



Division of Investment Management  
Analytics Office

# Private Funds Statistics

Second Calendar Quarter 2019

January 29, 2020

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

## Introduction

This report provides a summary of recent private fund industry statistics and trends, reflecting data collected through Form PF and Form ADV filings.<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 Third Calendar Quarter 2017 through Second Calendar Quarter 2019 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 Second Calendar Quarter 2019 Private Funds Statistics, please contact:**

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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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Private Equity Fund	10,298	11,541	11,581	11,601	11,610	12,721	12,950	12,957
Hedge Fund	9,166	9,036	9,194	9,307	9,382	9,194	9,389	9,486
Other Private Fund	4,458	4,537	4,608	4,581	4,587	4,898	4,755	4,715
Section 4 Private Equity Fund	2,989	3,482	3,494	3,494	3,495	3,936	3,933	3,933
Real Estate Fund	2,443	2,653	2,663	2,657	2,664	2,837	2,850	2,851
Qualifying Hedge Fund	1,727	1,801	1,772	1,806	1,818	1,827	1,794	1,784
Securitized Asset Fund	1,477	1,504	1,510	1,510	1,514	1,564	1,569	1,577
Venture Capital Fund	773	866	866	851	850	961	962	962
Liquidity Fund	69	70	69	68	68	73	72	72
Section 3 Liquidity Fund	46	48	46	45	45	46	45	44
<b>Total</b>	<b>28,684</b>	<b>30,207</b>	<b>30,491</b>	<b>30,575</b>	<b>30,675</b>	<b>32,248</b>	<b>32,547</b>	<b>32,620</b>

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Private Equity Fund	1,089	1,145	1,153	1,154	1,157	1,249	1,257	1,258
Hedge Fund	1,691	1,734	1,736	1,739	1,739	1,748	1,741	1,738
Other Private Fund	577	586	593	589	590	627	626	627
Section 4 Private Equity Fund	247	293	296	296	296	308	307	307
Real Estate Fund	315	331	333	333	335	347	349	350
Qualifying Hedge Fund	536	551	542	550	545	553	540	536
Securitized Asset Fund	154	155	155	156	158	153	153	154
Venture Capital Fund	110	115	116	116	117	133	132	132
Liquidity Fund	38	39	39	38	38	40	39	39
Section 3 Liquidity Fund	23	25	23	22	22	23	22	22
<b>Total</b>	<b>2,925</b>	<b>3,030</b>	<b>3,041</b>	<b>3,046</b>	<b>3,046</b>	<b>3,149</b>	<b>3,151</b>	<b>3,147</b>

<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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Hedge Fund	7,184	7,242	7,520	7,659	7,911	7,593	8,052	8,255
Qualifying Hedge Fund	5,856	5,863	6,076	6,281	6,386	6,153	6,480	6,735
Private Equity Fund	2,310	2,727	2,766	2,769	2,769	3,175	3,259	3,258
Section 4 Private Equity Fund	1,641	1,941	1,978	1,978	1,978	2,330	2,365	2,365
Other Private Fund	1,061	1,191	1,206	1,208	1,222	1,225	1,222	1,213
Real Estate Fund	433	500	505	505	505	568	574	575
Securitized Asset Fund	453	485	480	488	490	570	573	575
Liquidity Fund	282	291	291	311	314	297	292	294
Section 3 Liquidity Fund	279	289	289	307	309	292	289	290
Venture Capital Fund	63	81	82	81	82	111	111	111
<b>Total</b>	<b>11,787</b>	<b>12,517</b>	<b>12,849</b>	<b>13,021</b>	<b>13,292</b>	<b>13,539</b>	<b>14,083</b>	<b>14,280</b>

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Hedge Fund	3,780	3,883	3,974	4,003	4,059	3,794	4,007	4,091
Qualifying Hedge Fund	2,984	3,047	3,106	3,151	3,188	2,968	3,127	3,180
Private Equity Fund	2,069	2,441	2,484	2,487	2,487	2,813	2,895	2,894
Section 4 Private Equity Fund	1,489	1,755	1,789	1,789	1,789	2,084	2,117	2,117
Other Private Fund	971	1,076	1,086	1,106	1,096	1,085	1,082	1,071
Real Estate Fund	340	391	394	394	394	443	448	448
Securitized Asset Fund	144	152	152	154	154	170	171	172
Liquidity Fund	280	291	289	309	311	295	288	292
Section 3 Liquidity Fund	278	288	287	305	306	289	285	288
Venture Capital Fund	61	77	77	76	77	98	98	98
<b>Total</b>	<b>7,646</b>	<b>8,311</b>	<b>8,456</b>	<b>8,530</b>	<b>8,578</b>	<b>8,698</b>	<b>8,989</b>	<b>9,067</b>

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

<b>Qualifying Hedge Fund GAV (\$ Billions)</b>								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
10th Percentile	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
25th Percentile	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Median	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2
75th Percentile	2.6	2.5	2.6	2.7	2.7	2.5	2.7	2.8
90th Percentile	6.2	6.0	6.1	6.0	6.1	5.6	6.3	6.4
Mean	3.4	3.3	3.4	3.5	3.5	3.4	3.6	3.8
<b>Qualifying Hedge Fund NAV (\$ Billions)</b>								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
10th Percentile	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
25th Percentile	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Median	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9
75th Percentile	1.8	1.8	1.8	1.8	1.8	1.7	1.8	1.8
90th Percentile	3.8	3.6	3.8	3.7	3.7	3.4	3.6	3.7
Mean	1.7	1.7	1.8	1.7	1.8	1.6	1.7	1.8
<b>Section 4 Private Equity Fund GAV (\$ Billions)</b>								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	0.6	0.6	0.6	0.6	0.6	0.6	0.6
<b>Section 4 Private Equity Fund NAV (\$ Billions)</b>								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
90th Percentile	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0
Mean	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7
<b>Qualifying Hedge Funds</b>								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	1.1	1.1	1.2	1.2	1.1	1.2	1.1	1.2
75th Percentile	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6
90th Percentile	2.5	2.4	2.6	2.5	2.5	2.5	2.6	2.7
Mean	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.7



## B Borrowings

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

Fund Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Securitized Asset Fund	48.4	51.9	51.2	51.2	50.6	53.5	52.7	52.1
Qualifying Hedge Fund	41.8	41.5	42.9	45.0	44.5	45.1	46.7	47.2
Hedge Fund	39.6	39.4	40.4	41.6	41.3	41.6	43.1	43.3
Real Estate Fund	12.7	13.2	13.5	13.2	13.2	14.7	14.9	14.6
Section 4 Private Equity Fund	4.1	4.6	4.6	4.6	4.6	5.2	5.2	5.2
Private Equity Fund	5.0	5.2	4.9	4.9	4.9	5.3	5.1	5.1
Other Private Fund	2.7	2.2	2.7	2.7	3.0	3.5	3.4	3.5
Venture Capital Fund	0.5	0.6	0.5	0.5	0.6	0.9	0.8	0.9
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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6
Qualifying Hedge Funds (\$ Billions)								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Median	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75th Percentile	1.0	1.0	1.1	1.1	1.1	1.0	1.1	1.1
90th Percentile	3.4	3.0	3.4	3.6	3.4	3.1	3.6	4.0
Mean	2.2	2.1	2.3	2.4	2.5	2.4	2.7	2.8

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	0.9	0.9	0.9	0.9
90th Percentile	3.8	3.5	3.4	3.6	3.7	4.4	4.4	4.5
Mean	1.8	1.7	1.7	1.7	1.7	2.5	2.4	2.5

  

<b>Qualifying Hedge Funds</b>								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
90th Percentile	2.1	1.9	2.1	2.1	2.1	2.1	2.3	2.3
Mean	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9

## C Fair Value Hierarchy

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

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Level One	2,558	3,269	3,017	2,976	2,856	3,213	2,679	2,694
Level Two	2,223	2,753	2,299	2,320	2,296	2,930	2,517	2,597
Level Three	2,509	2,898	2,859	2,869	2,882	3,400	3,375	3,370
Cost-Based	1,711	2,225	1,863	1,879	1,840	2,445	1,997	2,016

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

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Level One	651	647	788	780	659	311	651	651
Level Two	455	608	588	602	604	714	803	840
Level Three	137	174	174	174	177	155	157	157
Cost-Based	650	479	762	773	733	603	1,060	1,092

## 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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Hedge Fund	668	669	674	678	686	663	659	648
Other Private Fund	499	513	518	514	505	508	509	504
Private Equity Fund	272	292	292	290	279	315	314	315
Qualifying Hedge Fund	227	238	233	234	236	231	223	221
Section 4 Private Equity Fund	88	98	98	98	98	112	112	112
Real Estate Fund	77	71	71	71	71	68	78	78
Liquidity Fund	16	16	16	16	16	18	15	14
Section 3 Liquidity Fund	16	16	16	16	16	16	13	12
Venture Capital Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
<b>Total</b>	1,571	1,575	1,585	1,583	1,571	1,581	1,584	1,568

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Hedge Fund	714	827	770	769	813	770	721	713
Other Private Fund	1,508	1,864	1,869	1,799	1,763	1,821	1,822	1,812
Private Equity Fund	28	37	37	37	37	48	48	48
Qualifying Hedge Fund	525	594	551	567	570	532	470	466
Section 4 Private Equity Fund	22	28	28	28	28	33	33	33
Real Estate Fund	6	6	6	6	6	4	5	5
Liquidity Fund	345	359	361	353	364	383	293	264
Section 3 Liquidity Fund	345	359	361	353	364	382	292	263
Venture Capital Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
<b>Total</b>	2,782	3,094	3,045	2,966	2,984	3,026	2,889	2,843

<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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	0.9	0.9	0.9	0.9
90th Percentile	3.5	3.6	3.5	3.5	3.5	3.4	3.2	3.3
Mean	1.8	2.0	1.9	1.9	1.9	1.9	1.8	1.8
<b>Qualifying Hedge Funds (\$ Billions)</b>								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
10th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25th Percentile	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Median	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.5
75th Percentile	1.8	1.9	1.9	1.9	1.8	1.7	1.5	1.5
90th Percentile	3.7	4.0	3.9	4.3	4.4	4.0	4.0	3.8
Mean	2.3	2.5	2.4	2.4	2.4	2.3	2.1	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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
United States	51.0	51.4	51.0	50.9	50.9	51.7	50.7	50.5
Cayman Islands	36.6	35.4	35.3	35.2	35.1	34.0	34.7	34.9
Ireland	4.3	4.4	4.4	4.5	4.6	4.6	4.5	4.5
Luxembourg	1.6	1.9	2.0	2.2	2.2	2.9	3.0	3.0
Virgin Islands, British	2.0	1.8	1.8	1.8	1.7	1.5	1.5	1.5
United Kingdom	1.1	1.3	1.3	1.3	1.3	1.3	1.2	1.2
Bermuda	1.3	1.2	1.2	1.2	1.2	1.1	1.1	1.1
Other	2.1	2.6	2.9	2.9	3.0	3.0	3.3	3.3
Qualifying Hedge Funds								
Country	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Cayman Islands	51.7	51.3	51.0	50.9	50.6	50.6	51.5	51.9
United States	35.3	35.8	35.6	35.5	35.1	35.6	34.7	34.5
Virgin Islands, British	4.8	4.5	4.4	4.4	4.2	4.1	3.9	3.9
Ireland	2.8	2.9	3.1	3.2	3.3	3.2	3.2	3.2
Luxembourg	1.7	1.9	2.0	2.4	2.7	2.6	2.7	2.7
Bermuda	1.7	1.6	1.7	1.8	1.8	2.0	1.9	1.8
Other	2.0	2.0	2.1	2.0	2.2	1.9	2.0	1.9
Section 3 Liquidity Funds								
Country	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Ireland	***	***	***	***	***	***	***	***
United States	34.7	35.1	35.8	36.9	36.8	32.9	30.0	29.7
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
United States	63.7	60.7	59.5	59.5	59.5	56.9	56.0	56.0
Cayman Islands	29.5	30.4	29.8	29.8	29.8	30.6	30.1	30.1
United Kingdom	2.0	2.7	2.9	2.9	2.9	2.3	2.3	2.3
Canada	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1
Bermuda	1.1	1.0	1.1	1.1	1.1	1.0	0.9	0.9
Other	2.9	4.2	5.7	5.7	5.7	8.2	9.6	9.6

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
United States	88.9	89.5	88.9	88.7	88.8	89.7	89.5	89.6
United Kingdom	6.8	6.5	6.9	7.0	6.9	6.2	6.3	6.2
Other	4.3	4.1	4.3	4.3	4.3	4.1	4.2	4.2
<b>Qualifying Hedge Funds</b>								
Country	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
United States	89.0	88.6	88.4	88.7	88.6	89.0	89.0	89.2
United Kingdom	6.3	6.6	6.6	6.5	6.5	6.1	6.0	5.8
Australia	***	***	***	***	***	***	***	***
Hong Kong	***	***	***	***	***	***	***	***
Other	2.3	2.2	2.3	2.3	2.1	2.1	2.0	2.0
<b>Section 3 Liquidity Funds</b>								
Country	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
United States	***	***	***	***	***	***	***	***
United Kingdom	***	***	***	***	***	***	***	***
<b>Section 4 Private Equity Funds</b>								
Country	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
United States	95.1	94.8	94.8	94.8	94.8	94.0	94.1	94.1
Canada	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

## IV Beneficial Ownership

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Private Funds	1,371	1,491	1,515	1,533	1,534	1,517	1,549	1,561
Other	1,039	1,189	1,234	1,238	1,250	1,332	1,375	1,381
State/Muni. Govt. Pension Plans	1,048	1,154	1,154	1,164	1,178	1,231	1,250	1,250
Non-Profits	790	849	861	869	868	849	894	902
U.S. Individuals	799	818	835	842	851	842	875	885
Pension Plans	973	1,038	1,046	1,049	1,048	1,044	1,068	1,083
Sov. Wealth Funds And For. Official Inst.	445	515	540	544	544	555	604	611
Insurance Companies	314	349	352	365	373	399	411	417
Unknown Non-U.S. Investors	188	195	193	189	187	204	216	222
Non-U.S. Individuals	183	187	191	193	195	205	209	210
Banking/Thrift Inst.	147	161	161	170	172	169	171	177
State/Muni. Govt. Entities	108	122	125	129	131	122	130	132
Sec-Registered Investment Companies	128	129	133	128	127	118	126	125
Broker-Dealers	111	112	113	114	121	108	107	109

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Private Funds	17.9	17.9	17.9	18.0	17.9	17.4	17.2	17.2
Other	13.6	14.3	14.6	14.5	14.6	15.3	15.3	15.2
State/Muni. Govt. Pension Plans	13.7	13.9	13.6	13.6	13.7	14.1	13.9	13.8
Non-Profits	10.3	10.2	10.2	10.2	10.1	9.8	9.9	9.9
U.S. Individuals	10.4	9.8	9.9	9.9	9.9	9.7	9.7	9.8
Pension Plans	12.7	12.5	12.4	12.3	12.2	12.0	11.9	11.9
Sov. Wealth Funds And For. Official Inst.	5.8	6.2	6.4	6.4	6.3	6.4	6.7	6.7
Insurance Companies	4.1	4.2	4.2	4.3	4.3	4.6	4.6	4.6
Unknown Non-U.S. Investors	2.5	2.3	2.3	2.2	2.2	2.3	2.4	2.4
Non-U.S. Individuals	2.4	2.3	2.3	2.3	2.3	2.4	2.3	2.3
Banking/Thrift Inst.	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9
State/Muni. Govt. Entities	1.4	1.5	1.5	1.5	1.5	1.4	1.4	1.5
Sec-Registered Investment Companies	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.4
Broker-Dealers	1.5	1.3	1.3	1.3	1.4	1.2	1.2	1.2



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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Private Funds	508	503	514	517	526	480	508	520
Non-Profits	418	429	429	443	442	404	442	449
Other	409	409	436	443	447	414	428	437
Pension Plans	398	414	416	415	417	399	417	428
State/Muni. Govt. Pension Plans	331	352	342	342	348	343	353	357
U.S. Individuals	340	345	342	352	357	323	347	340
Sov. Wealth Funds And For. Official Inst.	160	166	193	197	195	196	198	206
Insurance Companies	74	78	78	83	91	82	89	90
Non-U.S. Individuals	70	73	76	77	79	75	79	79
Broker-Dealers	79	79	80	81	84	77	77	79
Unknown Non-U.S. Investors	56	58	55	53	53	48	57	58
Sec-Registered Investment Companies	65	65	66	61	59	52	54	54
State/Muni. Govt. Entities	42	42	47	49	50	39	42	45
Banking/Thrift Inst.	33	35	33	36	38	32	33	36

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Private Funds	17.0	16.5	16.5	16.4	16.5	16.2	16.3	16.4
Non-Profits	14.0	14.1	13.8	14.1	13.9	13.6	14.1	14.1
Other	13.7	13.4	14.0	14.1	14.0	14.0	13.7	13.7
Pension Plans	13.3	13.6	13.4	13.2	13.1	13.5	13.3	13.5
State/Muni. Govt. Pension Plans	11.1	11.5	11.0	10.9	10.9	11.6	11.3	11.2
U.S. Individuals	11.4	11.3	11.0	11.2	11.2	10.9	11.1	10.7
Sov. Wealth Funds And For. Official Inst.	5.4	5.4	6.2	6.2	6.1	6.6	6.3	6.5
Insurance Companies	2.5	2.5	2.5	2.6	2.9	2.8	2.8	2.8
Non-U.S. Individuals	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.5
Broker-Dealers	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5
Unknown Non-U.S. Investors	1.9	1.9	1.8	1.7	1.6	1.6	1.8	1.8
Sec-Registered Investment Companies	2.2	2.1	2.1	1.9	1.8	1.8	1.7	1.7
State/Muni. Govt. Entities	1.4	1.4	1.5	1.6	1.6	1.3	1.3	1.4
Banking/Thrift Inst.	1.1	1.1	1.1	1.1	1.2	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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Other	51	55	57	55	57	55	57	58
Private Funds	83	96	94	109	105	97	84	84
Unknown Non-U.S. Investors	55	53	52	52	51	54	60	60
Sec-Registered Investment Companies	24	23	24	24	23	18	19	19
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	***	***	***	***	***	***	***	***
Insurance Companies	10	9	9	12	12	9	10	10
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-U.S. Individuals	4	4	4	4	4	5	4	3
Pension Plans	5	5	5	3	4	3	***	***
Non-Profits	2	2	1	***	1	1	1	***
State/Muni. Govt. Pension Plans	1	1	1	***	2	2	***	***
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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Other	18.5	19.1	19.7	17.9	18.7	19.0	20.0	20.1
Private Funds	30.0	33.3	32.6	35.7	34.4	33.6	29.6	29.1
Unknown Non-U.S. Investors	19.8	18.4	18.1	17.0	16.6	18.7	20.9	20.7
Sec-Registered Investment Companies	8.6	7.8	8.3	7.9	7.6	6.2	6.6	6.6
Broker-Dealers	***	***	***	***	***	***	***	***
Banking/Thrift Inst.	***	***	***	***	***	***	***	***
Insurance Companies	3.7	3.0	3.3	3.9	3.8	3.1	3.5	3.3
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
Non-U.S. Individuals	1.4	1.3	1.4	1.2	1.1	1.7	1.3	1.1
Pension Plans	1.9	1.8	1.7	1.1	1.2	0.9	***	***
Non-Profits	0.6	0.5	0.5	***	0.4	0.4	0.5	***
State/Muni. Govt. Pension Plans	0.4	0.4	0.3	***	0.6	0.6	***	***
U.S. Individuals	***	***	***	***	***	***	***	***

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
State/Muni. Govt. Pension Plans	366	415	416	416	416	454	454	454
Private Funds	284	353	356	356	356	398	397	397
Other	161	212	225	225	225	322	336	336
Sov. Wealth Funds And For. Official Inst.	153	186	203	203	203	225	244	244
Pension Plans	139	159	159	159	159	175	175	175
Insurance Companies	94	109	109	109	109	127	127	127
U.S. Individuals	88	94	94	94	94	118	118	118
Non-Profits	90	104	104	104	104	116	116	116
Non-U.S. Individuals	34	36	36	36	36	48	48	48
State/Muni. Govt. Entities	22	28	28	28	28	36	36	36
Banking/Thrift Inst.	31	29	29	29	29	31	31	31
Sec-Registered Investment Companies	12	16	16	16	16	17	17	17
Unknown Non-U.S. Investors	13	14	14	14	14	17	17	17
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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
State/Muni. Govt. Pension Plans	24.6	23.6	23.3	23.3	23.3	21.8	21.4	21.4
Private Funds	19.1	20.1	19.9	19.9	19.9	19.1	18.8	18.8
Other	10.8	12.1	12.6	12.6	12.6	15.4	15.9	15.9
Sov. Wealth Funds And For. Official Inst.	10.3	10.6	11.3	11.3	11.3	10.8	11.5	11.5
Pension Plans	9.4	9.1	8.9	8.9	8.9	8.4	8.3	8.3
Insurance Companies	6.3	6.2	6.1	6.1	6.1	6.1	6.0	6.0
U.S. Individuals	5.9	5.3	5.2	5.3	5.2	5.6	5.6	5.6
Non-Profits	6.1	5.9	5.8	5.8	5.8	5.6	5.5	5.5
Non-U.S. Individuals	2.3	2.1	2.0	2.0	2.0	2.3	2.3	2.3
State/Muni. Govt. Entities	1.5	1.6	1.5	1.5	1.5	1.7	1.7	1.7
Banking/Thrift Inst.	2.1	1.7	1.6	1.6	1.6	1.5	1.5	1.5
Sec-Registered Investment Companies	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8
Unknown Non-U.S. Investors	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Broker-Dealers	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

## V Derivatives

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

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

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Hedge Fund	11,369	12,133	14,212	13,419	13,597	12,677	14,164	13,084
Qualifying Hedge Fund	9,583	10,127	12,095	11,314	10,331	9,871	11,298	11,447
Other Private Fund	109	148	149	148	134	132	131	134
Private Equity Fund	38	39	40	40	40	38	37	37
Section 4 Private Equity Fund	34	33	34	34	34	31	31	31
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Real Estate Fund	16	17	17	17	17	17	17	17
Securitized Asset Fund	13	3	2	2	2	3	3	3
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	11,573	12,328	14,330	13,620	13,818	12,914	14,386	13,306

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

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Hedge Fund	300.8	312.5	357.6	335.2	335.0	334.1	353.5	319.8
Qualifying Hedge Fund	321.1	332.3	389.4	359.0	324.0	332.6	361.3	360.0
Other Private Fund	11.2	13.7	13.7	13.4	12.3	12.2	12.1	12.5
Private Equity Fund	1.8	1.6	1.6	1.6	1.6	1.3	1.3	1.3
Section 4 Private Equity Fund	2.3	1.9	1.9	1.9	1.9	1.5	1.5	1.5
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Real Estate Fund	4.7	4.4	4.4	4.4	4.4	3.8	3.7	3.7
Securitized Asset Fund	9.2	1.7	1.6	1.5	1.5	1.6	1.6	1.6
Venture Capital Fund	***	***	***	***	***	***	***	***
<b>Total</b>	151.4	148.3	169.5	159.7	161.1	148.5	160.0	146.7

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

All Private Funds (\$ Billions)								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	0.3	0.3	0.3	0.3
90th Percentile	1.6	1.7	1.7	1.7	1.7	1.5	1.5	1.6
Mean	1.1	1.2	1.3	1.2	1.3	1.1	1.2	1.2
Qualifying Hedge Funds (\$ Billions)								
Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
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	0.0	0.1	0.1	0.0	0.1
Median	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
75th Percentile	2.1	2.2	2.2	2.1	2.1	1.8	2.0	2.3
90th Percentile	9.4	9.9	10.9	9.4	10.2	9.5	11.2	11.3
Mean	5.1	5.1	6.6	6.0	5.7	5.2	6.2	6.6

## 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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
0%	7,704	7,767	7,883	7,990	8,057	7,918	7,987	8,056
Less than 100%	63	42	70	69	58	64	67	64
100% or More	13	12	11	11	11	5	5	5

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

Fraction of NAV	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
0%	3,652	3,771	3,845	3,894	3,955	3,721	3,922	3,990
Less than 100%	43	41	46	42	43	43	84	85
100% or More	37	37	38	38	39	35	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.

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Top 10	7.5	7.5	7.2	7.3	7.2	7.4	7.2	7.3
Top 25	13.2	13.4	13.3	13.5	13.5	13.5	13.4	13.5
Top 50	20.0	20.2	20.2	20.1	20.1	19.7	19.7	19.8
Top 100	28.5	28.8	28.6	28.4	28.4	27.9	28.0	28.1
Top 250	43.4	43.2	43.0	42.6	42.5	42.1	42.4	42.6
Top 500	56.8	56.5	56.4	56.0	55.9	55.6	56.2	56.1

**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.

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Top 10	15.5	15.1	15.5	15.5	15.4	16.7	16.5	16.2
Top 25	24.2	23.7	24.2	23.8	24.4	26.0	25.7	25.4
Top 50	32.6	31.8	32.6	32.0	32.9	34.2	34.2	33.7
Top 100	42.2	41.4	41.9	41.7	42.4	43.4	43.4	43.1
Top 250	56.0	55.3	55.5	55.2	56.0	56.6	57.1	56.7
Top 500	67.4	66.6	66.9	66.7	67.2	67.6	68.1	67.9

**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).

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Top 10	35.0	34.4	35.1	34.5	34.7	36.3	36.1	35.2
Top 25	47.5	47.5	49.1	48.3	48.4	51.3	50.9	50.0
Top 50	58.6	59.0	60.0	59.6	60.0	62.9	63.0	62.0
Top 100	70.2	70.8	71.0	70.7	71.0	73.3	73.3	72.8
Top 250	82.6	82.6	82.8	82.9	82.9	84.7	85.0	84.9
Top 500	90.5	90.2	90.4	90.6	90.6	91.6	91.9	91.7

**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).

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Top 10	32.6	32.6	31.8	30.8	30.4	32.7	31.7	29.2
Top 25	49.4	47.9	49.7	49.6	48.5	49.0	50.0	47.1
Top 50	61.7	60.3	62.2	62.1	61.3	62.0	63.0	59.8
Top 100	73.7	72.8	73.9	73.3	73.0	73.6	74.9	72.4
Top 250	86.5	86.0	87.0	86.3	86.2	86.6	87.8	86.2
Top 500	93.2	93.0	93.8	93.2	93.2	93.3	94.0	93.2

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

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Top 10	30.4	30.5	29.6	28.4	27.6	29.7	30.0	28.3
Top 25	45.2	45.1	46.3	44.7	44.1	47.2	47.1	44.9
Top 50	57.1	56.6	59.2	58.1	57.8	60.2	59.7	57.8
Top 100	68.8	68.6	70.5	69.6	69.4	71.2	71.2	69.3
Top 250	82.6	82.6	84.0	82.8	82.7	83.9	84.3	82.9
Top 500	91.1	91.1	92.0	91.2	91.1	91.8	92.0	91.4

## 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	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	0.9	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.5	1.5	1.5	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.4	1.3	1.4	1.3	1.4	1.4	1.4
Median	2.3	2.4	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	2.4	2.3	2.4	2.4	2.3	2.4	2.4	2.2	2.2	2.2	2.1	2.2	2.3	2.3
75th Percentile	5.0	5.0	4.9	5.2	5.2	4.8	5.4	5.3	5.1	5.2	5.4	5.1	5.0	5.0	4.9	5.2	5.1	4.7	5.2	5.1	4.8	4.9	5.0	4.8
90th Percentile	12.6	14.4	13.1	13.4	13.8	12.7	16.4	15.4	14.9	17.6	18.0	16.8	18.7	18.2	17.4	19.0	20.5	17.7	18.4	20.0	18.6	17.6	17.1	16.5
Mean	6.7	7.1	6.9	6.7	7.1	6.5	7.8	7.7	7.4	8.2	8.3	8.0	8.1	8.4	7.7	8.3	8.7	7.7	8.1	8.6	8.3	8.4	8.4	7.9
Excluding IRDs																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
10th Percentile	0.9	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	0.9	1.0	1.0	1.0	0.9	1.0
25th Percentile	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Median	2.1	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.9	1.9	2.0	2.0	2.0	2.0	2.0
75th Percentile	3.7	3.7	3.7	3.7	3.8	3.6	3.8	3.7	3.6	3.8	4.0	3.7	3.9	3.8	3.8	3.8	3.8	3.5	3.8	3.9	3.9	4.1	3.9	3.9
90th Percentile	8.7	8.9	9.1	8.8	9.1	8.6	10.0	9.2	8.8	9.4	9.8	9.0	9.2	9.1	8.9	9.6	8.8	8.4	9.1	9.4	8.7	9.1	8.5	7.9
Mean	4.3	4.3	4.2	4.2	4.3	4.0	4.5	4.2	4.1	4.5	4.5	4.5	4.5	4.6	4.5	5.0	5.1	4.5	4.9	5.0	4.8	5.0	4.9	4.9



**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	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
10th Percentile	0.9	1.0	1.0	0.9	0.9	0.9	0.9	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	0.9	0.9	1.0	0.9	0.9	1.0
25th Percentile	1.2	1.2	1.2	1.2	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	1.1	1.1	1.1	1.2	1.1	1.2
Median	1.6	1.6	1.6	1.7	1.7	1.6	1.7	1.7	1.6	1.6	1.7	1.6	1.7	1.7	1.6	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6
75th Percentile	3.1	3.1	3.0	3.0	3.1	2.9	3.2	3.2	3.0	3.1	3.2	3.0	3.1	3.1	3.0	3.1	3.1	2.9	3.2	3.2	3.1	3.2	3.1	3.0
90th Percentile	7.6	7.9	7.4	7.8	8.0	6.9	8.9	8.2	8.0	9.2	9.1	9.0	9.9	10.0	9.1	10.3	10.3	9.7	9.4	9.9	9.2	9.2	9.3	9.1
Mean	3.9	4.2	4.1	4.1	4.2	3.9	4.5	4.5	4.3	4.7	4.8	4.6	4.7	4.6	4.3	4.8	5.1	4.5	4.7	5.2	4.9	4.7	4.8	4.4
Long Exposure Excluding IRDs																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
10th Percentile	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	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	1.6	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	1.5	1.5	1.5
75th Percentile	2.4	2.4	2.5	2.5	2.5	2.4	2.5	2.5	2.4	2.5	2.6	2.4	2.5	2.5	2.4	2.6	2.5	2.4	2.4	2.5	2.4	2.5	2.4	2.5
90th Percentile	5.2	5.2	5.2	5.4	5.5	5.1	5.9	5.2	5.1	5.5	5.4	5.5	5.2	5.3	5.2	5.4	5.1	5.0	5.4	5.5	5.2	5.7	5.6	5.7
Mean	2.7	2.7	2.7	2.7	2.7	2.6	2.7	2.6	2.5	2.8	2.8	2.8	2.8	2.7	2.7	3.0	3.1	2.8	2.9	3.0	2.8	3.0	2.9	2.9
Short Exposure Including IRDs																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	0.4	0.3	0.4	0.4	0.4	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	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.8
75th Percentile	2.3	2.2	2.2	2.3	2.4	2.2	2.5	2.4	2.3	2.4	2.3	2.3	2.3	2.2	2.3	2.3	2.2	2.0	2.3	2.4	2.3	2.4	2.3	2.3
90th Percentile	6.5	6.7	6.8	7.0	7.7	6.4	8.3	7.8	8.0	9.0	9.8	8.8	9.5	9.1	9.2	9.3	9.6	7.9	9.1	9.3	9.2	9.5	9.1	9.0
Mean	3.1	3.1	3.2	3.2	3.5	3.1	3.6	3.6	3.4	3.8	3.8	3.6	3.8	3.8	3.7	3.7	3.7	3.4	3.8	3.9	3.7	4.0	4.0	3.8
Short Exposure Excluding IRDs																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	0.0	0.0	0.0	0.0	0.1	0.1	0.0
25th Percentile	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	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	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
75th Percentile	1.5	1.5	1.5	1.4	1.5	1.5	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.5	1.6	1.7	1.7	1.8	1.7	1.7
90th Percentile	4.1	4.2	4.4	4.3	4.5	4.2	4.6	4.3	4.4	4.7	5.0	4.4	4.4	4.3	4.4	5.1	3.9	4.2	4.4	4.1	4.1	4.4	4.7	4.6
Mean	1.8	1.8	1.8	1.9	2.0	1.7	2.0	1.9	1.8	2.0	2.0	1.9	2.1	2.1	2.1	2.0	2.1	1.9	2.2	2.2	2.1	2.3	2.2	2.2

## 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)
2017-07	18.6	28.1	36.6	51.1
2017-08	18.6	28.1	37.4	52.5
2017-09	18.6	28.1	36.2	50.8
2017-10	18.4	27.7	36.0	51.3
2017-11	18.4	27.7	36.3	52.0
2017-12	18.4	27.7	36.5	51.8
2018-01	18.4	27.7	37.5	53.6
2018-02	18.4	27.7	41.0	56.3
2018-03	18.4	27.7	40.0	55.3
2018-04	18.1	27.2	41.0	56.4
2018-05	18.1	27.2	40.3	56.0
2018-06	18.1	27.2	38.1	53.7
2018-07	18.2	27.4	35.4	51.2
2018-08	18.3	27.6	34.1	49.9
2018-09	18.3	27.6	34.4	49.6
2018-10	19.2	28.7	35.4	51.9
2018-11	19.2	28.7	36.4	52.4
2018-12	19.2	28.7	36.9	52.1
2019-01	19.0	28.5	37.4	53.2
2019-02	18.9	28.5	36.9	53.0
2019-03	18.9	28.5	36.8	53.0
2019-04	18.9	28.5	37.7	54.1
2019-05	18.9	28.5	37.4	54.1
2019-06	18.9	28.5	36.3	52.6

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
2017-07	11,133	2,673	2,099	101	17	16,023
2017-08	10,809	2,932	2,385	92	21	16,239
2017-09	13,460	2,997	2,259	109	24	18,849
2017-10	8,761	2,646	2,220	107	29	13,763
2017-11	10,364	2,857	2,399	210	25	15,856
2017-12	13,350	2,459	2,081	70	15	17,976
2018-01	16,512	3,164	2,449	142	33	22,299
2018-02	18,150	3,516	2,446	132	27	24,271
2018-03	17,329	3,238	2,273	153	33	23,027
2018-04	10,382	2,733	2,438	119	22	15,693
2018-05	15,734	3,727	2,499	132	31	22,122
2018-06	15,104	3,080	2,582	119	29	20,913
2018-07	8,108	3,178	2,272	92	17	13,668
2018-08	11,643	3,280	2,417	96	20	17,455
2018-09	12,915	2,953	2,110	114	32	18,124
2018-10	11,765	3,180	3,018	129	23	18,115
2018-11	13,470	3,214	2,576	112	20	19,393
2018-12	12,715	2,911	2,189	72	13	17,901
2019-01	9,675	3,783	2,353	159	23	15,993
2019-02	11,269	4,095	2,048	135	22	17,569
2019-03	14,103	3,779	2,295	143	27	20,347
2019-04	9,917	3,425	2,263	127	18	15,749
2019-05	18,308	3,834	2,528	134	22	24,826
2019-06	16,336	3,866	2,188	134	25	22,549

**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	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Median	1.0	1.0	1.1	1.0	1.2	1.1	1.2	1.4	1.4	1.1	1.4	1.4	1.0	1.1	1.1	1.4	1.2	1.2	1.1	1.2	1.2	1.0	1.3	1.2
75th Percentile	4.5	5.1	6.0	4.6	5.1	4.8	6.6	6.8	7.4	6.3	6.8	7.7	5.1	6.1	5.8	6.8	6.2	5.8	6.3	6.0	6.6	5.3	7.0	6.9
90th Percentile	40.8	44.7	49.6	34.9	40.1	37.4	51.0	54.5	60.5	42.7	60.4	56.5	38.0	43.6	46.2	58.7	43.8	42.1	43.0	46.6	52.4	46.7	61.5	60.9
Mean	22.4	27.8	31.4	20.6	25.2	26.4	31.2	36.3	37.2	23.2	34.6	31.2	20.6	28.7	28.7	28.7	32.0	26.4	25.1	29.1	30.9	25.4	39.7	34.6

  

Total Turnover to NAV Ratio																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Median	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.6	0.5	0.6	0.6	0.4	0.5	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5
75th Percentile	1.8	2.3	2.3	1.7	2.1	2.0	2.4	3.0	2.8	2.5	2.8	2.6	1.7	2.2	2.0	2.7	2.4	2.5	2.4	2.3	2.3	1.9	2.6	2.2
90th Percentile	13.4	14.3	18.6	11.7	13.9	12.8	16.2	18.1	20.0	17.5	21.1	21.2	16.6	19.2	20.7	21.9	19.4	19.5	15.3	16.0	20.2	16.3	20.8	22.3
Mean	7.0	6.9	7.8	6.5	7.3	7.6	9.5	10.9	9.6	9.2	12.5	9.7	6.7	7.6	8.5	8.6	7.6	7.7	6.4	7.5	8.8	8.0	11.8	11.7

## 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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
North America	5,089	4,527	4,811	4,923	5,112	5,007	5,323	5,522
Europe EEA	1,708	1,663	1,990	1,822	1,751	1,822	1,804	1,765
Asia	713	673	735	698	678	787	844	840
South America	108	133	114	112	101	111	115	119
Europe Other	77	91	86	74	72	70	78	82
Supranational	67	75	72	59	60	66	48	38
Africa	24	31	37	33	31	29	31	33
Middle East	23	26	30	37	26	27	25	28

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
North America	155.9	135.4	140.5	141.4	147.2	153.0	154.2	156.4
Europe EEA	52.3	49.7	58.1	52.3	50.4	55.7	52.3	50.0
Asia	21.8	20.1	21.5	20.1	19.5	24.0	24.5	23.8
South America	3.3	4.0	3.3	3.2	2.9	3.4	3.3	3.4
Europe Other	2.4	2.7	2.5	2.1	2.1	2.1	2.3	2.3
Supranational	2.0	2.2	2.1	1.7	1.7	2.0	1.4	1.1
Africa	0.7	0.9	1.1	0.9	0.9	0.9	0.9	0.9
Middle East	0.7	0.8	0.9	1.1	0.7	0.8	0.7	0.8

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

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

Country	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
United States	4,824	4,312	4,551	4,683	4,869	4,783	5,201	5,233
Japan	233	245	269	244	251	274	265	239
China (Inc. Hong Kong)	152	164	178	184	165	147	187	186
Brazil	45	60	47	50	42	40	43	46
India	37	47	38	36	36	35	36	32
Russia	16	18	16	12	11	9	9	11

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
United States	147.8	129.0	132.9	134.5	140.2	146.2	150.7	148.3
Japan	7.1	7.3	7.9	7.0	7.2	8.4	7.7	6.8
China (Inc. Hong Kong)	4.7	4.9	5.2	5.3	4.7	4.5	5.4	5.3
Brazil	1.4	1.8	1.4	1.4	1.2	1.2	1.2	1.3
India	1.1	1.4	1.1	1.0	1.0	1.1	1.0	0.9
Russia	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3

## 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	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06	
10th 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	1.1
25th Percentile	1.5	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.4
Median	2.3	2.3	2.2	2.3	2.3	2.1	2.2	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.3	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.2
75th Percentile	4.4	4.5	4.2	4.6	4.6	4.3	4.8	4.7	4.5	4.6	4.5	4.2	4.6	4.5	4.3	4.7	4.6	4.4	4.6	4.9	4.3	4.7	4.8	4.4	4.4
90th Percentile	9.6	9.7	9.2	11.0	11.1	9.5	11.2	11.2	10.3	10.7	11.2	10.6	12.6	12.0	11.0	12.9	12.1	10.8	11.5	11.6	10.9	12.2	13.1	11.2	11.2
Mean	5.0	5.1	4.7	5.4	5.4	4.8	5.7	5.9	5.6	5.5	5.3	5.0	6.0	5.9	5.4	6.6	6.7	6.0	6.7	7.0	6.3	7.0	7.5	6.3	6.3
Excluding IRDs																									
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06	
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	1.0
25th Percentile	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	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.3	1.1	1.1
Median	1.9	1.9	1.8	1.9	1.9	1.8	1.9	1.9	1.8	1.9	1.9	1.8	1.9	1.9	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
75th Percentile	3.3	3.4	3.3	3.5	3.5	3.2	3.5	3.4	3.4	3.4	3.4	3.3	3.4	3.4	3.3	3.7	3.5	3.3	3.6	3.6	3.3	3.7	3.6	3.4	3.4
90th Percentile	6.6	6.9	6.7	7.3	7.4	6.5	7.7	7.2	6.9	7.5	7.3	7.0	7.5	6.9	6.8	7.5	7.1	6.8	7.2	7.3	7.1	7.7	7.8	7.3	7.3
Mean	3.4	3.4	3.2	3.6	3.6	3.1	3.6	3.5	3.3	3.4	3.4	3.3	3.5	3.4	3.3	3.9	3.7	3.4	3.8	4.0	3.7	3.9	3.8	3.6	3.6

**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	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.2	1.2	1.1	1.2	1.2	1.1	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
Median	1.6	1.7	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6
75th Percentile	2.8	2.8	2.6	2.8	2.8	2.7	2.9	2.9	2.8	2.9	2.8	2.7	2.8	2.7	2.6	2.9	2.8	2.7	2.9	2.9	2.7	2.8	2.9	2.8
90th Percentile	5.7	5.6	5.4	6.5	6.4	5.6	6.4	6.0	5.8	5.8	6.0	5.9	6.7	6.5	5.8	6.8	6.7	6.0	6.5	6.5	6.0	6.7	7.1	6.5
Mean	3.0	3.1	2.9	3.3	3.4	3.0	3.4	3.5	3.3	3.3	3.3	3.1	3.5	3.5	3.2	3.9	3.9	3.6	4.1	4.2	3.9	4.1	4.3	3.8
Long Exposure Excluding IRDs																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	1.4	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4
75th Percentile	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	2.4	2.3	2.2	2.4	2.4	2.4	2.2	2.3	2.3
90th Percentile	4.0	4.2	4.0	4.4	4.4	4.0	4.6	4.4	4.3	4.3	4.3	4.2	4.4	4.2	3.9	4.3	4.2	4.0	4.5	4.4	4.4	4.7	4.6	4.3
Mean	2.2	2.3	2.2	2.4	2.4	2.1	2.4	2.3	2.2	2.3	2.3	2.2	2.3	2.2	2.2	2.5	2.4	2.3	2.5	2.5	2.4	2.4	2.4	2.3
Short Exposure Including IRDs																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	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	0.2	0.3	0.2
Median	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.6	0.7	0.7	0.7
75th Percentile	1.9	1.8	1.8	2.0	2.0	1.8	1.9	2.0	1.9	2.0	1.9	1.8	2.0	2.0	1.9	2.1	2.0	1.9	2.0	2.1	1.9	2.1	2.1	1.9
90th Percentile	4.4	4.2	4.2	4.7	4.9	4.6	5.1	5.2	5.0	5.1	5.1	5.1	6.0	5.8	5.7	6.1	5.6	5.1	5.5	5.5	5.2	6.0	6.2	5.2
Mean	2.1	2.2	2.0	2.3	2.3	2.1	2.5	2.6	2.5	2.4	2.3	2.2	2.7	2.7	2.5	3.0	3.0	2.6	3.0	3.0	2.8	3.2	3.1	2.9
Short Exposure Excluding IRDs																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
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	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.5
75th Percentile	1.3	1.3	1.3	1.4	1.4	1.3	1.4	1.5	1.4	1.5	1.4	1.4	1.5	1.5	1.5	1.7	1.5	1.4	1.5	1.6	1.5	1.6	1.6	1.5
90th Percentile	3.0	3.0	2.9	3.2	3.2	3.0	3.5	3.5	3.4	3.5	3.5	3.3	3.4	3.3	3.3	3.7	3.3	3.0	3.1	3.3	3.2	3.7	3.6	3.5
Mean	1.4	1.3	1.3	1.4	1.4	1.2	1.5	1.5	1.4	1.4	1.4	1.3	1.5	1.5	1.4	1.7	1.6	1.5	1.7	1.7	1.6	1.8	1.7	1.7

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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
	Subtotal	1,635	1,664	1,647	1,716	1,761	1,477	1,616	1,644
Equity	Long/Short	926	945	925	951	956	762	841	867
	Long Bias	369	371	372	392	414	348	384	392
	Market Neutral	***	***	342	365	383	360	386	380
	Short Bias	***	***	8	8	8	7	5	5
	Subtotal	968	999	983	984	1,005	1,013	1,038	1,088
Other	Subtotal	815	719	739	786	774	879	963	1,054
	F.I. Sov.	566	477	496	537	506	599	686	774
	F.I. Asset Backed	119	119	121	127	137	145	130	134
	F.I. Corp.	50	46	49	52	56	59	67	69
	F.I. Conv. Arb.	49	50	51	49	53	55	60	59
Relative Value	Volatility Arb.	31	27	22	21	22	21	19	18
	Subtotal	699	660	784	760	819	716	782	753
	Global Macro	617	575	698	670	729	627	695	666
	Currency	***	***	***	45	45	47	46	***
	Commodity	38	40	39	40	41	37	37	38
Macro	Active Trading	***	***	***	5	4	4	4	***
	Subtotal	359	353	363	360	350	304	313	337
	Distressed/Restruct.	170	167	165	162	165	164	169	165
	Risk Arb./Merger Arb.	89	86	101	98	88	64	64	86
	Equity	100	101	97	100	98	76	80	86
Event Driven	Subtotal	289	287	286	297	307	321	325	314
	Long/Short	240	235	248	238	247	256	258	246
	Asset Based Lending	49	51	38	59	60	65	66	68
Credit	Subtotal	136	142	138	141	157	150	172	191
	Quantitative	134	***	***	***	***	***	***	***
	Fundamental	2	***	***	***	***	***	***	***
Managed Futures/CTA	Subtotal	49	49	44	42	48	44	43	41
	Investment in other funds	49	49	44	42	48	44	43	41
<b>Total</b>	<b>Total</b>	4,951	4,873	4,985	5,086	5,220	4,904	5,251	5,422

<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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
	Subtotal	54.8	54.6	53.0	54.4	55.2	49.8	51.7	51.7
Equity	Long/Short	31.0	31.0	29.8	30.2	30.0	25.7	26.9	27.3
	Long Bias	12.4	12.2	12.0	12.4	13.0	11.7	12.3	12.3
	Market Neutral	***	***	11.0	11.6	12.0	12.1	12.4	12.0
	Short Bias	***	***	0.3	0.3	0.2	0.2	0.2	0.1
Other	Subtotal	32.4	32.8	31.7	31.2	31.5	34.1	33.2	34.2
	Subtotal	27.3	23.6	23.8	24.9	24.3	29.6	30.8	33.1
Relative Value	F.I. Sov.	19.0	15.7	16.0	17.0	15.9	20.2	22.0	24.3
	F.I. Asset Backed	4.0	3.9	3.9	4.0	4.3	4.9	4.2	4.2
	F.I. Corp.	1.7	1.5	1.6	1.6	1.8	2.0	2.2	2.2
	F.I. Conv. Arb.	1.7	1.6	1.6	1.6	1.7	1.9	1.9	1.9
	Volatility Arb.	1.1	0.9	0.7	0.7	0.7	0.7	0.6	0.6
Macro	Subtotal	23.4	21.7	25.2	24.1	25.7	24.1	25.0	23.7
	Global Macro	20.7	18.9	22.5	21.3	22.9	21.1	22.2	20.9
	Currency	***	***	***	1.4	1.4	1.6	1.5	***
	Commodity	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2
	Active Trading	***	***	***	0.1	0.1	0.1	0.1	***
Event Driven	Subtotal	12.0	11.6	11.7	11.4	11.0	10.2	10.0	10.6
	Distressed/Restruct.	5.7	5.5	5.3	5.1	5.2	5.5	5.4	5.2
	Risk Arb./Merger Arb.	3.0	2.8	3.3	3.1	2.8	2.1	2.0	2.7
	Equity	3.4	3.3	3.1	3.2	3.1	2.6	2.6	2.7
Credit	Subtotal	9.7	9.4	9.2	9.4	9.6	10.8	10.4	9.9
	Long/Short	8.1	7.7	8.0	7.6	7.7	8.6	8.3	7.7
	Asset Based Lending	1.6	1.7	1.2	1.9	1.9	2.2	2.1	2.1
Managed Futures/CTA	Subtotal	4.6	4.6	4.5	4.5	4.9	5.0	5.5	6.0
	Quantitative	4.5	***	***	***	***	***	***	***
	Fundamental	0.1	***	***	***	***	***	***	***
Investment in other funds	Subtotal	1.6	1.6	1.4	1.3	1.5	1.5	1.4	1.3
<b>Total</b>	<b>Total</b>	<b>165.9</b>	<b>159.9</b>	<b>160.5</b>	<b>161.4</b>	<b>163.7</b>	<b>165.2</b>	<b>167.9</b>	<b>170.5</b>

## 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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Relative Value	5.0	4.7	5.0	5.1	4.7	5.4	5.4	6.0
Macro	3.9	3.7	3.9	4.1	4.4	3.9	4.2	4.5
Multi-Strategy	2.3	2.2	2.2	2.2	2.3	2.3	2.3	2.5
Other	1.6	1.7	1.6	1.6	1.7	1.7	1.7	1.8
Equity	1.6	1.6	1.7	1.6	1.7	1.7	1.7	1.6
Credit	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.5
Managed Futures/CTA	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4
Event Driven	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Investment in other funds	***	1.0	1.3	1.1	1.1	4.8	4.5	1.2

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

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

Strategy	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Macro	20.6	21.5	26.8	27.7	23.8	24.6	28.0	29.1
Relative Value	18.5	18.2	20.9	19.9	19.0	21.4	22.4	24.0
Managed Futures/CTA	8.4	10.0	8.4	10.5	14.0	9.7	17.9	19.9
Multi-Strategy	9.0	8.6	9.7	8.4	8.4	8.7	9.1	9.8
Other	5.4	5.4	5.0	4.4	4.7	4.5	4.4	4.7
Equity	3.2	3.2	4.0	3.3	3.6	3.5	3.6	3.3
Credit	3.1	3.2	3.3	2.9	2.8	3.3	3.2	2.6
Investment in other funds	***	1.7	2.6	2.4	3.6	14.8	12.0	2.4
Event Driven	2.0	2.0	2.0	1.9	1.9	1.8	1.8	2.0

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Managed Futures/CTA	59.0	58.0	60.6	55.5	47.5	57.4	49.9	48.5
Macro	40.3	40.2	37.0	36.4	36.8	38.3	36.5	38.8
Multi-Strategy	24.9	24.8	24.7	27.0	30.6	29.7	23.0	25.7
Relative Value	21.0	19.3	20.9	18.7	18.5	20.1	19.8	18.6
Other	21.3	21.0	18.5	18.8	19.2	18.1	18.2	18.6
Equity	9.8	10.2	9.7	11.5	11.4	13.5	10.6	9.6
Event Driven	10.0	9.7	8.1	8.6	9.6	12.2	9.9	7.2
Credit	9.9	9.8	8.3	7.0	7.3	8.3	7.3	6.8
Investment in other funds	***	9.4	4.2	6.6	3.6	12.8	14.5	5.8

## 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.

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Cash/Cash Equivalents	677	681	726	741	747	763	786	806
Equities	2,521	2,600	3,037	2,713	2,740	2,300	2,580	2,649
Treasuries	1,156	1,158	1,196	1,342	1,477	1,793	1,931	2,189
G10 (non-US)	1,138	1,179	1,321	1,277	1,241	1,270	1,312	1,276
Other Bonds	263	254	289	286	299	312	325	343
Corp. Bonds	259	253	264	272	278	266	301	302
MBS	254	266	264	252	276	358	309	234
ABS (non-MBS)	75	77	80	88	87	88	93	96
Conv. Bonds	82	82	94	97	93	86	87	90
Derivatives - IR	4,125	4,446	5,699	5,390	5,512	5,355	6,600	6,755
Derivatives - FX	3,051	3,149	3,738	3,245	2,470	2,278	2,413	2,501
Derivatives - Equity	1,283	1,331	1,364	1,307	1,317	1,110	1,208	1,272
Derivatives - Credit	798	716	733	684	669	730	770	721
Derivatives - Commodity	368	378	366	381	380	286	316	309
Derivatives - Other	267	412	568	580	339	319	263	274
Repurchase Agreements	1,348	1,280	1,452	1,533	1,553	1,771	1,995	1,939
Other	775	748	764	792	784	741	796	821

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

	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Cash/Cash Equivalents	88.0	85.9	80.8	79.8	82.0	82.9	82.0	80.4
Securities - Equities	70.3	71.9	75.5	70.7	70.8	71.2	70.7	70.9
Securities - Treasuries	62.3	62.9	60.4	62.7	63.1	64.2	63.2	60.0
Securities - G10 (non-US)	50.3	50.5	52.5	51.4	49.4	51.4	51.9	52.3
Securities - Other Bonds	70.8	73.6	72.8	72.9	71.0	74.0	75.6	79.1
Securities - Corp. Bonds	81.2	81.6	81.9	82.6	82.8	82.4	83.0	83.0
Securities - MBS	71.9	71.2	73.2	74.2	71.0	67.6	70.2	82.4
Securities - ABS (non-MBS)	***	96.8	98.2	95.5	95.0	96.8	97.1	95.6
Securities - Conv. Bonds	94.1	93.4	88.2	88.0	87.8	86.5	94.2	94.0
Derivatives - IR	47.7	49.4	51.2	52.2	49.3	50.9	52.2	51.6
Derivatives - FX	49.8	49.9	56.8	53.5	55.6	54.6	55.1	54.7
Derivatives - Equity	56.8	57.0	51.5	51.6	52.2	51.1	52.9	54.5
Derivatives - Credit	47.4	47.8	44.8	45.3	45.2	41.4	43.1	42.1
Derivatives - Commodity	64.1	64.5	65.7	62.7	59.6	56.5	58.3	59.4
Derivatives - Other	51.2	53.7	46.6	41.6	34.4	60.9	67.8	63.5
Repurchase Agreements	52.0	52.2	52.0	47.1	47.3	42.2	39.6	37.1
Other	87.0	89.9	88.9	88.1	87.9	89.4	87.5	87.5

## 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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
At most 1 day	8.3	8.5	8.9	9.0	8.8	8.4	8.5	8.1
At most 7 days	14.6	15.0	15.4	15.2	14.9	14.8	14.5	14.0
At most 30 days	27.5	28.0	30.0	27.8	27.8	27.8	29.2	27.3
At most 90 days	48.2	50.9	48.9	47.5	47.9	50.2	47.9	46.4
At most 180 days	61.6	60.0	60.3	58.8	61.2	58.4	58.5	57.4
At most 365 days	73.6	73.8	74.1	73.5	73.7	71.8	70.8	70.2

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
At most 1 day	37.7	38.0	38.8	38.9	38.7	39.3	37.0	36.3
At most 7 days	61.5	61.8	62.2	62.1	61.9	61.2	60.2	59.9
At most 30 days	75.5	75.3	75.0	75.0	74.9	73.7	73.0	72.5
At most 90 days	81.9	81.6	81.4	81.3	80.8	79.4	79.0	78.6
At most 180 days	85.3	85.1	84.8	84.7	84.2	83.0	82.7	82.3
At most 365 days	88.9	88.9	88.7	88.9	88.2	86.8	86.7	86.5

**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 Second Calendar Quarter 2019

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	35.9	58.7	71.4	77.8	81.7	86.0
Inv. Liquidity	7.6	13.8	27.0	47.0	58.5	69.7

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
May Suspend	2,325	2,363	2,411	2,431	2,470	2,266	2,396	2,441
May Have Gates	1,392	1,405	1,459	1,489	1,512	1,402	1,488	1,519
Side-Pocketed	39	39	42	41	39	42	42	42
Gated	30	38	39	32	34	40	39	40
Suspended	22	17	***	13	12	19	17	16

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

Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0
25th Percentile	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.8
Median	7.0	7.0	9.0	7.0	7.0	7.0	7.0	8.5
75th Percentile	23.0	22.0	26.0	24.5	21.8	21.0	21.5	22.0
90th Percentile	46.0	45.0	64.0	49.0	44.0	34.0	34.0	37.0
Mean	17.3	18.1	20.4	18.5	17.1	16.3	15.3	16.0

## F Borrowings

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

Type	Subtype	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Secured	Subtotal	2,437	2,419	2,592	2,813	2,830	2,757	3,016	3,158
	Prime Broker	1,371	1,379	1,418	1,527	1,591	1,289	1,412	1,438
	Reverse Repo	721	685	780	894	862	1,081	1,202	1,291
	Other Secured	345	356	394	392	377	387	401	429
Unsecured	Subtotal	12	14	14	14	12	12	13	15
<b>Total</b>	<b>Total</b>	2,448	2,433	2,606	2,827	2,842	2,769	3,028	3,173

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

Creditor Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
US Financial	61.4	61.7	60.5	63.3	63.6	63.0	63.1	63.5
Non-US Financial	38.3	37.9	39.1	36.3	36.1	36.5	36.5	35.9
US Non-Financial	***	***	***	***	***	***	***	***
Non-US Non-Financial	***	***	***	***	***	***	***	***

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

Borrowing Type	Collateral Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Prime Broker	Subtotal	1,672	1,685	1,751	1,841	2,148	1,597	1,723	1,806
	Other	1,151	1,183	1,225	1,272	1,557	1,067	1,158	1,222
	Cash	522	502	526	569	591	530	565	584
Reverse Repo	Subtotal	734	718	781	909	885	1,121	1,250	1,355
	Other	478	455	513	569	573	702	766	804
	Cash	256	263	268	340	312	420	484	550
Other Secured	Subtotal	423	426	447	468	436	443	456	494
	Other	265	262	296	308	298	278	297	324
	Cash	158	165	152	159	138	165	160	169
<b>Total</b>	<b>Total</b>	2,830	2,829	2,979	3,217	3,468	3,162	3,429	3,654

**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	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
10th Percentile	0.8	0.8	0.8	0.8	0.9	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	0.9	0.9	0.9	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	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.2	1.3
75th Percentile	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.0	2.1	2.2	2.2	2.1	2.2
90th Percentile	4.0	4.0	4.0	4.2	4.2	4.2	4.2	4.2	4.6	4.1	4.0	4.8	4.3	4.7	4.7	4.3	4.7	5.7	4.7	4.8	4.8	5.1	4.8	5.0
Mean	2.5	2.5	2.5	2.6	2.3	2.9	3.3	3.1	4.4	3.0	2.5	3.9	2.7	3.1	2.8	3.5	3.2	3.8	2.8	3.0	4.8	3.9	2.8	3.3

  

Ratio of Collateral/Prime Broker Borrowing																								
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
10th Percentile	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	0.9	0.9	0.9
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	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.4	1.3	1.4
75th Percentile	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.4	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.5	2.5	2.4	2.5	2.6	2.5	2.5	2.6
90th Percentile	4.4	4.7	4.7	4.7	5.4	5.0	5.1	5.8	5.3	5.8	5.6	6.6	6.4	6.2	5.6	5.6	6.4	7.2	6.0	6.2	5.9	6.4	5.2	6.0
Mean	2.8	3.2	3.1	3.2	3.6	6.4	5.2	4.7	5.5	4.4	5.2	5.5	3.5	3.6	3.2	4.6	4.4	5.0	5.0	5.7	7.0	6.8	3.8	6.8

  

Ratio of Collateral/Reverse Repo Borrowing																									
Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06	
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
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
Median	1.1	1.1	1.0	1.1	***	1.0	1.1	***	1.1	1.1	1.0	1.1	1.0	1.1	1.0	1.1	1.1	***	1.0	***	***	***	1.0	1.0	1.1
75th Percentile	1.4	1.4	1.4	1.4	***	1.4	1.3	***	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	***	1.2	***	***	***	1.3	1.3	1.3
90th Percentile	1.6	1.6	1.6	1.5	***	1.5	1.5	***	1.5	1.5	1.5	1.4	1.4	1.5	1.4	1.4	1.4	***	1.4	***	***	***	1.4	1.4	1.5
Mean	1.3	1.3	1.5	1.2	***	1.2	1.2	***	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

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

Financing Available	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
At most 1 day	35.4	34.2	31.6	32.9	35.8	30.0	34.7	34.5
At most 7 days	51.7	49.5	51.5	52.7	51.8	50.2	51.4	51.0
At most 30 days	64.1	64.7	64.9	66.7	66.0	68.6	68.6	68.0
At most 90 days	79.3	80.3	80.6	80.6	79.9	82.8	82.7	83.5
At most 180 days	96.0	95.9	95.8	95.8	96.0	95.7	95.7	95.4
At most 365 days	97.3	97.2	96.9	97.1	97.2	96.8	96.7	96.5

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

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	39.7	54.1	68.9	82.7	95.1	96.2

## G Central Clearing

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

Statistic	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Percent of Funds	17.0	17.5	17.0	15.4	15.2	16.3	16.2	15.7
Percent of NAV	16.8	16.7	17.1	16.3	16.3	16.9	16.4	16.3



## H Value-at-Risk (“VaR”) Reporting

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

VaR Method	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
VaR (Any Method)	649	663	660	672	682	684	676	665
Historical Simulation	271	278	286	287	298	303	297	305
Parametric	186	193	185	193	194	189	191	189
Monte Carlo Simulation	188	186	175	178	182	186	183	165
Other	42	47	51	52	52	49	45	46
VaR Not Used	1,078	1,138	1,112	1,134	1,136	1,143	1,118	1,119

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

VaR Method	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
VaR (Any Method)	3,586	3,546	3,661	3,779	3,841	3,652	3,887	4,021
Historical Simulation	1,900	1,882	1,969	2,027	2,017	1,954	2,104	2,212
Parametric	767	806	817	837	842	801	817	831
Monte Carlo Simulation	930	835	854	838	670	617	683	700
Other	461	495	496	522	759	742	833	851
VaR Not Used	2,269	2,317	2,415	2,502	2,546	2,502	2,592	2,714

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

VaR Method	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
VaR (Any Method)	1,394	1,397	1,423	1,430	1,434	1,324	1,385	1,393
Historical Simulation	561	562	580	570	575	524	547	561
Parametric	477	490	494	500	496	460	475	482
Monte Carlo Simulation	386	377	375	379	353	337	345	332
Other	90	89	91	96	130	114	128	131
VaR Not Used	1,590	1,650	1,683	1,721	1,754	1,643	1,742	1,787

## 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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Stress and VaR	555	589	593	599	613	606	588	587
Stress, No VaR	467	498	494	490	496	486	453	463
No Stress, VaR	94	74	67	73	69	78	88	78
Neither	611	640	618	644	640	657	665	656

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Stress and VaR	3,350	3,386	3,499	3,612	3,675	3,496	3,684	3,798
Stress, No VaR	1,178	1,190	1,269	1,294	1,300	1,322	1,322	1,380
No Stress, VaR	236	160	162	168	165	155	203	223
Neither	1,091	1,127	1,146	1,208	1,246	1,180	1,270	1,334

**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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Stress and VaR	1,236	1,289	1,313	1,318	1,320	1,222	1,255	1,254
Stress, No VaR	712	736	746	745	757	704	728	740
No Stress, VaR	158	108	110	112	114	103	129	139
Neither	878	914	938	977	998	939	1,014	1,048

## 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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
At most 1 day	79.1	80.5	78.9	79.1	78.8	77.9	77.9	76.2
At most 7 days	95.5	95.5	95.5	96.1	96.0	95.9	95.9	96.1
At most 30 days	99.5	99.5	99.7	99.7	99.5	99.4	99.5	99.6
At most 90 days	99.7	99.7	99.9	99.9	99.8	99.8	99.9	99.9
At most 180 days	99.8	99.8	99.9	100.0	99.9	99.9	100.0	100.0
At most 365 days	99.9	99.9	100.0	100.0	100.0	99.9	100.0	100.0

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
May Suspend	261	273	269	284	291	278	273	276
May Have Gates	226	237	232	245	255	243	237	241
Suspended	0	0	0	0	0	0	0	0
Gated	0	0	0	0	0	0	0	0

### B Portfolio Characteristics

**Figure 17:** Weighted-Average Maturity of Section 3 Liquidity Funds (Days)  
As reported on Form PF, Questions 55.

Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
Average WAM	33.1	32.4	32.5	34.4	33.5	33.4	32.0	31.8	32.9	31.5	31.5	33.3	32.7	33.3	33.4	30.9	29.1	27.8	29.1	31.2	30.8	29.0	31.3	29.0
Asset-Weighted WAM	42.0	38.9	37.2	39.2	38.4	35.5	35.7	41.6	42.0	39.7	39.7	40.9	38.1	40.1	38.8	40.3	39.3	37.3	39.9	39.3	36.5	35.7	38.9	36.9

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

Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
Average WAL	67.8	67.4	67.1	59.9	58.9	57.9	68.0	65.8	66.4	64.1	62.2	60.4	60.7	60.8	60.0	55.3	53.7	53.6	53.3	54.1	55.4	54.4	57.8	56.4
Asset-Weighted WAL	76.9	74.1	71.8	69.1	68.6	64.7	66.4	70.7	71.5	68.5	68.1	67.1	66.5	69.1	66.6	67.6	67.4	66.2	66.9	65.8	64.1	67.1	72.9	67.5

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

Statistic	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
Average Gross Yield	1.07	1.08	1.08	1.05	1.08	1.23	1.34	1.39	1.61	1.59	1.63	1.73	1.80	1.83	1.90	2.00	1.99	2.14	2.21	2.20	2.26	2.25	2.21	2.19
Asset-Weighted Gross Yield	1.12	1.12	1.13	1.13	1.16	1.31	1.39	1.47	1.65	1.70	1.73	1.85	1.90	1.95	2.03	2.11	2.13	2.27	2.36	2.35	2.33	2.33	2.30	2.27

**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	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
Average DLA	43.50	44.43	43.69	44.92	44.13	46.33	43.65	43.10	45.09	48.11	47.25	46.26	48.06	48.94	47.49	50.60	51.81	52.98	49.20	50.30	50.22	51.36	47.51	49.37
Asset-Weighted DLA	47.43	45.55	45.48	45.48	47.36	49.92	46.80	46.54	46.57	49.65	48.87	49.59	50.45	50.89	48.91	50.56	53.77	53.45	51.12	47.72	45.67	46.85	44.60	47.27

**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	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
Average WLA	58.10	58.58	58.75	58.87	59.08	60.17	58.34	58.58	59.71	61.37	61.20	60.83	60.97	61.64	62.76	63.99	64.76	64.98	62.05	64.24	63.90	63.97	61.47	61.97
Asset-Weighted WLA	57.49	56.48	58.38	57.21	60.15	58.99	58.67	57.99	57.04	58.05	57.80	61.04	58.40	59.40	57.77	59.14	62.42	62.42	58.14	58.47	57.50	56.06	55.44	57.97

## 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	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Credit Quality	56.5	56.2	58.7	60.0	60.0	60.9	60.0	61.4
Diversification	52.2	52.1	54.3	55.6	55.6	56.5	55.6	56.8
Maturity	52.2	52.1	54.3	55.6	55.6	56.5	55.6	56.8
Liquidity	52.2	52.1	50.0	51.1	51.1	52.2	51.1	52.3
Fully	45.7	45.8	45.7	46.7	46.7	47.8	46.7	47.7
None	41.3	41.7	41.3	40.0	40.0	39.1	40.0	38.6

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

As reported on Form PF, Questions 9 and 54.

Compliance Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Credit Quality	15.9	14.7	15.9	14.6	14.5	13.4	13.8	13.6
Diversification	14.9	13.7	14.9	13.7	13.5	12.4	12.7	12.8
Maturity	15.0	13.7	14.9	13.7	13.5	12.4	12.7	12.8
Liquidity	15.0	13.7	14.5	13.4	13.3	12.2	12.5	12.6
Fully	12.8	11.8	12.7	11.7	11.5	10.3	10.5	10.8
None	83.9	85.2	84.1	85.4	85.5	86.6	86.2	86.4

## D Methods of Calculating NAV

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

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Stable	78.3	79.2	80.4	80.0	77.8	78.3	80.0	75.0
Floating	21.7	20.8	19.6	20.0	22.2	21.7	20.0	25.0

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

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

Type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2
Stable	70.2	69.1	70.3	68.4	68.0	70.9	74.4	56.5
Floating	29.8	30.9	29.7	31.6	32.0	29.1	25.6	43.5

## E Aggregate Portfolio Holdings

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

Product Type	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06
Deposits	74.3	73.9	69.7	73.6	73.2	66.6	72.3	69.3	54.3	64.2	60.8	64.6
Repo - Govt. Collateral	28.6	29.0	30.2	32.1	31.0	29.6	37.3	30.5	34.2	40.6	39.0	35.1
Other	43.9	42.7	43.5	41.6	41.9	46.9	48.7	47.5	45.1	45.8	48.1	48.6
Commercial Paper	39.6	37.7	39.4	41.8	41.9	37.5	42.9	41.2	42.2	42.6	44.1	42.8
U.S. Treasuries	50.9	48.5	47.0	50.6	56.4	58.2	54.2	54.2	60.9	56.7	54.5	61.9
Asset-Backed Securities	19.1	18.6	21.4	20.6	19.6	19.8	21.7	21.3	21.4	21.9	22.6	23.1
Repo - Other Collateral	16.9	16.7	15.2	16.7	16.2	15.3	16.8	16.8	15.8	17.1	19.7	16.2
U.S. Govt. Debt	4.3	4.0	5.5	5.4	5.6	5.6	4.8	5.6	5.4	4.6	5.2	5.7
Municipal Debt	0.9	0.9	0.9	1.2	1.2	0.9	0.9	1.0	1.0	1.2	1.0	1.1

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

Product Type	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12	2019-01	2019-02	2019-03	2019-04	2019-05	2019-06
Deposits	61.5	59.0	64.1	59.5	60.7	54.2	55.0	58.5	57.6	61.7	62.3	65.8
Repo - Govt. Collateral	43.9	45.3	44.8	49.3	49.9	48.3	58.0	57.6	48.4	58.0	59.0	62.4
Other	47.3	49.9	47.9	47.2	42.7	46.4	48.5	45.4	45.4	41.2	39.2	44.4
Commercial Paper	50.5	47.0	45.7	46.8	46.5	41.1	43.9	40.4	37.8	40.2	42.0	39.6
U.S. Treasuries	53.3	54.5	53.6	51.4	57.2	60.3	45.1	46.2	48.9	40.9	37.5	39.5
Asset-Backed Securities	21.9	22.0	20.2	21.8	22.7	22.4	24.4	21.9	20.8	20.3	21.4	18.6
Repo - Other Collateral	17.6	17.2	17.8	15.6	14.1	***	***	***	***	***	***	11.9
U.S. Govt. Debt	5.1	4.5	4.8	3.5	3.1	3.2	2.9	3.5	4.4	3.2	4.2	***
Municipal Debt	1.0	1.0	1.2	0.9	0.9	***	***	***	***	***	***	***

## XI Section 4 Private Equity Fund Specific Information

### A CPC Industry Concentration

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

Type	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4
Software Publishers	2.8	3.8	4.9	6.1	6.0	8.0
Oil & Gas Extraction	7.9	7.8	5.8	6.7	6.2	4.9
Electric Power Generation,...	3.8	3.8	3.7	4.1	4.2	4.5
Data Processing, Hosting, &...	2.9	2.3	1.8	2.0	2.3	3.5
Telecommunications Data Processing...	2.6	2.5	2.7	2.3	2.2	2.4
Pharmaceutical & Medicine Mfg	1.0	1.3	1.5	1.4	1.5	2.4
Other Financial Investment...	2.0	1.8	1.8	1.7	1.4	2.1
Medical Equipment & Supplies Mfg	1.1	1.3	0.9	0.6	0.7	2.0
Pipeline Transportation	2.4	2.6	2.4	2.2	1.9	1.8
Custom Computer Programming...	0.9	1.0	1.5	1.5	1.5	1.8
Other Information Services	2.0	2.1	1.9	1.8	2.0	1.7
All Other Professional,...	0.4	0.6	0.6	0.9	0.8	1.4
Management, Scientific, &...	1.0	1.2	1.1	1.3	1.6	1.4
Activities Related to Credit...	1.2	1.2	1.4	1.0	1.2	1.3
Other Financial Vehicles	0.4	0.4	0.6	1.8	1.6	1.3
Educational Services	1.4	1.3	1.3	1.2	1.4	1.2
Insurance Agencies & Brokerages	0.9	1.0	1.0	1.2	1.1	1.0
Scientific Research & Development...	0.9	0.9	1.0	0.7	1.0	1.0
Support Activities for Mining	1.3	1.6	1.2	1.0	1.0	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	2017Q4	2018Q4
10th Percentile	0.7	0.6	0.7	0.8	0.8	0.7
25th Percentile	1.8	1.4	1.7	1.9	2.1	1.5
Median	5.7	5.3	6.0	6.9	7.3	6.0
75th Percentile	19.6	17.9	20.0	20.7	21.5	17.8
90th Percentile	48.4	50.0	49.9	54.3	51.8	49.3
Mean	17.0	16.2	16.7	17.5	17.7	15.3

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

Statistic	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4
10th Percentile	1.0	1.0	2.0	2.0	1.0	1.0
25th Percentile	4.0	3.0	4.0	4.0	3.0	3.0
Median	9.0	8.0	9.0	9.0	8.0	9.0
75th Percentile	18.0	22.0	22.0	22.0	17.0	22.2
90th Percentile	33.0	40.0	48.0	48.0	42.0	56.0
Mean	14.8	16.8	18.3	18.6	16.5	19.5



## C CPC Investments by Region and Country

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

Region	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4
North America	5,249	4,506	4,132	3,942	3,961	4,219
Europe EEA	1,432	1,259	941	848	963	1,256
Asia	445	462	447	406	379	435
South America	75	85	58	111	184	140
Supranational	65	67	23	37	49	55
Europe Other	25	9	21	22	40	46
Middle East	8	12	9	15	23	16
Africa	21	12	12	18	14	10

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

Region	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4
North America	71.7	70.2	73.2	73.0	70.5	68.3
Europe EEA	19.6	19.6	16.7	15.7	17.1	20.3
Asia	6.1	7.2	7.9	7.5	6.8	7.0
South America	1.0	1.3	1.0	2.0	3.3	2.3
Supranational	0.9	1.0	0.4	0.7	0.9	0.9
Europe Other	0.3	0.1	0.4	0.4	0.7	0.7
Middle East	0.1	0.2	0.2	0.3	0.4	0.3
Africa	0.3	0.2	0.2	0.3	0.3	0.2

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

Country	2013Q4	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4
United States	5,002	4,305	3,943	3,776	3,794	4,023
China and Hong Kong	171	186	173	114	147	154
India	63	83	89	92	73	104
Brazil	45	58	41	88	131	96
Japan	108	98	85	79	52	52
Russia	3	2	5	4	4	2

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

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

## XII Appendices

### A Form PF Filer Categories

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

#### 1 All Private Fund Advisers

SEC-registered investment advisers with at least \$150 million in private fund assets under management are required to file Form PF. Registered investment advisers with less than \$150 million in private funds assets under management, exempt reporting advisers, and state-registered advisers report general private fund data on Form ADV, but do not file Form PF.<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.

<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.