



Division of Investment Management
Analytics Office

Private Funds Statistics

Third Calendar Quarter 2023

March 31, 2024

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 Fourth Calendar Quarter 2021 through Third Calendar Quarter 2023 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 Third Calendar Quarter 2023 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.

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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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Private Equity Fund	19,082	18,961	19,001	19,054	20,895	20,937	20,950	20,956
Hedge Fund	9,461	9,648	9,752	9,786	9,798	9,857	9,857	9,958
Section 4 Private Equity Fund	6,548	6,646	6,644	6,644	7,488	7,398	7,481	7,480
Other Private Fund	6,046	6,286	6,275	6,277	6,744	6,887	6,844	6,816
Real Estate Fund	3,783	3,778	3,781	3,781	4,269	4,270	4,272	4,261
Venture Capital Fund	2,212	2,229	2,287	2,288	2,990	2,993	3,002	2,998
Securitized Asset Fund	2,243	2,251	2,257	2,257	2,461	2,470	2,474	2,479
Qualifying Hedge Fund	2,075	2,095	2,062	2,042	2,074	2,046	2,091	2,102
Liquidity Fund	79	79	79	78	71	70	69	68
Section 3 Liquidity Fund	56	54	52	51	50	50	50	50
Total	42,906	43,232	43,432	43,521	47,228	47,484	47,468	47,536

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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Private Equity Fund	1,638	1,636	1,640	1,642	1,754	1,757	1,757	1,758
Hedge Fund	1,862	1,861	1,864	1,862	1,860	1,861	1,860	1,861
Section 4 Private Equity Fund	434	435	435	436	453	451	453	452
Other Private Fund	738	738	734	732	759	763	765	765
Real Estate Fund	427	428	430	430	459	459	460	460
Venture Capital Fund	235	237	239	240	284	286	287	285
Securitized Asset Fund	176	175	175	173	178	176	175	174
Qualifying Hedge Fund	620	609	601	585	593	576	591	590
Liquidity Fund	39	39	39	39	34	33	33	33
Section 3 Liquidity Fund	24	23	22	21	21	21	21	21
Total	3,677	3,677	3,681	3,676	3,796	3,801	3,800	3,799

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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Hedge Fund	9,766	9,789	9,450	9,285	9,366	9,508	9,909	10,224
Qualifying Hedge Fund	8,336	8,271	7,925	7,705	7,831	8,003	8,443	8,766
Private Equity Fund	6,409	6,384	6,397	6,402	6,709	6,644	6,655	6,662
Section 4 Private Equity Fund	4,962	4,949	4,949	4,949	5,275	5,219	5,231	5,231
Other Private Fund	1,748	1,766	1,740	1,716	1,643	1,602	1,574	1,566
Real Estate Fund	972	967	969	975	1,138	1,137	1,136	1,127
Securitized Asset Fund	869	869	868	869	923	925	923	924
Venture Capital Fund	330	333	334	334	375	374	374	374
Liquidity Fund	318	318	335	335	321	320	332	361
Section 3 Liquidity Fund	316	314	331	331	319	319	330	359
Total	20,411	20,426	20,092	19,915	20,475	20,510	20,903	21,237

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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Hedge Fund	5,136	5,155	4,920	4,857	4,824	4,865	4,919	4,939
Qualifying Hedge Fund	4,193	4,151	3,880	3,773	3,796	3,882	3,941	3,968
Private Equity Fund	5,746	5,729	5,738	5,742	6,026	5,968	5,979	5,987
Section 4 Private Equity Fund	4,489	4,483	4,483	4,483	4,776	4,723	4,733	4,733
Other Private Fund	1,559	1,582	1,557	1,534	1,413	1,370	1,343	1,336
Real Estate Fund	745	744	745	750	858	858	858	848
Securitized Asset Fund	264	265	264	264	264	265	265	264
Venture Capital Fund	310	313	314	314	342	341	341	341
Liquidity Fund	313	313	327	331	318	313	319	346
Section 3 Liquidity Fund	311	309	324	327	316	311	317	345
Total	14,073	14,101	13,866	13,793	14,045	13,979	14,024	14,062

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

Qualifying Hedge Fund GAV (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
10th Percentile	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25th Percentile	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Median	1.4	1.4	1.3	1.2	1.2	1.3	1.3	1.2
75th Percentile	3.0	3.0	2.8	2.8	2.6	2.8	2.8	2.8
90th Percentile	6.8	6.6	6.3	6.3	6.1	6.4	6.5	6.5
Mean	4.0	3.9	3.8	3.8	3.8	3.9	4.0	4.2

Qualifying Hedge Fund NAV (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
10th Percentile	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2
25th Percentile	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Median	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9
75th Percentile	2.0	2.0	1.8	1.8	1.8	1.9	1.9	1.9
90th Percentile	4.5	4.4	4.0	3.9	3.9	4.0	4.0	4.0
Mean	2.0	2.0	1.9	1.8	1.8	1.9	1.9	1.9

Section 4 Private Equity Fund GAV (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
90th Percentile	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Mean	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Section 4 Private Equity Fund NAV (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
90th Percentile	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Mean	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6

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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Median	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
75th Percentile	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
90th Percentile	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Mean	1.7	1.7	1.7	1.7	1.9	1.9	1.9	1.9
Qualifying Hedge Funds								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	1.1	1.2	1.1	1.1	1.1	1.1
75th Percentile	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
90th Percentile	2.7	2.8	2.6	2.6	2.6	2.6	2.6	2.5
Mean	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6

B Borrowings

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

Fund Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Securitized Asset Fund	52.4	49.7	49.3	49.4	56.5	53.6	53.6	53.3
Qualifying Hedge Fund	45.6	43.2	43.3	43.5	44.7	47.3	48.5	48.3
Hedge Fund	42.1	39.8	39.7	40.0	41.1	43.5	44.5	44.5
Real Estate Fund	13.2	12.3	12.2	12.5	14.0	13.2	13.2	13.6
Other Private Fund	3.5	3.6	3.5	3.7	5.6	5.8	5.9	5.9
Section 4 Private Equity Fund	5.4	5.5	5.4	5.4	5.7	5.8	5.8	5.8
Private Equity Fund	5.5	5.5	5.5	5.5	5.7	5.6	5.6	5.5
Venture Capital Fund	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Section 3 Liquidity Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

All Private Funds (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	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	0.6
Qualifying Hedge Funds (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75th Percentile	1.3	1.2	1.1	1.0	1.0	1.1	1.1	1.2
90th Percentile	3.8	3.7	3.3	3.4	3.3	3.5	3.8	3.7
Mean	2.9	2.8	2.7	2.6	2.7	3.0	3.2	3.3

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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	1.0	0.9
90th Percentile	9.5	9.2	9.1	9.2	10.0	9.9	9.8	9.9
Mean	2.3	2.2	2.3	2.3	3.7	3.7	3.6	3.6
Qualifying Hedge Funds								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	0.8	0.8	0.8	0.9	0.9	0.8
90th Percentile	2.3	2.4	2.2	2.0	2.1	2.2	2.3	2.2
Mean	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.8

Table 6: Aggregate Borrowing by Creditor Entity Type (Percent)

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

Creditor Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
US Financial	67.1	66.4	66.6	67.7	66.5	66.4	66.3	65.3
Non-US Financial	29.3	30.6	30.3	28.9	29.4	30.5	30.9	32.0
US Non-Financial	2.8	3.1	3.0	3.3	3.3	3.1	2.9	2.8
Non-US Non-Financial	1.0	0.9	0.9	1.0	0.9	0.8	0.7	0.7

C Fair Value Hierarchy

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

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Level One	4,690	4,659	4,610	4,582	4,156	4,091	4,069	4,064
Level Two	3,842	3,828	3,835	3,798	3,601	3,567	3,519	3,522
Level Three	6,803	6,832	6,843	6,804	7,562	7,470	7,474	7,462
Cost-Based	2,854	2,878	2,860	2,869	3,078	3,057	3,054	3,062

Table 8: Liabilities According to Fair Value Hierarchy (\$ Billions)
As reported on Form PF, Question 14.

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Level One	1,702	1,702	1,695	1,701	1,584	1,590	1,591	1,594
Level Two	1,362	1,350	1,369	1,328	1,494	1,473	1,439	1,447
Level Three	377	377	340	342	377	377	391	381
Cost-Based	2,274	2,271	2,271	2,278	2,583	2,577	2,578	2,572

D Parallel Managed Accounts⁴

Table 9: 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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Hedge Fund	571	580	578	576	566	562	559	570
Other Private Fund	504	503	502	498	478	481	458	445
Private Equity Fund	303	303	315	314	339	415	421	421
Qualifying Hedge Fund	210	211	202	208	214	207	203	218
Section 4 Private Equity Fund	137	137	137	137	154	154	160	160
Real Estate Fund	89	89	89	89	67	68	68	68
Venture Capital Fund	30	30	30	30	39	39	39	39
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	1,509	1,517	1,526	1,519	1,499	1,575	1,555	1,553

Table 10: 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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Hedge Fund	881	840	765	729	725	695	693	706
Other Private Fund	2,674	2,671	3,451	3,416	2,369	2,367	1,535	1,495
Private Equity Fund	119	120	152	152	117	129	123	123
Qualifying Hedge Fund	566	538	483	438	435	385	405	426
Section 4 Private Equity Fund	102	102	110	110	118	118	112	112
Real Estate Fund	16	16	16	16	14	15	15	15
Venture Capital Fund	2	2	2	2	2	2	2	2
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
Total	4,111	4,025	4,781	4,705	3,609	3,595	2,746	2,749

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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
75th Percentile	1.5	1.4	1.5	1.4	1.1	1.0	1.0	0.9
90th Percentile	5.3	5.3	5.4	5.3	3.9	3.7	3.4	3.4
Mean	2.7	2.7	3.1	3.1	2.4	2.3	1.8	1.8
Qualifying Hedge Funds (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
10th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25th Percentile	0.2	0.3	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	0.7	0.6
75th Percentile	2.0	2.0	1.9	1.8	1.6	1.7	1.8	1.7
90th Percentile	6.0	5.8	5.5	4.8	4.9	4.6	4.9	4.3
Mean	2.7	2.6	2.4	2.1	2.0	1.9	2.0	2.0

III Fund Domiciles and Adviser Main Offices

Table 11: Fund Domicile (Percent of NAV)
As reported on Form PF, Question 9 and Form ADV.

All Private Funds								
Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
United States	51.7	52.2	52.5	52.9	52.7	52.5	52.4	52.4
Cayman Islands	32.8	32.7	32.4	32.7	32.2	32.5	32.7	32.7
Luxembourg	4.1	4.1	4.1	4.1	5.0	5.0	4.9	4.9
Ireland	3.9	3.9	3.9	3.9	3.6	3.6	3.6	3.7
Bermuda	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
United Kingdom	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Virgin Islands, British	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8
Other	4.7	4.2	4.2	3.6	3.7	3.6	3.6	3.6
Qualifying Hedge Funds								
Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Cayman Islands	51.8	51.0	52.4	53.2	52.5	53.0	53.3	53.4
United States	34.2	34.9	35.7	34.9	35.5	35.5	35.3	35.3
Luxembourg	2.4	2.4	2.4	2.3	2.7	2.9	3.0	3.0
Ireland	3.2	3.1	3.0	2.8	3.0	2.7	2.7	2.6
Virgin Islands, British	2.6	2.8	3.1	3.1	2.8	2.6	2.5	2.4
Bermuda	1.5	1.7	1.7	1.9	1.9	1.7	1.6	1.7
Other	4.2	4.2	1.8	1.7	1.4	1.6	1.6	1.6
Section 3 Liquidity Funds								
Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Ireland	***	***	***	***	***	***	***	***
United States	27.6	28.5	27.3	25.5	23.4	23.9	23.5	25.5
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
United States	56.1	56.9	56.9	56.9	56.2	56.4	56.4	56.4
Cayman Islands	29.3	29.6	29.6	29.6	28.0	28.1	28.1	28.1
Canada	2.0	1.9	1.9	1.9	2.0	2.1	2.1	2.1
United Kingdom	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Bermuda	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.0
Other	9.9	9.0	9.0	9.0	11.3	11.0	11.0	11.0

Table 12: Adviser Main Office Location (Percent of NAV)
As reported on Form PF, Question 9 and Form ADV.

All Private Funds								
Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
United States	91.2	90.9	91.8	91.9	92.3	91.9	91.8	92.0
United Kingdom	3.9	4.0	3.9	3.9	3.7	4.0	4.1	3.9
Other	4.9	5.1	4.3	4.2	4.0	4.1	4.1	4.1
Qualifying Hedge Funds								
Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
United States	88.1	88.5	90.7	91.1	90.5	90.7	91.6	92.3
United Kingdom	4.1	3.9	3.7	3.5	4.1	3.9	4.0	3.5
Australia	***	***	***	***	***	***	***	***
Hong Kong	***	***	***	***	***	***	***	***
Other	4.1	4.1	2.2	2.1	3.0	3.1	2.1	2.0
Section 3 Liquidity Funds								
Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
United States	***	***	***	***	***	***	***	***
United Kingdom	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
United States	95.6	95.6	95.6	95.6	95.5	95.5	95.5	95.5
Canada	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***

IV Beneficial Ownership

A All Private Funds

Table 13: Beneficial Ownership for All Private Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Private Funds	2,599	2,638	2,596	2,590	2,598	2,596	2,612	2,633
Other	2,445	2,444	2,408	2,415	2,542	2,558	2,556	2,578
State/Muni. Govt. Pension Plans	1,858	1,882	1,871	1,862	1,912	1,905	1,914	1,918
U.S. Individuals	1,422	1,417	1,372	1,367	1,324	1,335	1,348	1,351
Pension Plans	1,372	1,378	1,341	1,273	1,308	1,307	1,295	1,282
Non-Profits	1,316	1,298	1,246	1,256	1,245	1,254	1,268	1,261
Sov. Wealth Funds And For. Official Inst.	1,007	1,000	1,004	1,010	1,083	1,069	1,081	1,090
Insurance Companies	697	705	702	703	745	754	762	760
Non-U.S. Individuals	416	402	396	393	376	314	317	316
State/Muni. Govt. Entities	232	226	222	223	240	247	249	262
Unknown Non-U.S. Investors	317	306	312	306	286	252	254	243
Banking/Thrift Inst.	188	195	194	197	193	190	179	179
Sec-Registered Investment Companies	155	161	151	148	149	151	145	146
Broker-Dealers	42	45	44	42	38	40	38	40

**Table 14: Beneficial Ownership for All Private Funds
(Percent of Aggregate NAV)**
As reported on Form PF, Questions 9 and 16.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Private Funds	18.5	18.7	18.7	18.8	18.5	18.6	18.6	18.7
Other	17.4	17.3	17.4	17.5	18.1	18.3	18.2	18.3
State/Muni. Govt. Pension Plans	13.2	13.3	13.5	13.5	13.6	13.6	13.6	13.6
U.S. Individuals	10.1	10.1	9.9	9.9	9.4	9.6	9.6	9.6
Pension Plans	9.7	9.8	9.7	9.2	9.3	9.3	9.2	9.1
Non-Profits	9.4	9.2	9.0	9.1	8.9	9.0	9.0	9.0
Sov. Wealth Funds And For. Official Inst.	7.2	7.1	7.2	7.3	7.7	7.6	7.7	7.7
Insurance Companies	5.0	5.0	5.1	5.1	5.3	5.4	5.4	5.4
Non-U.S. Individuals	3.0	2.8	2.9	2.8	2.7	2.2	2.3	2.2
State/Muni. Govt. Entities	1.7	1.6	1.6	1.6	1.7	1.8	1.8	1.9
Unknown Non-U.S. Investors	2.3	2.2	2.3	2.2	2.0	1.8	1.8	1.7
Banking/Thrift Inst.	1.3	1.4	1.4	1.4	1.4	1.4	1.3	1.3
Sec-Registered Investment Companies	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0
Broker-Dealers	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

B Qualifying Hedge Funds

Table 15: Beneficial Ownership for Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Private Funds	725	734	704	699	695	712	735	748
Other	607	604	572	564	562	590	595	591
Non-Profits	602	581	546	559	528	537	549	546
State/Muni. Govt. Pension Plans	458	462	453	432	446	455	467	471
U.S. Individuals	493	473	433	423	424	424	439	440
Pension Plans	479	478	452	384	409	418	412	409
Sov. Wealth Funds And For. Official Inst.	264	266	268	266	289	283	292	303
Insurance Companies	144	147	151	149	148	164	161	165
Non-U.S. Individuals	182	171	108	102	102	104	103	102
State/Muni. Govt. Entities	62	61	58	59	59	62	63	73
Unknown Non-U.S. Investors	86	82	47	43	47	45	45	46
Banking/Thrift Inst.	41	41	39	42	38	39	37	34
Sec-Registered Investment Companies	38	39	39	38	38	37	32	28
Broker-Dealers	9	9	9	8	9	9	9	9

**Table 16: Beneficial Ownership for Qualifying Hedge Funds
(Percent of Aggregate NAV)**

As reported on Form PF, Questions 9 and 16.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Private Funds	17.3	17.7	18.1	18.5	18.3	18.3	18.6	18.9
Other	14.5	14.5	14.7	15.0	14.8	15.2	15.1	14.9
Non-Profits	14.3	14.0	14.1	14.8	13.9	13.8	13.9	13.8
State/Muni. Govt. Pension Plans	10.9	11.1	11.7	11.4	11.7	11.7	11.9	11.9
U.S. Individuals	11.8	11.4	11.1	11.2	11.2	10.9	11.1	11.1
Pension Plans	11.4	11.5	11.6	10.2	10.8	10.8	10.4	10.3
Sov. Wealth Funds And For. Official Inst.	6.3	6.4	6.9	7.1	7.6	7.3	7.4	7.6
Insurance Companies	3.4	3.5	3.9	4.0	3.9	4.2	4.1	4.2
Non-U.S. Individuals	4.3	4.1	2.8	2.7	2.7	2.7	2.6	2.6
State/Muni. Govt. Entities	1.5	1.5	1.5	1.6	1.5	1.6	1.6	1.8
Unknown Non-U.S. Investors	2.1	2.0	1.2	1.1	1.3	1.2	1.1	1.2
Banking/Thrift Inst.	1.0	1.0	1.0	1.1	1.0	1.0	0.9	0.9
Sec-Registered Investment Companies	0.9	0.9	1.0	1.0	1.0	0.9	0.8	0.7
Broker-Dealers	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

C Section 3 Liquidity Funds

Table 17: Beneficial Ownership for Section 3 Liquidity Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Other	96	103	100	106	108	106	114	135
Private Funds	57	58	65	64	56	50	49	64
Unknown Non-U.S. Investors	60	51	64	68	65	63	64	52
Banking/Thrift Inst.	***	***	***	***	***	***	***	***
Broker-Dealers	***	***	***	***	***	***	***	***
Sec-Registered Investment Companies	23	24	16	15	14	17	16	16
Insurance Companies	9	8	9	8	10	12	11	10
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
Non-U.S. Individuals	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	3	***	***	***	***	***	***	***
Pension Plans	7	5	5	***	***	***	5	***
Non-Profits	4	3	3	3	2	3	3	3
State/Muni. Govt. Pension Plans	1	1	***	***	1	***	***	***
U.S. Individuals	***	***	***	***	***	***	***	***

Table 18: Beneficial Ownership for Section 3 Liquidity Funds
(Percent of Aggregate NAV)

As reported on Form PF, Questions 9 and 16.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Other	31.0	33.4	30.8	32.4	34.1	34.1	35.8	39.1
Private Funds	18.5	18.6	19.9	19.6	17.8	15.9	15.5	18.5
Unknown Non-U.S. Investors	19.2	16.6	19.9	20.7	20.6	20.2	20.1	15.0
Banking/Thrift Inst.	***	***	***	***	***	***	***	***
Broker-Dealers	***	***	***	***	***	***	***	***
Sec-Registered Investment Companies	7.5	7.8	4.9	4.6	4.3	5.4	5.0	4.6
Insurance Companies	2.8	2.6	2.8	2.5	3.0	3.9	3.6	2.9
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
Non-U.S. Individuals	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	1.0	***	***	***	***	***	***	***
Pension Plans	2.3	1.7	1.5	***	***	***	1.5	***
Non-Profits	1.2	1.0	0.9	0.8	0.8	0.9	0.8	0.8
State/Muni. Govt. Pension Plans	0.3	0.3	***	***	0.4	***	***	***
U.S. Individuals	***	***	***	***	***	***	***	***

D Section 4 Private Equity Funds

Table 19: Beneficial Ownership for Section 4 Private Equity Funds (\$ Billions)
As reported on Form PF, Questions 9 and 16.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Private Funds	957	974	973	973	1,031	1,018	1,020	1,020
Other	819	802	802	802	887	876	877	877
State/Muni. Govt. Pension Plans	836	850	851	851	887	874	876	876
Sov. Wealth Funds And For. Official Inst.	501	477	477	477	525	515	515	515
Pension Plans	324	325	326	326	362	362	364	364
Insurance Companies	252	255	256	256	283	282	284	284
Non-Profits	237	238	238	238	259	259	259	259
U.S. Individuals	265	265	265	265	245	246	246	246
State/Muni. Govt. Entities	82	82	82	82	94	94	95	95
Non-U.S. Individuals	83	77	77	77	68	67	67	67
Sec-Registered Investment Companies	49	50	50	50	49	48	48	48
Banking/Thrift Inst.	45	49	49	49	47	44	45	45
Unknown Non-U.S. Investors	33	34	34	34	33	33	33	33
Broker-Dealers	3	3	3	3	3	3	3	3

Table 20: Beneficial Ownership for Section 4 Private Equity Funds
(Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 16.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Private Funds	21.3	21.7	21.7	21.7	21.6	21.5	21.6	21.6
Other	18.2	17.9	17.9	17.9	18.6	18.5	18.5	18.5
State/Muni. Govt. Pension Plans	18.6	19.0	19.0	19.0	18.6	18.5	18.5	18.5
Sov. Wealth Funds And For. Official Inst.	11.2	10.6	10.6	10.6	11.0	10.9	10.9	10.9
Pension Plans	7.2	7.3	7.3	7.3	7.6	7.7	7.7	7.7
Insurance Companies	5.6	5.7	5.7	5.7	5.9	6.0	6.0	6.0
Non-Profits	5.3	5.3	5.3	5.3	5.4	5.5	5.5	5.5
U.S. Individuals	5.9	5.9	5.9	5.9	5.1	5.2	5.2	5.2
State/Muni. Govt. Entities	1.8	1.8	1.8	1.8	2.0	2.0	2.0	2.0
Non-U.S. Individuals	1.9	1.7	1.7	1.7	1.4	1.4	1.4	1.4
Sec-Registered Investment Companies	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0
Banking/Thrift Inst.	1.0	1.1	1.1	1.1	1.0	0.9	0.9	0.9
Unknown Non-U.S. Investors	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7
Broker-Dealers	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

E Concentration**Table 21:** Weighted-Average Beneficial Ownership of Top 5 Owners (Percent)
As reported on Form PF, Questions 9 and 15.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Other Private Fund	57.0	57.5	57.1	57.5	59.0	58.4	58.3	57.9
Real Estate Fund	59.0	59.0	59.0	58.7	56.9	57.0	57.0	57.4
Hedge Fund	53.9	54.6	55.0	54.7	55.5	56.3	56.2	56.6
Qualifying Hedge Fund	49.9	50.9	51.9	51.6	52.1	52.0	51.8	52.0
Venture Capital Fund	52.6	52.5	52.3	52.4	49.9	49.9	49.9	49.9
Private Equity Fund	49.5	49.1	49.2	49.1	49.8	49.4	49.5	49.5
Section 4 Private Equity Fund	44.9	44.7	44.7	44.7	46.5	45.9	46.0	46.0
Liquidity Fund	46.1	48.1	46.7	46.5	45.1	44.3	43.1	44.5
Section 3 Liquidity Fund	45.8	47.7	46.4	46.1	44.8	44.1	42.9	44.4
Securitized Asset Fund	37.3	37.5	37.6	37.8	41.6	42.3	41.8	41.9
Total	52.2	52.4	52.5	52.3	52.9	52.9	52.9	53.0

V Derivatives

Table 22: 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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Hedge Fund	15,525	15,884	14,976	14,302	14,930	15,298	15,252	15,527
Qualifying Hedge Fund	14,167	14,287	13,294	12,739	13,061	13,032	13,861	14,009
Private Equity Fund	70	69	69	71	158	159	159	159
Other Private Fund	118	110	110	112	105	103	104	101
Section 4 Private Equity Fund	52	54	54	54	73	72	72	72
Real Estate Fund	41	41	41	41	72	76	78	65
Securitized Asset Fund	5	5	5	5	***	6	4	4
Venture Capital Fund	***	***	***	***	0	0	0	0
Liquidity Fund	***	***	***	***	***	0	0	0
Section 3 Liquidity Fund	***	***	0	0	0	0	0	0
Total	15,787	16,068	15,208	14,543	15,311	15,645	15,611	15,923

Table 23: Aggregate Derivative Value (Percent of Aggregate NAV)

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

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Hedge Fund	302.3	308.1	304.4	294.5	309.5	314.5	310.1	314.4
Qualifying Hedge Fund	337.9	344.2	342.6	337.6	344.1	335.7	351.7	353.0
Private Equity Fund	1.2	1.2	1.2	1.2	2.6	2.7	2.7	2.7
Other Private Fund	7.6	7.0	7.1	7.3	7.4	7.5	7.8	7.6
Section 4 Private Equity Fund	1.2	1.2	1.2	1.2	1.5	1.5	1.5	1.5
Real Estate Fund	5.6	5.6	5.6	5.5	8.4	8.9	9.0	7.6
Securitized Asset Fund	1.8	1.8	1.8	1.8	***	2.1	1.4	1.4
Venture Capital Fund	***	***	***	***	0.1	0.1	0.1	0.1
Liquidity Fund	***	***	***	***	***	0.0	0.0	0.0
Section 3 Liquidity Fund	***	***	0.0	0.0	0.0	0.0	0.0	0.0
Total	112.2	114.0	109.7	105.4	109.0	111.9	111.3	113.2

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

All Private Funds (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	1.4	1.3	1.2	1.1	1.2	1.1	1.2	1.2
Mean	1.1	1.1	1.1	1.0	1.0	1.0	1.1	1.1
Qualifying Hedge Funds (\$ Billions)								
Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75th Percentile	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.5
90th Percentile	10.4	9.4	9.5	8.6	8.2	8.6	9.0	9.1
Mean	5.5	5.8	5.4	5.0	5.6	4.9	5.4	5.6

VI Additional Hedge Fund Industry Information

A High Frequency Trading

Table 24: Number of Hedge Funds Using
High Frequency Trading (HFT) Strategies
As reported on Form PF, Question 21.

Fraction of NAV	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
0%	8,392	8,530	8,618	8,677	8,702	8,783	8,865	8,909
Less than 100%	49	52	53	50	56	56	54	56
100% or More	8	8	8	8	5	5	5	5

Table 25: Hedge Fund Assets Managed Using HFT Strategies (\$ Billions)
As reported on Form PF, Questions 9 and 21.

Fraction of NAV	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
0%	5,001	5,002	4,763	4,690	4,672	4,695	4,757	4,753
Less than 100%	115	128	127	135	128	138	133	137
100% or More	6	7	8	8	9	9	9	10

B Industry Concentration

Table 26: 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.

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Top 10	7.3	7.6	7.8	8.1	7.8	7.9	7.8	8.0
Top 25	13.3	13.5	13.5	13.7	13.3	13.4	13.2	13.6
Top 50	19.3	19.5	19.4	19.6	19.1	19.3	19.3	19.5
Top 100	27.6	27.5	27.3	27.5	27.0	27.3	27.3	27.5
Top 250	42.2	41.9	41.5	41.6	41.2	41.6	41.5	41.7
Top 500	55.7	55.4	54.8	54.9	54.6	54.8	54.7	54.7

Table 27: 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.

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Top 10	16.2	15.7	16.7	16.8	17.6	17.7	18.9	19.7
Top 25	25.2	25.6	26.0	25.7	26.3	26.7	28.0	29.1
Top 50	33.4	33.5	34.1	33.7	34.4	34.7	36.2	37.6
Top 100	41.9	41.9	42.4	42.4	43.0	43.3	44.6	46.0
Top 250	54.8	54.5	54.6	54.7	55.1	55.4	56.5	57.8
Top 500	66.3	66.0	66.0	65.9	66.2	66.6	67.3	68.3

Table 28: 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).

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Top 10	34.7	34.1	34.6	34.1	36.5	35.8	37.0	37.4
Top 25	49.3	48.5	50.0	50.2	51.0	51.2	52.2	53.0
Top 50	61.3	60.9	61.7	62.0	63.3	64.1	64.7	65.8
Top 100	72.1	71.4	72.0	72.3	73.6	74.5	74.8	75.6
Top 250	83.3	83.3	83.1	83.4	84.2	85.0	85.4	86.0
Top 500	90.8	90.7	90.5	90.5	91.0	91.5	91.9	92.3

Table 29: 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).

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Top 10	41.0	38.3	39.2	41.2	38.3	41.3	40.9	39.8
Top 25	55.4	55.3	55.4	56.1	55.6	56.7	55.2	54.8
Top 50	67.5	67.8	67.3	68.1	68.8	68.5	67.6	67.5
Top 100	78.4	79.1	78.8	79.3	80.1	80.1	79.4	79.3
Top 250	89.8	90.3	90.0	90.1	90.5	90.7	90.6	90.8
Top 500	95.2	95.4	95.2	95.2	95.5	95.6	95.5	95.6

Table 30: 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).

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Top 10	35.3	34.7	34.5	34.9	34.2	36.8	36.9	36.8
Top 25	48.5	48.7	49.1	49.9	50.1	51.4	50.5	51.6
Top 50	59.7	60.0	60.4	60.8	61.6	62.2	61.5	63.3
Top 100	70.2	70.8	70.8	71.5	72.6	73.1	72.8	74.0
Top 250	82.7	82.9	82.8	83.1	83.9	84.2	84.2	85.1
Top 500	90.7	90.8	90.5	90.6	91.1	91.4	91.2	91.7

C Single-Strategy US-Domiciled Hedge Funds

Table 31: Exposures of Single-Strategy US-Domiciled Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Equity	Subtotal	680	637	589	555	551	549	584	561
	Long/Short	326	311	280	273	271	262	294	280
	Long Bias	324	298	273	251	251	258	262	254
	Market Neutral	***	26	***	29	28	27	27	26
	Short Bias	***	1	***	2	1	1	1	1
Other	Subtotal	625	649	648	656	658	666	673	674
Credit	Subtotal	141	144	144	150	163	179	170	174
	Asset Based Lending	70	73	72	77	86	87	94	96
	Long/Short	71	72	72	73	77	93	77	79
Event Driven	Subtotal	74	76	75	76	83	80	82	76
	Distressed/Restruct.	43	46	47	48	50	49	51	50
	Equity	20	19	18	19	26	26	27	21
	Risk Arb./Merger Arb.	11	10	10	9	7	5	4	5
Relative Value	Subtotal	55	55	56	55	59	63	64	64
	F.I. Asset Backed	31	32	32	32	37	38	37	37
	F.I. Corp.	11	11	11	11	11	11	12	12
	F.I. Conv. Arb.	9	9	9	8	7	7	7	7
	Volatility Arb.	2	2	3	3	3	5	7	6
Investment in other funds	F.I. Sov.	1	1	2	1	2	2	2	2
	Subtotal	33	34	33	32	32	39	39	39
Macro	Subtotal	13	15	15	16	14	13	14	18
	Global Macro	9	10	10	11	9	8	9	12
	Commodity	3	4	4	4	4	4	4	5
	Active Trading	***	***	***	***	***	***	1	1
	Currency	***	***	***	***	***	***	0	0
Managed Futures/CTA	Subtotal	6	7	6	6	6	6	6	6
	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Total	Total	1,437	1,433	1,385	1,368	1,383	1,418	1,442	1,437

Table 32: Number of Single-Strategy US-Domiciled Hedge Funds
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
	Subtotal	1,128	1,150	1,152	1,155	1,129	1,132	1,135	1,160
Equity	Long/Short	471	480	475	474	493	496	512	526
	Long Bias	605	616	624	627	582	583	576	585
	Market Neutral	***	51	***	50	47	47	45	46
	Short Bias	***	8	***	9	13	12	12	13
Other	Subtotal	1,034	1,070	1,093	1,114	1,165	1,189	1,216	1,229
	Subtotal	383	395	404	422	429	441	455	464
Credit	Asset Based Lending	197	200	197	207	212	212	220	226
	Long/Short	189	198	210	218	220	232	238	241
	Subtotal	243	259	270	276	298	297	305	303
Event Driven	Distressed/Restruct.	164	179	189	195	212	211	218	219
	Equity	59	60	60	61	68	68	69	66
	Risk Arb./Merger Arb.	21	21	21	21	19	19	19	19
	Subtotal	186	189	198	201	212	219	221	230
Relative Value	F.I. Asset Backed	94	93	99	100	107	119	123	130
	F.I. Corp.	55	54	59	58	58	59	57	66
	F.I. Conv. Arb.	20	22	23	26	26	24	24	24
	Volatility Arb.	19	19	20	20	18	18	18	19
	F.I. Sov.	18	14	19	19	18	18	18	19
Investment in other funds	Subtotal	241	260	261	257	302	326	329	334
	Subtotal	45	48	48	45	44	44	46	48
Macro	Global Macro	18	19	19	19	18	18	21	21
	Commodity	15	17	17	16	15	15	15	16
	Active Trading	***	***	***	***	***	***	10	11
	Currency	***	***	***	***	***	***	0	0
	Subtotal	24	24	23	22	23	23	24	24
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Total	Total	3,079	3,175	3,215	3,264	3,338	3,408	3,463	3,520

D Single-Strategy Non-US-Domiciled Hedge Funds

Table 33: Exposures of Single-Strategy Non-US-Domiciled Hedge Funds (\$ Billions)
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
	Subtotal	1,272	1,145	1,018	965	1,019	1,028	996	966
Equity	Long/Short	815	731	649	620	669	696	667	651
	Long Bias	356	321	280	259	261	230	226	217
	Market Neutral	***	***	***	***	***	***	***	***
	Short Bias	***	***	***	***	***	***	***	***
	Subtotal	267	286	306	329	329	326	408	433
Macro	Global Macro	255	275	295	314	316	316	399	422
	Commodity	8	8	8	6	7	7	7	7
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
Other	Subtotal	767	776	736	715	760	756	762	762
Relative Value	Subtotal	456	434	442	409	369	377	352	355
	F.I. Sov.	315	284	309	283	248	256	229	228
	F.I. Asset Backed	77	75	75	74	71	68	68	74
	Volatility Arb.	22	24	27	23	20	20	23	20
	F.I. Corp.	27	28	18	17	17	19	18	19
	F.I. Conv. Arb.	16	22	13	12	12	14	14	14
Credit	Subtotal	287	297	290	309	314	321	333	333
	Long/Short	210	216	207	219	221	227	232	231
	Asset Based Lending	77	81	83	89	93	94	101	102
Managed Futures/CTA	Subtotal	209	231	206	240	190	226	285	273
	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Event Driven	Subtotal	185	185	180	173	166	420	182	179
	Distressed/Restruct.	117	120	120	119	117	371	132	131
	Risk Arb./Merger Arb.	33	30	30	29	21	21	22	25
	Equity	35	34	30	25	28	28	27	24
Investment in other funds	Subtotal	34	33	30	30	27	32	38	35
Total	Total	2,438	2,397	2,223	2,149	2,159	2,151	2,175	2,172

Table 34: Number of Single-Strategy Non-US-Domiciled Hedge Funds
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
	Subtotal	1,094	1,097	1,096	1,093	1,084	1,040	1,022	1,020
Equity	Long/Short	631	632	632	630	604	601	592	592
	Long Bias	391	394	388	385	392	351	347	344
	Market Neutral	***	***	***	***	***	***	***	***
	Short Bias	***	***	***	***	***	***	***	***
	Subtotal	210	214	213	216	217	213	213	217
Macro	Global Macro	162	168	172	171	165	163	164	165
	Commodity	42	40	38	39	45	40	40	46
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
Other	Subtotal	854	876	893	882	924	941	943	955
	Subtotal	304	302	301	305	294	300	303	301
Relative Value	F.I. Sov.	60	59	59	61	60	59	59	60
	F.I. Asset Backed	149	146	148	150	139	143	147	145
	Volatility Arb.	27	26	25	24	29	29	30	30
	F.I. Corp.	91	92	88	90	87	91	90	91
	F.I. Conv. Arb.	24	25	26	24	24	24	25	24
	Subtotal	353	367	369	380	378	389	405	406
Credit	Long/Short	248	259	259	266	269	279	285	284
	Asset Based Lending	108	111	113	117	112	113	123	125
	Subtotal	108	113	120	121	125	129	126	126
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
	Subtotal	310	316	318	314	313	313	317	318
Event Driven	Distressed/Restruct.	214	221	223	223	219	223	227	229
	Risk Arb./Merger Arb.	48	50	49	47	43	44	44	43
	Equity	74	70	70	69	75	70	70	70
Investment in other funds	Subtotal	104	103	106	110	113	114	118	111
Total	Total	3,106	3,161	3,188	3,190	3,222	3,204	3,218	3,219

VII 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	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0
25th Percentile	1.3	1.3	1.2	1.2	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.3	1.2	1.2
Median	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1
75th Percentile	4.5	4.5	4.1	4.4	4.5	4.1	4.5	4.5	4.1	4.4	4.2	3.9	4.4	4.4	4.1	4.7	4.4	3.8	4.2	4.1	4.1	4.2	4.2	4.0
90th Percentile	14.3	14.3	13.2	14.5	13.9	12.3	12.0	12.7	11.3	12.3	13.3	11.4	13.7	14.6	12.6	14.3	14.5	11.5	12.7	14.2	12.6	13.6	14.5	13.9
Mean	7.2	7.3	6.7	6.4	6.6	6.2	6.2	6.4	5.6	5.8	5.9	5.6	6.4	6.7	5.7	6.2	6.7	5.8	6.1	6.6	6.3	6.8	6.8	6.6
Excluding IRDs																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	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	1.1	1.2	1.2	1.1	1.1	1.2	1.1	1.2	1.1	1.1	1.2	1.1	1.1	1.2	1.2	1.1
Median	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.7	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8
75th Percentile	3.6	3.5	3.3	3.5	3.6	3.4	3.6	3.4	3.1	3.2	3.3	3.1	3.4	3.5	3.3	3.6	3.5	3.2	3.5	3.5	3.3	3.6	3.5	3.4
90th Percentile	8.9	8.7	8.2	8.2	8.5	7.8	8.3	8.6	7.5	8.4	7.7	7.7	8.7	8.6	7.6	8.9	8.6	8.1	8.5	9.2	8.6	9.0	9.2	8.6
Mean	4.1	4.1	3.9	4.0	3.9	3.8	4.0	4.0	3.6	3.7	3.7	3.5	3.8	4.1	3.7	3.8	3.8	3.6	3.8	4.0	3.9	4.4	4.3	4.0

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	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.9	0.9	1.0	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	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	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Median	1.6	1.5	1.6	1.6	1.6	1.5	1.6	1.6	1.5	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6
75th Percentile	2.7	2.7	2.6	2.6	2.7	2.6	2.6	2.6	2.5	2.6	2.5	2.4	2.6	2.7	2.5	2.8	2.7	2.5	2.6	2.6	2.5	2.7	2.7	2.6
90th Percentile	7.3	7.6	7.3	7.4	7.4	6.8	7.1	7.3	6.3	7.3	7.0	7.1	7.4	8.1	7.0	7.4	7.0	6.4	6.8	7.1	6.3	7.1	7.6	7.2
Mean	4.2	4.2	3.9	3.7	3.9	3.8	3.7	3.8	3.4	3.5	3.6	3.3	3.7	3.9	3.4	3.6	3.8	3.4	3.5	3.7	3.6	3.9	4.0	3.8
Long Exposure Excluding IRDs																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	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	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	1.0	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.1
Median	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.4	1.4	1.5	1.4	1.5	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.4
75th Percentile	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.2	2.1	2.2	2.2	2.0	2.2	2.3	2.2	2.4	2.3	2.2	2.3	2.3	2.3	2.2	2.3	2.2
90th Percentile	5.0	4.9	4.5	4.6	4.7	4.8	5.1	5.0	4.4	4.6	4.6	4.3	4.8	4.8	4.6	5.0	4.9	4.7	4.6	5.0	4.8	5.0	4.9	4.9
Mean	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.3	2.4	2.4	2.3	2.4	2.6	2.3	2.4	2.4	2.3	2.4	2.5	2.5	2.7	2.6	2.5
Short Exposure Including IRDs																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	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	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
75th Percentile	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	1.9	2.1	2.2	2.0	2.1	2.1	2.0
90th Percentile	8.1	8.3	7.3	8.1	7.2	6.7	6.7	7.4	6.4	7.4	7.9	6.7	7.5	8.0	7.5	8.0	8.5	7.1	7.7	8.6	8.5	8.7	8.8	8.2
Mean	3.6	3.8	3.4	3.1	3.2	2.9	3.0	3.0	2.7	2.6	2.7	2.6	3.1	3.5	2.7	3.0	3.2	2.8	3.0	3.2	3.2	3.2	3.3	3.3
Short Exposure Excluding IRDs																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Median	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
75th Percentile	1.5	1.5	1.3	1.6	1.5	1.4	1.4	1.5	1.4	1.4	1.4	1.3	1.5	1.4	1.4	1.5	1.4	1.3	1.4	1.5	1.4	1.5	1.4	1.4
90th Percentile	4.3	4.4	4.2	4.2	4.1	3.7	4.2	4.2	4.0	4.1	3.8	3.7	4.1	4.7	4.2	4.4	4.6	4.0	4.1	4.4	4.5	4.9	4.6	4.6
Mean	1.8	1.8	1.7	1.8	1.7	1.6	1.7	1.7	1.5	1.5	1.6	1.5	1.7	1.8	1.6	1.7	1.7	1.6	1.7	1.8	1.8	1.9	1.9	1.8

B Industry Concentration

Table 35: 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)
2021-10	17.1	27.4	38.3	56.2
2021-11	17.1	27.4	38.4	56.3
2021-12	17.1	27.4	38.1	54.7
2022-01	17.5	28.1	38.9	55.3
2022-02	16.8	27.2	38.4	55.7
2022-03	16.8	27.2	38.3	55.1
2022-04	17.1	28.0	42.8	57.7
2022-05	17.2	28.1	42.8	58.7
2022-06	17.2	28.1	39.0	55.5
2022-07	17.5	28.3	40.6	57.4
2022-08	17.5	28.3	40.7	57.9
2022-09	17.5	28.3	40.3	57.0
2022-10	17.4	28.2	39.7	57.2
2022-11	17.4	28.2	40.2	57.8
2022-12	17.4	28.2	39.4	55.9
2023-01	17.5	28.5	40.5	58.1
2023-02	17.5	28.5	40.6	58.5
2023-03	17.5	28.5	41.0	57.6
2023-04	17.7	28.7	41.6	58.3
2023-05	17.7	28.7	41.7	58.9
2023-06	17.7	28.7	40.8	58.0
2023-07	18.1	28.9	40.9	58.9
2023-08	18.1	28.9	41.5	59.8
2023-09	18.1	28.9	40.7	58.2

C Portfolio Turnover

Table 36: Aggregate Portfolio Turnover (\$ Billions)
As reported on Form PF, Question 27.

Month	Futures	Sov. and muni. bonds	Listed equities	Corporate bonds	Convertible bonds	Total
2021-10	19,432	5,666	3,409	183	38	28,729
2021-11	17,055	6,210	3,779	164	53	27,262
2021-12	14,329	4,672	3,843	121	38	23,002
2022-01	16,735	5,340	3,951	188	40	26,255
2022-02	21,395	6,355	3,794	292	35	31,872
2022-03	23,132	6,016	4,528	255	36	33,968
2022-04	16,025	4,574	3,678	223	27	24,527
2022-05	19,479	5,143	4,255	339	30	29,245
2022-06	22,129	4,903	3,897	313	24	31,266
2022-07	17,470	4,388	3,023	318	17	25,215
2022-08	20,561	5,151	3,434	236	29	29,410
2022-09	23,845	4,929	3,532	204	25	32,536
2022-10	17,728	4,372	4,301	185	32	26,619
2022-11	19,964	5,198	4,375	200	29	29,767
2022-12	20,051	4,522	4,027	149	19	28,768
2023-01	16,309	5,310	4,126	230	33	26,008
2023-02	22,084	6,512	4,084	238	50	32,968
2023-03	32,291	7,334	4,935	252	39	44,851
2023-04	16,689	5,691	3,844	164	30	26,418
2023-05	21,107	7,484	4,704	244	43	33,582
2023-06	17,995	7,088	4,719	215	41	30,058
2023-07	19,497	7,105	4,471	198	60	31,332
2023-08	24,576	8,724	5,416	195	85	38,997
2023-09	20,516	7,606	4,668	221	75	33,086

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.

Statistic	Total Turnover (\$ Billions)																							
	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
25th Percentile	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2
Median	0.9	1.1	1.0	1.1	1.1	1.5	1.0	1.2	1.0	0.9	1.1	0.9	0.9	1.0	0.8	1.0	1.0	1.3	0.8	1.0	0.9	0.9	1.0	0.9
75th Percentile	5.2	6.7	5.9	6.2	6.6	7.1	5.6	6.6	5.5	4.6	5.3	5.5	5.1	6.1	5.1	5.6	6.0	7.6	4.0	5.5	5.0	4.6	5.4	5.0
90th Percentile	48.7	46.5	44.8	46.4	53.8	56.8	38.9	45.2	52.4	37.9	45.4	51.9	47.3	46.7	40.5	48.6	44.0	80.9	36.9	42.3	45.9	41.9	48.8	43.9
Mean	39.9	38.5	31.8	38.7	49.1	48.8	35.8	42.5	45.1	35.0	41.5	44.0	36.6	40.9	40.9	38.2	51.4	66.8	40.4	50.8	45.7	46.6	61.2	52.2
Statistic	Total Turnover to NAV Ratio																							
	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Median	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.5	0.3	0.4	0.4	0.3	0.4	0.4
75th Percentile	1.6	1.9	1.7	2.0	2.3	2.5	2.0	2.2	2.1	1.6	2.0	2.1	2.0	2.1	1.7	2.0	2.1	2.9	1.6	2.2	2.0	1.6	2.0	1.8
90th Percentile	14.3	16.7	13.6	14.1	14.1	16.2	13.0	14.8	14.4	11.4	12.8	12.9	12.3	16.3	13.6	12.6	16.0	22.6	11.0	15.5	15.5	15.0	16.7	15.3
Mean	7.3	7.9	6.4	7.0	8.3	8.9	7.0	7.6	10.5	5.4	6.2	6.4	6.3	8.0	8.2	6.4	8.9	11.9	6.0	7.5	7.0	9.6	11.6	9.5

D Region and Country Exposure

Table 37: Large Hedge Fund Adviser Hedge Fund
Region Exposure (\$ Billions)
As reported on Form PF, Questions 3(a) and 28.

Region	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
North America	5,944	5,867	5,583	5,426	5,547	5,855	6,181	6,201
Europe EEA	1,482	1,637	1,480	1,433	1,658	1,530	1,456	1,433
Asia	768	718	713	737	750	732	754	755
Europe Other	306	418	324	336	356	372	393	406
South America	86	93	81	81	86	83	90	89
Supranational	48	42	38	32	27	34	36	37
Middle East	30	27	26	46	26	26	31	29
Africa	27	29	22	21	24	21	23	23

Table 38: Large Hedge Fund Adviser Hedge Fund
Region Exposure (Percent of Aggregate NAV)
As reported on Form PF, Questions 3(a) and 28.

Region	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
North America	131.0	132.2	132.0	131.4	133.9	136.7	143.0	144.9
Europe EEA	32.7	36.9	35.0	34.7	40.0	35.7	33.7	33.5
Asia	16.9	16.2	16.9	17.9	18.1	17.1	17.4	17.6
Europe Other	6.7	9.4	7.7	8.1	8.6	8.7	9.1	9.5
South America	1.9	2.1	1.9	2.0	2.1	1.9	2.1	2.1
Supranational	1.1	0.9	0.9	0.8	0.7	0.8	0.8	0.9
Middle East	0.7	0.6	0.6	1.1	0.6	0.6	0.7	0.7
Africa	0.6	0.7	0.5	0.5	0.6	0.5	0.5	0.5

Table 39: Large Hedge Fund Adviser Hedge Fund
Country Exposure (\$ Billions)

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

Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
United States	5,548	5,551	5,288	5,148	5,276	5,556	5,888	5,823
Japan	217	213	240	266	337	332	354	360
China (Inc. Hong Kong)	239	204	198	174	171	171	138	130
Russia	16	5	5	5	3	3	3	98
India	51	48	47	49	44	44	50	47
Brazil	33	39	34	34	34	31	40	39

Table 40: Large Hedge Fund Adviser Hedge Fund
Country Exposure (Percent of Aggregate NAV)

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

Country	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
United States	122.3	125.1	125.0	124.7	127.3	129.8	136.2	136.1
Japan	4.8	4.8	5.7	6.4	8.1	7.8	8.2	8.4
China (Inc. Hong Kong)	5.3	4.6	4.7	4.2	4.1	4.0	3.2	3.0
Russia	0.3	0.1	0.1	0.1	0.1	0.1	0.1	2.3
India	1.1	1.1	1.1	1.2	1.1	1.0	1.2	1.1
Brazil	0.7	0.9	0.8	0.8	0.8	0.7	0.9	0.9

VIII 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	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0
25th Percentile	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.3	1.3	1.2	1.2	1.3	1.2	1.3	1.3	1.2	1.3	1.2	1.2
Median	2.0	2.0	1.9	2.0	2.0	1.9	2.0	2.0	1.9	2.0	1.9	1.9	2.0	1.9	1.9	1.9	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9
75th Percentile	4.0	4.2	3.5	4.1	4.1	3.6	3.8	3.9	3.7	4.1	4.0	3.6	4.2	3.9	3.6	4.0	4.0	3.6	4.2	4.3	3.7	3.8	3.8	3.6
90th Percentile	11.7	12.2	10.9	11.5	11.8	9.7	9.9	10.8	10.1	10.6	10.6	9.4	12.1	11.0	10.0	11.2	11.8	10.3	12.9	13.7	12.3	13.4	13.3	12.5
Mean	6.2	6.4	5.2	5.7	5.8	5.2	5.2	5.4	5.1	5.1	5.2	4.8	5.4	5.4	4.8	5.4	5.7	4.8	5.5	6.0	5.3	5.9	5.8	5.5

Excluding IRDs																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Median	1.7	1.7	1.7	1.8	1.7	1.6	1.7	1.7	1.6	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.6
75th Percentile	3.2	3.3	2.9	3.2	3.2	2.9	2.9	2.9	2.7	2.8	2.8	2.7	2.9	2.9	2.9	3.1	3.1	2.8	3.2	3.3	2.9	3.0	3.0	2.9
90th Percentile	7.9	7.6	6.8	7.5	7.7	6.9	6.8	6.9	6.6	6.9	6.7	6.2	7.6	7.2	6.6	7.6	7.9	6.8	8.2	8.6	7.8	8.3	8.3	7.3
Mean	3.5	3.5	3.2	3.5	3.4	3.2	3.1	3.3	3.1	3.2	3.2	3.1	3.4	3.3	3.2	3.5	3.4	3.2	3.5	3.6	3.4	3.7	3.5	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	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1
Median	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.5
75th Percentile	2.7	2.7	2.5	2.7	2.6	2.4	2.5	2.5	2.4	2.6	2.5	2.4	2.6	2.5	2.4	2.6	2.6	2.4	2.6	2.7	2.5	2.5	2.5	2.4
90th Percentile	6.4	6.2	5.9	6.2	6.3	5.5	5.9	6.2	5.3	5.9	5.6	5.2	6.5	6.1	5.5	6.2	6.1	5.7	7.3	7.3	6.1	7.1	7.0	6.6
Mean	3.7	3.7	3.2	3.4	3.4	3.1	3.2	3.2	3.0	3.2	3.2	2.9	3.3	3.3	2.9	3.3	3.4	3.1	3.3	3.5	3.2	3.5	3.4	3.2
Long Exposure Excluding IRDs																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
25th Percentile	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0	1.1	1.1	1.0
Median	1.4	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.3	1.4	1.3	1.3
75th Percentile	2.2	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.2	2.1	2.1	2.2	2.2	2.1	2.3	2.3	2.1	2.1	2.1	2.0
90th Percentile	4.5	4.3	4.0	4.3	4.4	3.9	4.0	4.0	3.8	4.0	4.0	3.8	4.2	4.1	4.0	4.5	4.5	4.1	4.7	4.8	4.3	4.6	4.5	4.3
Mean	2.3	2.3	2.1	2.3	2.2	2.1	2.2	2.2	2.1	2.2	2.2	2.0	2.2	2.2	2.1	2.3	2.3	2.2	2.3	2.4	2.2	2.4	2.3	2.2
Short Exposure Including IRDs																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Median	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6	0.6
75th Percentile	1.9	1.9	1.7	1.8	1.9	1.7	1.8	1.9	1.8	1.9	1.9	1.7	2.0	2.0	1.8	1.9	2.0	1.7	1.9	2.0	1.8	1.9	2.0	1.8
90th Percentile	7.1	7.1	6.4	7.3	7.1	6.4	6.1	6.2	5.8	5.9	6.3	5.4	6.3	6.4	6.1	6.1	6.6	5.7	7.0	7.8	7.2	7.7	8.0	7.4
Mean	3.1	3.1	2.7	2.7	2.8	2.6	2.4	2.5	2.4	2.3	2.4	2.2	2.5	2.6	2.4	2.5	2.7	2.3	2.7	3.0	2.8	3.0	3.0	2.9
Short Exposure Excluding IRDs																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25th Percentile	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Median	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75th Percentile	1.6	1.5	1.3	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.6	1.4	1.4	1.3	1.4	1.2	1.5	1.5	1.5	1.6	1.5	1.5	1.5
90th Percentile	4.1	4.0	3.8	3.9	3.8	3.6	3.6	3.9	3.6	3.7	3.5	3.4	3.9	4.0	3.7	4.2	4.2	3.9	4.4	4.7	4.3	4.9	5.1	4.6
Mean	1.6	1.5	1.4	1.6	1.5	1.4	1.3	1.4	1.3	1.3	1.4	1.3	1.5	1.5	1.4	1.5	1.5	1.4	1.5	1.6	1.5	1.8	1.7	1.6

B Gross Exposure by Strategy⁵**Table 41: Exposures of Hedge Funds (\$ Billions)**
As reported on Form PF, Questions 9 and 20.

Category	Strategy	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
	Subtotal	2,254	2,033	1,776	1,687	1,797	1,851	1,886	1,796
Equity	Long/Short	1,215	1,102	972	941	1,020	1,053	1,063	1,033
	Long Bias	643	577	467	414	438	448	453	434
	Market Neutral	396	***	***	***	***	***	***	***
	Short Bias	0	***	***	***	***	***	***	***
	Subtotal	1,456	1,483	1,441	1,427	1,461	1,487	1,512	1,543
Other	Subtotal	1,063	1,043	1,028	969	950	1,035	1,091	1,132
Relative Value	F.I. Sov.	709	676	684	638	627	706	722	761
	F.I. Asset Backed	102	110	113	115	121	103	129	135
	F.I. Conv. Arb.	123	112	89	84	82	88	94	93
	Volatility Arb.	65	74	79	72	54	76	85	79
	F.I. Corp.	63	70	62	60	66	61	61	64
	Subtotal	794	856	874	886	999	897	1,059	1,069
Macro	Global Macro	704	745	744	748	902	820	987	1,004
	Commodity	54	73	88	92	58	44	40	33
	Currency	***	***	39	44	37	***	***	***
	Active Trading	***	***	2	2	2	***	***	***
	Subtotal	479	485	482	507	527	543	538	542
Credit	Long/Short	359	359	350	367	378	390	370	372
	Asset Based Lending	119	127	132	140	149	154	168	170
	Subtotal	458	429	403	394	371	382	397	392
Event Driven	Distressed/Restruct.	205	202	201	201	203	201	210	208
	Risk Arb./Merger Arb.	108	91	90	93	72	75	85	99
	Equity	145	136	112	101	96	106	102	85
	Subtotal	222	238	215	258	196	195	287	259
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Investment in other funds	Subtotal	65	75	69	68	71	84	86	107
Total	Total	6,790	6,641	6,287	6,196	6,373	6,474	6,857	6,840

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

Category	Strategy	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
	Subtotal	53.8	49.0	45.8	44.7	47.4	47.7	47.9	45.2
Equity	Long/Short	29.0	26.5	25.1	24.9	26.9	27.1	27.0	26.0
	Long Bias	15.3	13.9	12.0	11.0	11.6	11.5	11.5	10.9
	Market Neutral	9.4	***	***	***	***	***	***	***
	Short Bias	0.0	***	***	***	***	***	***	***
Other	Subtotal	34.7	35.7	37.1	37.8	38.5	38.3	38.4	38.9
	Subtotal	25.3	25.1	26.5	25.7	25.0	26.7	27.7	28.5
Relative Value	F.I. Sov.	16.9	16.3	17.6	16.9	16.5	18.2	18.3	19.2
	F.I. Asset Backed	2.4	2.7	2.9	3.0	3.2	2.7	3.3	3.4
	F.I. Conv. Arb.	2.9	2.7	2.3	2.2	2.2	2.3	2.4	2.3
	Volatility Arb.	1.5	1.8	2.0	1.9	1.4	2.0	2.2	2.0
	F.I. Corp.	1.5	1.7	1.6	1.6	1.7	1.6	1.6	1.6
Macro	Subtotal	18.9	20.6	22.5	23.5	26.3	23.1	26.9	27.0
	Global Macro	16.8	18.0	19.2	19.8	23.8	21.1	25.1	25.3
	Commodity	1.3	1.8	2.3	2.4	1.5	1.1	1.0	0.8
	Currency	***	***	1.0	1.2	1.0	***	***	***
	Active Trading	***	***	0.1	0.1	0.1	***	***	***
Credit	Subtotal	11.4	11.7	12.4	13.4	13.9	14.0	13.7	13.7
	Long/Short	8.6	8.6	9.0	9.7	10.0	10.0	9.4	9.4
	Asset Based Lending	2.8	3.0	3.4	3.7	3.9	4.0	4.3	4.3
Event Driven	Subtotal	10.9	10.3	10.4	10.4	9.8	9.8	10.1	9.9
	Distressed/Restruct.	4.9	4.9	5.2	5.3	5.4	5.2	5.3	5.2
	Risk Arb./Merger Arb.	2.6	2.2	2.3	2.5	1.9	1.9	2.2	2.5
	Equity	3.5	3.3	2.9	2.7	2.5	2.7	2.6	2.1
Managed Futures/CTA	Subtotal	5.3	5.7	5.5	6.8	5.2	5.0	7.3	6.5
	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Investment in other funds	Subtotal	1.6	1.8	1.8	1.8	1.9	2.2	2.2	2.7
Total	Total	162.0	160.0	162.0	164.2	168.0	166.8	174.0	172.4

C Leverage by Strategy

Table 43: Asset Weighted-Average Ratio of GAV to NAV
by Strategy

As reported on Form PF, Questions 8, 9, 10, and 20.

Strategy	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Relative Value	7.0	6.0	6.5	6.2	5.9	5.8	6.2	6.2
Macro	4.2	4.5	4.3	4.5	4.9	5.0	5.5	5.7
Multi-Strategy	3.4	3.1	3.0	2.9	3.5	3.6	3.9	4.0
Credit	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.7
Equity	1.5	1.6	1.6	1.6	1.6	1.6	1.7	1.7
Managed Futures/CTA	1.4	1.5	1.9	1.6	1.5	1.6	1.5	1.7
Investment in other funds	1.3	1.2	1.5	1.4	1.3	1.3	1.4	1.6
Other	1.5	1.4	1.4	1.5	1.5	1.5	1.4	1.4
Event Driven	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3

Table 44: 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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Macro	32.9	33.0	29.2	28.5	34.4	34.3	38.4	39.4
Relative Value	27.1	25.4	24.8	23.8	21.3	23.1	25.5	25.4
Managed Futures/CTA	16.9	15.0	16.5	14.0	14.3	12.1	17.1	18.6
Multi-Strategy	16.0	14.9	13.2	11.0	14.0	14.1	14.8	15.6
Investment in other funds	3.3	2.8	4.1	3.9	3.0	3.6	3.6	3.8
Credit	3.1	3.2	3.1	3.2	3.2	3.4	3.5	3.4
Equity	3.1	2.9	2.9	3.4	3.5	3.6	3.1	3.1
Other	3.1	3.1	2.9	2.9	2.9	2.8	2.7	2.7
Event Driven	1.9	1.9	2.0	1.8	1.8	2.1	2.1	1.9

Table 45: Asset Weighted-Average Percent of Unencumbered Cash
by Strategy

As reported on Form PF, Questions 9, 10, 20, and 33 (Third Month).

Strategy	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Managed Futures/CTA	48.2	51.0	56.0	54.2	49.3	39.9	38.8	45.3
Macro	42.8	44.1	44.1	42.2	45.7	43.1	41.4	42.0
Multi-Strategy	26.1	23.9	27.7	27.9	30.5	27.3	25.7	26.0
Relative Value	21.8	23.3	23.8	25.0	23.5	25.9	26.6	25.4
Investment in other funds	8.2	4.9	6.8	5.5	6.1	7.5	11.3	12.4
Equity	8.5	10.4	12.7	13.7	13.9	12.4	11.1	11.4
Other	11.8	11.3	11.5	12.3	11.5	9.6	9.0	8.7
Event Driven	8.1	10.7	9.6	10.0	9.8	8.1	8.4	7.5
Credit	8.3	6.8	8.3	7.3	8.9	8.5	7.4	7.2

D Investment Exposures

Table 46: Aggregate Qualifying Hedge Fund Gross Notional Exposure
by Asset Type (\$ Billions)

As reported on Form PF, Questions 26 and 30.

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Interest Rate Derivatives	7,477	7,770	7,165	6,761	7,326	6,962	7,182	7,691
Foreign Exchange Derivatives	3,974	3,820	3,416	3,512	3,113	3,436	3,766	3,945
Repurchase Agreements	2,221	2,197	2,167	2,089	2,136	2,349	2,515	2,695
U.S. Treasury Securities	1,760	1,690	1,523	1,495	1,701	1,870	2,255	2,645
Non-Financial Listed Equities	2,753	2,488	2,121	2,021	2,094	2,200	2,324	2,259
Non-Financial Equity Derivatives	1,580	1,778	1,485	1,467	1,533	1,567	1,735	1,806
Sovereign Bonds - Non-U.S. G10	1,412	1,373	1,377	1,313	1,479	1,401	1,417	1,539
Credit Derivatives	759	750	809	740	683	739	848	900
Non-Financial Unlisted Equities	467	480	479	479	483	498	509	529
Cash/Cash Equivalents - Other	579	858	531	515	533	488	515	504
Commodity Derivatives	393	424	399	376	362	391	376	393
Leveraged Loans	259	271	275	279	295	307	321	329
Financial Listed Equities	376	349	307	285	307	312	338	322
Non-Financial Corporate Bonds	280	272	248	246	254	266	282	284
Cash/Cash Equivalents - Deposits	218	216	224	221	240	301	248	258
Non-U.S. Currency Holdings	218	232	262	222	225	231	265	249
MBS	205	170	189	183	180	179	208	222
Other Derivatives	207	215	219	205	228	203	218	218
Sovereign Bonds - Other	308	267	209	182	199	205	223	210
Physical Real Estate	166	176	186	171	186	191	203	204
Other Private Funds	183	184	186	185	176	175	177	182
Cash/Cash Equivalents - MMFs	208	199	228	218	216	187	174	164
Other Loans (Excluding Repo)	141	144	149	151	155	153	160	159
Other	112	110	118	112	113	114	120	158
Non-Financial Convertible Bonds	173	154	125	119	118	123	128	124
Financial Equity Derivatives	106	102	93	85	88	94	107	110
U.S. Agency and GSE Securities	46	47	56	46	60	41	69	83
Financial Corporate Bonds	71	76	71	68	81	77	80	78
Other ABS/Structured Products	59	63	55	57	57	56	161	69
CDO/CLO	39	39	36	36	40	41	41	42
Financial Unlisted Equities	29	30	27	26	37	39	35	35
U.S. State and Local Bonds	22	19	17	18	16	16	18	17
Registered Investment Companies	16	17	15	14	15	16	16	11
Financial Convertible Bonds	9	8	7	6	6	8	7	7
Physical Commodities	6	9	9	3	6	4	4	4

Table 47: Percent of Qualifying Hedge Fund Gross Notional Exposure
Representing Long Notional Exposure
As reported on Form PF, Questions 26 and 30.

	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Interest Rate Derivatives	47.8	48.1	47.4	50.1	50.4	49.6	46.8	47.5
Foreign Exchange Derivatives	55.2	56.0	55.2	54.5	53.0	53.7	55.5	56.9
Repurchase Agreements	48.5	49.0	48.5	47.2	46.5	43.2	40.0	39.3
U.S. Treasury Securities	56.9	59.2	62.8	60.0	59.2	60.9	56.1	54.3
Non-Financial Listed Equities	71.8	70.3	68.2	67.8	67.4	66.8	66.7	67.2
Non-Financial Equity Derivatives	51.9	56.9	50.6	48.3	51.3	50.2	51.1	49.3
Sovereign Bonds - Non-U.S. G10	48.5	47.9	48.2	49.7	48.2	48.9	46.6	45.2
Credit Derivatives	44.5	43.0	40.2	41.1	47.6	45.9	47.3	48.0
Non-Financial Unlisted Equities	99.8	99.6	99.8	99.8	99.6	99.8	99.8	99.7
Cash/Cash Equivalents - Other	71.6	67.2	77.0	78.2	77.6	81.1	79.7	76.2
Commodity Derivatives	65.2	64.3	59.9	55.4	59.1	57.4	55.9	55.4
Leveraged Loans	98.0	98.2	98.7	97.6	97.5	97.8	97.6	97.4
Financial Listed Equities	73.1	71.4	69.5	68.6	68.1	67.5	66.7	67.5
Non-Financial Corporate Bonds	74.5	77.2	75.4	76.4	76.8	76.2	75.8	76.4
Cash/Cash Equivalents - Deposits	74.9	71.9	67.3	63.5	64.5	65.0	69.6	58.4
Non-U.S. Currency Holdings	62.5	61.7	60.8	62.1	65.7	58.8	60.4	55.1
MBS	70.0	78.4	81.7	83.6	83.6	84.3	84.0	82.3
Other Derivatives	51.6	50.5	44.8	41.5	39.1	56.7	51.5	51.5
Sovereign Bonds - Other	64.2	63.4	58.6	60.6	63.4	68.8	68.9	64.1
Physical Real Estate	***	***	***	***	***	***	***	***
Other Private Funds	99.9	99.9	99.9	99.9	100.0	***	100.0	99.9
Cash/Cash Equivalents - MMFs	***	***	99.9	***	99.9	***	***	***
Other Loans (Excluding Repo)	90.7	91.4	91.6	89.4	91.3	90.2	90.1	90.8
Other	94.8	93.4	90.7	90.0	86.4	85.7	83.4	86.5
Non-Financial Convertible Bonds	97.9	97.3	97.2	97.5	97.7	98.4	98.5	98.4
Financial Equity Derivatives	55.5	54.3	55.7	55.5	59.0	57.0	58.4	53.5
U.S. Agency and GSE Securities	62.8	55.3	52.8	61.7	58.8	70.6	59.8	64.3
Financial Corporate Bonds	86.4	86.5	87.0	86.3	86.5	79.7	80.6	76.6
Other ABS/Structured Products	84.2	80.7	83.5	82.3	86.2	86.2	91.1	79.3
CDO/CLO	***	***	86.3	86.7	88.1	87.5	87.6	88.0
Financial Unlisted Equities	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9
U.S. State and Local Bonds	***	***	***	***	***	***	***	***
Registered Investment Companies	97.8	98.1	98.8	98.3	98.5	99.0	98.8	97.9
Financial Convertible Bonds	96.2	96.7	96.3	96.3	98.1	98.5	97.8	98.0
Physical Commodities	***	99.8	99.4	***	93.9	96.9	98.2	94.5

E Number of Positions

Figure 12: Number of Positions Reported by Qualifying Hedge Funds
As reported on Form PF, Question 34.

Month	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	14	14	14	13	13	13	12	12	12	13	12	12	13	13	13	12	12	12	12	12	12	12	12	12
25th Percentile	51	51	47	50	50	47	49	49	47	50	50	49	49	49	49	49	50	48	49	49	48	49	47	46
Median	173	170	162	178	176	164	169	165	158	173	173	164	170	166	158	169	164	158	164	163	151	158	158	150
75th Percentile	618	635	576	624	626	576	608	627	565	624	628	599	616	609	559	598	592	557	572	589	560	566	569	545
90th Percentile	2,035	2,054	1,927	2,012	2,071	2,036	2,178	2,337	2,015	2,216	2,233	2,048	2,261	2,284	2,012	2,155	2,183	1,892	2,180	2,187	2,026	2,155	2,270	1,963
Mean	2,397	2,442	2,292	2,403	2,491	2,366	2,675	2,792	2,689	2,851	2,928	2,826	3,004	3,038	2,882	3,005	3,115	2,999	2,849	2,916	2,824	2,960	3,006	2,874

F Liquidity

Table 48: Investor Liquidity for Qualifying Hedge Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 50.

Liquidation Period	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
At most 1 day	7.5	7.5	5.8	5.5	5.6	5.4	5.6	5.4
At most 7 days	11.0	10.9	8.6	8.2	8.2	7.5	7.8	7.5
At most 30 days	23.1	23.4	19.9	18.9	18.5	18.6	17.9	17.2
At most 90 days	42.9	39.8	36.7	35.6	37.8	34.5	34.1	33.3
At most 180 days	50.3	50.1	47.0	47.4	45.6	45.4	44.3	44.9
At most 365 days	62.8	62.2	60.4	59.1	58.5	56.7	56.5	55.2

Table 49: Portfolio Liquidity for Qualifying Hedge Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9, 26, 30, and 32.

Liquidation Period	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
At most 1 day	33.7	35.4	33.6	33.6	32.3	31.5	31.3	30.4
At most 7 days	52.9	53.5	51.5	50.4	49.5	49.0	49.1	48.4
At most 30 days	65.7	64.9	62.3	61.3	60.3	59.1	59.6	58.3
At most 90 days	72.5	71.2	68.4	67.6	66.5	65.2	65.7	64.3
At most 180 days	77.1	75.5	73.6	72.8	71.8	70.8	70.7	69.4
At most 365 days	81.9	80.5	79.3	78.6	77.9	76.5	76.7	75.7

Figure 13: Asset Weighted-Average Qualifying Hedge Fund
Investor and Portfolio Liquidity
(Percent of Aggregate NAV)

As reported on Form PF, Questions 9, 26, 30, 32, and 50 as of Third Calendar Quarter 2023

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	30.4	48.4	58.3	64.3	69.4	75.7
Inv. Liquidity	5.4	7.5	17.2	33.3	44.9	55.2

Table 50: Restrictions on Qualifying Hedge Fund Assets (\$ Billions)
As reported on Form PF, Questions 48 and 49.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
May Suspend	2,924	2,884	2,660	2,534	2,499	2,562	2,574	2,570
May Have Gates	1,885	1,878	1,847	1,754	1,728	1,757	1,762	1,754
Side-Pocketed	114	104	97	96	90	87	90	86
Gated	84	74	74	75	81	80	81	76
Suspended	18	17	14	13	20	22	23	20

**Figure 14: Percentage of Qualifying Hedge Fund NAV
Subject to a Side-Pocket Arrangement**
As reported on Form PF, Questions 9 and 48.

Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
10th Percentile	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0
25th Percentile	5.0	5.0	5.5	6.0	6.0	5.0	5.0	5.0
Median	13.5	14.0	13.0	13.0	12.0	10.0	11.5	12.0
75th Percentile	28.3	30.0	31.0	31.0	26.0	24.0	27.8	24.5
90th Percentile	50.0	55.0	55.0	59.0	44.0	47.0	44.0	44.0
Mean	20.6	21.9	21.5	21.6	19.3	18.6	19.4	18.6

G Borrowings

Table 51: Borrowings of Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Question 43 (Third Month).

Type	Subtype	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Secured	Subtotal	3,748	3,532	3,398	3,309	3,461	3,739	4,053	4,191
	Prime Broker	1,965	1,843	1,660	1,592	1,651	1,739	1,870	1,807
	Reverse Repo	1,151	1,090	1,150	1,150	1,227	1,432	1,637	1,822
	Other Secured	633	599	588	567	582	568	546	563
Unsecured	Subtotal	49	39	34	36	39	40	38	37
Total	Total	3,797	3,571	3,432	3,345	3,500	3,779	4,092	4,228

Table 52: Aggregate Borrowing by Creditor Entity Type (Percent)
As reported on Form PF, Question 43 (Third Month).

Creditor Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
US Financial	65.3	63.7	63.9	65.0	63.7	63.1	63.5	62.4
Non-US Financial	33.9	35.4	35.4	33.8	35.3	36.0	35.8	37.0
US Non-Financial	0.7	0.9	0.7	1.1	1.0	0.8	0.7	0.6
Non-US Non-Financial	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.1

Table 53: Aggregate Collateral for Secured Borrowings
of Qualifying Hedge Funds (\$ Billions)
As reported on Form PF, Question 43 (Third Month).

Borrowing Type	Collateral Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Prime Broker	Subtotal	2,411	2,237	1,974	1,923	2,029	2,155	2,282	2,205
	Other	1,588	1,472	1,323	1,279	1,356	1,453	1,546	1,513
	Cash	822	766	651	645	673	702	736	692
Reverse Repo	Subtotal	1,204	1,141	1,196	1,192	1,262	1,475	1,678	1,772
	Other	826	766	815	793	788	940	1,029	1,042
	Cash	378	375	381	399	473	535	649	730
Other Secured	Subtotal	755	727	734	723	729	723	717	730
	Other	520	528	561	562	535	561	557	580
	Cash	235	199	173	161	194	161	161	150
Total	Total	4,370	4,104	3,905	3,839	4,020	4,352	4,677	4,707

Figure 15: 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	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.8	0.9	0.9	0.9	0.9	0.9	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	1.3	1.3	1.3	1.4	1.3	1.4	1.4	1.3	1.3	1.3	1.3	1.4	1.3	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.4	1.3	1.4
75th Percentile	2.3	2.3	2.3	2.4	2.3	2.3	2.4	2.2	2.2	2.2	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.4	2.4
90th Percentile	5.0	4.7	5.3	5.2	5.4	5.6	6.3	5.7	5.6	5.5	5.5	5.8	5.6	5.7	5.2	5.5	5.6	4.8	5.0	4.8	5.0	5.2	5.4	5.3
Mean	3.5	3.2	3.4	4.1	3.5	3.7	4.1	3.7	3.3	4.0	4.2	4.5	5.8	4.6	3.1	4.7	5.9	3.2	4.6	3.4	2.8	3.1	3.9	4.0

Ratio of Collateral/Prime Broker Borrowing																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	0.9	1.0	1.0	1.0	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	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	1.3	1.3	1.3	1.4	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	1.2	1.3	1.3	1.3	1.3
75th Percentile	2.4	2.5	2.4	2.5	2.4	2.4	2.4	2.3	2.3	2.1	2.1	2.3	2.3	2.4	2.3	2.2	2.3	2.2	2.3	2.3	2.2	2.3	2.2	2.3
90th Percentile	5.1	5.8	5.8	6.7	5.9	6.2	7.2	8.0	6.9	5.5	6.0	7.1	6.5	7.0	5.7	5.3	6.0	5.5	5.2	5.0	5.1	4.9	5.2	5.3
Mean	4.3	3.9	4.4	6.5	6.4	5.8	9.2	9.8	6.2	4.5	8.1	6.7	14.7	14.1	4.5	7.4	11.5	4.7	9.3	5.6	4.5	4.9	6.5	6.3

Ratio of Collateral/Reverse Repo Borrowing																								
Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
10th Percentile	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	***	1.0	1.0	1.0	1.0	1.0	1.0	1.0	***	0.9	1.0	1.0	0.9	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	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	***	1.1	1.1	1.1	1.0	1.1	1.1	***	1.1	1.1	1.1	1.1	1.1	1.1	1.1	***
75th Percentile	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	***	1.5	1.5	1.4	1.4	1.4	1.5	***	1.5	1.5	1.5	1.5	1.5	1.5	1.5	***
90th Percentile	1.9	1.9	1.8	1.9	1.8	1.8	1.9	1.8	***	1.9	1.9	1.8	1.7	1.8	1.9	***	1.9	1.8	1.9	2.0	2.0	1.9	***	1.9
Mean	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.2	***	1.3	1.2	1.2	1.2	1.3	1.3	***	1.3	1.3	1.2	1.3	1.3	1.3	***	1.3

Table 54: Financing Liquidity for Qualifying Hedge Funds
(Percent of Available Financing)
As reported on Form PF, Question 46.

Financing Available	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
At most 1 day	26.5	35.6	36.9	27.4	25.4	28.7	28.2	25.5
At most 7 days	42.8	46.3	47.2	47.2	41.5	48.1	48.7	50.1
At most 30 days	63.0	63.7	64.8	62.4	61.7	63.9	63.8	64.9
At most 90 days	77.3	76.6	76.3	75.7	75.3	76.5	77.3	78.4
At most 180 days	93.9	93.9	93.0	92.8	91.9	92.8	92.8	92.6
At most 365 days	95.5	95.2	94.3	94.2	94.0	94.7	94.6	94.7

Figure 16: Weighted-Average Qualifying Hedge Fund
Financing Liquidity (Percent of Available Financing)
As reported on Form PF, Question 46 as of Third Calendar Quarter 2023.

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	25.5	50.1	64.9	78.4	92.6	94.7

H Central Clearing

Figure 17: Qualifying Hedge Funds Using Central Clearing
As reported on Form PF, Question 39.

Statistic	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Percent of Funds	15.7	15.8	14.2	13.5	12.9	12.9	14.0	14.1
Percent of NAV	14.1	14.7	13.6	13.2	12.3	12.4	13.2	13.2

I Value-at-Risk (“VaR”) Reporting

Table 55: Number of Qualifying Hedge Funds Using VaR
As reported on Form PF, Question 40.

VaR Method	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
VaR (Any Method)	678	685	653	694	651	625	647	638
Historical Simulation	268	268	275	284	280	271	284	285
Monte Carlo Simulation	201	210	193	186	181	181	181	173
Parametric	201	202	181	220	181	167	171	169
Other	55	52	52	50	53	47	51	51
VaR Not Used	1,397	1,410	1,409	1,348	1,423	1,421	1,444	1,464

Table 56: Aggregate Qualifying Hedge Fund GAV Managed Using VaR (\$ Billions)
As reported on Form PF, Questions 8 and 40.

VaR Method	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
VaR (Any Method)	4,467	4,449	4,317	4,266	4,326	4,436	4,770	5,101
Historical Simulation	2,198	2,154	2,146	2,146	2,174	2,263	2,500	2,699
Monte Carlo Simulation	1,014	1,029	966	916	945	938	908	922
Parametric	721	695	625	641	556	560	577	558
Other	1,119	1,124	1,114	1,095	1,220	1,233	1,389	1,550
VaR Not Used	3,869	3,821	3,608	3,439	3,505	3,567	3,673	3,666

Table 57: Aggregate Qualifying Hedge Fund NAV Managed Using VaR (\$ Billions)
As reported on Form PF, Questions 9 and 40.

VaR Method	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
VaR (Any Method)	1,549	1,550	1,418	1,425	1,357	1,352	1,363	1,362
Historical Simulation	608	613	604	620	593	595	607	617
Monte Carlo Simulation	448	460	391	372	373	367	352	341
Parametric	441	422	368	373	330	325	329	319
Other	182	191	192	200	191	199	209	225
VaR Not Used	2,644	2,601	2,462	2,349	2,438	2,530	2,578	2,606

J Stress Testing and VaR

Table 58: 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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Stress and VaR	562	571	581	589	578	556	577	569
Stress, No VaR	478	479	465	458	466	469	467	466
No Stress, VaR	116	114	72	105	73	69	70	69
Neither	919	931	944	890	957	952	977	998

Table 59: 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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Stress and VaR	4,076	4,108	4,084	4,001	4,099	4,216	4,529	4,785
Stress, No VaR	1,555	1,548	1,450	1,384	1,398	1,386	1,427	1,408
No Stress, VaR	391	341	234	264	227	221	241	316
Neither	2,314	2,273	2,158	2,056	2,108	2,181	2,246	2,258

Table 60: 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	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Stress and VaR	1,287	1,302	1,274	1,266	1,220	1,216	1,227	1,226
Stress, No VaR	922	904	850	821	843	860	872	879
No Stress, VaR	261	248	144	159	138	136	137	136
Neither	1,722	1,697	1,612	1,527	1,595	1,670	1,706	1,727

K Stress Testing

Table 61: Number of Qualifying Hedge Funds Stressing Each Market Factor
As reported on Form PF, Question 42.

Market Factor	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Equity Prices	860	876	864	859	857	839	857	844
Currency Rates	746	766	771	778	768	751	771	758
Risk Free Rates	708	722	736	735	732	718	734	719
Credit Spreads	622	650	657	656	657	655	663	653
Implied Volatilities	499	530	526	523	524	512	526	503
Commodity Prices	425	443	455	451	447	429	441	426
Bond Default Rates	270	291	287	286	288	296	294	276
ABS Default Rates	227	252	252	247	253	258	261	248

Table 62: Aggregate GAV of Qualifying Hedge Funds
Stressing Each Market Factor (\$ Billions)
As reported on Form PF, Questions 8 and 42.

Market Factor	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Equity Prices	5,042	5,087	5,086	4,940	5,062	5,179	5,524	5,751
Currency Rates	4,527	4,562	4,489	4,392	4,519	4,610	4,917	5,150
Risk Free Rates	4,758	4,870	4,808	4,707	4,801	4,883	5,210	5,441
Credit Spreads	4,235	4,359	4,341	4,225	4,352	4,479	4,775	4,979
Implied Volatilities	3,713	3,796	3,787	3,707	3,842	3,873	4,429	4,591
Commodity Prices	3,742	3,846	3,975	3,867	4,002	4,078	4,386	4,637
Bond Default Rates	1,134	1,184	1,123	1,139	1,102	1,132	1,240	1,178
ABS Default Rates	899	970	936	901	938	1,093	1,238	1,134

Table 63: Aggregate NAV of Qualifying Hedge Funds
Stressing Each Market Factor (\$ Billions)
As reported on Form PF, Questions 9 and 42.

Market Factor	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Equity Prices	1,972	1,967	1,894	1,858	1,833	1,846	1,870	1,860
Currency Rates	1,655	1,691	1,639	1,634	1,590	1,601	1,596	1,602
Risk Free Rates	1,599	1,654	1,629	1,625	1,586	1,593	1,607	1,600
Credit Spreads	1,385	1,459	1,448	1,443	1,416	1,436	1,447	1,438
Implied Volatilities	1,128	1,192	1,176	1,166	1,140	1,124	1,192	1,160
Commodity Prices	1,108	1,151	1,169	1,159	1,115	1,123	1,145	1,139
Bond Default Rates	467	504	484	471	427	443	438	405
ABS Default Rates	374	422	409	382	390	401	415	378

Table 64: Number of Qualifying Hedge Funds Stressing Market Factors
As reported on Form PF, Question 42.

Factors Tested	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
0	1,035	1,045	1,016	995	1,030	1,021	1,047	1,067
1	223	212	208	208	206	207	206	209
2	130	129	126	128	129	123	123	127
3	84	83	80	78	82	81	82	89
4	103	101	100	108	100	94	101	101
5	127	126	131	127	128	126	134	126
6	165	167	168	166	167	159	164	164
7	79	81	79	82	82	78	81	73
8	129	151	154	150	150	157	153	146

Table 65: Aggregate GAV of Qualifying Hedge Funds
Stressing Market Factors (\$ Billions)
As reported on Form PF, Questions 8 and 42.

Factors Tested	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
0	2,706	2,615	2,392	2,320	2,334	2,402	2,487	2,574
1	485	432	412	385	374	377	385	397
2	618	568	431	407	406	412	426	435
3	314	306	279	267	305	308	331	327
4	353	352	425	471	394	404	406	414
5	747	871	811	738	778	809	627	663
6	2,159	2,123	2,193	2,127	2,263	2,133	2,458	2,708
7	348	341	335	373	346	527	597	598
8	606	662	647	616	632	632	724	651

Table 66: Aggregate NAV of Qualifying Hedge Funds
Stressing Market Factors (\$ Billions)
As reported on Form PF, Questions 9 and 42.

Factors Tested	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
0	1,984	1,946	1,756	1,686	1,733	1,806	1,843	1,863
1	319	276	255	234	241	246	246	259
2	312	294	269	259	256	258	259	270
3	215	212	190	183	214	212	217	226
4	189	187	176	198	175	168	158	153
5	291	302	281	267	264	281	272	274
6	502	509	543	544	540	524	553	559
7	169	174	160	169	142	149	156	147
8	212	252	249	233	232	238	237	218

IX Section 3 Liquidity Fund Specific Information

A Liquidity

Table 67: Investor Liquidity For Section 3 Liquidity Funds (Percent of Aggregate NAV)
As reported on Form PF, Questions 9 and 64.

Liquidation Period	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
At most 1 day	68.9	69.5	66.4	68.1	70.7	71.1	71.0	68.7
At most 7 days	92.4	91.6	91.8	92.7	93.1	92.9	92.6	92.9
At most 30 days	96.6	96.0	96.5	97.2	97.2	97.3	97.0	97.0
At most 90 days	97.8	97.9	98.5	98.5	98.3	98.2	97.9	98.0
At most 180 days	99.0	99.5	99.6	99.5	99.5	99.3	99.1	98.9
At most 365 days	99.8	99.8	99.8	99.6	99.7	99.7	99.8	99.8

Table 68: Suspensions and Gates of Section 3 Liquidity Funds (\$ Billions)
As reported on Form PF, Question 63.

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
May Suspend	291	290	310	313	302	294	301	331
May Have Gates	260	261	281	281	275	266	274	299
Suspended	0	0	0	0	0	0	0	0
Gated	0	0	0	0	0	0	0	0

B Portfolio Characteristics

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

Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
Average WAM	48.1	46.3	41.7	40.6	38.8	37.1	39.0	35.0	31.2	30.7	21.2	21.3	24.1	30.1	26.7	29.1	27.7	25.9	28.1	29.5	29.8	29.3	28.1	29.9
Asset-Weighted WAM	50.9	49.8	45.4	35.8	37.5	42.2	39.7	30.5	30.6	30.3	25.5	29.3	25.0	27.7	25.4	26.1	29.0	24.4	24.1	26.2	30.0	29.9	34.3	35.5

Figure 19: Weighted-Average Life of Section 3 Liquidity Funds (Days)
As reported on Form PF, Questions 55.

Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
Average WAL	62.0	59.8	54.7	52.7	52.3	51.4	54.2	51.6	47.8	47.6	38.1	38.5	41.8	49.5	45.6	47.2	44.4	42.8	45.7	47.9	46.7	47.3	45.6	44.7
Asset-Weighted WAL	66.2	64.0	59.0	51.9	55.8	61.1	59.3	50.4	52.2	50.5	45.4	48.1	47.6	50.0	46.6	45.6	46.4	42.4	41.6	45.4	49.6	52.4	54.7	54.7

Figure 20: Seven-Day Gross Yield Section 3 Liquidity Funds (Percent)
As reported on Form PF, Questions 55.

Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
Average Gross Yield	0.17	0.19	0.20	0.25	0.29	0.47	0.52	0.87	1.33	1.88	2.06	2.55	2.39	3.26	3.62	4.33	4.57	4.74	4.82	5.01	5.07	5.21	5.47	5.49
Asset-Weighted Gross Yield	0.05	0.06	0.06	0.09	0.14	0.36	0.45	0.78	1.30	1.67	2.14	2.73	2.87	3.53	3.95	4.09	4.34	4.52	4.59	4.82	4.90	5.04	5.19	5.25

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

Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
Average DLA	48.17	49.13	50.42	49.49	49.76	49.29	49.47	48.85	48.90	52.36	49.63	48.54	50.27	51.23	51.18	51.03	52.10	53.21	53.48	52.81	52.06	54.37	54.64	53.07
Asset-Weighted DLA	44.29	43.06	41.71	46.66	48.49	47.89	51.29	54.85	52.03	57.88	57.74	51.62	55.87	56.66	51.75	53.15	55.01	58.88	58.10	57.74	52.32	56.36	53.91	52.36

Figure 22: Ratio of Weekly Liquid Assets to Net Asset Value
for Section 3 Liquidity Funds (Percent)
As reported on Form PF, Questions 55.

Statistic	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
Average WLA	59.45	59.67	62.00	60.23	60.03	60.89	62.38	59.72	60.24	62.88	59.89	60.25	62.53	61.63	61.60	61.02	60.76	63.36	63.44	60.87	60.99	62.97	62.40	60.90
Asset-Weighted WLA	59.17	56.56	57.18	59.46	58.19	60.09	64.01	66.04	64.11	69.17	70.12	65.95	70.93	66.93	66.79	68.16	67.78	71.25	73.02	68.95	64.84	67.85	64.80	62.04

C Rule 2a-7 Compliance

Table 69: Rule 2a-7 Compliance (Percent of Funds)

As reported on Form PF, Questions 9 and 54.

Compliance Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
None	51.8	51.9	53.8	52.9	52.0	52.0	52.0	52.0
Credit Quality	48.2	48.1	46.2	47.1	48.0	48.0	48.0	48.0
Diversification	44.6	44.4	42.3	43.1	44.0	44.0	44.0	44.0
Maturity	44.6	44.4	42.3	39.2	44.0	44.0	44.0	44.0
Liquidity	41.1	40.7	36.5	37.3	38.0	38.0	38.0	38.0
Fully	37.5	37.0	34.6	35.3	36.0	36.0	36.0	36.0

Table 70: Rule 2a-7 Compliance (Percent of Aggregate NAV)

As reported on Form PF, Questions 9 and 54.

Compliance Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
None	82.1	81.3	83.9	84.3	84.1	83.6	84.2	85.2
Credit Quality	17.9	18.7	16.1	15.7	15.9	16.4	15.8	14.8
Diversification	16.5	17.2	14.6	14.4	14.6	15.1	14.5	13.7
Maturity	16.5	17.2	14.6	14.3	14.6	15.1	14.5	13.7
Liquidity	16.3	17.0	13.4	13.2	13.3	13.7	13.2	12.5
Fully	14.2	15.0	12.5	12.3	12.7	12.9	12.5	11.8

D Methods of Calculating NAV

Table 71: NAV Calculation Method (Percent of Funds)

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

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Stable	75.0	74.1	71.2	64.7	72.0	72.0	72.0	72.0
Floating	25.0	25.9	28.8	35.3	28.0	28.0	28.0	28.0

Table 72: NAV Calculation Method (Percent of Aggregate NAV)

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

Type	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Stable	64.4	67.2	61.2	62.1	65.9	68.8	69.1	63.6
Floating	35.6	32.8	38.8	37.9	34.1	31.2	30.9	36.4

E Aggregate Portfolio Holdings

Table 73: Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 1 of 2
As reported on Form PF, Question 63.

Product Type	2021-10	2021-11	2021-12	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09
U.S. Treasuries	88.7	88.8	88.7	69.9	81.5	91.4	84.3	63.4	78.4	57.2	59.9	69.2
Deposits	83.1	82.0	60.8	73.5	80.5	62.8	73.4	78.9	72.0	85.0	88.8	73.9
Repo - Govt. Collateral	31.3	31.6	47.2	44.1	38.1	48.0	52.2	69.2	67.1	80.9	86.3	78.8
Commercial Paper	53.1	50.5	48.2	51.9	48.2	46.6	44.2	46.4	53.6	46.5	42.1	45.3
Asset-Backed Securities	23.9	24.5	24.4	25.2	24.7	26.0	24.1	18.9	20.8	20.4	20.2	20.6
Other	18.9	21.0	26.0	18.4	13.5	16.4	11.7	13.4	15.7	11.3	10.0	16.6
Repo - Other Collateral	7.7	10.6	10.1	8.0	9.1	9.9	10.7	10.5	9.3	10.4	9.1	8.7
U.S. Govt. Debt	1.3	1.6	1.5	1.6	1.7	2.3	2.1	2.5	1.9	3.3	5.2	5.2
Municipal Debt	1.1	1.0	1.1	1.1	1.0	1.0	1.1	1.0	1.0	0.9	1.0	1.0

Table 74: Section 3 Liquidity Fund Aggregate Product Exposures (\$Billions) — 2 of 2
As reported on Form PF, Question 63.

Product Type	2022-10	2022-11	2022-12	2023-01	2023-02	2023-03	2023-04	2023-05	2023-06	2023-07	2023-08	2023-09
U.S. Treasuries	48.8	53.8	49.7	43.0	47.5	32.7	25.6	27.2	58.5	53.4	78.6	81.3
Deposits	91.4	88.9	70.4	78.3	78.0	69.4	75.3	81.7	75.3	81.9	86.3	76.0
Repo - Govt. Collateral	85.2	78.4	84.2	82.0	84.3	103.7	105.4	104.9	75.3	82.4	71.3	75.1
Commercial Paper	49.5	53.0	52.9	52.7	47.6	45.1	47.8	47.0	47.7	45.6	43.4	48.4
Asset-Backed Securities	20.1	17.7	18.6	19.2	20.1	16.9	17.7	17.8	18.2	19.1	19.6	24.3
Other	14.1	13.7	17.9	13.8	10.1	14.5	21.8	15.3	21.0	14.5	17.1	23.1
Repo - Other Collateral	10.4	10.9	9.7	7.7	9.4	10.9	11.2	10.0	11.1	12.1	10.7	9.5
U.S. Govt. Debt	5.7	5.4	8.7	7.7	7.5	13.9	13.1	10.7	6.3	5.4	4.0	4.0
Municipal Debt	0.9	0.9	0.8	0.7	0.7	0.7	1.0	1.0	0.9	0.6	0.1	0.1

X Section 4 Private Equity Fund Specific Information

A CPC Industry Concentration

Table 75: Gross Assets in CPC Industries (Percent of Total)
As reported on Form PF, Questions 8 and 77.

Type	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4	2021Q4	2022Q4
Software Publishers	3.8	4.9	6.1	6.0	8.0	10.6	9.7	11.7	12.0
Computing Infrastructure...	2.3	1.8	2.0	2.3	3.5	4.2	3.6	3.4	4.2
Other Financial Vehicles	0.4	0.6	1.8	1.6	1.3	1.2	1.8	2.2	2.9
Custom Computer Programming...	1.0	1.5	1.5	1.5	1.8	2.1	1.9	2.5	2.8
Insurance Agencies and Brokerages	1.0	1.0	1.2	1.1	1.0	1.1	1.5	1.7	1.8
All Other Professional,...	0.6	0.6	0.9	0.8	1.4	1.4	1.9	1.4	1.4
Computer Systems Design Services	0.8	0.6	1.0	0.8	0.6	0.6	1.0	1.6	1.1
Other Computer Related Services	0.4	0.5	0.9	0.9	1.0	0.8	1.2	1.5	1.0
Engineering Services	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.7
Offices of Physicians	0.2	0.3	0.4	0.3	0.3	0.5	0.5	0.7	0.7
Natural Gas Distribution	0.4	0.6	0.7	1.0	1.0	0.7	0.8	0.6	0.6
Other Activities Related to Real...	0.5	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.6
Consumer Lending	0.6	0.8	0.9	0.8	0.6	0.6	0.7	0.6	0.5
Commercial Banking	1.1	0.9	0.8	0.7	0.3	0.3	0.4	0.4	0.5
Hotels and Motels	0.7	0.6	0.7	0.4	0.2	0.4	0.4	0.4	0.5
Lessors of Nonresidential Buildings	0.8	0.8	0.7	0.7	0.6	1.1	0.6	0.4	0.5
Full-Service Restaurants	0.9	0.7	0.5	0.5	0.3	0.4	0.3	0.2	0.4
Offices of Other Holding Companies	0.3	0.6	0.3	0.4	0.5	0.4	0.4	0.4	0.4
Home Health Care Services	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.4	0.4
Offices of Dentists	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Commercial and Service Industry...	0.1	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.2
Lessors of Residential Buildings...	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.2
Marketing Research and Public...	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Supermarkets and Other Grocery...	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.2
Electric Power Generation,...	3.8	3.7	4.1	4.2	4.5	4.3	4.8	3.7	***
Semiconductor & Other Electronic...	0.7	0.6	0.4	0.3	0.5	0.5	0.6	0.5	***
Facilities Support Services	0.1	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.2
Real Estate Credit	0.4	0.9	0.6	0.5	0.4	0.4	0.4	0.2	0.1
Support Activities for Water...	0.6	0.5	0.6	0.7	0.7	0.5	0.4	0.3	***

B CPC Financial Leverage

Figure 23: Ratio of Portfolio Company Current to Total Liabilities (Percent)
As reported on Form PF, Questions 71 and 72.

Statistic	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4	2021Q4	2022Q4
10th Percentile	0.6	0.7	0.8	0.8	0.7	0.7	0.7	0.6	0.7
25th Percentile	1.4	1.7	1.9	2.1	1.5	1.3	1.4	1.1	1.3
Median	5.3	6.0	6.9	7.3	6.0	5.2	5.9	4.6	5.5
75th Percentile	17.9	20.0	20.7	21.5	17.8	16.8	18.2	16.4	18.3
90th Percentile	50.0	49.9	54.3	51.8	49.3	48.7	46.8	40.5	48.0
Mean	16.2	16.7	17.5	17.7	15.4	15.5	16.0	14.4	15.7

Figure 24: CPC Payment-in-Kind Borrowings to Total Borrowings (Percent)
As reported on Form PF, Questions 73.

Statistic	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4	2021Q4	2022Q4
10th Percentile	1.0	2.0	2.0	1.0	1.0	2.0	2.0	1.0	2.0
25th Percentile	3.0	4.0	4.0	3.0	3.0	4.0	4.0	4.0	4.0
Median	8.0	9.0	9.0	8.0	9.0	11.0	11.0	9.0	11.0
75th Percentile	22.0	22.0	22.0	17.0	22.2	27.0	32.0	31.0	30.0
90th Percentile	40.0	48.0	48.0	42.0	56.0	61.0	65.0	88.0	66.0
Mean	16.8	18.3	18.6	16.5	19.5	21.8	23.1	24.2	22.8

C CPC Investments by Region and Country

Table 76: Aggregate Gross Value of Private Equity
Investments by Region (\$ Billions)
As reported on Form PF, Questions 70 and 78.

Region	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4	2021Q4	2022Q4
North America	4,506	4,132	3,942	3,961	4,211	5,163	6,633	9,558	10,958
Europe EEA	1,259	941	848	963	1,256	1,547	2,155	3,576	3,073
Asia	462	447	406	379	435	561	1,028	881	1,079
Europe Other	9	21	22	40	46	69	158	409	613
South America	85	58	111	184	140	149	141	171	216
Middle East	12	9	15	23	16	18	44	124	151
Supranational	67	23	37	49	55	60	78	82	77
Africa	12	12	18	14	10	15	9	12	14

Table 77: Private Equity CPC Investments by Region
(Percent of Aggregate CPC Gross Asset Value)
As reported on Form PF, Questions 70 and 78.

Region	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4	2021Q4	2022Q4
North America	70.2	73.2	73.0	70.5	68.2	68.0	64.7	64.6	67.7
Europe EEA	19.6	16.7	15.7	17.1	20.3	20.4	21.0	24.2	19.0
Asia	7.2	7.9	7.5	6.8	7.0	7.4	10.0	6.0	6.7
Europe Other	0.1	0.4	0.4	0.7	0.7	0.9	1.5	2.8	3.8
South America	1.3	1.0	2.0	3.3	2.3	2.0	1.4	1.2	1.3
Middle East	0.2	0.2	0.3	0.4	0.3	0.2	0.4	0.8	0.9
Supranational	1.0	0.4	0.7	0.9	0.9	0.8	0.8	0.6	0.5
Africa	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.1

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

Country	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4	2021Q4	2022Q4
United States	4,305	3,943	3,776	3,794	4,015	4,803	6,243	8,364	10,299
India	83	89	92	73	104	128	229	277	280
China and Hong Kong	186	173	114	147	154	149	235	210	279
Japan	98	85	79	52	52	78	283	128	201
Brazil	58	41	88	131	96	93	78	55	96
Russia	2	5	4	4	2	1	1	6	27

Table 79: Private Equity CPC Investments by Country
(Percent of Aggregate CPC Gross Asset Value)
As reported on Form PF, Questions 70 and 78.

Country	2014Q4	2015Q4	2016Q4	2017Q4	2018Q4	2019Q4	2020Q4	2021Q4	2022Q4
United States	67.1	69.9	69.9	67.6	65.1	63.3	60.9	56.5	63.6
India	1.3	1.6	1.7	1.3	1.7	1.7	2.2	1.9	1.7
China and Hong Kong	2.9	3.1	2.1	2.6	2.5	2.0	2.3	1.4	1.7
Japan	1.5	1.5	1.5	0.9	0.8	1.0	2.8	0.9	1.2
Brazil	0.9	0.7	1.6	2.3	1.6	1.2	0.8	0.4	0.6
Russia	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2

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

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

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.