



Division of Investment Management
Analytics Office

Private Funds Statistics

Fourth Calendar Quarter 2018

July 23, 2019

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

Introduction

This report provides a summary of recent private fund industry statistics and trends, reflecting data collected through Form PF and Form ADV filings.¹ Form PF information provided in this report is aggregated, rounded, and/or masked to avoid potential disclosure of proprietary information of individual Form PF filers.

This report reflects data from First Calendar Quarter 2017 through Fourth Calendar Quarter 2018 as reported by Form PF filers.² Please see the Appendix for information on the categories of Form PF filers, the definitions of capitalized terms, a description of the boxplots used in several figures, as well as other technical descriptions.

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

If you have any questions or comments about Fourth Calendar Quarter 2018 Private Funds Statistics, please contact:

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¹Only SEC-registered advisers with at least \$150 million in private fund assets under management must report to the Commission on Form PF. SEC-registered investment advisers with less than \$150 million in private fund assets under management, SEC exempt reporting advisers, and state-registered investment advisers are not required to file Form PF, but report general information about the private funds they manage on Form ADV.

²The Commission began receiving Form PF filings from Large Hedge Fund Advisers in July 2012. A full data set was not received until March 2013. This report relies upon the Form PF database constructed and maintained by the Office of Research and Data Services in the Division of Economic and Risk Analysis.

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I Number of Funds and Advisers³

Table 1: Number of Funds

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

Fund Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Private Equity Fund	10,383	10,389	10,298	11,541	11,581	11,601	11,610	12,685
Hedge Fund	9,088	9,126	9,166	9,036	9,194	9,307	9,382	9,193
Other Private Fund	4,477	4,499	4,458	4,536	4,607	4,580	4,586	4,893
Section 4 Private Equity Fund	3,006	3,009	2,989	3,482	3,494	3,494	3,495	3,932
Real Estate Fund	2,451	2,450	2,441	2,652	2,662	2,656	2,663	2,833
Qualifying Hedge Fund	1,671	1,717	1,727	1,801	1,772	1,806	1,818	1,827
Securitized Asset Fund	1,463	1,475	1,477	1,504	1,510	1,510	1,514	1,564
Venture Capital Fund	777	787	773	866	866	851	850	961
Liquidity Fund	70	69	69	70	69	68	68	73
Section 3 Liquidity Fund	45	47	46	48	46	45	45	46
Total	28,709	28,795	28,682	30,205	30,489	30,573	30,673	32,202

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Private Equity Fund	1,095	1,092	1,089	1,145	1,153	1,154	1,157	1,243
Hedge Fund	1,689	1,690	1,691	1,734	1,736	1,739	1,739	1,747
Other Private Fund	580	580	577	585	592	588	589	625
Section 4 Private Equity Fund	250	250	247	293	296	296	296	306
Real Estate Fund	316	315	314	330	332	332	334	345
Qualifying Hedge Fund	527	534	536	551	542	550	545	553
Securitized Asset Fund	151	153	154	155	155	156	158	153
Venture Capital Fund	110	111	110	115	116	116	117	133
Liquidity Fund	39	38	38	39	39	38	38	40
Section 3 Liquidity Fund	24	24	23	25	23	22	22	23
Total	2,922	2,924	2,924	3,028	3,039	3,044	3,044	3,138

³In this report, “Funds” means all private funds reported on Form PF and “Advisers” means all SEC-registered investment advisers that file a Form PF to report private funds. Please see Appendix 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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Hedge Fund	6,707	6,862	7,184	7,242	7,519	7,659	7,911	7,593
Qualifying Hedge Fund	5,494	5,681	5,856	5,863	6,076	6,281	6,386	6,153
Private Equity Fund	2,327	2,324	2,310	2,727	2,766	2,769	2,769	3,173
Section 4 Private Equity Fund	1,648	1,648	1,641	1,941	1,978	1,978	1,978	2,328
Other Private Fund	1,077	1,088	1,061	1,190	1,206	1,208	1,222	1,219
Securitized Asset Fund	449	454	453	485	480	488	490	570
Real Estate Fund	436	433	432	499	504	504	504	567
Liquidity Fund	282	276	282	291	291	311	314	297
Section 3 Liquidity Fund	267	273	279	289	289	307	309	292
Venture Capital Fund	64	65	63	81	82	81	82	111
Total	11,343	11,502	11,786	12,515	12,847	13,020	13,290	13,530

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Hedge Fund	3,601	3,658	3,780	3,883	3,974	4,003	4,059	3,794
Qualifying Hedge Fund	2,818	2,890	2,984	3,047	3,106	3,151	3,188	2,968
Private Equity Fund	2,084	2,082	2,069	2,441	2,484	2,487	2,487	2,811
Section 4 Private Equity Fund	1,496	1,496	1,489	1,755	1,789	1,789	1,789	2,083
Other Private Fund	988	995	971	1,075	1,085	1,106	1,096	1,079
Securitized Asset Fund	141	145	144	152	152	154	154	170
Real Estate Fund	342	340	339	391	394	394	393	442
Liquidity Fund	281	275	280	291	289	309	311	295
Section 3 Liquidity Fund	265	272	278	288	287	305	306	289
Venture Capital Fund	61	62	61	77	77	76	77	98
Total	7,498	7,557	7,645	8,310	8,455	8,529	8,577	8,689

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

Qualifying Hedge Fund GAV (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
10th Percentile	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2
25th Percentile	0.5	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	1.2	1.2	1.1
75th Percentile	2.5	2.5	2.6	2.5	2.6	2.7	2.7	2.5
90th Percentile	6.0	6.1	6.2	6.0	6.1	6.0	6.1	5.6
Mean	3.3	3.3	3.4	3.3	3.4	3.5	3.5	3.4
Qualifying Hedge Fund NAV (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
10th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
25th Percentile	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5
Median	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8
75th Percentile	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.7
90th Percentile	3.7	3.7	3.8	3.6	3.8	3.7	3.7	3.4
Mean	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.6
Section 4 Private Equity Fund GAV (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75th Percentile	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
90th Percentile	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Mean	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
Section 4 Private Equity Fund NAV (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75th Percentile	0.4	0.3	0.3	0.3	0.3	0.3	0.3	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.

All Private Funds								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	1.2	1.2	1.1	1.1	1.1	1.1	1.1
90th Percentile	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0
Mean	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7
Qualifying Hedge Funds								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	1.2	1.1	1.1	1.2	1.2	1.1	1.2
75th Percentile	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6
90th Percentile	2.7	2.6	2.5	2.4	2.6	2.5	2.5	2.5
Mean	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6

B Borrowings

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

Fund Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Securitized Asset Fund	49.5	48.8	48.4	51.9	51.2	51.2	50.6	53.5
Qualifying Hedge Fund	41.0	42.3	41.8	41.5	42.9	45.0	44.5	45.1
Hedge Fund	38.3	39.3	39.6	39.4	40.4	41.6	41.3	41.6
Real Estate Fund	12.9	12.7	12.8	13.2	13.5	13.3	13.3	14.7
Private Equity Fund	5.0	5.0	5.0	5.2	4.9	4.9	4.9	5.3
Section 4 Private Equity Fund	4.0	4.0	4.1	4.6	4.6	4.6	4.6	5.2
Other Private Fund	2.7	2.7	2.7	2.2	2.7	2.7	3.0	3.6
Venture Capital Fund	0.4	0.5	0.5	0.6	0.5	0.5	0.6	0.9
Section 3 Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

All Private Funds (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	0.5	0.5	0.6	0.5
Qualifying Hedge Funds (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	0.0	0.0	0.1	0.0
Median	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75th Percentile	1.1	1.1	1.0	1.0	1.1	1.1	1.1	1.0
90th Percentile	3.4	3.2	3.4	3.0	3.4	3.6	3.4	3.1
Mean	2.1	2.2	2.2	2.1	2.3	2.4	2.5	2.4

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).

All Private Funds								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	3.8	3.8	3.5	3.4	3.6	3.7	4.4
Mean	1.8	1.8	1.8	1.7	1.7	1.7	1.7	2.5
Qualifying Hedge Funds								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Median	0.4	0.4	0.3	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	2.1	2.1	1.9	2.1	2.1	2.1	2.1
Mean	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9

C Fair Value Hierarchy

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

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Level One	2,573	2,566	2,558	3,269	3,016	2,975	2,856	3,208
Level Two	2,197	2,182	2,223	2,753	2,299	2,320	2,296	2,930
Level Three	2,513	2,514	2,508	2,897	2,858	2,868	2,881	3,398
Cost-Based	1,679	1,706	1,711	2,225	1,863	1,879	1,840	2,444

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

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Level One	654	650	651	647	788	780	659	311
Level Two	462	451	455	608	588	602	604	714
Level Three	136	140	137	174	174	174	177	155
Cost-Based	650	644	650	479	762	773	733	603

D Parallel Managed Accounts⁴

Table 8: Number of Funds with Parallel Managed Accounts

As reported on Form PF, Question 11.

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Hedge Fund	654	661	668	669	674	678	686	663
Other Private Fund	502	501	499	513	518	514	505	508
Private Equity Fund	240	239	272	292	292	290	279	313
Qualifying Hedge Fund	224	220	227	238	233	234	236	231
Section 4 Private Equity Fund	88	88	88	98	98	98	98	110
Real Estate Fund	77	77	77	71	71	71	71	68
Liquidity Fund	16	16	16	16	16	16	16	18
Section 3 Liquidity Fund	16	16	16	16	16	16	16	16
Venture Capital Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	1,529	1,534	1,571	1,575	1,585	1,583	1,571	1,579

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Hedge Fund	666	680	714	827	770	769	813	770
Other Private Fund	1,438	1,489	1,508	1,864	1,869	1,799	1,763	1,821
Private Equity Fund	29	28	28	37	37	37	37	48
Qualifying Hedge Fund	438	440	525	594	551	567	570	532
Section 4 Private Equity Fund	22	22	22	28	28	28	28	33
Real Estate Fund	6	6	6	6	6	6	6	4
Liquidity Fund	333	330	345	359	361	353	364	383
Section 3 Liquidity Fund	333	330	345	359	361	353	364	382
Venture Capital Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	2,653	2,714	2,782	3,094	3,045	2,966	2,984	3,026

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

Figure 5: Parallel Managed Account Value Distributions
As reported on Form PF, Question 11.

All Private Funds (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	3.5	3.5	3.6	3.5	3.5	3.5	3.4
Mean	1.7	1.8	1.8	2.0	1.9	1.9	1.9	1.9
Qualifying Hedge Funds (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	0.2	0.2	0.1	0.2	0.2
Median	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.4
75th Percentile	1.6	1.7	1.8	1.9	1.9	1.9	1.8	1.7
90th Percentile	3.4	3.4	3.7	4.0	3.9	4.3	4.4	4.0
Mean	2.0	2.0	2.3	2.5	2.4	2.4	2.4	2.3

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
United States	51.4	51.5	51.0	51.4	51.0	50.9	50.9	51.6
Cayman Islands	36.4	36.4	36.6	35.4	35.3	35.2	35.1	34.0
Ireland	4.2	4.2	4.3	4.4	4.4	4.5	4.6	4.6
Luxembourg	1.5	1.6	1.6	1.9	2.0	2.2	2.2	2.9
Virgin Islands, British	2.2	2.0	2.0	1.8	1.8	1.8	1.7	1.5
United Kingdom	1.1	1.1	1.1	1.3	1.3	1.3	1.3	1.3
Bermuda	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.1
Other	2.0	2.0	2.1	2.6	2.9	2.9	3.0	3.0

Qualifying Hedge Funds								
Country	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Cayman Islands	52.6	52.4	51.7	51.3	51.0	50.9	50.6	50.5
United States	34.6	35.0	35.3	35.8	35.6	35.5	35.1	35.7
Virgin Islands, British	5.3	5.0	4.8	4.5	4.4	4.4	4.2	4.1
Ireland	2.7	2.7	2.8	2.9	3.1	3.2	3.3	3.2
Luxembourg	1.4	1.6	1.7	1.9	2.0	2.4	2.7	2.6
Bermuda	1.7	1.7	1.7	1.6	1.7	1.8	1.8	2.0
Other	1.7	1.6	2.0	2.0	2.1	2.0	2.2	1.9

Section 3 Liquidity Funds								
Country	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Ireland	***	***	***	***	***	***	***	***
United States	33.9	36.8	34.7	35.1	35.8	36.9	36.8	33.4
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

Section 4 Private Equity Funds								
Country	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
United States	63.8	63.8	63.7	60.7	59.5	59.5	59.5	56.9
Cayman Islands	29.4	29.4	29.5	30.4	29.8	29.8	29.8	30.6
United Kingdom	1.9	1.9	2.0	2.7	2.9	2.9	2.9	2.4
Canada	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1
Bermuda	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.0
Other	2.9	2.9	2.9	4.2	5.7	5.7	5.7	8.1

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

All Private Funds								
Country	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
United States	89.4	89.0	88.9	89.5	88.9	88.7	88.8	89.7
United Kingdom	6.5	6.7	6.8	6.5	6.9	7.0	6.9	6.1
Other	4.1	4.2	4.3	4.1	4.3	4.3	4.3	4.1
Qualifying Hedge Funds								
Country	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
United States	89.5	89.3	89.0	88.6	88.4	88.7	88.6	89.0
United Kingdom	5.8	6.2	6.3	6.6	6.6	6.5	6.5	6.1
Australia	***	***	***	***	***	***	***	***
Hong Kong	***	***	***	***	***	***	***	***
Other	2.3	2.3	2.3	2.2	2.3	2.3	2.1	2.1
Section 3 Liquidity Funds								
Country	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
United States	***	***	***	***	***	***	***	***
United Kingdom	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
United States	95.1	95.1	95.1	94.8	94.8	94.8	94.8	94.0
Canada	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

IV Beneficial Ownership

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Private Funds	1,355	1,371	1,370	1,491	1,515	1,533	1,534	1,515
Other	996	1,011	1,039	1,189	1,234	1,238	1,250	1,331
State/Muni. Govt. Pension Plans	1,029	1,033	1,048	1,154	1,153	1,164	1,177	1,230
Pension Plans	958	967	973	1,037	1,045	1,049	1,048	1,043
Non-Profits	770	778	790	849	861	869	868	846
U.S. Individuals	786	790	799	818	835	841	851	842
Sov. Wealth Funds and For. Official Inst.	438	443	445	515	540	544	544	555
Insurance Companies	310	312	314	349	352	365	373	399
Unknown Non-U.S. Investors	187	185	188	194	193	188	186	204
Non-U.S. Individuals	198	185	183	187	191	193	195	205
Banking/Thrift Inst.	141	143	147	161	161	170	172	169
State/Muni. Govt. Entities	104	107	108	122	125	129	131	122
SEC-Registered Investment Companies	119	121	128	129	133	128	127	118
Broker-Dealers	104	107	111	112	113	114	121	108

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

As reported on Form PF, Questions 9 and 16.

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Private Funds	18.1	18.1	17.9	17.9	17.9	18.0	17.9	17.4
Other	13.3	13.4	13.6	14.3	14.6	14.5	14.6	15.3
State/Muni. Govt. Pension Plans	13.7	13.7	13.7	13.9	13.6	13.6	13.7	14.2
Pension Plans	12.8	12.8	12.7	12.5	12.4	12.3	12.2	12.0
Non-Profits	10.3	10.3	10.3	10.2	10.2	10.2	10.1	9.7
U.S. Individuals	10.5	10.5	10.4	9.8	9.9	9.9	9.9	9.7
Sov. Wealth Funds and For. Official Inst.	5.8	5.9	5.8	6.2	6.4	6.4	6.3	6.4
Insurance Companies	4.1	4.1	4.1	4.2	4.2	4.3	4.3	4.6
Unknown Non-U.S. Investors	2.5	2.5	2.5	2.3	2.3	2.2	2.2	2.3
Non-U.S. Individuals	2.6	2.5	2.4	2.2	2.3	2.3	2.3	2.4
Banking/Thrift Inst.	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9
State/Muni. Govt. Entities	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.4
SEC-Registered Investment Companies	1.6	1.6	1.7	1.6	1.6	1.5	1.5	1.4
Broker-Dealers	1.4	1.4	1.5	1.3	1.3	1.3	1.4	1.2

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Private Funds	493	503	508	503	514	517	526	480
Non-Profits	395	404	418	429	429	443	442	404
Other	375	385	409	409	436	443	447	414
Pension Plans	379	386	398	414	416	415	417	399
State/Muni. Govt. Pension Plans	310	314	331	352	342	342	348	343
U.S. Individuals	324	331	340	345	342	352	357	323
Sov. Wealth Funds and For. Official Inst.	152	158	160	166	193	197	195	196
Insurance Companies	69	73	74	78	78	83	91	82
Non-U.S. Individuals	68	68	70	73	76	77	79	75
Broker-Dealers	72	75	79	79	80	81	84	77
Unknown Non-U.S. Investors	45	52	56	58	55	53	53	48
SEC-Registered Investment Companies	63	62	65	65	66	61	59	52
State/Muni. Govt. Entities	40	42	42	42	47	49	50	39
Banking/Thrift Inst.	31	33	33	35	33	36	38	32

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Private Funds	17.5	17.4	17.0	16.5	16.5	16.4	16.5	16.2
Non-Profits	14.0	14.0	14.0	14.1	13.8	14.1	13.9	13.6
Other	13.3	13.3	13.7	13.4	14.0	14.1	14.0	14.0
Pension Plans	13.4	13.4	13.3	13.6	13.4	13.2	13.1	13.5
State/Muni. Govt. Pension Plans	11.0	10.9	11.1	11.5	11.0	10.9	10.9	11.6
U.S. Individuals	11.5	11.5	11.4	11.3	11.0	11.2	11.2	10.9
Sov. Wealth Funds and For. Official Inst.	5.4	5.5	5.4	5.4	6.2	6.2	6.1	6.6
Insurance Companies	2.5	2.5	2.5	2.5	2.5	2.6	2.9	2.8
Non-U.S. Individuals	2.4	2.4	2.3	2.4	2.4	2.5	2.5	2.5
Broker-Dealers	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Unknown Non-U.S. Investors	1.6	1.8	1.9	1.9	1.8	1.7	1.6	1.6
SEC-Registered Investment Companies	2.2	2.1	2.2	2.1	2.1	1.9	1.8	1.8
State/Muni. Govt. Entities	1.4	1.4	1.4	1.4	1.5	1.6	1.6	1.3
Banking/Thrift Inst.	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.1

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Private Funds	75	89	83	96	94	109	105	97
Unknown Non-U.S. Investors	60	52	55	53	52	52	51	54
Other	51	51	51	55	57	55	57	55
Broker-Dealers	***	***	***	***	***	***	***	***
SEC-Registered Investment Companies	18	21	24	23	24	24	23	18
Banking/Thrift Inst.	***	12	***	***	13	17	17	***
Insurance Companies	9	9	10	9	9	12	12	9
Sov. Wealth Funds and For. Official Inst.	***	***	***	***	***	***	***	***
Non-U.S. Individuals	4	4	4	4	4	4	4	5
Pension Plans	5	5	5	5	5	3	4	3
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
State/Muni. Govt. Pension Plans	1	1	1	1	1	***	2	2
Non-Profits	2	2	2	2	1	***	1	1
U.S. Individuals	***	***	***	***	***	***	***	***

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Private Funds	28.3	32.6	30.0	33.3	32.6	35.7	34.4	33.6
Unknown Non-U.S. Investors	22.7	19.2	19.8	18.4	18.1	17.0	16.6	18.7
Other	19.3	18.7	18.5	19.1	19.7	17.9	18.7	19.0
Broker-Dealers	***	***	***	***	***	***	***	***
SEC-Registered Investment Companies	6.9	7.6	8.6	7.8	8.3	7.9	7.6	6.2
Banking/Thrift Inst.	***	4.3	***	***	4.7	5.6	5.4	***
Insurance Companies	3.4	3.3	3.7	3.0	3.3	3.9	3.8	3.1
Sov. Wealth Funds and For. Official Inst.	***	***	***	***	***	***	***	***
Non-U.S. Individuals	1.5	1.5	1.4	1.3	1.4	1.2	1.1	1.7
Pension Plans	1.8	1.8	1.9	1.8	1.7	1.1	1.2	0.9
State/Muni. Govt. Entities	***	***	***	***	***	***	***	***
State/Muni. Govt. Pension Plans	0.6	0.4	0.4	0.4	0.3	***	0.6	0.6
Non-Profits	0.6	0.6	0.6	0.5	0.5	***	0.4	0.4
U.S. Individuals	***	***	***	***	***	***	***	***

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
State/Muni. Govt. Pension Plans	366	366	366	415	416	416	416	454
Private Funds	285	284	284	353	356	356	356	397
Other	162	161	161	212	225	225	225	321
Sov. Wealth Funds and For. Official Inst.	154	154	153	186	203	203	203	225
Pension Plans	142	142	139	159	159	159	159	175
Insurance Companies	94	94	94	109	109	109	109	127
U.S. Individuals	88	88	88	94	94	94	94	118
Non-Profits	92	92	90	104	104	104	104	116
Non-U.S. Individuals	34	34	34	36	36	36	36	48
State/Muni. Govt. Entities	22	22	22	28	28	28	28	36
Banking/Thrift Inst.	31	31	31	29	29	29	29	31
SEC-Registered Investment Companies	12	12	12	16	16	16	16	17
Unknown Non-U.S. Investors	14	14	13	14	14	14	14	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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
State/Muni. Govt. Pension Plans	24.5	24.5	24.6	23.6	23.3	23.3	23.3	21.8
Private Funds	19.0	19.0	19.1	20.1	19.9	19.9	19.9	19.0
Other	10.8	10.8	10.8	12.1	12.6	12.6	12.6	15.4
Sov. Wealth Funds and For. Official Inst.	10.3	10.3	10.3	10.6	11.3	11.3	11.3	10.8
Pension Plans	9.5	9.5	9.4	9.1	8.9	8.9	8.9	8.4
Insurance Companies	6.3	6.3	6.3	6.2	6.1	6.1	6.1	6.1
U.S. Individuals	5.9	5.9	5.9	5.3	5.2	5.3	5.2	5.7
Non-Profits	6.1	6.2	6.1	5.9	5.8	5.8	5.8	5.6
Non-U.S. Individuals	2.3	2.3	2.3	2.1	2.0	2.0	2.0	2.3
State/Muni. Govt. Entities	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.7
Banking/Thrift Inst.	2.0	2.0	2.1	1.7	1.6	1.6	1.6	1.5
SEC-Registered Investment Companies	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.8
Unknown Non-U.S. Investors	0.9	0.9	0.9	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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Hedge Fund	10,184	10,100	11,369	12,133	14,212	13,419	13,597	12,677
Qualifying Hedge Fund	8,767	8,765	9,583	10,127	12,095	11,314	10,331	9,871
Other Private Fund	109	108	109	148	149	148	134	132
Private Equity Fund	38	38	38	39	40	40	40	38
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Section 4 Private Equity Fund	35	34	34	33	34	34	34	31
Real Estate Fund	16	16	16	17	17	17	17	17
Securitized Asset Fund	14	14	13	3	2	2	2	3
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	10,333	10,330	11,573	12,328	14,330	13,620	13,818	12,913

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

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Hedge Fund	282.8	276.1	300.8	312.5	357.7	335.3	335.0	334.1
Qualifying Hedge Fund	311.1	303.3	321.1	332.3	389.4	359.0	324.0	332.6
Other Private Fund	11.0	10.9	11.2	13.7	13.7	13.4	12.3	12.2
Private Equity Fund	1.8	1.8	1.8	1.6	1.6	1.6	1.6	1.3
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Section 4 Private Equity Fund	2.3	2.3	2.3	1.9	1.9	1.9	1.9	1.5
Real Estate Fund	4.8	4.7	4.8	4.4	4.4	4.4	4.4	3.8
Securitized Asset Fund	9.8	9.4	9.2	1.7	1.6	1.5	1.5	1.6
Venture Capital Fund	***	***	***	***	***	***	***	***
Total	137.8	136.7	151.4	148.4	169.5	159.7	161.1	148.6

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

All Private Funds (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	1.4	1.5	1.6	1.7	1.7	1.7	1.7	1.5
Mean	1.0	1.0	1.1	1.2	1.3	1.2	1.3	1.1
Qualifying Hedge Funds (\$ Billions)								
Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
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	0.0	0.1	0.1
Median	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
75th Percentile	2.1	2.1	2.1	2.2	2.2	2.1	2.1	1.8
90th Percentile	8.3	8.8	9.4	9.9	10.9	9.4	10.2	9.5
Mean	4.7	4.6	5.1	5.1	6.6	6.0	5.7	5.2

VI High Frequency Trading

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

Fraction of NAV	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
0%	7,626	7,668	7,704	7,767	7,883	7,990	8,057	7,917
Less than 100%	62	66	63	42	70	69	58	64
100% or More	12	11	12	12	11	11	11	5

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

Fraction of NAV	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
0%	3,487	3,551	3,652	3,771	3,845	3,894	3,955	3,721
Less than 100%	79	78	43	41	46	42	43	43
100% or More	3	3	37	37	38	38	38	35

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.

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Top 10	7.7	7.7	7.5	7.5	7.2	7.3	7.2	7.4
Top 25	13.4	13.5	13.2	13.4	13.3	13.5	13.5	13.5
Top 50	20.2	20.3	20.0	20.2	20.2	20.1	20.1	19.7
Top 100	28.7	28.6	28.5	28.8	28.6	28.4	28.4	27.9
Top 250	43.7	43.5	43.4	43.2	43.0	42.6	42.5	42.1
Top 500	57.0	56.9	56.8	56.5	56.4	56.0	55.9	55.6

Table 25: Percent of Aggregate Hedge Fund Gross Asset Value
Reported by Top Hedge Funds Sorted by Gross Asset Value
As reported on Form PF, Questions 8 and 10.

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Top 10	14.6	14.9	15.5	15.1	15.5	15.5	15.4	16.7
Top 25	23.5	23.3	24.2	23.7	24.2	23.8	24.4	26.0
Top 50	32.1	31.6	32.6	31.8	32.6	32.0	32.9	34.2
Top 100	41.6	41.3	42.2	41.4	41.9	41.7	42.4	43.4
Top 250	55.3	55.1	56.0	55.3	55.5	55.2	56.0	56.6
Top 500	66.8	66.8	67.4	66.6	66.9	66.7	67.2	67.6

Table 26: Percent of Aggregate Hedge Fund Borrowings
Reported by Top Hedge Funds Sorted by Borrowings
As reported on Form PF, Questions 12 and 43 (Month 3).

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Top 10	31.9	33.3	35.0	34.4	35.2	34.5	34.7	36.3
Top 25	45.1	46.2	47.5	47.5	49.1	48.3	48.4	51.3
Top 50	56.7	57.3	58.6	59.0	60.0	59.6	60.0	62.9
Top 100	68.8	69.2	70.2	70.8	71.1	70.7	71.0	73.3
Top 250	81.5	81.8	82.6	82.6	82.8	82.9	82.9	84.7
Top 500	89.9	90.1	90.5	90.2	90.4	90.6	90.6	91.6

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

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Top 10	34.3	32.4	32.6	32.6	31.8	30.8	30.4	32.7
Top 25	48.3	46.7	49.4	47.9	49.7	49.6	48.5	49.0
Top 50	60.8	59.5	61.7	60.3	62.2	62.1	61.3	62.0
Top 100	73.5	72.1	73.7	72.8	73.9	73.3	73.0	73.6
Top 250	86.3	85.8	86.5	86.0	87.0	86.3	86.2	86.6
Top 500	93.2	92.7	93.2	93.0	93.8	93.2	93.2	93.3

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

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Top 10	31.1	30.4	30.4	30.5	29.6	28.4	27.6	29.7
Top 25	44.7	43.5	45.2	45.1	46.3	44.7	44.1	47.2
Top 50	56.9	55.7	57.1	56.6	59.2	58.1	57.8	60.2
Top 100	69.0	67.7	68.8	68.6	70.5	69.6	69.4	71.2
Top 250	82.6	82.0	82.6	82.6	84.0	82.8	82.7	83.9
Top 500	91.4	90.7	91.1	91.1	92.0	91.2	91.1	91.8

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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	1.5	1.5	1.5	1.6	1.6	1.5	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
Median	2.4	2.4	2.4	2.4	2.4	2.3	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
75th Percentile	5.1	5.2	5.0	5.2	5.3	4.9	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
90th Percentile	11.7	11.8	11.3	11.6	12.1	11.4	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
Mean	6.0	6.2	6.0	5.9	6.3	5.7	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
Excluding IRDs																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	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
25th Percentile	1.3	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2
Median	2.1	2.1	2.1	2.1	2.2	2.1	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
75th Percentile	3.6	3.7	3.6	3.7	3.8	3.6	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
90th Percentile	8.1	8.4	7.9	8.6	8.7	8.3	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
Mean	4.0	4.1	3.9	4.1	4.2	3.8	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

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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
10th Percentile	0.9	0.9	1.0	1.0	1.0	1.0	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
25th Percentile	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	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Median	1.6	1.7	1.7	1.7	1.7	1.7	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	1.6	1.7	1.6
75th Percentile	3.0	3.2	3.0	3.1	3.1	3.0	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
90th Percentile	6.5	6.8	6.3	7.1	7.3	6.7	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
Mean	3.6	3.6	3.6	3.6	3.8	3.5	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

Long Exposure Excluding IRDs																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
10th Percentile	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	0.9	0.9	0.9	1.0	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	1.6	1.6	1.6	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
75th Percentile	2.4	2.6	2.4	2.5	2.5	2.4	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
90th Percentile	4.8	4.9	4.7	5.2	5.1	5.0	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
Mean	2.5	2.6	2.5	2.6	2.7	2.5	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

Short Exposure Including IRDs																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	0.4	0.4	0.4	0.4	0.4	0.3	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
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	0.8	0.8	0.8	0.8	0.8	0.8	0.7
75th Percentile	2.2	2.3	2.2	2.3	2.3	2.3	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
90th Percentile	6.0	6.4	6.4	6.1	6.2	5.9	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
Mean	2.7	2.8	2.8	2.7	2.9	2.7	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

Short Exposure Excluding IRDs																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	0.0
25th Percentile	0.3	0.3	0.3	0.3	0.3	0.3	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
Median	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.5
75th Percentile	1.5	1.5	1.5	1.5	1.5	1.5	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
90th Percentile	3.9	3.9	3.8	4.1	4.3	3.9	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
Mean	1.7	1.7	1.7	1.7	1.8	1.6	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	2.0	2.1	2.1	1.9

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)
2017-01	18.6	28.2	38.4	52.2
2017-02	18.6	28.2	39.0	52.8
2017-03	18.6	28.2	37.3	51.1
2017-04	18.5	28.1	36.1	50.1
2017-05	18.5	28.1	36.5	50.5
2017-06	18.5	28.1	36.3	50.5
2017-07	18.6	28.1	36.6	51.1
2017-08	18.6	28.1	37.4	52.5
2017-09	18.6	28.1	36.2	50.8
2017-10	18.4	27.7	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

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
2017-01	11,361	2,596	1,855	123	20	15,955
2017-02	12,255	2,750	1,869	105	21	17,001
2017-03	14,639	2,735	2,043	125	25	19,567
2017-04	10,971	1,992	1,846	85	16	14,910
2017-05	11,955	3,001	2,189	131	25	17,300
2017-06	16,994	2,963	2,187	115	23	22,282
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

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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	0.3	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
Median	1.2	1.3	1.5	1.1	1.3	1.4	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
75th Percentile	5.3	6.0	7.0	5.0	6.2	7.4	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
90th Percentile	40.9	42.2	55.0	34.8	44.4	51.2	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
Mean	25.6	29.5	33.8	22.6	27.6	34.8	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
Total Turnover to NAV Ratio																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	0.1	0.2	0.1	0.1	0.2	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
Median	0.5	0.5	0.6	0.4	0.6	0.6	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.6	0.5	0.6	0.4	0.5	0.4	0.5	0.6	0.5	0.5
75th Percentile	2.2	2.5	2.9	2.0	2.7	2.5	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
90th Percentile	14.1	17.0	18.7	14.9	15.9	18.3	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
Mean	7.9	8.4	9.3	6.5	7.5	9.2	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

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
North America	4,406	4,500	5,089	4,527	4,811	4,923	5,112	5,007
Europe EEA	1,709	1,669	1,708	1,663	1,990	1,822	1,751	1,822
Asia	596	600	713	673	735	698	678	787
South America	95	102	108	133	114	112	101	111
Europe Other	80	78	77	91	86	74	72	70
Supranational	60	68	67	75	72	59	60	66
Africa	19	23	24	31	37	33	31	29
Middle East	20	23	23	26	30	37	26	27

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
North America	141.7	142.9	155.9	135.4	140.5	141.4	147.2	153.0
Europe EEA	55.0	53.0	52.3	49.7	58.1	52.3	50.4	55.7
Asia	19.2	19.0	21.8	20.1	21.5	20.1	19.5	24.0
South America	3.1	3.2	3.3	4.0	3.3	3.2	2.9	3.4
Europe Other	2.6	2.5	2.4	2.7	2.5	2.1	2.1	2.1
Supranational	1.9	2.2	2.0	2.2	2.1	1.7	1.7	2.0
Africa	0.6	0.7	0.7	0.9	1.1	0.9	0.9	0.9
Middle East	0.6	0.7	0.7	0.8	0.9	1.1	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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
United States	4,182	4,246	4,824	4,312	4,551	4,683	4,869	4,783
Japan	231	229	233	245	269	244	251	274
China (Inc. Hong Kong)	130	144	152	164	178	184	165	147
Brazil	40	42	45	60	47	50	42	40
India	32	35	37	47	38	36	36	35
Russia	17	13	16	18	16	12	11	9

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
United States	134.5	134.9	147.8	129.0	132.9	134.5	140.2	146.2
Japan	7.4	7.3	7.1	7.3	7.9	7.0	7.2	8.4
China (Inc. Hong Kong)	4.2	4.6	4.7	4.9	5.2	5.3	4.7	4.5
Brazil	1.3	1.3	1.4	1.8	1.4	1.4	1.2	1.2
India	1.0	1.1	1.1	1.4	1.1	1.0	1.0	1.1
Russia	0.5	0.4	0.5	0.5	0.5	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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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
25th Percentile	1.6	1.5	1.4	1.5	1.6	1.5	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
Median	2.3	2.3	2.2	2.3	2.3	2.2	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	2.2	2.3
75th Percentile	4.5	4.6	4.4	4.6	4.7	4.3	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
90th Percentile	9.7	10.0	9.4	10.4	10.3	9.5	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
Mean	4.6	4.6	4.4	4.9	4.9	4.7	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
Excluding IRDs																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	1.3	1.3	1.2	1.3	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	1.2	1.2	1.2	1.2
Median	2.0	2.0	1.9	2.0	2.0	1.9	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
75th Percentile	3.5	3.4	3.3	3.4	3.4	3.3	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
90th Percentile	6.8	6.9	6.8	7.1	7.0	6.8	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
Mean	3.2	3.2	3.2	3.5	3.5	3.3	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

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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	1.1	1.1	1.0
25th Percentile	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	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
Median	1.7	1.7	1.6	1.7	1.7	1.6	1.6	1.7	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.7	1.6
75th Percentile	2.9	2.9	2.8	2.8	2.9	2.7	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
90th Percentile	5.5	5.5	5.3	6.1	6.0	5.5	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
Mean	2.8	2.8	2.7	3.0	3.1	2.9	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

Long Exposure Excluding IRDs																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Median	1.5	1.5	1.5	1.5	1.5	1.5	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
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	2.3	2.2	2.3	2.2	2.3	2.2	2.4	2.3	2.2
90th Percentile	4.1	4.1	4.1	4.2	4.3	4.1	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
Mean	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.3	2.2	2.4	2.4	2.1	2.4	2.3	2.2	2.3	2.2	2.3	2.2	2.2	2.2	2.5	2.4	2.3

Short Exposure Including IRDs																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	0.0	0.1	0.0	0.0
25th Percentile	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Median	0.7	0.8	0.7	0.7	0.7	0.7	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
75th Percentile	1.9	2.0	2.0	1.9	2.0	1.8	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
90th Percentile	4.6	4.9	5.0	4.7	4.7	4.3	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
Mean	1.9	2.0	2.0	2.1	2.1	2.0	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

Short Exposure Excluding IRDs																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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	0.6	0.5	0.6	0.6	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
75th Percentile	1.3	1.3	1.3	1.3	1.4	1.3	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
90th Percentile	3.0	3.1	3.1	3.1	3.1	3.0	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
Mean	1.2	1.3	1.3	1.4	1.4	1.3	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

B Gross Exposure by Strategy⁵

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

Category	Strategy	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
	Subtotal	1,482	1,547	1,635	1,664	1,647	1,716	1,761	1,477
Equity	Long/Short	880	906	926	945	925	951	956	762
	Market Neutral	***	***	***	***	342	365	383	360
	Long Bias	310	330	369	371	372	392	414	348
	Short Bias	***	***	***	***	8	8	8	7
	Subtotal	880	935	968	999	983	984	1,005	1,013
Relative Value	Subtotal	717	750	815	719	739	786	774	879
	F.I. Sov.	488	507	566	477	496	537	506	599
	F.I. Asset Backed	115	120	119	119	121	127	137	145
	F.I. Corp.	41	48	50	46	49	52	56	59
	F.I. Conv. Arb.	44	47	49	50	51	49	53	55
	Volatility Arb.	30	29	31	27	22	21	22	21
Macro	Subtotal	694	652	699	660	784	760	819	716
	Global Macro	612	570	617	575	698	670	729	627
	Currency	44	***	***	***	***	45	45	47
	Commodity	35	35	38	40	39	40	41	37
	Active Trading	3	***	***	***	***	5	4	4
Credit	Subtotal	283	285	289	287	286	297	307	321
	Long/Short	240	240	240	235	248	238	247	256
	Asset Based Lending	43	45	49	51	38	59	60	65
Event Driven	Subtotal	342	353	359	353	363	360	350	304
	Distressed/Restruct.	172	167	170	167	165	162	165	164
	Equity	94	100	100	101	97	100	98	76
	Risk Arb./Merger Arb.	77	86	89	86	101	98	88	64
	Subtotal	131	137	136	142	138	141	157	150
Managed Futures/CTA	Quantitative	***	***	134	***	***	***	***	***
	Fundamental	***	***	2	***	***	***	***	***
Investment in other funds	Subtotal	42	48	49	49	44	42	48	44
Total	Total	4,571	4,706	4,951	4,873	4,985	5,086	5,220	4,904

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

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

Category	Strategy	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
	Subtotal	52.6	53.5	54.8	54.6	53.0	54.4	55.2	49.8
Equity	Long/Short	31.2	31.4	31.0	31.0	29.8	30.2	30.0	25.7
	Market Neutral	***	***	***	***	11.0	11.6	12.0	12.1
	Long Bias	11.0	11.4	12.4	12.2	12.0	12.4	13.0	11.7
	Short Bias	***	***	***	***	0.3	0.3	0.2	0.2
Other	Subtotal	31.2	32.3	32.4	32.8	31.7	31.2	31.5	34.1
	Subtotal	25.4	26.0	27.3	23.6	23.8	24.9	24.3	29.6
Relative Value	F.I. Sov.	17.3	17.5	19.0	15.7	16.0	17.0	15.9	20.2
	F.I. Asset Backed	4.1	4.2	4.0	3.9	3.9	4.0	4.3	4.9
	F.I. Corp.	1.4	1.7	1.7	1.5	1.6	1.6	1.8	2.0
	F.I. Conv. Arb.	1.6	1.6	1.7	1.6	1.6	1.6	1.7	1.9
	Volatility Arb.	1.1	1.0	1.1	0.9	0.7	0.7	0.7	0.7
	Subtotal	24.6	22.5	23.4	21.7	25.2	24.1	25.7	24.1
Macro	Global Macro	21.7	19.7	20.7	18.9	22.5	21.3	22.9	21.1
	Currency	1.6	***	***	***	***	1.4	1.4	1.6
	Commodity	1.3	1.2	1.3	1.3	1.3	1.3	1.3	1.3
	Active Trading	0.1	***	***	***	***	0.1	0.1	0.1
	Subtotal	10.0	9.8	9.7	9.4	9.2	9.4	9.6	10.8
Credit	Long/Short	8.5	8.3	8.1	7.7	8.0	7.6	7.7	8.6
	Asset Based Lending	1.5	1.6	1.6	1.7	1.2	1.9	1.9	2.2
	Subtotal	12.1	12.2	12.0	11.6	11.7	11.4	11.0	10.2
Event Driven	Distressed/Restruct.	6.1	5.8	5.7	5.5	5.3	5.1	5.2	5.5
	Equity	3.3	3.5	3.4	3.3	3.1	3.2	3.1	2.6
	Risk Arb./Merger Arb.	2.7	3.0	3.0	2.8	3.3	3.1	2.8	2.1
	Subtotal	4.6	4.7	4.6	4.6	4.5	4.5	4.9	5.0
Managed Futures/CTA	Quantitative	***	***	4.5	***	***	***	***	***
	Fundamental	***	***	0.1	***	***	***	***	***
Investment in other funds	Subtotal	1.5	1.6	1.6	1.6	1.4	1.3	1.5	1.5
Total	Total	162.2	162.9	165.9	159.9	160.5	161.4	163.7	165.2

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Relative Value	4.6	5.0	5.0	4.7	5.0	5.1	4.7	5.4
Investment in other funds	1.1	1.0	***	1.0	1.3	1.1	1.1	4.8
Macro	3.8	3.6	3.9	3.7	3.9	4.1	4.4	3.9
Multi-Strategy	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.3
Equity	1.6	1.6	1.6	1.6	1.7	1.6	1.7	1.7
Other	1.6	1.6	1.6	1.7	1.6	1.6	1.7	1.7
Credit	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.6
Managed Futures/CTA	1.2	1.9	1.2	1.2	1.2	1.3	1.3	1.3
Event Driven	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Macro	17.7	18.1	20.6	21.5	26.8	27.7	23.8	24.6
Relative Value	19.1	17.6	18.5	18.2	20.9	19.9	19.0	21.4
Investment in other funds	1.7	1.6	***	1.7	2.6	2.4	3.6	14.8
Managed Futures/CTA	8.0	9.5	8.4	10.0	8.4	10.5	14.0	9.7
Multi-Strategy	7.9	7.9	9.0	8.6	9.7	8.4	8.4	8.7
Other	5.0	5.3	5.4	5.4	5.0	4.4	4.7	4.5
Equity	3.2	3.2	3.2	3.2	4.0	3.3	3.6	3.5
Credit	3.3	3.0	3.1	3.2	3.3	2.9	2.8	3.3
Event Driven	2.2	2.0	2.0	2.0	2.0	1.9	1.9	1.8

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Managed Futures/CTA	65.5	61.2	59.0	58.0	60.6	55.5	47.5	57.4
Macro	37.7	40.6	40.3	40.2	37.0	36.4	36.8	38.3
Multi-Strategy	25.3	22.4	24.9	24.8	24.7	27.1	30.6	29.7
Relative Value	22.7	19.9	21.0	19.3	20.9	18.7	18.5	20.1
Other	21.5	20.6	21.3	21.0	18.5	18.8	19.2	18.1
Equity	10.6	11.5	9.8	10.2	9.7	11.5	11.4	13.5
Investment in other funds	3.4	6.2	***	9.4	4.2	6.6	3.6	12.8
Event Driven	8.0	11.1	10.0	9.7	8.1	8.6	9.6	12.2
Credit	9.8	10.9	9.9	9.8	8.3	7.0	7.3	8.3

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.

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Cash/Cash Equivalents	679	682	677	681	726	741	747	763
Securities - Equities	2,299	2,393	2,521	2,600	3,037	2,713	2,740	2,300
Securities - Treasuries	1,142	1,107	1,156	1,158	1,196	1,342	1,477	1,793
Securities - G10 (non-US)	1,017	1,037	1,138	1,179	1,321	1,277	1,241	1,270
Securities - MBS	246	241	254	266	264	252	276	358
Securities - Other Bonds	203	233	263	254	289	286	299	312
Securities - Corp. Bonds	268	269	259	253	264	272	278	266
Securities - ABS (non-MBS)	75	77	75	77	80	88	87	88
Securities - Conv. Bonds	82	89	82	82	94	97	93	86
Derivatives - IR	4,149	3,824	4,125	4,446	5,699	5,390	5,512	5,355
Derivatives - FX	2,634	2,711	3,051	3,149	3,738	3,245	2,470	2,278
Derivatives - Equity	1,182	1,215	1,283	1,331	1,364	1,307	1,317	1,110
Derivatives - Credit	636	683	798	716	733	684	669	730
Derivatives - Other	132	273	267	412	568	580	339	319
Derivatives - Commodity	329	331	368	378	366	381	380	286
Repurchase Agreements	1,314	1,374	1,348	1,280	1,452	1,533	1,553	1,771
Other	697	725	775	748	764	792	784	741

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

	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Cash/Cash Equivalents	85.0	86.8	88.0	85.9	80.8	79.8	82.0	82.9
Securities - Equities	70.2	70.0	70.3	71.9	75.5	70.7	70.8	71.2
Securities - Treasuries	65.3	63.2	62.3	62.9	60.4	62.7	63.1	64.2
Securities - G10 (non-US)	49.3	50.2	50.3	50.5	52.5	51.4	49.4	51.4
Securities - MBS	74.1	73.6	71.9	71.2	73.2	74.2	71.0	67.6
Securities - Other Bonds	77.5	77.7	70.8	73.6	72.8	72.9	71.0	74.0
Securities - Corp. Bonds	80.9	79.9	81.2	81.6	81.9	82.6	82.8	82.4
Securities - ABS (non-MBS)	98.0	98.0	***	96.8	98.2	95.5	95.0	96.8
Securities - Conv. Bonds	95.2	95.6	94.1	93.4	88.2	88.0	87.8	86.5
Derivatives - IR	48.3	47.3	47.7	49.4	51.2	52.2	49.3	50.9
Derivatives - FX	50.9	50.1	49.8	49.9	56.8	53.5	55.6	54.6
Derivatives - Equity	56.3	55.6	56.8	57.0	51.5	51.6	52.2	51.1
Derivatives - Credit	47.3	47.7	47.4	47.8	44.8	45.3	45.2	41.4
Derivatives - Other	60.2	53.3	51.2	53.7	46.6	41.6	34.4	60.9
Derivatives - Commodity	64.2	58.9	64.1	64.5	65.7	62.7	59.6	56.5
Repurchase Agreements	50.0	49.5	52.0	52.2	52.0	47.1	47.3	42.2
Other	87.8	90.3	87.0	89.9	88.9	88.1	87.9	89.4

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
At most 1 day	8.2	8.1	8.3	8.5	8.9	9.0	8.8	8.4
At most 7 days	14.3	14.4	14.6	15.0	15.4	15.2	14.9	14.8
At most 30 days	28.5	27.1	27.5	28.0	30.0	27.8	27.8	27.8
At most 90 days	47.5	46.6	48.2	50.9	48.9	47.5	47.9	50.2
At most 180 days	59.7	59.3	61.6	60.0	60.3	58.8	61.2	58.4
At most 365 days	74.1	73.9	73.6	73.8	74.1	73.5	73.7	71.8

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
At most 1 day	38.0	38.1	37.7	38.0	38.8	38.9	38.7	39.3
At most 7 days	61.1	61.7	61.5	61.8	62.2	62.1	61.9	61.2
At most 30 days	75.4	75.6	75.5	75.3	75.0	75.0	74.9	73.7
At most 90 days	81.5	81.7	81.9	81.6	81.4	81.3	80.8	79.4
At most 180 days	85.1	85.2	85.3	85.1	84.8	84.7	84.2	83.0
At most 365 days	89.1	89.0	88.9	88.9	88.7	88.9	88.2	86.8

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 Fourth Calendar Quarter 2018

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	37.0	60.3	73.0	79.0	82.7	86.7
Inv. Liquidity	8.5	14.5	29.2	47.9	58.5	70.7

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
May Suspend	2,212	2,263	2,325	2,363	2,411	2,431	2,470	2,266
May Have Gates	1,335	1,359	1,392	1,405	1,459	1,489	1,512	1,402
Side-Pocketed	39	38	39	39	42	41	39	42
Gated	27	28	30	38	39	32	34	40
Suspended	27	27	22	17	***	13	12	19

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

Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	3.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Median	8.0	7.0	7.0	7.0	9.0	7.0	7.0	7.0
75th Percentile	21.5	22.0	23.0	22.0	26.0	24.5	21.8	21.0
90th Percentile	32.0	46.0	46.0	45.0	64.0	49.0	44.0	34.0
Mean	16.7	16.7	17.3	18.1	20.4	18.5	17.1	16.3

F Borrowings

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

Type	Subtype	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
	Subtotal	2,238	2,391	2,437	2,419	2,592	2,813	2,830	2,757
Secured	Prime Broker	1,185	1,265	1,371	1,379	1,418	1,527	1,591	1,289
	Reverse Repo	739	795	721	685	780	894	862	1,081
	Other Secured	313	331	345	356	394	392	377	387
Unsecured	Subtotal	14	11	12	14	14	14	12	12
Total	Total	2,252	2,402	2,448	2,433	2,606	2,827	2,842	2,769

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

Creditor Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
US Financial	61.3	61.1	61.4	61.7	60.5	63.3	63.6	63.0
Non-US Financial	38.3	38.5	38.3	37.9	39.1	36.3	36.1	36.5
US Non-Financial	***	0.3	***	***	***	***	***	***
Non-US Non-Financial	***	0.1	***	***	***	***	***	***

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

Borrowing Type	Collateral Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
	Subtotal	1,466	1,544	1,672	1,685	1,751	1,841	2,148	1,597
Prime Broker	Other	949	1,022	1,151	1,183	1,225	1,272	1,557	1,067
	Cash	517	521	522	502	526	569	591	530
	Subtotal	783	786	734	718	781	909	885	1,121
Reverse Repo	Other	517	506	478	455	513	569	573	702
	Cash	266	281	256	263	268	340	312	420
	Subtotal	384	407	423	426	447	468	436	443
Other Secured	Other	254	251	265	262	296	308	298	278
	Cash	130	156	158	165	152	159	138	165
Total	Total	2,633	2,737	2,830	2,829	2,979	3,217	3,468	3,162

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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
10th Percentile	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	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
25th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Median	1.3	1.2	1.3	1.2	1.3	1.2	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
75th Percentile	2.1	2.0	2.1	1.9	2.0	2.0	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
90th Percentile	4.8	4.2	4.3	4.1	4.6	4.5	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
Mean	4.2	2.6	2.7	2.4	2.9	2.6	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

Ratio of Collateral/Prime Broker Borrowing																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
10th Percentile	0.7	0.7	0.7	0.7	0.7	0.7	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
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	1.2	1.2	1.2	1.3	1.2	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
75th Percentile	2.3	2.1	2.1	2.1	2.3	2.2	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
90th Percentile	5.7	4.5	4.5	4.5	4.8	4.7	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
Mean	5.0	3.7	4.1	2.8	3.4	2.9	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

Ratio of Collateral/Reverse Repo Borrowing																								
Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
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
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
Median	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1	***	1.0	1.1	***	1.1	1.1	1.0	1.1	1.0	1.1	1.1	1.1	***	1.0
75th Percentile	1.3	1.3	1.4	1.4	1.4	1.4	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	***	1.2
90th Percentile	1.6	1.6	1.6	1.6	1.7	1.6	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
Mean	1.2	1.2	1.2	1.2	1.2	1.3	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

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

Financing Available	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
At most 1 day	36.3	34.6	35.4	34.2	31.6	32.9	35.8	30.0
At most 7 days	52.9	53.4	51.7	49.5	51.5	52.7	51.8	50.2
At most 30 days	65.0	65.4	64.1	64.7	64.9	66.7	66.0	68.6
At most 90 days	80.2	80.8	79.3	80.3	80.6	80.6	79.9	82.8
At most 180 days	96.0	96.2	96.0	95.9	95.8	95.8	96.0	95.7
At most 365 days	97.3	97.4	97.3	97.2	96.9	97.1	97.2	96.8

Figure 15: Weighted-Average Qualifying Hedge Fund
 Financing Liquidity (Percent of Available Financing)
 As reported on Form PF, Question 46 as of Fourth Calendar Quarter 2018.

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	34.7	51.5	68.6	82.7	95.7	96.6

G Central Clearing

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

Statistic	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Percent of Funds	16.5	16.9	17.0	17.5	17.0	15.4	15.2	16.3
Percent of NAV	17.5	17.3	16.8	16.7	17.1	16.3	16.3	16.9

H Value-at-Risk (“VaR”) Reporting

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

VaR Method	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
VaR (Any Method)	637	649	649	663	660	672	682	684
Historical Simulation	238	249	271	278	286	287	298	303
Parametric	190	190	186	193	185	193	194	189
Monte Carlo Simulation	200	205	188	186	175	178	182	186
Other	43	44	42	47	51	52	52	49
VaR Not Used	1,034	1,068	1,078	1,138	1,112	1,134	1,136	1,143

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

VaR Method	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
VaR (Any Method)	3,397	3,480	3,586	3,546	3,661	3,779	3,841	3,652
Historical Simulation	1,829	1,798	1,900	1,882	1,969	2,027	2,017	1,954
Parametric	737	760	767	806	817	837	842	801
Monte Carlo Simulation	854	938	930	835	854	838	670	617
Other	402	431	461	495	496	522	759	742
VaR Not Used	2,097	2,201	2,269	2,317	2,415	2,502	2,546	2,502

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

VaR Method	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
VaR (Any Method)	1,334	1,366	1,394	1,397	1,423	1,430	1,434	1,324
Historical Simulation	491	504	561	562	580	570	575	524
Parametric	465	474	477	490	494	500	496	460
Monte Carlo Simulation	395	416	386	377	375	379	353	337
Other	92	90	90	89	91	96	130	114
VaR Not Used	1,484	1,524	1,590	1,650	1,683	1,721	1,754	1,643

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Stress and VaR	545	555	555	589	593	599	613	606
Stress, No VaR	451	457	467	498	494	490	496	486
No Stress, VaR	92	94	94	74	67	73	69	78
Neither	583	611	611	640	618	644	640	657

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Stress and VaR	3,158	3,209	3,350	3,386	3,499	3,612	3,675	3,496
Stress, No VaR	1,076	1,114	1,178	1,190	1,269	1,294	1,300	1,322
No Stress, VaR	240	271	236	160	162	168	165	155
Neither	1,021	1,086	1,091	1,127	1,146	1,208	1,246	1,180

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Stress and VaR	1,189	1,219	1,236	1,289	1,313	1,318	1,320	1,222
Stress, No VaR	683	673	712	736	746	745	757	704
No Stress, VaR	146	147	158	108	110	112	114	103
Neither	801	850	878	914	938	977	998	939

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
At most 1 day	78.0	79.6	79.1	80.5	78.9	79.1	78.8	77.9
At most 7 days	95.5	95.2	95.5	95.5	95.5	96.1	96.0	95.9
At most 30 days	99.7	99.5	99.5	99.5	99.7	99.7	99.5	99.4
At most 90 days	100.0	99.8	99.7	99.7	99.9	99.9	99.8	99.8
At most 180 days	100.0	99.9	99.8	99.8	99.9	100.0	99.9	99.9
At most 365 days	100.0	99.9	99.9	99.9	100.0	100.0	100.0	99.9

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
May Suspend	246	255	261	273	269	284	291	278
May Have Gates	215	224	226	237	232	245	255	243
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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
Average WAM	34.5	32.3	32.1	32.0	29.5	31.5	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
Asset-Weighted WAM	42.6	41.6	39.9	41.0	40.4	40.8	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

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

Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
Average WAL	67.9	66.2	66.3	65.8	65.5	62.7	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
Asset-Weighted WAL	74.2	76.3	77.0	80.8	79.2	74.3	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

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

Statistic	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
Average Gross Yield	0.88	0.92	1.09	0.83	0.85	0.99	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	2.04	2.14
Asset-Weighted Gross Yield	0.70	0.70	0.83	0.88	0.92	1.04	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	2.16	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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
Average DLA	44.43	45.85	44.82	42.63	43.36	42.80	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
Asset-Weighted DLA	50.84	48.14	46.74	45.01	47.81	46.58	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

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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	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
Average WLA	58.01	58.84	60.32	57.03	57.81	59.08	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
Asset-Weighted WLA	59.84	56.77	57.91	55.46	56.74	59.80	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

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	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Credit Quality	57.8	59.6	56.5	56.2	58.7	60.0	60.0	60.9
Diversification	55.6	55.3	52.2	52.1	54.3	55.6	55.6	56.5
Maturity	55.6	55.3	52.2	52.1	54.3	55.6	55.6	56.5
Liquidity	55.6	55.3	52.2	52.1	50.0	51.1	51.1	52.2
Fully	48.9	48.9	45.7	45.8	45.7	46.7	46.7	47.8
None	40.0	38.3	41.3	41.7	41.3	40.0	40.0	39.1

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

As reported on Form PF, Questions 9 and 54.

Compliance Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Credit Quality	15.5	15.9	15.9	14.7	15.9	14.6	14.5	13.4
Diversification	14.9	14.9	14.9	13.7	14.9	13.7	13.5	12.4
Maturity	14.8	14.7	15.0	13.7	14.9	13.7	13.5	12.4
Liquidity	14.8	14.7	15.0	13.7	14.5	13.4	13.3	12.2
Fully	12.8	12.8	12.8	11.8	12.7	11.7	11.5	10.3
None	84.3	84.1	83.9	85.2	84.1	85.4	85.5	86.6

D Methods of Calculating NAV

Table 59: NAV Calculation Method (Percent of Funds)

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Stable	80.0	78.7	78.3	79.2	80.4	80.0	77.8	78.3
Floating	20.0	21.3	21.7	20.8	19.6	20.0	22.2	21.7

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

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

Type	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4
Stable	71.4	68.3	70.2	69.1	70.3	68.4	68.0	70.9
Floating	28.6	31.7	29.8	30.9	29.7	31.6	32.0	29.1

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	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09	2017-10	2017-11	2017-12
U.S. Treasuries	56.3	59.1	56.3	55.9	50.4	47.5	50.9	48.5	47.0	50.6	56.4	58.2
Deposits	68.2	67.7	65.7	73.5	72.2	69.1	74.3	73.9	69.7	73.6	73.2	66.6
Repo - Govt. Collateral	26.9	21.2	18.3	21.0	27.2	27.5	28.6	29.0	30.2	32.1	31.0	29.6
Other	43.2	42.2	38.4	39.8	44.5	44.3	43.9	42.7	43.5	41.6	41.9	46.9
Commercial Paper	35.2	37.1	40.2	34.0	37.6	36.2	39.6	37.7	39.4	41.8	41.9	37.5
Asset-Backed Securities	23.1	21.0	21.6	23.4	22.8	19.8	19.1	18.6	21.4	20.6	19.6	19.8
Repo - Other Collateral	14.2	13.6	14.9	17.2	16.3	16.6	16.9	16.7	15.2	16.7	16.2	15.3
U.S. Govt. Debt	3.7	3.8	4.9	4.6	5.0	5.7	4.3	4.0	5.5	5.4	5.6	5.6
Municipal Debt	1.3	1.3	0.9	0.9	1.1	0.9	0.9	0.9	0.9	1.2	1.2	0.9

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

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

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	17.9
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	15.4

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	57.0
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	4,218
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	4,022
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.⁶ Not all Form PF filers report on a quarterly basis. Smaller private fund advisers and all private equity fund advisers file Form PF on an annual basis, while larger hedge fund advisers and larger liquidity fund advisers file the form quarterly.⁷ As a result of the difference in reporting frequency, information in this report related to funds that are reported annually may be dated by several months.⁸

2 Large Hedge Fund Advisers

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

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

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

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

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

3 Large Liquidity Fund Advisers

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

4 Large Private Equity Fund Advisers

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

5 Other Private Fund Advisers

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

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

B Handling Annual and Quarterly Data

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

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

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

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

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

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

¹¹Such 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.

<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.