

Virtus Asset Trust

Supplement dated July 23, 2018 to the Prospectuses and
Statement of Additional Information (“SAI”) dated July 23, 2018

IMPORTANT NOTICE

Availability of Shares

Class T Shares are not currently available for purchase.

Investors should retain this supplement for future reference.

VAT 8622/ClassTNotAvailable (7/2018)

Virtus Seix Floating Rate High Income Fund

A: SFRAX

C: SFRCX

I: SAMBX

R6: SFRZX

T: SFRTX

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, statement of additional information (SAI), annual report and other information about the fund online at virtus.com/products/prospectuses.

You can also get this information at no cost by calling 800-243-1574 or by sending an e-mail to: virtus.investment.partners@virtus.com. If you purchase shares of the fund through a broker-dealer or other financial intermediary (such as a bank), the prospectus and other information will also be available from your financial intermediary.

The fund's prospectus and SAI, both dated July 23, 2018, are incorporated by reference into this Summary Prospectus.

Investment Objective

The fund has an investment objective of attempting to provide a high level of current income.

Fees and Expenses

The tables below illustrate the fees and expenses that you may pay if you buy and hold shares of the fund. You may qualify for sales charge discounts if you and your family invest, or agree to invest in the future, at least \$50,000 in Virtus Funds. You may qualify for sales charge discounts in Class T Shares if you invest at least \$250,000 in the fund. Information about these and other discounts is available: (i) from your financial advisor or other financial intermediary; (ii) under "Sales Charges" on page 182 of the fund's statutory prospectus; (iii) with respect to purchase of shares through specific intermediaries, in Appendix A to the fund's statutory prospectus, entitled "Intermediary Sales Charge Discounts and Waivers;" and (iv) under "Alternative Purchase Arrangements" on page 117 of the fund's statement of additional information.

The Virtus Seix Floating Rate High Income Fund, a series of Virtus Asset Trust, is the successor of the RidgeWorth Seix Floating Rate High Income Fund, a series of RidgeWorth Funds ("Predecessor Fund"), resulting from a reorganization of the Predecessor Fund with and into the fund.

| Shareholder Fees (fees paid directly from your investment) | Class A | Class C | Class I | Class R6 | Class T |
|---|---------|----------------------|---------|----------|---------|
| Maximum Sales Charge (load) Imposed on Purchases (as a percentage of offering price) | 2.75% | None | None | None | 2.50% |
| Maximum Deferred Sales Charge (load) (as a percentage of the lesser of purchase price or redemption proceeds) | None | 1.00% ^(a) | None | None | None |

| Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment) | Class A | Class C | Class I | Class R6 | Class T |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| Management Fees | 0.41% | 0.41% | 0.41% | 0.41% | 0.41% |
| Distribution and Shareholder Servicing (12b-1) Fees | 0.25% | 1.00% | None | None | 0.25% |
| Other Expenses | 0.32% ^(b) | 0.23% ^(b) | 0.31% ^(b) | 0.21% ^(b) | 0.32% ^(c) |
| Acquired Fund Fees and Expenses | 0.02% | 0.02% | 0.02% | 0.02% | 0.02% |
| Total Annual Fund Operating Expenses ^(d) | 1.00% | 1.66% | 0.74% | 0.64% | 1.00% |
| Less: Fee Waivers and/or Expense Reimbursements ^(e) | (0.04)% | (0.12)% | (0.10)% | (0.10)% | (0.04)% |
| Total Annual Fund Operating Expenses After Expense Reimbursements ^{(d)(e)} | 0.96% | 1.54% | 0.64% | 0.54% | 0.96% |

(a) The deferred sales charge is imposed on Class C Shares redeemed during the first year only.

(b) Restated to reflect current fees and expenses.

(c) Estimated for current fiscal year, as annualized.

(d) The Total Annual Fund Operating Expenses do not correlate to the ratio of expenses to average net assets appearing in the Financial Highlights tables, which tables reflect only the operating expenses of the fund and do not include acquired fund fees and expenses.

(e) The fund's investment adviser has contractually agreed to limit the fund's total operating expenses (excluding certain expenses, such as front-end or contingent deferred sales charges, taxes, leverage expenses, interest, brokerage commissions, expenses incurred in connection with any merger or reorganization, unusual or infrequently occurring expenses (such as litigation), acquired fund fees and expenses, and dividend expenses, if any) so that such expenses do not exceed 0.94% for Class A Shares, 1.52% for Class C Shares, 0.62% for Class I Shares, 0.52% for Class R6 Shares and 0.94% for Class T Shares through July 31, 2019. Following the contractual period, the adviser may discontinue these expense reimbursement arrangements at any time. Under certain conditions, the adviser may recapture operating expenses reimbursed under these arrangements for a period of three years after the date on which it was incurred or waived by Virtus.

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 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. It shows your costs if you sold your shares at the end of the period or continued to hold them. The example also assumes that your investment has a 5% return each year, that the fund's operating expenses remain the same and that the expense reimbursement agreement remains in place for the contractual period. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

| | Share Status | 1 Year | 3 Years | 5 Years | 10 Years |
|----------|--------------|--------|---------|---------|----------|
| Class A | Sold or Held | \$370 | \$581 | \$808 | \$1,462 |
| Class C | Sold | \$257 | \$512 | \$891 | \$1,955 |
| | Held | \$157 | \$512 | \$891 | \$1,955 |
| Class I | Sold or Held | \$65 | \$226 | \$402 | \$909 |
| Class R6 | Sold or Held | \$55 | \$195 | \$347 | \$789 |
| Class T | Sold or Held | \$345 | \$557 | \$785 | \$1,440 |

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 most recent fiscal period, the fund's portfolio turnover rate was 55% of the average value of its portfolio.

Investments, Risks and Performance

Principal Investment Strategies

Under normal circumstances, the fund invests at least 80% of its net assets (plus any borrowings for investment purposes) in a combination of first- and second-lien senior floating rate loans and other floating rate debt securities. These loans are loans made by banks and other large financial institutions to various companies and are senior in the borrowing companies' capital structure. Coupon rates are generally floating, not fixed, and are tied to a benchmark lending rate, the most popular of which is the London Interbank Offered Rate ("LIBOR") or are set at a specified floor, whichever is higher.

The fund invests all or substantially all of its assets in debt securities that are rated below investment grade by the Merrill Composite Rating (sometimes referred to as "junk bonds") or in comparable unrated securities, and floating rate loans. The fund may also invest up to 20% of its net assets in any combination of junior debt securities or securities with a lien on collateral lower than a senior claim on collateral, high yield fixed-rate bonds, investment grade fixed income debt obligations, asset-backed securities (such as special purpose trusts investing in bank loans), and short-term investments, including money market securities and repurchase agreements. The fund may invest a portion of its assets in securities that are restricted as to resale.

In selecting investments for purchase and sale, the subadviser will emphasize loans and securities which are within the segment of the high yield market it has targeted, which are loans and securities rated below investment grade or unrated loans and securities that the subadviser believes are of comparable quality. The fund may invest up to 20% of its total assets in senior loans made to non-U.S. borrowers provided that no more than 5% of the portfolio's loans are non-U.S. dollar denominated. There are no limits on the fund's average-weighted maturity or on the remaining maturities of individual securities in which the fund may invest. The fund may also engage in certain hedging transactions.

In order to meet short-term liquidity needs, the fund employs a variety of techniques, such as investing in highly-liquid fixed income securities and holding a portion of its assets in cash. Although not a principal investment strategy, the fund may, under certain market conditions, borrow an amount up to 33 1/3% of its total assets (including the amount borrowed) for investment purposes, to meet redemption requests and for temporary, extraordinary or emergency purposes.

Some types of senior loans in which the fund may invest require that an open loan for a specific amount be continually offered to a borrower. These types of senior loans are commonly referred to as revolvers. Because revolvers contractually obligate the lender (and therefore those with an interest in the loan) to fund the revolving portion of the loan at the borrower's discretion, the fund must have funds sufficient to cover its contractual obligation. Therefore, the fund will maintain, on a daily basis, high-quality, liquid assets in an amount at least equal in value to its contractual obligation to fulfill the revolving senior loan. The fund will not encumber any assets that are otherwise encumbered.

The fund will limit its investments in such obligations to no more than 10% of the fund's total assets. In addition, to implement its investment strategy, the fund may buy or sell derivative instruments (such as swaps, including credit default swaps, futures, credit linked notes, options and warrants) to use as a substitute for a purchase or sale of a position in the underlying assets and/or as part of a strategy designed to reduce exposure to other risks, such as interest rate or credit risks. The fund

may count the value of certain derivatives with floating rate debt or high yield bond characteristics towards its policy to invest, under normal circumstances, at least 80% of its net assets in a combination of first- and second-lien senior floating rate loans and other floating rate debt securities.

Principal Risks

The fund may not achieve its objective(s), and it is not intended to be a complete investment program. The value of the fund's investments that supports your share value may decrease. If between the time you purchase shares and the time you sell shares the value of the fund's investments decreases, you will lose money. Investment values can decrease for a number of reasons. Conditions affecting the overall economy, specific industries or companies in which the fund invests can be worse than expected, and investments may fail to perform as the subadviser expects. As a result, the value of your shares may decrease. Purchase and redemption activities by fund shareholders may impact the management of the fund and its ability to achieve its investment objective(s). The redemption by one or more large shareholders or groups of shareholders of their holdings in the fund could have an adverse impact on the remaining shareholders in the fund including by accelerating the realization of capital gains and increasing the fund's transaction costs. The principal risks of investing in the fund are:

- > **Asset-Backed Securities.** The risk that changes in interest rates will cause both extension and prepayment risks for asset-backed securities in which the fund invests, or that an impairment of the value of collateral underlying such securities will cause the value of the securities to decrease.
- > **Call Risk.** The risk that issuers will prepay fixed rate obligations when interest rates fall, forcing the fund to reinvest in obligations with lower interest rates than the original obligations and otherwise not benefit fully from the increase in value that other fixed income securities experience when interest rates decline.
- > **Credit Risk.** The risk that the issuer of a security will fail to pay interest or principal in a timely manner, or that negative perceptions of the issuer's ability to make such payments will cause the price of the security to decline. Debt securities rated below investment grade are especially susceptible to this risk.
- > **Derivatives Risk.** The risk that the fund will incur a loss greater than the fund's investment in, or will experience greater share price volatility as a result of investing in, a derivative contract. Derivatives may include, among other things, futures, options, forwards and swap agreements and may be used in order to hedge portfolio risks, create leverage, or to attempt to increase yield.
- > **Foreign Investing Risk.** The risk that the prices of foreign securities in the fund's portfolio will be more volatile than those of domestic securities, or will be negatively affected by currency fluctuations, less regulated or liquid securities markets, or economic, political or other developments.
- > **High-Yield/High-Risk Fixed Income Securities (Junk Bonds) Risk.** The risk that the issuers of high-yield/high-risk securities in the fund's portfolio will default, that the prices of such securities will be volatile, and that the securities will not be liquid.
- > **Income Risk.** The risk that income received from the fund will vary widely over the short- and/or long-term and/or be less than anticipated if the proceeds from maturing securities in the fund are reinvested in lower-yielding securities.
- > **Illiquid and Restricted Securities.** Certain securities in which a fund invests may be difficult to sell at the time and price beneficial to the fund, for example due to low trading volumes or legal restrictions.
- > **Interest Rate Risk.** The risk that when interest rates rise, the values of the fund's debt securities, especially those with longer maturities, will fall.
- > **Loan Risk.** The risks that, in addition to the risks typically associated with high-yield/high-risk fixed income securities, loans (including floating rate loans) in which the fund invests may be unsecured or not fully collateralized, may be subject to restrictions on resale, and/or some loans may trade infrequently on the secondary market. Loans settle on a delayed basis, potentially leading to the sale proceeds of loans not being available to meet redemptions for a substantial period of time after the sale of the loans.
- > **Market Volatility Risk.** The risk that the value of the securities in which the fund invests may go up or down in response to the prospects of individual issuers and/or general economic conditions. Such price changes may be temporary or may last for extended periods.
- > **Short-Term Investments Risk.** The risk that the fund's short-term investments will not provide the liquidity or protection intended or will prevent the fund from experiencing positive movements in the fund's principal investment strategies.
- > **Unrated Fixed Income Securities Risk.** The risk that the subadviser will be unable to accurately assess the quality of an unrated fixed income security, so that the fund invests in a security with greater risk than intended, or that the liquidity of unrated fixed income securities in which the fund invests will be hindered, making it difficult for the fund to sell them.
- > **U.S. Government Securities Risk.** The risk that U.S. Government securities in the fund's portfolio will be subject to price fluctuations, or that an agency or instrumentality will default on an obligation not backed by the full faith and credit of the United States.

Performance Information

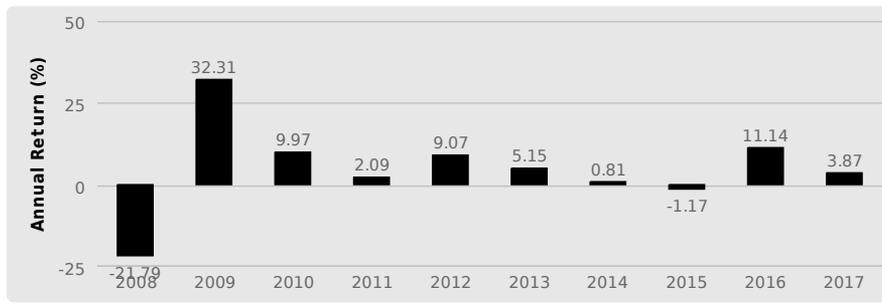
The bar chart and table below provide some indication of the potential risks of investing in the fund. The fund's past performance, before and after taxes, is not necessarily an indication of how the fund will perform in the future. The fund has adopted the past performance of the Predecessor Fund as its own. The Predecessor Fund and the fund have identical investment objectives and strategies.

The bar chart shows changes in the fund's performance from year to year over a 10-year period. The table shows how the fund's average annual returns compare to those of a broad-based securities market index that reflects the market sectors in which the fund invests. Updated performance information is available at virtus.com or by calling 800-243-1574.

Performance for Class T Shares is not shown here as Class T Shares had not begun operations prior to the date of this prospectus.

Calendar year total returns for Class I Shares

Returns do not reflect sales charges applicable to other share classes and would be lower if they did.



Best Quarter: Q2/2009: 12.47% Worst Quarter: Q4/2008: -18.40% Year to Date (6/30/18): 1.87%

Average Annual Total Returns (for the periods ended 12/31/17)

Returns reflect deduction of maximum sales charges and full redemption at end of periods shown.

| | 1 Year | 5 Years | 10 Years | Class R6 Since Inception (1/30/15) |
|--|--------|---------|----------|------------------------------------|
| Class I | | | | |
| Return Before Taxes | 3.87% | 3.88% | 4.36% | — |
| Return After Taxes on Distributions | 1.97% | 1.90% | 2.32% | — |
| Return After Taxes on Distributions and Sale of Fund Shares | 2.17% | 2.04% | 2.47% | — |
| Class A | | | | |
| Return Before Taxes | 0.59% | 2.99% | 3.75% | — |
| Class C | | | | |
| Return Before Taxes | 2.82% | 2.95% | 3.40% | — |
| Class R6 | | | | |
| Return Before Taxes | 3.97% | — | — | 4.68% |
| Credit Suisse Leveraged Loan Index (reflects no deduction for fees, expenses or taxes) | 4.25% | 4.33% | 4.57% | 4.54% |

The Credit Suisse Leveraged Loan Index is a market-weighted index that tracks the investable universe of the U.S. dollar-denominated leveraged loan market. The index is calculated on a total return basis. The index is unmanaged and not available for direct investment.

After-tax returns are calculated using the historical highest individual federal marginal income tax rates and do not reflect the impact of state and local taxes. After-tax returns are shown only for Class I Shares; after-tax returns for other classes will vary. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. After-tax returns are not relevant to investors who hold fund shares in tax-deferred accounts or to shares held by non-taxable entities. In certain cases, the Return After Taxes on Distributions and Sale of Fund Shares for a period may be higher than other return figures for the same period. This will occur when a capital loss is realized upon the sale of fund shares and provides an assumed tax benefit that increases the return.

Management

The fund's investment adviser is Virtus Fund Advisers, LLC.

The fund's subadviser is Seix Investment Advisors LLC ("Seix").

Portfolio Management

- > *Vincent Flanagan*, Vice President and Portfolio Manager of Seix, has co-managed the fund since 2011.
- > *George Goudelias*, Managing Director and Head of Leveraged Finance of Seix, has managed the fund since 2006.

Purchase and Sale of Fund Shares

Minimum initial investments applicable to Class A and Class C Shares:

- \$2,500, generally
- \$100 for Individual Retirement Accounts (IRAs), systematic purchase or exchange accounts
- No minimum for defined contribution plans, asset-based fee programs, profit-sharing plans or employee benefit plans.

Minimum additional investments applicable to Class A and Class C Shares:

- \$100, generally
- No minimum for defined contribution plans, asset-based fee programs, profit-sharing plans or employee benefit plans.

For Class I Shares, the minimum initial purchase is \$100,000; there is no minimum for additional purchases.

Class R6 Shares are available only to the following investors without a minimum initial investment or minimum additional purchases: certain employer-sponsored retirement plans, including Section 401(k), 403(b) and 457, profit-sharing, money purchase pension and defined benefit plans and non-qualified deferred compensation plans, in each case provided that plan level or omnibus accounts are held on the books of the fund. Other institutional investors may be permitted to purchase Class R6 Shares subject to the fund's determination of eligibility and may be subject to a \$2,500,000 minimum initial investment requirement.

Class T Shares are available only through financial intermediaries. Your financial intermediary will provide you with the information you need to open an account and to buy or sell Class T Shares.

In general, you may buy or sell shares of the fund by mail or telephone on any business day. You also may buy and sell shares through a financial advisor, broker-dealer or other financial intermediary.

Taxes

The fund's distributions are taxable to you as either ordinary income or capital gains, except when your investment is through a tax-deferred arrangement, such as a 401(k) plan or an individual retirement account. Such tax-deferred arrangements may be taxed later upon withdrawal of monies from those arrangements.

Payments to Broker-Dealers and Other Financial Intermediaries

If you purchase the fund through a broker-dealer or other financial intermediary (such as a bank), the fund and its related companies may pay the intermediary for the sale of fund shares and related services. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary and your financial advisor to recommend the fund over another investment.

No compensation, administrative payments, sub-transfer agency payments or service payments are paid to brokers or other entities from fund assets or the Distributor's or an affiliate's resources on sales of or investments in Class R6 Shares. Class R6 Shares do not carry sales commissions or pay Rule 12b-1 fees, or make payments to brokers or other entities to assist in, or in connection with, the sale of the fund's shares.

Ask your financial advisor or visit your financial intermediary's website for more information.

Virtus Mutual Funds
P.O. Box 9874
Providence, RI 02940-8074