

John Hancock Managed Account Shares Investment-Grade Corporate Bond Portfolio

Investment-Grade Corporate Bond Portfolio/JMABX

ANNUAL SHAREHOLDER REPORT | MAY 31, 2025

This annual shareholder report contains important information about the John Hancock Managed Account Shares Investment-Grade Corporate Bond Portfolio (the fund) for the period of June 1, 2024 to May 31, 2025. You can find additional information about the fund at jhinvestments.com/underlying-funds. You can also request this information by contacting us at 800-247-0278.

What were the fund costs during the last year?

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

Fund	Costs of a \$10,000 investment	Costs paid as a percentage of a \$10,000 investment
Investment-Grade Corporate Bond Portfolio/JMABX	\$0	0.00%

Management’s Discussion of Fund Performance

SUMMARY OF RESULTS

Managed Account Shares Investment-Grade Corporate Bond Portfolio (Investment-Grade Corporate Bond Portfolio/JMABX) returned 6.82% for the year ended May 31, 2025. Corporate bonds produced solid gains in the annual period, with the benefit of income offsetting a small increase in yield spreads. Investors were cheered by the backdrop of falling inflation, moderate economic growth, and interest rate cuts by the U.S. Federal Reserve. However, corporates experienced meaningful volatility in March and April 2025 due to uncertainty related to U.S. trade policy.

TOP PERFORMANCE CONTRIBUTORS

Banking | Holdings in this industry group made the largest contribution to absolute performance, with Citizens Financial Group, Inc. and Truist Financial Corp. being meaningful contributors.

Midstream energy | Enbridge, Inc. was a leading contributor in the industry and the fund as a whole. In addition to energy, holdings in the utilities, information technology, and financials industries also helped results.

Additional security contributors | The fund’s position in the bonds of General Motors Financial, the auto-financing arm of General Motors, was another top contributor at the individual security level. The bonds of the energy producer Antero Resources Corp. also aided returns, as did AT&T, Inc.

TOP PERFORMANCE DETRACTORS

Integrated energy and communication services | Holdings in these industries detracted from fund performance, albeit with minor impacts due to their small portfolio weightings.

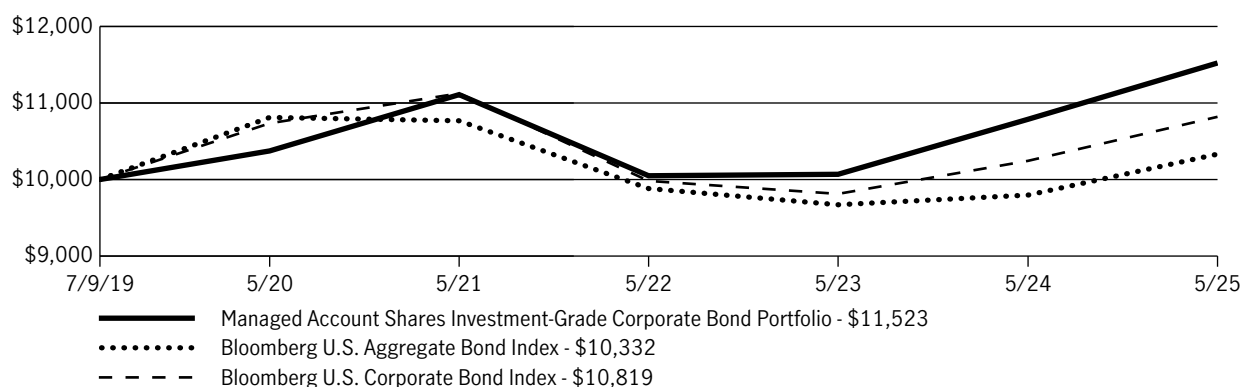
Individual security detractors | Positions in Occidental Petroleum Corp. and Viatris, Inc. detracted.

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 \$10,000 initial investment in the fund and in an appropriate, broad-based securities market index for the same period.

GROWTH OF \$10,000



AVERAGE ANNUAL TOTAL RETURN	1 Year	5 Years	Since inception
Managed Account Shares Investment-Grade Corporate Bond Portfolio (Investment-Grade Corporate Bond Portfolio/JMABX)	6.82%	2.12%	2.43%
Bloomberg U.S. Aggregate Bond Index	5.46%	(0.90)%	0.55%
Bloomberg U.S. Corporate Bond Index	5.61%	0.16%	1.34%

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. 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	\$402,286,912
Total number of portfolio holdings	275
Total advisory fees paid (net)	\$0
Portfolio turnover rate	47%

Graphical Representation of Holdings

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

SECTOR COMPOSITION	
Financials	30.8%
Energy	16.2%
Health care	9.4%
Utilities	9.3%
Industrials	8.4%
Information technology	7.8%
Real estate	5.8%
Communication services	4.5%
Consumer staples	2.8%
Consumer discretionary	2.4%
Materials	1.0%
Municipal bonds	0.1%
Short-term investments and other	1.5%

QUALITY COMPOSITION	
AA	1.5%
A	9.2%
BBB	80.2%
BB	7.6%
Short-term investments and other	1.5%

Ratings are from Moody's Investors Service, Inc. If not available, we have used S&P Global Ratings. In the absence of ratings from these agencies, we have used Fitch Ratings, Inc. "Not rated" securities are those with no ratings available from these agencies. All ratings are as of 5-31-25 and do not reflect subsequent downgrades or upgrades, if any.

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 prospectus. For more information, please refer to the "Principal risks" section of the prospectus.

Availability of Additional Information



At jhinvestments.com/underlying-funds, 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 800-247-0278.

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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