

Model portfolios Investor fact sheet

John Hancock Fixed Income Model Portfolio

Strategy

Actively managed

The portfolio targets consistent alpha generation through active credit and sector positioning

Multimanager approach

Underlying strategies are managed by a diverse set of asset managers, each with specialized expertise

Active/passive implementation

Positions consist of ETFs and active mutual funds to mitigate cost and allow for alpha generation

Integrating asset allocation and manager research

For more than 30 years, our multi-asset solutions team has combined asset allocation with manager research and oversight to seek better outcomes for investors.



Multi-asset solutions team

- Portfolio managers/strategists
- Model portfolio construction and delivery

59 investment professionals

- 32 CFA charterholders
- 2 Ph.D.s

Manager research team

Investment manager due diligence and oversight

28 manager research professionals

- 31 professional designations
- 19 advanced degrees

Managed by

Manulife Investment Management

Established asset manager with global resources and expertise extending across equity, fixed-income, and alternative investments as well as asset allocation strategies

Nathan W. Thoof, CFA
On the portfolio since 2022
Investing since 2000

Bruce G. Picard, CFA
On the portfolio since 2022
Investing since 2000

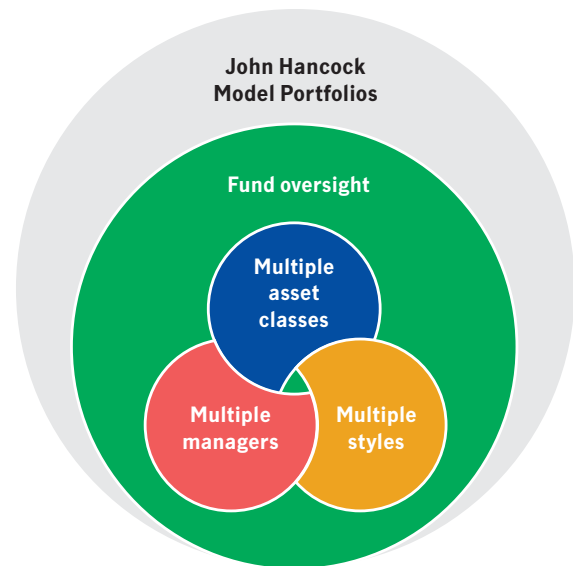
Robert E. Sykes, CFA
On the portfolio since 2022
Investing since 2001

David M. Kobuszewski, CFA
On the portfolio since 2022
Investing since 2000

Blending complementary managers from around the world

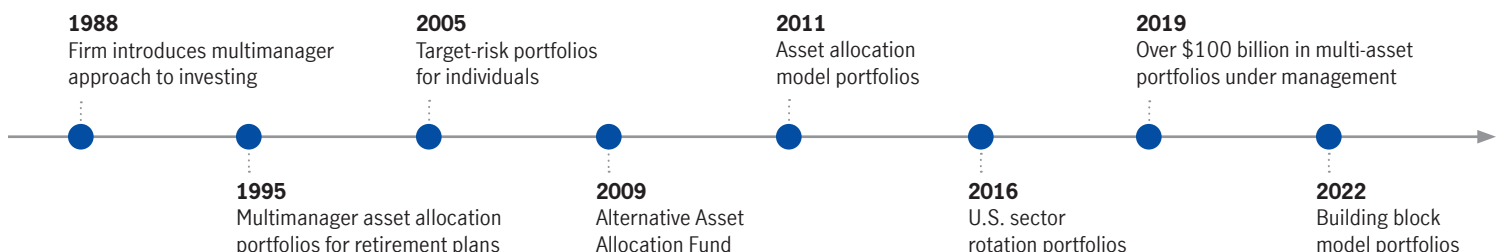
Our method delivers layers of diversification for investors in our asset allocation portfolios.

- Oversight
- Multiple asset classes
- Multiple managers
- Multiple styles



A leader in asset allocation

Multimanager approach since 1988 and model portfolios since 2011



Quarterly commentary

Highlights

- Fixed-income markets climbed higher in the first quarter led higher by corporate bonds.
- The portfolio generated positive total returns and led its benchmark.
- Asset allocation decisions contributed to returns while manager selection was neutral.

Market review and outlook

Fluctuating economic and inflation expectations buffeted the bond market in January and February. However, bonds rallied in March as a series of liquidity crises hit several regional banks, including two that collapsed entirely. The federal government stepped in quickly to take the banks into receivership and implement other measures to prevent further liquidity issues elsewhere in the banking system. Concerns that the turmoil would spread to other local and regional banks led to a flight to quality in the financial markets, which boosted demand for bonds.

U.S. bond yields declined broadly, with intermediate-term bond yields falling the most. In contrast, yields on the shortest-term bonds rose as the U.S. Federal Reserve raised short-term interest rates twice during the quarter, continuing its efforts to lower the U.S. inflation rate. U.S.

Treasury securities and higher-quality corporate bonds produced the best returns, benefiting the most from the flight to quality, while shorter-term sectors such as asset-backed securities and commercial mortgage-backed securities lagged.

Portfolio review

The portfolio posted positive absolute returns and led its benchmark. From an asset allocation perspective, an overweight in investment-grade corporate bonds and high-yield corporate bonds contributed to relative outperformance. An overweight in emerging-market bonds detracted from relative performance.

Overall, manager selection was a neutral contributor to performance. John Hancock High Yield Fund contributed positively to relative returns while John Hancock Emerging Markets Debt Fund detracted from relative performance.

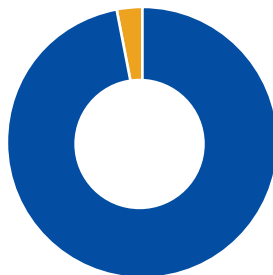
Portfolio changes

We made no changes to the portfolio during the quarter. The portfolio remains overweight in investment-grade and high-yield corporate bonds.

Distinguishing features

- Diversified international equity exposure
- A mix of market capitalizations, sectors, and factors with exposure to international developed and emerging-market equity

Strategy allocation (%)



| Underlying fund | Ticker | Manager | Current quarter |
|---|--------|--------------------------------|-----------------|
| ■ Fixed income | | | |
| John Hancock Corporate Bond ETF | JHCB | Manulife Investment Management | 31.48 |
| John Hancock Mortgage-Backed Securities ETF | JHMB | Manulife Investment Management | 27.69 |
| iShares U.S. Treasury Bond ETF | GOVT | BlackRock Fund Advisors | 25.95 |
| John Hancock High Yield Fund | JYHIX | Manulife Investment Management | 8.07 |
| John Hancock Emerging Markets Debt Fund | JMKIX | Manulife Investment Management | 4.00 |
| Total fixed income | | | 97.19 |
| ■ Cash | | | |
| Total underlying expenses | | | 0.27 |

See the conflicts disclosure on the last page for further information.

1 Morningstar, as of the date of the material. Weighted average annual net expense ratio is provided based on aggregation of the underlying fund fees. Share classes used for calculation may not be available to all investors, and expense ratios charged may vary.

| Average annual total returns | QTD | YTD | 1 year | 3 year | 5 year | 10 year | Inception 1/1/23 |
|---|------|------|--------|--------|--------|---------|---------------------|
| Fixed Income Model Portfolio Composite, gross of fees | 3.14 | 3.14 | — | — | — | — | 3.14 |
| Fixed Income Model Portfolio Composite, net of fees | 2.75 | 2.75 | — | — | — | — | 2.75 |
| Blended benchmark ² | 2.92 | 2.92 | — | — | — | — | 2.92 |

Source: Manulife Investment Management (a Manulife company).

Important performance information

Performance figures shown are of the Fixed Income Model Portfolio Composite, managed by Manulife Investment Management, gross of fees, and represents a single, non-fee-paying affiliated seed capital account, which is representative of the investment strategy. Net performance results reflect the deduction of, from the respective gross-of-fee returns, the highest industry-applied bundled fees (3.00% annually). Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. Performance may not be reflective of a full market cycle. The short-term results of a relatively new model portfolio are not necessarily indicative of its long-term prospects. Manulife Investment Management claims compliance with the Global Investment Performance Standards (GIPS). To receive a complete list and description of Manulife Investment Management's composites and/or a presentation that adheres to the GIPS, contact our institutional sales team at 888-332-7132.

Performance does not reflect the platform or program sponsor, trading costs, administrative management fees, or other expenses that would be incurred by a participant portfolio and would reduce returns. Performance does reflect the deduction of investment expenses for the underlying funds. The results do not represent actual trading, which is conducted by the platform or program sponsor on behalf of the client. It should not be assumed that investors would have obtained the performance shown had they invested in the manner shown and does not represent performance that any third-party investor actually attained. Actual performance may differ substantially from the performance presented. Returns for periods shorter than one year are cumulative. The performance presented is based on an assumption that the trades were executed at the same time as the model. The performance of your account may materially differ from the performance shown due to assumptions that include, but are not limited to, trade execution timing; your investment advisor, not John Hancock Investment Management, determines when to implement trade in the account; differences in market conditions; client-imposed investment restrictions; the timing of client investments and withdrawals; fees payable; foreign exchange rates; and account size.

Performance shown does not reflect the performance of model-based program accounts managed by your investment advisor using model portfolios. Your investment advisor may or may not add model portfolios in your account. John Hancock Investment Management is not responsible for determining the suitability or appropriateness of a strategy based on the model portfolios. John Hancock Investment Management does not have investment discretion of your account and does not place trade orders for your account. All information and data, including allocations, are subject to change.

The portfolio's performance depends on the advisor's skill in determining asset class allocations, the mix of underlying funds, and the performance of those underlying funds. The portfolio is subject to the same risks as the underlying funds and exchange-traded funds in which it invests: Stocks and bonds can decline due to adverse issuer, market, regulatory, or economic developments; foreign investing, especially in emerging markets, has additional risks, such as currency and market volatility and political and social instability; the securities of small companies are subject to higher volatility than those of larger, more established companies; and high-yield bonds are subject to additional risks, such as increased risk of default. Liquidity—the extent to which a security may be sold or a derivative position closed without negatively affecting its market value, if at all—may be impaired by reduced trading volume, heightened volatility, rising interest rates, and other market conditions. Owning an ETF generally reflects the risks of owning the underlying securities it is designed to track, which may cause lack of liquidity, more volatility, and increased management fees. Hedging and other strategic transactions may increase volatility of a portfolio and could result in a significant loss. The principal value of each portfolio is not guaranteed, and you could lose money at any time.

² A custom blended benchmark reflects the portfolio's asset allocation under normal conditions. This custom blended benchmark comprises 98% Bloomberg Barclays U.S. Aggregate and 2% Ftse 3-month US Treasury T-Bill Index.

John Hancock Investment Management LLC and Manulife Investment Management (US) LLC are affiliated SEC registered investment advisers using the brand name John Hancock Investment Management.

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Conflicts disclosure

The information in the charts shown reflects the current portfolio allocations across the underlying model portfolios. Allocations are as of the date indicated, are subject to change, and should not be relied on as current thereafter.

Certain model portfolios may include ETFs and mutual funds that are managed by an unaffiliated investment manager (unaffiliated funds) or an affiliate (affiliated funds). Recommendation of the model portfolios that use affiliated funds raises conflicts of interest. To the extent that the advisor does use affiliated funds as the components of the model portfolios, this will generate advisory and other fees for John Hancock Investment Management (a Manulife company) and, in certain cases, its affiliates, when intermediary accounts and other persons use the model portfolios, and the management fees of affiliated funds may be higher than fees charged by other funds. Clients should review any information provided by the managed account program sponsor for further details regarding the extent to which model portfolios provided may include affiliated funds. In addition, affiliates may engage the investment managers that are recommended or included in the model portfolios as subadvisors to the John Hancock funds or have other business relationships with such investment managers. Some sponsors and intermediaries have other business relationships with John Hancock Investment Management or its affiliates.

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