

Annual report

John Hancock Alternative Asset Allocation Fund

Alternative

August 31, 2023

A *message* to shareholders



Dear shareholder,

Global equities shook off a number of concerns to register gains during the 12 months ended August 31, 2023. Although central banks continued to raise interest rates, falling inflation gave investors confidence that the tightening cycle would likely slow at some point within the next year. In addition, continued global growth fueled optimism that the world economy would experience a soft landing rather than a recession. Corporate earnings also came in much better than the markets had been anticipating in late 2022. A large portion of the gain for the major world indexes came from a narrow group of U.S. mega-cap, technology-related companies. European equities also performed very well, reflecting better-than-expected economic conditions. Value stocks, defensive sectors, smaller companies, and the emerging markets posted gains but underperformed the broad-based indexes.

The global bond markets struggled in the rising-rate environment. While credit-sensitive market segments such as high-yield bonds and emerging-market debt held up well, the benefit was outweighed by pronounced weakness in longer-term government issues in the developed markets.

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 stylized, handwritten signature in black ink, appearing to read 'Kristie M. Feinberg'.

Kristie M. Feinberg

Head of Wealth and Asset Management,
United States and Europe
Manulife Investment Management

President and CEO,
John Hancock Investment Management

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

Alternative Asset Allocation Fund

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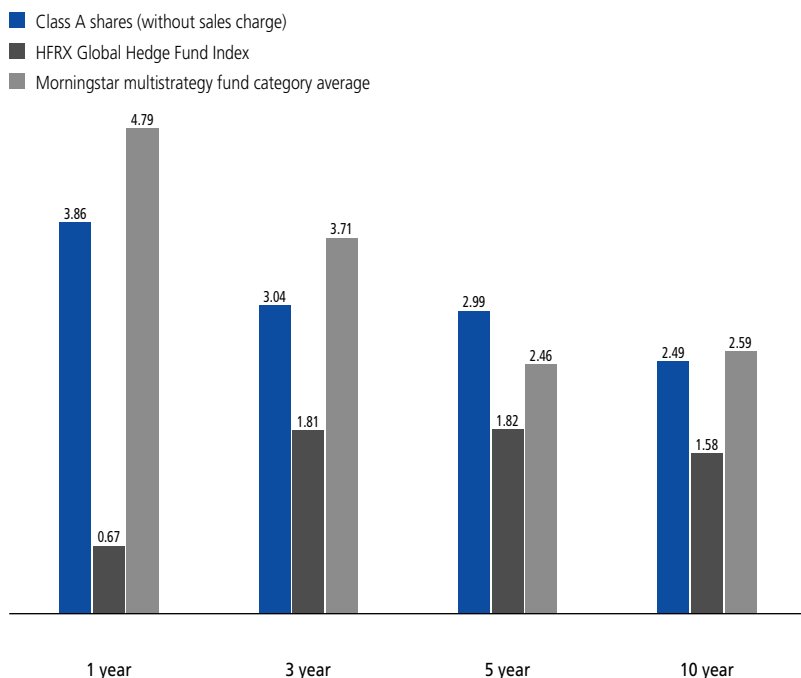
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Your fund at a glance

INVESTMENT OBJECTIVE

The fund seeks long-term growth of capital.

AVERAGE ANNUAL TOTAL RETURNS AS OF 8/31/2023 (%)



The HFRX Global Hedge Fund Index comprises funds representing all main hedge fund strategies, with underlying asset-weighted strategies based on the distribution of assets in the hedge fund industry. 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.

PERFORMANCE HIGHLIGHTS OVER THE LAST TWELVE MONTHS

The financial markets posted mixed results during the annual period

While the broader tone for risk assets was generally positive, market segments with above-average interest-rate sensitivity were hurt by central banks' continued tightening of monetary policy.

The fund outpaced its benchmark, the HFRX Global Hedge Fund Index

Positions in absolute return strategies helped performance, as did holdings in strategies that use alternative approaches within traditional asset classes.

Holdings in real estate investment trusts, commodities, and infrastructure stocks detracted

These market segments proved vulnerable to the backdrop of slowing growth and rising inflation.

ASSET ALLOCATION AS OF 8/31/2023 (% of net assets)

| | |
|--|-------------|
| Affiliated investment companies | 66.1 |
| Absolute return strategies | 39.7 |
| Alternative investment approaches | 18.7 |
| Alternative markets | 7.7 |
| Unaffiliated investment companies | 30.1 |
| Absolute return strategies | 14.8 |
| Alternative investment approaches | 12.9 |
| Alternative markets | 2.4 |
| Short-term investments and other | 3.8 |

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.

Management's discussion of fund performance

Can you tell us how the markets performed during the 12 months ended August 31, 2023?

Financial assets produced mixed results during the period. On the positive side, global equities shook off a number of concerns to register robust gains. The global bond markets struggled in the rising-rate environment. While the broader tone for risk assets was generally positive, market segments with above-average interest-rate sensitivity were hurt by central banks' continued tightening of monetary policy.

How did the fund perform?

The fund consists of three main strategies: Absolute return (weighted at 54.5% as of period end), which is designed to generate positive performance through a variety of scenarios; alternative investment approaches (31.6%), where the underlying managers use opportunistic techniques; and alternative markets (10.1%), which includes asset classes where the drivers of return are often unrelated to those of traditional investments.

The alternative investment approaches portfolio was the largest contributor to performance. All three of the holdings in this area—JPMorgan Hedged Equity Fund, Seaport Long/Short Fund (Wellington), and Strategic Income Opportunities Fund (MIM US)—were positioned to capitalize on the generally favorable tone in the markets.

The absolute return portfolio also contributed to performance. The majority of the strategies held in this segment of the fund produced positive returns, with the largest gains coming from Calamos Market Neutral Income Fund and Multi-Asset Absolute Return Fund (NIMNAI). However, Credit Suisse Managed Futures Strategy Fund and IQ Merger Arbitrage ETF experienced losses.

The alternative markets portfolio was the smallest contributor in the annual period. On the plus side, positions in exchange-traded funds that invest in gold and precious metals posted gains in the environment of persistent inflation. On the other hand, commodities—held through a position in Invesco Optimum Yield Diversified Commodity Strategy No K-1 ETF—finished with a loss as concerns about the global economic outlook weighed on the asset class through most of 2023. Allocations to infrastructure stocks and real estate investment trusts also lagged amid the backdrop of rising interest rates.

What changes did you make to the portfolio?

We maintained a fairly stable approach to asset allocation on the belief that the fund was well positioned for the broader investment environment. In late 2022 we eliminated the fund's position in Absolute Return Currency Fund (First Quadrant), which liquidated, and reduced its allocation to Managed Futures Strategy Fund (Credit Suisse), whose weighting had moved above our target following a stretch of outperformance. We redeployed the proceeds across the absolute return portfolio, primarily into market-neutral and merger-arbitrage strategies. Early in 2023, one of the two funds we used to achieve exposure to gold—Invesco DB Gold Fund—closed, and we replaced it with a new position in Invesco DB Precious Metals Fund. The latter fund is different in that it in addition to holding gold, it also has an allocation to silver.

MANAGED BY

Nathan W. Thooft, CFA
Christopher Walsh, CFA

||| Manulife Investment Management

The views expressed in this report are exclusively those of Nathan W. Thooft, CFA, and Christopher Walsh, CFA, Manulife Investment Management (US) LLC, and are subject to change. They are not meant as investment advice. Please note that the holdings discussed in this report may not have been held by the fund for the entire period. Portfolio composition is subject to review in accordance with the fund's investment strategy and may vary in the future. Current and future portfolio holdings are subject to risk.

A look at performance

TOTAL RETURNS FOR THE PERIOD ENDED AUGUST 31, 2023

| | Average annual total returns (%) with maximum sales charge | | | Cumulative total returns (%) with maximum sales charge | |
|-----------------------|---|--------|---------|---|---------|
| | 1-year | 5-year | 10-year | 5-year | 10-year |
| Class A | -1.34 | 1.94 | 1.97 | 10.08 | 21.49 |
| Class C | 2.11 | 2.27 | 1.77 | 11.87 | 19.19 |
| Class I [†] | 4.17 | 3.31 | 2.80 | 17.66 | 31.84 |
| Class R2 [†] | 3.82 | 2.89 | 2.37 | 15.31 | 26.37 |
| Class R4 [†] | 4.06 | 3.15 | 2.64 | 16.80 | 29.78 |
| Class R6 [†] | 4.25 | 3.41 | 2.91 | 18.24 | 33.18 |
| Index [†] | 0.67 | 1.82 | 1.58 | 9.43 | 17.02 |

Performance figures assume all distributions are 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 held for less than one year are subject to a 1% CDSC. Sales charges are not applicable to Class I, Class R2, Class R4, and Class R6 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 prospectus 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 December 31, 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 R6 |
|-----------|---------|---------|---------|----------|----------|----------|
| Gross (%) | 1.84 | 2.54 | 1.54 | 1.93 | 1.78 | 1.43 |
| Net (%) | 1.66 | 2.36 | 1.36 | 1.75 | 1.50 | 1.25 |

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.

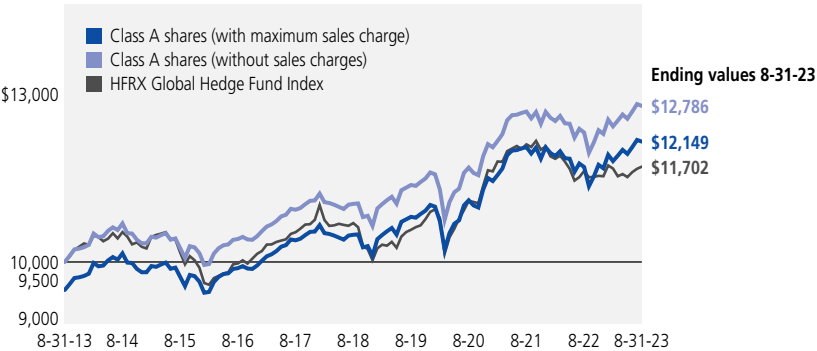
The returns reflect past results and should not be considered indicative of future performance. The return and principal value of an investment will fluctuate so that shares, when redeemed, may be worth more or less than their original cost. Due to market volatility and other factors, the fund's current 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.

[†] Index is the HFRX Global Hedge Fund Index.

See the following page for footnotes.

This chart and table show what happened to a hypothetical \$10,000 investment in John Hancock Alternative Asset Allocation Fund for the share classes and periods indicated, assuming all distributions were reinvested. For comparison, we've shown the same investment in the HFRX Global Hedge Fund Index.



| | Start date | With maximum sales charge (\$) | Without sales charge (\$) | Index (\$) |
|-----------------------|------------|--------------------------------|---------------------------|------------|
| Class C ² | 8-31-13 | 11,919 | 11,919 | 11,702 |
| Class I ¹ | 8-31-13 | 13,184 | 13,184 | 11,702 |
| Class R2 ¹ | 8-31-13 | 12,637 | 12,637 | 11,702 |
| Class R4 ¹ | 8-31-13 | 12,978 | 12,978 | 11,702 |
| Class R6 ¹ | 8-31-13 | 13,318 | 13,318 | 11,702 |

The HFRX Global Hedge Fund Index comprises funds representing all main hedge fund strategies, with underlying asset-weighted strategies based on the distribution of assets in the hedge fund industry. 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 prospectus.

² 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 March 1, 2023, with the same investment held until August 31, 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 August 31, 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

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

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 March 1, 2023, with the same investment held until August 31, 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 prospectus for details regarding transaction costs.

SHAREHOLDER EXPENSE EXAMPLE CHART

| | | Account value on 3-1-2023 | Ending value on 8-31-2023 | Expenses paid during period ended 8-31-2023 ¹ | Annualized expense ratio ² |
|-----------------|--------------------------------|---------------------------------|---------------------------------|---|---|
| Class A | Actual expenses/actual returns | \$1,000.00 | \$1,029.30 | \$3.89 | 0.76% |
| | Hypothetical example | 1,000.00 | 1,021.40 | 3.87 | 0.76% |
| Class C | Actual expenses/actual returns | 1,000.00 | 1,025.80 | 7.45 | 1.46% |
| | Hypothetical example | 1,000.00 | 1,017.80 | 7.43 | 1.46% |
| Class I | Actual expenses/actual returns | 1,000.00 | 1,031.40 | 2.36 | 0.46% |
| | Hypothetical example | 1,000.00 | 1,022.90 | 2.35 | 0.46% |
| Class R2 | Actual expenses/actual returns | 1,000.00 | 1,029.40 | 4.35 | 0.85% |
| | Hypothetical example | 1,000.00 | 1,020.90 | 4.33 | 0.85% |
| Class R4 | Actual expenses/actual returns | 1,000.00 | 1,030.60 | 3.07 | 0.60% |
| | Hypothetical example | 1,000.00 | 1,022.20 | 3.06 | 0.60% |
| Class R6 | Actual expenses/actual returns | 1,000.00 | 1,031.30 | 1.79 | 0.35% |
| | Hypothetical example | 1,000.00 | 1,023.40 | 1.79 | 0.35% |

¹ Expenses are equal to the annualized expense ratio, multiplied by the average account value over the period, multiplied by 184/365 (to reflect the one-half year period).

² Ratios do not include fees and expenses indirectly incurred by the underlying funds and can vary based on mixed of underlying funds held by the fund.

Fund's investments

AS OF 8-31-23

| | Shares | Value |
|---|-----------|----------------------|
| Affiliated investment companies (A) 66.1% | | \$501,098,247 |
| (Cost \$500,889,109) | | |
| Absolute return strategies 39.7% | | 300,963,912 |
| Credit Suisse Managed Futures Strategy Fund (B) | 4,546,777 | 42,375,962 |
| Diversified Macro, Class NAV, JHIT (Graham) | 6,403,615 | 61,026,450 |
| IQ Merger Arbitrage ETF (B)(C)(D) | 949,632 | 29,837,437 |
| Multi-Asset Absolute Return, Class NAV, JHF II (NIMNAI) | 9,867,461 | 99,069,307 |
| The Arbitrage Fund, Class I (B) | 5,281,135 | 68,654,756 |
| Alternative investment approaches 18.7% | | 141,642,975 |
| Seaport Long/Short, Class NAV, JHIT (Wellington) | 7,394,104 | 84,366,725 |
| Strategic Income Opportunities, Class NAV, JHF II (MIM US) (E) | 5,898,687 | 57,276,250 |
| Alternative markets 7.7% | | 58,491,360 |
| Infrastructure, Class NAV, JHIT (Wellington) | 2,873,394 | 35,687,553 |
| Invesco DB Precious Metals Fund (B) | 453,347 | 22,803,807 |
| Unaffiliated investment companies 30.1% | | \$228,439,272 |
| (Cost \$210,097,507) | | |
| Absolute return strategies 14.8% | | 112,624,594 |
| Calamos Market Neutral Income Fund | 3,519,553 | 51,526,263 |
| Victory Market Neutral Income Fund | 7,188,039 | 61,098,331 |
| Alternative investment approaches 12.9% | | 97,538,741 |
| JPMorgan Hedged Equity Fund | 3,452,699 | 97,538,741 |
| Alternative markets 2.4% | | 18,275,937 |
| Invesco Optimum Yield Diversified Commodity Strategy No K-1 ETF (D) | 648,664 | 9,567,794 |
| Vanguard Real Estate ETF | 105,707 | 8,708,143 |
| | Yield (%) | Shares |
| Short-term investments 5.0% | | \$37,604,230 |
| (Cost \$37,590,270) | | |
| Short-term funds 5.0% | | 37,604,230 |
| John Hancock Collateral Trust (F) | 5.4789(G) | 3,761,702 |
| | | 37,604,230 |
| Total investments (Cost \$748,576,886) 101.2% | | \$767,141,749 |
| Other assets and liabilities, net (1.2%) | | (8,968,341) |
| Total net assets 100.0% | | \$758,173,408 |

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

JHF II John Hancock Funds II

JHIT John Hancock Investment Trust

- (A) The underlying funds' subadvisor is shown parenthetically.
- (B) The fund owns 5% or more of the outstanding voting shares of the issuer and the security is considered an affiliate of the fund. For more information on this security refer to the Notes to financial statements.
- (C) Non-income producing.
- (D) All or a portion of this security is on loan as of 8-31-23.
- (E) The subadvisor is an affiliate of the advisor.
- (F) Investment is an affiliate of the fund, the advisor and/or subadvisor. A portion of this security represents the investment of cash collateral received for securities lending. Market value of this investment amounted to \$10,138,932.
- (G) The rate shown is the annualized seven-day yield as of 8-31-23.

At 8-31-23, the aggregate cost of investments for federal income tax purposes was \$764,470,913. Net unrealized appreciation aggregated to \$2,670,836, of which \$18,205,691 related to gross unrealized appreciation and \$15,534,855 related to gross unrealized depreciation.

Subadvisors of Affiliated Underlying Funds

| | |
|--|--------------|
| Graham Capital Management, L.P. | (Graham) |
| Manulife Investment Management (US) LLC | (MIM US) |
| Nordea Investment Management North America, Inc. | (NIMNAI) |
| Wellington Management Company LLP | (Wellington) |

Financial statements

STATEMENT OF ASSETS AND LIABILITIES 8-31-23

| | |
|--|----------------------|
| Assets | |
| Unaffiliated investments, at value (Cost \$210,097,507) including \$9,955,352 of securities loaned | \$228,439,272 |
| Affiliated investments, at value (Cost \$538,479,379) | 538,702,477 |
| Total investments, at value (Cost \$748,576,886) | 767,141,749 |
| Dividends and interest receivable | 298,120 |
| Receivable for fund shares sold | 2,053,668 |
| Receivable for investments sold | 760,152 |
| Receivable for securities lending income | 3,667 |
| Receivable from affiliates | 1,186 |
| Other assets | 77,810 |
| Total assets | 770,336,352 |
| Liabilities | |
| Due to custodian | 702,155 |
| Payable for investments purchased | 308,374 |
| Payable for fund shares repurchased | 823,195 |
| Payable upon return of securities loaned | 10,158,405 |
| Payable to affiliates | |
| Accounting and legal services fees | 38,932 |
| Transfer agent fees | 73,263 |
| Distribution and service fees | 644 |
| Trustees' fees | 52 |
| Other liabilities and accrued expenses | 57,924 |
| Total liabilities | 12,162,944 |
| Net assets | \$758,173,408 |
| Net assets consist of | |
| Paid-in capital | \$781,365,068 |
| Total distributable earnings (loss) | (23,191,660) |
| Net assets | \$758,173,408 |

STATEMENT OF ASSETS AND LIABILITIES 8-31-23 (continued)

Net asset value per share

Based on net asset value and shares outstanding - the fund has an unlimited number of shares authorized with no par value

| | |
|--|---------|
| Class A (\$60,308,943 ÷ 3,993,835 shares) ¹ | \$15.10 |
| Class C (\$7,168,094 ÷ 474,610 shares) ¹ | \$15.10 |
| Class I (\$660,062,268 ÷ 43,627,979 shares) | \$15.13 |
| Class R2 (\$3,002,162 ÷ 199,040 shares) | \$15.08 |
| Class R4 (\$115,067 ÷ 7,600 shares) | \$15.14 |
| Class R6 (\$27,516,874 ÷ 1,817,209 shares) | \$15.14 |

Maximum offering price per share

| | |
|--|---------|
| Class A (net asset value per share ÷ 95%) ² | \$15.89 |
|--|---------|

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 year ended 8-31-23

| | |
|---|---------------------|
| Investment income | |
| Dividends from affiliated investments | \$18,444,702 |
| Dividends | 5,809,947 |
| Securities lending | 52,803 |
| Total investment income | 24,307,452 |
| Expenses | |
| Investment management fees | 3,275,729 |
| Distribution and service fees | 303,131 |
| Accounting and legal services fees | 148,421 |
| Transfer agent fees | 802,168 |
| Trustees' fees | 17,432 |
| Custodian fees | 43,224 |
| State registration fees | 158,570 |
| Printing and postage | 58,194 |
| Professional fees | 91,795 |
| Other | 48,072 |
| Total expenses | 4,946,736 |
| Less expense reductions | (1,379,026) |
| Net expenses | 3,567,710 |
| Net investment income | 20,739,742 |
| Realized and unrealized gain (loss) | |
| Net realized gain (loss) on | |
| Unaffiliated investments | (2,214,113) |
| Affiliated investments | (1,402,705) |
| Capital gain distributions received from unaffiliated investments | 4,174,240 |
| Capital gain distributions received from affiliated investments | 7,317,772 |
| | 7,875,194 |
| Change in net unrealized appreciation (depreciation) of | |
| Unaffiliated investments | 11,047,008 |
| Affiliated investments | (7,991,205) |
| | 3,055,803 |
| Net realized and unrealized gain | 10,930,997 |
| Increase in net assets from operations | \$31,670,739 |

STATEMENTS OF CHANGES IN NET ASSETS

| | Year ended 8-31-23 | Year ended 8-31-22 |
|--|-----------------------|-----------------------|
| Increase (decrease) in net assets | | |
| From operations | | |
| Net investment income | \$20,739,742 | \$8,806,233 |
| Net realized gain | 7,875,194 | 6,847,520 |
| Change in net unrealized appreciation (depreciation) | 3,055,803 | (31,014,064) |
| Increase (decrease) in net assets resulting from operations | 31,670,739 | (15,360,311) |
| Distributions to shareholders | | |
| From earnings | | |
| Class A | (2,173,302) | (1,158,179) |
| Class C | (198,996) | (144,223) |
| Class I | (20,633,976) | (7,749,131) |
| Class R2 | (27,745) | (15,564) |
| Class R4 | (3,724) | (1,362) |
| Class R6 | (924,684) | (444,124) |
| Total distributions | (23,962,427) | (9,512,583) |
| From fund share transactions | 108,938,502 | 184,838,183 |
| Total increase | 116,646,814 | 159,965,289 |
| Net assets | | |
| Beginning of year | 641,526,594 | 481,561,305 |
| End of year | \$758,173,408 | \$641,526,594 |

Financial highlights

| CLASS A SHARES Period ended | 8-31-23 | 8-31-22 | 8-31-21 | 8-31-20 | 8-31-19 |
|--|----------------|----------------|----------------|----------------|----------------|
| Per share operating performance | | | | | |
| Net asset value, beginning of period | \$14.98 | \$15.70 | \$14.57 | \$14.66 | \$14.51 |
| Net investment income ^{1,2} | 0.40 | 0.23 | 0.07 | 0.09 | 0.25 |
| Net realized and unrealized gain (loss) on investments | 0.16 | (0.69) | 1.17 | 0.31 | 0.17 |
| Total from investment operations | 0.56 | (0.46) | 1.24 | 0.40 | 0.42 |
| Less distributions | | | | | |
| From net investment income | (0.34) | (0.24) | (0.03) | (0.27) | (0.17) |
| From net realized gain | (0.10) | (0.02) | (0.08) | (0.22) | (0.10) |
| Total distributions | (0.44) | (0.26) | (0.11) | (0.49) | (0.27) |
| Net asset value, end of period | \$15.10 | \$14.98 | \$15.70 | \$14.57 | \$14.66 |
| Total return (%)^{3,4} | 3.86 | (2.95) | 8.55 | 2.74 | 3.05 |
| Ratios and supplemental data | | | | | |
| Net assets, end of period (in millions) | \$60 | \$73 | \$68 | \$62 | \$73 |
| Ratios (as a percentage of average net assets): | | | | | |
| Expenses before reductions ⁵ | 0.95 | 0.90 | 0.88 | 0.88 | 0.77 |
| Expenses including reductions ⁵ | 0.76 | 0.72 | 0.66 | 0.66 | 0.64 |
| Net investment income ² | 2.69 | 1.47 | 0.47 | 0.63 | 1.73 |
| Portfolio turnover (%) | 30 | 13 | 25 | 37 | 39 |

¹ Based on average daily shares outstanding.

² Net investment income is affected by the timing and frequency of the declaration of dividends by the underlying funds in which the fund invests.

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 Ratios do not include expenses indirectly incurred from underlying funds and can vary based on the mix of underlying funds held by the fund.

| CLASS C SHARES Period ended | 8-31-23 | 8-31-22 | 8-31-21 | 8-31-20 | 8-31-19 |
|--|----------------|----------------|----------------|----------------|----------------|
| Per share operating performance | | | | | |
| Net asset value, beginning of period | \$14.98 | \$15.70 | \$14.58 | \$14.67 | \$14.51 |
| Net investment income (loss) ^{1,2} | 0.29 | 0.13 | (0.03) | (0.01) | 0.15 |
| Net realized and unrealized gain (loss) on investments | 0.16 | (0.69) | 1.16 | 0.31 | 0.18 |
| Total from investment operations | 0.45 | (0.56) | 1.13 | 0.30 | 0.33 |
| Less distributions | | | | | |
| From net investment income | (0.23) | (0.14) | — | (0.17) | (0.07) |
| From net realized gain | (0.10) | (0.02) | (0.01) | (0.22) | (0.10) |
| Total distributions | (0.33) | (0.16) | (0.01) | (0.39) | (0.17) |
| Net asset value, end of period | \$15.10 | \$14.98 | \$15.70 | \$14.58 | \$14.67 |
| Total return (%)^{3,4} | 3.11 | (3.62) | 7.77 | 2.04 | 2.37 |
| Ratios and supplemental data | | | | | |
| Net assets, end of period (in millions) | \$7 | \$11 | \$17 | \$31 | \$42 |
| Ratios (as a percentage of average net assets): | | | | | |
| Expenses before reductions ⁵ | 1.65 | 1.60 | 1.58 | 1.58 | 1.47 |
| Expenses including reductions ⁵ | 1.46 | 1.41 | 1.36 | 1.36 | 1.34 |
| Net investment income (loss) ² | 1.93 | 0.86 | (0.21) | (0.06) | 1.02 |
| Portfolio turnover (%) | 30 | 13 | 25 | 37 | 39 |

¹ Based on average daily shares outstanding.

² Net investment income is affected by the timing and frequency of the declaration of dividends by the underlying funds in which the fund invests.

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 Ratios do not include expenses indirectly incurred from underlying funds and can vary based on the mix of underlying funds held by the fund.

| CLASS I SHARES Period ended | 8-31-23 | 8-31-22 | 8-31-21 | 8-31-20 | 8-31-19 |
|--|----------------|----------------|----------------|----------------|----------------|
| Per share operating performance | | | | | |
| Net asset value, beginning of period | \$15.01 | \$15.73 | \$14.59 | \$14.68 | \$14.53 |
| Net investment income ^{1,2} | 0.43 | 0.26 | 0.12 | 0.14 | 0.29 |
| Net realized and unrealized gain (loss) on investments | 0.17 | (0.67) | 1.17 | 0.30 | 0.18 |
| Total from investment operations | 0.60 | (0.41) | 1.29 | 0.44 | 0.47 |
| Less distributions | | | | | |
| From net investment income | (0.38) | (0.29) | (0.07) | (0.31) | (0.22) |
| From net realized gain | (0.10) | (0.02) | (0.08) | (0.22) | (0.10) |
| Total distributions | (0.48) | (0.31) | (0.15) | (0.53) | (0.32) |
| Net asset value, end of period | \$15.13 | \$15.01 | \$15.73 | \$14.59 | \$14.68 |
| Total return (%)³ | 4.17 | (2.66) | 8.92 | 3.04 | 3.39 |
| Ratios and supplemental data | | | | | |
| Net assets, end of period (in millions) | \$660 | \$529 | \$374 | \$347 | \$423 |
| Ratios (as a percentage of average net assets): | | | | | |
| Expenses before reductions ⁴ | 0.65 | 0.60 | 0.58 | 0.58 | 0.49 |
| Expenses including reductions ⁴ | 0.46 | 0.42 | 0.36 | 0.36 | 0.35 |
| Net investment income ² | 2.90 | 1.67 | 0.76 | 0.95 | 2.04 |
| Portfolio turnover (%) | 30 | 13 | 25 | 37 | 39 |

¹ Based on average daily shares outstanding.

² Net investment income is affected by the timing and frequency of the declaration of dividends by the underlying funds in which the fund invests.

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

⁴ Ratios do not include expenses indirectly incurred from underlying funds and can vary based on the mix of underlying funds held by the fund.

| CLASS R2 SHARES Period ended | 8-31-23 | 8-31-22 | 8-31-21 | 8-31-20 | 8-31-19 |
|--|----------------|----------------|----------------|----------------|----------------|
| Per share operating performance | | | | | |
| Net asset value, beginning of period | \$14.95 | \$15.67 | \$14.55 | \$14.64 | \$14.49 |
| Net investment income ^{1,2} | 0.25 | 0.22 | 0.06 | 0.08 | 0.24 |
| Net realized and unrealized gain (loss) on investments | 0.30 | (0.69) | 1.16 | 0.31 | 0.17 |
| Total from investment operations | 0.55 | (0.47) | 1.22 | 0.39 | 0.41 |
| Less distributions | | | | | |
| From net investment income | (0.32) | (0.23) | (0.02) | (0.26) | (0.16) |
| From net realized gain | (0.10) | (0.02) | (0.08) | (0.22) | (0.10) |
| Total distributions | (0.42) | (0.25) | (0.10) | (0.48) | (0.26) |
| Net asset value, end of period | \$15.08 | \$14.95 | \$15.67 | \$14.55 | \$14.64 |
| Total return (%)³ | 3.82 | (3.04) | 8.41 | 2.65 | 2.95 |
| Ratios and supplemental data | | | | | |
| Net assets, end of period (in millions) | \$3 | \$1 | \$1 | \$1 | \$2 |
| Ratios (as a percentage of average net assets): | | | | | |
| Expenses before reductions ⁴ | 1.04 | 0.99 | 0.95 | 0.96 | 0.87 |
| Expenses including reductions ⁴ | 0.85 | 0.81 | 0.74 | 0.75 | 0.74 |
| Net investment income ² | 1.67 | 1.45 | 0.38 | 0.54 | 1.67 |
| Portfolio turnover (%) | 30 | 13 | 25 | 37 | 39 |

¹ Based on average daily shares outstanding.

² Net investment income is affected by the timing and frequency of the declaration of dividends by the underlying funds in which the fund invests.

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

⁴ Ratios do not include expenses indirectly incurred from underlying funds and can vary based on the mix of underlying funds held by the fund.

| CLASS R4 SHARES Period ended | 8-31-23 | 8-31-22 | 8-31-21 | 8-31-20 | 8-31-19 |
|--|------------------|------------------|------------------|------------------|------------------|
| Per share operating performance | | | | | |
| Net asset value, beginning of period | \$15.01 | \$15.73 | \$14.60 | \$14.69 | \$14.54 |
| Net investment income ^{1,2} | 0.41 | 0.21 | 0.10 | 0.07 | 0.27 |
| Net realized and unrealized gain (loss) on investments | 0.18 | (0.64) | 1.16 | 0.35 | 0.18 |
| Total from investment operations | 0.59 | (0.43) | 1.26 | 0.42 | 0.45 |
| Less distributions | | | | | |
| From net investment income | (0.36) | (0.27) | (0.05) | (0.29) | (0.20) |
| From net realized gain | (0.10) | (0.02) | (0.08) | (0.22) | (0.10) |
| Total distributions | (0.46) | (0.29) | (0.13) | (0.51) | (0.30) |
| Net asset value, end of period | \$15.14 | \$15.01 | \$15.73 | \$14.60 | \$14.69 |
| Total return (%)³ | 4.06 | (2.78) | 8.70 | 2.91 | 3.22 |
| Ratios and supplemental data | | | | | |
| Net assets, end of period (in millions) | \$— ⁴ | \$— ⁴ | \$— ⁴ | \$— ⁴ | \$— ⁴ |
| Ratios (as a percentage of average net assets): | | | | | |
| Expenses before reductions ⁵ | 0.89 | 0.84 | 0.83 | 0.81 | 0.73 |
| Expenses including reductions ⁵ | 0.60 | 0.56 | 0.51 | 0.50 | 0.50 |
| Net investment income ² | 2.75 | 1.41 | 0.68 | 0.45 | 1.76 |
| Portfolio turnover (%) | 30 | 13 | 25 | 37 | 39 |

¹ Based on average daily shares outstanding.

² Net investment income is affected by the timing and frequency of the declaration of dividends by the underlying funds in which the fund invests.

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

⁴ Less than \$500,000.

⁵ Ratios do not include expenses indirectly incurred from underlying funds and can vary based on the mix of underlying funds held by the fund.

| CLASS R6 SHARES Period ended | 8-31-23 | 8-31-22 | 8-31-21 | 8-31-20 | 8-31-19 |
|--|----------------|----------------|----------------|----------------|----------------|
| Per share operating performance | | | | | |
| Net asset value, beginning of period | \$15.02 | \$15.74 | \$14.60 | \$14.69 | \$14.54 |
| Net investment income ^{1,2} | 0.45 | 0.27 | 0.13 | 0.14 | 0.32 |
| Net realized and unrealized gain (loss) on investments | 0.17 | (0.66) | 1.18 | 0.32 | 0.16 |
| Total from investment operations | 0.62 | (0.39) | 1.31 | 0.46 | 0.48 |
| Less distributions | | | | | |
| From net investment income | (0.40) | (0.31) | (0.09) | (0.33) | (0.23) |
| From net realized gain | (0.10) | (0.02) | (0.08) | (0.22) | (0.10) |
| Total distributions | (0.50) | (0.33) | (0.17) | (0.55) | (0.33) |
| Net asset value, end of period | \$15.14 | \$15.02 | \$15.74 | \$14.60 | \$14.69 |
| Total return (%)³ | 4.25 | (2.55) | 9.02 | 3.15 | 3.49 |
| Ratios and supplemental data | | | | | |
| Net assets, end of period (in millions) | \$28 | \$27 | \$21 | \$22 | \$26 |
| Ratios (as a percentage of average net assets): | | | | | |
| Expenses before reductions ⁴ | 0.54 | 0.49 | 0.48 | 0.46 | 0.37 |
| Expenses including reductions ⁴ | 0.35 | 0.31 | 0.26 | 0.25 | 0.24 |
| Net investment income ² | 2.99 | 1.74 | 0.88 | 1.01 | 2.23 |
| Portfolio turnover (%) | 30 | 13 | 25 | 37 | 39 |

¹ Based on average daily shares outstanding.

² Net investment income is affected by the timing and frequency of the declaration of dividends by the underlying funds in which the fund invests.

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

⁴ Ratios do not include expenses indirectly incurred from underlying funds and can vary based on the mix of underlying funds held by the fund.

Notes to financial statements

Note 1 — Organization

John Hancock Alternative Asset Allocation Fund (the fund) is a series of John Hancock Funds II (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 growth of capital. The fund operates as a “fund of funds”, investing in affiliated underlying funds of the Trust, other series of the Trust, other funds in John Hancock group of funds complex, non-John Hancock funds and certain other permitted investments.

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 and Class R4 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 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.

The accounting policies of the underlying funds in which the fund invests are outlined in the underlying funds’ shareholder reports, which include the underlying funds’ financial statements. These are available on the Securities and Exchange Commission (SEC) website at sec.gov. John Hancock underlying funds’ shareholder reports are also available without charge by calling 800-225-5291 or visiting jhinvestments.com. The underlying funds are not covered by this report.

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: Investments by the fund in underlying affiliated funds and other open-end mutual funds, including John Hancock Collateral Trust (JHCT), are valued at their respective NAVs each business day. ETFs held by the fund are 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.

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.

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.

As of August 31, 2023, all investments are categorized as Level 1 under the hierarchy described above.

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. Capital gain distributions from underlying funds are recorded on ex-date. 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. Return of capital distributions from underlying funds, if any, are treated as a reduction of cost.

Securities lending. The fund may lend its securities to earn additional income. The fund receives collateral from the borrower in an amount not less than the market value of the loaned securities. The fund may invest its cash collateral in JHCT, an affiliate of the fund, which has a floating NAV and is registered with the SEC as an investment company. JHCT is a prime money market fund and invests in short-term money market investments. The fund will receive the benefit of any gains and bear any losses generated by JHCT with respect to the cash collateral.

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

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

from fees earned from borrowers of the securities. Securities lending income received by the fund is net of fees retained by the securities lending agent. Net income received from JHCT is a component of securities lending income as recorded on the Statement of operations.

Obligations to repay collateral received by the fund are shown on the Statement of assets and liabilities as Payable upon return of securities loaned and are secured by the loaned securities. As of August 31, 2023, the fund loaned securities valued at \$9,955,352 and received \$10,158,405 of cash collateral.

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. Overdrafts at period end are presented under the caption Due to custodian in the Statement of assets and liabilities.

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 year ended August 31, 2023, the fund had no borrowings under the line of credit. Commitment fees for the year ended August 31, 2023 were \$5,441.

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

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

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

For federal income tax purposes, as of August 31, 2023, the fund has a short-term capital loss carryforward of \$11,026,909 and a long-term capital loss carryforward of \$17,428,807 available to offset future net realized capital gains. These carryforwards do not expire.

As of August 31, 2023, 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.

The tax character of distributions for the years ended August 31, 2023 and 2022 was as follows:

| | August 31, 2023 | August 31, 2022 |
|-----------------|-----------------|-----------------|
| Ordinary income | \$23,962,427 | \$9,512,583 |

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. As of August 31, 2023, the components of distributable earnings on a tax basis consisted of \$2,593,220 of undistributed ordinary income.

Such distributions and distributable earnings, 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. Short-term gains from underlying funds are treated as ordinary income for tax purposes.

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 partnerships 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 pays the Advisor a management fee for its services to the fund. 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 management fee has two components: (1) a fee on assets invested in a fund of the Trust or John Hancock Funds III (JHF III); and (2) a fee on assets invested in investments other than a fund of the Trust or JHF III (Other assets).

Management fees are determined in accordance with the following schedule:

| | First \$5.0 billion of average net assets | Excess over \$5.0 billion of average net assets |
|--|---|---|
| Assets in a fund of the Trust or JHF III | 0.100% | 0.075% |
| Other assets | 0.550% | 0.525% |

The Advisor has contractually agreed to reduce its management fee and/or make payment to the fund in an amount equal to the amount by which "Other expenses" of the fund exceed 0.04% of the average net assets of the fund. "Other expenses" means all of the expenses of the fund, excluding: advisory fees, taxes, brokerage commissions, interest expense, litigation and indemnification expenses and other extraordinary expenses not incurred in the ordinary course of the fund's business, class specific expenses, underlying fund expenses (acquired

fund fees), and short dividend expense. The current expense limitation agreement expires on December 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 reduce its management fee by 0.05% of the fund’s average daily net assets up to \$5 billion, and by 0.025% of the fund’s average daily net assets over \$5 billion. The current expense limitation agreement expires on December 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 its management fee for the fund so that the aggregate advisory fee retained by the Advisor with respect to both the fund and its underlying investments (after payment of subadvisory fees) does not exceed 0.55% of the fund’s first \$5 billion of average daily net assets and 0.525% of the fund’s average daily net assets in excess of \$5 billion. This agreement expires on December 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.

For the year ended August 31, 2023, the expense reductions described above amounted to the following:

| Class | Expense reduction | Class | Expense reduction |
|----------|-------------------|--------------|--------------------|
| Class A | \$131,672 | Class R4 | \$227 |
| Class C | 16,237 | Class R6 | 52,349 |
| Class I | 1,175,201 | Total | \$1,378,907 |
| Class R2 | 3,221 | | |

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 year ended August 31, 2023, were equivalent to a net annual effective rate of 0.26% 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 year ended August 31, 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 | 0.30% | — |
| Class C | 1.00% | — |
| Class R2 | 0.25% | 0.25% |
| Class R4 | 0.25% | 0.10% |

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 December 31, 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 \$119 for Class R4 shares for the year ended August 31, 2023.

Sales charges. Class A shares are assessed up-front sales charges, which resulted in payments to the Distributor amounting to \$70,022 for the year ended August 31, 2023. Of this amount, \$11,491 was retained and used for printing prospectuses, advertising, sales literature and other purposes and \$58,531 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 year ended August 31, 2023, CDSCs received by the Distributor amounted to \$3 and \$261 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 year ended August 31, 2023 were as follows:

| Class | Distribution and service fees | Transfer agent fees |
|--------------|-------------------------------|---------------------|
| Class A | \$208,594 | \$80,055 |
| Class C | 85,942 | 9,874 |
| Class I | — | 710,042 |
| Class R2 | 8,176 | 106 |
| Class R4 | 419 | 9 |
| Class R6 | — | 2,082 |
| Total | \$303,131 | \$802,168 |

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 years ended August 31, 2023 and 2022 were as follows:

| | Year Ended 8-31-23 | | Year Ended 8-31-22 | |
|--------------------------------|--------------------|-----------------------|--------------------|----------------------|
| | Shares | Amount | Shares | Amount |
| Class A shares | | | | |
| Sold | 620,355 | \$9,191,860 | 1,244,419 | \$18,972,407 |
| Distributions reinvested | 146,858 | 2,122,095 | 72,236 | 1,116,043 |
| Repurchased | (1,670,002) | (24,775,499) | (763,300) | (11,698,023) |
| Net increase (decrease) | (902,789) | \$(13,461,544) | 553,355 | \$8,390,427 |
| Class C shares | | | | |
| Sold | 51,285 | \$759,484 | 295,681 | \$4,503,368 |
| Distributions reinvested | 13,666 | 198,423 | 9,254 | 143,625 |
| Repurchased | (306,151) | (4,542,124) | (686,749) | (10,496,959) |
| Net decrease | (241,200) | \$(3,584,217) | (381,814) | \$(5,849,966) |
| Class I shares | | | | |
| Sold | 25,705,834 | \$382,033,630 | 18,592,993 | \$283,634,391 |
| Distributions reinvested | 1,377,863 | 19,910,119 | 487,798 | 7,536,474 |
| Repurchased | (18,720,646) | (278,008,520) | (7,602,455) | (116,191,625) |
| Net increase | 8,363,051 | \$123,935,229 | 11,478,336 | \$174,979,240 |
| Class R2 shares | | | | |
| Sold | 147,595 | \$2,195,602 | 13,996 | \$213,182 |
| Distributions reinvested | 1,667 | 24,067 | 882 | 13,616 |
| Repurchased | (17,606) | (261,935) | (8,996) | (137,741) |
| Net increase | 131,656 | \$1,957,734 | 5,882 | \$89,057 |
| Class R4 shares | | | | |
| Sold | 994 | \$14,766 | 5,136 | \$78,964 |
| Distributions reinvested | 257 | 3,724 | 88 | 1,361 |
| Repurchased | (1,476) | (22,027) | (453) | (6,966) |
| Net increase (decrease) | (225) | \$(3,537) | 4,771 | \$73,359 |
| Class R6 shares | | | | |
| Sold | 712,045 | \$10,574,599 | 1,007,464 | \$15,367,183 |
| Distributions reinvested | 63,992 | 924,684 | 28,746 | 444,124 |
| Repurchased | (766,984) | (11,404,446) | (567,668) | (8,655,241) |
| Net increase | 9,053 | \$94,837 | 468,542 | \$7,156,066 |
| Total net increase | 7,359,546 | \$108,938,502 | 12,129,072 | \$184,838,183 |

Affiliates of the fund owned 2% of shares of Class R6 on August 31, 2023.

Note 6 — Purchase and sale of securities

Purchases and sales of securities, other than short-term investments, amounted to \$300,476,231 and \$209,121,873, respectively, for the year ended August 31, 2023.

Note 7 — Investment in affiliated underlying funds

The fund invests primarily in affiliated underlying funds that are managed by the Advisor and its affiliates. The fund does not invest in the affiliated underlying funds for the purpose of exercising management or control; however, the fund's investment may represent a significant portion of each affiliated underlying funds' net assets. At August 31, 2023, the fund held 5% or more of the net assets of the affiliated underlying funds shown below:

| Fund | Underlying fund's net assets |
|--|------------------------------|
| John Hancock Funds II Multi-Asset Absolute Return Fund | 20.6% |
| John Hancock Investment Trust Seaport Long/Short Fund | 11.8% |
| John Hancock Investment Trust Infrastructure Fund | 5.4% |

Information regarding the fund's fiscal year to date purchases and sales of the affiliated underlying funds as well as income and capital gains earned by the fund, if any, is as follows:

| Affiliate | Ending share amount | Beginning value | Cost of purchases | Proceeds from shares sold | Realized gain (loss) | Change in unrealized appreciation (depreciation) | Dividends and distributions | | Ending value |
|--------------------------------|---------------------|-----------------|-------------------|---------------------------|----------------------|--|-------------------------------|-------------------------------------|----------------------|
| | | | | | | | Income distributions received | Capital gain distributions received | |
| Absolute Return Currency | — | \$48,348,931 | — | \$(49,137,942) | \$292,463 | \$496,548 | — | — | — |
| Diversified Macro | 6,403,615 | 50,223,383 | \$32,724,274 | (16,905,379) | (828,812) | (4,187,016) | \$5,945,325 | — | \$61,026,450 |
| Infrastructure | 2,873,394 | 30,221,348 | 15,699,130 | (9,121,969) | (510,167) | (600,789) | 810,862 | — | 35,687,553 |
| John Hancock Collateral Trust* | 3,761,702 | 15,756,778 | 219,692,727 | (197,856,652) | (4,560) | 15,937 | 1,143,688 | — | 37,604,230 |
| Multi-Asset Absolute Return | 9,867,461 | 83,590,963 | 27,234,563 | (13,761,347) | (588,079) | 2,593,207 | 3,272,596 | — | 99,069,307 |
| Seaport Long/Short | 7,394,104 | 71,052,319 | 23,814,855 | (12,400,420) | (1,239,225) | 3,139,196 | 2,596,800 | — | 84,366,725 |
| Strategic Income Opportunities | 5,898,687 | 48,139,779 | 17,269,613 | (7,660,891) | (1,005,934) | 533,683 | 2,133,280 | — | 57,276,250 |
| | | | | | \$(3,884,314) | \$1,990,766 | \$15,902,551 | — | \$375,030,515 |

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

Note 8 — Transactions in securities of affiliated issuers

Affiliated issuers, as defined by the 1940 Act, are those in which the fund's holdings of an issuer represent 5% or more of the outstanding voting securities of the issuer. A summary of the fund's transactions in the securities of these issuers during the year ended August 31, 2023, is set forth below:

| Affiliate | Ending share amount | Beginning value | Cost of purchases | Proceeds from shares sold | Realized gain (loss) | Change in unrealized appreciation (depreciation) | Dividends and distributions | | Ending value |
|---|---------------------|-----------------|-------------------|---------------------------|----------------------|--|-------------------------------|-------------------------------------|----------------------|
| | | | | | | | Income distributions received | Capital gain distributions received | |
| Credit Suisse Managed Futures Strategy Fund | 4,546,777 | \$34,982,689 | \$28,368,428 | \$(10,469,670) | \$1,278,452 | \$(11,783,937) | \$1,742,687 | \$5,527,957 | \$42,375,962 |
| Invesco DB Gold Fund | — | 16,837,070 | 9,994,522 | (28,520,657) | 1,864,556 | (175,491) | 172,829 | — | — |
| Invesco DB Precious Metals Fund | 453,347 | — | 25,116,734 | (3,886,154) | 90,053 | 1,483,174 | — | — | 22,803,807 |
| IQ Merger Arbitrage ETF* | 949,632 | 25,224,517 | 9,283,544 | (4,391,982) | (240,106) | (38,536) | — | — | 29,837,437 |
| The Arbitrage Fund, Class I* | 5,281,135 | 52,083,600 | 27,992,317 | (10,946,385) | (511,346) | 36,570 | 679,438 | 1,789,815 | 68,654,756 |
| | | | | | \$2,481,609 | \$(10,478,220) | \$2,594,954 | \$7,317,772 | \$163,671,962 |

* The security was not an affiliate at the beginning of the year.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of John Hancock Funds II and Shareholders of John Hancock Alternative Asset Allocation Fund

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the fund's investments, of John Hancock Alternative Asset Allocation Fund (one of the funds constituting John Hancock Funds II, referred to hereafter as the "Fund") as of August 31, 2023, the related statement of operations for the year ended August 31, 2023, the statements of changes in net assets for each of the two years in the period ended August 31, 2023, including the related notes, and the financial highlights for each of the five years in the period ended August 31, 2023 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Fund as of August 31, 2023, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended August 31, 2023 and the financial highlights for each of the five years in the period ended August 31, 2023 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Fund in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of August 31, 2023 by correspondence with the custodian, transfer agent and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

October 4, 2023

We have served as the auditor of one or more investment companies in the John Hancock group of funds since 1988.

Tax information

(Unaudited)

For federal income tax purposes, the following information is furnished with respect to the distributions of the fund, if any, paid during its taxable year ended August 31, 2023.

The fund reports the maximum amount allowable of its net taxable income as eligible for the corporate dividends-received deduction.

The fund reports the maximum amount allowable of its net taxable income as qualified dividend income as provided in the Jobs and Growth Tax Relief Reconciliation Act of 2003.

The fund reports the maximum amount allowable as Section 163(j) Interest Dividends.

The fund reports the maximum amount allowable of its Section 199A dividends as defined in Proposed Treasury Regulation §1.199A-3(d).

Eligible shareholders will be mailed a 2023 Form 1099-DIV in early 2024. This will reflect the tax character of all distributions paid in calendar year 2023.

Please consult a tax advisor regarding the tax consequences of your investment in the fund.

EVALUATION OF ADVISORY AND SUBADVISORY AGREEMENTS BY THE BOARD OF TRUSTEES

This section describes the evaluation by the Board of Trustees (the Board) of John Hancock Funds II (the Trust) of the Advisory Agreement (the Advisory Agreement) with John Hancock Investment Management, LLC (the Advisor) and the Subadvisory Agreement (the Subadvisory Agreement) with Manulife Investment Management (US) LLC (the Subadvisor) for John Hancock Alternative Asset Allocation Fund (the fund). The Advisory Agreement and Subadvisory Agreement are collectively referred to as the Agreements. Prior to the June 26-29, 2023 meeting at which the Agreements were approved, the Board also discussed and considered information regarding the proposed continuation of the Agreements at a meeting held on May 30-June 1, 2023. The Trustees who are not “interested persons” of the Trust as defined by the Investment Company Act of 1940, as amended (the 1940 Act) (the Independent Trustees) also met separately to evaluate and discuss the information presented, including with counsel to the Independent Trustees and a third-party consulting firm.

Approval of Advisory and Subadvisory Agreements

At meetings held on June 26-29, 2023, the Board, including the Trustees who are not parties to any Agreement or considered to be interested persons of the Trust under the 1940 Act, reapproved for an annual period the continuation of the Advisory Agreement between the Trust and the Advisor and the Subadvisory Agreement between the Advisor and the Subadvisor with respect to the fund.

In considering the Advisory Agreement and the Subadvisory Agreement, the Board received in advance of the meetings a variety of materials relating to the fund, the Advisor and the Subadvisor, including comparative performance, fee and expense information for a peer group of similar funds prepared by an independent third-party provider of fund data, performance information for an applicable benchmark index; and, with respect to the Subadvisor, comparative performance information for comparably managed accounts, as applicable, and other information provided by the Advisor and the Subadvisor regarding the nature, extent and quality of services provided by the Advisor and the Subadvisor under their respective Agreements, as well as information regarding the Advisor’s revenues and costs of providing services to the fund and any compensation paid to affiliates of the Advisor. At the meetings at which the renewal of the Advisory Agreement and Subadvisory Agreement are considered, particular focus is given to information concerning fund performance, comparability of fees and total expenses, and profitability. However, the Board noted that the evaluation process with respect to the Advisor and the Subadvisor is an ongoing one. In this regard, the Board also took into account discussions with management and information provided to the Board (including its various committees) at prior meetings with respect to the services provided by the Advisor and the Subadvisor to the fund, including quarterly performance reports prepared by management containing reviews of investment results and prior presentations from the Subadvisor with respect to the fund. The information received and considered by the Board in connection with the May and June meetings and throughout the year was both written and oral. The Board noted the affiliation of the Subadvisor with the Advisor, noting any potential conflicts of interest. The Board also considered the nature, quality, and extent of non-advisory services, if any, to be provided to the fund by the Advisor’s affiliates, including distribution services. The Board considered the Advisory Agreement and the Subadvisory Agreement separately in the course of its review. In doing so, the Board noted the respective roles of the Advisor and Subadvisor in providing services to the fund.

Throughout the process, the Board asked questions of and requested additional information from management. The Board is assisted by counsel for the Trust and the Independent Trustees are also separately assisted by independent legal counsel throughout the process. The Independent Trustees also received a memorandum from their independent legal counsel discussing the legal standards for their consideration of the proposed continuation of the Agreements and discussed the proposed continuation of the Agreements in private sessions with their independent legal counsel at which no representatives of management were present.

Approval of Advisory Agreement

In approving the Advisory Agreement with respect to the fund, the Board, including the Independent Trustees, considered a variety of factors, including those discussed below. The Board also considered other factors (including conditions and trends prevailing generally in the economy, the securities markets, and the industry) and did not treat any single factor as determinative, and each Trustee may have attributed different weights to different factors. The Board's conclusions may be based in part on its consideration of the advisory and subadvisory arrangements in prior years and on the Board's ongoing regular review of fund performance and operations throughout the year.

Nature, extent, and quality of services. Among the information received by the Board from the Advisor relating to the nature, extent, and quality of services provided to the fund, the Board reviewed information provided by the Advisor relating to its operations and personnel, descriptions of its organizational and management structure, and information regarding the Advisor's compliance and regulatory history, including its Form ADV. The Board also noted that on a regular basis it receives and reviews information from the Trust's Chief Compliance Officer (CCO) regarding the fund's compliance policies and procedures established pursuant to Rule 38a-1 under the 1940 Act. The Board observed that the scope of services provided by the Advisor, and of the undertakings required of the Advisor in connection with those services, including maintaining and monitoring its own and the fund's compliance programs, risk management programs, liquidity management programs, derivatives risk management programs, and cybersecurity programs, had expanded over time as a result of regulatory, market and other developments. The Board considered that the Advisor is responsible for the management of the day-to-day operations of the fund, including, but not limited to, general supervision of and coordination of the services provided by the Subadvisor, and is also responsible for monitoring and reviewing the activities of the Subadvisor and third-party service providers. The Board also considered the significant risks assumed by the Advisor in connection with the services provided to the fund including entrepreneurial risk in sponsoring new funds and ongoing risks including investment, operational, enterprise, litigation, regulatory and compliance risks with respect to all funds.

In considering the nature, extent, and quality of the services provided by the Advisor, the Trustees also took into account their knowledge of the Advisor's management and the quality of the performance of the Advisor's duties, through Board meetings, discussions and reports during the preceding year and through each Trustee's experience as a Trustee of the Trust and of the other trusts in the John Hancock group of funds complex (the John Hancock Fund Complex).

In the course of their deliberations regarding the Advisory Agreement, the Board considered, among other things:

- (a) the skills and competency with which the Advisor has in the past managed the Trust's affairs and its subadvisory relationship, the Advisor's oversight and monitoring of the Subadvisor's investment performance and compliance programs, such as the Subadvisor's compliance with fund policies and objectives, review of brokerage matters, including with respect to trade allocation and best execution and the Advisor's timeliness in responding to performance issues;
- (b) the background, qualifications and skills of the Advisor's personnel;
- (c) the Advisor's compliance policies and procedures and its responsiveness to regulatory changes and fund industry developments;
- (d) the Advisor's administrative capabilities, including its ability to supervise the other service providers for the fund, as well as the Advisor's oversight of any securities lending activity, its monitoring of class action litigation and collection of class action settlements on behalf of the fund, and bringing loss recovery actions on behalf of the fund;
- (e) the financial condition of the Advisor and whether it has the financial wherewithal to provide a high level and quality of services to the fund;

- (f) the Advisor's initiatives intended to improve various aspects of the Trust's operations and investor experience with the fund; and
- (g) the Advisor's reputation and experience in serving as an investment advisor to the Trust and the benefit to shareholders of investing in funds that are part of a family of funds offering a variety of investments.

The Board concluded that the Advisor may reasonably be expected to continue to provide a high quality of services under the Advisory Agreement with respect to the fund.

Investment performance. In considering the fund's performance, the Board noted that it reviews at its regularly scheduled meetings information about the fund's performance results. In connection with the consideration of the Advisory Agreement, the Board:

- (a) reviewed information prepared by management regarding the fund's performance;
- (b) considered the comparative performance of an applicable benchmark index;
- (c) considered the performance of comparable funds, if any, as included in the report prepared by an independent third-party provider of fund data; and
- (d) took into account the Advisor's analysis of the fund's performance and its plans and recommendations regarding the Trust's subadvisory arrangements generally.

The Board noted that while it found the data provided by the independent third-party generally useful it recognized its limitations, including in particular that the data may vary depending on the end date selected and that the results of the performance comparisons may vary depending on the selection of the peer group. The Board noted that the fund outperformed its benchmark index for the one-, three-, five- and ten-year periods ended December 31, 2022. The Board also noted that the fund outperformed its peer group median for the one-, three-, five- and ten-year periods ended December 31, 2022. The Board took into account management's discussion of the fund's performance, including the favorable performance relative to the benchmark index and its peer group median for the one-, three-, five- and ten-year periods. The Board concluded that the fund's performance has generally been in line with or outperformed the historical performance of comparable funds and the fund's benchmark index.

Fees and expenses. The Board reviewed comparative information prepared by an independent third-party provider of fund data, including, among other data, the fund's contractual and net management fees (and subadvisory fees, to the extent available) and total expenses as compared to similarly situated investment companies deemed to be comparable to the fund in light of the nature, extent and quality of the management and advisory and subadvisory services provided by the Advisor and the Subadvisor. The Board considered the fund's ranking within a smaller group of peer funds chosen by the independent third-party provider, as well as the fund's ranking within a broader group of funds. In comparing the fund's contractual and net management fees to those of comparable funds, the Board noted that such fees include both advisory and administrative costs. The Board noted that net management fees and net total expenses for the fund are lower than the peer group median.

The Board took into account management's discussion with respect to the overall management fee and the fees of the Subadvisor, including the amount of the advisory fee retained by the Advisor after payment of the subadvisory fees, in each case in light of the services rendered for those amounts and the risk undertaken by the Advisor. The Board also noted that the Advisor pays the subadvisory fees. In addition, the Board took into account that management had agreed to implement an overall fee waiver across the complex, which is discussed further below. The Board also noted that, in addition, the Advisor is currently waiving fees and/or reimbursing expenses with respect to the fund and that the fund has breakpoints in its contractual management fee schedule that reduces management fees as assets increase. The Board also noted that the fund's distributor, an affiliate of the Advisor, has agreed to waive a portion of its Rule 12b-1 fee for a share class of the fund. The Board reviewed information provided by the Advisor concerning the investment advisory fee charged by the Advisor or one of its advisory

affiliates to other clients (including other funds in the John Hancock Fund Complex) having similar investment mandates, if any. The Board considered any differences between the Advisor's and Subadvisor's services to the fund and the services they provide to other comparable clients or funds. The Board concluded that the advisory fee paid with respect to the fund is reasonable in light of the nature, extent and quality of the services provided to the fund under the Advisory Agreement.

In addition, the Trustees reviewed the advisory fee to be paid to the Advisor for the fund and noted that the Advisor has evaluated the complexity of the structure and fees and expenses associated with the fund's investments in the underlying portfolios, and that the Advisor made a finding that the fund's expenses do not duplicate the fees and expenses of the underlying portfolios.

Profitability/indirect benefits. In considering the costs of the services to be provided and the profits to be realized by the Advisor and its affiliates (including the Subadvisor) from the Advisor's relationship with the Trust, the Board:

- (a) reviewed financial information of the Advisor;
- (b) reviewed and considered information presented by the Advisor regarding the net profitability to the Advisor and its affiliates with respect to the fund;
- (c) received and reviewed profitability information with respect to the John Hancock Fund Complex as a whole and with respect to the fund;
- (d) received information with respect to the Advisor's allocation methodologies used in preparing the profitability data and considered that the Advisor hired an independent third-party consultant to provide an analysis of the Advisor's allocation methodologies;
- (e) considered that the John Hancock insurance companies that are affiliates of the Advisor, as shareholders of the Trust directly or through their separate accounts, receive certain tax credits or deductions relating to foreign taxes paid and dividends received by certain funds of the Trust and noted that these tax benefits, which are not available to participants in qualified retirement plans under applicable income tax law, are reflected in the profitability information reviewed by the Board;
- (f) considered that the Advisor also provides administrative services to the fund on a cost basis pursuant to an administrative services agreement;
- (g) noted that affiliates of the Advisor provide transfer agency services and distribution services to the fund, and that the fund's distributor also receives Rule 12b-1 payments to support distribution of the fund;
- (h) noted that the fund's Subadvisor is an affiliate of the Advisor;
- (i) noted that the Advisor also derives reputational and other indirect benefits from providing advisory services to the fund;
- (j) noted that the subadvisory fees for the fund are paid by the Advisor;
- (k) with respect to the fund, the Board noted that the advisory fee is in addition to the fees received by the Advisor and its affiliates with regard to the affiliated underlying funds in which the funds may invest;
- (l) considered the Advisor's ongoing costs and expenditures necessary to improve services, meet new regulatory and compliance requirements, and adapt to other challenges impacting the fund industry; and
- (m) considered that the Advisor should be entitled to earn a reasonable level of profits in exchange for the level of services it provides to the fund and the risks that it assumes as Advisor, including entrepreneurial, operational, reputational, litigation and regulatory risk.

Based upon its review, the Board concluded that the level of profitability, if any, of the Advisor and its affiliates (including the Subadvisor) from their relationship with the fund was reasonable and not excessive.

Economies of scale. In considering the extent to which economies of scale would be realized as the fund grows and whether fee levels reflect these economies of scale for the benefit of fund shareholders, the Board:

- (a) considered that with respect to the John Hancock underlying funds in which the fund invests, the Advisor has contractually agreed to waive a portion of its management fee such funds and for each of the other John Hancock funds in the complex (except as discussed below) with respect to the John Hancock underlying funds in which the fund invests (the participating portfolios) or otherwise reimburse the expenses of the participating portfolios (the reimbursement). This waiver is based upon aggregate net assets of all the participating portfolios. The funds that are not participating portfolios are each of the funds of funds of the Trust and John Hancock Variable Insurance Trust. The funds of funds also benefit from such overall management fee waiver through their investment in underlying funds that include certain of the participating portfolios, which are subject to reimbursement;
- (b) reviewed the fund's advisory fee structure and concluded that: (i) the fund's fee structure contains breakpoints at the subadvisory fee level and that such breakpoints are reflected as breakpoints in the advisory fees for the fund; and (ii) although economies of scale cannot be measured with precision, these arrangements permit shareholders of the fund to benefit from economies of scale if the fund grows. The Board also took into account management's discussion of the fund's advisory fee structure; and
- (c) the Board also considered the effect of the fund's growth in size on its performance and fees. The Board also noted that if the fund's assets increase over time, the fund may realize other economies of scale.

Approval of Subadvisory Agreement

In making its determination with respect to approval of the Subadvisory Agreement, the Board reviewed:

- (1) information relating to the Subadvisor's business, including current subadvisory services to the Trust (and other funds in the John Hancock Fund Complex);
- (2) the historical and current performance of the fund and comparative performance information relating to an applicable benchmark index and comparable funds; and
- (3) the subadvisory fees for the fund and to the extent available, comparable fee information prepared by an independent third party provider of fund data.

Nature, extent, and quality of services. With respect to the services provided by the Subadvisor, the Board received information provided to the Board by the Subadvisor, including the Subadvisor's respective Form ADV, as well as took into account information presented throughout the past year. The Board considered the Subadvisor's current level of staffing and its overall resources, as well as received information relating to the Subadvisor's compensation program. The Board reviewed the Subadvisor's history and investment experience, as well as information regarding the qualifications, background, and responsibilities of the Subadvisor's investment and compliance personnel who provide services to the fund. The Board also considered, among other things, the Subadvisor's compliance program and any disciplinary history. The Board also considered the Subadvisor's risk assessment and monitoring process. The Board reviewed the Subadvisor's regulatory history, including whether it was involved in any regulatory actions or investigations as well as material litigation, and any settlements and amelioratory actions undertaken, as appropriate. The Board noted that the Advisor conducts regular, periodic reviews of the Subadvisor and its operations, including regarding investment processes and organizational and staffing matters. The Board also noted that the Trust's CCO and his staff conduct regular, periodic compliance

reviews with the Subadvisor and present reports to the Independent Trustees regarding the same, which includes evaluating the regulatory compliance systems of the Subadvisor and procedures reasonably designed to assure compliance with the federal securities laws. The Board also took into account the financial condition of the Subadvisor.

The Board considered the Subadvisor's investment process and philosophy. The Board took into account that the Subadvisor's responsibilities include the development and maintenance of an investment program for the fund that is consistent with the fund's investment objective, the selection of investment securities and the placement of orders for the purchase and sale of such securities, as well as the implementation of compliance controls related to performance of these services. The Board also received information with respect to the Subadvisor's brokerage policies and practices, including with respect to best execution and soft dollars.

Subadvisor compensation. In considering the cost of services to be provided by the Subadvisor and the profitability to the Subadvisor of its relationship with the fund, the Board noted that the fees under each Subadvisory Agreement are paid by the Advisor and not the fund. The Board also received information and took into account any other potential conflicts of interest the Advisor might have in connection with the Subadvisory Agreement.

In addition, the Board considered other potential indirect benefits that the Subadvisor and its affiliates may receive from the Subadvisor's relationship with the fund, such as the opportunity to provide advisory services to additional funds in the John Hancock Fund Complex and reputational benefits.

Subadvisory fees. The Board considered that the fund pays an advisory fee to the Advisor and that, in turn, the Advisor pays a subadvisory fee to the Subadvisor. As noted above, the Board also considered the fund's subadvisory fees as compared to similarly situated investment companies deemed to be comparable to the fund as included in the report prepared by the independent third party provider of fund data, to the extent available. The Board noted that the limited size of the Lipper peer group was not sufficient for comparative purposes. The Board also took into account the subadvisory fees paid by the Advisor to the Subadvisor with respect to the fund and compared them to fees charged by the Subadvisor to manage other subadvised portfolios and portfolios not subject to regulation under the 1940 Act, as applicable.

Subadvisor performance. As noted above, the Board considered the fund's performance as compared to the fund's peer group median and the benchmark index and noted that the Board reviews information about the fund's performance results at its regularly scheduled meetings. The Board noted the Advisor's expertise and resources in monitoring the performance, investment style and risk-adjusted performance of the Subadvisor. The Board was mindful of the Advisor's focus on the Subadvisor's performance. The Board also noted the Subadvisor's long-term performance record for similar accounts, as applicable.

The Board's decision to approve the Subadvisory Agreement was based on a number of determinations, including the following:

- (1) the Subadvisor has extensive experience and demonstrated skills as a manager;
- (2) the performance of the fund has generally been in line with or outperformed the historical performance of comparable funds and the fund's benchmark index;
- (3) the subadvisory fee is reasonable in relation to the level and quality of services being provided under the Subadvisory Agreement; and
- (4) noted that the subadvisory fees are paid by the Advisor not the fund.

In addition, the Trustees reviewed the subadvisory fees to be paid to the Subadvisor for the fund and noted that the Advisor has evaluated the complexity of the structure and fees and expenses associated with the fund's investments in the underlying portfolios, and that the Advisor made a finding that the fund's expenses do not duplicate the fees and expenses of the underlying portfolios.

Based on the Board's evaluation of all factors that the Board deemed to be material, including those factors described above, the Board, including the Independent Trustees, concluded that renewal of the Advisory Agreement and the Subadvisory Agreement would be in the best interest of the fund and its shareholders. Accordingly, the Board, and the Independent Trustees voting separately, approved the Advisory Agreement and Subadvisory Agreement for an additional one-year period.

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 Alternative Asset Allocation 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 crises).

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.

Trustees and Officers

This chart provides information about the Trustees and Officers who oversee your John Hancock fund. Officers elected by the Trustees manage the day-to-day operations of the fund and execute policies formulated by the Trustees.

Independent Trustees

| Name, year of birth Position(s) held with Trust Principal occupation(s) and other directorships during past 5 years | Trustee of the Trust since¹ | Number of John Hancock funds overseen by Trustee |
|--|---|---|
| Hassell H. McClellan,² Born: 1945 | 2005 | 186 |
| <i>Trustee and Chairperson of the Board</i> Director/Trustee, Virtus Funds (2008-2020); Director, The Barnes Group (2010-2021); Associate Professor, The Wallace E. Carroll School of Management, Boston College (retired 2013). Trustee (since 2005) and Chairperson of the Board (since 2017) of various trusts within the John Hancock Fund Complex. | | |
| James R. Boyle, Born: 1959 | 2015 | 183 |
| <i>Trustee</i> Board Member, United of Omaha Life Insurance Company (since 2022). Board Member, Mutual of Omaha Investor Services, Inc. (since 2022). Foresters Financial, Chief Executive Officer (2018–2022) and board member (2017–2022). Manulife Financial and John Hancock, more than 20 years, retiring in 2012 as Chief Executive Officer, John Hancock and Senior Executive Vice President, Manulife Financial. Trustee of various trusts within the John Hancock Fund Complex (2005–2014 and since 2015). | | |
| William H. Cunningham,³ Born: 1944 | 2012 | 184 |
| <i>Trustee</i> Professor, University of Texas, Austin, Texas (since 1971); former Chancellor, University of Texas System and former President of the University of Texas, Austin, Texas; Director (since 2006), Lincoln National Corporation (insurance); Director, Southwest Airlines (since 2000). Trustee of various trusts within the John Hancock Fund Complex (since 1986). | | |
| Noni L. Ellison,* Born: 1971 | 2022 | 183 |
| <i>Trustee</i> Senior Vice President, General Counsel & Corporate Secretary, Tractor Supply Company (rural lifestyle retailer) (since 2021); General Counsel, Chief Compliance Officer & Corporate Secretary, Carestream Dental, L.L.C. (2017–2021); Associate General Counsel & Assistant Corporate Secretary, W.W. Grainger, Inc. (global industrial supplier) (2015–2017); Board Member, Goodwill of North Georgia, 2018 (FY2019)–2020 (FY2021); Board Member, Howard University School of Law Board of Visitors (since 2021); Board Member, University of Chicago Law School Board of Visitors (since 2016); Board member, Children's Healthcare of Atlanta Foundation Board (2021–present). Trustee of various trusts within the John Hancock Fund Complex (since 2022). | | |
| Grace K. Fey, Born: 1946 | 2008 | 186 |
| <i>Trustee</i> Chief Executive Officer, Grace Fey Advisors (since 2007); Director and Executive Vice President, Frontier Capital Management Company (1988–2007); Director, Fiduciary Trust (since 2009). Trustee of various trusts within the John Hancock Fund Complex (since 2008). | | |
| Dean C. Garfield,* Born: 1968 | 2022 | 183 |
| <i>Trustee</i> Vice President, Netflix, Inc. (since 2019); President & Chief Executive Officer, Information Technology Industry Council (2009–2019); NYU School of Law Board of Trustees (since 2021); Member, U.S. Department of Transportation, Advisory Committee on Automation (since 2021); President of the United States Trade Advisory Council (2010–2018); Board Member, College for Every Student (2017–2021); Board Member, The Seed School of Washington, D.C. (2012–2017). Trustee of various trusts within the John Hancock Fund Complex (since 2022). | | |

Independent Trustees (continued)

| Name, year of birth Position(s) held with Trust Principal occupation(s) and other directorships during past 5 years | Trustee of the Trust since ¹ | Number of John Hancock funds overseen by Trustee |
|--|--|---|
| Deborah C. Jackson, Born: 1952 | 2012 | 185 |
| <i>Trustee</i> President, Cambridge College, Cambridge, Massachusetts (since 2011); Board of Directors, Amwell Corporation (since 2020); Board of Directors, Massachusetts Women's Forum (2018-2020); Board of Directors, National Association of Corporate Directors/New England (2015-2020); Chief Executive Officer, American Red Cross of Massachusetts Bay (2002–2011); Board of Directors of Eastern Bank Corporation (since 2001); Board of Directors of Eastern Bank Charitable Foundation (since 2001); Board of Directors of Boston Stock Exchange (2002–2008); Board of Directors of Harvard Pilgrim Healthcare (health benefits company) (2007–2011). Trustee of various trusts within the John Hancock Fund Complex (since 2008). | | |
| Steven R. Pruchansky, Born: 1944 | 2012 | 183 |
| <i>Trustee and Vice Chairperson of the Board</i> Managing Director, Pru Realty (since 2017); Chairman and Chief Executive Officer, Greenscapes of Southwest Florida, Inc. (2014-2020); Director and President, Greenscapes of Southwest Florida, Inc. (until 2000); Member, Board of Advisors, First American Bank (until 2010); Managing Director, Jon James, LLC (real estate) (since 2000); Partner, Right Funding, LLC (2014-2017); Director, First Signature Bank & Trust Company (until 1991); Director, Mast Realty Trust (until 1994); President, Maxwell Building Corp. (until 1991). Trustee (since 1992), Chairperson of the Board (2011–2012), and Vice Chairperson of the Board (since 2012) of various trusts within the John Hancock Fund Complex. | | |
| Frances G. Rathke,³ Born: 1960 | 2020 | 183 |
| <i>Trustee</i> Director, Audit Committee Chair, Oatly Group AB (plant-based drink company) (since 2021); Director, Audit Committee Chair and Compensation Committee Member, Green Mountain Power Corporation (since 2016); Director, Treasurer and Finance & Audit Committee Chair, Flynn Center for Performing Arts (since 2016); Director and Audit Committee Chair, Planet Fitness (since 2016); Chief Financial Officer and Treasurer, Keurig Green Mountain, Inc. (2003-retired 2015). Trustee of various trusts within the John Hancock Fund Complex (since 2020). | | |
| Gregory A. Russo, Born: 1949 | 2012 | 183 |
| <i>Trustee</i> Director and Audit Committee Chairman (2012-2020), and Member, Audit Committee and Finance Committee (2011-2020), NCH Healthcare System, Inc. (holding company for multi-entity healthcare system); Director and Member (2012-2018), and Finance Committee Chairman (2014-2018), The Moorings, Inc. (nonprofit continuing care community); Global Vice Chairman, Risk & Regulatory Matters, KPMG LLP (KPMG) (2002–2006); Vice Chairman, Industrial Markets, KPMG (1998–2002). Trustee of various trusts within the John Hancock Fund Complex (since 2008). | | |

Non-Independent Trustees⁴

| Name, year of birth Position(s) held with Trust Principal occupation(s) and other directorships during past 5 years | Trustee of the Trust since¹ | Number of John Hancock funds overseen by Trustee |
|--|---|---|
| Andrew G. Arnott, Born: 1971 | 2017 | 184 |

Non-Independent Trustee

Global Head of Retail for Manulife (since 2022); Head of Wealth and Asset Management, United States and Europe, for John Hancock and Manulife (2018-2023); Director and Chairman, John Hancock Investment Management LLC (since 2005, including prior positions); Director and Chairman, John Hancock Variable Trust Advisers LLC (since 2006, including prior positions); Director and Chairman, John Hancock Investment Management Distributors LLC (since 2004, including prior positions); President of various trusts within the John Hancock Fund Complex (2007-2023, including prior positions). Trustee of various trusts within the John Hancock Fund Complex (since 2017).

| | | |
|-----------------------------------|-------------|------------|
| Paul Lorentz, † Born: 1968 | 2022 | 183 |
|-----------------------------------|-------------|------------|

Non-Independent Trustee

Global Head, Manulife Wealth and Asset Management (since 2017); General Manager, Manulife, Individual Wealth Management and Insurance (2013–2017); President, Manulife Investments (2010–2016). Trustee of various trusts within the John Hancock Fund Complex (since 2022).

Principal officers who are not Trustees

| Name, year of birth Position(s) held with Trust Principal occupation(s) during past 5 years | Current Position(s) with the Trust since |
|--|---|
| Kristie M. Feinberg, Born: 1975 | 2023 |

President

Head of Wealth and Asset Management, United States and Europe, for John Hancock and Manulife (since 2023); CFO and Global Head of Strategy, Manulife Investment Management (2021-2023, including prior positions); CFO Americas & Global Head of Treasury, Invesco, Ltd., Invesco US (2019-2020, including prior positions); Senior Vice President, Corporate Treasurer and Business Controller, Oppenheimer Funds (2001-2019, including prior positions); President of various trusts within the John Hancock Fund Complex (since 2023).

| | |
|-------------------------------------|-------------|
| Charles A. Rizzo, Born: 1957 | 2007 |
|-------------------------------------|-------------|

Chief Financial Officer

Vice President, John Hancock Financial Services (since 2008); Senior Vice President, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (since 2008); Chief Financial Officer of various trusts within the John Hancock Fund Complex (since 2007).

| | |
|--|-------------|
| Salvatore Schiavone, Born: 1965 | 2009 |
|--|-------------|

Treasurer

Assistant Vice President, John Hancock Financial Services (since 2007); Vice President, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (since 2007); Treasurer of various trusts within the John Hancock Fund Complex (since 2007, including prior positions).

Principal officers who are not Trustees (continued)

| Name, year of birth Position(s) held with Trust Principal occupation(s) during past 5 years | Current Position(s) with the Trust since |
|--|--|
| Christopher (Kit) Sechler, Born: 1973 <i>Secretary and Chief Legal Officer</i> Vice President and Deputy Chief Counsel, John Hancock Investment Management (since 2015); Assistant Vice President and Senior Counsel (2009–2015), John Hancock Investment Management; Assistant Secretary of John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (since 2009); Chief Legal Officer and Secretary of various trusts within the John Hancock Fund Complex (since 2009, including prior positions). | 2018 |
| Trevor Swanberg, Born: 1979 <i>Chief Compliance Officer</i> Chief Compliance Officer, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (since 2020); Deputy Chief Compliance Officer, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (2019–2020); Assistant Chief Compliance Officer, John Hancock Investment Management LLC and John Hancock Variable Trust Advisers LLC (2016–2019); Vice President, State Street Global Advisors (2015–2016); Chief Compliance Officer of various trusts within the John Hancock Fund Complex (since 2016, including prior positions). | 2020 |

The business address for all Trustees and Officers is 200 Berkeley Street, Boston, Massachusetts 02116-5023.

The Statement of Additional Information of the fund includes additional information about members of the Board of Trustees of the Trust and is available without charge, upon request, by calling 800-225-5291.

- ¹ Each Trustee holds office until his or her successor is duly elected and qualified, or until the Trustee's death, retirement, resignation, or removal. Mr. Boyle has served as Trustee at various times prior to the date listed in the table.
- ² Member of the Audit Committee as of September 26, 2023.
- ³ Member of the Audit Committee.
- ⁴ The Trustee is a Non-Independent Trustee due to current or former positions with the Advisor and certain affiliates.
- ^{*} Elected to serve as Independent Trustee effective as of September 9, 2022.
- [†] Elected to serve as Non-Independent Trustee effective as of September 9, 2022.

More information

Trustees

Hassell H. McClellan, *Chairperson*^π
Steven R. Pruchansky, *Vice Chairperson*
Andrew G. Arnott[†]
James R. Boyle
William H. Cunningham^{*}
Grace K. Fey
Noni L. Ellison[^]
Dean C. Garfield[^]
Deborah C. Jackson
Patricia Lizarraga^{*,^,§}
Paul Lorentz[†]
Frances G. Rathke^{*}
Gregory A. Russo

Officers

Kristie M. Feinberg[#]
President
Charles A. Rizzo
Chief Financial Officer
Salvatore Schiavone
Treasurer
Christopher (Kit) Sechler
Secretary and Chief Legal Officer
Trevor Swanberg
Chief Compliance Officer

^π Member of the Audit Committee as of September 26, 2023.

[†] Non-Independent Trustee

^{*} Member of the Audit Committee

[^] Elected to serve as Independent Trustee effective as of September 9, 2022.

[§] Effective September 21, 2023, Ms. Lizarraga is no longer a Trustee.

[‡] Elected to serve as Non-Independent Trustee effective as of September 9, 2022.

[#] Effective June 29, 2023.

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.

Investment advisor

John Hancock Investment Management LLC

Subadvisor

Manulife Investment Management (US) LLC

Portfolio Managers

Nathan W. Thooft, CFA
Christopher Walsh, CFA

Principal distributor

John Hancock Investment Management
Distributors LLC

Custodian

State Street Bank and Trust Company

Transfer agent

John Hancock Signature Services, Inc.

Legal counsel

K&L Gates LLP

Independent registered public accounting firm

PricewaterhouseCoopers LLP

You can also contact us:

800-225-5291

jhinvestments.com

Regular mail:

John Hancock Signature Services, Inc.
P.O. Box 219909
Kansas City, MO 64121-9909

Express mail:

John Hancock Signature Services, Inc.
430 W 7th Street
Suite 219909
Kansas City, MO 64105-1407

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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
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

Balanced
Multi-Asset High Income
Lifestyle Blend Portfolios
Lifetime Blend Portfolios
Multimanager Lifestyle Portfolios
Multimanager Lifetime Portfolios
Preservation Blend Portfolios

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE FUNDS

ESG Core Bond
ESG International Equity
ESG Large Cap Core

CLOSED-END FUNDS

Asset-Based Lending
Financial Opportunities
Hedged Equity & Income
Income Securities Trust
Investors Trust
Preferred Income
Preferred Income II
Preferred Income III
Premium Dividend
Tax-Advantaged Dividend Income
Tax-Advantaged Global Shareholder Yield

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

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

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

A trusted brand

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

A better way to invest

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

Results for investors

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

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



John Hancock Investment Management Distributors LLC, Member FINRA, SIPC
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jhiinvestments.com

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