



Semiannual report

John Hancock Fundamental Large Cap Core Fund

U.S. equity

April 30, 2023

A *message* to shareholders



Dear shareholder,

Despite significant volatility, the U.S. stock market finished the six months ended April 30, 2023, with a gain. In late 2022 and early 2023, stocks began to recover from the elevated inflation, recession fears, and geopolitical tensions. As inflationary pressure started to ease, the U.S. Federal Reserve dialed back the size of its interest-rate hikes. Healthy employment trends, abating pandemic-related challenges, and a normalizing U.S. economy also aided returns.

During the final two months of the period, however, the markets sustained another jolt when a number of significant U.S. regional banks unexpectedly collapsed.

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 Fundamental Large Cap Core Fund

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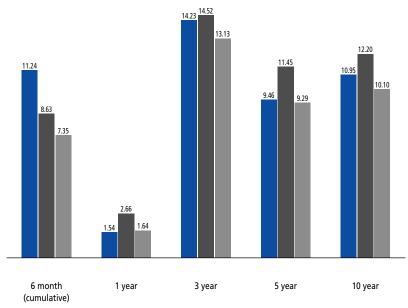
Your fund at a glance

INVESTMENT OBJECTIVE

The fund seeks long-term capital appreciation.

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

- Class A shares (without sales charge)
- S&P 500 Index
- Morningstar large blend fund category average



The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States.

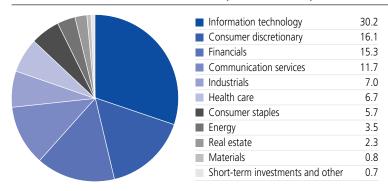
It is not possible to invest directly in an index. Index figures do not reflect expenses or sales charges, which would result in lower returns.

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.

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

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



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

Apple, Inc.	7.3
Amazon.com, Inc.	7.3
Alphabet, Inc., Class A	5.8
Anheuser-Busch InBev SA/NV, ADR	4.8
Microsoft Corp.	4.6
Salesforce, Inc.	4.5
Lennar Corp., A Shares	4.4
KKR & Company, Inc.	4.1
Workday, Inc., Class A	3.9
Morgan Stanley	3.7
TOTAL	50.4

Cash and cash equivalents are not included.

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  \left[ \begin{array}{c} \text{My account value} \ / \$1,000.00 = 8.6 \end{array} \right] \quad \text{x} \quad \$ \left[ \begin{array}{c} \text{"expenses paid"} \\ \text{from table} \end{array} \right] \quad = \quad \begin{array}{c} \text{My actual} \\ \text{expenses} \end{array}
```

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 ¹	Annualized expense ratio
Class A	Actual expenses/actual returns	\$1,000.00	\$1,112.40	\$5.34	1.02%
	Hypothetical example	1,000.00	1,019.70	5.11	1.02%
Class C	Actual expenses/actual returns	1,000.00	1,108.20	9.25	1.77%
	Hypothetical example	1,000.00	1,016.00	8.85	1.77%
Class I	Actual expenses/actual returns	1,000.00	1,113.70	4.04	0.77%
	Hypothetical example	1,000.00	1,021.00	3.86	0.77%
Class R2	Actual expenses/actual returns	1,000.00	1,111.80	5.92	1.13%
	Hypothetical example	1,000.00	1,019.20	5.66	1.13%
Class R4	Actual expenses/actual returns	1,000.00	1,112.90	4.77	0.91%
	Hypothetical example	1,000.00	1,020.30	4.56	0.91%
Class R5	Actual expenses/actual returns	1,000.00	1,113.90	3.72	0.71%
	Hypothetical example	1,000.00	1,021.30	3.56	0.71%
Class R6	Actual expenses/actual returns	1,000.00	1,114.20	3.51	0.67%
	Hypothetical example	1,000.00	1,021.50	3.36	0.67%
Class NAV	Actual expenses/actual returns	1,000.00	1,114.40	3.46	0.66%
	Hypothetical example	1,000.00	1,021.50	3.31	0.66%

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

A3 OF 4-30-23 (ullauditeu)	Shares	Value
Common stocks 99.3%		\$4,893,719,001
(Cost \$2,941,574,276)		
Communication services 11.7%		575,529,050
Entertainment 5.0%		
Liberty Media CorpLiberty Formula One, Series C (A)	2,072,408	149,607,134
The Walt Disney Company (A)	925,709	94,885,173
Interactive media and services 5.9%		
Alphabet, Inc., Class A (A)	2,654,864	284,973,102
CarGurus, Inc. (A)	270,672	4,449,848
Media 0.8%		
Comcast Corp., Class A	1,005,893	41,613,793
Consumer discretionary 16.1%		795,496,481
Broadline retail 8.8%		
Amazon.com, Inc. (A)	3,404,637	359,018,972
eBay, Inc.	1,616,615	75,059,434
Hotels, restaurants and leisure 1.7%		
Airbnb, Inc., Class A (A)	691,188	82,714,468
Household durables 4.4%		
Lennar Corp., A Shares	1,925,052	217,165,116
Leisure products 1.2%		
Polaris, Inc.	566,392	61,538,491
Consumer staples 5.7%		279,327,095
Beverages 4.8%		
Anheuser-Busch InBev SA/NV, ADR	3,596,002	233,632,250
Consumer staples distribution and retail 0.9%		
Walmart, Inc.	302,675	45,694,845
Energy 3.5%		170,554,455
Oil, gas and consumable fuels 3.5%		
Cheniere Energy, Inc.	1,114,735	170,554,455
Financials 15.3%		753,670,371
Banks 2.1%		
JPMorgan Chase & Co.	516,450	71,394,048
Wells Fargo & Company	747,780	29,724,255
Capital markets 10.8%		
KKR & Company, Inc.	3,777,791	200,487,368
Morgan Stanley	2,035,268	183,113,062
State Street Corp.	393,510	28,435,033
The Goldman Sachs Group, Inc.	348,318	119,626,334

	Shares	Value
Financials (continued) Consumer finance 0.5%		
Synchrony Financial	919,393	\$27,131,287
Financial services 1.9%	313,333	\$27,131,207
PayPal Holdings, Inc. (A)	480,627	36,527,652
Visa, Inc., Class A	245,913	57,231,332
	213,313	
Health care 6.7%		329,781,584
Biotechnology 1.3%	400 552	66 305 500
Moderna, Inc. (A)	499,553	66,385,598
Health care providers and services 2.0%	455.000	70 705 560
Elevance Health, Inc.	155,309	72,785,563
UnitedHealth Group, Inc.	49,303	24,261,513
Life sciences tools and services 3.4%		
Danaher Corp.	394,175	93,383,999
Thermo Fisher Scientific, Inc.	131,492	72,964,911
Industrials 7.0%		346,097,988
Aerospace and defense 5.0%		
Airbus SE	514,214	72,008,032
General Dynamics Corp.	254,404	55,546,569
Lockheed Martin Corp.	203,669	94,594,067
Raytheon Technologies Corp.	238,867	23,862,813
Building products 0.2%		
Carrier Global Corp.	235,759	9,859,441
Ground transportation 1.6%		
Union Pacific Corp.	409,663	80,171,049
Machinery 0.2%		
Otis Worldwide Corp.	117,890	10,056,017
Information technology 30.2%		1,488,576,664
Semiconductors and semiconductor equipment 7.0%		
Analog Devices, Inc.	617,032	110,991,716
Broadcom, Inc.	67,932	42,559,398
KLA Corp.	232,462	89,855,861
Taiwan Semiconductor Manufacturing Company, Ltd., ADR	642,796	54,187,703
Texas Instruments, Inc.	298,716	49,945,315
Software 15.9%		
Intuit, Inc.	195,016	86,577,353
Microsoft Corp.	745,681	229,117,944
Oracle Corp.	586,472	55,550,628
Salesforce, Inc. (A)	1,108,053	219,804,474
Workday, Inc., Class A (A)	1,024,272	190,657,990

			Shares	Value
Information technology (continued)				
Technology hardware, storage and periphe	rals 7.3%			
Apple, Inc.			2,117,682	\$359,328,282
Materials 0.8%				40,523,450
Chemicals 0.8%				
LyondellBasell Industries NV, Class A			428,321	40,523,450
Real estate 2.3%				114,161,863
Specialized REITs 2.3%				
American Tower Corp.			409,718	83,742,262
Crown Castle, Inc.			247,133	30,419,601
	Yield* (%)	Maturity date	Par value^	Value
Short-term investments 0.4%				\$20,909,000
(Cost \$20,909,000)				
U.S. Government Agency 0.4%				20,909,000
Federal Home Loan Bank Discount Note	4.550	05-01-23	20,909,000	20,909,000
Total investments (Cost \$2,962,483,276) 99.7%			\$4,914,628,001
Other assets and liabilities, net 0.3%				12,394,247
Total net assets 100.0%				\$4.927.022.248

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

Security Abbreviations and Legend

ADR American Depositary Receipt

- Non-income producing security. (A)
- Yield represents either the annualized yield at the date of purchase, the stated coupon rate or, for floating rate securities, the

At 4-30-23, the aggregate cost of investments for federal income tax purposes was \$2,976,569,157. Net unrealized appreciation aggregated to \$1,938,058,844, of which \$2,005,853,072 related to gross unrealized appreciation and \$67,794,228 related to gross unrealized depreciation.

[^]All par values are denominated in U.S. dollars unless otherwise indicated.

Financial statements

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

Assets	
Unaffiliated investments, at value (Cost \$2,962,483,276)	\$4,914,628,001
Cash	15,723,761
Dividends and interest receivable	2,644,629
Receivable for fund shares sold	1,590,299
Receivable for investments sold	896,511
Other assets	612,527
Total assets	4,936,095,728
Liabilities	
Payable for fund shares repurchased	5,256,680
Payable to affiliates	
Investment management fees	2,481,994
Accounting and legal services fees	289,766
Transfer agent fees	233,702
Distribution and service fees	397,963
Trustees' fees	3,888
Other liabilities and accrued expenses	409,487
Total liabilities	9,073,480
Net assets	\$4,927,022,248
Net assets consist of	
Paid-in capital	\$2,806,569,710
Total distributable earnings (loss)	2,120,452,538
Net assets	\$4,927,022,248

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 (\$1,794,527,186 ÷ 31,646,676 shares) ¹	\$56.71
Class C (\$50,526,079 ÷ 1,067,570 shares) ¹	\$47.33
Class I (\$683,664,572 ÷ 11,377,722 shares)	\$60.09
Class R2 (\$5,862,724 ÷ 98,221 shares)	\$59.69
Class R4 (\$1,258,705 ÷ 21,087 shares)	\$59.69
Class R5 (\$483,603 ÷ 8,025 shares)	\$60.26
Class R6 (\$509,819,038 ÷ 8,455,043 shares)	\$60.30
Class NAV (\$1,880,880,341 ÷ 31,206,998 shares)	\$60.27
Maximum offering price per share	
Class A (net asset value per share \div 95%) ²	\$59.69

¹ 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	
Dividends	\$28,130,556
Interest	1,067,911
Less foreign taxes withheld	(152,311)
Total investment income	29,046,156
Expenses	
Investment management fees	14,568,906
Distribution and service fees	2,378,387
Accounting and legal services fees	465,482
Transfer agent fees	1,419,896
Trustees' fees	59,741
Custodian fees	266,701
State registration fees	70,511
Printing and postage	89,441
Professional fees	103,932
Other	77,567
Total expenses	19,500,564
Less expense reductions	(170,713)
Net expenses	19,329,851
Net investment income	9,716,305
Realized and unrealized gain (loss)	
Net realized gain (loss) on	
Unaffiliated investments and foreign currency transactions	176,449,899
	176,449,899
Change in net unrealized appreciation (depreciation) of	
Unaffiliated investments and translation of assets and liabilities in foreign currencies	328,498,274
	328,498,274
Net realized and unrealized gain	504,948,173
Increase in net assets from operations	\$514,664,478

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	\$9,716,305	\$17,697,134
Net realized gain	176,449,899	292,129,689
Change in net unrealized appreciation (depreciation)	328,498,274	(1,687,135,261)
Increase (decrease) in net assets resulting from operations	514,664,478	(1,377,308,438)
Distributions to shareholders		
From earnings		
Class A	(103,662,388)	(164,879,085)
Class C	(3,629,035)	(7,277,662)
Class I	(40,016,149)	(67,395,930)
Class R2	(356,639)	(630,655)
Class R4	(67,684)	(148,532)
Class R5	(34,129)	(58,656)
Class R6	(29,701,365)	(43,425,188)
Class NAV	(110,641,840)	(170,798,823)
Total distributions	(288,109,229)	(454,614,531)
From fund share transactions	59,996,782	170,535,939
Total increase (decrease)	286,552,031	(1,661,387,030)
Net assets		
Beginning of period	4,640,470,217	6,301,857,247
End of period	\$4,927,022,248	\$4,640,470,217

Financial highlights

CLASS A SHARES Period ended	4-30-23 ¹	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	\$54.43	\$76.05	\$50.84	\$46.52	\$46.66	\$51.87
Net investment income (loss) ²	0.06	0.08	(0.03)	0.20	0.24	0.16
Net realized and unrealized gain (loss) on investments	5.63	(16.10)	25.42	4.38	4.82	(1.10)
Total from investment operations	5.69	(16.02)	25.39	4.58	5.06	(0.94)
Less distributions						
From net investment income	(0.12)	_	(0.18)	(0.26)	(0.13)	(0.26)
From net realized gain	(3.29)	(5.60)	_	_	(5.07)	(4.01)
Total distributions	(3.41)	(5.60)	(0.18)	(0.26)	(5.20)	(4.27)
Net asset value, end of period	\$56.71	\$54.43	\$76.05	\$50.84	\$46.52	\$46.66
Total return (%) ^{3,4}	11.24 ⁵	(22.73)	50.04	9.88	13.23	(2.20)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$1,795	\$1,670	\$2,242	\$1,550	\$1,550	\$1,511
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.02 ⁶	1.02	1.02	1.04	1.03	1.03
Expenses including reductions	1.02 ⁶	1.01	1.01	1.03	1.02	1.02
Net investment income (loss)	0.21 ⁶	0.12	(0.04)	0.40	0.56	0.32
Portfolio turnover (%)	9	26	16	19	29 ⁷	47 ⁷

¹ Six months ended 4-30-23. Unaudited.

Based on average daily shares outstanding.

³ Total returns would have been lower had certain expenses not been reduced during the applicable periods.

⁴ Does not reflect the effect of sales charges, if any.

⁵ Not annualized.

⁶ Annualized.

Excludes in-kind transactions.

CLASS C SHARES Period ended	4-30-23 ¹	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	\$46.04	\$65.65	\$44.08	\$40.42	\$41.41	\$46.57
Net investment loss ²	(0.12)	(0.34)	(0.46)	(0.14)	(0.07)	(0.19)
Net realized and unrealized gain (loss) on investments	4.70	(13.67)	22.03	3.80	4.15	(0.96)
Total from investment operations	4.58	(14.01)	21.57	3.66	4.08	(1.15)
Less distributions						
From net realized gain	(3.29)	(5.60)	_	_	(5.07)	(4.01)
Net asset value, end of period	\$47.33	\$46.04	\$65.65	\$44.08	\$40.42	\$41.41
Total return (%) ^{3,4}	10.82 ⁵	(23.32)	48.93	9.05	12.38	(2.93)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$51	\$53	\$89	\$84	\$127	\$184
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.78 ⁶	1.77	1.77	1.79	1.78	1.78
Expenses including reductions	1.77 ⁶	1.76	1.76	1.78	1.77	1.77
Net investment loss	$(0.54)^6$	(0.64)	(0.79)	(0.33)	(0.17)	(0.42)
Portfolio turnover (%)	9	26	16	19	29 ⁷	47 ⁷

Six months ended 4-30-23. Unaudited.

 $^{^{2}\,\,}$ Based on average daily shares outstanding.

³ Total returns would have been lower had certain expenses not been reduced during the applicable periods.

⁴ Does not reflect the effect of sales charges, if any.

⁵ Not annualized.

⁶ Annualized.

Excludes in-kind transactions.

CLASS I SHARES Period ended	4-30-23 ¹	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	\$57.56	\$80.04	\$53.47	\$48.89	\$48.78	\$54.05
Net investment income ²	0.13	0.25	0.14	0.34	0.37	0.29
Net realized and unrealized gain (loss) on investments	5.96	(17.01)	26.73	4.61	5.07	(1.15)
Total from investment operations	6.09	(16.76)	26.87	4.95	5.44	(0.86)
Less distributions						
From net investment income	(0.27)	(0.12)	(0.30)	(0.37)	(0.26)	(0.40)
From net realized gain	(3.29)	(5.60)	_	_	(5.07)	(4.01)
Total distributions	(3.56)	(5.72)	(0.30)	(0.37)	(5.33)	(4.41)
Net asset value, end of period	\$60.09	\$57.56	\$80.04	\$53.47	\$48.89	\$48.78
Total return (%) ³	11.37 ⁴	(22.55)	50.42	10.16	13.51	(1.97)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$684	\$672	\$941	\$625	\$819	\$846
Ratios (as a percentage of average net assets):						
Expenses before reductions	0.78 ⁵	0.77	0.77	0.79	0.79	0.79
Expenses including reductions	0.77 ⁵	0.76	0.76	0.78	0.78	0.78
Net investment income	0.465	0.37	0.20	0.66	0.81	0.56
Portfolio turnover (%)	9	26	16	19	29 ⁶	47 ⁶

¹ Six months ended 4-30-23. Unaudited.

² Based on average daily shares outstanding.

³ Total returns would have been lower had certain expenses not been reduced during the applicable periods.

⁴ Not annualized.

⁵ Annualized.

⁶ Excludes in-kind transactions.

CLASS R2 SHARES Period ended	4-30-23 ¹	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	\$57.06	\$79.54	\$53.16	\$48.63	\$48.51	\$53.77
Net investment income (loss) ²	0.03	3	(0.12)	0.13	0.19	0.12
Net realized and unrealized gain (loss) on investments	5.92	(16.88)	26.60	4.59	5.06	(1.18)
Total from investment operations	5.95	(16.88)	26.48	4.72	5.25	(1.06)
Less distributions						
From net investment income	(0.03)	_	(0.10)	(0.19)	(0.06)	(0.19)
From net realized gain	(3.29)	(5.60)	_	_	(5.07)	(4.01)
Total distributions	(3.32)	(5.60)	(0.10)	(0.19)	(5.13)	(4.20)
Net asset value, end of period	\$59.69	\$57.06	\$79.54	\$53.16	\$48.63	\$48.51
Total return (%) ⁴	11.18 ⁵	(22.84)	49.87	9.73	13.09	(2.36)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$6	\$6	\$9	\$7	\$2	\$2
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.13 ⁶	1.14	1.14	1.17	1.18	1.18
Expenses including reductions	1.13 ⁶	1.13	1.13	1.17	1.17	1.18
Net investment income (loss)	0.10 ⁶	7	(0.17)	0.28	0.41	0.23
Portfolio turnover (%)	9	26	16	19	29 ⁸	47 ⁸

¹ Six months ended 4-30-23. Unaudited.

² Based on average daily shares outstanding.

³ Less than \$0.005 per share.

⁴ Total returns would have been lower had certain expenses not been reduced during the applicable periods.

Not annualized.

⁶ Annualized.

⁷ Less than 0.005%.

⁸ Excludes in-kind transactions.

CLASS R4 SHARES Period ended	4-30-23 ¹	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	\$57.16	\$79.54	\$53.15	\$48.61	\$48.51	\$53.76
Net investment income ²	0.09	0.15	0.04	0.26	0.36	0.20
Net realized and unrealized gain (loss) on investments	5.92	(16.90)	26.58	4.59	4.99	(1.13)
Total from investment operations	6.01	(16.75)	26.62	4.85	5.35	(0.93)
Less distributions						
From net investment income	(0.19)	(0.03)	(0.23)	(0.31)	(0.18)	(0.31)
From net realized gain	(3.29)	(5.60)	_	_	(5.07)	(4.01)
Total distributions	(3.48)	(5.63)	(0.23)	(0.31)	(5.25)	(4.32)
Net asset value, end of period	\$59.69	\$57.16	\$79.54	\$53.15	\$48.61	\$48.51
Total return (%) ³	11.29 ⁴	(22.67)	50.20	10.00	13.35	(2.10)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$1	\$2	\$2	\$2	\$1	\$4
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.02 ⁵	1.01	1.01	1.02	1.03	1.03
Expenses including reductions	0.91 ⁵	0.90	0.90	0.92	0.92	0.92
Net investment income	0.32 ⁵	0.23	0.06	0.51	0.77	0.39
Portfolio turnover (%)	9	26	16	19	29 ⁶	47 ⁶

¹ Six months ended 4-30-23. Unaudited.

² Based on average daily shares outstanding.

³ Total returns would have been lower had certain expenses not been reduced during the applicable periods.

⁴ Not annualized.

⁵ Annualized.

⁶ Excludes in-kind transactions.

CLASS R5 SHARES Period ended	4-30-23 ¹	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	\$57.74	\$80.26	\$53.61	\$49.02	\$48.89	\$54.14
Net investment income ²	0.14	0.29	0.19	0.36	0.40	0.34
Net realized and unrealized gain (loss) on investments	5.98	(17.06)	26.79	4.63	5.08	(1.17)
Total from investment operations	6.12	(16.77)	26.98	4.99	5.48	(0.83)
Less distributions						
From net investment income	(0.31)	(0.15)	(0.33)	(0.40)	(0.28)	(0.41)
From net realized gain	(3.29)	(5.60)	_	_	(5.07)	(4.01)
Total distributions	(3.60)	(5.75)	(0.33)	(0.40)	(5.35)	(4.42)
Net asset value, end of period	\$60.26	\$57.74	\$80.26	\$53.61	\$49.02	\$48.89
Total return (%) ³	11.39 ⁴	(22.50)	50.50	10.22	13.60	(1.92)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$— ⁵	\$1	\$1	\$1	\$ _ 5	\$— ⁵
Ratios (as a percentage of average net assets):						
Expenses before reductions	0.72 ⁶	0.71	0.71	0.73	0.73	0.73
Expenses including reductions	0.71 ⁶	0.70	0.70	0.72	0.72	0.72
Net investment income	0.50 ⁶	0.43	0.26	0.71	0.86	0.64
Portfolio turnover (%)	9	26	16	19	29 ⁷	47 ⁷

¹ Six months ended 4-30-23. Unaudited.

² Based on average daily shares outstanding.

³ Total returns would have been lower had certain expenses not been reduced during the applicable periods.

⁴ Not annualized.

⁵ Less than \$500,000.

⁶ Annualized.

Excludes in-kind transactions.

CLASS R6 SHARES Period ended	4-30-23 ¹	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	\$57.79	\$80.32	\$53.64	\$49.04	\$48.91	\$54.16
Net investment income ²	0.16	0.32	0.22	0.39	0.45	0.34
Net realized and unrealized gain (loss) on investments	5.98	(17.07)	26.81	4.63	5.05	(1.15)
Total from investment operations	6.14	(16.75)	27.03	5.02	5.50	(0.81)
Less distributions						
From net investment income	(0.34)	(0.18)	(0.35)	(0.42)	(0.30)	(0.43)
From net realized gain	(3.29)	(5.60)	_	_	(5.07)	(4.01)
Total distributions	(3.63)	(5.78)	(0.35)	(0.42)	(5.37)	(4.44)
Net asset value, end of period	\$60.30	\$57.79	\$80.32	\$53.64	\$49.04	\$48.91
Total return (%) ³	11.42 ⁴	(22.46)	50.59	10.28	13.63	(1.85)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$510	\$478	\$593	\$386	\$397	\$963
Ratios (as a percentage of average net assets):						
Expenses before reductions	0.67 ⁵	0.66	0.66	0.68	0.68	0.68
Expenses including reductions	0.67 ⁵	0.65	0.65	0.67	0.67	0.67
Net investment income	0.56 ⁵	0.48	0.31	0.76	0.96	0.66
Portfolio turnover (%)	9	26	16	19	29 ⁶	47 ⁶

¹ Six months ended 4-30-23. Unaudited.

² Based on average daily shares outstanding.

³ Total returns would have been lower had certain expenses not been reduced during the applicable periods.

⁴ Not annualized.

⁵ Annualized.

⁶ Excludes in-kind transactions.

CLASS NAV SHARES Period ended	4-30-23 ¹	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	\$57.77	\$80.29	\$53.62	\$49.02	\$48.90	\$54.15
Net investment income ²	0.16	0.33	0.23	0.40	0.42	0.33
Net realized and unrealized gain (loss) on investments	5.98	(17.06)	26.80	4.63	5.07	(1.13)
Total from investment operations	6.14	(16.73)	27.03	5.03	5.49	(0.80)
Less distributions						
From net investment income	(0.35)	(0.19)	(0.36)	(0.43)	(0.30)	(0.44)
From net realized gain	(3.29)	(5.60)	_	_	(5.07)	(4.01)
Total distributions	(3.64)	(5.79)	(0.36)	(0.43)	(5.37)	(4.45)
Net asset value, end of period	\$60.27	\$57.77	\$80.29	\$53.62	\$49.02	\$48.90
Total return (%) ³	11.44 ⁴	(22.47)	50.60	10.30	13.65	(1.85)
Ratios and supplemental data						
Net assets, end of period (in millions)	\$1,881	\$1,759	\$2,425	\$2,063	\$2,218	\$1,671
Ratios (as a percentage of average net assets):						
Expenses before reductions	0.665	0.65	0.65	0.67	0.67	0.67
Expenses including reductions	0.66 ⁵	0.65	0.64	0.66	0.66	0.66
Net investment income	0.57 ⁵	0.49	0.33	0.78	0.91	0.64
Portfolio turnover (%)	9	26	16	19	29 ⁶	47 ⁶

¹ Six months ended 4-30-23. Unaudited.

² Based on average daily shares outstanding.

³ Total returns would have been lower had certain expenses not been reduced during the applicable periods.

⁴ Not annualized.

⁵ Annualized.

⁶ Excludes in-kind transactions.

Notes to financial statements (unaudited)

Note 1 — Organization

John Hancock Fundamental Large Cap Core 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 long-term 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 R2. Class R4 and Class R5 shares are available only to certain retirement and 529 plans. 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. 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. 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	\$575,529,050	\$575,529,050	_	_
Consumer discretionary	795,496,481	795,496,481	_	_
Consumer staples	279,327,095	279,327,095	_	_
Energy	170,554,455	170,554,455	_	_
Financials	753,670,371	753,670,371	_	_
Health care	329,781,584	329,781,584	_	_
Industrials	346,097,988	274,089,956	\$72,008,032	_
Information technology	1,488,576,664	1,488,576,664	_	_
Materials	40,523,450	40,523,450	_	_
Real estate	114,161,863	114,161,863	_	_
Short-term investments	20,909,000	_	20,909,000	_
Total investments in securities	\$4,914,628,001	\$4,821,710,969	\$92,917,032	_

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.

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. 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 guarter, 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. For the six months ended April 30, 2023, the fund had no borrowings under the line of credit. Commitment fees for the six months ended April 30, 2023 were \$9,375.

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.

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 treating a portion of the proceeds from redemptions as distributions for tax purposes and wash sale loss deferrals.

Note 3 — 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 yet occurred. The risk of material loss from such claims is considered remote.

Note 4 — 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 monthly management fee to the Advisor equivalent on an annual basis to the sum of: (a) 0.625% of the first \$3 billion of the fund's average daily net assets and (b) 0.600% of the fund's average daily net assets in excess of \$3 billion. The Advisor has a subadvisory agreement with Manulife Investment Management (US) LLC, an indirectly owned subsidiary of Manulife Financial Corporation and an affiliate of the Advisor. 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.

The Advisor has contractually agreed to waive and/or reimburse a portion of the operating expenses for Class C and Class I shares of the fund to the extent they exceed 1.82% and 0.78%, respectively, of the average daily net assets attributable to each class. These waivers and/or reimbursements exclude taxes, brokerage commissions, interest expense, acquired fund fees and expenses paid indirectly, short dividend expense, litigation and indemnification expenses not incurred in the ordinary course of the fund's business, borrowing costs, and prime brokerage fees. The waivers and/or reimbursements will expire on February 28, 2024, unless renewed by mutual agreement of the fund and Advisor based upon determination that this is appropriate under the circumstances at the 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	\$61,521	Class R5	\$19
Class C	1,828	Class R6	17,494
Class I	23,836	Class NAV	65,145
Class R2	221	Total	\$170,108
Class R4	44		

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 0.61% 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. In addition, under a service plan for certain classes as detailed below, the fund pays for certain other services. 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	Service fee
Class A	0.25%	_
Class C	1.00%	_
Class R2	0.25%	0.25%
Class R4	0.25%	0.10%
Class R5	_	0.05%

The fund's Distributor has contractually agreed to waive 0.10% of Rule12b-1 fees for Class R4 shares. The current waiver agreement expires on February 28, 2024, unless renewed by mutual agreement of the fund and the Distributor based upon a determination that this is appropriate under the circumstances at the time. This contractual waiver amounted to \$605 for Class R4 shares for the six months ended April 30, 2023.

Sales charges. Class A shares are assessed up-front sales charges, which resulted in payments to the Distributor amounting to \$233,291 for the six months ended April 30, 2023. Of this amount, \$39,350 was retained and used for printing prospectuses, advertising, sales literature and other purposes and \$193,941 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, CDSCs received by the Distributor amounted to \$2,070 and \$3,196 for Class A and Class C shares, respectively.

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	\$2,107,371	\$984,065
Class C	254,602	29,272
Class I	_	381,485
Class R2	14,183	312
Class R4	2,110	61
Class R5	121	27
Class R6	_	24,674
Total	\$2,378,387	\$1,419,896

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.

Note 5 — 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	Six Months Ended 4-30-23		Year Ended 10-31-22	
	Shares	Amount	Shares	Amount	
Class A shares					
Sold	1,388,092	\$75,428,644	2,664,726	\$170,231,936	
Distributions reinvested	1,957,816	98,556,452	2,223,295	156,385,999	
Repurchased	(2,380,633)	(129,546,695)	(3,685,597)	(233,884,630	
Net increase	965,275	\$44,438,401	1,202,424	\$92,733,305	
Class C shares					
Sold	57,120	\$2,592,563	119,754	\$6,625,848	
Distributions reinvested	79,101	3,332,533	112,988	6,766,844	
Repurchased	(219,946)	(10,040,464)	(433,361)	(23,749,308	
Net decrease	(83,725)	\$(4,115,368)	(200,619)	\$(10,356,616	
Class I shares					
Sold	669,750	\$38,238,631	2,002,208	\$137,223,888	
Distributions reinvested	628,519	33,500,087	759,500	56,377,658	
Repurchased	(1,595,642)	(91,606,116)	(2,848,077)	(189,978,865	
Net increase (decrease)	(297,373)	\$(19,867,398)	(86,369)	\$3,622,681	
Class R2 shares					
Sold	2,780	\$157,929	10,702	\$735,510	
Distributions reinvested	6,485	343,793	8,043	593,632	
Repurchased	(20,285)	(1,172,752)	(24,999)	(1,646,110	
Net decrease	(11,020)	\$(671,030)	(6,254)	\$(316,968	
Class R4 shares					
Sold	466	\$26,738	1,885	\$125,743	
Distributions reinvested	1,278	67,684	2,013	148,532	
Repurchased	(8,267)	(492,879)	(2,596)	(174,129	
Net increase (decrease)	(6,523)	\$(398,457)	1,302	\$100,146	
Class R5 shares					
Sold	929	\$54,086	2,246	\$148,113	
Distributions reinvested	639	34,129	788	58,656	
Repurchased	(3,232)	(189,617)	(3,445)	(212,152	

	Six Months	Ended 4-30-23	Year Ended 10-31-22		
	Shares	Amount	Shares	Amount	
Class R6 shares					
Sold	776,800	\$45,117,708	2,156,329	\$148,755,312	
Distributions reinvested	553,406	29,585,062	581,114	43,263,963	
Repurchased	(1,147,166)	(66,376,140)	(1,842,794)	(122,684,013)	
Net increase	183,040	\$8,326,630	894,649	\$69,335,262	
Class NAV shares					
Sold	365,446	\$21,594,460	1,160,598	\$70,535,654	
Distributions reinvested	2,070,394	110,641,840	2,295,066	170,798,823	
Repurchased	(1,674,484)	(99,850,894)	(3,216,126)	(225,910,965)	
Net increase	761,356	\$32,385,406	239,538	\$15,423,512	
Total net increase	1,509,366	\$59,996,782	2,044,260	\$170,535,939	

Affiliates of the fund owned 2% and 100% of shares of Class R6 and Class NAV, respectively, 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 6 — Purchase and sale of securities

Purchases and sales of securities, other than short-term investments, amounted to \$412,285,753 and \$590,192,211, respectively, for the six months ended April 30, 2023.

Note 7 — Industry or sector risk

The fund may invest a large percentage of its assets in one or more particular industries or sectors of the economy. If a large percentage of the fund's assets are economically tied to a single or small number of industries or sectors of the economy, the fund will be less diversified than a more broadly diversified fund, and it may cause the fund to underperform if that industry or sector underperforms. In addition, focusing on a particular industry or sector may make the fund's NAV more volatile. Further, a fund that invests in particular industries or sectors is particularly susceptible to the impact of market, economic, regulatory and other factors affecting those industries or sectors.

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 36.1% 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 Multimanager Lifestyle Growth Portfolio	8.7%
John Hancock Variable Insurance Trust Managed Volatility Growth Portfolio	7.6%
John Hancock Funds II Multimanager Lifestyle Balanced Portfolio	5.1%

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 Fundamental Large Cap Core 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, Manulife Investment Management (US) LLC (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[†] James R. Boyle William H. Cunningham* Grace K. Fev Noni L. Ellison[^] Dean C. Garfield[^] Marianne Harrison^{†,#} Deborah C. Jackson Patricia Lizarraga*,/ Paul Lorentz‡

Officers

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

Chief Compliance Officer [†] Non-Independent Trustee

Trevor Swanberg

* 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.

[‡] 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 jhinvestments.com or by calling 800-225-5291.

You can also contact us:

800-225-5291 jhinvestments.com

John Hancock Signature Services, Inc. P.O. Box 219909

Kansas City, MO 64121-9909

Regular mail:

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John Hancock Investment Management LLC

Subadvisor

Manulife Investment Management (US) LLC

Portfolio Managers

Emory W. (Sandy) Sanders, Jr., CFA Jonathan T. White, CFA

Principal distributor

John Hancock Investment Management Distributors LLC

Custodian

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You may revoke your consent at any time by simply visiting jhinvestments.com/login and following the instructions above. You may also revoke consent by calling 800-225-5291 or by writing to us at the following address: John Hancock Signature Services, Inc., P.O. Box 219909, Kansas City, MO 64121-9909. We reserve the right to deliver documents to you on paper at any time should the need arise.

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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.

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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

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