



Division of Investment Management  
Analytics Office

# Private Funds Statistics

Third Calendar Quarter 2017

April 12, 2018

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

## Introduction

This report provides a summary of recent private fund industry statistics and trends, reflecting data collected through Form PF and Form ADV filings.<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 Fourth Calendar Quarter 2015 through Third Calendar Quarter 2017 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.

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

**If you have any questions or comments about Third Calendar Quarter 2017 Private Funds Statistics, please contact:**

Tim Dulaney, PhD, FRM or Tim Husson, PhD, FRM at FormPF@sec.gov with subject line “Third Calendar Quarter 2017-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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Private Equity Fund	9,644	9,706	9,717	9,744	10,341	10,359	10,339	10,249
Hedge Fund	8,784	8,912	8,920	8,979	8,910	9,064	9,105	9,136
Other Private Fund	4,132	4,105	4,131	4,123	4,435	4,454	4,477	4,435
Section 4 Private Equity Fund	2,733	2,739	2,741	2,746	3,001	3,005	3,008	2,988
Real Estate Fund	2,065	2,102	2,100	2,117	2,445	2,442	2,440	2,431
Qualifying Hedge Fund	1,640	1,597	1,606	1,617	1,650	1,671	1,717	1,715
Securitized Asset Fund	1,406	1,421	1,418	1,417	1,451	1,463	1,475	1,477
Venture Capital Fund	636	635	646	651	761	759	769	755
Liquidity Fund	65	64	66	67	69	70	69	69
Section 3 Liquidity Fund	41	36	37	36	44	45	47	46
<b>Total</b>	26,732	26,945	26,998	27,098	28,412	28,611	28,674	28,552

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Private Equity Fund	1,019	1,021	1,021	1,020	1,087	1,090	1,086	1,083
Hedge Fund	1,690	1,693	1,687	1,683	1,684	1,683	1,684	1,684
Other Private Fund	572	564	567	568	578	574	575	571
Section 4 Private Equity Fund	241	242	242	242	247	249	249	246
Real Estate Fund	291	293	291	293	311	313	311	310
Qualifying Hedge Fund	535	525	525	515	531	527	534	534
Securitized Asset Fund	155	157	156	154	149	151	153	154
Venture Capital Fund	97	97	98	100	109	109	110	109
Liquidity Fund	37	37	37	37	39	39	38	38
Section 3 Liquidity Fund	21	19	19	19	24	24	24	23
<b>Total</b>	2,836	2,838	2,833	2,829	2,903	2,904	2,905	2,904

<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 D 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Hedge Fund	6,078	6,159	6,326	6,461	6,403	6,699	6,890	7,212
Qualifying Hedge Fund	4,999	4,991	5,101	5,243	5,217	5,493	5,714	5,888
Private Equity Fund	2,058	2,059	2,061	2,063	2,315	2,323	2,320	2,307
Section 4 Private Equity Fund	1,471	1,472	1,472	1,472	1,644	1,648	1,648	1,641
Other Private Fund	978	974	979	983	1,066	1,076	1,087	1,060
Securitized Asset Fund	416	420	420	420	448	449	454	453
Real Estate Fund	398	406	406	407	436	436	433	432
Liquidity Fund	286	273	287	292	293	282	276	282
Section 3 Liquidity Fund	283	247	258	249	274	267	273	279
Venture Capital Fund	55	55	56	55	64	64	64	63
<b>Total</b>	10,268	10,345	10,535	10,682	11,025	11,329	11,525	11,808

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Hedge Fund	3,455	3,404	3,434	3,492	3,489	3,606	3,664	3,785
Qualifying Hedge Fund	2,736	2,653	2,669	2,736	2,742	2,827	2,899	2,992
Private Equity Fund	1,883	1,882	1,884	1,885	2,071	2,080	2,079	2,066
Section 4 Private Equity Fund	1,376	1,377	1,377	1,377	1,492	1,496	1,496	1,488
Other Private Fund	877	874	878	884	977	986	993	970
Securitized Asset Fund	135	138	138	140	141	141	145	144
Real Estate Fund	319	323	323	325	341	342	340	339
Liquidity Fund	285	272	285	290	292	281	275	280
Section 3 Liquidity Fund	282	246	256	247	273	265	272	278
Venture Capital Fund	52	52	53	52	61	61	62	60
<b>Total</b>	7,006	6,945	6,995	7,068	7,374	7,498	7,557	7,644

**Figure 1: GAV and NAV Distributions**  
As reported on Form PF, Questions 8 and 9.

<b>Qualifying Hedge Fund GAV (\$ Billions)</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
25th Percentile	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
Median	1.1	1.2	1.2	1.2	1.1	1.2	1.2	1.2
75th Percentile	2.6	2.6	2.6	2.6	2.5	2.6	2.6	2.6
90th Percentile	5.8	5.8	5.8	6.0	6.0	6.0	6.1	6.2
Mean	3.0	3.1	3.2	3.2	3.2	3.3	3.3	3.4
<b>Qualifying Hedge Fund NAV (\$ Billions)</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25th Percentile	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
Median	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.9
75th Percentile	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.8
90th Percentile	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.8
Mean	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
<b>Section 4 Private Equity Fund GAV (\$ Billions)</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75th Percentile	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
90th Percentile	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Mean	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
<b>Section 4 Private Equity Fund NAV (\$ Billions)</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75th Percentile	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3
90th Percentile	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Mean	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

**Figure 2: Ratio of GAV to NAV**  
(Winsorized, limits=[0%,98%])

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

<b>All Private Funds</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Median	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
75th Percentile	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2
90th Percentile	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0
Mean	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
<b>Qualifying Hedge Funds</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Median	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.1
75th Percentile	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6
90th Percentile	2.4	2.5	2.5	2.6	2.5	2.7	2.6	2.5
Mean	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6



## B Borrowings

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

Fund Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Securitized Asset Fund	50.7	48.9	48.7	48.4	50.7	49.5	48.8	48.4
Qualifying Hedge Fund	38.1	39.1	38.2	39.9	39.7	41.0	42.0	41.6
Hedge Fund	35.6	36.8	36.3	38.1	37.3	38.4	39.2	39.5
Real Estate Fund	13.3	13.3	13.4	13.3	13.9	12.9	12.7	12.8
Private Equity Fund	4.8	4.8	4.9	4.9	5.1	5.0	5.0	5.0
Section 4 Private Equity Fund	3.4	3.4	3.4	3.4	4.0	4.0	4.0	4.1
Other Private Fund	2.3	2.2	2.2	2.1	2.8	2.7	2.7	2.7
Venture Capital Fund	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 3 Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Figure 3: Distribution of Total Borrowings**  
As reported on Form PF, Questions 12 and 43.

All Private Funds (\$ Billions)								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75th Percentile	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
90th Percentile	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Mean	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5
Qualifying Hedge Funds (\$ Billions)								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Median	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75th Percentile	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.1
90th Percentile	3.0	3.2	2.9	3.2	3.2	3.4	3.2	3.4
Mean	1.8	1.8	1.9	2.0	1.9	2.1	2.2	2.2

**Figure 4: Ratio of Borrowings to NAV**

(Winsorized, limits=[0%,98%])

See Appendix C for an explanation of winsorization.

As reported on Form PF, Questions 9, 10, 12, and 43 (Third Month).

<b>All Private Funds</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75th Percentile	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
90th Percentile	3.0	2.9	3.0	3.0	3.6	3.8	3.8	3.8
Mean	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8

  

<b>Qualifying Hedge Funds</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Median	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4
75th Percentile	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
90th Percentile	1.8	1.8	1.9	2.0	1.9	2.1	2.1	2.1
Mean	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8

## C Fair Value Hierarchy

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

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Level One	2,746	2,479	2,463	2,483	2,876	2,583	2,576	2,560
Level Two	2,451	2,141	2,071	2,064	2,544	2,202	2,186	2,232
Level Three	2,339	2,267	2,260	2,258	2,592	2,510	2,510	2,504
Cost-Based	1,749	1,580	1,539	1,537	1,972	1,691	1,722	1,731

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

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Level One	628	668	680	677	520	665	663	667
Level Two	335	476	424	428	417	462	451	455
Level Three	110	111	107	106	142	136	140	137
Cost-Based	492	672	693	695	464	659	654	660

## 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Hedge Fund	698	692	695	690	658	646	654	659
Other Private Fund	409	411	409	412	484	499	499	497
Private Equity Fund	250	250	250	249	237	238	237	271
Qualifying Hedge Fund	246	233	236	232	232	223	220	224
Section 4 Private Equity Fund	82	82	82	82	88	88	88	88
Real Estate Fund	49	52	52	52	77	77	77	77
Securitized Asset Fund	***	***	***	***	***	***	***	***
Liquidity Fund	14	16	14	15	15	16	16	16
Section 3 Liquidity Fund	13	15	14	15	15	16	16	16
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	1,455	1,456	1,455	1,453	1,511	1,516	1,523	1,559

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Hedge Fund	654	612	598	598	576	597	603	630
Other Private Fund	1,329	1,325	1,307	1,361	1,491	1,529	1,580	1,600
Private Equity Fund	96	96	96	96	29	29	28	28
Qualifying Hedge Fund	478	437	417	436	411	425	427	467
Section 4 Private Equity Fund	19	19	19	19	22	22	22	22
Real Estate Fund	10	11	11	11	6	6	6	6
Securitized Asset Fund	***	***	***	***	***	***	***	***
Liquidity Fund	250	321	305	312	309	333	330	345
Section 3 Liquidity Fund	245	316	305	312	309	333	330	345
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	2,495	2,521	2,472	2,533	2,593	2,675	2,728	2,790

<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  
As reported on Form PF, Question 11.

<b>All Private Funds (\$ Billions)</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75th Percentile	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.8
90th Percentile	3.6	3.5	3.4	3.5	3.4	3.5	3.5	3.5
Mean	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8
<b>Qualifying Hedge Funds (\$ Billions)</b>								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
25th Percentile	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Median	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
75th Percentile	1.3	1.2	1.2	1.4	1.3	1.6	1.7	1.7
90th Percentile	3.0	2.8	2.9	3.4	3.1	3.4	3.4	3.6
Mean	1.9	1.9	1.8	1.9	1.8	1.9	1.9	2.1

### 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
United States	50.1	50.7	50.7	50.7	51.2	51.3	51.4	50.9
Cayman Islands	37.8	37.4	37.3	37.2	36.4	36.5	36.4	36.8
Ireland	3.9	3.8	3.9	3.9	4.3	4.2	4.2	4.2
Virgin Islands, British	2.3	2.4	2.3	2.3	2.2	2.2	2.0	2.0
Luxembourg	1.3	1.3	1.5	1.5	1.4	1.5	1.6	1.6
Bermuda	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.3
United Kingdom	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Other	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0
Qualifying Hedge Funds								
Country	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Cayman Islands	55.7	54.7	54.5	53.8	52.9	52.7	52.5	51.8
United States	32.0	32.7	33.0	33.7	34.2	34.6	34.9	35.3
Virgin Islands, British	5.4	5.7	5.7	5.5	5.5	5.3	5.0	4.8
Ireland	2.5	2.6	2.5	2.6	2.7	2.7	2.7	2.7
Bermuda	1.5	1.4	1.4	1.4	1.8	1.7	1.7	1.7
Luxembourg	1.2	1.2	1.2	1.3	1.3	1.4	1.5	1.7
Other	1.9	1.8	1.7	1.7	1.7	1.7	1.6	1.9
Section 3 Liquidity Funds								
Country	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Ireland	***	***	***	***	***	***	***	***
United States	35.0	36.5	34.2	34.1	33.1	33.9	36.8	33.9
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
United States	62.0	62.0	62.0	62.0	63.8	63.8	63.8	63.7
Cayman Islands	30.3	30.3	30.3	30.3	29.5	29.4	29.4	29.5
United Kingdom	2.6	2.6	2.6	2.6	1.9	1.9	1.9	2.0
Bermuda	1.3	1.3	1.3	1.3	1.1	1.1	1.1	1.1
Canada	1.2	1.2	1.2	1.2	0.9	0.9	0.9	0.9
Other	2.7	2.6	2.6	2.7	2.9	2.9	2.9	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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
United States	89.8	89.5	89.5	89.7	90.1	89.3	89.0	89.1
United Kingdom	6.4	6.6	6.6	6.6	6.2	6.5	6.8	6.8
Other	3.8	3.9	3.9	3.7	3.7	4.1	4.2	4.1
<b>Qualifying Hedge Funds</b>								
Country	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
United States	89.2	89.3	89.5	89.3	89.6	89.4	89.3	89.0
United Kingdom	5.6	5.7	5.6	5.7	5.7	5.9	6.3	6.4
Australia	***	***	***	***	***	***	***	***
Hong Kong	***	***	***	***	***	***	***	***
Other	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.2
<b>Section 3 Liquidity Funds</b>								
Country	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
United States	57.4	58.4	59.4	64.1	62.5	64.2	64.1	62.5
United Kingdom	***	***	***	***	***	***	***	***
France	***	***	***	***	***	***	***	***
<b>Section 4 Private Equity Funds</b>								
Country	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
United States	97.2	97.2	97.2	97.2	95.1	95.1	95.1	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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Private Funds	1,360	1,328	1,324	1,323	1,340	1,356	1,372	1,371
State/Muni. Govt. Pension Plans	896	909	918	933	1,008	1,028	1,032	1,046
Other	897	882	895	920	976	995	1,010	1,037
Pension Plans	891	881	893	908	947	956	966	972
U.S. Individuals	759	767	770	777	771	783	787	796
Non-Profits	710	705	704	724	748	768	777	788
Sov. Wealth Funds and For. Official Inst.	383	382	386	386	429	438	443	444
Insurance Companies	278	274	276	275	305	310	312	314
Unknown Non-U.S. Investors	169	163	171	170	186	186	185	189
Non-U.S. Individuals	201	196	199	200	197	198	185	182
Banking/Thrift Inst.	147	144	149	145	137	141	143	147
SEC-Registered Investment Companies	106	123	120	119	125	127	129	137
Broker-Dealers	112	107	104	97	102	104	107	111
State/Muni. Govt. Entities	99	87	89	90	99	104	107	108

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

As reported on Form PF, Questions 9 and 16.

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Private Funds	19.4	19.1	18.9	18.7	18.2	18.1	18.2	17.9
State/Muni. Govt. Pension Plans	12.8	13.1	13.1	13.2	13.7	13.7	13.7	13.7
Other	12.8	12.7	12.8	13.0	13.2	13.3	13.4	13.6
Pension Plans	12.7	12.7	12.8	12.9	12.8	12.8	12.8	12.7
U.S. Individuals	10.8	11.0	11.0	11.0	10.5	10.4	10.4	10.4
Non-Profits	10.1	10.2	10.1	10.2	10.1	10.2	10.3	10.3
Sov. Wealth Funds and For. Official Inst.	5.5	5.5	5.5	5.5	5.8	5.8	5.9	5.8
Insurance Companies	4.0	3.9	4.0	3.9	4.1	4.1	4.1	4.1
Unknown Non-U.S. Investors	2.4	2.3	2.4	2.4	2.5	2.5	2.5	2.5
Non-U.S. Individuals	2.9	2.8	2.8	2.8	2.7	2.6	2.5	2.4
Banking/Thrift Inst.	2.1	2.1	2.1	2.1	1.9	1.9	1.9	1.9
SEC-Registered Investment Companies	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.8
Broker-Dealers	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.5
State/Muni. Govt. Entities	1.4	1.2	1.3	1.3	1.3	1.4	1.4	1.4



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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Private Funds	550	513	509	504	490	495	505	510
Non-Profits	370	363	359	378	383	395	405	418
Other	334	323	333	356	356	375	385	408
Pension Plans	358	347	352	364	369	379	387	399
U.S. Individuals	316	305	308	319	318	324	331	340
State/Muni. Govt. Pension Plans	265	272	278	291	304	310	314	330
Sov. Wealth Funds and For. Official Inst.	136	137	136	140	143	152	158	160
Broker-Dealers	83	77	76	69	68	72	75	79
SEC-Registered Investment Companies	63	77	76	75	71	70	70	74
Insurance Companies	68	64	65	65	67	69	72	73
Non-U.S. Individuals	66	64	65	66	65	68	68	70
Unknown Non-U.S. Investors	50	48	46	46	41	45	52	56
State/Muni. Govt. Entities	42	31	32	33	35	41	42	42
Banking/Thrift Inst.	31	30	32	30	28	30	32	33

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Private Funds	20.1	19.3	19.1	18.4	17.9	17.5	17.4	17.0
Non-Profits	13.5	13.7	13.4	13.8	13.9	14.0	14.0	14.0
Other	12.2	12.2	12.5	13.0	13.0	13.3	13.3	13.7
Pension Plans	13.1	13.1	13.2	13.3	13.5	13.4	13.3	13.3
U.S. Individuals	11.6	11.5	11.5	11.7	11.6	11.5	11.4	11.4
State/Muni. Govt. Pension Plans	9.7	10.2	10.4	10.6	11.1	11.0	10.8	11.0
Sov. Wealth Funds and For. Official Inst.	5.0	5.1	5.1	5.1	5.2	5.4	5.4	5.4
Broker-Dealers	3.0	2.9	2.8	2.5	2.5	2.5	2.6	2.6
SEC-Registered Investment Companies	2.3	2.9	2.9	2.7	2.6	2.5	2.4	2.5
Insurance Companies	2.5	2.4	2.4	2.4	2.4	2.4	2.5	2.5
Non-U.S. Individuals	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3
Unknown Non-U.S. Investors	1.8	1.8	1.7	1.7	1.5	1.6	1.8	1.9
State/Muni. Govt. Entities	1.5	1.2	1.2	1.2	1.3	1.4	1.4	1.4
Banking/Thrift Inst.	1.1	1.1	1.2	1.1	1.0	1.1	1.1	1.1

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Private Funds	82	79	79	80	81	75	89	83
Unknown Non-U.S. Investors	45	***	***	60	65	60	52	55
Other	51	38	38	40	52	51	51	51
SEC-Registered Investment Companies	16	17	17	18	16	18	21	24
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	***	***	***	***	10	***	12	***
Insurance Companies	8	7	8	8	9	9	9	10
Pension Plans	5	5	5	***	5	5	5	5
Sov. Wealth Funds and For. Official Inst.	***	***	***	***	***	***	***	***
Non-U.S. Individuals	28	17	17	4	4	4	4	4
Non-Profits	***	***	***	***	1	2	2	2
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
State/Muni. Govt. Pension Plans	***	***	***	***	1	1	1	1
U.S. Individuals	***	***	***	***	***	***	***	***

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Private Funds	29.0	32.2	30.9	32.3	29.6	28.3	32.6	30.0
Unknown Non-U.S. Investors	15.8	***	***	24.2	23.7	22.7	19.2	19.9
Other	17.9	15.5	14.7	16.2	19.2	19.3	18.7	18.5
SEC-Registered Investment Companies	5.8	7.1	6.5	7.1	5.9	6.9	7.6	8.6
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	***	***	***	***	3.6	***	4.3	***
Insurance Companies	2.9	2.9	3.3	3.2	3.3	3.4	3.3	3.7
Pension Plans	1.9	1.9	1.8	***	1.7	1.8	1.8	1.9
Sov. Wealth Funds and For. Official Inst.	***	***	***	***	***	***	***	***
Non-U.S. Individuals	10.0	6.9	6.8	1.6	1.4	1.5	1.5	1.4
Non-Profits	***	***	***	***	0.5	0.6	0.6	0.6
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
State/Muni. Govt. Pension Plans	***	***	***	***	0.4	0.6	0.4	0.4
U.S. Individuals	***	***	***	***	***	***	***	***

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
State/Muni. Govt. Pension Plans	325	326	326	326	366	366	366	366
Private Funds	270	270	270	270	283	285	284	284
Other	140	140	140	140	162	162	161	161
Sov. Wealth Funds and For. Official Inst.	132	132	132	131	153	154	154	153
Pension Plans	137	138	137	138	141	142	142	139
Insurance Companies	84	84	84	84	94	94	94	94
Non-Profits	87	87	87	86	92	92	92	90
U.S. Individuals	95	95	95	95	88	88	88	88
Non-U.S. Individuals	35	35	35	35	34	34	34	34
Banking/Thrift Inst.	32	32	32	32	31	31	31	31
State/Muni. Govt. Entities	19	19	19	19	22	22	22	22
Unknown Non-U.S. Investors	15	15	15	15	14	14	14	13
SEC-Registered Investment Companies	5	5	5	5	12	12	12	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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
State/Muni. Govt. Pension Plans	23.7	23.7	23.7	23.6	24.5	24.5	24.5	24.6
Private Funds	19.6	19.6	19.6	19.6	19.0	19.0	19.0	19.1
Other	10.2	10.2	10.2	10.2	10.8	10.8	10.8	10.8
Sov. Wealth Funds and For. Official Inst.	9.6	9.6	9.6	9.6	10.3	10.3	10.3	10.3
Pension Plans	10.0	10.0	10.0	10.0	9.5	9.5	9.5	9.4
Insurance Companies	6.1	6.1	6.1	6.1	6.3	6.3	6.3	6.3
Non-Profits	6.3	6.3	6.3	6.3	6.1	6.1	6.2	6.1
U.S. Individuals	6.9	6.9	6.9	6.9	5.9	5.9	5.9	5.9
Non-U.S. Individuals	2.6	2.6	2.6	2.6	2.3	2.3	2.3	2.3
Banking/Thrift Inst.	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.1
State/Muni. Govt. Entities	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5
Unknown Non-U.S. Investors	1.1	1.1	1.1	1.1	0.9	0.9	0.9	0.9
SEC-Registered Investment Companies	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
Broker-Dealers	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1

## V Derivatives

**Table 20:** Aggregate Derivative Value (\$ Billions)

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

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Hedge Fund	8,455	9,181	9,363	9,397	9,189	10,245	10,260	11,443
Qualifying Hedge Fund	7,368	8,027	8,073	8,207	7,919	8,833	8,929	9,659
Other Private Fund	100	99	97	98	113	109	109	110
Private Equity Fund	54	54	54	53	38	38	38	38
Section 4 Private Equity Fund	42	42	42	42	35	35	34	34
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Real Estate Fund	21	21	21	21	16	16	16	16
Securitized Asset Fund	11	11	11	10	14	14	14	13
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	<b>8,634</b>	<b>9,368</b>	<b>9,500</b>	<b>9,544</b>	<b>9,391</b>	<b>10,395</b>	<b>10,491</b>	<b>11,647</b>

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

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Hedge Fund	244.7	269.7	272.7	269.1	263.3	284.1	280.0	302.3
Qualifying Hedge Fund	269.3	302.5	302.5	299.9	288.8	312.4	308.0	322.9
Other Private Fund	11.4	11.3	11.0	11.1	11.5	11.0	11.0	11.3
Private Equity Fund	2.9	2.8	2.8	2.8	1.8	1.8	1.8	1.8
Section 4 Private Equity Fund	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Real Estate Fund	6.7	6.6	6.6	6.6	4.8	4.8	4.7	4.8
Securitized Asset Fund	8.3	7.9	7.7	7.4	9.8	9.8	9.4	9.2
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	<b>123.2</b>	<b>134.9</b>	<b>135.8</b>	<b>135.0</b>	<b>127.4</b>	<b>138.6</b>	<b>138.8</b>	<b>152.4</b>

**Figure 6:** Distribution of Derivative Values  
As reported on Form PF, Questions 13 and 44 (Third Month).

All Private Funds (\$ Billions)								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75th Percentile	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3
90th Percentile	1.3	1.4	1.4	1.3	1.3	1.4	1.5	1.6
Mean	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1
Qualifying Hedge Funds (\$ Billions)								
Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Median	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5
75th Percentile	2.0	2.0	2.2	2.0	2.0	2.2	2.1	2.2
90th Percentile	8.2	9.2	8.9	8.1	7.7	8.6	9.2	10.0
Mean	4.4	4.9	4.5	4.3	4.2	4.7	4.8	5.2

## 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
0%	7,382	7,459	7,482	7,521	7,483	7,610	7,655	7,678
Less than 100%	40	63	64	70	62	62	66	63
100% or More	11	9	10	9	11	12	11	12

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

Fraction of NAV	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
0%	3,338	3,285	3,321	3,377	3,377	3,494	3,558	3,658
Less than 100%	77	84	83	84	78	79	78	43
100% or More	2	2	2	2	2	3	3	37

## VII Hedge Fund Industry Concentration

**Table 24:** Percent of Aggregate Hedge Fund Net Asset Value  
Reported by Top Hedge Funds Sorted by Net Asset Value  
As reported on Form PF, Questions 9 and 10.

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Top 10	7.9	7.9	7.8	7.9	7.9	7.7	7.7	7.5
Top 25	14.1	13.7	13.6	13.8	13.8	13.3	13.5	13.2
Top 50	20.8	20.5	20.4	20.6	20.5	20.2	20.2	20.0
Top 100	29.5	29.2	29.1	29.2	29.0	28.7	28.6	28.5
Top 250	44.8	44.4	44.1	44.3	44.2	43.7	43.5	43.5
Top 500	58.5	57.9	57.6	57.7	57.6	57.0	57.0	56.9

**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.

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Top 10	13.4	15.1	15.0	14.4	14.7	14.7	14.9	15.4
Top 25	21.3	23.3	23.6	22.9	23.2	23.5	23.2	24.1
Top 50	28.7	30.5	31.2	31.2	31.4	32.0	31.5	32.6
Top 100	38.8	40.1	40.8	41.0	41.0	41.6	41.4	42.2
Top 250	53.8	54.4	54.9	55.2	55.0	55.2	55.2	56.1
Top 500	66.1	66.5	66.8	67.0	66.8	66.8	66.9	67.6

**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).

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Top 10	30.6	32.7	32.7	32.8	31.5	31.9	33.3	35.0
Top 25	41.1	43.9	45.3	45.5	44.5	45.1	46.2	47.6
Top 50	52.4	54.5	56.0	56.5	56.1	56.7	57.4	58.7
Top 100	65.0	66.3	67.5	68.6	68.5	68.8	69.2	70.2
Top 250	79.8	80.6	80.6	81.8	81.6	81.5	81.8	82.7
Top 500	89.2	89.5	89.5	90.2	90.0	89.9	90.1	90.5

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

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Top 10	30.0	31.5	34.5	36.9	34.7	34.1	31.9	32.4
Top 25	45.8	47.2	48.7	50.5	48.5	48.1	46.5	49.1
Top 50	58.8	60.0	60.7	61.4	60.1	60.5	59.4	61.3
Top 100	71.0	71.8	72.2	73.2	73.0	73.2	72.1	73.4
Top 250	84.9	85.5	85.7	86.2	86.1	86.3	85.9	86.5
Top 500	92.5	92.8	92.9	93.2	93.3	93.3	92.8	93.3

**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).

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Top 10	27.0	28.6	31.5	32.6	31.6	30.9	30.1	30.2
Top 25	40.4	42.6	44.0	45.3	45.4	44.5	43.5	44.9
Top 50	52.5	54.7	55.1	56.3	56.8	56.6	55.6	56.9
Top 100	64.8	66.5	66.9	67.5	68.6	68.8	67.7	68.6
Top 250	80.4	81.2	81.3	81.6	82.2	82.5	82.0	82.6
Top 500	90.6	91.1	90.9	90.8	91.2	91.4	90.8	91.2

## VIII Information Reported by Large Hedge Fund Advisers

### A Economic Leverage

**Figure 7:** Ratio of Hedge Fund Gross Notional Exposure to Net Asset Value  
(Winsorized, limits=[0%,98%])

See Appendix C for an explanation of winsorization.  
As reported on Form PF, Questions 3(a) and 26.

Including Interest Rate Derivatives (IRDs)																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.5	1.5	1.5	1.5
Median	2.5	2.4	2.3	2.4	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.4	2.3
75th Percentile	4.5	4.7	4.2	4.7	4.8	4.7	4.8	4.9	4.8	4.8	4.9	4.8	4.9	4.8	4.6	5.1	5.3	5.0	5.2	5.3	4.9	5.0	5.0	4.9
90th Percentile	10.3	10.8	9.6	11.1	11.7	11.1	11.6	12.0	11.4	11.5	11.5	10.8	12.6	12.2	10.5	11.7	11.9	11.3	11.6	12.1	11.4	12.6	14.4	13.5
Mean	5.3	5.9	4.8	5.2	5.5	5.6	5.4	5.7	5.3	5.4	5.7	5.4	6.0	6.1	5.5	6.0	6.2	6.0	5.9	6.3	5.7	6.7	7.2	6.9
Excluding IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0
25th Percentile	1.4	1.4	1.3	1.3	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.3
Median	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.0
75th Percentile	3.5	3.4	3.3	3.4	3.4	3.4	3.7	3.7	3.6	3.6	3.7	3.6	3.7	3.6	3.4	3.6	3.7	3.6	3.7	3.8	3.6	3.7	3.7	3.7
90th Percentile	7.1	7.1	6.8	6.8	6.7	7.0	7.2	7.5	6.9	7.0	7.2	7.6	7.9	8.2	7.8	8.1	8.5	7.9	8.6	8.7	8.3	8.7	8.9	9.2
Mean	3.4	3.5	3.1	3.4	3.4	3.4	3.6	3.6	3.5	3.8	3.8	3.7	4.0	4.0	3.7	4.0	4.1	3.9	4.1	4.2	3.8	4.4	4.3	4.3



**Figure 8: Ratio of Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value (Winsorized, limits=[0%,98%])**  
 See Appendix C for an explanation of winsorization.  
 As reported on Form PF, Questions 3(a) and 26.

Long Exposure Including IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.0	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	0.9	1.0	1.0	0.9	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	0.9	1.0	1.0
25th Percentile	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Median	1.7	1.7	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6
75th Percentile	2.7	2.7	2.5	2.8	2.9	2.8	3.0	3.0	2.9	2.9	2.9	3.0	2.9	2.9	2.8	3.0	3.2	3.0	3.1	3.1	3.0	3.1	3.1	3.0
90th Percentile	5.8	5.9	5.2	6.1	6.7	6.1	6.1	6.4	6.2	6.4	6.4	6.2	6.7	6.5	6.0	6.6	7.0	6.3	7.1	7.3	6.7	7.6	7.9	7.4
Mean	3.2	3.3	2.8	3.2	3.3	3.3	3.3	3.4	3.3	3.3	3.4	3.3	3.5	3.6	3.3	3.6	3.6	3.6	3.7	3.8	3.5	3.9	4.2	4.2
Long Exposure Excluding IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.0	1.0	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	1.0	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.9
25th Percentile	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Median	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.5	1.5	1.5
75th Percentile	2.3	2.2	2.2	2.2	2.2	2.2	2.5	2.5	2.3	2.4	2.4	2.4	2.5	2.4	2.4	2.6	2.4	2.5	2.5	2.4	2.4	2.4	2.4	2.5
90th Percentile	4.1	4.1	3.9	4.2	4.1	4.4	4.7	4.7	4.5	4.8	4.7	4.8	4.9	4.6	4.8	4.9	4.7	5.2	5.1	5.0	5.2	5.2	5.2	5.2
Mean	2.2	2.2	2.0	2.2	2.2	2.3	2.3	2.4	2.3	2.4	2.4	2.4	2.5	2.5	2.4	2.5	2.6	2.5	2.6	2.7	2.5	2.7	2.7	2.7
Short Exposure Including IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25th Percentile	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3
Median	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
75th Percentile	1.9	2.0	1.8	1.9	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.2	2.2	2.0	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.3
90th Percentile	5.3	5.6	4.7	5.9	5.6	5.4	5.4	5.4	5.2	5.8	5.7	5.5	5.9	6.2	6.0	6.1	6.6	6.4	6.1	6.2	5.9	6.5	6.7	6.8
Mean	2.4	2.7	2.1	2.3	2.4	2.5	2.5	2.6	2.4	2.6	2.7	2.4	2.8	2.9	2.6	2.7	2.8	2.8	2.7	2.9	2.7	3.1	3.1	3.2
Short Exposure Excluding IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25th Percentile	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Median	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
75th Percentile	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.3	1.4	1.3	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
90th Percentile	3.4	3.5	3.1	3.3	3.0	3.1	3.5	3.7	3.4	3.3	3.5	3.4	3.6	3.8	3.7	3.9	3.9	3.8	4.1	4.3	3.9	4.1	4.2	4.4
Mean	1.4	1.5	1.3	1.3	1.4	1.4	1.4	1.5	1.4	1.5	1.6	1.5	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.8	1.6	1.8	1.9	1.8

## 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)
2015-10	17.1	26.8	39.5	53.4
2015-11	17.1	26.9	40.1	54.1
2015-12	17.2	26.9	35.7	49.8
2016-01	17.6	27.5	35.8	50.0
2016-02	17.4	27.3	38.2	51.4
2016-03	17.4	27.3	35.9	49.1
2016-04	17.9	27.8	37.4	51.2
2016-05	18.1	28.0	38.2	51.7
2016-06	18.0	28.0	37.1	51.0
2016-07	18.0	27.9	38.1	52.4
2016-08	18.0	27.9	38.9	52.8
2016-09	18.0	27.9	38.7	52.8
2016-10	18.1	27.9	39.6	53.2
2016-11	18.1	27.9	40.0	53.4
2016-12	18.1	27.9	36.8	50.8
2017-01	18.6	28.2	38.4	52.2
2017-02	18.6	28.2	39.0	52.8
2017-03	18.6	28.2	37.3	51.1
2017-04	18.5	28.2	36.1	50.1
2017-05	18.5	28.2	36.5	50.5
2017-06	18.5	28.2	36.3	50.5
2017-07	18.6	28.2	36.6	51.1
2017-08	18.6	28.1	37.4	52.5
2017-09	18.7	28.2	36.3	50.9

C Portfolio Turnover

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

Month	Futures	Sov. and muni. bonds	Listed equities	Corporate bonds	Convertible bonds	Total
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	2,266	2,190	110	15	13,343
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	8,476	2,074	1,972	111	22	12,655
2016-05	9,577	2,590	1,969	110	17	14,263
2016-06	12,915	2,795	2,108	99	21	17,938
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
2017-01	11,430	2,595	1,855	123	20	16,023
2017-02	12,332	2,749	1,870	105	21	17,077
2017-03	14,741	2,733	2,043	125	25	19,667
2017-04	11,035	1,993	1,846	85	16	14,976
2017-05	12,042	3,002	2,189	131	25	17,388
2017-06	17,107	2,965	2,187	115	23	22,396
2017-07	11,208	2,673	2,099	101	17	16,098
2017-08	10,895	2,932	2,385	92	21	16,325
2017-09	13,555	2,996	2,260	108	24	18,942

**Figure 9:** Distributions of Portfolio Turnover  
(Winsorized, limits=[1%,99%])  
See Appendix C for an explanation of winsorization.  
As reported on Form PF, Questions 3(a) and 27.

Total Turnover (\$ Billions)																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25th Percentile	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.3
Median	1.2	1.1	1.2	1.3	1.3	1.4	1.2	1.2	1.3	1.1	1.1	1.2	1.1	1.5	1.1	1.2	1.3	1.4	1.1	1.3	1.4	1.0	1.1	1.1
75th Percentile	4.7	4.7	4.8	5.4	6.6	5.9	4.8	5.1	6.2	4.7	5.5	6.2	5.1	6.8	5.6	5.5	6.1	7.0	5.1	6.2	7.6	4.5	5.4	6.1
90th Percentile	23.7	21.3	30.9	28.3	28.3	32.6	30.5	31.0	39.1	30.1	35.0	46.5	35.3	51.6	44.5	42.0	43.2	55.7	35.2	50.4	51.2	42.4	44.7	59.2
Mean	20.5	23.1	24.8	23.0	24.9	26.3	20.4	24.5	29.1	19.7	24.1	29.8	22.3	32.9	26.0	25.6	29.6	33.9	22.7	27.7	35.0	22.6	28.0	31.7
Total Turnover to NAV Ratio																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1
Median	0.5	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.4	0.7	0.5	0.5	0.6	0.4	0.6	0.6	0.4	0.4	0.5
75th Percentile	1.9	1.7	1.7	2.1	2.3	2.3	1.9	2.1	2.2	1.8	1.9	2.1	2.0	2.9	2.4	2.2	2.6	2.9	2.0	2.7	2.5	1.9	2.3	2.4
90th Percentile	9.1	8.1	9.3	10.2	10.6	12.7	12.7	13.5	19.0	12.5	12.3	18.3	14.3	18.6	16.7	14.6	17.8	19.5	15.2	16.3	19.6	13.9	19.0	20.7
Mean	6.4	6.4	7.6	7.4	7.5	7.6	6.8	7.9	9.1	6.6	7.1	8.2	7.7	10.2	8.7	7.9	8.5	9.4	6.5	7.5	9.3	7.0	6.9	7.9

## 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
North America	3,767	3,878	3,942	4,101	4,074	4,402	4,498	5,088
Europe EEA	1,094	1,216	1,198	1,219	1,221	1,707	1,669	1,710
Asia	578	619	601	611	530	595	599	713
South America	90	101	91	91	87	95	102	108
Europe Other	66	61	62	67	64	80	78	77
Supranational	33	30	30	33	46	60	68	67
Africa	21	21	21	19	18	19	22	24
Middle East	23	22	22	20	18	20	23	23

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
North America	129.0	134.2	136.4	138.4	136.4	141.8	143.0	156.1
Europe EEA	37.5	42.1	41.5	41.1	40.9	55.0	53.1	52.5
Asia	19.8	21.4	20.8	20.6	17.8	19.2	19.1	21.9
South America	3.1	3.5	3.2	3.1	2.9	3.1	3.2	3.3
Europe Other	2.3	2.1	2.1	2.3	2.1	2.6	2.5	2.4
Supranational	1.1	1.0	1.0	1.1	1.5	1.9	2.2	2.1
Africa	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7
Middle East	0.8	0.8	0.8	0.7	0.6	0.6	0.7	0.7

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

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

Country	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
United States	3,597	3,637	3,658	3,915	3,863	4,179	4,244	4,823
Japan	259	290	264	263	218	230	229	232
China (Inc. Hong Kong)	145	139	129	136	129	130	144	152
Brazil	41	42	35	36	37	40	42	45
India	30	28	30	35	30	32	35	37
Russia	8	11	13	15	14	17	13	16

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
United States	123.2	125.8	126.6	132.1	129.3	134.6	135.0	148.0
Japan	8.9	10.0	9.1	8.9	7.3	7.4	7.3	7.1
China (Inc. Hong Kong)	5.0	4.8	4.4	4.6	4.3	4.2	4.6	4.7
Brazil	1.4	1.4	1.2	1.2	1.2	1.3	1.3	1.4
India	1.0	1.0	1.0	1.2	1.0	1.0	1.1	1.1
Russia	0.3	0.4	0.4	0.5	0.5	0.5	0.4	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**  
 (Winsorized, limits=[0%,98%])  
 See Appendix C for an explanation of winsorization.  
 As reported on Form PF, Questions 9, 10, 26, and 30.

Including Interest Rate Derivatives (IRDs)																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
25th Percentile	1.6	1.6	1.5	1.6	1.6	1.5	1.5	1.6	1.5	1.6	1.6	1.5	1.5	1.6	1.5	1.6	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.4
Median	2.4	2.4	2.3	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2
75th Percentile	4.5	4.5	4.1	4.6	4.7	4.3	4.6	4.6	4.3	4.6	4.6	4.3	4.6	4.6	4.4	4.6	4.6	4.4	4.6	4.7	4.4	4.5	4.6	4.3
90th Percentile	8.4	8.8	7.8	8.7	8.9	8.5	9.0	8.8	8.6	9.1	9.3	8.6	9.4	9.5	8.3	9.7	10.0	9.6	10.4	10.3	9.5	9.7	9.8	9.6
Mean	4.8	4.8	4.2	4.9	4.9	4.3	4.8	4.7	4.4	4.6	4.6	4.2	4.5	4.6	4.2	4.6	4.7	4.4	4.9	5.0	4.7	5.0	5.1	4.7

  

Excluding IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.2	1.2	1.2	1.2	1.2
Median	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.8
75th Percentile	3.4	3.3	3.1	3.3	3.2	3.1	3.3	3.3	3.3	3.3	3.4	3.2	3.5	3.4	3.3	3.5	3.4	3.3	3.4	3.4	3.3	3.4	3.4	3.3
90th Percentile	6.5	6.4	5.6	6.3	6.2	5.7	6.4	6.4	6.0	6.5	6.5	6.4	6.6	7.0	6.2	6.8	6.9	6.8	7.3	7.1	6.8	6.6	6.9	6.7
Mean	3.2	3.2	2.9	3.2	3.1	2.9	3.2	3.1	3.0	3.2	3.1	3.1	3.3	3.3	3.1	3.3	3.3	3.2	3.5	3.5	3.3	3.4	3.4	3.2

**Figure 11: Ratio of Qualifying Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value (Winsorized, limits=[0%,98%])**

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

Long Exposure Including IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1
Median	1.7	1.7	1.6	1.7	1.7	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.6
75th Percentile	2.7	2.6	2.5	2.8	2.7	2.6	2.8	2.8	2.7	2.8	2.8	2.7	2.8	2.8	2.7	2.9	2.9	2.8	2.9	2.9	2.7	2.8	2.8	2.7
90th Percentile	4.9	4.8	4.4	5.1	5.1	4.6	5.4	5.1	5.0	5.2	5.4	5.0	5.3	5.3	4.8	5.5	5.5	5.3	6.1	6.0	5.6	5.7	5.7	5.4
Mean	2.9	2.9	2.6	3.0	3.0	2.7	2.9	2.8	2.8	2.8	2.8	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.7	3.0	3.1	2.9	3.1	2.9
Long Exposure Excluding IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Median	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.4
75th Percentile	2.3	2.2	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.2
90th Percentile	3.8	3.8	3.4	3.7	3.6	3.5	3.7	3.9	3.6	3.9	3.9	3.8	4.0	4.0	3.8	4.1	4.1	4.1	4.3	4.4	4.1	4.1	4.3	4.1
Mean	2.2	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.3	2.2
Short Exposure Including IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25th Percentile	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Median	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.7
75th Percentile	1.9	1.9	1.8	1.9	1.9	1.8	1.9	1.9	1.8	1.8	1.8	1.8	2.0	2.0	1.8	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.8
90th Percentile	4.2	4.3	3.8	4.3	4.4	4.2	4.4	4.1	4.0	4.3	4.3	4.0	4.5	4.5	4.3	4.6	4.9	5.0	4.7	4.9	4.4	4.4	4.3	4.3
Mean	2.1	2.1	1.8	2.1	2.0	1.9	2.0	2.0	1.8	1.9	1.9	1.8	1.9	2.0	1.8	1.9	2.1	2.1	2.1	2.2	2.0	2.2	2.2	2.1
Short Exposure Excluding IRDs																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Median	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
75th Percentile	1.3	1.3	1.2	1.3	1.2	1.2	1.3	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.3
90th Percentile	3.0	3.1	2.7	2.9	2.7	2.7	3.1	2.9	2.8	2.8	2.8	2.8	3.0	3.1	2.8	3.0	3.1	3.1	3.1	3.1	3.0	3.0	3.0	3.0
Mean	1.3	1.3	1.1	1.2	1.1	1.1	1.2	1.2	1.1	1.2	1.2	1.1	1.3	1.3	1.2	1.2	1.3	1.3	1.4	1.4	1.3	1.4	1.3	1.3

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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
	Subtotal	1,459	1,360	1,367	1,431	1,408	1,495	1,560	1,646
Equity	Long/Short	925	865	850	878	841	880	906	926
	Long Bias	278	268	274	284	288	310	330	368
	Market Neutral	250	221	237	265	273	***	***	***
	Short Bias	6	5	6	5	6	***	***	***
	Subtotal	736	811	826	835	850	883	938	971
Other	Subtotal	721	784	781	763	701	717	784	851
Relative Value	F.I. Sov.	490	547	541	517	469	488	541	601
	F.I. Asset Backed	129	127	128	129	123	115	120	119
	F.I. Corp.	41	45	42	43	41	41	48	50
	F.I. Conv. Arb.	38	38	35	38	39	44	47	49
	Volatility Arb.	23	28	34	36	28	30	29	31
	Subtotal	541	555	595	668	697	702	661	709
Macro	Global Macro	474	486	523	599	614	621	579	626
	Currency	31	***	***	***	***	44	***	***
	Commodity	33	33	35	34	38	35	35	38
	Active Trading	2	***	***	***	***	3	***	***
	Subtotal	373	358	325	335	324	342	353	359
Event Driven	Distressed/Restruct.	172	170	166	172	173	172	167	170
	Equity	111	97	85	91	80	94	100	100
	Risk Arb./Merger Arb.	90	92	75	72	71	77	86	89
	Subtotal	277	356	363	267	274	283	285	289
Credit	Long/Short	249	316	328	227	231	240	240	240
	Asset Based Lending	29	40	35	40	43	43	45	49
	Subtotal	90	98	115	123	124	140	147	145
Managed Futures/CTA	Quantitative	***	***	109	***	***	131	144	143
	Fundamental	***	***	6	***	***	9	3	2
Investment in other funds	Subtotal	45	40	42	41	43	42	48	49
<b>Total</b>	<b>Total</b>	4,242	4,362	4,415	4,464	4,419	4,604	4,775	5,019

<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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
	Subtotal	53.3	51.2	51.2	52.3	51.3	52.9	53.8	55.0
Equity	Long/Short	33.8	32.6	31.9	32.1	30.7	31.1	31.3	31.0
	Long Bias	10.2	10.1	10.3	10.4	10.5	11.0	11.4	12.3
	Market Neutral	9.1	8.3	8.9	9.7	10.0	***	***	***
	Short Bias	0.2	0.2	0.2	0.2	0.2	***	***	***
Other	Subtotal	26.9	30.6	31.0	30.5	31.0	31.2	32.4	32.5
	Subtotal	26.4	29.6	29.3	27.9	25.6	25.4	27.1	28.4
Relative Value	F.I. Sov.	17.9	20.6	20.3	18.9	17.1	17.2	18.6	20.1
	F.I. Asset Backed	4.7	4.8	4.8	4.7	4.5	4.1	4.1	4.0
	F.I. Corp.	1.5	1.7	1.6	1.6	1.5	1.4	1.6	1.7
	F.I. Conv. Arb.	1.4	1.4	1.3	1.4	1.4	1.6	1.6	1.7
	Volatility Arb.	0.8	1.1	1.3	1.3	1.0	1.1	1.0	1.1
	Subtotal	19.8	20.9	22.3	24.4	25.4	24.8	22.8	23.7
Macro	Global Macro	17.3	18.3	19.6	21.9	22.4	22.0	20.0	20.9
	Currency	1.1	***	***	***	***	1.6	***	***
	Commodity	1.2	1.2	1.3	1.3	1.4	1.2	1.2	1.3
	Active Trading	0.1	***	***	***	***	0.1	***	***
	Subtotal	13.6	13.5	12.2	12.2	11.8	12.1	12.2	12.0
Event Driven	Distressed/Restruct.	6.3	6.4	6.2	6.3	6.3	6.1	5.8	5.7
	Equity	4.0	3.6	3.2	3.3	2.9	3.3	3.4	3.3
	Risk Arb./Merger Arb.	3.3	3.4	2.8	2.6	2.6	2.7	3.0	3.0
	Subtotal	10.1	13.4	13.6	9.7	10.0	10.0	9.8	9.7
Credit	Long/Short	9.1	11.9	12.3	8.3	8.4	8.5	8.3	8.0
	Asset Based Lending	1.0	1.5	1.3	1.5	1.6	1.5	1.6	1.6
	Subtotal	3.3	3.7	4.3	4.5	4.5	4.9	5.1	4.9
Managed Futures/CTA	Quantitative	***	***	4.1	***	***	4.6	5.0	4.8
	Fundamental	***	***	0.2	***	***	0.3	0.1	0.1
Investment in other funds	Subtotal	1.6	1.5	1.6	1.5	1.6	1.5	1.6	1.6
<b>Total</b>	<b>Total</b>	155.0	164.4	165.4	163.1	161.2	162.8	164.7	167.8

## 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Relative Value	4.3	4.5	4.7	4.2	4.1	4.6	5.1	5.3
Macro	2.5	2.8	3.1	3.1	3.2	3.6	3.5	3.8
Multi-Strategy	1.7	1.9	1.8	2.4	2.4	2.3	2.2	2.1
Other	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Equity	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Credit	1.6	1.5	1.5	1.6	1.5	1.6	1.6	1.5
Event Driven	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3
Managed Futures/CTA	1.2	1.2	1.2	1.2	1.2	1.2	1.9	1.2
Investment in other funds	1.1	1.1	1.1	1.1	1.1	1.1	1.0	***

**Table 38:** Asset Weighted-Average Ratio of GNE to NAV  
by Strategy

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

Strategy	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Relative Value	15.0	16.1	16.9	16.9	16.4	19.1	18.3	20.9
Macro	13.5	14.7	14.6	11.2	13.3	16.4	17.5	19.9
Managed Futures/CTA	10.9	9.8	7.3	8.2	7.3	8.0	9.5	8.4
Multi-Strategy	6.1	7.0	7.1	11.0	10.1	8.0	7.9	7.7
Other	3.8	4.1	4.5	4.6	4.7	5.0	5.3	5.4
Equity	3.2	3.4	3.2	3.1	3.1	3.2	3.2	3.2
Credit	4.1	4.1	4.0	2.9	2.7	3.3	3.0	3.1
Event Driven	2.1	2.1	2.1	2.0	2.0	2.2	2.0	2.0
Investment in other funds	1.5	1.9	1.4	1.5	1.4	1.7	1.6	***

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Managed Futures/CTA	68.8	57.7	68.3	68.8	67.7	65.5	61.2	59.0
Macro	44.7	44.0	42.8	40.9	40.0	36.6	39.0	38.6
Multi-Strategy	26.3	25.5	26.4	26.9	28.1	25.5	22.4	25.1
Other	24.9	24.6	26.6	26.8	25.7	21.6	20.6	21.5
Relative Value	27.2	27.8	27.2	21.6	22.5	22.7	20.4	21.2
Event Driven	10.9	10.0	12.0	11.6	11.5	8.0	11.1	10.0
Credit	14.0	12.0	14.1	10.9	11.7	9.8	10.9	9.9
Equity	13.0	13.0	13.9	11.2	12.3	10.6	11.5	9.7
Investment in other funds	12.1	10.3	8.4	6.2	5.5	3.4	6.2	***

## 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.

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Cash/Cash Equivalents	705	723	734	694	675	681	684	690
Securities - Equities	2,168	2,049	2,000	2,138	2,116	2,302	2,396	2,522
Securities - G10 (non-US)	699	744	723	797	972	1,033	1,056	1,159
Securities - Treasuries	944	1,002	1,058	1,116	1,139	1,144	1,108	1,156
Securities - Other Bonds	207	209	233	213	196	209	240	270
Securities - Corp. Bonds	239	250	245	251	251	267	268	258
Securities - MBS	250	237	250	258	227	245	240	253
Securities - Conv. Bonds	65	67	63	71	69	82	89	82
Securities - ABS (non-MBS)	82	79	73	76	76	75	77	75
Derivatives - IR	3,292	3,566	3,645	3,759	3,546	4,170	3,943	4,147
Derivatives - FX	2,372	2,640	2,581	2,478	2,442	2,649	2,724	3,069
Derivatives - Equity	891	953	1,005	1,081	1,115	1,195	1,228	1,297
Derivatives - Credit	705	732	608	630	598	640	687	805
Derivatives - Commodity	220	246	290	307	325	330	332	369
Derivatives - Other	124	133	120	138	137	144	287	280
Repurchase Agreements	970	1,045	1,060	1,113	1,156	1,314	1,398	1,373
Other	611	642	648	668	679	701	731	780

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

	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Cash/Cash Equivalents	88.7	87.0	88.1	87.2	86.9	85.0	86.9	88.1
Securities - Equities	69.9	69.3	69.2	69.7	70.1	70.2	70.0	70.3
Securities - G10 (non-US)	55.8	56.6	55.5	53.4	49.6	49.2	50.0	50.0
Securities - Treasuries	71.4	69.6	66.8	66.6	68.1	65.2	63.2	62.3
Securities - Other Bonds	70.7	74.8	71.6	78.0	75.4	78.1	78.3	71.4
Securities - Corp. Bonds	81.0	80.2	80.8	82.8	81.7	80.9	79.8	81.1
Securities - MBS	79.3	78.7	76.5	74.7	76.0	74.1	73.5	71.8
Securities - Conv. Bonds	94.6	93.3	95.2	95.5	95.2	95.2	95.6	94.1
Securities - ABS (non-MBS)	99.1	99.1	99.4	99.0	98.7	98.0	98.0	96.7
Derivatives - IR	51.7	49.6	50.8	52.8	51.0	48.3	46.8	47.7
Derivatives - FX	48.5	50.4	52.5	51.7	48.5	50.8	50.1	49.7
Derivatives - Equity	53.1	53.4	55.0	55.3	55.1	56.2	55.5	56.8
Derivatives - Credit	44.2	46.0	44.4	47.3	48.2	47.1	47.6	47.2
Derivatives - Commodity	51.2	59.3	62.2	63.4	63.4	64.2	58.8	64.0
Derivatives - Other	53.3	57.0	58.2	60.2	58.6	62.6	55.2	53.2
Repurchase Agreements	44.3	43.3	43.4	45.3	48.7	50.0	49.4	51.6
Other	90.0	90.5	90.5	89.6	89.0	87.8	90.4	86.7

## 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
At most 1 day	7.1	7.7	7.9	8.3	8.1	8.4	8.3	8.4
At most 7 days	13.3	14.0	14.0	14.3	14.1	14.4	14.6	14.8
At most 30 days	25.4	27.4	27.3	26.4	26.5	28.6	27.2	27.6
At most 90 days	45.4	47.0	46.7	47.3	49.7	47.6	46.8	48.3
At most 180 days	58.4	60.4	60.1	61.8	58.9	59.8	59.5	61.7
At most 365 days	72.9	75.3	75.5	74.6	74.2	74.2	74.0	73.6

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
At most 1 day	41.0	41.6	41.6	40.1	40.1	38.3	38.6	38.0
At most 7 days	64.7	65.7	65.1	63.9	63.4	61.6	62.4	61.9
At most 30 days	78.3	78.5	78.0	77.3	76.7	76.1	76.5	76.1
At most 90 days	85.1	84.6	84.1	83.8	83.1	82.2	82.6	82.4
At most 180 days	89.0	88.0	87.8	87.3	86.4	85.8	86.2	85.9
At most 365 days	92.0	91.4	91.2	90.7	89.8	89.6	89.8	89.3

**Figure 12:** Asset Weighted-Average Qualifying Hedge Fund  
Investor and Portfolio Liquidity  
(Percent of Aggregate NAV)

As reported on Form PF, Questions 9, 26, 30, 32, and 50 as of Third Calendar Quarter 2017

Statistic	At most 1 day	At most 7 days	At most 30 days	At most 90 days	At most 180 days	At most 365 days
Port. Liquidity	38.0	61.9	76.1	82.4	85.9	89.3
Inv. Liquidity	8.4	14.8	27.6	48.3	61.7	73.6

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
May Suspend	2,200	2,122	2,141	2,178	2,154	2,222	2,275	2,337
May Have Gates	1,370	1,289	1,307	1,330	1,290	1,338	1,362	1,394
Side-Pocketed	37	38	37	38	38	39	38	39
Gated	33	29	27	30	27	27	28	30
Suspended	14	14	16	16	19	27	27	22

**Figure 13: Percentage of Qualifying Hedge Fund NAV  
Subject to a Side-Pocket Arrangement**  
As reported on Form PF, Questions 9 and 48.

Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	2.0	2.0	3.0	3.0	3.0	3.0	2.0	2.0
Median	6.0	6.0	6.0	6.0	7.0	8.0	7.0	7.0
75th Percentile	17.5	16.2	19.0	20.5	19.8	21.5	22.0	23.0
90th Percentile	27.0	28.0	29.0	31.0	31.0	32.0	46.0	46.0
Mean	13.0	12.9	13.6	15.5	15.6	16.7	16.7	17.3

## F Borrowings

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

Type	Subtype	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
	Subtotal	1,894	1,942	1,939	2,079	2,057	2,239	2,391	2,437
Secured	Prime Broker	1,025	977	980	1,084	1,087	1,186	1,265	1,371
	Reverse Repo	603	696	692	729	675	739	795	721
	Other Secured	266	269	267	267	295	313	331	345
Unsecured	Subtotal	10	10	9	11	12	14	11	12
<b>Total</b>	<b>Total</b>	1,904	1,952	1,948	2,090	2,069	2,253	2,402	2,448

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

Creditor Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
US Financial	63.7	62.8	62.3	64.7	63.2	61.2	61.1	61.4
Non-US Financial	35.8	36.7	37.3	34.8	36.3	38.4	38.5	38.3
US Non-Financial	***	0.4	0.3	0.3	0.3	***	0.3	***
Non-US Non-Financial	***	0.1	0.1	0.2	0.1	***	0.1	***

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

Borrowing Type	Collateral Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
	Subtotal	1,314	1,253	1,229	1,339	1,334	1,467	1,545	1,674
Prime Broker	Other	837	801	776	861	857	949	1,022	1,151
	Cash	476	452	454	478	477	518	522	523
	Subtotal	633	718	711	774	691	783	786	734
Reverse Repo	Other	475	547	518	574	451	517	506	478
	Cash	157	171	194	200	241	266	281	256
	Subtotal	314	320	308	312	349	384	407	423
Other Secured	Other	240	240	230	236	210	254	251	265
	Cash	75	79	78	77	139	130	156	158
	Subtotal	314	320	308	312	349	384	407	423
<b>Total</b>	<b>Total</b>	2,261	2,291	2,249	2,426	2,375	2,634	2,738	2,831

**Figure 14: Ratio of Collateral Posted to Secured Borrowing for Qualifying Hedge Funds (Winsorized, limits=[0%,98%])**  
 See Appendix C for an explanation of winsorization.  
 As reported on Form PF, Question 43 (Third Month).

Ratio of Total Collateral/Total Secured Borrowing																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	0.8	0.8	0.9	0.9	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
25th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Median	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.3	1.2	1.2	1.3	1.2
75th Percentile	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	1.9	2.1	1.9	2.0	2.0	2.0	2.0	2.0
90th Percentile	4.0	4.0	4.1	4.1	4.0	3.9	3.7	3.5	3.8	3.5	3.8	4.0	3.6	3.7	4.3	4.8	4.2	4.3	4.1	4.6	4.5	4.0	4.0	4.0
Mean	2.4	2.3	2.6	2.3	2.2	2.3	2.1	2.1	2.1	1.9	2.2	2.3	2.2	2.5	2.7	4.2	2.6	2.7	2.4	2.9	2.6	2.5	2.5	2.5

  

Ratio of Collateral/Prime Broker Borrowing																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
25th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Median	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.2	1.3	1.2	1.3	1.3	1.2
75th Percentile	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	2.0	2.0	2.2	2.3	2.1	2.1	2.1	2.3	2.2	2.1	2.2	2.2
90th Percentile	4.9	5.0	4.5	4.7	4.8	4.4	4.3	4.4	4.5	4.0	4.3	4.1	4.4	4.6	5.1	5.7	4.5	4.5	4.5	4.8	4.7	4.4	4.6	4.7
Mean	2.8	2.5	2.4	2.5	2.5	2.5	2.4	2.6	2.4	2.2	2.6	2.8	2.8	3.2	3.6	5.0	3.6	4.1	2.8	3.4	2.9	2.8	3.1	3.1

  

Ratio of Collateral/Reverse Repo Borrowing																								
Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	***	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	***	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Median	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	***	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0
75th Percentile	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.4	1.5	1.4	1.4	1.4	1.4	1.4	***	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
90th Percentile	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	***	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6
Mean	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.2	***	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3

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

Financing Available	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
At most 1 day	31.0	43.3	43.5	37.1	35.8	36.3	34.6	35.3
At most 7 days	38.8	52.7	52.8	53.6	48.1	52.9	53.3	51.7
At most 30 days	66.2	66.5	65.8	65.2	64.0	65.0	65.3	64.0
At most 90 days	77.7	81.8	81.7	80.8	81.0	80.2	80.8	79.2
At most 180 days	89.0	96.1	95.9	96.0	95.9	95.9	96.1	95.9
At most 365 days	98.3	97.6	97.4	97.5	97.3	97.3	97.4	97.3

**Figure 15: Weighted-Average Qualifying Hedge Fund**  
 Financing Liquidity (Percent of Available Financing)  
 As reported on Form PF, Question 46 as of Third Calendar Quarter 2017.

Statistic	At most 1 day	At most 7 days	At most 30 days	At most 90 days	At most 180 days	At most 365 days
Financing Liquidity	35.3	51.7	64.0	79.2	95.9	97.3

## G Central Clearing

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

Statistic	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Percent of Funds	17.9	18.1	17.4	16.3	17.5	16.3	16.7	16.4
Percent of NAV	18.6	18.3	17.3	17.6	16.7	17.4	17.2	16.7



## H Value-at-Risk (“VaR”) Reporting

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

VaR Method	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
VaR (Any Method)	623	622	626	622	631	640	652	651
Historical Simulation	233	240	237	239	234	238	249	270
Monte Carlo Simulation	203	196	188	185	196	202	207	190
Parametric	194	192	190	193	196	190	190	186
Other	38	38	41	46	42	44	45	43
VaR Not Used	1,017	975	980	995	1,019	1,031	1,065	1,064

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

VaR Method	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
VaR (Any Method)	3,020	3,079	3,205	3,267	3,225	3,428	3,516	3,624
Historical Simulation	1,554	1,602	1,688	1,762	1,700	1,829	1,798	1,900
Monte Carlo Simulation	633	648	628	640	645	862	947	940
Parametric	729	729	756	746	731	737	760	767
Other	333	317	321	344	373	425	457	489
VaR Not Used	1,979	1,912	1,896	1,976	1,992	2,064	2,199	2,264

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

VaR Method	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
VaR (Any Method)	1,305	1,270	1,293	1,308	1,303	1,345	1,377	1,405
Historical Simulation	482	463	483	501	479	491	504	561
Monte Carlo Simulation	356	346	336	340	352	403	424	394
Parametric	468	457	449	462	459	465	474	477
Other	91	88	90	94	94	95	94	94
VaR Not Used	1,431	1,384	1,376	1,428	1,439	1,482	1,522	1,586

## 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Stress and VaR	541	538	545	547	555	548	558	557
Stress, No VaR	456	444	454	447	453	451	457	467
No Stress, VaR	82	84	81	75	76	92	94	94
Neither	561	531	526	548	566	580	608	597

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Stress and VaR	2,799	2,861	3,001	3,088	3,045	3,189	3,244	3,388
Stress, No VaR	1,041	1,011	1,008	1,030	1,001	1,076	1,114	1,178
No Stress, VaR	221	218	204	179	179	240	271	236
Neither	938	901	888	946	992	989	1,084	1,086

**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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Stress and VaR	1,165	1,144	1,162	1,191	1,185	1,199	1,230	1,248
Stress, No VaR	694	669	666	666	661	683	673	712
No Stress, VaR	140	125	131	117	117	146	147	158
Neither	736	715	710	762	779	799	849	874

## 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
At most 1 day	74.4	81.2	77.4	80.1	80.9	78.0	79.6	79.1
At most 7 days	92.2	96.0	96.0	98.3	97.3	95.5	95.2	95.5
At most 30 days	99.4	99.7	99.7	99.9	99.6	99.7	99.5	99.5
At most 90 days	100.0	100.0	100.0	100.0	99.8	100.0	99.8	99.7
At most 180 days	100.0	100.0	100.0	100.0	99.9	100.0	99.9	99.8
At most 365 days	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.9

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
May Suspend	268	232	241	232	253	246	255	261
May Have Gates	235	200	207	199	220	215	224	227
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 of Section 3 Liquidity Funds (Days)  
As reported on Form PF, Questions 55.

Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
Average WAM	33.7	32.2	30.9	33.4	34.5	36.3	33.1	30.2	30.5	29.0	28.3	30.7	28.9	28.3	29.0	34.5	32.0	31.7	33.4	29.0	29.6	32.8	30.6	31.1
Asset-Weighted WAM	39.1	40.2	42.4	43.5	49.3	49.6	45.6	41.6	42.1	41.2	44.8	44.8	42.2	43.0	39.3	42.9	42.1	40.3	41.4	40.6	40.8	42.1	38.8	37.4

**Figure 18:** Weighted-Average Life of Section 3 Liquidity Funds (Days)  
As reported on Form PF, Questions 55.

Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
Average WAL	60.1	59.7	55.4	61.4	61.7	63.3	81.9	79.6	80.1	78.2	77.8	74.5	62.0	61.1	61.5	67.5	65.1	65.2	68.5	64.1	58.8	67.9	63.8	63.7
Asset-Weighted WAL	64.6	69.1	68.7	70.8	73.6	74.0	81.1	76.7	78.8	78.3	85.6	82.6	78.9	78.4	70.4	74.3	76.8	77.5	81.2	79.4	74.0	77.0	73.8	71.7

**Figure 19:** Seven-Day Gross Yield Section 3 Liquidity Funds (Percent)  
As reported on Form PF, Questions 55.

Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
Average Gross Yield	0.20	0.22	0.32	0.38	0.41	0.42	0.45	0.49	0.50	0.47	0.46	0.54	0.47	0.48	0.66	0.88	0.90	1.07	0.84	0.82	0.95	3.32	1.03	1.03
Asset-Weighted Gross Yield	0.19	0.22	0.31	0.36	0.39	0.42	0.43	0.43	0.43	0.43	0.44	0.49	0.53	0.54	0.63	0.69	0.70	0.83	0.88	0.91	1.03	1.12	1.12	1.13

**Figure 20:** Ratio of Daily Liquid Assets to Net Asset Value  
for Section 3 Liquidity Funds (Percent)  
As reported on Form PF, Questions 55.

Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
Average DLA	46.94	48.63	46.75	45.12	47.72	45.91	45.79	46.28	45.16	47.42	46.80	49.53	43.19	43.06	45.35	45.84	45.96	45.05	45.43	43.59	43.11	44.43	44.65	43.97
Asset-Weighted DLA	50.41	53.32	49.69	53.51	56.74	53.39	50.43	52.78	51.56	55.51	51.92	52.41	49.64	51.95	53.09	51.00	48.27	46.95	45.25	48.03	46.92	47.54	45.72	45.71

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

Statistic	2015-10	2015-11	2015-12	2016-01	2016-02	2016-03	2016-04	2016-05	2016-06	2016-07	2016-08	2016-09	2016-10	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
Average WLA	56.97	58.12	56.34	53.45	56.31	53.86	54.48	56.13	55.00	57.02	57.95	61.64	57.37	57.36	59.88	59.29	59.10	60.73	59.23	58.12	58.54	58.54	58.62	58.70
Asset-Weighted WLA	57.72	58.96	56.58	60.12	61.85	59.62	57.80	60.48	59.26	63.11	60.07	60.22	57.65	60.37	62.29	60.06	56.93	58.18	55.67	56.92	59.65	57.36	56.45	58.38

## 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	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Credit Quality	63.4	61.1	64.9	61.1	59.1	57.8	59.6	56.5
Diversification	61.0	58.3	62.2	58.3	56.8	55.6	55.3	52.2
Liquidity	61.0	52.8	54.1	55.6	56.8	55.6	55.3	52.2
Maturity	61.0	58.3	62.2	58.3	56.8	55.6	55.3	52.2
Fully	56.1	47.2	48.6	50.0	50.0	48.9	48.9	45.7
None	34.1	36.1	32.4	36.1	38.6	40.0	38.3	41.3

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

As reported on Form PF, Questions 9 and 54.

Compliance Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Credit Quality	22.4	16.2	17.9	13.5	14.4	15.5	15.9	15.9
Diversification	22.4	16.2	17.9	13.5	13.8	14.9	14.9	14.9
Liquidity	22.3	10.8	11.3	12.2	13.6	14.8	14.7	15.0
Maturity	22.3	16.0	17.7	13.5	13.6	14.8	14.7	15.0
Fully	21.5	10.0	10.4	11.0	11.8	12.8	12.8	12.8
None	77.4	83.6	82.0	86.1	85.5	84.3	84.0	83.9

## D Methods of Calculating NAV

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

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Stable	***	***	***	***	81.8	80.0	78.7	78.3
Floating	***	***	***	***	18.2	20.0	21.3	21.7

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

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

Type	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3
Stable	***	***	***	***	69.9	71.4	68.3	70.2
Floating	***	***	***	***	30.1	28.6	31.7	29.8

## 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	2015Q4	2016Q1
U.S. Treasuries	80.5	79.7
Other	51.3	39.2
Deposits	42.7	32.6
Repo - Govt. Collateral	33.1	30.9
Commercial Paper	34.1	22.8
Asset-Backed Securities	13.9	12.8
Repo - Other Collateral	7.4	***
U.S. Govt. Debt	8.7	5.5
Municipal Debt	0.5	***

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

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

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

Product Type	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
Deposits	82.0	81.4	77.3	83.5	83.2	79.7
Other	55.2	66.4	67.2	62.8	60.6	62.1
U.S. Treasuries	66.1	62.8	57.5	61.5	56.6	55.3
Repo - Other Collateral	41.1	46.4	35.4	38.6	46.6	48.8
Commercial Paper	40.5	44.8	41.3	45.9	45.1	45.2
Repo - Govt. Collateral	26.4	34.9	34.8	32.7	30.9	32.5
Asset-Backed Securities	26.7	25.2	21.3	22.0	21.8	23.9
U.S. Govt. Debt	5.0	5.3	6.0	4.5	4.0	5.8
Municipal Debt	1.5	1.6	1.1	1.3	1.1	1.1

## XI Section 4 Private Equity Fund Specific Information

### A CPC Industry Concentration

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

Type	2013Q4	2014Q4	2015Q4	2016Q4
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:** Ratio of Portfolio Company Current to Total Liabilities (Percent)  
As reported on Form PF, Questions 71 and 72.

Statistic	2013Q4	2014Q4	2015Q4	2016Q4
10th Percentile	0.7	0.6	0.7	0.8
25th Percentile	1.8	1.4	1.7	1.9
Median	5.8	5.4	6.0	6.9
75th Percentile	20.0	18.1	20.0	20.7
90th Percentile	49.4	51.0	49.9	54.3
Mean	17.2	16.4	16.7	17.5

**Figure 23:** CPC Payment-in-Kind Borrowings to Total Borrowings (Percent)  
As reported on Form PF, Questions 73.

Statistic	2013Q4	2014Q4	2015Q4	2016Q4
10th Percentile	1.0	2.0	2.0	2.0
25th Percentile	4.0	3.0	4.0	4.0
Median	9.0	9.0	9.0	9.0
75th Percentile	18.0	23.0	22.0	22.0
90th Percentile	33.0	40.0	48.0	48.0
Mean	14.8	17.0	18.3	18.6



## C CPC Investments by Region and Country

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

Region	2013Q4	2014Q4	2015Q4	2016Q4
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	15

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

Region	2013Q4	2014Q4	2015Q4	2016Q4
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 67:** Aggregate Gross Asset Value of Private Equity  
CPC Investments by Country (\$ Billions)  
As reported on Form PF, Questions 70 and 78.

Country	2013Q4	2014Q4	2015Q4	2016Q4
United States	5,035	4,300	3,943	3,775
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 68:** Private Equity CPC Investments by Country  
(Percent of Aggregate CPC Gross Asset Value)  
As reported on Form PF, Questions 70 and 78.

Country	2013Q4	2014Q4	2015Q4	2016Q4
United States	67.5	67.1	69.9	69.9
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 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>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.

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

## D 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.