

Summary prospectus

John Hancock Mortgage-Backed Securities ETF

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus and other information about the fund, including the Statement of Additional Information and most recent reports, online at www.jhinvestments.com/prospectuses. You can also get this information at no cost by calling 800-225-6020 or by sending an email request to info@jhinvestments.com. The fund's prospectus and Statement of Additional Information, both dated September 1, 2022, as may be supplemented, and most recent financial highlights information included in the shareholder report, dated April 30, 2022, are incorporated by reference into this summary prospectus.

Ticker

NYSE Arca JHMB

Investment objective

To seek a high level of current income while seeking to outperform the benchmark over a market cycle.

Fees and expenses

This table describes the fees and expenses you may pay if you buy, hold, and sell shares of the fund. **You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the tables and examples below.**

Annual fund operating expenses (%) (expenses that you pay each year as a percentage of the value of your investment)

Management fee	0.34
Other expenses	0.59
Acquired fund fees and expenses ¹	0.01
Total annual fund operating expenses²	0.94
Contractual expense reimbursement ³	-0.54
Total annual fund operating expenses after expense reimbursements	0.40

¹ "Acquired fund fees and expenses" are based on indirect net expenses associated with the fund's investments in underlying investment companies.

² The "Total annual fund operating expenses" shown may not correlate to the fund's ratios of expenses to average daily net assets shown in the "Financial highlights" section of the fund's prospectus, which does not include "Acquired fund fees and expenses."

³ The advisor contractually agrees to reduce its management fee or, if necessary, make payment to the fund in an amount equal to the amount by which expenses of the fund exceed 0.39% of average daily net assets. Expenses means all the expenses of the fund, excluding (a) taxes, (b) brokerage commissions, (c) interest expense, (d) litigation and indemnification expenses and other extraordinary expenses not incurred in the ordinary course of the fund's business, (e) borrowing costs, (f) prime brokerage fees, (g) acquired fund fees and expenses paid indirectly, and (h) short dividend expense. This agreement expires on August 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 also contractually agrees to waive a portion of its management fee and/or reimburse expenses for the fund and certain other John Hancock funds according to an asset level breakpoint schedule that is based on the aggregate net assets of all the funds participating in the waiver or reimbursement. This waiver is allocated proportionally among the participating funds. During its most recent fiscal year, the fund's reimbursement amounted to 0.01% of the fund's average daily net assets. This agreement expires on July 31, 2024, 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.

Expense example

This example is intended to help you compare the cost of investing in the fund with the cost of investing in other funds. Please see below a hypothetical example showing the expenses of a \$10,000 investment in the fund for the time periods indicated assuming you redeem all of your shares at the end of those periods. The example assumes a 5% average annual return and that fund expenses will not change over the periods. The example does not take into account brokerage commissions that you may pay on your purchases and sales of shares of the fund. Although your actual costs may be higher or lower, based on these assumptions, your costs would be:

Expenses (\$)

1 year	41
3 years	246
5 years	467
10 years	1,105

Portfolio turnover

The fund pays transaction costs, such as commissions, when it buys and sells securities (or “turns over” its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the fund’s performance. During the fiscal period from August 18, 2021 (commencement of operations) through April 30, 2022, the fund’s portfolio turnover rate was 33% of the average value of its portfolio.

Principal investment strategies

The fund is an ETF, which is a fund that trades like other publicly-traded securities. The fund is not an index fund. The fund is actively managed and does not seek to replicate the performance of a specified index.

Under normal market conditions, the fund invests at least 80% of its net assets (plus any borrowings for investment purposes) in mortgage-backed securities. The fund may invest in mortgage-related securities issued or guaranteed by U.S. governmental entities and privately issued mortgage-related securities. These may include residential mortgage-backed securities, commercial mortgage-backed securities and to-be-announced mortgage contracts, and may be rated investment grade or below. Investment-grade securities are rated from AAA to BBB- by S&P Global Ratings (S&P) or by Fitch Ratings (Fitch) or from Aaa to Baa3 by Moody’s Investors Service, Inc. (Moody’s), or comparable rating by any nationally recognized statistical rating organization (NRSRO), or their unrated equivalents. Below investment-grade securities are rated BB and below by S&P or Fitch or Ba and below by Moody’s, or comparable rating by any NRSRO, or their unrated equivalents. The fund will limit its investment in below investment grade securities to 20% of its net assets at time of purchase. The fund’s investment policies are based on credit ratings at the time of purchase. There is no limit on the fund’s average maturity.

The manager focuses on bottom-up sector allocation and security selection in making investment decisions. When making sector allocations, the manager considers each sector’s place in the business cycle, forward looking trends and historical and technical factors before relative value decisions are made. The manager uses bottom-up fundamental research to find individual securities that appear comparatively undervalued. Under normal market conditions, the fund will not invest more than 5% of its net assets in derivatives transactions. Derivatives transactions include credit default swaps, foreign currency forward contracts, futures contracts, and options. The fund may engage in derivatives transactions to reduce risk and/or obtain efficient market exposure. The fund’s investments in U.S. government and agency securities may or may not be supported by the full faith and credit of the United States. The fund may trade securities actively.

The fund may invest up to 20% of its net assets in non-mortgage-backed securities including other asset-backed securities and Collateralized Loan Obligations (CLOs) and cash and cash equivalents.

The fund may invest in U.S. dollar-denominated securities of foreign governments and corporations. Under normal market conditions, the fund will limit its investments in U.S. dollar-denominated foreign securities (excluding Canadian securities) to 25% of its total assets. The fund may invest in bonds issued by master limited partnerships.

Due to the nature of certain of the fund’s investments, the fund intends to effect a portion of creations and redemptions for cash, rather than in-kind securities.

Principal risks

An investment in the fund is not a bank deposit and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Many factors affect performance, and fund shares will fluctuate in price, meaning you could lose money. The fund’s investment strategy may not produce the intended results.

During periods of heightened market volatility or reduced liquidity, governments, their agencies, or other regulatory bodies, both within the United States and abroad, may take steps to intervene. These actions, which could include legislative, regulatory, or economic initiatives, might have unforeseeable consequences and could adversely affect the fund’s performance or otherwise constrain the fund’s ability to achieve its investment objective.

The fund’s main risks are listed below in alphabetical order, not in order of importance. *Before investing, be sure to read the additional descriptions of these risks beginning on page 15 of the prospectus.*

Active trading market risk. Active trading markets for fund shares may not be developed or maintained by market makers or authorized participants. Market makers are not obligated to make a market in the fund’s shares or to submit purchase or redemption orders for creation units.

Authorized participant concentration risk. To the extent that authorized participants are unable or otherwise unavailable to proceed with creation and/or redemption orders and no other authorized participant is able to create or redeem in their place, shares may trade at a discount to net asset value (NAV) and may face delisting.

Cash transactions risk. The fund intends to effect some or all of its creation and redemption transactions using cash, rather than in-kind securities. As a result, an investment in the fund may be less tax-efficient than an investment in an ETF that effects all of its creation and redemption transactions in-kind. In order to obtain the cash needed to distribute redemption proceeds, the fund may be required to sell portfolio securities which may cause

John Hancock Mortgage-Backed Securities ETF

the fund to recognize capital gains or losses and incur higher brokerage costs. To the extent that the maximum additional charge for creation or redemption transactions is insufficient to cover these costs and expenses, the fund's NAV could be negatively impacted.

Changing distribution levels risk. The fund may cease or reduce the level of its distribution if income or dividends paid from its investments declines.

Credit and counterparty risk. The issuer or guarantor of a fixed-income security, the counterparty to an over-the-counter derivatives contract, or a borrower of fund securities may not make timely payments or otherwise honor its obligations. U.S. government securities are subject to varying degrees of credit risk depending upon the nature of their support. A downgrade or default affecting any of the fund's securities could affect the fund's performance.

Currency risk. Fluctuations in exchange rates may adversely affect the U.S. dollar value of a fund's investments. Foreign currencies may decline in value, which could negatively impact performance.

Economic and market events risk. Events in the U.S. and global financial markets, including actions taken by the U.S. Federal Reserve or foreign central banks to stimulate or stabilize economic growth, may at times result in unusually high market volatility, which could negatively impact performance. Reduced liquidity in credit and fixed-income markets could adversely affect issuers worldwide. Banks and financial services companies could suffer losses if interest rates rise or economic conditions deteriorate.

ETF trading risk. The market price of shares may include a bid-ask spread (the difference between the prices at which investors are willing to buy and sell shares), which may vary over time and may increase for various reasons, including decreased trading volume or reduced market liquidity.

Fixed-income securities risk. A rise in interest rates typically causes bond prices to fall. The longer the average maturity or duration of the bonds held by a fund, the more sensitive it will likely be to interest-rate fluctuations. An issuer may not make all interest payments or repay all or any of the principal borrowed. Changes in a security's credit quality may adversely affect fund performance.

Foreign securities risk. Less information may be publicly available regarding foreign issuers, including foreign government issuers. Foreign securities may be subject to foreign taxes and may be more volatile than U.S. securities. Currency fluctuations and political and economic developments may adversely impact the value of foreign securities. If applicable, depositary receipts are subject to most of the risks associated with investing in foreign securities directly because the value of a depositary receipt is dependent upon the market price of the underlying foreign equity security. Depositary receipts are also subject to liquidity risk.

Hedging, derivatives, and other strategic transactions risk. Hedging, derivatives, and other strategic transactions may increase a fund's volatility and could produce disproportionate losses, potentially more than the fund's principal investment. Risks of these transactions are different from and possibly greater than risks of investing directly in securities and other traditional instruments. Under certain market conditions, derivatives could become harder to value or sell and may become subject to liquidity risk (i.e., the inability to enter into closing transactions). Derivatives and other strategic transactions that the fund intends to utilize include: credit default swaps; foreign currency forward contracts; foreign currency swaps; futures contracts; interest-rate swaps; and options. Foreign currency forward contracts, futures contracts, options, and swaps generally are subject to counterparty risk. In addition, swaps may be subject to interest-rate and settlement risk, and the risk of default of the underlying reference obligation. Derivatives associated with foreign currency transactions are subject to currency risk.

High portfolio turnover risk. Trading securities actively and frequently can increase transaction costs (thus lowering performance) and taxable distributions.

Liquidity risk. The extent (if at all) to which a security may be sold or a derivative position closed without negatively impacting its market value may be impaired by reduced market activity or participation, legal restrictions, or other economic and market impediments. Liquidity risk may be magnified in rising interest rate environments due to higher than normal redemption rates. Widespread selling of fixed-income securities to satisfy redemptions during periods of reduced demand may adversely impact the price or salability of such securities. Periods of heavy redemption could cause the fund to sell assets at a loss or depressed value, which could negatively affect performance. Redemption risk is heightened during periods of declining or illiquid markets.

Lower-rated and high-yield fixed-income securities risk. Lower-rated and high-yield fixed-income securities (junk bonds) are subject to greater credit quality risk, risk of default, and price volatility than higher-rated fixed-income securities, may be considered speculative, and can be difficult to resell.

Master limited partnership (MLP) risk. MLPs generally reflect the risks associated with their underlying assets and with pooled investment vehicles. MLPs with credit-related holdings are subject to interest-rate risk and risk of default.

Mortgage-backed and asset-backed securities risk. Mortgage-backed and asset-backed securities are subject to different combinations of prepayment, extension, interest-rate, and other market risks. Factors that impact the value of these securities include interest rate changes, the reliability of available information, credit quality or enhancement, and market perception.

Inverse interest-only securities. Inverse interest-only securities that are mortgage-backed securities are subject to the same risks as other mortgage-backed securities. In addition, the coupon on an inverse interest-only security can be extremely sensitive to changes in prevailing interest rates.

TBA mortgage contracts. To-be-announced (TBA) mortgage contracts involve a risk of loss if the value of the underlying security to be purchased declines prior to delivery date. The yield obtained for such securities may be higher or lower than yields available in the market on delivery date.

Operational and cybersecurity risk. Cybersecurity breaches may allow an unauthorized party to gain access to fund assets, customer data, or proprietary information, or cause a fund or its service providers to suffer data corruption or lose operational functionality. Similar incidents affecting issuers of a fund's securities may negatively impact performance. Operational risk may arise from human error, error by third parties, communication errors, or technology failures, among other causes.

Premium/discount risk. The NAV of the fund and the value of your investment may fluctuate. Disruptions to creations and redemptions or the market price of the fund's holdings, the existence of extreme market volatility or potential lack of an active trading market for shares may result in shares trading at a significant premium or discount to NAV. If a shareholder purchases shares at a time when the market price is at a premium to the NAV or sells shares at a time when the market price is at a discount to the NAV, the shareholder may sustain losses. Given the nature of the relevant markets for certain of the fund's securities, shares may trade at a larger premium or discount to the NAV than shares of other ETFs. In addition, in stressed market conditions, the market for shares may become less liquid in response to deteriorating liquidity in the markets for the fund's underlying portfolio holdings.

Sector risk. When a fund focuses its investments in certain sectors of the economy, its performance may be driven largely by sector performance and could fluctuate more widely than if the fund were invested more evenly across sectors.

Trading issues risk. Trading in shares on NYSE Arca, Inc. (NYSE Arca) may be halted in certain circumstances. There can be no assurance that the requirements of NYSE Arca necessary to maintain the listing of the fund will continue to be met.

Past performance

This section normally shows how the fund's total return has varied from year to year, along with a broad-based market index for reference. Performance information is not shown because the fund had been in operation for less than a full calendar year as of the date of this prospectus.

Investment management

Investment advisor John Hancock Investment Management LLC

Subadvisor Manulife Investment Management (US) LLC

Portfolio management

The following individuals are jointly and primarily responsible for the day-to-day management of the fund's portfolio.

David A. Bees, CFA <i>Managing Director and Portfolio Manager</i> Managed the fund since 2021	Peter M. Farley, CFA <i>Managing Director and Senior Portfolio Manager</i> Managed the fund since 2021	Jeffrey N. Given, CFA <i>Senior Managing Director and Senior Portfolio Manager</i> Managed the fund since 2021	Howard C. Greene, CFA <i>Senior Managing Director and Senior Portfolio Manager</i> Managed the fund since 2021	Connor Minnaar, CFA <i>Senior Director and Associate Portfolio Manager</i> Managed the fund since 2022
---	--	--	--	--

Purchase and sale of fund shares

The fund will issue and redeem shares at NAV only with authorized participants and only in a large specified number of shares, each called a "creation unit," or multiples thereof, in exchange for the deposit or delivery of a basket of securities and/or cash. Except when aggregated in creation units, the shares are not redeemable securities of the fund.

Individual shares of the fund may be purchased and sold only in secondary market transactions through brokers or financial intermediaries. Shares of the fund are listed and traded on the NYSE Arca. Because shares trade at market prices rather than NAV, shares of the fund may trade at a price greater than NAV (premium) or less than NAV (discount).

An investor may incur costs attributable to the difference between the highest price a buyer is willing to pay to purchase shares of the fund (bid) and the lowest price a seller is willing to accept for shares of the fund (ask) when buying or selling shares in the secondary market (bid-ask spread).

Recent information, including information about the fund's NAV, market price, premiums and discounts, and bid-ask spreads, is included on the fund's website at jhinvestments.com/etf.

Taxes

The fund's distributions are taxable, and will be taxed as ordinary income and/or capital gains, unless you are investing through a tax-deferred arrangement, such as a 401(k) plan or individual retirement account. Withdrawals from such tax-deferred arrangements may be subject to tax at a later date.

Payments to broker-dealers and other financial intermediaries

The advisor and its related companies may pay broker-dealers or other financial intermediaries (such as a bank) for the sale of the fund shares and related services. These payments may create a conflict of interest by influencing your broker-dealer or other intermediary or its employees or associated persons to recommend the fund over another investment. Ask your financial advisor or visit your financial intermediary's website for more information.



© 2022 John Hancock Exchange-Traded Fund Trust
200 Berkeley Street Boston, MA 02116
800-225-6020, jihinvestments.com

Manulife, Manulife Investment Management, Stylized M Design, and Manulife Investment Management & Stylized M Design are trademarks of The Manufacturers Life Insurance Company and are used by its affiliates under license.

A company of  **Manulife** Investment Management

SEC file number: 811-22733
8250SP 9/1/22

[Click here for the prospectus](#)
[Click here for the Statement of Additional Information](#)