



## Semiannual report

# John Hancock Seaport Long/Short Fund

Alternative

April 30, 2023

## A message to shareholders



Dear shareholders,

The world equity markets performed well during the six months ended April 30, 2023, as stocks climbed to recapture a healthy portion of the ground they had lost over the first nine months of 2022. Investors were primarily encouraged by the shifting tone of central banks' communications surrounding interest-rate policy. Whereas the extent and duration of rate increases appeared largely open-ended for much of last year, by late 2022 the markets had grown more confident that the U.S. Federal Reserve and other developed market central banks would soon shift to a neutral policy.

Stocks were also well supported by the fact that global economic growth—while slowing—remained in positive territory. Growth stocks performed particularly well in this environment, as the prospect of a peak in rates prompted investors to rotate back into the types of faster-growing companies that had lagged considerably for most of last year. Europe was a top performer at the regional level, as the economy held up much better than investors had anticipated in the wake of the ongoing conflict between Russia and Ukraine.

In these uncertain times, your financial professional can assist with positioning your portfolio so that it's sufficiently diversified to help meet your long-term objectives and to withstand the inevitable bouts of market volatility along the way.

On behalf of everyone at John Hancock Investment Management, I'd like to take this opportunity to welcome new shareholders and thank existing shareholders for the continued trust you've placed in us.

Sincerely,

Andrew G. Arnott

Global Head of Retail, Manulife Investment Management

President and CEO, John Hancock Investment Management Head of Wealth and Asset Management, United States and Europe

This commentary reflects the CEO's views as of this report's period end and are subject to change at any time. Diversification does not guarantee investment returns and does not eliminate risk of loss. All investments entail risks, including the possible loss of principal. For more up-to-date information, you can visit our website at jhinvestments.com.

## John Hancock Seaport Long/Short Fund

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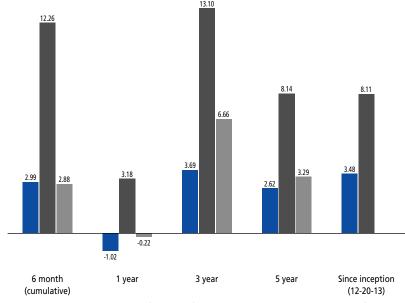
## Your fund at a glance

#### INVESTMENT OBJECTIVE

The fund seeks capital appreciation.

#### AVERAGE ANNUAL TOTAL RETURNS AS OF 4/30/2023 (%)

- Class A shares (without sales charge)
- MSCI World Index
- Morningstar long-short equity fund category average



The MSCI World Index tracks the performance of publicly traded large- and mid-cap stocks of developed-market companies.

It is not possible to invest directly in an index. Index figures do not reflect expenses or sales charges, which would result in lower returns.

The fund's Morningstar category average is a group of funds with similar investment objectives and strategies and is the equal-weighted return of all funds per category. Morningstar places funds in certain categories based on their historical portfolio holdings. Figures from Morningstar, Inc. include reinvested distributions and do not take into account sales charges. Actual load-adjusted performance is lower. Since-inception returns for the Morningstar fund category average are not available.

The past performance shown here reflects reinvested distributions and the beneficial effect of any expense reductions, and does not guarantee future results. Performance of the other share classes will vary based on the difference in the fees and expenses of those classes. Shares will fluctuate in value and, when redeemed, may be worth more or less than their original cost. Current month-end performance may be lower or higher than the performance cited, and can be found at jhinvestments.com or by calling 800-225-5291. For further information on the fund's objectives, risks, and strategy, see the fund's prospectus.

## Portfolio summary

Common stocks	76.0
Health care	20.9
Financials	18.4
Information technology	12.3
Energy	4.7
Industrials	4.4
Consumer discretionary	4.0
Communication services	3.3
Materials	2.9
Utilities	2.8
Consumer staples	2.2
Real estate	0.1
Preferred securities	0.3
Exchange-traded funds	0.2
Purchased options	0.2
Corporate bonds	0.1
Short-term investments and other	23.2
TOTAL	100.0

## TOP 10 HOLDINGS AS OF 4/30/2023 (% of net assets)

American Express Company	1.3
Vertex Pharmaceuticals, Inc.	1.1
Ares Management Corp., Class A	1.0
Amazon.com, Inc.	0.9
The Goldman Sachs Group, Inc.	0.9
NVIDIA Corp.	0.9
AIB Group PLC	0.9
Meta Platforms, Inc., Class A	0.9
The Bank of New York Mellon Corp.	0.8
Eli Lilly & Company	0.8
TOTAL	9.5

Cash and cash equivalents are not included.

### COUNTRY COMPOSITION AS OF 4/30/2023 (% of net assets)

United States	72.6
United Kingdom	4.1
Japan	3.3
China	2.6
Canada	2.1
Ireland	1.8
Netherlands	1.8
Switzerland	1.7
France	1.3
Germany	1.1
Other countries	7.6
TOTAL	100.0

#### Notes about risk

The fund is subject to various risks as described in the fund's prospectus. Political tensions and armed conflicts, including the Russian invasion of Ukraine, and any resulting economic sanctions on entities and/or individuals of a particular country could lead such a country into an economic recession. The COVID-19 disease has resulted in significant disruptions to global business activity. A widespread health crisis such as a global pandemic could cause substantial market volatility, exchange-trading suspensions, and closures, which may lead to less liquidity in certain instruments, industries, sectors, or the markets, generally, and may ultimately affect fund performance. For more information, please refer to the "Principal risks" section of the prospectus.

## Your expenses

These examples are intended to help you understand your ongoing operating expenses of investing in the fund so you can compare these costs with the ongoing costs of investing in other mutual funds.

## **Understanding fund expenses**

As a shareholder of the fund, you incur two types of costs:

- Transaction costs, which include sales charges (loads) on purchases or redemptions (varies by share class), minimum account fee charge, etc.
- Ongoing operating expenses, including management fees, distribution and service fees (if applicable), and other fund expenses.

We are presenting only your ongoing operating expenses here.

#### Actual expenses/actual returns

The first line of each share class in the table on the following page is intended to provide information about the fund's actual ongoing operating expenses, and is based on the fund's actual return. It assumes an account value of \$1,000.00 on November 1, 2022, with the same investment held until April 30, 2023.

Together with the value of your account, you may use this information to estimate the operating expenses that you paid over the period. Simply divide your account value at April 30, 2023, by \$1,000.00, then multiply it by the "expenses paid" for your share class from the table. For example, for an account value of \$8,600.00, the operating expenses should be calculated as follows:

```
Example
 My account value / $1,000.00 = 8.6 ] x $ [ "expenses paid" ] $8,600.00
                                                                                My actual
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## Hypothetical example for comparison purposes

The second line of each share class in the table on the following page allows you to compare the fund's ongoing operating expenses with those of any other fund. It provides an example of the fund's hypothetical account values and hypothetical expenses based on each class's actual expense ratio and an assumed 5% annualized return before expenses (which is not the class's actual return). It assumes an account value of \$1,000.00 on November 1, 2022, with the same investment held until April 30, 2023. Look in any other fund shareholder report to find its hypothetical example and you will be able to compare these expenses. Please remember that these hypothetical account values and expenses may not be used to estimate the actual ending account balance or expenses you paid for the period.

Remember, these examples do not include any transaction costs, therefore, these examples will not help you to determine the relative total costs of owning different funds. If transaction costs were included, your expenses would have been higher. See the prospectuses for details regarding transaction costs.

#### SHAREHOLDER EXPENSE EXAMPLE CHART

		Account value on 11-1-2022	Ending value on 4-30-2023	Expenses paid during period ended 4-30-2023 <sup>1</sup>	Annualized expense ratio
Class A	Actual expenses/actual returns	\$1,000.00	\$1,029.90	\$ 9.71	1.93%
	Hypothetical example	1,000.00	1,015.20	9.64	1.93%
Class C	Actual expenses/actual returns	1,000.00	1,026.60	13.22	2.63%
	Hypothetical example	1,000.00	1,011.80	13.12	2.63%
Class I	Actual expenses/actual returns	1,000.00	1,032.30	8.21	1.63%
	Hypothetical example	1,000.00	1,016.70	8.15	1.63%
Class R6	Actual expenses/actual returns	1,000.00	1,032.10	7.71	1.53%
	Hypothetical example	1,000.00	1,017.20	7.65	1.53%
Class NAV	Actual expenses/actual returns	1,000.00	1,032.20	7.66	1.52%
	Hypothetical example	1,000.00	1,017.30	7.60	1.52%

Expenses are equal to the annualized expense ratio, multiplied by the average account value over the period, multiplied by 181/365 (to reflect the one-half year period).

## Fund's investments

c	Shares	Value
Common stocks 76.0%		\$598,695,859
(Cost \$553,042,683)		
Communication services 3.3%		26,251,842
Entertainment 0.8%		
Activision Blizzard, Inc. (A)	71,802	5,579,733
Netflix, Inc. (A)	2,308	761,478
Spotify Technology SA (A)	3,068	409,88
Interactive media and services 1.9%		
Alphabet, Inc., Class A (A)	33,122	3,555,315
Alphabet, Inc., Class C (A)	9,596	1,038,479
Bumble, Inc., Class A (A)	47,534	865,594
Meta Platforms, Inc., Class A (A)	29,202	7,017,825
Pinterest, Inc., Class A (A)	25,475	585,925
Tencent Holdings, Ltd.	37,600	1,670,046
Media 0.3%		
Charter Communications, Inc., Class A (A)	3,230	1,190,90
Nippon Television Holdings, Inc.	1,203	10,82
Publicis Groupe SA	10,574	864,499
Wireless telecommunication services 0.3%		
Bharti Airtel, Ltd.	189,284	1,852,039
T-Mobile US, Inc. (A)	5,902	849,298
Consumer discretionary 4.0%		31,242,065
Automobiles 0.0%		
XPeng, Inc., A Shares (A)	2,145	10,242
Broadline retail 2.0%		
Alibaba Group Holding, Ltd. (A)	583,814	6,173,029
Amazon.com, Inc. (A)	70,597	7,444,454
Coupang, Inc. (A)	60,053	1,006,488
Etsy, Inc. (A)	4,394	443,926
MercadoLibre, Inc. (A)	737	941,510
Diversified consumer services 0.0%		
Hope Education Group Company, Ltd. (A)(B)	108,374	8,32
Hotels, restaurants and leisure 0.2%		
Airbnb, Inc., Class A (A)	5,345	639,636
Booking Holdings, Inc. (A)	350	940,209
Household durables 0.8%	330	3/202
Nikon Corp.	268,326	2,773,705
ranton corp.		
Panasonic Holdings Corn	72 207	747 766
Panasonic Holdings Corp. Skyline Champion Corp. (A)	78,807 20,199	742,266 1,498,166

	Shares	Value
Consumer discretionary (continued)		
Specialty retail 0.3%		4
Bath & Body Works, Inc.	42,529	\$1,492,768
Ulta Beauty, Inc. (A)	1,806	995,883
Textiles, apparel and luxury goods 0.7%		
Cie Financiere Richemont SA, A Shares	16,226	2,682,171
Crocs, Inc. (A)	7,161	885,601
Li Ning Company, Ltd.	234,500	1,677,054
Consumer staples 2.2%		17,040,628
Consumer staples distribution and retail 0.3%		
BJ's Wholesale Club Holdings, Inc. (A)	35,708	2,727,020
Food products 1.0%		
Cranswick PLC	66,966	2,708,059
Nomad Foods, Ltd. (A)	253,769	4,770,857
Personal care products 0.6%		.,,
Haleon PLC	703,957	3,095,087
Shiseido Company, Ltd.	28,500	1,428,585
Tobacco 0.3%	20/300	., .20,303
British American Tobacco PLC	28,294	1,045,344
Imperial Brands PLC	51,130	1,265,676
Imperial branus i EC	31,130	1,203,070
Energy 4.7%		36,890,357
Energy equipment and services 0.9%		
Cactus, Inc., Class A	39,900	1,615,152
Diamond Offshore Drilling, Inc. (A)	69,589	799,578
John Wood Group PLC (A)	271,020	769,013
Noble Corp. PLC (A)	22,995	884,158
ProFrac Holding Corp., Class A (A)	36,108	404,410
Schlumberger, Ltd.	20,897	1,031,267
Technip Energies NV	39,381	873,699
Vallourec SA (A)	37,414	427,389
Oil, gas and consumable fuels 3.8%		
ARC Resources, Ltd.	147,223	1,828,810
Canadian Natural Resources, Ltd.	26,124	1,592,780
Cenovus Energy, Inc.	227,280	3,818,304
Cheniere Energy, Inc.	17,860	2,732,580
		2 425 252
Chesapeake Energy Corp.	41,429	3,425,350
Chesapeake Energy Corp. ConocoPhillips	41,429 8,405	3,425,350 864,790
, 3, ,		
ConocoPhillips	8,405	864,790
ConocoPhillips Coterra Energy, Inc.	8,405 129,914	864,790 3,325,798
ConocoPhillips Coterra Energy, Inc. Diamondback Energy, Inc.	8,405 129,914 25,334	864,790 3,325,798 3,602,495

Energy (continued)	Shares	Valu
Oil, gas and consumable fuels (continued)		
Shell PLC	71,005	\$2,181,85
Viper Energy Partners LP	25,019	736,55
Financials 18.4%		144,850,93
Banks 6.2%		, 000 0, 00
AIB Group PLC	1,659,734	7,137,81
Axis Bank, Ltd.	124,481	1,314,00
Banco Bradesco SA, ADR	829,703	2,323,16
BAWAG Group AG (A)(B)	99,956	4,875,25
Citizens Financial Group, Inc.	53,855	1,666,27
Commerzbank AG (A)	236,975	2,633,52
Concordia Financial Group, Ltd.	203,900	773,67
Erste Group Bank AG	45,470	1,653,25
FinecoBank Banca Fineco SpA	92,381	1,400,28
First Citizens BancShares, Inc., Class A	3,262	3,285,42
FNB Corp.	70,108	804,84
JPMorgan Chase & Co.	6,842	945,83
Kasikornbank PCL	41,141	151,04
KBC Group NV	75,049	5,365,13
Nordea Bank ABP	44,708	495,63
Royal Bank of Canada	20,048	1,990,37
Security Bank Corp.	7,171	11,96
The Chiba Bank, Ltd.	224,100	1,463,37
The Shiga Bank, Ltd.	68,000	1,417,50
UniCredit SpA	186,538	3,696,34
Wells Fargo & Company	143,946	5,721,85
Capital markets 5.7%	1 15,5 10	5,7 2 1,05
Ares Management Corp., Class A	87,895	7 600 72
3 , , ,		7,698,72
Artisan Partners Asset Management, Inc., Class A BlackRock, Inc.	22,145 1,717	767,76
Choe Global Markets, Inc.	2,200	1,152,45 307,34
Federated Hermes, Inc.	55,964	2,316,35
Japan Exchange Group, Inc.	50,300	816,76
Julius Baer Group, Ltd.		2,378,12
KKR & Company, Inc.	33,188 46,234	2,376,12
Morgan Stanley	51,666	4,648,39
S&P Global, Inc.	5,424	
The Bank of New York Mellon Corp.	146,313	1,966,63 6,231,47
The Goldman Sachs Group, Inc.	21,659	
Tradeweb Markets, Inc., Class A	85,834	7,438,56 6,043,57
WisdomTree, Inc.	78,102	
·	70,102	487,35
Consumer finance 1.3%	62.001	10 174 25
American Express Company	63,061	10,174,25

	Shares	Value
Financials (continued) Financial services 3.4%		
Adyen NV (A)(B)	657	\$1,055,702
Apollo Global Management, Inc.	36,919	2,340,295
BFF Bank SpA (B)	126,079	1,213,277
Block, Inc. (A)	86,236	5,242,286
EXOR NV (A)	65,299	5,374,048
FleetCor Technologies, Inc. (A)	14,501	3,102,054
Global Payments, Inc.	2,146	241,876
Mastercard, Inc., Class A	8,526	3,240,136
Pagseguro Digital, Ltd., Class A (A)	77,495	762,551
PayPal Holdings, Inc. (A)	361	27,436
Visa, Inc., Class A	3,869	900,432
WEX, Inc. (A)	16,440	2,915,634
Insurance 1.8%		
Admiral Group PLC	53,873	1,565,771
AIA Group, Ltd.	189,600	2,064,189
ASR Nederland NV	46,990	2,066,744
Enstar Group, Ltd. (A)(C)	3,471	835,123
Intact Financial Corp.	4,648	703,075
Muenchener Rueckversicherungs-Gesellschaft AG	1,162	436,711
Ping An Insurance Group Company of China, Ltd., H Shares	2,264	16,517
T&D Holdings, Inc.	107,900	1,321,381
Talanx AG	29,506	1,484,027
The Progressive Corp.	6,376	869,686
Trupanion, Inc. (A)	87,269	3,064,015
Health care 20.9%		164,514,694
Biotechnology 8.1%		
Abcam PLC, ADR (A)	40,587	661,162
Akero Therapeutics, Inc. (A)	19,637	878,559
Alkermes PLC (A)	47,787	1,364,319
Alnylam Pharmaceuticals, Inc. (A)	13,724	2,733,821
Amoy Diagnostics Company, Ltd., Class A	138,510	563,201
Apellis Pharmaceuticals, Inc. (A)	19,119	1,595,098
Argenx SE, ADR (A)	7,422	2,878,845
Ascendis Pharma A/S, ADR (A)	22,774	1,593,269
Biogen, Inc. (A)	15,959	4,855,207
Bioxcel Therapeutics, Inc. (A)	30,150	621,693
Blueprint Medicines Corp. (A)	9,000	459,450
Celldex Therapeutics, Inc. (A)	7,106	223,413
Clementia Pharmaceuticals, Inc. (A)(D)	9,185	0
Crinetics Pharmaceuticals, Inc. (A)	44,579	871,074
CTI BioPharma Corp. (A)	15,745	76,521
Cytokinetics, Inc. (A)	71,664	2,680,234
Cytokinerics, inc. (ry	71,004	2,000,234

Hackb are (aretimed)	Shares	Value
Health care (continued) Biotechnology (continued)		
Denali Therapeutics, Inc. (A)	25,981	\$645,368
Exact Sciences Corp. (A)	30,985	1,985,209
Genmab A/S (A)	4,711	1,936,054
Genus PLC	18,825	636,479
Geron Corp. (A)	294,938	725,547
Gilead Sciences, Inc.	26,300	2,162,123
Grifols SA (A)	14,999	154,394
Immatics NV (A)	12,578	89,933
Immunocore Holdings PLC, ADR (A)	4,512	261,922
ImmunoGen, Inc. (A)	124,640	671,810
Innovent Biologics, Inc. (A)(B)	189,000	908,725
Intellia Therapeutics, Inc. (A)	4,998	188,675
Karuna Therapeutics, Inc. (A)	13,863	2,750,974
Kymera Therapeutics, Inc. (A)	16,457	519,054
Legend Biotech Corp., ADR (A)	12,947	889,588
Merus NV (A)	53,644	1,028,892
Mirati Therapeutics, Inc. (A)	10,516	465,964
Moderna, Inc. (A)	11,710	1,556,142
Morphic Holding, Inc. (A)	2,390	112,951
Nuvalent, Inc., Class A (A)	30,127	1,066,195
Prothena Corp. PLC (A)	18,685	983,205
Regeneron Pharmaceuticals, Inc. (A)	1,995	1,599,571
Remegen Company, Ltd., H Shares (A)(B)	105,705	621,192
REVOLUTION Medicines, Inc. (A)	10,685	250,991
Rocket Pharmaceuticals, Inc. (A)	56,709	1,016,225
Roivant Sciences, Ltd. (A)	129,300	1,105,515
Sage Therapeutics, Inc. (A)	10,225	499,491
Seagen, Inc. (A)	14,395	2,879,000
Ultragenyx Pharmaceutical, Inc. (A)	2,000	87,340
United Therapeutics Corp. (A)	10,778	2,480,341
Vaxcyte, Inc. (A)	3,300	141,339
Veracyte, Inc. (A)	16,288	368,760
Vertex Pharmaceuticals, Inc. (A)	24,907	8,486,562
Xenon Pharmaceuticals, Inc. (A)	24,600	990,888
Zai Lab, Ltd. (A)	320,000	1,120,352
Zealand Pharma A/S (A)	23,530	795,784
Health care equipment and supplies 3.8%		
Abbott Laboratories	27,266	3,012,075
Alcon, Inc.	24,140	1,757,786
Align Technology, Inc. (A)	2,814	901,460
AtriCure, Inc. (A)	27,564	1,212,540
Becton, Dickinson and Company	7,170	1,895,103
Boston Scientific Corp. (A)	23,060	1,201,887

Health care (continued)	Shares	Value
Health care equipment and supplies (continued)		
DexCom, Inc. (A)	38,302	\$4,647,565
DiaSorin SpA	14,936	1,622,239
Edwards Lifesciences Corp. (A)	16,185	1,423,956
Glaukos Corp. (A)	6,406	304,349
Hologic, Inc. (A)	23,854	2,051,683
IDEXX Laboratories, Inc. (A)	77	37,896
Inari Medical, Inc. (A)	3,806	252,795
Insulet Corp. (A)	11,513	3,661,595
Intuitive Surgical, Inc. (A)	5,816	1,751,896
Lifetech Scientific Corp. (A)	643,024	225,238
QuidelOrtho Corp. (A)	4,541	408,463
Shandong Weigao Group Medical Polymer Company, Ltd., H		
Shares	168,192	287,001
Shockwave Medical, Inc. (A)	4,995	1,449,349
Smith & Nephew PLC	23,828	392,441
Stryker Corp.	1,264	378,758
Teleflex, Inc.	256	69,765
Venus MedTech Hangzhou, Inc., H Shares (A)(B)(E)	468,500	655,892
Health care providers and services 2.6%		
Acadia Healthcare Company, Inc. (A)	23,102	1,670,044
Addus HomeCare Corp. (A)	11,084	906,006
agilon health, Inc. (A)	29,226	709,315
Alignment Healthcare, Inc. (A)	17,995	113,189
Amedisys, Inc. (A)	372	29,872
AmerisourceBergen Corp.	12,143	2,026,060
Centene Corp. (A)	28,514	1,965,470
Elevance Health, Inc.	1,153	540,353
Encompass Health Corp.	11,077	710,590
Hapvida Participacoes e Investimentos SA (A)(B)	1,026,930	568,252
HCA Healthcare, Inc.	5,796	1,665,365
Humana, Inc.	8,367	4,438,610
Laboratory Corp. of America Holdings	2,419	548,411
Molina Healthcare, Inc. (A)	1,308	389,640
Owens & Minor, Inc. (A)	26,756	415,788
Surgery Partners, Inc. (A)	37,911	1,503,550
UnitedHealth Group, Inc.	4,691	2,308,394
Health care technology 0.5%		
Health Catalyst, Inc. (A)	30,359	382,523
Veeva Systems, Inc., Class A (A)	21,387	3,829,984
Life sciences tools and services 1.6%		
Agilent Technologies, Inc.	3,583	485,246
Avantor, Inc. (A)	13,294	258,967
Danaher Corp.	12,652	2,997,385

	Shares	Value
Health care (continued)  Life sciences tools and services (continued)		
Hangzhou Tigermed Consulting Company, Ltd., A Shares	1,700	\$22,372
ICON PLC (A)	4,166	802,747
Illumina, Inc. (A)	16.391	3,369,334
NanoString Technologies, Inc. (A)	77,052	755,110
Repligen Corp. (A)	5,227	792,570
Syneos Health, Inc. (A)	12,486	490,200
Tecan Group AG	2,305	1,004,456
Thermo Fisher Scientific, Inc.	644	357,356
Waters Corp. (A)	277	83,200
WuXi AppTec Company, Ltd., H Shares (B)	103.800	912,914
Pharmaceuticals 4.3%	103/000	3.2,3
Aclaris Therapeutics, Inc. (A)	86,991	773,350
Astellas Pharma, Inc.	29,541	445,022
AstraZeneca PLC	37,899	5,577,328
Bayer AG	· · · · · · · · · · · · · · · · · · ·	252,832
Chuqai Pharmaceutical Company, Ltd.	3,831 84,400	
Daiichi Sankyo Company, Ltd.	59,012	2,177,996 2,024,973
Eisai Company, Ltd.	23,759	
Elanco Animal Health, Inc. (A)	87,772	1,370,973 831,201
Eli Lilly & Company	15,699	6,214,606
GSK PLC	3,027	54,586
Hikma Pharmaceuticals PLC	25,467	589,835
Intra-Cellular Therapies, Inc. (A)	15,359	954,562
Merck & Company, Inc.	37,664	4,349,062
Nippon Shinyaku Company, Ltd.	37,004	14,679
Novartis AG	22,200	2,270,924
Ono Pharmaceutical Company, Ltd.	15,176	305,570
Pfizer. Inc.	2,091	81,319
UCB SA	31,666	2,943,595
Verona Pharma PLC, ADR (A)	51,031	1,069,099
Zoetis, Inc.	7,508	1,319,756
Industrials 4.4%	7,500	34,860,385
Aerospace and defense 1.0%		34,000,505
BWX Technologies, Inc. (C)	63,730	4,115,683
Dassault Aviation SA	8,882	1,735,700
Hensoldt AG	20,877	782,993
Rheinmetall AG	3,084	903,281
Building products 0.6%	• • • •	, -
Builders FirstSource, Inc. (A)	26,698	2,530,169
Johnson Controls International PLC	21,398	1,280,456
The AZEK Company, Inc. (A)	44,813	1,216,225

Industrials (sontinued)	Shares	Value
Industrials (continued)  Construction and engineering 0.2%		
China Railway Group, Ltd., Class A	14,800	\$19,884
MasTec, Inc. (A)	13,765	1,222,470
Electrical equipment 0.6%	15,7.05	.,, ., 0
Contemporary Amperex Technology Company, Ltd., Class A	75,931	2,540,848
Schneider Electric SE	6,267	1,092,913
Shoals Technologies Group, Inc., Class A (A)	35,614	743,976
Zhejiang HangKe Technology, Inc., Company, Class A	2,341	16,858
	2,341	10,030
Ground transportation 0.9%	270 251	2 250 002
ALD SA (B)	270,351	3,256,883
Uber Technologies, Inc. (A)	132,601	4,117,261
Machinery 0.5%		
CNH Industrial NV	85,349	1,201,017
Ebara Corp.	36,600	1,601,298
IMI PLC	24,271	486,970
The Japan Steel Works, Ltd.	31,000	563,204
Zoomlion Heavy Industry Science and Technology Company, Ltd., Class A	16,760	15,693
Marine transportation 0.5%		
Irish Continental Group PLC	830,872	4,286,339
Professional services 0.0%		
Genpact, Ltd.	3,525	157,039
Trading companies and distributors 0.1%		
Applied Industrial Technologies, Inc.	7,174	973,225
Information technology 12.3%		97,247,297
Communications equipment 0.1%		
Arista Networks, Inc. (A)	5,829	933,573
Ciena Corp. (A)	5,023	231,259
Electronic equipment, instruments and components 0.4%		
Flex, Ltd. (A)	60,560	1,245,719
Kyocera Corp.	31,275	1,632,328
Taiyo Yuden Company, Ltd.	507	15,524
IT services 1.4%		
GoDaddy, Inc., Class A (A)	10,523	796,381
MongoDB, Inc. (A)	9,224	2,213,391
Okta, Inc. (A)	33,758	2,313,436
Shopify, Inc., Class A (A)	26,452	1,281,599
Squarespace, Inc., Class A (A)	5,285	164,364
VeriSign, Inc. (A)	20,265	4,494,777
	20,203	., ., ., ., .
•		
Semiconductors and semiconductor equipment 5.0%  Advanced Micro Devices, Inc. (A)	42,200	3,771,414

Information technology (continued)	Shares	Value
Semiconductors and semiconductor equipment (continued)		
Infineon Technologies AG	17,702	\$644,650
Intel Corp. (C)	69,366	2,154,508
KLA Corp.	8,330	3,219,878
Marvell Technology, Inc.	151,692	5,988,800
Nova, Ltd. (A)	18,818	1,720,906
NVIDIA Corp.	26,706	7,410,648
ON Semiconductor Corp. (A)	29,951	2,155,274
Rambus, Inc. (A)	7,242	321,110
Rohm Company, Ltd.	10,114	761,464
Sanken Electric Company, Ltd.	34,120	2,562,737
SiTime Corp. (A)	3,804	412,620
SolarEdge Technologies, Inc. (A)	9,773	2,791,462
Taiwan Semiconductor Manufacturing Company, Ltd.	149,000	2,439,963
Tokyo Electron, Ltd.	1,800	206,110
Ulvac, Inc.	26,500	1,052,008
Software 4.8%		.,,
Atlassian Corp., Class A (A)	13,102	1,934,641
Ceridian HCM Holding, Inc. (A)	49,223	3,124,676
Datadog, Inc., Class A (A)	20,422	1,376,034
DocuSign, Inc. (A)	35,746	1,767,282
Dynatrace, Inc. (A)	82,457	3,486,282
Five9, Inc. (A)	7,993	518,266
HubSpot, Inc. (A)	12,421	5,228,620
Intuit, Inc.	6,267	2,782,235
Microsoft Corp.	12,941	3,976,252
Palo Alto Networks, Inc. (A)	6,152	1,122,494
Paycom Software, Inc. (A)	3,171	920,763
Salesforce, Inc. (A)	13,249	2,628,204
ServiceNow, Inc. (A)	10,691	4,911,659
Splunk, Inc. (A)	16,164	1,393,983
Workday, Inc., Class A (A)	15,221	2,833,237
Technology hardware, storage and peripherals 0.6%		
Inventec Corp.	368,000	396,941
Quanta Computer, Inc.	139,000	389,207
Samsung Electronics Company, Ltd.	65,564	3,226,017
Wiwynn Corp.	17,956	683,345
Materials 2.9%		22,638,180
Chemicals 0.6%		, ,
Cabot Corp.	12,860	922,834
Guangzhou Tinci Materials Technology Company, Ltd., Class A	2,224	13,740
Hansol Chemical Company, Ltd.	2,187	364,533
Sinoma Science & Technology Company, Ltd., Class A	576,180	1,758,778

	Shares	Value
Materials (continued)		
Chemicals (continued)		
SKC Company, Ltd.	202	\$15,087
Wacker Chemie AG	7,463	1,154,165
Yunnan Energy New Material Company, Ltd., Class A	2,020	30,417
Construction materials 0.1%		
Ambuja Cements, Ltd. (A)	3,615	17,601
Anhui Conch Cement Company, Ltd., H Shares	244,683	772,591
China National Building Material Company, Ltd., H Shares	22,870	17,160
Metals and mining 2.2%		
Anglo American PLC	83,793	2,582,011
Barrick Gold Corp.	244,980	4,664,419
Endeavour Mining PLC	73,491	1,891,993
Fresnillo PLC	164,301	1,470,360
Glencore PLC	628,388	3,709,145
Newmont Corp.	68,636	3,253,346
Real estate 0.1%		678,820
Real estate management and development 0.1%		
China Vanke Company, Ltd., H Shares	420,400	657,209
Country Garden Holdings Company, Ltd.	83,894	21,611
Utilities 2.8%		22,480,657
Electric utilities 2.3%		
American Electric Power Company, Inc. (C)	39,712	3,670,183
Exelon Corp.	71,379	3,029,325
NextEra Energy, Inc.	44,298	3,394,556
PG&E Corp. (A)	342,668	5,863,049
Public Power Corp. SA (A)	232,412	2,005,620
Gas utilities 0.3%		
Atmos Energy Corp.	25,399	2,899,042
Multi-utilities 0.2%		
Engie SA	101,153	1,618,882
Preferred securities 0.3%		\$2,686,262
(Cost \$2,339,638)		
Energy 0.2%		1,828,056
Oil, gas and consumable fuels 0.2%		
Raizen SA	2,858,300	1,828,056
Industrials 0.1%		858,206
Construction and engineering 0.1%		
Fluor Corp., 6.500%	627	858,206

	Shares	Value
Exchange-traded funds 0.2%		\$1,681,653
(Cost \$1,178,518)		
VanEck Gold Miners ETF	50,079	1,681,653
	Contracts/Notional amount	Value
Purchased options 0.2%		\$1,736,238
(Cost \$2,809,494)		
Calls 0.2%		1,645,264
Exchange Traded Option on Alphabet, Inc., Class A (Expiration Date: 6-16-23; Strike Price: \$110.00; Notional Amount: 14,400) (A)	144	47,520
Exchange Traded Option on Amazon.com, Inc. (Expiration Date: 5-5-23; Strike Price: \$107.00; Notional Amount: 3,100) (A)	31	4,092
Exchange Traded Option on BILL Holdings, Inc. (Expiration Date: 5-19-23; Strike Price: \$105.00; Notional Amount: 13,700) (A)	137	11,988
Exchange Traded Option on Block, Inc. (Expiration Date: 6-16-23; Strike Price: \$80.00; Notional Amount: 19,300) (A)	193	9,361
Exchange Traded Option on Datadog, Inc., Class A (Expiration Date: 6-16-23; Strike Price: \$85.00; Notional Amount: 14,800) (A)	148	16,502
Exchange Traded Option on Etsy, Inc. (Expiration Date: 6-16-23; Strike Price: \$150.00; Notional Amount: 9,600) (A)	96	2,160
Exchange Traded Option on Invesco QQQ Trust Series 1 (Expiration Date: 5-5-23; Strike Price: \$324.00; Notional Amount: 8,100) (A)	81	24,462
Exchange Traded Option on Invesco QQQ Trust Series 1 (Expiration Date: 6-16-23; Strike Price: \$330.00; Notional Amount: 54,400) (A)	544	345,168
Exchange Traded Option on iShares Expanded Tech-Software Sector ETF (Expiration Date: 5-19-23; Strike Price: \$300.00; Notional Amount: 4,300) (A)	43	19,135
Exchange Traded Option on iShares MSCI Brazil ETF (Expiration Date: 5-19-23; Strike Price: \$30.00; Notional Amount: 293,300) (A)	2,933	61,593
Exchange Traded Option on Marvell Technology, Inc. (Expiration Date: 5-19-23; Strike Price: \$42.50; Notional		
Amount: 16,600) (A)	166	8,964

	Contracts/Notional amount	Value
Calls (continued)		
Exchange Traded Option on Sarepta Therapeutics, Inc. (Expiration Date: 6-16-23; Strike Price: \$170.00; Notional Amount: 7,000) (A)	70	\$33,600
Exchange Traded Option on Shopify, Inc., Class A (Expiration Date: 6-16-23; Strike Price: \$50.00; Notional Amount: 29,000) (A)	290	100,050
Over the Counter Option on Alibaba Group Holding, Ltd. (Expiration Date: 6-29-23; Strike Price: HKD 105.00; Counterparty: JPMorgan Chase Bank,		
N.A.) (A)(F)  Over the Counter Option on Contemporary  Amperex Technology Company, Ltd.,  Class A (Expiration Date: 5-30-23; Strike  Price: CNY 495.60; Counterparty: Morgan  Stanley & Company International	596,225	54,132
PLC) (A)(F)  Over the Counter Option on Meituan, Class B (Expiration Date: 9-28-23; Strike Price: HKD 145.51; Counterparty: JPMorgan Chase Bank,	68,600	0
N.A.) (A)(F)  Over the Counter Option on Murata  Manufacturing Company, Ltd. (Expiration Date: 6-8-23; Strike Price: JPY 8,833.00;  Counterparty: BNP Paribas SA) (A)(F)	272,400	403,201
Over the Counter Option on Panasonic Holdings Corp. (Expiration Date: 7-14-23; Strike Price: JPY 1,423.86; Counterparty: JPMorgan Chase Bank, N.A.) (A)(F)	9,290	1,219
Over the Counter Option on Ping An Insurance Group Company of China, Ltd., H Shares (Expiration Date: 9-28-23; Strike Price: HKD 56.18; Counterparty: BNP Paribas SA) (A)(F)	890,980	497,311
Over the Counter Option on Samsung Electronics Company, Ltd. (Expiration Date: 5-11-23; Strike Price: KRW 64,612.83; Counterparty: Morgan Stanley		
& Company International PLC) (A)(F)  Over the Counter Option on Sinoma Science & Technology Company, Ltd., Class A (Expiration Date: 5-30-23; Strike Price: CNY 26.91; Counterparty: Morgan Stanley & Company International	2,140	2,500
PLC) (A)(F)  Over the Counter Option on TDK Corp. (Expiration Date: 6-8-23; Strike Price: JPY 5,192.00; Counterparty: BNP Paribas SA) (A)(F)	13,600	34

		Cont	racts/Notional amount	Value
Calls (continued)				
Over the Counter Option on XPeng, Inc., A Shares (Expiration Date: 6-29-23; Strike Price: HKD 45.43; Counterparty: BNP				
Paribas SA) (A)(F)			7,932	\$1,785
Puts 0.0%				90,974
Exchange Traded Option on Advanced Micro Devices, Inc. (Expiration Date: 5-5-23; Strike Price: \$85.00; Notional Amount: 30,000) (A)			300	44,85
Exchange Traded Option on HubSpot, Inc. (Expiration Date: 5-5-23; Strike Price: \$390.00; Notional Amount: 3,200) (A)			32	21,86
Exchange Traded Option on iShares Semiconductor ETF (Expiration Date: 5-19-23; Strike Price: \$405.00;				
Notional Amount: 3,100) (A)			31	21,390
Over the Counter Option on S&P 500 E-Mini Index (Expiration Date: 6-16-23; Strike Price: \$409.68; Counterparty: JPMorgan				
Securities LLC) (A)(F)			434	2,869
	Rate (%)	Maturity date	Par value^	Value
Corporate bonds 0.1%				\$988,892
(Cost \$955,367)				
Health care 0.1%				000 00
				900,09
Health care providers and services 0.1%				900,09.
•	6.500	02-15-30	1,204,000	
Health care providers and services 0.1% AthenaHealth Group, Inc. (B)				988,89
AthenaHealth Group, Inc. (B)	6.500 Yield* (%)	02-15-30  Maturity date	1,204,000 Par value^	988,89. <b>Val</b> u
AthenaHealth Group, Inc. (B)  Short-term investments 27.1%				988,892 988,892 Value \$213,364,392
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)				988,89. Value \$213,364,392
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4%	Yield* (%)	Maturity date	Par value^	988,89 Valu \$213,364,39 160,578,16
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4%  U.S. Treasury Bill (C)	Yield* (%)	Maturity date	Par value^	988,89.  Valu. \$213,364,39.  160,578,16.  15,617,98.
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4%  U.S. Treasury Bill (C)  U.S. Treasury Bill	Yield* (%) 4.227 4.264	Maturity date  05-30-23 05-04-23	Par value^ 15,669,900 3,670,000	988,89.  Valu. \$213,364,39.  160,578,16.  15,617,98. 3,668,74.
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4%  U.S. Treasury Bill (C) U.S. Treasury Bill U.S. Treasury Bill	Yield* (%) 4.227 4.264 4.293	05-30-23 05-04-23 05-25-23	Par value^ 15,669,900 3,670,000 1,915,000	988,89  Valu \$213,364,39  160,578,16  15,617,98  3,668,74  1,909,57
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4%  U.S. Treasury Bill (C) U.S. Treasury Bill U.S. Treasury Bill U.S. Treasury Bill U.S. Treasury Bill	Yield* (%)  4.227 4.264 4.293 4.377	Maturity date  05-30-23 05-04-23	Par value^ 15,669,900 3,670,000 1,915,000 1,075,000	988,89.  Valu. \$213,364,39.  160,578,16.  15,617,98. 3,668,74. 1,909,57. 1,073,11.
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4%  U.S. Treasury Bill (C) U.S. Treasury Bill	4.227 4.264 4.293 4.377 4.400	05-30-23 05-04-23 05-25-23 05-16-23 06-01-23	Par value^ 15,669,900 3,670,000 1,915,000 1,075,000 2,355,000	988,89  Valu \$213,364,39  160,578,16  15,617,98  3,668,74  1,909,57  1,073,11  2,346,32
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4% U.S. Treasury Bill	Yield* (%)  4.227 4.264 4.293 4.377	05-30-23 05-04-23 05-25-23 05-16-23	Par value^ 15,669,900 3,670,000 1,915,000 1,075,000 2,355,000 11,190,000	988,89  Valu \$213,364,39  160,578,16  15,617,98 3,668,74 1,909,77 1,073,11 2,346,32 11,161,53
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4% U.S. Treasury Bill (C) U.S. Treasury Bill	Yield* (%)  4.227 4.264 4.293 4.377 4.400 4.449	05-30-23 05-04-23 05-25-23 05-16-23 06-01-23 05-23-23	15,669,900 3,670,000 1,915,000 1,075,000 2,355,000 11,190,000 12,625,000	988,89  Valu \$213,364,39  160,578,16  15,617,98 3,668,74 1,909,57 1,073,11 2,346,32 11,161,53 12,565,41
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4% U.S. Treasury Bill	4.227 4.264 4.293 4.377 4.400 4.449 4.472	05-30-23 05-04-23 05-25-23 05-16-23 06-01-23 05-23-23 06-06-23	15,669,900 3,670,000 1,915,000 1,075,000 2,355,000 11,190,000 12,625,000 11,265,000	988,89  Valu \$213,364,39  160,578,16  15,617,98 3,668,74 1,909,57 1,073,11 2,346,32 11,161,53 12,565,41 11,198,50
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4%  U.S. Treasury Bill	4.227 4.264 4.293 4.377 4.400 4.449 4.472 4.500 4.648	05-30-23 05-04-23 05-25-23 05-16-23 06-01-23 06-06-23 06-15-23 06-08-23	15,669,900 3,670,000 1,915,000 2,355,000 11,190,000 12,625,000 11,265,000 5,115,000	988,89  Valu \$213,364,39  160,578,16  15,617,98 3,668,74 1,909,57 1,073,11 2,346,32 11,161,53 12,565,41 11,198,50 5,089,25
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4%  U.S. Treasury Bill (C) U.S. Treasury Bill	4.227 4.264 4.293 4.377 4.400 4.449 4.472 4.500	05-30-23 05-04-23 05-25-23 05-16-23 06-01-23 06-06-23 06-15-23	15,669,900 3,670,000 1,915,000 1,075,000 2,355,000 11,190,000 12,625,000 11,265,000 5,115,000 16,025,000	988,89  Valu \$213,364,39  160,578,16  15,617,98  3,668,74  1,909,57  1,073,11  2,346,32  11,161,53  12,565,41  11,198,50  5,089,25  16,006,41
AthenaHealth Group, Inc. (B)  Short-term investments 27.1% (Cost \$213,363,110)  U.S. Government 20.4% U.S. Treasury Bill (C) U.S. Treasury Bill (C)	4.227 4.264 4.293 4.377 4.400 4.449 4.472 4.500 4.648 4.660	05-30-23 05-04-23 05-25-23 05-16-23 06-01-23 06-06-23 06-15-23 06-08-23 05-11-23	15,669,900 3,670,000 1,915,000 1,075,000 2,355,000 11,190,000 12,625,000 5,115,000 16,025,000 42,085,000	988,89  Valu \$213,364,39  160,578,16  15,617,98  3,668,74  1,909,57  1,073,11  2,346,32  11,161,53  12,565,41  11,198,50  5,089,25  16,006,41  41,839,69
AthenaHealth Group, Inc. (B)	4.227 4.264 4.293 4.377 4.400 4.449 4.472 4.500 4.648 4.660 4.720	05-30-23 05-04-23 05-25-23 05-16-23 06-01-23 06-06-23 06-15-23 06-08-23 05-11-23	15,669,900 3,670,000 1,915,000 1,075,000 2,355,000 11,190,000 12,625,000 11,265,000 5,115,000 16,025,000	988,89 Valu \$213,364,39 160,578,16

	Yield* (%)	Maturity date	Par value^	Value
U.S. Government (continued)				
U.S. Treasury Bill	4.831	07-06-23	2,330,000	\$2,308,962
U.S. Treasury Bill (C)	4.850	06-20-23	16,895,000	16,781,897
		Yield (%)	Shares	Value
Short-term funds 6.7%				52,786,227
John Hancock Collateral Trust (G)		4.9058(H)	48,111	480,967
State Street Institutional U.S. Government Mon Fund, Premier Class	ey Market	4.7429(H)	52,305,260	52,305,260
Total investments (Cost \$773,688,810) 1	03.9%			\$819,153,296
Other assets and liabilities, net (3.9%)				(31,067,098)

The percentage shown for each investment category is the total value of the category as a percentage of the net assets of the fund.

#### **Currency Abbreviations**

CNY Chinese Yuan Renminbi

Total net assets 100.0%

HKD Hong Kong Dollar

IPY Japanese Yen

KRW Korean Won

#### Security Abbreviations and Legend

American Depositary Receipt ADR

NYRS New York Registry Shares

- (A) Non-income producing security.
- (B) These securities are exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be resold, normally to qualified institutional buyers, in transactions exempt from registration.
- All or a portion of this security is segregated at the custodian as collateral for certain derivatives. (C)
- Security is valued using significant unobservable inputs and is classified as Level 3 in the fair value hierarchy. Refer to (D) Note 2 to the financial statements.
- (E) All or a portion of this security is on loan as of 4-30-23.
- For this type of option, notional amounts are equivalent to number of contracts. (F)
- Investment is an affiliate of the fund, the advisor and/or subadvisor. This security represents the investment of cash (G) collateral received for securities lending.
- (H) The rate shown is the annualized seven-day yield as of 4-30-23.
- Yield represents either the annualized yield at the date of purchase, the stated coupon rate or, for floating rate securities, the rate at period end.

\$788,086,198

<sup>^</sup>All par values are denominated in U.S. dollars unless otherwise indicated.

#### **DERIVATIVES**

#### **FUTURES**

Open contracts	Number of contracts		Expiration date	Notional basis^	Notional value^	Unrealized appreciation (depreciation)
SPI 200 Index Futures	7	Long	Jun 2023	\$855,359	\$853,543	\$(1,816)
SGX FTSE Taiwan Index Futures	20	Short	May 2023	(1,089,440)	(1,085,400)	4,040
						\$2,224

 $<sup>^{\</sup>wedge}$  Notional basis refers to the contractual amount agreed upon at inception of open contracts; notional value represents the current value of the open contract.

#### FORWARD FOREIGN CURRENCY CONTRACTS

(	Contract to buy	C	ontract to sell	Counterparty (OTC)	Contractual settlement date	Unrealized appreciation	Unrealized depreciation
AUD	7,480,000	USD	5,012,677	GSI	5/31/2023	_	\$(57,059)
CAD	7,960,000	USD	5,881,145	MSI	5/31/2023	_	(2,571)
CAD	3,100,000	USD	2,245,329	MSI	6/21/2023	\$45,022	_
CHF	3,720,000	USD	4,196,295	JPM	5/31/2023	_	(21,224)
DKK	10,480,000	USD	1,549,368	MSI	5/31/2023	2,896	_
EUR	1,587,000	USD	1,703,898	DB	6/21/2023	49,709	_
EUR	1,515,000	USD	1,640,540	GSI	6/21/2023	33,509	_
EUR	3,434,000	USD	3,676,957	MSI	6/21/2023	117,555	_
EUR	5,394,000	USD	5,906,880	SSB	6/21/2023	53,397	_
GBP	6,243,000	USD	7,775,407	JPM	5/31/2023	75,306	_
GBP	3,170,000	USD	3,910,317	BNP	6/21/2023	77,683	_
HKD	15,665,000	USD	1,999,617	GSI	5/31/2023	_	(1,518)
JPY	1,395,400,000	USD	10,410,286	JPM	5/31/2023	_	(123,815)
JPY	135,000,000	USD	1,032,643	MSI	6/21/2023	_	(34,258)
KRW	5,255,910,000	USD	3,945,434	MSI	5/31/2023	_	(10,908)
SEK	20,280,000	USD	1,970,936	JPM	5/31/2023	9,442	_
USD	7,073,765	CNY	48,725,000	BNP	6/21/2023	13,501	_
USD	20,862,559	EUR	18,929,000	GSI	5/31/2023	_	(29,026)
USD	1,740,403	EUR	1,621,000	DB	6/21/2023	_	(50,774)
USD	4,078,584	EUR	3,833,000	GSI	6/21/2023	_	(156,813)
USD	7,659	EUR	7,000	MSI	6/21/2023	_	(76)
USD	2,447,905	EUR	2,236,000	SCB	6/21/2023	_	(22,837)
USD	3,631,508	EUR	3,384,000	SSB	6/21/2023	_	(107,754)
USD	3,886,485	GBP	3,170,000	MSI	6/21/2023	_	(101,515)
USD	3,062,500	INR	251,370,000	MSI	5/31/2023	_	(8,521)
						\$478,020	\$(728,669)

#### WRITTEN OPTIONS

## Options on securities

Counterparty (OTC)/ Exchange- traded	Name of issuer	Currency	Exercise price	Expiration date	Number of contracts		Premium	Value
Calls								
JPM	Alibaba Group Holding, Ltd.	HKD	115.00	Jun 2023	596,225	596,225	\$279,508	\$(24,609)
MSI	Contemporary Amperex Technology Company, Ltd., Class A	CNY	585.71	May 2023	68,600	68,600	48,515	_
JPM	Meituan, Class B	HKD	165.36	Sep 2023	272,400	272,400	257,068	(223,868)
BNP	Murata Manufacturing Company, Ltd.	JPY	9,636.00	Jun 2023	1,220	1,220	221	(6)
JPM	Panasonic Holdings Corp.	JPY	1,553.30	Jul 2023	9,290	9,290	450	(300)
BNP	Ping An Insurance Group Company of China, Ltd., H Shares	HKD	63.84	Sep 2023	890,980	890,980	119,415	(234,807)
MSI	Sinoma Science & Technology Company, Ltd., Class A	CNY	31.80	May 2023	13,600	13,600	293	_
BNP	TDK Corp.	JPY	5,664.00	Jun 2023	1,650	1,650	399	(33)
BNP	XPeng, Inc., A Shares	HKD	51.63	Jun 2023	7,932	7,932	2,662	(885)
							\$708,531	\$(484,508)
Exchange-traded	Alphabet, Inc., Class A	USD	125.00	Jun 2023	144	14,400	19,941	(4,464)
Exchange-traded	Amazon.com, Inc.	USD	120.00	May 2023	31	3,100	1,036	(109)
Exchange-traded	BILL Holdings, Inc.	USD	140.00	May 2023	137	13,700	44,754	(2,398)
Exchange-traded	Block, Inc.	USD	100.00	Jun 2023	104	10,400	6,103	(624)
Exchange-traded	Block, Inc.	USD	110.00	Jun 2023	89	8,900	12,954	(267)
Exchange-traded	Etsy, Inc.	USD	190.00	Jun 2023	96	9,600	44,596	(528)
Exchange-traded	Marvell Technology, Inc.	USD	50.00	May 2023	166	16,600	7,794	(664)
Exchange-traded	Sarepta Therapeutics, Inc.	USD	200.00	Jun 2023	70	7,000	7,538	(6,825)
							\$144,716	\$(15,879)
Puts								
JPM	Meituan, Class B	HKD	99.21	Sep 2023	272,400	272,400	\$140,928	\$(115,263)
BNP	Ping An Insurance Group Company of China, Ltd., H Shares	HKD	35.75	Sep 2023	890,980	890,980	79,996	(29,908)
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## Options on securities (continued)

Counterparty (OTC)/ Exchange- traded	Name of issuer	Currency	Exercise price		Number of contracts	Notional amount	Premium	Value
Puts (continued)								
BNP	XPeng, Inc., A Shares	HKD	28.91	Jun 2023	7,932	7,932	\$1,611	\$(1,143)
							\$222,535	\$(146,314)
Exchange-traded	Advanced Micro Devices, Inc.	USD	80.00	May 2023	142	14,200	10,768	(7,171)
Exchange-traded	Datadog, Inc., Class A	USD	70.00	Jun 2023	74	7,400	37,373	(53,835)
Exchange-traded	Etsy, Inc.	USD	110.00	Jun 2023	96	9,600	62,176	(124,560)
Exchange-traded	HubSpot, Inc.	USD	350.00	May 2023	32	3,200	4,086	(4,086)
Exchange-traded	Sarepta Therapeutics, Inc.	USD	90.00	Jun 2023	70	7,000	30,217 <b>\$144,620</b>	(32,550) <b>\$(222,202)</b>
							\$1,220,402	\$(868,903)

## Options on index

Counterparty (OTC)/ Exchange- traded	Name of issuer	Currency			Number of contracts		Premium	Value
Puts								
JPM	S&P 500 E-Mini Index	USD	393.13	Jun 2023	434	434	\$2,191	\$(1,545)
							\$2,191	\$(1,545)

### **SWAPS**

### Total return swaps

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Pay	GS Custom Basket	1-Day USD OBFR - 0.50%	Monthly	USD	6,751,562	May 2033	GSI	_	\$(105,846)	\$(105,846)
Pay	Health Care Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	9,088,275	May 2033	GSI	_	10,724	10,724
Pay	Invesco QQQ ETF	1-Day USD OBFR - 0.40%	Monthly	USD	720,170	May 2033	GSI	_	(13,625)	(13,625)
Pay	iShares MSCI EAFE ETF	1-Day USD OBFR - 0.20%	Monthly	USD	1,421,903	May 2033	GSI	_	(443)	(443)
Pay	iShares Russell 2000 ETF	1-Day USD OBFR - 0.45%	Monthly	USD	4,431,122	May 2033	GSI	_	75,534	75,534
Pay	iShares Russell Mid-Cap Growth ETF	1-Day USD OBFR - 0.55%	Monthly	USD	10,544,690	May 2033	GSI	_	89,184	89,184

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Pay	iShares Semiconductor ETF	1-Day USD OBFR - 1.09%	Monthly	USD	2,696,953	May 2033	GSI	_	\$52,306	\$52,306
Pay	SPDR S&P 500 ETF	1-Day USD OBFR - 0.20%	Monthly	USD	13,603,985	May 2033	GSI	_	(157,726)	(157,726)
Pay	SPDR S&P Oil & Gas Exploration & Production ETF	1-Day USD OBFR - 0.78%	Monthly	USD	1,496,938	May 2033	GSI	_	6,383	6,383
Pay	SPDR S&P Pharmaceuticals ETF	1-Day USD OBFR - 1.70%	Monthly	USD	2,693,095	May 2033	GSI	_	4,820	4,820
Pay	SPDR S&P Regional Banking ETF	1-Day USD OBFR - 1.45%	Monthly	USD	2,835,287	May 2033	GSI	_	38,574	38,574
Pay	TOPIX Banks Index	1-Day JPY TONAR Compounded OIS - 0.25%	Monthly	JPY	105,777,350	May 2033	GSI	_	22,375	22,375
Pay	VanEck Oil Services ETF	1-Day USD OBFR - 1.00%	Monthly	USD	5,219,726	May 2033	GSI	_	185,798	185,798
Pay	Vanguard FTSE Developed Markets ETF	1-Day USD OBFR - 0.40%	Monthly	USD	3,574,339	May 2033	GSI	_	(3,507)	(3,507)
Pay	Industrial Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	2,441,577	May 2028	JPM	_	(47,077)	(47,077)
Pay	iShares Expanded Tech Sector ETF	1-Day USD OBFR - 1.82%	Monthly	USD	1,917,414	May 2028	JPM	_	(23,608)	(23,608)
Pay	iShares MSCI Eurozone ETF	1-Day USD OBFR - 1.07%	Monthly	USD	103,777	May 2028	JPM	_	(2,839)	(2,839)
Pay	iShares Russell Mid-Cap Growth ETF	1-Day USD OBFR - 0.91%	Monthly	USD	2,763,057	May 2028	JPM	_	(18,799)	(18,799)
Pay	iShares Semiconductor ETF	1-Day USD OBFR - 0.97%	Monthly	USD	7,197,537	May 2028	JPM	_	242,723	242,723
Pay	S&P Oil & Gas Equipment Select Industry Total Return Index	1-Day USD OBFR - 0.05%	Monthly	USD	1,098,214	May 2028	JPM	_	43,675	43,675
Pay	SPDR S&P Biotech ETF	1-Day USD OBFR - 3.32%	Monthly	USD	17,673,143	May 2028	JPM	_	(1,073,281)	(1,073,281)
Pay	SPDR S&P Metals & Mining ETF	1-Day USD OBFR - 0.70%	Monthly	USD	2,481,942	May 2028	JPM	_	110,567	110,567
Pay	VanEck Semiconductor ETF	1-Day USD OBFR - 0.57%	Monthly	USD	20,759	May 2028	JPM	_	551	551

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Pay	MSCI USA Momentum Index	Fixed (0.48%)	Monthly	USD	711,650	Feb 2024	MSI	_	_	_
	ARK Innovation	1-Day USD OBFR	,		,					
Pay	ETF Consumer	- 3.63%	Monthly	USD	7,029,605	May 2033	MSI	_	\$461,721	\$461,721
Pay	Discretionary Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	8,194,397	May 2033	MSI	_	27,970	27,970
Pay	Energy Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	4,894,867	May 2033	MSI	_	56,830	56,830
Pay	Financial Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	18,105,181	May 2033	MSI	_	62,890	62,890
Pay	Harvest CSI 300 China A-Shares ETF	1-Day USD OBFR - 0.68%	Monthly	USD	2,013,790	May 2033	MSI	_	(46,678)	(46,678)
Pay	Health Care Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	27,382,645	May 2033	MSI	_	226,282	226,282
Pay	Industrial Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	16,386,727	May 2033	MSI	_	129,774	129,774
Pay	Invesco QQQ ETF	1-Day USD OBFR - 0.20%	Monthly	USD	8,869,074	May 2033	MSI	_	(55,394)	(55,394)
Pay	Invesco Solar ETF	1-Day USD OBFR - 6.78%	Monthly	USD	1,628,399	May 2033	MSI	_	140,980	140,980
Pay	iShares Biotechnology ETF	1-Day USD OBFR - 2.38%	Monthly	USD	10,071,579	May 2033	MSI	_	269,479	269,479
Pay	iShares Expanded Tech-Software Sector ETF	1-Day USD OBFR - 1.98%	Monthly	USD	39,672,094	May 2033	MSI	_	927,217	927,217
Pay	iShares MSCI EAFE ETF	1-Day USD OBFR - 0.20%	Monthly	USD	4,983,495	May 2033	MSI	_	(10,805)	(10,805)
Pay	iShares MSCI EAFE Value ETF	1-Day USD OBFR - 0.20%	Monthly	USD	12,273,605	May 2033	MSI	_	(32,334)	(32,334)
Pay	iShares MSCI Eurozone ETF	1-Day USD OBFR - 1.13%	Monthly	USD	8,989,962	May 2033	MSI	_	(46,393)	(46,393)
Pay	iShares Russell 1000 ETF	1-Day USD OBFR - 0.73%	Monthly	USD	2,387,034	May 2033	MSI	_	4,325	4,325
Pay	iShares Russell 2000 ETF	1-Day USD OBFR - 1.08%	Monthly	USD	24,708,681	May 2033	MSI	_	505,216	505,216
Pay	iShares Russell 2000 Value ETF	1-Day USD OBFR - 0.93%	Monthly	USD	8,789,567	May 2033	MSI	_	224,980	224,980
Pay	iShares Russell 3000 ETF	1-Day USD OBFR - 0.83%	Monthly	USD	2,446,321	May 2033	MSI	_	8,103	8,103

Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)			Value
iShares Russell Mid-Cap Growth ETF	1-Day USD OBFR - 0.89%	Monthly	USD	16,019,817	May 2033	MSI	_	\$281,899	\$281,899
iShares Semiconductor ETF	1-Day USD OBFR - 2.18%	Monthly	USD	13,497,530	May 2033	MSI	_	379,277	379,277
Materials Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	2,413,966	May 2033	MSI	_	(18,533)	(18,533)
S&P Oil & Gas Equipment Select Industry Total Return Index	1-Day USD OBFR - 0.50%	Monthly	USD	2,575,340	May 2033	MSI	_	129,043	129,043
SPDR S&P 500 ETF	1-Day USD OBFR - 0.20%	Monthly	USD	32,332,026	May 2033	MSI	_	(73,963)	(73,963)
SPDR S&P Biotech ETF	1-Day USD OBFR - 5.18%	Monthly	USD	3,822,443	May 2033	MSI	_	84,642	84,642
SPDR S&P Oil & Gas Exploration & Production ETF	1-Day USD OBFR - 1.33%	Monthly	USD	11,137,687	May 2033	MSI	_	236,128	236,128
SPDR S&P Pharmaceuticals ETF	1-Day USD OBFR - 1.88%	Monthly	USD	5,704,752	May 2033	MSI	_	36,560	36,560
SPDR S&P Regional Banking ETF	1-Day USD OBFR - 2.18%	Monthly	USD	25,921,362	May 2033	MSI	_	417,851	417,851
SPDR S&P Retail ETF	1-Day USD OBFR - 3.53%	Monthly	USD	5,110,688	May 2033	MSI	_	80,980	80,980
STOXX Europe 600 Automobiles & Parts Index	1-Day EUR ESTR Compounded OIS - 0.40%	Monthly	EUR	715,182	May 2033	MSI	_	493	493
STOXX Europe 600 Basic Resources Index	1-Day EUR ESTR Compounded OIS - 0.40%	Monthly	EUR	1,176,210	May 2033	MSI	_	82,946	82,946
STOXX Europe 600 Financial Services Index	1-Day EUR ESTR Compounded OIS - 0.40%	Monthly	EUR	334,415	May 2033	MSI	_	(4,229)	(4,229)
STOXX Europe 600 Industrial Goods & Services Index	1-Day EUR ESTR Compounded OIS - 0.40%	Monthly	EUR	2,304,535	May 2033	MSI	_	(4,786)	(4,786)
TOPIX Banks Index	1-Day JPY TONAR Compounded OIS - 0.25%	Monthly	JPY	46,948,067	May 2033	MSI	_	248	248
Utilities Select Sector SPDR Fund	1-Day USD OBFR - 0.20%	Monthly	USD	5,066,893	May 2033	MSI	_	11,401	11,401
	entity  iShares Russell Mid-Cap Growth ETF iShares Semiconductor ETF  Materials Select Sector SPDR Fund  \$&P Oil & Gas Equipment Select Industry Sleat Industry Sleat Industry Sleat SPDR \$&P 500 ETF  SPDR \$&P 500 ETF  SPDR \$&P 600 ETF  SPDR \$&P 600 ETF  SPDR \$&P 88P Biotech ETF  SPDR \$&P 0il & Gas Exploration & Production ETF  SPDR \$&P Regional Banking ETF  STOXX Europe 600 Automobiles & Parts Index  STOXX Europe 600 Basic Resources Index  STOXX Europe 600 Inancial Services Index  STOXX Europe 600 Inancial Services Index  STOXX Europe 600 Industrial Goods & Services Index  TOPIX Banks Index  Utilities Select Sector SPDR	Reference entity rate  IShares Russell Mid-Cap Growth ETF -0.89%  IShares Semiconductor ETF -2.18%  Materials Select Sector SPDR 1-Day USD OBFR ETF -0.20%  S&P Oil & Gas Equipment Select Industry Total Return Index -0.50%  SPDR S&P Oil & Gas Equipment Select Industry Total Return Index -0.50%  SPDR S&P Oil & Gas Equipment Select Industry Total Return Index -0.50%  SPDR S&P Oil & Gas Equipment Select Industry Total Industry Total Return Index -0.50%  SPDR S&P Oil & Industrial Service SPDR S&P Oil & Industrial Service Index -2.18%  SPDR S&P Oil & Gas Exploration Industrial Industrial Goods & Services Index  STOXX Europe 600 Automobiles & Parts Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%  STOXX Europe 600 Industrial Goods & Services Index OIS -0.40%	Reference entity is a fixed entity frequency  IShares Russell Higher entity is a fixed semiconductor ETF -0.89% Monthly  IShares	Reference entity   Shares Russell   1-Day USD OBFR ETF   -2.18%   Monthly   USD	Reference entity         fixed rate         Payment frequency         Currency         Notional amount           IShares Russell Mid-Cap Growth ETF         1-Day USD OBFR 2-0.89%         Monthly         USD         16,019,817           IShares Semiconductor ETF         1-Day USD OBFR 2-2.18%         Monthly         USD         13,497,530           Materials Select Sector SPDR Fund         1-Day USD OBFR 2-2.18%         Monthly         USD         2,413,966           S&P Oil & Gas Equipment Select Industry Total Return Index         1-Day USD OBFR 2-0.50%         Monthly         USD         2,575,340           SPDR S&P 500         1-Day USD OBFR 2-0.20%         Monthly         USD         32,332,026           SPDR S&P 501         1-Day USD OBFR 2-0.20%         Monthly         USD         32,332,026           SPDR S&P 501 & Gas Exploration & Production ETF         -0.20%         Monthly         USD         3,822,443           SPDR S&P Poll & Gas Exploration & Port S&P Po	Reference entity	Page	Reference	Page   Page

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Pay	Vanguard FTSE Developed Markets ETF	1-Day USD OBFR - 0.20%	Monthly	USD	94,688,563	May 2033	MSI	_	\$(73,915)	\$(73,915)
Pay	Vanguard FTSE Europe ETF	1-Day USD OBFR - 1.58%	Monthly	USD	14,243,549	May 2033	MSI	_	(153,534)	(153,534)
Pay	iShares iBoxx \$ High Yield Corporate Bond ETF	1-Day USD OBFR - 1.08%	Monthly	USD	3,076,103	May 2033	MSI	_	(14,043)	(14,043)
Receive	Astellas Pharma, Inc.	1-Day JPY TONAR Compounded OIS + 0.40%	Monthly	JPY	6,081,645	May 2026	CITI	_	3,815	3,815
Receive	Adyen NV	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	97,294	May 2033	GSI	_	1,997	1,997
Receive	Agilent Technologies, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,300,410	May 2033	GSI	_	(19)	(19)
Receive	Alcon, Inc.	1-Day CHF SARON Compounded OIS + 0.20%	Monthly	CHF	384,246	May 2033	GSI	_	8,259	8,259
Receive	Amazon.com, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	260,978	May 2033	GSI	_	3,878	3,878
Receive	American Express Company	1-Day USD OBFR + 0.25%	Monthly	USD	1,705,460	May 2033	GSI	_	(21,862)	(21,862)
Receive	Amoy Diagnostics Company, Ltd., Class A	1-Day USD OBFR + 0.75%	Monthly	USD	356,454	May 2033	GSI	_	(10,468)	(10,468)
Receive	Ares Management Corp., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	422,702	May 2033	GSI	_	_	_
Receive	AstraZeneca PLC	1-Day GBP SONIA Compounded OIS + 0.20%	Monthly	GBP	696,580	May 2033	GSI	_	(22,593)	(22,593)
Receive	Avantor, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	745,423	May 2033	GSI	_	(15,329)	(15,329)
Receive	BAWAG Group AG	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	276,493	May 2033	GSI	_	(3,416)	(3,416)
Receive	Bayer AG	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	2,629,950	May 2033	GSI	_	(53,752)	(53,752)
Receive	BFF Bank SpA	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	57,078	May 2033	GSI	_	535	535

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)		Value
Receive	Boston Scientific Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	3,826,947	May 2033	GSI	_	\$(39,951)	\$(39,951)
Receive	Bumble, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	257,772	May 2033	GSI	_	13,789	13,789
Receive	Contemporary Amperex Technology Company, Ltd., Class A	1-Day USD OBFR + 0.75%	Monthly	USD	898,455	May 2033	GSI	_	49,764	49,764
Receive	CTI BioPharma Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	657,099	May 2033	GSI	_	(22,824)	(22,824)
Receive	Daiichi Sankyo Company, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	379,070,045	May 2033	GSI	_	(43,679)	(43,679)
Receive	Datadog, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	664,206	May 2033	GSI	_	(1,607)	(1,607)
Receive	Edwards Lifesciences Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	150,028	May 2033	GSI	_	3,797	3,797
Receive	Eisai Company, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	79,288,884	May 2033	GSI	_	24,496	24,496
Receive	Elanco Animal Health, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	3,649	May 2033	GSI	_	(101)	(101)
Receive	Elevance Health, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	444,922	May 2033	GSI	_	13,001	13,001
Receive	Encompass Health Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	702,551	May 2033	GSI	_	31,885	31,885
Receive	FNB Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	789,316	May 2033	GSI	_	(23,444)	(23,444)
Receive	Genmab A/S	1-Month DKK CIBOR + 0.20%	Monthly	DKK	3,647,360	May 2033	GSI	_	(330)	(330)
Receive	Genpact, Ltd.	1-Day USD OBFR + 0.25%	Monthly	USD	1,413,568	May 2033	GSI	_	(8,271)	(8,271)
Receive	Glaukos Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	265,929	May 2033	GSI	_	(9,957)	(9,957)
Receive	Global Payments, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	2,309,429	May 2033	GSI	_	74,252	74,252
Receive	GSK PLC	1-Day GBP SONIA Compounded OIS + 0.20%	Monthly	GBP	1,599,421	May 2033	GSI	_	(50,689)	(50,689)
Receive	Hikma Pharmaceuticals PLC	1-Day GBP SONIA Compounded OIS + 0.20%	Monthly	GBP	87,623	May 2033	GSI	_	2,361	2,361
		2.0 . 0.20/0		00.	3.,523	2000			2,501	2,551

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Humana, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	526,593	May 2033	GSI	_	\$43,610	\$43,610
Receive	IDEXX Laboratories, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	206,547	May 2033	GSI	_	459	459
Receive	IMI PLC	1-Day GBP SONIA Compounded OIS + 0.20%	Monthly	GBP	1,024,100	May 2033	GSI	_	78,452	78,452
Receive	Immatics NV	1-Day USD OBFR + 0.25%	Monthly	USD	573,191	May 2033	GSI	_	(2,136)	(2,136)
Receive	Inari Medical, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	149,698	May 2033	GSI	_	(858)	(858)
Receive	Mirati Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	94,407	May 2033	GSI	_	7,285	7,285
Receive	Mitsubishi UFJ Financial Group, Inc.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	47,245,120	May 2033	GSI	_	(6,873)	(6,873)
Receive	Molina Healthcare, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	458,778	May 2033	GSI	_	35,885	35,885
Receive	MongoDB, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	44,171	May 2033	GSI	_	2,579	2,579
Receive	Morgan Stanley	1-Day USD OBFR + 0.25%	Monthly	USD	3,143,618	May 2033	GSI	_	(4,467)	(4,467)
Receive	NanoString Technologies, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	80,290	May 2033	GSI	_	(1,995)	(1,995)
Receive	Nikon Corp.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	50,709,199	May 2033	GSI	_	29,341	29,341
Receive	Nippon Shinyaku Company, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	15,314,610	May 2033	GSI	_	4,024	4,024
Receive	Novartis AG	1-Day CHF SARON Compounded OIS + 0.20%	Monthly	CHF	898,689	May 2033	GSI	_	37,472	37,472
Receive	Panasonic Holdings Corp.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	63,213,410	May 2033	GSI	_	95	95
Receive	PayPal Holdings, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	692,020	May 2033	GSI	_	22,112	22,112
Receive	PTC Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,746,457	May 2033	GSI	_	41,530	41,530
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Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Remegen Company, Ltd., H Shares	1-Day HKD HONIA Compounded OIS + 0.20%	Monthly	HKD	4,836,000	May 2033	GSI	_	\$(43,465)	\$(43,465)
Receive	REVOLUTION Medicines, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	923,894	May 2033	GSI	_	(36,415)	(36,415)
Receive	Rheinmetall AG	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	662,480	May 2033	GSI	_	(12,812)	(12,812)
Receive	Sage Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	319,244	May 2033	GSI	_	13,614	13,614
Receive	Shandong Weigao Group Medical Polymer Company, Ltd., H Shares	1-Day HKD HONIA Compounded OIS + 0.20%	Monthly	HKD	2,779,376	May 2033	GSI	_	3,386	3,386
Receive	Shopify, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	737,232	May 2033	GSI	_	6,221	6,221
Receive	Smith & Nephew PLC	1-Day GBP SONIA Compounded OIS + 0.20%	Monthly	GBP	6,691	May 2033	GSI	_	555	555
Receive	Snap, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	163,761	May 2033	GSI	_	(23,248)	(23,248)
Receive	Spotify Technology SA	1-Day USD OBFR + 0.25%	Monthly	USD	682,116	May 2033	GSI	_	742	742
Receive	Stem, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	195,561	May 2033	GSI	_	(12,189)	(12,189)
Receive	Syndax Pharmaceuticals, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	970,874	May 2033	GSI	_	(45,102)	(45,102)
Receive	Taiyo Yuden Company, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	153,971,999	May 2033	GSI	_	(15,593)	(15,593)
Receive	Tecan Group AG	1-Day CHF SARON Compounded OIS + 0.20%	Monthly	CHF	8,615	May 2033	GSI	_	20	20
Receive	Teleflex, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	142,861	May 2033	GSI	_	2,531	2,531
Receive	Tokyo Electron, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	50,803,500	May 2033	GSI	_	10,887	10,887
Receive	Tradeweb Markets, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	323,312	May 2033	GSI	_	(11,346)	(11,346)

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	UCB SA	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	75,028	May 2033	GSI	_	\$(1,421)	\$(1,421)
Receive	UniCredit SpA	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	237,794	May 2033	GSI		9,246	9,246
Receive	Veracyte, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	77,828	May 2033	GSI		(381)	(381)
Receive	Wacker Chemie AG	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	405,202	May 2033	GSI	_	(23,617)	(23,617)
Receive	Wells Fargo & Company	1-Day USD OBFR + 0.25%	Monthly	USD	3,243,176	May 2033	GSI	_	(152,473)	(152,473)
Receive	Yunnan Energy New Material Company, Ltd., Class A	1-Day USD OBFR + 0.75%	Monthly	USD	976,686	May 2033	GSI	_	(59,089)	(59,089)
Receive	Zhejiang HangKe Technology, Inc., Class A	1-Day USD OBFR + 0.75%	Monthly	USD	2,290	May 2033	GSI	_	256	256
Receive	Zoetis, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	317,757	May 2033	GSI	_	2,900	2,900
Receive	Advanced Micro Devices, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	916,529	May 2028	JPM	_	(34,532)	(34,532)
Receive	Agilent Technologies, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,208,426	May 2028	JPM	_	(25,192)	(25,192)
Receive	ALD SA	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	51,478	May 2028	JPM	_	2,191	2,191
Receive	Alphabet, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	1,979,393	May 2028	JPM	_	48,017	48,017
Receive	Alphabet, Inc., Class C	1-Day USD OBFR + 0.25%	Monthly	USD	2,215,285	May 2028	JPM	_	61,905	61,905
Receive	Amazon.com, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	2,158,283	May 2028	JPM	_	85,929	85,929
Receive	Anglo American PLC	1-Day GBP SONIA Compounded OIS + 0.20%	Monthly	GBP	550,006	May 2028	JPM	_	(27,315)	(27,315)
Receive	ASML Holding NV, NYRS	1-Day USD OBFR + 0.25%	Monthly	USD	2,216,762	May 2028	JPM	_	(97,410)	(97,410)
Receive	Astellas Pharma,	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	20,080,188	May 2028	JPM	_	14,666	14,666
		1-Day GBP SONIA Compounded	,						,	
Receive	AstraZeneca PLC	OIS + 0.20%	Monthly	GBP	1,285,079	May 2028	JPM	_	12,434	12,434

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Atlassian Corp., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	527,015	May 2028	JPM	_	\$(33,014)	\$(33,014)
Receive	Bank of New York Mellon Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	1,670,426	May 2028	JPM	_	(89,737)	(89,737)
Receive	Becton Dickinson & Company	1-Day USD OBFR + 0.25%	Monthly	USD	267,274	May 2028	JPM	_	12,565	12,565
Receive	Blueprint Medicines Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	163,965	May 2028	JPM	_	32,970	32,970
Receive	Boston Scientific Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	503,189	May 2028	JPM	_	12,069	12,069
Receive	Cboe Global Markets, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	783,098	May 2028	JPM	_	(1,302)	(1,302)
Receive	Commerzbank AG	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	350,816	May 2028	JPM	_	_	_
Receive	Concordia Financial Group, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	88,426,500	May 2028	JPM	_	32,986	32,986
Receive	Country Garden Holdings Company, Ltd.	1-Year HKD HONIA Compounded OIS + 0.30%	Monthly	HKD	8,531,593	May 2028	JPM	_	(159,132)	(159,132)
Receive	Daiichi Sankyo Company, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	32,882,400	May 2028	JPM	_	6,510	6,510
Receive	Eisai Company, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	10,412,985	May 2028	JPM	_	6,053	6,053
Receive	Elanco Animal Health, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	161,568	May 2028	JPM	_	11,782	11,782
Receive	Elevance Health, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,741,976	May 2028	JPM	_	(63,245)	(63,245)
Receive	Eli Lilly & Company	1-Day USD OBFR + 0.25%	Monthly	USD	1,311,671	May 2028	JPM	_	114,497	114,497
Receive	Encompass Health Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	225,348	May 2028	JPM	_	11,195	11,195
Receive	Engie SA	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	2,432,848	May 2028	JPM	_	174,463	174,463
Receive	Erste Group Bank AG	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	1,052,518	May 2028	JPM	_	_	_
Receive	HCA Healthcare, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,508,212	May 2028	JPM	_	84,209	84,209

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Health Catalyst, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	258,088	May 2028	JPM	_	\$2,911	\$2,911
Receive	Hologic, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	42,769	May 2028	JPM	_	1,905	1,905
Receive	Humana, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	559,077	May 2028	JPM	_	14,606	14,606
Receive	IDEXX Laboratories, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	749,833	May 2028	JPM	_	21,925	21,925
Receive	Immunocore Holdings PLC, ADR	1-Day USD OBFR + 0.25%	Monthly	USD	958,665	May 2028	JPM	_	184,742	184,742
Receive	Insulet Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	225,545	May 2028	JPM	_	810	810
Receive	Intel Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	1,414,579	May 2028	JPM	_	(80,811)	(80,811)
Receive	Julius Baer Group, Ltd.	1-Day CHF SARON Compounded OIS + 0.20%	Monthly	CHF	348,194	May 2028	JPM	_	_	_
Receive	Karuna Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	36,498	May 2028	JPM	_	4,462	4,462
Receive	Kasikornbank PCL	1-Day USD OBFR + 1.00%	Monthly	USD	680,603	May 2028	JPM	_	(4,270)	(4,270)
Receive	Laboratory Corp of America Holdings	1-Day USD OBFR + 0.25%	Monthly	USD	2,527,542	May 2028	JPM	_	(86,969)	(86,969)
Receive	Lifetech Scientific Corp.	1-Day HKD HONIA Compounded OIS + 0.30%	Monthly	HKD	59,798	May 2028	JPM	_	(546)	(546)
Receive	Mitsubishi UFJ Financial Group, Inc.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	90,996,200	May 2028	JPM	_	38,625	38,625
Receive	Morgan Stanley	1-Day USD OBFR + 0.25%	Monthly	USD	1,981,421	May 2028	JPM	_	157,333	157,333
		1-Day CHF SARON Compounded		6115	70.4040				40.040	40.040
Receive	Novartis AG Palo Alto	OIS + 0.20% 1-Day USD OBFR	Monthly	CHF	724,248	May 2028	JPM	_	49,012	49,012
Receive	Networks, Inc.	+ 0.25%	Monthly	USD	1,784,126	May 2028	JPM	_	(113,416)	(113,416)
Receive	Panasonic Holdings Corp.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	35,977,360	May 2028	JPM	_	12,407	12,407
Receive	PayPal Holdings, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	361,204	May 2028	JPM	_	10,567	10,567

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Pfizer, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	3,041,626	May 2028	JPM	_	\$(204,496)	\$(204,496)
Receive	Phillips 66	1-Day USD OBFR + 0.25%	Monthly	USD	3,375,098	May 2028	JPM	_	(187,901)	(187,901)
Receive	ProFrac Holding Corp., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	247,108	May 2028	JPM	_	(41,979)	(41,979)
Receive	QuidelOrtho Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	476,965	May 2028	JPM	_	1,026	1,026
Receive	Richter Gedeon Nyrt	1-Month HUF BUBOR + 0.75%	Monthly	HUF	147,546,630	May 2028	JPM	_	23,708	23,708
Receive	Royal Bank of Canada	1-Day CAD CORRA Compounded OIS + 0.20%	Monthly	CAD	759,172	May 2028	JPM	_	22,176	22,176
Receive	S&P Global, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	310,928	May 2028	JPM	_	17,908	17,908
Receive	Shandong Weigao Group Medical Polymer Company, Ltd., H Shares	1-Day HKD HONIA Compounded OIS + 0.30%	Monthly	HKD	2,964,950	May 2028	JPM	_	(3,742)	(3,742)
Receive	Singapore Exchange, Ltd.	1-Month SGD SORA Compounded OIS + 0.45%	Monthly	SGD	1,061,219	May 2028	JPM	_	4,092	4,092
Receive	SKC Company, Ltd.	1-Day USD OBFR + 0.50%	Monthly	USD	1,177,156	May 2028	JPM	_	(81,259)	(81,259)
Receive	Spotify Technology SA	1-Day USD OBFR + 0.25%	Monthly	USD	407,006	May 2028	JPM	_	5,979	5,979
Receive	Talanx AG	1-Day EUR ESTR Compounded OIS + 0.20%	Monthly	EUR	351,809	May 2028	JPM	_	24,865	24,865
Receive	Teleflex, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	927,557	May 2028	JPM	_	33,638	33,638
Receive	The Bank of Kyoto, Ltd.	1-Day JPY TONAR Compounded OIS + 0.20%	Monthly	JPY	227,652,000	May 2028	JPM	_	151,398	151,398
Receive	Thermo Fisher Scientific, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	2,361,190	May 2028	JPM	_	(107,799)	(107,799)
Receive	Trupanion, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	33,450	May 2028	JPM	_	(4,241)	(4,241)
Receive	UnitedHealth Group, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	3,141,949	May 2028	JPM	_	(115,850)	(115,850)
Receive	Vaxcyte, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	988,051	May 2028	JPM	_	133,361	133,361
Receive	Waters Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	1,361,667	May 2028	JPM	_	(14,723)	(14,723)

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Wells Fargo & Company	1-Day USD OBFR + 0.25%	Monthly	USD	1,170,330	May 2028	JPM	_	\$(339)	\$(339)
Receive	Weyerhaeuser Company	1-Day USD OBFR + 0.25%	Monthly	USD	1,372,364	May 2028	JPM	_	10,900	10,900
Receive	Abcam PLC, ADR	1-Day USD OBFR + 0.25%	Monthly	USD	498,319	May 2033	MSI	_	7,502	7,502
Receive	Accton Technology Corp.	1-Day USD OBFR + 0.55%	Monthly	USD	663,989	May 2033	MSI	_	(34,228)	(34,228)
Receive	Activision Blizzard, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	954,095	May 2033	MSI	_	(92,511)	(92,511)
Receive	Adyen NV	1-Day EUR ESTR Compounded OIS + 0.30%	Monthly	EUR	1,434,248	May 2033	MSI	_	7,253	7,253
Receive	ALD SA	1-Day EUR ESTR Compounded OIS + 0.30%	Monthly	EUR	62,307	May 2033	MSI	_	330	330
Receive	Alnylam Pharmaceuticals, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,007,724	May 2033	MSI	_	(38,620)	(38,620)
Receive	Alphabet, Inc., Class C	1-Day USD OBFR + 0.25%	Monthly	USD	631,816	May 2033	MSI	_	7,047	7,047
Receive	Amedisys, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	760,849	May 2033	MSI	_	7,883	7,883
Receive	Amicus Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	959,381	May 2033	MSI	_	(32,443)	(32,443)
Receive	ASML Holding NV, NYRS	1-Day USD OBFR + 0.25%	Monthly	USD	626,898	May 2033	MSI	_	(5,871)	(5,871)
Receive	ASR Nederland NV	1-Day EUR ESTR Compounded OIS + 0.30%	Monthly	EUR	350,939	May 2033	MSI	_	_	_
Descion	Astellas Pharma,	1-Day JPY TONAR Compounded	Mandela	IDV	45 456 405	M 2022	NC		4.707	4707
Receive	Inc.	OIS + 0.35%  1-Day GBP  SONIA  Compounded	Monthly	JPY	15,456,135	May 2033	MSI		4,707	4,707
Receive	AstraZeneca PLC	OIS + 0.30%	Monthly	GBP	1,271,553	May 2033	MSI	_	(17,660)	(17,660)
Receive	Atlassian Corp., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	666,845	May 2033	MSI	_	(79,086)	(79,086)
Receive	Banco Bradesco SA, ADR	1-Day USD OBFR + 0.25%	Monthly	USD	1,357,653	May 2033	MSI	_	(1,270)	(1,270)
Receive	Bayer AG	1-Day EUR ESTR Compounded OIS + 0.30%	Monthly	EUR	773,491	May 2033	MSI	_	(23,362)	(23,362)
Receive	Block, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	517,371	May 2033	MSI	_	(30,969)	(30,969)

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Boston Scientific Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	801,090	May 2033	MSI	_	\$1,196	\$1,196
Receive	BP PLC	1-Year GBP SONIA Compounded OIS + 0.30%	Monthly	GBP	750,221	May 2033	MSI	_	(21,946)	(21,946)
Receive	British American Tobacco PLC	1-Day GBP SONIA Compounded OIS + 0.30%	Monthly	GBP	3,536,065	May 2033	MSI	_	107,777	107,777
Receive	Bumble, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	125,103	May 2033	MSI	_	4,448	4,448
Receive	Canadian Natural Resources, Ltd.	1-Day USD OBFR + 0.25%	Monthly	USD	2,483,175	May 2033	MSI	_	(4,802)	(4,802)
Receive	Celldex Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	927,810	May 2033	MSI	_	(36,096)	(36,096)
Receive	Cenovus Energy, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	732,391	May 2033	MSI	_	(38,238)	(38,238)
Receive	Ceridian HCM Holding, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	627,206	May 2033	MSI	_	(51,954)	(51,954)
Receive	Datadog, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	654,121	May 2033	MSI	_	(26,987)	(26,987)
Receive	Dynatrace, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	798,152	May 2033	MSI	_	(11,492)	(11,492)
Receive	Eisai Company, Ltd.	1-Day JPY TONAR Compounded OIS + 0.35%	Monthly	JPY	34,805,064	May 2033	MSI	_	10,578	10,578
Receive	Elevance Health, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,235,373	May 2033	MSI	_	(43,387)	(43,387)
Receive	Encompass Health Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	668,660	May 2033	MSI	_	28,025	28,025
Receive	Endeavour Mining PLC	1-Day CAD CORRA Compounded OIS + 0.25%	Monthly	CAD	19,670	May 2033	MSI	_	(303)	(303)
Receive	Erste Group Bank AG	1-Day EUR ESTR Compounded OIS + 0.30%	Monthly	EUR	350,053	May 2033	MSI	_	5,450	5,450
Receive	Etsy, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,086,885	May 2033	MSI	_	(28,829)	(28,829)
Receive	FNB Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	774,925	May 2033	MSI	_	835	835
Receive	Genpact, Ltd.	1-Day USD OBFR + 0.25%	Monthly	USD	1,176,318	May 2033	MSI	_	(18,562)	(18,562)

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
		1-Day GBP SONIA Compounded							4	****
Receive	Genus PLC	OIS + 0.30%	Monthly	GBP	89,771	May 2033	MSI	_	\$(4,345)	\$(4,345)
Receive	Goldman Sachs Group, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,685,797	May 2033	MSI	_	39,446	39,446
Receive	Hangzhou Tigermed Consulting Company, Ltd., Class A	1-Day USD OBFR + 0.70%	Monthly	USD	698,857	May 2033	MSI	_	(102,343)	(102,343)
Receive	Hikma Pharmaceuticals PLC	1-Day GBP SONIA Compounded OIS + 0.30%	Monthly	GBP	126,604	May 2033	MSI	_	6,982	6,982
Receive	Humana, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	51,882	May 2033	MSI	_	951	951
Receive	Inari Medical, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	515,717	May 2033	MSI	_	5,051	5,051
Receive	Insulet Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	1,385,638	May 2033	MSI	_	(22,237)	(22,237)
Receive	Intel Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	1,571,775	May 2033	MSI	_	(58,304)	(58,304)
Receive	Intellia Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	581,253	May 2033	MSI	_	(25,919)	(25,919)
Receive	Kymera Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	95,691	May 2033	MSI	_	(9,658)	(9,658)
Receive	Laboratory Corp of America Holdings	1-Day USD OBFR + 0.25%	Monthly	USD	506,247	May 2033	MSI	_	(13,440)	(13,440)
Receive	Lifetech Scientific Corp.	1-Day HKD HONIA Compounded OIS + 0.40%	Monthly	HKD	4,667,712	May 2033	MSI	_	(64,181)	(64,181)
Receive	M&T Bank Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	1,563,250	May 2033	MSI	_	31,139	31,139
Receive	Marvell Technology, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	437,737	May 2033	MSI	_	(12,520)	(12,520)
Receive	MercadoLibre, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,811,712	May 2033	MSI	_	(62,562)	(62,562)
Receive	Molina Healthcare, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	58,731	May 2033	MSI	_	217	217
Receive	MongoDB, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,417,679	May 2033	MSI	_	86,867	86,867
Receive	Morphic Holding, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	825,433	May 2033	MSI	_	88,869	88,869
Receive	NanoString Technologies, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	98,894	May 2033	MSI	_	(6,240)	(6,240)

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
	Nippon Shinyaku	1-Day JPY TONAR Compounded		101	54.700.040				442.744	***
Receive	Company, Ltd.	OIS + 0.35% 1-Day USD OBFR	Monthly	JPY	54,799,040	May 2033	MSI		\$13,714	\$13,714
Receive	Nova, Ltd.	+ 0.25%	Monthly	USD	454,809	May 2033	MSI	_	(13,530)	(13,530)
Receive	Owens & Minor, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	5,329	May 2033	MSI	_	267	267
Receive	Panasonic Holdings Corp.	1-Day JPY TONAR Compounded OIS + 0.35%	Monthly	JPY	219,903,400	May 2033	MSI	_	11,597	11,597
Receive	Pinterest, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	107,668	May 2033	MSI	_	(21,747)	(21,747)
Receive	PTC Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	78,478	May 2033	MSI	_	4,884	4,884
Receive	QuidelOrtho Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	63,789	May 2033	MSI	_	(1,914)	(1,914)
Receive	Rambus, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	404,799	May 2033	MSI	_	(43,838)	(43,838)
Receive	Regeneron Pharmaceuticals, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	2,605,953	May 2033	MSI	_	(72,316)	(72,316)
Receive	Rheinmetall AG	1-Day EUR ESTR Compounded OIS + 0.30%	Monthly	EUR	741,459	May 2033	MSI	_	(4,440)	(4,440)
Receive	Royal Bank of Canada	1-Day CAD CORRA Compounded OIS + 0.25%	Monthly	CAD	5,863,836	May 2033	MSI	_	68,057	68,057
Receive	Sage Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	689,296	May 2033	MSI	_	42,290	42,290
Receive	Sarepta Therapeutics, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,985,330	May 2033	MSI	_	(52,439)	(52,439)
Receive	Seagen, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,743,846	May 2033	MSI	_	(60,996)	(60,996)
Receive	Shandong Weigao Group Medical Polymer Company, Ltd., H Shares	1-Day HKD HONIA Compounded OIS + 0.40%	Monthly	HKD	57,321	May 2033	MSI	_	(62)	(62)
Receive	Shopify, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	1,476,658	May 2033	MSI	_	(10,331)	(10,331)
Receive	Skyworks Solutions, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	362,436	May 2033	MSI	_	(16,853)	(16,853)
	Smith & Nephew	1-Day GBP SONIA Compounded	,	GBP	,	•				
Receive	PLC	OIS + 0.30%	Monthly	GBY	517,572	May 2033	MSI		70,066	70,066

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Snap, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	229,644	May 2033	MSI	_	\$(48,914)	\$(48,914)
Receive	Splunk, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,557,391	May 2033	MSI	_	(122,072)	(122,072)
Receive	Stryker Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	1,443,991	May 2033	MSI	_	29,097	29,097
Receive	Syneos Health, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	518,797	May 2033	MSI	_	(17,417)	(17,417)
Receive	Talanx AG	1-Day EUR ESTR Compounded OIS + 0.30%	Monthly	EUR	2,343,611	May 2033	MSI	_	108,720	108,720
Receive	Teleflex, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	24,501	May 2033	MSI	_	979	979
Receive	The Chiba Bank, Ltd.	1-Day JPY TONAR Compounded OIS + 0.35%	Monthly	JPY	101,415,600	May 2033	MSI	_	40,500	40,500
Receive	Trupanion, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	463,346	May 2033	MSI	_	(14,710)	(14,710)
Receive	Ultragenyx Pharmaceutical, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	787,575	May 2033	MSI	_	51,565	51,565
Receive	Ulvac, Inc.	1-Day JPY TONAR Compounded OIS + 0.35%	Monthly	JPY	50,220,000	May 2033	MSI	_	(11,315)	(11,315)
Receive	Unimicron Technology Corp.	1-Day USD OBFR + 0.55%	Monthly	USD	360,080	May 2033	MSI	_	13,827	13,827
Receive	UnitedHealth Group, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	422,473	May 2033	MSI	_	(12,166)	(12,166)
Receive	VanEck Gold Miners ETF	1-Day USD OBFR + 0.25%	Monthly	USD	2,545,403	May 2033	MSI	_	(62,133)	(62,133)
Receive	Veracyte, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	276,186	May 2033	MSI	_	(5,555)	(5,555)
Receive	Wartsila OYJ Abp	1-Day EUR ESTR Compounded OIS + 0.30%	Monthly	EUR	1,462,537	May 2033	MSI	_	314,150	314,150
Receive	Zoetis, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,071,119	May 2033	MSI	_	3,101	3,101
Receive	Airbnb, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	100,719	May 2033	MSI	_	2,422	2,422
Receive	Alphabet, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	739,883	May 2033	MSI	_	5,304	5,304
Receive	Amazon.com, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	25,890	May 2033	MSI	_	530	530
Receive	Danaher Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	469,813	May 2033	MSI	_	(36,904)	(36,904)
					•					

Pay/ receive total return*	Reference entity	Floating/ fixed rate	Payment frequency	Currency	Notional amount	Maturity date	Counterparty (OTC)	Unamortized upfront payment paid (received)	Unrealized appreciation (depreciation)	Value
Receive	Five9, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	18,289	May 2033	MSI	_	\$(3,051)	\$(3,051)
Receive	FleetCor Technologies, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	1,733,190	May 2033	MSI	_	(73,304)	(73,304)
Receive	Illumina, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	710,837	May 2033	MSI	_	(79,822)	(79,822)
Receive	Mastercard, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	2,085,592	May 2033	MSI	_	31,598	31,598
Receive	Meta Platforms, Inc., Class A	1-Day USD OBFR + 0.25%	Monthly	USD	1,119,907	May 2033	MSI	_	103,379	103,379
Receive	Mitsubishi UFJ Financial Group, Inc.	1-Day JPY TONAR Compounded OIS + 0.35%	Monthly	JPY	91,676,920	May 2033	MSI	_	(750)	(750)
Receive	Novartis AG	1-Day CHF SARON Compounded OIS + 0.30%	Monthly	CHF	655,376	May 2033	MSI	_	27,758	27,758
Receive	NVIDIA Corp.	1-Day USD OBFR + 0.25%	Monthly	USD	180,373	May 2033	MSI	_	3,986	3,986
Receive	Palo Alto Networks, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	696,416	May 2033	MSI	_	(68,772)	(68,772)
Receive	Pfizer, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	78,901	May 2033	MSI	_	(4,868)	(4,868)
Receive	Spotify Technology SA	1-Day USD OBFR + 0.25%	Monthly	USD	252,710	May 2033	MSI	_	(1,833)	(1,833)
Receive	Uber Technologies, Inc.	1-Day USD OBFR + 0.25%	Monthly	USD	860,065	May 2033	MSI	_	(32,920)	(32,920)
								_	\$3,050,934	\$3,050,934

<sup>\*</sup> Fund will pay or receive the total return of the reference asset depending on whether the return is positive or negative. For contracts where the fund has elected to receive the total return of the reference asset if positive, it will be responsible for paying the floating rate and the total return of the reference asset if negative. If the fund has elected to pay the total return of the reference asset if positive, it will receive (pay) the floating rate and the total return of the reference asset if negative.

#### **Derivatives Currency Abbreviations**

AUD Australian Dollar

CAD Canadian Dollar

CHF Swiss Franc

CNY Chinese Yuan Renminbi

DKK Danish Krone

EUR Euro

GBP Pound Sterling

HKD Hong Kong Dollar

HUF Hungarian Forint

INR Indian Rupee

JPY Japanese Yen KRW Korean Won

SEK Swedish Krona

SGD Singapore Dollar

USD U.S. Dollar

#### **Derivatives Abbreviations**

ADR American Depositary Receipt

RNP **BNP Paribas** 

BUBOR Budapest Interbank Offered Rate CIBOR Copenhagen Interbank Offered Rate

CITI Citibank, N.A.

CORRA Canadian Overnight Repo Rate Average

DB Deutsche Bank AG ESTR Euro Short-Term Rate

Goldman Sachs International GSI

HONIA Hong Kong Overnight Index Average Rate

JPM JPMorgan Chase Bank, N.A.

MSI Morgan Stanley & Co. International PLC

NYRS New York Registry Shares OBFR Overnight Bank Funding Rate OIS Overnight Index Swap

OTC Over-the-counter

SARON Swiss Average Rate Overnight SCB Standard Chartered Bank

Sterling Overnight Interbank Average Rate SONIA

SORA Singapore Overnight Rate Average SSB State Street Bank and Trust Company

TONAR Tokyo Overnight Average Rate

At 4-30-23, the aggregate cost of investments for federal income tax purposes was \$798,913,979. Net unrealized appreciation aggregated to \$22,171,378, of which \$43,458,310 related to gross unrealized appreciation and \$21,286,932 related to gross unrealized depreciation.

See Notes to financial statements regarding investment transactions and other derivatives information.

# Financial statements

## STATEMENT OF ASSETS AND LIABILITIES 4-30-23 (unaudited)

Assets	
Unaffiliated investments, at value (Cost \$773,207,878) including \$455,447 of securities	
loaned	\$818,672,329
Affiliated investments, at value (Cost \$480,932)	480,967
Total investments, at value (Cost \$773,688,810)	819,153,296
Swap contracts, at value	9,308,621
Unrealized appreciation on forward foreign currency contracts	478,020
Receivable for futures variation margin	68,618
Cash	8,458,527
Foreign currency, at value (Cost \$386,864)	379,166
Collateral segregated at custodian for OTC derivative contracts	288,000
Dividends and interest receivable	1,353,950
Receivable for fund shares sold	927,297
Receivable for investments sold	6,366,304
Receivable for securities lending income	993
Other assets	153,611
Total assets	846,936,403
Liabilities	
Unrealized depreciation on forward foreign currency contracts	728,669
Written options, at value (Premiums received \$1,222,593)	870,448
Swap contracts, at value	6,257,687
Foreign capital gains tax payable	30,777
Payable for collateral on OTC derivatives	654,407
Payable for investments purchased	21,297,371
Payable for fund shares repurchased	28,274,157
Payable upon return of securities loaned	480,396
Payable to affiliates	
Accounting and legal services fees	49,188
Transfer agent fees	54,312
Trustees' fees	983
Other liabilities and accrued expenses	151,810
Total liabilities	58,850,205
Net assets	\$788,086,198
Net assets consist of	
Paid-in capital	\$826,496,282
Total distributable earnings (loss)	(38,410,084)
Net assets	\$788,086,198

## STATEMENT OF ASSETS AND LIABILITIES 4-30-23 (unaudited) (continued)

Net asset value per share	
Based on net asset value and shares outstanding - the fund has an unlimited number of shares authorized with no par value	
Class A (\$10,778,915 ÷ 1,015,780 shares) <sup>1</sup>	\$10.61
Class C (\$2,444,729 ÷ 243,541 shares) <sup>1</sup>	\$10.04
Class I (\$463,923,755 ÷ 42,503,716 shares)	\$10.91
Class R6 (\$228,661,916 ÷ 20,688,466 shares)	\$11.05
Class NAV (\$82,276,883 ÷ 7,442,812 shares)	\$11.05
Maximum offering price per share	
Class A (net asset value per share $\div 95\%$ ) <sup>2</sup>	\$11.17

Redemption price per share is equal to net asset value less any applicable contingent deferred sales charge.
 On single retail sales of less than \$50,000. On sales of \$50,000 or more and on group sales the offering price is reduced.

## **STATEMENT OF OPERATIONS** For the six months ended 4-30-23 (unaudited)

Investment income	
Interest	\$5,277,101
Dividends	4,558,346
Securities lending	10,252
Less foreign taxes withheld	(158,915)
Total investment income	9,686,784
Expenses	
Investment management fees	5,706,414
Distribution and service fees	30,235
Accounting and legal services fees	79,042
Transfer agent fees	389,832
Trustees' fees	11,294
Custodian fees	132,187
State registration fees	41,173
Printing and postage	27,890
Professional fees	77,463
Other	71,511
Total expenses	6,567,041
Less expense reductions	(28,958)
Net expenses	6,538,083
Net investment income	3,148,701
Realized and unrealized gain (loss)	
Net realized gain (loss) on	
Unaffiliated investments and foreign currency transactions	(12,239,238)
Affiliated investments	1,623
Futures contracts	(299,151)
Forward foreign currency contracts	(822,077)
Written options	(869,831)
Swap contracts	(26,467,120)
	(40,695,794)
Change in net unrealized appreciation (depreciation) of	
Unaffiliated investments and translation of assets and liabilities in foreign currencies	49,829,766
Affiliated investments	144
Futures contracts	162,650
Forward foreign currency contracts	(326,094)
Written options	1,036,892
Swap contracts	12,267,727
	62,971,085
Net realized and unrealized gain	22,275,291
Increase in net assets from operations	\$25,423,992

## STATEMENTS OF CHANGES IN NET ASSETS

	Six months ended 4-30-23 (unaudited)	Year ended 10-31-22
Increase (decrease) in net assets	(,	
From operations		
Net investment income (loss)	\$3,148,701	\$(1,624,993)
Net realized loss	(40,695,794)	(21,576,089)
Change in net unrealized appreciation (depreciation)	62,971,085	(93,823,763)
Increase (decrease) in net assets resulting from operations	25,423,992	(117,024,845)
Distributions to shareholders		
From earnings		
Class A	(322,770)	(958,141)
Class C	(67,590)	(268,997)
Class I	(21,284,340)	(61,631,044)
Class R6	(1,219,858)	(3,086,648)
Class NAV	(2,596,800)	(3,588,697)
Total distributions	(25,491,358)	(69,533,527)
From fund share transactions	(30,142,442)	(142,510,196)
Total decrease	(30,209,808)	(329,068,568)
Net assets		
Beginning of period	818,296,006	1,147,364,574
End of period	\$788,086,198	\$818,296,006

# Financial highlights

CLASS A SHARES Period ended	4-30-23 <sup>1</sup>	10-31-22	10-31-21	10-31-20	10-31-19	10-31-18
Per share operating performance						
Net asset value, beginning of period	\$10.61	\$12.73	\$11.60	\$11.02	\$10.73	\$11.82
Net investment income (loss) <sup>2</sup>	0.02	(0.05)	(0.15)	(0.10)	(0.03)	(0.07)
Net realized and unrealized gain (loss) on investments	0.29	(1.25)	1.73	0.78	0.67	(0.11)
Total from investment operations	0.31	(1.30)	1.58	0.68	0.64	(0.18)
Less distributions						
From net investment income	(0.31)	_	_	(0.10)	_	_
From net realized gain	_	(0.82)	(0.45)	_	(0.35)	(0.91)
Total distributions	(0.31)	(0.82)	(0.45)	(0.10)	(0.35)	(0.91)
Net asset value, end of period	\$10.61	\$10.61	\$12.73	\$11.60	\$11.02	\$10.73
Total return (%) <sup>3,4</sup>	2.99 <sup>5</sup>	(10.69)	13.69	6.15	6.09	(1.57)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$11	\$11	\$16	\$12	\$11	\$19
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.94 <sup>6</sup>	1.93	1.97	2.00	1.98	2.00
Expenses including reductions	1.93 <sup>6</sup>	1.92	1.96	1.99	1.97	1.99
Net investment income (loss)	0.44 <sup>6</sup>	(0.47)	(1.18)	(0.87)	(0.25)	(0.61)
Portfolio turnover (%)	94	214	259	221	170	169

<sup>&</sup>lt;sup>1</sup> Six months ended 4-30-23. Unaudited.

Based on average daily shares outstanding.

<sup>&</sup>lt;sup>3</sup> Total returns would have been lower had certain expenses not been reduced during the applicable periods.

<sup>&</sup>lt;sup>4</sup> Does not reflect the effect of sales charges, if any.

<sup>&</sup>lt;sup>5</sup> Not annualized.

<sup>&</sup>lt;sup>6</sup> Annualized.

CLASS C SHARES Period ended	4-30-23 <sup>1</sup>	10-31-22	10-31-21	10-31-20	10-31-19	10-31-18
Per share operating performance						
Net asset value, beginning of period	\$10.01	\$12.13	\$11.16	\$10.61	\$10.42	\$11.57
Net investment loss <sup>2</sup>	(0.01)	(0.13)	(0.23)	(0.17)	(0.10)	(0.15)
Net realized and unrealized gain (loss) on investments	0.27	(1.17)	1.65	0.74	0.64	(0.09)
Total from investment operations	0.26	(1.30)	1.42	0.57	0.54	(0.24)
Less distributions						
From net investment income	(0.23)	_	_	(0.02)	_	_
From net realized gain	_	(0.82)	(0.45)	_	(0.35)	(0.91)
Total distributions	(0.23)	(0.82)	(0.45)	(0.02)	(0.35)	(0.91)
Net asset value, end of period	\$10.04	\$10.01	\$12.13	\$11.16	\$10.61	\$10.42
Total return (%) <sup>3,4</sup>	2.66 <sup>5</sup>	(11.33)	12.86	5.33	5.39	(2.26)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$2	\$3	\$5	\$5	\$6	\$10
Ratios (as a percentage of average net assets):						
Expenses before reductions	2.64 <sup>6</sup>	2.63	2.67	2.70	2.68	2.70
Expenses including reductions	2.63 <sup>6</sup>	2.62	2.66	2.69	2.67	2.69
Net investment loss	(0.26) <sup>6</sup>	(1.20)	(1.89)	(1.56)	(0.99)	(1.33)
Portfolio turnover (%)	94	214	259	221	170	169

<sup>&</sup>lt;sup>1</sup> Six months ended 4-30-23. Unaudited.

<sup>&</sup>lt;sup>2</sup> Based on average daily shares outstanding.

<sup>&</sup>lt;sup>3</sup> Total returns would have been lower had certain expenses not been reduced during the applicable periods.

<sup>&</sup>lt;sup>4</sup> Does not reflect the effect of sales charges, if any.

<sup>&</sup>lt;sup>5</sup> Not annualized.

<sup>&</sup>lt;sup>6</sup> Annualized.

CLASS I SHARES Period ended	4-30-23 <sup>1</sup>	10-31-22	10-31-21	10-31-20	10-31-19	10-31-18
Per share operating performance						
Net asset value, beginning of period	\$10.92	\$13.04	\$11.84	\$11.24	\$10.92	\$11.97
Net investment income (loss) <sup>2</sup>	0.04	(0.02)	(0.11)	(0.07)	3	(0.04)
Net realized and unrealized gain (loss) on investments	0.30	(1.28)	1.76	0.80	0.67	(0.10)
Total from investment operations	0.34	(1.30)	1.65	0.73	0.67	(0.14)
Less distributions						
From net investment income	(0.35)	_	_	(0.13)	_	_
From net realized gain	_	(0.82)	(0.45)	_	(0.35)	(0.91)
Total distributions	(0.35)	(0.82)	(0.45)	(0.13)	(0.35)	(0.91)
Net asset value, end of period	\$10.91	\$10.92	\$13.04	\$11.84	\$11.24	\$10.92
Total return (%) <sup>4</sup>	3.23 <sup>5</sup>	(10.49)	14.00	6.57	6.36	(1.28)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$464	\$691	\$1,019	\$616	\$565	\$566
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.64 <sup>6</sup>	1.63	1.67	1.70	1.69	1.71
Expenses including reductions	1.63 <sup>6</sup>	1.62	1.66	1.69	1.68	1.70
Net investment income (loss)	0.76 <sup>6</sup>	(0.16)	(0.86)	(0.58)	7	(0.36)
Portfolio turnover (%)	94	214	259	221	170	169

<sup>&</sup>lt;sup>1</sup> Six months ended 4-30-23. Unaudited.

<sup>&</sup>lt;sup>2</sup> Based on average daily shares outstanding.

<sup>&</sup>lt;sup>3</sup> Less than \$0.005 per share.

<sup>&</sup>lt;sup>4</sup> Total returns would have been lower had certain expenses not been reduced during the applicable periods.

<sup>&</sup>lt;sup>5</sup> Not annualized.

<sup>&</sup>lt;sup>6</sup> Annualized.

<sup>&</sup>lt;sup>7</sup> Less than 0.005%.

CLASS R6 SHARES Period ended	4-30-23 <sup>1</sup>	10-31-22	10-31-21	10-31-20	10-31-19	10-31-18
Per share operating performance						
Net asset value, beginning of period	\$11.06	\$13.18	\$11.95	\$11.34	\$11.00	\$12.04
Net investment income (loss) <sup>2</sup>	0.05	(0.01)	(0.10)	(0.06)	0.01	(0.03)
Net realized and unrealized gain (loss) on investments	0.30	(1.29)	1.78	0.81	0.68	(0.10)
Total from investment operations	0.35	(1.30)	1.68	0.75	0.69	(0.13)
Less distributions						
From net investment income	(0.36)	_	_	(0.14)	_	_
From net realized gain	_	(0.82)	(0.45)	_	(0.35)	(0.91)
Total distributions	(0.36)	(0.82)	(0.45)	(0.14)	(0.35)	(0.91)
Net asset value, end of period	\$11.05	\$11.06	\$13.18	\$11.95	\$11.34	\$11.00
Total return (%) <sup>3</sup>	3.21 <sup>4</sup>	(10.37)	14.22	6.62	6.50	(1.19)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$229	\$40	\$51	\$37	\$27	\$30
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.53 <sup>5</sup>	1.53	1.56	1.59	1.58	1.60
Expenses including reductions	1.53 <sup>5</sup>	1.52	1.55	1.58	1.57	1.60
Net investment income (loss)	1.02 <sup>5</sup>	(0.07)	(0.76)	(0.51)	0.12	(0.23)
Portfolio turnover (%)	94	214	259	221	170	169

<sup>&</sup>lt;sup>1</sup> Six months ended 4-30-23. Unaudited.

<sup>&</sup>lt;sup>2</sup> Based on average daily shares outstanding.

<sup>&</sup>lt;sup>3</sup> Total returns would have been lower had certain expenses not been reduced during the applicable periods.

<sup>&</sup>lt;sup>4</sup> Not annualized.

<sup>&</sup>lt;sup>5</sup> Annualized.

CLASS NAV SHARES Period ended	4-30-23 <sup>1</sup>	10-31-22	10-31-21	10-31-20	10-31-19	10-31-18
Per share operating performance						
Net asset value, beginning of period	\$11.06	\$13.18	\$11.96	\$11.35	\$11.00	\$12.04
Net investment income (loss) <sup>2</sup>	0.05	3	(0.10)	(0.04)	0.01	(0.03)
Net realized and unrealized gain (loss) on investments	0.30	(1.30)	1.77	0.79	0.69	(0.10)
Total from investment operations	0.35	(1.30)	1.67	0.75	0.70	(0.13)
Less distributions						
From net investment income	(0.36)	_	_	(0.14)	_	_
From net realized gain	_	(0.82)	(0.45)	_	(0.35)	(0.91)
Total distributions	(0.36)	(0.82)	(0.45)	(0.14)	(0.35)	(0.91)
Net asset value, end of period	\$11.05	\$11.06	\$13.18	\$11.96	\$11.35	\$11.00
Total return (%) <sup>4</sup>	3.22 <sup>5</sup>	(10.38)	14.12	6.64	6.59	(1.19)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$82	\$74	\$57	\$59	\$134	\$130
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.52 <sup>6</sup>	1.52	1.55	1.58	1.56	1.59
Expenses including reductions	1.52 <sup>6</sup>	1.51	1.54	1.57	1.55	1.58
Net investment income (loss)	0.88 <sup>6</sup>	0.01	(0.78)	(0.35)	0.13	(0.23)
Portfolio turnover (%)	94	214	259	221	170	169

<sup>&</sup>lt;sup>1</sup> Six months ended 4-30-23. Unaudited.

<sup>&</sup>lt;sup>2</sup> Based on average daily shares outstanding.

<sup>&</sup>lt;sup>3</sup> Less than \$0.005 per share.

<sup>&</sup>lt;sup>4</sup> Total returns would have been lower had certain expenses not been reduced during the applicable periods.

<sup>&</sup>lt;sup>5</sup> Not annualized.

<sup>&</sup>lt;sup>6</sup> Annualized.

## Notes to financial statements (unaudited)

#### Note 1 — Organization

John Hancock Seaport Long/Short Fund (the fund) is a series of John Hancock Investment Trust (the Trust), an open-end management investment company organized as a Massachusetts business trust and registered under the Investment Company Act of 1940, as amended (the 1940 Act). The investment objective of the fund is to seek capital appreciation.

The fund may offer multiple classes of shares. The shares currently outstanding are detailed in the Statement of assets and liabilities. Class A and Class C shares are offered to all investors. Class I shares are offered to institutions and certain investors. Class R6 shares are only available to certain retirement plans, institutions and other investors. Class NAV shares are offered to John Hancock affiliated funds of funds, retirement plans for employees of John Hancock and/or Manulife Financial Corporation, and certain 529 plans. Class C shares convert to Class A shares eight years after purchase (certain exclusions may apply). Shareholders of each class have exclusive voting rights to matters that affect that class. The distribution and service fees, if any, and transfer agent fees for each class may differ.

#### Note 2 — Significant accounting policies

The financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (US GAAP), which require management to make certain estimates and assumptions as of the date of the financial statements. Actual results could differ from those estimates and those differences could be significant. The fund qualifies as an investment company under Topic 946 of Accounting Standards Codification of US GAAP.

Events or transactions occurring after the end of the fiscal period through the date that the financial statements were issued have been evaluated in the preparation of the financial statements. The following summarizes the significant accounting policies of the fund:

Security valuation. Investments are stated at value as of the scheduled close of regular trading on the New York Stock Exchange (NYSE), normally at 4:00 P.M., Eastern Time. In case of emergency or other disruption resulting in the NYSE not opening for trading or the NYSE closing at a time other than the regularly scheduled close, the net asset value (NAV) may be determined as of the regularly scheduled close of the NYSE pursuant to the Advisor's Valuation Policies and Procedures.

In order to value the securities, the fund uses the following valuation techniques: Equity securities, including exchange-traded or closed-end funds, are typically valued at the last sale price or official closing price on the exchange or principal market where the security trades. In the event there were no sales during the day or closing prices are not available, the securities are valued using the last available bid price. Investments by the fund in open-end mutual funds, including John Hancock Collateral Trust (JHCT), are valued at their respective NAVs each business day. Debt obligations are typically valued based on evaluated prices provided by an independent pricing vendor. Independent pricing vendors utilize matrix pricing, which takes into account factors such as institutional-size trading in similar groups of securities, yield, quality, coupon rate, maturity, type of issue, trading characteristics and other market data, as well as broker supplied prices. Exchange-traded options are valued at the mid-price of the last quoted bid and ask prices from the exchange where the option trades. Unlisted options are valued using evaluated prices obtained from an independent pricing vendor. Futures contracts whose settlement prices are determined as of the close of the NYSE are typically valued based on the settlement price while other futures contracts are typically valued at the last traded price on the exchange on which they trade. Foreign equity index futures that trade in the electronic trading market subsequent to the close of regular trading may be valued at the last traded price in the electronic trading market as of 4:00 P.M. ET, or may be fair valued based on fair value adjustment factors provided by an independent pricing vendor in order to adjust for events that may occur between the close of foreign exchanges or markets and the close of the NYSE. Swaps are generally valued using evaluated prices obtained from an independent pricing vendor. Forward foreign currency contracts are valued at

the prevailing forward rates which are based on foreign currency exchange spot rates and forward points supplied by an independent pricing vendor. Foreign securities and currencies are valued in U.S. dollars based on foreign currency exchange rates supplied by an independent pricing vendor.

In certain instances, the Pricing Committee of the Advisor may determine to value equity securities using prices obtained from another exchange or market if trading on the exchange or market on which prices are typically obtained did not open for trading as scheduled, or if trading closed earlier than scheduled, and trading occurred as normal on another exchange or market.

Other portfolio securities and assets, for which reliable market quotations are not readily available, are valued at fair value as determined in good faith by the Pricing Committee following procedures established by the Advisor and adopted by the Board of Trustees. The frequency with which these fair valuation procedures are used cannot be predicted and fair value of securities may differ significantly from the value that would have been used had a ready market for such securities existed. Trading in foreign securities may be completed before the scheduled daily close of trading on the NYSE. Significant events at the issuer or market level may affect the values of securities between the time when the valuation of the securities is generally determined and the close of the NYSE. If a significant event occurs, these securities may be fair valued, as determined in good faith by the Pricing Committee, following procedures established by the Advisor and adopted by the Board of Trustees. The Advisor uses fair value adjustment factors provided by an independent pricing vendor to value certain foreign securities in order to adjust for events that may occur between the close of foreign exchanges or markets and the close of the NYSE.

The fund uses a three tier hierarchy to prioritize the pricing assumptions, referred to as inputs, used in valuation techniques to measure fair value. Level 1 includes securities valued using quoted prices in active markets for identical securities, including registered investment companies, Level 2 includes securities valued using other significant observable inputs. Observable inputs may include quoted prices for similar securities, interest rates, prepayment speeds and credit risk. Prices for securities valued using these inputs are received from independent pricing vendors and brokers and are based on an evaluation of the inputs described. Level 3 includes securities valued using significant unobservable inputs when market prices are not readily available or reliable, including the Advisor's assumptions in determining the fair value of investments. Factors used in determining value may include market or issuer specific events or trends, changes in interest rates and credit quality. The inputs or methodology used for valuing securities are not necessarily an indication of the risks associated with investing in those securities. Changes in valuation techniques and related inputs may result in transfers into or out of an assigned level within the disclosure hierarchy.

The following is a summary of the values by input classification of the fund's investments as of April 30, 2023, by major security category or type:

	Total value at 4-30-23	Level 1 quoted price	Level 2 significant observable inputs	Level 3 significant unobservable inputs
Investments in securities:				
Assets				
Common stocks				
Communication services	\$26,251,842	\$21,854,433	\$4,397,409	_
Consumer discretionary	31,242,065	16,288,635	14,953,430	_
Consumer staples	17,040,628	7,497,877	9,542,751	_
Energy	36,890,357	32,638,403	4,251,954	_
Financials	144,850,934	92,668,877	52,182,057	_
Health care	164,514,694	132,869,861	31,644,833	_
Industrials	34,860,385	16,356,504	18,503,881	_

	Total value at 4-30-23	Level 1 quoted price	Level 2 significant observable inputs	Level 3 significant unobservable inputs
Information technology	\$97,247,297	\$83,237,003	\$14,010,294	_
Materials	22,638,180	10,732,592	11,905,588	_
Real estate	678,820	_	678,820	_
Utilities	22,480,657	18,856,155	3,624,502	_
Preferred securities				
Energy	1,828,056	1,828,056	_	_
Industrials	858,206	_	858,206	_
Exchange-traded funds	1,681,653	1,681,653	_	_
Purchased options	1,736,238	772,700	963,538	_
Corporate bonds	988,892	_	988,892	_
Short-term investments	213,364,392	52,786,227	160,578,165	_
Total investments in securities	\$819,153,296	\$490,068,976	\$329,084,320	_
Derivatives:				
Assets				
Futures	\$4,040	\$4,040	_	_
Forward foreign currency contracts	478,020	_	\$478,020	_
Swap contracts	9,308,621	_	9,308,621	_
Liabilities				
Futures	(1,816)	(1,816)	_	_
Forward foreign currency contracts	(728,669)	_	(728,669)	_
Written options	(870,448)	(238,081)	(632,367)	_
Swap contracts	(6,257,687)	_	(6,257,687)	_
Level 3 includes securities valued at \$0	. Refer to Fund's investm	ents.		

Real estate investment trusts. The fund may invest in real estate investment trusts (REITs). Distributions from REITs may be recorded as income and subsequently characterized by the REIT at the end of their fiscal year as a reduction of cost of investments and/or as a realized gain. As a result, the fund will estimate the components of distributions from these securities. Such estimates are revised when the actual components of the distributions are known

Security transactions and related investment income. Investment security transactions are accounted for on a trade date plus one basis for daily NAV calculations. However, for financial reporting purposes, investment transactions are reported on trade date. Interest income is accrued as earned. Interest income includes coupon interest and amortization/accretion of premiums/discounts on debt securities. Debt obligations may be placed in a non-accrual status and related interest income may be reduced by stopping current accruals and writing off interest receivable when the collection of all or a portion of interest has become doubtful. Dividend income is recorded on ex-date, except for dividends of certain foreign securities where the dividend may not be known until after the ex-date. In those cases, dividend income, net of withholding taxes, is recorded when the fund becomes aware of the dividends. Non-cash dividends, if any, are recorded at the fair market value of the securities received. Gains and losses on securities sold are determined on the basis of identified cost and may include proceeds from litigation.

Securities lending. The fund may lend its securities to earn additional income. The fund receives collateral from the borrower in an amount not less than the market value of the loaned securities. The fund may invest its cash collateral in JHCT, an affiliate of the fund, which has a floating NAV and is registered with the Securities and Exchange Commission (SEC) as an investment company. JHCT is a prime money market fund and invests in

short-term money market investments. The fund will receive the benefit of any gains and bear any losses generated by JHCT with respect to the cash collateral.

The fund has the right to recall loaned securities on demand. If a borrower fails to return loaned securities when due, then the lending agent is responsible and indemnifies the fund for the lent securities. The lending agent uses the collateral received from the borrower to purchase replacement securities of the same issue, type, class and series of the loaned securities. If the value of the collateral is less than the purchase cost of replacement securities, the lending agent is responsible for satisfying the shortfall but only to the extent that the shortfall is not due to any decrease in the value of JHCT.

Although the risk of loss on securities lent is mitigated by receiving collateral from the borrower and through lending agent indemnification, the fund could experience a delay in recovering securities or could experience a lower than expected return if the borrower fails to return the securities on a timely basis. During the existence of the loan, the fund will receive from the borrower amounts equivalent to any dividends, interest or other distributions on the loaned securities, as well as interest on such amounts. The fund receives compensation for lending its securities by retaining a portion of the return on the investment of the collateral and compensation from fees earned from borrowers of the securities. Securities lending income received by the fund is net of fees retained by the securities lending agent. Net income received from JHCT is a component of securities lending income as recorded on the Statement of operations.

Obligations to repay collateral received by the fund are shown on the Statement of assets and liabilities as Payable upon return of securities loaned and are secured by the loaned securities. As of April 30, 2023, the fund loaned securities valued at \$455,447 and received \$480,396 of cash collateral.

Foreign investing. Assets, including investments, and liabilities denominated in foreign currencies are translated into U.S. dollar values each day at the prevailing exchange rate. Purchases and sales of securities, income and expenses are translated into U.S. dollars at the prevailing exchange rate on the date of the transaction. The effect of changes in foreign currency exchange rates on the value of securities is reflected as a component of the realized and unrealized gains (losses) on investments. Foreign investments are subject to a decline in the value of a foreign currency versus the U.S. dollar, which reduces the dollar value of securities denominated in that currency.

Funds that invest internationally generally carry more risk than funds that invest strictly in U.S. securities. These risks are heightened for investments in emerging markets. Risks can result from differences in economic and political conditions, regulations, market practices (including higher transaction costs), accounting standards and other factors.

Foreign taxes. The fund may be subject to withholding tax on income, capital gains or repatriations imposed by certain countries, a portion of which may be recoverable. Foreign taxes are accrued based upon the fund's understanding of the tax rules and rates that exist in the foreign markets in which it invests. Taxes are accrued based on gains realized by the fund as a result of certain foreign security sales. In certain circumstances, estimated taxes are accrued based on unrealized appreciation of such securities. Investment income is recorded net of foreign withholding taxes.

**Overdraft.** The fund may have the ability to borrow from banks for temporary or emergency purposes, including meeting redemption requests that otherwise might require the untimely sale of securities. Pursuant to the fund's custodian agreement, the custodian may loan money to the fund to make properly authorized payments. The fund is obligated to repay the custodian for any overdraft, including any related costs or expenses. The custodian may have a lien, security interest or security entitlement in any fund property that is not otherwise segregated or pledged, to the extent of any overdraft, and to the maximum extent permitted by law.

Line of credit. The fund and other affiliated funds have entered into a syndicated line of credit agreement with Citibank, N.A. as the administrative agent that enables them to participate in a \$1 billion unsecured committed line of credit. Excluding commitments designated for a certain fund and subject to the needs of all other affiliated funds, the fund can borrow up to an aggregate commitment amount of \$750 million, subject to asset coverage

and other limitations as specified in the agreement. A commitment fee payable at the end of each calendar quarter, based on the average daily unused portion of the line of credit, is charged to each participating fund based on a combination of fixed and asset-based allocations and is reflected in Other expenses on the Statement of operations. Commitment fees for the six months ended April 30, 2023 were \$3,511.

**Expenses.** Within the John Hancock group of funds complex, expenses that are directly attributable to an individual fund are allocated to such fund. Expenses that are not readily attributable to a specific fund are allocated among all funds in an equitable manner, taking into consideration, among other things, the nature and type of expense and the fund's relative net assets. Expense estimates are accrued in the period to which they relate and adjustments are made when actual amounts are known.

Class allocations. Income, common expenses and realized and unrealized gains (losses) are determined at the fund level and allocated daily to each class of shares based on the net assets of the class. Class-specific expenses, such as distribution and service fees, if any, and transfer agent fees, for all classes, are charged daily at the class level based on the net assets of each class and the specific expense rates applicable to each class.

Federal income taxes. The fund intends to continue to qualify as a regulated investment company by complying with the applicable provisions of the Internal Revenue Code and will not be subject to federal income tax on taxable income that is distributed to shareholders. Therefore, no federal income tax provision is required.

For federal income tax purposes, as of October 31, 2022, the fund has a short-term capital loss carryforward of \$30,304,804 available to offset future net realized capital gains. This carryforward does not expire.

As of October 31, 2022, the fund had no uncertain tax positions that would require financial statement recognition, derecognition or disclosure. The fund's federal tax returns are subject to examination by the Internal Revenue Service for a period of three years.

Distribution of income and gains. Distributions to shareholders from net investment income and net realized gains, if any, are recorded on the ex-date. The fund generally declares and pays dividends annually. Capital gain distributions, if any, are typically distributed annually.

Distributions paid by the fund with respect to each class of shares are calculated in the same manner, at the same time and in the same amount, except for the effect of class level expenses that may be applied differently to each class.

Such distributions, on a tax basis, are determined in conformity with income tax regulations, which may differ from US GAAP. Distributions in excess of tax basis earnings and profits, if any, are reported in the fund's financial statements as a return of capital. The final determination of tax characteristics of the distribution will occur at the end of the year and will subsequently be reported to shareholders.

Capital accounts within the financial statements are adjusted for permanent book-tax differences. These adjustments have no impact on net assets or the results of operations. Temporary book-tax differences, if any, will reverse in a subsequent period. Book-tax differences are primarily attributable to foreign currency transactions, wash sale loss deferrals, investments in passive foreign investment companies and derivative transactions.

#### Note 3 — Derivative instruments

The fund may invest in derivatives in order to meet its investment objective. Derivatives include a variety of different instruments that may be traded in the over-the-counter (OTC) market, on a regulated exchange or through a clearing facility. The risks in using derivatives vary depending upon the structure of the instruments, including the use of leverage, optionality, the liquidity or lack of liquidity of the contract, the creditworthiness of the counterparty or clearing organization and the volatility of the position. Some derivatives involve risks that are potentially greater than the risks associated with investing directly in the referenced securities or other referenced underlying instrument. Specifically, the fund is exposed to the risk that the counterparty to an OTC derivatives contract will be unable or unwilling to make timely settlement payments or otherwise honor its obligations. OTC derivatives transactions typically can only be closed out with the other party to the transaction.

Derivatives which are typically traded through the OTC market are regulated by the Commodity Futures Trading Commission (the CFTC). Derivative counterparty risk is managed through an ongoing evaluation of the creditworthiness of all potential counterparties and, if applicable, designated clearing organizations. The fund attempts to reduce its exposure to counterparty risk for derivatives traded in the OTC market, whenever possible. by entering into an International Swaps and Derivatives Association (ISDA) Master Agreement with each of its OTC counterparties. The ISDA gives each party to the agreement the right to terminate all transactions traded under the agreement if there is certain deterioration in the credit quality or contractual default of the other party, as defined in the ISDA. Upon an event of default or a termination of the ISDA, the non-defaulting party has the right to close out all transactions and to net amounts owed.

As defined by the ISDA, the fund may have collateral agreements with certain counterparties to mitigate counterparty risk on OTC derivatives. Subject to established minimum levels, collateral for OTC transactions is generally determined based on the net aggregate unrealized gain or loss on contracts with a particular counterparty. Collateral pledged to the fund, if any, is held in a segregated account by a third-party agent or held by the custodian bank for the benefit of the fund and can be in the form of cash or debt securities issued by the U.S. government or related agencies; collateral posted by the fund, if any, for OTC transactions is held in a segregated account at the fund's custodian and is noted in the accompanying Fund's investments, or if cash is posted, on the Statement of assets and liabilities. The fund's risk of loss due to counterparty risk is equal to the asset value of outstanding contracts offset by collateral received.

Certain derivatives are traded or cleared on an exchange or central clearinghouse. Exchange-traded or centrally-cleared transactions generally present less counterparty risk to a fund than OTC transactions. The exchange or clearinghouse stands between the fund and the broker to the contract and therefore, credit risk is generally limited to the failure of the exchange or clearinghouse and the clearing member.

Futures. A futures contract is a contractual agreement to buy or sell a particular currency or financial instrument at a pre-determined price in the future. Futures are traded on an exchange and cleared through a central clearinghouse. Risks related to the use of futures contracts include possible illiquidity of the futures markets and contract prices that can be highly volatile and imperfectly correlated to movements in the underlying financial instrument and potential losses in excess of the amounts recognized on the Statement of assets and liabilities. Use of long futures contracts subjects the fund to the risk of loss up to the notional value of the futures contracts. Use of short futures contracts subjects the fund to unlimited risk of loss.

Upon entering into a futures contract, the fund is required to deposit initial margin with the broker in the form of cash or securities. The amount of required margin is set by the broker and is generally based on a percentage of the contract value. The margin deposit must then be maintained at the established level over the life of the contract. Cash that has been pledged by the fund, if any, is detailed in the Statement of assets and liabilities as Collateral held at broker for futures contracts. Securities pledged by the fund, if any, are identified in the Fund's investments. Subsequent payments, referred to as variation margin, are made or received by the fund periodically and are based on changes in the market value of open futures contracts. Futures contracts are marked-to-market daily and unrealized gain or loss is recorded by the fund. Receivable for futures variation margin is included on the Statement of assets and liabilities. When the contract is closed, the fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed.

During the six months ended April 30, 2023, the fund used futures contracts to manage against changes in interest rates and to manage against changes in certain securities markets. The fund held futures contracts with USD notional values ranging from \$1.9 million to \$5.2 million, as measured at each guarter end.

Forward foreign currency contracts. A forward foreign currency contract is an agreement between two parties to buy and sell specific currencies at a price that is set on the date of the contract. The forward contract calls for delivery of the currencies on a future date that is specified in the contract. Forwards are typically traded OTC. Risks related to the use of forwards include the possible failure of counterparties to meet the terms of the forward agreement, the failure of the counterparties to timely post collateral if applicable, and the risk that currency movements will not favor the fund thereby reducing the fund's total return, and the potential for losses in excess of the amounts recognized on the Statement of assets and liabilities.

The market value of a forward foreign currency contract fluctuates with changes in foreign currency exchange rates. Forward foreign currency contracts are marked-to-market daily and the change in value is recorded by the fund as an unrealized gain or loss. Realized gains or losses, equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed, are recorded upon delivery or receipt of the currency or settlement with the counterparty.

During the six months ended April 30, 2023, the fund used forward foreign currency contracts to manage against changes in foreign currency exchange rates and to gain exposure to foreign currencies. The fund held forward foreign currency contracts with USD notional values ranging from \$109.6 million to \$160.9 million, as measured at each quarter end.

**Options.** There are two types of options, put options and call options. Options are traded either OTC or on an exchange. A call option gives the purchaser of the option the right to buy (and the seller the obligation to sell) the underlying asset at the exercise price. A put option gives the purchaser of the option the right to sell (and the writer the obligation to buy) the underlying asset at the exercise price. Writing puts and buying calls may increase the fund's exposure to changes in the value of the underlying instrument. Buying puts and writing calls may decrease the fund's exposure to such changes. Risks related to the use of options include the loss of premiums on purchased options, possible illiquidity of the options markets, trading restrictions imposed by an exchange and movements in underlying security values, and for written options, potential losses in excess of the amounts recognized on the Statement of assets and liabilities. In addition, OTC options are subject to the risks of all OTC derivatives contracts

Purchased options are included in the Fund's investments and are subsequently "marked-to-market" to reflect current market value. If a purchased option expires, the fund realizes a loss equal to the premium paid for the option. Premiums paid for purchased options which are exercised or closed are added to the amounts paid or offset against the proceeds on the underlying asset transaction to determine the realized gain (loss). Written options are included as liabilities in the Statement of assets and liabilities and are "marked-to-market" to reflect the current market value. If the written option expires, the fund realizes a gain equal to the premium received. Premiums received from writing options which are exercised or closed are added to the proceeds or offset against amounts paid on the underlying asset transaction to determine the realized gain (loss).

During the six months ended April 30, 2023, the fund used purchased options contracts to manage against changes in certain securities markets and foreign currency exchange rates and to gain exposure to certain securities markets and foreign currencies. The fund held purchased options contracts with market values ranging from \$0.7 million to \$1.7 million, as measured at each guarter end.

During the six months ended April 30, 2023, the fund wrote option contracts to manage against changes in certain securities markets and foreign currency exchange rates and to gain exposure to certain securities markets and foreign currencies. The fund held written option contracts with market values ranging from \$451,000 to \$2.2 million, as measured at each guarter end.

Swaps. Swap agreements are agreements between the fund and a counterparty to exchange cash flows, assets, foreign currencies or market-linked returns at specified intervals. Swap agreements are privately negotiated in the OTC market (OTC swaps) or may be executed on a registered commodities exchange (centrally cleared swaps). Swaps are marked-to-market daily and the change in value is recorded as a component of unrealized

appreciation/depreciation of swap contracts. The value of the swap will typically impose collateral posting obligations on the party that is considered out-of-the-money on the swap.

Upfront payments made/received by the fund, if any, are amortized/accreted for financial reporting purposes, with the unamortized/unaccreted portion included in the Statement of assets and liabilities. A termination payment by the counterparty or the fund is recorded as realized gain or loss, as well as the net periodic payments received or paid by the fund.

Entering into swap agreements involves, to varying degrees, elements of credit, market and documentation risk that may provide outcomes that produce losses in excess of the amounts recognized on the Statement of assets and liabilities. Such risks involve the possibility that there will be no liquid market for the swap, or that a counterparty may default on its obligation or delay payment under the swap terms. The counterparty may disagree or contest the terms of the swap. In addition to interest rate risk, market risks may also impact the swap. The fund may also suffer losses if it is unable to terminate or assign outstanding swaps or reduce its exposure through offsetting transactions.

Total Return Swaps. The fund may enter into total return swap contracts to obtain synthetic exposure to a specific reference asset or index without owning, taking physical custody of, or short selling the underlying assets. Total return swaps are commitments where one party pays a fixed or variable rate premium (the Buyer) in exchange for a market-linked return (the Seller). The Seller pays the total return of a specific reference asset or index and in return receives interest payments from the Buyer. To the extent the total return of the underlying asset or index exceeds or falls short of the offsetting interest rate obligation, the Buyer will receive or make a payment to the Seller. A fund may enter into total return swaps in which it may act as either the Buyer or the Seller. Total return swap contracts are subject to the risk associated with the investment in the underlying reference asset or index. The risk in the case of short total return swap contracts is unlimited based on the potential for unlimited increases in the market value of the underlying reference asset or index.

During the six months ended April 30, 2023, the fund used total return swaps to gain exposure to a security or market without investing directly in such security or market. The fund held total return swaps with total USD notional amounts ranging from \$671.1 million to \$761.3 million, as measured at each guarter end.

#### Fair value of derivative instruments by risk category

The table below summarizes the fair value of derivatives held by the fund at April 30, 2023 by risk category:

Risk	Statement of assets and liabilities location	Financial instruments location	Assets derivatives fair value	Liabilities derivatives fair value
Equity	Receivable/payable for futures variation margin <sup>1</sup>	Futures	\$4,040	\$(1,816)
Currency	Unrealized appreciation (depreciation) on forward foreign currency contracts	Forward foreign currency contracts	478,020	(728,669)
Equity	Unaffiliated investments, at value <sup>2</sup>	Purchased options	1,736,238	_
Equity	Written options, at value	Written options	_	(870,448)
Equity	Swap contracts, at value	Total return swaps	9,308,621	(6,257,687)
			\$11,526,919	\$(7,858,620)

Reflects cumulative appreciation/depreciation on open futures as disclosed in the Derivatives section of Fund's investments. Only the period end variation margin receivable/payable is separately reported on the Statement of assets and liabilities.

Purchased options are included in Fund's investments.

For financial reporting purposes, the fund does not offset OTC derivative assets or liabilities that are subject to master netting arrangements, as defined by the ISDAs, in the Statement of assets and liabilities. In the event of default by the counterparty or a termination of the agreement, the ISDA allows an offset of amounts across the various transactions between the fund and the applicable counterparty.

The tables below reflect the fund's exposure to OTC derivative transactions and exposure to counterparties subject to an ISDA:

OTC Financial Instruments	Asset	Liability
Forward foreign currency contracts	\$478,020	\$(728,669)
Purchased options	963,538	_
Swap contracts	9,308,621	(6,257,687)
Written options	_	(632,367)
Totals	\$10,750,179	\$(7,618,723)

Counterparty	Assets	Liabilities	Total Market Value of OTC Derivatives	Collateral Posted by Counterparty <sup>1</sup>	Collateral Posted by Fund <sup>1</sup>	Net Exposure
BNP Paribas	\$590,767	\$(266,782)	\$323,985	\$290,000	_	\$33,985
Citibank, N.A.	3,815	_	3,815	_	_	3,815
Deutsche Bank AG	49,709	(50,774)	(1,065)	_	_	(1,065)
Goldman Sachs International	1,100,423	(1,307,335)	(206,912)	_	\$206,912	_
JPMorgan Chase Bank, N.A.	2,596,482	(3,255,448)	(658,966)	_	658,966	_
Morgan Stanley & Co. International PLC	6,355,586	(2,607,793)	3,747,793	_	_	3,747,793
Standard Chartered Bank	_	(22,837)	(22,837)	_	_	(22,837)
State Street Bank and Trust Company	53,397	(107,754)	(54,357)	_	54,357	_
Totals	\$10,750,179	(7,618,723)	\$3,131,456	\$290,000	\$920,235	\$3,761,691

<sup>&</sup>lt;sup>1</sup> Reflects collateral posted by the counterparty or posted by the fund, excluding any excess collateral amounts.

#### Effect of derivative instruments on the Statement of operations

The table below summarizes the net realized gain (loss) included in the net increase (decrease) in net assets from operations, classified by derivative instrument and risk category, for the six months ended April 30, 2023:

Statement of operations location - Net realized gain (loss) on:

Risk	Unaffiliated investments and foreign currency transactions <sup>1</sup>	Futures contracts	Forward foreign currency contracts	Written options	Swap contracts	Total
Interest rate	_	\$(70,758)	_	_	_	\$(70,758)
Currency	<i>_</i>	_	\$(822,077)	_	_	(822,077)
Equity	\$(5,110,733)	(228,393)	_	\$(869,831)	\$(26,467,120)	(32,676,077)
Total	\$(5,110,733)	\$(299,151)	\$(822,077)	\$(869,831)	\$(26,467,120)	\$(33,568,912)

<sup>1</sup> Realized gain (loss) associated with purchased options is included in this caption on the Statement of operations.

The table below summarizes the net change in unrealized appreciation (depreciation) included in the net increase (decrease) in net assets from operations, classified by derivative instrument and risk category, for the six months ended April 30, 2023:

Statement of operations location - Change in net unrealized appreciation (depreciation) of:

Risk	Unaffiliated investments and translation of assets and liabilities in foreign currencies <sup>1</sup>	Futures contracts	Forward foreign currency contracts	Written options	Swap contracts	Total
Curre	ncy —	_	\$(326,094)	_	_	\$(326,094)
Equit	\$3,236,484	\$162,650	_	\$1,036,892	\$12,267,727	16,703,753
Total	\$3,236,484	\$162,650	\$(326,094)	\$1,036,892	\$12,267,727	\$16,377,659

Change in unrealized appreciation (depreciation) associated with purchased options is included in this caption on the Statement of operations.

#### Note 4 — Guarantees and indemnifications

Under the Trust's organizational documents, its Officers and Trustees are indemnified against certain liabilities arising out of the performance of their duties to the Trust, including the fund. Additionally, in the normal course of business, the fund enters into contracts with service providers that contain general indemnification clauses. The fund's maximum exposure under these arrangements is unknown, as this would involve future claims that may be made against the fund that have not vet occurred. The risk of material loss from such claims is considered remote.

#### Note 5 — Fees and transactions with affiliates

John Hancock Investment Management LLC (the Advisor) serves as investment advisor for the fund. John Hancock Investment Management Distributors LLC (the Distributor), an affiliate of the Advisor, serves as principal underwriter of the fund. The Advisor and the Distributor are indirect, principally owned subsidiaries of John Hancock Life Insurance Company (U.S.A.), which in turn is a subsidiary of Manulife Financial Corporation.

Management fee. The fund has an investment management agreement with the Advisor under which the fund pays a daily management fee to the Advisor equivalent on an annual basis to the sum of: (a) 1.450% of the first \$250 million of the fund's average daily net assets; (b) 1.400% of the next \$750 million of the fund's average

daily net assets; (c) 1.375% of the next \$1 billion of the fund's average daily net assets; and (d) 1.350% of the fund's average daily net assets in excess of \$2 billion. The Advisor has a subadvisory agreement with Wellington Management Company LLP. The fund is not responsible for payment of the subadvisory fees.

The Advisor has contractually agreed to waive a portion of its management fee and/or reimburse expenses for certain funds of the John Hancock group of funds complex, including the fund (the participating portfolios). This waiver is based upon aggregate net assets of all the participating portfolios. The amount of the reimbursement is calculated daily and allocated among all the participating portfolios in proportion to the daily net assets of each fund. During the six months ended April 30, 2023, this waiver amounted to 0.01% of the fund's average daily net assets, on an annualized basis. This arrangement expires on July 31, 2024, unless renewed by mutual agreement of the fund and the Advisor based upon a determination that this is appropriate under the circumstances at that time.

For the six months ended April 30, 2023, the expense reductions described above amounted to the following:

Class	Expense reduction	Class	Expense reduction
Class A	\$395	Class R6	\$2,031
Class C	98	Class NAV	2,850
Class I	23,584	Total	\$28,958

Expenses waived or reimbursed in the current fiscal period are not subject to recapture in future fiscal periods.

The investment management fees, including the impact of the waivers and reimbursements as described above, incurred for the six months ended April 30, 2023, were equivalent to a net annual effective rate of 1.41% of the fund's average daily net assets.

Accounting and legal services. Pursuant to a service agreement, the fund reimburses the Advisor for all expenses associated with providing the administrative, financial, legal, compliance, accounting and recordkeeping services to the fund, including the preparation of all tax returns, periodic reports to shareholders and regulatory reports, among other services. These expenses are allocated to each share class based on its relative net assets at the time the expense was incurred. These accounting and legal services fees incurred, for the six months ended April 30, 2023, amounted to an annual rate of 0.02% of the fund's average daily net assets.

Distribution and service plans. The fund has a distribution agreement with the Distributor. The fund has adopted distribution and service plans for certain classes as detailed below pursuant to Rule 12b-1 under the 1940 Act, to pay the Distributor for services provided as the distributor of shares of the fund. The fund may pay up to the following contractual rates of distribution and service fees under these arrangements, expressed as an annual percentage of average daily net assets for each class of the fund's shares:

Class	Rule 12b-1 Fee
Class A	0.30%
Class C	1.00%

Sales charges. Class A shares are assessed up-front sales charges, which resulted in payments to the Distributor amounting to \$1,265 for the six months ended April 30, 2023. Of this amount, \$193 was retained and used for printing prospectuses, advertising, sales literature and other purposes and \$1,072 was paid as sales commissions to broker-dealers

Class A and Class C shares may be subject to contingent deferred sales charges (CDSCs). Certain Class A shares purchased, including those that are acquired through purchases of \$1 million or more, and redeemed within one year of purchase are subject to a 1.00% sales charge. Class C shares that are redeemed within one year of purchase are subject to a 1.00% CDSC, CDSCs are applied to the lesser of the current market value at the time of redemption or the original purchase cost of the shares being redeemed. Proceeds from CDSCs are used to compensate the Distributor for providing distribution-related services in connection with the sale of these shares. During the six months ended April 30, 2023, there were no CDSCs received by the Distributor for Class A or Class C shares

Transfer agent fees. The John Hancock group of funds has a complex-wide transfer agent agreement with John Hancock Signature Services, Inc. (Signature Services), an affiliate of the Advisor. The transfer agent fees paid to Signature Services are determined based on the cost to Signature Services (Signature Services Cost) of providing recordkeeping services. It also includes out-of-pocket expenses, including payments made to third-parties for recordkeeping services provided to their clients who invest in one or more John Hancock funds. In addition, Signature Services Cost may be reduced by certain fees that Signature Services receives in connection with retirement and small accounts. Signature Services Cost is calculated monthly and allocated, as applicable, to five categories of share classes: Retail Share and Institutional Share Classes of Non-Municipal Bond Funds, Class R6 Shares, Retirement Share Classes and Municipal Bond Share Classes. Within each of these categories, the applicable costs are allocated to the affected John Hancock affiliated funds and/or classes, based on the relative average daily net assets.

Class level expenses. Class level expenses for the six months ended April 30, 2023 were as follows:

Class	Distribution and service fees	Transfer agent fees
Class A	\$16,534	\$6,338
Class C	13,701	1,575
Class I	_	379,068
Class R6	_	2,851
Total	\$30,235	\$389,832

Trustee expenses. The fund compensates each Trustee who is not an employee of the Advisor or its affiliates. The costs of paying Trustee compensation and expenses are allocated to the fund based on its net assets relative to other funds within the John Hancock group of funds complex.

Interfund lending program. Pursuant to an Exemptive Order issued by the SEC, the fund, along with certain other funds advised by the Advisor or its affiliates, may participate in an interfund lending program. This program provides an alternative credit facility allowing the fund to borrow from, or lend money to, other participating affiliated funds. At period end, no interfund loans were outstanding. The fund's activity in this program during the period for which loans were outstanding was as follows:

Borrower	Weighted Average	Days	Weighted Average		
or Lender	Loan Balance	Outstanding	Interest Rate		
Lender	\$7,562,500	8	3.408%	\$5,727	

#### Note 6 — Fund share transactions

Transactions in fund shares for the six months ended April 30, 2023 and for the year ended October 31, 2022 were as follows:

	Six Months	Ended 4-30-23	Year Ended 10-31-22		
	Shares	Amount	Shares	Amount	
Class A shares					
Sold	402,772	\$4,293,784	672,552	\$7,686,103	
Distributions reinvested	28,137	294,036	75,489	874,923	
Repurchased	(439,551)	(4,708,194)	(972,689)	(11,071,543)	
Net decrease	(8,642)	\$(120,374)	(224,648)	\$(2,510,517)	
Class C shares					
Sold	1,145	\$11,351	54,787	\$593,786	
Distributions reinvested	5,498	54,484	19,582	215,399	
Repurchased	(61,576)	(624,680)	(168,041)	(1,871,379)	
Net decrease	(54,933)	\$(558,845)	(93,672)	\$(1,062,194)	
Class I shares					
Sold	11,896,466	\$130,780,044	33,722,531	\$389,847,452	
Distributions reinvested	1,171,689	12,583,936	3,588,613	42,704,495	
Repurchased	(33,859,926)	(369,744,299)	(52,171,102)	(595,467,568)	
Net decrease	(20,791,771)	\$(226,380,319)	(14,859,958)	\$(162,915,621)	
Class R6 shares					
Sold	18,546,980	\$204,546,426	14,564	\$174,804	
Distributions reinvested	106,341	1,155,922	244,458	2,940,827	
Repurchased	(1,539,263)	(17,189,672)	(533,876)	(6,402,803)	
Net increase (decrease)	17,114,058	\$188,512,676	(274,854)	\$(3,287,172)	
Class NAV shares					
Sold	1,072,918	\$11,882,442	2,506,591	,591 \$28,883,481	
Distributions reinvested	238,896	2,596,800	298,065	3,588,697	
Repurchased	(545,525)	(6,074,822)	(439,074) (5,206,870		
Net increase	766,289 \$8,404,420 2,365,582 \$27,2		\$27,265,308		
Total net decrease	(2,974,999)	\$(30,142,442)	(13,087,550)	\$(142,510,196)	

Affiliates of the fund owned 100% of shares of Class NAV on April 30, 2023. Such concentration of shareholders' capital could have a material effect on the fund if such shareholders redeem from the fund.

#### Note 7 — Purchase and sale of securities

Purchases and sales of securities, other than short-term investments, amounted to \$578,457,113 and \$541,394,274, respectively, for the six months ended April 30, 2023.

#### Note 8 — Investment by affiliated funds

Certain investors in the fund are affiliated funds that are managed by the Advisor and its affiliates. The affiliated funds do not invest in the fund for the purpose of exercising management or control; however, this investment may represent a significant portion of the fund's net assets. At April 30, 2023, funds within the John Hancock group of funds complex held 10.4% of the fund's net assets. The following fund(s) had an affiliate ownership of 5% or more of the fund's net assets:

Fund	Affiliated Concentration
John Hancock Funds II Alternative Asset Allocation Fund	10.4%

#### Note 9 — Investment in affiliated underlying funds

The fund may invest in affiliated underlying funds that are managed by the Advisor and its affiliates. Information regarding the fund's fiscal year to date purchases and sales of the affiliated underlying funds as well as income and capital gains earned by the fund, if any, is as follows:

Affiliate	Ending share amount	Beginning value	Cost of purchases	Proceeds from shares sold	Realized gain (loss)	Change in unrealized appreciation (depreciation)	Dividends and distributions		
							Income distributions received	Capital gain distributions received	Ending value
John Hancock Collateral									
Trust*	48,111	\$3,545,902	\$13,913,074	\$(16,979,776)	\$1,623	\$144	\$10,252	_	\$480,967

Refer to the Securities lending note within Note 2 for details regarding this investment.

#### STATEMENT REGARDING LIQUIDITY RISK MANAGEMENT

#### Operation of the Liquidity Risk Management Program

This section describes the operation and effectiveness of the Liquidity Risk Management Program (LRMP) established in accordance with Rule 22e-4 under the Investment Company Act of 1940, as amended (the Liquidity Rule). The Board of Trustees (the Board) of each Fund in the John Hancock Group of Funds (each a Fund and collectively, the Funds) that is subject to the requirements of the Liquidity Rule has appointed John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (together, the Advisor) to serve as Administrator of the LRMP with respect to each of the Funds, including John Hancock Seaport Long/Short Fund, subject to the oversight of the Board. In order to provide a mechanism and process to perform the functions necessary to administer the LRMP, the Advisor established the Liquidity Risk Management Committee (the Committee). The Fund's subadvisor, Wellington Management Company LLP (the Subadvisor) executes the day-to-day investment management and security-level activities of the Fund in accordance with the requirements of the LRMP, subject to the supervision of the Advisor and the Board.

The Committee receives monthly reports and holds quarterly in person meetings to: (1) review the day-to-day operations of the LRMP; (2) monitor current market and liquidity conditions and assess liquidity risks; (3) review and approve month-end liquidity classifications; (4) monitor illiquid investment levels against the 15% limit on illiquid investments and established Highly Liquid Investment Minimums (HLIMs), if any; (5) review quarterly testing and determinations, as applicable; (6) review redemption-in-kind activities; and (7) review other LRMP related material. The Advisor also conducts daily, monthly, quarterly, and annual quantitative and qualitative assessments of each subadvisor to a Fund that is subject to the requirements of the Liquidity Rule and is a part of the LRMP to monitor investment performance issues, risks and trends. In addition, the Advisor may conduct ad-hoc reviews and meetings with subadvisors as issues and trends are identified, including potential liquidity issues. The Committee also monitors global events, such as the ongoing Russian invasion of Ukraine and related U.S. imposed sanctions on the Russian government, companies and oligarchs, and other amendments to the Office of Foreign Assets Control sanctioned company lists, that could impact the markets and liquidity of portfolio investments and their classifications. In addition, the Committee monitors macro events and assesses their potential impact on liquidity brought on by fear of contagion (e.g. regional banking crisis).

The Committee provided the Board at a meeting held on March 28-30, 2023 with a written report which addressed the Committee's assessment of the adequacy and effectiveness of the implementation and operation of the LRMP and any material changes to the LRMP. The report, which covered the period January 1, 2022 through December 31, 2022, included an assessment of important aspects of the LRMP including, but not limited to: (1) Security-level liquidity classifications; (2) Fund-level liquidity risk assessment; (3) Reasonably Anticipated Trade Size (RATS) determination; (4) HLIM determination and daily monitoring; (5) Daily compliance with the 15% limit on illiquid investments; (6) Operation of the Fund's Redemption-In-Kind Procedures; and (7) Review of liquidity management facilities.

The report provided an update on Committee activities over the previous year. Additionally, the report included a discussion of notable changes and enhancements to the LRMP implemented during 2022 and key initiatives for 2023.

The report also covered material liquidity matters which occurred or were reported during this period applicable to the Fund, if any, and the Committee's actions to address such matters.

The report stated, in relevant part, that during the period covered by the report:

- The Fund's investment strategy remained appropriate for an open-end fund structure;
- The Fund was able to meet requests for redemption without significant dilution of remaining shareholders' interests in the Fund:

- The Fund did not experience any breaches of the 15% limit on illiquid investments, or any applicable HLIM, that would require reporting to the Securities and Exchange Commission;
- The Fund continued to qualify as a Primarily Highly Liquid Fund under the Liquidity Rule and therefore is not required to establish a HLIM; and
- The Chief Compliance Officer's office, as a part of their annual Rule 38a-1 assessment of the Fund's policies and procedures, reviewed the LRMP's control environment and deemed it to be operating effectively and in compliance with the Board approved procedures.

#### **Adequacy and Effectiveness**

Based on the annual review and assessment conducted by the Committee, the Committee has determined that the LRMP and its controls have been implemented and are operating in a manner that is adequately and effectively managing the liquidity risk of the Fund.

## More information

#### Trustees

Hassell H. McClellan, Chairperson Steven R. Pruchansky, Vice Chairperson Andrew G. Arnott<sup>†</sup> James R. Bovle William H. Cunningham\* Grace K. Fey Noni L. Ellison^ Dean C. Garfield<sup>^</sup> Marianne Harrison<sup>†,#</sup> Deborah C. Jackson Patricia Lizarraga\*,^

#### Officers

Paul Lorentz<sup>‡</sup>

Frances G. Rathke\* Gregory A. Russo

Andrew G. Arnott President Charles A. Rizzo Chief Financial Officer Salvatore Schiavone Treasurer Christopher (Kit) Sechler Secretary and Chief Legal Officer Trevor Swanberg

#### Investment advisor

John Hancock Investment Management LLC

#### Subadvisor

Wellington Management Company LLP

#### Portfolio Managers

Jennifer N. Berg, CFA Ann C. Gallo Bruce L. Glazer Wen Shi, Phd, CFA Rebecca D. Sykes, CFA Michael G. Toman Keith E. White

#### Principal distributor

John Hancock Investment Management Distributors LLC

#### Custodian

State Street Bank and Trust Company

#### Transfer agent

John Hancock Signature Services, Inc.

#### Legal counsel

K&I Gates IIP

- Chief Compliance Officer <sup>†</sup> Non-Independent Trustee
- \* Member of the Audit Committee
- ^ Elected to serve as Independent Trustee effective as of September 9, 2022.
- # Ms. Harrison is retiring effective May 1, 2023.
- <sup>‡</sup> Elected to serve as Non-Independent Trustee effective as of September 9, 2022.

The fund's proxy voting policies and procedures, as well as the fund proxy voting record for the most recent twelve-month period ended June 30, are available free of charge on the Securities and Exchange Commission (SEC) website at sec.gov or on our website.

All of the fund's holdings as of the end of the third month of every fiscal quarter are filed with the SEC on Form N-PORT within 60 days of the end of the fiscal quarter. The fund's Form N-PORT filings are available on our website and the SEC's website, sec.gov.

We make this information on your fund, as well as monthly portfolio holdings, and other fund details available on our website at ihinvestments.com or by calling 800-225-5291.

You can also contact us:

800-225-5291 jhinvestments.com Regular mail:

John Hancock Signature Services, Inc.

P.O. Box 219909

Kansas City, MO 64121-9909

Express mail:

John Hancock Signature Services, Inc.

430 W 7th Street

Suite 219909

Kansas City, MO 64105-1407

## John Hancock family of funds

#### **U.S. EOUITY FUNDS**

Blue Chip Growth

Classic Value

Disciplined Value

Disciplined Value Mid Cap

Equity Income

Financial Industries

Fundamental All Cap Core

Fundamental Large Cap Core

Mid Cap Growth

**New Opportunities** 

Regional Bank

Small Cap Core

Small Cap Growth

Small Cap Value

U.S. Global Leaders Growth

U.S. Growth

### INTERNATIONAL EQUITY FUNDS

Disciplined Value International

**Emerging Markets** 

**Emerging Markets Equity** 

Fundamental Global Franchise

Global Environmental Opportunities

Global Equity

Global Shareholder Yield

**Global Thematic Opportunities** 

International Dynamic Growth

International Growth

International Small Company

#### FIXED-INCOME FUNDS

Bond

California Municipal Bond

**Emerging Markets Debt** 

Floating Rate Income

Government Income

High Yield

High Yield Municipal Bond

Income

Investment Grade Bond

Money Market

Municipal Opportunities

Opportunistic Fixed Income

Short Duration Bond

Short Duration Municipal Opportunities

Strategic Income Opportunities

#### **ALTERNATIVE FUNDS**

Alternative Asset Allocation

Diversified Macro

Infrastructure

Multi-Asset Absolute Return

Real Estate Securities

Seaport Long/Short

A fund's investment objectives, risks, charges, and expenses should be considered carefully before investing. The prospectus contains this and other important information about the fund. To obtain a prospectus, contact your financial professional, call John Hancock Investment Management at 800-225-5291, or visit our website at jhinvestments.com. Please read the prospectus carefully before investing or sending money.

#### **EXCHANGE-TRADED FUNDS**

John Hancock Corporate Bond ETF

John Hancock International High Dividend ETF

John Hancock Mortgage-Backed Securities ETF

John Hancock Multifactor Developed International ETF

John Hancock Multifactor Emerging Markets ETF

John Hancock Multifactor Large Cap ETF

John Hancock Multifactor Mid Cap ETF

John Hancock Multifactor Small Cap ETF

John Hancock Preferred Income ETF

John Hancock U.S. High Dividend ETF

#### ASSET ALLOCATION/TARGET DATE FUNDS

Ralanced

Multi-Asset High Income

Lifestyle Blend Portfolios

Lifetime Blend Portfolios

Multimanager Lifestyle Portfolios

Multimanager Lifetime Portfolios

Preservation Blend Portfolios

## ENVIRONMENTAL, SOCIAL, AND GOVERNANCE FUNDS

ESG Core Bond

**ESG International Equity** 

ESG Large Cap Core

#### CLOSED-END FUNDS

Asset-Based Lending

Financial Opportunities

Hedged Equity & Income

Income Securities Trust

Investors Trust

Preferred Income

Preferred Income II

Preferred Income III

Premium Dividend

Tax-Advantaged Dividend Income

Tax-Advantaged Global Shareholder Yield

John Hancock ETF shares are bought and sold at market price (not NAV), and are not individually redeemed from the fund. Brokerage commissions will reduce returns.

John Hancock ETFs are distributed by Foreside Fund Services, LLC, and are subadvised by Manulife Investment Management (US) LLC or Dimensional Fund Advisors LP. Foreside is not affiliated with John Hancock Investment Management Distributors LLC, Manulife Investment Management (US) LLC or Dimensional Fund Advisors LP.

Dimensional Fund Advisors LP receives compensation from John Hancock in connection with licensing rights to the John Hancock Dimensional indexes. Dimensional Fund Advisors LP does not sponsor, endorse, or sell, and makes no representation as to the advisability of investing in, John Hancock Multifactor ETFs.

## A *trusted* brand

John Hancock Investment Management is a premier asset manager with a heritage of financial stewardship dating back to 1862. Helping our shareholders pursue their financial goals is at the core of everything we do. It's why we support the role of professional financial advice and operate with the highest standards of conduct and integrity.

# A *better way* to invest

We serve investors globally through a unique multimanager approach: We search the world to find proven portfolio teams with specialized expertise for every strategy we offer, then we apply robust investment oversight to ensure they continue to meet our uncompromising standards and serve the best interests of our shareholders.

## *Results* for investors

Our unique approach to asset management enables us to provide a diverse set of investments backed by some of the world's best managers, along with strong risk-adjusted returns across asset classes.

"A trusted brand" is based on a survey of 6,651 respondents conducted by Medallia between 3/18/20 and 5/13/20.

John Hancock Investment Management

John Hancock Investment Management Distributors LLC, Member FINRA, SIPC 200 Berkeley Street, Boston, MA 02116-5010, 800-225-5291, ihinvestments.com

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This report is for the information of the shareholders of John Hancock Seaport Long/Short Fund. It is not authorized for distribution to prospective investors unless preceded or accompanied by a prospectus.

A company of **Manulife** Investment Management

MF2879849 437SA 4/23 6/2023