

Vanguard Admiral Funds
Vanguard Index Funds
Vanguard World Fund
Vanguard Tax-Managed Funds
Vanguard Variable Insurance Funds

Supplement Dated June 5, 2024, to the Statement of Additional Information

Important Changes to Vanguard Admiral Funds

Mid-Cap 400 Value Index Fund

Effective immediately, Awais Khan will no longer serve as portfolio manager of Vanguard S&P Mid-Cap Index Fund, Vanguard S&P Mid-Cap 400 Growth Index Fund, and Vanguard S&P Mid-Cap 400 Value Index Fund (the Funds).

Kenny Narzikul will continue to manage the Funds.

Each Fund•s investment objective, strategies, and policies remain unchanged.

Important Changes to Vanguard Index Funds

Vanguard Mid-Cap Index Fund, Vanguard Mid-Cap Growth Index Fund, and Vanguard Mid-Cap Value Index Fund

Effective immediately, Awais Khan will no longer serve as portfolio manager of Vanguard Mid-Cap Index Fund, Vanguard Mid-Cap Growth Index Fund, and Vanguard Mid-Cap Value Index Fund (the Funds).

Aaron Choi and Aurélie Denis will continue to co-manage the Funds.

Each Fund•s investment objective, strategies, and policies remain unchanged.

Important Changes to Vanguard World Fund

Vanguard Communication Services Index Fund, Vanguard Consumer Discretionary Index Fund, Vanguard Consumer Staples Index Fund, Vanguard Energy Index Fund, and Vanguard Utilities Index Fund

Effective immediately, Awais Khan will no longer serve as portfolio manager of Vanguard Communication Services Index Fund, Vanguard Consumer Discretionary Index Fund, Vanguard Consumer Staples Index Fund, Vanguard Energy Index Fund, and Vanguard Utilities Index Fund (the Funds).

Nick Birkett will continue to manage Vanguard Consumer Discretionary Index Fund, Vanguard Consumer Staples Index Fund, and Vanguard Energy Index Fund.

Walter Nejman will continue to manage Vanguard Communication Services Index Fund and Vanguard Utilities Index Fund.

Each Fund•s investment objective, strategies, and policies remain unchanged.

Important Changes to Vanguard Tax-Managed Funds

Vanguard Tax-Managed Capital Appreciation Fund

Effective immediately, Awais Khan will no longer serve as portfolio manager of Vanguard Tax-Managed Capital Appreciation Fund (the Fund).

Walter Nejman will continue to manage the Fund.

The Fund•s investment objective, strategies, and policies remain unchanged.

Important Changes to Vanguard Variable Insurance Funds

Vanguard Variable Insurance Funds,,Mid-Cap Index Portfolio

Effective immediately, Awais Khan will no longer serve as portfolio manager of Vanguard Variable Insurance Funds, Mid-Cap Index Portfolio (the Portfolio).

Aaron Choi will continue to manage the Portfolio.

The Portfolio•s investment objective, strategies, and policies remain unchanged.

Statement of Additional Information Text Changes

All references to Awais Khan in the Statement of Additional Information are hereby deleted in their entirety.

#### PART B

# VANGUARD® VARIABLE INSURANCE FUNDS STATEMENT OF ADDITIONAL INFORMATION

# April 26, 2024

This Statement of Additional Information is not a prospectus but should be read in conjunction with a Fund\*s current prospectus (dated April 26, 2024). To obtain, without charge, a prospectus or the most recent Annual Report to Shareholders, which contains the Fund\*s financial statements as hereby incorporated by reference, please contact The Vanguard Group, Inc. (Vanguard), or the insurance company sponsoring the accompanying variable life insurance or variable annuity contract.

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#### **DESCRIPTION OF THE TRUST**

Vanguard Variable Insurance Funds (the Trust) currently offers the following Funds1:

Balanced Portfolio Mid-Cap Index Portfolio
Capital Growth Portfolio Moderate Allocation Portfolio
Conservative Allocation Portfolio Money Market Portfolio
Diversified Value Portfolio Real Estate Index Portfolio<sup>2</sup>

Equity Income PortfolioShort-Term Investment-Grade PortfolioEquity Index PortfolioSmall Company Growth PortfolioGrowth PortfolioTotal Bond Market Index Portfolio

Global Bond Index Portfolio Total International Stock Market Index Portfolio

High Yield Bond Portfolio Total Stock Market Index Portfolio

International Portfolio

- 1 Individually, a Fund or a Portfolio; collectively, the Funds or the Portfolios.
- 2 Prior to January 18, 2018, the Fund was named the REIT Index Portfolio.

Each Fund offers only one class of shares (Investor Shares). Throughout this document, any references to "class" indicate how a Fund would operate if, in the future, the Fund issued more than one class of shares. The Trust has the ability to offer additional portfolios or classes of shares. There is no limit on the number of full and fractional shares that may be issued for a single portfolio or class of shares.

## Organization

The Trust was organized as a Maryland corporation in 1989 before becoming a Pennsylvania business trust later in 1989, and was reorganized as a Delaware statutory trust in 1998. The Trust is registered with the United States Securities and Exchange Commission (SEC) under the Investment Company Act of 1940 (the 1940 Act) as an open-end management investment company. All Portfolios within the Trust, other than the Growth and Real Estate Index Portfolios, are classified as diversified within the meaning of the 1940 Act. The Growth and Real Estate Index Portfolios are classified as nondiversified within the meaning of the 1940 Act.

Each Fund offers its shares to insurance companies that sponsor both annuity and life insurance contracts. An insurance company might offer some, but not necessarily all, of the Funds.

#### **Service Providers**

Custodians. The Bank of New York Mellon, 240 Greenwich Street, New York, NY 10286 (for Vanguard Money Market, Short- Term Investment-Grade, High Yield Bond, and Total Bond Market Index Portfolios); State Street Bank and Trust Company, One Congress Street, Suite 1, Boston, MA 02114 (for Vanguard Balanced, Capital Growth, Diversified Value, Equity Income, Growth, International, and Small Company Growth Portfolios); JPMorgan Chase Bank, N.A., 383 Madison Avenue, New York, NY 10179 (for Vanguard Conservative Allocation, Equity Index, Global Bond Index, Mid-Cap Index, Moderate Allocation, Real Estate Index, Total Stock Market Index, and Total International Stock Market Index Portfolios), serve as the Funds' custodians. The custodians are responsible for maintaining the Funds' assets, keeping all necessary accounts and records of Fund assets, and appointing any foreign subcustodians or foreign securities depositories.

*Independent Registered Public Accounting Firm.* PricewaterhouseCoopers LLP, Two Commerce Square, Suite 1800, 2001 Market Street, Philadelphia, PA 19103-7042, serves as the Funds' independent registered public accounting firm. The independent registered public accounting firm audits the Funds' annual financial statements and provides other related services.

*Transfer and Dividend-Paying Agent.* The Funds' transfer agent and dividend-paying agent is Vanguard, P.O. Box 2600, Valley Forge, PA 19482.

#### **Characteristics of the Funds' Shares**

**Restrictions on Holding or Disposing of Shares.** There are no restrictions on the right of shareholders to retain or dispose of a Fund's shares, other than those described in the Fund's current prospectus and elsewhere in this Statement of Additional Information. Each Fund or class may be terminated by reorganization into another mutual fund or class or by liquidation and distribution of the assets of the Fund or class. Unless terminated by reorganization or liquidation, each Fund and share class will continue indefinitely.

**Shareholder Liability.** The Trust is organized under Delaware law, which provides that shareholders of a statutory trust are entitled to the same limitations of personal liability as shareholders of a corporation organized under Delaware law. This means that a shareholder of a Fund generally will not be personally liable for payment of the Fund's debts. Some state courts, however, may not apply Delaware law on this point. We believe that the possibility of such a situation arising is remote.

**Dividend Rights.** The shareholders of each class of a Fund are entitled to receive any dividends or other distributions declared by the Fund for each such class. No shares of a Fund have priority or preference over any other shares of the Fund with respect to distributions. Distributions will be made from the assets of the Fund and will be paid ratably to all shareholders of a particular class according to the number of shares of the class held by shareholders on the record date. The amount of dividends per share may vary between separate share classes of the Fund based upon differences in the net asset values of the different classes and differences in the way that expenses are allocated between share classes pursuant to a multiple class plan approved by the Vanguard Variable Insurance Funds' board of trustees.

Taxable ordinary dividends received and distributed by each Fund on its REIT holdings may be eligible to be reported by the Fund, and treated by individual shareholders, as "qualified REIT dividends" that are eligible for a 20% deduction on its federal income tax returns. Individuals must satisfy holding period and other requirements in order to be eligible for this deduction. Without further legislation, the deduction would sunset after 2025. Shareholders should consult their own tax professionals concerning their eligibility for this deduction.

For more information on the tax treatment of the Funds and their insurance company separate account shareholders, see  $s = \frac{1}{s} s + \frac{$ 

**Loans.** Each Fund may make loans to another person only as permitted by the 1940 Act or other governing statute, by the Rules thereunder, or by the SEC or other regulatory agency with authority over the Fund.

**Real Estate.** Each Fund may not invest directly in real estate unless it is acquired as a result of ownership of securities or other instruments. This restriction shall not prevent a Fund from investing in securities or other instruments (1) issued by companies that invest, deal, or otherwise engage in transactions in real estate or (2) backed or secured by real estate or interests in real estate.

**Senior Securities.** Each Fund may not issue senior securities except as permitted by the 1940 Act or other governing statute, by the Rules thereunder, or by the SEC or other regulatory agency with authority over the Fund.

*Underwriting.* Each Fund may not act as an underwriter of another issuer's securities, except to the extent that the Fund may be deemed to be an underwriter within the meaning of the Securities Act of 1933 (the 1933 Act), in connection with the purchase and sale of portfolio securities.

Compliance with the fundamental policies previously described is generally measured at the time the securities are purchased. Unless otherwise required by the 1940 Act (as is the case with borrowing), if a percentage restriction is adhered to at the time the investment is made, a later change in percentage resulting from a change in the market value of assets will not constitute a violation of such restriction. All fundamental policies must comply with applicable regulatory requirements. For more details, see **Investment Strategies**, **Risks**, **and Nonfundamental Policies**.

None of these policies prevents the Funds from having an ownership interest in Vanguard. As a part owner of Vanguard, each Fund may own securities issued by Vanguard, make loans to Vanguard, and contribute to Vanguard's costs or other financial requirements. See **Management of the Funds** for more information.

# INVESTMENT STRATEGIES, RISKS, AND NONFUNDAMENTAL POLICIES

Some of the investment strategies and policies described on the following pages and in each Fund's prospectus set forth percentage limitations on a Fund's investment in, or holdings of, certain securities or other assets. Unless otherwise required by law, compliance with these strategies and policies will be determined immediately after the acquisition of such securities or assets by the Fund. Subsequent changes in values, net assets, or other circumstances will not be considered when determining whether the investment complies with the Fund's investment strategies and policies.

The following investment strategies, risks, and policies supplement each Fund's investment strategies, risks, and policies set forth in the prospectus. With respect to the different investments discussed as follows, each Fund may acquire such investments to the extent consistent with its investment strategies and policies.

The Conservative Allocation, Global Bond Index, Moderate Allocation, Total International Stock Market Index, and Total Stock Market Index Portfolios (the Fund-of-Fund Portfolios) are indirectly exposed to the investment strategies and policies of the underlying Vanguard funds in which they invest and are therefore subject to all risks associated with the investment strategies and policies of the underlying Vanguard funds. The investment strategies and policies and associated risks detailed in this section also include those to which the Fund-of-Fund Portfolios indirectly may be exposed through their investment in the underlying Vanguard funds.

Asset-Backed Securities. Asset-backed securities represent a participation in, or are secured by and payable from, pools of underlying assets such as debt securities, bank loans, motor vehicle installment sales contracts, installment loan contracts, leases of various types of real and personal property, receivables from revolving credit (i.e., credit card) agreements, and other categories of receivables. These underlying assets are securitized through the use of trusts and special purpose entities. Payment of interest and repayment of principal on asset-backed securities may be largely dependent upon the cash flows generated by the underlying assets backing the securities and, in certain cases, may be supported by letters of credit, surety bonds, or other credit enhancements. The rate of principal payments on asset-backed securities is related to the rate of principal payments, including prepayments, on the underlying assets. The credit quality of asset-backed securities depends primarily on the quality of the underlying assets, the level of credit support, if any, provided for the securities, and the credit quality of the credit-support providerin casst and useon asset-backed securities may aff77.-277.8(the)-277.8(r)0(ate)-277.8,ateonsecuritedit 277.8(purposets)-277.8(backa8(on)-27iJ T8(cae)

or foreclosure or other enforcement action by creditors shortens the term of the underlying assets. The occurrence of prepayments is a function of several factors, such as the level of interest rates, the general economic conditions, the location and age of the underlying obligations, and other social and demographic conditions. A fund's ability to maintain positions in asset-backed securities is affected by the reductions in the principal amount of the underlying assets because of prepayments. A fund's ability to reinvest such prepayments of principal (as well as interest and other distributions and sale proceeds) at a comparable yield is subject to generally prevailing interest rates at that time. The value of asset-backed securities varies with changes in market interest rates generally and the differentials in yields among various kinds of U.S. government securities, mortgage-backed securities, and asset-backed securities. In periods of rising interest rates, the rate of prepayment tends to decrease, thereby lengthening the average life of the underlying securities. Conversely, in periods of falling interest rates, the rate of prepayment tends to increase, thereby shortening the average life of such assets. Because prepayments of principal generally occur when interest rates are declining, an investor, such as a fund, generally has to reinvest the proceeds of such prepayments at lower interest rates than those at which the assets were previously invested. Therefore, asset-backed securities have less potential for capital appreciation in periods of falling interest rates than other income-bearing securities of comparable maturity.

Because asset-backed securities generally do not have the benefit of a security interest in the underlying assets that is comparable to a mortgage, asset-backed securities present certain additional risks that are not present with mortgage-backed securities. For example, revolving credit receivables are generally unsecured and the debtors on such receivables are entitled to the protection of a number of state and federal consumer credit laws, many of which give debtors the right to set off certain amounts owed, thereby reducing the balance due. Automobile receivables generally are secured, but by automobiles rather than by real property. Most issuers of automobile receivables permit loan servicers to retain possession of the underlying assets. If the servicer of a pool of underlying assets sells them to another party, there is the risk that the purchaser could acquire an interest superior to that of holders of the asset-backed securities. In addition, because of the large number of vehicles involved in a typical issue of asset-backed securities and technical requirements under state law, the trustee for the holders of the automobile receivables may not have a proper security interest in the automobiles. Therefore, there is the possibility that recoveries on repossessed collateral may not be available to support payments on these securities. Asset-backed securities have been, and may continue to be, subject to greater liquidity risks when worldwide economic and liquidity conditions deteriorate. In addition, government actions and proposals that affect the terms of underlying home and consumer loans, thereby changing demand for products financed by those loans, as well as the inability of borrowers to refinance existing loans, have had and may continue to have a negative effect on the valuation and liquidity of asset-backed securities.

Bank Loans, Loan Interests, and Direct Debt Instruments. Loan interests and direct debt instruments are interests in amounts owed by a corporate, governmental, or other borrower to lenders or lending syndicates (in the case of loans and loan participations); to suppliers of goods or services (in the case of trade claims or other receivables); or to other parties. These investments involve a risk of loss in case of default, insolvency, or the bankruptcy of the borrower; may not be deemed to be securities under certain federal securities laws; and may offer less legal protection to the purchaser in the event of fraud or misrepresentation, or there may be a requirement that a purchaser supply additional calo.8(in)-277foank

in bankruptcy and acquisition of assets out of bankruptcy. Loans in restructuring or work-out scenarios may be especially vulnerable to the inherent uncertainties in restructuring processes. In addition, the highly leveraged capital structure of the borrowers in any such transactions, whether in acquisition financing or restructuring, may make such loans especially vulnerable to adverse or unusual economic or market conditions.

Loans and other forms of direct indebtedness generally are subject to restrictions on transfer, and only limited opportunities may exist to sell them in secondary markets. As a result, a fund may be unable to sell loans and other forms of direct indebtedness at a time when it may otherwise be desirable to do so or may be able to sell them only at a price that is less than their fair value.

Investments in loans through direct assignment of a financial institution's interests with respect to a loan may involve additional risks. For example, if a loan is foreclosed, the purchaser could become part owner of any collateral and would bear the costs and liabilities associated with owning and disposing of the collateral. In addition, it is at least conceivable that, under emerging legal theories of lender liability, a purchaser could be held liable as a co-lender. Direct debt instruments may also involve a risk of insolvency of the lending bank or other intermediary.

A loan is often administered by a bank or other financial institution that acts as agent for all holders. The agent administers the terms of the loan, as specified 77.8(restructuring,as)-277.8(specifile)-277.8(t)77.8(as)-27bs2778(is)-2nonuo tasl evholon.8(asl evhol-277.8(a)0(ll)-277.8an mpp

**Common Stock.** Common stock represents an equity or ownership interest in an issuer. Common stock typically entitles the owner to vote on the election of directors and other important matters, as well as to receive dividends on such stock. In the event an issuer is liquidated or declares bankruptcy, the claims of owners of bonds, other debt holders, and owners of preferred stock take precedence over the claims of those who own common stock.

Convertible Securities. Convertible securities are hybrid securities that combine the investment characteristics of bonds and common stocks. Convertible securities typically consist of debt securities or preferred stock that may be converted (on a voluntary or mandatory basis) within a specified period of time (normally for the entire life of the security) into a certain amount of common stock or other equity security of the same or a different issuer at a predetermined price. Convertible securities also include debt securities with warrants or common stock attached and derivatives combining the features of debt securities and equity securities. Other convertible securities with features and risks not specifically referred to herein may become available in the future. Convertible securities involve risks similar to those of both fixed income and equity securities. In a corporation's capital structure, convertible securities are senior to common stock but are usually subordinated to senior debt obligations of the issuer.

The market value of a convertible security is a function of its "investment value" and its "conversion value." A security's "investment value" represents the value of the security without its conversion feature (i.e., a nonconvertible debt security). The investment value may be determined by reference to its credit quality and the current value of its yield to maturity or probable call date. At any given time, investment value is dependent upon such factors as the general level of interest rates, the yield of similar nonconvertible securities, the financial strength of the issuer, and the seniority of the security in the issuer's capital structure. A security's "conversion value" is determined by multiplying the number of shares the holder is entitled to receive upon conversion or exchange by the current price of the underlying security. If the conversion value of a convertible security is significantly below its investment value, the convertible security will trade like nonconvertible debt or preferred stock and its market value will not be influenced greatly by fluctuations in the market price of the underlying security. In that circumstance, the convertible security takes on the characteristics of a bond, and its price moves in the opposite direction from interest rates. Conversely, if the conversion value of a convertible security is near or above its investment value, the market value of the convertible security will be more heavily influenced by fluctuations in the market price of the underlying security. In that case, the convertible security's price may be as volatile as that of common stock. Because both interest rates and market movements can influence its value, a convertible security generally is not as sensitive to interest rates as a similar debt security, nor is it as sensitive to changes in share price as its underlying equity security. Convertible securities are often rated below investment-grade or are not rated, and they are generally subject to a high degree of credit risk.

Although all markets are prone to change over time, the generally high rate at which convertible securities are retired (through mandatory or scheduled conversions by issuers or through voluntary redemptions by holders) and replaced with newly issued convertible securities may cause the convertible securities market to change more rapidly than other markets. For example, a concentration of available convertible securities in a few economic sectors could elevate the sensitivity of the convertible securities market to the volatility of the equity markets and to the specific risks of those sectors. Moreover, convertible securities with innovative structures, such as mandatory-conversion securities and equity-linked securities, have increased the sensitivity of the convertible securities market to the volatility of the equity markets and to the special risks of those innovations, which may include risks different from, and possibly greater than, those associated with traditional convertible securities. A convertible security may be subject to redemption at the option of the issuer at a price set in the governing instrument of the convertible security. If a convertible security held by a fund is subject to such redemption option and is called for redemption, the fund must allow the issuer to redeem the security, convert it into the underlying common stock, or sell the security to a third party.

Cybersecurity Risks. The increased use of technology to conduct business could subject a fund and its third-party

and/or its s	shareholders.	Some example	es of negative i	mpacts that co	ould occur as a	result of a cybe	rsecurity incident

for the payees of such notes, whereby both parties have the right to vary the amount of the outstanding indebtedness on the notes. Because variable-amount master-demand notes are direct lending arrangements between a lender and a borrower, it is not generally contemplated that such instruments will be traded, and there is no secondary market for these notes, although they are redeemable (and thus immediately repayable by the borrower) at face value, plus accrued interest, at any time. In connection with a fund's investment in variable-amount master-demand notes, Vanguard's investment management staff will monitor, on an ongoing basis, the earning power, cash flow, and other liquidity ratios of the issuer, along with the borrower's ability to pay principal and interest on demand.

Debt Securities—Emerging Market Risk. Investing in emerging market countries involves certain risks not typically associated with investing in the United States, and imposes risks greater than, or in addition to, risks of investing in more developed foreign countries. These risks may significantly affect the value of emerging market investments and include, but are not limited to, the following: (i) nationalization or expropriation of assets or confiscatory taxation: (ii) currency devaluations and other currency exchange rate fluctuations; (iii) greater social, economic, and political uncertainty and instability (including amplified risk of war and terrorism); (iv) more substantial government involvement in and control over the economy; (v) less government supervision and regulation of the securities markets and participants in those markets and possible arbitrary and unpredictable enforcement of securities regulations and other laws, which may increase the risk of market manipulation; (vi) controls on foreign investment and limitations on repatriation of invested capital and on a fund's ability to exchange local currencies for U.S. dollars; (vii) unavailability of currency hedging techniques in certain emerging market countries; (viii); generally, smaller, less seasoned, or newly organized companies; (ix) the difference in, or lack of, corporate governance, accounting, auditing, recordkeeping, and financial reporting standards, which may result in unavailability of material information about issuers and impede evaluation of such issuers; (x) difficulty in obtaining and/or enforcing a judgment in a court outside the United States; and (xi) greater price volatility, substantially less liquidity, and significantly smaller market capitalization of bond markets. Also, any change in the leadership or politics of emerging market countries, or the countries that exercise a significant influence over those countries, may halt the expansion of or reverse the liberalization of foreign investment policies now occurring and adversely affect existing investment opportunities. Furthermore, high rates of inflation and rapid fluctuations in inflation rates have had, and may continue to have, negative effects on the economies and bond markets of certain emerging market countries. Custodial expenses and other investment-related costs are often more expensive in emerging market countries, which can reduce a fund's income from investments in securities or debt instruments of emerging market country issuers. Additionally, information regarding companies located in emerging markets may be less available and less reliable, which can impede the ability to evaluate such companies. There may also be limited regulatory oversight of certain foreign subcustodians that hold foreign securities subject to the supervision of a fund's primary U.S.-based custodian. A fund may be limited in its ability to recover assets if a foreign subcustodian becomes bankrupt or otherwise unable or unwilling to return assets to the fund, which may expose the fund to risk, especially in circumstances where the fund's primary custodian may not be contractually obligated to make the fund whole for the particular loss.

Emerging market investments also carry the risk that strained international relations may give rise to retaliatory actions, including actions through financial markets such as purchase and ownership restrictions, sanctions, tariffs, cyberattacks, and unpredictable enforcement of securities regulations and other laws. Such actual and/or threatened retaliatory actions may impact emerging market economies and issuers in which a fund invests.

**Debt Securities—Foreign Debt Securities.** Foreign debt securities are debt securities issued by entities organized, domiciled, or with a principal executive office outside the United States, such as foreign governments and corporations. Foreign debt securities may trade in U.S. or foreign markets. Investing in foreign debt securities involves certain special risk considerations that are not typically associated with investing in debt securities of U.S. issuers.

**Debt Securities—Inflation-Indexed Securities.** Inflation-indexed securities are debt securities, the principal value of which is periodically adjusted to reflect the rate of inflation as indicated by the Consumer Price Index (CPI). Inflation-indexed securities may be issued by the U.S. government, by agencies and instrumentalities of the U.S. government, and by corporations. Two structures are common. The U.S. Treasury and some other issuers use a structure that accrues inflation into the principal value of the bond. Most other issuers pay out the CPI accruals as part of a semiannual coupon payment.

The periodic adjustment of U.S. inflation-indexed securities is tied to the CPI, which is calculated monthly by the U.S. Bureau of Labor Statistics. The CPI is a measurement of changes in the cost of living, made up of components such as

housing, food, transportation, and energy. Inflation-indexed securities issued by a foreign government are generally adjusted to reflect a comparable inflation index, calculated by that government. There can be no assurance that the CPI or any foreign inflation index will accurately measure the real rate of inflation in the prices of goods and services. Moreover, there can be no assurance that the rate of inflation in a foreign country will correlate to the rate of inflation in the United States.

Inflation—a general rise in prices of goods and services—erodes the purchasing power of an investor's portfolio. For example, if an investment provides a "nominal" total return of 5% in a given year and inflation is 2% during that period, the inflation-adjusted, or real, return is 3%. Inflation, as measured by the CPI, has generally occurred during the past 50 years, so investors should be conscious of both the nominal and real returns of their investments. Investors in inflation-indexed securities funds who do not reinvest the portion of the income distribution that is attributable to inflation adjustments will not maintain the purchasing power of the investment over the long term. This is because interest earned depends on the amount of principal invested, and that principal will not grow with inflation if the investor fails to reinvest the principal adjustment paid out as part of a fund's income distributions. Although inflation-indexed securities are expected to be protected from long-term inflationary trends, short-term increases in inflation may lead to a decline in value. If interest rates rise because of reasons other than inflation (e.g., changes in currency exchange rates), investors in these securities may not be protected to the extent that the increase is not reflected in the bond's inflation measure.

If the periodic adjustment rate measuring inflation (i.e., the CPI) falls, the principal value of inflation-indexed securities will be adjusted downward, and consequently the interest payable on these securities (calculated with respect to a smaller principal amount) will be reduced. Repayment of the original bond principal upon maturity (as adjusted for inflation) is guaranteed in the case of U.S. Treasury inflation-indexed securities, even during a period of deflation. However, the current market value of the inflation-indexed securities is not guaranteed and will fluctuate. Other inflation-indexed securities include inflation-related bonds, which may or may not provide a similar guarantee. If a guarantee of principal is not provided, the adjusted principal value of the bond repaid at maturity may be less than the original principal.

The value of inflation-indexed securities should change in response to changes in real interest rates. Real interest rates, in turn, are tied to the relationship between nominal interest rates and the rate of inflation. Therefore, if inflation were to rise at a faster rate than nominal interest rates, real interest rates might decline, leading to an increase in value of inflation-indexed securities. In contrast, if nominal interest rates were to increase at a faster rate than inflation, real interest rates might rise, leading to a decrease in value of inflation-indexed securities.

Coupon payments that a fund receives from inflation-indexed securities are included in the fund's gross income for the period during which they accrue. Any increase in principal for an inflation-indexed security resulting from inflation adjustments is considered by Internal Revenue Service (IRS) regulations to be taxable income in the year it occurs. For direct holders of an inflation-indexed security, this means that taxes must be paid on principal adjustments, even though these amounts are not received until the bond matures. By contrast, a fund holding these securities distributes both interest income and the income attributable to principal adjustments each quarter in the form of cash or reinvested shares (which, like principal adjustments, are taxable to shareholders). It may be necessary for the fund to liquidate portfolio positions, including when it is not advantageous to do so, in order to make required distributions.

securities are often highly leveraged and may not have more traditional methods of financing available to them. Therefore, the risk associated with acquiring the securities of such issuers generally is greater than is the case with investment-grade securities. Some high-yield securities were once rated as investment-grade but have been downgraded to junk bond status because of financial difficulties experienced by their issuers.

The market values of high-yield securities tend to reflect individual issuer developments to a greater extent than do investment-grade securities, which in general react to fluctuations in the general level of interest rates. High-yield securities also tend to be more sensitive to economic conditions than are investment-grade securities. An actual or anticipated economic downturn or sustained period of rising interest rates, for example, could cause a decline in junk bond prices because the advent of a recession could lessen the ability of a highly leveraged company to make principal and interest payments on its debt securities. If an issuer of high-yield securities defaults, in addition to risking payment of all or a portion of interest and principal, a fund investing in such securities may incur additional expenses to seek recovery.

The secondary market on which high-yield securities are traded may be less liquid than the market for investment-grade securities. Less liquidity in the secondary trading market could adversely affect the ability of a fund's advisor to sell a high-yield security or the price at which a fund's advisor could sell a high-yield security, and it could also adversely affect the daily net asset value of fund shares. When secondary markets for high-yield securities are less liquid than the market for investment-grade securities, it may be more difficult to value the securities because such valuation may require more research, and elements of judgment may play a greater role in the valuation of the securities.

Except as otherwise provided in a fund's prospectus, if a credit rating agency changes the rating of a portfolio security held by a fund, the fund may retain the portfolio security if the advisor deems it in the best interests of shareholders.

Debt Securities—Structured and Indexed Securities. Structured securities (also called "structured notes") and indexed securities are derivative debt securities, the interest rate or principal of which is determined by an unrelated indicator. Indexed securities include structured notes as well as securities other than debt securities. The value of the principal of and/or interest on structured and indexed securities is determined by reference to changes in the value of a specific asset, reference rate, or index (the reference) or the relative change in two or more references. The interest rate or the principal amount payable upon maturity or redemption may be increased or decreased, depending upon changes in the applicable reference. The terms of the structured and indexed securities may provide that, in certain circumstances, no principal is due at maturity and, therefore, may result in a loss of invested capital. Structured and indexed securities may be positively or negatively indexed, so that appreciation of the reference may produce an increase or a decrease in the interest rate or value of the security at maturity. In addition, changes in the interest rate or the value of the structured or indexed security at maturity may be calculated as a specified multiple of the change in the value of the reference; therefore, the value of such security may be very volatile. Structured and indexed securities may entail a greater degree of market risk than other types of debt securities because the investor bears the risk of the reference. Structured or indexed securities may also be more volatile, less liquid, and more difficult to accurately price than less complex securities or more traditional debt securities, which could lead to an overvaluation or an undervaluation of the securities.

**Debt Securities—U.S. Government Securities.** The term "U.S. government securities" refers to a variety of debt securities that are issued or guaranteed by the U.S. Treasury, by various agencies of the U.S. government, or by various instrumentalities that have been established or sponsored by the U.S. government. The term also refers to repurchase agreements collateralized by such securities.

U.S. Treasury securities are backed by the full faith and credit of the U.S. government, meaning that the U.S. government is required to repay the principal in the event of default. Other types of securities issued or guaranteed by federal agencies and U.S. government-sponsored instrumentalities may or may not be backed by the full faith and credit of the U.S. government. The U.S. government, however, does not guarantee the market price of any U.S. government securities. In the case of securities not backed by the full faith and credit of the U.S. government, the investor must look principally to the agency or instrumentality issuing or guaranteeing the obligation for ultimate repayment and may not be able to assert a claim against the United States itself in the event the agency or instrumentality does not meet its commitment.

Some of the U.S. government agencies that issue or guarantee securities include the Government National Mortgage Association, the Export-Import Bank of the United States, the Federal Housing Administration, the Maritime Administration, the Small Business Administration, and the Tennessee Valley Authority. An instrumentality of the U.S. government is a government agency organized under federal charter with government supervision. Instrumentalities issuing or guaranteeing securities include, among others, the Federal Deposit Insurance Corporation, the Federal Home

charges fees upon the deposit and withdrawal of the underlying securities, the conversion of dividends into U.S. dollars or other currency, the disposition of noncash distributions, and the performance of other services. The depository of an unsponsored facility frequently is under no obligation to distribute shareholder communications received from the underlying issuer or to pass through voting rights to depositary receipt holders with respect to the underlying securities.

Sponsored depositary receipt facilities are created in generally the same manner as unsponsored facilities, except that sponsored depositary receipts are established jointly by a depository and the underlying issuer through a deposit agreement. The deposit agreement sets out the rights and responsibilities of the underlying issuer, the depository, and the depositary receipt holders. With sponsored facilities, the underlying issuer typically bears some of the costs of the depositary receipts (such as dividend payment fees of the depository), although most sponsored depositary receipt holders may bear costs such as deposit and withdrawal fees. Depositories of most sponsored depositary receipts agree to distribute notices of shareholder meetings, voting instructions, and other shareholder communications and information to the depositary receipt holders at the underlying issuer's request.

For purposes of a fund's investment policies, investments in depositary receipts will be deemed to be investments in the underlying securities. Thus, a depositary receipt representing ownership of common stock will be treated as common stock. Depositary receipts do not eliminate all of the risks associated with directly investing in the securities of foreign issuers.

Derivatives. A derivative is a financial instrument that has a value based on—or "derived from"—the values of other assets, reference rates, or indexes. Derivatives may relate to a wide variety of underlying references, such as commodities, stocks, bonds, interest rates, currency exchange rates, and related indexes. Derivatives include futures contracts and options on futures contracts, certain forward-commitment transactions, options on securities, caps, floors, collars, swap agreements, and certain other financial instruments. Some derivatives, such as futures contracts and certain options, are traded on U.S. commodity and securities exchanges, while other derivatives, such as swap agreements, may be privately negotiated and entered into in the over-the-counter market (OTC Derivatives) or may be cleared through a clearinghouse (Cleared Derivatives) and traded on an exchange or swap execution facility. As a result of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), certain swap agreements, such as certain standardized credit default and interest rate swap agreements, must be cleared through a clearinghouse and traded on an exchange or swap execution facility. This could result in an increase in the overall costs of such transactions. While the intent of derivatives regulatory reform is to mitigate risks associated with derivatives markets, the regulations could, among other things, increase liquidity and decrease pricing for more standardized products while decreasing liquidity and increasing pricing for less standardized products. The risks associated with the use of derivatives are different from, and possibly greater than, the risks associated with investing directly in the securities or assets on which the derivatives are based.

Derivatives may be used for a variety of purposes, including—but not limited to—hedging, managing risk, seeking to stay fully invested, seeking to reduce transaction costs, seeking to simulate an investment in equity or debt securities or other investments, and seeking to add value by using derivatives to more efficiently implement portfolio positions when derivatives are favorably priced relative to equity or debt securities or other investments. Some investors may use derivatives primarily for speculative purposes while other uses of derivatives may not constitute speculation. There is no assurance that any derivatives strategy used by a fund's advisor will succeed. The other parties to a fund's OTC Derivatives contracts (usually referred to as "counterparties") will not be considered the issuers thereof for purposes of certain provisions of the 1940 Act and the IRC, although such OTC Derivatives may qualify as securities or investments under such laws. A fund's advisor(s), however, will monitor and adjust, as appropriate, the fund's credit risk exposure to OTC Derivative counterparties.

Derivative products are highly specialized instruments that require investment techniques and risk analyses different from those associated with stocks, bonds, and other traditional investments. The use of a derivative requires an understanding not only of the underlying instrument but also of the derivative itself, without the benefit of observing the performance of the derivative under all possible market conditions.

When a fund enters into a Cleared Derivative, an initial margin deposit with a Futures Commission Merchant (FCM) is required. Initial margin deposits are typically calculated as an amount equal to the volatility in market value of a Cleared Derivative over a fixed period. If the value of the fund's Cleared Derivatives declines, the fund will be required to make additional "variation margin" payments to the FCM to settle the change in value. If the value of the fund's Cleared Derivatives increases, the FCM will be required to make additional "variation margin" payments to the fund to settle the change in value. This process is known as "marking-to-market" and is calculated on a daily basis.

For OTC Derivatives, a fund is subject to the risk that a loss may be sustained as a result of the insolvency or bankruptcy of the counterparty or the failure of the counterparty to make required payments or otherwise comply with the terms of the contract. Additionally, the use of credit derivatives can result in losses if a fund's advisor does not correctly evaluate the creditworthiness of the issuer on which the credit derivative is based.

Derivatives may be subject to liquidity risk, which exists when a particular derivative is difficult to purchase or sell. If a derivative transaction is particularly large or if the relevant market is illiquid (as is the case with certain OTC Derivatives), it may not be possible to initiate a transaction or liquidate a position at an advantageous time or price.

Derivatives may be subject to pricing or "basis" risk, which exists when a particular derivative becomes extraordinarily expensive relative to historical prices or the prices of corresponding cash market instruments. Under certain market conditions, it may not be economically feasible to initiate a transaction or liquidate a position in time to avoid a loss or take advantage of an opportunity.

Because certain derivatives have a leverage component, adverse changes in the value or level of the underlying asset, reference rate, or index can result in a loss substantially greater than the amount invested in the derivative itself. Certain derivatives have the potential for unlimited loss, regardless of the size of the initial investment. A derivative transaction will not be considered to constitute the issuance, by a fund, of a "senior security," as that term is defined in Section 18(g) of the 1940 Act, and therefore such transaction will not be subject to the 300% asset coverage requirement otherwise applicable to borrowings by a fund, if the fund complies with Rule 18f-4.

often not uniformly measured or defined, which could impact an advisor's ability to assess an issuer. Where ESG risk	

markets. A fund may make foreign investments either directly by purchasing foreign securities or indirectly by purchasing depositary receipts or depositary shares of similar instruments (depositary receipts) for foreign securities. Direct investments in foreign securities may be made either on foreign securities exchanges or in the over-the-counter (OTC) markets. Investing in foreign securities involves certain special risk considerations that are not typically associated with investing in securities of U.S. companies or governments.

Because foreign issuers are not generally subject to uniform accounting, auditing, and financial reporting standards and practices comparable to those applicable to U.S. issuers, there may be less publicly available information about certain foreign issuers than about U.S. issuers. Evidence of securities ownership may be uncertain in many foreign countries. As a result, there are risks that could result in a loss to the fund, including, but not limited to, the risk that a fund's trade details could be incorrectly or fraudulently entered at the time of a transaction. Securities of foreign issuers are generally more volatile and less liquid than securities of comparable U.S. issuers, and foreign investments may be effected through structures that may be complex or confusing. In certain countries, there is less government supervision and regulation of stock exchanges, brokers, and listed companies than in the United States. The risk that securities traded on foreign exchanges may be suspended, either by the issuers themselves, by an exchange, or by government

Investing in China A-shares through Stock Connect. The China Stock Connect program (Stock Connect) is a mutual market access program designed to, among other things, enable foreign investment in the PRC via brokers in Hong Kong. A QFI license is not required to trade via Stock Connect. There are significant risks inherent in investing in A-shares through Stock Connect. Specifically, trading can be affected by a number of issues. Stock Connect can only operate when both PRC and Hong Kong markets are open for trading and when banking services are available in both markets on the corresponding settlement days. As such, if one or both markets are closed on a U.S. trading day, a fund may not be able to dispose of its shares in a timely manner, which could adversely affect the fund's performance. Trading through Stock Connect may require pre-delivery or pre-validation of cash or securities to or by a broker. If the cash or securities are not in the broker's possession before the market opens on the day of selling, the sell order will be rejected. This requirement may limit a fund's ability to dispose of its A-shares purchased through Stock Connect in a timely manner.

Additionally, Stock Connect is subject to daily quota limitations on purchases into the PRC. Foreign investors, in the aggregate, are subject to ownership limitations for Shanghai or Shenzhen listed companies, including those purchased through Stock Connect. Once the daily quota is reached, orders to purchase additional A-shares through Stock Connect will be rejected. Only certain A-shares are eligible to be accessed through Stock Connect and such securities could lose their eligibility at any time. In addition, a fund's purchase of A-shares through Stock Connect may only be subsequently sold through Stock Connect and is not otherwise transferable. Stock Connect utilizes an omnibus clearing structure, and the fund's shares will be registered in its custodian's name on the Hong Kong Central Clearing and Settlement System. This may limit an advisor's ability to effectively manage a fund's holdings, including the potential enforcement of equity owner rights.

Foreign Securities—China Bonds Risk. The People's Republic of China (China) continues to limit direct foreign investments, generally in industries deemed important to national interests. Foreign investment in Chinese securities is also subject to substantial restrictions, although Chinese regulators have begun to introduce programs through which foreign investors can gain direct access to certain Chinese securities markets. The People's Bank of China (PBoC) has established a program that permits eligible foreign investors to invest directly in securities traded on the Chinese Interbank Bond Market (CIBM). A fund may invest in the bonds available on the CIBM through Bond Connect and the Hong Kong Monetary Authority that allows investors from mainland China and overseas to trade in each other's respective markets. Bond Connect provides a connection between mainland China- and Hong Kong-based financial institutions, permitting investors to trade between the mainland China and Hong Kong markets electronically, thus eliminating the stricter restrictions that were present under previous access models. While the CIBM is relatively large and trading volumes are generally high, the market remains subject to similar risks as bond markets in other emerging market countries.

Investing in securities traded on the CIBM through Bond Connect is also subject to regulatory risks. The relevant rules and regulations of, the structure and terms of, and a fund's access to Bond Connect may be subject to change with minimal notice and have the potential to be applied retroactively. Additionally, as is the case with other emerging market economies, China's ability to develop and sustain its legal, tax, regulatory, financial reporting, accounting, and recordkeeping systems could influence the course of foreign investment. In particular, the Chinese legal system constitutes a significant risk factor for investors. The interpretation and enforcement of Chinese laws and regulations are uncertain, and investments in China may not be subject to the same degree of legal protection as in other developed countries.

In the event account opening or trading is suspended on the CIBM, a fund's ability to invest in securities traded on the CIBM will be adversely affected and may negatively affect the fund. Furthermore, if Bond Connect is not operating, a fund may not be able to acquire or dispose of bonds through Bond Connect in a timely manner, which could adversely affect the fund's performance.

Market volatility and potential lack of liquidity due to low trading volume of certain bonds on the CIBM may result in significant fluctuations in the prices of certain bonds traded on the CIBM. The bid-ask spreads of the prices of such securities may be large, and a fund may therefore incur significant costs and may suffer losses when selling such investments. The bonds traded on the CIBM may be difficult or impossible to sell, which may impact a fund's ability to acquire or dispose of such securities at their expected prices. A fund is also exposed to risks associated with settlement procedures and default of counterparties.

Bond Connect trades are settled in RMB, which is currently restricted and not freely convertible. As a result, a fund's investments through Bond Connect will be exposed to currency risk and incur currency conversion costs, and it cannot be guaranteed that investors will have timely access to a reliable supply of RMB. RMB is the only currency of China. Although both onshore RMB (CNY) and offshore RMB (CNH) are the same currency, they are traded in different and

separate markets. These markets operate separately and can be subject to different liquidity constraints and market forces, meaning their valuations can vary. As part of standard fund management practices, a fund may hedge the foreign exchange (FX) exposure that arises from the inclusion of Chinese RMB-denominated bonds into the base currency of the fund.

Trading through Bond Connect is performed through newly developed trading platforms and operational systems. There is no assurance that such systems will function properly (in particular, under extreme market conditions) or will continue to be adapted to changes and developments in the market. In the event relevant systems fail to function properly, trading through Bond Connect may be disrupted. A fund's ability to trade through Bond Connect may therefore be adversely affected. In addition, where a fund invests in securities traded on the CIBM through Bond Connect, it may be subject to risks of delays inherent in order placing and/or settlement.

Any changes in the application of tax law to China-sourced dividends and interest from non-government bonds paid to a fund, future clarifications thereof, and/or subsequent retroactive enforcement by Chinese tax authorities may result in a loss to a fund.

Foreign Securities—Emerging Market Risk. Investing in emerging market countries involves certain risks not typically associated with investing in the United States, and it imposes risks greater than, or in addition to, risks of investing in more developed foreign countries. These risks may significantly affect the value of emerging market investments and include: (i) nationalization or expropriation of assets or confiscatory taxation; (ii) currency devaluations and other currency exchange rate fluctuations; (iii) greater social, economic, and political uncertainty and instability (including amplified risk of war and terrorism); (iv) more substantial government involvement and control over the economy; (v) less government supervision and regulation of the securities markets and participants in those markets and possible arbitrary and unpredictable enforcement of securities regulations and other laws, which may increase the risk of market manipulation; (vi) controls on foreign investment and limitations on repatriation of invested capital and on the fund's ability to exchange local currencies for U.S. dollars; (vii) unavailability of currency-hedging techniques in certain emerging market countries; (viii) generally smaller, less seasoned, or newly organized companies; (ix) differences in, or lack of, corporate governance, accounting, auditing, record keeping and financial reporting standards, which may result in unavailability of material information about issuers and impede evaluation of such issuers; (x) difficulty in obtaining and/or enforcing a judgment in a court outside the United States; and (xi) greater price volatility, substantially less liquidity, and significantly smaller market capitalization of securities markets. Also, any change in the leadership or politics of emerging market countries, or the countries that exercise a significant influence over those countries, may halt the expansion of or reverse the liberalization of foreign investment policies now occurring and adversely affect existing investment opportunities. Furthermore, high rates of inflation and rapid fluctuations in inflation rates have had, and may continue to have, negative effects on the economies and securities markets of certain emerging market countries. Custodial expenses and other investment-related costs are often more expensive in emerging market countries, which can reduce a fund's income from investments in securities or debt instruments of emerging market country issuers. Additionally, information regarding companies located in emerging markets may be less available and less reliable, which can impede the ability to evaluate such companies. There may also be limited regulatory oversight of certain foreign sub-custodians that hold foreign securities subject to the supervision of the Fund's primary U.S.-based custodian. The Fund may be limited in its ability to recover assets if a foreign sub-custodian becomes bankrupt or otherwise unable or unwilling to return assets to the Fund, which may expose the Fund to risk, especially in circumstances where the Fund's primary custodian may not be contractually obligated to make the Fund whole for the particular loss.

Emerging market investments also carry the risk that strained international relations may give rise to retaliatory actions, including actions through financial markets such as purchase and ownership restrictions, sanctions, tariffs, cyberattacks, and unpredictable enforcement of securities regulations and other laws. Such actual and/or threatened retaliatory actions may impact emerging market economies and issuers in which a Fund invests. For example, in China, ownership of companies in certain sectors by foreign individuals and entities is prohibited. In order to facilitate investment in these companies by foreign individuals, many Chinese companies have created variable interest entities ("VIEs") that provide exposure to the Chinese company through contractual arrangements instead of equity ownership. VIE structures are subject to risks associated with breach of the contractual arrangements, including difficulty in enforcing any judgments outside of the United States, and do not offer the same level of investor protection as direct ownership. Additionally, while VIEs are a longstanding industry practice, they have not been approved by Chinese regulators. Chinese regulators could prohibit Chinese companies from accessing foreign investment through VIEs, or sever their ability to

Foreign Securities—Foreign Currency Transactions. The value in U.S. dollars of a fund's non-dollar-denominated foreign securities may be affected favorably or unfavorably by changes in foreign currency exchange rates and exchange control regulations, and the fund may incur costs in connection with conversions between various currencies. To seek to minimize the impact of such factors on net asset values, a fund may engage in foreign currency transactions in connection with its investments in foreign securities. A fund will enter into foreign currency transactions only to attempt to "hedge" the currency risk associated with investing in foreign securities. Although such transactions tend to minimize the risk of loss that would result from a decline in the value of the hedged currency, they also may limit any potential gain that might result should the value of such currency increase

Currency exchange transactions may be conducted either on a spot (i.e., cash) basis at the rate prevailing in the currency exchange market or through forward contracts to purchase or sell foreign currencies. A forward currency contract involves an obligation to purchase or sell a specific currency at a future date, which may be any fixed number of days from the date of the contract agreed upon by the parties, at a price set at the time of the contract. These contracts are entered into with large commercial banks or other currency traders who are participants in the interbank market. Currency exchange transactions also may be effected through the use of swap agreements or other derivatives.

Currency exchange transactions may be considered borrowings. A currency exchange transaction will not be considered to constitute the issuance, by a fund, of a "senior security," as that term is defined in Section 18(g) of the 1940 Act, and therefore such transaction will not be subject to the 300% asset coverage requirement otherwise applicable to borrowings by a fund, if the fund complies with Rule 18f-4.

By entering into a forward contract for the purchase or sale of foreign currency involved in underlying security transactions, a fund may be able to protect itself against part or all of the possible loss between trade and settlement dates for that purchase or sale resulting from an adverse change in the relationship between the U.S. dollar and such foreign currency. This practice is sometimes referred to as "transaction hedging." In addition, when the advisor reasonably believes that a particular foreign currency may suffer a substantial decline against the U.S. dollar, a fund may enter into a forward contract to sell an amount of foreign currency approximating the value of some or all of its portfolio securities denominated in such foreign currency. This practice is sometimes referred to as "portfolio hedging." Similarly, when the advisor reasonably believes that the U.S. dollar may suffer a substantial decline against a foreign currency, a fund may enter into a forward contract to buy that foreign currency for a fixed dollar amount.

A fund may also attempt to hedge its foreign currency exchange rate risk by engaging in currency futures, options, and "cross-hedge" transactions. In cross-hedge transactions, a fund holding securities denominated in one foreign currency will enter into a forward currency contract to buy or sell a different foreign currency (one that the advisor reasonably believes generally tracks the currency being hedged with regard to price movements). The advisor may select the tracking (or substitute) currency rather than the currency in which the security is denominated for various reasons, including in order to take advantage of pricing or other opportunities presented by the tracking currency or to take advantage of a more liquid or more efficient market for the tracking currency. Such cross-hedges are expected to help protect a fund against an increase or decrease in the value of the U.S. dollar against certain foreign currencies.

A fund may hold a portion of its assets in bank deposits denominated in foreign currencies so as to facilitate investment in foreign securities as well as protect against c01s 17.8(traoantuansact-277.8(U)0bcted)-277.8(the)-277.8neted to covcerr such ass

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**Foreign Securities—Russian Market Risk.** There are significant risks inherent in investing in Russian securities. The underdeveloped state of Russia's banking system subjects the settlement, clearing, and registration of securities transactions to significant risks. In March of 2013, the National Settlement Depository (NSD) began acting as a central

change in value. If the value of the fund's position increases, the FCM will be required to make additional "variation margin" payments to the fund to settle the change in value. This process is known as "marking-to-market" and is calculated on a daily basis. A futures transaction will not be considered to constitute the issuance, by a fund, of a "senior security," as that term is defined in Section 18(g) of the 1940 Act, and therefore such transaction will not be subject to the 300% asset coverage requirement otherwise applicable to borrowings by a fund, if the fund complies with Rule 18f-4.

An option on a futures contract (or futures option) conveys the right, but not the obligation, to purchase (in the case of a call option) or sell (in the case of a put option) a specific futures contract at a specific price (called the "exercise" or "strike" price) any time before the option expires. The seller of an option is called an option writer. The purchase price of an option is called the premium. The potential loss to an option buyer is limited to the amount of the premium plus transaction costs. This will be the case, for example, if the option is held and not exercised prior to its expiration date. Generally, an option writer sells options with the goal of obtaining the premium paid by the option buyer. If an option sold by an option writer expires without being exercised, the writer retains the full amount of the premium. The option writer, however, has unlimited economic risk because its potential loss, except to the extent offset by the premium received when the option was written, is equal to the amount the option is "in-the-money" at the expiration date. A call option is in-the-money if the value of the underlying futures contract exceeds the exercise price of the option. A put option is in-the-money if the exercise price of the option exceeds the value of the underlying futures contract. Generally, any profit realized by an option buyer represents a loss for the option writer.

A fund that takes the position of a writer of a futures option is required to deposit and maintain initial and variation margin with respect to the option, as previously described in the case of futures contracts. A futures option transaction will not be considered to constitute the issuance, by a fund, of a "senior security," as that term is defined in Section 18(g) of the 1940 Act, and therefore such transaction will not be subject to the 300% asset coverage requirement otherwise applicable to borrowings by a fund, if the fund complies with Rule 18f-4.

Futures Contracts and Options on Futures Contracts—Risks. The risk of loss in trading futures contracts and in writing futures options can be substantial because of the low margin deposits required, the extremely high degree of leverage involved in futures and options pricing, and the potential high volatility of the futures markets. As a result, a relatively small price movement in a futures position may result in immediate and substantial loss (or gain) for the investor. For example, if at the time of purchase, 10% of the value of the futures contract is deposited as margin, a subsequent 10% decrease in the value of the futures contract would result in a total loss of the margin deposit, before any deduction for the transaction costs, if the account were then closed out. A 15% decrease would result in a loss equal to 150% of the original margin deposit if the contract were closed out. Thus, a purchase or sale of a futures contract, and the writing of a futures option, may result in losses in excess of the amount invested in the position. In the event of adverse price movements, a fund would continue to be required to make daily cash payments to maintain its required margin. In such situations, if the fund has insufficient cash, it may have to sell portfolio securities to meet daily margin requirements at a time when it may be disadvantageous to do so. In addition, on the settlement date, a fund may be required to make delivery of the instruments underlying the futures positions it holds.

A fund could suffer losses if it is unable to close out a futures contract or a futures option because of an illiquid secondary market. Futures contracts and futures options may be closed out only on an exchange that provides a secondary market for such products. However, there can be no assurance that a liquid secondary market will exist for any particular futures product at any specific time. Thus, it may not be possible to close a futures or option position. Moreover, most futures exchanges limit the amount of fluctuation permitted in futures contract prices during a single trading day. The daily limit establishes the maximum amount that the price of a futures contract may vary either up or down from the previous day's settlement price at the end of a trading session. Once the daily limit has been reached in a particular type of contract, no trades may be made on that day at a price beyond that limit. The daily limit governs only price movement during a particular trading day, and therefore does not limit potential losses because the limit may prevent the liquidation of unfavorable positions. Futures contract prices have occasionally moved to the daily limit for several consecutive trading days with little or no trading, thereby preventing prompt liquidation of future positions and subjecting some futures traders to substantial losses. The inability to close futures and options positions also could have an adverse impact on the ability to hedge a portfolio investment or to establish a substitute for a portfolio investment. U.S. Treasury futures are generally not subject to such daily limits.

A fund bears the risk that its advisor will incorrectly predict future market trends. If the advisor attempts to use a futures contract or a futures option as a hedge against, or as a substitute for, a portfolio investment, the fund will be exposed to

the risk that the futures position will have or will develop imperfect or no correlation with the portfolio investment. This could cause substantial losses for the fund. Although hedging strategies involving futures products can reduce the risk of loss, they can also reduce the opportunity for gain or even result in losses by offsetting favorable price movements in other fund investments.

A fund could lose margin payments it has deposited with its FCM if, for example, the FCM breaches its agreement with the fund or becomes insolvent or goes into bankruptcy. In that event, the fund may be entitled to return of margin owed to it only in proportion to the amount received by the FCM's other customers, potentially resulting in losses to the fund.

Hybrid Instruments. A hybrid instrument, or hybrid, is an interest in an issuer that combines the characteristics of an equity security, a debt security, a commodity, and/or a derivative. A hybrid may have characteristics that, on the whole, more strongly suggest the existence of a bond, stock, or other traditional investment, but a hybrid may also have prominent features that are normally associated with a different type of investment. Moreover, hybrid instruments may be treated as a particular type of investment for one regulatory purpose (such as taxation) and may be simultaneously treated as a different type of investment for a different regulatory purpose (such as securities or commodity regulation). Hybrids can be used as an efficient means of pursuing a variety of investment goals, including increased total return, duration management, and currency hedging. Because hybrids combine features of two or more traditional investments and may involve the use of innovative structures, hybrids present risks that may be similar to, different from, or greater than those associated with traditional investments with similar characteristics.

Examples of hybrid instruments include convertible securities, which combine the investment characteristics of bonds and common stocks; perpetual bonds, which are structured like fixed income securities, have no maturity date, and may be characterized as debt or equity for certain regulatory purposes; contingent convertible securities, which are fixed income securities that, under certain circumstances, either convert into common stock of the issuer or undergo a principal write-down by a predetermined percentage if the issuer's capital ratio falls below a predetermined trigger level; and trust-preferred securities, which are preferred stocks of a special-purpose trust that holds subordinated debt of the corporate parent. Another example of a hybrid is a commodity-linked bond, such as a bond issued by an oil company that pays a small base level of interest with additional interest that accrues in correlation to the extent to which oil prices exceed a certain predetermined level. Such a hybrid would be a combination of a bond and a call option on oil.

In the case of hybrids that are structured like fixed income securities (such as structured notes), the principal amount or the interest rate is generally tied (positively or negatively) to the price of some commodity, currency, securities index, interest rate, or other economic factor (each, a benchmark). For some hybrids, the principal amount payable at maturity or the interest rate may be increased or decreased, depending on changes in the value of the benchmark. Other hybrids do not bear interest or pay dividends. The value of a hybrid or its interest rate may be a multiple of a benchmark and, as a result, may be leveraged and move (up or down) more steeply and rapidly than the benchmark, thus magnifying movements within the benchmark. These benchmarks may be sensitive to economic and political events, such as

5% of the lending fund's net assets. In addition, a Vanguard fund may participate in the program only if and to the extent that such participation is consistent with the fund's investment objective and investment policies. The boards of trustees of the Vanguard funds are responsible for overseeing the interfund lending program. Any delay in repayment to a lending fund could result in a lost investment opportunity or additional borrowing costs.

**Investing for Control.** Each Vanguard fund invests in securities and other instruments for the sole purpose of achieving a specific investment objective. As such, a Vanguard fund does not seek to acquire, individually or collectively with any other Vanguard fund, enough of a company's outstanding voting stock to have control over management decisions. A Vanguard fund does not invest for the purpose of controlling a company's management.

Interest Rates. In a low or negative interest rate environment, debt securities may trade at, or be issued with, negative yields, which means the purchaser of the security may receive at maturity less than the total amount invested. In addition, in a negative interest rate environment, if a bank charges negative interest, instead of receiving interest on deposits, a depositor must pay the bank fees to keep money with the bank. To the extent a fund holds a negatively-yielding debt security or has a bank deposit with a negative interest rate, the fund would generate a negative return on that investment. Cash positions may also subject a fund to increased counterparty risk to the fund's bank.

Debt market conditions are highly unpredictable and some parts of the market are subject to dislocations. In the past, the U.S. government and certain foreign central banks have taken steps to stabilize markets by, among other things, reducing interest rates. To the extent such actions are pursued, they present heightened risks to debt securities, and such risks could be even further heightened if these actions are unexpectedly or suddenly reversed or are ineffective in achieving their desired outcomes. In recent years, the U.S. government began implementing increases to the federal funds interest rate and there may be further rate increases. As interest rates rise, there is risk that rates across the financial system also may rise. To the extent rates increase substantially and/or rapidly, the Funds may be subject to significant losses.

In a low or negative interest rate environment, some investors may seek to reallocate assets to other income-producing assets, such as investment-grade and higher-yield debt securities, or equity securities that pay a dividend, absent other market risks that may make such alternative investments unattractive. This increased demand for higher income-producing assets may cause the price of such securities to rise while triggering a corresponding decrease in yield over time, thus reducing the value of such alternative investments. These considerations may limit a fund's ability to locate fixed income instruments containing the desired risk/return profile. Changing interest rates, including, but not limited to, rates that fall below zero, could have unpredictable effects on the markets and may expose fixed income markets to heightened volatility and potential illiquidity.

A low or negative interest rate environment could, and a prolonged low or negative interest rate environment will, impact a fund's ability to provide a positive yield to its shareholders, pay expenses out of current income, and/or achieve its investment objective.

Market Disruption. Significant market disruptions, such as those caused by pandemics, natural or environmental disasters, war, acts of terrorism, or other events, can adversely affect local and global markets and normal market operations. Market disruptions may exacerbate political, social, and economic risks discussed above and in a fund's prospectus. Additionally, market disruptions may result in increased market volatility; regulatory trading halts; closure of domestic or foreign exchanges, markets, or governments; or market participants operating pursuant to business continuity plans for indeterminate periods of time. Such events can be highly disruptive to economies and markets and significantly impact individual companies, sectors, industries, markets, currencies, interest and inflation rates, credit ratings, investor sentiment, and other factors affecting the value of a fund's investments and operation of a fund. These events could also result in the closure of businesses that are integral to a fund's operations or otherwise disrupt the ability of employees of fund service providers to perform essential tasks on behalf of a fund.

Money Market Fund Reform. In July 2023, the SEC adopted amendments to the rules that govern registered money market funds. The reforms impact money market funds differently depending on the types of investors permitted to invest in a fund, the types of securities in which a fund may invest, and the principal investments of a money market fund. These amendments, among other changes: (i) modify the existing liquidity fee framework for non-government money market funds; (ii) increase required weekly liquid asset and daily liquid asset minimums, effective April 2, 2024; (iii) require institutional prime and institutional tax-exempt money market funds to impose a mandatory liquidity fee when daily net redemptions exceed certain levels unless the amount of the fee determined by the fund is less than 0.01% of

pool on which ARMBSs are based. Such ARMBSs generally have higher current yield and lower price fluctuations than is the case with more traditional fixed income debt securities of comparable rating and maturity. However, because the interest rates on ARMBSs are reset only periodically, changes in market interest rates or in the issuer's creditworthiness may affect their value. In addition, when prepayments of principal are made on the underlying mortgages during periods of rising interest rates, a fund can reinvest the proceeds of such prepayments at rates higher than those at which they were previously invested. Mortgages underlying most ARMBSs, however, have limits on the allowable annual or lifetime increases that can be made in the interest rate that the mortgagor pays. Therefore, if current interest rates rise above such limits over the period of the limitation, a fund holding an ARMBS does not benefit from further increases in interest rates. Moreover, when interest rates are in excess of coupon rates (i.e., the rates being paid by mortgagors) of the mortgages, ARMBSs behave more like fixed income securities and less like adjustable rate securities and are thus subject to the risks associated with fixed income securities. In addition, during periods of rising interest rates, increases in the coupon rate of adjustable rate mortgages generally lag current market interest rates slightly, thereby creating the potential for capital depreciation on such securities.

Mortgage-Backed Securities—Collateralized Mortgage Obligations. Collateralized mortgage obligations (CMOs) are mortgage-backed securities that are collateralized by whole loan mortgages or mortgage pass-through securities. The bonds issued in a CMO transaction are divided into groups, and each group of bonds is referred to as a "tranche." Under the traditional CMO structure, the cash flows generated by the mortgages or mortgage pass-through securities in the collateral pool are used to first pay interest and then pay principal to the CMO bondholders. The bonds issued under a traditional CMO structure are retired sequentially as opposed to the pro-rata return of principal found in traditional pass-through obligations. Subject to the various provisions of individual CMO issues, the cash flow generated by the underlying collateral (to the extent it exceeds the amount required to pay the stated interest) is used to retire the bonds. Under a CMO structure, the repayment of principal among the different tranches is prioritized in accordance with the terms of the particular CMO issuance. The "fastest-pay" tranches of bonds, as specified in the prospectus for the issuance, would initially receive all principal payments. When those tranches of bonds are retired, the next tranche (or tranches) in the sequence, as specified in the prospectus, receives all of the principal payments until that tranche is retired. The sequential retirement of bond groups continues until the last tranche is retired. Accordingly, the CMO structure allows the issuer to use cash flows of long-maturity, monthly pay collateral to formulate securities with short, intermediate, and long final maturities and expected average lives and risk characteristics.

In recent years, new types of CMO tranches have evolved. These include floating rate CMOs, planned amortization classes, accrual bonds, and CMO residuals. These newer structures affect the amount and timing of principal and interest received by each tranche from the underlying collateral. Under certain of these new structures, given classes of CMOs have priority over others with respect to the receipt of prepayments on the mortgages. Therefore, depending on the type of CMOs in which a fund invests, the investment may be subject to a greater or lesser risk of prepayment than other types of mortgage-backed securities.

CMOs may include real estate mortgage investment conduits (REMICs). REMICs, which were authorized under the Tax Reform Act of 1986, are private entities formed for the purpose of holding a fixed pool of mortgages secured by an interest in real property. A REMIC is a CMO that qualifies for special tax treatment under the IRC and invests in certain mortgages principally secured by interests in real property. Investors may purchase beneficial interests in REMICs, which are known as "regular" interests, or "residual" interests. Guaranteed REMIC pass-through certificates (REMIC Certificates) issued by FNMA or FHLMC represent beneficial ownership interests in a REMIC trust consisting principally of mortgage loans or FNMA, FHLMC, or GNMA-guaranteed mortgage pass-through certificates. For FHLMC REMIC Certificates, FHLMC guarantees the timely payment of interest and also guarantees the payment of principal, as payments are required to be made on the underlying mortgage participation certificates. FNMA REMIC Certificates are issued and guaranteed as to timely distribution of principal and interest by FNMA.

The primary risk of CMOs is the uncertainty of the timing of cash flows that results from the rate of prepayments on the underlying mortgages serving as collateral and from the structure of the particular CMO transaction (i.e., the priority of the individual tranches). An increase or decrease in prepayment rates (resulting from a decrease or increase in mortgage interest rates) will affect the yield, the average life, and the price of CMOs. The prices of certain CMOs, depending on their structure and the rate of prepayments, can be volatile. Some CMOs may also not be as liquid as other securities.

**Mortgage-Backed Securities—Hybrid ARMs.** A hybrid adjustable rate mortgage (hybrid ARM) is a type of mortgage in which the interest rate is fixed for a specified period and then resets periodically, or floats, for the remaining mortgage term. Hybrid ARMs are usually referred to by their fixed and floating periods. For example, a 5/1 ARM refers to a mortgage with a 5-year fixed interest rate period, followed by a 1-year interest rate adjustment period. During the initial

interest period (i.e., the initial five years for a 5/1 hybrid ARM), hybrid ARMs behave more like fixed income securities and are thus subject to the risks associated with fixed income securities. All hybrid ARMs have reset dates. A reset date is the date when a hybrid ARM changes from a fixed interest rate to a floating interest rate. At the reset date, a hybrid ARM can adjust by a maximum specified amount based on a margin over an identified index. Like ARMBSs, hybrid ARMs have periodic and lifetime limitations on the increases that can be made to the interest rates that mortgagors pay. Therefore, if during a floating rate period interest rates rise above the interest rate limits of the hybrid ARM, a fund holding the hybrid ARM does not benefit from further increases in interest rates.

Mortgage-Backed Securities—Mortgage Dollar Rolls. A mortgage dollar roll is a transaction in which a fund sells a mortgage-backed security to a dealer and simultaneously agrees to purchase a similar security (but not the same security) in the future at a predetermined price. A mortgage-dollar-roll program may be structured to simulate an investment in mortgage-backed securities at a potentially lower cost, or with potentially reduced administrative burdens, than directly holding mortgage-backed securities. For accounting purposes, each transaction in a mortgage dollar roll is viewed as a separate purchase and sale of a mortgage-backed security. These transactions may increase a fund's portfolio turnover rate. The fund receives cash for a mortgage-backed security in the initial transaction and enters into an agreement that requires the fund to purchase a similar mortgage-backed security in the future.

The counterparty with which a fund enters into a mortgage-dollar-roll transaction is obligated to provide the fund with similar securities to purchase as those originally sold by the fund. These securities generally must (1) be issued by the same agency and be part of the same program; (2) have similar original stated maturities; (3) have identical net coupon rates; and (4) satisfy "good delivery" requirements, meaning that the aggregate principal amounts of the securities delivered and received back must be within a certain percentage of the initial amount delivered. Mortgage dollar rolls will be used only if consistent with a fund's investment objective and strategies and will not be used to change a fund's risk profile.

Mortgage-Backed Securities—Stripped Mortgage-Backed Securities. Stripped mortgage-backed securities (SMBSs) are derivative multiclass mortgage-backed securities. SMBSs may be issued by agencies or instrumentalities of the U.S. government or by private originators of, or investors in, mortgage loans, including savings and loan associations, mortgage banks, commercial banks, investment banks, and special purpose entities formed or sponsored by any of the foregoing.

SMBSs are usually structured with two classes that receive different proportions of the interest and principal distributions on a pool of mortgage assets. A common type of SMBS will have one class receiving some of the interest and most of the principal from the mortgage assets, while the other class will receive most of the interest and the remainder of the principal. In the most extreme case, one class will receive all of the interest (the "IO" class), while the other class will receive all of the principal (the principal-only or "PO" class). The price and yield to maturity on an IO class are extremely sensitive to the rate of principal payments (including prepayments) on the related underlying mortgage assets, and a rapid rate of principal payments may have a material adverse effect on a fund's yield to maturity from these securities. If the underlying mortgage assets experience greater than anticipated prepayments of principal, a fund may fail to recoup some or all of its initial investment in these securities, even if the security is in one of the highest rating categories.

Although SMBSs are purchased and sold by institutional investors through several investment banking firms acting as brokers or dealers, these securities were only recently developed. As a result, established trading markets have not yet developed, and accordingly, these securities may be deemed "illiquid" and thus subject to a fund's limitations on investment in illiquid securities.

For TBA purchases, a fund will maintain sufficient liquid assets (e.g., cash or marketable securities) until settlement date in an amount sufficient to meet the purchase price. Unsettled TBA securities are valued by an independent pricing service based on the characteristics of the securities to be delivered or received. A risk associated with TBA

nongovernmental insurance company) provides an unconditional and irrevocable guarantee that the insured bond's principal and interest will be paid when due. Insurance does not guarantee the price of the bond or the share price of any fund. The credit quality of an insured bond reflects the higher of the credit quality of the insurer, based on its claims-paying ability, or the credit quality of the underlying bond issuer or obligor. The obligation of a municipal bond insurance company to pay a claim extends over the life of each insured bond. Although defaults on insured municipal bonds have been historically low and municipal bond insurers historically have met their claims, there is no assurance this will continue. A higher-than-expected default rate could strain the insurer's loss reserves and adversely affect its ability to pay claims to bondholders. The number of municipal bond insurers is relatively small, and not all of them are assessed as high credit quality. An SBPA can include a liquidity facility that is provided to pay the purchase price of any bonds that cannot be remarketed. The obligation of the liquidity provider (usually a bank) is only to advance funds to purchase tendered bonds that cannot be remarketed and does not cover principal or interest under any other circumstances. The liquidity provider's obligations under the SBPA are usually subject to numerous conditions, including the continued creditworthiness of the underlying borrower or bond issuer.

Municipal bonds also include tender option bonds, which are municipal bond structured products created by dividing the income stream provided by an underlying security, such as municipal bonds or preferred shares issued by a tax-exempt bond fund, to create two securities issued by a special-purpose trust, one short-term and one long-term. The interest rate on the short-term component is periodically reset. The short-term component has negligible interest rate risk, while the long-term component has all of the risk of the underlying security. After income is paid on the short-term securities at current rates, the residual income goes to the long-term securities. Therefore, rising short-term interest rates result in lower income for the longer-term portion, and vice versa. The longer-term components can be very volatile and may be less liquid than other municipal bonds of comparable maturity. These securities have been developed in the secondary market to meet the demand for short-term, tax-exempt securities.

Municipal securities also include a variety of structures geared toward accommodating municipal-issuer short-term cash-flow requirements. These structures include, but are not limited to, general market notes, commercial paper, put bonds, and variable-rate demand obligations (VRDOs). VRDOs comprise a significant percentage of the outstanding debt in the short-term municipal market. VRDOs can be structured to provide a wide range of maturity options (1 day to over 360 days) to the underlying issuing entity and are typically issued at par. The longer the maturity option, the greater the degree of liquidity risk (the risk of not receiving an asking price of par or greater) and reinvestment risk (the risk that the proceeds from maturing bonds must be reinvested at a lower interest rate).

Although most municipal bonds are exempt from federal income tax, some are not. Taxable municipal bonds include Build America Bonds (BABs). The borrowing costs of BABs are subsidized by the federal government, but BABs are subject to state and federal income tax. BABs were created pursuant to the American Recovery and Reinvestment Act of 2009 (ARRA) to offer an alternative form of financing to state and local governments whose primary means for accessing the capital markets had been through the issuance of tax-exempt municipal bonds. BABs also include Recovery Zone Economic Development Bonds, which are subsidized more heavily by the federal government than other BABs and are designed to finance certain types of projects in distressed geographic areas.

Municipal Bonds—Risks.

Options. An option is a derivative. An option on a security (or index) is a contract that gives the holder of the option, in return for the payment of a "premium," the right, but not the obligation, to buy from (in the case of a call option) or sell to (in the case of a put option) the writer of the option the security underlying the option (or the cash value of the index) at a specified exercise price prior to the expiration date of the option. The writer of an option on a security has the obligation upon exercise of the option to deliver the underlying security upon payment of the exercise price (in the case of a call option) or to pay the exercise price upon delivery of the underlying security (in the case of a put option). The writer of an option on an index has the obligation upon exercise of the option to pay an amount equal to the cash value of the index minus the exercise price, multiplied by the specified multiplier for the index option. The multiplier for an index option determines the size of the investment position the option represents. Unlike exchange-traded options, which are standardized with respect to the underlying instrument, expiration date, contract size, and strike price, the terms of over-the-counter (OTC) options (options not traded on exchanges) generally are established through negotiation with the other party to the option contract. Although this type of arrangement allows the purchaser or writer

current obligations (or rights) under an OTC swap agreement will generally be equal only to the net amount to be paid or received under the agreement, based on the relative values of the positions held by each counterparty. OTC swap agreements allow for a wide variety of transactions. For example, fixed rate payments may be exchanged for floating rate payments; U.S. dollar-denominated payments may be exchanged for payments denominated in a different currency; and payments tied to the price of one asset, reference rate, or index may be exchanged for payments tied to the price of another asset, reference rate, or index.

An OTC option on an OTC swap agreement, also called a "swaption," is an option that gives the buyer the right, but not the obligation, to enter into a swap on a future date in exchange for paying a market-based "premium." A receiver swaption gives the owner the right to receive the total return of a specified asset, reference rate, or index. A payer swaption gives the owner the right to pay the total return of a specified asset, reference rate, or index. Swaptions also include options that allow an existing swap to be terminated or extended by one of the counterparties.

The use of OTC swap agreements by a fund entails certain risks, which may be different from, or possibly greater than, the risks associated with investing directly in the securities and other investments that are the referenced asset for the swap agreement. OTC swaps are highly specialized instruments that require investment techniques, risk analyses, and tax planning different from those associated with stocks, bonds, and other traditional investments. The use of an OTC swap requires an understanding not only of the referenced asset, reference rate, or index but also of the swap itself, without the benefit of observing the performance of the swap under all possible market conditions.

OTC swap agreements may be subject to liquidity risk, which exists when a particular swap is difficult to purchase or sell. If an OTC swap transaction is particularly large or if the relevant market is illiquid (as is the case with many OTC swaps), it may not be possible to initiate a transaction or liquidate a position at an advantageous time or price, which may result in significant losses. In addition, OTC swap transactions may be subject to a fund's limitation on investments in illiquid securities.

OTC swap agreements may be subject to pricing risk, which exists when a particular swap becomes extraordinarily expensive or inexpensive relative to historical prices or the prices of corresponding cash market instruments. Under certain market conditions, it may not be economically feasible to initiate a transaction or liquidate a position in time to avoid a loss or take advantage of an opportunity or to realize the intrinsic value of the OTC swap agreement.

Because certain OTC swap agreements have a leverage component, adverse changes in the value or level of the underlying asset, reference rate, or index can result in a loss substantially greater than the amount invested in the swap itself. Certain OTC swaps have the potential for unlimited loss, regardless of the size of the initial investment. A leveraged OTC swap transaction will not be considered to constitute the issuance, by a fund, of a "senior security," as that term is defined in Section 18(g) of the 1940 Act, and therefore such transaction will not be subject to the 300% asset coverage requirement otherwise applicable to borrowings by a fund, if the fund complies with Rule 18f-4.

Like most other investments, OTC swap agreements are subject to the risk that the market value of the instrument will change in a way detrimental to a fund's interest. A fund bears the risk that its advisor will not accurately forecast future market trends or the values of assets, reference rates, indexes, or other economic factors in establishing OTC swap positions for the fund. If the advisor attempts to use an OTC swap as a hedge against, or as a substitute for, a portfolio investment, the fund will be exposed to the risk that the OTC swap will have or will develop imperfect or no correlation with the portfolio investment. This could cause substantial losses for the fund. Although hedging strategies involving OTC swap instruments can reduce the risk of loss, they can also reduce the opportunity for gain or even result in losses by offsetting favorable price movements in other fund investments. Many OTC swaps are complex and often valued subjectively. Improper valuations can result in increased cash payment requirements to counterparties or a loss of value to a fund.

The use of an OTC swap agreement also involves the risk that a loss may be sustained as a result of the insolvency or bankruptcy of the counterparty or the failure of the counterparty to make required payments or otherwise comply with the terms of the agreement. Additionally, the use of credit default swaps can result in losses if a fund's advisor does not correctly evaluate the creditworthiness of the issuer on which the credit swap is based.

Other Investment Companies. A fund may invest in other investment companies, including ETFs, non-exchange traded U.S. registered open-end investment companies (mutual funds), and closed-end investment companies, to the extent permitted by applicable law or SEC exemption. Under Section 12(d)(1) of the 1940 Act, a fund may invest up to

of a closed-end investm	nent company.SEC Rule	e 12d1-4 under the 19	940 Act permits registe	ered investment companies lect to certain conditions,	to
invest in other registere	u investment companie	is beyond the lithits in	Section 12(u)(1), Sub	ect to certain conditions,	

fund provisions, as well as provisions allowing the stock to be called or redeemed, which can limit the benefit of a decline in interest rates. Preferred stock is subject to many of the risks to which common stock and debt securities are subject. In addition, preferred stock may be subject to more abrupt or erratic price movements than common stock or debt securities because preferred stock may trade with less frequency and in more limited volume.

**Private Equity.** Private equity is equity capital that is not quoted on a public exchange. Acquiring private equity involves making investments directly into private companies or conducting buyouts of public companies that result in a delisting of public equity. Capital for private equity can be used to fund new technologies, expand working capital within an owned company, make acquisitions, or to strengthen a balance sheet. Private equity securities should be regarded as illiquid, as they are not listed on an exchange and generally are not widely transferable. By their nature, investments in privately held companies tend to be riskier than investments in publicly traded companies. Generally, there will be no readily available market for private equity investments and, accordingly, most such investments are difficult to value and can be difficult to exit.

**Real Estate Investment Trusts (REITs).** An equity REIT owns real estate properties directly and generates income from rental and lease payments. Equity REITs also have the potential to generate capital gains as properties are sold at a profit. A mortgage REIT makes construction, development, and long-term mortgage loans to commercial real estate developers and earns interest income on these loans. A hybrid REIT holds both properties and mortgages. To avoid

The use of repurchase agreements involves certain risks. One risk is the seller's ability to pay the agreed-upon repurchase price on the repurchase date. If the seller defaults, the fund may incur costs in disposing of the collateral, which would reduce the amount realized thereon. If the seller seeks relief under bankruptcy laws, the disposition of the collateral may be delayed or limited. For example, if the other party to the agreement becomes insolvent and subject to liquidation or reorganization under bankruptcy or other laws, a court may determine that the underlying security is collateral for a loan by the fund not within its control, and therefore the realization by the fund on such collateral may be automatically stayed. Finally, it is possible that the fund may not be able to substantiate its interest in the underlying security and may be deemed an unsecured creditor of the other party to the agreement.

Restricted and Illiquid Securities/Investments (including Private Placements). For the Money Market Portfolio, illiquid securities/investments are securities that cannot be sold or disposed of in the ordinary course of business within seven calendar days at approximately the value ascribed to it by the fund. For the remaining Funds, illiquid securities/investments are investments that a fund reasonably expects cannot be sold or disposed of in current market conditions in seven calendar days or less without the sale or disposition significantly changing the market value of the investment. The SEC generally limits aggregate holdings of illiquid securities/investments by a mutual fund to 15% of its net assets (5% for money market funds). A fund may experience difficulty valuing and selling illiquid securities/investments and, in some cases, may be unable to value or sell certain illiquid securities for an indefinite period of time. Illiquid securities may include a wide variety of investments, such as (1) repurchase agreements maturing in more than seven days (unless the agreements have demand/redemption features), (2) OTC options contracts and certain other derivatives (including certain swap agreements), (3) fixed time deposits that are not subject to prepayment or do not provide for withdrawal penalties upon prepayment (other than overnight deposits), (4) certain loan interests and other direct debt instruments, (5) certain municipal lease obligations, (6) private equity investments, (7) commercial paper issued pursuant to Section 4(a)(2) of the 1933 Act, and (8) securities whose disposition is restricted under the federal securities laws. Illiquid securities/investments may include restricted, privately placed securities (such as private investments in public equity (PIPEs8(w)0(ithdtr)-277.(ex)-277.8(o)0(saSnrovide)-277.(for)ests andwhoseas maturinA cu(The/F2 1 Tf 16.506 0 TD277Innvestmenund)-277.ents

The terms and the structure of the loan arrangements, as well as the aggregate amount of securities loans, must be consistent with the 1940 Act and the rules or interpretations of the SEC thereunder. These provisions limit the amount of securities a fund may lend to 331/3% of the fund's total assets and require that (1) the borrower pledge and maintain with the fund collateral consisting of cash, an irrevocable letter of credit, or securities issued or guaranteed by the U.S. government having at all times not less than 100% of the value of the securities lent; (2) the borrower add to such collateral whenever the price of the securities lent rises (i.e., the borrower "marks to market" on a daily basis); (3) the loan be made subject to termination by the fund at any time; and (4) the fund receives reasonable interest on the loan (which may include the fund investing any cash collateral in interest-bearing short-term investments), any distribution on the lent securities, and any increase in their market value. Loan arrangements made by a fund will comply with any other applicable regulatory requirements. At the present time, the SEC does not object if an investment company pays reasonable negotiated fees in connection with lent securities, so long as such fees are set forth in a written contract and approved by the investment company's trustees. In addition, voting rights pass with the lent securities, but if a fund has knowledge that a material event will occur affecting securities on loan, and in respect to which the holder of the securities will be entitled to vote or consent, the lender must be entitled to call the loaned securities in time to vote or consent. A fund bears the risk that there may be a delay in the return of the securities, which may impair the fund's ability to vote on such a matter. See s for information about certain tax consequences related to a S fund's securities lending activities.

Pursuant to Vanguard's securities lending policy, Vanguard's fixed income and money market funds are not permitted to, and do not, lend their investment securities.

Tax Matters—Federal Tax Discussion Applicable to Variable Annuity and Variable Life Insurance Contracts. Discussion herein of U.S. federal income tax matters summarizes some of the important, generally applicable U.S. federal tax considerations relevant to the Funds and the insurance company separate accounts investing in the Funds in the IRC, U.S. Treasury regulations, and other applicable authorities. These authorities are subject to change by legislative, administrative, or judicial action, possibly with retroactive effect. The discussion assumes that the shares of each Fund will be respected as owned by the insurance company separate accounts that invest in such Fund to fund the insurance company's obligations under a variable life or variable annuity contract. If the IRS were to determine that contract holders have an impermissible level of control over the investments funding their contracts and thus treat the holders as the owners of the shares of a Fund, your contract could lose its favorable tax treatment and income and gain allocable to your contract could be taxable to you currently under the applicable federal income tax rules that may not be described herein. For information concerning the federal income tax consequences to a holder of such a contract, refer to the prospectus for the particular contract. A contract holder should consult his or her tax professional for information regarding the particular situation and the possible application of U.S. federal, state, local, foreign, and other taxes. Because insurance company separate accounts and other permitted investors are the only shareholders in the Funds, only certain tax aspects of an investment in the Funds relevant to such shareholders are described herein.

Tax Matters—Federal Tax Treatment of Bonds Issued or Purchased at a Discount.

subordinated debt may be secured or unsecured, and it generally ranks slightly higher in terms of payment priority than both common and preferred securities of the issuer, but below its other debt securities. Trust preferred securities generally have a yield advantage over traditional preferred stocks, but unlike preferred stocks, distributions generally are treated as interest rather than dividends for federal income tax purposes and, therefore, are not eligible for the dividends-received deduction available to U.S. corporations for dividends paid by U.S. corporations or the lower federal tax rate applicable to qualified dividends. Trust preferred securities typically have maturities of 30 years or more, may be subject to prepayment by the issuer under certain circumstances, and have periodic fixed or variable interest payments and maturities at face value. In addition, trust preferred securities may allow for deferral of interest payments for up to 5 years or longer. However, during any deferral period, interest will accrue and be taxable for holders of the trust preferred securities. Furthermore, if an issuer of trust preferred securities exercised its right to defer interest payments, the securities would be treated as issued with original issue discount (OID) at that time and all interest on the securities would thereafter be treated as OID as long as the securities remained outstanding. Unlike typical asset-backed securities, trust preferred securities have only one underlying obligor and are not over-collateralized. For that reason, the market may effectively treat trust preferred securities as subordinate corporate debt of the parent company issuer. The risks associated with trust preferred securities typically include those relating to the financial condition of the parent company, as the trust typically has no business operations other than holding the subordinated debt issued by the parent company. Holders of trust preferred securities have limited voting rights to control the activities of the trust and no voting rights with respect to the parent company. There can be no assurance as to the liquidity of trust preferred securities or the ability of holders of the trust preferred securities to sell their holdings.

Warrants. Warrants are instruments that give the holder the right, but not the obligation, to buy an equity security at a specific price for a specific period of time. Changes in the value of a warrant do not necessarily correspond to changes in the value of its underlying security. The price of a warrant may be more volatile than the price of its underlying security, and a warrant may offer greater potential for capital appreciation as well as capital loss. Warrants do not entitle a holder to dividends or voting rights with respect to the underlying security and do not represent any rights in the assets of the issuing company. A warrant ceases to have value if it is not exercised prior to its expiration date. These factors can make warrants more speculative than other types of investments. Other kinds of warrants exist, including, but not limited to, warrants linked to countries' economic performance or to commodity prices such as oil prices. These warrants may be subject to risk from fluctuation of underlying assets or indexes, as well as credit risk that the issuer does not pay on the obligations and risk that the data used for warrant payment calculation does not accurately reflect the true underlying commodity price or economic performance.

When-Issued, Delayed-Delivery, and Forward-Commitment Transactions. When-issued, delayed-delivery, and forward-commitment transactions involve a commitment to purchase or sell specific securities at a predetermined price or yield in which payment and delivery take place after the customary settlement period for that type of security. Typically, no interest accrues to the purchaser until the security is delivered. When purchasing securities pursuant to one of these transactions, payment for the securities is not required until the delivery date. However, the purchaser assumes the rights and risks of ownership, including the risks of price and yield fluctuations and the risk that the security will not be issued as anticipated. When a fund has sold a security pursuant to one of these transactions, the fund does not participate in further gains or losses with respect to the security. If the other party to a delayed-delivery transaction fails to deliver or pay for the securities, the fund could miss a favorable price or yield opportunity or suffer a loss. A fund may renegotiate a when-issued or forward-commitment transaction and may sell the underlying securities before delivery, which may result in capital gains or losses for the fund. When-issued, delayed-delivery, and forward-commitment transactions will not be considered to constitute the issuance, by a fund, of a "senior security," as that term is defined in Section 18(g) of the 1940 Act, and therefore such transaction will not be subject to the 300% asset coverage requirement otherwise applicable to borrowings by the fund, if the fund complies with Rule 18f-4.

Regulatory restrictions in India. Shares of the International Portfolio have not been, and will not be, registered under the laws of India and are not intended to benefit from any laws in India promulgated for the protection of shareholders. As a result of regulatory requirements in India, shares of the International Portfolio shall not be knowingly offered to (directly or indirectly) or sold or delivered to (within India); transferred to or purchased by; or held by, for, on the account of, or for the benefit of (i) a "person resident in India" (as defined under applicable Indian law), (ii) an "overseas corporate body" or a "person of Indian origin" (as defined under applicable Indian law), or (iii) any other entity or person disqualified or otherwise prohibited from accessing the Indian securities market under applicable laws, as may be amended from time to time. Investors, prior to purchasing shares of the International Portfolio, must satisfy themselves regarding compliance with these requirements.

#### SHARE PRICE

Each Fund's share price, also known as ss v (NAV), which is calculated as of the close of regular trading on the New York Stock Exchange (NYSE), generally 4 p.m., Eastern time, on each day that the NYSE is open for business (a business day). In the rare event the NYSE experiences unanticipated disruptions and is unavailable at the close of the trading day, each Fund reserves the right to treat such day as a business day and calculate NAVs as of the close of regular trading on the Nasdaq (or another alternate exchange if the Nasdaq is unavailable, as determined at Vanguard's discretion), generally 4 p.m., Eastern time. The NAV per share is computed by dividing the total assets, minus liabilities, of the Fund by the number of Fund shares outstanding. On U.S. holidays or other days when the NYSE is closed, the NAV is not calculated, and the Funds do not sell or redeem shares.

However, on those days the value of a Fund's assets may be affected to the extent that the Fund holds securities that change in value on those days (such as foreign securities that trade on foreign markets that are open). The underlying Vanguard funds in which the Fund-of-Fund Portfolios invest also do not calculate their NAV on days when the NYSE is closed but the value of their assets may be affected to the extent that they hold securities that change in value on those days (such as foreign securities that trade on foreign markets that are open).

The NYSE typically observes the following holidays: New Year's Day; Martin Luther King, Jr., Day; Presidents' Day (Washington's Birthday); Good Friday; Memorial Day; Juneteenth National Independence Day; Independence Day; Labor Day; Thanksgiving Day; and Christmas Day. Although each Fund expects the same holidays to be observed in the future, the NYSE may modify its holiday schedule or hours of operation at any time.

It is the policy of the Money Market Portfolio to attempt to maintain a net asset value of \$1 per share for sales and redemptions. The instruments held by the Fund are valued on the basis of amortized cost, which does not take into account unrealized capital gains or losses. This involves valuing an instrument at its cost and thereafter assuming a constant amortization to maturity of any discount or premium, regardless of the impact of fluctuating interest rates on the market value of the instrument. While this method provides certainty in valuation, it may result in periods during which value, as determined by amortized cost, is higher or lower than the price which the Fund would receive if it sold the instrument. The Fund's holdings will be reviewed by the trustees, at such intervals as they may deem appropriate, to determine whether the Fund's net asset value calculated by using available market quotations deviates from \$1 per share based on amortized cost. The extent of any deviation will be examined by the trustees. If such deviation exceeds ½ of 1%, the trustees will promptly consider what action, if any, will be initiated. In the event the trustees determine that a deviation exists which may result in material dilution or other unfair results to investors or existing shareholders, they have agreed to take such corrective action as they regard as necessary and appropriate, including selling fund instruments prior to maturity to realize capital gains or losses or to shorten average portfolio maturity; withholding dividends; making a special capital distribution; redeeming shares in kind; or establishing a net asset value per share by using available market quotations.

The use of amortized cost and the maintenance of the Money Market Portfolio's net asset value at \$1 is based on its election to operate under Rule 2a-7 under the 1940 Act. As a condition of operating under that rule, the Fund must maintain a dollar-weighted average portfolio maturity of 60 days or less; maintain a dollar-weighted average life of 120 days or less; purchase only instruments having remaining maturities of 397 days or less; meet applicable daily, weekly, and general liquidity requirements; and invest only in securities that are determined by methods approved by the trustees to present minimal credit risks and that are of high quality.

#### PURCHASE AND REDEMPTION OF SHARES

# **Purchase of Shares other than ETF Shares**

The purchase price of shares of each Fund is the NAV next determined after the purchase request is received in good order, as defined in the Fund's prospectus.

The Total Bond Market Index Portfolio reserves the right to impose a transaction fee of 0.25% on any purchase that, in the opinion of the advisor, would disrupt efficient management of the Fund. The advisor may impose this transaction fee if an investor's aggregate purchases into the Fund over a 12-month period exceed, or are expected to exceed, \$50 million. The Fund may incur substantial transaction costs in absorbing very large investments, and the fee (paid directly to the Fund) is intended to protect existing shareholders from being unfairly impacted by such costs. The Fund's advisor

#### **Right to Change Policies**

Vanguard reserves the right, without notice, to (1) alter, add, or discontinue any conditions of purchase (including eligibility requirements), redemption, exchange, conversion, service, or privilege at any time and (2) alter, impose, discontinue, or waive any purchase fee, redemption fee, account service fee, or other fee charged to a shareholder or a group of shareholders. Changes may affect any or all investors. These actions will be taken when, at the sole discretion of Vanguard management, Vanguard believes they are in the best interest of a fund.

#### **Account Restrictions**

Vanguard reserves the right to: (1) redeem all or a portion of a fund/account to meet a legal obligation, including tax withholding, tax lien, garnishment order, or other obligation imposed on your account by a court or government agency; (2) redeem shares, close an account, or suspend account privileges, features, or options in the case of threatening conduct or activity; (3) redeem shares, close an account, or suspend account privileges, features, or options if Vanguard believes or suspects that not doing so could result in a suspicious, fraudulent, or illegal transaction; (4) place restrictions on the ability to redeem any or all shares in an account if it is required to do so by a court or government agency; (5) place restrictions on the ability to redeem any or all shares in an account if Vanguard believes that doing so will prevent fraud or financial exploitation or abuse, or will protect vulnerable investors; (6) freeze any account and/or suspend account services if Vanguard has received reasonable notice of a dispute regarding the assets in an account, including notice of a dispute between the registered or beneficial account owners; and (7) freeze any account and/or suspend account services upon initial notification to Vanguard of the death of an account owner.

#### MANAGEMENT OF THE FUNDS

#### Vanguard

Each Fund is part of the Vanguard group of investment companies, which consists of i2 OF fund is a series of a Delaware statutory trust.7.8 Funds obtain virtually all of their corporate management, administrative, and distribution services through the trusts' jointly owned subsidiary, Vanguard. Vanguard may contract with certain third-party service providers to assist Vanguard in providing certain administrative and/or accounting services with respect to the funds, subject to Vanguard's o2 Vanguard also provides investment advisory services to certain Vanguard funds. All of these services are provided at Vanguard's total cost of operations pursuant to the Fifth Amended and Restated Funds' Service Agreement (the Agreement).

Vanguard was established and operates under the Agreement. Vanguard employs a supporting staff of management and administrative personnel needed to provide the requisite services to the funds and also furnishes the funds with necessary office space, furnishings, and equipment.

Pursuant to an agreement between Vanguard and JPMorgan Chase Bank N.A. (JPMorgan), JPMorgan provides services for the Conservative Allocation Portfolio, Moderate Allocation Portfolio, Equity Index Portfolio, Mid-Cap Index Portfolio, Real Estate Index Portfolio, Total Stock Market Index Portfolio, Total International Stock Market Index Portfolio, and Global Bond Index Portfolio. These services include, but are not limited to: (i) the calculation of such funds' daily NAVs and (ii) the furnishing of financial reports. The fees paid to JPMorgan under this agreement are based on a combination of flat and asset based fees. During the fiscal years ended Decemb OFOF and JPMorgan had received fees from the Funds for administrative services rendered as shown in the table below.

Pursuant to an agreement between Vanguard and State Street Bank and Trust Company (State Street), State Street provides services for the Balanced Portfolio, Capital Growth Portfolio, Di2 Value Portfolio, Equity Income Portfolio, Growth Portfolio, High Yield Bond Portfolio, International Portfolio, Money Market Portfolio, Short-Term Investment-Grade Portfolio, Small Company Growth Portfolio, and Total Bond Market Index Portfolio. These services include, but are not limited to: (i) the calculation of such funds' daily NAVs and (ii) the furnishing of financial reports. The fees paid to State Street under this agreement are based on a combination of flat and asset based fees. During the fiscal years ended OF and State Street had received fees from the Funds for administrative services rendered as shown in the table below.

Portfolio 2.22 2.23

Portfolio	2021	2022	2023
Conservative Allocation Portfolio	15,583.26	16,999.92	16,999.92
Diversified Value Portfolio	22,666.72	21,500.04	21,500.04
Equity Income Portfolio	22,666.72	21,500.04	21,500.04
Equity Index Portfolio	16,999.92	16,999.92	16,999.92

	Percentage of			
	Capital	Fund's	Percent of	
	Contribution to	Average	Vanguard Funds'	
Vanguard Fund	Vanguard	Net Assets	Contribution	
Short-Term Investment-Grade Portfolio	72,000	Less than 0.01	0.03	
Small Company Growth Portfolio	44,000	Less than 0.01	0.02	
Total Bond Market Index Portfolio	137,000	Less than 0.01	0.05	

For the Fund-of-Fund Portfolios. The Agreement provides that each Fund will not contribute to Vanguard's capitalization or pay for corporate management, administrative, and distribution services provided by Vanguard. However, each Fund will bear its own direct expenses, such as legal, auditing, and custodial fees. In addition, the Agreement further provides that each Fund's direct expenses may be offset by (1) the Fund's contributions to the costs of operating the underlying Vanguard funds in which the Fund invests, and (2) certain savings in administrative and marketing costs that Vanguard expects to derive from the Fund's operation. Accordingly, all expenses for services provided by Vanguard to the Funds and all other expenses incurred by the Funds are expected to be borne by the underlying funds. Each Fund's shareholders bear the fees and expenses associated with the Fund's investments in the underlying funds.

As of December 31, 2023, the Acquired Fund Fees and Expenses of each Fund were as follows: 0.13% for the Total Stock Market Index Portfolio, the Global Bond Index Portfolio, the Conservative Allocation Portfolio, and for the Moderate Allocation Portfolio; and 0.11% for the Total International Stock Market Index Portfolio.

**Management.** Corporate management and administrative services include (1) executive staff, (2) accounting and financial, (3) legal and regulatory, (4) shareholder account maintenance, (5) monitoring and control of custodian relationships, (6) shareholder reporting, and (7) review and evaluation of advisory and other services provided to the funds by third parties.

*Distribution.* Vanguard Marketing Corporation, 100 Vanguard Boulevard, Malvern, PA 19355, a wholly owned subsidiary of Vanguard, is the principal underwriter for the funds and in that capacity performs and finances marketing,

Providing administrative services in connection with investments in the funds or other investments, including, but not limited to, shareholder services, recordkeeping services, and educational services.

Providing products or services that assist investors or financial service providers (as defined below) in the investment decision-making process.

VMC performs most marketing and distribution activities itself. Some activities may be conducted by third parties pursuant to shared marketing arrangements under which VMC agrees to share the costs and performance of marketing and distribution activities in concert with a financial service provider. Financial service providers include, but are not limited to, investment advisors, broker-dealers, financial planners, financial consultants, banks, and insurance companies. Under these cost- and performance-sharing arrangements, VMC may pay or reimburse a financial service provider (or a third party it retains) for marketing and distribution activities that VMC would otherwise perform. VMC's cost- and performance-sharing arrangements may be established in connection with Vanguard investment products or services offered or provided to or through the financial service providers.

VMC's arrangements for shared marketing and distribution activities may vary among financial service providers, and its payments or reimbursements to financial service providers in connection with shared marketing and distribution activities may be significant. VMC, as a matter of policy, does not pay asset-based fees, sales-based fees, or account-based fees to financial service providers in connection with its marketing and distribution activities for the Vanguard funds. VMC does make fixed dollar payments to financial service providers when sponsoring, jointly sponsoring, financially supporting, or participating in conferences, programs, seminars, presentations, meetings, or other events involving fund shareholders, financial service providers, or others concerning the funds, other investments, the financial markets, or the economy, such as industry conferences, prospecting trips, due diligence visits, training or education meetings, and sales presentations. VMC also makes fixed dollar payments to financial service providers for data regarding funds, such as statistical information regarding sales of fund shares. In addition, VMC makes fixed dollar payments for expenses associated with financial service providers' use of Vanguard's funds including, but not limited to, the use of funds in model portfolios. These payments may be used for services including, but not limited to, technology support and development; platform support and development; due diligence related to products used on a platform; legal, regulatory, and compliance expenses related to a platform; and other platform-related services.

In connection with its marketing and distribution activities, VMC may give financial service providers (or their representatives) (1) promotional items of nominal value that display Vanguard's logo, such as golf balls, shirts, towels, pens, and mouse pads; (2) gifts that do not exceed \$100 per person annually and are not preconditioned on achievement of a sales target; (3) an occasional meal, a ticket to a sporting event or the theater, or comparable entertainment that is neither so frequent nor so extensive as to raise any question of propriety and is not preconditioned on achievement of a sales target; and (4) reasonable travel and lodging accommodations to facilitate participation in marketing and distribution activities.

VMC policy prohibits marketing and distribution activities that are intended, designed, or likely to compromise suitability determinations by, or the fulfillment of any fiduciary duties or other obligations that apply to, financial service providers. Nonetheless, VMC's marketing and distribution activities are primarily intended to result in the sale of the funds' shares, and as such, its activities, including shared marketing and distribution activities and fixed dollar payments as described above, may influence applicable financial service providers (or their representatives) to recommend, promote, include, or invest in a Vanguard fund or share class. In addition, Vanguard or any of its subsidiaries may retain a financial service provider to provide consulting or other services, and that financial service provider also may provide services to investors. Investors should consider the possibility that any of these activities, relationships, or payments may influence a financial service provider's (or its representatives') decision to recommend, promote, include, or invest in a Vanguard fund or share class. Each financial service provider should consider its suitability determinations, fiduciary duties, and other legal obligations (or those of its representatives) in connection with any decision to consider, recommend, promote, include, or invest in a Vanguard fund or share class.

The following table describes the expenses of Vanguard and VMC that are incurred by Funds (other than the Fund-of-Fund Portfolios). Amounts captioned "Management and Administrative Expenses" include a Fund's allocated share of expenses associated with the management, administrative, and transfer agency services Vanguard provides to the Vanguard funds. Amounts captioned "Marketing and Distribution Expenses" include a Fund's allocated share of expenses associated with the marketing and distribution activities that VMC conducts on behalf of the Vanguard funds.

As is the case with all mutual funds, transaction costs incurred by the Funds for buying and selling securities are not reflected in the table. Annual Shared Fund Operating Expenses are based on expenses incurred in the fiscal years ended December 31, 2021, 2022, and 2023, and are presented as a percentage of each Fund's average month-end net assets.

# Annual Shared Fund Operating Expenses (Shared Expenses Deducted From Fund Assets)

Vanguard Fund	2021	2022	2023
Balanced Portfolio			
Management and Administrative Expenses	0.15%	0.15%	0.15%
Marketing and Distribution Expenses	0.01	0.01	Less than 0.01
Capital Growth Portfolio			
Management and Administrative Expenses	0.18%	0.18%	0.18%
Marketing and Distribution Expenses	0.01	0.01	0.01
Diversified Value Portfolio			
Management and Administrative Expenses	0.15%	0.15%	0.15%
Marketing and Distribution Expenses	0.01	0.01	0.01
Equity Income Portfolio			
Management and Administrative Expenses	0.19%	0.20%	0.21%
Marketing and Distribution Expenses	0.01	0.01	0.01
Equity Index Portfolio			
Management and Administrative Expenses	0.12%	0.12%	0.13%
Marketing and Distribution Expenses	0.01	0.01	0.01
Growth Portfolio			
Management and Administrative Expenses	0.24%	0.24%	0.24%
Marketing and Distribution Expenses	0.01	0.01	0.01
High Yield Bond Portfolio			
Management and Administrative Expenses	0.18%	0.18%	0.18%
Marketing and Distribution Expenses	0.01	0.01	0.01
International Portfolio			
Management and Administrative Expenses	0.18%	0.18%	0.18%
Marketing and Distribution Expenses	0.01	0.01	0.01
Mid-Cap Index Portfolio			
Management and Administrative Expenses	0.14%	0.15%	0.16%
Marketing and Distribution Expenses	0.01	0.01	0.01
Money Market Portfolio			
Management and Administrative Expenses	0.14%	0.13%	0.13%
Marketing and Distribution Expenses	0.01	0.01	0.01
Real Estate Index Portfolio			
Management and Administrative Expenses	0.23%	0.24%	0.24%
Marketing and Distribution Expenses	0.01	0.01	0.01
Short-Term Investment-Grade Portfolio			
Management and Administrative Expenses	0.12%	0.12%	0.11%
Marketing and Distribution Expenses	0.01	0.01	0.01
Small Company Growth Portfolio			
Management and Administrative Expenses	0.17%	0.18%	0.19%
Marketing and Distribution Expenses	0.01	0.01	0.01
Total Bond Sa3whd SExpeo8%			

The Balanced, Equity Income, and Growth Portfolios' investment advisors may direct certain security trades, subject to obtaining the best price and execution, to brokers who have agreed to rebate to each Fund part of the commissions generated. Such rebates are used solely to reduce each Fund's management and administrative expenses and are not reflected in these totals.

#### **Officers and Trustees**

Each Vanguard fund is governed by the board of trustees of its trust and a single set of officers. Consistent with the board's corporate governance principles, the trustees believe that their primary responsibility is oversight of the

The Nominating Committee will consider shareholder recommendations for trustee nominees. Shareholders may send recommendations to Mr. Loughridge, chairman of the committee.

Trustees retire in accordance with the funds' governing documents and policies, and typically by age 75.

#### **Trustee Compensation**

The same individuals serve as trustees of all Vanguard funds and each fund pays a proportionate share of the trustees' compensation. Vanguard funds also employ their officers on a shared basis; however, officers are compensated by Vanguard, not the funds. The trustees and officers of the Global Bond Index, Total International Stock Market Index, Conservative Allocation, Moderate Allocation, and Total Stock Market Index Portfolios will receive no remuneration directly from the Funds. However, the Funds' underlying funds pay their proportionate share of the trustees' compensation and the officers' salaries and benefits.

*Independent Trustees.* The funds compensate their independent trustees (i.e., the ones who are not also officers of the funds) in two ways:

The independent trustees receive an annual fee for their service to the funds, which is subject to reduction based on absences from scheduled board meetings.

The independent trustees are reimbursed for the travel and other expenses that they incur in attending board meetings.

"Interested" Trustee. Mr. Buckley serves as a trustee, but is not paid in this capacity. He is, however, paid in his role as an officer of Vanguard.

**Compensation Table.** The following table provides compensation details for each of the trustees. We list the amounts paid as compensation by the Funds for each trustee. In addition, the table shows the total amount of compensation paid to each trustee by all Vanguard funds.

## VANGUARD VARIABLE INSURANCE FUNDS TRUSTEES' COMPENSATION TABLE

	Aggregate Compensation From	Total Compensation From All Vanguard
Trustee	the Funds <sup>1</sup>	Funds Paid to Trustees <sup>2</sup>
Mortimer J. Buckley	_	_
Tara Bunch	\$2,037	\$330,000
Emerson U. Fullwood	2,037	330,000
F. Joseph Loughrey	2,160	350,000
Mark Loughridge	2,469	400,000
Scott C. Malpass	2,037	330,000
Deanna Mulligan	2,037	330,000
Lubos Pastor <sup>3</sup>	_	_
André F. Perold	2,037	330,000
Sarah Bloom Raskin	2,160	350,000
Grant Reid⁴	1,164	188,572
David Thomas	2,037	330,000
Peter F. Volanakis	2,160	350,000

<sup>1</sup> The amounts shown in this column are based on the Trust's fiscal year ended December 31, 2023. Each Fund within the Trust (except for funds of funds) is responsible for a proportionate share of these amounts.

#### **Ownership of Fund Shares**

All current trustees allocate their investments among the various Vanguard funds based on their own investment needs. The Portfolios are mutual funds used solely as investment options for annuity or life insurance contracts offered by insurance companies, which can only be purchased through a contract offered by an insurance company. Accordingly, the trustees cannot directly own shares of the Portfolios. The following table shows each trustee's ownership of shares of all Vanguard funds served by the trustee as of December 31, 2023.

Trustee	Aggregate Dollar Range of Vanguard Fund Shares Owned By Trustee
Mortimer J. Buckley	Over \$100,000
Tara Bunch	Over \$100,000
Emerson U. Fullwood	Over \$100,000
F. Joseph Loughrey	Over \$100,000
Mark Loughridge	Over \$100,000
Scott C. Malpass	Over \$100,000
Deanna Mulligan	Over \$100,000
André F. Perold	Over \$100,000
Sarah Bloom Raskin	Over \$100,000
David Thomas	Over \$100,000
Peter F. Volanakis	Over \$100.000

<sup>2</sup> The amounts reported in this column reflect the total compensation paid to each trustee for his or her service as trustee of 208 Vanguard funds for the 2023 calendar year and include any amount a trustee has elected to defer. During the 2023 calendar year, the following trustees elected to defer all or a portion of their compensation as follows: Ms. Bunch, \$330,000; Ms. Mulligan, \$330,000; Mr. Perold, \$330,000; Ms. Raskin, \$175,000; Mr. Reid, \$188,572; and Dr. Thomas, \$165,000.

<sup>3</sup> Mr. Pastor became a member of the Funds' board effective January 1, 2024.

<sup>4</sup> Mr. Reid became a member of the Funds' board effective July 20, 2023.

As of March 31, 2024, the following owned of record 5% or more of the outstanding shares of each Fundother than ETF Shares:

Vanguard Fund	Owner	Percentage of Ownership
Vanguard Variable Insurance Fund - Balanced Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	64.44%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	6.76%
	AMERICAN FIDELITY ASSURANCE OKLAHOMA CITY, OK	5.32%
Vanguard Variable Insurance Fund - Capital Growth Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	53.46%
	AMERICAN FIDELITY ASSURANCE OKLAHOMA CITY, OK	9.76%
Vanguard Variable Insurance Fund - Conservative Allocation Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	72.24%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	8.76%
	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	6.65%
Vanguard Variable Insurance Fund - Diversified Value Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	45.57%
	MUTUAL OF AMERICA MID ATLANTIC TRUST COMPANY PITTSBURG, PA	28.00%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	5.47%
Vanguard Variable Insurance Fund - Equity Income Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	45.62%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	13.05%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	8.47%
	EMPOWER ANNUITY INSURANCE BENEFIT TRUST CO FBO GWLA COLI VUL7 GREENWOOD VLG, CO	5.22%
Vanguard Variable Insurance Fund - Equity Index Portfolio	VANGUARD VARIABLE FUNDS CONSERVATIVE ALLOCATION PORTFOLIO VALLEY FORGE, PA	44.55%
	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	22.35%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	5.04%
Vanguard Variable Insurance Fund - Global Bond Index Portfolio	THE LINCOLN LIFE INSURANCE COMPANY FORT WAYNE, IN	32.00%
	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	30.63%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	13.77%
	TRANSAMERICA PREMIER LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	6.67%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	5.36%
Vanguard Variable Insurance Fund - Growth Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	63.35%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	12.75%
	TRANSAMERICA FINANCIAL LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	6.23%

Vanguard Fund	Owner	Percentage of Ownership
Vanguard Variable Insurance Fund - High Yield Bond Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	37.26%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	9.40%
	TIAA CREF LIFE INSURANCE COMPANY NEW YORK, NY	8.92%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	7.94%
Vanguard Variable Insurance Fund - International Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	31.32%
	MUTUAL OF AMERICA MID ATLANTIC TRUST COMPANY PITTSBURG, PA	13.78%
	PRUDENTIAL INSURANCE COMPANY OF AMERICA NEWARK, NJ	11.00%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	6.72%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	5.76%
	TALCOTT RESOLUTION LIFE INSURANCE COMPANY HARTFORD, CT	5.38%
Vanguard Variable Insurance Fund - Mid-Cap Index Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	31.35%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	9.61%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	7.27%
	PRINCIPAL LIFE INSURANCE COMPANY DES MOINES, IA	6.17%
	THE LINCOLN LIFE INSURANCE COMPANY FORT WAYNE, IN	5.94%
Vanguard Variable Insurance Fund - Moderate Allocation Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	67.46%
	TRANSAMERICA FINANCIAL LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	6.34%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	6.19%
Vanguard Variable Insurance Fund - Money Market Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	PRINCIPAL LIFE IN:

Vanguard Fund	Owner	Percentage of Ownership
Vanguard Variable Insurance Fund - Small Company Growth Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	51.96%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	11.25%
Vanguard Variable Insurance Fund - Total Bond Market Index Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	26.78%
	VANGUARD VARIABLE FUNDS CONSERVATIVE ALLOCATION PORTFOLIO VALLEY FORGE, PA	15.78%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	14.33%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	13.89%
	TIAA CREF LIFE INSURANCE COMPANY NEW YORK, NY	7.01%
Vanguard Variable Insurance Fund - Total International Stock Market Index Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	17.21%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	17.03%
	THE LINCOLN LIFE INSURANCE COMPANY FORT WAYNE, IN	13.69%
	NATIONWIDE LIFE INSURANCE COMPANY COLUMBUS, OH	11.63%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	10.33%
	TRANSAMERICA PREMIER LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	9.94%
Vanguard Variable Insurance Fund - Total Stock Market Index Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	38.72%
	JEFFERSON NATIONAL LIFE INSURANCE COMPANY COLUMBUS, OH	11.24%
	AMERICAN FIDELITY ASSURANCE OKLAHOMA CITY, OK	8.77%
	TRANSAMERICA PREMIER LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	6.48%

A shareholder who owns more than 25% of a Fund's voting shares may be considered a controlling person. As of March 31, 2024, the following held of record 25% or more of the voting shares:

Vanguard Fund	Owner	Percentage of Ownership
Vanguard Variable Insurance Fund - Balanced Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	64.44%
Vanguard Variable Insurance Fund - Capital Growth Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	53.46%
Vanguard Variable Insurance Fund - Conservative Allocation Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	72.24%
Vanguard Variable Insurance Fund - Diversified Value Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	45.57%
	MUTUAL OF AMERICA MID ATLANTIC TRUST COMPANY PITTSBURG, PA	28.00%
Vanguard Variable Insurance Fund - Equity Income Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	45.62%
Vanguard Variable Insurance Fund - Equity Index Portfolio	VANGUARD VARIABLE FUNDS CONSERVATIVE ALLOCATION PORTFOLIO VALLEY FORGE, PA	44.55%
Vanguard Variable Insurance Fund - Global Bond Index Portfolio	THE LINCOLN LIFE INSURANCE COMPANY FORT WAYNE, IN	32.00%
	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	30.63%

Vanguard Fund	Owner	of Ownership
Vanguard Variable Insurance Fund - Growth Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	63.35%
Vanguard Variable Insurance Fund - High Yield Bond Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	37.26%
Vanguard Variable Insurance Fund - International Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	31.32%
Vanguard Variable Insurance Fund - Mid-Cap Index Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	31.35%
Vanguard Variable Insurance Fund - Moderate Allocation Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	67.46%
Vanguard Variable Insurance Fund - Money Market Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	87.40%
Vanguard Variable Insurance Fund - Real Estate Index Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	36.60%
Vanguard Variable Insurance Fund - Short-Term Investment-Grade Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	34.74%
Vanguard Variable Insurance Fund - Small Company Growth Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	51.96%
Vanguard Variable Insurance Fund - Total Bond Market Index Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	26.78%
Vanguard Variable Insurance Fund - Total Stock Market Index Portfolio	TRANSAMERICA LIFE INSURANCE COMPANY CEDAR RAPIDS, IA	38.72%

Percentage

#### Portfolio Holdings Disclosure Policies and Procedures

#### Introduction

Vanguard and the boards of trustees of the Vanguard funds (the Boards) have adopted Portfolio Holdings Disclosure Policies and Procedures (Policies and Procedures) to govern the disclosure of the portfolio holdings of each Vanguard fund. Vanguard and the Boards considered each of the circumstances under which Vanguard fund portfolio holdings may be disclosed to different categories of persons under the Policies and Procedures. Vanguard and the Boards also considered actual and potential material conflicts that could arise in such circumstances between the interests of Vanguard fund shareholders, on the one hand, and those of the fund's investment advisor, sub-advisor, distributor, or any affiliated person of the fund, its investment advisor, sub-advisor, or its distributor, on the other. After giving due consideration to such matters and after the exercise of their fiduciary duties and reasonable business judgment, Vanguard and the Boards determined that the Vanguard funds have a legitimate business purpose for disclosing portfolio holdings to the persons described in each of the circumstances set forth in the Policies and Procedures and that the Policies and Procedures are reasonably designed to ensure that disclosure of portfolio holdings and information about portfolio holdings is in the best interests of fund shareholders and appropriately addresses the potential for material conflicts of interest.

The Boards exercise continuing oversight of the disclosure of Vanguard fund portfolio holdings by (1) overseeing the implementation and enforcement of the Policies and Procedures, the Code of Ethical Conduct, and the Policies and Procedures Designed to Prevent the Misuse of Inside Information (collectively, the portfolio holdings governing policies) by the chief compliance officer of Vanguard and the Vanguard funds; (2) considering reports and recommendations by the chief compliance officer concerning any material compliance matters (as defined in Rule 38a-1 under the 1940 Act and Rule 206(4)-7 under the Investment Advisers Act of 1940) that may arise in connection with any portfolio holdings governing policies; and (3) considering whether to approve or ratify any amendment to any portfolio holdings governing policies.

Vanguard and the Boards reserve the right to amend the Policies and Procedures at any time and from time to time without prior notice at their sole discretion. For purposes of the Policies and Procedures, the term "portfolio holdings" means the equity and debt securities (e.g., stocks and bonds) held by a Vanguard fund and does not mean the cash equivalent investments, derivatives, and other investment positions (collectively, other investment positions) held by the fund.

#### **Online Disclosure of Complete Portfolio Holdings**

Each actively managed Vanguard fund, unless otherwise stated, generally will seek to disclose the fund's complete portfolio holdings as of the end of the most recent calendar quarter online at v .c 30 calendar days after the end of the calendar quarter. In accordance with Rule 2a-7 under the 1940 Act, each of the Vanguard money market funds will disclose the fund's complete portfolio holdings as of the last business day of the prior month online at no later than the fifth business day of the current month. The complete portfolio holdings information for money market funds will remain available online for at least six months after the initial posting. Each Vanguard index fund, other than those Vanguard index funds relying on Rule 6c-11 under the 1940 Act (e.g., standalone ETFs). generally will seek to disclose the fund's complete portfolio holdings as of the end of the most recent month online at .c , 15 calendar days after the end of the month. Online disclosure of complete portfolio holdings is made to all categories of persons, including individual investors, institutional investors, intermediaries, third-party service providers, rating and ranking organizations, affiliated persons of a Vanguard fund, and all other persons. Vanguard will review complete portfolio holdings before disclosure is made and, except with respect to the complete portfolio holdings of the Vanguard money market funds, may withhold any portion of the fund's complete portfolio holdings from disclosure when deemed to be in the best interests of the fund after consultation with a Vanguard fund's investment advisor.

Vanguard Variable Insurance Funds will also disclose the complete portfolio holdings of each Fund on our website for Financial Advisors at  $\sqrt[4]{s}$  s.v .c .

# Disclosure of Complete Portfolio Holdings to Service Providers Subject to Confidentiality and Trading Restrictions

Vanguard, for legitimate business purposes, may disclose Vanguard fund complete portfolio holdings at times it deems necessary and appropriate to rating and ranking organizations; financial printers; proxy voting service providers; pricing information vendors; issuers of guaranteed investment contracts for stable value portfolios; third parties that deliver analytical, statistical, or consulting services; and other third parties that provide services (collectively, Service Providers) to Vanguard, Vanguard subsidiaries, and/or the Vanguard funds. Disclosure of complete portfolio holdings to a Service Provider is conditioned on the Service Provider being subject to a written agreement imposing a duty of confidentiality, including a duty not to trade on the basis of any material nonpublic information.

The frequency with which complete portfolio holdings may be disclosed to a Service Provider, and the length of the lag, if any, between the date of the information and the date on which the information is disclosed to the Service Provider, is determined based on the facts and circumstances, including, without limitation, the nature of the portfolio holdings information to be disclosed, the risk of harm to the funds and their shareholders, and the legitimate business purposes served by such disclosure. The frequency of disclosure to a Service Provider varies and may be as frequent as daily, with no lag. Disclosure of Vanguard fund complete portfolio holdings by Vanguard to a Service Provider must be authorized by a Vanguard fund officer or a Principal in Vanguard's Portfolio Review Department or Office of the General Counsel. Any disclosure of Vanguard fund complete portfolio holdings to a Service Provider as previously described may also include a list of the other investment positions that make up the fund, such as cash equivalent investments and derivatives.

Currently, Vanguard fund complete portfolio holdings are disclosed to the following Service Providers as part of ongoing arrangements that serve legitimate business purposes: Abel/Noser Corporation; Advisor Software, Inc.; Alcom Printing Group Inc.; Apple Press, L.C.; Bloomberg L.P.; Brilliant Graphics, Inc.; Broadridge Financial Solutions, Inc.; Brown Brothers Harriman & Co.; Canon Business Process Services; Charles River Systems, Inc.; Eagle Investments; Equilend; FactSet Research Systems Inc.; Gresham Technologies, Plc.; Innovation Printing & Communications; Institutional Shareholder Services, Inc.; Intelligencer Printing Company; Investment Technology Group, Inc.; Lipper, Inc.; Markit WSO Corporation; McMunn Associates, Inc.; Morningstar; Pirium; Reuters America Inc.; R.R. Donnelley, Inc.; State Street Bank and Trust Company; Stonewain; and Trade Informatics LLC.

# Disclosure of Complete Portfolio Holdings to Vanguard Affiliates and Certain Fiduciaries Subject to Confidentiality and Trading Restrictions

Vanguard fund complete portfolio holdings may be disclosed between and among the following persons (collectively, Affiliates and Fiduciaries) for legitimate business purposes within the scope of their official duties and responsibilities, subject to such persons' continuing legal duty of confidentiality and legal duty not to trade on the basis of any material nonpublic information, as such duties are imposed under the Code of Ethical Conduct, the Policies and Procedures Designed to Prevent the Misuse of Inside Information, by agreement, or under applicable laws, rules, and regulations:

(1) persons who are subject to the Code of Ethical Conduct or the Policies and Procedures Designed to Prevent the Misuse of Inside Information; (2) an investment advisor, sub-advisor, distributor, administrator, transfer agent, or custodian to a Vanguard fund; (3) an accounting firm, an auditing firm, or outside legal counsel retained by Vanguard, a Vanguard subsidiary, or a Vanguard fund; (4) an investment advisor to whom complete portfolio holdings are disclosed for due diligence purposes when the advisor is in merger or acquisition talks with a Vanguard fund's current advisor; and (5) a newly hired investment advisor or sub-advisor to whom complete portfolio holdings are disclosed prior to the time it commences its duties.

The frequency with which complete portfolio holdings may be disclosed between and among Affiliates and Fiduciaries, and the length of the lag, if any, between the date of the information and the date on which the information is disclosed between and among the Affiliates and Fiduciaries, is determined by such Affiliates and Fiduciaries based on the facts and circumstances, including, without limitation, the nature of the portfolio holdings information to be disclosed, the risk of harm to the funds and their shareholders, and the legitimate business purposes served by such disclosure. The frequency of disclosure between and among Affiliates and Fiduciaries varies and may be as frequent as daily, with no lag. Any disclosure of Vanguard fund complete portfolio holdings to any Affiliates and Fiduciaries as previously described may also include a list of the other investment positions that make up the fund, such as cash equivalent investments and derivatives. Disclosure of Vanguard fund complete portfolio holdings or other investment positions by Vanguard, VMC, or a Vanguard fund to Affiliates and Fiduciaries must be authorized by a Vanguard fund officer or a Principal of Vanguard.

Currently, Vanguard discloses complete portfolio holdings to the following Affiliates and Fiduciaries as part of ongoing arrangements that serve legitimate business purposes: Vanguard and each investment advisor, sub-advisor, custodian, and independent registered public accounting firm identified in each fund's Statement of Additional Information.

# Disclosure of Portfolio Holdings to Trading Counterparties in the Normal Course of Managing a Fund's Assets

An investment advisor, sub-advisor, administrator, or custodian for a Vanguard fund may, for legitimate business purposes within the scope of its official duties and responsibilities, disclose portfolio holdings (whether partial portfolio holdings or complete portfolio holdings) and other investment positions that make up the fund to any trading counterparty, including one or more broker-dealers or banks, during the course of, or in connection with, normal day-to-day securities and derivatives transactions with or through such trading counterparties subject to the counterparty's legal obligation not to use or disclose material nonpublic information concerning the fund's portfolio holdings, other investment positions, securities transactions, or derivatives transactions without the consent of the fund or its agents. The Vanguard funds have not given their consent to any such use or disclosure and no person or agent of Vanguard is authorized to give such consent except as approved in writing by the Boards of the Vanguard funds. Disclosure of portfolio holdings or other investment positions by Vanguard to trading counterparties must be authorized by a Vanguard fund officer or a Principal of Vanguard.

In addition to the disclosures described below to Authorized Participants, a Vanguard fund investment advisor or administrator may also disclose portfolio holdings information to other current or prospective fund shareholders in connection with the dissemination of information necessary for transactions in Creation Units (as defined below) or other large transactions with a Vanguard fund. Such shareholders are typically Authorized Participants or other financial institutions that have been authorized by VMC to purchase and redeem large blocks of shares, but may also include market makers and other institutional market participants and entities to whom a Vanguard fund advisor or administrator may provide information in connection with transactions in a Vanguard fund.

#### **Disclosure of Nonmaterial Information**

The Policies and Procedures permit Vanguard fund officers, Vanguard fund portfolio managers, and other Vanguard representatives (collectively, Approved Vanguard Representatives) to disclose any views, opinions, judgments, advice, or commentary, or any analytical, statistical, performance, or other information, in connection with or relating to a Vanguard fund or its portfolio holdings and/or other investment positions (collectively, commentary and analysis) or any changes in the portfolio holdings of a Vanguard fund that occurred after the end of the most recent calendar quarter (recent portfolio changes) to any person if (1) such disclosure serves a legitimate business purpose, (2) such disclosure does not effectively result in the disclosure of the complete portfolio holdings of any Vanguard fund (which can be disclosed only in accordance with the Policies and Procedures), and (3) such information does not constitute material nonpublic information. Disclosure of commentary and analysis or recent portfolio changes by Vanguard, VMC, or a Vanguard fund must be authorized by a Vanguard fund officer or a Principal of Vanguard.

#### **Prohibitions on Disclosure of Portfolio Holdings**

No person is authorized to disclose Vanguard fund portfolio holdings or other investment positions (whether online at v .c , in writing, by fax, by email, orally, or by other means) except in accordance with the Policies and Procedures. In addition, no person is authorized to make disclosure pursuant to the Policies and Procedures if such disclosure is otherwise unlawful under the antifraud provisions of the federal securities laws (as defined in Rule 38a-1 under the 1940 Act). Furthermore, Vanguard's management, at its sole discretion, may determine not to disclose portfolio holdings or other investment positions that make up a Vanguard fund to any person who would otherwise be eligible to receive such information under the Policies and Procedures, or may determine to make such disclosures publicly as provided by the Policies and Procedures.

#### **Prohibitions on Receipt of Compensation or Other Consideration**

The Policies and Procedures prohibit a Vanguard fund, its investment advisor, and any other person or entity from paying or receiving any compensation or other consideration of any type for the purpose of obtaining disclosure of Vanguard fund portfolio holdings or other investment positions. "Consideration" includes any agreement to maintain assets in the fund or in other investment companies or accounts managed by the investment advisor or sub-advisor or by any affiliated person of the investment advisor or sub-advisor.

#### INVESTMENT ADVISORY AND OTHER SERVICES

The Trust currently uses eight investment advisors:

ArrowMark Colorado Holdings, LLC (ArrowMark Partners) provides investment advisory services for a portion of the assets in the Small Company Growth Portfolio.

Baillie Gifford Overseas Ltd. (Baillie Gifford) provides investment advisory services for a portion of the assets in the International Portfolio.

Hotchkis and Wiley Capital Management, LLC (Hotchkis and Wiley) provides investment advisory services for a portion of the assets in the Diversified Value Portfolio.

Lazard Asset Management LLC (Lazard) provides investment advisory services for a portion of the assets in the Diversified Value Portfolio.

PRIMECAP Management Company (PRIMECAP) provides investment advisory services to the Capital Growth Portfolio.

Schroder Investment Management North America Inc. (Schroders) provides investment advisory services for a portion of the assets in the International Portfolio. Schroder Investment Management North America Limited serves as the sub-advisor for the Schroders portion of the International Portfolio.

Wellington Management Company LLP (Wellington Management) provides investment advisory services to the Growth and Balanced Portfolios, and for a portion of the assets in the Equity Income and High Yield Bond Portfolios.

Vanguard provides investment advisory services to the Conservative Allocation, Global Bond Index, Equity Index, Mid-Cap Index, Moderate Allocation, Money Market, Real Estate Index, Short-Term Investment-Grade, Total Bond Market Index, Total International Stock Market Index, and Total Stock Market Index Portfolios, and for a portion of the assets in the Equity Income, High Yield Bond, and Small Company Growth Portfolios.

Jackson Square Partners, LLC, provided investment advisory services for a portion of the Growth Portfolio from 2010 until March 2021.

#### **Independent Third-Party Advisors**

For funds that are advised by independent third-party advisory firms unaffiliated with Vanguard, the board of trustees of each fund hires investment advisory firms, not individual portfolio managers, to provide investment advisory services to such funds. Vanguard negotiates each advisory agreement, which contains advisory fee arrangements, on an arm's length basis with the advisory firm. Each advisory agreement is reviewed annually by each fund's board of trustees, taking into account numerous factors, which include, without limitation, the nature, extent, and quality of the services provided; investment performance; and the fair market value of the services provided. Each advisory agreement is between the Trust and the advisory firm, not between the Trust and the portfolio manager. The structure of the advisory

fee paid to each unaffiliated investment advisory firm is described in the following sections. In addition, each firm has established policies and procedures designed to address the potential for conflicts of interest. Each firm's compensation structure and management of potential conflicts of interest are summarized by the advisory firm in the following sections for the fiscal year ended December 31, 2023.

A fund is a party to an investment advisory agreement with each of its independent third-party advisors whereby the advisor manages the investment and reinvestment of the portion of the fund's assets that the fund's board of trustees determines to assign to the advisor. In this capacity, each advisor continuously reviews, supervises, and administers the fund's investment program for its portion of the fund's assets. Hereafter, each portion is referred to as the advisor's

impacted as well. Portfolio managers who have day-to-day management responsibilities with respect to more than one fund or other account may be presented with several potential or actual conflicts of interest. For example, the management of multiple funds and/or other accounts may result in a portfolio manager devoting unequal time and attention to the management of each fund and/or other accounts. If a portfolio manager identifies a limited investment opportunity which may be suitable for more than one fund or other accounts, a fund may not be able to take full advantage of the opportunity due to an allocation of filled purchase or sale orders across all eligible funds and other accounts managed by the portfolio managers. PRIMECAP has adopted best execution and trade allocation policies and procedures to address the potential conflicts of interest that may arise between mutual funds and separate accounts, whereby a client or clients may be disadvantaged by trades executed in other clients' portfolios in the same security. These policies and procedures are monitored and are reviewed by PRIMECAP. Investment personnel of the firm are

best thinking of the investment team is reflected in the "target portfolios." Investment ideas for the Hotchkis and Wiley Portfolio are generated by Hotchkis and Wiley's investment team. Although the Hotchkis and Wiley Portfolio is managed by Hotchkis and Wiley's investment team, Hotchkis and Wiley has identified George H. Davis, Jr. and Scott McBride as the portfolio managers with the most significant responsibility for the day-to-day management of the Hotchkis and Wiley Portfolio.

The following table provides information relating to the other accounts managed by the portfolio managers of the Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
George H. Davis Jr.	Registered investment companies <sup>1</sup>	25	\$22.1B	2	\$ 13.5B
	Other pooled investment vehicles	11	\$ 2.3B	2	\$ 46.3M
	Other accounts	52	\$ 6.4B	4	\$791.1M
Scott McBride	Registered investment companies <sup>1</sup>	25	\$22.1B	2	\$ 13.5B
	Other pooled investment vehicles	11	\$ 2.3B	2	\$ 46.3M
	Other accounts	52	\$ 6.4B	4	\$791.1M

<sup>1</sup> Includes Diversified Value Portfolio which held assets of \$1.1 billion as of December 31, 2023.

#### 2. Material Conflicts of Interest

The Portfolio is managed by Hotchkis and Wiley's investment team (Investment Team). The Investment Team also manages institutional accounts and other mutual funds in several different investment strategies. The portfolios within an investment strategy are managed using a target portfolio; however, each portfolio may have different restrictions, cash flows, tax and other relevant considerations which may preclude a portfolio from participating in certain transactions for that investment strategy. Consequently, the performance of portfolios may vary due to these different considerations. The Investment Team may place transactions for one investment strategy that are directly or indirectly contrary to investment decisions made on behalf of another investment strategy. Hotchkis and Wiley also provides model portfolio investment recommendations to sponsors without trade execution or additional services. The timing of model delivery recommendations will vary depending on the contractual arrangement with the program Sponsor. As a result, depending on the program arrangement and circumstances surrounding a trade order, Hotchkis and Wiley's discretionary clients may receive prices that are more favorable than those received by a client of a program Sponsor or vice versa. Hotchkis and Wiley may be restricted from purchasing more than a limited percentage of the outstanding shares of a company or otherwise restricted from trading in a company's securities due to other regulatory limitations. If a company is a viable investment for more than one investment strategy, Hotchkis and Wiley has adopted policies and procedures reasonably designed to ensure that all of its clients are treated fairly and equitably. Additionally, potential and actual conflicts of interest may also arise as a result of Hotchkis and Wiley's other business activities and Hotchkis

compared to a benchmark. Because such fee arrangements have the potential to create an incentive for Hotchkis and Wiley to favor such accounts in making investment decisions and allocations, Hotchkis and Wiley has adopted policies and procedures reasonably designed to ensure that all of its clients are treated fairly and equitably, including in respect of allocation decisions, such as initial public offerings.

Since accounts are managed to a target portfolio by the Investment Team, adequate time and resources are consistently applied to all accounts in the same investment strategy. Investment personnel of the firm or its affiliates may be permitted to be commercially or professionally involved with an issuer of securities. Any potential conflicts of interest from such involvement would be monitored for compliance with the firm's Code of Conduct.

#### 3. Description of Compensation

The Investment Team, including portfolio managers, is compensated in various forms, which may include one or more of the following: (i) a base salary, (ii) bonus, (iii) profit sharing and (iv) equity ownership. Compensation is used to

# 2. Material Conflicts of Interest

Although the potential for conflicts of interest exists when an investment adviser and portfolio managers manage other accounts that invest in securities in which the Portfolio may invest or that may pursue a strategy similar to the Portfolio's investment strategies implemented by Lazard (Similar Accounts), Lazard has procedures in place that are designed to ensure that all accounts are treated fairly and that the Portfolio is not disadvantaged, including procedures regarding trade allocations and "conflicting trades" (e.g., long and short positions in the same or similar securities). In addition, the Portfolio is subject to different regulations than certain of the Similar Accounts, and, consequently, may not be permitted to engage in all the investment techniques or transactions, or to engage in such techniques or transactions to the same degree, as the Similar Accounts.

Potential conflicts of interest may arise because of Lazard's management of the Portfolio (Lazard Portfolio) and Similar Accounts. For example, conflicts of interest may arise with both the aggregation and allocation of securities transactions and allocation of limited investment opportunities, as Lazard may be perceived as causing accounts it manages to participate in an offering to increase Lazard's overall allocation of securities in that offering, or to increase Lazard's ability to participate in future offerings by the same underwriter or issuer. Allocations of bunched trades, particularly trade orders that were only partially filled due to limited availability, and allocation of investment opportunities generally, could raise a potential conflict of interest, as Lazard may have an incentive to allocate securities that are expected to increase in value to preferred accounts. Initial public offerings, in particular, are frequently of very limited availability. Additionally, portfolio managers may be perceived to have a conflict of interest because of the large number of Similar Accounts, in addition to the Portfolio, that they are managing on behalf of Lazard. Although Lazard does not track each individual portfolio manager's time dedicated to each account, Lazard periodically reviews each portfolio manager's overall responsibilities to ensure that he or she is able to allocate the necessary time and resources to effectively manage the Portfolio. In addition, Lazard could be viewed as having a conflict of interest to the extent that Lazard and/or portfolio managers have a materially larger investment in a Similar Account than their investment in the Portfolio.

A potential conflict of interest may be perceived to arise if transactions in one account closely follow related transactions in a different account, such as when a purchase increases the value of securities previously purchased by the other account, or when a sale in one account lowers the sale price received in a sale by a second account. Lazard may place transactions on behalf of Similar Accounts that are directly or indirectly contrary to investment decisions made for the Portfolio, which could have the potential to adversely impact the Portfolio, depending on market conditions. In addition, if the Portfolio's investment in an issuer is at a different level of the issuer's capital structure than an investment in the issuer by Similar Accounts, in the event of credit deterioration of the issuer, there may be a conflict of interest between the Portfolio's and such Similar Accounts' investments in the issuer. If Lazard sells securities short, it may be seen as harmful to the performance of the Portfolio investing "long" in the same or similar securities whose market values fall as a result of short-selling activities. Investment decisions for the Portfolio are made independently from those of Similar Accounts. If, however, Similar Accounts desire to invest in, or dispose of, the same securities as the Portfolio, available investment or opportunities for sales will be allocated equitably to each. In some cases, this procedure may adversely affect the size of the position obtained for or disposed of by the Portfolio or the price paid or received by the Portfolio.

#### 3. Description of Compensation

Lazard compensates portfolio managers by a competitive salary and bonus structure, which is determined both quantitatively and qualitatively. Salary and bonus are paid in cash, stock, and restricted interests in funds managed by Lazard or its affiliates. Portfolio managers are compensated on the performance of the aggregate group of portfolios managed by the teams of which they are a member rather than for a specific fund or account. Various factors are considered in the determination of a portfolio manager's compensation. All of the portfolios managed by a portfolio manager are comprehensively evaluated to determine his or her positive and consistent performance contribution over time. Further factors include the amount of assets in the portfolios as well as qualitative aspects that reinforce Lazard's investment philosophy. Total compensation is generally not fixed, but rather is based on the following factors: (1) leadership, teamwork, and commitment; (2) maintenance of current knowledge and opinions on companies owned in the portfolio; (3) generation and development of new investment ideas, including the quality of security analysis and identification of appreciation catalysts; (4) ability and willingness to develop and share ideas on a team basis; and (5) the performance results of the portfolios managed by the investment teams of which the portfolio manager is a member.

Variable bonus is based on the portfolio manager's quantitative performance as measured by his or her ability to make investment decisions that contribute to the pre-tax absolute and relative returns of the accounts managed by the teams of which the portfolio manager is a member, by comparison of each account to a predetermined benchmark (as set forth in the prospectus or other governing document) over the current fiscal year and the longer-term performance of such

account, as well as performance of the account relative to peers. The portfolio manager's bonus also can be influenced by subjective measurement of the manager's ability to help others make investment decisions. A portion of a portfolio manager's variable bonus is awarded under a deferred compensation arrangement pursuant to which the portfolio manager may allocate certain amounts awarded among certain portfolios, in shares that vest in two to three years. Certain portfolio managers' bonus compensation may be tied to a fixed percentage of revenue or assets generated by the accounts managed by such portfolio management teams.

#### III. Growth Portfolio

Wellington Management is a Delaware limited liability partnership with principal offices at 280 Congress Street, Boston, MA, 02210. Wellington Management is a professional investment counseling firm that provides investment services to investment companies, employee benefit plans, endowments, foundations, and other institutions. Wellington Management and its predecessor organizations have provided investment advisory services for over 80 years.

responsible for the day-to-day management of the Wellington Management Portfolio or Fund includes a base salary and incentive components. The base salary for the Portfolio Manager who is a partner (a "Partner") of Wellington Management Group LLP, the ultimate holding company of Wellington Management, is generally a fixed amount that is determined by the managing partners of Wellington Management Group LLP.

The Portfolio Manager is eligible to receive an incentive payment based on the revenues earned by Wellington Management from the Wellington Management Portfolio or Fund and generally each other account managed by such Portfolio Manager. The Portfolio Manager's incentive payment relating to the Wellington Management Portfolio or Fund is linked to the net pre-tax performance of the Wellington Management Portfolio or Fund compared to the Russell 1000 Growth Index over one-, three-, and five-year periods, with an emphasis on five-year results. Wellington Management applies similar incentive compensation structures (although the benchmarks or peer groups, time periods, and rates may differ) to other accounts managed by the Portfolio Manager, including accounts with performance fees.

Portfolio-based incentives across all accounts managed by an investment professional can, and typically do, represent a significant portion of an investment professional's overall compensation; incentive compensation varies significantly by individual and can vary significantly from year to year. The Portfolio Manager may also be eligible for bonus payments based on his overall contribution to Wellington Management's business operations. Senior management at Wellington Management may reward individuals as it deems appropriate based on other factors. Each Partner is eligible to participate in a Partner-funded tax-qualified retirement plan, the contributions to which are made pursuant to an actuarial formula. Mr. Shilling is a Partner.

#### IV. International Portfolio

The Portfolio pays each of its independent third-party investment advisors a base fee plus or minus a performance adjustment. The base fee, which is paid quarterly, is a percentage of average daily net assets managed by the advisor during the most recent fiscal quarter. The performance adjustment, also paid quarterly, is based on the cumulative total return of each advisor's portion of the Portfolio relative to that of the MSCI ACWI ex USA Index over the preceding 36-month period.

During the fiscal years ended December 31, 2021, 2022, and 2023, the International Portfolio incurred aggregate investment advisory fees of approximately \$7,578,000 (before a performance based increase of \$1,988,000), \$4,759,000 (before a performance-based increase of \$1,940,000) and \$4,553,000 (before a performance-based decrease of \$588,000), respectively.

### Baillie Gifford Overseas Ltd. (Baillie Gifford)

Baillie Gifford Overseas Ltd. is an investment advisory firm founded in 1983. Baillie Gifford is wholly owned by a Scottish investment company, Baillie Gifford & Co., which is one of the largest independently owned investment management firms in the United Kingdom, manages money primarily for institutional clients.

#### 1. Other Accounts Managed

The following table provides information relating to the other accounts managed by the portfolio managers of the Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Lawrence Burns	Registered investment companies <sup>1</sup>	7	\$37.7B	3	\$33.8B
	Other pooled investment vehicles	7	\$18.5B	1	\$ 114M
	Other accounts	35	\$12.9B	1	\$ 70M
Thomas Coutts	Registered investment companies <sup>1</sup>	4	\$36.9B	2	\$33.1B
	Other pooled investment vehicles	5	\$ 1.3B	1	\$ 114M
	Other accounts	29	\$12.9B	0	\$ 0

<sup>1</sup> Includes International Portfolio which held assets of \$3.0 billion as of December 31, 2023.

#### 2. Material Conflicts of Interest

At Baillie Gifford, individual portfolio managers may manage multiple accounts for multiple clients. In addition to mutual funds, these other accounts may include separate accounts, collective investment schemes, or offshore funds. Baillie Gifford manages potential conflicts between funds or with other types of accounts by implementing effective organizational and administrative arrangements to ensure that reasonable steps are taken to prevent the conflict giving rise to a material risk of damage to the interests of clients.

One area where a conflict of interest potentially arises is in the placing of orders for multiple clients and subsequent allocation of trades. Unless client-specific circumstances dictate otherwise, investment teams normally implement transactions in individual stocks for all clients with similar mandates at the same time. This aggregation of individual transactions can, of course, operate to the advantage or disadvantage of the clients involved in the order. When receiving orders from investment managers, traders at Baillie Gifford will generally treat order priority on a "first come, first served" basis, and any exceptions to this are permitted only in accordance with established policies. Baillie Gifford has also developed trade allocation systems and controls to ensure that no one client, regardless of type, is intentionally favored at the expense of another. Allocation policies are designed to address potential conflicts in situations where two or more funds or accounts participate in investment decisions involving the same securities. Investment personnel of the firm or its affiliates may be permitted to be commercially or professionally involved with an issuer of securities. Any potential conflicts of interest from such involvement would be monitored for compliance with the firm's Code of Ethics.

## 3. Description of Compensation

Mr. Coutts, and Mr. Burns are Partners of Baillie Gifford & Co. As such, each receives a base salary and a share of the partnership profits. The profit share is calculated as a percentage of total partnership profits based on seniority, role within Baillie Gifford & Co., and length of service. The basis for the profit share is detailed in the Baillie Gifford Partnership Agreement. The main staff benefits, such as pension schemes, are not available to partners, and therefore partners provide for benefits from their own personal funds.

#### B. Schroder Investment Management North America Inc. (Schroders)

Each of Schroders and Schroder Investment Management North America Limited (Schroder Limited), 1 London Wall Place, London, EC2Y 5AU, United Kingdom, is an indirect wholly owned subsidiary of Schroders plc, the ultimate parent of a large world-wide group of financial service companies with subsidiaries and branches and representative based in 37 locations across Europe, the Americas, Asia, and the Middle East.

#### Schroders Sub-advisory Agreement

On behalf of Vanguard Variable Insurance Funds, Schroders has entered into a sub-advisory agreement with Schroder Limited pursuant to which Schroder Limited has primary responsibility for choosing investments for the Schroders portion of International Portfolio. Under the terms of the sub-advisory agreement with the Trust, Schroders pays Schroder Limited a portion of the management fee payable to Schroders under its management contract with the Trust.

#### 1. Other Accounts Managed

The following table provides information relating to the other accounts managed by the portfolio managers of the Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
James Gautrey	Registered investment companies <sup>1</sup>	7	\$23.2B	3	\$ 17B
	Other pooled investment vehicles	4	\$ 1.5B	1	\$48M
	Other accounts	12	\$ 4.7B	0	\$ 0
Simon Webber	Registered investment companies <sup>1</sup>	8	\$23.2B	3	\$ 17B
	Other pooled investment vehicles	5	\$ 4.9B	1	\$48M
	Other accounts	15	\$ 6.9B	1	\$1.7B

<sup>1</sup> Includes International Portfolio which held assets of \$3.0 billion as of December 31, 2023.

#### 2. Material Conflicts of Interest

Whenever a portfolio manager of the Portfolio manages other accounts, potential conflicts of interest exist, including potential conflicts between the investment strategy of the Portfolio and the investment strategy of the other accounts. For example, in certain instances, a portfolio manager may take conflicting positions in a particular security for different accounts by selling a security for one account and continuing to hold it for another account. In addition, the fact that other accounts require the portfolio manager to devote less than all of his or her time to the Portfolio may be seen itself to constitute a conflict with the interest of the Portfolio.

A portfolio manager may also execute transactions for another fund or account at the direction of such fund or account that may adversely impact the value of securities held by the Portfolio. Securities selected for funds or accounts other than the Portfolio may outperform the securities selected for the Portfolio. Finally, if a portfolio manager identifies a limited investment opportunity that may be suitable for more than one fund or other account, the Portfolio may not be able to take full advantage of that opportunity because of an allocation of that opportunity across all eligible funds and accounts. Schroders' policies, however, require that portfolio managers allocate investment opportunities among accounts managed by them in an equitable manner over time. Orders are normally allocated on a pro rata basis, except that in certain circumstances, such as the small size of an issue, orders will be allocated among clients in a manner be td

into account factors such as leadership, contribution to other parts of the business, and identifying those whose behavior exemplifies our corporate values of excellence, integrity, teamwork, passion, and innovation. For those employees receiving significant bonuses, a part may be deferred in the form of Schroders plc stock and fund-based awards of notional cash investments in a range of Schroders funds.

These deferrals vest over a period of three years or more and seek to ensure that the interests of employees are aligned with those of clients and shareholders.

# V. Small Company Growth Portfolio

The Portfolio pays ArrowMark Partners a base fee plus or minus a performance adjustment. The base fee, which is paid quarterly, is a percentage of average daily net assets managed by the advisor during the most recent fiscal quarter. The performance adjustment, also paid quarterly, is based on the cumulative total return of the advisor's portion of the Portfolio relative to that of the Russell 2500 Growth Index over the preceding 60-month period. Vanguard provides investment advisory services for a portion of the Portfolio.

During the fiscal years ended December 31, 2021, 2022, and 2023, the Small Company Growth Portfolio incurred aggregate investment advisory fees and expenses of approximately \$2,893,000 (before a performance-based decrease of \$417,000), \$1,838,000 (before a performance-based decrease of \$354,000), and \$1,568,000 (before a performance-based decrease of \$395,000), respectively.

Of the aggregate fees and expenses previously described, the investment advisory expenses paid to Vanguard for the fiscal year ended December 31, 2023, were approximately \$199,000 (representing an effective annual rate of 0.01%). The investment advisory fees paid to ArrowMark Partners for the fiscal year ended December 31, 2023, were \$974,000 (representing an effective annual rate of 0.07%).

# A. ArrowMark Colorado Holdings, LLC (ArrowMark Partners)

ArrowMark Partners, located in Denver, Colorado, is an investment advisory firm founded in 2007.

# 1. Other Accounts Managed

The following table provides information relating to the other accounts managed by the portfolio managers of the Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Chad Meade	Registered investment companies <sup>1</sup>	7	\$7.2B	2	\$ 4.4B
	Other pooled investment vehicles	0	\$ 0	0	\$ 0
	Other accounts	23	\$1.4B	2	\$103M
Brian Schaub	Registered investment companies <sup>1</sup>	7	\$7.2B	2	\$ 4.4B
	Other pooled investment vehicles	0	\$ 0	0	\$ 0
	Other accounts	23	\$1.4B	2	\$103M

<sup>1</sup> Includes Small Company Growth Portfolio which held assets of \$1.5 billion as of December 31, 2023.

#### 2. Material Conflicts of Interest

Potential conflicts could include a portfolio manager's knowledge about the size, timing, and possible market impact of a fund's trades, whereby the portfolio manager could use this information to the advantage or disadvantage of another fund. A fund's portfolio managers may be able to select or otherwise influence the selection of the brokers and dealers that are used to execute securities transactions for a fund. In addition to executing trades, some brokers and dealers provide managers with brokerage research services, which may result in the payment of higher brokerage fees than might have otherwise been available. These services may be more beneficial to certain funds or accounts than to others.

Although the payment of brokerage commissions is subject to the requirement that the portfolio manager determine	in

# 3. Description of Compensation

Wellington Management receives a fee based on the assets under management of each Wellington Management Portfolio or Fund as set forth in the Investment Advisory Agreement between Wellington Management and the Trust on behalf of each Fund. Wellington Management pays its investment professionals out of its total revenues, including the advisory fees earned with respect to each Wellington Management Portfolio or Fund. The following relates to the fiscal year ended December 31, 2023.

Wellington Management's compensation structure is designed to attract and retain high-caliber investment professionals necessary to deliver high-quality investment management services to its clients. Wellington Management's compensation of each Wellington Management Portfolio's or Fund's managers listed in a prospectus who are primarily responsible for the day-to-day management of each Wellington Management Portfolio or Fund includes a base salary and incentive components. The base salary for the Portfolio Manager who is a partner (a "Partner") of Wellington Management Group LLP, the ultimate holding company of Wellington Management, is generally a fixed amount that is determined by the managing partners of Wellington Management Group LLP.

The Portfolio Manager is eligible to receive an incentive payment based on the revenues earned by Wellington Management from the Wellington Management Portfolio or Fund and generally each other account managed by such Portfolio Manager. Mr. Hand's incentive payment relating to the Equity Income Portfolio is linked to the net pre-tax performance of the Wellington Management Portfolio or Fund compared to the FTSE High Dividend Yield Index over one-, three-, and five-year periods, with an emphasis on five-year results. Wellington Management applies similar incentive compensation structures (although the benchmarks or peer groups, time periods, and rates may differ) to other accounts managed by Mr. Hand, including accounts with performance fees. The incentive paid to the other Portfolio Manager, which has no performance-related component, is based on the revenues earned by Wellington Management.

Portfolio-based incentives across all accounts managed by an investment professional can, and typically do, represent a significant portion of an investment professional's overall compensation; incentive compensation varies significantly by individual and can vary significantly from year to year. The Portfolio Managers may also be eligible for bonus payments based on their overall contribution to Wellington Management's business operations. Senior management at Wellington Management may reward individuals as it deems appropriate based on other factors. Each Partner is eligible to participate in a Partner-funded tax-qualified retirement plan, the contributions to which are made pursuant to an actuarial formula. Mr. Hand and Ms. Shortsleeve are Partners.

# **B.** Vanguard

Vanguard, through its Quantitative Equity Group, provides investment advisory services for a portion of the Equity Income Portfolio's assets. The compensation and other expenses of Vanguard's advisory staff are allocated among the funds utilizing Vanguard's advisory services.

Vanguard, through its Fixed Income Group, provides investment advisory services for a portion of the High Yield Bond Portfolio. The compensation and other expenses of Vanguard's advisory staff are allocated among the fund utilizing these services.

### 1. Other Accounts Managed

The following table provides information relating to the other accounts managed by the portfolio managers of the Equity Income Portfolio and High Yield Bond Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

#### 2. Material Conflicts of Interest

Please refer to Vanguard's discussion on page B-78.

### 3. Description of Compensation

Please refer to Vanguard's discussion beginning on page B-78.

#### VII. Balanced Portfolio

Wellington Management is a Delaware limited liability partnership with principal offices at 280 Congress Street, Boston, MA 02210. Wellington Management is a professional investment counseling firm that provides investment services to investment companies, employee benefit plans, endowments, foundations, and other institutions. Wellington Management and its predecessor organizations have provided investment advisory services for over 80 years. Wellington Management is owned by the partners of Wellington Management Group LLP, a Massachusetts limited liability partnership.

The Balanced Portfolio pays Wellington Management a base fee plus or minus a performance adjustment. The base fee, which is paid quarterly, is a percentage of average daily net assets under management during the most recent fiscal quarter. The base fee has breakpoints, which means that the percentage declines as assets go up. The performance adjustment, also paid quarterly, is based on the cumulative total return of the Portfolio relative to that of the Composite Stock/Bond Index over the preceding 36-month period. The Index is a composite benchmark, weighted 65% in the Standard & Poor's 500 Index and 35% in the Bloomberg U.S. Credit A or Better Bond Index.

During the fiscal years ended December 31, 2021, 2022, and 2023, the Balanced Portfolio incurred investment advisory fees of approximately \$1,770,000 (before a performance-based decrease of \$279,000), and \$1,647,000 (before a performance-based decrease of \$38,000) respectively.

## 1. Other Accounts Managed

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account and not another account, and the performance of securities purchased for one account may vary from the performance of securities purchased for other accounts. Alternatively, these accounts may be managed in a similar fashion to the Wellington Management Portfolio or Fund and thus the accounts may have similar—and in some cases nearly identical—objectives, strategies, and/or holdings to those of the Wellington Management Portfolio or Fund.

A Portfolio Manager or other investment professionals at Wellington Management may place transactions on behalf of other accounts that are directly or indirectly contrary to investment decisions made on behalf of the Wellington Management Portfolio or Fund, or make investment decisions that are similar to those made for the Wellington Management Portfolio or Fund, both of which have the potential to adversely impact the Wellington Management Portfolio or Fund depending on market conditions. For example, an investment professional may purchase a security in one account while appropriately selling that same security in another account. Similarly, a Portfolio Manager may purchase the same security for a Wellington Management Portfolio or Fund and one or more other accounts at or about the same time. In those instances, the other accounts will have access to their respective holdings prior to the public disclosure of the Wellington Management Portfolio's or Fund's holdings. In addition, some of these accounts have fee structures, including performance fees, which are or have the potential to be higher, in some cases significantly higher, than the fees Wellington Management receives for managing the Wellington Management Portfolio or Fund. Messrs. Pozen, Shilling, Hand, and Ms. Moran also manage accounts which pay performance allocations to Wellington Management or its affiliates. Because incentive payments paid by Wellington Management to the Portfolio Manager are tied to revenues earned by Wellington Management and, where noted, to the performance achieved by the manager in each account, the incentives associated with any given account may be significantly higher or lower than those associated with other accounts managed by a given Portfolio Manager. Finally, a Portfolio Manager may hold shares or

Portfolio-based incentives across all accounts managed by an investment professional can, and typically do, represent a significant portion of an investment professional's overall compensation; incentive compensation varies significantly by individual and can vary significantly from year to year. The Portfolio Managers may also be eligible for bonus payments based on their overall contribution to Wellington Management's business operations. Senior management at Wellington Management may reward individuals as it deems appropriate based on other factors. Each Partner is eligible to participate in a Partner-funded tax-qualified retirement plan, the contributions to which are made pursuant to an actuarial formula. Mr. Pozen and Ms. Moran are Partners.

VIII. Conservative Allocation, Equity Index, Global Bond Index, Mid-Cap Index, Moderate Allocation, Money Market, Real Estate Index, Short-Term Investment-Grade, Total Bond Market Index, Total International Stock Market Index, and Total Stock Market Index Portfolios

Vanguard, through its Equity Index Group, provides investment advisory services to the Equity Index, Mid-Cap Index, and Real Estate Index Portfolios. Vanguard, through its Fixed Income Group, provides investment advisory services to the Money Market, Short-Term Investment-Grade, and Total Bond Market Index Portfolios. The compensation and other expenses of Vanguard's advisory staff are allocated among the funds utilizing these services.

During the fiscal years ended December 31, 2021, 2022, and 2023, the Portfolios listed above incurred the following approximate investment advisory expenses:

Vanguard Fund	2021	2022	2023
Equity Index Portfolio	\$1,268,000	\$ 770,000	\$246,000
Mid-Cap Index Portfolio	383,000	215,000	47,000
Money Market Portfolio	26,000	14,000	5,000
Real Estate Index Portfolio	195,000	118,000	22,000
Short-Term Investment-Grade Portfolio	210,000	161,000	234,000
Total Bond Market Index Portfolio	111,000	1,115,000	90,000

Vanguard also provides investment advisory services to the Fund-of-Fund Portfolios by (1) maintaining each Portfolio's allocation to its underlying investments and (2) providing investment advisory services to those underlying funds. Vanguard's Investment Strategy Group establishes and reviews the asset allocation targets of the Conservative Allocation and Moderate Allocation Portfolios and determines whether any changes are required to best enable each Portfolio to achieve its investment objective. The Equity Index Group implements the asset allocation targets and performs other portfolio management functions for the Conservative Allocation and Moderate Allocation Portfolios. The Portfolios benefit from the investment advisory services provided to the underlying funds and, as shareholders of those funds, indirectly bear a proportionate share of those funds' advisory expenses. For more information about the investment advisory services provided to the underlying funds, please refer to each fund's Statement of Additional Information.

#### 1. Other Accounts Managed

The following table provides information relating to the other accounts managed by the portfolio managers of the Equity Index Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	а	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Aurélie Denis	Registered investment companies <sup>1</sup>	31	\$	1.0T	0	\$0
	Other pooled investment vehicles	14	\$6	75.6B	0	\$0
	Other accounts	0	\$	0	0	\$0
Michelle Louie	Registered investment companies <sup>1</sup>	15	\$	2.9T	0	\$0
	Other pooled investment vehicles	0	\$	0	0	\$0
	Other accounts	0	\$	0	0	\$0

<sup>1</sup> Includes Equity Index Portfolio, which held assets of \$9.2 billion as of December 31, 2023.

The following table provides information relating to the other accounts managed by the portfolio managers of the Mid-Cap Index Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	ā	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Aaron Choi	Registered investment companies <sup>1</sup>	6	\$	1.2T	0	\$0
	Other pooled investment vehicles	0	\$	0	0	\$0
	Other accounts	0	\$	0	0	\$0
Awais Khan	Registered investment companies <sup>1</sup>	13	\$2	266.5B	0	\$0
	Other pooled investment vehicles	0	\$	0	0	\$0
	Other accounts	0	\$	0	0	\$0

<sup>1</sup> Includes Mid-Cap Index Portfolio, which held assets of \$2.6 billion as of December 31, 2023.

The following table provides information relating to the other accounts managed by the portfolio manager of the Money Market Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	,	Total assets		in accounts with performance-based
John C. Lanius	Registered investment companies <sup>1</sup>	3	\$:	364.1E	0	\$0
	Other pooled investment vehicles	0	\$	C	0	\$0
	Other accounts	0	\$	C	0	\$0

<sup>1</sup> Includes Money Market Portfolio, which held assets of \$1.2 billion as of December 31, 2023.

The following table provides information relating to the other accounts managed by the portfolio managers of the Real Estate Index Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	ā	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Walter Nejman	Registered investment companies <sup>1</sup>	40	\$	2.9T	0	\$0
	Other pooled investment vehicles	12	\$6	67.4B	0	\$0
	Other accounts	0	\$	0	0	\$0
Gerard C. O'Reilly	Registered investment companies <sup>1</sup>	18	\$	2.4T	0	\$0
	Other pooled investment vehicles	0	\$	0	0	\$0
	Other accounts	0	\$	0	0	\$0

<sup>1</sup> Includes the Real Estate Index Portfolio, which held assets of \$1.1 billion as of December 31, 2023.

The following table provides information relating to the other accounts managed by the portfolio managers of the Short-Term Investment-Grade Portfolio as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Arvind Narayanan	Registered investment companies <sup>1</sup>	15	\$224.2B	0	\$0
	Other pooled investment vehicles	1	\$859.6M	0	\$0
	Other accounts	1	\$ 32.4M	0	\$0
Daniel Shaykevich	Registered investment companies <sup>1</sup>	16	\$227.1B	0	\$0
	Other pooled investment vehicles	1	\$859.6M	0	\$0
	Other accounts	1	\$ 32.4M	0	\$0

<sup>1</sup> Includes Short-Term Investment-Grade Portfolio, which held assets of \$2.2 billion as of December 31, 2023.

The following table provides information relating to the other accounts managed by the portfolio managers of the Total Bond Market Index and Global Bond Index Portfolios as of the fiscal year ended December 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	á	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Joshua C. Barrickman	Registered investment companies <sup>1</sup>	24	\$	1.2T	0	\$0
	Other pooled investment vehicles	0	\$	0	0	\$0
	Other accounts	7	\$	6.4B	0	\$0
Tara Talone	Registered investment companies <sup>2</sup>	4	\$2	255.3B	0	\$0
	Other pooled investment vehicles	0	\$	0	0	\$0
	Other accounts	7	\$	6.4B	0	\$0

<sup>1</sup> Includes Total Bond Market Portfolio and Global Bond Index Portfolio, which collectively held assets of \$4.8 billion as of December 31, 2023. 2 Includes Total Bond Market Portfolio which, held assets of \$4.3 billion as of December 31, 2023.

The following table provides information relating to the other accounts managed by the portfolio managers of the Conservative Allocation, Moderate Allocation, Total International Stock Market Index, and Total Stock Market Index Portfolios as of the fiscal year ended December 31, 2023 (unless otherwise noted):

				No. of accounts with	Total assets in accounts with
Portfolio Manager		No. of accounts	Total assets	performance-based fees	performance-based fees
Aurélie Denis	Registered investment companies <sup>1</sup>	31	\$ 1.0T	0	\$0
	Other pooled investment vehicles	14	\$675.6B	0	\$0
	Other accounts	0	\$ 0	0	\$0
Walter Nejman	Registered investment companies <sup>1</sup>	40	\$ 2.9T	0	\$0
	Other pooled investment vehicles	12	\$667.4B	0	\$0
	Other accounts	0	\$ 0	0	\$0
Roger Aliaga-Diaz	Registered investment companies <sup>2</sup>	18	\$676.4B	0	\$0
	Other pooled investment vehicles	12	\$667.4B	0	\$0
	Other accounts	0	\$ 0	0	\$0
Michael R. Roach	Registered investment companies <sup>2</sup>	22	\$763.3B	0	\$0
	Other pooled investment vehicles	12	\$667.4B	0	\$0
	Other accounts	0	\$ 0	0	\$0

<sup>1</sup> Includes Conservative Allocation Portfolio, Moderate Allocation Portfolio, Total Stock Market Index Portfolio, and Total International Stock Market Index Portfolio, which collectively held assets of \$6.8 billion as of December 31, 2023.

compensation program. In addition, portfolio managers are eligible for the standard retirement benefits and health and welfare benefits available to all Vanguard employees. Also, certain portfolio managers may be eligible for additional retirement benefits under several supplemental retirement plans that Vanguard adopted in the 1980s to restore dollar-for-dollar the benefits of management employees that had been cut back solely as a result of tax law changes. These plans are structured to provide the same retirement benefits as the standard retirement plans.

In the case of portfolio managers responsible for managing multiple Vanguard funds or accounts, the method used to determine their compensation is the same for all funds and investment accounts. A portfolio manager's base salary is determined by the manager's experience and performance in the role, taking into account the ongoing compensation benchmark analyses performed by Vanguard's Human Resources Department. A portfolio manager's base salary is generally a fixed amount that may change as a result of an annual review, upon assumption of new duties, or when a market adjustment of the position occurs.

A portfolio manager's bonus is determined by a number of factors. With the exception of portfolio managers from the Investment Strategy Group, one factor is gross, pre-tax performance of a fund relative to expectations for how the fund should have performed, given the fund's investment objective, policies, strategies, and limitations, and the market environment during the measurement period. This performance factor is not based on the amount of assets held in any individual fund's portfolio. For the Short-Term Investment-Grade Portfolio, the performance factor depends on how successfully the portfolio manager outperforms these expectations and maintains the risk parameters of the fund over a three-year period. For the Conservative Allocation and Moderate Allocation Portfolios, the performance factor depends on how successfully the portfolio manager from the Equity Index Group outperforms each Portfolio's composite index and maintains the risk parameters of the Portfolio over a three-year period. For portfolio managers from the Investment Strategy Group, contributions to long-term investor outcomes are a factor in compensation for managing these Portfolios. For the Equity Index, Mid-Cap Index, Real Estate Index, Total Bond Market Index, and Total Stock Market Index Portfolios, the performance factor depends on how closely the portfolio manager tracks the Portfolio's benchmark index over a one-year period. For the Equity Income and Small Company Growth Portfolios, the performance factor depends on how successfully the portfolio manager maintains the risk parameters of the fund and outperforms the relevant peer group that invests in the market sectors in which the fund is permitted to invest over a three-year period. For the Money Market Portfolio, the performance factor depends on how successfully the portfolio manager maintains the credit quality of the fund and, consequently, how the fund performs relative to the expectations described above over a one-year period. Except for portfolio managers from the Investment Strategy Group, additional factors include the portfolio manager's contributions to the investment management functions within the sub-asset class. For all portfolio managers, factors include contributions to the development of other investment professionals and supporting staff, and overall contributions to strategic planning and decisions for the investment group. The target bonus is expressed as a percentage of base salary. The actual bonus paid may be more or less than the target bonus, based on how well the manager satisfies the objectives previously described. The bonus is paid on an annual basis.

Under the long-term incentive compensation program, all full-time employees receive a payment from Vanguard's long-term incentive compensation plan based on their years of service, job level, and, if applicable, management responsibilities. Each year, Vanguard's independent directors determine the amount of the long-term incentive compensation award for that year based on the investment performance of the Vanguard funds relative to competitors and Vanguard's operating efficiencies in providing services to the Vanguard funds.

# 4. Ownership of Securities in the Portfolios

Shares of the Portfolios may only be owned by purchasing variable annuity and variable life insurance contracts. Consequently, the portfolio managers do not hold shares of the Portfolios. Each portfolio manager's need for variable annuity or variable life contracts and the role those contracts would play in his or her comprehensive investment portfolio will vary and depend on a number of factors including tax, estate planning, life insurance, alternative retirement plans, or other considerations.

# **Duration and Termination of Investment Advisory Agreements**

The current investment advisory agreements with the unaffiliated advisors (other than Hotchkis and Wiley and Lazard) are renewable for successive one-year periods, only if (1) each renewal is specifically approved by a vote of the Vanguard Variable Insurance Funds' board of trustees, including the affirmative votes of a majority of the trustees who are not parties to the agreement or "interested persons" (as defined in the 1940 Act) of any such party, cast in person at a meeting called for the purpose of considering such approval, or (2) each renewal is specifically approved by a vote of a majority of the Fund's outstanding voting securities.

Each initial investment advisory agreement with Hotchkis and Wiley and Lazard is binding for a two-year period. At the	

# **PORTFOLIO TRANSACTIONS**

The advisors decide which securities to buy and sell on behalf of a Fund and then selects the brokers or dealers that will execute the trades on an agency basis or the dealers with whom the trades will be effected on a principal basis. For each trade, the advisor must select a broker-dealer that it believes will provide "best execution." Best execution does not necessarily mean paying the lowest spread or commission rate available. In seeking best execution, the SEC has said that an advisor should consider the full range of a broker-dealer's services. The factors considered by the advisor in seeking best execution include, but are not limited to, the broker-dealer's execution capability; clearance and settlement services; commission rate; trading expertise; willingness and ability to commit capital; ability to provide anonymity; financial responsibility; reputation and integrity; responsiveness; access to underwritten offerings and secondary markets; and access to company management, as well as the value of any research provided by the broker-dealer. In assessing which broker-dealer can provide best execution for a particular trade, the advisor also may consider the timing and size of the order and available liquidity and current market conditions. Subject to applicable legal requirements, the advisor may select a broker based partly on brokerage or research services provided to the advisor and its clients, including the Fund. The advisor may cause a Fund to pay a higher commission than other brokers would charge if the advisor determines in good faith that the amount of the commission is reasonable in relation to the value of services provided. An advisor also may receive brokerage or research services from broker-dealers that are provided at no charge in recognition of the volume of trades directed to the broker. To the extent research services or products may be a factor in selecting brokers, services and products may include written research reports analyzing performance or securities; discussions with research analysts; meetings with corporate executives to obtain oral reports on company performance; market data; and other products and services that will assist the advisor in its investment decision-making process. The research services provided by brokers through which a Fund effects securities transactions may be used by the advisor in servicing all of its accounts, and some of the services may not be used by the advisor in connection with the Fund.

The Conservative Allocation, Global Bond Index, Moderate Allocation, Total International Stock Market Index, and Total Stock Market Index Portfolios each do not incur commission on their purchase and sales of conventional shares (i.e., not exchange-traded) of the underlying Vanguard funds by dealing directly with the issuer of the underlying funds.

# Balanced (bond portion only), High Yield Bond, Money Market, Short-Term Investment-Grade, and Total Bond Market Index Portfolios

The types of securities in which the money market and bond Portfolios invest are generally purchased and sold through principal transactions, meaning that the Funds normally purchase securities directly from the issuer or a primary market-maker acting as principal for the securities on a net basis. Explicit brokerage commissions are not paid on these transactions, although purchases of new issues from underwriters of bonds typically include a commission or concession paid by the issuer to the underwriter, and purchases from dealers serving as market-makers typically include a dealer's markup (i.e., a spread between the bid and the asked prices).

As previously explained, the types of securities that the Funds purchase do not normally involve the payment of explicit brokerage commissions. If any such brokerage commissions are paid, however, the advisor will evaluate their reasonableness by considering (1) historical commission rates; (2) rates which other institutional investors are paying, based upon publicly available information; (3) rates quoted by brokers and dealers; (4) the size of a particular transaction, in terms of the number of shares, dollar amount, and number of clients involved; (5) the complexity of a particular transaction in terms of both execution and settlement; (6) the level and type of business done with a particular firm over a period of time; and (7) the extent to which the broker or dealer has capital at risk in the transaction.

During the fiscal years ended December 31, 2021, 2022, and 2023, the Funds paid the following approximate amounts in brokerage commissions. Brokerage commissions paid by a fund may be substantially different from year to year for multiple reasons, such as overall fund performance, market volatility, trading volumes, cash flows, portfolio turnover, or changes to the securities that make up the Fund or a fund's target index.

Vanguard Fund	2021	2022	2023
Balanced Portfolio <sup>1</sup>	\$241,000	\$ 263,000	\$ 151,000
Capital Growth Portfolio	107,000	81,000	74,000
Conservative Allocation Portfolio	Less than 1,000	Less than 1,000	_
Diversified Value Portfolio	171,000	174,000	191,000
Equity Income Portfolio	265,000	333,000	466,000
Equity Index Portfolio	28,000	42,000	46,000
Global Bond Index Portfolio	_	_	_
Growth Portfolio	164,000	105,000	151,000
High Yield Bond Portfolio <sup>2</sup>	1,000	3,000	_
International Portfolio	897,000	456,000	424,000
Mid-Cap Index Portfolio	55,000	53,000	66,000
Moderate Allocation Portfolio	Less than 1,000	Less than 1,000	_
Money Market Portfolio	_	_	_
Real Estate Index Portfolio	25,000	19,000	20,000
Short-Term Investment-Grade Portfolio	34,000	40,000	29,000

Vanguard Fund	Regular Broker or Dealer (or Parent)	Aggregate Holdings
Equity Index Portfolio	BofA Securities, Inc.	53,092,000
	Citigroup, Inc.	22,549,000
	Goldman Sachs & Co. LLC	28,812,000
	J.P. Morgan Securities LLC	112,621,000
	Morgan Stanley & Co. LLC	26,990,000
	Wells Fargo Securities, LLC	40,938,000
Growth Portfolio	Morgan Stanley & Co. LLC	9,267,000
High Yield Bond Portfolio	Barclays Capital Inc.	17,271,000
	BofA Securities, Inc.	54,061,000
	Citigroup, Inc.	25,306,000
	Goldman Sachs & Co. LLC	24,518,000
	J.P. Morgan Securities LLC	28,351,000
	Morgan Stanley & Co. LLC	39,277,000
	Nomura Securities International, Inc.	3,472,000
	Wells Fargo Securities, LLC	66,052,000
International Portfolio	_	_
Mid-Cap Index Portfolio	_	_
Money Market Portfolio	Goldman Sachs & Co. LLC	11,000,000
	J.P. Morgan Securities LLC	_
	MUFG Securities Americas Inc.	_
	RBC Dominion Securities, Inc.	5,000,000
	Standard Chartered Bank	11,000,000
	Sumitomo Trust and Banking Co. (U.S.A.)	11,000,000
	The Toronto-Dominion Bank	3,000,000
Short-Term Investment-Grade Portfolio	BofA Securities, Inc.	22,798,000
	Citigroup, Inc.	17,683,000
	Wells Fargo Securities, LLC	25,671,000
Small Company Growth Portfolio	_	_
Total Bond Market Index Portfolio	Barclays Capital Inc.	9,003,000
	BofA Securities, Inc.	30,263,000
	Citigroup, Inc.	21,471,000
	Deutsche Bank Securities Inc.	5,114,000
	Goldman Sachs & Co. LLC	17,753,000
	J.P. Morgan Securities LLC	26,999,000
	Morgan Stanley & Co. LLC	27,210,000
	Wells Fargo Securities, LLC	24,475,000

# **PROXY VOTING**

# I. Proxy Voting Policies

Each Vanguard fund advised by Vanguard retains the authority to vote proxies received with respect to the shares of equity securities held in a portfolio advised by Vanguard. The Board of Trustees of the Vanguard-advised funds (the Board) has adopted proxy voting procedures and guidelines to govern proxy voting for each portfolio retaining proxy voting authority, which are summarized in *A*A. The Board of each Vanguard fund advised by a manager not affiliated with Vanguard has delegated the authority to vote proxies related to the portfolio securities held by each fund to its respective advisor(s). Each advisor will vote such proxies in accordance with its own proxy voting policies and procedures, which are summarized in *A*\$\int\$\$\bar{\beta}\$.

Vanguard has entered into agreements with various state, federal, and non-U.S. regulators and with certain issuers that limit the amount of shares that the funds may vote at their discretion for particular securities. For these securities, the funds are able to vote a limited portion of the shares at their discretion. Any additional shares generally are voted in the same proportion as votes cast by the issuer's entire shareholder base (i.e., mirror voted), or the fund is not permitted to vote such shares. Further, the Board has adopted policies that will result in certain funds mirror voting a higher proportion of the shares they own in a regulated issuer in order to permit certain other funds (generally advised by managers not affiliated with Vanguard) to mirror vote none, or a lower proportion, of their shares in such regulated issuer.

# II. Securities Lending

There may be occasions when Vanguard needs to restrict lending of and/or recall securities that are out on loan in order to vote the full position at a shareholder meeting. For the funds managed by Vanguard, Vanguard has processes to monitor securities on loan and to evaluate any circumstances that may require it to restrict and/or attempt to recall the security based on the criteria set forth in *A*. Additionally, Vanguard has processes in place for advisors unaffiliated with Vanguard who have been delegated authority to vote proxies on behalf of certain Vanguard funds to inform Vanguard of an upcoming vote the advisor deems to be material in accordance with such advisor's proxy voting policies and procedures in order for Vanguard to instruct the recall of the security.

To obtain a free copy of a report that details how the funds voted the proxies relating to the portfolio securities held by the funds for the prior 12-month period ended June 30, log on to *v* . . . . . or visit the SEC's website at *s* . . . v.

## FINANCIAL STATEMENTS

Each Fund's Financial Statements for the fiscal year ended December 31, 2023, appearing in the Funds' 2023 Annual Reports to Shareholders, and the reports thereon of PricewaterhouseCoopers LLP, an independent registered public accounting firm, also appearing therein, are incorporated by reference into this Statement of Additional Information. For a more complete discussion of each Fund's performance, please see the Funds' Annual and Semiannual Reports to Shareholders, which may be obtained without charge.

#### **DESCRIPTION OF BOND RATINGS**

## Moody's Rating Symbols

The following describe characteristics of the global long-term (original maturity of 1 year or more) bond ratings provided by Moody's Investors Service, Inc. (Moody's):

Aaa—Judged to be obligations of the highest quality, they are subject to the lowest level of credit risk.

**Aa**—Judged to be obligations of high quality, they are subject to very low credit risk. Together with the Aaa group, they make up what are generally known as high-grade bonds.

**A**—Judged to be upper-medium-grade obligations, they are subject to low credit risk.

**Baa**—Judged to be medium-grade obligations, subject to moderate credit risk, they may possess certain speculative characteristics.

Ba—Judged to be speculative obligations, they are subject to substantial credit risk.

**B**—Considered to be speculative obligations, they are subject to high credit risk.

Caa—Judged to be speculative obligations of poor standing, they are subject to very high credit risk.

**Ca**—Viewed as highly speculative obligations, they are likely in, or very near, default, with some prospect of recovery of principal and interest.

**C**—Viewed as the lowest rated obligations, they are typically in default, with little prospect for recovery of principal and interest.

The following describe characteristics of the global short-term (original maturity of 13 months or less) bond ratings provided by Moody's. This ratings scale also applies to U.S. municipal tax-exempt commercial paper.

Prime-1 (P-1)—Judged to have a superior ability to repay short-term debt obligations.

Prime-2 (P-2)—Judged to have a strong ability to repay short-term debt obligations.

Prime-3 (P-3)Prime-3 ([(The)-277.8(fpneaed6))]TJ/F2group((m)0(unaciiiii2ct)-9ou(he)-277.8(IMIGt)0(he)-3ebtto

- **AA**—These also qualify as high-grade obligations. They have a very strong capacity to pay interest and repay principal, and they differ from AAA issues only in small degree.
- **A**—These are regarded as upper-medium-grade obligations. They have a strong capacity to pay interest and repay principal although they are somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than debt in higher-rated categories.
- **BBB**—These are regarded as having an adequate capacity to pay interest and repay principal. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity in this regard. This group is the lowest that qualifies for commercial bank investment.
- **BB**, **B**, **CCC**, **CC**, **and C**—These obligations range from speculative to significantly speculative with respect to the capacity to pay interest and repay principal. BB indicates the lowest degree of speculation and C the highest.
- **D**—These obligations are in default, and payment of principal and/or interest is likely in arrears.



The following describe characteristics of short-term (original maturity of 365 days or less) bond and commercial paper ratings designations provided by Standard and Poor's:

- **A-1**—These are the highest rated obligations. The capacity of the obligor to pay interest and repay principal is strong. The addition of a plus sign (+) would indicate a very strong capacity.
- **A-2**—These obligations are somewhat susceptible to changing economic conditions. The obligor has a satisfactory capacity to pay interest and repay principal.
- **A-3**—These obligations are more susceptible to the adverse effects of changing economic conditions, which could lead to a weakened capacity to pay interest and repay principal.
- **B**—These obligations are vulnerable to nonpayment and are significantly speculative, but the obligor currently has the capacity to meet its financial commitments.
- **C**—These obligations are vulnerable to nonpayment, but the obligor must rely on favorable economic conditions to meet its financial commitment.
- **D**—These obligations are in default, and payment of principal and/or interest is likely in arrears.

The following describe characteristics of U.S. municipal short-term (original maturity of 3 years or less) note

#### APPENDIX A

# Summary of the Vanguard-Advised Funds Proxy Voting Policy

The funds for which Vanguard acts as investment advisor (Vanguard-advised funds) retain authority to vote proxies received for the shares of equity securities held in each fund. The Board of Trustees (the Board) for the Vanguard-advised funds has adopted proxy voting procedures and guidelines to govern proxy voting for each portfolio retaining proxy voting authority.

The Investment Stewardship Oversight Committee (the Committee), comprised primarily of fund officers and subject to the procedures described below, oversees the Vanguard-advised funds' proxy voting. The Committee reports directly to the Board. Vanguard is subject to these procedures and the proxy voting policies to the extent that they call for Vanguard to administer the voting process and implement the resulting voting decisions, and for these purposes the voting policies have also been approved by the Board of Directors of Vanguard.

## I. Investment Stewardship Team

The Investment Stewardship Team administers the day-to-day operation of the funds' proxy voting process, overseen by the Committee. The Investment Stewardship Team performs the following functions: (1) managing and conducting due diligence of proxy voting vendors; (2) reconciling share positions; (3) analyzing proxy proposals using factors described in the voting policies; (4) determining and addressing potential or actual conflicts of interest that may be presented by a particular proxy; and (5) voting proxies. The Investment Stewardship Team also prepares periodic and special reports for the Board and proposes amendments to the procedures and voting policies.

# II. Investment Stewardship Oversight Committee

The Board, including a majority of the independent trustees, appoints the members of the Committee (which is comprised primarily of fund officers). The Committee works with the Investment Stewardship Team to provide reports and other guidance to the Board regarding proxy voting by the funds. The Committee has an obligation to exercise its decision-making authority in accordance with the Board's instructions as set forth in the funds' proxy voting procedures and voting policies and subject to the fiduci,/F1 1 Tf 9.978 0 0 9.978 55.0545 534. 1 Tf 9.47D5p athehe Committee (

particularly those involving routine corporate governance matters, the evaluation could result in the funds having a common interest in the matter and, accordingly, each fund casting votes in the same manner. In other cases, however, a fund may vote differently from other funds, depending upon the nature and objective of each fund, if doing so is in the best interest of the individual fund.

The voting policies do not permit the Board to delegate voting discretion to a third party that does not serve as a fiduciary for all Vanguard-advised funds. Because many factors bear on each decision, the voting policies incorporate factors that should be considered in each voting decision. A fund may refrain from voting some or all of its shares or vote in a particular way if doing so would be in the fund's and its shareholders' best interests. These circumstances may arise, for example, if the expected cost of voting exceeds the expected benefits of voting, if exercising the vote would result in the imposition of trading or other restrictions, or if a fund (or all Vanguard funds in the aggregate) were to own more than the permissible maximum percentage of a company's stock (as determined by the company's governing documents or by applicable law, regulation, or regulatory agreement), or if voting would present a potential conflict of interest.

In evaluating proxy proposals, the Investment Stewardship Team considers information from many sources, which could include, but is not limited to, the perspectives of the company management or shareholders presenting a proposal, independent proxy research services, or proprietary research. Additionally, data and recommendations from proxy advisors serve as one of many inputs into our research process. The Vanguard-advised funds may utilize automated voting for matters that are clearly addressed by the funds' proxy voting procedures and guidelines.

While serving as a framework, the voting policies cannot contemplate all possible proposals with which a fund may be presented. In the absence of a specific guideline for a particular proposal (e.g., in the case of a transactional issue or contested proxy), the Investment Stewardship Team, under the supervision of the Committee, will evaluate the matter and cast the fund's vote in a manner that is in the fund's best interest, subject to the individual circumstances of the fund

#### V. Conflicts of Interest

Vanguard takes seriously its commitment to avoid potential conflicts of interest. Vanguard funds invest in thousands of publicly listed companies worldwide. Those companies may include clients, potential clients, vendors, or competitors. Some companies may employ Vanguard trustees, former Vanguard executives, or family members of Vanguard personnel who have direct involvement in Vanguard's Investment Stewardship program.

Vanguard's approach to mitigating conflicts of interest begins with the funds' proxy voting procedures. The procedures require that voting personnel act as fiduciaries and must conduct their activities at all times in accordance with the following standards: (i) fund shareholders' interests come first; (ii) conflicts of interest must be avoided and mitigated to the extent possible; and (iii) compromising situations must be avoided.

We maintain an important separation between Vanguard's Investment Stewardship Team and other groups within Vanguard that are responsible for sales, marketing, client service, and vendor/partner relationships. Proxy voting personnel are required to disclose potential conflicts of interest and must recuse themselves from all voting decisions and engagement activities in such instances. In certain circumstances, Vanguard may refrain from voting shares of a company, or may engage an independent third-party fiduciary to vote proxies.

Each externally managed fund has adopted the proxy voting guidelines of its advisor(s) and votes in accordance with the external advisors' guidelines and procedures. Each advisor has its own procedures for managing conflicts of interest in the best interests of fund shareholders.

#### VI. Shareholder Proposals

Shareholder proposals are evaluated in the context of the general corporate governance principle that a company's board has ultimate responsibility for providing effective ongoing oversight of relevant sector and company-specific risks, including risks related to environmental and social matters. Each proposal is evaluated on its merits and in the context of the particular facts and circumstances at the company in question and supported when there is a logically demonstrable linkage between the specific proposal and long-term shareholder value of the company. Some of the factors considered when evaluating shareholder proposals include the materiality of the risk addressed by the proposal, the quality of the current disclosures/business practices, and any progress by the company toward addressing and disclosing the relevant material risk.

# VII. Voting in Markets Outside the United States

Corporate governance standards, disclosure requirements, and voting mechanics vary greatly among the markets outside the United States (U.S.) in which the funds may invest. Each fund's votes will be used, where applicable, to support improvements in governance and disclosure by each fund's portfolio companies. Matters presented by non-U.S. portfolio companies will be evaluated in the foregoing context, as well as in accordance with local market standards and best practices. Votes are cast for each fund in a manner philosophically consistent with the voting policies, taking into account differing practices by market.

In many other markets, voting proxies will result in a fund being prohibited from selling the shares for a period of time due to requirements known as "share-blocking" or reregistration. Generally, the value of voting is unlikely to outweigh the loss of liquidity imposed by these requirements on the funds. In such instances, the funds will generally abstain from voting.

The costs of voting (e.g., custodian fees, vote agency fees) in other markets may be substantially higher than for U.S. holdings. As such, the fund may limit its voting on foreign holdings in instances in which the issues presented are unlikely to have a material impact on shareholder value.

#### VIII. Voting Shares of a Company That Has an Ownership Limitation

Certain companies have provisions in their governing documents or other agreements that restrict stock ownership in excess of a specified limit. Typically, these ownership restrictions are included in the governing documents of real estate investment trusts but may be included in other companies' governing documents. A company's governing documents normally allow the company to grant a waiver of these ownership limits, which would allow a fund to exceed the stated ownership limit. Sometimes a company will grant a waiver without restriction. From time to time, a company may grant a waiver only if a fund (or funds) agrees to not vote the company's shares in excess of the normal specified limit. In such a circumstance, a fund may refrain from voting shares if owning the shares beyond the company's specified limit is in the best interests of the fund and its shareholders.

In addition, applicable law may require prior regulatory approval to permit ownership of certain regulated issuer's voting securities above certain limits or may impose other restrictions on owners of more than a certain percentage of a regulated issuer's voting shares. The Board has authorized the funds to vote shares above these limits in the same proportion as votes cast by the issuer's entire shareholder base (i.e., mirror vote), or to refrain from voting excess shares. Further, the Board has adopted policies that will result in certain funds mirror voting a higher proportion of the shares they own in a regulated issuer in order to permit certain other funds (generally advised by managers not affiliated with Vanguard) to mirror vote none, or a lower proportion of, their shares in such regulated issuer.

#### IX. Voting on a Fund's Holdings of Other Vanguard Funds

Certain Vanguard funds (owner funds) may, from time to time, own shares of other Vanguard funds (underlying funds). If an underlying fund submits a matter to a vote of its shareholders, votes for and against such matters on behalf of the owner funds will be cast in the same proportion as the votes of the other shareholders in the underlying fund.

#### X. Securities Lending

There may be occasions when Vanguard needs to restrict lending of and/or recall securities that are out on loan in order to vote in a shareholder meeting. Vanguard has processes to monitor securities on loan and to evaluate any circumstances that may require us to restrict and/or recall the stock. In making this decision, we consider:

The subject of the vote and whether, based on our knowledge and experience, we believe the topic is potentially material to the corporate governance and/or long-term performance of the company;

The funds' individual and/or aggregate equity investment in a company, and whether we estimate that voting funds' shares would affect the shareholder meeting outcome; and

The long-term impact to our fund shareholders, evaluating whether we believe the benefits of voting a company's shares would outweigh the benefits of stock lending revenues in a particular instance.

# **APPENDIX B**

# **ArrowMark Partners Proxy Voting Policy and Procedures**

# Issue

Rule 206(4)-6 under the Advisers Act requires every investment adviser who exercises voting authority with respect to client securities to adopt and implement written policies and procedures, reasonably designed to ensure that the adviser

# **Procedures for Identification and Voting of Proxies**

The Proxy Manager is responsible for ensuring that all proxies received are voted in a timely manner and voted consistently across all portfolios. Although many proxy proposals can be voted in accordance with the Proxy Manager's established guidelines (the "Guidelines"), ArrowMark retains the right to vote any proposal in a manner differing from the Guidelines. Such deviations from the Guidelines must be approved by the CCO with a written explanation of the rationale for the deviation. ArrowMark, in conjunction with the custodian, is responsible for ensuring that all corporate actions received are addressed in a timely manner and consistent action is taken across all portfolios.

ArrowMark's authority to vote proxies or act with respect to other corporate actions is established through the delegation of discretionary authority under its investment advisory agreements. Therefore, unless a Client specifically reserves the right, in writing, to vote its own proxies or to take shareholder action with respect to other corporate actions requiring shareholder actions, ArrowMark will vote all proxies and act on all other actions in a timely manner as part of its full discretionary authority over Clients in accordance with established policies and procedures.

#### **Procedures for Glass Lewis Reconciliation**

ArrowMark provides Glass Lewis with a daily holdings file representing all accounts in which ArrowMark has proxy voting authority. ArrowMark's account master file is reconciled with Glass Lewis' account master file at least guarterly.

The daily reconciliation process performed by Glass Lewis is as follows:

- 1. ArrowMark's holdings files from QED Financial Systems are automatically uploaded daily into the Glass Lewis' ViewPoint system ("ViewPoint").
- 2. If ViewPoint doesn't recognize security IDs contained in the holdings files, the rejected holdings are sent to Glass Lewis' securities processing group to be investigated. If there are other errors in the holdings file, the securities processing group will alert the client service manager who will contact ArrowMark.
- 3. New Meeting Notices and Agendas are automatically uploaded into the ViewPoint system. Each meeting contains one or more security identifiers associated with it.
- 4. The ViewPoint reconciliation engine determines if there are matches between holdings and meetings for which Glass Lewis has not received ballots. These matches are displayed on the Ballot Reconciliation workbench for ViewPoint client service managers and audit team members.
- 5. The reconciliation tool can be used for the creation of ballots based on holdings information and the meeting and agenda information. This is a service Glass Lewis offers to clients with accounts that are not contracted with a proxy distribution service, such as Broadridge ("BFS") or GPD, for the delivery of ballots electronically. The ballots created by Glass Lewis are transmitted directly via email or fax to the custodians once investors' vote execution instructions are carried out.
- 6. If reconciliation records are generated for positions in U.S. companies and/or positions in global companies held in accounts custodied at banks that do contract with a proxy distribution service for the delivery of proxy materials, Glass Lewis will consider these records as "missing ballots" if a ballot has not been received by 10 business days prior to meeting date.
- 7. Multiple times a week Glass Lewis sends an automated reconciliation file to BFS with all of our clients' "open records." 24 hours later BFS provides us with a response file containing control numbers or further account setup and/or reconciliation instructions. Control numbers are uploaded immediately into VP by the Ballot Reconciliation team. All remaining open records are researched by individual client service managers (i.e., ballot reconciliation and account setup requests/inquiries are sent by email to the custodian).
- 8. Once a ballot is created, the corresponding reconciliation record is automatically closed. A record can be closed manually if no ballot is created when the investigation of the issue determines that no ballot will be delivered.

# **Proxy Review Procedures**

On a monthly basis, Glass Lewis provides ArrowMark with two reports: the Proxy Voting Report ("PVR") and Analyze Voting Activity Report ("AVA"). The CCO or designee will review these reports monthly.

A PVR provides a snapshot of each meeting voted in a given time period and includes but isn't limited to the following:

Agenda Items

Management Recommendations

Glass Lewis Recommendations

ArrowMark's Policy Recommendations

Vote Cast

The AVA can be used to get a broad look at ballot data or can be narrowed down very specifically to only include certain data points. These include:

Meeting Types

Vote Decisions (with or against management/policy/Glass Lewis)

Country of Issue

Specific Meeting Issues

**Proposal Categories** 

## **Baillie Gifford Proxy Voting Guidelines**

Baillie Gifford has adopted the ESG Principles and Guidelines (the Guidelines) to vote proxies related to securities held by the funds.

The Guidelines are developed and administered by the Environmental, Social and Governance (ESG) Team of Baillie Gifford & Co. This ESG Team works with the investment teams and is responsible for the voting of proxies. The head of the ESG Team is a partner of Baillie Gifford & Co, with oversight of the function falling under the remit of the ESG Oversight Group.

The Guidelines cover Baillie Gifford's approach to ESG matters including the following areas:

- Board Effectiveness and Composition
- Capital Allocation
- Governance Processes and Disclosure
- Remuneration
- Sustainability

Baillie Gifford recognizes that given the range of markets in which the Funds invest, one set of standards is unlikely to be appropriate. The Guidelines consequently take an issues based approach covering standards from a global perspective.

# **Pragmatic & Flexible Approach**

Baillie Gifford recognizes that companies within particular markets operate under significantly differing conditions. The Guidelines are intended to provide an insight into how Baillie Gifford approaches voting and engagement on behalf of clients with it important to note that Baillie Gifford assesses every company individually. With respect to voting, Baillie Gifford will evaluate proposals on a case-by-case basis, based on what it believes to be in the best long-term interests of the clients, rather than rigidly applying a policy.

In evaluating each proxy, the ESG Team follows the Guidelines, while also considering third party analysis, Baillie Gifford's and its affiliates own research and discussions with company management.

The ESG Team oversees voting analysis and execution in conjunction with the investment managers. Baillie Gifford may elect not to vote on certain proxies. While Baillie Gifford endeavors to vote a fund's shares in all markets, on occasion this may not be possible due to a practice known as share blocking, whereby voting shares would result in Baillie Gifford being prevented from trading for a certain period of time. When voting in these markets, Baillie Gifford assesses the benefits of voting clients' shares against the relevant restrictions. Baillie Gifford may also not vote where it has sold out of a stock following the record date.

# **Conflicts of Interest**

Baillie Gifford recognizes the importance of managing potential conflicts of interest that may exist when voting a proxy solicited by a company with whom Baillie Gifford & Co. has a material business or personal relationship. The ESG Team of Baillie Gifford & Co. is responsible for monitoring possible material conflicts of interest with respect to proxy voting.

For proxy votes that involve a potential conflict of interest that is not managed in line with the Conflicts of Interest policy, the ESG team report the conflict to the Equity Leadership Group for discussion. Application of the Guidelines to vote proxies will in most instances adequately address any possible conflicts of interest. For proxy votes that involve a potential conflict of interest or, that are inconsistent with (or not covered by) the Guidelines, Baillie Gifford has an internal process to review the proposed voting rationale. It would consider whether business relationships between Baillie Gifford and the company have influenced the proposed vote and decide the course of action to be taken in the best interests of its clients. Where a conflict of interest is deemed not to have been prevented or managed by organisational arrangement in place, we would disclose the existence of a conflict of interest.

# Hotchkis and Wiley ("H&W") Summary of Proxy Voting Policies and Procedures

# INTRODUCTION

Our primary responsibility is to act as a fiduciary for our clients when voting proxies. We evaluate and vote each proposed proxy in a manner that encourages sustainable business practices which in turn maximizes long term shareholder value.

As part of our normal due diligence and monitoring of investments, we engage management, board members, or their representatives on material business issues including environmental, social, and governance ("ESG") matters. Each proxy to be voted is an opportunity to give company management and board members formal feedback on these important matters.

This document summarizes our stance on important issues that are commonly found on proxy ballots, though each vote is unique and there will be occasional exceptions to these guidelines. The purpose of our proxy guidelines is to ensure decision making is consistent with our responsibilities as a fiduciary.

In general, we support proposals that encourage disclosure of risks provided they are not overly burdensome or disclose sensitive competitive information balanced against the materiality of the risk. We also consider whether the proposal is more effectively addressed through other means, like legislation or regulation.

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# Climate Change and Green House Gas Emissions

Climate change has become an important factor in companies' long-term sustainability and opportunity. Understanding a company's strategy in managing these risks and opportunities is necessary in evaluating an investment's prospects. We support disclosures related to the risks and/or opportunities a company faces related to climate change, including information on how the company identifies and manages such risks/opportunities.

## **Energy Efficiency**

We generally support proposals requesting that a company report on its energy efficiency policies. Exceptions may include a request that is overly burdensome or provides unrealistic deadlines.

# **Hydraulic Fracturing**

We support proposals requesting greater disclosure of a company's hydraulic fracturing operations. This includes steps the company has taken, or plans to take, regarding mitigating and managing its environmental impact overall and on surrounding communities.

# Renewable Energy

We support requests for reports on renewable energy accomplishments and future plans. Exceptions may include duplicative, irrelevant, or otherwise unreasonable requests.

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# **Equal Opportunity**

We support proposals requesting disclosures of companies' policies and/or future initiatives related to diversity, including current data regarding the diversity of its workforce.

#### Gender Identity and Sexual Orientation

We support proposals to revise diversity policies to prohibit discrimination based on sexual orientation and/or gender identity.

#### **Human Rights Proposals**

We support proposals requesting disclosure related to labor and/or human rights policies.

#### Political Activities

We support the disclosure of a company's policies and procedures related to political contributions and lobbying activities.

# Sexual Harassment

We vote on a case-by-case basis regarding proposals seeking reports on company actions related to sexual harassment. We evaluate the company's current policies, oversight, and disclosures. We also consider the company's history and any related litigation or regulatory actions related to sexual harassment, and support proposals we believe will prevent such behavior when systemic issues are suspected.

## 3. Auditors and Related Matters

Generally, we will support the board's recommendation of auditors provided that the auditors are independent, non-audit fees are less than the sum of all audit and tax related fees, and there are no indications of fraud or misleading audit opinions.

#### 4. Shareholder Rights

#### **ONGOING REVIEW AND RESPONSIBILITIES**

Investment analysts are responsible for voting proxies following a thorough review of the proposals and guided by our internal proxy policy. The analysts draw from a variety of sources during their proprietary research process, which informs the proxy vote decision. These sources include meetings with senior management and/or board members, other industry experts/contacts, and many other means. To support the proxy voting effort, Hotchkis & Wiley has engaged Institutional Shareholder Services ("ISS") for proxy research and proxy voting administration to help facilitate our process.

Hotchkis & Wiley also has a Proxy Oversight Committee consisting of the Chief Operating Officer, Chief Compliance Officer, and Managing Director of Portfolio Services. This group oversees H&W's proxy voting policies and procedures by providing an administrative framework to facilitate and monitor the exercise of such proxy voting and to fulfill the obligations of reporting and recordkeeping under the federal securities laws. This team is responsible for reviewing the policy annually and solicits feedback from investment team members to help inform any material enhancements.

## **Policy**

PRIMECAP maintains a policy of voting proxies in a way which, in PRIMECAP's opinion, best serves the interest of its clients in their capacity as shareholders of a company. PRIMECAP believes that this is consistent with SEC and U.S. Department of Labor guidelines, which state that an investment manager's primary responsibility as a fiduciary is to vote in the best interest of its clients. As an investment manager, PRIMECAP is primarily concerned with maximizing the value of its clients' investment portfolios.

PRIMECAP believes the best interests of clients are served by voting proxies in a way that maximizes long-term shareholder value. Therefore, the investment professionals responsible for voting proxies have the discretion to make the best decision given the individual facts and circumstances of each issue. Proxy issues are evaluated on their merits and considered in the context of the analyst's knowledge of a company, its current management, management's past record, and PRIMECAP's general position on each issue.

PRIMECAP believes that management, subject to the oversight of the relevant Board of Directors, is often in the best position to make decisions that serve the interests of shareholders. However, PRIMECAP votes against management on proposals where it perceives a conflict may exist between management and client interests or where the facts and circumstances indicate the proposal is not in its clients' best interests.

#### **Conflicts of Interest**

From time to time conflicts of interest may exist in the proxy voting decision process where (a) portfolio companies are also clients of, or vendors to, PRIMECAP, (b) shareholder proposals are submitted by clients, or (c) proxies for which clients have publicly supported or actively solicited PRIMECAP to support a particular position. When a proxy proposal raises a potential material conflict of interest, possible conflict resolutions may include, but are not limited to: (a) vote in accordance with the guidelines to the extent that PRIMECAP has little or no discretion to deviate from the guidelines; (b) vote according to the recommendations of an independent proxy service firm retained by PRIMECAP; (c) vote in proportion to other shareholders; (d) disclose the conflict of interest to the client and obtain the client's consent before voting; or (e) vote in other ways that are consistent with PRIMECAP's obligation to vote in the clients' best interest. Conflict resolution is determined based on the facts and circumstances of the potential or actual conflict of interest.

# **Procedures**

#### **Proxy Review Process**

PRIMECAP's Director of Research is responsible for coordinating the voting of proxies in a timely manner, consistent with PRIMECAP's determination of the client's best interests. PRIMECAP utilizes the services of a third-party proxy voting firm to act as agent for the proxy process, to maintain records on proxy votes for its clients, and to provide independent research on corporate governance, proxy, and corporate responsibility issues.

The Director of Research reviews each proxy ballot for routine and non-routine items. Routine proxy items are .8(corporate)-277.8is ru(its)-277.8(setroxy) ] TJ T\* factsfodi.8(tndts)-277.8(cp277.e)-277.8(poc277.8(fofiate)he)-277.8(pnd)toxy clients,to on d0(snerandivaccordance withdetermstances ofhe cc277.8(forsylicl7s)-277.8(a8(277he)te)-277.8(0(lyiets)-277.8(o(n)(airocess,)-270(rosts)) accordance withdetermstances of the cc277.8(forsylicl7s)-277.8(a8(277he)te)-277.8(0(lyiets)-277.8(o(n)(airocess,)-270(rosts)) accordance withdetermstances of the cc277.8(forsylicl7s)-277.8(a8(277he)te)-277.8(o(n)(airocess,)-270(rosts)) accordance withdetermstances of the cc277.8(forsylicl7s)-277.8(a8(277he)te)-277.8(o(n)(airocess,)-270(rosts)) accordance withdetermstances of the cc277.8(forsylicl7s)-277.8(a8(277he)te)-277.8(o(n)(airocess,)-270(rosts)) accordance withdetermstances of the cc277.8(forsylicl7s)-277.8(a8(277he)te)-277.8(o(n)(airocess,)-277.8(o(n)(airocess,)-270(rosts)) accordance withdetermstances of the cc277.8(forsylicl7s)-277.8(a8(277he)te)-277.8(o(n)(airocess,)-277

## **Proxy Voting Guidelines**

PRIMECAP has developed proxy voting guidelines that reflect its general position and practice on various issues. To preserve the ability of decision makers to make the best decision in each case, these guidelines are intended only to provide context and are not intended to dictate how the issue must be voted. The guidelines are reviewed and updated as necessary by the Director of Research.

- Corporate Governance: PRIMECAP supports strong corporate governance practices and generally votes against proposals that serve as anti-takeover devices or diminish shareholder rights, and generally supports proposals that encourage responsiveness to shareholders. PRIMECAP evaluates board size, structure, and compensation on a case-by-case basis though generally believes the Directors and management of companies are in the best position to determine an efficient, functional structure for the Board of Directors. Mergers and acquisitions, reincorporations, and other corporate restructurings are considered on a case-by-case basis, based on the investment merits of each proposal.
- Compensation: PRIMECAP generally supports the concept of stock-related compensation plans as a way to align employee and shareholder interests. However, plans that include features which undermine the connection between employee and shareholder interests generally are not supported. When voting on proposals related to new plans or changes to existing plans, PRIMECAP considers, among other things: the size of the overall plan and/or the size of the increase, the historical dilution rate, whether the plan permits option repricing, the duration of the plan, and the needs of the company. PRIMECAP generally supports employee stock purchase plans and the establishment of 401(k) plans.
- Capital Structure: PRIMECAP generally supports increases to capital stock for legitimate financing needs but generally does not support changes in capital stock that can be used as an anti-takeover device, such as the creation of or increase in blank-check preferred stock or of a dual class capital structure with different voting rights. PRIMECAP generally supports share repurchases.
- Environmental and Social Issues: PRIMECAP votes on these issues based on their potential to improve the prospects for long-term success of a company and investment returns. PRIMECAP expects companies to comply with applicable laws and regulations with regards to environment and social standards.

# **Proxy Voting Records**

Upon client request, PRIMECAP will provide reports of its proxy voting record as it relates to the securities held in the client's account(s) for which PRIMECAP has proxy voting authority. PRIMECAP utilizes the services of a third-party proxy voting firm to maintain records on proxy votes for its clients.

#### **Annual Assessment**

PRIMECAP will conduct an annual assessment of this proxy voting policy and related procedures.

# **Schroders Proxy Voting Policy Summary**

#### **Proxy Voting General Principles**

Pursuant to its Proxy Voting policy, Schroders votes on all shares in publicly quoted equities except as described below. Schroders votes on all of its clients' shares covered by its policy, except in the following very limited circumstances:

- Where there are share blocking requirements over the shares and the Investment team considers that the ability to trade the shares is more important than the ability to vote, it may elect not to do so. In this case, Schroders' Corporate Governance team is consulted and must approve this decision.
- Where the relevant Corporate Governance team considers that costs associated with voting the shares (for example, the financial and/or administrative cost of providing additional documentation) may outweigh the value of the ability to vote.
- Where there are physical barriers to voting and/or timing issues. For example, where the Schroders proxy voting provider has not provided an electronic means to vote or has not provided their research (which enables Schroders to vote) more than one U.K. business day before the voting cut off.

## All voting is conducted as per Global and Regional Voting Guidelines adopted by the Schroders Group.

Schroders Global Voting Guidelines can be found <a href="here">here</a>. The Global Voting Guidelines set the minimum standards to be applied and are supported by the Regional Voting Guidelines, where applicable, which provide specific guidance on how to apply these locally. All voting is conducted in line with such Guidelines except in the circumstances described above.

Global and Regional Voting Guidelines are reviewed at least annually by regional Corporate Governance teams, with any material changes agreed with by the Compliance team.

# Corporate Governance teams are responsible for conducting the voting on shares covered by Schroders Proxy Voting policy.

Corporate Governance teams discuss and agree with the relevant Investment teams how to vote with respect to each issuer's shares covered by the policy with reference to the applicable Global and Regional Voting Guidelines, and any discussion and/or other engagement with each company. Once an agreement is reached, the relevant Corporate Governance team is responsible for voting accordingly.

# Schroders has the ability to conduct all voting electronically.

All voting is conducted via the electronic voting platform provided by Schroders proxy voting provider, unless there are specific operational reasons not to do so or Schroders attends the meeting in person.

# **Voting Escalation Process**

Where an agreement on how to vote the shares cannot be reached between the relevant Corporate Governance team and the relevant Investment team(s):

- The Corporate Governance team and the Investment team(s) will each write a memo setting out their views on the resolution, how they believe the shares should be voted and their rationale.
- The Corporate Governance team shall convene a meeting (electronically or physically) between the disagreeing
  parties and the Co-Head of Investment and Head of Equities who will adjudicate and make a decision on how to vote
  the shares.
- The Corporate Governance team will document this decision in writing and vote the shares in accordance with the decision.

For the avoidance of doubt, Schroders is not required to follow any recommendations made by the Schroders proxy voting provider, provided as part of its research.

## **Conflicts of Interest**

Schroders is responsible for monitoring and identifying situations that could give rise to a conflict of interest, including those that could give rise to a conflict of interest when voting at company meetings. Those responsible for monitoring and identifying situations that could give rise to a conflict of interest are responsible for informing the Corporate Governance team of any potential conflicts in accordance with Schroders Group Conflicts of Interest Policy.

- Where there is a conflict of interest between one client and another client, or there is pressure to vote in a particular way due to a client request.
- Where the Corporate Governance team votes on Schroders plc resolutions.

There may be scenarios where it is in the best interest of a client to override the recommendations of the Schroders proxy voting provider. In such scenarios, Schroders will obtain approval for the decision from Schroders' the Head of Equities (or other relevant asset class) with the reason for such a vote being recorded in writing. In cases where a recommendation from the Schroders proxy voting provider is not available, Schroders will vote in what it considers to be the best interests of its clients.

# **Corporate Actions**

In the case of mergers, acquisitions, or similar corporate actions where an account holds investments in both the target and the acquirer, Schroders acts in what it considers the best interests of its clients based on the information available at the time.

There may be other instances where different accounts, managed by the same or different Schroders fund managers, hold stocks on either side of a transaction. In these cases, the fund managers will each vote in the best interests of their respective clients. The Corporate Governance team will execute the votes on the instruction of the relevant Investment team(s).

**Wellington Management Global Proxy Policy and Procedures** 

#### **Procedures**

# **Use of Third-Party Voting Agent**

Wellington Management uses the services of a third-party voting agent for research and to manage the administrative aspects of proxy voting. We view third-party research as an input to our process. Wellington Management complements the research provided by its primary voting agent with research from other firms.

Our primary voting agent processes proxies for client accounts and maintains records of proxies voted. For certain routine issues, as detailed below, votes may be instructed according to standing instructions given to our primary voting agent, which are based on the Guidelines.

We manually review instances where our primary voting agent discloses a material conflict of interest of its own, potentially impacting its research outputs. We perform oversight of our primary voting agent, which involves regular service calls and an annual due diligence exercise, as well as regular touchpoints in the normal course of business.

#### **Receipt of Proxy**

If a client requests that Wellington Management votes proxies on its behalf, the client must instruct its custodian bank to deliver all relevant voting materials to Wellington Management or its designated voting agent in a timely manner.

#### Reconciliation

Proxies for public equity securities received by electronic means are matched to the securities eligible to be voted, and a reminder is sent to custodians/trustees that have not forwarded the proxies due. This reconciliation is performed at the ballot level. Although proxies received for private equity securities, as well as those received in non-electronic format for any securities, are voted as received, Wellington Management is not able to reconcile these ballots and does not notify custodians of non-receipt; Wellington Management is only able to reconcile ballots where clients have consented to providing holdings information with its provider for this purpose.

# **Proxy Voting Process**

Our approach to voting is investment-led and serves as an influential component of our engagement and escalation strategy. The Investment Stewardship Committee, a cross-functional group of experienced professionals, oversees Wellington Management's activities with regards to proxy voting practices.

Routine issues that can be addressed by the proxy voting guidance below are voted by means of standing instructions communicated to our primary voting agent. Some votes warrant analysis of specific facts and circumstances and therefore are reviewed individually. We examine such vote sources including internal research notes, third-party voting research and company engagement. While manual votes are often resolved by investment research teams, each portfolio manager is empowered to make a final decision for their relevant client portfolio(s), absent a material conflict of interest. Proactive portfolio manager input is sought under certain circumstances, which may include consideration of position size and proposal subject matter and nature. Where portfolio manager input is proactively sought, deliberation across the firm may occur. This collaboration does not prioritize consensus across the firm above all other interests but rather seeks to inform portfolio managers' decisions by allowing them to consider multiple perspectives. Portfolio managers may occasionally arrive at different voting conclusions for their clients, resulting in different decisions for the same vote. Voting procedures and the deliberation that occurs before a vote decision are aligned with our role as active owners and fiduciaries for our clients.

# Material Conflict of Interest Identification and Resolution Processes

Further detail on our management of conflicts of interest can be found in our Stewardship Conflicts of Interest Policy, available on our website.

## Other Considerations

In certain instances, Wellington Management may be unable to vote or may determine not to vote a proxy on behalf of

#### **Securities Lending**

Clients may elect to participate in securities lending Such lending may impact their ability to have their shares voted. Under certain circumstances, and where practical considerations allow, Wellington Management may determine that the anticipated value of voting could outweigh the benefit to the client resulting from use of securities for lending and recommend that a client attempt to have its custodian recall the security to permit voting of related proxies. We do not borrow shares for the sole purpose of exercising voting rights.

# **Share Blocking and Re-Registration**

Certain countries impose trading restrictions or requirements regarding re-registration of securities held in omnibus accounts in order for shareholders to vote a proxy. The potential impact of such requirements is evaluated when determining whether to vote such proxies.

# Lack of Adequate Information, Untimely Receipt of Proxy Materials, or Excessive Costs

Wellington Management may abstain from voting a proxy when the proxy statement or other available information is inadequate to allow for an informed vote, the proxy materials are not delivered in a timely fashion; or, in Wellington Management's judgment, the costs of voting exceed the expected benefits to clients (included but not limited to instances such as when powers of attorney or consularization or the disclosure of client confidential information are