



Touchstone Bond Fund

April 28, 2023

Before you invest, you may want to review the Fund's prospectus, which contains information about the Fund and its risks. The Fund's prospectus and Statement of Additional Information, both dated April 28, 2023, as amended from time to time, are incorporated by reference into this summary prospectus. For free paper or electronic copies of the Fund's prospectus and other information about the Fund, go to TouchstoneInvestments.com/Resources, call 1.800.543.0407, or ask the insurance company that offers your variable annuity or variable life insurance contract or your financial intermediary.

TOUCHSTONE BOND FUND SUMMARY**The Fund's Investment Goal**

The Touchstone Bond Fund (the "Fund") seeks to provide as high a level of current income as is consistent with the preservation of capital. Capital appreciation is a secondary goal.

The Fund's Fees and Expenses

This table describes the fees and expenses that you may pay if you buy, hold and sell shares of the Fund, but does not reflect the effect of any fees or other expenses of any variable annuity or variable life insurance product. If variable annuity or variable life contract fees were included, expenses would be higher:

| | Class I | Class SC |
|---|----------------------|----------|
| Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment) | | |
| Management Fees ⁽¹⁾ | 0.38% | 0.38% |
| Other Expenses | | |
| Shareholder Service Fees | 0.00% | 0.07% |
| Other Operating Expenses | 0.36% | 0.31% |
| Total Other Expenses | 0.36% | 0.38% |
| Acquired Fund Fees and Expenses (AFFE) | 0.02% | 0.02% |
| Total Annual Fund Operating Expenses ⁽²⁾ | 0.76% | 0.78% |
| Fee Waiver and/or Expense Reimbursement ⁽³⁾ | (0.13)% | 0.00% |
| Total Annual Fund Operating Expenses After Fee Waiver and/or Expense Reimbursement ⁽²⁾⁽³⁾ | 0.63% ⁽⁴⁾ | 0.78% |

⁽¹⁾ Management Fees have been restated to reflect contractual changes to the Fund's Investment Advisory Agreement effective January 1, 2023.

⁽²⁾ Total Annual Fund Operating Expenses include Acquired Fund Fees and Expenses and will differ from the ratios of expenses to average net assets that are included in the Fund's annual report for the fiscal year ended December 31, 2022.

⁽³⁾ Touchstone Advisors, Inc. (the "Adviser" or "Touchstone Advisors") and Touchstone Variable Series Trust (the "Trust") have entered into a contractual expense limitation agreement whereby Touchstone Advisors will waive a portion of its fees or reimburse certain Fund expenses (excluding dividend and interest expenses relating to short sales; interest; taxes; brokerage commissions and other transaction costs; portfolio transaction and investment related expenses, including expenses associated with the Fund's liquidity providers; other expenditures which are capitalized in accordance with U.S. generally accepted accounting principles; the cost of "Acquired Fund Fees and Expenses", if any; and other extraordinary expenses not incurred in the ordinary course of business) in order to limit annual Fund operating expenses to 0.61% and 0.91% of average daily net assets for Class I and Class SC shares, respectively. This contractual expense limitation is effective through April 29, 2024, but can be terminated by a vote of the Board of Trustees of the Trust (the "Board") if it deems the termination to be beneficial to the Fund's shareholders. The terms of the contractual expense limitation agreement provide that Touchstone Advisors is entitled to recoup, subject to

approval by the Board, such amounts waived or reimbursed for a period of up to three years from the date on which the Adviser reduced its compensation or assumed expenses for the Fund. The Fund will make repayments to the Adviser only if such repayment does not cause the annual Fund operating expenses (after the repayment is taken into account) to exceed both (1) the expense cap in place when such amounts were waived or reimbursed and (2) the Fund's current expense limitation.

⁽⁴⁾ Total Annual Fund Operating Expenses After Fee Waiver and/or Expense Reimbursement will differ from the ratio of net expenses to average net assets that is included in the Fund's annual report for the fiscal year ended December 31, 2022 due to contractual changes in the Fund's expense limitation agreement effective January 1, 2023.

Example. This example is intended to help you compare the cost of investing in the Fund with the cost of investing in other mutual funds. The example does not include expenses incurred from investing through a variable annuity or a variable life insurance product. If the example included these expenses, the figures shown would be higher. The example assumes that you invest \$10,000 in the Fund for the time periods indicated and then redeem all of your shares at the end of those periods. The example also assumes that your investment has a 5% return each year, that the Fund's operating expenses remain the same and that all fee waivers or expense limits for the Fund will expire after one year. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | <u>Class I</u> | <u>Class SC</u> |
|----------|----------------|-----------------|
| 1 Year | \$ 64 | \$ 80 |
| 3 Years | \$230 | \$249 |
| 5 Years | \$410 | \$433 |
| 10 Years | \$930 | \$966 |

Portfolio Turnover. The Fund pays transaction costs, such as brokerage commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs. These costs, which are not reflected in total annual Fund operating expenses or in the example, affect the Fund's performance. During the most recent fiscal year, the Fund's portfolio turnover rate was 163% of the average value of its portfolio.

The Fund's Principal Investment Strategies

Under normal conditions, the Fund invests at least 80% of its assets (including borrowing for investment purposes) in bonds. This is a non-fundamental investment policy that the Fund can change upon 60 days prior notice to shareholders. Bonds include mortgage-related securities, asset-backed securities, government securities (both U.S. government securities and foreign sovereign debt), and corporate debt securities. The Fund may engage in frequent and active trading as part of its principal investment strategy.

In deciding which securities to buy and sell for the Fund, the Fund's sub-adviser, Fort Washington Investment Advisors, Inc. ("Fort Washington"), analyzes the overall investment opportunities and risks in different sectors of the debt securities markets by focusing on maximizing total return while reducing volatility of the Fund's portfolio.

In building the Fund's portfolio, Fort Washington primarily invests in investment-grade debt securities, but may invest up to 30% of the Fund's total assets in non-investment-grade debt securities rated as low as B by a Nationally Recognized Statistical Rating Organization ("NRSRO"). Non-investment-grade debt securities are often referred to as "junk bonds" and are considered speculative. The Fund's investment policies are based on credit ratings at the time of purchase. The Fund may also invest up to 20% of its total assets in foreign-issued debt denominated in either the U.S. dollar or a foreign currency. Foreign-issued debt may include debt securities of emerging market countries.

Additionally, in order to implement its investment strategy, the Fund may invest in collateralized loan obligations, mortgage dollar-roll transactions and reverse repurchase agreements, and in derivatives including forwards and futures contracts, interest rate and credit default swap agreements, and options. Mortgage “dollar rolls” are transactions in which mortgage-backed securities are sold for delivery in the current month and the seller simultaneously contracts to repurchase substantially similar securities on a specified future date. These investments may be used for both gaining and hedging market exposure, to adjust the Fund’s duration, to manage interest rate risk, and for any other purposes consistent with the Fund’s investment strategies and limitations.

The Fund’s Principal Risks

The Fund’s share price will fluctuate. You could lose money on your investment in the Fund and the Fund could also return less than other investments. Investments in the Fund are not bank guaranteed, are not deposits, and are not insured by the Federal Deposit Insurance Corporation or any other federal government agency. As with any mutual fund, there is no guarantee that the Fund will achieve its investment goal. You can find more information about the Fund’s investments and risks under the “Principal Investment Strategies and Risks” section of the Fund’s prospectus. The Fund is subject to the principal risks summarized below.

Fixed-Income Risk: The market value of the Fund’s fixed-income securities responds to economic developments, particularly interest rate changes, as well as to perceptions about the creditworthiness of individual issuers, including governments. Generally, the Fund’s fixed-income securities will decrease in value if interest rates rise and increase in value if interest rates fall. Normally, the longer the maturity or duration of the fixed-income securities the Fund owns, the more sensitive the value of the Fund’s shares will be to changes in interest rates.

- **Asset-Backed Securities Risk:** Asset-backed securities are fixed-income securities backed by other assets such as credit card, automobile or consumer loan receivables, retail installment loans, or participations in pools of leases. The values of these securities are sensitive to changes in the credit quality of the underlying collateral, the credit strength of any credit enhancement feature, changes in interest rates, and, at times, the financial condition of the issuer.
- **Credit Risk:** The fixed-income securities in the Fund’s portfolio are subject to the possibility that a deterioration, whether sudden or gradual, in the financial condition of an issuer, or a deterioration in general economic conditions, could cause an issuer to fail to make timely payments of principal or interest, when due. This may cause the issuer’s securities to decline in value.
- **Interest Rate Risk:** In general, when interest rates rise, the prices of debt securities fall, and when interest rates fall, the prices of debt securities rise. The price volatility of a debt security also depends on its maturity. Longer-term securities are generally more volatile, so the longer the average maturity or duration of these securities, the greater their price risk. Duration is a measure used to determine the sensitivity of a security’s price to changes in interest rates that incorporates a security’s yield, coupon, final maturity, and call features, among other characteristics. The longer a fixed-income security’s duration, the more sensitive it will be to changes in interest rates. Maturity, on the other hand, is the date on which a fixed-income security becomes due for payment of principal. Recent and potential future changes in government policy may affect interest rates.
- **Investment-Grade Debt Securities Risk:** Investment-grade debt securities may be downgraded by a nationally recognized statistical rating organization (“NRSRO”) to below-investment-grade status, which would increase the risk of holding these securities. Investment-grade debt securities rated in the lowest rating category by a NRSRO involve a higher degree of risk than fixed-income securities with higher credit ratings.
- **Mortgage-Backed Securities Risk:** Mortgage-backed securities are fixed-income securities representing an interest in a pool of underlying mortgage loans. Mortgage-backed securities are sensitive to changes in interest rates, but may respond to these changes differently from other fixed-income securities due to the possibility of prepayment of the underlying mortgage loans. Mortgage-backed securities may fluctuate in

price based on deterioration in the value of the collateral underlying the pool of mortgage loans, which may result in the collateral being worth less than the remaining principal amount owed on the mortgages in the pool.

- **Non-Investment-Grade Debt Securities Risk:** Non-investment-grade debt securities are sometimes referred to as “junk bonds” and are considered speculative with respect to their issuers’ ability to make payments of interest and principal. There is a high risk that the Fund could suffer a loss from investments in non-investment-grade debt securities caused by the default of an issuer of such securities. Non-investment-grade debt securities may also be less liquid than investment-grade debt securities.
- **Prepayment Risk:** The risk that a debt security may be paid off and proceeds reinvested earlier than anticipated. Prepayment impacts both the interest rate sensitivity of the underlying asset, such as an asset-backed or mortgage-backed security and its cash flow projections. Therefore, prepayment risk may make it difficult to calculate the average duration of the Fund’s asset- or mortgage-backed securities which in turn would make it difficult to assess the interest rate risk of the Fund.
- **U.S. Government Securities Risk:** Certain U.S. government securities are backed by the right of the issuer to borrow from the U.S. Treasury while others are supported only by the credit of the issuer or instrumentality. While the U.S. government is able to provide financial support to U.S. government-sponsored agencies or instrumentalities, no assurance can be given that it will always do so. Such securities are generally neither issued nor guaranteed by the U.S. Treasury.
- **Rating Agency Risk:** Ratings represent a NRSRO opinion regarding the quality of the security and are not a guarantee of quality. NRSROs may fail to timely update credit ratings in response to subsequent events. In addition, NRSROs are subject to an inherent conflict of interest because they are often compensated by the same issuers whose securities they grade.

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, and for varying periods of time, result in unusually high market volatility, which could negatively impact the Fund’s performance and cause the Fund to experience illiquidity, shareholder redemptions, or other potentially adverse effects. Reduced liquidity in credit and fixed-income markets could negatively affect issuers worldwide. Financial institutions could suffer losses as interest rates rise or economic conditions deteriorate. In addition, the Fund’s service providers are susceptible to operational and information or cyber security risks that could result in losses to a Fund and its shareholders. Cyber security breaches are either intentional or unintentional events that allow an unauthorized party to gain access to Fund assets, customer data, or proprietary information, or cause a Fund or Fund service provider to suffer data corruption or lose operational functionality. A cyber security breach could result in the loss or theft of customer data or funds, loss or theft of proprietary information or corporate data, physical damage to a computer or network system, or costs associated with system repairs, any of which could have a substantial impact on a Fund. Such incidents could affect issuers in which a Fund invests, thereby causing the Fund’s investments to lose value.

Management Risk: In managing the Fund’s portfolio, the Adviser engages one or more sub-advisers to make investment decisions for a portion of or the entire portfolio. There is a risk that the Adviser may be unable to identify and retain sub-advisers who achieve superior investment returns relative to other similar sub-advisers.

Collateralized Loan Obligations Risk: Typically, collateralized loan obligations are privately offered and sold, and thus are not registered under the securities laws. As a result, the Fund may in certain circumstances characterize its investments in collateralized loan obligations as illiquid. Collateralized loan obligations are subject to the typical risks associated with debt instruments (i.e., interest rate risk and credit risk). Additional risks of

collateralized loan obligations include the possibility that distributions from collateral securities will be insufficient to make interest or other payments, the potential for a decline in the quality of the collateral, and the possibility that the Fund may invest in a subordinate tranche of a collateralized loan obligation.

Derivatives Risk: The use of derivatives may expose the Fund to additional risks that it would not be subject to if it invested directly in the securities underlying those derivatives. Risks associated with derivatives may include the risk that the derivative does not correlate well with the security, index, or currency to which it relates, the risk that the Fund will be unable to sell or close out the derivative due to an illiquid market, the risk that the counterparty may be unwilling or unable to meet its obligations, and the risk that the derivative could expose the Fund to the risk of magnified losses resulting from leverage. These additional risks could cause the Fund to experience losses to which it would otherwise not be subject.

- **Forward Foreign Currency Exchange Contract Risk:** A forward foreign currency exchange contract is an agreement to buy or sell a specific currency at a future date and at a price set at the time of the contract. Forward foreign currency exchange contracts may reduce the risk of loss from a change in value of a currency, but they also limit any potential gains and do not protect against fluctuations in the value of the underlying position.
- **Futures Contracts Risk:** The risks associated with the Fund's futures positions include liquidity and counterparty risks associated with derivative instruments.
- **Leverage Risk:** Leverage occurs when the Fund uses borrowings, derivatives (such as futures or options), or similar instruments or techniques to gain exposure to investments in an amount that exceeds the Fund's initial investment. The use of leverage magnifies changes in the Fund's net asset value and thus may result in increased portfolio volatility and increased risk of loss. Leverage can create an interest expense that may lower the Fund's overall returns. There can be no guarantee that a leveraging strategy will be successful.
- **Options Risk:** Options trading is a highly specialized activity that involves investment techniques and risks different from those associated with ordinary portfolio securities transactions. The value of options can be highly volatile, and their use can result in loss if the sub-adviser is incorrect in its expectation of price fluctuations. Options, whether exchange traded or over-the-counter, may also be illiquid.
- **Swap Agreements Risk:** Swap agreements ("swaps") are individually negotiated and structured to include exposure to a variety of different types of investments or market factors. Swaps may increase or decrease the overall volatility of the investments of the Fund and its share price. The performance of swaps may be affected by a change in the specific interest rate, currency, or other factors that determine the amounts of payments due to and from the Fund. A swap can be a form of leverage, which can magnify the Fund's gains or losses.

Foreign Securities Risk: Investing in foreign securities poses additional risks since political and economic events unique in a country or region will affect those markets and their issuers, while such events may not necessarily affect the U.S. economy or issuers located in the United States. In addition, investments in foreign securities are generally denominated in foreign currency. As a result, changes in the value of those currencies compared to the U.S. dollar may affect (positively or negatively) the value of the Fund's investments. There are also risks associated with foreign accounting standards, government regulation, market information, and clearance and settlement procedures. Foreign markets may be less liquid and more volatile than U.S. markets and offer less protection to investors.

- **Emerging Markets Risk:** Emerging markets may be more likely to experience political turmoil or rapid changes in market or economic conditions than more developed countries. In addition, the financial stability of issuers (including governments) in emerging market countries may be more precarious than that of issuers in other countries.

- **Sovereign Debt Risk:** The actions of foreign governments concerning their respective economies could have an important effect on their ability or willingness to service their sovereign debt. Such actions could have significant effects on market conditions and on the prices of securities and instruments held by the Fund, including the securities and instruments of foreign private issuers.

Mortgage Dollar Roll Risk: Mortgage “dollar rolls” are transactions in which mortgage-backed securities are sold for delivery in the current month and the seller simultaneously contracts to repurchase substantially similar securities on a specified future date. If the broker-dealer to whom the Fund sells the security becomes insolvent, the Fund’s right to repurchase the security may be restricted. Other risks involved in entering into mortgage dollar rolls include the risk that the value of the security may change adversely over the term of the mortgage dollar roll and that the security the Fund is required to repurchase may be worth less than the security that the Fund held.

Portfolio Turnover Risk: Frequent and active trading may result in greater expenses to the Fund, which may lower the Fund’s performance and may result in the realization of substantial capital gains, including net short-term capital gains although owners of variable annuity contracts or variable life policies are not expected to be subject to federal income tax on distributions of capital gains by the Fund. As a result, high portfolio turnover may reduce the Fund’s returns.

The Fund’s Performance

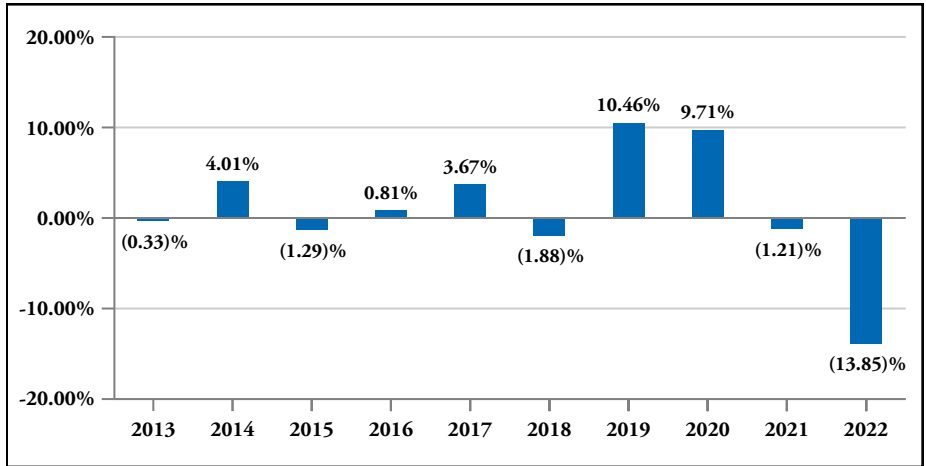
On October 27, 2017, the Sentinel Variable Products Bond Fund, previously a series of Sentinel Variable Products Trust (the “Predecessor Fund”), was reorganized into Class I shares of the Fund. As a result of the reorganization, the performance history of the Predecessor Fund was assumed by the Fund. Performance information prior to October 27, 2017 is that of the Predecessor Fund.

The bar chart and the performance table below illustrate some indication of the risks and volatility of an investment in the Fund by showing changes in the Fund’s Class I share performance from calendar year to calendar year and by showing how the Fund’s Class I share average annual total returns for one year, five years, and ten years compare with the Bloomberg U.S. Aggregate Bond Index.

The performance information shown does not reflect fees that are paid by the separate accounts through which shares of the Fund are sold. Inclusion of those fees would reduce the total return figures for all periods. Past performance does not necessarily indicate how the Fund will perform in the future. More recent performance information is available at no cost by visiting TouchstoneInvestments.com or by calling 1.800.543.0407.

The Fund returns shown in the table below are before taxes. After-tax returns are not relevant to investors who hold their Fund shares through tax-deferred arrangements. Please see the “Distribution and Taxes” section of the Fund’s prospectus for more information.

Touchstone Bond Fund — Class I Shares Total Return as of December 31



Best Quarter: 2nd Quarter 2020 7.34%
 Worst Quarter: 1st Quarter 2022 (5.99)%

Class SC shares of the Fund commenced operations on July 10, 2019. Performance shown prior to the commencement date of Class SC shares is that of Class I shares or the Predecessor Fund, as applicable. Class SC shares would have had substantially similar annual returns to Class I shares because the shares are invested in the same portfolio of securities and the annual returns differ only to the extent that the share classes do not have the same expenses.

**Average Annual Total Returns
 For the periods ended December 31, 2022**

| | <u>1 Year</u> | <u>5 Years</u> | <u>10 Years</u> |
|--|---------------|----------------|-----------------|
| Touchstone Bond Fund - Class I | (13.85)% | 0.24% | 0.80% |
| Touchstone Bond Fund - Class SC | (13.90)% | 0.08% | 0.57% |
| Bloomberg U.S. Aggregate Bond Index (reflects no deduction for fees, expenses or taxes) | (13.01)% | 0.02% | 1.06% |

The Fund's Management**Investment Adviser**

Touchstone Advisors, Inc. serves as the Fund's investment adviser.

| Sub-Adviser | Portfolio Managers | Investment Experience with the Fund | Primary Title with Sub-Adviser |
|---|---------------------------|--|--|
| Fort Washington Investment Advisors, Inc. | Daniel J. Carter, CFA | Since inception in October 2017 | Managing Director and Senior Portfolio Manager |
| | Austin R. Kummer, CFA | Since inception in October 2017 | Vice President and Senior Portfolio Manager |

Buying and Selling Fund Shares

You cannot buy or sell shares of the Fund directly. You can invest indirectly in the Fund through your purchase of a variable annuity contract or variable life policy. Please see the variable contract prospectus for additional investment information.

Tax Information

The dividends and distributions paid by the Fund will consist of ordinary income, capital gains or some combination of both. Because shares of the Fund must be purchased through separate accounts used to fund variable life and variable annuity insurance contracts, such dividends and distributions will be exempt from current taxation to you if you leave such amounts to accumulate within a separate account. Please see the variable contract prospectus for additional tax information.

Payments to Sponsoring Insurance Companies and Other Financial Intermediaries

The Fund or its distributor (and related companies) may pay broker/dealers or other financial intermediaries (such as insurance companies or their related companies) for the sale and retention of variable contracts that offer Fund shares and/or for other services. These payments may create a conflict of interest for a financial intermediary, or may be a factor in the insurance company's decision to include the Fund as an investment option in its variable contract. For more information, ask your financial adviser, visit your financial intermediary's website, or consult the variable contract prospectus or the Fund's prospectus.