89.0	88.2	90.1	90.5	90.4	89.5	89.0

## E Liquidity

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

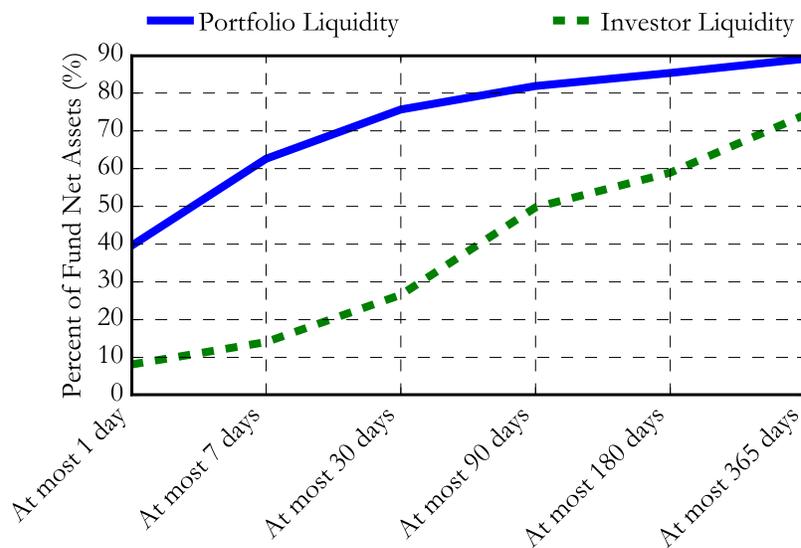
Liquidation Period	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
At most 1 day	6.9	7.1	7.2	7.1	7.7	8.0	8.3	8.1
At most 7 days	13.0	13.3	13.6	13.3	14.0	14.1	14.3	14.1
At most 30 days	27.3	26.0	26.5	25.4	27.4	27.3	26.5	26.6
At most 90 days	46.7	45.9	46.9	45.4	47.1	46.6	47.3	49.7
At most 180 days	60.5	60.1	62.7	58.4	60.4	60.1	61.9	58.9
At most 365 days	75.3	74.9	74.8	72.9	75.4	75.6	74.7	74.2

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
At most 1 day	40.0	39.5	40.9	40.1	40.6	40.7	39.3	39.6
At most 7 days	63.8	63.3	63.7	63.3	64.4	64.0	62.9	62.6
At most 30 days	78.4	77.5	77.1	76.7	77.0	76.6	76.1	75.6
At most 90 days	85.8	85.0	84.4	83.4	83.2	82.5	82.5	81.9
At most 180 days	89.4	88.6	87.9	87.0	86.5	86.2	85.9	85.3
At most 365 days	92.5	92.0	91.3	90.5	90.1	89.9	89.6	89.1

**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 2016.

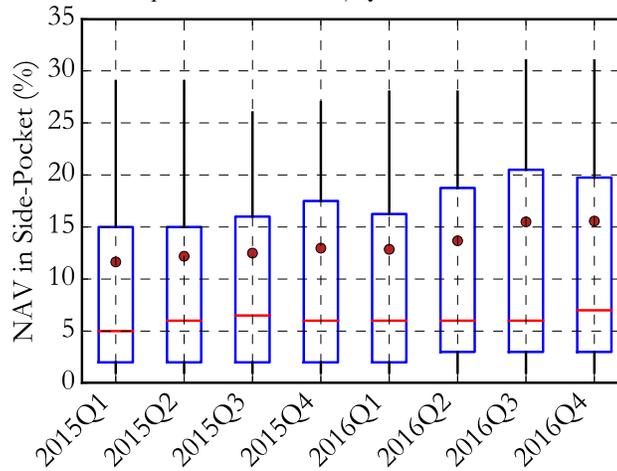


**Table 44:** Restrictions on Qualifying Hedge Fund Assets (\$ Billions)  
As reported on Form PF, Questions 48 and 49.

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
May Suspend	2,320	2,343	2,239	2,200	2,122	2,141	2,178	2,154
May Have Gates	1,468	1,467	1,395	1,370	1,289	1,307	1,330	1,290
Side-Pocketed	37	38	35	37	38	38	38	38
Gated	38	35	33	33	29	27	30	27
Suspended	12	12	12	14	14	16	16	19

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
	Subtotal	2,015	2,037	2,023	1,894	1,942	1,937	2,079	2,057
Secured	Prime Broker	1,080	1,132	1,054	1,025	977	978	1,084	1,087
	Reverse Repo	659	649	719	603	696	691	729	675
	Other Secured	276	255	250	266	269	267	267	295
Unsecured	Subtotal	8	11	11	10	10	9	11	12
<b>Total</b>	<b>Total</b>	2,023	2,047	2,034	1,904	1,952	1,946	2,090	2,069

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

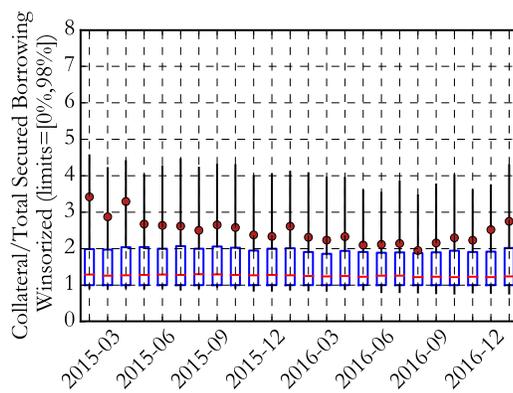
Creditor Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
US Financial	62.2	64.4	63.5	63.6	62.8	62.2	64.7	63.2
Non-US Financial	37.4	35.0	36.0	35.9	36.7	37.4	34.8	36.3
US Non-Financial	***	***	***	***	0.4	0.3	0.3	0.3
Non-US Non-Financial	***	***	***	***	0.1	0.1	0.2	0.1

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

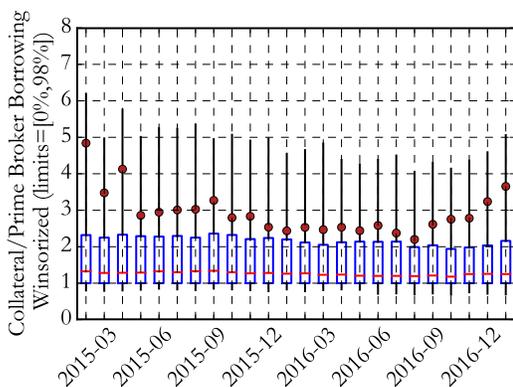
Borrowing Type	Collateral Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
	Subtotal	1,409	1,431	1,345	1,314	1,253	1,228	1,339	1,334
Prime Broker	Other	923	948	870	837	801	774	861	857
	Cash	486	483	475	476	452	455	478	477
	Subtotal	697	693	752	632	718	711	774	691
Reverse Repo	Other	547	523	575	475	547	518	574	451
	Cash	149	170	177	157	171	193	200	241
	Subtotal	305	284	289	314	320	308	312	349
Other Secured	Other	211	196	211	240	240	230	236	210
	Cash	94	88	79	75	79	78	77	139
<b>Total</b>	<b>Total</b>	2,411	2,409	2,387	2,260	2,291	2,247	2,426	2,375

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

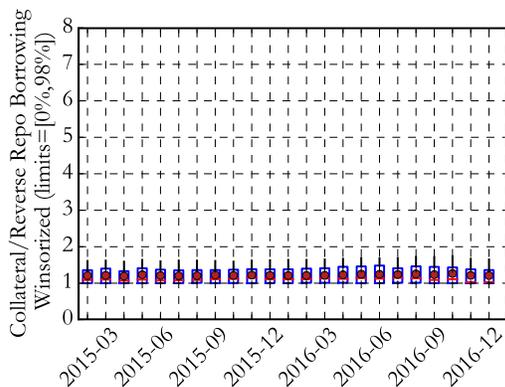
See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Question 43.



(a) Total Secured Borrowing



(b) Prime Broker Borrowing

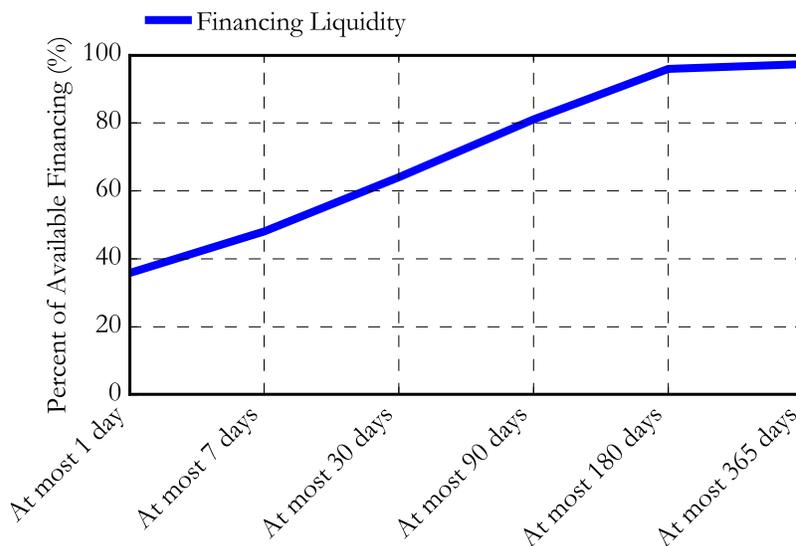


(c) Reverse Repo Borrowing

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

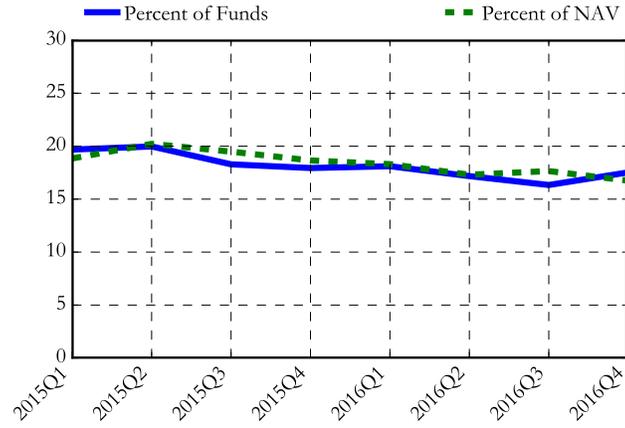
Financing Available	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
At most 1 day	44.6	43.5	43.9	31.0	43.3	43.5	37.1	35.8
At most 7 days	52.6	51.7	53.3	38.8	52.7	52.8	53.6	48.1
At most 30 days	65.3	63.5	65.3	66.2	66.5	65.8	65.2	64.0
At most 90 days	80.3	79.0	79.4	77.7	81.8	81.7	80.8	81.0
At most 180 days	95.8	94.7	95.0	89.0	96.1	95.9	96.0	95.9
At most 365 days	98.2	97.8	97.6	98.3	97.6	97.4	97.5	97.3

**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 2016.



### 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
VaR (Any Method)	598	612	620	623	622	627	622	631
Historical Simulation	228	230	233	233	240	237	239	234
Parametric	182	188	191	194	192	191	193	196
Monte Carlo Simulation	201	206	205	203	196	188	185	196
Other	27	34	38	38	38	41	46	42
VaR Not Used	962	980	1,004	1,016	974	980	994	1,018

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

VaR Method	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
VaR (Any Method)	3,254	3,183	3,200	3,020	3,079	3,206	3,267	3,225
Historical Simulation	1,678	1,660	1,667	1,554	1,602	1,688	1,762	1,700
Parametric	874	809	816	729	729	757	746	731
Monte Carlo Simulation	665	686	688	633	648	628	640	645
Other	287	314	307	333	317	321	344	373
VaR Not Used	2,058	2,095	1,993	1,968	1,910	1,893	1,973	1,990

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

VaR Method	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
VaR (Any Method)	1,339	1,361	1,316	1,305	1,270	1,294	1,308	1,303
Historical Simulation	507	519	498	482	463	483	501	479
Parametric	497	493	463	468	457	450	462	459
Monte Carlo Simulation	363	372	369	356	346	336	340	352
Other	58	74	78	91	88	90	94	94
VaR Not Used	1,499	1,506	1,444	1,429	1,382	1,373	1,426	1,437

## 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Stress and VaR	513	528	535	541	538	545	547	555
Stress, No VaR	428	428	461	455	443	453	446	452
No Stress, VaR	85	84	85	82	84	82	75	76
Neither	534	552	543	561	531	527	548	566

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Stress and VaR	3,028	2,971	2,985	2,799	2,861	3,001	3,088	3,045
Stress, No VaR	1,076	1,085	1,063	1,030	1,009	1,006	1,027	998
No Stress, VaR	226	212	215	221	218	205	179	179
Neither	982	1,010	930	938	901	887	946	992

**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Stress and VaR	1,193	1,223	1,176	1,165	1,144	1,162	1,191	1,185
Stress, No VaR	718	712	712	692	666	664	664	658
No Stress, VaR	147	138	141	140	125	132	117	117
Neither	780	793	733	736	715	709	762	779

## 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.

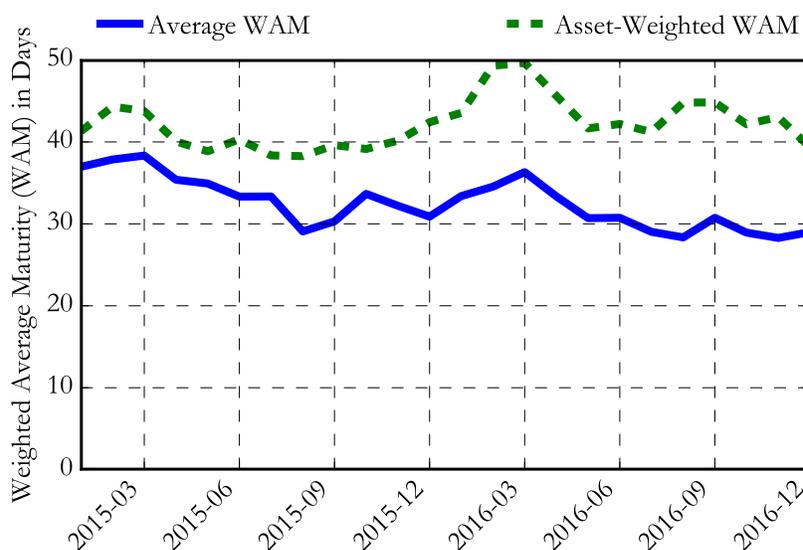
Liquidation Period	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
At most 1 day	73.2	73.8	74.1	74.4	81.2	77.4	80.1	80.9
At most 7 days	92.0	92.1	92.3	92.2	96.0	96.0	98.3	97.3
At most 30 days	99.4	99.4	99.4	99.4	99.7	99.7	99.9	99.6
At most 90 days	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8
At most 180 days	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9
At most 365 days	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

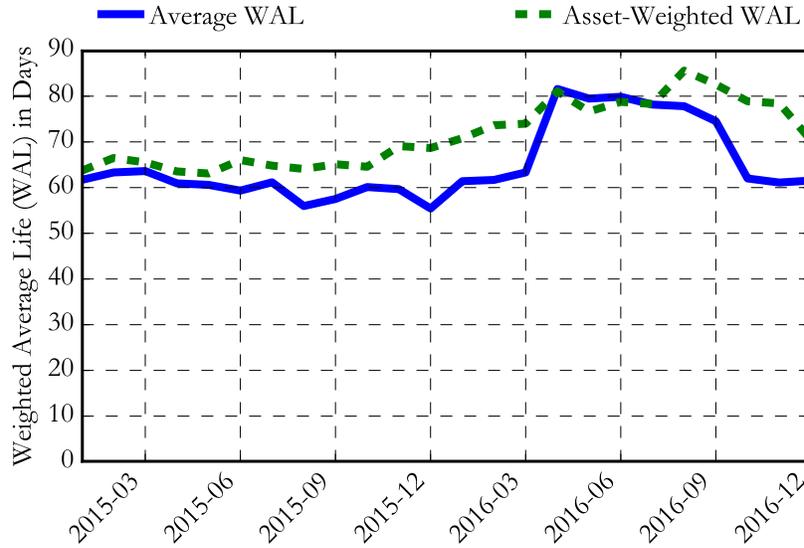
Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
May Suspend	268	248	252	268	232	241	232	253
May Have Gates	233	215	222	235	200	207	199	220
Suspended	0	0	0	0	0	0	0	0
Gated	0	0	0	0	0	0	0	0

### B Portfolio Characteristics

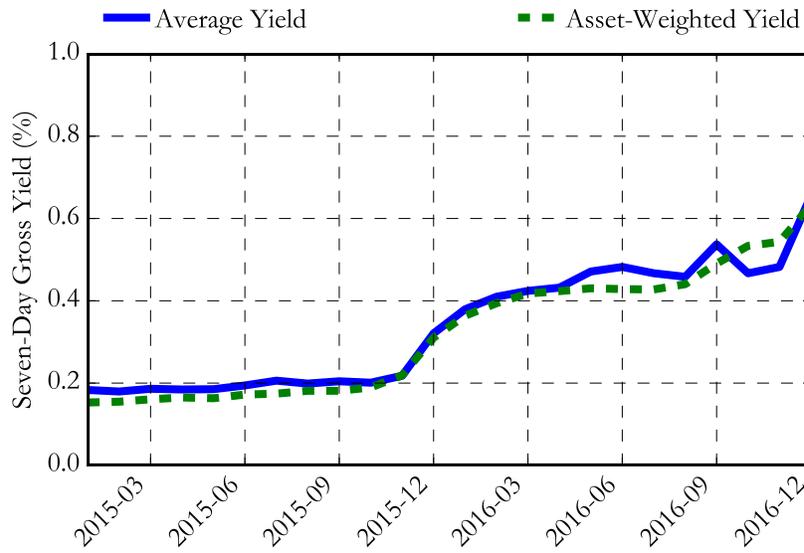
**Figure 17:** Weighted-Average Maturity Reported by Section 3 Liquidity Funds  
As reported on Form PF, Question 55.



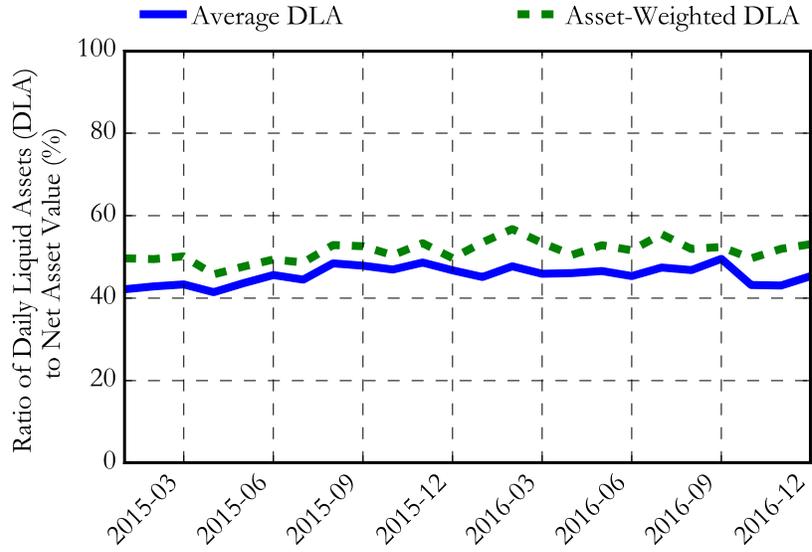
**Figure 18: Weighted-Average Life Reported by Section 3 Liquidity Funds**  
As reported on Form PF, Question 55.



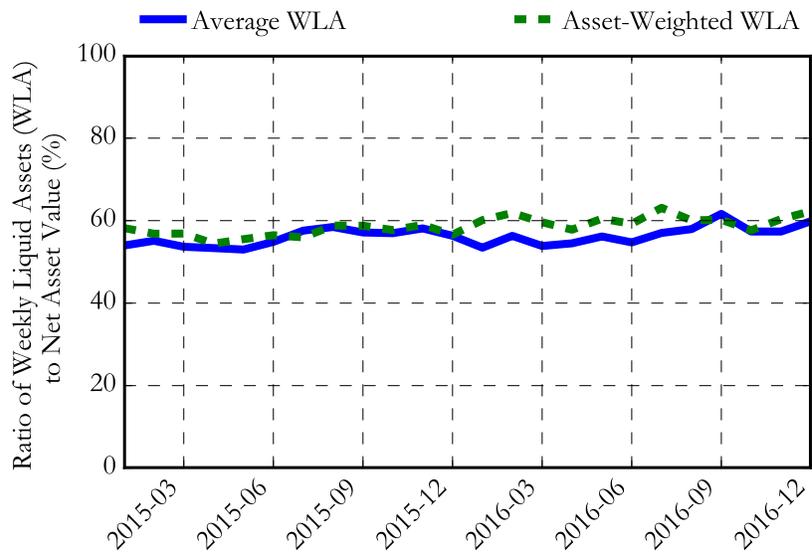
**Figure 19: Seven-Day Gross Yield Reported by Section 3 Liquidity Funds**  
As reported on Form PF, Question 55.



**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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Credit Quality	61.9	61.9	60.0	63.4	61.1	64.9	61.1	59.1
Diversification	59.5	59.5	57.5	61.0	58.3	62.2	58.3	56.8
Liquidity	59.5	59.5	57.5	61.0	52.8	54.1	55.6	56.8
Maturity	59.5	59.5	57.5	61.0	58.3	62.2	58.3	56.8
Fully	54.8	54.8	52.5	56.1	47.2	48.6	50.0	50.0
None	35.7	35.7	37.5	34.1	36.1	32.4	36.1	38.6

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

As reported on Form PF, Questions 9 and 54.

Compliance Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Credit Quality	23.8	23.6	21.8	22.4	16.2	17.9	13.5	14.4
Diversification	23.8	23.6	21.8	22.4	16.2	17.9	13.5	13.8
Liquidity	23.4	23.5	21.5	22.3	10.8	11.2	12.2	13.6
Maturity	23.4	23.5	21.5	22.3	16.0	17.6	13.5	13.6
Fully	22.9	22.7	20.8	21.5	10.0	10.4	11.0	11.8
None	76.1	76.2	78.1	77.4	83.6	82.0	86.1	85.5

## D Methods of Calculating NAV

**Table 59:** NAV Calculation Method (Percent of Funds)

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Stable	***	***	***	***	***	***	***	81.8
Floating	***	***	***	***	***	***	***	18.2

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

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

Type	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4
Stable	***	***	***	***	***	***	***	69.9
Floating	***	***	***	***	***	***	***	30.1

## 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	2015Q1	2015Q2	2015Q3	2015Q4	2016Q1
U.S. Treasuries	73.5	61.7	***	80.5	79.7
Other	49.4	49.6	53.6	51.3	39.2
Deposits	47.1	40.8	37.3	42.7	32.6
Repo - Govt. Collateral	41.5	38.9	44.2	33.1	30.9
Commercial Paper	42.9	41.1	37.3	34.1	22.8
Asset-Backed Securities	14.2	14.0	12.3	13.9	12.8
Repo - Other Collateral	13.9	10.2	9.2	7.4	***
U.S. Govt. Debt	5.2	5.7	6.4	8.7	5.5
Municipal Debt	0.5	0.4	***	0.5	***

**Table 62:** Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 2 of 2  
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
U.S. Treasuries	66.7	67.0	69.9	70.3	67.2	64.8	66.2	71.5	73.4
Deposits	55.7	62.0	55.3	61.7	58.1	55.3	57.8	61.7	73.3
Other	24.0	28.1	30.5	29.3	31.6	33.7	30.5	29.8	42.4
Commercial Paper	27.6	26.2	25.0	27.1	26.0	26.9	34.7	33.8	38.8
Repo - Govt. Collateral	43.0	41.0	35.7	36.6	41.7	35.9	45.5	42.7	37.2
Asset-Backed Securities	12.7	13.9	16.7	19.0	20.2	22.8	22.7	22.3	24.0
Repo - Other Collateral	***	***	***	***	***	6.4	7.6	10.4	15.5
U.S. Govt. Debt	4.6	4.5	5.6	5.9	5.0	5.9	5.3	4.2	4.2
Municipal Debt	***	***	***	***	***	1.1	1.0	1.2	3.0

## XI Section 4 Private Equity Fund Specific Information

### A CPC Industry Concentration

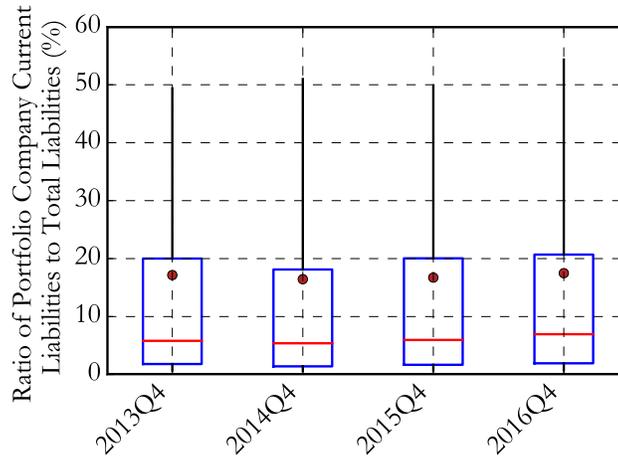
**Table 63:** Gross Assets in CPC Industries (Percent of Total)  
As reported on Form PF, Questions 8 and 77.

Type	2013Q4	2014Q4	2015Q4	2016Q4
Oil & Gas Extraction	7.9	7.8	5.8	6.7
Software Publishers	2.9	3.8	4.9	6.1
Electric Power Generation, Transmission & Distribution	3.8	3.9	3.7	4.1
Telecommunications Data Processing Services	2.6	2.5	2.7	2.3
Pipeline Transportation	2.5	2.6	2.4	2.2
Other Insurance Related Activities	0.9	1.0	1.0	2.0
Data Processing, Hosting, & Related Services	2.9	2.3	1.8	2.0
Other Information Services	2.0	2.1	1.9	1.8
Other Financial Vehicles	0.4	0.4	0.6	1.8
Other Financial Investment Activities	2.0	1.8	1.8	1.7
Custom Computer Programming Services	0.9	1.0	1.5	1.5
Pharmaceutical & Medicine Mfg	1.0	1.3	1.5	1.4
Management, Scientific, & Technical Consulting Services	1.0	1.2	1.1	1.3
Investigation & Security Services	0.5	0.5	0.7	1.2
Educational Services	1.1	1.1	1.3	1.2
Insurance Agencies & Brokerages	0.9	1.0	1.0	1.2
Activities Related to Credit Intermediation	1.2	1.2	1.4	1.0
Computer Systems Design Services	0.5	0.8	0.6	1.0

**B CPC Financial Leverage**

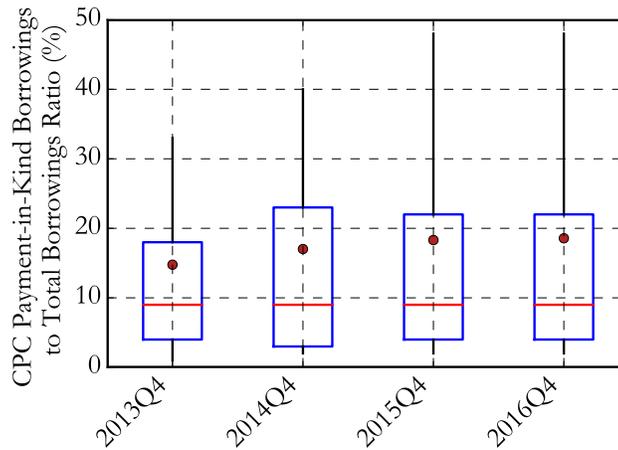
**Figure 22:** Distribution of Ratio of Aggregate CPC Current Liabilities to Total Liabilities of Section 4 Private Equity Funds

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

Region	2013Q4	2014Q4	2015Q4	2016Q4
North America	5,274	4,501	4,132	3,942
Europe EEA	1,423	1,259	941	848
Asia	571	462	447	406
South America	75	85	58	111
Supranational	65	67	23	37
Europe Other	25	9	21	22
Africa	20	12	12	18
Middle East	8	12	9	14

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

Region	2013Q4	2014Q4	2015Q4	2016Q4
North America	70.7	70.2	73.2	73.0
Europe EEA	19.1	19.6	16.7	15.7
Asia	7.6	7.2	7.9	7.5
South America	1.0	1.3	1.0	2.0
Supranational	0.9	1.0	0.4	0.7
Europe Other	0.3	0.1	0.4	0.4
Africa	0.3	0.2	0.2	0.3
Middle East	0.1	0.2	0.2	0.3

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

Country	2013Q4	2014Q4	2015Q4	2016Q4
United States	5,035	4,300	3,943	3,776
China and Hong Kong	171	186	173	114
India	63	83	89	92
Brazil	45	58	41	88
Japan	233	98	85	79
Russia	3	2	5	4

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

Country	2013Q4	2014Q4	2015Q4	2016Q4
United States	67.5	67.1	69.9	70.0
China and Hong Kong	2.3	2.9	3.1	2.1
India	0.8	1.3	1.6	1.7
Brazil	0.6	0.9	0.7	1.6
Japan	3.1	1.5	1.5	1.5
Russia	0.0	0.0	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.<sup>6</sup> 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.<sup>7</sup> 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.<sup>8</sup>

#### **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.

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<sup>6</sup>Note 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.

<sup>7</sup>An 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.

<sup>8</sup>In 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.<sup>9</sup> 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.

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<sup>9</sup>This 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:

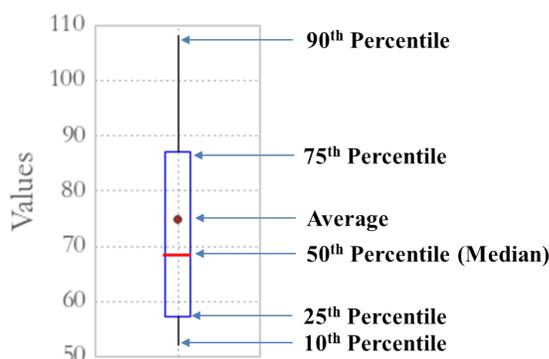
- (Q1): February 15 to May 14
- (Q2): May 15 to August 14
- (Q3): August 15 to November 14
- (Q4): November 15 to February 14

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.<sup>10</sup>

## 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



<sup>10</sup>Form 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 REO 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.<sup>11</sup> 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.

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<sup>11</sup>Such 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.

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<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.