John Hancock Multi-Asset High Income Fund

Class I/JIAIX

ANNUAL SHAREHOLDER REPORT | AUGUST 31, 2024

This annual shareholder report contains important information about the John Hancock Multi-Asset High Income Fund (the fund) for the period of September 1, 2023 to August 31, 2024. You can find additional information about the fund at jhinvestments.com/documents. You can also request this information by contacting us at 800-225-5291.

What were the fund costs during the last year?

(Based on a hypothetical \$10,000 investment)

Fund (Class)	Costs of a \$10,000 investment	Costs paid as a percentage of a \$10,000 investment
Multi-Asset High Income Fund (Class I/JIAIX)	\$69	0.64%

Management's Discussion of Fund Performance

SUMMARY OF RESULTS

Multi-Asset High Income Fund (Class I/JIAIX) returned 15.19% for the year ended August 31, 2024. The world financial markets gained ground in the annual period, with equities leading the way. Positive growth data and the start of interest-rate cuts by major central banks raised hopes that the global economy was on track for a "soft landing." Bonds also produced gains, with credit-oriented categories generally outperforming the broader fixed-income market.

TOP PERFORMANCE CONTRIBUTORS

The multi-sector fixed-income portfolio | This segment of the fund generated strong absolute returns and made a sizable contribution to results. The fund's Asia fixed-income portfolio further helped performance.

Equities | The equity portfolio delivered healthy, broad-based gains. NVIDIA Corp., Microsoft Corp. and Apple, Inc. were notable contributors.

TOP PERFORMANCE DETRACTORS

Specific holdings | While all of the fund's major segments were positive, a number of individual securities - including Unilever PLC and Medical Properties Trust, Inc. (sold prior to year end) - finished with losses.

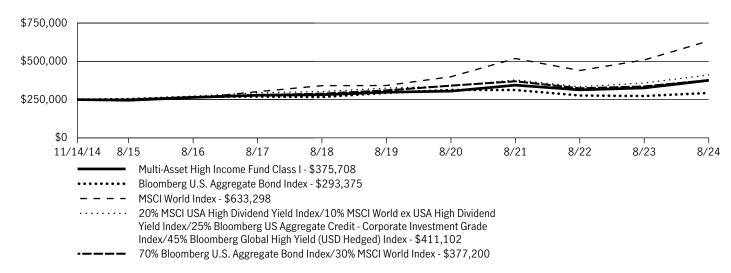
Energy stocks | Some of the fund's holdings in the sector were pressured by lower prices for oil and natural gas. On the fixed-income side, certain positions experienced price weakness due to issuer-specific events.

The views expressed in this report are exclusively those of the portfolio management team at Manulife Investment Management (US) LLC, and are subject to change. They are not meant as investment advice.

Fund Performance

The following graph compares the initial and subsequent account values at the end of each of the most recently completed 10 fiscal years of the fund (or for the life of the fund, if shorter). It assumes a \$250,000 initial investment in the fund and in an appropriate, broad-based securities market index for the same period.

GROWTH OF \$250,000



AVERAGE ANNUAL TOTAL RETURN	1 Year	5 Years	Since inception
Multi-Asset High Income Fund (Class I/JIAIX)	15.19%	4.72%	4.25%
Bloomberg U.S. Aggregate Bond Index	7.30%	(0.04)%	1.65%
MSCI World Index	24.43%	13.11%	9.95%
20% MSCI USA High Dividend Yield Index / 10% MSCI World ex USA High Dividend Yield Index / 25% Bloomberg US Aggregate Credit - Corporate Investment Grade Index / 45% Bloomberg Global High Yield (USD Hedged) Index	14.71%	4.83%	5.21%
70% Bloomberg U.S. Aggregate Bond Index / 30% MSCI World Index	12.27%	4.00%	4.29%

The fund has designated Bloomberg U.S. Aggregate Bond Index as its broad-based securities market index in accordance with the revised definition for such an index.

Performance figures assume all distributions have been reinvested and reflect the beneficial effect of any expense reductions. Past performance does not guarantee future results. 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 and can be found at jhinvestments.com/investments or by calling 800-225-5291. The graph and table do not reflect the deduction of taxes that a shareholder would pay on fund distributions or redemption of fund shares. It is not possible to invest directly in an index.

Fund Statistics

Fund net assets	\$115,125,646
Total number of portfolio holdings	574
Total advisory fees paid (net)	\$347,887
Portfolio turnover rate	46%

Graphical Representation of Holdings

The tables below show the investment makeup of the fund, representing percentage of the total net assets of the fund.

PORTFOLIO COMPOSITION		
Corporate bonds	52.9%	
Common stocks	32.3%	
Term loans	2.7%	
Asset backed securities	2.0%	
Preferred securities	1.9%	
U.S. Government Agency	1.1%	
Convertible bonds	0.5%	
Capital preferred securities	0.2%	
Foreign government obligations	0.2%	
Short-term investments and other	6.2%	

COUNTRY COMPOSITION	
United States	68.5%
Canada	4.3%
Japan	2.6%
United Kingdom	2.6%
Hong Kong	2.2%
France	2.2%
Netherlands	1.8%
Switzerland	1.6%
Ireland	1.6%
Luxembourg	1.2%
Other countries	11.4%
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Holdings may not have been held by the fund for the entire period and are subject to change without notice. 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 and may change at any time.

The fund is subject to various risks as described in the fund's prospectuses. For more information, please refer to the "Principal risks" section of the prospectuses.

Availability of Additional Information



At jhinvestments.com/documents, you can find additional information about the fund, including the fund's:

- Prospectus
- Financial information
- Fund holdings
- Proxy voting information

You can also request this information by contacting us at 800-225-5291.

This report is for the information of the shareholders in this fund. It is not authorized for distribution to prospective investors unless preceded or accompanied by the fund's prospectus.

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