

Semiannual report

John Hancock Fundamental Large Cap Core Fund

U.S. equity

April 30, 2022

A *message* to shareholders



Dear shareholder,

The U.S. stock market delivered negative performance for the six months ended April 30, 2022. Rising inflation prompted the U.S. Federal Reserve to wind down its quantitative easing policies and begin raising interest rates. The conflict between Russia and Ukraine further weighed on sentiment by creating uncertainty about the economy and fueling expectations for still-higher inflation.

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,

A handwritten signature in black ink that reads "Andrew Arnott". The signature is fluid and cursive, with the first name "Andrew" and last name "Arnott" clearly legible.

Andrew G. Arnott

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 jihinvestments.com.

John Hancock

Fundamental Large Cap Core Fund

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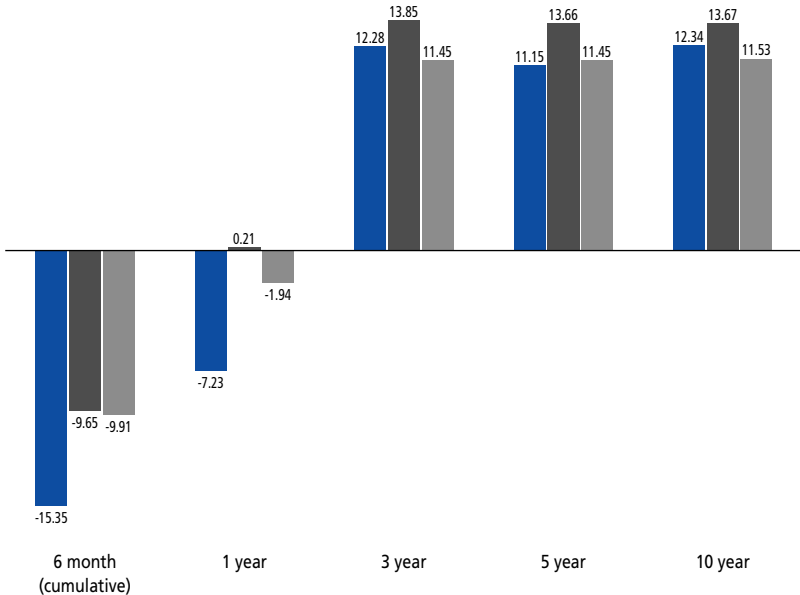
Your fund at a glance

INVESTMENT OBJECTIVE

The fund seeks long-term capital appreciation.

AVERAGE ANNUAL TOTAL RETURNS AS OF 4/30/2022 (%)

- 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.

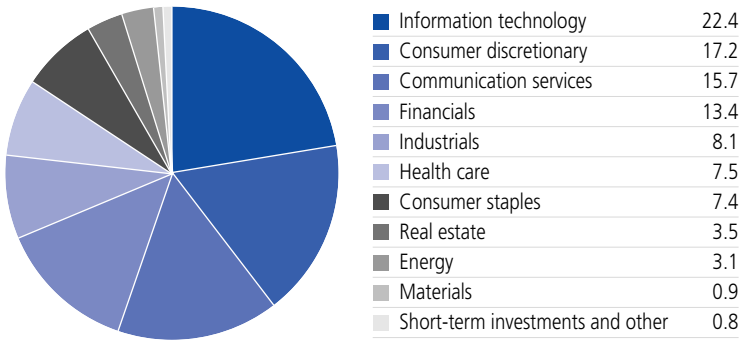
It is not possible to invest directly in an index. Index figures do not reflect expenses or sales charges, which would result in lower returns.

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 4/30/2022 (% of net assets)



TOP 10 HOLDINGS AS OF 4/30/2022 (% of net assets)

Amazon.com, Inc.	8.0
Apple, Inc.	7.7
Alphabet, Inc., Class A	6.1
Anheuser-Busch InBev SA/NV, ADR	4.7
Morgan Stanley	4.6
Lennar Corp., A Shares	4.5
Meta Platforms, Inc., Class A	3.8
UnitedHealth Group, Inc.	3.6
Workday, Inc., Class A	3.5
CarMax, Inc.	3.5
TOTAL	50.0

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.

A look at performance

TOTAL RETURNS FOR THE PERIOD ENDED APRIL 30, 2022

	Average annual total returns (%) with maximum sales charge			Cumulative total returns (%) with maximum sales charge		
	1-year	5-year	10-year	6-month	5-year	10-year
Class A	-11.86	10.01	11.76	-19.58	61.15	204.08
Class C	-8.76	10.31	11.50	-16.44	63.37	197.01
Class I ¹	-6.99	11.42	12.64	-15.25	71.71	228.73
Class R2 ¹	-7.34	11.00	12.22	-15.41	68.48	216.87
Class R4 ¹	-7.12	11.27	12.47	-15.30	70.53	223.84
Class R5 ¹	-6.93	11.49	12.69	-15.22	72.24	230.36
Class R6 ¹	-6.88	11.55	12.75	-15.20	72.72	232.16
Class NAV ^{1,2}	-6.89	11.55	12.55	-15.20	72.75	226.25
Index ¹	0.21	13.66	13.67	-9.65	89.68	260.05

Performance figures assume all distributions have been reinvested. Figures reflect maximum sales charges on Class A shares of 5% and the applicable contingent deferred sales charge (CDSC) on Class C shares. Class C shares sold within one year of purchase are subject to a 1% CDSC. Sales charges are not applicable to Class I, Class R2, Class R4, Class R5, Class R6, and Class NAV shares.

The expense ratios of the fund, both net (including any fee waivers and/or expense limitations) and gross (excluding any fee waivers and/or expense limitations), are set forth according to the most recent publicly available prospectuses for the fund and may differ from those disclosed in the Financial highlights tables in this report. Net expenses reflect contractual fee waivers and expense limitations in effect until February 28, 2023 and are subject to change. Had the contractual fee waivers and expense limitations not been in place, gross expenses would apply. The expense ratios are as follows:

	Class A	Class C	Class I	Class R2	Class R4	Class R5	Class R6	Class NAV
Gross (%)	1.02	1.77	0.77	1.16	1.01	0.71	0.66	0.65
Net (%)	1.01	1.76	0.76	1.15	0.90	0.70	0.65	0.64

Please refer to the most recent prospectus and annual or semiannual report for more information on expenses and any expense limitation arrangements for each class.

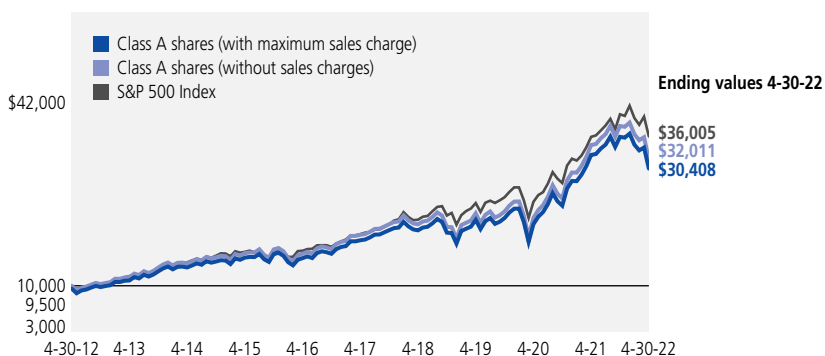
The returns reflect past results and should not be considered indicative of future performance. The return and principal value of an investment will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Due to market volatility and other factors, the fund's current performance may be higher or lower than the performance shown. For current to the most recent month-end performance data, please call 800-225-5291 or visit the fund's website at jhinvestments.com.

The performance table above and the chart on the next page do not reflect the deduction of taxes that a shareholder would pay on fund distributions or the redemption of fund shares. The fund's performance results reflect any applicable fee waivers or expense reductions, without which the expenses would increase and results would have been less favorable.

¹ Index is the S&P 500 Index.

See the following page for footnotes.

This chart and table show what happened to a hypothetical \$10,000 investment in John Hancock Fundamental Large Cap Core Fund for the share classes and periods indicated, assuming all distributions were reinvested. For comparison, we've shown the same investment in the S&P 500 Index.



	Start date	With maximum sales charge (\$)	Without sales charge (\$)	Index (\$)
Class C ³	4-30-12	29,701	29,701	36,005
Class I ¹	4-30-12	32,873	32,873	36,005
Class R2 ¹	4-30-12	31,687	31,687	36,005
Class R4 ¹	4-30-12	32,384	32,384	36,005
Class R5 ¹	4-30-12	33,036	33,036	36,005
Class R6 ¹	4-30-12	33,216	33,216	36,005
Class NAV ^{1,2}	4-30-12	32,625	32,625	36,005

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.

Footnotes related to performance pages

¹ For certain types of investors, as described in the fund's prospectuses.

² Class NAV shares were first offered on 2-8-17. Returns prior to this date are those of Class A shares that have not been adjusted for class-specific expenses; otherwise, returns would vary.

³ The contingent deferred sales charge is not applicable.

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, 2021, with the same investment held until April 30, 2022.

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, 2022, 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

$$\left[\frac{\text{My account value}}{\$8,600.00} / \$1,000.00 = 8.6 \right] \times \$ \left[\begin{array}{c} \text{"expenses paid"} \\ \text{from table} \end{array} \right] = \text{My actual expenses}$$

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, 2021, with the same investment held until April 30, 2022. 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 11-1-2021	Ending value on 4-30-2022	Expenses paid during period ended 4-30-2022 ¹	Annualized expense ratio
Class A	Actual expenses/actual returns	\$1,000.00	\$ 846.50	\$4.62	1.01%
	Hypothetical example	1,000.00	1,019.80	5.06	1.01%
Class C	Actual expenses/actual returns	1,000.00	843.30	8.04	1.76%
	Hypothetical example	1,000.00	1,016.10	8.80	1.76%
Class I	Actual expenses/actual returns	1,000.00	847.50	3.48	0.76%
	Hypothetical example	1,000.00	1,021.00	3.81	0.76%
Class R2	Actual expenses/actual returns	1,000.00	845.90	5.17	1.13%
	Hypothetical example	1,000.00	1,019.20	5.66	1.13%
Class R4	Actual expenses/actual returns	1,000.00	847.00	4.12	0.90%
	Hypothetical example	1,000.00	1,020.30	4.51	0.90%
Class R5	Actual expenses/actual returns	1,000.00	847.80	3.21	0.70%
	Hypothetical example	1,000.00	1,021.30	3.51	0.70%
Class R6	Actual expenses/actual returns	1,000.00	848.00	2.98	0.65%
	Hypothetical example	1,000.00	1,021.60	3.26	0.65%
Class NAV	Actual expenses/actual returns	1,000.00	848.00	2.93	0.64%
	Hypothetical example	1,000.00	1,021.60	3.21	0.64%

¹ 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

AS OF 4-30-22 (unaudited)

	Shares	Value
Common stocks 99.2%		\$5,182,181,639
(Cost \$3,162,323,091)		
Communication services 15.7%		819,455,708
Entertainment 3.6%		
Liberty Media Corp.-Liberty Formula One, Series C (A)	2,257,302	140,697,634
The Walt Disney Company (A)	405,084	45,219,527
Interactive media and services 11.3%		
Alphabet, Inc., Class A (A)	140,197	319,956,191
CarGurus, Inc. (A)	2,284,140	74,645,695
Meta Platforms, Inc., Class A (A)	974,581	195,374,253
Media 0.8%		
Comcast Corp., Class A	1,095,634	43,562,408
Consumer discretionary 17.2%		899,726,717
Hotels, restaurants and leisure 0.1%		
Airbnb, Inc., Class A (A)	50,288	7,704,624
Household durables 4.5%		
Lennar Corp., A Shares	3,048,496	233,179,459
Internet and direct marketing retail 8.0%		
Amazon.com, Inc. (A)	167,502	416,347,996
Leisure products 1.1%		
Polaris, Inc.	616,921	58,570,480
Specialty retail 3.5%		
CarMax, Inc. (A)	2,144,138	183,924,158
Consumer staples 7.4%		384,048,367
Beverages 4.7%		
Anheuser-Busch InBev SA/NV, ADR	4,222,503	242,582,798
Food and staples retailing 2.7%		
Walmart, Inc.	924,672	141,465,569
Energy 3.1%		162,919,713
Oil, gas and consumable fuels 3.1%		
Cheniere Energy, Inc.	1,199,615	162,919,713
Financials 13.4%		701,277,121
Banks 3.9%		
First Republic Bank	16,750	2,499,435
JPMorgan Chase & Co.	1,082,629	129,222,597
Wells Fargo & Company	1,624,910	70,894,823
Capital markets 8.8%		
KKR & Company, Inc.	1,043,699	53,197,338

	Shares	Value
Financials (continued)		
Capital markets (continued)		
Morgan Stanley	2,965,925	\$239,023,896
State Street Corp.	801,509	53,677,058
The Goldman Sachs Group, Inc.	379,390	115,899,851
Consumer finance 0.7%		
Synchrony Financial	1,001,416	36,862,123
Health care 7.5%		390,728,893
Biotechnology 2.5%		
Alnylam Pharmaceuticals, Inc. (A)	429,255	57,275,495
Moderna, Inc. (A)	544,119	73,135,035
Health care providers and services 3.6%		
UnitedHealth Group, Inc.	364,361	185,295,787
Life sciences tools and services 1.4%		
Danaher Corp.	298,740	75,022,576
Industrials 8.1%		420,421,854
Aerospace and defense 4.8%		
Airbus SE	560,087	61,313,934
General Dynamics Corp.	277,096	65,541,517
Lockheed Martin Corp.	221,835	95,859,340
Raytheon Technologies Corp.	260,174	24,693,114
Building products 0.2%		
Carrier Global Corp.	256,790	9,827,353
Machinery 1.1%		
Caterpillar, Inc.	234,119	49,291,414
Otis Worldwide Corp.	128,403	9,352,875
Road and rail 2.0%		
Union Pacific Corp.	446,209	104,542,307
Information technology 22.4%		1,172,031,307
IT services 2.0%		
PayPal Holdings, Inc. (A)	517,506	45,504,303
Visa, Inc., Class A	267,848	57,086,444
Semiconductors and semiconductor equipment 4.5%		
Analog Devices, Inc.	386,254	59,629,893
Broadcom, Inc.	73,989	41,018,762
KLA Corp.	253,197	80,835,674
Texas Instruments, Inc.	325,364	55,393,221
Software 8.2%		
Adobe, Inc. (A)	174,671	69,160,982
DocuSign, Inc. (A)	506,547	41,030,307
Intuit, Inc.	122,710	51,384,813

	Shares	Value
Information technology (continued)		
Software (continued)		
salesforce.com, Inc. (A)	464,181	\$81,668,005
Workday, Inc., Class A (A)	890,204	184,005,167
Technology hardware, storage and peripherals 7.7%		
Apple, Inc.	2,570,972	405,313,736
		49,466,388
Chemicals 0.9%		
LyondellBasell Industries NV, Class A	466,532	49,466,388
		182,105,571
Equity real estate investment trusts 3.5%		
American Tower Corp.	350,274	84,423,039
Crown Castle International Corp.	527,415	97,682,532
	Yield (%)	Shares
Short-term investments 0.7%		Value
(Cost \$34,280,335)		\$34,280,335
Short-term funds 0.7%		34,280,335
Federated Government Obligations Fund, Institutional Class	0.2014(B)	34,280,335
Total investments (Cost \$3,196,603,426) 99.9%		\$5,216,461,974
Other assets and liabilities, net 0.1%		7,554,426
Total net assets 100.0%		\$5,224,016,400

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

Security Abbreviations and Legend

ADR American Depositary Receipt

(A) Non-income producing security.

(B) The rate shown is the annualized seven-day yield as of 4-30-22.

At 4-30-22, the aggregate cost of investments for federal income tax purposes was \$3,207,144,855. Net unrealized appreciation aggregated to \$2,009,317,119, of which \$2,161,843,800 related to gross unrealized appreciation and \$152,526,681 related to gross unrealized depreciation.

Financial statements

STATEMENT OF ASSETS AND LIABILITIES 4-30-22 (unaudited)

Assets	
Unaffiliated investments, at value (Cost \$3,196,603,426)	\$5,216,461,974
Cash	1,096,825
Dividends and interest receivable	4,366,215
Receivable for fund shares sold	3,994,418
Receivable for investments sold	52,244,550
Other assets	255,770
Total assets	5,278,419,752
Liabilities	
Payable for investments purchased	47,527,415
Payable for fund shares repurchased	2,598,399
Payable to affiliates	
Investment management fees	2,851,209
Accounting and legal services fees	304,867
Transfer agent fees	279,124
Distribution and service fees	475,132
Trustees' fees	1,953
Other liabilities and accrued expenses	365,253
Total liabilities	54,403,352
Net assets	\$5,224,016,400
Net assets consist of	
Paid-in capital	\$2,868,001,954
Total distributable earnings (loss)	2,356,014,446
Net assets	\$5,224,016,400

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 (\$1,861,024,258 ÷ 31,205,618 shares) ¹	\$59.64
Class C (\$65,542,844 ÷ 1,294,397 shares) ¹	\$50.64
Class I (\$772,125,464 ÷ 12,258,676 shares)	\$62.99
Class R2 (\$7,508,499 ÷ 120,044 shares)	\$62.55
Class R4 (\$1,741,488 ÷ 27,825 shares)	\$62.59
Class R5 (\$754,541 ÷ 11,946 shares)	\$63.16
Class R6 (\$536,539,742 ÷ 8,489,408 shares)	\$63.20
Class NAV (\$1,978,779,564 ÷ 31,322,025 shares)	\$63.18
Maximum offering price per share	
Class A (net asset value per share ÷ 95%) ²	\$62.78

¹ Redemption price per share is equal to net asset value less any applicable contingent deferred sales charge.

² 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 4-30-22 (unaudited)

Investment income	
Dividends	\$30,707,257
Interest	18,026
Less foreign taxes withheld	(137,670)
Total investment income	30,587,613
Expenses	
Investment management fees	18,192,272
Distribution and service fees	3,066,558
Accounting and legal services fees	409,778
Transfer agent fees	1,762,166
Trustees' fees	47,769
Custodian fees	318,392
State registration fees	84,671
Printing and postage	70,973
Professional fees	144,912
Other	89,809
Total expenses	24,187,300
Less expense reductions	(267,289)
Net expenses	23,920,011
Net investment income	6,667,602
Realized and unrealized gain (loss)	
Net realized gain (loss) on	
Unaffiliated investments and foreign currency transactions	341,445,742
	341,445,742
Change in net unrealized appreciation (depreciation) of	
Unaffiliated investments and translation of assets and liabilities in foreign currencies	(1,290,956,708)
	(1,290,956,708)
Net realized and unrealized loss	(949,510,966)
Decrease in net assets from operations	\$(942,843,364)

STATEMENTS OF CHANGES IN NET ASSETS

	Six months ended 4-30-22 (unaudited)	Year ended 10-31-21
Increase (decrease) in net assets		
From operations		
Net investment income	\$6,667,602	\$9,445,222
Net realized gain	341,445,742	578,193,415
Change in net unrealized appreciation (depreciation)	(1,290,956,708)	1,684,455,104
Increase (decrease) in net assets resulting from operations	(942,843,364)	2,272,093,741
Distributions to shareholders		
From earnings		
Class A	(164,879,085)	(5,405,064)
Class C	(7,277,662)	—
Class I	(67,395,930)	(3,472,209)
Class R2	(630,655)	(13,648)
Class R4	(148,532)	(5,881)
Class R5	(58,656)	(3,233)
Class R6	(43,425,188)	(2,527,442)
Class NAV	(170,798,823)	(13,434,867)
Total distributions	(454,614,531)	(24,862,344)
From fund share transactions	319,617,048	(661,846,613)
Total increase (decrease)	(1,077,840,847)	1,585,384,784
Net assets		
Beginning of period	6,301,857,247	4,716,472,463
End of period	\$5,224,016,400	\$6,301,857,247

Financial highlights

CLASS A SHARES Period ended	4-30-22 ¹	10-31-21	10-31-20	10-31-19	10-31-18	10-31-17
Per share operating performance						
Net asset value, beginning of period	\$76.05	\$50.84	\$46.52	\$46.66	\$51.87	\$42.42
Net investment income (loss) ²	0.01	(0.03)	0.20	0.24	0.16	0.24
Net realized and unrealized gain (loss) on investments	(10.82)	25.42	4.38	4.82	(1.10)	10.71
Total from investment operations	(10.81)	25.39	4.58	5.06	(0.94)	10.95
Less distributions						
From net investment income	—	(0.18)	(0.26)	(0.13)	(0.26)	(0.19)
From net realized gain	(5.60)	—	—	(5.07)	(4.01)	(1.31)
Total distributions	(5.60)	(0.18)	(0.26)	(5.20)	(4.27)	(1.50)
Net asset value, end of period	\$59.64	\$76.05	\$50.84	\$46.52	\$46.66	\$51.87
Total return (%)^{3,4}	(15.35)⁵	50.04	9.88	13.23	(2.20)	26.39
Ratios and supplemental data						
Net assets, end of period (in millions)	\$1,861	\$2,242	\$1,550	\$1,550	\$1,511	\$1,620
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.01 ⁶	1.02	1.04	1.03	1.03	1.04
Expenses including reductions	1.01 ⁶	1.01	1.03	1.02	1.02	1.04
Net investment income (loss)	0.02 ⁶	(0.04)	0.40	0.56	0.32	0.51
Portfolio turnover (%)	11	16	19	29 ⁷	47 ⁷	54 ⁷

¹ Six months ended 4-30-22. 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.

⁷ Excludes in-kind transactions.

CLASS C SHARES Period ended	4-30-22¹	10-31-21	10-31-20	10-31-19	10-31-18	10-31-17
Per share operating performance						
Net asset value, beginning of period	\$65.65	\$44.08	\$40.42	\$41.41	\$46.57	\$38.33
Net investment loss ²	(0.21)	(0.46)	(0.14)	(0.07)	(0.19)	(0.10)
Net realized and unrealized gain (loss) on investments	(9.20)	22.03	3.80	4.15	(0.96)	9.65
Total from investment operations	(9.41)	21.57	3.66	4.08	(1.15)	9.55
Less distributions						
From net realized gain	(5.60)	—	—	(5.07)	(4.01)	(1.31)
Net asset value, end of period	\$50.64	\$65.65	\$44.08	\$40.42	\$41.41	\$46.57
Total return (%)^{3,4}	(15.67)⁵	48.93	9.05	12.38	(2.93)	25.44
Ratios and supplemental data						
Net assets, end of period (in millions)	\$66	\$89	\$84	\$127	\$184	\$303
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.76 ⁶	1.77	1.79	1.78	1.78	1.79
Expenses including reductions	1.76 ⁶	1.76	1.78	1.77	1.77	1.79
Net investment loss	(0.73) ⁶	(0.79)	(0.33)	(0.17)	(0.42)	(0.23)
Portfolio turnover (%)	11	16	19	29 ⁷	47 ⁷	54 ⁷

¹ Six months ended 4-30-22. 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.

⁷ Excludes in-kind transactions.

CLASS I SHARES Period ended	4-30-22¹	10-31-21	10-31-20	10-31-19	10-31-18	10-31-17
Per share operating performance						
Net asset value, beginning of period	\$80.04	\$53.47	\$48.89	\$48.78	\$54.05	\$44.13
Net investment income ²	0.10	0.14	0.34	0.37	0.29	0.40
Net realized and unrealized gain (loss) on investments	(11.43)	26.73	4.61	5.07	(1.15)	11.12
Total from investment operations	(11.33)	26.87	4.95	5.44	(0.86)	11.52
Less distributions						
From net investment income	(0.12)	(0.30)	(0.37)	(0.26)	(0.40)	(0.29)
From net realized gain	(5.60)	—	—	(5.07)	(4.01)	(1.31)
Total distributions	(5.72)	(0.30)	(0.37)	(5.33)	(4.41)	(1.60)
Net asset value, end of period	\$62.99	\$80.04	\$53.47	\$48.89	\$48.78	\$54.05
Total return (%)³	(15.25)⁴	50.42	10.16	13.51	(1.97)	26.73
Ratios and supplemental data						
Net assets, end of period (in millions)	\$772	\$941	\$625	\$819	\$846	\$985
Ratios (as a percentage of average net assets):						
Expenses before reductions	0.76 ⁵	0.77	0.79	0.79	0.79	0.78
Expenses including reductions	0.76 ⁵	0.76	0.78	0.78	0.78	0.78
Net investment income	0.27 ⁵	0.20	0.66	0.81	0.56	0.82
Portfolio turnover (%)	11	16	19	29 ⁶	47 ⁶	54 ⁶

¹ Six months ended 4-30-22. 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	4-30-22 ¹	10-31-21	10-31-20	10-31-19	10-31-18	10-31-17
Per share operating performance						
Net asset value, beginning of period	\$79.54	\$53.16	\$48.63	\$48.51	\$53.77	\$43.93
Net investment income (loss) ²	(0.04)	(0.12)	0.13	0.19	0.12	0.18
Net realized and unrealized gain (loss) on investments	(11.35)	26.60	4.59	5.06	(1.18)	11.10
Total from investment operations	(11.39)	26.48	4.72	5.25	(1.06)	11.28
Less distributions						
From net investment income	—	(0.10)	(0.19)	(0.06)	(0.19)	(0.13)
From net realized gain	(5.60)	—	—	(5.07)	(4.01)	(1.31)
Total distributions	(5.60)	(0.10)	(0.19)	(5.13)	(4.20)	(1.44)
Net asset value, end of period	\$62.55	\$79.54	\$53.16	\$48.63	\$48.51	\$53.77
Total return (%)³	(15.41)⁴	49.87	9.73	13.09	(2.36)	26.22
Ratios and supplemental data						
Net assets, end of period (in millions)	\$8	\$9	\$7	\$2	\$2	\$3
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.14 ⁵	1.14	1.17	1.18	1.18	1.18
Expenses including reductions	1.13 ⁵	1.13	1.17	1.17	1.18	1.18
Net investment income (loss)	(0.10) ⁵	(0.17)	0.28	0.41	0.23	0.36
Portfolio turnover (%)	11	16	19	29 ⁶	47 ⁶	54 ⁶

¹ Six months ended 4-30-22. 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 R4 SHARES Period ended	4-30-22¹	10-31-21	10-31-20	10-31-19	10-31-18	10-31-17
Per share operating performance						
Net asset value, beginning of period	\$79.54	\$53.15	\$48.61	\$48.51	\$53.76	\$43.91
Net investment income ²	0.05	0.04	0.26	0.36	0.20	0.30
Net realized and unrealized gain (loss) on investments	(11.37)	26.58	4.59	4.99	(1.13)	11.09
Total from investment operations	(11.32)	26.62	4.85	5.35	(0.93)	11.39
Less distributions						
From net investment income	(0.03)	(0.23)	(0.31)	(0.18)	(0.31)	(0.23)
From net realized gain	(5.60)	—	—	(5.07)	(4.01)	(1.31)
Total distributions	(5.63)	(0.23)	(0.31)	(5.25)	(4.32)	(1.54)
Net asset value, end of period	\$62.59	\$79.54	\$53.15	\$48.61	\$48.51	\$53.76
Total return (%)³	(15.30)⁴	50.20	10.00	13.35	(2.10)	26.53
Ratios and supplemental data						
Net assets, end of period (in millions)	\$2	\$2	\$2	\$1	\$4	\$3
Ratios (as a percentage of average net assets):						
Expenses before reductions	1.01 ⁵	1.01	1.02	1.03	1.03	1.04
Expenses including reductions	0.90 ⁵	0.90	0.92	0.92	0.92	0.93
Net investment income	0.13 ⁵	0.06	0.51	0.77	0.39	0.61
Portfolio turnover (%)	11	16	19	29 ⁶	47 ⁶	54 ⁶

¹ Six months ended 4-30-22. 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	4-30-22¹	10-31-21	10-31-20	10-31-19	10-31-18	10-31-17
Per share operating performance						
Net asset value, beginning of period	\$80.26	\$53.61	\$49.02	\$48.89	\$54.14	\$44.20
Net investment income ²	0.12	0.19	0.36	0.40	0.34	0.38
Net realized and unrealized gain (loss) on investments	(11.47)	26.79	4.63	5.08	(1.17)	11.18
Total from investment operations	(11.35)	26.98	4.99	5.48	(0.83)	11.56
Less distributions						
From net investment income	(0.15)	(0.33)	(0.40)	(0.28)	(0.41)	(0.31)
From net realized gain	(5.60)	—	—	(5.07)	(4.01)	(1.31)
Total distributions	(5.75)	(0.33)	(0.40)	(5.35)	(4.42)	(1.62)
Net asset value, end of period	\$63.16	\$80.26	\$53.61	\$49.02	\$48.89	\$54.14
Total return (%)³	(15.22)⁴	50.50	10.22	13.60	(1.92)	26.77
Ratios and supplemental data						
Net assets, end of period (in millions)	\$1	\$1	\$1	\$— ⁵	\$— ⁵	\$2
Ratios (as a percentage of average net assets):						
Expenses before reductions	0.71 ⁶	0.71	0.73	0.73	0.73	0.74
Expenses including reductions	0.70 ⁶	0.70	0.72	0.72	0.72	0.73
Net investment income	0.33 ⁶	0.26	0.71	0.86	0.64	0.77
Portfolio turnover (%)	11	16	19	29 ⁷	47 ⁷	54 ⁷

¹ Six months ended 4-30-22. 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.

⁷ Excludes in-kind transactions.

CLASS R6 SHARES Period ended	4-30-22¹	10-31-21	10-31-20	10-31-19	10-31-18	10-31-17
Per share operating performance						
Net asset value, beginning of period	\$80.32	\$53.64	\$49.04	\$48.91	\$54.16	\$44.21
Net investment income ²	0.14	0.22	0.39	0.45	0.34	0.28
Net realized and unrealized gain (loss) on investments	(11.48)	26.81	4.63	5.05	(1.15)	11.31
Total from investment operations	(11.34)	27.03	5.02	5.50	(0.81)	11.59
Less distributions						
From net investment income	(0.18)	(0.35)	(0.42)	(0.30)	(0.43)	(0.33)
From net realized gain	(5.60)	—	—	(5.07)	(4.01)	(1.31)
Total distributions	(5.78)	(0.35)	(0.42)	(5.37)	(4.44)	(1.64)
Net asset value, end of period	\$63.20	\$80.32	\$53.64	\$49.04	\$48.91	\$54.16
Total return (%)³	(15.20)⁴	50.59	10.28	13.63	(1.85)	26.86
Ratios and supplemental data						
Net assets, end of period (in millions)	\$537	\$593	\$386	\$397	\$963	\$975
Ratios (as a percentage of average net assets):						
Expenses before reductions	0.66 ⁵	0.66	0.68	0.68	0.68	0.69
Expenses including reductions	0.65 ⁵	0.65	0.67	0.67	0.67	0.68
Net investment income	0.38 ⁵	0.31	0.76	0.96	0.66	0.57
Portfolio turnover (%)	11	16	19	29 ⁶	47 ⁶	54 ⁶

¹ Six months ended 4-30-22. 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	4-30-22¹	10-31-21	10-31-20	10-31-19	10-31-18	10-31-17²
Per share operating performance						
Net asset value, beginning of period	\$80.29	\$53.62	\$49.02	\$48.90	\$54.15	\$47.04
Net investment income ³	0.14	0.23	0.40	0.42	0.33	0.35
Net realized and unrealized gain (loss) on investments	(11.46)	26.80	4.63	5.07	(1.13)	6.76
Total from investment operations	(11.32)	27.03	5.03	5.49	(0.80)	7.11
Less distributions						
From net investment income	(0.19)	(0.36)	(0.43)	(0.30)	(0.44)	—
From net realized gain	(5.60)	—	—	(5.07)	(4.01)	—
Total distributions	(5.79)	(0.36)	(0.43)	(5.37)	(4.45)	—
Net asset value, end of period	\$63.18	\$80.29	\$53.62	\$49.02	\$48.90	\$54.15
Total return (%)⁴	(15.20)⁵	50.60	10.30	13.65	(1.85)	15.11⁵
Ratios and supplemental data						
Net assets, end of period (in millions)	\$1,979	\$2,425	\$2,063	\$2,218	\$1,671	\$1,152
Ratios (as a percentage of average net assets):						
Expenses before reductions	0.65 ⁶	0.65	0.67	0.67	0.67	0.68 ⁶
Expenses including reductions	0.64 ⁶	0.64	0.66	0.66	0.66	0.67 ⁶
Net investment income	0.39 ⁶	0.33	0.78	0.91	0.64	0.94 ⁶
Portfolio turnover (%)	11	16	19	29 ⁷	47 ⁷	54 ^{7,8}

¹ Six months ended 4-30-22. Unaudited.

² The inception date for Class NAV shares is 2-8-17.

³ Based on average daily shares outstanding.

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

⁵ Not annualized.

⁶ Annualized.

⁷ Excludes in-kind transactions.

⁸ The portfolio turnover is shown for the period from 11-1-16 to 10-31-17.

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 fund'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 are valued at their respective NAVs each business day. 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 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 fund's Pricing Committee following procedures established 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 fund's Pricing Committee, following

procedures established by the Board of Trustees. The fund 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 fund's own 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, 2022, by major security category or type:

	Total value at 4-30-22	Level 1 quoted price	Level 2 significant observable inputs	Level 3 significant unobservable inputs
Investments in securities:				
Assets				
Common stocks				
Communication services	\$819,455,708	\$819,455,708	—	—
Consumer discretionary	899,726,717	899,726,717	—	—
Consumer staples	384,048,367	384,048,367	—	—
Energy	162,919,713	162,919,713	—	—
Financials	701,277,121	701,277,121	—	—
Health care	390,728,893	390,728,893	—	—
Industrials	420,421,854	359,107,920	\$61,313,934	—
Information technology	1,172,031,307	1,172,031,307	—	—
Materials	49,466,388	49,466,388	—	—
Real estate	182,105,571	182,105,571	—	—
Short-term investments	34,280,335	34,280,335	—	—
Total investments in securities	\$5,216,461,974	\$5,155,148,040	\$61,313,934	—

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 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. For the six months ended April 30, 2022, the fund had no borrowings under the line of credit. Commitment fees for the six months ended April 30, 2022 were \$9,779.

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, 2021, 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 fund's 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, 2022, this waiver amounted to 0.01% of the fund's average daily net assets, on an annualized basis. This arrangement expires on July 31, 2023, 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 continue in effect until February 28, 2023, unless renewed by mutual agreement of the fund and Advisor based upon determination of that this is appropriate under the circumstances at the time.

For the six months ended April 30, 2022, the expense reductions described above amounted to the following:

Class	Expense reduction	Class	Expense reduction
Class A	\$94,907	Class R5	\$36
Class C	3,543	Class R6	26,248
Class I	39,620	Class NAV	101,473
Class R2	385	Total	\$266,301
Class R4	89		

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, 2022, were equivalent to a net annual effective rate of 0.60% 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, 2022, amounted to an annual rate of 0.01% 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 Rule 12b-1 fees for Class R4 shares. The current waiver agreement expires on February 28, 2023, 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 \$988 for Class R4 shares for the six months ended April 30, 2022.

Sales charges. Class A shares are assessed up-front sales charges, which resulted in payments to the Distributor amounting to \$431,922 for the six months ended April 30, 2022. Of this amount, \$74,623 was retained and used for printing prospectuses, advertising, sales literature and other purposes and \$357,299 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, 2022, CDSCs received by the Distributor amounted to \$5,698 and \$1,977 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, 2022 were as follows:

Class	Distribution and service fees	Transfer agent fees
Class A	\$2,647,203	\$1,193,633
Class C	395,009	44,505
Class I	—	498,271
Class R2	20,696	370
Class R4	3,451	85
Class R5	199	35
Class R6	—	25,267
Total	\$3,066,558	\$1,762,166

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, 2022 and for the year ended October 31, 2021 were as follows:

	Six Months Ended 4-30-22		Year Ended 10-31-21	
	Shares	Amount	Shares	Amount
Class A shares				
Sold	1,452,645	\$100,729,762	2,267,498	\$149,360,588
Distributions reinvested	2,223,295	156,385,995	86,657	5,108,118
Repurchased	(1,949,299)	(134,564,485)	(3,362,270)	(224,177,191)
Net increase (decrease)	1,726,641	\$122,551,272	(1,008,115)	\$(69,708,485)
Class C shares				
Sold	83,684	\$4,904,291	142,636	\$8,339,464
Distributions reinvested	112,988	6,766,844	—	—
Repurchased	(254,189)	(15,093,707)	(690,721)	(37,968,593)
Net decrease	(57,517)	\$(3,422,572)	(548,085)	\$(29,629,129)
Class I shares				
Sold	1,260,991	\$92,254,575	2,139,180	\$154,994,445
Distributions reinvested	759,500	56,377,658	46,317	2,867,015
Repurchased	(1,523,279)	(110,302,284)	(2,104,738)	(145,895,198)
Net increase	497,212	\$38,329,949	80,759	\$11,966,262
Class R2 shares				
Sold	6,496	\$480,327	19,510	\$1,358,046
Distributions reinvested	8,043	593,632	198	12,230
Repurchased	(9,990)	(743,584)	(38,717)	(2,690,377)
Net increase (decrease)	4,549	\$330,375	(19,009)	\$(1,320,101)
Class R4 shares				
Sold	1,333	\$92,656	1,579	\$113,442
Distributions reinvested	2,013	148,532	95	5,881
Repurchased	(1,829)	(128,639)	(3,924)	(241,758)
Net increase (decrease)	1,517	\$112,549	(2,250)	\$(122,435)
Class R5 shares				
Sold	1,108	\$79,102	3,573	\$264,677
Distributions reinvested	788	58,656	52	3,233
Repurchased	(50)	(3,878)	(3,270)	(249,616)
Net increase	1,846	\$133,880	355	\$18,294

	Six Months Ended 4-30-22		Year Ended 10-31-21	
	Shares	Amount	Shares	Amount
Class R6 shares				
Sold	1,444,839	\$105,473,366	1,853,288	\$133,558,375
Distributions reinvested	581,114	43,263,963	40,435	2,509,807
Repurchased	(913,899)	(66,534,941)	(1,719,468)	(120,980,665)
Net increase	1,112,054	\$82,202,388	174,255	\$15,087,517
Class NAV shares				
Sold	191,004	\$14,005,796	876,559	\$60,103,322
Distributions reinvested	2,295,066	170,798,823	216,552	13,434,867
Repurchased	(1,370,149)	(105,425,412)	(9,357,316)	(661,676,725)
Net increase (decrease)	1,115,921	\$79,379,207	(8,264,205)	\$(588,138,536)
Total net increase (decrease)	4,402,223	\$319,617,048	(9,586,295)	\$(661,846,613)

Affiliates of the fund owned 100% and 2% of shares of Class NAV and Class R6, respectively on April 30, 2022. 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 \$667,846,339 and \$762,946,241, respectively, for the six months ended April 30, 2022.

Note 7 — 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, 2022, funds within the John Hancock group of funds complex held 35.9% of the fund's net assets. The following fund(s) had an affiliate ownership of 5% or more of the fund's net assets:

Portfolio	Affiliated Concentration
John Hancock Funds II Multimanager Lifestyle Growth Portfolio	8.6%
John Hancock Variable Insurance Trust Managed Volatility Growth Portfolio	7.5%
John Hancock Funds II Multimanager Lifestyle Balanced Portfolio	5.0%

Note 8 — Coronavirus (COVID-19) pandemic

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.

STATEMENT REGARDING LIQUIDITY RISK MANAGEMENT

Operation of the Liquidity Risk Management Program

This section describes 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 meetings to: (1) review the day-to-day operations of the LRMP; (2) monitor current market and liquidity conditions; (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 COVID-19 Coronavirus pandemic and amendments to the Office of Foreign Assets Control sanctioned company lists, that could impact the markets and liquidity of portfolio investments and their classifications.

The Committee provided the Board at a meeting held by videoconference on March 22-24, 2022 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, 2021 through December 31, 2021, 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; (5) 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.

Additionally, the report included a discussion of notable changes and enhancements to the LRMP implemented during 2021 and key initiatives for 2022.

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 report any breaches of the 15% limit on illiquid investments 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 review and assessment conducted by the Committee, the Committee has determined that the LRMP has been implemented, and is operating in a manner that is adequate and effective at assessing and 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
Peter S. Burgess*
William H. Cunningham*
Grace K. Fey
Marianne Harrison[†]
Deborah C. Jackson
Frances G. Rathke*
Gregory A. Russo

Officers

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

[†] Non-Independent Trustee

* Member of the Audit Committee

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

Regular mail:

John Hancock Signature Services, Inc.
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Express mail:

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430 W 7th Street
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Investment advisor

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

Citibank, N.A.

Transfer agent

John Hancock Signature Services, Inc.

Legal counsel

K&L Gates LLP

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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.

Brokerage account shareholders

If you receive statements directly from your bank or broker and would like to participate in eDelivery, go to **[icsdelivery/live](#)** or contact your financial representative.

Get your questions answered by using our shareholder resources

ONLINE

- Visit **jhinvestments.com** to access a range of resources for individual investors, from account details and fund information to forms and our latest insight on the markets and economy.
- Use our **Fund Compare** tool to compare thousands of funds and ETFs across dozens of risk and performance metrics—all powered by Morningstar.
- Visit our online **Tax Center**, where you'll find helpful taxpayer resources all year long, including tax forms, planning guides, and other fund-specific information.
- Follow us on **Facebook, Twitter, and LinkedIn** to get the latest updates on the markets and what's trending now.

BY PHONE

Call our customer service representatives at 800-225-5291, Monday to Thursday, 8:00 A.M. to 7:00 P.M., and Friday, 8:00 A.M. to 6:00 P.M., Eastern time. We're here to help!

John Hancock family of funds

U.S. EQUITY 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
Strategic Income Opportunities

ALTERNATIVE FUNDS

Absolute Return Currency
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 Mortgage-Backed Securities ETF
John Hancock Multifactor Consumer Discretionary ETF
John Hancock Multifactor Consumer Staples ETF
John Hancock Multifactor Developed International ETF
John Hancock Multifactor Emerging Markets ETF
John Hancock Multifactor Energy ETF
John Hancock Multifactor Financials ETF
John Hancock Multifactor Healthcare ETF
John Hancock Multifactor Industrials ETF
John Hancock Multifactor Large Cap ETF
John Hancock Multifactor Materials ETF
John Hancock Multifactor Media and Communications ETF
John Hancock Multifactor Mid Cap ETF
John Hancock Multifactor Small Cap ETF
John Hancock Multifactor Technology ETF
John Hancock Multifactor Utilities ETF
John Hancock Preferred Income ETF

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE FUNDS

ESG Core Bond
ESG International Equity
ESG Large Cap Core

ASSET ALLOCATION/TARGET DATE FUNDS

Balanced
Multi-Asset High Income
Multi-Index Lifetime Portfolios
Multi-Index Preservation Portfolios
Multimanager Lifestyle Portfolios
Multimanager Lifetime Portfolios
CLOSED-END FUNDS
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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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.

 Investment Management

John Hancock Investment Management Distributors LLC, Member FINRA, SIPC
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