



Division of Investment Management  
Analytics Office

# Private Funds Statistics

Fourth Calendar Quarter 2022

July 18, 2023

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

## Introduction

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

This report reflects data from First Calendar Quarter 2021 through Fourth Calendar Quarter 2022 as reported by Form PF filers.<sup>2</sup> Please see the Appendix for information on the categories of Form PF filers, the definitions of capitalized terms, a description of the boxplots used in several figures, as well as other technical descriptions.

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

**If you have any questions or comments about Fourth Calendar Quarter 2022 Private Funds Statistics, please contact:**

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

<sup>2</sup>The Commission began receiving Form PF filings from Large Hedge Fund Advisers in July 2012. A full data set was not received until March 2013.

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## I Number of Funds and Advisers<sup>3</sup>

**Table 1: Number of Funds**

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

Fund Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Private Equity Fund	15,854	15,892	15,866	19,077	18,956	18,996	19,049	20,860
Hedge Fund	9,484	9,622	9,496	9,458	9,645	9,749	9,783	9,783
Section 4 Private Equity Fund	5,292	5,308	5,309	6,548	6,646	6,644	6,644	7,485
Other Private Fund	5,406	5,385	5,352	6,045	6,285	6,274	6,276	6,688
Real Estate Fund	3,292	3,295	3,289	3,783	3,778	3,781	3,781	4,226
Venture Capital Fund	1,422	1,424	1,419	2,207	2,224	2,282	2,283	2,978
Securitized Asset Fund	1,867	1,915	1,910	2,243	2,251	2,257	2,257	2,482
Qualifying Hedge Fund	1,859	1,966	2,015	2,073	2,093	2,059	2,039	2,069
Liquidity Fund	73	76	77	79	79	79	78	71
Section 3 Liquidity Fund	54	56	57	56	54	52	51	50
<b>Total</b>	<b>37,398</b>	<b>37,609</b>	<b>37,409</b>	<b>42,892</b>	<b>43,218</b>	<b>43,418</b>	<b>43,507</b>	<b>47,088</b>

**Table 2: Number of Advisers Advising Each Fund Type**

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

Fund Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Private Equity Fund	1,457	1,460	1,458	1,637	1,635	1,639	1,641	1,750
Hedge Fund	1,759	1,764	1,760	1,859	1,858	1,862	1,860	1,855
Section 4 Private Equity Fund	367	369	369	434	435	435	436	451
Other Private Fund	693	691	682	737	737	733	731	753
Real Estate Fund	388	389	388	427	428	430	430	451
Venture Capital Fund	177	176	176	233	235	237	238	280
Securitized Asset Fund	165	166	165	176	175	175	173	177
Qualifying Hedge Fund	567	589	594	618	607	598	582	588
Liquidity Fund	37	37	37	39	39	39	39	34
Section 3 Liquidity Fund	24	24	24	24	23	22	21	21
<b>Total</b>	<b>3,392</b>	<b>3,396</b>	<b>3,387</b>	<b>3,673</b>	<b>3,673</b>	<b>3,678</b>	<b>3,673</b>	<b>3,777</b>

<sup>3</sup>In this report, “Funds” means all private funds reported on Form PF and “Advisers” means all SEC-registered investment advisers that file a Form PF to report private funds. Please see Appendix E for definitions of other capitalized terms used in this report.

## II Gross and Net Assets

### A Aggregate Assets by Fund Type over Time

**Table 3:** Aggregate Private Fund Gross Asset Value (GAV) (\$ Billions)

As reported on Form PF, Question 8.

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

Fund Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Hedge Fund	8,916	9,579	9,779	9,759	9,778	9,439	9,274	9,347
Qualifying Hedge Fund	7,229	7,888	8,303	8,329	8,261	7,913	7,694	7,812
Private Equity Fund	4,822	4,826	4,826	6,409	6,384	6,397	6,402	6,710
Section 4 Private Equity Fund	3,665	3,673	3,674	4,962	4,949	4,949	4,949	5,275
Other Private Fund	1,496	1,509	1,438	1,748	1,766	1,740	1,716	1,622
Real Estate Fund	810	810	812	972	967	969	975	1,137
Securitized Asset Fund	712	729	729	869	869	868	869	935
Venture Capital Fund	223	222	222	329	333	333	334	375
Liquidity Fund	314	330	310	318	318	335	335	321
Section 3 Liquidity Fund	312	328	308	316	314	331	331	319
<b>Total</b>	17,294	18,004	18,114	20,403	20,415	20,080	19,904	20,447

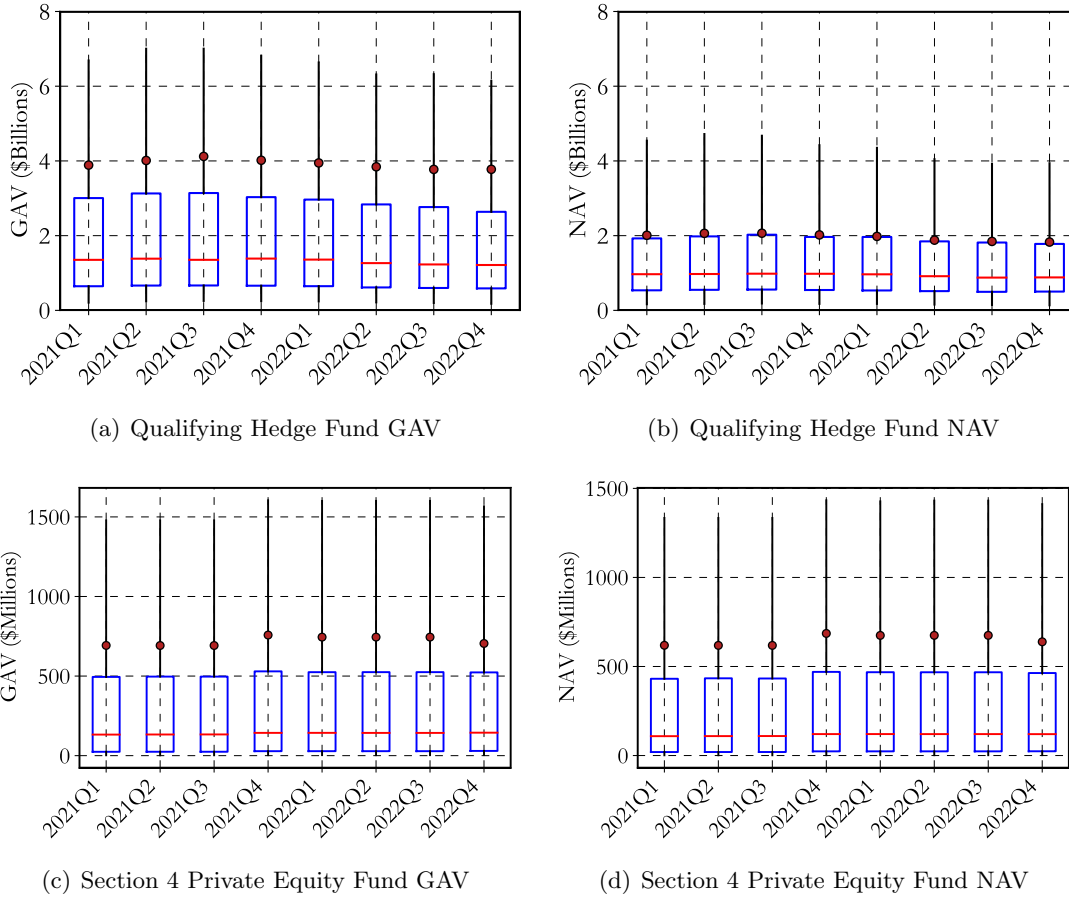
**Table 4:** Aggregate Private Fund Net Asset Value (NAV) (\$ Billions)

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.

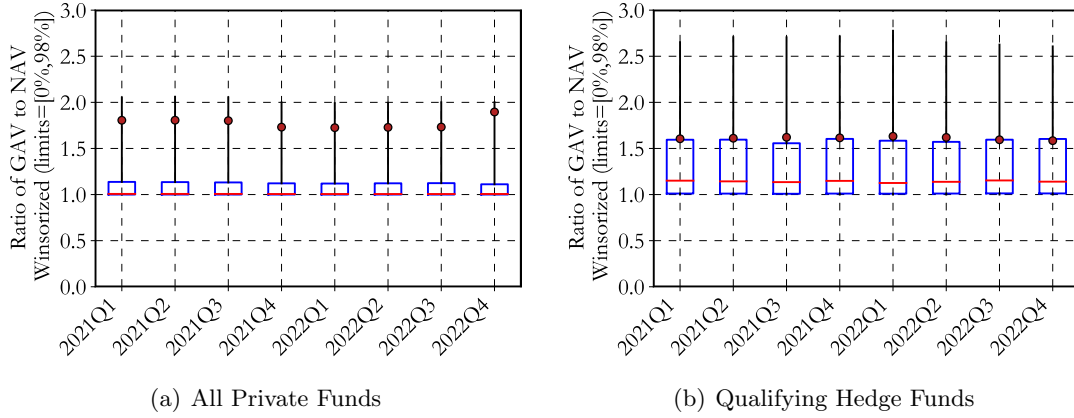
Fund Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Hedge Fund	4,810	5,129	5,111	5,130	5,148	4,912	4,849	4,811
Qualifying Hedge Fund	3,737	4,054	4,162	4,187	4,144	3,871	3,764	3,783
Private Equity Fund	4,266	4,270	4,271	5,746	5,729	5,738	5,742	6,030
Section 4 Private Equity Fund	3,276	3,283	3,283	4,489	4,483	4,483	4,483	4,780
Other Private Fund	1,318	1,341	1,274	1,559	1,582	1,557	1,534	1,397
Real Estate Fund	613	613	615	745	744	745	750	857
Securitized Asset Fund	216	219	220	264	265	264	264	272
Venture Capital Fund	215	214	215	309	313	314	314	342
Liquidity Fund	304	319	302	313	313	327	331	318
Section 3 Liquidity Fund	302	317	300	311	309	324	327	316
<b>Total</b>	11,742	12,106	12,007	14,066	14,094	13,858	13,784	14,027

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



**Figure 2: Ratio of GAV to NAV**

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





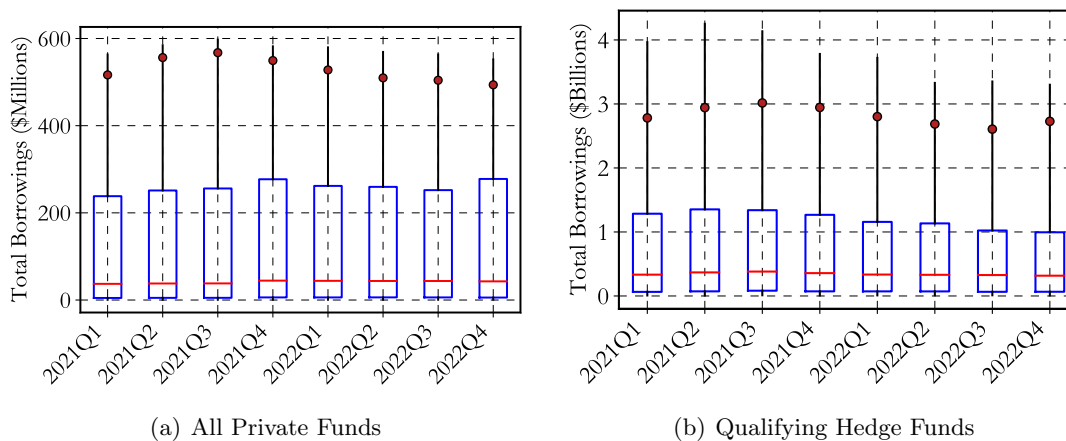
## B Borrowings

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

Fund Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Securitized Asset Fund	50.1	50.0	49.8	52.4	49.7	49.3	49.4	56.1
Qualifying Hedge Fund	45.3	45.7	44.6	45.6	43.2	43.4	43.5	44.7
Hedge Fund	40.9	41.6	41.3	42.1	39.9	39.8	40.0	41.1
Real Estate Fund	13.9	13.6	14.0	13.2	12.3	12.2	12.5	14.0
Section 4 Private Equity Fund	4.9	4.9	4.9	5.4	5.5	5.4	5.4	5.7
Private Equity Fund	4.7	4.7	4.7	5.5	5.5	5.5	5.5	5.7
Other Private Fund	4.9	4.1	3.9	3.5	3.6	3.5	3.7	5.5
Venture Capital Fund	0.5	0.5	0.5	0.7	0.7	0.7	0.7	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

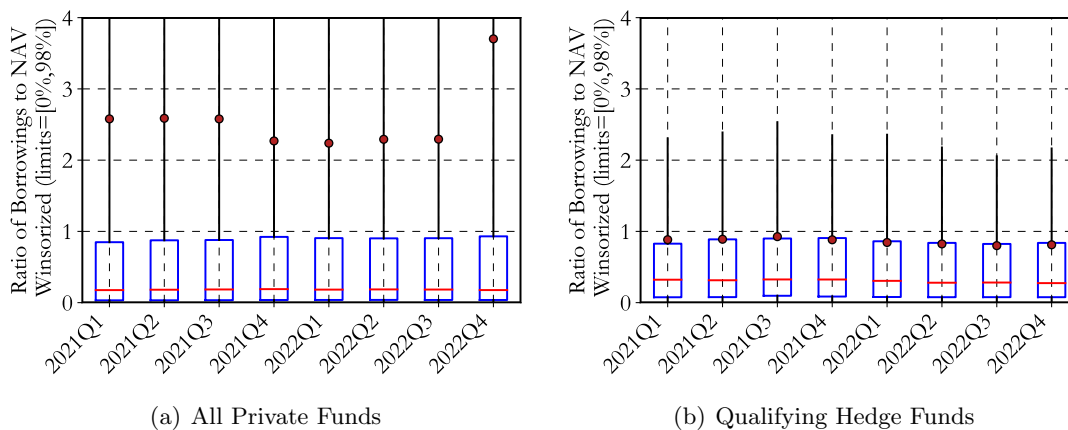
**Figure 3:** Distribution of Total Borrowings for All Private Funds and Qualifying Hedge Funds

See Appendix C for an explanation of boxplots.  
As reported on Form PF, Questions 12 and 43 (Third Month).



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

See Appendix C and Appendix D for an explanation of boxplots and winsorization.  
As reported on Form PF, Questions 9, 10, 12, and 43 (Third Month).



**Table 6: Aggregate Borrowing by Creditor Entity Type (Percent)**  
As reported on Form PF, Questions 12 and 43 (Third Month).

Creditor Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
US Financial	67.2	67.7	67.0	67.1	66.4	66.6	67.7	68.8
Non-US Financial	30.1	29.9	30.5	29.3	30.5	30.3	28.8	27.1
US Non-Financial	2.4	2.2	2.3	2.8	3.1	3.0	3.3	3.3
Non-US Non-Financial	1.0	0.9	0.9	1.0	0.9	0.9	1.0	0.9

## C Fair Value Hierarchy

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Level One	4,279	4,315	4,384	4,669	4,638	4,590	4,562	4,143
Level Two	3,636	3,646	3,648	3,842	3,828	3,834	3,798	3,593
Level Three	5,173	5,204	5,274	6,803	6,832	6,843	6,804	7,561
Cost-Based	2,340	2,333	2,323	2,853	2,878	2,859	2,868	3,075

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Level One	1,336	1,340	1,342	1,691	1,691	1,684	1,690	1,580
Level Two	1,174	1,178	1,196	1,362	1,350	1,369	1,328	1,492
Level Three	296	303	338	377	377	340	342	378
Cost-Based	2,081	2,075	2,071	2,274	2,270	2,271	2,278	2,579

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

**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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Hedge Fund	581	575	559	570	579	577	575	565
Other Private Fund	475	487	485	504	503	502	498	476
Private Equity Fund	311	312	312	303	303	315	314	327
Qualifying Hedge Fund	199	200	207	209	210	201	207	213
Section 4 Private Equity Fund	103	115	115	137	137	137	137	146
Real Estate Fund	73	73	73	89	89	89	89	67
Venture Capital Fund	17	17	17	30	30	30	30	39
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	11	11	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
<b>Total</b>	1,470	1,478	1,459	1,508	1,516	1,525	1,518	1,484

**Table 10:** Aggregate Value in Parallel Managed Accounts (\$ Billions)

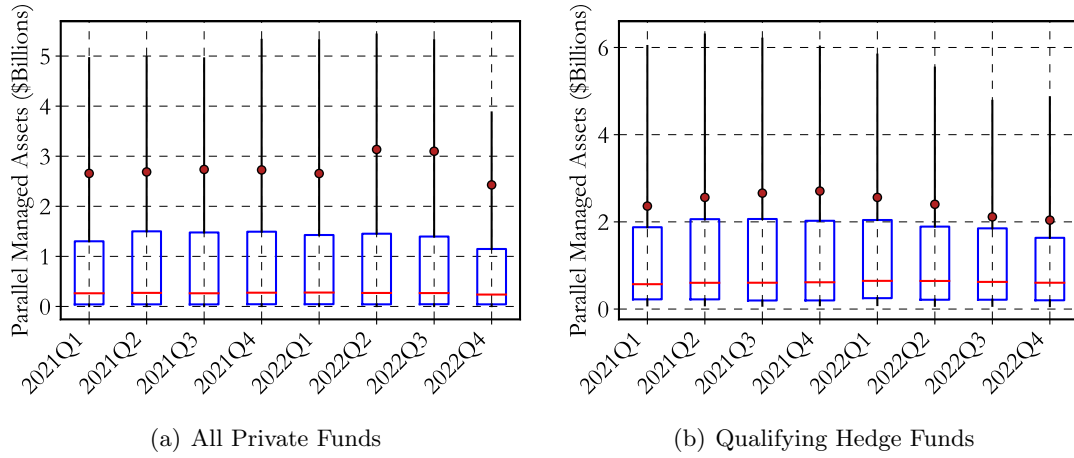
As reported on Form PF, Question 11.

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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Hedge Fund	768	808	840	880	839	765	729	725
Other Private Fund	2,620	2,647	2,641	2,674	2,671	3,451	3,416	2,366
Private Equity Fund	98	98	98	119	120	152	152	114
Qualifying Hedge Fund	470	512	551	566	538	483	438	435
Section 4 Private Equity Fund	44	68	68	102	102	110	110	114
Real Estate Fund	7	7	7	16	16	16	16	14
Venture Capital Fund	1	1	1	2	2	2	2	2
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	411	396	***	***	***	***	***	***
Securitized Asset Fund	***	***	***	***	***	***	***	***
<b>Total</b>	3,905	3,970	3,992	4,111	4,024	4,781	4,704	3,602

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

**Figure 5: Parallel Managed Account Value Distributions**  
See Appendix C for an explanation of boxplots.  
As reported on Form PF, Question 11.



### III Fund Domiciles and Adviser Main Offices

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

All Private Funds								
Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
United States	50.9	50.0	49.5	51.8	52.3	52.6	52.9	52.7
Cayman Islands	34.2	34.3	34.8	32.8	32.7	32.4	32.7	32.2
Luxembourg	3.6	3.7	3.7	4.1	4.1	4.1	4.1	5.0
Ireland	4.1	4.1	4.0	3.9	3.9	3.9	3.9	3.6
Bermuda	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0
United Kingdom	1.0	0.9	0.9	1.0	0.9	0.9	0.9	0.9
Virgin Islands, British	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8
Other	4.1	5.0	5.0	4.7	4.2	4.2	3.6	3.7
Qualifying Hedge Funds								
Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Cayman Islands	52.7	51.6	51.7	51.7	51.0	52.3	53.1	52.5
United States	35.0	34.1	33.9	34.2	34.9	35.7	35.0	35.6
Ireland	3.1	3.2	3.2	3.2	3.1	3.0	2.8	3.0
Virgin Islands, British	2.8	2.7	2.7	2.6	2.8	3.1	3.1	2.9
Luxembourg	2.6	2.5	2.6	2.4	2.4	2.4	2.3	2.7
Bermuda	1.7	1.6	1.5	1.5	1.7	1.7	1.9	1.9
Other	2.1	4.3	4.5	4.2	4.2	1.8	1.7	1.4
Section 3 Liquidity Funds								
Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Ireland	***	***	***	***	***	***	***	***
United States	28.0	27.8	26.6	27.6	28.5	27.3	25.5	23.4
Cayman Islands	***	***	***	***	***	***	***	***
Other	***	***	***	***	***	***	***	***
Section 4 Private Equity Funds								
Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
United States	55.2	55.2	55.2	56.1	56.9	56.9	56.9	56.0
Cayman Islands	29.0	28.9	28.9	29.3	29.6	29.6	29.6	28.1
Canada	2.2	2.2	2.2	2.0	1.9	1.9	1.9	2.0
United Kingdom	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4
Bermuda	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.0
Other	11.0	11.1	11.1	9.9	9.0	9.0	9.0	11.4

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

<b>All Private Funds</b>								
Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
United States	90.3	89.4	89.6	91.2	90.9	91.7	91.9	92.3
United Kingdom	4.8	4.8	4.6	3.9	4.0	3.9	3.9	3.7
Other	4.9	5.9	5.8	4.9	5.1	4.3	4.2	4.0
<b>Qualifying Hedge Funds</b>								
Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
United States	89.6	87.6	88.0	88.1	88.5	90.7	91.1	90.5
United Kingdom	4.4	4.3	4.1	4.1	3.9	3.7	3.5	4.1
Australia	***	***	***	***	***	***	***	***
Hong Kong	***	***	***	***	***	***	***	***
Other	1.8	4.0	4.1	4.1	4.1	2.2	2.2	3.0
<b>Section 3 Liquidity Funds</b>								
Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
United States	***	***	***	***	***	***	***	***
United Kingdom	***	***	***	***	***	***	***	***
<b>Section 4 Private Equity Funds</b>								
Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
United States	94.3	94.3	94.3	95.6	95.6	95.6	95.6	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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Private Funds	2,073	2,128	2,131	2,598	2,635	2,593	2,588	2,594
Other	1,861	1,948	1,929	2,445	2,444	2,407	2,414	2,539
State/Muni. Govt. Pension Plans	1,557	1,576	1,587	1,858	1,882	1,871	1,862	1,910
U.S. Individuals	1,196	1,226	1,208	1,422	1,417	1,372	1,366	1,321
Pension Plans	1,265	1,277	1,261	1,370	1,375	1,339	1,270	1,309
Non-Profits	1,170	1,208	1,215	1,316	1,298	1,246	1,256	1,243
Sov. Wealth Funds And For. Official Inst.	844	855	856	1,007	1,000	1,004	1,010	1,082
Insurance Companies	567	583	593	697	704	702	703	747
Non-U.S. Individuals	309	386	384	416	401	396	393	375
Unknown Non-U.S. Investors	269	263	266	317	305	312	305	284
State/Muni. Govt. Entities	199	205	203	232	226	222	223	241
Banking/Thrift Inst.	176	189	188	188	194	193	196	189
Sec-Registered Investment Companies	143	144	138	155	161	151	148	149
Broker-Dealers	110	110	44	42	45	44	42	38

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

Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Private Funds	17.7	17.6	17.8	18.5	18.7	18.7	18.8	18.5
Other	15.8	16.1	16.1	17.4	17.3	17.4	17.5	18.1
State/Muni. Govt. Pension Plans	13.3	13.0	13.2	13.2	13.4	13.5	13.5	13.6
U.S. Individuals	10.2	10.1	10.1	10.1	10.1	9.9	9.9	9.4
Pension Plans	10.8	10.5	10.5	9.7	9.8	9.7	9.2	9.3
Non-Profits	10.0	10.0	10.1	9.4	9.2	9.0	9.1	8.9
Sov. Wealth Funds And For. Official Inst.	7.2	7.1	7.1	7.2	7.1	7.2	7.3	7.7
Insurance Companies	4.8	4.8	4.9	5.0	5.0	5.1	5.1	5.3
Non-U.S. Individuals	2.6	3.2	3.2	3.0	2.8	2.9	2.8	2.7
Unknown Non-U.S. Investors	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.0
State/Muni. Govt. Entities	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.7
Banking/Thrift Inst.	1.5	1.6	1.6	1.3	1.4	1.4	1.4	1.3
Sec-Registered Investment Companies	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1
Broker-Dealers	0.9	0.9	0.4	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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Private Funds	642	695	724	723	732	701	696	689
Other	523	573	598	607	603	571	563	561
Non-Profits	561	594	601	602	581	546	559	528
State/Muni. Govt. Pension Plans	411	430	447	458	462	453	431	445
U.S. Individuals	454	486	492	493	473	432	423	423
Pension Plans	466	477	476	477	476	449	381	407
Sov. Wealth Funds And For. Official Inst.	237	244	256	264	266	267	266	289
Insurance Companies	121	131	140	144	147	150	149	148
Non-U.S. Individuals	113	186	185	181	171	107	102	102
State/Muni. Govt. Entities	56	62	59	62	61	58	59	59
Unknown Non-U.S. Investors	63	80	89	86	82	46	42	46
Banking/Thrift Inst.	40	43	42	41	40	38	41	38
Sec-Registered Investment Companies	41	42	42	38	39	39	38	38
Broker-Dealers	5	6	8	9	9	9	8	9

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

As reported on Form PF, Questions 9 and 16.

Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Private Funds	17.2	17.1	17.4	17.3	17.7	18.1	18.5	18.2
Other	14.0	14.1	14.4	14.5	14.6	14.7	15.0	14.8
Non-Profits	15.0	14.7	14.5	14.4	14.0	14.1	14.8	13.9
State/Muni. Govt. Pension Plans	11.0	10.6	10.7	10.9	11.1	11.7	11.5	11.8
U.S. Individuals	12.1	12.0	11.8	11.8	11.4	11.2	11.2	11.2
Pension Plans	12.5	11.8	11.4	11.4	11.5	11.6	10.1	10.8
Sov. Wealth Funds And For. Official Inst.	6.3	6.0	6.1	6.3	6.4	6.9	7.1	7.6
Insurance Companies	3.2	3.2	3.4	3.4	3.5	3.9	4.0	3.9
Non-U.S. Individuals	3.0	4.6	4.5	4.3	4.1	2.8	2.7	2.7
State/Muni. Govt. Entities	1.5	1.5	1.4	1.5	1.5	1.5	1.6	1.5
Unknown Non-U.S. Investors	1.7	2.0	2.1	2.1	2.0	1.2	1.1	1.2
Banking/Thrift Inst.	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.0
Sec-Registered Investment Companies	1.1	1.0	1.0	0.9	0.9	1.0	1.0	1.0
Broker-Dealers	0.1	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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Other	83	105	101	96	103	100	106	108
Unknown Non-U.S. Investors	73	57	50	60	51	64	68	65
Private Funds	55	52	50	57	58	65	64	56
Banking/Thrift Inst.	***	24	***	***	***	***	***	***
Broker-Dealers	***	***	***	***	***	***	***	***
Sec-Registered Investment Companies	24	25	27	23	24	16	15	14
Insurance Companies	11	11	9	9	8	9	8	10
Pension Plans	7	8	7	7	5	5	***	***
Non-U.S. Individuals	***	4	3	***	***	***	***	***
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	3	***	***	***	***
Non-Profits	3	3	3	4	3	3	3	2
State/Muni. Govt. Pension Plans	1	1	1	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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Other	27.4	33.1	33.8	31.0	33.4	30.8	32.4	34.1
Unknown Non-U.S. Investors	24.1	18.0	16.7	19.2	16.6	19.9	20.7	20.6
Private Funds	18.1	16.5	16.5	18.5	18.6	19.9	19.6	17.8
Banking/Thrift Inst.	***	7.4	***	***	***	***	***	***
Broker-Dealers	***	***	***	***	***	***	***	***
Sec-Registered Investment Companies	7.9	7.8	8.9	7.5	7.8	4.9	4.6	4.3
Insurance Companies	3.6	3.5	3.2	2.8	2.6	2.8	2.5	3.0
Pension Plans	2.3	2.4	2.4	2.3	1.7	1.5	***	***
Non-U.S. Individuals	***	1.1	0.9	***	***	***	***	***
Sov. Wealth Funds And For. Official Inst.	***	***	***	***	***	***	***	***
State/Muni. Govt. Entities	***	***	***	1.0	***	***	***	***
Non-Profits	1.0	1.0	1.1	1.2	1.0	0.9	0.8	0.8
State/Muni. Govt. Pension Plans	0.3	0.3	0.4	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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Private Funds	659	662	662	957	974	973	973	1,033
State/Muni. Govt. Pension Plans	654	655	655	836	850	851	851	887
Other	544	544	544	819	802	802	802	886
Sov. Wealth Funds And For. Official Inst.	387	388	388	501	477	477	477	525
Pension Plans	246	247	247	324	325	326	326	364
Insurance Companies	190	190	190	252	255	256	256	286
Non-Profits	180	180	180	237	238	238	238	259
U.S. Individuals	187	187	187	265	265	265	265	245
State/Muni. Govt. Entities	63	63	63	82	82	82	82	95
Non-U.S. Individuals	71	71	71	83	77	77	77	68
Sec-Registered Investment Companies	27	27	27	49	50	50	50	49
Banking/Thrift Inst.	38	38	38	45	49	49	49	47
Unknown Non-U.S. Investors	25	25	25	33	34	34	34	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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Private Funds	20.1	20.2	20.2	21.3	21.7	21.7	21.7	21.6
State/Muni. Govt. Pension Plans	20.0	20.0	20.0	18.6	19.0	19.0	19.0	18.6
Other	16.6	16.6	16.6	18.2	17.9	17.9	17.9	18.5
Sov. Wealth Funds And For. Official Inst.	11.8	11.8	11.8	11.2	10.6	10.6	10.6	11.0
Pension Plans	7.5	7.5	7.5	7.2	7.3	7.3	7.3	7.6
Insurance Companies	5.8	5.8	5.8	5.6	5.7	5.7	5.7	6.0
Non-Profits	5.5	5.5	5.5	5.3	5.3	5.3	5.3	5.4
U.S. Individuals	5.7	5.7	5.7	5.9	5.9	5.9	5.9	5.1
State/Muni. Govt. Entities	1.9	1.9	1.9	1.8	1.8	1.8	1.8	2.0
Non-U.S. Individuals	2.2	2.2	2.2	1.9	1.7	1.7	1.7	1.4
Sec-Registered Investment Companies	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.0
Banking/Thrift Inst.	1.2	1.2	1.2	1.0	1.1	1.1	1.1	1.0
Unknown Non-U.S. Investors	0.8	0.8	0.8	0.7	0.8	0.8	0.8	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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Other Private Fund	59.4	59.4	60.2	57.0	57.5	57.1	57.5	59.2
Real Estate Fund	56.2	56.1	56.1	59.0	59.0	59.0	58.7	56.9
Hedge Fund	55.2	54.3	54.0	53.9	54.6	55.1	54.8	55.4
Qualifying Hedge Fund	50.5	49.7	49.9	50.0	51.0	51.9	51.6	52.1
Private Equity Fund	51.1	51.1	51.1	49.5	49.1	49.2	49.1	49.9
Venture Capital Fund	53.7	53.9	53.9	52.6	52.5	52.3	52.4	49.9
Section 4 Private Equity Fund	46.1	46.2	46.2	44.9	44.7	44.7	44.7	46.6
Liquidity Fund	45.4	47.4	46.3	46.1	48.1	46.7	46.0	45.1
Section 3 Liquidity Fund	45.2	47.1	46.0	45.8	47.7	46.4	45.5	44.8
Securitized Asset Fund	35.3	35.0	35.0	37.3	37.5	37.6	37.8	42.8
<b>Total</b>	<b>53.6</b>	<b>53.3</b>	<b>53.2</b>	<b>52.2</b>	<b>52.4</b>	<b>52.5</b>	<b>52.4</b>	<b>52.9</b>

## 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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Hedge Fund	15,204	16,252	15,822	15,430	15,866	14,941	14,489	14,922
Qualifying Hedge Fund	13,429	14,363	14,416	14,072	14,268	13,256	12,922	13,050
Private Equity Fund	66	66	66	70	69	69	71	158
Other Private Fund	138	134	133	118	110	110	112	105
Section 4 Private Equity Fund	34	34	34	52	54	54	54	73
Real Estate Fund	18	18	18	41	41	41	41	72
Securitized Asset Fund	3	3	3	5	5	5	5	***
Venture Capital Fund	***	***	***	***	***	***	***	0
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	0	0	0
<b>Total</b>	<b>15,472</b>	<b>16,500</b>	<b>16,028</b>	<b>15,692</b>	<b>16,050</b>	<b>15,173</b>	<b>14,730</b>	<b>15,302</b>

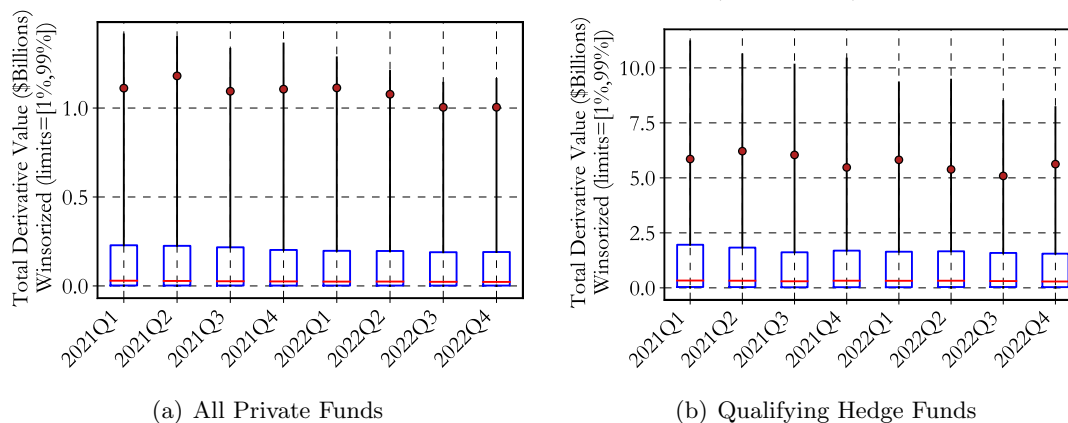
**Table 23:** Aggregate Derivative Value (Percent of Aggregate NAV)

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

Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Hedge Fund	316.1	316.8	309.6	300.8	308.2	304.2	298.8	310.1
Qualifying Hedge Fund	359.4	354.3	346.4	336.1	344.3	342.4	343.3	344.9
Private Equity Fund	1.5	1.6	1.6	1.2	1.2	1.2	1.2	2.6
Other Private Fund	10.5	10.0	10.4	7.6	7.0	7.1	7.3	7.5
Section 4 Private Equity Fund	1.0	1.0	1.0	1.2	1.2	1.2	1.2	1.5
Real Estate Fund	2.9	2.9	2.9	5.6	5.6	5.6	5.5	8.4
Securitized Asset Fund	1.3	1.2	1.2	1.8	1.8	1.8	1.8	***
Venture Capital Fund	***	***	***	***	***	***	***	0.1
Liquidity Fund	***	***	***	***	***	***	***	***
Section 3 Liquidity Fund	***	***	***	***	***	0.0	0.0	0.0
<b>Total</b>	<b>131.8</b>	<b>136.3</b>	<b>133.5</b>	<b>111.6</b>	<b>113.9</b>	<b>109.5</b>	<b>106.9</b>	<b>109.1</b>

**Figure 6:** Distribution of Derivative Values

See Appendix C and Appendix D for an explanation of boxplots and winsorization.  
As reported on Form PF, Questions 13 and 44 (Third Month).



## VI 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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
0%	8,200	8,313	8,213	8,389	8,527	8,615	8,674	8,693
Less than 100%	45	49	49	49	52	53	50	56
100% or More	6	6	6	8	8	8	8	5

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

Fraction of NAV	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
0%	4,672	4,986	4,958	4,995	4,995	4,755	4,681	4,660
Less than 100%	103	112	117	115	128	127	135	128
100% or More	4	4	5	6	7	8	8	9

## 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.

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Top 10	7.1	7.0	7.3	7.3	7.6	7.8	8.1	7.8
Top 25	13.3	13.0	13.3	13.3	13.5	13.5	13.7	13.3
Top 50	19.5	19.1	19.4	19.3	19.5	19.5	19.6	19.1
Top 100	27.8	27.5	27.9	27.6	27.6	27.3	27.6	27.0
Top 250	42.7	42.2	42.7	42.2	41.9	41.5	41.6	41.2
Top 500	56.1	55.9	56.2	55.7	55.5	54.8	54.9	54.6

**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.

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Top 10	14.1	14.8	16.2	16.2	15.8	16.7	16.9	17.7
Top 25	22.8	23.7	25.2	25.3	25.6	26.1	25.7	26.4
Top 50	31.6	32.2	33.5	33.5	33.6	34.1	33.8	34.5
Top 100	40.4	40.8	42.3	41.9	41.9	42.4	42.4	43.1
Top 250	54.2	54.2	55.4	54.9	54.5	54.7	54.7	55.2
Top 500	65.8	65.7	66.8	66.3	66.1	66.0	65.9	66.3

**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).

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Top 10	32.4	31.7	32.2	34.7	34.1	34.6	34.1	36.5
Top 25	47.1	47.5	48.0	49.3	48.6	50.1	50.2	51.1
Top 50	59.7	60.2	60.5	61.4	61.0	61.7	62.0	63.4
Top 100	71.0	70.7	71.1	72.1	71.5	72.0	72.4	73.7
Top 250	83.1	83.0	83.2	83.3	83.4	83.1	83.4	84.2
Top 500	90.7	90.8	90.9	90.9	90.8	90.5	90.6	91.0

**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).

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Top 10	41.5	39.5	40.9	41.3	38.3	39.3	40.7	38.3
Top 25	56.5	55.0	57.0	55.8	55.3	55.6	56.0	55.4
Top 50	67.8	67.3	69.4	67.7	67.9	67.4	68.2	68.8
Top 100	78.0	78.2	79.6	78.4	79.2	78.9	79.7	80.3
Top 250	89.2	89.3	90.4	89.7	90.3	90.0	90.2	90.6
Top 500	94.9	95.0	95.5	95.2	95.4	95.2	95.3	95.5

**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).

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Top 10	36.7	34.8	35.1	35.5	34.7	34.6	34.6	34.3
Top 25	50.2	48.5	49.8	48.7	48.7	49.2	49.8	50.1
Top 50	60.6	59.6	60.8	59.9	60.1	60.6	60.9	61.5
Top 100	71.3	70.0	71.0	70.2	70.9	70.9	71.7	72.6
Top 250	83.4	82.8	83.4	82.6	82.9	82.8	83.3	84.0
Top 500	91.3	90.9	91.1	90.7	90.8	90.5	90.8	91.1



## 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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
	Subtotal	642	666	654	680	637	589	555	552
Equity	Long/Short	288	310	307	326	311	280	273	272
	Long Bias	329	327	319	324	298	273	251	252
	Market Neutral	25	28	27	***	26	***	29	28
	Short Bias	1	1	1	***	1	***	2	1
	Subtotal	561	589	595	625	649	648	656	655
Other	Subtotal	122	126	134	141	144	144	150	163
Credit	Asset Based Lending	55	57	62	70	73	72	77	86
	Long/Short	67	68	72	71	72	72	73	77
Event Driven	Subtotal	56	61	66	74	76	75	76	83
	Distressed/Restruct.	37	41	47	43	46	47	48	50
	Equity	12	14	13	20	19	18	19	26
	Risk Arb./Merger Arb.	6	6	6	11	10	10	9	7
	Subtotal	49	48	49	55	55	56	55	59
Relative Value	F.I. Asset Backed	29	28	30	31	32	32	32	37
	F.I. Corp.	9	9	9	11	11	11	11	11
	F.I. Conv. Arb.	8	8	7	9	9	9	8	7
	Volatility Arb.	1	1	1	2	2	3	3	3
	F.I. Sov.	1	1	1	1	1	2	1	2
Investment in other funds	Subtotal	31	32	32	33	34	33	32	32
Macro	Subtotal	13	13	13	13	15	15	16	14
	Global Macro	10	9	10	9	10	10	11	9
	Commodity	***	***	3	3	4	4	4	4
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
	Subtotal	6	6	6	6	7	6	6	6
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
<b>Total</b>	<b>Total</b>	<b>1,314</b>	<b>1,369</b>	<b>1,383</b>	<b>1,437</b>	<b>1,433</b>	<b>1,386</b>	<b>1,368</b>	<b>1,385</b>

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

Category	Strategy	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
	Subtotal	1,024	1,031	1,035	1,128	1,150	1,153	1,156	1,139
Equity	Long/Short	441	451	458	471	480	475	474	496
	Long Bias	534	528	527	605	616	624	627	589
	Market Neutral	46	46	45	***	51	***	51	47
	Short Bias	11	11	11	***	8	***	9	13
Other	Subtotal	979	1,003	1,017	1,034	1,070	1,093	1,114	1,173
Credit	Subtotal	357	366	373	383	394	404	422	431
	Asset Based Lending	185	193	198	197	200	197	207	214
	Long/Short	175	176	178	189	197	210	218	220
Event Driven	Subtotal	231	239	236	243	259	270	276	298
	Distressed/Restruct.	161	165	166	164	179	189	195	212
	Equity	53	56	52	59	60	60	61	68
	Risk Arb./Merger Arb.	21	22	21	21	21	21	21	19
Relative Value	Subtotal	177	174	174	186	189	198	201	212
	F.I. Asset Backed	95	95	96	94	93	99	100	107
	F.I. Corp.	50	45	48	55	54	59	58	58
	F.I. Conv. Arb.	18	19	18	20	22	23	26	26
	Volatility Arb.	13	12	11	19	19	20	20	18
Investment in other funds	F.I. Sov.	17	16	15	18	14	19	19	18
	Subtotal	239	233	238	241	260	261	257	306
Macro	Subtotal	46	46	43	45	48	48	45	44
	Global Macro	24	24	22	18	19	19	19	18
	Commodity	***	***	13	15	17	17	16	15
	Active Trading	***	***	***	***	***	***	***	***
	Currency	***	***	***	***	***	***	***	***
Managed Futures/CTA	Subtotal	27	27	24	24	24	23	22	23
	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
<b>Total</b>	<b>Total</b>	<b>2,853</b>	<b>2,908</b>	<b>2,931</b>	<b>3,079</b>	<b>3,175</b>	<b>3,216</b>	<b>3,265</b>	<b>3,358</b>

## 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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
	Subtotal	1,160	1,280	1,275	1,270	1,143	1,015	962	1,013
Equity	Long/Short	779	830	825	813	728	647	617	665
	Long Bias	296	357	360	356	321	280	259	261
	Market Neutral	***	***	***	***	***	***	***	***
	Short Bias	***	***	***	***	***	***	***	***
	Subtotal	656	745	761	767	776	736	715	758
Other	Subtotal	410	423	445	456	434	442	409	369
Relative Value	F.I. Sov.	274	283	299	315	284	309	283	248
	F.I. Asset Backed	80	78	79	77	75	75	74	71
	Volatility Arb.	17	19	22	22	24	27	23	20
	F.I. Corp.	24	27	28	27	28	18	17	17
	F.I. Conv. Arb.	15	16	17	16	22	13	12	12
	Subtotal	376	401	381	261	280	299	321	320
Macro	Global Macro	365	389	369	250	269	288	306	307
	Commodity	7	9	8	8	8	8	6	7
	Currency	***	***	***	***	***	***	***	***
	Active Trading	***	***	***	***	***	***	***	***
	Subtotal	247	303	325	287	297	290	309	314
Credit	Long/Short	185	238	229	210	217	207	219	221
	Asset Based Lending	62	66	96	77	81	83	89	93
	Subtotal	167	201	233	209	231	206	240	190
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
	Subtotal	168	182	178	185	185	180	173	166
Event Driven	Distressed/Restruct.	103	110	112	117	120	120	119	117
	Equity	29	31	33	35	34	30	25	28
	Risk Arb./Merger Arb.	35	41	33	33	30	30	29	21
Investment in other funds	Subtotal	35	34	35	33	33	30	30	27
<b>Total</b>	<b>Total</b>	<b>2,205</b>	<b>2,415</b>	<b>2,464</b>	<b>2,432</b>	<b>2,390</b>	<b>2,215</b>	<b>2,140</b>	<b>2,145</b>

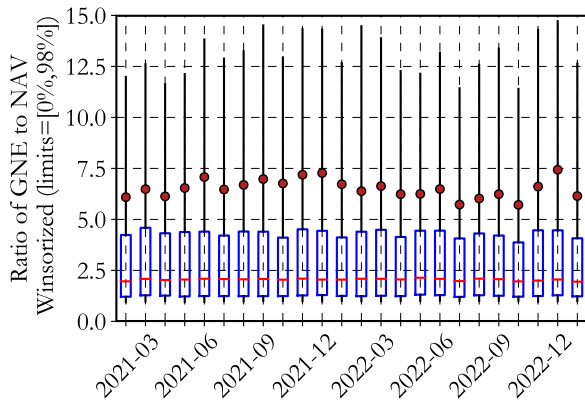
**Table 34:** Number of Single-Strategy Non-US-Domiciled Hedge Funds  
As reported on Form PF, Questions 9, 19, and 20.

Category	Strategy	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
	Subtotal	1,050	1,084	1,072	1,093	1,097	1,096	1,093	1,068
Equity	Long/Short	609	612	607	630	631	631	629	598
	Long Bias	342	375	379	391	394	388	385	385
	Market Neutral	***	***	***	***	***	***	***	***
	Short Bias	***	***	***	***	***	***	***	***
Other	Subtotal	826	881	857	853	875	892	881	914
	Subtotal	305	307	304	304	302	301	305	294
Relative Value	F.I. Sov.	57	55	54	60	59	59	61	60
	F.I. Asset Backed	149	151	147	149	146	148	150	139
	Volatility Arb.	26	25	25	27	26	25	24	29
	F.I. Corp.	92	98	98	91	92	88	90	87
	F.I. Conv. Arb.	27	25	27	24	25	26	24	24
Macro	Subtotal	212	211	206	209	213	212	214	215
	Global Macro	162	161	159	161	167	171	169	163
	Commodity	40	38	34	42	40	38	39	45
	Currency	***	***	***	***	***	***	***	***
	Active Trading	***	***	***	***	***	***	***	***
Credit	Subtotal	342	358	356	353	368	370	381	378
	Long/Short	242	254	249	248	260	260	267	267
	Asset Based Lending	103	107	111	108	111	113	117	114
Managed Futures/CTA	Subtotal	118	120	123	108	113	120	121	125
	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Event Driven	Subtotal	313	318	321	310	316	318	314	313
	Distressed/Restruct.	218	220	223	214	221	223	223	219
	Equity	82	80	79	74	70	70	69	75
	Risk Arb./Merger Arb.	43	48	47	48	50	49	47	43
Investment in other funds	Subtotal	130	104	102	103	101	104	108	106
<b>Total</b>	<b>Total</b>	<b>3,099</b>	<b>3,180</b>	<b>3,131</b>	<b>3,103</b>	<b>3,158</b>	<b>3,185</b>	<b>3,186</b>	<b>3,195</b>

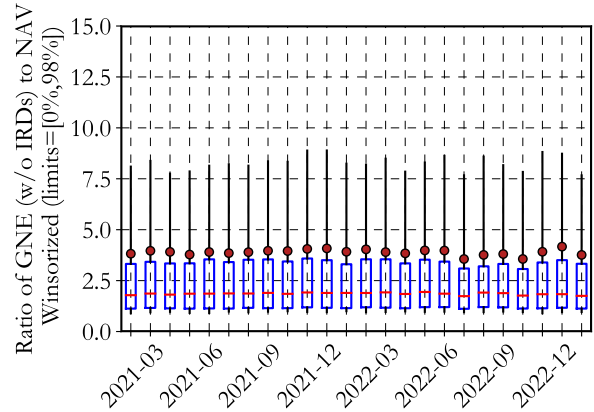
## VII Information Reported by Large Hedge Fund Advisers

### A Economic Leverage

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

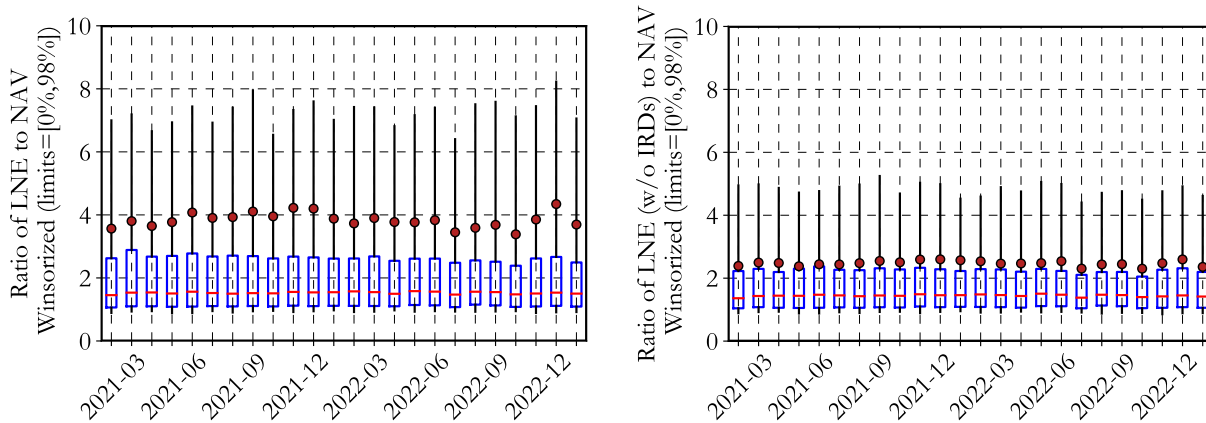


(a) Gross Exposure with Interest Rate Derivatives (IRDs)



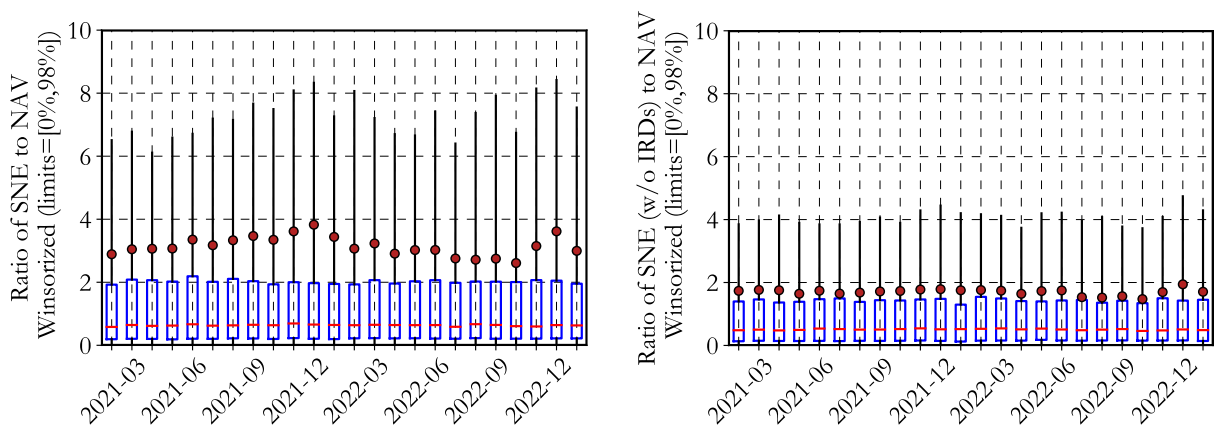
(b) Gross Exposure without IRDs

**Figure 8: Ratio of Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value Distribution**  
 See Appendix C and Appendix D for an explanation of boxplots and winsorization.  
 As reported on Form PF, Questions 3(a) and 26.



(a) Long Exposure with IRDs

(b) Long Exposure without IRDs



(c) Short Exposure with IRDs

(d) Short Exposure without IRDs

## 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)
2021-01	16.2	26.2	40.2	55.7
2021-02	16.2	26.2	42.1	57.5
2021-03	16.2	26.2	41.4	55.8
2021-04	16.3	26.5	40.7	55.5
2021-05	16.3	26.5	40.4	55.7
2021-06	16.3	26.5	40.0	54.8
2021-07	16.3	26.6	40.7	56.9
2021-08	17.0	27.5	39.3	56.3
2021-09	17.0	27.5	38.8	55.7
2021-10	17.1	27.4	38.4	56.4
2021-11	17.1	27.4	38.5	56.5
2021-12	17.1	27.4	38.2	54.9
2022-01	17.5	28.2	39.0	55.4
2022-02	16.8	27.3	38.5	55.8
2022-03	16.8	27.3	38.3	55.2
2022-04	17.1	28.0	42.8	57.6
2022-05	17.2	28.1	42.5	58.4
2022-06	17.2	28.1	38.4	55.2
2022-07	17.5	28.3	39.4	57.5
2022-08	17.5	28.3	39.3	57.9
2022-09	17.5	28.3	39.1	56.9
2022-10	17.4	28.2	38.2	56.6
2022-11	17.4	28.2	39.1	58.6
2022-12	17.4	28.2	39.0	56.5

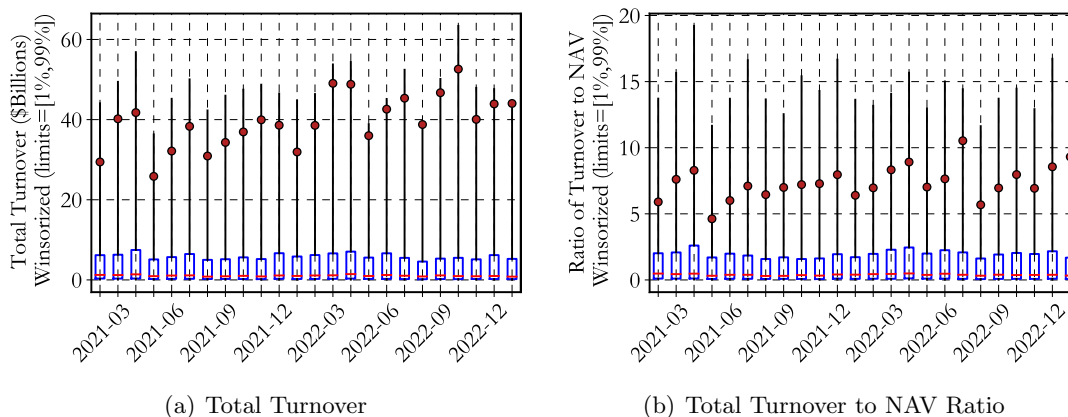
### C Portfolio Turnover

**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
2021-01	10,690	4,417	3,454	176	58	18,794
2021-02	17,637	5,555	3,460	175	63	26,891
2021-03	18,604	5,492	4,130	189	63	28,477
2021-04	9,445	4,022	3,210	173	51	16,902
2021-05	13,934	4,403	3,375	157	44	21,912
2021-06	16,641	5,152	3,678	151	48	25,671
2021-07	11,986	5,097	3,158	142	29	20,411
2021-08	13,952	5,423	3,100	140	39	22,654
2021-09	15,988	5,468	3,436	167	54	25,112
2021-10	19,432	5,646	3,403	182	38	28,701
2021-11	17,055	6,181	3,775	164	53	27,228
2021-12	14,329	4,656	3,842	120	38	22,986
2022-01	16,568	5,313	3,948	188	40	26,056
2022-02	21,266	6,327	3,792	292	35	31,712
2022-03	23,015	5,986	4,526	255	36	33,818
2022-04	16,025	4,574	3,676	223	27	24,525
2022-05	19,479	5,143	4,252	339	30	29,242
2022-06	22,129	4,903	3,892	312	24	31,261
2022-07	19,117	4,389	3,022	318	17	26,862
2022-08	23,968	5,152	3,433	236	29	32,819
2022-09	29,032	4,931	3,531	205	25	37,724
2022-10	20,479	4,372	4,302	185	32	29,370
2022-11	25,693	5,199	4,375	201	29	35,497
2022-12	25,184	4,522	4,027	149	19	33,902

**Figure 9:** Distributions of Portfolio Turnover

See Appendix C and Appendix D for an explanation of boxplots and winsorization.  
As reported on Form PF, Questions 3(a) and 27.





## D Region and Country Exposure

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

Region	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
North America	5,271	5,579	5,837	5,931	5,851	5,581	5,424	5,549
Europe EEA	1,353	1,487	1,594	1,478	1,633	1,480	1,433	1,659
Asia	782	816	800	767	716	713	737	750
Europe Other	291	313	313	305	416	324	336	359
South America	84	91	86	86	92	81	81	86
Supranational	45	47	51	48	42	38	32	27
Middle East	28	54	31	30	27	26	46	26
Africa	34	38	32	26	28	22	21	24

**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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
North America	127.8	127.6	128.4	130.9	132.1	132.0	131.4	134.0
Europe EEA	32.8	34.0	35.1	32.6	36.9	35.0	34.7	40.1
Asia	19.0	18.7	17.6	16.9	16.2	16.9	17.9	18.1
Europe Other	7.1	7.2	6.9	6.7	9.4	7.7	8.1	8.7
South America	2.0	2.1	1.9	1.9	2.1	1.9	2.0	2.1
Supranational	1.1	1.1	1.1	1.1	0.9	0.9	0.8	0.7
Middle East	0.7	1.2	0.7	0.7	0.6	0.6	1.1	0.6
Africa	0.8	0.9	0.7	0.6	0.6	0.5	0.5	0.6

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

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

Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
United States	5,014	5,284	5,472	5,540	5,541	5,286	5,146	5,278
Japan	209	219	233	217	213	240	266	337
China (Inc. Hong Kong)	280	284	251	239	204	198	174	171
India	46	52	53	51	48	47	49	44
Brazil	33	43	33	33	39	34	34	34
Russia	16	18	16	16	5	5	5	3

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

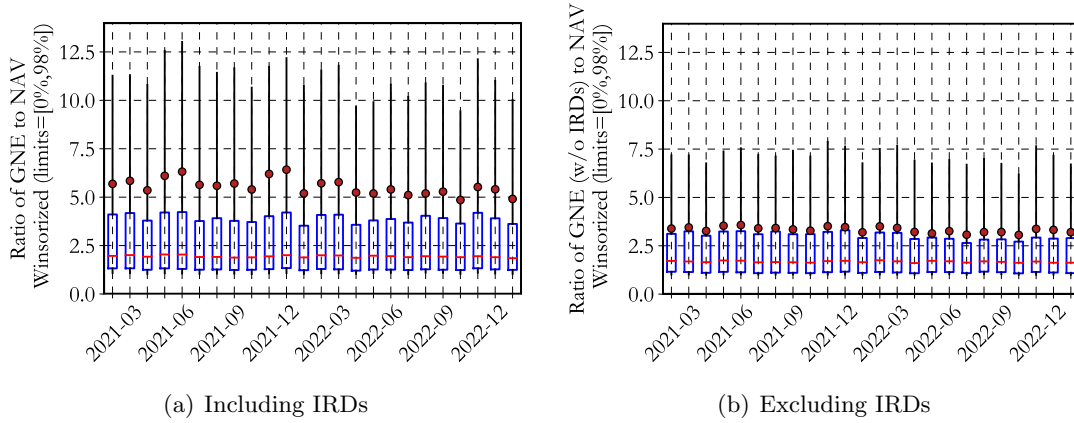
As reported on Form PF, Questions 3(a) and 28.

Country	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
United States	121.6	120.9	120.4	122.3	125.1	125.0	124.7	127.5
Japan	5.1	5.0	5.1	4.8	4.8	5.7	6.4	8.1
China (Inc. Hong Kong)	6.8	6.5	5.5	5.3	4.6	4.7	4.2	4.1
India	1.1	1.2	1.2	1.1	1.1	1.1	1.2	1.1
Brazil	0.8	1.0	0.7	0.7	0.9	0.8	0.8	0.8
Russia	0.4	0.4	0.3	0.3	0.1	0.1	0.1	0.1

## VIII Qualifying Hedge Fund Specific Information

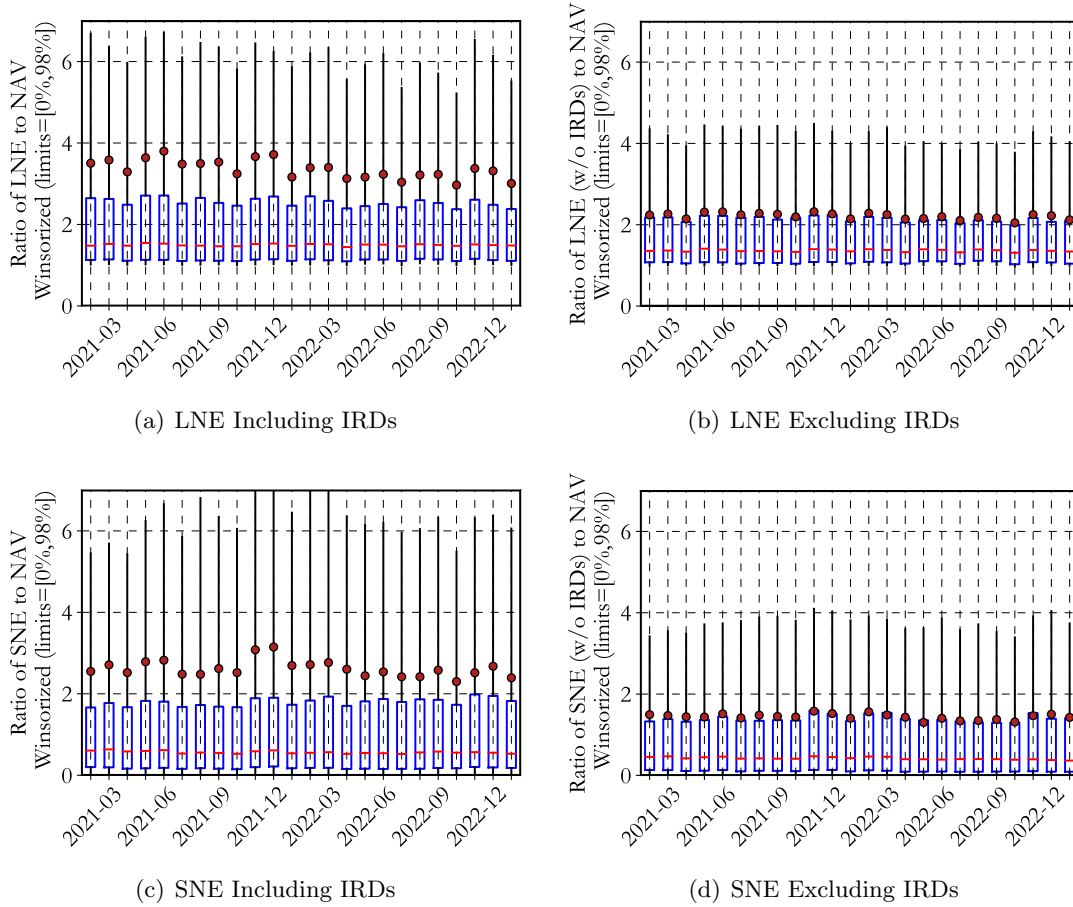
### A Economic Leverage

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



**Figure 11: Ratio of Qualifying Hedge Fund Long Notional Exposure (LNE) and Short Notional Exposure (SNE) to Net Asset Value**

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



## B Gross Exposure by Strategy<sup>5</sup>

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

Category	Strategy	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
	Subtotal	2,036	2,244	2,229	2,252	2,031	1,773	1,684	1,793
Equity	Long/Short	1,114	1,205	1,201	1,212	1,100	970	938	1,016
	Long Bias	574	649	649	643	577	467	414	438
	Market Neutral	***	390	***	396	***	***	***	***
	Short Bias	***	0	***	0	***	***	***	***
	Subtotal	1,247	1,365	1,427	1,456	1,483	1,440	1,427	1,456
Other	Subtotal	981	1,031	1,035	1,063	1,043	1,028	968	950
Relative Value	F.I. Sov.	647	692	691	709	676	684	638	627
	F.I. Asset Backed	103	95	100	102	110	113	115	121
	F.I. Conv. Arb.	129	133	126	123	112	89	84	82
	F.I. Corp.	58	63	61	63	70	62	60	66
	Volatility Arb.	43	48	57	65	74	79	72	54
	Subtotal	738	814	888	789	850	867	879	923
Macro	Global Macro	667	736	785	699	740	737	740	826
	Commodity	34	44	66	54	73	88	92	58
	Currency	***	***	34	***	***	39	44	37
	Active Trading	***	***	4	***	***	2	2	2
	Subtotal	415	448	453	479	485	482	507	527
Credit	Long/Short	317	346	348	359	359	350	367	378
	Asset Based Lending	98	102	105	119	127	132	140	149
	Subtotal	408	452	449	458	429	403	394	371
Event Driven	Distressed/Restruct.	180	186	202	205	202	201	201	203
	Equity	116	138	141	145	136	112	101	96
	Risk Arb./Merger Arb.	111	129	107	108	91	90	93	72
	Subtotal	169	215	246	222	238	215	258	196
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Investment in other funds	Subtotal	51	54	57	65	75	69	68	71
<b>Total</b>	<b>Total</b>	6,045	6,623	6,785	6,783	6,633	6,277	6,185	6,288

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

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

Category	Strategy	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
	Subtotal	54.5	55.4	53.6	53.8	49.0	45.8	44.7	47.4
Equity	Long/Short	29.8	29.7	28.8	29.0	26.5	25.0	24.9	26.9
	Long Bias	15.4	16.0	15.6	15.4	13.9	12.1	11.0	11.6
	Market Neutral	***	9.6	***	9.5	***	***	***	***
	Short Bias	***	0.0	***	0.0	***	***	***	***
Other	Subtotal	33.4	33.7	34.3	34.8	35.8	37.2	37.9	38.5
	Subtotal	26.2	25.4	24.9	25.4	25.2	26.6	25.7	25.1
Relative Value	F.I. Sov.	17.3	17.1	16.6	16.9	16.3	17.7	16.9	16.6
	F.I. Asset Backed	2.8	2.3	2.4	2.4	2.7	2.9	3.1	3.2
	F.I. Conv. Arb.	3.5	3.3	3.0	2.9	2.7	2.3	2.2	2.2
	F.I. Corp.	1.6	1.6	1.5	1.5	1.7	1.6	1.6	1.7
	Volatility Arb.	1.2	1.2	1.4	1.5	1.8	2.0	1.9	1.4
	Subtotal	19.8	20.1	21.3	18.8	20.5	22.4	23.3	24.4
Macro	Global Macro	17.9	18.2	18.9	16.7	17.8	19.0	19.7	21.8
	Commodity	0.9	1.1	1.6	1.3	1.8	2.3	2.4	1.5
	Currency	***	***	0.8	***	***	1.0	1.2	1.0
	Active Trading	***	***	0.1	***	***	0.1	0.1	0.1
	Subtotal	11.1	11.0	10.9	11.4	11.7	12.4	13.5	13.9
Credit	Long/Short	8.5	8.5	8.4	8.6	8.7	9.0	9.8	10.0
	Asset Based Lending	2.6	2.5	2.5	2.9	3.1	3.4	3.7	3.9
	Subtotal	10.9	11.2	10.8	10.9	10.3	10.4	10.5	9.8
Event Driven	Distressed/Restruct.	4.8	4.6	4.9	4.9	4.9	5.2	5.3	5.4
	Equity	3.1	3.4	3.4	3.5	3.3	2.9	2.7	2.5
	Risk Arb./Merger Arb.	3.0	3.2	2.6	2.6	2.2	2.3	2.5	1.9
	Subtotal	4.5	5.3	5.9	5.3	5.7	5.6	6.8	5.2
Managed Futures/CTA	Quantitative	***	***	***	***	***	***	***	***
	Fundamental	***	***	***	***	***	***	***	***
Investment in other funds	Subtotal	1.4	1.3	1.4	1.6	1.8	1.8	1.8	1.9
<b>Total</b>	<b>Total</b>	161.8	163.4	163.0	162.0	160.1	162.1	164.3	166.3

## 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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Relative Value	5.6	5.7	7.0	7.0	6.0	6.5	6.2	5.9
Macro	4.6	4.8	4.8	4.3	4.6	4.5	4.6	4.9
Multi-Strategy	3.1	3.2	3.3	3.4	3.1	3.0	2.9	3.5
Credit	1.5	1.6	1.5	1.6	1.6	1.6	1.7	1.7
Equity	1.6	1.5	1.5	1.5	1.6	1.6	1.6	1.6
Other	1.4	1.4	1.5	1.5	1.4	1.4	1.5	1.5
Managed Futures/CTA	1.5	1.5	1.5	1.4	1.5	1.9	1.6	1.5
Event Driven	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3
Investment in other funds	1.2	1.3	1.3	1.3	1.2	1.5	1.4	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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Macro	37.8	37.4	35.1	33.2	33.8	30.1	30.4	33.7
Relative Value	24.9	23.3	26.4	27.1	25.4	24.8	23.8	21.3
Multi-Strategy	14.7	16.1	16.2	16.0	14.9	13.2	11.0	14.5
Managed Futures/CTA	19.2	21.4	22.9	16.9	15.0	16.5	14.0	14.3
Equity	3.0	3.0	2.9	3.1	2.9	2.9	3.4	3.5
Credit	3.0	3.2	3.0	3.1	3.2	3.1	3.2	3.2
Investment in other funds	1.9	2.9	3.3	3.3	2.8	4.1	3.9	3.0
Other	3.1	3.2	3.2	3.1	3.1	2.9	2.9	2.9
Event Driven	2.0	2.1	2.0	1.9	1.9	2.0	1.8	1.8

**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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Managed Futures/CTA	38.7	34.0	42.7	48.2	51.0	56.0	54.2	49.3
Macro	42.2	43.7	42.6	44.1	45.4	45.8	43.6	45.2
Multi-Strategy	24.9	25.4	25.4	26.1	23.9	27.7	27.9	30.5
Relative Value	21.9	20.9	21.1	21.8	23.3	23.8	25.0	23.5
Equity	8.0	7.5	8.1	8.5	10.3	12.7	13.7	13.9
Other	12.5	12.2	11.6	11.8	11.3	11.4	12.3	11.5
Event Driven	7.5	7.2	7.7	8.1	10.7	9.6	9.8	9.8
Credit	9.4	8.9	8.8	8.3	6.8	8.3	7.3	8.9
Investment in other funds	1.1	3.0	1.6	8.2	4.9	6.8	5.5	6.1

## 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.

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Interest Rate Derivatives	6,757	7,465	7,593	7,398	7,765	7,156	7,002	7,351
Foreign Exchange Derivatives	3,754	4,071	4,073	3,963	3,811	3,390	3,479	3,074
Repurchase Agreements	1,894	2,071	2,270	2,220	2,196	2,164	2,085	2,129
Non-Financial Listed Equities	2,551	2,836	2,711	2,751	2,486	2,118	2,018	2,089
U.S. Treasury Securities	1,671	1,726	1,733	1,757	1,690	1,523	1,493	1,697
Non-Financial Equity Derivatives	1,620	1,558	1,593	1,580	1,778	1,483	1,460	1,526
Sovereign Bonds - Non-U.S. G10	1,302	1,416	1,472	1,412	1,373	1,377	1,312	1,476
Credit Derivatives	734	714	783	759	746	808	736	680
Cash/Cash Equivalents - Other	503	572	529	573	850	521	504	520
Non-Financial Unlisted Equities	385	433	417	467	480	479	479	483
Commodity Derivatives	367	417	455	393	424	399	376	362
Financial Listed Equities	314	348	361	376	349	307	285	307
Leveraged Loans	223	230	247	261	274	277	281	295
Non-Financial Corporate Bonds	240	272	271	280	272	248	246	254
Other Derivatives	210	215	185	202	215	219	210	242
Cash/Cash Equivalents - Deposits	196	205	240	218	216	224	222	240
Non-U.S. Currency Holdings	207	221	254	216	230	259	220	224
Cash/Cash Equivalents - MMFs	173	172	181	207	198	226	216	213
Sovereign Bonds - Other	278	320	332	308	267	209	181	198
Physical Real Estate	120	130	146	166	176	186	171	186
MBS	184	203	212	205	170	189	183	180
Other Private Funds	145	157	171	177	184	186	185	174
Other Loans (Excluding Repo)	118	123	133	141	144	149	151	155
Non-Financial Convertible Bonds	182	200	178	173	154	125	119	117
Other	95	88	98	112	110	118	112	113
Financial Equity Derivatives	99	110	105	106	102	93	85	88
Financial Corporate Bonds	67	71	73	71	76	71	68	81
U.S. Agency and GSE Securities	39	43	52	46	47	56	46	60
Other ABS/Structured Products	52	62	60	59	63	55	57	57
CDO/CLO	35	37	38	39	39	36	36	40
Financial Unlisted Equities	27	30	27	29	30	27	26	37
U.S. State and Local Bonds	19	19	21	22	19	17	18	16
Registered Investment Companies	18	17	16	16	17	15	14	15
Physical Commodities	5	5	7	6	9	9	3	6
Financial Convertible Bonds	9	10	9	9	8	7	6	6

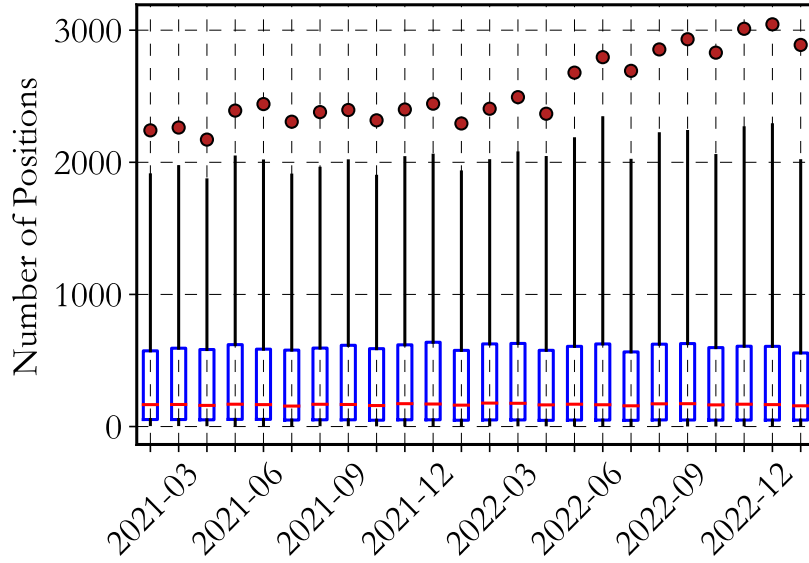


**Table 47:** Percent of Qualifying Hedge Fund Gross Notional Exposure  
Representing Long Notional Exposure  
As reported on Form PF, Questions 26 and 30.

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Interest Rate Derivatives	49.6	48.2	48.2	47.3	48.1	47.4	49.5	50.7
Foreign Exchange Derivatives	58.5	57.7	57.0	55.2	56.0	55.2	54.5	53.1
Repurchase Agreements	45.0	46.5	46.8	48.5	49.0	48.4	47.1	46.4
Non-Financial Listed Equities	70.9	70.1	71.4	71.8	70.3	68.3	67.9	67.5
U.S. Treasury Securities	55.4	56.7	57.2	56.8	59.2	62.8	60.0	59.1
Non-Financial Equity Derivatives	57.0	53.7	51.3	51.9	56.9	50.6	48.3	51.3
Sovereign Bonds - Non-U.S. G10	48.6	50.0	48.5	48.5	47.9	48.2	49.7	48.2
Credit Derivatives	46.7	46.5	46.9	44.5	43.1	40.3	41.3	47.8
Cash/Cash Equivalents - Other	71.4	75.1	73.3	71.8	67.3	77.6	78.6	77.4
Non-Financial Unlisted Equities	99.7	99.7	99.8	99.8	99.6	99.8	99.8	99.6
Commodity Derivatives	67.1	67.0	63.8	65.2	64.3	59.9	55.4	59.0
Financial Listed Equities	72.4	72.3	73.5	73.1	71.4	69.5	68.6	68.1
Leveraged Loans	98.3	99.4	98.0	98.0	98.2	98.7	97.6	97.5
Non-Financial Corporate Bonds	81.9	81.0	79.0	74.5	77.2	75.4	76.4	76.8
Other Derivatives	43.4	48.2	61.3	50.3	50.5	44.8	41.9	40.7
Cash/Cash Equivalents - Deposits	72.9	75.4	72.8	74.9	71.9	67.3	63.6	64.5
Non-U.S. Currency Holdings	53.4	53.5	57.0	62.6	61.8	60.7	62.2	65.8
Cash/Cash Equivalents - MMFs	***	***	***	***	***	99.9	***	99.9
Sovereign Bonds - Other	75.6	69.7	70.3	64.2	63.4	58.5	60.4	63.2
Physical Real Estate	***	***	***	***	***	***	***	***
MBS	82.2	73.6	71.9	70.0	78.4	81.7	83.6	83.6
Other Private Funds	***	99.5	***	99.9	99.9	99.9	99.9	100.0
Other Loans (Excluding Repo)	93.5	93.1	91.7	90.7	91.4	91.6	89.4	91.3
Non-Financial Convertible Bonds	97.9	97.8	97.7	97.9	97.3	97.2	97.5	97.7
Other	94.6	95.3	96.0	94.8	93.4	90.7	90.0	86.4
Financial Equity Derivatives	59.8	60.6	60.1	55.5	54.3	55.6	55.5	59.0
Financial Corporate Bonds	89.5	88.3	87.1	86.4	86.5	87.0	86.3	86.5
U.S. Agency and GSE Securities	72.5	59.3	65.0	62.8	55.3	52.8	61.7	58.8
Other ABS/Structured Products	86.7	84.5	85.3	84.2	80.7	83.5	82.3	86.2
CDO/CLO	***	***	***	***	***	86.3	86.7	88.1
Financial Unlisted Equities	99.7	99.8	99.7	99.7	99.7	99.9	99.9	99.9
U.S. State and Local Bonds	***	***	***	***	***	***	***	***
Registered Investment Companies	***	96.2	97.9	97.8	98.1	98.8	98.3	98.5
Physical Commodities	***	***	98.4	***	99.8	99.4	***	93.9
Financial Convertible Bonds	97.3	95.8	95.0	96.2	96.7	96.3	96.3	98.1

### E Number of Positions

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



## F Liquidity

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

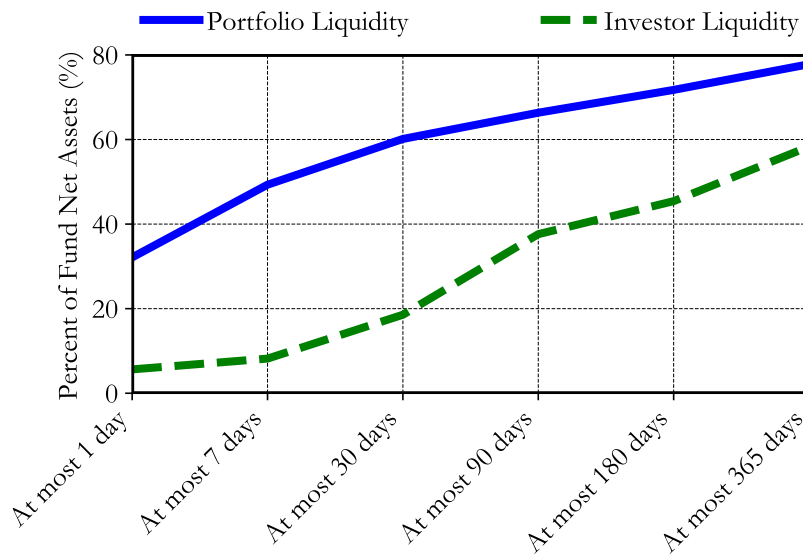
Liquidation Period	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
At most 1 day	6.2	7.8	7.5	7.5	7.5	5.8	5.5	5.6
At most 7 days	9.5	11.7	11.2	11.0	10.9	8.6	8.2	8.2
At most 30 days	22.4	23.6	23.1	23.1	23.5	20.0	19.0	18.6
At most 90 days	39.8	40.3	40.2	42.8	39.7	36.6	35.5	37.6
At most 180 days	51.0	51.3	52.2	50.2	50.1	46.9	47.3	45.4
At most 365 days	63.8	64.6	63.4	62.8	62.2	60.3	59.0	58.3

**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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
At most 1 day	33.3	33.8	33.2	33.6	35.3	33.5	33.5	32.1
At most 7 days	54.6	54.6	53.2	52.9	53.4	51.4	50.3	49.3
At most 30 days	67.6	67.5	66.1	65.7	64.8	62.2	61.2	60.1
At most 90 days	74.1	74.0	72.9	72.4	71.1	68.3	67.5	66.3
At most 180 days	78.3	78.2	77.3	77.0	75.5	73.5	72.7	71.7
At most 365 days	83.5	83.2	82.2	81.8	80.5	79.2	78.6	77.8

**Figure 13:** Asset Weighted-Average Qualifying Hedge Fund  
Investor and Portfolio Liquidity

As reported on Form PF, Questions 9, 26, 30, 32, and 50 as of Fourth Calendar Quarter 2022.

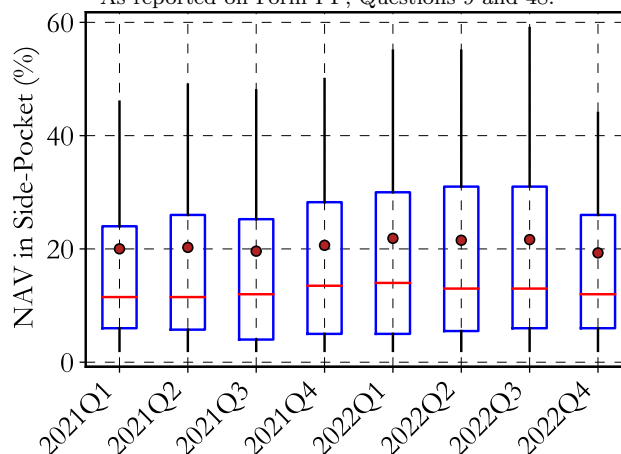


**Table 50:** Restrictions on Qualifying Hedge Fund Assets (\$ Billions)  
As reported on Form PF, Questions 48 and 49.

Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
May Suspend	2,720	2,956	2,980	2,923	2,883	2,658	2,533	2,496
May Have Gates	1,809	1,909	1,926	1,885	1,878	1,847	1,754	1,727
Side-Pocketed	89	100	110	114	104	97	96	90
Gated	76	78	84	84	74	74	75	81
Suspended	19	18	18	18	17	14	13	20

**Figure 14:** Percentage of Qualifying Hedge Fund NAV Subject to a Side-Pocket Arrangement

See Appendix C for an explanation of boxplots.  
As reported on Form PF, Questions 9 and 48.



## G Borrowings

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

Type	Subtype	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Secured	Subtotal	3,255	3,586	3,670	3,747	3,530	3,397	3,307	3,453
	Prime Broker	1,709	1,931	1,918	1,964	1,842	1,658	1,591	1,648
	Reverse Repo	1,066	1,113	1,205	1,151	1,090	1,150	1,150	1,223
	Other Secured	480	542	547	633	599	588	567	582
Unsecured	Subtotal	16	17	32	49	39	34	36	39
<b>Total</b>	<b>Total</b>	3,271	3,603	3,703	3,796	3,570	3,430	3,344	3,493

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

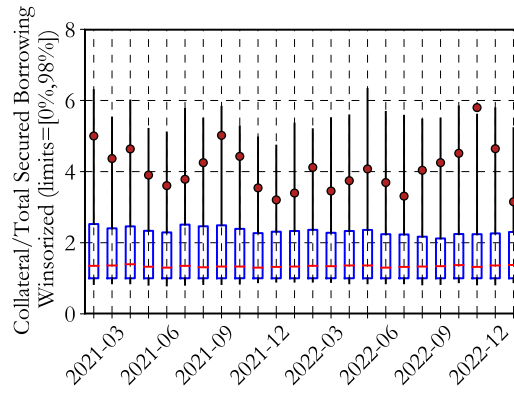
Creditor Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
US Financial	65.2	65.8	64.5	65.3	63.7	63.9	65.1	67.0
Non-US Financial	34.1	33.6	34.8	33.9	35.4	35.3	33.8	32.0
US Non-Financial	0.6	0.5	0.6	0.7	0.9	0.7	1.1	1.0
Non-US Non-Financial	0.1	0.1	0.1	0.2	0.0	0.0	0.0	0.1

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

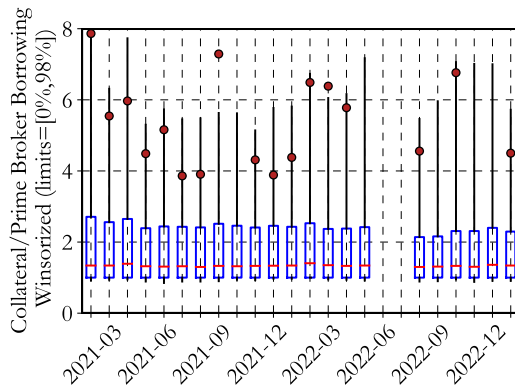
Borrowing Type	Collateral Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Prime Broker	Subtotal	2,230	2,454	2,433	2,409	2,236	1,972	1,922	2,019
	Other	1,556	1,659	1,582	1,588	1,471	1,322	1,278	1,353
	Cash	673	795	851	821	764	650	644	666
Reverse Repo	Subtotal	1,090	1,166	1,271	1,204	1,141	1,196	1,192	1,255
	Other	742	811	908	826	766	815	793	853
	Cash	348	355	363	378	375	381	399	402
Other Secured	Subtotal	594	658	709	755	727	734	723	729
	Other	435	476	522	520	528	561	562	535
	Cash	159	182	186	235	199	173	161	194
<b>Total</b>	<b>Total</b>	3,913	4,278	4,412	4,369	4,103	3,903	3,837	4,002

**Figure 15:** Ratio of Collateral Posted to Secured Borrowing for Qualifying Hedge Funds

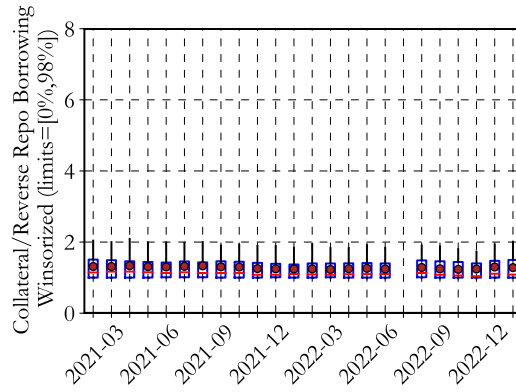
See Appendix C and Appendix D for an explanation of boxplots and winsorization. As reported on Form PF, Question 43.



(a) Total Secured Borrowing



(b) Prime Broker Borrowing

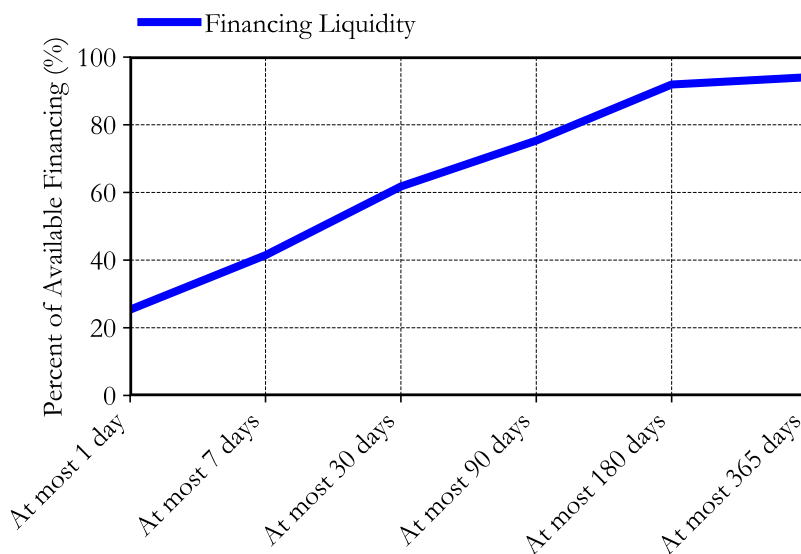


(c) Reverse Repo Borrowing

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

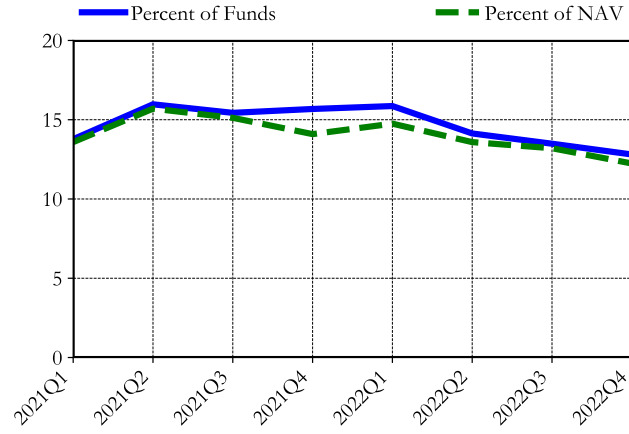
Financing Available	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
At most 1 day	37.4	36.5	36.5	26.5	35.6	36.8	27.3	25.4
At most 7 days	45.0	46.9	47.8	42.8	46.3	47.2	47.2	41.5
At most 30 days	65.3	64.9	64.9	63.0	63.7	64.8	62.4	61.8
At most 90 days	78.7	76.9	76.6	77.3	76.6	76.3	75.7	75.3
At most 180 days	94.4	94.5	94.5	93.9	93.9	93.0	92.8	91.9
At most 365 days	95.5	95.8	95.5	95.5	95.2	94.3	94.2	94.0

**Figure 16:** Weighted-Average Qualifying Hedge Fund  
Financing Liquidity (Percent of Available Financing)  
As reported on Form PF, Question 46 as of Fourth Calendar Quarter 2022.



## H Central Clearing

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





## I Value-at-Risk (“VaR”) Reporting

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

VaR Method	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
VaR (Any Method)	596	656	662	677	684	651	693	647
Historical Simulation	268	271	265	267	267	274	283	278
Parametric	158	186	193	201	202	181	220	180
Monte Carlo Simulation	171	194	199	201	210	192	186	180
Other	45	50	53	55	52	52	50	53
VaR Not Used	1,263	1,310	1,353	1,396	1,409	1,408	1,346	1,422

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

VaR Method	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
VaR (Any Method)	3,804	4,261	4,585	4,462	4,441	4,308	4,258	4,310
Historical Simulation	1,988	2,242	2,316	2,192	2,146	2,138	2,138	2,161
Parametric	632	698	735	721	695	625	641	554
Monte Carlo Simulation	871	988	984	1,014	1,029	965	916	944
Other	846	905	1,127	1,119	1,124	1,114	1,095	1,220
VaR Not Used	3,424	3,627	3,719	3,867	3,819	3,605	3,435	3,502

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

VaR Method	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
VaR (Any Method)	1,352	1,514	1,538	1,544	1,544	1,411	1,418	1,347
Historical Simulation	583	615	615	603	608	597	612	583
Parametric	373	432	437	441	422	368	373	329
Monte Carlo Simulation	368	432	443	448	460	390	372	372
Other	156	170	185	182	191	192	200	191
VaR Not Used	2,384	2,540	2,624	2,643	2,600	2,460	2,346	2,437

## 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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Stress and VaR	534	564	555	561	570	580	588	576
Stress, No VaR	435	450	472	478	479	465	458	466
No Stress, VaR	62	92	107	116	114	71	105	71
Neither	828	860	881	918	930	943	888	956

**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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Stress and VaR	3,541	3,949	4,220	4,071	4,100	4,075	3,994	4,086
Stress, No VaR	1,435	1,496	1,538	1,555	1,548	1,450	1,384	1,398
No Stress, VaR	263	312	364	391	341	233	264	224
Neither	1,989	2,131	2,181	2,312	2,271	2,155	2,052	2,104

**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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Stress and VaR	1,203	1,310	1,284	1,282	1,296	1,267	1,259	1,211
Stress, No VaR	846	887	936	922	904	850	821	843
No Stress, VaR	150	204	254	261	248	144	159	136
Neither	1,538	1,653	1,688	1,721	1,696	1,611	1,525	1,593

## K Stress Testing

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

Market Factor	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Equity Prices	788	825	843	859	875	863	858	855
Currency Rates	709	740	747	745	765	770	777	766
Risk Free Rates	668	699	707	707	721	735	734	731
Credit Spreads	574	615	609	621	649	656	655	656
Implied Volatilities	463	485	501	499	530	526	523	523
Commodity Prices	399	419	428	425	443	455	451	446
Bond Default Rates	241	253	268	270	291	287	286	288
ABS Default Rates	202	225	228	227	252	252	247	253

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

Market Factor	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Equity Prices	4,457	4,875	5,188	5,037	5,079	5,077	4,933	5,049
Currency Rates	3,968	4,369	4,641	4,522	4,554	4,481	4,384	4,506
Risk Free Rates	4,206	4,623	4,921	4,753	4,862	4,799	4,699	4,795
Credit Spreads	3,508	3,906	4,222	4,230	4,351	4,333	4,218	4,345
Implied Volatilities	3,250	3,624	3,909	3,713	3,796	3,787	3,707	3,836
Commodity Prices	3,254	3,605	3,883	3,742	3,846	3,975	3,867	3,996
Bond Default Rates	882	1,001	1,136	1,134	1,184	1,123	1,139	1,102
ABS Default Rates	752	852	882	899	970	936	901	938

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

Market Factor	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Equity Prices	1,823	1,944	1,985	1,967	1,962	1,887	1,851	1,824
Currency Rates	1,550	1,675	1,671	1,650	1,686	1,631	1,626	1,581
Risk Free Rates	1,505	1,616	1,618	1,594	1,648	1,622	1,618	1,584
Credit Spreads	1,263	1,384	1,372	1,380	1,453	1,441	1,436	1,408
Implied Volatilities	1,071	1,152	1,167	1,128	1,192	1,176	1,166	1,139
Commodity Prices	1,037	1,114	1,123	1,108	1,151	1,169	1,159	1,113
Bond Default Rates	387	424	482	467	504	484	471	427
ABS Default Rates	340	380	379	374	422	409	382	390

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

Factors Tested	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
0	890	952	988	1,034	1,044	1,014	993	1,027
1	202	210	214	223	212	208	208	206
2	117	121	130	130	129	126	128	129
3	90	96	83	84	83	80	78	81
4	104	106	100	102	100	99	107	100
5	117	127	137	127	126	131	127	127
6	157	155	155	165	167	168	166	167
7	61	60	71	79	81	79	82	82
8	121	139	137	129	151	154	150	150

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

Factors Tested	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
0	2,253	2,442	2,545	2,704	2,612	2,388	2,316	2,328
1	414	425	444	485	432	412	385	374
2	596	638	629	618	568	431	407	406
3	302	342	324	314	306	279	267	297
4	337	340	358	348	344	417	464	394
5	831	926	929	747	871	811	738	772
6	1,722	1,890	2,101	2,159	2,123	2,193	2,127	2,263
7	263	279	360	348	341	335	373	346
8	511	605	613	606	662	647	616	632

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

Factors Tested	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
0	1,688	1,857	1,942	1,983	1,945	1,754	1,684	1,729
1	272	284	300	319	276	255	234	241
2	307	328	322	312	294	269	259	256
3	217	247	231	215	212	190	183	206
4	163	159	172	184	182	169	191	175
5	282	318	321	291	302	281	267	262
6	480	491	477	502	509	543	544	540
7	120	124	170	169	174	160	169	142
8	207	246	227	212	252	249	233	232

## 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.

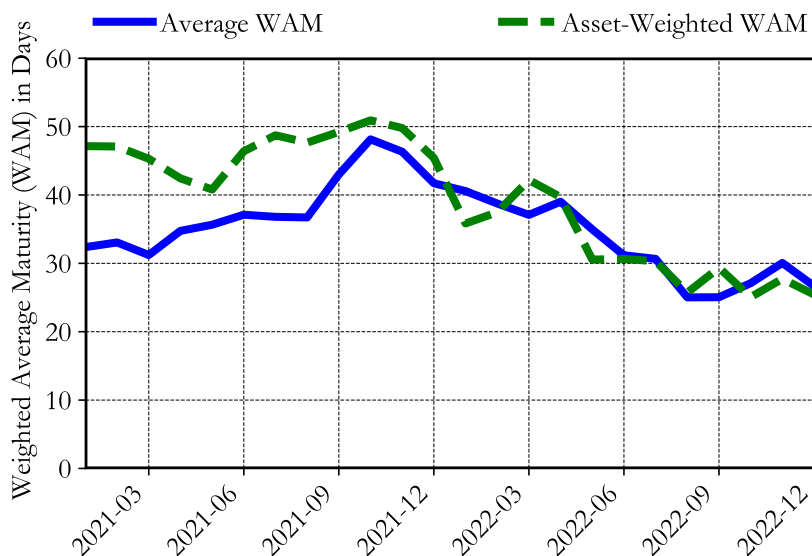
Liquidation Period	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
At most 1 day	72.2	70.3	68.6	68.9	69.5	66.4	68.1	70.7
At most 7 days	93.6	92.8	92.6	92.4	91.6	91.8	92.7	93.1
At most 30 days	98.1	97.2	97.3	96.6	96.0	96.5	97.2	97.2
At most 90 days	98.9	98.2	97.8	97.8	97.9	98.5	98.5	98.3
At most 180 days	99.4	99.0	98.8	99.0	99.5	99.6	99.5	99.5
At most 365 days	99.9	99.7	99.8	99.8	99.8	99.8	99.6	99.7

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

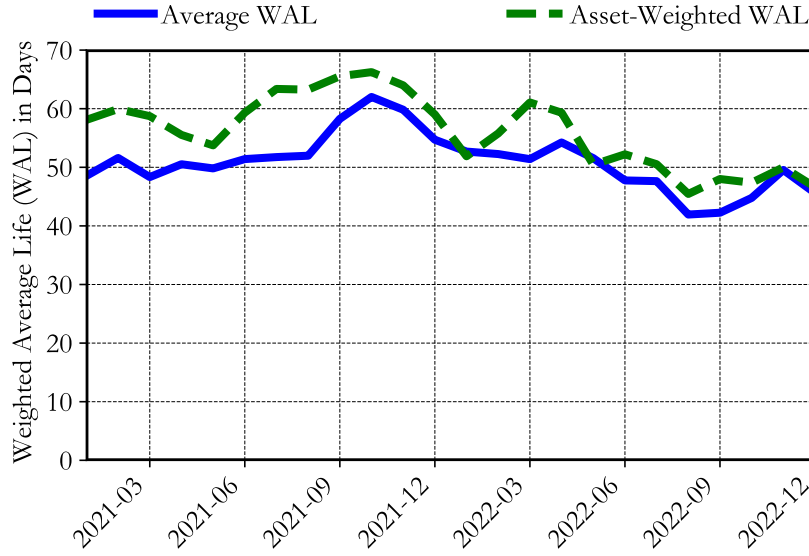
Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
May Suspend	280	296	278	291	290	310	313	302
May Have Gates	247	263	245	260	261	281	281	275
Suspended	0	0	0	0	0	0	0	0
Gated	0	0	0	0	0	0	0	0

### B Portfolio Characteristics

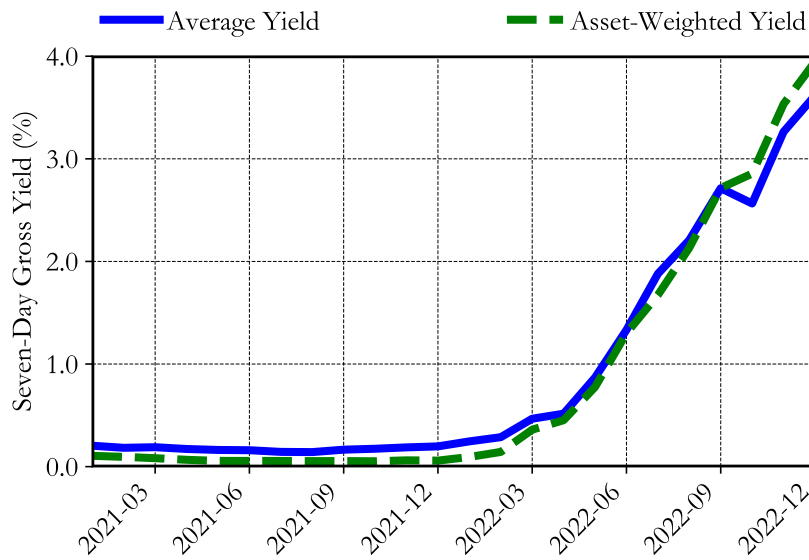
**Figure 18:** Weighted-Average Maturity Reported by Section 3 Liquidity Funds  
As reported on Form PF, Question 55.



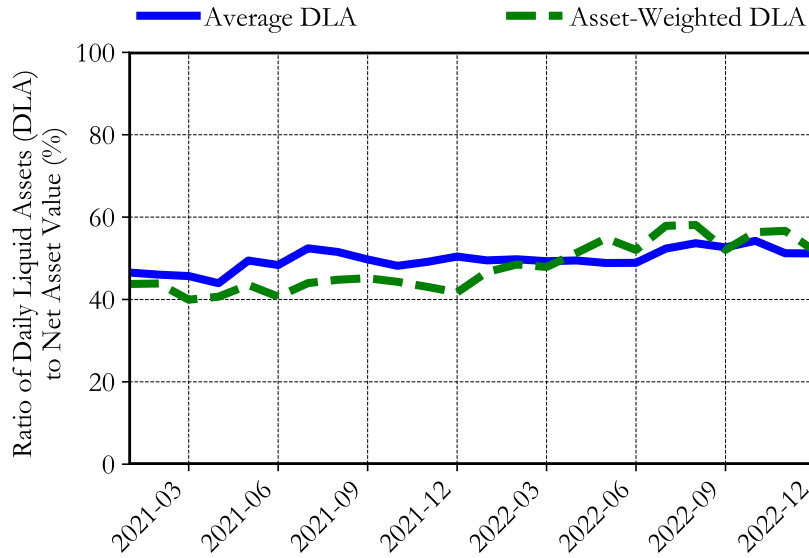
**Figure 19: Weighted-Average Life Reported by Section 3 Liquidity Funds**  
As reported on Form PF, Question 55.



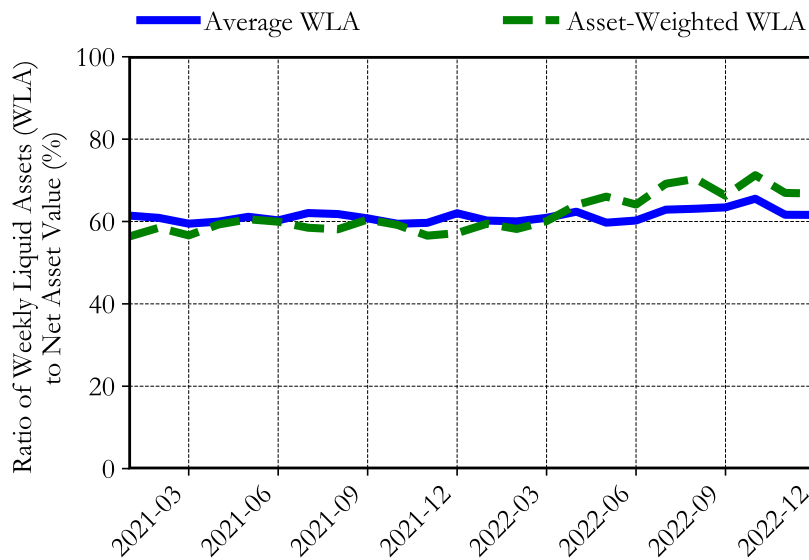
**Figure 20: Seven-Day Gross Yield Reported by Section 3 Liquidity Funds**  
As reported on Form PF, Question 55.



**Figure 21:** Ratio of Daily Liquid Assets to Net Asset Value of Section 3 Liquidity Funds  
As reported on Form PF, Question 55.



**Figure 22:** Ratio of Weekly Liquid Assets to Net Asset Value of Section 3 Liquidity Funds  
As reported on Form PF, Question 55.



## 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	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
None	46.3	48.2	50.9	51.8	51.9	53.8	52.9	52.0
Credit Quality	53.7	51.8	49.1	48.2	48.1	46.2	47.1	48.0
Diversification	50.0	48.2	45.6	44.6	44.4	42.3	43.1	44.0
Maturity	50.0	48.2	45.6	44.6	44.4	42.3	39.2	44.0
Liquidity	46.3	44.6	42.1	41.1	40.7	36.5	37.3	38.0
Fully	42.6	39.3	38.6	37.5	37.0	34.6	35.3	36.0

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

As reported on Form PF, Questions 9 and 54.

Compliance Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
None	83.7	81.6	80.9	82.1	81.3	83.9	84.3	84.1
Credit Quality	16.3	18.4	19.1	17.9	18.7	16.1	15.7	15.9
Diversification	14.9	17.1	17.4	16.5	17.2	14.6	14.4	14.6
Maturity	14.9	17.1	17.4	16.5	17.2	14.6	14.3	14.6
Liquidity	14.7	16.9	17.2	16.3	17.0	13.4	13.2	13.3
Fully	12.7	14.3	15.0	14.2	15.0	12.5	12.3	12.7

## D Methods of Calculating NAV

**Table 71:** NAV Calculation Method (Percent of Funds)

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

Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Stable	75.9	75.0	77.2	75.0	74.1	71.2	72.5	72.0
Floating	24.1	25.0	22.8	25.0	25.9	28.8	27.5	28.0

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

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

Type	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4
Stable	69.0	66.1	66.7	64.4	67.2	61.2	63.2	65.9
Floating	31.0	33.9	33.3	35.6	32.8	38.8	36.8	34.1



## 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	2021-01	2021-02	2021-03	2021-04	2021-05	2021-06	2021-07	2021-08	2021-09	2021-10	2021-11	2021-12
Repo - Govt. Collateral	27.7	25.8	23.9	23.8	26.1	32.1	26.0	35.2	40.2	31.3	31.6	47.2
Deposits	63.7	69.1	59.5	76.0	80.0	69.9	83.1	75.5	69.7	83.1	82.0	60.8
Commercial Paper	45.2	45.3	48.8	50.0	53.4	51.2	52.3	51.7	51.4	53.1	50.5	48.2
U.S. Treasuries	97.2	89.5	91.9	82.7	86.1	94.8	86.4	80.2	73.1	88.7	88.8	88.7
Asset-Backed Securities	20.0	20.3	22.8	21.8	22.3	21.7	20.9	21.0	23.0	23.9	24.5	24.4
Other	34.6	36.2	36.9	33.4	29.1	27.9	24.0	21.0	26.0	18.9	21.0	26.0
Repo - Other Collateral	18.3	17.9	13.3	13.2	12.4	15.1	12.4	11.6	12.1	7.7	10.6	10.1
U.S. Govt. Debt	1.9	1.6	1.4	1.5	1.3	1.4	1.3	1.2	1.4	1.3	1.6	1.5
Municipal Debt	0.9	0.9	1.1	1.2	1.2	1.1	0.9	0.9	1.1	1.1	1.0	1.1

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

Product Type	2022-01	2022-02	2022-03	2022-04	2022-05	2022-06	2022-07	2022-08	2022-09	2022-10	2022-11	2022-12
Repo - Govt. Collateral	44.1	38.1	48.0	52.2	69.2	67.1	80.9	86.3	78.8	85.2	78.4	84.2
Deposits	73.5	80.5	62.8	73.4	78.9	72.0	85.0	88.8	73.9	91.4	88.9	70.4
Commercial Paper	51.9	48.2	46.6	44.2	46.4	53.6	46.5	44.8	48.2	53.1	53.0	52.9
U.S. Treasuries	69.9	81.5	91.4	84.3	63.4	78.4	57.2	59.9	69.2	48.8	53.8	49.7
Asset-Backed Securities	25.2	24.7	26.0	24.1	18.9	20.8	20.4	20.2	20.6	20.1	17.7	18.6
Other	18.4	13.5	16.4	11.7	13.4	15.7	11.3	10.0	16.6	14.1	13.7	17.9
Repo - Other Collateral	8.0	9.1	9.9	10.7	10.5	9.3	10.4	9.1	8.7	10.4	10.9	9.7
U.S. Govt. Debt	1.6	1.7	2.3	2.1	2.5	1.9	3.3	5.2	5.2	5.7	5.4	8.7
Municipal Debt	1.1	1.0	1.0	1.1	1.0	1.0	0.9	1.0	1.0	0.9	0.9	0.8

## X Section 4 Private Equity Fund Specific Information

### A CPC Industry Concentration

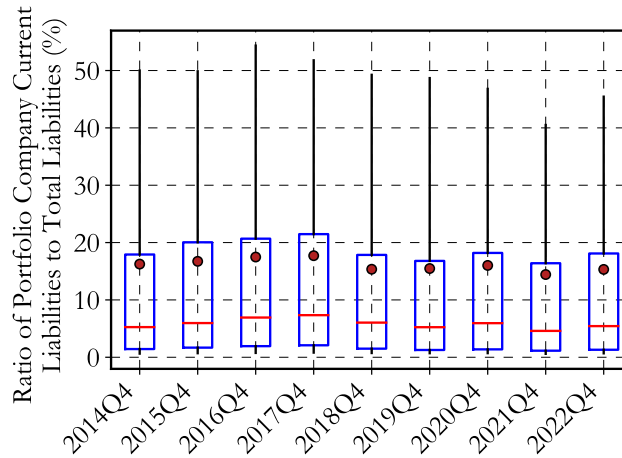
**Table 75: Gross Assets in CPC Industries (Percent of Total)**  
As reported on Form PF, Questions 8 and 77.

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	0.3
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	***
Other Miscellaneous Durable Goods...	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1

## B CPC Financial Leverage

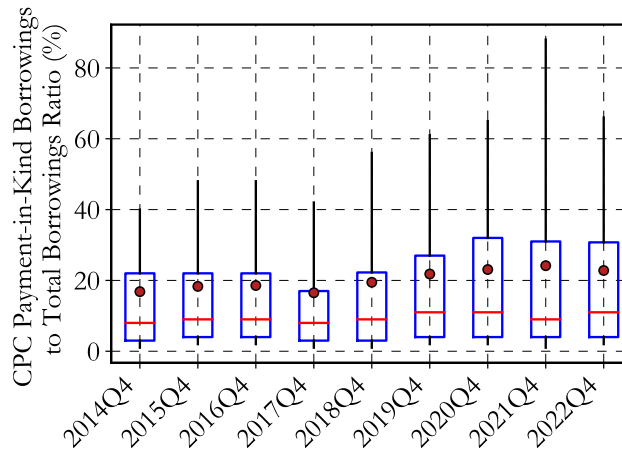
**Figure 23:** Distribution of Ratio of Aggregate CPC Current Liabilities to Total Liabilities of Section 4 Private Equity Funds

See Appendix C for an explanation of boxplots.  
As reported on Form PF, Questions 71 and 72.



**Figure 24:** Distribution of CPC Payment-in-Kind or Zero Coupon Borrowings to Total Borrowings Ratio

See Appendix C for an explanation of boxplots.  
As reported on Form PF, Question 73.



## C CPC Investments by Region and Country

**Table 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	10,956
Europe EEA	1,259	941	848	963	1,256	1,547	2,155	3,576	3,072
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	10,297
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.<sup>6</sup> Not all Form PF filers report on a quarterly basis. Smaller private fund advisers and all private equity fund advisers file Form PF on an annual basis, while larger hedge fund advisers and larger liquidity fund advisers file the form quarterly.<sup>7</sup> As a result of the difference in reporting frequency, information in this report related to funds that are reported annually may be dated by several months.<sup>8</sup>

#### 2 Large Hedge Fund Advisers

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

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

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

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

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

### **3 Large Liquidity Fund Advisers**

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

### **4 Large Private Equity Fund Advisers**

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

### **5 Other Private Fund Advisers**

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

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

## B Handling Annual and Quarterly Data

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

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

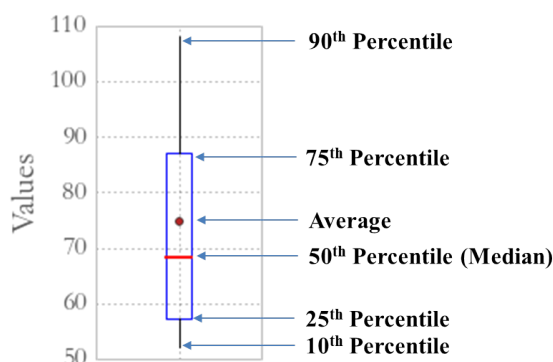
- (Q1): February 15 to May 14
- (Q2): May 15 to August 14
- (Q3): August 15 to November 14
- (Q4): November 15 to February 14

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

## C How to Read a Boxplot

In these figures, the boxes extend from the twenty-fifth percentile to the seventy-fifth percentile, while the levels (the dashed vertical lines) extend from the tenth to the twenty-fifth percentile as well as the seventy-fifth to the ninetieth percentile. Also shown as a red line within the box is the median (the fiftieth percentile) and the horizontal dashed line is mean of the distribution. See Figure 25 for an explanation of each feature.

**Figure 25:** How to Read a Boxplot



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



## D Mitigating the Effects of Outliers

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

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

## E Definitions

*Included by reference are all definitions included in the glossary of Form PF.*

<i>Aggregate Exposure</i>	A dollar value for long and short positions as of the last day in each month of the reporting period, by sub-asset class, including all exposure whether held physically, synthetically or through derivatives. Includes closed out and OTC forward positions that have not expired, as well as positions in side-pockets.
<i>Borrowing</i>	In Form PF, borrowings include secured borrowings, unsecured borrowings, as well as synthetic borrowings (e.g., total return swaps that meet the failed sale accounting requirements).
<i>CPC</i>	Controlled portfolio company, as defined in Form PF.
<i>Gross Notional Exposure (GNE)</i>	The gross nominal or notional value of all transactions that have been entered into but not yet settled as of the data reporting date. For contracts with variable nominal or notional principal amounts, the basis for reporting is the nominal or notional principal amounts as of the data reporting date.
<i>Hedge Fund</i>	Any private fund (other than a securitized asset fund): (a) with respect to which one or more investment advisers (or related persons of investment advisers) may be paid a performance fee or allocation calculated by taking into account unrealized gains (other than a fee or allocation the calculation of which may take into account unrealized gains solely for the purpose of reducing such fee or allocation to reflect net unrealized losses); (b) that may borrow an amount in excess of one-half of its net asset value (including any committed capital) or may have gross notional exposure in excess of twice its net asset value (including any committed capital); or (c) that may sell securities or other assets short or enter into similar transactions (other than for the purpose of hedging currency exposure or managing duration). The definition of a hedge fund for Form PF purposes also includes any commodity pool an adviser reports on Form PF.
<i>IRDs</i>	Interest rate derivatives, including foreign exchange derivatives used for either investment or hedging.
<i>Large Hedge Fund Adviser</i>	An adviser that has at least \$1.5 billion in hedge fund assets under management.

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<i>Large Liquidity Fund Adviser</i>	An adviser that has at least \$1 billion in combined liquidity fund and money market fund assets under management.
<i>Large Private Equity Fund Adviser</i>	An adviser that has at least a \$2 billion in private equity fund assets under management.
<i>Parallel Managed Account</i>	An account advised by an adviser that pursues substantially the same investment objective and strategy and invests side by side in substantially the same positions as the reporting fund.
<i>Qualifying Hedge Fund</i>	A hedge fund advised by a Large Hedge Fund Adviser that has a net asset value (individually or in combination with any feeder funds, parallel funds, and/or dependent parallel managed accounts) of at least \$500 million as of the last day of any month in the fiscal quarter immediately preceding the adviser's most recently completed fiscal quarter.
<i>Section 3 Liquidity Fund</i>	A liquidity fund advised by a Large Liquidity Fund Adviser.
<i>Section 4 Private Equity Fund</i>	A private equity fund advised by a Large Private Equity Fund Adviser.
<i>Value</i>	For derivatives (other than options), "value" means gross notional value; for options, "value" means delta adjusted notional value; for all other investments and for all borrowings where the reporting fund is the creditor, "value" means market value or, where there is not a readily available market value, fair value; for borrowings where the reporting fund is the debtor, "value" means the value you report internally and to current and prospective investors.