Vanguard®

Vanguard Funds

Supplement Dated June 30, 2026, to the Statement of Additional Information

Leadership Announcements

Effective June 4, 2026, Ashley Grim resigned as, and My Trieu-Gatt has been appointed as Treasurer of the Vanguard funds.

In addition, André Perold will retire as trustee of the Vanguard funds effective June 30, 2026.

Statement of Additional Information Text Changes

All references to Ms. Grim are hereby deleted in their entirety. Effective June 30, 2026, the information about Mr. Perold in the **Management of the Fund(s)** section under *Officers and Trustees* will be deleted in its entirety.

In the **Management of the Fund(s)** section under *Officers and Trustees*, the following biographical information is added:

Name, Year of Birth	Position(s) Held With Funds	Vanguard Funds' Trustee/ Officer Since	Principal Occupation(s) During the Past Five Years, Outside Directorships, and Other Experience
My Trieu-Gatt (1979)	Treasurer	June 2026	Treasurer of each of the investment companies served by Vanguard and Head of Global Fund Administration (2026-present). Global Head of Fund Accounting and Oversight (2023-2026) at Vanguard. Head of Global Fund Accounting (2016-2023) at Vanguard Australia.

Changes to the Nominating Committee

In the **Management of the Fund(s)** section under *Officers and Trustees*, the description of the board's nominating committee is replaced with the following text:

Nominating and Governance Committee: This committee nominates candidates for election to the board of trustees of each fund and has the authority to recommend the removal of any trustee. The committee also oversees corporate governance matters, including, but not limited to, board composition and succession planning; assessments related to governance documents, board committee structure, and board effectiveness; and board education matters. Ms. Bunch chairs the committee. The following independent trustees serve as members of the committee: Mr. Loughridge, Mr. Malpass, Dr. Thomas, and Ms. Venneman.

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Vanguard®

Vanguard STAR® Funds

Supplement Dated May 12, 2026, to the Statement of Additional Information Dated February 27, 2026

Important Changes to Vanguard LifeStrategy® Income Fund, Vanguard LifeStrategy Conservative Growth Fund, Vanguard LifeStrategy Moderate Growth Fund, and Vanguard LifeStrategy Growth Fund (each, a "Fund" and collectively, the "LifeStrategy Funds")

Fund Name Changes

As previously announced, effective today, each Vanguard LifeStrategy Fund has changed its name as shown below:

Prior Fund Name	New Fund Name
Vanguard LifeStrategy Income Fund	Vanguard LifeStrategy 20/80 Fund
Vanguard LifeStrategy Conservative Growth Fund	Vanguard LifeStrategy 40/60 Fund
Vanguard LifeStrategy Moderate Growth Fund	Vanguard LifeStrategy 60/40 Fund
Vanguard LifeStrategy Growth Fund	Vanguard LifeStrategy 80/20 Fund

All references to the LifeStrategy Funds are replaced with the applicable new fund name shown in the table above.

Each Fund's investment objective, strategies, and polices will remain unchanged.

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PART B

VANGUARD® STAR® FUNDS

STATEMENT OF ADDITIONAL INFORMATION

February 27, 2026

This Statement of Additional Information (SAI) is not a prospectus but should be read in conjunction with a Fund's current prospectus (dated February 27, 2026). To obtain, without charge, a prospectus, the most recent report to shareholders, or the Fund's financial statements hereby incorporated by reference, please visit https://vgi.vg/fund-literature or contact The Vanguard Group, Inc. (Vanguard).

Phone: Investor Information Department at 800-662-7447
Online: vanguard.com

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DESCRIPTION OF THE TRUST

Vanguard STAR Funds (the Trust) currently offers the following funds and share classes (identified by ticker symbol):

	Share Classes[1]					
Vanguard Fund[2]	**Investor**	**Admiral**	**Institutional**	**Institutional Plus**	**Institutional Select**	**ETF**
Vanguard LifeStrategy® Conservative Growth Fund[3]	VSCGX	—	—	—	—	—
Vanguard LifeStrategy Growth Fund[3]	VASGX	—	—	—	—	—
Vanguard LifeStrategy Income Fund[3]	VASIX	—	—	—	—	—
Vanguard LifeStrategy Moderate Growth Fund[3]	VSMGX	—	—	—	—	—
Vanguard STAR Fund	VGSTX	—	—	—	—	—
Vanguard Total International Stock Index Fund	VGTSX	VTIAX	VTSNX	VTPSX	VTISX	VXUS[4]
Vanguard STAR Core-Plus Bond Fund	—	—	VCPSX	—	—	—

1 Individually, a class; collectively, the classes.
2 Individually, a Fund; collectively, the Funds.
3 Individually, a Vanguard LifeStrategy Fund; collectively, the Vanguard LifeStrategy Funds.
4 Exchange: Nasdaq.

The Trust has the ability to offer additional funds or classes of shares. There is no limit on the number of full and fractional shares that may be issued for a single fund or class of shares.

Throughout this document, any references to “class” apply only to the extent a Fund issues multiple classes.

Organization

The Trust was organized as a Pennsylvania business trust in 1983 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 Funds within the Trust are classified as diversified within the meaning of the 1940 Act.

Service Providers

Custodians. JPMorgan Chase Bank, N.A. 383 Madison Avenue, New York, NY 10179 serves as the Funds’ custodian. The custodian is responsible for maintaining the Funds’ assets, keeping all necessary accounts and records of Fund assets, and appointing any foreign subcustodians or foreign securities depositories.

Investment Advisor. The Vanguard Group, Inc., P.O. Box 2600, Valley Forge, PA 19482, through its wholly owned subsidiary, Vanguard Capital Management, LLC (VCM). VCM exercises portfolio management and investment stewardship responsibilities for the Funds.

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 Fund’s board of trustees.

Voting Rights. Shareholders are entitled to vote on a matter if (1) the matter concerns an amendment to the Declaration of Trust that would adversely affect to a material degree the rights and preferences of the shares of a Fund or any class; (2) the trustees determine that it is necessary or desirable to obtain a shareholder vote; (3) a merger or consolidation, share conversion, share exchange, or sale of assets is proposed and a shareholder vote is required by the 1940 Act to approve the transaction; or (4) a shareholder vote is required under the 1940 Act. The 1940 Act requires a shareholder vote under various circumstances, including to elect or remove trustees upon the written request of shareholders representing 10% or more of a Fund’s net assets, to change any fundamental policy of a Fund (please see **Fundamental Policies**), and to enter into certain merger transactions. Unless otherwise required by applicable law, shareholders of a Fund receive one vote for each dollar of net asset value owned on the record date and a fractional

vote for each fractional dollar of net asset value owned on the record date. However, only the shares of the Fund or the class affected by a particular matter are entitled to vote on that matter. In addition, each class has exclusive voting rights on any matter submitted to shareholders that relates solely to that class, and each class has separate voting rights on any matter submitted to shareholders in which the interests of one class differ from the interests of another. Voting rights are noncumulative and cannot be modified without a majority vote by the shareholders.

Liquidation Rights. In the event that a Fund is liquidated, shareholders will be entitled to receive a pro rata share of the Fund's net assets. In the event that a class of shares is liquidated, shareholders of that class will be entitled to receive a pro rata share of the Fund's net assets that are allocated to that class. Shareholders may receive cash, securities, or a combination of the two.

Preemptive Rights. There are no preemptive rights associated with the Funds' shares.

Conversion Rights. Shareholders of Vanguard Total International Stock Index Fund may convert their shares to another class of shares of the same Fund upon the satisfaction of any then-applicable eligibility requirements, as described in the Fund's current prospectus. ETF Shares cannot be converted into conventional shares of the Vanguard Total International Stock Index Fund by a shareholder. For additional information about the conversion rights applicable to ETF Shares, please see **Information About the ETF Share Class**. There are no conversion rights associated with the other Funds.

Redemption Provisions. Each Fund's redemption provisions are described in its current prospectus and elsewhere in this Statement of Additional Information.

Sinking Fund Provisions. The Funds have no sinking fund provisions.

Calls or Assessment. Each Fund's shares, when issued, are fully paid and non-assessable.

Shareholder Rights. Any limitations on a shareholder's right to bring an action do not apply to claims arising under the federal securities laws to the extent that any such federal securities laws, rules, or regulations do not permit such limitations. The Trust's bylaws place limitations on the forum in which certain claims against or related to the Trust, a trustee, an officer, or other employee of the Trust may be heard. The Trust's bylaws also provide that shareholders waive the right to trial by jury to the fullest extent permitted by law.

Tax Status of the Funds

Each Fund expects to qualify each year for treatment as a "regulated investment company" under Subchapter M of the Internal Revenue Code of 1986, as amended (the IRC). This special tax status means that the Fund will not be liable for federal tax on income and capital gains distributed to shareholders. In order to preserve its tax status, each Fund must comply with certain requirements relating to the source of its income and the diversification of its assets. If a Fund fails to meet these requirements in any taxable year, the Fund will, in some cases, be able to cure such failure, including by paying a fund-level tax, paying interest, making additional distributions, and/or disposing of certain assets. If the Fund is ineligible to or otherwise does not cure such failure for any year, it will be subject to tax on its taxable income at corporate rates, and all distributions from earnings and profits, including any distributions of net tax-exempt income and net long-term capital gains, will be taxable to shareholders as ordinary income. In addition, the Fund could be required to recognize unrealized gains, pay substantial taxes and interest, and make substantial distributions before regaining its tax status as a regulated investment company.

Dividends received and distributed by each Fund on shares of stock of domestic corporations (excluding Real Estate Investment Trusts [REITs]) and certain foreign corporations generally may be eligible to be reported by the Fund, and treated by individual shareholders, as "qualified dividend income" taxed at long-term capital gain rates instead of at higher ordinary income tax rates. Individuals must satisfy holding period and other requirements in order to be eligible for such treatment. Also, distributions attributable to income earned on a Fund's securities lending transactions, including substitute dividend payments received by a Fund with respect to a security out on loan, will not be eligible for treatment as qualified dividend income.

Taxable ordinary dividends received and distributed by each Fund on its REIT holdings may be eligible to be reported by each Fund, and treated by individual shareholders, as "qualified REIT dividends" that are eligible for a 20% deduction on their federal income tax returns. Individuals must satisfy holding period and other requirements in order to be eligible for this deduction. Shareholders should consult their own tax professionals concerning their eligibility for this deduction.

Dividends received and distributed by each Fund on shares of stock of domestic corporations (excluding REITs) may be eligible for the dividends-received deduction applicable to corporate shareholders. Corporations must satisfy certain requirements in order to claim the deduction. Capital gains distributed by each Fund are not eligible for the dividends-received deduction.

Each Fund may declare a capital gain dividend consisting of the excess (if any) of net realized long-term capital gains over net realized short-term capital losses. Net capital gains for a fiscal year are computed by taking into account any capital loss carryforwards of the Fund. Capital losses may be carried forward indefinitely and retain their character as either short-term or long-term.

FUNDAMENTAL POLICIES

Each Fund is subject to the following fundamental investment policies, which cannot be changed in any material way without the approval of the holders of a majority of the Fund's shares. For these purposes, a "majority" of shares means shares representing the lesser of (1) 67% or more of the Fund's net assets voted, so long as shares representing more than 50% of the Fund's net assets are present or represented by proxy or (2) more than 50% of the Fund's net assets.

Borrowing. Each Fund may borrow money 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.

Commodities. Each Fund may invest in commodities 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.

Industry Concentration. Vanguard LifeStrategy Funds, Vanguard STAR Fund, and Vanguard STAR Core-Plus Bond Fund will not concentrate its investments in the securities of issuers whose principal business activities are in the same industry or same group of industries.

Vanguard Total International Stock Index Fund will not concentrate its investments in the securities of issuers whose principal business activities are in the same industry or group of industries, except as may be necessary to approximate the composition of its target index.

Investment Objective. The investment objectives of Vanguard LifeStrategy Conservative Growth Fund, Vanguard LifeStrategy Growth Fund, Vanguard LifeStrategy Income Fund, Vanguard LifeStrategy Moderate Growth Fund and Vanguard STAR Fund may not be materially changed without a shareholder vote.

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, a Fund may acquire such investments to the extent consistent with its investment strategies and policies.

The Vanguard LifeStrategy Funds and Vanguard STAR Fund 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 Vanguard LifeStrategy Funds and Vanguard STAR Fund 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 provider, if any. The value of asset-backed securities may be affected by the various factors described above and other factors, such as changes in interest rates, the availability of information concerning the pool and its structure, the creditworthiness of the servicing agent for the pool, the originator of the underlying assets, or the entities providing the credit enhancement.

Asset-backed securities are often subject to more rapid repayment than their stated maturity date would indicate, as a result of the pass-through of prepayments of principal on the underlying assets. Prepayments of principal by borrowers 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. Bank loans, 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 cash to a borrower on demand.

Purchasers of loans and other forms of direct indebtedness depend primarily upon the creditworthiness of the borrower for payment of interest and repayment of principal. Direct debt instruments may not be rated by a rating agency. If scheduled interest or principal payments are not made, or are not made in a timely manner, the value of the instrument may be adversely affected. Loans that are fully secured provide more protections than unsecured loans in the event of failure to make scheduled interest or principal payments. However, there is no assurance that the liquidation of collateral from a secured loan would satisfy the borrower's obligation or that the collateral could be liquidated. Indebtedness of borrowers whose creditworthiness is poor involves substantially greater risks and may be highly speculative. Borrowers that are in bankruptcy or restructuring may never pay off their indebtedness, or they may pay only a small fraction of the amount owed. Direct indebtedness of countries, particularly developing countries, also involves a risk that the governmental entities responsible for the repayment of the debt may be unable, or unwilling, to pay interest and repay principal when due.

Corporate loans and other forms of direct corporate indebtedness in which a fund may invest generally are made to finance internal growth, mergers, acquisitions, stock repurchases, refinancing of existing debt, leveraged buyouts, and other corporate activities. A significant portion of the corporate indebtedness purchased by a fund may represent interests in loans or debt made to finance highly leveraged corporate acquisitions (known as "leveraged buyout" transactions), leveraged recapitalization loans, and other types of acquisition financing. Another portion may also represent loans incurred in restructuring or "work-out" scenarios, including super-priority debtor-in-possession facilities 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 in the loan agreement. Unless the purchaser has direct recourse against the borrower, the purchaser may have to rely on the agent to apply appropriate credit remedies against a borrower under the terms of the loan or other indebtedness. If assets held by the agent for the benefit of a purchaser were determined to be subject to the claims of the agent's general creditors, the purchaser might incur certain costs and delays in realizing payment on the loan or loan participation and could suffer a loss of principal and/or interest.

Direct indebtedness may include letters of credit, revolving credit facilities, or other standby financing commitments that obligate purchasers to make additional cash payments on demand. These commitments may have the effect of requiring a purchaser to increase its investment in a borrower when it would not otherwise have done so, even if the borrower's condition makes it unlikely that the amount will ever be repaid.

A fund's investment policies will govern the amount of total assets that it may invest in any one issuer or in issuers within the same industry. For purposes of these limitations, a fund generally will treat the borrower as the "issuer" of indebtedness held by the fund. In the case of loan participations in which a bank or other lending institution serves as financial intermediary between a fund and the borrower, if the participation does not shift to the fund the direct debtor-creditor relationship with the borrower, SEC interpretations require the fund, in some circumstances, to treat both the lending bank or other lending institution and the borrower as "issuers" for purposes of the fund's investment policies. Treating a financial intermediary as an issuer of indebtedness may restrict a fund's ability to invest in indebtedness related to a single financial intermediary, or a group of intermediaries engaged in the same industry, even if the underlying borrowers represent many different companies and industries.

Borrowing. A fund's ability to borrow money is limited by its investment policies and limitations; by the 1940 Act; and by applicable exemptions, no-action letters, interpretations, and other pronouncements issued from time to time by the SEC and its staff or any other regulatory authority with jurisdiction. Under the 1940 Act, a fund is required to maintain continuous asset coverage (i.e., total assets including borrowings, less liabilities exclusive of borrowings) of 300% of the amount borrowed, with an exception for borrowings not in excess of 5% of the fund's total assets (at the time of borrowing) made for temporary or emergency purposes. Any borrowings for temporary purposes in excess of 5% of the fund's total assets must maintain continuous asset coverage. If the 300% asset coverage should decline as a result of market fluctuations or for other reasons, a fund may be required to sell some of its portfolio holdings within three days (excluding Sundays and holidays) to reduce the debt and restore the 300% asset coverage, even though it may be disadvantageous from an investment standpoint to sell securities at that time.

Borrowing will tend to exaggerate the effect on net asset value of any increase or decrease in the market value of a fund's portfolio. Money borrowed will be subject to interest costs that may or may not be recovered by earnings on the securities purchased with the proceeds of such borrowing. A fund also may be required to maintain minimum average balances in connection with a borrowing or to pay a commitment or other fee to maintain a line of credit; either of these requirements would increase the cost of borrowing over the stated interest rate.

A borrowing 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 under the 1940 Act.

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. A cybersecurity incident could subject the Vanguard funds, their advisors, and/or their third-party service providers to operational and financial risks. Cybersecurity incidents typically result from a deliberate attack, which could take multiple forms (e.g., phishing, malware, ransomware, or denial-of-service attacks), or wrongdoing by an authorized individual. In either case, sensitive assets, information, or data could fall into the hands of unauthorized individuals and potentially cause operational disruption. To prevent or reduce the impact of a cybersecurity incident, Vanguard has implemented controls, such as technological safeguards and business continuity plans. Cybersecurity risks are also present for third-party service providers (such as investment advisors, transfer agents, and custodians) that support the Vanguard funds. Vanguard has processes for assessing the cybersecurity programs implemented by a fund's third-party service providers. These processes help reduce the risk of potential incidents that could impact a Vanguard fund and/or its shareholders.

Despite the measures described above, a cybersecurity incident could still disrupt business operations, which could affect a fund and/or its shareholders. Examples of impacts that might occur as a result of a cybersecurity incident include: a fund being unable to calculate its net asset value (NAV) or process transactions, fund shareholders being unable to place transactions or otherwise conduct business with Vanguard, or a fund being unable to safeguard its data or the personal information of its shareholders.

Debt Securities. A debt security, sometimes called a fixed income security, consists of a certificate or other evidence of a debt (secured or unsecured) upon which the issuer of the debt security promises to pay the holder a fixed, variable, or floating rate of interest for a specified length of time and to repay the debt on the specified maturity date. Some debt securities, such as zero-coupon bonds, do not make regular interest payments but are issued at a discount to their principal or maturity value. Debt securities include a variety of fixed income obligations, including, but not limited to, corporate bonds, government securities, municipal securities, convertible securities, mortgage-backed securities, and asset-backed securities. Debt securities include investment-grade securities, non-investment-grade securities, and unrated securities. Debt securities are subject to a variety of risks, such as interest rate risk, income risk, call risk, prepayment risk, extension risk, inflation risk, credit risk, liquidity risk, and (in the case of foreign securities) country risk and currency risk. The reorganization of an issuer under the federal bankruptcy laws or an out-of-court restructuring of an issuer's capital structure may result in the issuer's debt securities being cancelled without repayment, repaid only in part, or repaid in part or in whole through an exchange thereof for any combination of cash, debt securities, convertible securities, equity securities, or other instruments or rights in respect to the same issuer or a related entity.

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.

Debt Securities—Non-Investment-Grade Securities. Non-investment-grade securities, also referred to as "high-yield securities" or "junk bonds," are debt securities that are rated lower than the four highest rating categories by a nationally recognized statistical rating organization (e.g., lower than Baa3/P-2 by Moody's Ratings or below BBB-/A-2 by S&P Global Ratings) or, if unrated, are determined to be of comparable quality by the fund's advisor. These securities are generally considered to be, on balance, predominantly speculative with respect to capacity to pay interest and repay principal in accordance with the terms of the obligation, and they will generally involve more credit risk than securities in the investment-grade categories. Non-investment-grade securities generally provide greater income and opportunity for capital appreciation than higher quality securities, but they also typically entail greater price volatility and principal and income risk.

Analysis of the creditworthiness of issuers of high-yield securities may be more complex than for issuers of investment-grade securities. Thus, reliance on credit ratings in making investment decisions entails greater risks for high-yield securities than for investment-grade securities. The success of a fund's advisor in managing high-yield securities is more dependent upon its own credit analysis than is the case with investment-grade securities.

Some high-yield securities are issued by smaller, less-seasoned companies, while others are issued as part of a corporate restructuring such as an acquisition, a merger, or a leveraged buyout. Companies that issue high-yield

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 its 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

Loan Banks, and the Federal National Mortgage Association. From time to time, uncertainty regarding the status of negotiations in the U.S. government to increase the statutory debt ceiling could increase the risk that the U.S. government may default on payments on certain U.S. government securities, cause the credit rating of the U.S. government to be downgraded, increase volatility in the stock and bond markets, result in higher interest rates, reduce prices of U.S. Treasury securities, and/or increase the costs of various kinds of debt. If a U.S. government-sponsored entity is negatively impacted by legislative or regulatory action, is unable to meet its obligations, or its creditworthiness declines, the performance of a fund that holds securities of the entity may be adversely impacted.

Debt Securities—Variable and Floating Rate Securities. Variable and floating rate securities are debt securities that provide for periodic adjustments in the interest rate paid on the security. Variable rate securities provide for a specified periodic adjustment in the interest rate, while floating rate securities have interest rates that change whenever there is a change in a designated benchmark or reference rate (such as the Secured Overnight Financing Rate (SOFR) or another reference rate) or the issuer's credit quality. There is a risk that the current interest rate on variable and floating rate securities may not accurately reflect current market interest rates or adequately compensate the holder for the current creditworthiness of the issuer. Some variable or floating rate securities are structured with liquidity features such as (1) put options or tender options that permit holders (sometimes subject to conditions) to demand payment of the unpaid principal balance plus accrued interest from the issuers or certain financial intermediaries or (2) auction-rate features, remarketing provisions, or other maturity-shortening devices designed to enable the issuer to refinance or redeem outstanding debt securities (market-dependent liquidity features). Variable or floating rate securities that include market-dependent liquidity features may have greater liquidity risk than other securities. The greater liquidity risk may exist, for example, because of the failure of a market-dependent liquidity feature to operate as intended (as a result of the issuer's declining creditworthiness, adverse market conditions, or other factors) or the inability or unwillingness of a participating broker-dealer to make a secondary market for such securities. As a result, variable or floating rate securities that include market-dependent liquidity features may lose value, and the holders of such securities may be required to retain them until the later of the repurchase date, the resale date, or the date of maturity. A demand instrument with a demand notice exceeding seven days may be considered illiquid if there is no secondary market for such security.

Debt Securities—Zero-Coupon and Pay-in-Kind Securities. Zero-coupon and pay-in-kind securities are debt securities that do not make regular cash interest payments. Zero-coupon securities generally do not pay interest. Zero-coupon Treasury bonds are U.S. Treasury notes and bonds that have been stripped of their unmatured interest coupons, or the coupons themselves, and also receipts or certificates representing an interest in such stripped debt obligations and coupons. The timely payment of coupon interest and principal on these instruments remains guaranteed by the full faith and credit of the U.S. government. Pay-in-kind securities pay interest through the issuance of additional securities. These securities are generally issued at a discount to their principal or maturity value. Because such securities do not pay current cash income, the price of these securities can be volatile when interest rates fluctuate. Although these securities do not pay current cash income, federal income tax law requires the holders of zero-coupon and pay-in-kind securities to include in income each year the portion of the original issue discount and other noncash income on such securities accrued during that year. Each fund that holds such securities intends to pass along such interest as a component of the fund's distributions of net investment income. 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.

Depositary Receipts. Depositary receipts (also sold as participatory notes) are securities that evidence ownership interests in a security or a pool of securities that have been deposited with a "depository." Depositary receipts may be sponsored or unsponsored and include American Depositary Receipts (ADRs), European Depositary Receipts (EDRs), and Global Depositary Receipts (GDRs). For ADRs, the depository is typically a U.S. financial institution, and the underlying securities are issued by a foreign issuer. For other depositary receipts, the depository may be a foreign or a U.S. entity, and the underlying securities may have a foreign or a U.S. issuer. Depositary receipts will not necessarily be denominated in the same currency as their underlying securities. Generally, ADRs are issued in registered form, denominated in U.S. dollars, and designed for use in the U.S. securities markets. Other depositary receipts, such as GDRs and EDRs, may be issued in bearer form and denominated in other currencies, and they are generally designed for use in securities markets outside the United States. Although the two types of depositary receipt facilities (sponsored and unsponsored) are similar, there are differences regarding a holder's rights and obligations and the practices of market participants.

A depository may establish an unsponsored facility without participation by (or acquiescence of) the underlying issuer; typically, however, the depository requests a letter of nonobjection from the underlying issuer prior to establishing the facility. Holders of unsponsored depositary receipts generally bear all the costs of the facility. The depository usually

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.

Like most other investments, derivative instruments 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 incorrectly forecast future market trends or the values of assets, reference rates, indexes, or other financial or economic factors in establishing derivative positions for the fund. If the advisor attempts to use a derivative as a hedge against, or as a substitute for, a portfolio investment, the fund will be exposed to the risk that the derivative 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 derivative 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 derivatives (in particular, OTC Derivatives) 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.

Securities and Exchange Commission Rule 18f-4 governs the use of derivatives by registered investment companies. Rule 18f-4 imposes limits on the amount of derivatives a fund can enter into, treats derivatives as senior securities, and requires funds whose use of derivatives exceeds a limited specified exposure amount to establish and maintain a comprehensive derivatives risk management program and appoint a derivatives risk manager.

Each Fund intends to comply with Rule 4.5 under the Commodity Exchange Act (CEA), under which a fund and Vanguard may be excluded from the definition of the term Commodity Pool Operator (CPO) if the fund meets certain conditions such as limiting its investments in certain CEA-regulated instruments (e.g., futures, options, or swaps) and complying with certain marketing restrictions. Accordingly, Vanguard is not subject to registration or regulation as a CPO with respect to each Fund under the CEA. Each Fund will only enter into futures contracts and futures options that are traded on a U.S. or foreign exchange, board of trade, or similar entity or that are quoted on an automated quotation system.

Environmental, Social, and Governance (ESG) Considerations. A Vanguard fund's consideration of ESG risk factors is driven first and foremost by the investment objective and principal investment strategies disclosed in the fund's prospectus. For Vanguard funds whose index providers or advisors select securities based on disclosed ESG criteria (ESG funds), the ESG fund's prospectus provides information about the ESG fund's use of ESG criteria and related ESG investing risks.

Unless specifically disclosed in a fund's prospectus, Vanguard funds do not seek to implement specific ESG impacts or strategies. However, except with respect to Vanguard equity index funds, a Vanguard fund's advisor may consider risk factors that could be categorized as "ESG" as a component of the fund's investment process if the advisor deems such risk factors to be financially material, either quantitatively or qualitatively. For example, as determined by the fund's advisor, certain ESG risk factors may be considered as a means to assess long-term risk to shareholder value (e.g., risk analysis, credit analysis, or investment opportunities) as the advisor deems appropriate. Consideration of ESG risk factors will vary depending on a fund's particular investment strategies as disclosed in its prospectus. The weight given to specific risk factors may vary across types of investments, industries, regions, and issuers and may change over time. Consideration of certain ESG risk factors may affect a fund's exposure to certain issuers or industries. For

purposes of this disclosure, “ESG risk factors” refers to financially material risk factors that could be viewed as ESG-focused. However, there are significant differences in how such terms are interpreted across funds, advisors, index providers, and individuals. It is possible that an advisor will not identify or evaluate every ESG risk factor that an investor would expect to be identified or evaluated, or that the advisor may not categorize a specific risk factor as “ESG.” The advisor’s assessment of an issuer may differ from that of other funds or an investor’s assessment of such issuer. As a result, securities selected by the advisor may not reflect the beliefs and values of any particular investor.

An advisor may be dependent on the availability of timely, complete, and accurate ESG data being reported by issuers and/or third-party research providers to evaluate ESG risk factors. ESG risk factors are often not uniformly measured or defined, which could impact an advisor’s ability to assess an issuer. Where ESG risk factor analysis is used as one part of an overall investment process (as may be the case for some or all of the funds included in this Statement of Additional Information), such funds may still invest in securities of issuers that all market participants may not view as ESG-focused.

Proxy Voting and Engagement. Vanguard’s proxy voting administration services are organized into separate teams (Investment Stewardship Teams) within two wholly owned subsidiaries, Vanguard Capital Management, LLC (VCM) and Vanguard Portfolio Management, LLC (VPM). On behalf of the board of trustees of each Vanguard fund for which VCM and/or VPM exercises portfolio management and investment stewardship responsibilities, VCM and/or VPM, as applicable, administers proxy voting for the equity holdings of such funds. The Investment Stewardship Teams may each independently engage with issuers to better understand how they are addressing material risks, including material ESG risks. Specifically, the Investment Stewardship Teams may each independently engage with company leaders and directors to understand how they oversee, mitigate, and disclose material risks to shareholders.

For Vanguard funds advised by third-party advisory firms independent of Vanguard, such third-party advisory firms are responsible for administration of proxy voting and engagement with respect to the equity holdings they manage on behalf of the fund. A fund’s third-party advisor may consider various ESG risks to be material to companies and may have their own practices and policies related to engagement. For example, the advisor may consider environmental risks such as climate change to be a material risk to many companies and their shareholders’ long-term financial success. As a result, certain third-party advisors engage with particular issuers held by the fund(s) they manage to advocate for science-based targets to address long-term risk to shareholder value resulting from climate change as long as such targets are not contrary to the investment objective and strategy of such fund(s).

Regulatory Environment. The regulatory landscape for ESG investing is still developing, both within the United States and globally. As society’s focus on particular ESG issues, such as climate change, continues to evolve, the emphasis and direction of governmental policies are subject to change.

Exchange-Traded Funds. A fund may purchase shares of exchange-traded funds (ETFs). Typically, a fund would purchase ETF shares for the same reason it would purchase (and as an alternative to purchasing) futures contracts: to obtain exposure to all or a portion of the stock or bond market. ETF shares enjoy several advantages over futures. Depending on the market, the holding period, and other factors, ETF shares can be less costly and more tax-efficient than futures. In addition, ETF shares can be purchased for smaller sums, offer exposure to market sectors and styles for which there is no suitable or liquid futures contract, and do not involve leverage.

An investment in an ETF generally presents the same principal risks as an investment in a conventional fund (i.e., one that is not exchange-traded) that has the same investment objective, strategies, and policies. The price of an ETF can fluctuate within a wide range, and a fund could lose money investing in an ETF if the prices of the securities owned by the ETF go down. In addition, ETFs are subject to the following risks that do not apply to conventional funds: (1) the market price of an ETF’s shares may trade at a discount or a premium to their net asset value; (2) an active trading market for an ETF’s shares may not develop or be maintained; and (3) trading of an ETF’s shares may be halted by the activation of individual or marketwide trading halts (which halt trading for a specific period of time when the price of a particular security or overall market prices decline by a specified percentage). Trading of an ETF’s shares may also be halted if the shares are delisted from the exchange without first being listed on another exchange or if the listing exchange’s officials determine that such action is appropriate in the interest of a fair and orderly market or for the protection of investors.

Most ETFs are investment companies. Therefore, a fund’s purchases of ETF shares generally are subject to the limitations on, and the risks of, a fund’s investments in other investment companies, which are described under the heading *“Other Investment Companies.”*

Foreign Securities. Typically, foreign securities are considered to be equity or debt securities issued by entities organized, domiciled, or with a principal executive office outside the United States, such as foreign corporations and governments. Securities issued by certain companies organized outside the United States may not be deemed to be foreign securities if the company's principal operations are conducted from the United States or when the company's equity securities trade principally on a U.S. stock exchange. Foreign securities may trade in U.S. or foreign securities 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 authorities, is also heightened. In addition, with respect to certain foreign countries, there is the possibility of expropriation or confiscatory taxation or other adverse tax consequences, political or social instability, changes to laws and regulations or interpretations of laws and regulations, war, terrorism, nationalization, limitations on the removal of funds or other assets, or diplomatic developments that could affect U.S. investments in those countries. Additionally, the imposition of sanctions, exchange controls (including repatriation restrictions), confiscations, trade restrictions (including tariffs) and other government restrictions on the United States by a foreign country, or on a foreign country or issuer by the United States, could impair a fund's ability to buy, sell, hold, receive, deliver, or otherwise transact in certain investment securities or obtain exposure to foreign securities and assets. This may negatively impact the value and/or liquidity of a fund's investments and could impair a fund's ability to meet its investment objective or invest in accordance with its investment strategy. Sanctions could also result in the devaluation of a country's currency, a downgrade in the credit ratings of a country or issuers in a country, or a decline in the value and/or liquidity of securities of issuers in that country.

Although an advisor will endeavor to achieve the most favorable execution costs for a fund's portfolio transactions in foreign securities under the circumstances, commissions and other transaction costs are generally higher than those on U.S. securities. In addition, it is expected that the custodian arrangement expenses for a fund that invests primarily in foreign securities will be somewhat greater than the expenses for a fund that invests primarily in domestic securities. Additionally, bankruptcy laws vary by jurisdiction and cash deposits may be subject to a custodian's creditors. Certain foreign governments levy withholding or other taxes against dividend and interest income from, capital gains on the sale of, or transactions in foreign securities. Although in some countries a portion of these taxes is recoverable by the fund, the nonrecovered portion of foreign withholding taxes will reduce the income received from such securities.

The value of the foreign securities held by a fund that are not U.S. dollar-denominated may be significantly affected by changes in currency exchange rates. The U.S. dollar value of a foreign security generally decreases when the value of the U.S. dollar rises against the foreign currency in which the security is denominated, and it tends to increase when the value of the U.S. dollar falls against such currency (as discussed under the heading *"Foreign Securities—Foreign Currency Transactions,"* a fund may attempt to hedge its currency risks). In addition, the value of fund assets may be affected by losses and other expenses incurred from converting between various currencies in order to purchase and sell foreign securities, as well as by currency restrictions, exchange control regulations, currency devaluations, and political and economic developments.

Foreign Securities—Special Risks of Investing in China. Investing in companies or issuers economically tied to China involves a high degree of risk and special considerations not typically associated with investing in more developed economies or markets. Such risks may include but are not limited to: Chinese Government Risk, Sanctions/Geopolitical Risk, Emerging Market Risk, Chinese Renminbi Risk, Regulatory and Legal Framework Risk, and risks with accessing and investing in their equity and bond markets.

Chinese Government Risk. In China, there are no freely elected government officials and political opposition is largely suppressed. As a result, the Chinese government has an outsized impact on the Chinese market which is

uncharacteristic when compared with developed nations. For example, the Chinese government has exercised authority over publicly traded Chinese companies in the past and may continue to do so. This authority can include, but is not limited to, dictating what types of products Chinese companies should produce and to whom such products can be sold, nationalizing assets, and pursuing regulatory enforcement in an unpredictable manner. The Chinese government could use this authority for a variety of reasons including targeting Chinese companies deemed to have violated Chinese interests or trying to reduce market volatility.

The nationalist focus of the Chinese government also can lead to the government making broad policy changes that deviate from what they have historically supported. The Chinese government has implemented several economic reforms since 1978. It is possible that these reforms may not be supported in the future and the government could return to a more centrally planned economy. Additional support to surrounding economies such as Hong Kong could be revoked, and foreign investment in China could be limited if not banned outright.

Sanctions/Geopolitical Risk. Investing in companies economically tied to China is subject to certain political risks. Following the establishment of the People's Republic of China (PRC) by the Communist Party in 1949, the Chinese government renounced various debt obligations incurred by China's predecessor governments, which obligations remain in default, and seized assets without compensation. There can be no assurance that the Chinese government will not take similar action in the future, resulting in a full or partial loss of Chinese holdings.

China has many ongoing disputes with Hong Kong, Taiwan, the Xinjiang region and the Uyghur population, and other neighboring areas. These disputes continue to escalate due to ongoing Chinese military exercises (such as land reclamation efforts in the South China Sea), Chinese policymaking, human rights violations assertions by the UN and other developed nations, and statements from high-ranking Chinese government officials. In addition, the Chinese government has been accused of participating in state-sponsored cyberattacks against other foreign countries and foreign companies.

The resulting political tensions, including with the United States, have had and may continue to have impacts on the Chinese economy and its ability to sell certain goods. Other countries, including the U.S., have imposed and may continue to impose sanctions, tariffs, and embargoes or blocking of certain goods produced in China to affect the Chinese economy. Countries have also raised concerns about Chinese companies' compliance with their own laws which could result in the delisting of securities. Compliance with sanctions could lead to a large market selloff, which could result in significant losses to investments. While tariffs and embargoes are not direct sanctions, they can still negatively affect the Chinese economy and individual Chinese companies. Lastly, because of the economic and financial market dependence between China and the surrounding regions, any decrease in demand for goods from China or an economic downturn in China, could negatively affect the economies and financial markets of the surrounding regions.

Emerging Market Risk. China's economy is classified as an emerging market. However, China's economy is considered to be more reliant on exports than other emerging markets and therefore could be negatively affected by a downturn in its export business. Chinese exports could be negatively affected by the aforementioned sanctions and geopolitical risk or other restrictions such as trade tariffs, embargoes, or capital controls. Chinese exports could also be affected by increasing competition across Asia's other emerging economies, higher rates of inflation, and/or the erratic nature of economic growth in China.

Regulatory and Legal Framework Risk. China's ability to develop and sustain its legal, tax, regulatory, financial reporting, accounting, and recordkeeping systems could influence the course of foreign investment. Chinese companies are not subject to the same degree of regulation as those in the United States with respect to matters such as tender offer regulation, stockholder proxy requirements, and the requirements mandating timely and accurate disclosure of information. China lacks accounting, auditing, and financial reporting standards, and U.S. public accounting oversight boards are unable to inspect audit work papers and practices of registered accounting firms in China. Further complicating matters, some of China's laws prohibit certain key information about their companies from being disclosed. As a result, obtaining the full financial picture of a publicly traded Chinese company may be more difficult than obtaining the full financial picture of a publicly traded U.S. company, making it harder to determine the true health of a company.

China's legal framework may make it more difficult, if not impossible, to obtain or enforce a judgment compared to other countries. The Chinese regulatory framework is also less extensive and still developing regarding business entities and commercial transactions, which can make it challenging to navigate China's markets. Chinese securities may be taxed differently than U.S. securities depending on the type of investment and the issuer.

Accessing and Investing in the Chinese Equity Market. China's investment and banking systems are still developing, which subjects the settlement, clearing, and registration of securities transactions to additional risks and costs. Chinese companies can list their shares in a variety of ways, such as A shares, B shares, or H shares. These shares are traded on various exchanges, such as the Shanghai or Shenzhen exchange.

A-shares are generally bought through the Qualified Foreign Investor (QFI) program or Stock Connect. Trading through a license granted under the QFI regime is subject to policies and rules that are unique and evolving. In addition, QFI licenses can be revoked or restricted, preventing a fund from any future trading through the QFI regime. There are QFI custodial arrangements that can limit a fund's ability to recover deposited cash if the QFI custodian becomes insolvent. Chinese regulators may impose fines or pursue other negative actions towards a QFI custodian if that custodian does not perform its required reporting obligations. Trades do not cross between the Shanghai and Shenzhen stock exchanges and a separate broker is assigned for each exchange. As a result, trades must be placed with separate brokers for different transaction sides, increasing complexity, potential for error, and costs.

Trading on Stock Connect is also subject to limitations such as daily quota limitations on purchases, limitations on transferability of shares, pre-delivery or pre-validation of cash or securities to or by a broker which may impact a fund's ability to trade portfolio securities in a timely manner and can negatively affect a fund's returns. Only certain A-shares are eligible to be accessed through Stock Connect and these securities could lose their eligibility at any time. Stock Connect utilizes an omnibus clearing structure, and a fund's shares will be registered in the custodian's name on the Hong Kong Central Clearing and Settlement System. This may reduce a manager's ability to effectively manage a fund's holdings, including the potential enforcement of equity owner rights. B shares can only be traded by non-residents of the PRC or residents with an appropriate foreign currency account that meets certain requirements.

China's foreign ownership limitations may result in limitations on investment or the return of profits if a fund purchases and sells shares of an issuer in which it owns 5% or more of the shares issued within a six-month period. It is unclear whether China will aggregate a fund's holdings with other affiliated funds in determining the 5% ownership level. The restrictions on ownership and ability of Chinese regulatory authorities and Chinese issuers to suspend trading, their willingness to exercise this option in response to market volatility and other events, can negatively affect liquidity and volatility of the Chinese markets.

It is also possible to gain exposure to certain Chinese companies through legal structures known as Variable Interest Entities (VIEs). The VIE structure is designed to provide foreign investors with exposure to Chinese companies that operate in certain sectors in which China restricts and/or prohibits foreign investments, such as internet, media, education, and telecommunications. VIEs seek to establish claims to a China-based company's profits and control of its assets through contractual arrangements. While VIEs are a longstanding industry practice, they are not formally recognized under Chinese law or approved by Chinese regulators. It is also uncertain whether Chinese officials or regulators will prohibit Chinese companies from accessing foreign investment through VIEs or remove VIEs' ability to pass through economic and governance rights to foreign individuals and entities. The contractual arrangements with the VIE also may not be as effective in providing operational control as direct equity ownership. The Chinese equity owner(s) of a VIE could decide to breach the contractual arrangements and may have conflicting interests and fiduciary duties as compared to foreign investors in the shell company. Further, any breach or dispute under these contracts will likely fall under Chinese jurisdiction and law. Prohibitions of these structures by the Chinese government, or the inability to enforce such contracts through Chinese courts and/or arbitration bodies, would likely cause the VIE-structured holding(s) to suffer significant, detrimental, and possibly permanent loss, and in turn, adversely affect a fund's returns and net asset value. Additionally, an investor's rights may be limited with respect to the underlying Chinese operating company.

Accessing and Investing in the Chinese Bond Market. The People's Bank of China has established a program that permits eligible foreign investors to invest directly in bonds traded on the Chinese Interbank Bond Market (CIBM). While the CIBM is relatively large and trading volumes are generally high, the market has similar risks as bond markets in other emerging market countries. A fund may invest in the bonds available on the CIBM through Bond Connect, which was established with the Hong Kong Monetary Authority as a way to permit overseas investors to trade in each other's respective markets. Bond Connect provides a connection between mainland China- and Hong Kong-based financial institutions, permitting securities trading between the mainland China and Hong Kong markets electronically, thus eliminating the stricter restrictions that were present under previous access models.

Investing in securities traded on the CIBM through Bond Connect is subject to regulatory risks. The relevant rules, regulations, structure, terms, and a fund's ability to access Bond Connect may be subject to change with minimal notice and any changes have the potential to be applied retroactively. For example, if Bond Connect is not operating or trading is otherwise suspended, a fund's ability to trade bonds in a timely manner may be affected and there may be negative

impacts on the fund. Additionally, market volatility and possible lack of liquidity due to low trading volume 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. Further, 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.

Bonds issued by Chinese companies or the Chinese government may be dollar denominated. These dollar-denominated bonds carry some of the same risks as RMB-denominated bonds traded through Bond Connect, but generally benefit from reduced currency risk since a fund does not need to engage in currency trading to settle the trade.

Foreign Securities—Emerging Markets 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 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) differences 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 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 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, seizure of assets, 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.

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 a fund's 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 a fund's 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 a fund's advisor reasonably believes generally tracks the currency being hedged with regard to price movements). A fund's 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 currency fluctuations and the need to convert such assets into U.S. dollars (thereby also reducing transaction costs). To the extent these assets are converted back into U.S. dollars, the value of the assets so maintained will be affected favorably or unfavorably by changes in foreign currency exchange rates and exchange control regulations.

Forecasting the movement of the currency market is extremely difficult. Whether any hedging strategy will be successful is highly uncertain. Moreover, it is impossible to forecast with precision the market value of portfolio securities at the expiration of a forward currency contract. Accordingly, a fund may be required to buy or sell additional currency on the spot market (and bear the expense of such transaction) if its advisor's predictions regarding the movement of foreign currency or securities markets prove inaccurate. In addition, the use of cross-hedging transactions may involve special risks and may leave a fund in a less advantageous position than if such a hedge had not been established. Because forward currency contracts are privately negotiated transactions, there can be no assurance that a fund will have flexibility to roll over a forward currency contract upon its expiration if it desires to do so. Additionally, there can be no assurance that the other party to the contract will perform its services thereunder.

Foreign Securities—Foreign Investment Companies. Some of the countries in which a fund may invest may not permit, or may place economic restrictions on, direct investment by outside investors. Fund investments in such countries may be permitted only through foreign government-approved or authorized investment vehicles, which may include other investment companies. Such investments may be made through registered or unregistered closed-end investment companies that invest in foreign securities. Investing through such vehicles may involve layered fees or expenses and may also be subject to the limitations on, and the risks of, a fund's investments in other investment companies, which are described under the heading *"Other Investment Companies."*

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 depository for the majority of Russian equity securities; however, pursuant to a Russian presidential decree, the NSD no longer serves as a system for the central handling of Russian equities. Instead, ownership records are now maintained by registrars located throughout Russia.

For Russian issuers, ownership records are maintained only by registrars who are under contract with the issuers. Russian subcustodians maintain copies of the registrar's records (Share Extracts) on its premises. The registrars may not be independent from the issuer, are not necessarily subject to effective state supervision, and may not be licensed with any governmental entity. A fund will endeavor to ensure by itself or through a custodian or other agent that the fund's interest continues to be appropriately recorded for Russian issuers by inspecting the share register and by obtaining extracts of share registers through regular confirmations. However, these extracts have no legal enforceability, and the possibility exists that a subsequent illegal amendment or other fraudulent act may deprive the fund of its ownership rights or may improperly dilute its interest. In addition, although applicable Russian regulations impose liability on registrars for losses resulting from their errors, a fund may find it difficult to enforce any rights it may have against the registrar or issuer of the securities in the event of loss of share registration.

Russia's launch of a large-scale invasion of Ukraine has resulted in sanctions against Russian governmental institutions, Russian entities, and Russian individuals that may result in the devaluation of Russian currency; a downgrade in the country's credit rating; a freeze of Russian foreign assets; a decline in the value and liquidity of Russian securities, properties, or interests; and other adverse consequences to the Russian economy and Russian assets. In addition, a fund's ability to price, buy, sell, receive, or deliver Russian investments has been and may continue to be impaired. These sanctions, divestment of interests in or curtailment of business dealing with Russia by large corporations and U.S. states, and the resulting disruption of the Russian economy, may cause volatility in other regional and global markets and may negatively impact the performance of various sectors and industries, as well as companies in other countries, which could have a negative effect on the performance of a fund, even if the fund does not have direct exposure to securities of Russian issuers.

Futures Contracts and Options on Futures Contracts. Futures contracts and options on futures contracts are derivatives. A futures contract is a standardized agreement between two parties to buy or sell at a specific time in the future a specific quantity of a commodity at a specific price. The commodity may consist of an asset, a reference rate, or an index. A security futures contract relates to the sale of a specific quantity of shares of a single equity security or a narrow-based securities index. The value of a futures contract tends to increase and decrease in tandem with the value of the underlying commodity. The buyer of a futures contract enters into an agreement to purchase the underlying commodity on the settlement date and is said to be "long" the contract. The seller of a futures contract enters into an agreement to sell the underlying commodity on the settlement date and is said to be "short" the contract. The price at which a futures contract is entered into is established either in the electronic marketplace or by open outcry on the floor of an exchange between exchange members acting as traders or brokers. Open futures contracts can be liquidated or closed out by physical delivery of the underlying commodity or payment of the cash settlement amount on the settlement date, depending on the terms of the particular contract. Some financial futures contracts (such as security futures) provide for physical settlement at maturity. Other financial futures contracts (such as those relating to interest rates, foreign currencies, and broad-based securities indexes) generally provide for cash settlement at maturity. In the case of cash-settled futures contracts, the cash settlement amount is equal to the difference between the final settlement or market price for the relevant commodity on the last trading day of the contract and the price for the relevant commodity agreed upon at the outset of the contract. Most futures contracts, however, are not held until maturity but instead are "offset" before the settlement date through the establishment of an opposite and equal futures position.

The purchaser or seller of a futures contract is not required to deliver or pay for the underlying commodity unless the contract is held until the settlement date. However, both the purchaser and seller are required to deposit "initial margin" with a futures commission merchant (FCM) when the futures contract is entered into. Initial margin deposits are typically calculated as an amount equal to the volatility in market value of a contract over a fixed period. If the value of the fund's position 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 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 a fund's 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 commodity shortages and currency devaluations, which cannot be readily foreseen by the purchaser of a hybrid. Under certain conditions, the redemption value of a hybrid could be zero. Thus, an investment in a hybrid may entail significant market risks that are not associated with a similar investment in a traditional, U.S. dollar-denominated bond with a fixed principal amount that pays a fixed rate or floating rate of interest. The purchase of hybrids also exposes a fund to the credit risk of the issuer of the hybrids. Depending on the level of a fund's investment in hybrids, these risks may cause significant fluctuations in the fund's net asset value. Hybrid instruments may also carry liquidity risk since the instruments are often "customized" to meet the needs of an issuer or, sometimes, the portfolio needs of a particular investor, and therefore the number of investors that are willing and able to buy such instruments in the secondary market may be smaller than that for more traditional securities.

Certain issuers of hybrid instruments known as structured products may be deemed to be investment companies as defined in the 1940 Act. As a result, a fund's investments in these products may be subject to the limitations described under the heading *"Other Investment Companies."*

Interfund Borrowing and Lending. The SEC has granted an exemption permitting registered open-end Vanguard funds to participate in Vanguard's interfund lending program. This program allows the Vanguard funds to borrow money from and lend money to each other for temporary or emergency purposes. The program is subject to a number of conditions, including, among other things, the requirements that (1) no fund may borrow or lend money through the program unless it receives a more favorable interest rate than is typically available from a bank for a comparable transaction, (2) no fund may lend money if the loan would cause its aggregate outstanding loans through the program to exceed 15% of its net assets at the time of the loan, and (3) a fund's interfund loans to any one fund shall not exceed 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.

Legal and Regulatory Risk. Vanguard funds and their advisors are subject to an extensive and complex set of laws and regulations. These laws and regulations have evolved rapidly in recent years and likely will continue to evolve. Changes and additions to laws and regulations can result in unintended or unexpected impacts, including impacts to the value of a fund's investments, a fund's investment strategy, and/or a fund's ability to manage tax consequences. Changes in how laws and regulations are interpreted could similarly impact a fund. In addition, complying with new or changing laws or regulations generally can be expected to increase operational costs, which can have a negative impact on fund performance.

Mortgage-Backed Securities. Mortgage-backed securities represent direct or indirect participation in, or are collateralized by and payable from, mortgage loans secured by real property or instruments derived from such loans and may be based on different types of mortgages, including those on residential properties or commercial real estate. Mortgage-backed securities include various types of securities, such as government stripped mortgage-backed securities, adjustable rate mortgage-backed securities, and collateralized mortgage obligations.

Generally, mortgage-backed securities represent partial interests in pools of mortgage loans assembled for sale to investors by various governmental agencies, such as the Government National Mortgage Association (GNMA); by government-related organizations, such as the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC); and by private issuers, such as commercial banks, savings and loan institutions, and mortgage bankers. The average maturity of pass-through pools of mortgage-backed securities in which a fund may invest varies with the maturities of the underlying mortgage instruments. In addition, a pool's average maturity may be shortened by unscheduled payments on the underlying mortgages. Factors affecting mortgage prepayments include the level of interest rates, the general economic and social conditions, the location of the mortgaged property, and the age of the mortgage. Because prepayment rates of individual mortgage pools vary widely, the average life of a particular pool cannot be predicted accurately.

Mortgage-backed securities may be classified as private, government, or government-related, depending on the issuer or guarantor. Private mortgage-backed securities represent interest in pass-through pools consisting principally of conventional residential or commercial mortgage loans created by nongovernment issuers, such as commercial banks, savings and loan associations, and private mortgage insurance companies. Private mortgage-backed securities may not be readily marketable. In addition, mortgage-backed securities have been subject to greater liquidity risk when worldwide economic and liquidity conditions deteriorate. U.S. government mortgage-backed securities are backed by the full faith and credit of the U.S. government. GNMA, the principal U.S. guarantor of these securities, is a wholly owned U.S. government corporation within the Department of Housing and Urban Development. Government-related mortgage-backed securities are not backed by the full faith and credit of the U.S. government. Issuers include FNMA and FHLMC, which are congressionally chartered corporations. In September 2008, the U.S. Treasury placed FNMA and FHLMC under conservatorship and appointed the Federal Housing Finance Agency (FHFA) to manage their daily operations. In addition, the U.S. Treasury entered into purchase agreements with FNMA and FHLMC to provide them with capital in exchange for senior preferred stock. Pass-through securities issued by FNMA are guaranteed as to timely payment of principal and interest by FNMA. Participation certificates representing interests in mortgages from FHLMC's national portfolio are guaranteed as to the timely payment of interest and principal by FHLMC. Private, government, or government-related entities may create mortgage loan pools offering pass-through investments in addition to those described above. The mortgages underlying these securities may be alternative mortgage instruments (i.e., mortgage instruments whose principal or interest payments may vary or whose terms to maturity may be shorter than customary).

Mortgage-backed securities are often subject to more rapid repayment than their stated maturity date would indicate as a result of the pass-through of prepayments of principal on the underlying loans. Prepayments of principal by mortgagors or mortgage foreclosures shorten the term of the mortgage pool underlying the mortgage-backed security. A fund's ability to maintain positions in mortgage-backed securities is affected by the reductions in the principal amount of such securities resulting from prepayments. A fund's ability to reinvest prepayments of principal at comparable yield is subject to generally prevailing interest rates at that time. The values of mortgage-backed securities vary with changes in market interest rates generally and the differentials in yields among various kinds of 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 a pool of mortgages supporting a mortgage-backed security. Conversely, in periods of falling interest rates, the rate of prepayment tends to increase, thereby shortening the average life of such a pool. 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 its assets were previously invested. Therefore, mortgage-backed securities have less potential for capital appreciation in periods of falling interest rates than other income-bearing securities of comparable maturity.

Mortgage-Backed Securities—Adjustable Rate Mortgage-Backed Securities. Adjustable rate mortgage-backed securities (ARMBSs) have interest rates that reset at periodic intervals. Acquiring ARMBSs permits a fund to participate in increases in prevailing current interest rates through periodic adjustments in the coupons of mortgages underlying the 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 substantially similar security (but not the same security) in the future at a predetermined price on a predetermined date. 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 substantially 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.

Municipal Bonds. Municipal bonds are debt obligations issued by states, municipalities, U.S. jurisdictions or territories, and other political subdivisions and by agencies, authorities, and instrumentalities of states and multistate agencies or authorities (collectively, municipalities). Typically, the interest payable on municipal bonds is, in the opinion of bond counsel to the issuer at the time of issuance, exempt from federal income tax.

Municipal bonds include securities from a variety of sectors, each of which has unique risks, and can be divided into government bonds (i.e., bonds issued to provide funding for governmental projects, such as public roads or schools) and conduit bonds (i.e., bonds issued to provide funding for a third-party permitted to use municipal bond proceeds, such as airports or hospitals). The Funds will not concentrate in any one industry or group of industries; tax-exempt securities issued by states, municipalities, and their political subdivisions are not considered to be part of an industry. However, if a municipal bond's income is derived from a specific project, the securities will be considered to be from the industry of that project. Municipal bonds include, but are not limited to, general obligation bonds, limited obligation bonds, and revenue bonds, including industrial development bonds issued pursuant to federal tax law.

General obligation bonds are secured by the issuer's pledge of its full faith, credit, and taxing power for the payment of principal and interest. Limited obligation bonds are payable only from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise or other specific revenue source. Revenue or special tax bonds are payable only from the revenues derived from a particular facility or class of facilities or, in some cases, from the proceeds of a special excise or other tax, but not from general tax revenues.

Revenue bonds involve the credit risk of the underlying project or enterprise (or its corporate user) rather than the credit risk of the issuing municipality. Under the IRC, certain limited obligation bonds are considered "private activity bonds," and interest paid on such bonds is treated as an item of tax preference for purposes of calculating federal alternative minimum tax liability. Tax-exempt private activity bonds and industrial development bonds generally are also classified as revenue bonds and thus are not payable from the issuer's general revenues. The credit and quality of private activity bonds and industrial development bonds are usually related to the credit of the corporate user of the facilities. Payment of interest on and repayment of principal of such bonds are the responsibility of the corporate user (and/or any guarantor). Some municipal bonds may be issued as variable or floating rate securities and may incorporate market-dependent liquidity features (see discussion of *"Debt Securities—Variable and Floating Rate Securities"*). A tax-exempt fund will generally invest only in securities deemed tax-exempt by a nationally recognized bond counsel, but there is no guarantee that the interest payments on municipal bonds will continue to be tax-exempt for the life of the bonds.

Some longer-term municipal bonds give the investor a "put option," which is the right to sell the security back to the issuer at par (face value) prior to maturity, within a specified number of days following the investor's request—usually one to seven days. This demand feature enhances a security's liquidity by shortening its maturity and enables it to trade at a price equal to or very close to par. If a demand feature terminates prior to being exercised, a fund would hold the longer-term security, which could experience substantially more volatility. Municipal bonds that are issued as variable or floating rate securities incorporating market-dependent liquidity features may have greater liquidity risk than other municipal bonds (see discussion of *"Debt Securities—Variable and Floating Rate Securities"*).

Some municipal bonds feature credit enhancements, such as lines of credit, letters of credit, municipal bond insurance, and standby bond purchase agreements (SBPAs). SBPAs include lines of credit that are issued by a third party, usually a bank, to enhance liquidity and ensure repayment of principal and any accrued interest if the underlying municipal bond should default. Municipal bond insurance (which is usually purchased by the bond issuer from a private, 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 derivatives 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.

Under ARRA, an issuer of a BAB is entitled to receive payments from the U.S. Treasury over the life of the BAB equal to 35% of the interest paid (or 45% of the interest paid in the case of a Recovery Zone Economic Development Bond). For example, if a state or local government were to issue a BAB at a taxable interest rate of 10% of the par value of the bond, the U.S. Treasury would make a payment directly to the issuing government of 35% of that interest (3.5% of the par value of the bond) or 45% of the interest (4.5% of the par value of the bond) in the case of a Recovery Zone Economic Development Bond. Thus, the state or local government's net borrowing cost would be 6.5% or 5.5%, respectively, on BABs that pay 10% interest. In other cases, holders of a BAB receive a 35% or 45% tax credit, respectively. The BAB program expired on December 31, 2010. BABs outstanding prior to the expiration of the program continue to be eligible for the federal interest rate subsidy or tax credit, which continues for the life of the BABs; however, the federal interest rate subsidy or tax credit has been reduced by the government sequester. Additionally, bonds issued following expiration of the program are not eligible for federal payment or tax credit. In addition to BABs, a fund may invest in other municipal bonds that pay taxable interest.

The reorganization under the federal bankruptcy laws of an issuer of, or payment obligor with respect to, municipal bonds may result in the municipal bonds being canceled without repayment; repaid only in part; or repaid in part or whole through an exchange thereof for any combination of cash, municipal bonds, debt securities, convertible securities, equity securities, or other instruments or rights in respect to the same issuer or payment obligor or a related entity. Certain issuers are not eligible to file for bankruptcy.

Municipal Bonds—Risks. Municipal bonds are subject to credit risk. The yields of municipal bonds depend on, among other things, general money market conditions, conditions in the municipal bond market, size of a particular offering, maturity of the obligation, and credit quality of the issue. Consequently, municipal bonds with the same maturity, coupon, and credit quality may have different yields, while municipal bonds of the same maturity and coupon, but with different credit quality, may have the same yield. It is the responsibility of a fund's investment management advisor to appraise independently the fundamental quality of bonds held by the fund. Information about the financial condition of an issuer of municipal bonds may not be as extensive as that which is made available by corporations whose securities are publicly traded. Obligations of issuers of municipal bonds are generally subject to the provisions of bankruptcy, insolvency, and other laws affecting the rights and remedies of creditors.

Congress, state legislatures, or other governing authorities may seek to extend the time for payment of principal or interest, or both, or to impose other constraints upon enforcement of such obligations. For example, from time to time, proposals have been introduced before Congress to restrict or eliminate the federal income tax exemption for interest on municipal bonds. Also, from time to time, proposals have been introduced before state and local legislatures to restrict or eliminate the state and local income tax exemption for interest on municipal bonds. Similar proposals may be introduced in the future. If any such proposal were enacted, it might restrict or eliminate the ability of a fund to achieve its respective investment objective. In that event, the fund's trustees and officers would reevaluate its investment objective and policies and consider recommending to its shareholders changes in such objective and policies.

There is also the possibility that, as a result of litigation or other conditions, the power or ability of issuers to meet their obligations for the payment of interest and principal on their municipal bonds may be materially affected or their obligations may be found to be invalid or unenforceable. Such litigation or conditions may, from time to time, have the effect of introducing uncertainties in the market for municipal bonds or certain segments thereof or of materially affecting the credit risk with respect to particular bonds. Adverse economic, business, legal, or political developments might affect all or a substantial portion of a fund's municipal bonds in the same manner. For example, a state specific tax-exempt fund is subject to state-specific risk, which is the chance that the fund, because it invests primarily in securities issued by a particular state and its municipalities, is more vulnerable to unfavorable developments in that state than are funds that invest in municipal securities of many states. Unfavorable developments in any economic sector may have

far-reaching ramifications on a state's overall municipal market. In the event that a particular obligation held by a fund is assessed at a credit quality below the minimum investment level permitted by the investment policies of such fund, the fund's investment advisor, pursuant to oversight from the trustees, will carefully assess the creditworthiness of the obligation to determine whether it continues to meet the policies and objective of the fund.

Municipal bonds are subject to interest rate risk, which is the chance that bond prices will decline over short or even long periods because of rising interest rates. Interest rate risk is higher for long-term bonds, whose prices are much more sensitive to interest rate changes than are the prices of shorter-term bonds. Generally, prices of longer-maturity issues tend to fluctuate more than prices of shorter-maturity issues. Prices and yields on municipal bonds are dependent on a variety of factors, such as the financial condition of the issuer, the general conditions of the municipal bond market, the size of a particular offering, the maturity of the obligation, and the rating of the issue. A number of these factors, including the ratings of particular issues, are subject to change from time to time.

Municipal bonds are subject to call risk, which is the chance that during periods of falling interest rates, issuers of callable bonds may call (redeem) securities with higher coupons or interest rates before their maturity dates. A fund would then lose any price appreciation above the bond's call price and would be forced to reinvest the unanticipated proceeds at lower interest rates, resulting in a decline in the fund's income. Some of these investments may generate taxable income, and thus a fund may need to distribute income subject to federal personal income tax or the alternative minimum tax. Call risk is generally high for long-term bonds. Conversely, municipal bonds are also subject to extension risk, which is the chance that during periods of rising interest rates, certain debt securities will be paid off substantially more slowly than originally anticipated, and the value of those securities may fall. Extension risk is generally high for long-term bonds.

Municipal bonds may be deemed to be illiquid as determined by or in accordance with methods adopted by a fund's board of trustees. In determining the liquidity and appropriate valuation of a municipal bond, a fund's advisor may consider the following factors relating to the security, among others: (1) the frequency of trades and quotes; (2) the number of dealers willing to purchase or sell the security; (3) the willingness of dealers to undertake to make a market; (4) the nature of the marketplace trades, including the time needed to dispose of the security, the method of soliciting offers, and the mechanics of transfer; and (5) the factors unique to a particular security, including general creditworthiness of the issuer and the likelihood that the marketability of the securities will be maintained throughout the time the security is held by the fund.

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 greater flexibility to tailor an option to its needs, OTC options generally involve credit risk to the counterparty, whereas for exchange-traded, centrally cleared options, credit risk is mutualized through the involvement of the applicable clearing house.

The buyer (or holder) of an option is said to be "long" the option, while the seller (or writer) of an option is said to be "short" the option. A call option grants to the holder the right to buy (and obligates the writer to sell) the underlying security at the strike price, which is the predetermined price at which the option may be exercised. A put option grants to the holder the right to sell (and obligates the writer to buy) the underlying security at the strike price. 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 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, but that person could also seek to profit from an anticipated rise or decline in option prices. 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 position 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 position. Generally, any profit realized by an option buyer represents a loss for the option writer. The writing of an option 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.

If a trading market, in particular options, were to become unavailable, investors in those options (such as a Fund) would be unable to close out their positions until trading resumes, and they may be faced with substantial losses if the value of the underlying instrument moves adversely during that time. Even if the market were to remain available, there may be times when options prices will not maintain their customary or anticipated relationships to the prices of the underlying instruments and related instruments. Lack of investor interest, changes in volatility, or other factors or conditions might adversely affect the liquidity, efficiency, continuity, or even the orderliness of the market for particular options.

A fund bears the risk that its advisor will not accurately predict future market trends. If a fund's advisor attempts to use an option as a hedge against, or as a substitute for, a portfolio investment, the fund will be exposed to the risk that the option will have or will develop imperfect or no correlation with the portfolio investment, which could cause substantial losses for the fund. Although hedging strategies involving options 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 options, in particular OTC options, are complex and often valued based on subjective factors. Improper valuations can result in increased cash payment requirements to counterparties or a loss of value to a fund.

OTC Swap Agreements. An over-the-counter (OTC) swap agreement, which is a type of derivative, is an agreement between two parties (counterparties) to exchange payments at specified dates (periodic payment dates) on the basis of a specified amount (notional amount) with the payments calculated with reference to a specified asset, reference rate, or index.

Examples of OTC swap agreements include, but are not limited to, interest rate swaps, credit default swaps, equity swaps, commodity swaps, foreign currency swaps, index swaps, excess return swaps, and total return swaps. Most OTC swap agreements provide that when the periodic payment dates for both parties are the same, payments are netted and only the net amount is paid to the counterparty entitled to receive the net payment. Consequently, a fund's 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 a fund's 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 10% of its assets in shares of investment companies generally and up to 5% of its assets in any one investment company, as long as no investment represents more than 3% of the voting stock of an acquired investment company. In addition, no funds for which Vanguard acts as an advisor through a wholly owned subsidiary (VCM and/or VPM) may, in the aggregate, own more than 10% of the voting stock of a closed-end investment company. SEC Rule 12d1-4 under the 1940 Act permits registered investment companies to invest in other registered investment companies beyond the limits in Section 12(d)(1), subject to certain conditions, including that funds with different investment advisors must enter into a fund of funds investment agreement. Rule 12d1-4 is also designed to limit the use of complex fund structures. Under Rule 12d1-4, an acquired fund is prohibited from purchasing or otherwise acquiring the securities of another investment company or private fund if, immediately after the purchase, the securities of investment companies and private funds owned by the acquired fund have an aggregate value in excess of 10% of the value of the acquired fund's total assets, subject to certain limited exceptions. Accordingly, to the extent a fund's shares are sold to other investment companies in reliance on Rule 12d1-4, the acquired fund will be limited in the amount it could invest in other investment companies and private funds. If a fund invests in other investment companies, shareholders will bear not only their proportionate share of the fund's expenses (including operating expenses and the fees of the advisor), but they also may indirectly bear similar expenses of the underlying investment companies. Certain investment companies, such as business development companies (BDCs), are more akin to operating companies and, as such, their expenses are not direct expenses paid by fund shareholders and are not used to calculate the fund's net asset value. SEC rules nevertheless require that any expenses incurred by a BDC be included in a fund's expense ratio as "Acquired Fund Fees and Expenses." The expense ratio of a fund that holds a BDC will thus overstate what the fund actually spends on portfolio management, administrative services, and other shareholder services by an amount equal to these Acquired Fund Fees and Expenses. The Acquired Fund Fees and Expenses are not included in a fund's financial statements, which provide a clearer picture of a fund's actual operating expenses. Shareholders would also be exposed to the risks associated not only with the investments of the fund but also with the portfolio investments of the underlying investment companies. Certain types of investment companies, such as closed-end investment companies, issue a fixed number of shares that typically trade on a stock exchange or over-the-counter at a premium or discount to their net asset value. Others are continuously offered at net asset value but also may be traded on the secondary market.

A fund may be limited to purchasing a particular share class of other investment companies (underlying funds). In certain cases, an investor may be able to purchase lower-cost shares of such underlying funds separately, and therefore be able to construct, and maintain over time, a similar portfolio of investments while incurring lower overall expenses.

Ownership Limitations and Regulatory Relief. As the Vanguard funds continue to grow, they may be increasingly impacted by ownership limitations that apply to certain securities held by the Vanguard funds ("limited securities"). An ownership limitation restricts the amount of a security that funds within the same fund complex or funds advised by the same investment advisor can own. These limitations may apply even where an external manager or different affiliate of Vanguard provides investment advisory services to a fund. Ownership restrictions and limitations can apply to certain industries (for example, banking, insurance, and utilities), certain issuers (who may, for example, have mechanisms such as poison pills in place to prevent takeovers), or certain transactions, and will also vary significantly in different contexts. A fund can be subject to more than one ownership limitation depending on its holdings, and each ownership limitation can impact multiple securities held by a fund.

Ownership limitations can restrict or impair a fund's investment activities in a variety of ways. To meet the requirements of a limitation or restriction, a fund may be unable to purchase or directly hold a security the fund would otherwise purchase or hold if the limitation did not apply. For index funds, this means a fund may not be able to track its index as closely as it would if it was not subject to an ownership limitation because the fund cannot buy its desired amount of an impacted security. For actively managed funds, this means a fund may miss an opportunity to invest in an impacted security that the fund's investment advisor otherwise would invest in if the fund were not subject to an ownership limitation. These types of restrictions could negatively impact a fund's performance.

When a Vanguard fund is subject to an ownership limitation, Vanguard or the fund typically will seek permission to exceed the limitation. However, there is no guarantee that permission will be granted, or that, once granted, it will not be modified or revoked at a later date. If this happens, the fund could be required to sell or otherwise dispose of holdings in one or more issuers to comply with limitations. In the event that a regulator revokes relief from ownership limitations for the Vanguard funds and other large fund complexes at the same time, there could be significant negative market impacts in the applicable industries and increased volatility in the share prices of the relevant securities. Sudden loss of ownership limitation relief relating to one or more limited securities could potentially result in wider bid-ask spreads and premium/discounts in ETF shares, and in extreme scenarios, impact the trading of ETF shares.

In order to obtain permission to exceed an ownership limitation, Vanguard may have to agree to certain conditions that will impact its ability to exercise rights on behalf of funds. For example, Vanguard may be required to agree to vote proxies in a certain way for any securities Vanguard funds hold that exceed a particular ownership limitation. Regulatory relief may also depend on the operational independence of certain Vanguard subsidiaries and/or business divisions and applicable regulators' recognition of such operational independence.

For situations in which the Vanguard funds do not have or are unable to obtain permission to exceed ownership limitations, the Vanguard funds and their advisors have adopted policies designed to allocate ownership of impacted securities across applicable Vanguard products in a manner that is fair and equitable over time in order to minimize the potential conflicts of interest that could arise in making such allocation determinations. These allocation policies could result in certain Vanguard products obtaining zero or reduced direct exposure to one or more impacted securities and/or indirect exposure to impacted securities. In order to obtain indirect exposure, funds may use derivatives (such as total return swaps) or invest in totally held subsidiaries that hold the impacted securities. Both of these ways of obtaining indirect exposure are more costly than owning securities of the issuer directly. Depending on the circumstances, certain Vanguard funds may incur and bear the costs associated with transactions entered into for these purposes that other Vanguard funds do not incur and bear. With respect to an index fund, these added costs could also result in tracking error relative to the fund's target index. There is no guarantee that laws and regulations always will allow that indirect exposure to limited securities may be omitted for purposes of determining the Vanguard funds' exposure to limited securities and compliance with the applicable ownership limitations. In such circumstances, the Vanguard funds could not use these techniques and would be required to sell down the indirect and/or direct holdings in the applicable limited securities.

In addition, there is no guarantee that Vanguard funds will be able to obtain some or all of the derivatives that Vanguard funds want in order to gain indirect exposure to a limited security. This limited availability of derivatives may impact the ability of a fund to meet its investment objective or invest in accordance with its investment strategy, and/or have additional impacts to fund performance. Additionally, funds that use derivatives for indirect exposure are subject to derivatives-related risks.

Ownership limitations and the use of derivatives to address ownership limitations could result in unanticipated tax consequences to a fund that may affect the amount, timing, and character of distributions to shareholders. The taxation of derivatives can be complex and, depending upon the type and amount of derivatives employed by a fund, the tax consequences of using derivatives could be worse than the tax consequences that result from direct exposure to impacted securities.

Ownership limitations are highly complex. It is possible that, despite a fund's intent to either comply with or be granted permission to exceed ownership limitations, it may inadvertently breach a limit.

Preferred Stock. Preferred stock represents an equity or ownership interest in an issuer. Preferred stock normally pays dividends at a specified rate and has precedence over common stock in the event the issuer is liquidated or declares bankruptcy. However, in the event an issuer is liquidated or declares bankruptcy, the claims of owners of bonds take precedence over the claims of those who own preferred and common stock. Preferred stock, unlike common stock, often has a stated dividend rate payable from the corporation's earnings. Preferred stock dividends may be cumulative or noncumulative, participating, or auction rate. "Cumulative" dividend provisions require all or a portion of prior unpaid dividends to be paid before dividends can be paid to the issuer's common stock. "Participating" preferred stock may be entitled to a dividend exceeding the stated dividend in certain cases. If interest rates rise, the fixed dividend on preferred stocks may be less attractive, causing the price of such stocks to decline. Preferred stock may have mandatory sinking 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.

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 taxation at the corporate level, REITs must distribute most of their earnings to shareholders.

Investments in REITs are subject to many of the same risks as direct investments in real estate. In general, real estate values can be affected by a variety of factors, including, but not limited to, supply and demand for properties, general or local economic conditions, and the strength of specific industries that rent properties. Ultimately, a REIT's performance depends on the types and locations of the properties it owns and on how well the REIT manages its properties. For example, rental income could decline because of extended vacancies, increased competition from nearby properties, tenants' failure to pay rent, regulatory limitations on rents, fluctuations in rental income, variations in market rental rates, or incompetent management. Property values could decrease because of overbuilding in the area, environmental liabilities, uninsured damages caused by natural disasters, a general decline in the neighborhood, losses because of casualty or condemnation, increases in property taxes, or changes in zoning laws.

The value of a REIT may also be affected by changes in interest rates. Rising interest rates generally increase the cost of financing for real estate projects, which could cause the value of an equity REIT to decline. During periods of declining interest rates, mortgagors may elect to prepay mortgages held by mortgage REITs, which could lower or diminish the yield on the REIT. REITs are also subject to heavy cash-flow dependency, default by borrowers, and changes in tax and regulatory requirements. In addition, a REIT may fail to meet the requirements for qualification and taxation as a REIT under the IRC and/or fail to maintain exemption from the 1940 Act.

Reliance on Service Providers, Data Providers, and Other Technology. Vanguard funds rely upon the performance of service providers to execute several key functions, which may include functions integral to a fund's operations. Failure by any service provider to carry out its obligations to a fund could disrupt the business of the fund and could have an adverse effect on the fund's performance. A fund's service providers' reliance on certain technology or information vendors (e.g., trading systems, investment analysis tools, benchmark analytics, and tax and accounting tools) could also adversely affect a fund and its shareholders. For example, a fund's investment advisor may use models and/or data with respect to potential investments for the fund. When models or data prove to be incorrect or incomplete, any decisions made in reliance upon such models or data expose a fund to potential risks.

Repurchase Agreements. A repurchase agreement is an agreement under which a fund acquires a debt security (generally a security issued by the U.S. government or an agency thereof, a banker's acceptance, or a certificate of deposit) from a bank, a broker, a dealer, or another counterparty that meets minimum credit requirements and simultaneously agrees to resell such security to the seller at an agreed-upon price and date (normally, the next business day). Because the security purchased constitutes collateral for the repurchase obligation, a repurchase agreement may

be considered a loan that is collateralized by the security purchased. The resale price reflects an agreed-upon interest rate effective for the period the instrument is held by a fund and is unrelated to the interest rate on the underlying instrument. In these transactions, the securities acquired by a fund (including accrued interest earned thereon) must have a total value in excess of the value of the repurchase agreement and be held by a custodian bank until repurchased. In addition, a fund's investment advisor will monitor a fund's repurchase agreement transactions generally and will evaluate the creditworthiness of any bank, broker, dealer, or other counterparty that meets minimum credit requirements to a repurchase agreement relating to a fund. The aggregate amount of any such agreements is not limited, except to the extent required by law.

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). 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 (PIPEs) or special purpose acquisition companies (SPACs)) that, under the federal securities laws, generally may be resold only to qualified institutional buyers. If a market develops for a restricted security held by a fund, it may be treated as a liquid security in accordance with guidelines approved by the board of trustees.

Reverse Repurchase Agreements. In a reverse repurchase agreement, a fund sells a security to another party, such as a bank or broker-dealer, in return for cash and agrees to repurchase that security at an agreed-upon price and time. Under a reverse repurchase agreement, the fund continues to receive any principal and interest payments on the underlying security during the term of the agreement. Reverse repurchase agreements involve the risk that the market value of securities retained by the fund may decline below the repurchase price of the securities sold by the fund that it is obligated to repurchase. In addition to the risk of such a loss, fees charged to the fund may exceed the return the fund earns from investing the proceeds received from the reverse repurchase agreement transaction. A reverse repurchase agreement may be considered a borrowing transaction for purposes of the 1940 Act. A reverse repurchase agreement 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. A fund will enter into reverse repurchase agreements only with parties whose creditworthiness has been reviewed and found satisfactory by the advisor. If the buyer in a reverse repurchase agreement becomes insolvent or files for bankruptcy, a fund's use of proceeds from the sale may be restricted while the other party or its trustee or receiver determines if it will honor the fund's right to repurchase the securities. If the fund is unable to recover the securities it sold in a reverse repurchase agreement, it would realize a loss equal to the difference between the value of the securities and the payment it received for them.

Securities Lending. A fund may lend its securities to financial institutions (typically brokers, dealers, and banks) to generate income for the fund. There are certain risks associated with lending securities, including counterparty, credit, market, regulatory, tax, and operational risks. Vanguard considers the creditworthiness of the borrower, among other factors, in making decisions with respect to the lending of securities, subject to oversight by the board of trustees. If the borrower defaults on its obligation to return the securities lent because of insolvency or other reasons, a fund could experience delays and costs in recovering the securities lent or in gaining access to the collateral. These delays and

costs could be greater for certain types of foreign securities, as well as certain types of borrowers that are subject to global regulatory regimes. If a fund is not able to recover the securities lent, the fund may sell the collateral and purchase a replacement security in the market. Collateral investments are subject to market appreciation or depreciation. The value of the collateral could decrease below the value of the replacement investment by the time the replacement investment is purchased. Currently, a fund invests cash collateral into Vanguard Market Liquidity Fund, an affiliated money market fund that invests primarily in high-quality, short-term money market instruments.

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 33⅓% 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 *Tax Status of the Funds* for information about certain tax consequences related to a 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. Discussion herein of U.S. federal income tax matters summarizes some of the important, generally applicable U.S. federal tax considerations relevant to investment in a fund based on 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. Each Fund has not requested and will not request an advance ruling from the Internal Revenue Service (IRS) as to the U.S. federal income tax matters discussed in this Statement of Additional Information. In some cases, a fund's tax position may be uncertain under current tax law and an adverse determination or future guidance by the IRS with respect to such a position could adversely affect the fund and its shareholders, including the fund's ability to continue to qualify as a regulated investment company or to continue to pursue its current investment strategy. A shareholder should consult their tax professional for information regarding the particular situation and the possible application of U.S. federal, state, local, foreign, and other taxes.

Tax Matters—Federal Tax Treatment of Derivatives, Hedging, and Related Transactions. A fund's transactions in derivative instruments (including, but not limited to, options, futures, forward contracts, and swap agreements), as well as any of the fund's hedging, short sale, securities loan, or similar transactions, may be subject to one or more special tax rules that accelerate income to the fund, defer losses to the fund, cause adjustments in the holding periods of the fund's securities, convert long-term capital gains into short-term capital gains, or convert short-term capital losses into long-term capital losses. These rules could therefore affect the amount, timing, and character of distributions to shareholders.

Because these and other tax rules applicable to these types of transactions are in some cases uncertain under current law, an adverse determination or future guidance by the IRS with respect to these rules (which determination or guidance could be retroactive) may affect whether a fund has made sufficient distributions, and otherwise satisfied the relevant requirements, to maintain its qualification as a regulated investment company and avoid a fund-level tax.

Tax Matters—Federal Tax Treatment of Futures Contracts. For federal income tax purposes, a fund generally must recognize, as of the end of each taxable year, any net unrealized gains and losses on certain futures contracts, as well as any gains and losses actually realized during the year. In these cases, any gain or loss recognized with respect to a futures contract is considered to be 60% long-term capital gain or loss and 40% short-term capital gain or loss, without regard to the holding period of the contract. Gains and losses on certain other futures contracts (primarily non-U.S. futures contracts) are not recognized until the contracts are closed and are treated as long-term or short-term,

depending on the holding period of the contract. Sales of futures contracts that are intended to hedge against a change in the value of securities held by a fund may affect the holding period of such securities and, consequently, the nature of the gain or loss on such securities upon disposition. A fund may be required to defer the recognition of losses on one position, such as futures contracts, to the extent of any unrecognized gains on a related offsetting position held by the fund.

A fund will distribute to shareholders annually any net capital gains that have been recognized for federal income tax purposes on futures transactions. Such distributions will be combined with distributions of capital gains realized on the fund's other investments, and shareholders will be advised on the nature of the distributions.

Tax Matters—Federal Tax Treatment of Non-U.S. Currency Transactions. Special rules generally govern the federal income tax treatment of a fund's transactions in the following: non-U.S. currencies; non-U.S. currency-denominated debt obligations; and certain non-U.S. currency options, futures contracts, forward contracts, and similar instruments. Accordingly, if a fund engages in these types of transactions it may have ordinary income or loss to the extent that such income or loss results from fluctuations in the value of the non-U.S. currency concerned. Such ordinary income could accelerate fund distributions to shareholders and increase the distributions taxed to shareholders as ordinary income. Any ordinary loss so created will generally reduce ordinary income distributions and, in some cases, could require the recharacterization of prior ordinary income distributions. Net ordinary losses cannot be carried forward by the fund to offset income or gains realized in subsequent taxable years.

Any gain or loss attributable to the non-U.S. currency component of a transaction engaged in by a fund that is not subject to these special currency rules (such as foreign equity investments other than certain preferred stocks) will generally be treated as a capital gain or loss and will not be segregated from the gain or loss on the underlying transaction.

To the extent a fund engages in non-U.S. currency hedging, the fund may elect or be required to apply other rules that could affect the character, timing, or amount of the fund's gains and losses. For more information, see *"Tax Matters—Federal Tax Treatment of Derivatives, Hedging, and Related Transactions."*

Tax Matters—Foreign Tax Credit. Foreign governments may withhold taxes on dividends and interest paid with respect to foreign securities held by a fund. Foreign governments may also impose taxes on other payments or gains with respect to foreign securities. If, at the close of its fiscal year, more than 50% of a fund's total assets are invested in securities of foreign issuers, the fund may elect to pass through to shareholders the ability to deduct or, if they meet certain holding period requirements, take a credit for foreign taxes paid by the fund. Similarly, if at the close of each quarter of a fund's taxable year, at least 50% of its total assets consist of interests in other regulated investment companies, the fund is permitted to elect to pass through to its shareholders the foreign income taxes paid by the fund in connection with foreign securities held directly by the fund or held by a regulated investment company in which the fund invests that has elected to pass through such taxes to shareholders.

Tax Matters—Market Discount or Premium. The price of a bond purchased after its original issuance may reflect market discount or premium. Depending on the particular circumstances, market discount may affect the tax character and amount of income required to be recognized by a fund holding the bond. In determining whether a bond is purchased with market discount, certain de minimis rules apply. Premium is generally amortizable over the remaining term of the bond. Depending on the type of bond, premium may affect the amount of income required to be recognized by a fund holding the bond and the fund's basis in the bond.

Tax Matters—Passive Foreign Investment Companies. Vanguard Total International Stock Index Fund may invest in passive foreign investment companies (PFICs). A foreign company is generally a PFIC if 75% or more of its gross income is passive or if 50% or more of its assets produce passive income. Capital gains on the sale of an interest in a PFIC will be deemed ordinary income regardless of how long the fund held it. Also, the fund may be subject to corporate income tax and an interest charge on certain dividends and capital gains earned in respect to PFIC interests, whether or not such amounts are distributed to shareholders. To avoid such tax and interest, the fund may elect to "mark to market" its PFIC interests, that is, to treat such interests as sold on the last day of the fund's fiscal year, and to recognize any unrealized gains (or losses, to the extent of previously recognized gains) as ordinary income (or loss) each year. Distributions from a fund that are attributable to income or gains earned in respect to PFIC interests are characterized as ordinary income.

Tax Matters—Real Estate Mortgage Investment Conduits. If a fund invests directly or indirectly, including through a REIT or other pass-through entity, in residual interests in real estate mortgage investment conduits (REMICs) or equity interests in taxable mortgage pools (TMPs), a portion of the fund's income that is attributable to a residual interest in a

REMIC or an equity interest in a TMP (such portion referred to in the IRC as an "excess inclusion") will be subject to U.S. federal income tax in all events—including potentially at the fund level—under a notice issued by the IRS in October 2006 and U.S. Treasury regulations that have yet to be issued but may apply retroactively. This notice also provides, and the regulations are expected to provide, that excess inclusion income of a regulated investment company will be allocated to shareholders of the regulated investment company in proportion to the dividends received by such shareholders, with the same consequences as if the shareholders held the related interest directly. In general, excess inclusion income allocated to shareholders (1) cannot be offset by net operating losses (subject to a limited exception for certain thrift institutions); (2) will constitute unrelated business taxable income (UBTI) to entities (including a qualified pension plan, an individual retirement account, a 401(k) plan, a Keogh plan, or other tax-exempt entity) subject to tax on UBTI, thereby potentially requiring such an entity, which otherwise might not be required, to file a tax return and pay tax on such income; and (3) in the case of a non-U.S. investor, will not qualify for any reduction in U.S. federal withholding tax. A shareholder will be subject to U.S. federal income tax on such inclusions notwithstanding any exemption from such income tax otherwise available under the IRC. As a result, a fund investing in such interests may not be suitable for charitable remainder trusts. See *"Tax Matters—Tax-Exempt Investors."*

Tax Matters—Tax Considerations for Non-U.S. Investors. U.S. withholding and estate taxes and certain U.S. tax reporting requirements may apply to any investments made by non-U.S. investors in Vanguard funds. Certain properly reported distributions of qualifying interest income or short-term capital gain made by a fund to its non-U.S. investors are exempt from U.S. withholding taxes, provided the investors furnish valid tax documentation (i.e., IRS Form W-8) certifying as to their non-U.S. status.

A fund is permitted, but is not required, to report any of its distributions as eligible for such relief, and some distributions (e.g., distributions of interest a fund receives from non-U.S. issuers) are not eligible for this relief. For some funds, Vanguard has chosen to report qualifying distributions and apply the withholding exemption to those distributions when made to non-U.S. shareholders who invest directly with Vanguard. For other funds, Vanguard may choose not to apply the withholding exemption to qualifying fund distributions made to direct shareholders, but may provide the reporting to such shareholders. In these cases, a shareholder may be able to reclaim such withholding tax directly from the IRS.

If shareholders hold fund shares (including ETF shares) through a broker or intermediary, their broker or intermediary may apply this relief to properly reported qualifying distributions made to shareholders with respect to those shares. If a shareholder's broker or intermediary instead collects withholding tax where the fund has provided the proper reporting, the shareholder may be able to reclaim such withholding tax from the IRS. Please consult your broker or intermediary regarding the application of these rules.

This relief does not apply to any withholding required under the Foreign Account Tax Compliance Act (FATCA), which generally requires a fund to obtain information sufficient to identify the status of each of its shareholders. If a shareholder fails to provide this information or otherwise fails to comply with FATCA, a fund may be required to withhold under FATCA at a rate of 30% with respect to that shareholder on fund distributions. Please consult your tax advisor for more information about these rules.

Tax Matters—Tax-Exempt Investors. Income of a fund that would be UBTI if earned directly by a tax-exempt entity will not generally be attributed as UBTI to a tax-exempt shareholder of the fund. Notwithstanding this "blocking" effect, a tax-exempt shareholder could realize UBTI by virtue of its investment in a fund if shares in the fund constitute debt-financed property in the hands of the tax-exempt shareholder within the meaning of IRC Section 514(b).

A tax-exempt shareholder may also recognize UBTI if a fund recognizes "excess inclusion income" derived from direct or indirect investments in residual interests in REMICs or equity interests in TMPs. See *"Tax Matters—Real Estate Mortgage Investment Conduits."*

In addition, special tax consequences apply to charitable remainder trusts that invest in a fund that invests directly or indirectly in residual interests in REMICs or equity interests in TMPs. Charitable remainder trusts and other tax-exempt investors are urged to consult their tax advisors concerning the consequences of investing in a fund.

Time Deposits. Time deposits are subject to the same risks that pertain to domestic issuers of money market instruments, most notably credit risk (and, to a lesser extent, income risk, market risk, and liquidity risk). Additionally, time deposits of foreign branches of U.S. banks and foreign branches of foreign banks may be subject to certain sovereign risks. One such risk is the possibility that a sovereign country might prevent capital, in the form of U.S. dollars, from flowing across its borders. Other risks include adverse political and economic developments, the extent

and quality of government regulation of financial markets and institutions, the imposition of foreign withholding taxes, and expropriation or nationalization of foreign issuers. However, time deposits of such issuers will undergo the same type of credit analysis as domestic issuers in which a Vanguard fund invests and will have at least the same financial strength as the domestic issuers approved for the fund.

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 Vanguard Total International Stock Index Fund 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 each Fund 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 each Fund, must satisfy themselves regarding compliance with these requirements.

SHARE PRICE

Multiple-class funds do not have a single share price. Rather, each class has a share price, also known as *net asset value (*NAV), which is typically 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 for Vanguard Total International Stock Index Fund is computed by dividing the total assets, minus liabilities, allocated to the share class by the number of Fund shares outstanding for that class. The NAV per share for each of the remaining Funds 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 Vanguard LifeStrategy Funds and Vanguard STAR Fund invest also do not calculate their NAV on days when the NYSE is closed but the value of their assets may also be affected to the extent that they hold 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.

PURCHASE AND REDEMPTION OF SHARES

Purchase of Shares (other than ETF Shares)

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

Exchange of Securities for Shares of a Fund. Shares of a Fund may be purchased "in kind" (i.e., in exchange for securities, rather than for cash) at the discretion of each Fund's portfolio manager. Such securities must not be restricted as to transfer and must have a value that is readily ascertainable. Securities accepted by each Fund will be valued, as set forth in the Fund's prospectus, as of the time of the next determination of NAV after such acceptance. All dividend, subscription, or other rights that are reflected in the market price of accepted securities at the time of valuation become the property of each Fund and must be delivered to the Fund by the investor upon receipt from the issuer. A gain or loss for federal income tax purposes, depending upon the cost of the securities tendered, would be realized by the investor upon the exchange. Investors interested in purchasing fund shares in kind should contact Vanguard.

Redemption of Shares (other than ETF Shares)

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

Each Fund can postpone payment of redemption proceeds for up to seven calendar days. In addition, each Fund can suspend redemptions and/or postpone payments of redemption proceeds beyond seven calendar days (1) during any period that the NYSE is closed or trading on the NYSE is restricted as determined by the SEC; (2) during any period when an emergency exists, as defined by the SEC, as a result of which it is not reasonably practicable for the Fund to dispose of securities it owns or to fairly determine the value of its assets; or (3) for such other periods as the SEC may permit.

The Trust has filed a notice of election with the SEC to pay in cash all redemptions requested by any shareholder of record limited in amount during any 90-day period to the lesser of $250,000 or 1% of the net assets of a Fund at the beginning of such period.

If a Fund determines that it would be detrimental to the best interests of the remaining shareholders of the Fund to make payment wholly or partly in cash, the Fund may pay the redemption price in whole or in part by a distribution in kind of readily marketable securities held by the Fund in lieu of cash in conformity with applicable rules of the SEC and in accordance with procedures adopted by the Fund's board of trustees. Redemptions in-kind may benefit a fund and its shareholders by reducing the need for a fund to maintain significant cash reserves and/or to sell securities held by the fund to meet redemption requests or for other reasons. However, this activity may adversely affect the market value of the securities redeemed in-kind and, consequently, the NAV of the fund. Investors may incur brokerage charges on the sale of such securities received in payment of redemptions.

The Funds do not charge a redemption fee. Shares redeemed may be worth more or less than what was paid for them, depending on the market value of the securities held by the Funds.

Vanguard processes purchase and redemption requests through a pooled account. Pending investment direction or distribution of redemption proceeds, the assets in the pooled account are invested and any earnings (the "float") are allocated proportionately among the Vanguard funds in order to offset fund expenses. Other than the float, Vanguard treats assets held in the pooled account as the assets of each shareholder making such purchase or redemption request.

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 when permitted by applicable law, regulations, or SEC guidance; (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.

Investing With Vanguard Through Other Firms

Each Fund has authorized certain agents to accept on its behalf purchase and redemption orders, and those agents are authorized to designate other intermediaries to accept purchase and redemption orders on the Fund's behalf (collectively, Authorized Agents). Each Fund will be deemed to have received a purchase or redemption order when an Authorized Agent accepts the order in accordance with the Fund's instructions. In most instances, a customer order that is properly transmitted to an Authorized Agent will be priced at the NAV per share next determined after the order is received by the Authorized Agent.

MANAGEMENT OF THE FUNDS

Vanguard

Each Fund is part of the Vanguard group of investment companies, which consists of over 200 funds. Each fund is a series of a Delaware statutory trust. The 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 oversight.Vanguard also provides investment advisory services to certain Vanguard funds through VCM and/or VPM, each a wholly owned subsidiary of Vanguard established in 2025. 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). In addition, as permitted by the Agreement, a wholly owned subsidiary of Vanguard (VCM and/or VPM) exercises portfolio management and certain investment stewardship responsibilities for certain Vanguard funds pursuant to an intercompany service agreement between Vanguard and such wholly owned subsidiary. These portfolio management and investment stewardship services are provided at cost.

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. In rendering investment management services to certain funds through a wholly owned subsidiary (VCM and/or VPM), Vanguard may also use the resources of its foreign wholly owned subsidiaries that are not registered as investment advisers with the SEC, using "participating affiliate arrangements." Participating affiliate arrangements are arrangements used in reliance on guidance of the staff of the SEC and recognized by the SEC that allow a US-registered investment adviser to use investment management resources of unregistered affiliates, subject to the regulatory supervision of the registered adviser.

Pursuant to an agreement between Vanguard and JP Morgan Chase Bank N.A. (JP Morgan), JP Morgan provides services for Vanguard Total International Stock Index Fund, Vanguard LifeStrategy Funds, Vanguard STAR Fund, and

Vanguard STAR Core-Plus Bond Fund. 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 JP Morgan under this agreement are based on a combination of flat and asset based fees. During the fiscal years ended October 31, 2023, 2024, and 2025, JP Morgan had received fees from the Funds for administrative services rendered as follows:

Vanguard Fund	2023	2024	2025
Vanguard LifeStrategy Conservative Growth Fund	$16,999.92	$16,499.94	$17,499.96
Vanguard LifeStrategy Growth Fund	16,999.92	16,499.94	17,499.96
Vanguard LifeStrategy Income Fund	16,999.92	16,499.94	17,499.96
Vanguard LifeStrategy Moderate Growth Fund	16,999.92	16,499.94	17,499.96
Vanguard STAR Core-Plus Bond Fund[1]	—	—	—
Vanguard STAR Fund	16,999.92	16,499.94	17,499.96
Vanguard Total International Stock Index Fund	16,999.91	18,499.75	21,499.71

1 Vanguard STAR Core-Plus Bond Fund commenced operations on March 12, 2025.

The funds' officers are also employees of Vanguard.

Vanguard (including VCM and VPM), Vanguard Marketing Corporation (VMC), the funds, and the funds' advisors have adopted codes of ethics designed to prevent employees who may have access to nonpublic information about the trading activities of the funds (access persons) from profiting from that information. The codes of ethics permit access persons to invest in securities for their own accounts, including securities that may be held by a fund, but place substantive and procedural restrictions on the trading activities of access persons. For example, the codes of ethics require that access persons receive advance approval for most securities trades to ensure that there is no conflict with the trading activities of the funds.

Vanguard Total International Stock Index Fund. Vanguard provides corporate management, administrative, and distribution services. Each fund (other than a fund of funds) pays its share of Vanguard's total expenses, which are allocated among the funds under methods approved by the board of trustees of each fund. In addition, each fund bears its own direct expenses, such as legal, auditing, and custodial fees. The Agreement provides that each Vanguard fund (other than a fund of funds) may be called upon to invest up to 0.40% of its net assets in Vanguard. The amounts that each fund has invested are adjusted from time to time in order to maintain the proportionate relationship between each fund's relative net assets and its contribution to Vanguard's capital.

As of October 31, 2025, Vanguard Total International Stock Index Fund and Vanguard STAR Core-Plus Bond Fund had contributed capital to Vanguard as follows. Vanguard STAR Core-Plus Bond Fund commenced operations on March 12, 2025.

Vanguard Fund	Capital Contribution to Vanguard	Percentage of Fund's Average Net Assets	Percent of Vanguard's Capitalization
Vanguard STAR Core-Plus Bond Fund	$ 206,000	Less than 0.01%	0.08%
Vanguard Total International Stock Index Fund	13,305,000	Less than 0.01%	5.32

Vanguard LifeStrategy Funds and Vanguard STAR Fund. Vanguard STAR Fund and each Vanguard LifeStrategy Fund is a fund of funds. The Agreement provides that the funds of funds 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 the Funds' direct expenses may be offset, in whole or in part, by (1) the Funds' contributions to the cost of operating the underlying funds in which the Funds invest, and (2) certain savings in administrative and marketing costs that Vanguard expects to derive from the Funds' operations. 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. The Funds' shareholders bear the fees and expenses associated with the Fund's investments in the underlying funds.

As of October 31, 2025, the Acquired Fund Fees and Expenses of the Funds were as follows: Vanguard LifeStrategy Conservative Growth Fund—0.10%; Vanguard LifeStrategy Growth Fund—0.10%; Vanguard LifeStrategy Income Fund—0.10%; Vanguard LifeStrategy Moderate Growth Fund—0.10%; and Vanguard STAR Fund—0.29%.

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, (7) review and evaluation of advisory and other services provided to the funds by third parties, and (8) such other services necessary to operate the funds at the lowest reasonable cost in accordance with the Agreement.

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, promotional, and distribution activities (collectively, marketing and distribution activities) that are primarily intended to result in the sale of the funds' shares. VMC offers shares of each fund for sale on a continuous basis and will use all reasonable efforts in connection with the distribution of shares of the funds. VMC performs marketing and distribution activities in accordance with the conditions of a 1981 SEC exemptive order that permits the Vanguard funds to internalize and jointly finance the marketing, promotion, and distribution of their shares. The funds' trustees review and approve the marketing and distribution expenses incurred by the funds, including the nature and cost of the activities and the desirability of each fund's continued participation in the joint arrangement.

To ensure that each fund's participation in the joint arrangement falls within a reasonable range of fairness, each fund contributes to VMC's marketing and distribution expenses in accordance with an SEC-approved formula. Under that formula, one half of the marketing and distribution expenses are allocated among the funds based upon their relative net assets. The remaining half of those expenses is allocated among the funds based upon each fund's sales for the preceding 24 months relative to the total sales of the funds as a group, provided, however, that no fund's aggregate quarterly rate of contribution for marketing and distribution expenses shall exceed 125% of the average marketing and distribution expense rate for Vanguard and that no fund shall incur annual marketing and distribution expenses in excess of 0.20% of its average month-end net assets. Each fund's contribution to these marketing and distribution expenses helps to maintain and enhance the attractiveness and viability of the Vanguard complex as a whole, which benefits all of the funds and their shareholders.

VMC's principal marketing and distribution expenses are for advertising, promotional materials, and marketing personnel. Other marketing and distribution activities of an administrative nature that VMC undertakes on behalf of the funds may include, but are not limited to:

- Conducting or publishing Vanguard-generated research and analysis concerning the funds, other investments, the financial markets, or the economy.
- Providing views, opinions, advice, or commentary concerning the funds, other investments, the financial markets, or the economy.
- Providing analytical, statistical, performance, or other information concerning the funds, other investments, the financial markets, or the economy.
- 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 Vanguard Total International Stock Index Fund. Amounts captioned "Management and Administrative Expenses" include the 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 the 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 Vanguard Total International Stock Index Fund 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 October 31, 2023, 2024, and 2025, 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	2023	2024	2025
Vanguard STAR Core-Plus Bond Fund[1]			
Management and Administrative Expenses	—	—	0.17%
Marketing and Distribution Expenses	—	—	Less than 0.01
Vanguard Total International Stock Index Fund			
Management and Administrative Expenses	0.10%	0.10%	0.10%
Marketing and Distribution Expenses	Less than 0.01	Less than 0.01	Less than 0.01

1 Vanguard STAR Core-Plus Bond Fund commenced operations on March 12, 2025.

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 management of each fund for the benefit of its shareholders, not day-to-day management. The trustees set broad policies for the funds; select investment advisors; monitor fund operations, regulatory compliance, performance, and costs; nominate and select new trustees; and elect fund officers. Vanguard manages the day-to-day operations of the funds under the direction of the board of trustees.

The trustees play an active role, as a full board and at the committee level, in overseeing risk management for the funds. The trustees delegate the day-to-day risk management of the funds to various groups, including portfolio review, investment management, risk management, compliance, legal, fund accounting, and fund services and oversight. These groups provide the trustees with regular reports regarding investment, valuation, liquidity, and compliance, as well as the risks associated with each. The trustees also oversee risk management for the funds through regular interactions with the funds' internal and external auditors.

The full board participates in the funds' risk oversight, in part, through the Vanguard funds' compliance program, which covers the following broad areas of compliance: investment and other operations; recordkeeping; valuation and pricing; communications and disclosure; reporting and accounting; oversight of service providers; fund governance; and codes of ethics, insider trading controls, and protection of nonpublic information. The program seeks to identify and assess risk through various methods, including through regular interdisciplinary communications between compliance professionals and business personnel who participate on a daily basis in risk management on behalf of the funds. The funds' chief compliance officer regularly provides reports to the board in writing and in person.

The Audit and Risk Committee of the board, which is composed of Sarah Bloom Raskin, Peter F. Volanakis, Tara Bunch, Mark Loughridge, and Barbara Venneman each of whom is an independent trustee, oversees the management of financial risks and controls and enterprise-wide risk management. The Audit and Risk Committee serves as the channel of communication between the independent auditors of the funds and the board with respect to financial statements and financial reporting processes, systems of internal control, and the audit process. The committee also serves as a channel of communication between risk management personnel and the board with respect to enterprise-wide risk management. Vanguard's head of internal audit reports directly to the Audit and Risk Committee. The committee receives reports in writing and in person on a regular basis from Vanguard's head of internal audit and Vanguard's chief risk officer. Although the Audit and Risk Committee is responsible for overseeing the management of financial risks and controls and enterprise-wide risk management, the entire board is regularly informed of these risks through the committee's reports.

All of the trustees bring to each fund's board a wealth of executive leadership experience derived from their service as executives (in many cases chief executive officers), board members, and leaders of diverse public operating companies, academic institutions, and other organizations. In determining whether an individual is qualified to serve as a trustee of the funds, the board considers a wide variety of information about the trustee, and multiple factors contribute to the board's decision. Each trustee is determined to have the experience, skills, and attributes necessary to serve the funds and their shareholders because each trustee demonstrates an exceptional ability to consider complex business and financial matters, evaluate the relative importance and priority of issues, make decisions, and contribute effectively to the deliberations of the board. The board also considers the individual experience of each trustee and determines that the trustee's professional experience, education, and background contribute to the diversity of perspectives on the board. The business acumen, experience, and objective thinking of the trustees are considered invaluable assets for Vanguard management and, ultimately, the Vanguard funds' shareholders. The specific roles and experience of each board member that factor into this determination are presented on the following pages. The mailing address of the trustees and officers is P.O. Box 876, Valley Forge, PA 19482.

Name, Year of Birth	Position(s) Held With Funds	Vanguard Funds' Trustee/ Officer Since	Principal Occupation(s) During the Past Five Years, Outside Directorships, and Other Experience	Number of Vanguard Funds Overseen by Trustee/Officer
Interested Trustee				
Salim Ramji[1] (1970)	Chief Executive Officer and President	CEO and President since July 2024; Trustee since February 2025	Chief executive officer and president of each of the investment companies served by Vanguard (2024–present). Chief executive officer and director of Vanguard (2024–present). Global head of iShares and of index investing of BlackRock (2019–2024) and member of iShares fund board (2019–2024). Head of U.S. Wealth Advisory of BlackRock (2015–2019). Member of the international leadership council of the University of Toronto.	228

Name, Year of Birth	Position(s) Held With Funds	Vanguard Funds' Trustee/ Officer Since	Principal Occupation(s) During the Past Five Years, Outside Directorships, and Other Experience	Number of Vanguard Funds Overseen by Trustee/Officer
David Hunt[2] (1961)	Trustee	February 2026	Chairman (January–July 2025) and president and chief executive officer (2011–2025) of PGIM, Inc. (investment firm). Managing director (2008–present) of Pointe Mecox Capital, LLC (investment firm). Member of the board of Sportime Holdings (recreation management company).	228
Kenneth Jacobs[3] (1958)	Trustee	February 2026	Senior chairman of the board (2025–present), executive chairman (2023–2024), and chairman and chief executive officer (2009–2023) of Lazard, Inc. (financial advisory and asset management firm). Vice chair of the board of the University of Chicago, vice chair of the board of The Brookings Institution (nonpartisan public policy research), and member of the board of the Partnership for New York City (organization of New York City businesses).	228

1 Mr. Ramji is considered an "interested person" as defined in the 1940 Act because he is an officer of the Funds.

2 Mr. Hunt is considered an "interested person" (as defined in the 1940 Act) of each series offered by Vanguard World Fund because of the roles he previously held with Jennison Associates LLC (Jennison) and its related entities, PGIM, Inc. and Prudential Financial, Inc. (Prudential) and his ownership of Prudential securities. Jennison provides investment advisory services for a portion of Vanguard U.S. Growth Fund, a series of Vanguard World Fund. For Vanguard Trusts other than Vanguard World Fund, Mr. Hunt is considered an independent trustee as defined in the 1940 Act.

3 Mr. Jacobs is considered an "interested person" (as defined in the 1940 Act) of the Vanguard funds given his relationship with Lazard, Inc. (Lazard) and the professional services provided to Vanguard by Lazard-affiliated entities.

Independent Trustees				
Tara Bunch (1962)	Trustee	November 2021	Head of global operations at Airbnb (2020–present). Vice president of AppleCare (2012–2020). Member of the boards of the University of California, Berkeley School of Engineering, and Santa Clara University's School of Business.	228
Mark Loughridge (1953)	Independent Chair	March 2012	Senior vice president and chief financial officer (retired 2013) of IBM (information technology services). Fiduciary member of IBM's Retirement Plan Committee (2004–2013), senior vice president and general manager (2002–2004) of IBM Global Financing, and vice president and controller (1998–2002) of IBM. Member of the Council on Chicago Booth.	228
Scott C. Malpass (1962)	Trustee	March 2012	Co-founder and managing partner (2022–present) of Grafton Street Partners (investment advisory firm). Chief investment officer and vice president of the University of Notre Dame (retired 2020). Chair of the board of Catholic Investment Services, Inc. (investment advisor). Member of the board of directors of Paxos Trust Company (finance).	228
John Murphy (1962)	Trustee	February 2025	President (2022–present), chief financial officer (2019–present), and president of the Asia Pacific group (2016–2018) of The Coca-Cola Company (TCCC). Member of the board of directors of Mexico-based Coca-Cola FEMSA (beverage bottler company); The Coca-Cola Foundation (TCCC's philanthropic arm); and Engage (innovation and corporate venture platform supporting startups). Member of the board of trustees of the Woodruff Arts Center.	228

Name, Year of Birth	Position(s) Held With Funds	Vanguard Funds' Trustee/ Officer Since	Principal Occupation(s) During the Past Five Years, Outside Directorships, and Other Experience	Number of Vanguard Funds Overseen by Trustee/Officer
Lubos Pastor (1974)	Trustee	January 2024	Charles P. McQuaid Distinguished Service Professor of Finance (2023–present) at the University of Chicago Booth School of Business; Charles P. McQuaid Professor of Finance at the University of Chicago Booth School of Business (2009–2023). Managing director (2024–present) of Andersen (professional services) and a member of the Advisory Board of the Andersen Institute for Finance and Economics. Member of the board of the Fama-Miller Center for Research in Finance. Research associate at the National Bureau of Economic Research.	228
Rebecca Patterson (1968)	Trustee	February 2025	Chief investment strategist at Bridgewater Associates LP (2020–2023). Chief investment officer at Bessemer Trust (2012–2019). Member of the Council on Foreign Relations and the Economic Club of New York. Chair of the Board of Directors of the Council for Economic Education. Member of the Board of the University of Florida Investment Corporation.	228
André F. Perold (1952)	Trustee	December 2004	George Gund Professor of Finance and Banking, Emeritus at the Harvard Business School (retired 2011). Chief investment officer and partner of HighVista Strategies LLC (private investment firm). Board member of RIT Capital Partners (investment firm).	228
Sarah Bloom Raskin (1961)	Trustee	January 2018	Deputy secretary (2014–2017) of the U.S. Department of the Treasury. Governor (2010–2014) of the Federal Reserve Board. Commissioner (2007–2010) of financial regulation for the State of Maryland. Colin W. Brown Distinguished Professor of the Practice, Duke Law School (2021–present); Rubenstein fellow, Duke University (2017–2020); distinguished fellow of the Global Financial Markets Center, Duke Law School (2020–2022); and senior fellow, Duke Center on Risk (2020–present).	228
Grant Reid (1959)	Trustee	July 2023	Senior operating partner (2023–present) of CVC Capital (alternative investment manager). Chief executive officer and president (2014–2022) and member of the board of directors (2015–2022) of Mars, Incorporated (multinational manufacturer). Member of the board of directors of Marriott International, Inc.	228
David Thomas (1956)	Trustee	July 2021	President Emeritus of Morehouse College (2018–2025). Professor of Business Administration, Emeritus at Harvard University (2017–2018) and dean (2011–2016) and professor of management at Georgetown University, McDonough School of Business (2016–2017). Director of DTE Energy Company. Trustee of Commonfund.	228
Barbara Venneman (1964)	Trustee	February 2025	Global head of Deloitte Digital (retired 2024) and member of the Deloitte Global Consulting Executive Committee (retired 2024) at Deloitte Consulting LLP.	228
Peter F. Volanakis (1955)	Trustee	July 2009	President and chief operating officer (retired 2010) of Corning Incorporated (communications equipment) and director of Corning Incorporated (2000–2010) and Dow Corning (2001–2010). Overseer of the Amos Tuck School of Business Administration, Dartmouth College (2001–2013). Member of the BMW Group Mobility Council.	228

Name, Year of Birth	Position(s) Held With Funds	Vanguard Funds' Trustee/ Officer Since	Principal Occupation(s) During the Past Five Years, Outside Directorships, and Other Experience	Number of Vanguard Funds Overseen by Trustee/Officer
Executive Officers				
Jacqueline Angell (1974)	Chief Compliance Officer	November 2022	Principal of Vanguard. Chief compliance officer (2022–present) of Vanguard and of each of the investment companies served by Vanguard. Chief compliance officer (2018–2022) and deputy chief compliance officer (2017–2019) of State Street.	228
John Bendl (1970)	Finance Director	July 2025	Finance director (July 2025–present) of each of the investment companies served by Vanguard. Managing director (July 2025–present) of Vanguard. Chief financial officer (July 2025–present) of Vanguard. Senior Vice President and Director (July 2025–present) of Vanguard Marketing Corporation. Head of Financial Planning and Analysis and Enterprise Strategic Services (2024–2025) of Vanguard. Divisional chief financial officer of Vanguard's International division (2021–2024). Chief financial officer (2019–2021) of each of the investment companies served by Vanguard. Chief accounting officer, treasurer, and controller (2017–2019) of Vanguard. Partner (2003–2016) at KPMG (audit, tax, and advisory services).	228
Glenn Booraem (1967)	Investment Stewardship Officer	January 2026	Principal of Vanguard. Investment stewardship officer of each of the investment companies served by Vanguard (2026–present). Head of Investment Stewardship Research & Policy (2024–2026) at Vanguard. Investment stewardship officer (2017–2020), treasurer (2015–2017), and controller (2010–2015) of each of the investment companies served by Vanguard.	228
Christine Buchanan (1970)	Chief Financial Officer	November 2017	Principal of Vanguard. Chief financial officer (2021–present) and treasurer (2017–2021) of each of the investment companies served by Vanguard. Partner (2005–2017) at KPMG (audit, tax, and advisory services).	228
Carolyn Cross (1983)	Investment Stewardship Officer	January 2026	Principal of Vanguard. Investment stewardship officer of each of the investment companies served by Vanguard (2026–present). Co-head of Investment Stewardship Americas (2021–2026) and Senior Manager of Investment Methodology in Personal Advisor Services (2019–2021) at Vanguard.	228
Gregory Davis (1970)	Vice President	July 2024	Vice president of each of the investment companies served by Vanguard (2024–present). President (2024–present) and director (2024–present) of Vanguard. Chief investment officer (2017–present) of Vanguard. Principal (2014–present) and head of the Fixed Income Group (2014–2017) of Vanguard. Asia-Pacific chief investment officer (2013–2014) and director of Vanguard Investments Australia, Ltd. (2013–2014). Member of the Treasury Borrowing Advisory Committee of the U.S. Department of the Treasury. Member of the investment advisory committee on Financial Markets for the Federal Reserve Bank of New York. Vice chairman of the board of the Children's Hospital of Philadelphia.	228
Ashley Grim (1984)	Treasurer	February 2022	Treasurer (2022–present) of each of the investment companies served by Vanguard. Fund transfer agent controller (2019–2022) and director of Audit Services (2017–2019) at Vanguard. Senior manager (2015–2017) at PricewaterhouseCoopers (audit and assurance, consulting, and tax services).	228

Name, Year of Birth	Position(s) Held With Funds	Vanguard Funds' Trustee/ Officer Since	Principal Occupation(s) During the Past Five Years, Outside Directorships, and Other Experience	Number of Vanguard Funds Overseen by Trustee/Officer
Natalie Lamarque (1976)	Secretary	September 2025	Chief Legal Officer of Vanguard (September 2025–present). Secretary (September 2025–present) of Vanguard and each of the investment companies served by Vanguard. Managing director (September 2025–present) of Vanguard. General Counsel and Secretary (2022–2025) at Principal Financial Group. General Counsel (2020–2022) and Deputy General Counsel (2019–2020) at New York Life Insurance Company. Member of the board of visitors for Duke University School of Law. Member of the board of trustees for City Year New York. Member of the advisory board for New York University School of Law, Program on Corporate Compliance and Enforcement.	228
Jodi Miller (1980)	Finance Director	September 2022	Principal of Vanguard. Finance director (2022–present) of each of the investment companies served by Vanguard. Head of Enterprise Investment Services (2020–present), head of Retail Client Services & Operations (2020–2022), and head of Retail Strategic Support (2018–2020) at Vanguard.	228
Matt Piro (1980)	Manager Oversight Officer	July 2025	Principal of Vanguard. Manager oversight officer (July 2025–present) of each of the investment companies served by Vanguard. Global head of Oversight & Manager Search (2022–present) of Vanguard. Global head of ESG product (2017–2021) of Vanguard. Head of product – Europe (2017–2021) of Vanguard. Senior investment director of Oversight & Manager Search (2012–2017) of Vanguard.	228

Mr. Hunt is independent for each Vanguard Trust other than the Vanguard World Fund Trust. With the exception of Mr. Ramji and Mr. Jacobs, all of the other trustees are independent. The trustees designate a chair of the board. Mr. Loughridge, an independent trustee, serves as chair. The independent chair is a spokesperson and principal point of contact for the trustees, including the independent trustees, and is responsible for coordinating the activities of the trustees, including calling regular executive sessions of the independent trustees, developing the agenda of each board meeting together with the chief executive officer, and chairing the meetings of the trustees.

Board Committees: The Trust's board has the following committees:

- Audit and Risk Committee: This committee oversees the accounting and financial reporting policies, the systems of internal controls, the independent audits of each fund, and enterprise-wide risk management. Ms. Raskin and Mr. Volanakis co-chair the committee. The following independent trustees serve as members of the committee: Ms. Bunch, Mr. Loughridge, and Ms. Venneman. The committee held five meetings during the Trust's fiscal year ended October 31, 2025.
- Compensation Committee: This committee oversees the compensation programs established by each fund for the benefit of its trustees. Mr. Reid chairs the committee. The following independent trustees serve as members of the committee: Mr. Loughridge, Mr. Murphy, and Ms. Patterson. The committee held six meetings during the Trust's fiscal year ended October 31, 2025.
- Executive Committee (formerly Independent Governance Committee): This committee assists the board in fulfilling its responsibilities and is empowered, when exigent circumstances require, to exercise board powers in the intervals between board meetings unless such action is prohibited by applicable law or Trust bylaws. Mr. Loughridge chairs the committee. The following trustees serve as members of the committee: Mr. Jacobs, Mr. Pastor, Mr. Perold, Mr. Ramji, Ms. Raskin, and Mr. Volanakis. The committee held one meeting during the Trust's fiscal year ended October 31, 2025.
- Investment Committees: These committees oversee the investment advisors to the funds. The committees are responsible for: approving the funds' investment advisory agreements and allocation of assets among advisors, overseeing the funds' proxy voting, and approving policies used to vote fund proxies. Mr. Pastor and Mr. Malpass each chair one of the committees and each trustee serves on at least one of the two investment committees, with

each committee comprised of a majority of the funds' independent trustees. Each investment committee held two meetings during the Trust's fiscal year ended October 31, 2025.

- Nominating Committee: This committee nominates candidates for election to the board of trustees of each fund. The committee also has the authority to recommend the removal of any trustee. Ms. Bunch chairs the committee. The following independent trustees serve as members of the committee: Mr. Loughridge, Mr. Malpass, Dr. Thomas, and Ms. Venneman. The committee held three meetings during the Trust's fiscal year ended October 31, 2025.

The Nominating Committee will consider shareholder recommendations for trustee nominees. Shareholders may send recommendations to Ms. Bunch, chair 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 Vanguard LifeStrategy Funds and Vanguard STAR Fund 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 and Non-Executive Interested Trustees. The funds compensate their independent trustees and non-executive interested trustees in two ways:

- The trustees receive an annual fee for their service to the funds, which is subject to reduction based on absences from scheduled board meetings.
- The trustees are reimbursed for the travel and other expenses that they incur in attending board meetings.

"Interested" Executive Trustee. Mr. Ramji serves as a trustee, but is not compensated in this capacity. He is, however, compensated 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 Vanguard Total International Stock Index Fund and Vanguard STAR Core-Plus Bond Fund for each trustee. In addition, the table shows the total amount of compensation paid to each trustee by all Vanguard funds.

VANGUARD TOTAL INTERNATIONAL STOCK INDEX FUND AND VANGUARD STAR CORE-PLUS BOND FUND
TRUSTEES' COMPENSATION TABLE

Trustee	Aggregate Compensation From the Funds[1]	Total Compensation From All Vanguard Funds Paid to Trustees[2]
Salim Ramji[3]	—	—
David Hunt[4]	—	—
Kenneth Jacobs[5]	—	—
Tara Bunch	$23,926	$415,000
Emerson U. Fullwood[6]	10,185	88,333
F. Joseph Loughrey[7]	11,338	98,333
Mark Loughridge	30,267	525,000
Scott C. Malpass	22,484	390,000
John Murphy[8]	16,431	380,000
Lubos Pastor	22,484	390,000
Rebecca Patterson[9]	16,549	350,833
André F. Perold	21,908	387,500
Sarah Bloom Raskin	23,926	415,000
Grant Reid	22,484	390,000
David Thomas	21,908	380,000
Barbara Venneman[10]	16,549	350,833

Trustee	Aggregate Compensation From the Funds[1]	Total Compensation From All Vanguard Funds Paid to Trustees[2]
Peter F. Volanakis	23,926	415,000

1 The amounts shown in this column are based on the Trust's fiscal year ended October 31, 2025. Each Fund within the Trust is responsible for a proportionate share of these amounts.
2 The amounts reported in this column reflect the total compensation paid to each trustee for his or her service as trustee of 228 Vanguard funds for the 2025 calendar year and include any amount a trustee has elected to defer. During the 2025 calendar year, the following trustees elected to defer all or a portion of their compensation as follows: Ms. Bunch, $415,000; Mr. Perold, $387,500; Ms. Raskin, $207,500; Mr. Reid, $390,000; and Dr. Thomas, $190,000.
3 Mr. Ramji became a member of the Funds' board effective February 26, 2025.
4 Mr. Hunt became a member of the Funds' board effective February 24, 2026.
5 Mr. Jacobs became a member of the Funds' board effective February 24, 2026.
6 Mr. Fullwood retired from the Funds' board effective February 26, 2025.
7 Mr. Loughrey retired from the Funds' board effective February 26, 2025.
8 Mr. Murphy became a member of the Funds' board effective February 26, 2025.
9 Ms. Patterson became a member of the Funds' board effective February 26, 2025.
10 Ms. Venneman became a member of the Funds' board effective February 26, 2025.

Ownership of Fund Shares

All trustees allocate their investments among the various Vanguard funds based on their own investment needs. The following table shows each trustee's ownership of shares of each Fund and of all Vanguard funds served by the trustee as of December 31, 2025.

VANGUARD STAR FUNDS

Vanguard Fund	Trustee	Dollar Range of Fund Shares Owned by Trustee	Aggregate Dollar Range of Vanguard Fund Shares Owned by Trustee
Vanguard LifeStrategy Conservative Growth Fund	Salim Ramji	—	Over $100,000
	David Hunt	—	Over $100,000
	Kenneth Jacobs	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	John Murphy	—	Over $100,000
	Lubos Pastor	—	Over $100,000
	Rebecca Patterson	—	Over $100,000
	André Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	Grant Reid	—	Over $100,000
	David Thomas	—	Over $100,000
	Barbara Venneman	—	Over $100,000
	Peter F. Volanakis	—	Over $100,000

Vanguard Fund	Trustee	Dollar Range of Fund Shares Owned by Trustee	Aggregate Dollar Range of Vanguard Fund Shares Owned by Trustee
Vanguard LifeStrategy Growth Fund	Salim Ramji	—	Over $100,000
	David Hunt	—	Over $100,000
	Kenneth Jacobs	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	John Murphy	—	Over $100,000
	Lubos Pastor	—	Over $100,000
	Rebecca Patterson	—	Over $100,000
	André Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	Grant Reid	—	Over $100,000
	David Thomas	—	Over $100,000
	Barbara Venneman	—	Over $100,000
	Peter F. Volanakis	—	Over $100,000
Vanguard LifeStrategy Income Fund	Salim Ramji	—	Over $100,000
	David Hunt	—	Over $100,000
	Kenneth Jacobs	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	John Murphy	—	Over $100,000
	Lubos Pastor	—	Over $100,000
	Rebecca Patterson	—	Over $100,000
	André Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	Grant Reid	—	Over $100,000
	David Thomas	—	Over $100,000
	Barbara Venneman	—	Over $100,000
	Peter F. Volanakis	—	Over $100,000
Vanguard LifeStrategy Moderate Growth Fund	Salim Ramji	—	Over $100,000
	David Hunt	—	Over $100,000
	Kenneth Jacobs	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	John Murphy	—	Over $100,000
	Lubos Pastor	—	Over $100,000
	Rebecca Patterson	—	Over $100,000
	André Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	Grant Reid	—	Over $100,000
	David Thomas	—	Over $100,000
	Barbara Venneman	—	Over $100,000
	Peter F. Volanakis	—	Over $100,000

Vanguard Fund	Trustee	Dollar Range of Fund Shares Owned by Trustee	Aggregate Dollar Range of Vanguard Fund Shares Owned by Trustee
Vanguard STAR Core-Plus Bond Fund	Salim Ramji	—	Over $100,000
	David Hunt	—	Over $100,000
	Kenneth Jacobs	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	John Murphy	—	Over $100,000
	Lubos Pastor	—	Over $100,000
	Rebecca Patterson	—	Over $100,000
	André Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	Grant Reid	—	Over $100,000
	David Thomas	—	Over $100,000
	Barbara Venneman	—	Over $100,000
	Peter F. Volanakis	—	Over $100,000
Vanguard STAR Fund	Salim Ramji	—	Over $100,000
	David Hunt	—	Over $100,000
	Kenneth Jacobs	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	John Murphy	—	Over $100,000
	Lubos Pastor	—	Over $100,000
	Rebecca Patterson	—	Over $100,000
	André Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	Grant Reid	—	Over $100,000
	David Thomas	—	Over $100,000
	Barbara Venneman	—	Over $100,000
	Peter F. Volanakis	—	Over $100,000
Vanguard Total International Stock Index Fund	Salim Ramji	Over $100,000	Over $100,000
	David Hunt	—	Over $100,000
	Kenneth Jacobs	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Mark Loughridge	Over $100,000	Over $100,000
	Scott C. Malpass	—	Over $100,000
	John Murphy	—	Over $100,000
	Lubos Pastor	Over $100,000	Over $100,000
	Rebecca Patterson	Over $100,000	Over $100,000
	André Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	Grant Reid	—	Over $100,000
	David Thomas	—	Over $100,000
	Barbara Venneman	—	Over $100,000
	Peter F. Volanakis	Over $100,000	Over $100,000

As of January 31, 2026, the trustees and officers of the funds owned, in the aggregate, less than 1% of each class of each fund's outstanding shares.

As of January 31, 2026, the following owned of record 5% or more of the outstanding shares of each class (other than ETF Shares):

Vanguard Fund	Share Class	Owner and Address	Percentage of Ownership
Vanguard LifeStrategy Growth Fund	Investor Shares	Charles Schwab & Co., Inc., San Francisco, CA	7.94%
Vanguard LifeStrategy Moderate Growth Fund	Investor Shares	Charles Schwab & Co., Inc., San Francisco, CA	6.42%
Vanguard STAR Core-Plus Bond Fund	Institutional Shares	Vanguard STAR Fund, Valley Forge, PA	99.99%
Vanguard STAR Fund	Investor Shares	Charles Schwab & Co., Inc., San Francisco, CA	5.20%
Vanguard Total International Stock ETF		National Financial Services LLC	9.74%
		Charles Schwab & Co., Inc.	12.58%
		Vanguard Marketing Corporation	53.80%
Vanguard Total International Stock Index Fund	Admiral Shares	Charles Schwab & Co., Inc., San Francisco, CA	6.29%
	Institutional Select Shares	The Northern Trust Company, FBO College Savings Plan of Nevada, VGI Total International Stock Index, Boston, MA	5.80%
		Vanguard Charitable Program Total International Stock Pool, Valley Forge, PA	6.49%
		The Northern Trust Company, FBO New York College Savings Plan, Aggressive Growth Portfolio, Newton, MA	11.22%
	Institutional Shares	Fidelity Investments Institutional Operations Company Inc., Covington, KY	10.91%
		Charles Schwab & Co., Inc., San Francisco, CA	11.03%
		TIAA Trust, N.A., Retirement Plans Recordkept By TIAA, Charlotte, NC	11.18%
	Investor Shares	Vanguard Target Retirement 2025 Fund, Valley Forge, PA	5.92%
		Vanguard Target Retirement 2060 Fund, Valley Forge, PA	5.97%
		Vanguard Target Retirement 2055 Fund, Valley Forge, PA	9.93%
		Vanguard Target Retirement 2030 Fund, Valley Forge, PA	10.34%
		Vanguard Target Retirement 2035 Fund, Valley Forge, PA	13.05%
		Vanguard Target Retirement 2040 Fund, Valley Forge, PA	13.32%
		Vanguard Target Retirement 2050 Fund, Valley Forge, PA	14.12%
		Vanguard Target Retirement 2045 Fund, Valley Forge, PA	14.72%
	Institutional Plus Shares	SEI Private Trust Company, FBO Principal Financial, Oaks, PA	5.29%
		Fidelity Investments Institutional Operations Company Inc., Covington, KY	7.56%
		National Financial Services LLC, Jersey City, NJ	8.57%
		TIAA Trust, N.A., Retirement Plans Recordkept By TIAA, Charlotte, NC	14.86%

Although the Vanguard Total International Stock Index Fund does not have information concerning the beneficial ownership of shares held in the names of Depository Trust Company (DTC) participants, as of January 31, 2026, the name and percentage ownership of each DTC participant that owned of record 5% or more of the outstanding ETF Shares of the Fund were as follows:

Vanguard Fund	Owner	Percentage of Ownership
Vanguard Total International Stock ETF	National Financial Services LLC	9.74%
	Charles Schwab & Co., Inc.	12.58%
	Vanguard Marketing Corporation	53.80%

A shareholder who owns more than 25% of a Fund's voting shares may be considered a controlling person. As of January 31, 2026, the following held of record 25% or more of the voting shares:

Vanguard Fund	Owner	Percentage of Ownership
Vanguard STAR Core-Plus Bond Fund	Vanguard STAR Fund, Valley Forge, PA	99.99%

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.[1] 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

Actively managed equity funds, unless otherwise stated, generally will seek to disclose complete portfolio holdings as of the end of the most recent calendar quarter online at *vanguard.com*, 30 calendar days after the end of the calendar

[1]Any disclosure of portfolio holdings will be subject to, and consistent with, the Information Barrier Policy.

quarter. Actively managed fixed income funds will seek to disclose complete portfolio holdings as of the end of the most recent month online at *vanguard.com*, 15 calendar days after the end of the month. Each Vanguard fund relying on Rule 6c-11 under the 1940 Act (e.g., standalone ETFs) generally will seek to disclose complete portfolio holdings, including other investment positions, at the beginning of each business day. These portfolio holdings, including other investment positions, will be disclosed online at *vanguard.com*. 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 *vanguard.com* 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 *vanguard.com*, 15 calendar days after the end of the month. Vanguard LifeStrategy Funds and Vanguard STAR Fund will seek to disclose complete portfolio holdings as of the end of the most recent month online at *vanguard.com*, 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.

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

Vanguard, VCM, and VPM (each, an Advisor and collectively, the Advisors), 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, VCM, VPM, other 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.; Confluence Technology Inc.; Eagle Investments; Equilend; FactSet Research Systems Inc.; Gresham Technologies, Plc.; Institutional Shareholder Services, Inc.; Intellicor, LLC; Investment Technology Group, Inc.; Lipper, Inc.; Markit WSO Corporation; McMunn Associates Inc.; Morningstar, Inc.; Phoenix Lithographing Corporation; Pirium Systems Limited; Reuters America Inc.; R.R. Donnelley, Inc.; Schvey, Inc. d/b/a Axoni; SimCorp USA Inc.; State Street Bank and Trust Company; Stonewain Systems Inc.; 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, the Information Barrier Policy, by agreement, or under applicable laws, rules, and regulations: (1) persons who are subject to the Code of Ethical Conduct, the Policies and Procedures Designed to Prevent the Misuse of Inside Information, and/or the Information Barrier Policy; (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, VCM, VPM, other Vanguard subsidiaries, 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 the Advisors, VMC, or a Vanguard fund to Affiliates and Fiduciaries must be authorized by a Vanguard fund officer or a Principal of Vanguard. Any disclosure of portfolio holdings to Vanguard Affiliates will be subject to, and consistent with, the Information Barrier Policy.

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 the Advisors 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 the Advisors 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.

An Approved Vanguard Representative must make a good faith determination whether the information constitutes material nonpublic information, which involves an assessment of the particular facts and circumstances. Vanguard believes that in most cases recent portfolio changes that involve a few or even several securities in a diversified portfolio or commentary and analysis would be immaterial and would not convey any advantage to a recipient in making an investment decision concerning a Vanguard fund. Nonexclusive examples of commentary and analysis about a Vanguard fund include (1) the allocation of the fund's portfolio holdings and other investment positions among various asset classes, sectors, industries, and countries; (2) the characteristics of the stock and bond components of the fund's portfolio holdings and other investment positions; (3) the attribution of fund returns by asset class, sector, industry, and country; and (4) the volatility characteristics of the fund. Approved Vanguard Representatives may, at their sole discretion, deny any request for information made by any person, and may do so for any reason or for no reason. Approved Vanguard Representatives include, for purposes of the Policies and Procedures, persons employed by or associated with Vanguard or a subsidiary of Vanguard who have been authorized by Vanguard's Portfolio Review Department to disclose recent portfolio changes and/or commentary and analysis in accordance with the Policies and Procedures.

Disclosure of Portfolio Holdings, Including Other Investment Positions, in Accordance with Securities and Exchange Commission (SEC) Exemptive Orders and Rule 6c-11

Vanguard's ETF Operations team may disclose to the National Securities Clearing Corporation (NSCC), Authorized Participants, and other market makers the daily portfolio composition files (PCFs) that identify a basket of specified securities that may overlap with the actual or expected portfolio holdings of the Vanguard funds that offer a class of shares known as Vanguard ETF Shares (ETF Funds). Each Vanguard fund relying on Rule 6c-11 under the 1940 Act generally will seek to disclose complete portfolio holdings, including other investment positions, at the beginning of each business day. These portfolio holdings, including other investment positions, will be disclosed online at *vanguard.com*. The disclosure of PCFs and portfolio holdings, including other investment positions, will be in accordance with the terms and conditions of related exemptive orders (Vanguard ETF Exemptive Orders) issued by the SEC or Rule 6c-11 under the 1940 Act, as described in this section. In addition to disclosing PCFs to the NSCC, as previously described, Vanguard's ETF Operations team will generally disclose the PCF for any ETF Fund online at *vanguard.com*.

Unlike the conventional classes of shares issued by ETF Funds, the ETF Shares are listed for trading on a national securities exchange. Each ETF Fund issues and redeems ETF Shares in large blocks, known as "Creation Units." To purchase or redeem a Creation Unit, an investor must be an "Authorized Participant" or the investor must purchase or redeem through a broker-dealer that is an Authorized Participant. An Authorized Participant is a participant in the Depository Trust Company (DTC) that has executed a "Participant Agreement" with VMC. Each ETF Fund issues Creation Units in exchange for a "portfolio deposit" consisting of a basket of specified securities (Deposit Securities) and a cash payment (Balancing Amount). Each ETF Fund also generally redeems Creation Units in kind; an investor who tenders a Creation Unit will receive, as redemption proceeds, a basket of specified securities together with a Balancing Amount.

In connection with the creation and redemption process, and in accordance with the terms and conditions of the Vanguard ETF Exemptive Orders and Rule 6c-11, Vanguard's ETF Operations team makes available to the NSCC (a clearing agency registered with the SEC and affiliated with the DTC), for dissemination to NSCC participants on each business day prior to the opening of trading on the listing exchange, a PCF containing a list of the names and the required number of shares of each Deposit Security for each ETF Fund. In addition, the listing exchange disseminates (1) continuously throughout the trading day, through the facilities of the Consolidated Tape Association, the market value of an ETF Share; and (2) every 15 seconds throughout the trading day, a calculation of the estimated NAV of an ETF Share (expected to be accurate to within a few basis points). Comparing these two figures allows an investor to determine whether, and to what extent, ETF Shares are selling at a premium or at a discount to NAV. ETF Shares are listed on the exchange and traded on the secondary market in the same manner as other equity securities. The price of ETF Shares trading on the secondary market is based on a current bid/offer market.

Disclosure of Portfolio Holdings Related Information to the Issuer of a Security for Legitimate Business Purposes

Vanguard, at its sole discretion, may disclose portfolio holdings information concerning a security held by one or more Vanguard funds to the issuer of such security if the issuer presents, to the satisfaction of Vanguard's Fund Services and Oversight unit, convincing evidence that the issuer has a legitimate business purpose for such information. Disclosure of this information to an issuer is conditioned on the issuer 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 portfolio holdings information concerning a security may be disclosed to the issuer of such security, 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 issuer, 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 an issuer cannot be determined in advance of a specific request and will vary based upon the particular facts and circumstances and the legitimate business purposes, but in unusual situations could be as frequent as daily, with no lag. Disclosure of portfolio holdings information concerning a security held by one or more Vanguard funds to the issuer of such security must be authorized by a Vanguard fund officer or a Principal in Vanguard's Portfolio Review Department, Oversight and Manager Search team, or Office of the General Counsel, or the equity trading units within VCM or VPM.

Disclosure of Portfolio Holdings as Required by Applicable Law

Vanguard fund portfolio holdings (whether partial portfolio holdings or complete portfolio holdings) and other investment positions that make up a fund shall be disclosed to any person as required by applicable laws, rules, and regulations. Examples of such required disclosure include, but are not limited to, disclosure of Vanguard fund portfolio holdings (1) in a filing or submission with the SEC or another regulatory body, (2) in connection with seeking recovery on defaulted bonds in a federal bankruptcy case, (3) in connection with a lawsuit, or (4) as required by court order. Disclosure of portfolio holdings or other investment positions by the Advisors, VMC, or a Vanguard fund as required by applicable laws, rules, and regulations 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 *vanguard.com*, 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

I. Vanguard LifeStrategy Funds and Vanguard STAR Fund

Vanguard provides investment advisory services to the Funds through its wholly owned subsidiary, VCM. Vanguard's Investment Strategy Group establishes and reviews the allocation targets of Vanguard LifeStrategy Funds and determines whether any changes are required to best enable each Fund to achieve its investment objective. VCM implements the asset allocation targets and performs other portfolio management functions for Vanguard LifeStrategy Funds. Each Fund is a fund of funds and invests in other Vanguard mutual funds (underlying funds). Vanguard also provides investment advisory services to each of the underlying funds through one of its wholly owned subsidiaries (VCM or VPM).

The allocation of the assets for Vanguard STAR Fund among the underlying Vanguard funds is made by officers of the Fund pursuant to instructions of the Fund's board of trustees and in conformity with the Fund's investment objective, strategies, and policies.

The Funds benefit from the investment advisory services provided to the underlying Vanguard funds and, as shareholders of those funds, indirectly bear a proportionate share of those funds' advisory fees and expenses. For more information about the investment advisory services provided to the underlying Vanguard 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 Funds as of the fiscal year ended October 31, 2025 (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
Roger Aliaga-Diaz	Registered investment companies[1]	18	$869.3B	0	$0
	Other pooled investment vehicles	12	$959.1B	0	$0
	Other accounts	0	$ 0	0	$0
Aurélie Denis	Registered investment companies[2]	27	$ 2.8T	0	$0
	Other pooled investment vehicles	12	$959.1B	0	$0
	Other accounts	0	$ 0	0	$0
Walter Nejman	Registered investment companies[2]	27	$ 3.1T	0	$0
	Other pooled investment vehicles	12	$959.1B	0	$0
	Other accounts	0	$ 0	0	$0
Michael R. Roach	Registered investment companies[2]	24	$977.9B	0	$0
	Other pooled investment vehicles	12	$959.1B	0	$0
	Other accounts	0	$ 0	0	$0

1 Includes Vanguard LifeStrategy Funds, which held assets of $63.4 billion as of October 31, 2025.
2 Includes Vanguard LifeStrategy Funds and Vanguard STAR Fund, which collectively held assets of $87.2 billion as of October 31, 2025.

2. Material Conflicts of Interest

Please refer to Vanguard's discussion under *II. Vanguard Total International Stock Index Fund and Vanguard STAR Core-Plus Bond Fund* below.

3. Description of Compensation

Please refer to Vanguard's discussion under *II. Vanguard Total International Stock Index Fund and Vanguard STAR Core-Plus Bond Fund* below.

4. Ownership of Securities

As of October 31, 2025, the named portfolio managers owned shares of the Funds they managed as follows:

Roger Aliaga-Diaz	Dollar Range						
	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	Over $1m
Vanguard LifeStrategy Conservative Growth Fund	x						
Vanguard LifeStrategy Growth Fund	x						
Vanguard LifeStrategy Income Fund	x						
Vanguard LifeStrategy Moderate Growth Fund					x		

Aurélie Denis	Dollar Range						
	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	Over $1m
Vanguard LifeStrategy Conservative Growth Fund	x						
Vanguard LifeStrategy Growth Fund	x						
Vanguard LifeStrategy Income Fund	x						
Vanguard LifeStrategy Moderate Growth Fund	x						
Vanguard STAR Fund	x						

Walter Nejman	Dollar Range						
	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	Over $1m
Vanguard LifeStrategy Conservative Growth Fund	x						
Vanguard LifeStrategy Growth Fund	x						
Vanguard LifeStrategy Income Fund	x						
Vanguard LifeStrategy Moderate Growth Fund	x						
Vanguard STAR Fund			x				

Michael R. Roach	Dollar Range						
	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	Over $1m
Vanguard LifeStrategy Conservative Growth Fund	x						
Vanguard LifeStrategy Growth Fund	x						
Vanguard LifeStrategy Income Fund	x						
Vanguard LifeStrategy Moderate Growth Fund	x						
Vanguard STAR Fund	x						

II. Vanguard Total International Stock Index Fund and Vanguard STAR Core-Plus Bond Fund

Vanguard provides investment advisory services to the Funds through its wholly owned subsidiary, VCM. These services are provided by an experienced investment management professionals who are employed by Vanguard and are associated persons of VCM. The compensation and other expenses of these investment management professionals are allocated among the funds utilizing these services.

During the fiscal years ended October 31, 2023, 2024, and 2025, the Funds incurred the following approximate investment advisory expenses. Vanguard STAR Core-Plus Bond Fund commenced operations on March 12, 2025.

Vanguard Fund	2023	2024	2025
Total International Stock Index Fund	$27,438,000	$25,598,000	$29,162,000
STAR Core-Plus Bond Fund	—	—	$ 1,289,000

1. Other Accounts Managed

The following table provides information relating to the other accounts managed by the portfolio managers of the Funds as of the fiscal year ended October 31, 2025 (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
Christine D. Franquin	Registered investment companies[1]	6	$ 1.0T	0	$0
	Other pooled investment vehicles	0	$ 0	0	$0
	Other accounts	0	$ 0	0	$0

Portfolio Manager		No. of accounts	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Jeffrey D. Miller	Registered investment companies[1]	6	$795.2B	0	$0
	Other pooled investment vehicles	0	$ 0	0	$0
	Other accounts	0	$ 0	0	$0
Michael Perre	Registered investment companies[1]	9	$ 1.0T	0	$0
	Other pooled investment vehicles	0	$ 0	0	$0
	Other accounts	19	$ 63.7B	0	$0
Arvind Narayanan	Registered investment companies[2]	17	$198.9B	0	$0
	Other pooled investment vehicles	1	$524.5M	0	$0
	Other accounts	1	$ 36.3M	0	$0
Michael Chang	Registered investment companies[2]	8	$ 37.4B	0	$0
	Other pooled investment vehicles	0	$ 0	0	$0
	Other accounts	0	$ 0	0	$0
Brian Quigley	Registered investment companies[2]	10	$ 84.8B	0	$0
	Other pooled investment vehicles	0	$ 0	0	$0
	Other accounts	0	$ 0	0	$0
Daniel Shaykevich	Registered investment companies[2]	15	$182.8B	0	$0
	Other pooled investment vehicles	1	$524.5M	0	$0
	Other accounts	1	$ 36.3M	0	$0

1 Includes Vanguard Total International Stock Index Fund, which held assets of $554.3 billion as of October 31, 2025.
2 Includes Vanguard STAR Core-Plus Bond Fund, which held assets of $8.5 billion as of October 31, 2025.

2. Material Conflicts of Interest

At VCM, individual portfolio managers may manage multiple accounts for multiple clients. In addition to mutual funds, these accounts may include separate accounts, collective trusts, or offshore funds. Managing multiple funds or accounts may give rise to potential conflicts of interest including, for example, conflicts among investment strategies and conflicts in the allocation of investment opportunities. VCM manages potential conflicts between funds or accounts through allocation policies and procedures, internal review processes, and oversight by trustees and independent third parties. VCM has developed trade allocation procedures 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 in which two or more funds or accounts participate in investment decisions involving the same securities.

3. Description of Compensation

This section describes the compensation of the Vanguard employee(s) who manage(s) the Funds. Each such portfolio manager is an associated person of VCM (except for Mr. Aliaga-Diaz). As of the date of this Statement of Additional Information, a portfolio manager's compensation generally consists of base salary, bonus, and payments under Vanguard's long-term incentive 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 they manage. 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, including the performance of all Vanguard clients and the performance of the portfolio manager's group within Vanguard. Except with respect to the Investment Strategy

Group, performance of a portfolio manager's group within Vanguard is determined based on gross, pre-tax performance of each fund managed by the group relative to expectations for how the funds should have performed, given the funds' investment objectives, policies, strategies, and limitations, and the market environment during the measurement period. For Vanguard Total International Stock Index Fund and Vanguard LifeStrategy Funds, the performance factor depends on how closely a portfolio manager's group tracks the benchmark indexes of the funds managed by the group over a one-year period. For Vanguard STAR Core-Plus Bond Fund, the performance factor depends on how successfully a portfolio manager's group outperforms these expectations and maintains the risk parameters of the funds managed by the group over a three-year period. Additional factors considered in determining a portfolio manager's bonus include the performance of the funds managed by the portfolio manager, the portfolio manager's contributions to the investment management functions within the sub-asset class, overall contributions to strategic planning and decisions for the investment group, and contributions to the development of other investment professionals and supporting staff. With respect to the Investment Strategy Group, factors considered in determining a portfolio manager's bonus include the portfolio manager's overall contributions to strategic planning and decisions for the investment group, contributions to the development of other investment professionals and supporting staff, and contributions to long term-term investor outcomes. 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 portfolio manager satisfies the objectives previously described. The bonus is paid on an annual basis.

Under the long-term incentive compensation program, eligible full-time employees receive a payment from Vanguard's long-term incentive compensation plan that is based on a number of factors, including their years of service, job level, performance rating, perceived potential, and market position. 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

As of October 31, 2025, the named portfolio managers owned shares of the Funds they managed as follows:

Michael Chang	**Dollar Range**						
	None	**$1 to $10k**	**$10,001 to $50k**	**$50,001 to $100k**	**$100,001 to $500k**	**$500,001 to $1m**	**Over $1m**
Vanguard STAR Core-Plus Bond Fund	x						

Christine D. Franquin	**Dollar Range**						
	None	**$1 to $10k**	**$10,001 to $50k**	**$50,001 to $100k**	**$100,001 to $500k**	**$500,001 to $1m**	**Over $1m**
Vanguard Total International Stock Index Fund					x		

Jeffrey D. Miller	**Dollar Range**						
	None	**$1 to $10k**	**$10,001 to $50k**	**$50,001 to $100k**	**$100,001 to $500k**	**$500,001 to $1m**	**Over $1m**
Vanguard Total International Stock Index Fund		x					

Arvind Narayanan	**Dollar Range**						
	None	**$1 to $10k**	**$10,001 to $50k**	**$50,001 to $100k**	**$100,001 to $500k**	**$500,001 to $1m**	**Over $1m**
Vanguard STAR Core-Plus Bond Fund	x						

Michael Perre	**Dollar Range**						
	None	**$1 to $10k**	**$10,001 to $50k**	**$50,001 to $100k**	**$100,001 to $500k**	**$500,001 to $1m**	**Over $1m**
Vanguard Total International Stock Index Fund						x	

Brian Quigley	Dollar Range						
	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	Over $1m
Vanguard STAR Core-Plus Bond Fund	x						

Daniel Shaykevich	Dollar Range						
	None	$1 to $10k	$10,001 to $50k	$50,001 to $100k	$100,001 to $500k	$500,001 to $1m	Over $1m
Vanguard STAR Core-Plus Bond Fund	x						

Duration and Termination of Investment Advisory Agreement

Vanguard provides investment advisory services to the Funds through its wholly owned subsidiary, VCM, pursuant to the terms of the Fifth Amended and Restated Funds' Service Agreement and an intercompany service agreement between Vanguard and VCM (ISA). The Agreement will continue in full force and effect until terminated or amended by mutual agreement of the Vanguard funds and Vanguard. With respect to the Funds, the ISA will continue, unless terminated sooner in accordance with the terms of the ISA, for one year from the date it was approved for the respective Fund. At the end of this one-year period, the ISA will continue automatically with respect to a Fund for successive periods of 12 months each, provided that such continuance is approved at least annually (i) by the board of trustees of the relevant Fund or (ii) by vote of a majority of the outstanding voting securities of the relevant Fund.

Securities Lending

The following table describes the securities lending activities of Vanguard Total International Stock Index Fund during the fiscal year ended October 31, 2025. Vanguard LifeStrategy Funds, Vanguard STAR Fund, and Vanguard STAR Core-Plus Bond Fund did not lend their securities during the fiscal year ended October 31, 2025. 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.

Vanguard Fund	Securities Lending Activities
Vanguard Total International Stock Index Fund	
Gross income from securities lending activities	$346,079,114
Fees paid to securities lending agent from a revenue split	$10
Fees paid for any cash collateral management service (including fees deducted from a pooled cash collateral reinvestment vehicle) that are not included in the revenue split	$293,864
Administrative fees not included in revenue split	$5,006,621
Indemnification fee not included in revenue split	$0
Rebate (paid to borrower)	$168,401,484
Other fees not included in revenue split (specify)	$0
Aggregate fees/compensation for securities lending activities	$173,701,979
Net income from securities lending activities	**$172,377,135**

The services provided by Brown Brothers Harriman & Co. and Vanguard, each acting separately as securities lending agents for certain Vanguard funds, include coordinating the selection of securities to be loaned to approved borrowers; negotiating the terms of the loan; monitoring the value of the securities loaned and corresponding collateral, marking to market daily; coordinating the investment of cash collateral in the funds' approved cash collateral reinvestment vehicle; monitoring dividends and coordinating material proxy votes relating to loaned securities; and transferring, recalling, and arranging the return of loaned securities to the funds upon termination of the loan.

PORTFOLIO TRANSACTIONS

The advisor decides which securities to buy and sell on behalf of Vanguard Total International Stock Index Fund and Vanguard STAR Core-Plus Bond 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 the 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. The 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 the 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 Vanguard LifeStrategy Funds and Vanguard STAR Fund will purchase and sell conventional shares (i.e., not exchange-traded) of the underlying Vanguard funds by dealing directly with the issuer of the underlying funds. The Funds will incur no brokerage commissions for these transactions. To the extent a Vanguard LifeStrategy Fund purchases and sells ETF Shares of an underlying fund, the Fund will pay brokerage commissions.

During the fiscal years ended October 31, 2023, 2024, and 2025, 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, or changes to the securities that make up the Fund or a fund's target index.

Vanguard Fund	2023	2024	2025
Vanguard LifeStrategy Conservative Growth Fund	$ 8,000	$ 5,000	$ 4,000
Vanguard LifeStrategy Growth Fund	16,000	15,000	10,000
Vanguard LifeStrategy Income Fund	3,000	2,000	2,000
Vanguard LifeStrategy Moderate Growth Fund	16,000	10,000	9,000
Vanguard STAR Core-Plus Bond Fund[1]	—	—	514,000
Vanguard STAR Fund	—	—	2,000
Vanguard Total International Stock Index Fund	10,281,000	11,113,000	14,720,000

1 Vanguard STAR Core-Plus Bond Fund commenced operations on March 12, 2025.

Some securities that are considered for investment by a Fund may also be appropriate for other Vanguard funds or for other clients served by the advisor. If such securities are compatible with the investment policies of the Fund and one or more of the advisor's other clients, and are considered for purchase or sale at or about the same time, then transactions in such securities may be aggregated by the advisor, and the purchased securities or sale proceeds may be allocated among the participating Vanguard funds and the other participating clients of the advisor in a manner deemed equitable by the advisor. Although there may be no specified formula for allocating such transactions, the allocation methods used, and the results of such allocations, will be subject to periodic review by the Fund's board of trustees.

As of October 31, 2025, Vanguard Total International Stock Index Fund and Vanguard STAR Core-Plus Bond Fund held securities of their "regular brokers or dealers," as that term is defined in Rule 10b-1 of the 1940 Act, as follows. Vanguard STAR Core-Plus Bond Fund commenced operations on March 12, 2025.

Vanguard Fund	Regular Broker or Dealer (or Parent)	Aggregate Holdings
Vanguard STAR Core-Plus Bond Fund	Barclays Capital, Inc.	$ 3,248,000
	BofA Securities, Inc.	59,607,000
	Citadel Securities LLC	1,335,000
	Citigroup, Inc.	76,343,000
	Goldman Sachs & Co. LLC	56,921,000
	J.P. Morgan Securities LLC	72,911,000
	Mizuho Financial Group, Inc.	994,000
	Morgan Stanley & Co. LLC	78,803,000
	Wells Fargo Securities, LLC	52,984,000
Vanguard Total International Stock Index Fund	BNP Paribas Securities Corp.	1,126,957,000
	CITIC Securities International USA, LLC	273,557,000
	HSBC Securities (USA) Inc.	3,535,813,000
	Nomura Holdings, Inc.	302,883,000
	UBS Securities LLC	1,772,493,000

Portfolio turnover for Vanguard STAR Fund. The STAR Fund experienced higher portfolio turnover during fiscal year ended October 31, 2025, resulting from the reallocation of a portion of the Fund's fixed income exposure through investment in Vanguard STAR Core-Plus Bond Fund, the replacement of Vanguard Core-Plus Bond Fund as an underlying fund, and the reallocation of a portion of the Fund's equity exposure with the replacement of Vanguard Explorer Fund with Vanguard Dividend Growth Fund and Vanguard International Core Fund, as underlying funds.

PROXY VOTING

I. Proxy Voting Policies

Each Vanguard fund advised by Vanguard through VCM (each, a VCM-Advised Fund and together, the VCM-Advised Funds) retains the authority to vote proxies received with respect to the shares of equity securities held in a VCM-Advised Fund portfolio. The trustees of each VCM-Advised Fund have adopted proxy voting procedures and guidelines, to be administered by VCM and the VCM Investment Stewardship Team, which govern proxy voting for each VCM-Advised Fund retaining proxy voting authority. This policy is included in *Appendix A*. Vanguard Investor Choice is offered as a program within participating Vanguard funds; see *Appendix B*.

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 boards of trustees of the Vanguard funds have 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 VCM-Advised Funds, 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. In making such a decision, Vanguard considers:

- The subject of the vote and whether, based on Vanguard's knowledge and experience, Vanguard believes 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 Vanguard estimates that voting funds' shares would affect the shareholder meeting outcome; and
- The long-term impact to Vanguard fund shareholders, evaluating whether Vanguard believes the benefits of voting a company's shares would outweigh the benefits of stock lending revenues in a particular instance.

III. Conflicts of Interest

The proxy voting procedures for VCM-Advised Funds 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.

The VCM Investment Stewardship Team maintains separation from VPM and the VPM Investment Stewardship Team and from 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, the VCM Investment Stewardship Team may refrain from voting shares of a company, or may engage an independent third-party fiduciary to vote proxies.

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.

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 vanguard.com or visit the SEC's website at *sec.gov*.

INFORMATION ABOUT THE ETF SHARE CLASS

Vanguard Total International Stock Index Fund (the ETF Fund) offers and issues an exchange-traded class of shares called ETF Shares. The ETF Fund issues and redeems ETF Shares in large blocks, known as "Creation Units."

To purchase or redeem a Creation Unit, you must be an Authorized Participant or you must transact through a broker that is an Authorized Participant. An Authorized Participant is a participant in the Depository Trust Company (DTC) that has executed a Participant Agreement with Vanguard Marketing Corporation, the ETF Fund's Distributor (the Distributor). For a current list of Authorized Participants, contact the Distributor.

Investors that are not Authorized Participants must hold ETF Shares in a brokerage account. As with any stock traded on an exchange through a broker, purchases and sales of ETF Shares will be subject to usual and customary brokerage commissions.

The ETF Fund issues Creation Units in kind in exchange for a basket of securities that are part of—or soon to be part of—its target index (Deposit Securities). The ETF Fund also redeems Creation Units in kind; an investor who tenders a Creation Unit will receive, as redemption proceeds, a basket of securities that are part of the Fund's portfolio holdings (Redemption Securities). As part of any creation or redemption transaction, the investor will either pay or receive some in addition to the securities (which may, in certain instances, include American Depository Receipts [ADRs]), as described more fully on the following pages. The ETF Fund reserves the right to issue Creation Units for cash, rather than in kind. As of the date of this Statement of Additional Information, cash purchases and redemptions will be required for securities traded in Brazil, Chile, China, Colombia, Egypt, India, Kuwait, Malaysia, Pakistan, Peru, Qatar, Russia, Saudi Arabia, South Korea, Taiwan, and UAE.

Exchange Listing and Trading

The ETF Shares have been approved for listing on a national securities exchange and will trade on the exchange at market prices that may differ from net asset value (NAV). There can be no assurance that, in the future, ETF Shares will continue to meet all of the exchange's listing requirements. The exchange will institute procedures to delist a Fund's ETF Shares if the Fund's ETF Shares do not continuously comply with the exchange's listing rules. The exchange will also delist a Fund's ETF Shares upon termination of the ETF share class.

The exchange disseminates, through the facilities of the Consolidated Tape Association, an updated "indicative optimized portfolio value" (IOPV) for the ETF Fund as calculated by an information provider. The ETF Fund is not involved with or responsible for the calculation or dissemination of the IOPVs, and it makes no warranty as to the accuracy of the IOPVs. An IOPV for a Fund's ETF Shares is disseminated every 15 seconds during regular exchange trading hours. An IOPV has a securities value component and a cash component. The IOPV is designed as an estimate of the ETF Fund's NAV at a particular point in time, but it is only an estimate and should not be viewed as the actual NAV, which is calculated once each day.

Conversions and Exchanges

Owners of conventional (i.e., not exchange-traded) shares issued by the ETF Fund may convert those shares to ETF Shares of equivalent value of the same Fund. Please see "Conversion Rights" in the **Description of the Trust** section to confirm the conversion rights. Please note that investors who own conventional shares through a 401(k) plan or other employer-sponsored retirement or benefit plan generally may not convert those shares to ETF Shares and should check with their plan sponsor or recordkeeper. ETF Shares, whether acquired through a conversion or purchased on the secondary market, cannot be converted to conventional shares by a shareholder. Also, ETF Shares of one fund cannot be exchanged for ETF Shares of another fund.

Investors that are not Authorized Participants must hold ETF Shares in a brokerage account. Thus, before converting conventional shares to ETF Shares, an investor must have an existing, or open a new, brokerage account. This account may be with Vanguard Brokerage Services or with any other brokerage firm. To initiate a conversion of conventional shares to ETF Shares, an investor must contact their broker.

Vanguard Brokerage Services does not impose a fee on conversions from Vanguard conventional shares to Vanguard ETF Shares. However, other brokerage firms may charge a fee to process a conversion. Vanguard reserves the right, in the future, to impose a transaction fee on conversions or to limit or terminate the conversion privilege.

Converting conventional shares to ETF Shares is generally accomplished as follows. First, after the broker notifies Vanguard of an investor's request to convert, Vanguard will transfer conventional shares from the investor's account with Vanguard to the broker's omnibus account with Vanguard (an account maintained by the broker on behalf of all its customers who hold conventional Vanguard fund shares through the broker). After the transfer, Vanguard's records will reflect the broker, not the investor, as the owner of the shares. Next, the broker will instruct Vanguard to convert the appropriate number or dollar amount of conventional shares in its omnibus account to ETF Shares of equivalent value, based on the respective NAVs of the two share classes. The ETF Fund's transfer agent will reflect ownership of all ETF Shares in the name of the DTC. The DTC will keep track of which ETF Shares belong to the broker, and the broker, in turn, will keep track of which ETF Shares belong to its customers.

Because the DTC is unable to handle fractional shares, only whole shares can be converted. For example, if the investor owned 300.25 conventional shares, and this was equivalent in value to 90.75 ETF Shares, the DTC account would receive 90 ETF Shares. Conventional shares with a value equal to 0.75 ETF Shares (in this example, that would be 2.481 conventional shares) would remain in the broker's omnibus account with Vanguard. The broker then could either (1) take certain internal actions necessary to credit the investor's account with 0.75 ETF Shares or (2) redeem the 2.481 conventional shares for cash at NAV and deliver that cash to the investor's account. If the broker chose to redeem the conventional shares, the investor would realize a gain or loss on the redemption that must be reported on their tax return (unless the shares are held in an IRA or other tax-deferred account). An investor should consult their broker for information on how the broker will handle the conversion process, including whether the broker will impose a fee to process a conversion.

The conversion process works differently for investors who opt to hold ETF Shares through an account at Vanguard Brokerage Services. Investors who convert their conventional shares to ETF Shares through Vanguard Brokerage Services will have *all* conventional shares for which they request conversion converted to the equivalent dollar value of ETF Shares. Because no fractional shares will have to be sold, the transaction will not be taxable.

Here are some important points to keep in mind when converting conventional shares of the ETF Fund to ETF Shares:

- The conversion process can take anywhere from several days to several weeks, depending on the broker. Vanguard generally will process conversion requests either on the day they are received or on the next business day. Vanguard imposes conversion blackout windows around the dates when the ETF Fund declares dividends. This is necessary to prevent a shareholder from collecting a dividend from both the conventional share class currently held and also from the ETF share class to which the shares will be converted.
- During the conversion process, an investor will remain fully invested in the Fund's conventional shares, and the investment will increase or decrease in value in tandem with the NAV of those shares.
- The conversion transaction is nontaxable except, if applicable, to the very limited extent previously described.
- During the conversion process, an investor will be able to liquidate all or part of an investment by instructing Vanguard or the broker (depending on whether the shares are held in the investor's account or the broker's omnibus account) to redeem the conventional shares. After the conversion process is complete, an investor will be able to liquidate all or part of an investment by instructing the broker to sell the ETF Shares.

Book Entry Only System

ETF Shares issued by the ETF Fund are registered in the name of the DTC or its nominee, Cede & Co., and are deposited with, or on behalf of, the DTC. The DTC is a limited-purpose trust company that was created to hold securities of its participants (DTC Participants) and to facilitate the clearance and settlement of transactions among them through electronic book-entry changes in their accounts, thereby eliminating the need for physical movement of securities certificates. DTC Participants include securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. The DTC is a subsidiary of the Depository Trust and Clearing Corporation (DTCC), which is owned by certain participants of the DTCC's subsidiaries, including the DTC. Access to the DTC system is also available to others such as banks, brokers, dealers, and trust companies that clear through or maintain a custodial relationship with a DTC Participant, either directly or indirectly (Indirect Participants).

Beneficial ownership of ETF Shares is limited to DTC Participants, Indirect Participants, and persons holding interests through DTC Participants and Indirect Participants. Ownership of beneficial interests in ETF Shares (owners of such beneficial interests are referred to herein as Beneficial Owners) is shown on, and the transfer of ownership is effected only through, records maintained by the DTC (with respect to DTC Participants) and on the records of DTC Participants (with respect to Indirect Participants and Beneficial Owners that are not DTC Participants). Beneficial Owners will receive from, or through, the DTC Participant a written confirmation relating to their purchase of ETF Shares. The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities. Such laws may impair the ability of certain investors to acquire beneficial interests in ETF Shares.

The ETF Fund recognizes the DTC or its nominee as the record owner of all ETF Shares for all purposes. Beneficial Owners of ETF Shares are not entitled to have ETF Shares registered in their names and will not receive or be entitled to physical delivery of share certificates. Each Beneficial Owner must rely on the procedures of the DTC and any DTC Participant and/or Indirect Participant through which such Beneficial Owner holds its interests to exercise any rights of a holder of ETF Shares.

Conveyance of all notices, statements, and other communications to Beneficial Owners is effected as follows. The DTC will make available to the ETF Fund, upon request and for a fee, a listing of the ETF Shares of the Fund held by each DTC Participant. The ETF Fund shall obtain from each DTC Participant the number of Beneficial Owners holding ETF Shares, directly or indirectly, through the DTC Participant. The ETF Fund shall provide each DTC Participant with copies of such notice, statement, or other communication, in form, in number, and at such place as the DTC Participant may reasonably request, in order that these communications may be transmitted by the DTC Participant, directly or indirectly, to the Beneficial Owners. In addition, the ETF Fund shall pay to each DTC Participant a fair and reasonable amount as reimbursement for the expenses attendant to such transmittal, subject to applicable statutory and regulatory requirements.

Share distributions shall be made to the DTC or its nominee as the registered holder of all ETF Shares. The DTC or its nominee, upon receipt of any such distributions, shall immediately credit the DTC Participants' accounts with payments in amounts proportionate to their respective beneficial interests in ETF Shares of the appropriate ETF Fund as shown on the records of the DTC or its nominee. Payments by DTC Participants to Indirect Participants and Beneficial Owners of ETF Shares held through such DTC Participants will be governed by standing instructions and customary practices, as is now the case with securities held for the accounts of customers in bearer form or registered in a "street name," and will be the responsibility of such DTC Participants.

The ETF Fund has no responsibility or liability for any aspects of the records relating to or notices to Beneficial Owners; for payments made on account of beneficial ownership interests in such ETF Shares; for maintenance, supervision, or review of any records relating to such beneficial ownership interests; or for any other aspect of the relationship between the DTC and DTC Participants or the relationship between such DTC Participants and the Indirect Participants and Beneficial Owners owning through such DTC Participants.

The DTC may determine to discontinue providing its service with respect to ETF Shares at any time by giving reasonable notice to the ETF Fund and discharging its responsibilities with respect thereto under applicable law. Under such circumstances, the ETF Fund shall take action either to find a replacement for the DTC to perform its functions at a comparable cost or, if such replacement is unavailable, to issue and deliver printed certificates representing ownership of ETF Shares, unless the ETF Fund makes other arrangements with respect thereto satisfactory to the exchange.

Purchase and Issuance of ETF Shares in Creation Units

Except for conversions to ETF Shares from conventional shares, the ETF Fund issues and sells ETF Shares only in Creation Units on a continuous basis through the Distributor, without a sales load, at its NAV next determined after receipt of an order in proper form on any business day. The ETF Fund does not issue fractional Creation Units. (Please see *"Conversions and Exchanges"* for the issuance of ETF Shares resulting from a conversion.)

A business day is any day on which the NYSE is open for business. As of the date of this Statement of Additional Information, the NYSE observes the following U.S. 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.

Fund Deposit. The consideration for purchase of a Creation Unit from the ETF Fund generally consists of an in-kind deposit of a designated portfolio of securities (Deposit Securities) and an amount of cash (Cash Component) consisting of a purchase balancing amount and a transaction fee (both described in the following paragraphs). Together, the Deposit Securities and the Cash Component constitute the fund deposit.

The purchase balancing amount is an amount equal to the difference between the NAV of a Creation Unit and the market value of the Deposit Securities (Deposit Amount). It ensures that the NAV of a fund deposit (not including the transaction fee) is identical to the NAV of the Creation Unit it is used to purchase. If the purchase balancing amount is a positive number (i.e., the NAV per Creation Unit exceeds the market value of the Deposit Securities), then that amount will be paid by the purchaser to the ETF Fund in cash. If the purchase balancing amount is a negative number (i.e., the NAV per Creation Unit is less than the market value of the Deposit Securities), then that amount will be paid by the ETF Fund to the purchaser in cash (except as offset by the transaction fee).

Vanguard, through the National Securities Clearing Corporation (NSCC), makes available after the close of each business day a list of the names and the number of shares of each Deposit Security to be included in the next business day's fund deposit for each ETF Fund (subject to possible amendment or correction). The ETF Fund reserves the right to accept a nonconforming fund deposit.

The identity and number of shares of the Deposit Securities required for a fund deposit may change from one day to another to reflect rebalancing adjustments and corporate actions or to respond to adjustments to the weighting or composition of the component securities of the relevant target index

The ETF Fund reserves the right to permit or require the substitution of an amount of cash—referred to as "cash in lieu"—to be added to the Cash Component to replace any Deposit Security. This might occur, for example, if a Deposit Security is not available in sufficient quantity for delivery, is not eligible for transfer through the applicable clearance and settlement system, or is not eligible for trading by an Authorized Participant or the investor for which an Authorized Participant is acting. Trading costs incurred by the ETF Fund in connection with the purchase of Deposit Securities with cash-in-lieu amounts will be an expense of the ETF Fund. However, the ETF Fund may adjust the transaction fee to protect existing shareholders from this expense.

All questions as to the number of shares of each security in the Deposit Securities and the validity, form, eligibility, and acceptance for deposit of any securities to be delivered shall be determined by the ETF Fund, and the ETF Fund's determination shall be final and binding.

Procedures for Purchasing Creation Units. To initiate a purchase order for a Creation Unit, an Authorized Participant must submit an order in proper form to the Distributor and such order must be received by the Distributor prior to the closing time of regular trading on the NYSE (Closing Time) (ordinarily 4 p.m., Eastern time) to receive that day's NAV. The date on which an order to purchase (or redeem) Creation Units is placed is referred to as the transmittal date. Authorized Participants must transmit orders using a transmission method acceptable to the Distributor pursuant to procedures set forth in the Participant Agreement.

The Distributor shall inform the ETF Fund's custodian of the order. The custodian will then inform the appropriate foreign subcustodians. Each subcustodian shall maintain an account into which the Authorized Participant shall deliver, on behalf of itself or the party on whose behalf it is acting, the relevant Deposit Securities (or the cash value of all or part of such securities, in the case of a permitted or required cash purchase or cash-in-lieu amount), with any appropriate adjustments as advised by Vanguard. Deposit Securities must be delivered to an account maintained at the applicable local subcustodians.

The Authorized Participant must also make available on or before the contractual settlement date, by means satisfactory to the ETF Fund, immediately available or same-day funds estimated by the ETF Fund to be sufficient to pay the Cash Component. Any excess funds will be returned following settlement of the issue of the Creation Unit.

Neither the Trust, the ETF Fund, the Distributor, nor any affiliated party will be liable to an investor who is unable to submit a purchase order by Closing Time, even if the problem is the responsibility of one of those parties (e.g., the Distributor's phone or email systems were not operating properly).

If you are not an Authorized Participant, you must place your purchase order in an acceptable form with an Authorized Participant. The Authorized Participant may request that you make certain representations or enter into agreements with respect to the order (e.g., to provide for payments of cash when required).

An order to purchase Creation Units is deemed received on the transmittal date if (1) such order is received by the ETF Fund's Distributor prior to Closing Time on such transmittal date and (2) all other procedures set forth in the Participant Agreement are properly followed.

Except as provided herein, a Creation Unit will not be issued until the transfer of good title to the ETF Fund of the Deposit Securities and the payment of the Cash Component have been completed. When each subcustodian has confirmed to the custodian that the required securities included in the fund deposit have been delivered to the account of the relevant subcustodian, and the Cash Component has been delivered to the custodian, the Distributor shall be notified of such delivery, and the ETF Fund will issue and cause the delivery of the Creation Unit.

If a fund deposit is incomplete on the first business day after the trade date (the trade date, known as "T," is the date on which the trade actually takes place; one business day after the trade date is known as "T+1") because of the failed delivery of one or more of the Deposit Securities, the ETF Fund shall be entitled to cancel the purchase order. Alternatively, the ETF Fund may issue Creation Units in reliance on the Authorized Participant's undertaking to deliver the missing Deposit Securities at a later date. Such undertaking shall be secured by the delivery and maintenance of cash collateral in an amount determined by the ETF Fund in accordance with the terms of the Participant Agreement.

Rejection of Purchase Orders. The ETF Fund reserves the absolute right to reject a purchase order. By way of example, and not limitation, the ETF Fund will reject a purchase order if:

- The order is not in proper form.
- The Deposit Securities delivered are not the same (in name or amount) as the published basket.
- Acceptance of the Deposit Securities would have certain adverse tax consequences to the ETF Fund.
- Acceptance of the fund deposit would, in the opinion of counsel, be unlawful.
- Acceptance of the fund deposit would otherwise, at the discretion of the ETF Fund or the ETF Fund's advisor, have an adverse effect on the ETF Fund or any of its shareholders.
- Circumstances outside the control of the ETF Fund, the Trust, the transfer agent, the custodian, subcustodian(s), the Distributor, and Vanguard make it for all practical purposes impossible to process the order. Examples include, but are not limited to, natural disasters, public service disruptions, or utility problems such as fires, floods, extreme weather conditions, and power outages resulting in telephone, telecopy, and computer failures; market conditions or activities causing trading halts; systems failures involving computer or other information systems affecting the aforementioned parties as well as the DTC, the NSCC, the federal reserve, or any other participant in the purchase process; and similar extraordinary events.

If a purchase order is rejected, the Distributor shall notify the Authorized Participant that submitted the order. The ETF Fund, the Trust, the transfer agent, the custodian, subcustodian(s), the Distributor, and Vanguard are under no duty, however, to give notification of any defects or irregularities in the delivery of a fund deposit, nor shall any of them incur any liability for the failure to give any such notification.

Transaction Fee on Purchases of Creation Units. The ETF Fund may impose a transaction fee (payable to the ETF Fund) to compensate the ETF Fund for costs associated with the issuance of Creation Units. The amount of the fee, which may be changed by the ETF Fund from time to time at its sole discretion, is made available daily to Authorized Participants, market makers, and other interested parties through Vanguard's proprietary portal system. When the ETF Fund permits (or requires) a purchaser to substitute cash in lieu of depositing one or more Deposit Securities, the

purchaser may be assessed an additional variable charge on the cash-in-lieu portion of the investment. The amount of this charge will be disclosed to investors before they place their orders. The amount will be determined by the ETF Fund at its sole discretion. The maximum transaction fee, including any variable charges, on purchases of Creation Units, including any additional charges as described, shall be 2% of the value of the Creation Units.

The ETF Fund reserves the right to not impose a transaction fee or to vary the amount of the transaction fee imposed, up to the maximum amount listed above. To the extent a creation transaction fee is not charged or does not cover the costs associated with the issuance of the Creation Units, certain costs may be borne by the ETF Fund.

Redemption of ETF Shares in Creation Units

To be eligible to place a redemption order, you must be an Authorized Participant. Investors that are not Authorized Participants must make appropriate arrangements with an Authorized Participant in order to redeem a Creation Unit.

ETF Shares may be redeemed only in Creation Units. Investors should expect to incur brokerage and other transaction costs in connection with assembling a sufficient number of ETF Shares to constitute a redeemable Creation Unit. There can be no assurance, however, that there will be sufficient liquidity in the public trading market at any time to permit assembly of a Creation Unit. Redemption requests received on a business day in good order will receive the NAV next determined after the request is made.

Unless cash redemptions are available or specified for the ETF Fund, an investor tendering a Creation Unit generally will receive redemption proceeds consisting of (1) a basket of Redemption Securities; plus (2) a redemption balancing amount in cash equal to the difference between (x) the NAV of the Creation Unit being redeemed, as next determined after receipt of a request in proper form, and (y) the value of the Redemption Securities; less (3) a transaction fee. If the Redemption Securities have a value greater than the NAV of a Creation Unit, the redeeming investor will pay the redemption balancing amount in cash to the ETF Fund, rather than receive such amount from the ETF Fund.

Vanguard, through the NSCC, makes available after the close of each business day a list of the names and the number of shares of each Redemption Security to be included in the next business day's redemption basket for the ETF Fund (subject to possible amendment or correction). The basket of Redemption Securities provided to an investor redeeming a Creation Unit may not be identical to the basket of Deposit Securities required of an investor purchasing a Creation Unit. The ETF Fund may provide a redeeming investor with a basket of Redemption Securities that differs from the composition of the redemption basket published through the NSCC.

The ETF Fund reserves the right to deliver cash in lieu of any Redemption Security for the same reason it might accept cash in lieu of a Deposit Security, as previously discussed, or if the ETF Fund could not lawfully deliver the security or could not do so without first registering such security under federal or state law.

Neither the Trust, the ETF Fund, the Distributor, nor any affiliated party will be liable to an investor who is unable to submit a redemption order by Closing Time, even if the problem is the responsibility of one of those parties (e.g., the Distributor's phone or email systems were not operating properly).

Transaction Fee on Redemptions of Creation Units. The ETF Fund may impose a transaction fee (payable to the ETF Fund) to compensate the ETF Fund for costs associated with the redemption of Creation Units. The amount of the fee, which may be changed by the ETF Fund from time to time at its sole discretion, is made available daily to Authorized Participants, market makers, and other interested parties through Vanguard's proprietary portal system. An additional charge may be imposed for redemptions of Creation Units effected outside the Clearing Process. When the ETF Fund permits (or requires) a redeeming investor to receive cash in lieu of one or more Redemption Securities, the ETF Fund may assess an additional variable charge on the cash portion of the redemption. The amount will vary as determined by the ETF Fund at its sole discretion and is made available daily to Authorized Participants, market makers, and other interested parties through Vanguard's proprietary portal system. The maximum transaction fee, including any variable charges, on redemptions of Creation Units shall be 2% of the value of the Creation Units.

The ETF Fund reserves the right to not impose a transaction fee or to vary the amount of the transaction fee imposed, up to the maximum amount listed above. To the extent a redemption transaction fee is not charged or does not cover the costs associated with the redemption of the Creation Units, certain costs may be borne by the ETF Fund.

Placement of Redemption Orders. Requests to redeem Creation Units must be submitted to the Distributor by or through an Authorized Participant on a business day prior to Closing Time.

An order to redeem a Creation Unit is deemed received on the transmittal date if (1) such order is received by the ETF Fund's Distributor before Closing Time on such transmittal date and (2) all other procedures set forth in the Participant Agreement are properly followed. If a redemption order in proper form is submitted to the designated agent by an Authorized Participant prior to Closing Time on the transmittal date, then the value of the Redemption Securities and the Cash Redemption Amount will be determined by the ETF Fund on such transmittal date.

If on T+1 an Authorized Participant has failed to deliver all of the Vanguard ETF Shares it is seeking to redeem, the ETF Fund shall be entitled to cancel the redemption order. Alternatively, the ETF Fund may deliver to the Authorized Participant the full complement of Redemption Securities and cash in reliance on the Authorized Participant's undertaking to deliver the missing ETF Shares at a later date. Such undertaking shall be secured by the Authorized Participant's delivery and maintenance of cash collateral in accordance with collateral procedures that are part of the Participant Agreement. In all cases the ETF Fund shall be entitled to charge the Authorized Participant for any costs (including investment losses, attorney's fees, and interest) incurred by the ETF Fund as a result of the late delivery or failure to deliver.

The ETF Fund reserves the right, at its sole discretion, to require or permit a redeeming investor to receive the redemption proceeds in cash. In such cases, the investor would receive a cash payment equal to the NAV of its ETF Shares based on the NAV of those shares next determined after the redemption request is received in proper form (minus a transaction fee, including a charge for cash redemptions, as previously discussed).

If an Authorized Participant, or a redeeming investor acting through an Authorized Participant, is subject to a legal restriction with respect to a particular security included in the basket of Redemption Securities, such investor may be paid an equivalent amount of cash in lieu of the security.

The ETF Fund generally will deliver redemption proceeds within one business day. Because of the schedule of holidays in certain markets, however, the delivery of in-kind redemption proceeds may take longer than one business day. For each market relating to the ETF Fund, the dates where more than seven days would be needed to deliver redemption proceeds are identified under the heading *ETF Shares*: *Foreign Market Information*. The ETF Fund will deliver redemption proceeds within the number of days stated under *ETF Shares*: *Foreign Market Information*.

In connection with taking delivery of shares of Redemption Securities upon redemption of a Creation Unit, an Authorized Participant, or a Beneficial Owner redeeming through an Authorized Participant, must maintain appropriate security arrangements with a qualified broker-dealer, bank, or other custody provider in each jurisdiction in which any of the Redemption Securities are customarily traded, to which account such Deposit Securities will be delivered.

If appropriate arrangements to take delivery of the Redemption Securities in the applicable foreign jurisdictions, as required in the preceding paragraph, are not in place, or if it is not possible to effect deliveries of the Redemption Securities in such jurisdictions, the ETF Fund may at its discretion effect the redemption in cash. In such case, the investor will receive a cash payment equal to the NAV of the redeemed shares, based on the NAV next calculated after receipt of the redemption request in proper form (minus a transaction fee and an additional variable charge for cash redemptions specified previously, to offset the ETF Fund's transaction costs associated with the disposition of Redemption Securities of the ETF Fund). Redemptions of Creation Units will be subject to compliance with applicable United States federal and state securities laws and the ETF Fund (whether or not it otherwise permits cash redemptions) reserves the right to redeem Creation Units for cash to the extent that the ETF Fund could not lawfully deliver specific Redemption Securities or could not do so without first registering such securities under federal or state law.

If cash redemptions are permitted or required by the ETF Fund, proceeds will be paid to the Authorized Participant as soon as practicable after the date of redemption (within seven calendar days thereafter, except for the instances listed under *ETF Shares*: *Foreign Market Information* hereto where more than seven calendar days may be needed).

To the extent contemplated by an Authorized Participant's agreement with the Distributor, in the event the Authorized Participant that has submitted a redemption request in proper form is unable to transfer all or part of the Creation Unit to be redeemed to the ETF Fund prior to Closing Time on the business day of submission of such redemption request, the Distributor will nonetheless accept the redemption in reliance on the undertaking by the Authorized Participant to deliver the missing ETF Shares as soon as possible, which undertaking shall be secured by the Authorized Participant's delivery and maintenance of collateral consisting of cash having a value at least equal to 103% of the value of the missing ETF Shares in accordance with the ETF Fund's then-effective procedures. In all cases the ETF Fund shall be entitled to charge the redeeming investor for any costs (including investment losses, attorney's fees, and interest) sustained by the ETF Fund as a result of the late delivery or failure to deliver.

Because the Redemption Securities of the ETF Fund may trade on the relevant exchange(s) on days that the exchange is closed, stockholders may not be able to redeem their shares of the ETF Fund, or to purchase or sell ETF Shares on the exchange, on days when the NAVs of the ETF Fund could be significantly affected by events in the relevant foreign markets.

As a result of security settlement cycles, local market holidays, and unscheduled foreign market closings, ETFs that hold foreign investments may deliver redemption proceeds (either in kind or in cash) more than seven days (but no more than fifteen days) after receipt of a redemption request in proper form.

Suspension of Redemption Rights. The right of redemption may be suspended or the date of payment postponed with respect to the ETF Fund (1) for any period during which the NYSE or listing exchange is closed (other than customary weekend and holiday closings), (2) for any period during which trading on the NYSE or listing exchange is suspended or restricted, (3) for any period during which an emergency exists as a result of which disposal of the ETF Fund's portfolio securities or determination of its NAV is not reasonably practicable, or (4) in such other circumstances as the SEC permits.

Precautionary Notes

A precautionary note to ETF investors: The DTC or its nominee will be the registered owner of all outstanding ETF Shares. Your ownership of ETF Shares will be shown on the records of the DTC and the DTC Participant broker through which you hold the shares. Vanguard will not have any record of your ownership. Your account information will be maintained by your broker, which will provide you with account statements, confirmations of your purchases and sales of ETF Shares, and tax information. Your broker also will be responsible for distributing income and capital gains distributions and for ensuring that you receive shareholder reports and other communications from the fund whose ETF Shares you own. You will receive other services (e.g., dividend reinvestment and average cost information) only if your broker offers these services.

You should also be aware that investments in ETF Shares may be subject to certain risks relating to having large shareholders. To the extent that a large number of the Fund's ETF Shares are held by a large shareholder (e.g., an institutional investor, an investment advisor or an affiliate of an investment advisor, an authorized participant, a lead market maker, or another entity), a large redemption by such a shareholder could result in an increase in the ETF's expense ratio, cause the ETF to incur higher transaction costs, cause the ETF to fail to comply with applicable listing standards of the listing exchange upon which it is listed, lead to the realization of taxable capital gains, or cause the remaining shareholders to receive distributions representing a disproportionate share of the ETF's ordinary income and long-term capital gains. In addition, transactions by large shareholders may account for a large percentage of the trading volume on an exchange and may, therefore, have a material upward or downward effect on the market price of the ETF Shares.

A precautionary note about investing in funds with both ETF and mutual fund share classes: A fund with both conventional mutual fund shares and ETF Shares may subject its ETF shareholders to different costs and tax impacts than a fund with only exchange-traded shares. For example, a fund with both mutual fund shares and ETF Shares may need to buy and sell portfolio securities in response to inflows and outflows in the mutual fund share class. These purchases and sales could result in the fund's ETF shareholders sharing in brokerage and other transaction costs that shareholders would not incur in a fund with only exchange-traded shares. To the extent a fund with both mutual fund shares and ETF Shares needs to sell portfolio securities at a gain to satisfy mutual fund share class redemptions, the fund may need to distribute taxable capital gains to all of the fund's shareholders, including those who hold ETF Shares. In addition, a fund with both mutual fund shares and ETF Shares could need to hold more uninvested cash than a fund with only exchange-traded shares in order to satisfy mutual fund share class transactions. This uninvested cash could result in a drag on the fund's performance.

A precautionary note to purchasers of Creation Units: You should be aware of certain legal risks unique to investors purchasing Creation Units directly from the issuing fund.

Because new ETF Shares may be issued on an ongoing basis, a "distribution" of ETF Shares could be occurring at any time. Certain activities that you perform as a dealer could, depending on the circumstances, result in your being deemed a participant in the distribution in a manner that could render you a statutory underwriter and subject you to the prospectus delivery and liability provisions of the Securities Act of 1933 (the 1933 Act). For example, you could be deemed a statutory underwriter if you purchase Creation Units from the issuing fund, break them down into the constituent ETF Shares, and sell those shares directly to customers or if you choose to couple the creation of a supply

of new ETF Shares with an active selling effort involving solicitation of secondary market demand for ETF Shares. Whether a person is an underwriter depends upon all of the facts and circumstances pertaining to that person's activities, and the examples mentioned here should not be considered a complete description of all the activities that could cause you to be deemed an underwriter.

Dealers who are not "underwriters" but are participating in a distribution (as opposed to engaging in ordinary secondary-market transactions), and thus dealing with ETF Shares as part of an "unsold allotment" within the meaning of Section 4(3)(C) of the 1933 Act, will be unable to take advantage of the prospectus delivery exemption provided by Section 4(3) of the 1933 Act.

A precautionary note to shareholders redeeming Creation Units: An Authorized Participant that is not a "qualified institutional buyer" as defined in Rule 144A under the 1933 Act will not be able to receive, as part of the redemption basket, restricted securities eligible for resale under Rule 144A.

A precautionary note to investment companies: Vanguard ETF Shares are issued by registered investment companies, and therefore the acquisition of such shares by other investment companies and private funds is subject to the restrictions of Section 12(d)(1) of the 1940 Act. SEC Rule 12d1-4 under the 1940 Act permits investments in Vanguard ETF Shares beyond the limits of Section 12(d)(1), subject to the conditions of Rule 12d1-4, as described under the heading "*Other Investment Companies*."

FINANCIAL STATEMENTS

Each Fund's financial statements for the fiscal year ended October 31, 2025, and the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, 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 reports to shareholders, which may be obtained without charge.

DESCRIPTION OF BOND RATINGS

Moody's Ratings Symbols

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

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.

Moody's Ratings also supplies numerical indicators (1, 2, and 3) to rating categories. The modifier 1 indicates that the security is in the higher end of its rating category, the modifier 2 indicates a mid-range ranking, and the modifier 3 indicates a ranking toward the lower end of the category.

The following describe characteristics of the global short-term (original maturity of 13 months or less) bond ratings provided by Moody's Ratings. 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)—Judged to have an acceptable ability to repay short-term debt obligations.

Not Prime (NP)—Cannot be judged to be in any of the prime rating categories.

The following describe characteristics of the U.S. municipal short-term bond ratings provided by Moody's Ratings:

Moody's Ratings for state and municipal notes and other short-term (up to 3 years) obligations are designated Municipal Investment Grade (MIG).

MIG 1—Indicates superior quality, enjoying the excellent protection of established cash flows, liquidity support, and broad-based access to the market for refinancing.

MIG 2—Indicates strong credit quality with ample margins of protection, although not as large as in the preceding group.

MIG 3—Indicates acceptable credit quality, with narrow liquidity and cash-flow protection and less well-established market access for refinancing.

SG—Indicates speculative credit quality with questionable margins of protection.

S&P Global Ratings

The following describe characteristics of the long-term (original maturity of 1 year or more) bond ratings provided by S&P Global Ratings:

AAA—These are the highest rated obligations. The capacity to pay interest and repay principal is extremely strong.

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 ratings from AA to CCC may be modified by the addition of a plus (+) or minus (–) sign to show relative standing within the major rating categories.

The following describe characteristics of short-term (original maturity of 365 days or less) bond and commercial paper ratings designations provided by S&P Global Ratings:

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 ratings provided by S&P Global Ratings:

SP-1—This designation indicates a strong capacity to pay principal and interest.

SP-2—This designation indicates a satisfactory capacity to pay principal and interest.

SP-3—This designation indicates a speculative capacity to pay principal and interest.

APPENDIX A

Fund Proxy Policy – Funds with Proxy Voting Administered by Vanguard Capital Management

Introduction

This proxy voting policy (the Policy) describes general positions on matters that may be subject to a shareholder vote at U.S.-domiciled companies and is aligned with governance practices believed to support long-term shareholder returns. The Policy has been adopted by the boards (or relevant governing bodies) of funds and portfolios managed by certain Vanguard-affiliated entities including U.S.-domiciled mutual funds and ETFs advised by Vanguard Capital Management, LLC (VCM), as well as the boards of Vanguard Asset Management, Ltd., Vanguard Fiduciary Trust Company, Vanguard Global Advisers, LLC, and Vanguard Investments Australia Ltd in connection with their management of certain equity index funds and portfolios (together with the U.S.-domiciled mutual funds and ETFs advised by VCM, the "Funds"). The adoption of this Policy is anchored in the belief that effective corporate governance practices support long-term investment returns.

It is important to note that proposals—whether submitted by company management or other shareholders—often require a facts-and-circumstances analysis based on an expansive set of factors. While the Policy may recommend a particular voting decision, all proposals are voted case by case as determined in the best interests of each Fund consistent with its investment objective. The Policy is applied over an extended period of time; as such, if a company's board is not responsive to voting results on certain matters, support may be withheld for those and other matters in the future.

As a baseline, the Policy looks for companies to abide by the relevant governance frameworks (e.g., listing standards, governance codes, laws, regulations, etc.) of the market(s) in which they are listed. While the Policy is informed by such frameworks, final voting decisions may differ from the application of those frameworks due to the investment stewardship team's independent research, analysis, and engagement. In addition, this Policy and its application to specific voting matters are predicated on the relevant Funds' acquisition and ownership of securities in the ordinary course of business, without the intent of influencing company strategy or changing the control of the issuer. These Funds will not nominate directors, solicit or participate in the solicitation of proxies, or submit shareholder proposals at portfolio companies. The application of this Policy to specific voting matters will also adhere to any passivity requirements to which the Funds and/or The Vanguard Group, Inc. and any of its subsidiaries (collectively, Vanguard) may be subject.

Pillar I: Board composition and effectiveness

The Funds believe that in order to maximize the long-term return of shareholders' investments in each company, the individuals who serve as board directors to represent the interests of all shareholders should be appropriately independent, experienced, committed, capable, and diverse. Diversity of thought, background, and experiences meaningfully contribute to the ability of boards to serve as effective, engaged stewards of shareholders' interests. The evaluation of portfolio company boards will be informed by relevant market-specific governance frameworks (e.g., listing standards, governance codes, laws, regulations, etc.).

Board and Key Committee Independence[1]

In order to appropriately represent shareholder interests in the oversight of company management, a majority of directors of a noncontrolled company should be independent, as should all of the members of the board's key committees (audit, compensation, and nominating/governance or their equivalents).[2]

A director's independence will generally be determined based on a company's disclosure in the context of relevant market-specific governance frameworks (e.g., listing standards, governance codes, laws, regulations, etc.) supplemented by independent research and/or engagement.

In cases where a noncontrolled company does not maintain a majority independent board, votes against members of the nominating committee and all nonindependent members of that board may be recommended. In cases where a noncontrolled company board is not majority independent over multiple years, votes may be recommended against the entire board. In cases where any of the key committees of a noncontrolled company are not entirely independent, votes may be recommended against (a) the nonindependent members of that committee, and (b) all of the members of the board's nominating committee. (In the absence of an explicit nominating committee, votes will generally be recommended against those directors responsible for nominating and/or appointing directors; this may include the entire board.)

At controlled companies, support will generally be recommended for a nonindependent director on a compensation committee or a nominating and governance committee, so long as the relevant committee is majority independent.

In both instances, if nominating committee members are not up for election in a given year, votes against any other relevant board member(s) may be recommended.

Independent Board Leadership

The Funds believe that shareholders' interests are best served by board leadership that is independent of company management. While this may take the form of an independent chair of the board or a lead independent director (with sufficiently robust authority and responsibilities), the Funds generally believe that determining the appropriate independent board leadership structure should be within the purview of the board. Certain shareholder proposals seek to require that companies do not permit the same person to serve as both CEO and chair of the board of directors. Proponents believe that separation of these duties will create a more independent board.

Given the Funds' belief that this matter should be within the purview of a company's board, votes will generally be recommended against shareholder proposals to separate the CEO and chair roles. Votes for such proposals may be recommended if there are significant concerns regarding the independence or effectiveness of the board at the company in question.

Board Composition

The Funds believe that boards should be fit for purpose by reflecting sufficient breadth of skills, experiences, and perspectives resulting in cognitive diversity that enables effective, independent oversight on behalf of all shareholders. The appropriate mix of skills, experiences, and perspectives is unique to each board and should reflect expertise related to the company's strategy and material risks from a variety of vantage points.

To this end, the Funds believe that companies should produce fulsome disclosure of a board's process for building, assessing, and maintaining an effective board well suited to supporting the company's strategy, long-term performance, and shareholder returns. Such fulsome disclosure may include the range of skills, background, and experiences that

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[1] Certain exchange-listing standards and regulatory provisions may apply more limited (or no) independence requirements to the boards of controlled companies (i.e., those in which a majority voting interest is held by company insiders or affiliates). In such cases, the majority of compensation and nominating/governance committee members should be independent; audit committees are expected to be entirely independent regardless of a company's control status. Committee composition at controlled companies that is inconsistent with these independence expectations may generally result in votes against nonindependent members of the committee in question, as well as the members of the nominating committee.

[2] The relevant exchange-listing standards provide an exception to the majority board independence requirement for controlled companies (companies in which more than 50% of the voting securities are controlled by a shareholder or group of affiliated shareholders). Accordingly, this guideline applies only to noncontrolled companies. A noncontrolled company is a company in which 50% or less of the voting power for the election of its directors is held by a single person, entity, or group.

each board member provides and their alignment with the company's strategy (often presented as a skills matrix). Such disclosure may also cover the board's process for evaluating the composition and effectiveness of their board on a regular basis, the identification of gaps and opportunities to be addressed through board refreshment and evolution, and a robust nomination (and renomination) process to ensure the right mix of skills, experiences, and perspectives in the future.

A board's composition should comply with requirements set by relevant market-specific governance frameworks (e.g., listing standards, governance codes, laws, regulations, etc.) and be consistent with market norms in the markets in which the company is listed. To the extent that a board's composition is inconsistent with such requirements or differs from prevailing market norms, the board's rationale for such differences (and any anticipated actions) should be explained in the company's public disclosures.

Votes against the nomination/governance committee chair may be recommended if, based on research and/or engagement, a company's board composition and/or related disclosure is inconsistent with relevant market-specific governance frameworks or market norms.

Director Capacity and Commitments

Directors' responsibilities are complex and time-consuming. Therefore, shareholders seek to understand whether the number of directorship positions held by a director makes it challenging for that director to dedicate the requisite time and attention to effectively fulfill their responsibilities at each company (sometimes referred to as being "overboarded"). While no two boards are identical and time commitments for directorships may vary, the Funds believe that limitations on the number of board positions held by individual directors may be appropriate, absent compelling evidence to the contrary.

Votes may generally be recommended against any director who is a public company executive and sits on more than two public company boards. In this instance, votes will typically be recommended against the nominee at each company where they serve as a nonexecutive director, but not at the company where they serve as an executive.

Similarly, votes may also generally be recommended against any director who serves on more than four public company boards. In such cases, votes will typically be recommended against the director at each company except the one (if any) where they serve as board chair or lead independent director.

In certain instances, support will be considered for a director who would otherwise be considered overboarded under the standards above, taking into account relevant market-specific governance frameworks or company-specific facts and circumstances.

The Funds believe that portfolio companies should adopt good governance practices regarding director commitments, including a policy regarding director capacity and commitments and disclosure of the board's oversight of the implementation of that policy. Helpful disclosure includes a discussion of the company's policy (e.g., what limits are in place) and, if a nominee for director exceeds the policy, any considerations and rationale for the director's nomination. Additionally, it is good practice to include disclosure of how the board developed its policy and how frequently it is reviewed to ensure it remains appropriate.

Director Attendance

Votes will generally be recommended against directors who attended less than 75% of board or committee meetings (in the aggregate) in the previous year unless an extenuating circumstance is disclosed, or they have served on the board for less than one year.

Director Accountability

Directors are generally nominated by boards and elected by shareholders to represent their interests. If there are instances in which the board has failed to adequately consider actions approved by a majority of shareholders, unilaterally taken action against shareholder interests, or, based on independent analysis, failed in its oversight role, votes against those directors deemed responsible (generally based on their functional or committee-level responsibilities) may be recommended. Such conditions will generally not apply to a director who has served less than one year on the board and/or applicable committee, but in such instances may apply to another relevant director in their place.

Contested Director Elections

Contested director elections will be analyzed case by case. The analysis of proxy contests focuses on three key areas:

- The case for change at the target company.
  - How has the company performed relative to its peers?
  - How effectively has the current board overseen the company's strategy and execution?
  - How does the dissident's case strengthen the target company's long-term shareholder returns?
- The quality of company governance.
  - How effectively has the company's governance structure supported shareholder rights consistent with market norms?
  - Has the board been sufficiently accessible and responsive to shareholder input in the past?
- The quality of the company's and dissident's board nominees.
  - Is the incumbent board (and/or the company's nominees) sufficiently independent, capable, and effective to serve long-term shareholder interests?
  - Having made a compelling case for change, do the dissident's nominees appear better aligned with long-term shareholder interests relative to the company's nominees?

Pillar II: Board Oversight of Strategy and Risk

Boards are responsible for effective oversight and governance of their companies' most relevant and material risks and for governance of their companies' long-term strategy. Boards should take a thorough, integrated, thoughtful approach to identifying, quantifying, mitigating, and disclosing risks that have the potential to affect shareholder returns over the long term. Boards should communicate their approach to risk oversight to shareholders through their normal course of business.

Capitalization

- Increase in authorized common stock. Increases in authorized common stock will generally be supported if the proposed increase represents potential dilution less than or equal to 100%. Increases of more than 100% dilution may be supported if the increase is to be used for a stock split.
- Reverse stock split. Reverse splits of outstanding shares will generally be supported if the number of shares authorized is proportionately reduced and the difference in reduction results in dilution equal to or less than 100%. Regardless of the level of dilution, reverse splits will generally be supported if necessary for the company to remain listed on its current exchange.
- Decrease in outstanding shares to reduce costs. Proposals to reduce outstanding shares to reduce costs will generally be supported if the level at which affected investors are cashed out is not material.
- Amendment of authorized common stock/preferred stock. Proposals to create, amend, or issue common or preferred stock will generally be supported unless the rights of the issuance are materially different from the rights of current shareholders (i.e., differential voting rights) or they include a blank-check provision. Proposals to create such stock will generally be opposed if the accompanying disclosure does not include a statement affirming that the new issuance will not be used for anti-takeover purposes.
- Tracking stock. Issuance of tracking stock as a dividend to current shareholders will generally be supported. Proposals to offer tracking stock through an initial public offering will be supported case by case based on the proposed use of the proceeds, as will proposals calling for the elimination of tracking stock.

Mergers, Acquisitions, and Financial Transactions

Transactions are assessed based on the likelihood that they will preserve or create long-term returns for shareholders. All mergers, acquisitions, and financial transactions will be considered case by case based on a governance-centric evaluation focused on four key areas:

- Valuation

- Does the consideration provided in the transaction appear consistent with other similar transactions (adjusting for size, sector, scope, etc.)?

- Rationale
  - Has the board sufficiently articulated how this transaction is aligned with the company's long-term shareholder returns?
- Board oversight of the deal process
  - Has the board provided sufficient evidence of the rigor of the evaluation process? This could include disclosures such as an independent valuation report or fairness opinion, a discussion of the board's process for evaluating alternative opportunities, management incentives, or other relevant disclosures.
  - How did the board manage any potential conflicts of interest among the parties to the transaction?
- The surviving entity's governance profile
  - Are shareholders' interests sufficiently protected in any surviving entities (in noncash transactions)?

Bankruptcy Proceedings

All proposals related to bankruptcy proceedings will be evaluated case by case. When evaluating proposals to restructure or liquidate a firm, factors such as the financial prospects of the firm, alternative options, and management incentives will be considered.

Environmental/Social Proposals

Each proposal will be evaluated on its merits and in the context that a company's board has responsibility for providing effective oversight of strategy and risk management. This oversight includes material sector- and company-specific risks and opportunities that have the potential to affect long-term shareholder returns. While each proposal will be assessed on its merits and in the context of a company's public disclosures, vote analysis will also consider these proposals relative to market norms or widely accepted frameworks. Support may be recommended for a shareholder proposal that:

- Addresses a shortcoming in the company's current disclosure relative to market norms or to widely accepted investor-oriented frameworks (e.g., the International Sustainability Standards Board (ISSB));
- Reflects an industry-specific, financial materiality-driven approach; and
- Is not overly prescriptive, such as by dictating company strategy or day-to-day operations, time frame, cost, or other matters.

Each of the Funds adopting this policy is a passive investor whose role is not to dictate company strategy or interfere with a company's day-to-day management. Fulsome disclosure of material risks to long-term shareholder returns by companies is beneficial to the public markets to inform the company's valuation. Clear, comparable, consistent, and accurate disclosure enables shareholders to understand the strength of a board's risk oversight. Furthermore, shareholders typically do not have sufficient information about specific business strategies to propose specific operational targets or environmental or social policies for a company, which is a responsibility that resides with management and the board. As such, support is more likely for proposals seeking disclosure of such risks where material and/or for the company's policies and practices to manage such risks over time.

Independent Auditors

- Ratification of management's proposed independent auditor. Support will generally be recommended for an independent audit committee's auditor selection absent material misstatement of financials (or other significant concerns about the integrity of the company's financial statements) or the payment of excessive fees to the independent auditor beyond audit and audit-related services in prior years. The ratification of independent auditors will be considered case by case when there is a material misstatement of financials or other significant concern about the integrity of the company's financial statements. Votes against the ratification of auditors may be recommended when tax-related and all other fees exceed the audit and audit-related fees, unless the company's disclosure makes clear that the non-audit fees are for services that do not impair auditor independence.
- Rotations of auditing firms. Proposals mandating independent auditor rotation will be considered case by case.
- Requirement for a shareholder vote. Shareholder proposals that require companies to submit ratification of independent auditors to a shareholder vote will generally be supported.

Pillar III: Executive pay

Compensation policies linked to long-term relative performance are fundamental drivers of sustainable, long-term investment returns for a company's investors. Providing effective disclosure of compensation policies, their alignment with company performance, and their outcomes is crucial to giving shareholders confidence in the link between executives' incentives and rewards and the long-term returns for shareholders.

Advisory Votes on Executive Compensation (Say on Pay)

Because norms and expectations vary by industry type, company size, company age, and geographic location, the following guidelines illustrate elements of effective executive compensation plans and are not a one-size-fits-all tool. Considerations when evaluating executive pay fall into three broad categories:

- Alignment of pay and performance. Company disclosure should include evidence of clear alignment between pay outcomes and company performance. This is mainly assessed through alignment of incentive targets with strategy set by the company and analysis of three-year total shareholder return and realized pay over the same period versus a relevant set of peer companies. If there are concerns that pay and performance are not aligned, votes against a pay-related proposal may be considered.
- Compensation plan structure. Plan structures should be aligned with the company's stated long- term strategy and should support pay-for-performance alignment. Where a plan includes structural issues that have led to, or could in the future lead to, pay-for-performance misalignment, votes against a pay-related proposal may be considered. For compensation structures that are not typical of a market, companies should consider specific disclosure demonstrating how the structure supports long-term returns for shareholders.
- Governance of compensation plans. Boards should articulate a clear philosophy on executive pay, utilize robust processes to evaluate and evolve executive pay plans, and implement executive pay plans responsive to shareholder feedback over time. Boards should also explain these matters to shareholders via company disclosures. Where pay-related proposals consistently receive low support, boards should demonstrate consideration of shareholder concerns.

Executive compensation proposals (including Say on Pay, compensation reports, and compensation policies) will be evaluated case by case. Support is more likely for proposals and plans aligned with long-term shareholder returns. Those that reflect improvements in compensation practices in the interests of long-term shareholder returns may be supported, even if the proposals are not perfectly aligned with all these guidelines.

Without being prescriptive as to the exact structure of a compensation plan, structures and processes that can reasonably be expected to align pay and performance over time are more likely to be supported. Such structures may include a meaningful portion of equity vesting on performance criteria, strategically aligned performance metrics set to rigorous goals, and clear disclosure of the program and outcomes enabling shareholders to understand the connection to long-term shareholder returns, among other factors. When compensation committees choose to include nonfinancial metrics (such as environmental, social, and governance (ESG) metrics), they should have the same rigor, disclosure, and alignment with key strategic goals, material risks, and shareholder returns as other metrics.

The following situations are among those that raise a higher level of concern related to a compensation plan:

- Pay outcomes are significantly higher than those of peers but total shareholder return is well below that of peers.
- The long-term plan makes up less than 50% of total pay.
- The long-term plan has a performance period of less than three years.
- Plan targets are reset or retested or are not rigorous.
- The target for total pay is set above the peer-group median.
- The following situations are among those that raise warning signs, or a moderate level of concern:
- The company's disclosed peer group used to benchmark pay is not comparably aligned with the company in size or sector.
- The plan uses absolute metrics only.
- The plan allows for positive discretion only.
- The company uses one-time (e.g., retention) awards.
- The disclosure related to plan structure or payout is limited.

Where these warning signs exist, elements of strong compensation governance, such as board responsiveness and disclosure that includes data, rationale, and alternatives considered, can sometimes serve to mitigate these concerns.

Say on Pay Frequency

Votes will generally be recommended for annual Say on Pay frequency (as opposed to a vote every two or three years).

Additional Executive Pay Matters

Severance packages/golden parachutes. Proposals to approve severance packages (or "golden parachutes") will generally be supported unless they are excessive or unreasonable (i.e., cash severance payments that total more than 2.99 times salary plus targeted bonus and/or have single trigger cash or equity payments). New or renewed severance agreements that provide excessive or unreasonable severance should be submitted to shareholders for approval. If a company's current severance arrangements are deemed excessive or unreasonable, shareholder proposals requiring that future golden parachutes be put to a vote, provided that ratification after the fact is permitted, may be supported. Proposals to approve Say on Severance will generally be supported unless they are excessive or unreasonable.

Shareholder proposals on pay for superior performance. Shareholder proposals that call for companies to set standards that require pay for superior performance will generally not be supported, particularly when the proposal calls for specific performance standards.

Adopting, Amending, and/or Adding Shares to Equity Compensation Plans

Appropriately designed stock-based compensation plans, administered by an independent board committee and approved by shareholders, can be an effective way to align the interests of management, employees, and directors with long-term shareholder returns.

Compensation plan proposals will be considered case by case. A plan or proposal will be evaluated in the context of several factors to determine whether it balances the interests of employees and the company's other shareholders.

These factors include the industry in which a company operates, market capitalization, and competitors for talent. Support is more likely for a proposal in circumstances that include the following:

- Senior executives must hold a minimum amount of company stock (frequently expressed as a multiple of salary).
- Stock acquired through equity awards must be held for a certain period.
- The program includes performance-vesting awards, indexed options, or other performance-linked grants.
- Concentration of equity grants to senior executives is limited.
- Stock-based compensation is clearly used as a substitute for cash in delivering market-competitive total pay.
- Votes against a proposal are more likely in circumstances that include the following:
- Total potential dilution (including all stock-based plans) exceeds 20% of shares outstanding.
- Annual equity grants have exceeded 4% of shares outstanding.
- The plan permits repricing or replacement of options without shareholder approval.
- The plan provides for the issuance of reload options.
- The plan contains an automatic share replenishment ("evergreen") feature.

Additional Employee Compensation Matters

Repricing or replacing underwater options. Support is more likely for proposals to reprice or exchange stock options that meet the following three considerations:

- Value neutrality. An exchange/repricing proposal should be value-neutral.
- Exclusion of executive and director participation. Executives and directors should not participate in an exchange or repricing. If they do, the board should clearly state why the program is necessary to retain and provide incentives to executives and directors for the benefit of long-term shareholder returns.
- Additional vesting requirements. New shares granted in an exchange should vest no earlier than the vesting date of the shares for which they were exchanged, and preferably later.

Granting stock options. Management proposals to grant one-time stock options may be opposed if dilution limits are exceeded. Other proposals will be evaluated case by case.

Adopting deferred compensation plan. Proposals to adopt a deferred compensation plan will generally be supported unless the plan includes discounts.

Adopting or adding shares to an employee stock purchase plan. Proposals to adopt or add shares to employee stock purchase plans will generally be supported unless they allow employees to purchase shares at a price less than 85% of fair market value.

Amending a 401(k) plan to allow excess benefits. Proposals to amend a 401(k) plan to allow for excess benefits will generally be supported.

Nonemployee Director Compensation

Proposals to adopt or amend nonexecutive director equity compensation plans, including stock award plans, will be evaluated case by case. Considerations include potential dilution, the size of the plan relative to employee equity compensation plans, annual grants made to nonemployee directors, and total director compensation relative to market norms.

Nonemployee director equity compensation plans that allow for repricing, those that contain an evergreen feature (automatic renewal), and nonemployee director pensions will generally be opposed.

All other proposals for nonemployee director compensation will be considered case by case.

Pillar IV: Shareholder Rights

The Funds believe that companies should adopt governance practices to ensure that boards and management serve in the best interests of the shareholders they represent. Such governance practices safeguard and support foundational rights for shareholders. Proposals on many of the following matters may be submitted by either company management or shareholders; proposals—irrespective of the proponent—that seek approval for governance structures that safeguard shareholder rights will generally be supported (and those that do not will generally be opposed) as described below.

Board Structure and Director Elections

The Funds believe that each company's board is generally best positioned to fill director vacancies (subject to shareholder ratification at the next annual meeting) and to set the board's size, tenure, and other structural provisions, so long as any such provision does not serve as an anti-takeover measure.

Classified ("staggered") boards. Votes will generally be recommended for proposals to declassify a current board and against proposals to create a classified board.

Cumulative voting. Votes will generally be recommended for management proposals to eliminate cumulative voting and against management or shareholder proposals to adopt cumulative voting.

Majority voting. If the company has plurality voting, votes will generally be recommended for shareholder proposals that require a majority vote for election of directors. Votes will also generally be recommended for management proposals to implement majority voting for election of directors. Votes may be recommended against shareholder proposals that require a majority vote for election of directors if the company has a director resignation policy under which a nominee who fails to get a majority of votes is required to resign.

Approval to fill board vacancies without shareholder approval. Votes will generally be recommended for management proposals to allow the directors to fill vacancies on the board if the company requires a majority vote for the election of directors and the board is not classified. Votes will generally be recommended against management proposals to allow directors to fill vacancies on a classified board.

Board authority to set board size. Votes will generally be recommended for management proposals to set the board at a specific size or designate a reasonable range to provide flexibility. However, the anti-takeover effects of such proposals will be considered, particularly in the context of a hostile takeover offer or board contest. Votes will generally be recommended against management proposals to give the board the authority to set the size of the board without shareholder approval at a future time.

Term limits for outside directors. Votes will generally be recommended for management proposals to limit terms of outside directors and against shareholder proposals to limit such terms.

Shareholder Access

Management and shareholder proposals to adopt proxy access will be considered case by case. Generally, votes will be recommended for proposals permitting a shareholder or a group of shareholders (which should not be limited to fewer than 20) representing ownership and holdings thresholds of at least 3% of a company's outstanding shares for three years to nominate up to 20% of the seats on the board. Any cap on the number of shareholders that can aggregate to satisfy the 3% outstanding share threshold should not be lower than 20.

Shareholder proposals that have differing thresholds will be considered if the company has not adopted any proxy access provision and does not intend to do so.

Additional Share Classes

The Funds believe that the alignment of voting and economic interests is a foundation of good governance. As such, companies issuing, or proposing to issue, more than one class of stock with different classes carrying different voting rights should bear in mind many investors' "one-share, one-vote" philosophy, while not hindering public capital formation in the equity markets. Furthermore, a newly public, dual-class company should consider adopting a sunset provision that would move the company toward a one-share, one-vote structure over time.

Proposals relating to the introduction of additional share classes with differential voting rights and proposals relating to the elimination of dual-class share structures with differential voting rights will be evaluated case by case.

Defensive Structures

All situations involving defensive structures are reviewed holistically and on a case-by-case basis as facts and circumstances vary widely across issuers and over time.

Shareholder rights plans/poison pills. Votes will generally be recommended against the adoption of poison pill proposals and for shareholder proposals to rescind poison pills, unless company-specific circumstances require that the board and management be provided reasonable time and protection in order to guide the company's strategy without excessive short-term distractions. This analysis would typically require engagements with both the company and the acquirer/activist to understand the proposal.

- Structures and practices that are short-term in nature (typically terms of one year or less) will generally be supported.
- Shareholder ratification of such plans at the next practicable annual meeting and at each subsequent annual meeting while the plan is in place are preferred. In cases where this is not the practice, a shareholder proposal to adopt such practice may be supported.
- Votes will generally be recommended for net operating loss (NOL) poison pills and proposals to amend securities transfer restrictions that are intended to preserve net operating losses that would be lost as a result of a change in control, as long as the NOLs exist, and the provision sets forth a five-year sunset provision.

Consideration of other stakeholder interests. Management proposals to expand or clarify the authority of the board of directors to consider factors outside the interests of shareholders will be evaluated case by case.

Other anti-takeover provisions. In general, votes will be recommended for proposals to create anti-greenmail provisions and eliminate fair price provisions. Votes may be recommended for shareholder proposals to opt out of anti-takeover provisions in state corporation laws where that is allowed.

Voting Requirements

Absent regulatory requirements, the Funds believe that material matters subject to shareholder approval should require support from no more than a majority of the company's shares outstanding. As such, votes will generally be recommended against proposals to adopt supermajority vote requirements and for proposals to reduce or eliminate such requirements.

Special Meetings and Written Consent

If a company does not provide shareholders the right to call a special meeting, votes will generally be recommended for management proposals to establish that right. Votes will also generally be recommended for shareholder proposals to establish this right, as long as the ownership threshold for shareholders to have the right to call a special meeting is not below 10% of current shares outstanding.

If a company already provides shareholders the right to call a special meeting at a threshold of 25% or lower, votes will generally be recommended:

- Against management proposals to increase the ownership threshold above 25%.
- Against shareholder proposals to lower the ownership threshold below the current threshold.

Management proposals to establish the right to act by majority written consent will generally be supported, as will shareholder proposals to adopt this right if shareholders do not have the right to call a special meeting.

Advance Notice of Shareholder Proposals

Votes will generally be recommended for management proposals to adopt advance notice requirements if the provision provides for notice of a minimum of 30 days and a maximum of 120 days before the meeting date and a submission window of at least 30 days prior to the deadline, and reasonable disclosure and ownership requirements that are not overly restrictive or burdensome for shareholders.

Bylaws Amendment Procedures

Votes will generally be recommended against management proposals that give the board the exclusive authority to amend the bylaws.

Change of Company Name

Votes will generally be recommended for proposals to change the company name unless evidence shows that the change would hurt shareholder returns.

Reincorporation

Management proposals to reincorporate to another domicile will be evaluated case by case based on the relative costs and benefits to both the company and shareholders. Considerations include the reasons for the relocation and the differences in regulation, governance, shareholder rights, and potential benefits.

Votes will generally be recommended against shareholder proposals to reincorporate from one domicile to another.

Exclusive Forum/Exclusive Jurisdiction

Management proposals to adopt an exclusive forum provision will be evaluated case by case. Considerations include the reasons for the proposal, regulations, governance, and shareholder rights available in the applicable jurisdiction, and the breadth of the application of the bylaw.

Companies will generally be given latitude on organizational matters and proposals to designate state courts in a company's state of incorporation or principal place of business will generally be supported. Any such choice of a state or federal court should generally be broad-based, rather than limited to a specific court within a state.

Shareholder Meeting Rules and Procedures

Quorum requirements. Votes will generally be recommended against proposals that would decrease quorum requirements for shareholder meetings below a majority of the shares outstanding unless there are compelling arguments to support such a decrease.

Other such matters that may come before the meeting. Votes will generally be recommended against proposals to approve other such matters that may come before the meeting.

Adjournment of a meeting to solicit more votes. In general, votes will be recommended for proposals to adjourn the meeting if the proposals in question are being supported and against such proposals if they are being opposed.

Bundled proposals. Bundled management proposals will be evaluated case by case.

Change in date, time, or location of annual general meeting. Votes will generally be recommended for management proposals to change the date, time, or location of the annual meeting if the proposed changes are reasonable.

Hybrid/virtual meetings. Votes will generally be recommended for proposals seeking permission to conduct "hybrid" meetings (in which shareholders can attend a meeting of the company in person or elect to participate online). Proposals to conduct "virtual-only" meetings (held entirely through online participation with no corresponding in-person meeting) may be supported. Virtual meetings should be designed by a company so as not to curtail shareholder rights—e.g., by limiting the ability for shareholders to ask questions.

APPENDIX B

Proxy Voting Under Vanguard Investor Choice

Vanguard Trust	Vanguard Fund
Vanguard Index Funds	Vanguard 500 Index Fund
Vanguard Index Funds	Vanguard Extended Market Index Fund
Vanguard Index Funds	Vanguard Growth Index Fund
Vanguard Index Funds	Vanguard Large-Cap Index Fund
Vanguard Index Funds	Vanguard Mid-Cap Index Fund
Vanguard Index Funds	Vanguard Value Index Fund
Vanguard Institutional Index Funds	Vanguard Institutional Index Fund
Vanguard Specialized Funds	Vanguard Dividend Appreciation Index Fund
Vanguard Tax-Managed Funds	Vanguard Tax-Managed Capital Appreciation Fund
Vanguard Tax-Managed Funds	Vanguard Tax-Managed Small-Cap Fund
Vanguard Whitehall Funds	Vanguard High Dividend Yield Index Fund
Vanguard Scottsdale Funds	Vanguard Russell 1000 Index Fund
Vanguard Admiral Funds	Vanguard S&P 500 Growth Index Fund
Vanguard Admiral Funds	Vanguard S&P 500 Value Index Fund
Vanguard Admiral Funds	Vanguard S&P Mid-Cap 400 Index Fund
Vanguard Admiral Funds	Vanguard S&P Mid-Cap 400 Growth Index Fund
Vanguard Admiral Funds	Vanguard S&P Mid-Cap 400 Value Index Fund
Vanguard Admiral Funds	Vanguard S&P Mid-Cap 600 Index Fund
Vanguard Admiral Funds	Vanguard S&P Mid-Cap 600 Growth Index Fund
Vanguard Admiral Funds	Vanguard S&P Mid-Cap 600 Value Index Fund
Vanguard World Fund	Vanguard ESG U.S. Stock ETF
Vanguard World Fund	Vanguard Mega Cap Index Fund
Vanguard World Fund	Vanguard Energy Index Fund
Vanguard World Fund	Vanguard Materials Index Fund
Vanguard World Fund	Vanguard Industrials Index Fund
Vanguard World Fund	Vanguard Consumer Discretionary Index Fund
Vanguard World Fund	Vanguard Consumer Staples Index Fund
Vanguard World Fund	Vanguard Health Care Index Fund
Vanguard World Fund	Vanguard Financials Index Fund
Vanguard World Fund	Vanguard Information Technology Index Fund
Vanguard World Fund	Vanguard Communication Services Index Fund
Vanguard World Fund	Vanguard Utilities Index Fund

As approved by the boards of trustees of the above-listed Vanguard trusts (the Boards), Vanguard Investor Choice (Investor Choice) is offered as a program in the above-listed Vanguard funds (Participating Funds). With Investor Choice, shareholders of Participating Funds may choose from among a number of different proxy voting policies through which they may direct how their pro-rata ownership interest in Participating Funds, as of the record date of each portfolio company shareholder meeting within such Participating Funds that occurs after the shareholder has selected a proxy voting policy, will vote on proposals presented for a vote at those shareholder meetings. Certain portfolio company meetings may be excluded as a result of operational issues or other infrequent events where it is determined, based on the facts and circumstances known to Vanguard at the time of the vote, that it is in the best interests of a Participating Fund and its shareholders to apply a consistent vote to all of the Participating Fund's shares at a particular meeting, including instances where it is necessary to preserve a Participating Fund's rights.

If you hold shares of a Participating Fund in a Vanguard account, you may participate directly through your Vanguard account. If you hold shares of a Participating Fund outside of a Vanguard account, you may select a policy by visiting proxyvote.com to verify that you are a Participating Fund shareholder. If you hold shares of a Participating Fund outside of a Vanguard account and Broadridge Financial Solutions (Broadridge) has your contact information and information regarding your pro-rata ownership interest in a Participating Fund, you may receive a communication accompanying the semiannual shareholder reports for each Participating Fund for which you hold shares. These communications will contain an invitation and an embedded link that will enable you to select a proxy voting policy.

If you hold shares of a Participating Fund and do not select a proxy voting policy, the proportionate share of your holdings in the Participating Fund will continue to be voted in accordance with the relevant Fund Proxy Policy (see *Overview of Proxy Voting Policies for Participating Funds* below). As a Participating Fund shareholder, you may change your proxy voting policy selection. You should expect a reasonable delay after any selection is made before it is implemented.

Overview of Proxy Voting Policies for Participating Funds

There are five proxy voting policies that reflect a range of defined proxy voting approaches from which Participating Fund shareholders may choose. The five proxy voting policies are: (i) a Company Board-Aligned Policy; (ii) a third-party policy provided by Egan-Jones Proxy Services (Egan-Jones Wealth-Focused Policy); (iii) a third-party policy provided by Glass Lewis & Co., LLC (Glass Lewis ESG Policy); (iv) a Mirror Voting Policy; and (v) the Fund Proxy Policy for either VCM or VPM Funds, as appropriate, which has been adopted by the trustees of the relevant Vanguard fund and will be administered by the relevant Investment Stewardship Team (the VCM Investment Stewardship Team or the VPM Investment Stewardship Team, as appropriate).

If a proxy voting policy becomes unavailable, the pro-rata ownership position of any Participating Fund shareholders who have selected such policy will be voted in accordance with the relevant Fund Proxy Policy. In addition, the Boards may determine it is in the best interests of Participating Fund shareholders to use a different provider for a proxy voting policy that is substantially the same as one of the policies described below.

- *Company Board-Aligned Policy.* The pro-rata ownership position of Participating Fund shareholders that select the Company Board-Aligned Policy will be voted in accordance with the recommendations on each proposal made by the portfolio company's board of directors pursuant to the board's own fiduciary duty to act in the best interest of the company's shareholders. In the absence of a recommendation from the portfolio company's board on a specific proposal, the Participating Fund will cast an ABSTAIN vote on that shareholder's behalf.
- *Egan-Jones Wealth-Focused Policy:* The pro-rata ownership position of Participating Fund shareholders that select the Egan-Jones Wealth-Focused Policy will be voted according to proxy voting recommendations from Egan-Jones Proxy Services, a third-party proxy advisor, that is based on the belief, as described by Egan-Jones, that maximizing shareholder value should be the primary focus of corporate governance and management decisions, without being influenced by political or social agendas. This policy by rule rejects proposals based on environmental, social, or political considerations unless they directly contribute to revenue generation at the company receiving the proposal.

  This description is qualified in its entirety by reference to the full text of the Egan-Jones Wealth-Focused Policy, which is included below, and details common items to be voted on by shareholders at company meetings, and the criteria used under the policy to analyze such proposals and determine a recommendation.
- *Glass Lewis ESG Policy:* The pro-rata ownership position of Participating Fund shareholders that select the Glass Lewis ESG Policy will be voted according to proxy voting recommendations from Glass Lewis & Co., LLC, a third-party proxy advisor, that is based on the belief, as described by Glass Lewis, that enhanced disclosures of company policies and practices related to certain environmental, social, and/or governance issues could mitigate company risks and create operational opportunities.

  This description is qualified in its entirety by reference to the full text of the Glass Lewis ESG Policy, which is included below, and details common items to be voted on by shareholders at company meetings, and the criteria used under the policy to analyze such proposals and determine a recommendation.
- *Mirror Voting Policy:* The pro-rata ownership position of Participating Fund shareholders that select the Mirror Voting Policy will be voted in approximately the same proportions as votes cast for the meeting by other shareholders of the security. In instances where proportionate voting cannot be reasonably executed due to operational considerations or other issues, inclusive of meetings at which the election of directors is contested, the Participating Fund will leave your proportionate share unvoted.

  The proportionate votes will be based on the votes that have been cast by beneficial owners of a portfolio security in

Broadridge's network generally as of the day prior to the applicable meeting and, as such, will not reflect all votes that are ultimately cast at the meeting.

- *Fund Proxy Policy:* See the relevant Fund Proxy Policy, which is included in *Appendix A* of the Statement of Additional Information for each Participating Fund above.

Retention of Policy Selections for Participating Funds

The policy selections of Participating Fund shareholders that make a policy selection will be retained and may be applied to any future funds participating in Investor Choice that are held by such Participating Fund shareholder within any account where such shareholder is a primary or joint account holder or trustee, so long as such policy selection is still available or a substantially similar policy is approved by the Boards and is included as a policy option.

Additional Proxy Policies for Participating Funds

Company Board-Aligned Policy

Under this policy, proportionate positions will be voted in accordance with the recommendations on each proposal made by the portfolio company's board of directors pursuant to the board's own fiduciary duty to act in the best interest of the company's shareholders. In the absence of a recommendation from the portfolio company's board on a specific proposal, the Participating Fund will cast ABSTAIN votes on the shareholder's behalf.

Egan-Jones
PROXY SERVICES

Wealth-Focused Policy Overview

Effective for shareholder meetings held on or after March 1, 2026
Published December 12, 2025



I. Wealth-Focused Policy Overview

Recommendations are based only on protecting and enhancing investor wealth.

Unlike conventional ESG frameworks that impose uniform governance and sustainability standards, this policy's guiding philosophy is to allow management the freedom to manage, while holding directors accountable for poor returns to shareholders. The policy is not a "board-aligned" policy because directors with poor impact on shareholder returns will be opposed.

Restrictive governance and environmental protection proposals are generally opposed. Proposals promoting diversity, equity, and inclusion are also opposed. Exceptions only exist when proposals are directly tailored to revenue generation.

Director elections

The Wealth-Focused Policy generally supports nominees with a record of responsible leadership, including attending at least 75% of board and committee meetings. Additionally, the TSR of the Company over the director's tenure is a primary consideration.

Director and executive compensation

The Wealth-Focused Policy supports compensation packages that are in alignment with total shareholder returns. Higher compensation packages are supported if significant shareholder returns have also been delivered.

Governance

The Wealth-Focused Policy generally supports removing board governance restrictions such as splitting CEO and chairman roles, term limits, and area expertise. Likewise, the Wealth-Focused Policy would generally oppose proposals for greater restrictions. The goal is to avoid excluding qualified board members who could drive shareholder returns.

Corporate operations (including human resources, health, safety, and environment)

The Wealth-Focused Policy generally rejects proposals to restrict the operations of the company, including with regards to hiring practices, environmental reporting, or political contributions. The goal is to rely on management and the board to effectively run the company's operations. Poor shareholder returns due to operational failures will be considered during compensation votes and director elections.

Procedure

The Wealth-Focused Policy generally supports routine and procedural proposals such as those to tabulate proxy voting, elect a clerk, or approve the previous board's actions, so as to not be obstructive to standard practices.

Auditors

The Wealth-Focused Policy generally supports management's proposed auditor, given that the auditor does not generate outsized non-audit or total audit fees from the company. The goal is to support independent auditors.

Shareholder rights

The Wealth-Focused Policy generally supports broader shareholder rights such as equal voting rights and requiring shareholder approval for bylaw amendments. However, the policy will generally oppose proposals that give shareholders the ability to request fundamental changes to the business operations of the company, such as restructuring. The goal is to allow management and the board to make key business decisions, while enabling shareholders to hold them accountable.

Mergers, acquisitions, and restructuring

The Wealth-Focused Policy supports proposals with a high probability of yielding outsized returns for investors. The fairness opinion by a qualified investment banker or advisor is carefully considered for these proposals.

Capitalization

The Wealth-Focused Policy generally supports managements' recommendations on the capitalization of the company. The goal is to rely on the expertise of the CEO and CFO. Poor shareholder returns due to capitalization failures will be considered during compensation votes and director elections. Excessive dilution for compensation plans is not supported unless directly tied to shareholder returns.

II. Notable Recommendations

View recommendations of the Wealth-Focused Policy from prior meetings.

Phillips 66

Annual Meeting
May 21, 2025
Opposition Proposal: Election of Directors

Egan-Jones' Wealth-Focused policy recommends FOR the Elliott Nominees, as we believe their election is in the best interests of the Company and its shareholders. Over the past five years, PSX's total shareholder return (TSR) has lagged its refining and midstream peers as well as the broader market. Additionally, the Company's substantial financial losses have been driven largely by elevated operating expenses, particularly in labor, maintenance, and energy. We agree with the dissidents that a strategic shift—refocusing on core assets, especially within the refining segment—is necessary to enhance performance and support long-term value creation.

Harley-Davidson, Inc.

Annual Meeting
May 14, 2025
Management Proposal: Election of Directors

Egan-Jones' Wealth-Focused policy recommends WITHHOLDING votes from management's nominees for this withhold campaign. Harley-Davidson yielded -11% returns for investors over the same five-year period in which total market returns were 94%. We therefore recommend withholding votes from three long-standing directors as well as the CEO who have overseen long-term sustained underperformance of the Company.

Tesla Inc.

Annual Meeting
November 6, 2025
Management Proposal: Approval of the 2025 CEO Performance Award

Egan-Jones' Wealth-Focused policy recommends FOR this proposal. While the potential dilution from the 2025 CEO Performance Award is estimated at 12.75%, which exceeds our typical threshold of shareholder equity dilution, we believe an exception is warranted in this case due to the highly performance-based structure of the potential awards to Mr. Elon Musk and the lengthy period over which these shares will be granted. If the full number of shares is granted over the next 10 years, the annual depletion rate each year will only be approximately 1.3%. Additionally, the combination of performance conditions and time-based vesting requirements is designed to align Mr. Musk's compensation with long-term shareholder value creation. If Mr. Musk meets the requirements for all twelve tranches of the CEO Performance Award, shareholders of Tesla will see an approximate 700% increase in the value of their stock within 10 years. Hence, we believe that the 2025 Performance CEO Award is aligned with shareholders' interests.

AMC Entertainment Holdings, Inc.

Annual Meeting
December 10, 2025
Management Proposal: Advisory Vote to Approve Executive Compensation

Egan-Jones' Wealth-Focused policy recommends AGAINST AMC Holdings' say-on-pay proposal as we do not believe the compensation amount is in alignment with shareholders' interests. Specifically, we review the total compensation of the highest paid NEO as compared to Company performance (as measured by TSR). In this case, the TSR during 2024 was -34.8% while the total compensation of the CEO was over $11 million.

Alphabet Inc.

Annual Meeting
June 6, 2025
Shareholder Proposal: Regarding an Enhanced Disclosure on Climate Goals

Egan-Jones' Wealth-Focused policy recommends AGAINST this enhanced disclosure. Considering the Company already provides extensive disclosure regarding its climate strategy, goals, challenges, and risk-management processes in its annual Environmental Report, we believe that the shareholder proposal is redundant and will not create additional benefits or value for the shareholders.

Apple, Inc.

Annual Meeting
February 25, 2025
Shareholder Proposal: Report on Risks and Impacts of Charitable Giving

Egan-Jones' Wealth-Focused policy recommends AGAINST this report. Apple already has a well-governed corporate donations program, including strict safeguards such as prohibiting the use of funds for lobbying or political campaigns. The company regularly discloses its charitable activities, making the requested additional report redundant and unlikely to provide meaningful shareholder benefit, while unnecessarily intruding into Apple's ordinary business operations.

Amazon.com, Inc.

Annual Meeting
May 21, 2025
Shareholder Proposal: Audit Report on Warehouse Working Conditions

Egan-Jones' Wealth-Focused policy recommends AGAINST. Considering Amazon has demonstrated a robust commitment to workplace safety, supported by measurable improvements in injury rates and extensive regulatory oversight, we believe that the proposed independent audit is unnecessary. Additionally, commissioning an audit could create legal and reputational risks by implying potential violations and providing a roadmap for future litigation, ultimately exposing shareholders to substantial long-term costs.

Comcast Corporation

Annual Meeting
June 18, 2025
Shareholder Proposal: Adopt Policy for an Independent Chairman

Egan-Jones' Wealth-Focused policy recommends AGAINST. Egan-Jones' Wealth-Focused policy recommends AGAINST because we believe that having an independent chairman is not a one-size-fits-all principle. We believe that the Board should have flexibility in determining a leadership structure that is conducive to the company's goal of maximizing shareholder value.

International Business Machines Corp. (IBM)

Annual Meeting
April 29, 2025
Shareholder Proposal: Report on Hiring/Recruitment Discrimination

Egan-Jones' Wealth-Focused policy recommends AGAINST because we believe that IBM already maintains transparent, legally compliant, and non-discriminatory hiring practices. As such, producing the requested report would be unnecessary, burdensome, and divert resources from more meaningful priorities.

Exxon Mobil Corporation

Annual Meeting
May 28, 2025
Management Proposal: Ratify the Appointment of Independent Auditor

Egan-Jones' Wealth-Focused policy recommends FOR the ratification of PricewaterhouseCoopers LLP as auditors, as we believe that neither the audit fees for the most recent fiscal year nor the disciplinary actions taken against the firm over the past decade raise concerns about the auditor's integrity, professionalism, or independence.

Eli Lilly and Company

Annual Meeting
May 5, 2025
Management Proposal: Proposal to Amend the Company's Articles of Incorporation to Eliminate Supermajority Voting Provisions

Egan-Jones' Wealth-Focused policy recommends FOR the elimination of supermajority voting provisions in the Company's Articles of Incorporation, as they grant disproportionate power to a minority of shareholders. Adopting a simple majority standard would ensure equal and fair representation for all shareholders and enable a more meaningful voting process.

Core Scientific, Inc.

Special Meeting
October 30, 2025
Management Proposal: Approval of the Agreement and Plan of Merger

Egan-Jones' Wealth-Focused policy recommends AGAINST the merger of Core Scientific with CoreWeave. We believe that while the proposed merger may offer operational synergies, the terms of the transaction materially undervalue Core Scientific relative to its intrinsic potential and the stock price. Additionally, given the all-stock nature of the transaction and the volatile share price of CoreWeave, the transaction is highly risky for Core Scientific shareholders. Given the company's strong fundamentals, long-term contracts, and clear growth trajectory as a standalone entity, we believe shareholders are better served by rejecting the current offer.

ProPhase Labs, Inc.

Annual Meeting
November 24, 2025
Management Proposal: Authorization for Amendment to Authorize Additional Shares

Egan-Jones' Wealth-Focused policy recommends FOR the issuance of additional shares of common stock because we generally support proposals to issue more shares when the new proposed stock is less than 50% of total authorized shares of common stock, or when the increase is tied to a specific transaction or financing proposal or when the share pool was used up due to equity plans. The Company seeks to increase its authorized common stock to ensure sufficient unissued shares to satisfy obligations under its $3 million 20% OID senior secured promissory note and related July 2025 warrants. We believe this purpose is reasonable and therefore fair and advisable to shareholders.

III. Detailed vote recommendations

View recommendations per category and region.

Proposals by management | Accounting

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Accept an accounting irregularity	World		We generally recommend FOR because according to our policy, the financial statements give a true and fair view of the financial position of the Company for the recent fiscal year, and of its financial performance and its cash flows for the year then ended in accordance with the law.
Accept the financial statements/statutory report	World	North America	We generally recommend FOR because according to our policy, the financial statements give a true and fair view of the financial position of the Company for the recent fiscal year, and of its financial performance and its cash flows for the year then ended in accordance with the law.
Approve a special transactions financial report	China, Western Europe, Latin America		We recommend FOR this Proposal, because according to our policy, approving the special transactions financial report ensures transparency and gives shareholders a clear overview of significant transactions, supporting informed decision-making.
Receive the annual report and accounts	World	North America	We generally recommend FOR because according to our policy, the financial statements give a true and fair view of the financial position of the Company for the recent fiscal year, and of its financial performance and its cash flows for the year then ended in accordance with the law.

Proposals by management | Auditor

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Approve the discharge of the auditors	Western Europe		We generally recommend FOR because after reviewing the auditor acts for the fiscal year that has ended, we find it advisable to grant discharge from liability to the auditors.
Ratify auditor AND director remuneration	World	United States	We generally recommend FOR the auditor when the non-audit fees do not make up a substantial proportion of all fees the auditor is charging the company and when the total audit fees are reasonable given the company's size. The purpose is to maintain some independence for the auditor.
Ratify auditor appointment and remuneration	Emerging & Frontier Asia-Pacific, Western Europe		We generally recommend FOR the auditor when the non-audit fees do not make up a substantial proportion of all fees the auditor is charging the company and when the total audit fees are reasonable given the company's size. The purpose is to maintain some independence for the auditor.
Ratify the appointment of a non-statutory auditor	World		We recommend FOR this Proposal, because according to our policy, ratifying the appointment of a non-statutory auditor strengthens oversight and reinforces the integrity of reporting.
Ratify the appointment of a special transactions auditor	China, Western Europe, Latin America		We recommend FOR this Proposal, because according to our policy, ratifying the appointment of a special transactions auditor ensures independent review of significant transactions and strengthens disclosure and transparency.
Ratify the appointment of an auditor	World		We generally recommend FOR the auditor when the non-audit fees do not make up a substantial proportion of all fees the auditor is charging the company and when the total audit fees are reasonable given the company's size. The purpose is to maintain some independence for the auditor.

Ratify the appointment of statutory AND sustainability auditors	Western Europe		We recommend AGAINST this Proposal, because according to our policy, ratifying the appointment of statutory and sustainability auditors may not directly align with the priorities of shareholders, as the proposal emphasizes ESG and non-financial reporting oversight rather than measures that drive immediate financial returns or shareholder value.
Remove the auditor	World		We generally recommend a vote FOR the removal of the auditors whenever the Company may deem it necessary to ensure auditor independence and integrity.

Proposals by management | Capitalization

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Allot securities	Western Europe		We generally recommend FOR because according to our policy, the allotment of shares or securities will enable the Company to capitalize on future business opportunities. This flexibility provides the Company with the ability to act promptly and strategically to business decisions, ensuring it remains competitive and well-positioned for long-term success.
Appropriate profits/surplus/retained earnings	World	North America	We recommend FOR this Proposal, because according to our policy, allocating corporate earnings through appropriate distribution of profits, surplus, or retained earnings supports shareholder interests and long-term value creation.
Approve a share repurchase plan	Emerging & Frontier Asia-Pacific, Western Europe		We generally recommend a vote FOR because according to our policy, the proposed share repurchase plan would grant the Company greater flexibility in managing its capital structure. Furthermore, share repurchases are widely regarded as an effective strategy for enhancing shareholder value and financial position of companies.
Approve a stock exchange listing	World		We generally recommend FOR because according to our policy, approval of the stock exchange listing would create investment opportunities for the Company and provide greater liquidity while diversifying the risks associated with it.
Approve a stock terms revision	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve adjustment in the share repurchase price	Emerging & Frontier Asia-Pacific		We recommend FOR this Proposal, because according to our policy, allocating corporate earnings through appropriate distribution of profits, surplus, or retained earnings supports shareholder interests and long-term value creation.

Approve capital utilization/cash management	Emerging & Frontier Asia-Pacific		We recommend FOR this Proposal, because according to our policy, the proposed capital or cash utilization enables the company to support its strategic initiatives and efficiently finance its operations.
Approve credit and/or debt financing	Emerging & Frontier Asia-Pacific		We recommend FOR this Proposal, because according to our policy, approving credit or debt financing provides the company with the necessary capital to support strategic initiatives, maintain liquidity, and ensure financial flexibility.
Approve dividends	World	North America	We generally recommend FOR this Proposal, because according to our policy, the proposed dividend distribution is financially prudent, maintains sufficient liquidity, and supports consistent shareholder returns.
Change share par value	World		We generally recommend FOR when the new par value is less than or equal to old par value.
Conduct a stock split	World		We generally recommend FOR because according to our policy, the proposed reverse stock split would make the Company's common stock a more attractive and cost-effective investment for many investors, thereby enhancing the liquidity of current stockholders and potentially broadening the investor base.
Distribute profit/dividend/etc according to a sharing plan	World	North America	We generally recommend FOR because according to our policy, the proposed distribution plan will not put the company´s liquidity at risk.
Exchange debt for equity	World		We generally recommend a vote FOR because according to our policy, the proposed exchange of debt for equity would strengthen the Company's financial position by reducing its liabilities, improving its balance sheet and enhancing its creditworthiness.
Increase authorized shares	World	Brazil	We generally recommend FOR except when one of the following conditions is met: 1) The new proposed stock is >50% of total authorized shares of common stock; 2) The increase is NOT tied to a specific transaction or financing proposal; and 3) The Share pool was NOT used up due to equity plans.

Increase authorized shares	Brazil		We generally recommend FOR except when one of the following conditions is met: 1) The increase is NOT tied to a specific transaction or financing proposal; and 2) The Share pool was NOT used up due to equity plans.
Issue bonds	World		We generally recommend FOR because according to our policy, approval of this proposal will give the Company greater flexibility in considering and planning for future corporate needs, including, but not limited to, stock dividends, grants under equity compensation plans, stock splits, financings, potential strategic transactions, including mergers, acquisitions, and business combinations, as well as other general corporate transactions.
Issue shares	World		We generally recommend FOR when there is a purpose for the share issuance and when the shareholder rights on the issued shares will not be superior to outstanding shares.
Issue shares below NAV	World		We generally recommend FOR because according to our policy, issuing shares below net asset value (NAV) would provide the Fund with flexibility in raising capital, reducing debt, preventing insolvency, and funding strategic acquisitions or growth opportunities. While it typically leads to dilution, a discounted issuance can be used in ways that may ultimately enhance shareholder value, improve financial stability, and position the company for long-term success.
Issue shares upon exercise of warrants	World		We generally recommend FOR because according to our policy, the proposed issuance of shares will provide the Company with a source of capital to fund its corporate endeavors and activities.
Re-price options	World		We generally recommend FOR re-pricing options when external and uncontrollable market factors caused the stock price to decrease.
Repurchase and/or cancel shares	Emerging & Frontier Asia-Pacific, Western Europe		We recommend FOR this Proposal because, according to our policy, share repurchase/cancellation can enhance

			shareholder value and provide the company with flexibility in managing its capital effectively.
Repurchase bonds	World		We recommend FOR this Proposal because, according to our policy, repurchase of bonds allows the company to manage its debt efficiently, reduce interest expenses, and optimize its capital structure, ultimately supporting financial flexibility and long-term shareholder value.
Create a new class of shares	World		We generally recommend FOR these proposals when the new class of shares to be created will not have blank-check authority and will not have superior voting rights to the existing class of shares.
Reclassify/convert shares	World		We generally recommend FOR if the conversion would provide equal rights to shareholders.

Proposals by management | Climate/Resources

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Approve the sustainability auditor	Western Europe		We generally recommend a vote AGAINST because according to our policy, the appointment of a separate sustainability auditor is unwarranted, given that the Company already integrates sustainability into its existing audit process. The Company's current approach effectively addresses sustainability concerns without the need for additional oversight. Furthermore, approval of this proposal would impose unnecessary costs and administrative burdens, diverting resources from other critical business priorities.
Approve the sustainability report	Western Europe, Australia		We generally recommend a vote AGAINST because, according to our policy, approval of this proposal would result in the Company incurring unnecessary costs and expenses by duplicating efforts that are already underway.

Proposals by management | Compensation

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Advise on executive compensation (say-on-pay)	World		We generally recommend FOR when the total compensation is reasonable considering the company's performance as measured by change in adjusted stock price.
Approve a stock compensation plan (non-SPAC)	United States		We generally recommend FOR when the plan results in dilution of 10% or less and when the average burn rate over the last three years is 3% or less (or the company has been public for five years or less).
Approve a stock compensation plan (non-SPAC)	World	United States	We generally recommend FOR when the plan results in dilution of 10% or less.
Approve a stock compensation plan (SPAC)	World		We recommend a vote AGAINST this proposal because according to our policy, this proposal would dilute shareholder value in this special purpose acquisition company and is therefore not in the shareholders' best interests. Because the company is a SPAC, management is already highly incentivized through founder shares and warrants, and an incentive stock option plan would be unnecessary and potentially excessive.
Approve an employee stock purchase plan	World		We generally recommend FOR when the plan is qualified under Section 423(c) or has dilution of 10% or less and when there is no evergreen provision.
Approve an employment/management /severance/partnership agreement	Emerging & Frontier Asia-Pacific, Western Europe		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve bonuses	Western Europe, Australia, Israel		We generally recommend FOR when the total compensation is reasonable considering the company's performance as measured by change in adjusted stock price.
Approve executive/director/related party transactions	Western Europe		We generally recommend FOR because according to our policy, the related party transaction is advisable, substantively and

			procedurally fair to, and in the best interests of the Company and its shareholders.
Approve future executive remuneration	Western Europe, Eastern Europe & Central Asia, Middle East & North Africa		We generally recommend FOR when the proposed compensation includes performance-based metrics.
Approve other compensation	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve the executive compensation policy	Middle East & North Africa, Western Europe, Eastern Europe & Central Asia		We generally recommend FOR when the total compensation is reasonable considering the company's performance as measured by change in adjusted stock price.
Approve the non-executive directors' compensation	Emerging & Frontier Asia-Pacific, Western Europe, Eastern Europe & Central Asia		We recommend FOR this Proposal, because according to our policy, the proposed non-executive directors' compensation is commensurate with their contributions and supports the company in remaining competitive in attracting and retaining skilled board members.
Decide the frequency of the executive compensation vote	World		We generally recommend an annual frequency for the say-on-pay vote.
Reduce the legal reserve	Emerging & Frontier Asia-Pacific, Western Europe, Developed Asia-Pacific		We generally recommend FOR because according to our policy, the proposed reduction of legal reserves is commensurate with the Company's current financial position and would strengthen its cashflow.

Proposals by management | Directors

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Allow for the removal of directors only with cause	World		We generally recommend AGAINST the proposal because according to our policy, directors should be removed with or without cause. This level of flexibility allows the Company to make necessary changes to its leadership when deemed appropriate. Allowing for the removal of directors with or without cause ensures that the Board can effectively address issues such as performance concerns and maintain the best interests of the Company and its shareholders.
Allow for the removal of directors without cause	World		We generally recommend a vote FOR because according to our policy, allowing shareholders to remove a director without cause enhances accountability and strengthens shareholder rights. This provision empowers shareholders to take action if they believe a director is not acting in the best interests of the company, ensuring greater transparency and governance.
Approve director indemnification	World		We generally recommend FOR because according to our policy, approval of director indemnification would enable the Company to provide a greater scope of protection to directors in cases of litigations. Further, such a provision would also help the Company to attract, retain and motivate its directors whose efforts are essential to the Company's success.
Approve director liability insurance	World		We generally recommend FOR because according to our policy, approval of director liability insurance would enable the Company to provide a greater scope of protection to directors in cases of litigations. Further, such a provision would also help the Company to attract, retain and motivate its directors whose efforts are essential to the Company's success.
Approve election and remuneration for the executive director(s)	Developed Asia-Pacific,		We generally recommend FOR when the director(s) passes our election of director test and the executive compensation passes our test.

	Western Europe		If any director or the executive compensation does not pass our tests, we will recommend against the proposal.
Approve election and remuneration for the non-executive director(s)	Developed Asia-Pacific, Western Europe		We generally recommend FOR when the change in adjusted stock price over the director's tenure is not poor (given that the director tenure is at least three years) and when the candidate attended at least 75% of all board and committee meetings.
Approve financial statements and discharge directors	Western Europe, Eastern Europe & Central Asia		We generally recommend FOR because according to our policy, the financial statements give a true and fair view of the financial position of the Company for the recent fiscal year, and of its financial performance and its cash flows for the year then ended in accordance with the law.
Approve the directors' report	Western Europe, Eastern Europe & Central Asia		We generally recommend FOR because approval of the directors' report is in the best interests of the Company and its shareholders.
Approve the discharge of the board and president	Western Europe, Eastern Europe & Central Asia		We generally recommend FOR because according to our policy, we find no breach of fiduciary duty that compromised the Company and shareholders' interests for the fiscal year that has ended.
Approve the discharge of the management board	Western Europe, Eastern Europe & Central Asia		We generally recommend FOR because according to our policy, we find no breach of fiduciary duty that compromised the Company and shareholders' interests for the fiscal year that has ended.
Approve the discharge of the supervisory board	Western Europe, Eastern Europe & Central Asia		We generally recommend FOR because according to our policy, we find no breach of fiduciary duty that compromised the Company and shareholders' interests for the fiscal year that has ended.
Approve the previous board's actions	Western Europe, Eastern Europe & Central Asia		We generally recommend FOR because according to our policy, we find no breach of fiduciary duty that compromised the Company and shareholders' interests for the fiscal year that has ended.
Approve the spill resolution	Australia		We generally recommend FOR this resolution when the company has failed our executive compensation test.

Authorize exculpation of officers (DGCL)	World		We generally recommend a vote FOR because according to our policy, implementation of the exculpation provision pursuant to Delaware Law will enable the Company to attract, retain and motivate its officers whose efforts are essential to the Company's success. Additionally, Delaware's exculpation law strikes a balanced approach, offering protection to directors while ensuring accountability for significant breaches of their fiduciary duties.
Authorize the board to execute legal formalities	Western Europe, Eastern Europe & Central Asia, Emerging & Frontier Asia-Pacific		We generally recommend FOR because approval of the proposal is necessary in order to carry out the legal formalities related to the meeting.
Authorize the board to fill vacancies	World		We generally recommend FOR if the appointees will face a shareholder vote at the next annual meeting.
Change the size of the board of directors	World		We generally recommend FOR if the board size is between 5 and 15.
Classify the board	World		We generally recommend AGAINST because according to our policy, staggered terms for directors increase the difficulty for shareholders to make fundamental changes to the composition and behavior of a board. We prefer that the entire board of a company be elected annually to provide appropriate responsiveness to shareholders.
Declassify the board	World		We generally recommend FOR because according to our policy, staggered terms for directors increase the difficulty for shareholders to make fundamental changes to the composition and behavior of a board. We prefer that the entire board of a company be elected annually to provide appropriate responsiveness to shareholders.
Delegate authority to a committee	Western Europe		We generally recommend FOR because the delegation of authority to the committee is in the best interests of the Company and its shareholders.

Elect a company clerk/secretary	Western Europe, Eastern Europe & Central Asia		We generally recommend FOR because according to our policy, the nominee appears qualified.
Elect a director to board	World		We generally recommend FOR when the change in adjusted stock price over the director's tenure is not poor (given that the director tenure is at least three years) and when the candidate attended at least 75% of all board and committee meetings.
Elect a director to committee	World		We generally recommend FOR when the change in adjusted stock price over the director's tenure is not poor (given that the director tenure is at least three years) and when the candidate attended at least 75% of all board and committee meetings.
Elect directors and appoint the auditor	Western Europe		We generally recommend FOR when the director(s) passes our election of director test and the auditor passes our auditor ratification test. If any director or the auditor does not pass our tests, we will recommend against the proposal.
Elect directors and fix the number of directors	Canada, Western Europe		We generally recommend FOR when the change in adjusted stock price over the director's tenure is not poor (given that the director tenure is at least three years) and when the candidate attended at least 75% of all board and committee meetings.
Elect multiple directors to the board	World	United States, United Kingdom	We generally recommend FOR when each director passes our election of director test. If any director does not pass this test, we will recommend against the proposal.
Eliminate the retirement age requirement	World		We generally recommend FOR this proposal because, in accordance with our policy, the Company and its shareholders are in the best position to determine the approach to corporate governance, particularly board composition. Imposing inflexible rules, such as age limits for outside directors, does not necessarily correlate with returns or benefits for shareholders. Similar to arbitrary term limits, age limits could force valuable directors off the board solely based on

			their age, potentially undermining the effectiveness of the board.
Fix the number of directors	Canada, Western Europe		We generally recommend FOR if the board size is between 5 and 15.
Receive the directors' report	World	North America	We generally recommend FOR because according to our policy, the financial statements give a true and fair view of the financial position of the Company for the recent fiscal year, and of its financial performance and its cash flows for the year that has ended.

Proposals by management | Legal and compliance

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt an exclusive forum for disputes	World		We generally recommend FOR because according to our policy, having an exclusive forum will allow the Company to address disputes and litigations in an exclusive jurisdiction, with familiarity of the law, and reduce the administrative cost and burden related to settlement.

Proposals by management | M&A / Structure

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt an anti-greenmail provision	World		We generally recommend FOR because according to our policy, the adoption of an anti-greenmail provision will prevent the likelihood of potential hostile takeover which could be detrimental to the shareholders' interests.
Advise on merger related compensation	World		We generally recommend FOR when 1) the total severance package doesn't exceed 3X the previous year's CAP for the highest paid NEO.
Approve a joint venture agreement	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve a liquidation plan	World		We generally recommend FOR if the following conditions are met: the transaction is the best strategic alternative for the company and the appraisal value is fair.
Approve an anti-takeover measure(s)	Australia		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve an extension amendment proposal (for SPACs)	World		We generally recommend FOR when the trust deposit payment is not less than the previous trust deposit payment.
Approve an M&A agreement (sale or purchase)	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve an M&A-related share issuance	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve an opt-out plan	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve the restructuring plan	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Change the domicile / jurisdiction of incorporation	World		We generally recommend FOR because according to our policy, changing the Company's legal domicile is necessary to align the legal structure of the Company in a manner that is more consistent with their business objectives.
Proceed with bankruptcy	World		We generally recommend FOR because according to our policy, approval of the bankruptcy plan is the best available alternative

			in order for the Company to provide a reasonable value for its shareholders.
Remove an antitakeover provision(s)	World		We recommend FOR this Proposal, because, according to our policy, the removal of the antitakeover provision can increase shareholder value by enhancing market responsiveness and facilitating potential takeovers that may lead to premium buyouts.
Ratify a poison pill	World		We generally recommend a vote FOR because according to our policy, approval of the proposal will acknowledge both the advantages and inherent risks of implementing a shareholder rights plan, or poison pill. While these plans can deter hostile takeovers, they also carry the risk of management entrenchment in some cases. Ensuring that shareholders are given a voice on the advisability of such a plan is crucial to safeguarding the Company from these risks, promoting transparency, and maintaining a balance between protecting shareholder interests and preventing potential misuse of the plan.

Proposals by management | Meeting and Proxy Statement

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt notice and access provisions	World		We generally recommend FOR because according to our policy, approval of the notice and access provision would provide shareholders with sufficient disclosure and ample time to make informed decisions regarding the election of directors at shareholder meetings. This provision ensures that shareholders have the opportunity to review relevant information regarding the nominees, the Company's performance, and other important matters, therefore enabling the shareholders to participate meaningfully in the governance process.
Approve administrative and/or procedural items	World		We recommend FOR this Proposal, because according to our policy, approving administrative and procedural items related to the convening of shareholder meetings ensures proper organization, compliance with governance requirements, and smooth conduct of proceedings.
Change the location/date/time of a shareholder meeting	World		We generally recommend FOR because according to our policy, the proposed change will increase the likelihood of increased attendance rate in meetings, not to mention the benefits of flexibility and improved accessibility to shareholders.
Indicate if you are a controlling shareholder or have a personal interest in the proposal	Canada, Israel, Latin America		This test will indicate NO if the shareholder is not a controlling shareholder and does not have a personal interest in the approval of this proposal.

Proposals by management | Mutual Fund

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt an investment policy	World		We generally recommend FOR if the investment strategy is cogent.
Approve the company as investment trust	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve the fundamental investment objective	World		We generally recommend FOR because according to our policy, a fundamental investment objective for funds will ensure that any revision or matter related to the fund's activities will be brought up for shareholder approval, thereby protecting their interests as shareowners. By involving shareholders in key decisions, the Company reinforces transparency, accountability, and the protection of shareholder value.
Approve the investment advisory agreement	World		We generally recommend FOR if the following conditions are met: the investment fees are reasonable (3% or less) and the investment strategy is cogent.
Approve the non-fundamental investment objective	World		We generally recommend AGAINST because according to our policy, a fundamental investment objective for funds will ensure that any revision or matter related to the fund's activities will be brought up for shareholder approval, thereby protecting their interests as shareowners.
Approve the reorganization	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve the sub-investment advisory agreement	World		We generally recommend FOR sub-investment advisory agreements when the sub-advisory fees are paid by the primary adviser and the investment strategy is cogent.
Change the fund's fundamental restriction to non-fundamental	World		We generally recommend AGAINST because according to our policy, approval of the proposal would increase the Fund's exposure to significant losses arising from investment in high-risk assets. Moreover, contrary to a

			fundamental investment restriction, non-fundamental investment restrictions are often focused on short-term investing which is subject to market volatility and fluctuations.
Convert the closed-end fund to an open-end fund	World		We generally recommend FOR because according to our policy, the conversion to an open-end fund would provide for portfolio diversification hence reducing the Company's risk exposure, and at the same time providing greater liquidity to its shareholders.
Issue/approve a 12b-1 plan (the distribution of funds through intermediaries)	World		We generally recommend FOR because according to our policy, approval of the 12b-1 plan would enable the Fund to facilitate its distribution and sale through various intermediaries, which would be beneficial in improving its asset position.

Proposals by management | Other

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Amend other articles/bylaws/charter	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Appoint a rating agency	Western Europe, Eastern Europe & Central Asia, Emerging & Frontier Asia-Pacific, Developed Asia-Pacific, Latin America		We generally recommend FOR because the appointment of the proposed rating agency is in the best interests of the Company and its shareholders.
Approve appointment of a (non-director) executive	Middle East & North Africa, Western Europe, Eastern Europe & Central Asia		We recommend FOR this Proposal, because according to our policy, approving the appointment of the executive ensures the company has the necessary management in place to support operational continuity.
Approve company related-party transactions	Emerging & Frontier Asia-Pacific, Developed Asia-Pacific, Western Europe		We recommend FOR the proposed transaction as we believe it will allow the company to execute on its operational and strategic objectives.
Approve other company policies	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Approve political & charitable contributions	United Kingdom		We generally recommend FOR because according to our policy, it is necessary to allow the Company to fund charitable and political activities, which is in the best interests of shareholders. Such contributions can enhance the Company's reputation, strengthen stakeholder relationships, and support its broader social and corporate responsibility

			goals, ultimately benefiting long-term shareholder value.
Approve the appointment of a (director) executive	World		We generally recommend FOR when the change in adjusted stock price over the director's tenure is not poor (given that the director tenure is at least three years) and when the candidate attended at least 75% of all board and committee meetings.
Approve the company name change	World		We generally recommend FOR because according to our policy, the proposed name change supports strategic changes that enhance the Company's business objectives. Furthermore, the proposed name change will more effectively reflect the Company's mission and vision, thereby strengthening its marketing and branding efforts and improving its overall market positioning.
Approve the continuance of company	Canada		We generally recommend FOR because according to our policy, approval of this proposal is in the best interests of the Company and its shareholders.
Approve the convening of the corporate assembly	Western Europe		We generally recommend FOR because approval of the convening of the corporate assembly or shareholders' meeting is in the best interests of the Company and its shareholders.
Approve the staking consideration	World		We recommend FOR the Proposal, because according to our policy, approving staking consideration in blockchain networks enhances yield by supporting network security and transaction validation. This complies with regulatory standards, reflecting responsible digital asset management and industry best practices.
Approve the staking fee	World		We recommend FOR approval of the staking fee, because according to our policy, the fee helps cover the Company's operational costs associated with staking activities. The fee aligns with industry standards and ensures transparency and fairness to clients in digital asset staking services.
Attend to other business	World		We generally recommend FOR when the company is domiciled in the US or Canada.

Ratify decisions made in the prior fiscal year	Western Europe, Eastern Europe & Central Asia		We generally recommend FOR when the act is related to routine matters such as the distribution of dividends, release from liability, or decisions made in the fiscal year that has ended.
Reimburse proxy contest expenses	World		This proposal is considered on a case-by-case basis by the guidelines committee.

Proposals by management | Shareholder Rights

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt an advanced notice requirement	Canada		We generally recommend FOR when the policy stipulates that nominations must be submitted no later than 30-65 days before the annual meeting and that nominations must be submitted no earlier than 30-65 days prior to the annual meeting.
Adopt an advanced notice requirement	United States, Australia		We generally recommend FOR when the policy stipulates that nominations must be submitted no later than 60-90 days prior to the annual meeting and that nominations must be submitted no earlier than 120-150 days prior to the annual meeting.
Adopt, renew, or amend a shareholder rights plan	World		We generally recommend FOR if the proposed plan expands rights for shareholders.
Adopt/increase proxy access	World		We generally recommend a vote AGAINST because according to our policy, , the adoption of a "proxy access" bylaw is not a universal solution to allegations of unresponsiveness to shareholder concerns. We believe that voting decisions should be based on the governance practices and performance of individual companies. We believe that implementing this bylaw could undermine the integrity of the director election process.
Allow virtual-only shareholder meetings	World		We generally recommend FOR because according to our policy, virtual meetings will increase the likelihood of an improved attendance rate in meetings, not to mention the benefits of flexibility, reducing costs and improved accessibility.
Approve preemptive rights	Western Europe		We generally recommend FOR because according to our policy, pre-emptive rights allow shareholders to maintain their proportional ownership in the Company in the event of new share issuance, protecting their interests and ensuring they are not diluted by future equity offerings.

Eliminate preemptive rights	United Kingdom		We generally recommend FOR because according to our policy, the elimination of pre-emptive rights would provide the Company with greater flexibility to finance business opportunities and conduct a rights issue without being restricted by the stringent requirements of statutory pre-emption provisions.
Establish the right to call a special meeting	World		We generally recommend FOR if the proposal will strengthen shareholder rights (i.e. lower the threshold required to call a special meeting).
Expand the right to act by written consent	World		We generally recommend FOR because according to our policy, the right to act on written consent allows an increased participation of shareholders in the voting process, thereby democratizing voting and giving shareholders the right to act independently from the management.
Redeem a shareholder rights plan	World		We generally recommend FOR when the additional shares for the beneficiaries of the poison pill are more attractive than takeover by a hostile party.
Restrict the right to act by written consent	World		We generally recommend AGAINST because according to our policy, the right to act on written consent allows an increased participation of shareholders in the voting process, thereby democratizing voting and giving the shareholders the right to act independently from the management.
Restrict the right to call a special meeting	World		We generally recommend AGAINST the proposal because according to our policy, the ability of shareholders to call special meetings is widely regarded as an important aspect of good corporate governance. We believe the Company's current threshold appropriately balances the rights of shareholders to call a special meeting with the broader interests of the Company and its shareholders.

Proposals by management | Voting

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt confidential voting	World		We generally recommend FOR because according to our policy, approval of the proposal will preserve the confidentiality and integrity of vote outcomes.
Adopt unequal voting rights	World		We generally recommend AGAINST because according to our policy, in order to provide equal voting rights to all shareholders, companies should not utilize dual class capital structures.
Amend the quorum/voting requirement	World		We generally recommend FOR when the proposed quorum is at least 33% of shares entitled to vote.
Approve cumulative voting	World	China	We generally recommend AGAINST because according to our policy cumulative voting could make it possible for an individual shareholder or group of shareholders with special interests to elect one or more directors to the Company's Board of directors to represent their particular interests. Such a shareholder or group of shareholders could have goals that are inconsistent, and could conflict with, the interests and goals of the majority of the Company's shareholders.
Approve cumulative voting	China		We generally recommend FOR because according to our policy, cumulative voting allows a significant group of shareholders to elect a director of its choice - safeguarding minority shareholder interests and bringing independent perspectives to Board decisions.
Approve plurality voting	World		We generally recommend for plurality voting when plurality voting will only be used in contested situations. In uncontested situations, we do not prefer for plurality voting to be used.
Approve/increase supermajority voting	World		We generally recommend AGAINST because according to our policy, a simple majority vote will strengthen the Company's corporate governance practice. Contrary to supermajority voting, a simple majority standard will give the

			shareholders equal and fair representation in the Company by limiting the power of shareholders who own a large stake in the entity, therefore, paving the way for a more meaningful voting outcome.
Eliminate cumulative voting	World		We generally recommend FOR because according to our policy cumulative voting could make it possible for an individual shareholder or group of shareholders with special interests to elect one or more directors to the Company's Board of directors to represent their particular interests. Such a shareholder or group of shareholders could have goals that are inconsistent, and could conflict with, the interests and goals of the majority of the Company's shareholders.
Eliminate or reduce supermajority voting	World		We generally recommend FOR because according to our policy, a simple majority vote will strengthen the Company's corporate governance practice. Contrary to supermajority voting, a simple majority standard will give the shareholders equal and fair representation in the Company by limiting the power of shareholders who own a large stake in the entity and paving the way for a more meaningful voting outcome.
Eliminate unequal voting rights	World		We generally recommend FOR because according to our policy, companies should ensure that all shareholders are provided with equal voting rights, promoting fairness, accountability, and alignment between economic ownership and control. By adopting a one-share, one-vote structure, the Company can better uphold shareholder democracy and support long-term value creation for all investors.

Proposals by shareholders | Auditors

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Appoint an auditor	World		We generally recommend a vote AGAINST because according to our policy, the appointment of auditors is a responsibility entrusted to the board of directors, specifically the Audit Committee. In our view, the procedures governing the selection of auditors adhere to standard corporate governance and accounting practices. Unless there are significant concerns that could jeopardize the integrity and independence of the auditors, we believe that approving this proposal is neither necessary nor justified at this time.
Limit auditor non-audit services	World		We generally recommend FOR because according to our policy, auditors should not provide non-audit services. This practice ensures the independence and integrity of the audit process, maintaining objectivity and minimizing any potential conflicts of interest that could undermine the reliability of the Company's financial reporting.
Rotate the auditor	World		We generally recommend AGAINST because according to our policy, we believe that it is in the best interests of shareholders for the board to maintain flexibility to choose and rotate auditors.

Proposals by shareholders | Board Report

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Report on board member information	World		We generally recommend AGAINST because according to our policy, the information being requested in the shareholder proposal is unnecessary and will not result in any additional benefit to the shareholders.
Report on board oversight	World		We generally recommend AGAINST because according to our policy, although board oversight is essential, channels already exist for effective board oversight.
Report on proxy voting review	World		We generally recommend AGAINST this proposal because the Company is already required to outline their proxy voting process. As such, and in accordance with our policy, we do not believe that the requested proxy voting report would provide no incremental or meaningful information to the Company's shareholders.

Proposals by shareholders | Capitalization

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Issue dividends	World		We recommend a vote AGAINST this proposal because according to our policy, the Company's dividend payout plan should be governed by the board of directors after taking into account relevant factors such as the Company's liquidity and financial position.
Issue shares	World		We generally recommend a vote AGAINST this proposal because according to our policy, the approval could cause potential excessive dilution in the interests of the shareholders and could potentially overvalue the Company's stock price with such an excessive issuance that is disproportionate to its needs.
Require shareholder approval to authorize the issuance of bonds/debentures	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Require shareholder approval to reclassify shares or conversion rights	World		We generally recommend FOR because according to our policy, companies should ensure that all shareholders are provided with equal voting rights, promoting fairness, accountability, and alignment between economic ownership and control. By adopting a one-share, one-vote structure, the Company can better uphold shareholder democracy and support long-term value creation for all investors.
Create a new class of shares	World		We generally recommend FOR these proposals when the new class of shares to be created will not have blank-check authority and will not have superior voting rights to the existing class of shares.
Reclassify/convert shares	World		We generally recommend FOR if the conversion would provide equal rights to shareholders.

Proposals by shareholders | Climate/Resources

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt a climate action plan / emissions reduction / resource restriction	World		We generally recommend AGAINST the proposal, because, according to our policy, its approval would not provide additional benefits or value to shareholders, given the Company's existing robust policy and strategy on climate change.
Adopt a GMO policy	World		We generally recommend AGAINST because according to our policy, approval of the proposal would impose unnecessary burdens on the Company's operations.
Adopt animal welfare standards	World		We generally recommend AGAINST because according to our policy, the matters raised in the proposal have already been addressed by the Company. Moreover, the proposal advocates for impractical and imprudent actions that could negatively impact the business and its results.
Approve an annual advisory vote on climate change	World		We generally recommend a vote AGAINST because according to our policy, adopting this proposal is unnecessary and unwarranted in light of the Company's existing approach to climate change and sustainability. The Company already implements effective strategies in these areas, making the proposal redundant. Furthermore, approval would result in significant administrative costs and financial burdens, diverting resources from other critical initiatives.
Reduce fossil fuel financing	World		We generally recommend AGAINST because according to our policy, the Company is already committed to meeting its climate action goals related to sustainable financing. As businesses move to achieving their net zero goals, we believe that the Company's current policies in financing will bridge the transition to a low carbon economy.
Report on animal welfare	World		We generally recommend AGAINST because according to our policy and given the current

			applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on costs and risks associated with a climate (or similar) plan	World		We generally recommend AGAINST because according to our policy, approval of this proposal would result in the Company incurring unnecessary costs and expenses by duplicating efforts that are already underway and providing additional reports with information that is already available to shareholders.
Report on GMO	World		We generally recommend AGAINST because according to our policy, preparing a report regarding GMOs would provide no incremental and meaningful information to the Company's shareholders. Moreover, given the Company's current compliance with SEC reporting requirements and other government regulators of GMOs, we believe that approval of this proposal will accrue unnecessary costs and administrative burden to the Company.
Report on the company's climate plan / emissions / resource use	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.

Proposals by shareholders | Compensation

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Amend the clawback provision	World		We generally recommend FOR when the proposal is only asking to expand the clawback provision to include fraud and misconduct.
Approve a retirement plan	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Cap executive gross pay	World		We generally recommend AGAINST this proposal because according to our policy, implementing a cap on executive compensation gross pay, could negatively impact the hiring and retention of the Company's key executives and employees. Such a restriction would limit the Company's ability to fully capitalize on the skills, expertise, and experience that individual leaders bring to the organization.
Change the use of ESG metrics in compensation	World		We generally recommend AGAINST this Proposal, because according to our policy, altering the use of ESG metrics in compensation could weaken the alignment of pay with shareholder interests and established best practices, which emphasize transparent, measurable, and material goals.
Deduct stock buybacks from pay	World		We generally recommend AGAINST because according to our policy, adoption of the proposal will not enhance the Company's compensation decision-making process.
Discontinue executive perquisites	World		We generally recommend a vote AGAINST because according to our policy, the absolute elimination of perquisites granted to executives could place the Company at a competitive disadvantage when it comes to hiring, retaining, and attracting top-tier leaders.
Discontinue stock option and bonus programs	World		We generally recommend AGAINST because according to our policy, approval of the proposal would impose arbitrary limits on the compensation committee and put the Company at a competitive disadvantage compared to peers.

Discontinue the professional services allowance	World		We generally recommend AGAINST because according to our policy, it is the benefit of the Company to retain flexibility with respect to executive compensation, rather than commit to arbitrary principles which could place the Company at a competitive disadvantage in recruiting and retaining top talent.
Implement an advisory vote on executive compensation	World		We recommend FOR this Proposal, because according to our policy, an advisory vote on executive compensation helps ensure that pay practices remain fair, transparent, and aligned with shareholder interests.
Implement double triggered vesting	World		We generally recommend FOR because according to our policy, vesting of equity awards over a period of time is intended to promote long-term improvements in performance. The link between pay and long-term performance can be severed if awards pay out on an accelerated schedule. More importantly, a double trigger vesting provision would provide protection to the Company's employees in the event of transition or change of control.
Include legal/compliance costs in adjustments	World		We recommend AGAINST this Proposal, because according to our policy, including legal and compliance costs in performance adjustments could weaken accountability by shielding management from the consequences of compliance or regulatory failures. Allowing such expenses to be adjusted out of performance metrics may distort true company performance and undermine the link between executive pay and effective risk oversight.
Include performance metrics in compensation	World		We generally recommend FOR this resolution when the company has failed our executive compensation test.
Prohibit equity vesting for government service	World		We generally recommend AGAINST the proposal, as, according to our policy, its implementation could hinder the Company's ability to attract key employees. Additionally, it could inadvertently penalize individuals who may wish to enter or return to governmental service.

Remove tax gross-ups	World		We generally recommend AGAINST because according to our policy, it is the benefit of the Company to retain flexibility with respect to executive compensation, rather than commit to arbitrary principles which could place the Company at a competitive disadvantage in recruiting and retaining top talent. We believe that it is ultimately in the shareholders' best interests that discretionary responsibilities for this ongoing process continue to be vested in the Board.
Report on executive compensation	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Require a shareholder vote to ratify executive or director severance pay	World		We generally recommend FOR because according to our policy, excessive executive compensation packages has been an ongoing cause of concern among shareholders and investors. While the Company argues that its severance and termination payments are reasonable, we believe that it is in the best interests of the stockholders if they ratify executive compensation in such form. We believe that approval of this proposal will enable the stockholders to voice their views and opinions regarding the Company's executive severance payments and will ensure decisions are in their best interests.
Require that executives retain shares	World		We generally recommend AGAINST because according to our policy, the Company's current stock ownership requirement strikes an appropriate balance of encouraging focus on the long-term performance of the Company and the

			strong alignment with shareholder interests, while enabling the Company to attract and retain the best people in the industry.
Use a deferral period for compensation	World		We generally recommend AGAINST because according to our policy, the existing compensation practice already reflects alignment with the long-term performance and goals of the Company.
Use GAAP metrics for compensation	World		We generally recommend AGAINST this proposal because, in accordance with our policy, approval would impose rigid targets that could hinder the Company's ability to adapt to adjustments and fluctuations beyond its control. Additionally, using GAAP metrics in compensation could misalign the Company's short-term financial goals with its long-term success, and increase the complexity of measuring and rewarding performance. We believe that approval of the proposal could undermine the Compensation Committee's flexibility in determining the most appropriate metrics for the Company's financial circumstances.

Proposals by shareholders | Directors

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Allow for the removal of directors without cause	World		We generally recommend FOR the proposal because according to our policy, allowing to remove directors without cause provides flexibility to the Company to make necessary changes to its leadership when deemed appropriate. Allowing for the removal of directors without cause ensures that the Board can effectively address issues such as performance concerns and maintain the best interests of the Company and its shareholders.
Amend the indemnification/liability provisions for directors	World		We generally recommend FOR because according to our policy, approval of the indemnification and liability provisions will enable the Company to attract, retain, and motivate its directors, whose efforts are crucial to its long-term success. By providing directors with appropriate protection against personal liability, the Company ensures that directors can make decisions in the best interests of the Company without undue concern about personal financial risks.
Change the size of the board of directors	World		We generally recommend a vote AGAINST because according to our policy, we believe that a board should ideally consist of between five and fifteen members. This size strikes an appropriate balance between meeting the Company's needs and ensuring effective oversight.
Classify the board	World		We generally recommend AGAINST because according to our policy, staggered terms for directors increase the difficulty for shareholders to make fundamental changes to the composition and behavior of a board. We prefer that the entire board of a company be elected annually to provide appropriate responsiveness to shareholders.

Create a CEO succession plan	World		We generally recommend FOR because according to our policy, a CEO succession plan would safeguard a smooth transition and alignment into a new leadership whenever the need arises, thereby ensuring continuity and shareholder confidence in the Company.
Create a key committee	World		We generally recommend FOR because according to our policy, the board of directors should establish key Board committees—namely Audit, Compensation, and Nominating committees—composed solely of independent outside directors. This structure ensures sound corporate governance practices, enhances objectivity, and strengthens the oversight of critical areas within the Company.
Create a non-key committee	World		We generally recommend AGAINST because according to our policy, implementing the proposal would not justify the administrative costs and efforts, nor would it provide a corresponding meaningful benefit to the Company's shareholders. Moreover, we believe that the scope of committee responsibilities as requested in the proposal are already fulfilled by the board of directors.
Declassify the board	World		We generally recommend FOR when the company performance (as measured by TSR) is the bottom 20th percentile of the universe.
Decrease the required director experience / expertise / diversity	World		We generally recommend AGAINST because according to our policy, a diversified board would encourage good governance and enhance shareholder value. Bringing together a diverse range of skills and experience is necessary in building a constructive and challenging board.
Designate an independent chairman	World		We generally recommend AGAINST because according to our policy, we believe that the current Board leadership structure has been effective in the Company's sustained long-term performance. Thus, we believe that the Board should have the flexibility in determining the Board's leadership structure rather than committing to a one-size-fits-all policy.

Elect a director to board	World		We generally recommend AGAINST because according to our policy, allowing a shareholder to elect a director to a board is not in the best interests of the Company. Instead, the board should continue to nominate directors for shareholder approval, as they possess the expertise and resources to find the most qualified candidates.
Eliminate term limits	World		We generally recommend FOR because according to our policy, elimination of term limits will help the Company to attract, retain and motivate directors who can contribute valuable insights and long-term strategic guidance. This will also ensure continuity and strengthen the Company's governance by retaining knowledgeable and capable leadership of experienced directors.
Eliminate the retirement age requirement	World		We generally recommend FOR this proposal because, in accordance with our policy, the Company and its shareholders are in the best position to determine the approach to corporate governance, particularly board composition. Imposing inflexible rules, such as age limits for outside directors, does not necessarily correlate with returns or benefits for shareholders. Similar to arbitrary term limits, age limits could force valuable directors off the board solely based on their age, potentially undermining the effectiveness of the board.
Ensure compensation advisor independence	World		We generally recommend AGAINST because according to our policy, this proposal is unnecessary as existing SEC regulations already require sufficient disclosures regarding the Company's comprehensive recoupment policies and practices.
Establish a stakeholder position to board	World		We generally recommend AGAINST because according to our policy, the current selection process, composition and skillset of the board of directors already captures stakeholder representation in the board room. As such, approval of the proposal would be redundant and duplicative.

Introduce a retirement age requirement	World		We generally recommend AGAINST this proposal because, in accordance with our policy, the Company and its shareholders are in the best position to determine the approach to corporate governance, particularly board composition. Imposing inflexible rules, such as age limits for outside directors, does not necessarily correlate with returns or benefits for shareholders. Similar to arbitrary term limits, age limits could force valuable directors off the board solely based on their age, potentially undermining the effectiveness of the board.
Introduce term limits	World		We generally recommend against this proposal because, in accordance with our policy, it would not serve a useful purpose. Having experienced directors on the board is crucial for the Company's long-term success and the enhancement of shareholder value.
Require director experience / expertise / diversity or other limits on the board	World		We generally recommend AGAINST because according to our policy, it is in the best interests of the shareholders for the board and nominating committee to manage the composition and qualifications of the board members.
Require stock ownership for directors	World		We generally recommend AGAINST because according to our policy, imposing a mandatory requirement on stock ownership for directors could potentially put the Company in a competitive disadvantage in retaining the best directors. Such a requirement might limit the Company's ability to fully capitalize on an individual's skills, expertise, and contributions.
Separate the chairman and CEO positions	World		We generally recommend AGAINST because according to our policy, we believe that the Board should have the flexibility in determining the Board's leadership structure rather than committing to a one-size-fits-all policy.

Proposals by shareholders | Health, Safety, and Operations

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt a paid sick leave policy	World		We generally recommend a vote AGAINST because according to our policy, approving this proposal would lead to unnecessary costs and expenses. Additionally, this policy is not universally applicable, as it would only affect the Company's non-unionized employees. In contrast, unionized employees are typically governed by collective bargaining agreements that address such matters.
Modify business operations with a high-risk country, entity, region, etc.	World		We generally recommend AGAINST because according to our policy, the company's existing operational protocols in conflict-affected and high-risk areas already address the concerns raised in the proposal. In our view, reducing or ceasing operations in these areas could negatively impact the company's profitability and long-term sustainability.
Reduce sales/marketing of alcohol products/services	World		We generally recommend AGAINST because according to our policy, approval of the proposal is unnecessary as the Company already complies with the applicable federal laws and regulations and given the Company's nature of business, we believe that approval of the proposal would significantly impact its operations.
Reduce sales/marketing of drug products/services	World		We generally recommend AGAINST because according to our policy, approval of the proposal is unnecessary as the Company already complies with the applicable federal laws and regulations and given the Company's nature of business, we believe that approval of the proposal would significantly impact its operations.
Reduce sales/marketing of gambling products/services	World		We generally recommend AGAINST because according to our policy, approval of the proposal is unnecessary as the Company already complies with the applicable federal laws and regulations and given the Company's nature of business, we

			believe that approval of the proposal would significantly impact its operations.
Reduce sales/marketing of other products/services	World		We generally recommend AGAINST because according to our policy, approval of the proposal is unnecessary as the Company is already required to comply with applicable federal laws and regulations and given the Company's nature of business, we believe that approval of the proposal would significantly impact its operations.
Reduce sales/marketing of pornography products/services	World		We generally recommend AGAINST because according to our policy, approval of the proposal would significantly impact the Company's business operations.
Reduce sales/marketing of tobacco/vape products/services	World		We generally recommend AGAINST because according to our policy, approval of the proposal is unnecessary as the Company already complies with the applicable federal laws and regulations and given the Company's nature of business, we believe that approval of the proposal would significantly impact its operations.
Reduce sales/marketing of unhealthy foods/beverages	World		We generally recommend AGAINST because according to our policy, the Company is already addressing the issues related to the consumption of its products through its sustainability and current marketing initiatives.
Reduce sales/marketing of weapon products/services	World		We generally recommend AGAINST because according to our policy, the Company has in place extensive procedures to ensure that weapon sales are made in strict compliance with all applicable United States laws and regulations.
Report on artificial intelligence	World		We generally recommend a vote AGAINST because according to our policy, the proposed report on artificial intelligence would be an unnecessary addition to the Company's existing efforts in AI reporting. Also, approval of the proposal would pose significant administrative costs and financial burden to the Company.
Report on content management	World		We generally recommend AGAINST because according to our policy, approval of this proposal would result in the Company incurring unnecessary costs and expenses. Additionally, it

			is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on cybersecurity	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on data privacy	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on high-risk country operations	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on intellectual property transfers	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the

			Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on maternal health outcomes	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on plant closure community impacts	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on product information / production	World		We generally recommend AGAINST because according to our policy, approval of this proposal would result in the Company incurring unnecessary costs and expenses by duplicating efforts that are already underway and providing additional reports with information that is already available to shareholders.
Report on product pricing/distribution	World		We generally recommend AGAINST because according to our policy, approval of this proposal

			would result in the Company incurring unnecessary costs and expenses by duplicating efforts that are already underway and providing additional reports with information that is already available to shareholders.
Report on public health risks	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on suppliers / partners / customers / sales	World		We generally recommend AGAINST because according to our policy, approval of this proposal would result in the Company incurring unnecessary costs and expenses. Additionally, it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on worker health and safety	World		We generally recommend AGAINST because, according to our policy and given the current laws and regulations that the company is already required to comply with, we do not believe the requested report would provide meaningful additional value beyond existing policies, processes, practices, and resources.

Proposals by shareholders | Human Resources and Rights

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Address fair lending	World		We generally recommend AGAINST the proposal because, according to our policy, it would not meaningfully improve the Company's existing robust policies and risk oversight structure, nor enhance any current disclosures that provide shareholders with meaningful information on how the Company addresses and oversees risks related to discrimination. Additionally, we are concerned that such an evaluation could, in today's highly litigious environment, inadvertently provide a roadmap for lawsuits against the Company, potentially leading to significant legal costs for shareholders in the long term.
Address income inequality	World		We generally recommend AGAINST because according to our policy, the Company's existing compensation processes are guided by the fundamental principle that decisions are made on the basis of the individual's personal capabilities, qualifications and contributions to the Company's needs and not on gender. Moreover, given the Company's current efforts to equal employment opportunity, we believe that approval of this proposal will accrue unnecessary costs and administrative burden to the Company.
Address labor disputes	World		We generally recommend AGAINST this proposal because, in accordance with our policy, the Company has already addressed the labor concerns raised in the proposal. As such, approval of the requested report is unnecessary and would result in significant administrative costs, diverting Company resources from more relevant and meaningful priorities.
Address sexual harassment complaints	World		We generally recommend AGAINST because according to our policy, adoption of the proposal is unnecessarily duplicative of the Company's

			efforts to deter incidents of sexual harassment through its own policies and practices.
Adopt an anti-discrimination policy	World		We generally recommend AGAINST because according to our policy, this could put the Company in an uncompetitive position in terms of hiring prospective talents due to the rigid requirements of the proposal.
Adopt diversity-based hiring	World		We generally recommend AGAINST because according to our policy, this could put the Company in an uncompetitive position in terms of hiring prospective talents due to the rigid requirements of the proposal.
Adopt merit-based hiring	World		We generally recommend AGAINST because according to our policy, this could put the Company in an uncompetitive position in terms of hiring prospective talents due to the rigid requirements of the proposal.
Become a public benefit corporation	World		We generally recommend AGAINST because according to our policy, the proposal is not necessary and is not in the best long-term interest of the Company and its shareholders.
Provide a human rights impact assessment	World		We generally recommend a vote AGAINST because, while human rights impact assessments (HRIAs) are valuable for identifying and mitigating risks, mandating rigid reporting can undermine their effectiveness. Such reporting requirements may encourage superficial compliance without meaningful human rights improvements.
Provide a report promoting DEI practices	World		We generally recommend AGAINST this proposal because, in accordance with our policy and considering the requirements that the Company already abides by with regards to equal employment opportunity, we believe its approval would impose unnecessary costs and administrative burdens on the Company.
Report on abortion policy	World		We generally recommend AGAINST because according to our policy, providing a report on a highly sensitive topic could cause divisiveness among the Company, its employees, customers and shareholders. The complexity of views drawn from reporting the policies on abortion or

			something similar could pose significant reputational and legal risks for the Company which could subsequently affect its operations and performance.
Report on collective bargaining/union relations	World		We generally recommend AGAINST this proposal because, in line with our policy and given the Company's compliance with applicable laws regarding freedom of association, we believe its approval would not provide additional benefits to employees or create further value for shareholders.
Report on fetal tissue use	World		We generally recommend AGAINST because according to our policy, providing a report on a highly sensitive topic could cause divisiveness among the Company, its employees, customers and shareholders. The complexity of views drawn from reporting the policies on fetal tissue use or something similar could pose significant reputational and legal risks for the Company which could subsequently affect its operations and performance.
Report on human trafficking	World		We generally recommend AGAINST because according to our policy and given the Company's current policies which effectively articulate their long-standing support for, and continued commitment to, human rights, the proposal would be duplicative and unnecessary.
Report on in vitro fertilization	World		We generally recommend AGAINST because according to our policy, providing a report on a highly sensitive topic could cause divisiveness among the Company, its employees, customers and shareholders. The complexity of views drawn from reporting the policies on abortion or something similar could pose significant reputational and legal risks for the Company which could subsequently affect its operations and performance.
Report on prison/slave/child labor	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful

			value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on sexual harassment complaints	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on the costs/risks of DEI practices	World		We generally recommend AGAINST this proposal because, in accordance with our policy, conducting a cost/benefit report or a stand-alone DEI audit by the Company or a group acting on its behalf could potentially uncover violations of regulations or laws, which could pose both legal and reputational risks. Additionally, we are concerned that such report could, in our highly litigious society, serve as a roadmap for lawsuits against the Company, potentially leading to significant costs for shareholders in the long term.
Report on worker misclassification	World		We generally recommend AGAINST because according to our policy, approval of the proposal would not create additional benefits to the employees or value for the shareholders.
Request the company cease or re-evaluate DEI activities	World		We generally recommend AGAINST this Proposal because, according to our policy, requests to cease or re-evaluate DEI activities risk undermining the significant benefits that diversity, equity, and inclusion bring to the company. Scaling back these efforts could also

			negatively affect talent attraction, retention, and overall company performance.
Rescind the racial equity audit	World		We generally recommend a vote AGAINST because, according to our policy, the proposed rescinding of the racial audit undermines efforts to assess the impacts of the Company's diversity, equity, and inclusion (DEI) practices. Racial audits are essential in identifying and addressing disparities, and reversing this initiative would limit shareholders' ability to evaluate the materiality and effectiveness of the Company's DEI efforts.

Proposals by shareholders | Legal and Compliance

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt exclusive forum bylaws	World		We generally recommend FOR because according to our policy, having an exclusive forum will allow the Company to address disputes and litigations in an exclusive jurisdiction, with familiarity of the law, and reduce the administrative cost and burden related to settlement.
Relinquish intellectual property	World		We generally recommend AGAINST because according to our policy the proposal would not meaningfully improve the Company's disclosure and reporting policies in place but is rather duplicative of its current efforts in addressing issues with product access and pricing.
Report on concealment clauses	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on employee arbitration claims	World		We generally recommend AGAINST this proposal because, in accordance with our policy, it presents a one-size-fits-all approach that could adversely impact the Company's ability to effectively use arbitration.
Report on patent process	World		We generally recommend AGAINST because according to our policy the proposal would not meaningfully improve the Company's disclosure and reporting policies in place and we do not believe the report would result in any additional benefit to shareholders.

Report on whistleblowers	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.

Proposals by shareholders | M&A / Structure

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Make a self-tender offer	World		We generally recommend AGAINST because according to our policy, the proposal is not necessary and is not in the best long-term interest of the Company and its shareholders.
Remove an antitakeover provision(s)	World		We generally recommend AGAINST because according to our policy, removal of the Company's antitakeover provisions may leave the Company vulnerable to a hostile takeover. Additionally, the current antitakeover provisions provide more time for management to consider offers and negotiate better terms.
Request an M&A / restructure	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Ratify a poison pill	World		We generally recommend a vote FOR because according to our policy, approval of the proposal will acknowledge both the advantages and inherent risks of implementing a shareholder rights plan, or poison pill. While these plans can deter hostile takeovers, they also carry the risk of management entrenchment in some cases. Ensuring that shareholders are given a voice on the advisability of such a plan is crucial to safeguarding the Company from these risks, promoting transparency, and maintaining a balance between protecting shareholder interests and preventing potential misuse of the plan.

Proposals by shareholders | Mutual Fund

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Convert the closed-end fund to an open-end fund	World		We generally recommend a vote AGAINST this proposal because, according to our policy, a closed-end fund structure tends to provide higher returns to shareholders, as the value of shares is influenced by market dynamics, which can result in trading at a premium or discount to NAV. Additionally, closed-end funds often generate higher income by utilizing leverage, making them particularly attractive to income-focused investors.

Proposals by shareholders | Other

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt MacBride Principles, Sullivan Principles, or similar	World		We generally recommend AGAINST because adoption of this proposal would be duplicative and would make the Company unnecessarily accountable to different sets of overlapping fair employment guidelines that are already covered in its policies.
Approve other company policies	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Disassociate from industry associations	World		We generally recommend AGAINST because according to our policy, companies benefit from industry associations, especially when it comes to influential policies that can directly affect businesses. As such, disassociation from such groups could potentially pose potential reputational and systemic risks that could be detrimental to the Company's business in the long-run.
Prepare an independent third-party audit	World		We generally recommend AGAINST this proposal because, in accordance with our policy, conducting a stand-alone audit by the Company or a group acting on its behalf could potentially reveal violations of regulations and laws, which could be legally and reputationally problematic. Additionally, we are concerned that such an audit could, in our highly litigious society, provide a roadmap for lawsuits against the Company, which could result in significant costs for shareholders over the long term.
Report on another matter	World		This proposal is considered on a case-by-case basis by the guidelines committee.
Report on key-person risk	World		We generally recommend AGAINST the proposal, because according to our policy, its approval would put the Company at a competitive disadvantage. The disclosure requested would make sensitive information publicly available, potentially undermining the

			execution of the Company's business strategy and hindering the recruitment and retention of top management talent.
Reimburse proxy contest expenses	World		This proposal is considered on a case-by-case basis by the guidelines committee.

Proposals by shareholders | Politics

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Report on charitable contributions	World		We generally recommend AGAINST this proposal because, in accordance with our policy, the Company already carefully evaluates and reviews its charitable activities, and makes information about its corporate giving publicly available. We do not believe that implementing the proposal would justify the administrative costs and efforts, nor would it provide a meaningful benefit to the Company's shareholders.
Report on government financial support	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on lobbying expenditures	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on partnerships with political (or globalist) organizations	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the

			Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on political contributions	World		We generally recommend AGAINST because according to our policy and given the current applicable laws and regulations that the Company must comply with, we do not believe that the requested report would add meaningful value to the policies, processes, practices, and resources that are already in place. Additionally, approval of this proposal would result in the Company incurring unnecessary costs and expenses as it is in the best interests of shareholders for the board to manage the Company's disclosures and risks.
Report on public policy advocacy	World		We generally recommend AGAINST because according to our policy and given the Company's policies and oversight mechanisms related to its political contributions and activities, we believe that the shareholder proposal is unnecessary and will not result in any additional benefit to the shareholders. Rather, the proposal promotes impractical and imprudent actions that would negatively affect the business and results.
Revoke a public policy endorsement	World		We generally recommend AGAINST because according to our policy, political endorsement and spending is an integral part of a business, as Companies should have a voice on policies affecting them. As such, approval of this proposal will strictly limit the Company's flexibility in supporting the advocacies that are congruent with its business.
Support a public policy endorsement	World		We generally recommend AGAINST because according to our policy, although the Company must comply with federal, state, and local campaign finance and lobbying regulations that

			are currently in place, we believe that political endorsements, often in the form of contributions, increase the possibility of misalignment with corporate values which in turn could lead to reputational risks.

Proposals by shareholders | Shareholder Rights

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt a fair elections/advance notice bylaw	Canada		We generally recommend FOR when the policy stipulates that nominations must be submitted no later than 30-65 days before the annual meeting and that nominations must be submitted no earlier than 30-65 days prior to the annual meeting.
Adopt a fair elections/advance notice bylaw	United States		We generally recommend FOR when the policy stipulates that nominations must be submitted no later than 60-90 days prior to the annual meeting and that nominations must be submitted no earlier than 120-150 days prior to the annual meeting.
Adopt/increase proxy access	World		We generally recommend a vote AGAINST because according to our policy, , the adoption of a "proxy access" bylaw is not a universal solution to allegations of unresponsiveness to shareholder concerns. We believe that voting decisions should be based on the governance practices and performance of individual companies. We believe that implementing this bylaw could undermine the integrity of the director election process.
Allow virtual-only shareholder meetings	World		We recommend AGAINST this Proposal, because according to our policy, virtual meetings should complement, not replace, in-person shareholder meetings, as relying solely on them may undermine transparency and shareholder participation.
Establish the right to call a special meeting	World		We generally recommend FOR if the proposal will strengthen shareholder rights (i.e. lower the threshold required to call a special meeting).
Introduce the right to act by written consent	World		We generally recommend FOR because according to our policy, the right to act on written consent allows an increased participation of shareholders in the voting process, thereby democratizing voting and

			giving shareholders the right to act independently from the management.
Oppose the right to act by written consent	World		We generally recommend AGAINST because according to our policy, the right to act on written consent allows an increased participation of shareholders in the voting process, thereby democratizing voting and giving the shareholders the right to act independently from the management.
Require shareholder approval for bylaw amendments	World		We generally recommend FOR because according to our policy, approval of the proposal will ensure that shareholders have a voice in revising or adopting the bylaws which could compromise their interests.

Proposals by shareholders | Voting

Proposal	Region(s) to Include	Region(s) to Exclude	Vote Recommendation
Adopt a majority vote for director election	World		We generally recommend a vote FOR because according to our policy, a majority vote requirement in boardroom elections enhance director accountability to shareholders. This standard ensures that shareholder dissatisfaction with director performance has tangible consequences, transforming the election process from a mere formality into one that truly reflects shareholders' voices.
Adopt confidential voting	World		We generally recommend FOR because according to our policy, approval of the proposal will preserve the confidentiality and integrity of vote outcomes.
Approve cumulative voting	World		We generally recommend AGAINST because according to our policy cumulative voting could make it possible for an individual shareholder or group of shareholders with special interests to elect one or more directors to the Company's Board of directors to represent their particular interests. Such a shareholder or group of shareholders could have goals that are inconsistent, and could conflict with, the interests and goals of the majority of the Company's shareholders.
Approve/increase supermajority voting	World		We generally recommend AGAINST because according to our policy, a simple majority vote will strengthen the Company's corporate governance practice. Contrary to supermajority voting, a simple majority standard will give the shareholders equal and fair representation in the Company by limiting the power of shareholders who own a large stake in the entity, therefore, paving the way for a more meaningful voting outcome.
Eliminate cumulative voting	World		We generally recommend FOR because according to our policy cumulative voting could make it possible for an individual shareholder or

			group of shareholders with special interests to elect one or more directors to the Company's Board of directors to represent their particular interests. Such a shareholder or group of shareholders could have goals that are inconsistent, and could conflict with, the interests and goals of the majority of the Company's shareholders.
Eliminate or reduce supermajority voting	World		We generally recommend FOR because according to our policy, a simple majority vote will strengthen the Company's corporate governance practice. Contrary to supermajority voting, a simple majority standard will give the shareholders equal and fair representation in the Company by limiting the power of shareholders who own a large stake in the entity and paving the way for a more meaningful voting outcome.
Promote equal voting rights	World		We generally recommend FOR because according to our policy, a differential in voting power may have the effect of denying shareholders the opportunity to vote on matters of critical economic importance to them. In order to provide equal voting right to all shareholders, we prefer that companies do not utilize multiple class capital structures.
Restrict nomination of directors	World		We generally recommend a vote FOR because, according to our policy, a simple majority requirement in director elections, combined with a mandatory resignation policy and prohibition on the renomination of directors, ensures that the election results accurately reflect shareholder sentiment. Specifically, this approach addresses situations where a director receives less than a majority of votes, aligning the election outcome with shareholder expectations and maintaining effective governance.
Tabulate proxy voting	World		We generally recommend FOR because according to our policy, adoption of proxy tabulation simplifies the voting process without compromising transparency or shareholder

			participation. This streamlined approach ensures that shareholder votes are accurately counted and reported, making it easier for investors to engage in the decision-making process. At the same time, it preserves the integrity and transparency of the voting process, ensuring that all shareholders have an equal opportunity to influence key decisions while promoting efficient governance practices.

IV. Legal Disclaimer

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GLASS LEWIS

ESG
Thematic Voting Policy Guidelines

2026

www.glasslewis.com

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About Glass Lewis

Glass Lewis is the world's choice for governance solutions. We enable institutional investors and publicly listed companies to make informed decisions based on research and data. We cover 30,000+ meetings each year, across approximately 100 global markets. Our team has been providing in-depth analysis of companies since 2003, relying solely on publicly available information to inform its policies, research, and voting recommendations.

Our customers include the majority of the world's largest pension plans, mutual funds, and asset managers, collectively managing over $40 trillion in assets. We have teams located across the United States, Europe, and Asia-Pacific giving us global reach with a local perspective on the important governance issues.

Investors around the world depend on Glass Lewis' Viewpoint platform to manage their proxy voting, policy implementation, recordkeeping, and reporting. Our industry leading Proxy Paper product provides comprehensive research and voting recommendations weeks ahead of voting deadlines. Public companies can also use our innovative Report Feedback Statement to deliver their opinion on our proxy research directly to the voting decision makers at every investor client in time for voting decisions to be made or changed.

The research team engages extensively with public companies, investors, regulators, and other industry stakeholders to gain relevant context into the realities surrounding companies, sectors, and the market in general. This enables us to provide the most comprehensive and pragmatic insights to our customers.

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Summary of Changes for 2026

On an ongoing basis, Glass Lewis extensively reviews and consults with stakeholders and clients on its policy guidelines. Annually, Glass Lewis updates its policy guidelines in accordance with market trends, developments and the results of our ongoing consultations.

Board Diversity

The ESG Policy will now oppose the chair of the nominating committee, regardless of gender, for board gender diversity concerns, rather than only targeting male members of the committee. It has also standardized its approach to this matter such that it will look for boards to ensure that they are 30% diverse, unless a regional requirement requires that boards maintain a higher level, in which case, it will default to that requirement.

Human Rights Considerations

The ESG Policy has streamlined its approach to human rights, and will now oppose the chair of the board in instances that a company has not adopted a human rights policy, instead of requiring that companies be a participant in the United Nations Global Compact ("UNGC") or adopt a human rights policy that is aligned with the standards set forth by the International Labour Organization ("ILO") or the Universal Declaration on Human Rights ("UDHR").

Sustainability Reporting

Given the changing nature of reporting frameworks, the ESG Policy has standardized its approach such that it will now vote against the chair of the committee responsible for overseeing environmental and social issues in instances where companies have not provided comprehensive sustainability reporting. This has replaced the previous policy whereby the ESG Policy will vote against the chair of the board in instances where companies either report against the recommendations of TCFD or in alignment with SASB standards.

Climate Considerations

Although the ESG Policy will continue to vote against the chair of the board in instances where companies have not established any forward-looking GHG emissions reduction targets, it will no longer require that companies adopt a net zero commitment or goal. The ESG Policy will also now vote against the chair of the committee responsible for overseeing environmental and social issues in instances where companies have not disclosed Scope 1 & 2 emissions.

Other Changes

A number of updates have been made to the Glass Lewis Benchmark Policy guidelines, which underpin and inform the ESG Policy. Further details can be found at www.glasslewis.com.

Introduction

Institutional investors are increasingly recognizing the importance of incorporating material environmental, social, and governance (ESG) factors into their investment processes. Active ownership on ESG issues will typically include also applying these considerations to proxy voting practices, and the ESG Policy allows clients to apply these enhanced ESG considerations when voting at the annual and special meetings of their portfolio companies.

The ESG Policy was designed for clients with a strong focus on environmental and social issues or as a supplemental voting policy for ESG-focused funds. This policy is also ideal for investors who would like to vote in a stakeholder-focused manner.

Implementation of the ESG Policy may vary market-to-market in accordance with regulatory requirements, corporate governance best practices, and other relevant standards in individual markets.

Election of Directors

Board of Directors

Boards are established in order to represent shareholders and protect their interests. The ESG Policy seeks boards that have a record for protecting shareholders and delivering value over the medium- and long-term. Boards that wish to protect and enhance the interests of shareholders should have sufficient levels of independence (the percentage varies by local market practice and regulations), boast a record of positive performance, have directors with diverse backgrounds, and appoint new directors that have a depth of relevant experience.

Board Composition

The ESG Policy examines a variety of elements to the board when voting on director elections. The policy looks at each individual on the board and explores their relationship with the company, the company's executives and with other board members. This is to ensure and determine whether a director has an existing relationship with the company that is likely to impact any decision processes of that board member.

The biographical information provided by the company on the individual director is essential for investors to understand the background and skills of the directors of the board. This information should be provided in the company's documents well in advance of the shareholder meeting, in order to give shareholders sufficient time to analyze the information. In cases where the company fails to disclose the names or backgrounds of director nominees, the ESG Policy may vote against or abstain from voting on the directors' elections.

The ESG Policy will vote in favor of governance structures that will drive positive performance and enhance shareholder value. The most crucial test of a board's commitment to the company and to its shareholders is the performance of the board and its members. The performance of directors in their capacity as board members and as executives of the company, when applicable, and in their roles at other companies where they serve is critical to this evaluation.

Directors are formed into three categories based on an examination of the type of relationship they have with the company. The table below includes a breakdown of how Glass Lewis classifies these director relationships with the company.

Insider	Affiliate	Independent
Someone who serves as a director and as an employee of the company	A director who has a material financial, familial or other relationship with the company, or its executives, but is NOT an employee of the company	No material financial, familial or other current relationships with the company, it's executives or other board members except for service
May also include executive chairs (who act as an employee of the company or is paid as an employee of the company)	A director who owns or controls, directly or indirectly 20% or more of the company's voting stock (except where local regulations or best practices set a different threshold).	A director who owns, directly or indirectly less than 10% of the company's voting stock (local regulations and best practices may set a different threshold)
	A director who has been employed by the company within the past 5 calendar years	A director who has not been employed by the company for a minimum of 5 calendar years
	A director who performs material consulting, legal, advisory, accounting or other professional services for the company	A director who is not involved in any Related Party Transactions (RPT) with the company (most common RPTs - consulting, legal, and accounting/advisory services)
	>A director who is involved in an "Interlocking Directorship"	

Common other reasons the ESG Policy will vote against a director:

(i) A director who attends less than 75% of the board and applicable committee meetings.
(ii) A director who is also the CEO of a company where a serious restatement has occurred after the CEO certified the pre-restatement financial statements.
(iii) An affiliated director when the board is not sufficiently independent in accordance with market best practice standards.
(iv) An affiliate or insider on any of the key committees (audit, compensation, nominating) or an affiliate or insider on any of the key committees and there is insufficient independence on that committee, both of the above can vary in accordance with the markets best practice standards.

The following conflicts of interests may hinder a director's performance and may result in a vote against:

(i) A director who sits on an excessive number of public company boards (see the relevant market guidelines for confirmation of the excessive amount).
(ii) Director, or a director whose immediate family member, or the firm at which the director is employed, provides material professional services to the company at any time during the past five years.
(iii) Director, or a director whose immediate family member, engages in airplane, real estate or other similar deals, including perquisite type grants from the company.
(iv) Director with an interlocking directorship.
(v) All board members who served at a time when a poison pill with a term of longer than one year was adopted without shareholder approval within the prior twelve months.
(vi) A director who has received two against recommendations from the Glass Lewis Benchmark Policy for identical reasons within the prior year at different companies.

Board Independence

A board composed of at least two-thirds independent is most effective in protecting shareholders' interests. Generally, the ESG Policy will vote against responsible directors if the board is less than two-thirds independent, however, this is also dependent on the market best practice standards.

Board Committee Composition

It is best practice to have independent directors serving on the audit, compensation, nominating and governance committees. As such, the ESG Policy will support boards with this structure and encourage change when this is not the case. However, board committee independence thresholds may vary depending on the market.

With respect to the creation of board committees and the composition thereof, the ESG Policy will generally support shareholder proposals requesting that companies create a committee to oversee material E&S issues, such as committees dedicated to climate change oversight or the oversight of public policy risks. The ESG Policy will also generally support shareholder proposals calling for the appointment of directors with specific expertise to the board, such as those requesting the appointment of an environmental expert or an individual with significant human rights expertise.

Board Diversity, Tenure and Refreshment

The ESG Policy acknowledges the importance of ensuring that the board is comprised of directors who have a diversity of skills, backgrounds, thoughts, and experiences. As such, having diverse boards benefits companies greatly by encompassing an array of different perspectives and insights.

In terms of board tenure and refreshment, the ESG Policy strongly supports routine director evaluations, including independent external reviews, and periodic board refreshment in order to enable a company to maintain a fresh set of ideas and business strategies in an ever-changing world and market. Having directors with diverse experiences and skills can strengthen the position of a company within the market. Therefore, the ESG Policy promotes refreshment within boards, as a lack of refreshment can lead to poor company performance. Thus, the ESG Policy may consider voting against directors with a lengthy tenure (e.g. over 12

years) when we identify significant performance or governance concerns indicating that a fresh perspective would be beneficial and there is no evidence of any plans of future board refreshment.

The ESG Policy will also evaluate a company's policies and actions with respect to board refreshment and diversity. As a part of this evaluation, we will review the diversity of board members and support shareholder proposals to report on or increase board diversity. The nominating and governance committee, as an agent for the shareholders, is responsible for the governance by the board of the company and its executives. In performing this role, the committee is responsible and accountable for selection of objective and competent board members. To that end, the ESG Policy will: (i) vote against members of the nominating committee in the event that the board has an average tenure of over ten years and the board has not appointed a new nominee to the board in at least five years; (ii) vote against the incumbent nominating committee members in instances where the board of a large- or mid-cap company is comprised of fewer than 30% gender-diverse directors, or the local market requirement for gender diversity where higher; or (iii) vote against the members of the nominating committee where there is not at least one gender-diverse director on the board of a small-cap company.

The ESG Policy conducts a further level of analysis for U.S. companies included in the Russel 1000 index. For these companies, the ESG Policy will vote against members of the nominating and governance committee when they receive a "Poor" score in Glass Lewis' Diversity Disclosure Assessment. The Diversity Disclosure Assessment is an analysis of companies' proxy statement disclosure relating to board diversity, skills and the director nomination process. This assessment reflects how a company's proxy statement presents: (i) the board's current percentage of racial/ethnic diversity; (ii) whether the board's definition of diversity explicitly includes gender and/or race/ethnicity; (iii) whether the board has adopted a policy requiring women and minorities to be included in the initial pool of candidates when selecting new director nominees ("Rooney Rule"); and (iv) board skills disclosure.

Director Overboarding

The ESG Policy will generally recommend that shareholders vote against a director who serves as an executive officer (other than executive chair) of any public company while serving on more than one external public company board, a director who serves as an executive chair of any public company while serving on more than two external public company boards, and any other director who serves on more than five public company boards.

Board Size

Although there is not a universally acceptable optimum board size, boards should have a minimum of five directors to ensure sufficient diversity in decision making and to enable the establishment of key committees with independent directors. Further, boards should not be composed of more than 20 directors as the board may suffer as a result of too many voices to be heard and have difficulty reaching consensus on issues with this number of members. As a result, the ESG Policy will generally vote against the chair of the nominating committee at a board with fewer than five directors or more than 20 directors.

Classified Boards

The ESG Policy favors the repeal of staggered boards in favor of the annual election of directors. Staggered boards are generally less accountable to shareholders than annually elected directors to the board. In addition, the annual election of directors encourages board members to focus on protecting the interests of shareholders. Further to this, if shareholders are unsatisfied with board members the annual election of directors allows them to voice these concerns.

Controlled Companies

The ESG Policy allows certain exceptions to the independence standards at controlled companies. The board's main function is to protect shareholder interests, however, when an individual, entity, or group own more than 50% of the voting shares, the interests of majority shareholders are the interests of that entity or individual. As a result, the ESG Policy does not apply the usual two-thirds independence threshold on controlled companies instead it includes the following guidelines:

(i) As long as insiders and/or affiliates are connected to the controlling entity, the ESG Policy will accept the presence of non-independent board members.
(ii) The compensation, nominating, and governance committees do not need to consist solely of independent directors. However, the compensation committee should not have any insider members, but affiliates are accepted.
(iii) The board does not need an independent chair or an independent lead or presiding director.
(iv) The audit committee should consist solely of independent directors, regardless of the controlled status of the company.

Significant Shareholders

Significant shareholders are either an individual or an entity which holds between 20-50% of a company's voting power, and the ESG Policy provides that shareholders should be allowed proportional representation on the board and in committees (excluding the audit committee) based on their percentage of ownership.

Director Performance and Oversight

The performance of board members is an essential element to understanding the board's commitment to the company and to shareholders. The ESG Policy will look at the performance of individuals as directors and executives of the company and of other companies where they have served. Often a director's past conduct is indicative of future conduct and performance.

The ESG Policy will typically vote against directors who have served on boards or as executives of companies with records of poor performance, inadequate risk oversight, excessive compensation, audit or accounting-related issues, and other actions or indicators of mismanagement. However, the ESG Policy will also reevaluate the directors based on factors such as the length of time that has passed since the incident, the director's role, and the severity of the issue.

Environmental and Social Oversight and Performance

The ESG Policy considers the oversight afforded to environmental and social issues. The ESG Policy looks to ensure that companies maintain appropriate board-level oversight of material risks to their operations, including those that are environmental and social in nature. When it is clear that these risks have not been properly managed or mitigated, the ESG Policy may vote against members of the board who are responsible for the oversight of environmental and social risks. In the absence of explicit board oversight of environmental and social issues, the ESG Policy may vote against members of the audit committee. In making these determinations, the ESG Policy will take into account the situation at hand, its effect on shareholder value, as well as any corrective action or other response made by the company.

Board-Level Oversight of Environmental and Social Risks

The insufficient oversight of environmental and social issues can present direct legal, financial, regulatory and reputational risks that could serve to harm shareholder interests. As a result, the ESG Policy promotes oversight structures that ensure that companies are mitigating attendant risks ad capitalizing on related opportunities to the best extent possible.

To that end, the ESG Policy looks to boards to maintain clear oversight of material risks to their operations, including those that are environmental and social in nature. These risks could include, but are not limited to, matters related to climate change, human capital management, diversity, stakeholder relations, and health, safety & environment.

The ESG Policy will review a company's overall governance practices to identify which directors or board-level committees have been charged with oversight of environmental and/or social issues. Given the importance of the board's role in overseeing environmental and social risks, the ESG Policy will vote against members of the governance committee that fails to provide explicit disclosure concerning the board's role in overseeing these issues.

Climate Risk

Given the importance of companies mitigation and management of climate-related risks, the ESG Policy includes specific consideration for companies' disclosure of and policies concerning climate change. Specifically, the ESG Policy will vote against the chair of the board in instances where companies have not established any forward-looking GHG emissions reduction targets. In this instance, if the chair of the board is also the company's CEO, the ESG Policy will vote against the chair of the audit committee.

Further, the ESG Policy will oppose the chair of the committee responsible for oversight of environmental and social issues if the company does not have comprehensive sustainability reporting, which is generally defined as reporting on environmental and social issues beyond legal requirements and that is sufficient to allow shareholders to understand a company's environmental and social initiatives and how it manages attendant risks. Additionally, the ESG Policy will vote against these board members if the company has not disclosed their Scope 1 & 2 emissions.

The ESG Policy also takes into consideration investors' growing expectation for robust climate and sustainability disclosures. While all companies maintain exposure to climate-related risks, additional consideration should be given to, and disclosure should be provided by, those companies whose own GHG emissions represent a financially material risk. For companies with this increased risk exposure, the ESG Policy evaluates whether companies are providing clear and comprehensive disclosure regarding these risks, including how they are being

mitigated and overseen. Such information is crucial to allow investors to understand the company's management of this issue as well as the potential impact of a lower carbon future on the company's operations.

In line with this view, the ESG Policy will carefully examine the climate-related disclosures provided by large-cap companies with material exposure to climate risk stemming from their own operations,[1] as well as companies where their emissions, climate impacts, or stakeholder scrutiny thereof, represent an outsized, financially material risk, in order to assess whether they have produced disclosures in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), IFRS S2 Climate-related Disclosures, or other equivalent climate reporting framework. The ESG Policy will also assess whether these companies have disclosed explicit and clearly defined board-level oversight responsibilities for climate-related issues. In instances where either (or both) of these disclosures are found to be absent or significantly lacking, the ESG Policy may recommend voting against the chair of the committee (or board) charged with oversight of climate-related issues, or if no committee has been charged with such oversight, the chair of the governance committee. Further, the ESG Policy may extend this recommendation on this basis to additional members of the responsible committee in cases where the committee chair is not standing for election due to a classified board, or based on other factors, including the company's size, industry and its overall governance profile. In instances where appropriate directors are not standing for election, the ESG Policy may, instead, recommend shareholders vote against other matters that are up for a vote, such as the ratification of board acts, or the accounts and reports proposal.

Stakeholder Considerations

In order to drive long-term shareholder value, companies require a social license to operate. A lack of consideration for stakeholders can present legal, regulatory, and reputational risks. With this view, the ESG Policy will vote against the chair of the board in instances where companies have not adopted a human rights policy.

For U.S. companies listed in the S&P 500 index, the ESG Policy will also evaluate whether companies have provided sufficient disclosure concerning their workforce diversity. In instances where these companies have not disclosed their full EEO-1 reports, the ESG Policy will vote against the nominating and governance chair.

Review of Risk Management Controls

The ESG Policy evaluates the risk management function of a public company on a case-by-case basis. Companies, particularly financial firms, should have a dedicated risk committee, or a committee on the board in charge of risk oversight, as well as a chief risk officer who reports directly to that committee, not to the CEO or another executive of the company. When analyzing the risk management practices of public companies, the ESG Policy takes note of any significant losses or write-downs on financial assets and/or structured transactions. In cases where a company has disclosed a sizable loss or write-down, and where the company's board-level risk committee's poor oversight contributed to the loss, the ESG Policy will vote against such committee members on that basis. In addition, in cases where a company maintains a significant level of financial risk exposure but

[1] This policy will generally apply to companies in the following SASB-defined industries: agricultural products, air freight & logistics, airlines, chemicals, construction materials, containers & packaging, cruise lines, electric utilities & power generators, food retailers & distributors, health care distributors, iron & steel producers, marine transportation, meat, poultry & dairy, metals & mining, non-alcoholic beverages, oil & gas, pulp & paper products, rail transportation, road transportation, semiconductors, waste management.

fails to disclose any explicit form of board-level risk oversight (committee or otherwise), the ESG Policy may vote against the chair of the board on that basis.

Slate Elections

In some countries, in particular Italy, companies elect their board members as a slate, whereby shareholders are unable to vote on the election of an individual director, but rather are limited to voting for or against the board as a whole. The ESG Policy will generally support the slate if no major governance or board-related concerns have been raised in the analysis, and the slate appears to support and protect the best interests of all shareholders.

Board Responsiveness

Majority-Supported Shareholder Proposals

The ESG Policy expects clear action from a board when shareholder proposals receive support from a majority of votes cast (excluding abstentions and broker non-votes). This may include fully implementing the request of the shareholder proposal and/or engaging with shareholders on the issue and providing sufficient disclosures to address shareholder concerns. When a board fails to demonstrate appropriate responsiveness to this issue, the ESG Policy will generally recommend against members of the nominating and governance committee.

Significantly Supported Shareholder Proposals

When shareholder proposals receive significant support (generally more than 30% but less than majority of votes cast), an initial level of board responsiveness is warranted. In instances where a shareholder proposal has received at least 30% shareholder support, the ESG Policy will look to boards to engage with shareholders on the issue and provide disclosure addressing shareholder concerns and outreach initiatives.

At controlled companies and companies that have multi-class share structures with unequal voting rights, the ESG Policy will carefully examine the level of approval or disapproval attributed to unaffiliated shareholders when determining whether board responsiveness is warranted.

Separation of the Roles of CEO and Chair

The separation of the positions of CEO and chair creates a better and more independent governance structure than a combined CEO/chair position. The role of executives is to manage the business based on the course charted by the board. Executives should be in the position of reporting and answering to the board for their performance in achieving their goals as set out by the board. This would become more complicated if they also held the position of chair, as it would be difficult for them to fulfil the duty of being both the overseer and policy setter when they, the CEO/chair control both the agenda and boardroom.

The ESG Policy views an independent chair as better able to oversee the executives of the company and set a pro-shareholder agenda without the management conflicts that a CEO and other executive insiders often face. Such oversight and concern for shareholders allows for a more proactive and effective board of directors that is better able to look out for the interests of shareholders.

Furthermore, it is the board's responsibility to select a chief executive to best serve the company and its shareholders and to replace this person when his or her duties have not been appropriately fulfilled. Such a replacement becomes more difficult and happens less frequently when the chief executive is also in the position of overseeing the board.

Even considering the above, the ESG Policy will not vote against CEOs who also chair the board. However, the ESG Policy will generally support separating the positions of CEO and chair whenever the question is posed in the form of a shareholder proposal.

In the absence of an independent chair, the ESG Policy will support the appointment of a presiding or lead independent director with authority to set the agenda for the meeting and to lead sessions. In the case where the company has neither an independent chair nor independent lead director, the ESG Policy may vote against the chair of the governance committee.

Governance Following an IPO or Spin-Off

Companies that have recently completed an initial public offering (IPO), or spin-off should be given adequate time to fully adjust and comply with marketplace listing requirements and meet basic corporate governance standards. The ESG Policy generally allows the company a one-year period following the IPO to comply with these requirements and as such refrains from voting based on governance standards (e.g., board independence, committee membership and structure, meeting attendance, etc.).

However, there are some cases that warrant shareholder action against the board of a company that have completed an IPO or spin-off in the past year. The ESG Policy will evaluate the terms of applicable governing documents when determining the recommendations and whether the shareholders rights will be severely restricted. In order to come to a conclusion the following points will be considered:

1. The adoption of anti-takeover provisions such as a poison pill or classified board;
2. Supermajority vote requirements to amend governing documents;
3. The presence of exclusive forum or fee-shifting provisions;
4. Whether shareholders can call special meetings or act by written consent;
5. The voting standard provided for the election of directors;
6. The ability of shareholders to remove directors without cause;
7. The presence of evergreen provisions in the company's equity compensation arrangements; and
8. The presence of a multi-class share structure which does not afford common shareholders voting power that is aligned with their economic interest.

Anti-takeover provisions can negatively impact future shareholders who (except for electing to buy or sell the stock) are unable to weigh in on matters that might negatively impact their ownership interest. In cases where the anti-takeover provision was adopted prior to the IPO, the ESG Policy may vote against the members of the board who served when it was adopted if the board:

(i) Did not also commit to submit the anti-takeover provision to a shareholder vote at the company's next shareholder meeting following the IPO; or

(ii) Did not provide a sound rationale or sunset provision for adopting the anti-takeover provision.

Financial Reporting

Accounts and Reports

Excluding situations where there are concerns surrounding the integrity of the statements/reports, the ESG Policy will generally vote for Accounts and Reports proposals.

Where the required documents have not been published at the time that the vote is cast, the ESG Policy will typically abstain from voting on this proposal.

Income Allocation (Distribution of Dividends)

The ESG Policy will generally vote for proposals concerning companies' distribution of dividends. However, particular scrutiny will be given to cases where the company's dividend payout ratio is exceptionally low or excessively high relative to its peers, and where the company has not provided a satisfactory explanation for this disparity.

Appointment of Auditors and Authority to Set Fees

The role of the auditor is crucial in protecting shareholder value. Like directors, auditors should be free from conflicts of interest and should assiduously avoid situations that require them to make choices between their own interests and the interests of the shareholders. Because of the importance of the role of the auditor, rotating auditors is an important safeguard against the relationship between the auditor and the company becoming too close, resulting in a lack of oversight due to complacency or conflicts of interest. Accordingly, the ESG Policy will vote against auditor ratification proposals in instances where it is clear that a company's auditor has not been changed for 20 or more years.

In instances where a company has retained an auditor for fewer than 20 years, the ESG Policy will generally support management's recommendation for the selection of an auditor, as well as the board's authority to fix auditor fees. However, there are a number of exceptions to this policy, and the ESG Policy will vote against the appointment of the auditor and/or the authorization of the board to set auditor fees in the following scenarios:

- The independence of an incumbent auditor or the integrity of the audit has been compromised.
- Audit fees combined with audit-related fees total less than one-half of total fees.
- There have been any recent restatements or late filings by the company and responsibility for such can be attributed to the auditor (e.g., a restatement due to a reporting error).
- The company has aggressive accounting policies.
- The company has poor disclosure or lack of transparency in financial statements.
- There are other relationships, or issues of concern, with the auditor that might suggest a conflict of interest.
- The company is changing auditors as a result of a disagreement between the company and the auditor on a matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedures.

Compensation

Compensation Reports and Compensation Policies

Depending on the market, compensation report and policy vote proposals may be either advisory or binding (e.g. in the UK a non-binding compensation report based upon the most recent fiscal year is voted upon annually, and a forward-looking compensation policy will be subject to a binding vote every three years).

In all markets, company filings are evaluated closely to determine how well information pertinent to compensation practices has been disclosed, the extent to which overall compensation is tied to performance, which performance metrics have been employed, as well as how the company's remuneration practices compare to that of its peers.

The ESG Policy will vote against the approval of a compensation report or policy in the following scenarios:

- There is a significant disconnect between pay and performance;
- Performance goals and metrics are inappropriate or insufficiently challenging;
- There is a lack of disclosure regarding performance metrics as well as a lack of clarity surrounding the implementation of these metrics.
- Short-term (e.g., generally less than three year) performance measurement is weighted excessively in incentive plans;
- Excessive discretion is afforded to, or exercised by, management or the Compensation Committee to deviate from defined performance metrics and goals in determining awards;
- Ex gratia or other non-contractual payments have been made and the reasoning for this is inadequate.
- Guaranteed bonuses are established;
- Egregious or excessive bonuses, equity awards or severance payments have been granted;
- Excessive increases (e.g. over 10%) in fixed payments, such as salary or pension entitlements, that are not adequately justified
- Where there is an absence of structural safeguarding mechanisms such as clawback and malus policies included in the Incentive plan.

Linking Compensation to Environmental and Social Issues

On top of Glass Lewis' robust evaluation of companies' compensation plans, the ESG Policy will evaluate if, and to what extent, a company has provided a link between compensation and environmental and social criteria. In most markets, should a company not provide any environmental or social considerations in its remuneration scheme and serious pay-for-performance concerns have been identified, the ESG Policy will vote against the proposed plan. The ESG Policy will also support shareholder resolutions requesting the inclusion of sustainability metrics in executive compensation plans.

Long-Term Incentive Plans

The ESG Policy recognizes the value of equity-based incentive programs. When used appropriately, they provide a means of linking an employee's pay to a company's performance, thereby aligning their interests with those of

shareholders. In addition, equity-based compensation can be an effective way to attract, retain and motivate key employees.

In order to allow for meaningful shareholder review, incentive programs should generally include:

(i) specific and appropriate performance goals;
(ii) a maximum award pool; and
(iii) a maximum award amount per employee.

In addition, the payments made should be reasonable relative to the performance of the business and total compensation paid to those included under the plan should be in line with compensation paid by the company's peers.

Performance-Based Equity Compensation

The ESG Policy supports performance-based equity compensation plans for senior executives; where it is warranted by both their performance, and that of the company. While it is unnecessary to base equity-based compensation for all employees to company performance, placing such limitations on grants to senior executives is considered advisable (although in specific scenarios equity-based compensation granted to senior executives without performance criteria is acceptable under Benchmark Policy guidelines, such as in the case of moderate incentive grants made in an initial offer of employment). While it is not uncommon for a board to state that tying equity compensation to performance goals may hinder them in attracting, and retaining, talented executives, the ESG Policy takes the stance that performance-based compensation aids in aligning executive interests to that of shareholders, and as such will support the company in achieving its objectives.

The ESG Policy will generally vote in favor of all performance-based option or share schemes; with the exception of plans that include a provision to allow for the re-testing of performance conditions; for which a vote against is recommended.

Director Compensation

The ESG Policy supports non-employee directors receiving an appropriate form, and level, of compensation for the time and effort they spend serving on the board and its committees; and director fees being at a level that allows a company to retain and attract qualified individuals. The ESG Policy compares the cost of director compensation to that of peer companies with similar market capitalizations in the same country so that compensation plans may be evaluated thoroughly, and a fair vote outcome reached.

Retirement Benefits for Directors

The ESG Policy will typically vote against the granting of retirement benefits to non-executive directors. Such extended payments can impair the objectivity and independence of these board members. Initial, and annual fees should be of a level that provides appropriate compensation to directors throughout their service to the company.

Limits on Executive Compensation

As a general rule, shareholders should not seek to micromanage executive compensation programs. Such matters should be left to the board's compensation committee. The election of directors, and specifically those who sit on the compensation committee, is viewed as an appropriate mechanism for shareholders to express their support, or disapproval, of board policy on this issue. Further, companies whose pay-for-performance is in line with their peers should be granted the flexibility to compensate their executives in a manner that drives sustainable growth. However, the ESG Policy favors performance-based compensation as an effective means of motivating executives to act in the best interests of shareholders. Performance-based compensation may be limited if a chief executive's pay is capped at a low level rather than flexibly tied to the performance of the company.

Pay-for-Performance

An integral part of a well-structured remuneration package is a successful link between pay and performance. Glass Lewis's proprietary pay-for-performance model, which serves as the ESG Policy's primary quantitative analysis, was developed to better evaluate the link between pay and performance. Generally, remuneration and performance are measured against a peer group of appropriate companies that may overlap, to a certain extent, with a company's self-disclosed peers. This quantitative analysis provides a consistent framework and historical context to determine how well companies link executive remuneration to relative performance. Glass Lewis's methodology takes a scorecard-based approach in evaluating pay-and-performance alignment. Final alignment scores are determined by the weighted sum of up to five tests, each with their own severity rating. Overall scores and ratings range as follows:

- Severe Concern: 0 to 20 points
- High Concern: 21 to 40 points
- Medium Concern: 41 to 60 points
- Low Concern: 61 to 80 points
- Negligible Concern: 81 to 100 points

The individual tests are as follows:

- Total vested CEO pay vs. TSR:
- Total vested CEO pay vs. financial performance;
- CEO STI payouts (in relation to maximum opportunity) vs. TSR;
- CEO LTI payouts (in relation to maximum opportunity) vs. TSR;
    - Alternative test for STI and LTI payout: Total vested CEO pay vs. company size measures as multiple of median;
- Qualitative downward modifier.

Separately, a specific comparison between the company's executive pay and its peers' executive pay levels may be discussed in the analysis of the remuneration report proposals for additional insight into the score. Likewise, a specific comparison between the company's performance and its peers' performance may be reflected in the analysis for further context.

Companies that demonstrate a weaker link (an overall rating of "Severe Concern" or "High Concern") are more likely to receive a negative recommendation under the ESG Policy; however, other qualitative factors are

considered in developing recommendations as each company is reviewed on a case-by-case basis. These additional factors include, but are not limited to, the consideration of competitors based in other regions (and, therefore, excluded from the peer group utilized by the model), overall incentive structure, trajectory of the program and disclosed future changes, the operational, economic and business context for the year in review, reasonable payout levels, or the presence of compelling disclosure explaining any deviation from best practice. These factors may provide sufficient rationale for the ESG Policy to recommend in favor of a proposal, even there is an identified disconnect between pay and performance.

Governance Structure

Amendments to the Articles of Association

The ESG Policy will evaluate proposed amendments to a company's articles of association on a case-by-case basis. The ESG Policy is generally opposed to bundling several amendments under a single proposal as it prevents shareholders from evaluating each amendment on its own merits. In cases, where it is a bundled amendment, the ESG Policy will evaluate each amendment individually and only support the proposal if, in the aggregate, the amendments are in the best interests of shareholders.

Anti-Takeover Measures

Multi-Class Share Structures

The ESG Policy views multi-class share structures as not in the best interests of shareholders and, instead, is in favor of one vote per share. This structure operates as a safeguard for common shareholders by ensuring that those who hold a significant minority of shares are still able to weigh in on issues set forth by the board. The economic stake of each shareholder should match their voting power and that no small group of shareholders, family or otherwise, should have differing voting rights from those of all other shareholders.

The ESG Policy considers a multi-class share structure as having the potential to negatively impact the overall corporate governance of a company. Companies should have share class structures that protect the interests of non-controlling shareholders as well as any controlling entity. Therefore, the ESG Policy will generally vote in favor of recapitalization proposals to eliminate multi-class share structures. Similarly, the ESG Policy will typically vote against proposals to adopt a new class of common stock.

Cumulative Voting

When voting on cumulative voting proposals, the ESG Policy will factor in the independence of the board and the company's governance structure. Cumulative voting is often found on ballots at companies where independence is lacking and where the appropriate balances favoring the interests of shareholders are not in place. However, cumulative voting increases the ability of minority shareholders to elect a director by allowing shareholders to cast as many shares of stock they own multiplied by the number of directors to be elected. Cumulative voting allows shareholders to cast all their votes for one single nominee, or a smaller number of nominees than up for election, thereby raising the likelihood of electing one or more of their preferred nominees to the board. Accordingly, cumulative voting generally acts as a safeguard for shareholders by ensuring that those who hold a significant minority of shares can elect a candidate of their choosing to the board. As a result, the ESG Policy will typically vote in favor proposals concerning cumulative voting.

However, in the case where the company has adopted a true majority vote standard (i.e., where a director must receive a majority of votes cast to be elected, as opposed to a modified policy indicated by a resignation policy only), the ESG Policy will vote against cumulative voting proposals due to the incompatibility of the two election methods. For companies, that have not adopted the true majority vote standard but have some form of majority voting, the ESG Policy will also vote against cumulative voting proposals if the company has also not adopted anti-takeover provisions and has been responsive to shareholders.

In instances where a company has not adopted majority voting standards and is facing both an election on the adoption of majority voting and a proposal to adopt cumulative voting, the ESG Policy will support only the majority voting proposal.

Fair Price Provision

Fair price provisions, which are rare, require that certain minimum price and procedural requirements to be observed by any party that acquires more than a specified percentage of a corporation's common stock. The intention of this provision is to protect minority shareholder value when an acquirer seeks to accomplish a merger or other transaction which would eliminate or change the rights of the shareholder. Fair price provisions sometimes protect the rights of shareholders in a takeover situation. However, more often than not they act as an impediment to takeovers, potentially limiting gains to shareholders from a variety of transactions that could potentially increase share price. As a result, the ESG Policy will generally oppose fair price provisions.

Supermajority Vote Requirements

The ESG Policy favors a simple majority voting structure except where a supermajority voting requirement is explicitly intended to protect the rights of minority shareholders in a controlled company. In the case of non-controlled companies, supermajority vote requirements act as impediments to shareholder action on ballot items that are critical to their interests. For example, supermajority vote requirements can strongly limit the voice of shareholders in making decisions on critical matters such as the selling of the business. Supermajority vote requirements can also allow small groups of shareholders to overrule and dictate the will of the majority of shareholders. Thus, having a simple majority is appropriate for protecting the rights of all shareholders.

Poison Pills (Shareholder Rights Plan)

The ESG Policy will generally oppose companies' adoption of poison pills, as they can reduce management accountability by substantially limiting opportunities for corporate takeovers. As a result, rights plans can prevent shareholders from receiving a buy-out premium for their stock. Generally, the ESG Policy will vote against these plans to protect their financial interests. While boards should be given wide latitude in directing the activities of the company and charting the company's course, on an issue such as this where the link between the financial interests of shareholders and their right to consider and accept buyout offers is so substantial, shareholders should be allowed to vote on whether or not they support such a plan's implementation. In certain limited circumstances, the ESG Policy will support a limited poison pill to accomplish a particular objective, such as the closing of an important merger, or a pill that contains a reasonable 'qualifying offer' clause.

Increase in Authorized Shares

Adequate capital stock is important to a company's operation. When analyzing a request for additional shares, the ESG Policy will typically review four common reasons why a company may need additional capital stock:

1. Stock Split	Three Metrics: (a) Historical stock pre-split price (if any) (b) Current price relative to the company's most common trading price over the past 52 weeks (c) Some absolute limits on stock price (that will either make the split appropriate or would produce an unreasonable price)
2. Shareholder Defenses	Additional authorized shares could be used to bolster takeover defenses such as a poison pill. The proxy filings often discuss the usefulness of additional shares in defending against a hostile takeover.
3. Financing for Acquisitions	Examine whether the company has a history of using stock for acquisitions and attempts to determine what levels of stock have generally been required to accomplish such transactions.
4. Financing for Operations	Review the company's cash position and its ability to secure financing through borrowing or other means.

The ESG Policy will generally support proposals when a company could reasonably use the requested shares for financing, stock splits and stock dividends, as having adequate shares to allow management to make quick decisions and effectively operate the business is critical. The ESG Policy favors that, when a company is undertaking significant transactions, management will justify its use of additional shares rather than providing a blank check in the form of large pools of unallocated shares available for any purpose.

Generally, the ESG Policy will support proposals to increase authorized shares up to 100% of the number of shares currently authorized unless, after the increase the company would be left with less than 30% of its authorized shares outstanding. In markets where such authorities typically also authorize the board to issue new shares without separate shareholder approval, the ESG Policy applies the policy described below on the issuance of shares.

Issuance of Shares

The issuance of additional shares generally dilutes existing shareholders in most circumstances. Further, the availability of additional shares, where the board has discretion to implement a poison pill, can often serve as a deterrent to interested suitors. In cases where a company has not detailed a plan for use of the proposed shares, or where the number of shares far exceeds those needed to accomplish a detailed plan, the ESG Policy will typically vote against the authorization of additional shares. In the case of a private placement, the ESG Policy will also factor in whether the company is offering a discount to its share price.

Generally, the ESG Policy will support proposals to authorize the board to issue shares (with pre-emptive rights) when the requested increase is equal to or less than the current issued share capital. The authority of these shares should not exceed five years unless that is the market best practice. In accordance with the different market practices, the specific thresholds for share issuance can vary. And, as a result, the ESG Policy will vote on these proposals on a case-by-case basis.

The ESG Policy will also generally support proposals to suspend pre-emption rights for a maximum of 5-20% of the issued ordinary share capital of the company, depending on best practice in the country in which the company is located. This authority should not exceed five years, or less for some countries.

Repurchase of Shares

The ESG Policy typically supports proposals to repurchase shares when the plan includes the following provisions:

(i) A maximum number of shares which may be purchased (typically not more than 10-15% of the issued share capital); and
(ii) A maximum price which may be paid for each share (as a percentage of the market price).

Reincorporation

A company is in the best position to determine the appropriate jurisdiction of incorporation. The ESG Policy will factor in several elements when a management proposal to reincorporate the company is put to vote. These elements include reviewing the relevant financial benefits, generally related to incorporate tax treatment, as well as changes in corporate governance provisions, especially those related to shareholder rights, resulting from the change in domicile. In cases where the financial benefits are too small to be meaningful and there is a decrease in shareholder rights, the ESG Policy will vote against the transaction.

Tax Havens

The ESG Policy evaluates a company's potential exposure to risks related to a company's tax haven policies on an as-needed basis and will support shareholder proposals requesting that companies report on the risks associated with their use of tax havens or that request that companies adopt policies to discontinue operations or withdraw from tax havens. The ESG Policy will also vote against reincorporation proposals when companies have proposed to redomicile in known tax havens.

Advance Notice Requirements

Typically, the ESG Policy will recommend vote against provisions that would require advance notice of shareholder proposals or of director nominees. Advance notice requirements typically range between three to six months prior to the annual meeting. These requirements often make it impossible for a shareholder who misses the deadline to present a shareholder proposal or director nominee that may be in the best interests of the company. Shareholders should be able to review and vote on all proposals and director nominees and are able to vote against proposals that appear with little prior notice. Therefore, by setting advance notice requirements it limits the opportunity for shareholders to raise issues that may arise after the window closes.

Transaction of Other Business

In general, the ESG Policy will vote against proposals that put the transaction of other business items proposal up for vote at an annual or special meeting, as granting unfettered discretion is unwise.

Anti-Greenmail Proposals

The ESG Policy will support proposals to adopt a provision preventing the payment of greenmail, which would serve to prevent companies from buying back company stock at significant premiums from a certain shareholder. The anti-greenmail provision helps to protect the company as it requires that a majority of shareholders other than the majority shareholder approve the buyback, thus, eliminating cases where a majority shareholder could attempt to charge a board a large premium for the shares.

Virtual-Only Shareholder Meetings

A growing number of companies have elected to hold shareholder meetings by virtual means only. The ESG Policy supports companies allowing a virtual option alongside an in-person meeting, so long as the shareholder interests are not compromised. Without proper controls, conducting a virtual-only meeting of shareholders could eliminate or significantly limit the rights of shareholders to confront, and ask management on any concerns they may have. When companies decide to only hold virtual-only meetings, the ESG Policy will examine the level of disclosure provided by the company on the virtual meeting procedures and may vote against members of the nominating and governance committee if the company does not provide disclosure assuring that shareholders will be afforded the same rights and opportunities to participate as they would at an in-person meeting.

Mergers, Acquisitions & Contested Meetings

For merger and acquisition proposals, the ESG Policy undertakes a thorough examination of all elements of the transactions and determine the transaction's likelihood of maximizing shareholder return. In order to make a voting recommendation, the ESG Policy will examine the process conducted, the specific parties and individuals involved in negotiating an agreement, as well as the economic and governance terms of the proposal.

In the case of contested merger situations, or board proxy fights, the ESG Policy will evaluate the plan presented by the dissident party and how, if elected, it plans to enhance or protect shareholder value. The ESG Policy will also consider any concerns presented by the board, including any plans for improving the performance of the company, when making the ultimate recommendation. In addition, the ESG Policy will support shareholder proposals asking a company to consider the effects of a merger, spin-off, or other transaction on its employees and other stakeholders.

Shareholder Proposals

The ESG Policy has a strong emphasis on enhancing the environmental, social and governance performance of companies. Accordingly, the ESG Policy will be broadly supportive of environmental and social shareholder proposals aimed at enhancing a company's policies and performance with respect to such issues. The ESG Policy will carefully examine each proposal's merits in order to ensure it seeks enhanced environmental disclosure and/or practices, and is not conversely aimed at limiting environmental or social disclosure or practices. Accordingly, the ESG Policy will not support proposals aimed at limiting or rescinding companies' ESG-related disclosures, goals or initiatives

Governance Proposals

The ESG Policy supports increased shareholder participation and access to a company and its board of directors. Accordingly, the ESG Policy will generally vote in favor of initiatives that seek to enhance shareholder rights, such as the introduction of majority voting to elect directors, the adoption and amendment of proxy access bylaws, the elimination/reduction of supermajority provisions, the declassification of the board, the submission of shareholder rights' plans to a shareholder vote, and the principle of one share, one vote.

The ESG Policy will also support proposals aimed at increasing the diversity of boards or management as well as those requesting additional information concerning workforce diversity and the adoption of more inclusive nondiscrimination policies. Further, the ESG Policy will support enhanced oversight of environmental and social issues at the board level by supporting resolutions calling for the creation of an environmental or social committee of the board or proposals requesting that the board adopt a subject-matter expert, such as one with deep knowledge and experience in human rights or climate change-related issues. The ESG Policy will also generally vote for proposals seeking to increase disclosure of a company's business ethics and code of conduct, as well as of its activities that relate to social welfare.

Environmental Proposals

The ESG Policy will generally support proposals regarding the environment, including those seeking improved sustainability reporting and disclosure about company practices which impact the environment. The ESG Policy will vote in favor of increased disclosure of a company's environmental risk through company-specific disclosure as well as compliance with international environmental conventions and adherence to environmental principles. Similarly, the ESG Policy will support proposals requesting companies develop greenhouse gas emissions reduction goals, comprehensive recycling programs, and other proactive means to mitigate a company's environmental footprint.

The ESG Policy will also vote for proposals seeking that companies provide certain disclosures or adopt certain policies related to mitigating their climate change-related risks. For example, regardless of industry, the ESG Policy will support proposals requesting that companies disclose information concerning their scenario analyses or that request the company provide disclosure in line with certain globally-recognized environmental and social reporting recommendations. Further, the ESG Policy will support proposals requesting that a company consider energy efficiency and renewable energy sources in its project development and overall business strategy.

The ESG Policy will also evaluate a company's impact on the environment, in addition to the regulatory risk a company may face by not adopting environmentally responsible policies.

Say on Climate

Shareholder Proposals

Beginning in 2021, companies began placing management proposals on their ballots that ask shareholders to vote on their climate transition plans, or a Say on Climate vote. The ESG Policy will generally recommend in favor of shareholder proposals requesting that companies adopt a Say on Climate vote.

Management Proposals

When evaluating management-sponsored votes seeking approval of climate transition plans the ESG Policy looks to the board to provide information concerning the governance of the Say on Climate vote. Specifically, the ESG Policy evaluates whether companies provide sufficient disclosure concerning the board's role in setting strategy in light of this vote, and how the board intends to interpret the vote results for the proposal. In instances where disclosure concerning the governance of the Say on Climate vote is not present, the ESG Policy will either abstain, or, depending on the quality of the plan presented, will vote against the proposal.

The ESG Policy also looks to companies to clearly articulate their climate plans in a distinct and easily understandable document, this disclosure, it is important that companies clearly explain their goals, how their GHG emissions targets support achievement of broader goals (i.e. net zero emissions goals), and any foreseeable obstacles that could hinder their progress on these initiatives.

When evaluating these proposals, the ESG Policy will take into account a variety of factors, including: (i) the request of the resolution (e.g., whether companies are asking shareholders to approve its disclosure or its strategy); (ii) the board's role in overseeing the company's climate strategy; (iii) the company's industry and size; (iv) whether the company's GHG emissions targets and the disclosure of these targets appear reasonable in light of its operations and risk profile; and (iv) where the company is on its climate reporting journey (e.g., whether the company has been reporting and engaging with shareholders on climate risk for a number of years or if this is a relatively new initiative). In addition, the ESG Policy will closely evaluate any stated net zero ambitions or targets. If these goals are absent, the ESG Policy will generally vote against management Say on Climate proposals.

Social Proposals

The ESG Policy will support proposals requesting that a company develop sustainable business practices, such as animal welfare policies, human rights policies, and fair lending policies. Furthermore, the ESG Policy will support reporting and reviewing a company's political and charitable spending as well as its lobbying practices. In addition, the ESG Policy will support proposals requesting that companies cease political spending or associated activities.

The ESG Policy will also generally support enhancing the rights of workers, as well as considering the communities and broader constituents in the areas in which companies do business. Accordingly, the ESG Policy will generally vote for proposals requesting that companies provide greater disclosure regarding impact on local stakeholders, workers' rights and human rights in general. In addition, the ESG Policy will support proposals for

companies to adopt or comply with certain codes of conduct relating to labor standards, human rights conventions, and corporate responsibility at large. The ESG Policy will also support proposals requesting independent verification of a company's contractors' compliance with labor and human rights standards. In addition, the ESG Policy supports the International Labor Organization standards and encourage companies to adopt such standards in its business operations.

The ESG Policy will provide for a review of the performance and oversight of certain directors in instances in which a company is found to have violated international human rights standards. Pursuant to the ESG Policy, if directors have not adequately overseen the overall business strategy of the company to ensure that basic human rights standards are met or if a company is subject to regulatory or legal action with a foreign government or entity due to human rights violations, the Policy may vote against directors taking into account the severity of the violations and the outcome of the claims.

The ESG Policy also generally votes in favor of proposals seeking increased disclosure regarding public health and safety issues, including those related to product responsibility. In particular, the ESG Policy supports proposals calling for the labeling of the use of genetically modified organisms (GMOs), the elimination or reduction of toxic emissions and use of toxic chemicals in manufacturing, and the prohibition of tobacco sales to minors. The ESG Policy also supports proposals seeking a report on a company's drug reimportation guidelines, as well as on a company's ethical responsibility as it relates to drug distribution and manufacture. The ESG Policy further supports proposals related to worker safety and companies' compliance with internationally recognized human rights or safety standards.

Compensation Proposals

The ESG Policy recognizes that ESG performance factors should be an important component of the overall consideration of proper levels of executive performance and compensation. Therefore, the ESG Policy generally votes in favor of proposals seeking to tie executive compensation to performance measures such as compliance with environmental regulations, health and safety regulations, nondiscrimination laws and compliance with international human rights standards. Furthermore, the ESG Policy will generally support proposals that seek to evaluate overall director performance based on environmental and social criteria.

The ESG Policy will support proposals seeking to prohibit or require more disclosure about stock hedging and pledging by executives. The ESG Policy will also generally support proposals requesting that companies adopt executive stock retention policies and prohibiting the accelerated vesting of equity awards. Furthermore, the ESG Policy will vote in favor of shareholder proposals to link pay with performance, to eliminate or require shareholder approval of golden coffins, and to clawback unearned bonuses. Finally, the ESG Policy will support proposals requesting disclosure from companies regarding gender pay inequity and company initiatives to reduce the gap in compensation paid to women compared to men.

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Mirror Voting Policy

Under this policy, the proportionate ownership position will be voted in approximately the same proportions as votes cast for the meeting by other shareholders of the security. In instances where proportionate voting cannot be reasonably executed due to operational considerations or other issues, inclusive of meetings at which the election of directors is contested, the fund will leave the proportionate shares unvoted. The proportionate votes will be based on the votes that have been cast by beneficial owners of a portfolio security in Broadridge's network generally as of the day prior to the applicable meeting and, as such, will not reflect all votes that are ultimately cast at the meeting.