

John Hancock Managed Account Shares Non-Investment-Grade Corporate Bond Portfolio

Non-Investment-Grade Corporate Bond Portfolio/JMADX

ANNUAL SHAREHOLDER REPORT | MAY 31, 2025

This annual shareholder report contains important information about the John Hancock Managed Account Shares Non-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 |
|---|--------------------------------|---|
| Non-Investment-Grade Corporate Bond Portfolio/JMADX | \$0 | 0.00% |

Management's Discussion of Fund Performance

SUMMARY OF RESULTS

Managed Account Shares Non-Investment-Grade Corporate Bond Portfolio (Non-Investment-Grade Corporate Bond Portfolio/JMADX) returned 7.44% for the year ended May 31, 2025. High-yield bonds delivered strong total returns in the annual period, with the benefit of income offsetting a small increase in yield spreads. The category was helped by the combination of steady economic growth, positive corporate earnings, and accommodative U.S. Federal Reserve policy. However, high-yield debt experienced meaningful volatility in March and April 2025 due to uncertainty related to U.S. trade policy.

TOP PERFORMANCE CONTRIBUTORS

Energy | Holdings in this industry group made the largest contribution to absolute performance, led by New Zealand-based Genesis Energy LP.

Other leading industries | In banking, British financial giant Barclays PLC was the leading contributor in the industry. Holdings in the utilities industry also helped results.

Individual security contributors | The fund's position in the bonds of the U.S. casino operator Mohegan Tribal Gaming Authority was a key contributor to performance at the individual security level. Parkland Corp. and Asbury Automotive Group, Inc. aided returns as well.

TOP PERFORMANCE DETRACTORS

Sectors | Specialty retail was one of the few sectors in which the fund's holdings suffered negative returns. Saks Global Enterprises LLC and The Michaels Companies, Inc. were the largest individual detractors in the sector. The fund's allocation to refining was also a modest detractor.

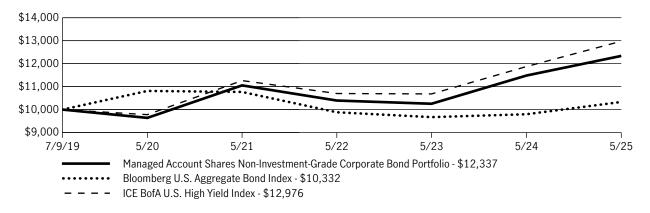
Additional security detractors | Liberty Communications Puerto Rico was also a notable detractor, as were Vital Energy, Inc. and the midstream energy operator Venture Global LNG, Inc.

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 Non-Investment-Grade Corporate Bond Portfolio (Non-Investment-Grade Corporate Bond Portfolio/JMADX) | 7.44% | 5.06% | 3.63% |
| Bloomberg U.S. Aggregate Bond Index | 5.46% | (0.90)% | 0.55% |
| ICE BofA U.S. High Yield Index | 9.28% | 5.82% | 4.52% |

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.

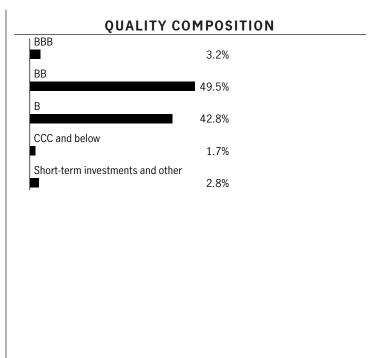
Fund Statistics

| Fund net assets | \$136,322,130 |
|------------------------------------|---------------|
| Total number of portfolio holdings | 186 |
| Total advisory fees paid (net) | \$0 |
| Portfolio turnover rate | 43% |

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 | | |
|----------------------------------|-------|--|
| Energy | 18.5% | |
| Consumer discretionary | 17.9% | |
| Industrials | 13.2% | |
| Financials | 12.0% | |
| Communication services | 9.0% | |
| Utilities | 8.9% | |
| Materials | 8.2% | |
| Health care | 3.3% | |
| Real estate | 2.3% | |
| Consumer staples | 2.0% | |
| Information technology | 1.6% | |
| Asset-backed securities | 0.3% | |
| Short-term investments and other | 2.8% | |



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





- 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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