Vanguard Admiral Funds
Vanguard Scottsdale Funds
Vanguard Specialized Funds
Vanguard World Fund

Supplement Dated February 9, 2024, to the Statement of Additional Information

Statement of Additional Information Text Changes

Appendix A to the Statement of Additional Information is amended to add the following additional information:

Proxy Voting Pilot

The Boards of Trustees of Vanguard Admiral Funds, Vanguard Scottsdale Funds, Vanguard Specialized Funds, and Vanguard World Fund (the Pilot Funds' Boards) have approved a proxy voting pilot for Vanguard S&P 500 Growth Index Fund, Vanguard ESG U.S. Stock ETF, Vanguard Russell 1000 Index Fund, Vanguard Mega Cap Index Fund, and Vanguard Dividend Appreciation Index Fund (the Pilot Funds) beginning February 12, 2024 through June 30, 2024 (the Pilot Period). Fund shareholders in a Pilot Fund whose pro-rata ownership interest in the Pilot Funds and contact information is available to Broadridge Financial Solutions at the time of the pilot will receive communication inviting them to participate. The communication will invite them to choose from among four different proxy voting policies through which they may direct how their pro-rata ownership interest in the Pilot Fund will vote on proposals presented for a vote at the annual shareholder meetings of certain select portfolio companies within the Pilot Fund.

Pilot Fund shareholders as of February 1, 2024, whose ownership information is available to Vanguard through Broadridge will receive an invitation to participate in the pilot. A second invitation to participate in the pilot will be sent to new Pilot Fund shareholders who own their fund shares as of March 1, 2024. Fund shareholders who purchase a Pilot Fund after March 1, 2024, will not be eligible to participate in the pilot.

Pilot Fund shareholders' proxy voting preferences will be applied to approximately the 30 largest holdings (as of December 31, 2023) within each Pilot Fund that have record dates and hold annual shareholder meetings during the period of the pilot. With respect to the included holdings, if the timing of an annual shareholder meeting varies significantly relative to previous years, the security is no longer held within the Pilot Fund as of the record date of its annual shareholder meeting, or if other issues, inclusive of operational considerations, impede inclusion, the security may not be included in the pilot. Ballot items at annual shareholder meetings of Pilot Fund holdings not included in the pilot will be voted in accordance with the Vanguard-Advised Fund Proxy Voting Policy.

The Investment Stewardship Team will continue the day-to-day administration of each Pilot Fund's proxy voting process during the pilot period, overseen by the Investment Stewardship Oversight Committee; however, for the votes for the annual shareholder meetings of each portfolio company in the pilot, the Investment Stewardship Team will apply the policy choices directed by Pilot Fund shareholders in proportion to those Pilot Fund shareholders' pro-rata ownership interests. Pilot Fund shareholders that sell all of their shares during the pilot will no longer be able to participate in the pilot after the sale.

Methodology for Determining and Calculating Ownership

Vanguard will rely on the share ownership information provided by your broker or custodian in its calculations. Your percentage ownership of the Pilot Fund—aggregated with other Pilot Fund shareholders selecting the same policy—will be utilized to calculate the percentage of portfolio company shares to be voted according to the selected policy. This percentage will be applied to the Pilot Fund's votable share position at each company, which may be impacted by securities lending or specific voting restrictions, to determine the number of shares voted pursuant to each policy. Due to rounding or other factors, the proportionate share of portfolio company shares that are voted according to a Pilot Fund shareholder's policy selection may not always exactly match that shareholder's proportionate ownership.

Changes to Policy Selection and Participating Shareholders

Pilot Fund shareholders that select a proxy voting policy may change that policy selection during the pilot. Vanguard has partnered with Broadridge Financial Solutions to leverage its beneficial ownership network to reach Fund shareholders whose pro-rata ownership interest in a Pilot Fund as well as their contact information are available to Broadridge Financial Solutions as of the record dates of February 1, 2024, and March 1, 2024, including many that hold shares through an intermediary. However, it is possible that some shareholders may not be able to participate in the pilot if the beneficial ownership information for their shares is not immediately available to Broadridge Financial Solutions.

Proxy Voting Policies

Consistent with the proxy voting pilot held from February 2023 through June 2023, there will be four proxy voting policies from which fund shareholders may choose. The four proxy voting policies are: (i) the Company Board-aligned policy; (ii) the "Not Voting" Policy; (iii) the Glass Lewis ESG Policy; and (iv) the Vanguard-Advised Funds Proxy Voting Policy, a summary of which is discussed in Appendix A of this Statement of Additional Information. If a Pilot Fund shareholder does not select one of the four proxy voting policies, the Pilot Fund will vote that shareholder's pro-rata ownership interest in accordance with the Vanguard-Advised Funds Proxy Voting Policy.

The Company Board-aligned Policy, the "Not Voting" Policy, and the Glass Lewis ESG Policy are summarized below.

Company Board-aligned Policy:

The pro-rata ownership position of Pilot 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 Pilot Fund will cast an ABSTAIN vote on that shareholder's behalf.

"Not Voting" Policy:

The pro-rata ownership position of Pilot Fund shareholders that select the "Not Voting" Policy will be left unvoted on all proposals. In instances where a Pilot Fund must execute a vote for procedural reasons, the Pilot Fund will cast an ABSTAIN vote on that shareholder's behalf.

Glass Lewis ESG Policy:

The pro-rata ownership position of Pilot 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, consistent with a view that investment returns can be enhanced through a focus on disclosing and mitigating risks related to environmental, social, and governance issues.

The policy 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.

The following is a summary of the Glass Lewis ESG Policy and does not contain all provisions. This description is qualified in its entirety by reference to the full text of the Glass Lewis ESG Policy.

Election of Directors

In analyzing director elections, the Glass Lewis ESG Policy generally seeks boards that have sufficient levels of independence, a record of positive performance, diverse backgrounds, and that appoint new directors that have a depth of experience that is relevant to the company.

The Glass Lewis ESG Policy generally supports having independent directors serve on the audit, compensation, and nominating and governance committees, depending on the market, and will support shareholder proposals requesting that companies create a committee to oversee material environmental and social issues or calling for the appointment of directors with special expertise, such as environmental or human rights expertise.

The Glass Lewis ESG Policy also supports boards that have a diversity of gender, race, and ethnicity, as well as diversity of skills, backgrounds, thoughts, and experiences.

Environmental and social oversight and performance

The Glass Lewis 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.

The Glass Lewis ESG Policy has specific consideration of companies' disclosure of, and policies relating to, climate change, particularly with regard to companies that operate in industries where greenhouse gas emissions represent a financially material risk and may vote against directors in certain instances where the companies fail to meet those expectations.

Compensation

The Glass Lewis ESG Policy looks at various factors to evaluate how well a company's compensation practices have been disclosed, whether a company's overall compensation is tied to performance, the metrics companies have used to evaluate executives' performance for purposes of compensation, and how a company's compensation practices compare to its peers. The Glass Lewis ESG Policy sets out certain instances when it will vote against a company's compensation proposal, such as when there is a significant disconnect between what the company has paid to executives and the company's performance or when there is inadequate disclosure of the company's compensation plan metrics.

With respect to the Glass Lewis ESG Policy's evaluation of proposals related to long-term incentive plan proposals or performance-based equity compensation, the Glass Lewis ESG Policy is generally supportive of both and will look to the reasonableness of the compensation relative to the performance of the business as well as what a company's peers have paid.

Governance Structure

The Glass Lewis ESG Policy will analyze management proposals regarding various governance structures to determine if the proposed structures are in the best interests of shareholders. The Glass Lewis ESG Policy generally supports proposals that do not negatively impact shareholder rights.

Shareholder Proposals

The Glass Lewis ESG Policy has a strong emphasis on enhancing the environmental, social, and governance performance of companies and will generally vote for environmental and social shareholder proposals that seek to enhance a company's policies and performance on those issues, as well as proposals that request additional disclosures and board accountability related to environmental, social, and governance issues. In extraordinary cases when companies have failed to adequately mitigate risks stemming from environmental or social practices, the Glass Lewis ESG Policy may vote against relevant directors or other management proposals. The Glass Lewis ESG Policy will vote against shareholder proposals that seek to limit environmental or social disclosures or practices.

The following is added as an Appendix to this Statement of Additional Information:

Appendix

Company Board-aligned Policy:

The pro-rata ownership position of Pilot 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 Pilot Fund will cast an ABSTAIN vote on that shareholder's behalf.

“Not Voting” Policy:

The pro-rata ownership position of Pilot Fund shareholders that select the “Not Voting” Policy will be left unvoted on all proposals. In instances where a Pilot Fund must execute a vote for procedural reasons, the Pilot Fund will cast an ABSTAIN vote on that shareholder’s behalf.

2024 ESG Thematic Voting Policy

An Overview of Glass Lewis' ESG Thematic Voting Policy

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 environmental, social, and governance 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.

Join the Conversation

Glass Lewis is committed to ongoing engagement with all market participants.

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Summary of Changes for 2024

Board Diversity

The ESG Policy has updated its policy concerning gender diversity on boards. The policy has been updated to provide that, if less than 30% of the board is female the ESG Policy will vote against the entire incumbent male nominating committee members for large- and mid-cap companies; however, where local market standards dictate a higher level of expected gender diversity, the ESG policy will follow the local market requirement. , Previously, the ESG Policy would vote against members of the nominating committee in instances where large-cap companies did not have at least 30% gender diversity and the chair of the nominating committee when mid- and small-cap companies did not have at least one woman on their boards. The policy will continue to recommend against male members of the nominating committee when small-cap companies do not have at least one woman on their boards.

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 has narrowed its focus to vote against the chair of the board in instances where companies in major blue chip indices are not signatories or participants in the United Nations Global Compact (“UNGC”) or have not adopted 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”).

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 and progressive 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. For boards that wish to protect and enhance the interests of shareholders they must 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. In terms of the directors, 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 are 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 RPT's - 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 presently 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 Glass Lewis 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 the 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 the incumbent male nominating committee members in instances where the board of a large- or mid-cap company is comprised of fewer than 30% female directors, or the local market requirement for gender diversity where higher; or (iii) vote against the male members of the nominating committee where there is not at least one woman 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

Board members performance and their actions in regard to performance of the board 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.

Glass Lewis 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. For companies included in the Climate Action 100+ focus list and those that operate in industries where the Sustainability Accounting Standards Board (SASB) has determined that greenhouse gas (GHG) emissions represent a financially material risk, the ESG Policy will vote against the chair of the board in instances where a company has not adopted a net zero emissions target or ambition. For all other companies, 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 both instances, if the chair of the board is also the company's CEO, the ESG Policy will vote against the chair of the audit committee.

The ESG Policy also takes into consideration investors' growing expectation for robust climate and sustainability disclosures. For Climate Action 100+ focus list companies, as well as those where SASB has determined that GHG emissions represent a material risk, the ESG Policy will vote against the chair of the board when the company has failed to produce reporting that is aligned with the recommendations of the Task force on Climate-related Financial Disclosures (TCFD). For all other companies, the ESG Policy may vote against the chair of the board when they have not produced sufficient sustainability reporting.

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 in major blue chip indices are not signatories or participants in the United Nations Global Compact ("UNGC") or have not adopted 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").

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 recommend that shareholders vote against such committee members on that basis. In addition, in cases where a company maintains a significant level of financial risk exposure but 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

Any time 20% or more of shareholders vote contrary to the recommendation of management on compensation or director elections proposals, the board should, depending on the issue, demonstrate some level of responsiveness to address the concerns of shareholders. While the 20% threshold alone will not automatically generate a negative vote from the ESG Policy on a future proposal (e.g., to vote against a director nominee, against a remuneration proposal, etc.), it will be a contributing factor to a vote against management's recommendation in the event we determine that the board did not respond appropriately.

As a general framework, the evaluation of board responsiveness involves a review of the publicly available disclosures released following the date of the company's last annual meeting up through the publication date of the most current Proxy Paper.

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 too 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.

However, even considering the above, the ESG Policy will not vote against CEOs who also chair the board. The ESG Policy will generally support separating the positions of CEO and chair whenever the question is posed in a shareholder proposal, as in the long-term it is in the best interests of the company.

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 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, the ESG Policy will vote against the proposed plan. For companies with a greater degree of exposure to environmental and climate-related issues (i.e., Climate Action 100+ focus list companies and those where SASB has deemed GHG emissions to be financially material), the ESG Policy will vote against compensation proposals if the company has not adequately incentivized executives to act in ways that mitigate a company's climate impact. 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 is 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 Glass Lewis 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.

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 recommend voting 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 protecting 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 vote to 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 what we believe to be 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 also vote in a manner that promotes enhanced disclosure and board accountability. In extraordinary cases when companies have failed to adequately mitigate risks stemming from environmental or social practices, the ESG Policy may vote against:

- (i) ratification of board and/or management acts;
- (ii) approving a company's accounts and reports; and/or
- (iii) relevant Directors

Governance Proposals

The ESG Policy supports increased shareholder participation and access to a company and its board of directors. Accordingly, the ESG Policy will 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, in particular, 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 reporting recommendations, such as those promulgated by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). 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.

With respect to issues related to bioengineering and nanotechnology, the ESG Policy will carefully scrutinize any proposals requesting that a company adopt a policy concerning these matters. In general, the ESG Policy support proposals that seek additional reporting on these topics, as well as the development of safety standards to regulate their use.

The ESG Policy will evaluate a company's impact on the environment, in addition to the regulatory risk a company may face by not adopting environmentally responsible policies. Further, the ESG Policy will consider voting against directors for not appropriately overseeing environmental risk.

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, which, as a best practice, should generally be aligned with the recommendations of the TCFD. In 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 determine if sufficient disclosure has been made concerning a company's capital allocations and expenditures in the context of its strategy and will also evaluate any stated net zero ambitions or targets. If either of these 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.

Trojan Horse Proposals

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 consideration. Accordingly, the ESG Policy will not support such proposals, which are often referred to as "Trojan Horse" proposals.

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Vanguard-advised funds

Proxy voting policy for U.S. portfolio companies

Effective February 2024

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Introduction

The information below, organized according to Vanguard Investment Stewardship's four pillars of corporate governance, is the voting policy adopted by the Boards of Trustees of the Vanguard-advised funds (the "Funds' Boards") and describes the general positions of the funds on proxy proposals that may be subject to a shareholder vote at U.S.-domiciled companies.[1] In all cases, proposals are voted as determined in the best interests of each fund consistent with its investment objective. It is important to note that proposals often require a facts-and-circumstances analysis based on an expansive set of factors. Proposals are voted case by case, under the supervision of Vanguard's Investment Stewardship Oversight Committee and at the direction of the relevant Fund's Board.

The following policies are applied over an extended period of time; as such, if a company's board is not responsive to voting results on certain matters, a fund may withhold support for those and other matters in the future. Regardless of whether proposals are submitted by company management or by other shareholders, they are voted in accordance with these policies and as determined to be in the best interests of each fund, consistent with its investment objective.

1 Vanguard's Investment Stewardship program is responsible for proxy voting and engagement on behalf of the quantitative and index equity portfolios advised by Vanguard (together, "Vanguard-advised funds"). Vanguard's externally managed portfolios are managed by unaffiliated third-party investment advisors, and proxy voting and engagement for those portfolios are conducted by their respective advisors. As such, throughout this document, "we" and "the funds" are used to refer to Vanguard's Investment Stewardship program and Vanguard-advised funds, respectively.

Pillar I: Board composition and effectiveness

In the interest of maximizing the long-term return of their investment in each company, the funds seek to ensure that the individuals who serve as board directors to represent the interests of all shareholders are appropriately independent, experienced, committed, capable, and diverse. Diversity of thought, background, and experience, as well as personal characteristics (such as gender, race, ethnicity, and age), meaningfully contribute to the ability of boards to serve as effective, engaged stewards of shareholders' interests.

In order to appropriately represent shareholder interests in the oversight of company management, a majority of directors should be independent, as should all of the members of the board's key committees (audit, compensation, and nominating/governance or their equivalents).[2] While the funds generally rely upon the relevant exchange listing or regulatory requirements in establishing a director's independence, there may be instances (such as former CEOs) in which directors who may be "technically independent" are considered otherwise after engagement and/or research.[3]

As detailed below, if a board's or committee's composition is inconsistent with these independence standards, a fund may not support (a) the nonindependent nominees on the board/committee and (b) members of the nominating/governance committee on the ballot.

Majority board independence[4]

A fund will generally vote against the nominating committee and all nonindependent board members of a noncontrolled company if that company does not maintain a majority independent board. In the second year that a board is not majority independent, the fund may vote against the entire board. Independence is generally defined in accordance with the relevant exchange-listing standards, with the following exceptions:

- *Former CEOs.* Former CEOs will not be considered independent unless they held only an "interim" CEO position for less than 18 months. An interim CEO who held that temporary position for less than 18 months will be considered independent three years after leaving the position.
- *CEO interlocks.* CEOs who sit on one another's boards will not be considered independent.
- *Other factors.* If it is determined, through engagement or research, that a director's independence has been compromised, that director may not be considered independent regardless of technical compliance with the exchange listing standards. Likewise, certain circumstances could lead to the determination that a director is independent, regardless of compliance with listing standards.

2 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). While the funds will relax their majority independence expectation with respect to the entire board in these cases, we still look for the majority of key committee members to be independent.

3 For example, a fund will generally consider former CEOs of the company—other than those who may have served in an interim capacity for less than 18 months—as permanently nonindependent members of their board. In addition, CEOs who serve on one another's boards (so-called interlocking directorships) may also be considered nonindependent.

4 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.

Key committee independence

At noncontrolled companies, a fund will typically vote against nonindependent directors who serve on the following key committees (or their equivalent):

- Audit committee
- Compensation committee
- Nominating and governance committee

In addition to voting against nonindependent committee members, a fund will generally vote against the entire nominating committee if any of the committees noted above is not 100% independent, regardless of the independent status of any committee members. If a board has no nominating and governance committee and instead acts as its own nominating committee, a fund will generally also vote against all directors, except where only the board's independent directors nominate directors and/or make the final appointment decision.

At controlled companies, a fund will generally support 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, a fund may vote against any other relevant board member(s).

Director capacity and commitments

Directors' responsibilities are complex and time-consuming. Therefore, the funds seek to understand whether the number of directorship positions held by a director makes it challenging 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 may vary, the funds believe that limitations on the number of board positions held by individual directors are appropriate, absent compelling evidence to the contrary.

A fund will generally vote against any director who is a named executive officer (NEO) and sits on more than two public company boards. The two boards could comprise either the NEO's "home board" (i.e., a company where the NEO serves as an executive officer) plus one outside board, or two outside boards if the NEO does not serve on their home board. If an NEO sits on more than two public company boards, a fund will typically vote against the nominee at each company where they serve as a nonexecutive director, but not at the nominee's home board.

A fund will also generally vote against any director who serves on more than four public company boards. In that instance, the fund will typically vote against the director at each company except the one where they serve as board chair or lead independent director.

In certain instances, a fund will consider voting for a director who would otherwise be considered overboarded under the standards above because of company-specific facts and circumstances. This may include, but is not limited to, indications that the director will have sufficient capacity to fulfill their responsibilities and/or a review of the full board's skill and diversity composition. In addition, a fund may vote for an overboarded director if the director has publicly committed to stepping down from the directorship(s) necessary to fall within the thresholds listed above.

The Vanguard-advised funds look for portfolio companies to adopt good governance practices regarding director commitments, including an overboarding policy 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 its policy, any considerations and rationale for their 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.

Board composition

The funds look for boards to be "fit for purpose" by reflecting sufficient diversity of skills, experience, perspective, and personal characteristics (such as gender, age, race, and ethnicity) resulting in cognitive diversity that enables effective, independent oversight on behalf of all shareholders. The funds believe that the appropriate mix of skills, experience, and characteristics is unique to each board and should reflect expertise related to the company's strategy and material risks from a variety of vantage points.

The funds look for companies to disclose their perspectives on the appropriate board structure and composition for their company and how those elements support the company's strategy, long-term performance, and shareholder returns. Disclosure of how the board's composition evolves over time enables shareholders to better understand how the board is positioned to serve as effective, engaged stewards of shareholders' interests.

The funds expect disclosure of tenure, skills, and experience at the director level (sometimes referred to as a "skills matrix"). To this end, a fund may support requests for disclosure of the company's approach to board composition, inclusive of board diversity.

To evaluate board composition in relation to this policy, factors for the funds to consider include applicable market regulations and expectations, along with additional company-specific context.

- Boards should reflect diversity of attributes including tenure, skills, and experience.
- A board should also, at a minimum, represent diversity of personal characteristics, inclusive of at least diversity in gender, race, and ethnicity on the board.
- Boards should take action to reflect a board composition that is appropriately representative, relative to their markets and to the needs of their long-term strategies.
- Disclosure of directors' personal characteristics (such as race and ethnicity) should occur on a self-identified basis and may occur on an aggregate level or individual director level. Disclosure of skills and experience at the director level is expected.
- Companies should provide disclosure regarding their 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 re-nomination) process to ensure the right mix of skills, experience, perspective, and personal characteristics into the future.

Escalation process: Director and committee accountability

Directors are generally nominated by boards and elected by shareholders to represent their interests. While a fund may generally support the board's director nominees, if there are instances in which the board has failed to respond to actions approved by a majority of shareholders, unilaterally taken action against shareholder interests, or, in the fund's view, failed in its oversight role, the fund may withhold support from those directors deemed responsible (generally based on their functional or committee-level responsibilities). A fund will generally not apply such a vote against a director who has served less than one year on the board and/or applicable committee but in such instances may apply it to another relevant director in their place. Issues that spur such votes may include:

- *Lack of majority board and key committee independence.* A fund will generally vote against relevant directors to raise concerns when a company lacks majority board independence or key committee independence.
- *"Zombie" directors.* A fund will typically vote against members of the nominating committee if management proposes the reappointment of a director or directors who failed to receive majority shareholder support and the board has not resolved the underlying issue driving the lack of shareholder support. This vote should apply only when a fund withheld initial support for a director. If nominating committee members are not on the ballot in any given year, a fund may vote against other relevant board members.
- *Limiting shareholder rights.* A fund will generally vote against members of a governance committee in response to unilateral board actions that meaningfully limit shareholder rights (including, but not limited to, the unilateral adoption of exclusive forum provisions that do not align with the fund's policy or changing bylaws to include overly onerous advance notice provisions). This vote is based on a holistic review of the company's governance structures and is applied only when there is concern that shareholders are unable to exercise their rights. If governance committee members are not on the ballot in any given year, a fund may vote against other relevant board members.
- *Compensation-related situations.*
  - A fund will generally vote against compensation committee members when it votes against the company's Say on Pay proposal in consecutive years unless meaningful improvements have been made to executive compensation practices since the prior year.
  - If egregious pay practices are identified, a fund will generally vote against compensation committee members if Say on Pay is not on the ballot.
  - A fund will generally also vote against compensation committee members when the fund votes against an equity compensation plan.
- *Nonresponsiveness to proposals.* A fund will generally vote against members of the relevant committee for failure to adequately respond to proposals (management or shareholder) that received sufficient support based on the applicable vote standard, including the support of the fund, based on votes cast at a prior year's shareholder meeting.
- *Oversight failure.* If a situation arises in which the board has failed to effectively identify, monitor, and ensure management of material risks and business practices under its purview based on committee responsibilities, a fund will generally vote against the relevant committee members and/or other relevant directors. These risks may include material social and environmental risks, inclusive of climate change.
  - For example, to assess a climate risk oversight failure, factors for the fund to consider include: the materiality of the risk; the effectiveness of disclosures to enable the market to understand and price the risk; whether the company has disclosed business strategies including reasonable risk mitigation plans in the context of the anticipated regulatory requirements and changes in market activity in line with the Paris Agreement or subsequent agreements; and consideration for company-specific context, market regulations, and expectations. The fund will also consider the board's overall governance of and effective independent oversight of climate risk.
  - When a specific risk does not fall under the purview of a board committee, a fund will generally vote against the lead independent director and/or chair, and/or any other relevant director(s).
- *Board composition*. Absent a compelling reason, a fund will generally vote against the nominating and/or governance committee chair, or another relevant board member if the nominating and/or

governance committee chair is not up for reelection, if a company's board is not taking action to achieve board composition that is appropriately representative, relative to their markets and the needs of their long term strategies.

- *Audit failures.*
  - A fund will generally vote against audit committee members when nonaudit fees paid to the auditor exceed audit-related fees without sufficient disclosure or when the fund votes against an audit-related management proposal.
  - A fund will generally vote against audit committee members in instances of a material misstatement or material weakness in multiple years without sufficient remedy.

Contested director elections

A fund will vote case by case on shareholder nominees in contested director elections. The analysis of proxy contests focuses on three key areas:

- The economic and strategic case for change at the target company
  - How has the company performed relative to its peers?
  - Has the current board's oversight of company strategy or execution been deficient?
  - Is the dissident focused on strengthening the target company's long-term strategy and shareholder returns?
- The quality of company governance
  - Did the board engage in productive dialogue with the dissident?
  - Is there evidence of effective, shareholder-friendly governance practices at the company?
  - Has the board actively engaged with shareholders in the past?
- The quality of the company's and dissident's board nominees
  - Is there reason to question the independence, engagement, or effectiveness of the incumbent board?
  - Has the board delivered strong oversight processes with long-term shareholders' interests in focus?
  - Are the directors proposed by the dissident (whether the full slate or a subset) well-suited to address the company's needs, and is this a stronger alternative to the current board?

Director attendance

A fund will generally vote against directors who attended less than 75% of board or committee meetings (in the aggregate) in the previous year unless an acceptable extenuating circumstance is disclosed.

Independent board leadership

In addition to the importance of board independence generally, 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 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 that the funds believe this matter should be within the purview of a company's board, a fund will generally vote against shareholder proposals to separate the CEO and chair roles, absent significant concerns regarding independence or effectiveness of the board at the company in question.

When independence or effectiveness concerns suggest that support for an independent chair may be appropriate the following factors, among others, are considered:

- *Lack of a robust lead independent director role.* A strong lead independent director generally provides sufficient independent perspective to balance the perspective of a nonindependent chair. Structures that do not provide a strong counterweight to insider leadership warrant requiring independent oversight.
- *Lack of board accessibility.* Communicating directly with independent board members, including a lead independent director or committee chairs, is an important way for shareholders to exchange perspectives. Restricting access to independent board members through policy or practice may prevent the board from receiving comprehensive feedback from shareholders to incorporate into corporate practices.
  - It may also contribute to a culture of management entrenchment by controlling the messages the board receives.
- *Low overall board independence.* High affiliated representation on the board may outweigh independent voices and serve to entrench insider leadership. Enhancing the role of independent directors may offer a counterweight to the nonindependent voices on the board. As noted by the guidelines for director independence, issues beyond exchange standards for technical independence may be considered in determining overall board independence.
- *Governance structural flaws*. Certain governance practices and corporate structures may create an environment more favorable to potential entrenchment of management and other insider board members. For example, multiple share classes with different voting rights limit shareholders' voices, and key committees that are not fully independent may limit a board's ability to oversee management.
- *Lack of responsiveness.* A pattern of being unresponsive to shareholders (e.g., a failure to act, or slow action, on shareholder votes) may indicate that a board is entrenched. A stronger independent leadership role may be necessary to remedy this.
- *Oversight failings.* Governance crises may indicate entrenchment or that the board is not receiving sufficient information from management to appropriately fulfill its oversight role. Evidence of failure to provide appropriate governance oversight and/or evidence of failure to oversee material or manifested risks, including those that may be considered "social" or "environmental," will be taken into account. In addition, board decisions that impair shareholder rights (e.g., unilaterally classifying the board) may indicate that a board does not properly value shareholder rights.

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 value 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*. A fund will generally vote for a proposal to increase authorized common stock if the proposed increase represents potential dilution less than or equal to 100%. It may vote for an increase resulting in more than 100% dilution if the increase is to be used for a stock split.
- *Reverse stock split*. A fund will typically vote for a reverse split of outstanding shares 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, it will generally vote for a reverse split if it is necessary for the company to remain listed on its current exchange.
- *Decrease in outstanding shares to reduce costs*. A fund will generally vote for a proposal to reduce outstanding shares to reduce costs if the level at which affected investors are cashed out is not material.
- *Amendment of authorized common stock/ preferred stock*. A fund will generally vote for proposals to create, amend, or issue common or preferred stock unless the rights of the issuance are materially different from the rights of current shareholders (i.e., differential voting rights) or include a blank-check provision. It will generally vote against proposals to create such stock if the accompanying disclosure does not include a statement affirming that the new issuance will not be used for anti-takeover purposes.
- *Tracking stock*. A fund will generally vote for the issuance of tracking stock as a dividend to current shareholders. It will vote case by case on proposals to offer tracking stock through an initial public offering based on the proposed use of the proceeds, as well as on proposals calling for the elimination of tracking stock.

Mergers, acquisitions, and financial transactions

The funds seek to assess the likelihood that a transaction preserves or will create long-term value for shareholders. A fund will vote case by case on all mergers, acquisitions, and financial transactions based on a governance-centric evaluation focused on four key areas:

- Valuation
- Strategic rationale
- Board oversight of the deal process
- The surviving entity's governance profile

In evaluating board oversight, the funds will consider independence, potential conflicts of interest, and management incentives.

Bankruptcy proceedings

A fund will vote case by case on all proposals related to bankruptcy proceedings. When evaluating proposals to restructure or liquidate a firm, a fund will consider factors such as the financial prospects of the firm, alternative options, and management incentives.

Environmental/social proposals

Each proposal will be evaluated on its merits and in the context that a company's board has ultimate responsibility for providing effective oversight of strategy and risk management. This oversight includes material sector- and company-specific sustainability risks and opportunities that have the potential to affect long-term shareholder value.

While each proposal will be assessed on its merits and in the context of a company's current practices and public disclosures, vote analysis will also consider these proposals relative to market norms or widely accepted frameworks endorsed or already referenced by Vanguard's Investment Stewardship program. Input from the board, management, and proponents may also be taken into consideration.

A fund may support a shareholder proposal that:

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

If the above criteria are met, a fund is likely to support the following types of proposals:

Specific to an environmental proposal (not exhaustive):

- Requests disclosure related to the company's Scope 1 and Scope 2 emissions data, and Scope 3 emissions data in categories where climate-related risks are deemed material by the board.
- Requests an assessment of a changing climate's impact on the company, disclosing appropriate scenario analysis and related impacts on strategic planning.

Specific to a social risk proposal (not exhaustive):

- Requests disclosure of workforce demographics inclusive of gender, racial, and ethnic categories, considering other widely accepted industry standards, and if appropriate under applicable laws and regulations. This could include publishing EEO-1 reports.
- Requests disclosure of the board's role in overseeing material diversity, equity, and inclusion (DEI) risks or other material social risks.
- Requests disclosure of the company's approach to board composition, inclusive of board diversity, and/or adoption of targets or goals related to board diversity (without prescribing what such targets should be, unless otherwise specified by applicable laws, regulatory requirements, or listing standards).
- Requests inclusion of additional protected classes in a company's employment and diversity policies, as appropriate under applicable laws and regulations and consistent with a focus on risks and opportunities related to the company's long-term performance, when the company has not already formally established such protection. A fund will generally not support proposals asking for

the exclusion of certain characteristics from a company's employment and diversity policies unless appropriate under applicable laws and regulations.

Disclosure proposals

A fund will vote case by case on disclosure-related management and shareholder proposals based on the materiality of environmental and social risks to a company.

Clear, comparable, consistent, and accurate disclosure enables shareholders to understand the strength of a board's risk oversight. Because sustainability disclosure is an evolving and complex topic, a fund's analysis of related proposals aims to strike a balance in avoiding prescriptiveness and providing a long-term perspective.

Targets, policies, and practices proposals

A fund will vote case by case on management and shareholder proposals that request adoption of specific targets or goals and on proposals that request adoption of environmental or social policies and practices.

Shareholders typically do not have sufficient information about specific business strategies to propose specific targets or environmental or social policies for a company, which is a responsibility that resides with management and the board. As a result, shareholder proposals that are more prescriptive in nature will generally not be supported by a fund.

Corporate political activity proposals

- A fund will vote case by case on all shareholder proposals that request greater disclosure of a company's political spending and/or lobbying activities, policies, or practices.
- Factors for consideration include, but are not limited to, applicable laws and regulations regarding political spending and/or lobbying; the prevalence of corporate political activity within a company's industry; the company's current disclosure and level of board oversight of current corporate political activity; disclosure regarding trade associations or other groups that a company supports, or is a member of, that engage in lobbying activities; and recent controversies, litigation, fines, or other manifested risks associated with the company's corporate political activity.

Independent auditors

- *Ratification of management's proposed independent auditor.* The funds are generally supportive of the annual submission of auditor appointment for shareholder approval. A fund is likely to support 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. A fund will vote case by case on the ratification of independent auditors when there is a material misstatement of financials or other significant concern about the integrity of the company's financial statements. The fund may vote against ratification when taxes 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 independence.
- *Rotations of auditing firms.* A fund will vote case by case on proposals mandating auditor rotation.
- *Requirement for a shareholder vote.* A fund will generally vote for shareholder proposals that require companies to submit ratification of auditors to a shareholder vote.

Pillar III: Executive pay (compensation)

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 creation of long-term value 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.

A fund's considerations when evaluating executive pay fall into three broad categories:

- *Alignment of pay and performance.* The funds look for evidence of clear alignment between pay outcomes and company performance. This is mainly assessed through alignment of incentive targets with corporate strategy and analysis of three-year total shareholder return and realized pay over the same period vs. a relevant set of peer companies. If there are concerns that pay and performance are not aligned, a fund may vote against a pay-related proposal.
- *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 which the funds determine have led to, or could in the future lead to, pay-for-performance misalignment, a fund may vote against a pay-related proposal. For compensation structures which are not typical of a market, the Vanguard-advised funds look for specific disclosure demonstrating how the structure supports long-term value creation for shareholders.
- *Governance of compensation plans.* The funds look for boards to have a clear strategy and 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. The funds also look for boards to explain these matters to shareholders via company disclosures. Where pay-related proposals consistently receive low support, the funds look for boards to demonstrate responsiveness to shareholder concerns.

A fund will vote case by case on executive compensation proposals (including Say on Pay, compensation reports, and compensation policies) and in general will support those that enhance long-term shareholder value. It may also vote for compensation proposals that reflect improvements in compensation practices in the interests of long-term shareholder value creation, even if the proposals are not perfectly aligned with all these guidelines.

While a fund will not be prescriptive as to exact structure of a compensation plan, it will seek structures and processes that can reasonably be expected to align pay and performance over time. 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 value, among other factors. A fund does not look for nonfinancial metrics (such as environmental, social, and governance [ESG] metrics) to be a standard component of all compensation plans. When compensation committees choose to include nonfinancial metrics, the funds look for the same qualities the funds do with more traditional metrics, such as rigor, disclosure, and alignment with key strategic goals and/or material risks.

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 peer group used to benchmark pay is not comparably aligned with the company in size or strategy.
- 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

A fund will typically support management proposals to put Say on Pay to an annual vote as opposed to a vote every two years or three years.

Additional executive pay matters

Severance packages/golden parachutes. A fund will typically vote for proposals to approve severance packages (or "golden parachutes") 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). The funds believe any 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, a fund may support shareholder proposals requiring that future golden parachutes be put to a vote, provided that ratification after the fact is permitted. A fund may also vote for proposals to approve Say on Severance unless they are excessive or unreasonable.

Shareholder proposals on pay for superior performance. A fund will generally vote against shareholder proposals that call for companies to set standards that require pay for superior performance, particularly when the proposal calls for specific performance standards.

Annual or long-term bonus plans. A fund will typically vote against bonus plans that are excessive or unreasonable and will use criteria similar to that used in the fund's Say on Pay analysis.

A fund will vote case by case on all other proposals with particular focus on situations that raise a higher level of concern, including:

- Plans that cannot be reasonably interpreted by investors
- Plans in which the maximum dollar payout per participant is not disclosed (bonus caps as a percentage of salary or another financial metric—e.g., total income is acceptable as long as the amounts are not unreasonable)
- Broad discretion to set performance criteria, or too many performance criteria
- Lack of correlation between performance and compensation

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 long-term shareholders with the interests of management, employees, and directors.

A fund will vote case by case on compensation plan proposals. 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. A fund is likely to vote 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.

A fund is likely to vote against a proposal 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. A fund will generally vote 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 value.
- *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. A fund will generally vote against management proposals to grant one-time stock options if dilution limits are exceeded. It will vote case by case on other proposals.

Adopting deferred compensation plan. A fund will generally vote for proposals to adopt a deferred compensation plan unless the plan includes discounts.

Adopting or adding shares to an employee stock purchase plan. A fund will typically vote against proposals to adopt or add shares to employee stock purchase plans if 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. A fund will generally vote for a proposal to amend a 401(k) plan to allow for excess benefits.

Nonemployee director compensation

A fund will vote case by case on proposals to adopt or amend nonexecutive director equity compensation plans, including stock award plans. 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.

A fund will generally vote against nonemployee director equity compensation plans that allow for repricing, as well as those that contain an evergreen feature (automatic renewal). It may also vote against nonemployee director pensions.

A fund will vote case by case on all other proposals for nonemployee director compensation.

Pillar IV: Shareholder rights

The funds believe that effective corporate governance includes shareholders having the ability—in proportion to their economic ownership of a company's shares—to effect and approve changes in corporate governance practices and the composition of the board. The funds look for companies to adopt governance practices to ensure that boards and management serve as designed in the interest 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; a fund may generally support proposals—irrespective of the proponent—that seek approval for governance structures that safeguard shareholder rights (and oppose those that do not) as described below.

Board structure and director elections

The funds believe that a given 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. A fund will generally vote for proposals to declassify a current board and vote against management or shareholder proposals to create a classified board.

Cumulative voting. A fund will generally vote for management proposals to eliminate cumulative voting and vote against management or shareholder proposals to adopt cumulative voting.

Majority voting. If the company has plurality voting, a fund will typically vote for shareholder proposals that require a majority vote for election of directors. A fund may also vote for management proposals to implement majority voting for election of directors. A fund will generally vote 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. A fund will generally vote 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. It will generally vote against management proposals to allow directors to fill vacancies on a classified board.

Board authority to set board size. Generally, a fund will support management proposals to set the board at a specific size or designate a reasonable range to provide flexibility. However, it will consider the anti-takeover effects of the proposal, particularly in the context of a hostile takeover offer or board contest. It will generally vote 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. A fund will generally vote for management proposals to limit terms of outside directors and will generally vote against shareholder proposals to limit such terms.

Shareholder access

A fund will vote case by case on management and shareholder proposals to adopt proxy access. Generally, it will vote 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.

A fund will consider supporting shareholder proposals that have differing thresholds if the company has not adopted any proxy access provision and does not intend to do so.

Dual-class stock

This guideline applies when a company issues more than one class of stock, with different classes carrying different voting rights. The funds' approach to this issue is principled yet practical. It remains philosophically aligned to "one-share, one-vote" but mindful of the need not to hinder public capital formation in the equity markets.

Alignment of voting and economic interests is a foundation of good governance. The funds support the idea of a newly public company with multiple classes of shares adopting a sunset provision that would move the company toward a one-share, one-vote structure over time.

A fund will vote case by case on proposals to eliminate dual-share-class structures with differential voting rights.

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." A fund will generally vote against 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.

- A fund will generally support structures and practices that are short-term in nature (typically terms of one year or less).
- A fund generally prefers that a plan be put to a shareholder ratification vote at the next practicable annual meeting and at each subsequent annual meeting while the plan is in place. In cases where this is not the practice, a fund may support a shareholder proposal to adopt such practice.
- A fund will generally vote for "net operating loss" (NOL) poison pills and for 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. A fund will vote case by case on management proposals to expand or clarify the authority of the board of directors to consider factors outside the interests of shareholders in assessing a takeover bid.

Other anti-takeover provisions. In general, a fund will vote for proposals to create anti-greenmail provisions and against "fair price" provisions. It will generally vote for shareholder proposals to opt out of anti-takeover provisions in state corporation laws where that is allowed (e.g., Pennsylvania).

Voting requirements

Supermajority voting. A fund will generally vote against proposals to adopt supermajority vote requirements and for proposals to reduce or eliminate them.

Confidential voting. A fund will generally vote for shareholder proposals to adopt confidential voting.

Time-phased voting. A fund will vote typically against proposals to implement time-phased voting.

Special meetings and written consent

If a company does not have a right to call a special meeting, a fund will generally vote for management proposals to establish that right. It may also vote for shareholder proposals to establish this right, as long as the ownership threshold is not below 10% of current shares outstanding.

If a company already has the right to call a special meeting at a threshold of 25% or lower, a fund will generally vote:

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

A fund will typically vote for management proposals to establish the right to act by majority written consent. It will generally support shareholder proposals to adopt this right if shareholders do not have the right to call a special meeting.

Advance notice of shareholder proposals

A fund will generally vote 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

A fund will generally vote against management proposals that give the board the exclusive authority to amend the bylaws.

Change of company name

A fund will generally vote for proposals to change the corporate name unless evidence shows that the change would hurt shareholder value.

Reincorporation

A fund will vote case by case on management proposals to reincorporate to another domicile. Considerations include the reasons for the relocation and the differences in regulation, governance, or shareholder rights.

A fund will vote case by case on management proposals to reincorporate outside the United States. Considerations include the reasons for the relocation, including differences in regulation, governance, shareholder rights, and potential tax benefits. Potential benefits (e.g., higher earnings/ stock price) will be weighed against reduced shareholder rights, potential for increased shareholder tax liability, and potential for other material, long-term risks to the company.

A fund will generally vote against shareholder proposals to reincorporate from one state to another.

Exclusive forum/exclusive jurisdiction

A fund will vote case by case on management proposals to adopt an exclusive forum provision. 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.

A fund will generally give companies latitude on organizational matters and, with respect to state forum selection provisions, will generally support proposals to designate state courts in Delaware, or a company's state of incorporation or principal place of business. Any such choice of a state or federal court should be broad-based, rather than limited to a specific court within a state. The funds will consider withholding support from governance committee members when a company unilaterally adopts a provision that meaningfully limits shareholders' rights without a compelling rationale for the choice of forum.

Shareholder meeting rules and procedures

Quorum requirements. A fund will generally vote 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. A fund will generally vote against proposals to approve "other such matters that may come before the meeting."

Adjournment of meeting to solicit more votes. In general, a fund will generally vote for the adjournment if the fund supports the proposal in question and against the adjournment if the fund does not support the proposal.

"Bundled" proposals. A fund will vote case by case on all bundled management proposals.

Change in date, time, or location of annual general meeting. A fund will typically vote for management proposals to change the date, time, or location of the annual meeting if the proposed changes are reasonable.

Hybrid/virtual meetings. A fund will generally support proposals seeking to conduct "hybrid" meetings (in which shareholders can attend a meeting of the company in person or elect to participate online). A fund may vote for proposals to conduct "virtual-only" meetings (held entirely through online participation with no corresponding in-person meeting). Virtual meetings should not curtail rights—e.g., by limiting the ability for shareholders to ask questions.

A fund will consider support if:

- Meeting procedures and requirements are disclosed ahead of a meeting;
- A formal process is in place to allow shareholders to submit questions to the board;
- Real-time video footage is available and attendees can call into the meeting or send a prerecorded message; and
- Shareholder rights are not unreasonably curtailed.

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Vanguard Funds

Supplement Dated December 28, 2023, to the Statement of Additional Information

The boards of trustees of the Vanguard funds (the “Boards”) have elected Lubos Pastor as trustee of the Boards effective January 1, 2024.

Statement of Additional Information Text Changes

In the **Management of the Fund(s)** section under *Officers and Trustees*, Mr. Pastor is added to the table as follows:

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
Independent Trustees				
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). Vice President at European Finance Association. Member of the board of the Fama-Miller Center for Research in Finance. Research Associate at the National Bureau of Economic Research, and Research Fellow at the Centre for Economic Policy and Research. Member of Center for Research in Security Prices (CRSP) Index Advisory Council and Advisory Board.	208

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Vanguard Funds

Supplement Dated December 20, 2023, to the Statement of Additional Information

Important Changes to Vanguard Funds' Board of Trustees

The board of trustees of the Vanguard funds (the "boards") have elected Lubos Pastor as a trustee of the board, effective January 1, 2024.

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Vanguard Funds

Supplement Dated July 20, 2023, to the Statement of Additional Information

The boards of trustees of the Vanguard funds (the "Boards") have elected Grant Reid as a trustee of the Boards, effective July 20, 2023.

Statement of Additional Information Text Changes

In the **Management of the Fund(s)** section under "Officers and Trustees," Mr. Reid is added to the table as follows:

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
Independent Trustees				
Grant Reid (1959)	Trustee	July 2023	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. Chair of Agribusiness Task Force, Sustainable Markets Initiative.	205

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Vanguard Specialized Funds

Supplement Dated March 23, 2023, to the Statement of Additional Information

Important Change to Vanguard Dividend Growth Fund (the Fund)

As part of a multi-year succession plan, Donald J. Kilbride will step down as portfolio manager of the Fund on or about January 1, 2024. At that time, Peter C. Fisher, who currently serves as a co-portfolio manager, will remain as the Fund's portfolio manager, and references to Mr. Kilbride in the Fund's Statement of Additional Information will be deleted in their entirety.

Mr. Kilbride will remain at Wellington Management and will continue to be a resource to Mr. Fisher. The Fund's investment objective, strategies, and policies will remain unchanged.

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PART B

VANGUARD® SPECIALIZED FUNDS

STATEMENT OF ADDITIONAL INFORMATION

May 25, 2023

This Statement of Additional Information is not a prospectus but should be read in conjunction with a Fund's current prospectus (dated May 25, 2023). To obtain, without charge, a prospectus or the most recent Annual Report to Shareholders, which contains the Fund's financial statements as hereby incorporated by reference, please contact The Vanguard Group, Inc. (Vanguard).

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

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DESCRIPTION OF THE TRUST

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

Vanguard Fund[2]	Share Classes[1] Investor	Admiral	Institutional	ETF
Vanguard Dividend Appreciation Index Fund	—	VDADX	—	VIG[3]
Vanguard Dividend Growth Fund	VDIGX	—	—	—
Vanguard Energy Fund	VGENX	VGELX	—	—
Vanguard Global Capital Cycles Fund[4]	VGPMX	—	—	—
Vanguard Global ESG Select Stock Fund	VEIGX	VESGX	—	—
Vanguard Health Care Fund	VGHCX	VGHAX	—	—
Vanguard Real Estate Index Fund[5]	VGSIX	VGSLX	VGSNX	VNQ[3]

1 Individually, a class; collectively, the classes.
2 Individually, a Fund; collectively, the Funds.
3 Exchange: NYSE Arca.
4 Prior to September 26, 2018, the Fund was named Vanguard Precious Metals and Mining Fund.
5 Prior to May 25, 2018, the Fund was named Vanguard REIT Index Fund.

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, was reorganized as a Maryland corporation in 1986, and was reorganized as a Delaware statutory trust in 1998. Prior to its reorganization as a Delaware statutory trust, the Trust was known as Vanguard Specialized Portfolios, Inc. 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 (other than Vanguard Energy Fund, Vanguard Global Capital Cycles Fund, Vanguard Health Care Fund, and Vanguard Real Estate Index Fund) are classified as diversified within the meaning of the 1940 Act. Vanguard Energy Fund, Vanguard Global Capital Cycles Fund, Vanguard Health Care Fund, and Vangard Real Estate Index Fund are classified as nondiversified within the meaning of the 1940 Act.

Service Providers

Custodians. JPMorgan Chase Bank, N.A., 383 Madison Avenue, New York, NY 10179 (for Vanguard Global Capital Cycles, Global ESG Select Stock, and Real Estate Index Funds); Bank of New York Mellon, 240 Greenwich Street, New York, NY 10286 (for Vanguard Dividend Growth Fund); and State Street Bank and Trust Company, One Lincoln Street, Boston, MA 02111 (for Vanguard Dividend Appreciation Index, Energy, and Health Care Funds) serve as the Funds' custodians. The custodians are responsible for maintaining the Funds' assets, keeping all necessary accounts and records of Fund assets, and appointing any foreign subcustodians or foreign securities depositories.

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

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

Characteristics of the Funds' Shares

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

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

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

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.

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. Because dividends from REITs are generally not eligible for qualified dividend treatment, Vanguard Real Estate Index Fund's dividend distributions attributable to its REIT investments are generally not expected to be eligible for that 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 the Fund, and treated by individual shareholders, as "qualified REIT dividends" that are eligible for a 20% deduction on its federal income tax returns. Individuals must satisfy holding period and other requirements in order to be eligible for this deduction. Without further legislation, the deduction would sunset after 2025. Shareholders should consult their own tax professionals concerning their eligibility for this deduction.

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. Because dividends from REITs are not eligible for the dividends–received deductions, Vanguard Real Estate Index Fund's dividend distributions attributable to its REIT investments are generally not expected to be eligible for the deduction. Also, distributions attributable to income earned on a Fund's securities lending transaction, including substitute dividend payments received by a Fund with respect to a security out on loan, will not be 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.

Diversification. With respect to 75% of its total assets, each Fund (other than Vanguard Energy Fund, Vanguard Global Capital Cycles Fund, Vanguard Health Care Fund, and Vanguard Real Estate Index Fund) may not (1) purchase more than 10% of the outstanding voting securities of any one issuer or (2) purchase securities of any issuer if, as a result, more than 5% of the Fund's total assets would be invested in that issuer's securities. This limitation does not apply to obligations of the U.S. government or its agencies or instrumentalities.

Vanguard Energy Fund, Vanguard Global Capital Cycles Fund, Vanguard Health Care Fund, and Vanguard Real Estate Index Fund will limit the aggregate value of all holdings (except U.S. government securities, cash, and cash items, as defined under subchapter M of the IRC), each of which exceeds 5% of the Fund's total assets or 10% of the issuer's outstanding voting securities, to an aggregate of 50% of the Fund's total assets as of the end of each quarter of the taxable year. Additionally, each Fund will limit the aggregate value of holdings of a single issuer (except U.S. government securities, as defined in the IRC) to a maximum of 25% of the Fund's total assets as of the end of each quarter of the taxable year.

Industry Concentration. Each Fund (other than Vanguard Dividend Appreciation Index Fund, Vanguard Dividend Growth Fund, Vanguard Global ESG Select Stock Fund, and Vanguard Global Capital Cycles Fund) will concentrate its investments in the securities of issuers whose principal business activities are in the industry denoted by the Fund name.

Vanguard Dividend Appreciation 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.

Vanguard Dividend Growth Fund and Vanguard Global ESG Select Stock Fund will not concentrate their investments in the securities of issuers whose principal business activities are in the same industry or group of industries.

Vanguard Global Capital Cycles Fund will concentrate its investments in the securities of issuers whose principal business activities are in the precious metals and mining industry.

Investment Objective. The investment objectives of Vanguard Energy Fund, Vanguard Global Capital Cycles Fund, Vanguard Health Care Fund, and Vanguard Real Estate Index 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.

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. The increased use of technology to conduct business could subject a fund and its third-party service providers (including, but not limited to, investment advisors, transfer agents, and custodians) to risks associated with cybersecurity. In general, a cybersecurity incident can occur as a result of a deliberate attack designed to gain unauthorized access to digital systems. If the attack is successful, an unauthorized person or persons could misappropriate assets or sensitive information, corrupt data, or cause operational disruption. A cybersecurity incident could also occur unintentionally if, for example, an authorized person inadvertently released proprietary or confidential information. Vanguard has developed robust technological safeguards and business continuity plans to prevent, or reduce the impact of, potential cybersecurity incidents. Additionally, Vanguard has a process for assessing the

information security and/or cybersecurity programs implemented by a fund's third-party service providers, which helps minimize the risk of potential incidents that could impact a Vanguard fund or its shareholders. Despite these measures, a cybersecurity incident still has the potential to disrupt business operations, which could negatively impact a fund and/or its shareholders. Some examples of negative impacts that could occur as a result of a cybersecurity incident include, but are not limited to, the following: a fund may be unable to calculate its net asset value (NAV), a fund's shareholders may be unable to transact business, a fund may be unable to process transactions, or a fund may be 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, coupon deferral risk, lower recovery value 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—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 Investors Service, Inc. (Moody's) or below BBB–/A-2 by Standard & Poor's Financial Services LLC (Standard & Poor's)) 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 the advisor deems it in the best interests of shareholders.

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.

On October 28, 2020, the Securities and Exchange Commission adopted new regulations governing the use of derivatives by registered investment companies ("Rule 18f-4"). The Funds were required to implement and comply with Rule 18f-4 by August 19, 2022. Rule 18f-4 imposes limits on the amount of derivatives a fund can enter into, eliminates the asset segregation framework currently used by funds to comply with Section 18 of the 1940 Act, as amended, treats derivatives as senior securities, and requires funds whose use of derivatives is more than 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 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. A 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. ESG risk factors, either quantitative or qualitative, may be used as a component of certain funds' investment processes 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. The weight given to ESG factors may vary across types of investments, industries, regions, and issuers; may change over time; and not every ESG factor may be identified or evaluated. Consideration of ESG factors may affect a fund's exposure to certain issuers or industries. 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. The 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 factors. ESG 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 actively managed 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 or that may be viewed as having a high ESG risk profile.

For funds advised by Vanguard, Vanguard's Investment Stewardship Team, on behalf of the Board of Trustees of each Vanguard-advised fund, administers proxy voting for the equity holdings of the Vanguard-advised funds. The Investment Stewardship Team may engage with issuers to better understand how they are addressing material risks, including ESG risks. Specifically, the Investment Stewardship Team may engage with companies on how they disclose significant risks to shareholders, develop their risk mitigation approach, and report on progress.

For 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 advisors 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 advisors will engage with particular issuers held by a fund 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 the fund.

Each fund has adopted procedures and guidelines for monitoring portfolio holding human rights practices and violations pursuant to which it may assess regulatory, reputational, or other risks that may affect long-term shareholder value associated with the alleged activity. In extraordinary circumstances a fund may divest of a portfolio holding where doing so is deemed appropriate.

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, political or social instability, 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 economic or other sanctions 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—China A-shares Risk. China A-shares (A-shares) are shares of mainland Chinese companies that are traded locally on the Shanghai and Shenzhen stock exchanges. A-shares investment by foreign investors are currently only available through the Qualified Foreign Investor (QFI) license or the China Stock Connect program. The developing state of the investment and banking systems of China subjects the settlement, clearing, and registration of securities transactions to heightened risks. Additionally, there are foreign ownership limitations that 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 if the 5% ownership will be determined by aggregating the holdings of a fund with affiliated funds.

Due to these restrictions, it is possible that the A-shares quota available to a fund as a foreign investor may not be sufficient to meet the fund's investment needs. In this situation, a fund may seek an alternative method of economic exposure, such as by purchasing other classes of securities or depositary receipts or by utilizing derivatives. Any of these options could increase a fund's investment cost. Additionally, investing in A-shares generally increases emerging markets risk due in part to government and issuer market controls and the developing settlement and legal systems.

Investing in China A-shares through QFI License. A fund may access securities of companies through the QFI program. Although the relevant QFI regulations have recently been revised to relax regulatory restrictions on the onshore capital management by QFI license holders (including removing investment quota limit and simplifying routine repatriation of invest proceeds), QFI policies and rules are unique and evolving, are still in the early stages and subject to uncertainties as to how they will be implemented in practice, and are subject to change and interpretation by PRC authorities. Any of the above could have potential adverse effects on a fund, including on a retroactive basis.

With respect to the QFI custodial arrangements, to the extent a fund's cash is commingled with the assets of other clients of a Chinese custodian and the Chinese custodian becomes insolvent, the fund will not have any proprietary rights to cash deposited in the account, and the fund will become and unsecured creditor, ranking pari passu with all other unsecured creditors of the Chinese custodian. The Chinese custodian is required to perform certain regulatory and reporting obligations. If these reporting obligations are not met, PRC authorities may impose a fine or other sanctions, including the revocation of the QFI license, which could have a negative impact on a fund investing in China A-shares and could result in increased fund expenses.

Trades do not cross between the Shanghai and Shenzhen stock exchanges, and a separate broker is assigned for each exchange. If a fund rebalances across both exchanges, the fund must trade out of stocks listed on one exchange with a broker and trade into stocks on the other exchange with a separate broker. As a result, the fund may incur additional fees.

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

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

Foreign Securities—Emerging Market Risk. Investing in emerging market countries involves certain risks not typically associated with investing in the United States, and it imposes risks greater than, or in addition to, risks of investing in more developed foreign countries. These risks may significantly affect the value of emerging market investments and include: (i) nationalization or expropriation of assets or confiscatory taxation; (ii) currency devaluations and other currency exchange rate fluctuations; (iii) greater social, economic, and political uncertainty and instability (including amplified risk of war and terrorism); (iv) more substantial government involvement 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, cyberattacks, and unpredictable enforcement of securities regulations and other laws. Such actual and/or threatened retaliatory actions may impact emerging market economies and issuers in which a fund invests. For example, in China, ownership of companies in certain sectors by foreign individuals and entities is prohibited. In order to facilitate investment in these companies by foreign individuals, many Chinese companies have created variable interest entities ("VIEs") that provide exposure to the Chinese company through contractual arrangements instead of equity ownership. VIE structures are subject to risks associated with breach of the contractual arrangements, including difficulty in enforcing any judgments outside of the United States, and do not offer the same level of investor protection as direct ownership. Additionally, while VIEs are a longstanding industry practice, they have not been approved by Chinese regulators. Chinese regulators could prohibit Chinese companies from accessing foreign investment through VIEs or sever their ability to transmit economic and governance rights to foreign individuals and entities. Such actions would significantly reduce, and possibly permanently eliminate, the market value of VIEs held by a fund.

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

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

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

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

enter into a forward contract to sell an amount of foreign currency approximating the value of some or all of its portfolio securities denominated in such foreign currency. This practice is sometimes referred to as "portfolio hedging." Similarly, when the advisor reasonably believes that the U.S. dollar may suffer a substantial decline against a foreign currency, a fund may enter into a forward contract to buy that foreign currency for a fixed dollar amount.

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

A fund may hold a portion of its assets in bank deposits denominated in foreign currencies so as to facilitate investment in foreign securities as well as protect against 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; the NSD is now recognized as the Central Securities Depository in Russia.

For Russian issuers with fewer than 50 shareholders, ownership records are maintained only by registrars who are under contract with the issuers and are currently not settled with the NSD. Although a Russian subcustodian will maintain copies of the registrar's records (Share Extracts) on its premises, such Share Extracts are not recorded with the NSD and may not be legally sufficient to establish ownership of securities. 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 with fewer than 50 shareholders 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 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, 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.

Each Fund's obligations under futures contracts will not exceed 20% of its total assets.

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 (and segregation requirements, if applicable) at a time when it may be disadvantageous to do so. In addition, on the settlement date, a fund may be required to make delivery of the instruments underlying the futures positions it holds.

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

A fund bears the risk that its advisor will incorrectly predict future market trends. If the advisor attempts to use a futures contract or a futures option as a hedge against, or as a substitute for, a portfolio investment, the fund will be exposed to the risk that the futures position will have or will develop imperfect or no correlation with the portfolio investment. This could cause substantial losses for the fund. Although hedging strategies involving futures products can reduce the risk of loss, they can also reduce the opportunity for gain or even result in losses by offsetting favorable price movements in other fund investments.

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

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.

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

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 the funds) 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 the 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 the advisor attempts to use an OTC swap as a hedge against, or as a substitute for, a portfolio investment, the fund will be exposed to the risk that the OTC swap will have or will develop imperfect or no correlation

with the portfolio investment. This could cause substantial losses for the fund. Although hedging strategies involving OTC swap instruments can reduce the risk of loss, they can also reduce the opportunity for gain or even result in losses by offsetting favorable price movements in other fund investments. Many OTC swaps are complex and often valued subjectively. Improper valuations can result in increased cash payment requirements to counterparties or a loss of value to a fund.

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

Other Investment Companies. A fund may invest in other investment companies, including ETFs, non-exchange traded U.S. registered open-end investment companies (mutual funds), and closed-end investment companies, to the extent permitted by applicable law or SEC exemption. Under Section 12(d)(1) of the 1940 Act, a fund may invest up to 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 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 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. The ability of Vanguard and external advisors to purchase or dispose of certain fund investments, or to exercise rights on behalf of a fund, is or may be restricted or impaired because of limitations imposed by law, regulation, or by certain regulators or issuers. As a result, Vanguard and external advisors, on behalf of certain funds currently and other funds potentially in the future, are required to limit purchases, sell existing investments, or otherwise limit the exercise of shareholder rights by the fund, including voting rights. These ownership restrictions and limitations can impact a fund's performance. For index funds, this impact generally takes the form of tracking error, which can arise when a fund is not able to acquire its desired amount of a security. For actively managed funds, this impact can result, for example, in missed investment opportunities otherwise desired by a fund's investment advisor. If a fund is required to limit its investment in a particular issuer, then the fund may seek to obtain regulatory or corporate consents or ownership waivers. Other options a fund may pursue include seeking to obtain economic exposure to that issuer through alternative means, such as through a derivative or through investment in a totally held subsidiary, both of which may be more costly than owning securities of the issuer directly. In the event a derivative, such as a swap, is used as an alternative means of exposure, Vanguard and external advisors on behalf of a

fund are not able to guarantee the availability of derivatives necessary to allow economic exposure to the security, sector, or industry. This limited availability may have additional impacts to fund performance. Additionally, use of derivatives as an alternative means of exposure subjects a fund to derivatives-related risks. Ownership restrictions and limitations could result in unanticipated tax consequences to the fund that may affect the amount, timing, and character of distributions to shareholders.

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, the 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, 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 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 his or her tax professional for information regarding the particular situation and the possible application of U.S. federal, state, local, foreign, and other taxes.

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—Passive Foreign Investment Companies. To the extent that a fund invests in stock in a foreign company, such stock may constitute an equity investment in a passive foreign investment company (PFIC). 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 a fund held it. Also, a 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, a fund may elect to "mark to market" its PFIC interests, that is, to treat such interests as sold on the last day of a 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—Special Tax Rules for Non-U.S. Investors in Vanguard Real Estate Index Fund. Because of the nature of the Fund's investments, the Fund is and expects to continue to be a "qualified investment entity" under Section 897(h) of the IRC. As a result, certain capital gain distributions from the Fund to non-U.S. investors that are attributable to the Fund's direct or indirect investments in REITs could be subject to ordinary income treatment (regardless of any reporting by the Fund that such distribution is a short-term or long-term capital gain dividend that would otherwise be exempt from U.S. withholding), and thus subject to a 30% withholding tax rate (or a lower applicable treaty rate). For non-U.S. investors owning more than 5% of a class of the Fund, these distributions may be treated as gains "effectively connected" with the conduct of a "U.S. trade or business" and subject to applicable withholding taxes and to U.S. federal income taxation at graduated rates, as well as require the filing of U.S. federal income tax returns. Under certain circumstances, a greater-than-5% non-U.S. investor could also be subject to U.S. withholding tax on the redemption of its Fund shares or on certain return-of-capital distributions from the Fund, in which case such investor could also be required to file a U.S. federal income tax return and pay any additional taxes due in connection with the redemption or distribution.

These and other U.S. tax rules governing the taxation of non-U.S. investors in U.S. real property interests is complex. Non-U.S. investors are urged to consult their 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 Energy Fund and Vanguard Global Capital Cycles 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 the Funds shall not be knowingly offered to (directly or indirectly) or sold or delivered to (within India); transferred to or purchased by; or held by, for, on the account of, or for the benefit of (i) a "person resident in India" (as defined under applicable Indian law), (ii) an "overseas corporate body" or a "person of Indian origin" (as defined under applicable Indian law), or (iii) any other entity or person disqualified or otherwise prohibited from accessing the Indian securities market under applicable laws, as may be amended from time to time. Investors, prior to purchasing shares of the Funds, 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 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 Dividend Appreciation Index, Energy, Health Care, Global ESG Select Stock, and Real Estate Index Funds 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 Vanguard Dividend Growth and Global Capital Cycles 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 wholly owned subsidiary, within the meaning of the 1940 Act, in which Vanguard Real Estate Index Fund may invest also does not calculate its NAV when the NYSE is closed, but the value of its assets may also be affected to the extent that it holds securities that change in value on those days (such as foreign securities that trade on foreign markets that are open).

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

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 the 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 the 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 the 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 the 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 the 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 Vanguard determines that it would be detrimental to the best interests of the remaining shareholders of a 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 Funds' board of trustees. Investors may incur brokerage charges on the sale of such securities received in payment of redemptions.

The Funds do not charge redemption fees. 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; (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). A 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

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. All of these services are provided at Vanguard's total cost of operations pursuant to the Fifth Amended and Restated Funds' Service Agreement (the Agreement).

Vanguard 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. 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.

Pursuant to an agreement between Vanguard and JPMorgan Chase Bank, N.A. (JPMorgan), JPMorgan provides services for Vanguard Global Capital Cycles Fund, Vanguard Real Estate Index Fund, and Vanguard Global ESG Select Stock 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 JPMorgan under this agreement are based on a combination of flat and asset based fees. As of the fiscal year ended January 31, 2023, JPMorgan had received fees from the Funds for administrative services rendered as shown in the table below.

Pursuant to an agreement between Vanguard and State Street Bank and Trust Company (State Street), State Street provides services for Vanguard Dividend Growth Fund, Vanguard Energy Fund, Vanguard Health Care Fund, and Vanguard Dividend Appreciation Index 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 State Street under this agreement are based on a combination of flat and asset based fees. During the fiscal years ended January 31, 2021, 2022, and 2023, State Street had received fees from the Funds for administrative services rendered as shown in the table below.

Vanguard Fund	2021	2022	2023
Vanguard Dividend Appreciation Index Fund	$—	$17,916.70	$21,500.04
Vanguard Dividend Growth Fund	6,000.00	22,958.39	21,500.04
Vanguard Energy Fund	6,000.00	22,958.39	21,500.04
Vanguard Global Capital Cycles Fund	2,833.32	16,999.92	16,999.92
Vanguard Global ESG Select Stock Fund	2,833.32	16,999.92	16,999.92
Vanguard Health Care Fund	6,000.00	22,958.39	21,500.04
Vanguard Real Estate Index Fund	14,166.58	16,999.93	16,999.89

The funds' officers are also employees of Vanguard.

Vanguard, 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 was established and operates under the Agreement. The Agreement provides that each Vanguard fund 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.

In addition, the amount Vanguard Real Estate Index Fund is required to contribute to Vanguard's capital will be reduced to the extent that the Fund invests in the wholly owned subsidiary.

As of January 31, 2023, each Fund had contributed capital to Vanguard as follows:

Vanguard Fund	Capital Contribution to Vanguard	Percentage of Fund's Average Net Assets	Percent of Vanguard Funds' Contribution
Vanguard Dividend Appreciation Index Fund	$2,921,000	Less than 0.01%	1.17%
Vanguard Dividend Growth Fund	2,003,000	Less than 0.01	0.80
Vanguard Energy Fund	228,000	Less than 0.01	0.09
Vanguard Global Capital Cycles Fund	53,000	Less than 0.01	0.02
Vanguard Global ESG Select Stock Fund	30,000	Less than 0.01	0.01
Vanguard Health Care Fund	1,801,000	Less than 0.01	0.72
Vanguard Real Estate Index Fund	2,082,000	Less than 0.01	0.83

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

Distribution. Vanguard Marketing Corporation, 100 Vanguard Boulevard, Malvern, PA 19355, a wholly owned subsidiary of Vanguard, is the principal underwriter for the funds and in that capacity performs and finances marketing, 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 the Funds. Amounts captioned "Management and Administrative Expenses" include a Fund's allocated share of expenses associated with the management, administrative, and transfer agency services Vanguard provides to the Vanguard funds. Amounts captioned "Marketing and Distribution Expenses" include a Fund's allocated share of expenses associated with the marketing and distribution activities that VMC conducts on behalf of the Vanguard funds.

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

Vanguard Fund	2021	2022	2023
Vanguard Dividend Appreciation Index Fund			
Management and Administrative Expenses	0.06%	0.05%	0.05%
Marketing and Distribution Expenses	Less than 0.01	Less than 0.01	Less than 0.01
Vanguard Dividend Growth Fund			
Management and Administrative Expenses	0.13%	0.13%	0.13%
Marketing and Distribution Expenses	0.01	0.01	0.01
Vanguard Energy Fund			
Management and Administrative Expenses	0.16%	0.17%	0.18%
Marketing and Distribution Expenses	0.01	0.01	Less than 0.01
Vanguard Global Capital Cycles Fund			
Management and Administrative Expenses	0.21%	0.21%	0.22%
Marketing and Distribution Expenses	0.01	0.01	0.01
Vanguard Global ESG Select Stock Fund			
Management and Administrative Expenses	0.21%	0.23%	0.22%
Marketing and Distribution Expenses	0.01	0.01	0.01
Vanguard Health Care Fund			
Management and Administrative Expenses	0.14%	0.14%	0.14%
Marketing and Distribution Expenses	Less than 0.01	Less than 0.01	Less than 0.01
Vanguard Real Estate 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

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

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 financial services. 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 committee of the board, which is composed of F. Joseph Loughrey, Mark Loughridge, Sarah Bloom Raskin, and Peter F. Volanakis, each of whom is an independent trustee, oversees management of financial risks and controls. The audit 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. Vanguard's head of internal audit reports directly to the audit committee and provides reports to the committee in writing and in person on a regular basis. Although the audit committee is responsible for overseeing the management of financial risks, the entire board is regularly informed of these risks through committee 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[1]				
Mortimer J. Buckley (1969)	Chairman of the Board, Chief Executive Officer, and President	January 2018	Chairman of the board (2019–present) of Vanguard and of each of the investment companies served by Vanguard; chief executive officer (2018–present) of Vanguard; chief executive officer, president, and trustee (2018–present) of each of the investment companies served by Vanguard; president and director (2017–present) of Vanguard; and president (2018–present) of Vanguard Marketing Corporation. Chief investment officer (2013–2017), managing director (2002–2017), head of the Retail Investor Group (2006–2012), and chief information officer (2001–2006) of Vanguard. Trustee and vice chair of The Shipley School. Member of the board of governors of the Investment Company Institute and of FINRA.	205

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

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
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 board of Out & Equal, the University of California, Berkeley School of Engineering, and Santa Clara University's School of Business.	205
Emerson U. Fullwood (1948)	Trustee	January 2008	Executive chief staff and marketing officer for North America and corporate vice president (retired 2008) of Xerox Corporation (document management products and services). Former president of the Worldwide Channels Group, Latin America, and Worldwide Customer Service and executive chief staff officer of Developing Markets of Xerox. Executive in residence and 2009–2010 Distinguished Minett Professor at the Rochester Institute of Technology. Member of the board of directors of the University of Rochester Medical Center, the Monroe Community College Foundation, the United Way of Rochester, North Carolina A&T University, Roberts Wesleyan College, and the Rochester Philharmonic Orchestra. Trustee of the University of Rochester.	205
F. Joseph Loughrey (1949)	Trustee	October 2009	President and chief operating officer (retired 2009) and vice chairman of the board (2008–2009) of Cummins Inc. (industrial machinery). Director of the V Foundation. Member of the advisory council for the College of Arts and Letters at the University of Notre Dame. Chairman of the board of Saint Anselm College.	205
Mark Loughridge (1953)	Lead Independent Trustee	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, vice president and controller (1998–2002) of IBM, and a variety of other prior management roles at IBM. Member of the Council on Chicago Booth.	205
Scott C. Malpass (1962)	Trustee	March 2012	Chief investment officer and vice president of the University of Notre Dame (retired 2020). Chair of the board of Catholic Investment Services, Inc. (investment advisors). Member of the board of superintendence of the Institute for the Works of Religion. Member of the Notre Dame 403(b) Investment Committee and the board of directors of Paxos Trust Company (finance).	205

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
Deanna Mulligan (1963)	Trustee	January 2018	Chief executive officer of Purposeful (2021–present). Board chair (2020), chief executive officer (2011–2020), and president (2010–2019) of The Guardian Life Insurance Company of America. Chief operating officer (2010–2011) and executive vice president (2008–2010) of Individual Life and Disability of The Guardian Life Insurance Company of America. Director of DuPont. Member of the board of the Economic Club of New York. Trustee of the Partnership for New York City (business leadership), the Chief Executives for Corporate Purpose, and the New York-Presbyterian Hospital.	205
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).	205
Sarah Bloom Raskin (1961)	Trustee	January 2018	Deputy secretary (2014–2017) of the United States 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). Partner of Kaya Corporation Ltd. (climate policy advisory services). Member of the board of directors of Arcadia Corporation (energy solution technology).	205
David Thomas (1956)	Trustee	July 2021	President of Morehouse College (2018–present). 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 Common Fund.	205
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). Director (2012) of SPX Corporation (multi-industry manufacturing). Overseer of the Amos Tuck School of Business Administration, Dartmouth College (2001–2013). Member of the BMW Group Mobility Council.	205
Executive Officers				
Jacqueline Angell (1974)	Chief Compliance Officer	November 2022	Principal of Vanguard. Chief compliance officer (November 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.	205
Christine M. 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).	205

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
John Galloway (1973)	Investment Stewardship Officer	September 2020	Principal of Vanguard. Investment stewardship officer (2020–present) of each of the investment companies served by Vanguard. Head of Investor Advocacy (2020–present) and head of Marketing Strategy and Planning (2017–2020) at Vanguard. Special Assistant to the President of the United States (2015).	205
Ashley Grim (1984)	Treasurer	February 2022	Treasurer (February 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).	205
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.	205
Anne E. Robinson (1970)	Secretary	September 2016	General counsel (2016–present) of Vanguard. Secretary (2016–present) of Vanguard and of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Managing director and general counsel of Global Cards and Consumer Services (2014–2016) at Citigroup. Counsel (2003–2014) at American Express. Non-executive director of the board of National Grid (energy).	205
Michael Rollings (1963)	Finance Director	February 2017	Finance director (2017–present) and treasurer (2017) of each of the investment companies served by Vanguard. Managing director (2016–present) of Vanguard. Chief financial officer (2016–present) of Vanguard. Director (2016–present) of Vanguard Marketing Corporation. Executive vice president and chief financial officer (2006–2016) of MassMutual Financial Group.	205

All but one of the trustees are independent. The independent trustees designate a lead independent trustee. The lead independent trustee is a spokesperson and principal point of contact for the independent trustees and is responsible for coordinating the activities of the independent trustees, including calling regular executive sessions of the independent trustees; developing the agenda of each meeting together with the chairman; and chairing the meetings of the independent trustees. The lead independent trustee also chairs the meetings of the audit, compensation, and nominating committees. The board also has two investment committees, which consist of independent trustees and the sole interested trustee.

The independent trustees appoint the chairman of the board. The roles of chairman of the board and chief executive officer currently are held by the same person; as a result, the chairman of the board is an "interested" trustee. The independent trustees generally believe that the Vanguard funds' chief executive officer is best qualified to serve as chairman and that fund shareholders benefit from this leadership structure through accountability and strong day-to-day leadership.

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

- Audit Committee: This committee oversees the accounting and financial reporting policies, the systems of internal controls, and the independent audits of each fund. The following independent trustees serve as members of the committee: Mr. Loughrey, Mr. Loughridge, Ms. Raskin, and Mr. Volanakis. The committee held six meetings during the Trust's fiscal year ended January 31, 2023.
- Compensation Committee: This committee oversees the compensation programs established by each fund for the benefit of its trustees. All independent trustees serve as members of the committee. The committee held two meetings during the Trust's fiscal year ended January 31, 2023.

- Investment Committees: These committees assist the board in its oversight of investment advisors to the funds and in the review and evaluation of materials relating to the board's consideration of investment advisory agreements with the funds. Each trustee serves on one of two investment committees. Each investment committee held four meetings during the Trust's fiscal year ended January 31, 2023.
- 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. All independent trustees serve as members of the committee. The committee held six meetings during the Trust's fiscal year ended January 31, 2023.

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

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

Trustee Compensation

The same individuals serve as trustees of all Vanguard funds and each fund pays a proportionate share of the trustees' compensation. Vanguard funds also employ their officers on a shared basis; however, officers are compensated by Vanguard, not the funds.

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

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

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

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

VANGUARD SPECIALIZED FUNDS
TRUSTEES' COMPENSATION TABLE

Trustee	Aggregate Compensation From the Funds[1]	Total Compensation From All Vanguard Funds Paid to Trustees[2]
Mortimer J. Buckley	—	—
Tara Bunch	$ 9,003	$330,000
Emerson U. Fullwood	9,003	330,000
F. Joseph Loughrey	9,549	350,000
Mark Loughridge	10,913	400,000
Scott C. Malpass	9,003	330,000
Deanna Mulligan	9,003	330,000
André F. Perold	9,003	330,000
Sarah Bloom Raskin	9,549	350,000
David Thomas	9,003	330,000
Peter F. Volanakis	9,549	350,000

1 The amounts shown in this column are based on the Trust's fiscal year ended January 31, 2023. 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 206 Vanguard funds for the 2022 calendar year.

Ownership of Fund Shares

All current 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, 2022.

VANGUARD SPECIALIZED FUNDS

Vanguard Fund	Trustee	Dollar Range of Fund Shares Owned by Trustee	Aggregate Dollar Range of Vanguard Fund Shares Owned by Trustee
Vanguard Dividend Appreciation Index Fund	Mortimer J. Buckley	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Emerson U. Fullwood	—	Over $100,000
	F. Joseph Loughrey	Over $100,000	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	Deanna Mulligan	—	Over $100,000
	André F. Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	David Thomas	—	Over $100,000
	Peter F. Volanakis	$10,001 – $50,000	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 Dividend Growth Fund	Mortimer J. Buckley	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Emerson U. Fullwood	—	Over $100,000
	F. Joseph Loughrey	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	Deanna Mulligan	Over $100,000	Over $100,000
	André F. Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	David Thomas	—	Over $100,000
	Peter F. Volanakis	Over $100,000	Over $100,000
Vanguard Energy Fund	Mortimer J. Buckley	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Emerson U. Fullwood	—	Over $100,000
	F. Joseph Loughrey	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	Deanna Mulligan	—	Over $100,000
	André F. Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	David Thomas	—	Over $100,000
	Peter F. Volanakis	Over $100,000	Over $100,000
Vanguard Global Capital Cycles Fund	Mortimer J. Buckley	—	Over $100,000
	Tara Bunch	—	Over $100,000
	Emerson U. Fullwood	—	Over $100,000
	F. Joseph Loughrey	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	Deanna Mulligan	—	Over $100,000
	André F. Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	David Thomas	—	Over $100,000
	Peter F. Volanakis	—	Over $100,000
Vanguard Global ESG Select Stock Fund	Mortimer J. Buckley	Over $100,000	Over $100,000
	Tara Bunch	—	Over $100,000
	Emerson U. Fullwood	—	Over $100,000
	F. Joseph Loughrey	—	Over $100,000
	Mark Loughridge	—	Over $100,000
	Scott C. Malpass	—	Over $100,000
	Deanna Mulligan	—	Over $100,000
	André F. Perold	—	Over $100,000
	Sarah Bloom Raskin	—	Over $100,000
	David Thomas	—	Over $100,000
	Peter F. Volanakis	—	Over $100,000

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

As of April 30, 2023, 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 April 30, 2023, 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 Dividend Appreciation Index Fund	Admiral Shares	CHARLES SCHWAB & CO INC SAN FRANCISCO, CA	6.33%
		NATIONAL FINANCIAL SERVICES CORPORATION JERSEY CITY, NJ	8.41%
Vanguard Dividend Growth Fund	Investor Shares	CHARLES SCHWAB & CO INC SAN FRANCISCO, CA	11.42%
		NATIONAL FINANCIAL SERVICES CORPORATION JERSEY CITY, NJ	14.98%
Vanguard Energy Fund	Investor Shares	CHARLES SCHWAB & CO INC SAN FRANCISCO, CA	8.84%
		NATIONAL FINANCIAL SERVICES CORPORATION JERSEY CITY, NJ	6.07%
	Admiral Shares	JOHN HANCOCK LIFE INSURANCE CO USA BOSTON, MA	5.85%
Vanguard Global ESG Select Stock Fund	Admiral Shares	NATIONAL FINANCIAL SERVICES CORPORATION JERSEY CITY, NJ	15.67%
Vanguard Health Care Fund	Investor Shares	CHARLES SCHWAB & CO INC SAN FRANCISCO, CA	16.07%
		NATIONAL FINANCIAL SERVICES CORPORATION JERSEY CITY, NJ	10.25%
		TD AMERITRADE INC OMAHA, NE	5.82%

Vanguard Fund	Share Class	Owner and Address	Percentage of Ownership
Vanguard Real Estate Index Fund	Admiral Shares	CHARLES SCHWAB & CO INC SAN FRANCISCO, CA	7.36%
	Institutional Shares	CHARLES SCHWAB & CO INC SAN FRANCISCO, CA	8.17%
		FIDELITY INVESTMENTS INSTITUTIONAL OPERATIONS CO COVINGTON, KY	7.27%
		NATIONAL FINANCIAL SERVICES CORPORATION JERSEY CITY, NJ	7.71%
		TIAA, FSB SAINT LOUIS, MO	12.97%
	Investor Shares	ASCENSUS TRUST COMPANY FARGO, ND	37.96%

Although the Funds do not have information concerning the beneficial ownership of shares held in the names of Depository Trust Company (DTC) participants, as of April 30, 2023, the name and percentage ownership of each DTC participant that owned of record 5% or more of the outstanding ETF Shares of a Fund were as follows:

Vanguard Fund	Owner	Percentage of Ownership
Vanguard Dividend Appreciation ETF	Charles Schwab & Co., Inc.	15.84%
	Merrill Lynch, Pierce, Fenner & Smith Incorporated	9.42%
	Morgan Stanley DW, Inc.	5.39%
	National Financial Services, LLC	12.71%
	TD Ameritrade Clearing, Inc.	5.72%
	Vanguard Marketing Corporation	7.86%
Vanguard Real Estate ETF	Charles Schwab & Co., Inc.	17.49%
	National Financial Services, LLC	12.57%
	Pershing, LLC	7.42%
	TD Ameritrade Clearing, Inc.	8.77%
	Vanguard Marketing Corporation	7.10%

Portfolio Holdings Disclosure Policies and Procedures

Introduction

Vanguard and the boards of trustees of the Vanguard funds (the Boards) have adopted Portfolio Holdings Disclosure Policies and Procedures (Policies and Procedures) to govern the disclosure of the portfolio holdings of each Vanguard fund. Vanguard and the Boards considered each of the circumstances under which Vanguard fund portfolio holdings may be disclosed to different categories of persons under the Policies and Procedures. Vanguard and the Boards also considered actual and potential material conflicts that could arise in such circumstances between the interests of Vanguard fund shareholders, on the one hand, and those of the fund's investment advisor, distributor, or any affiliated person of the fund, its investment 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 Ethics, 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 investments, derivatives, and other investment positions (collectively, other investment positions) held by the fund.

Online Disclosure of Ten Largest Stock Holdings

Each actively managed Vanguard fund generally will seek to disclose the fund's ten largest stock portfolio holdings and the percentage of the fund's total assets that each of these holdings represents as of the end of the most recent calendar quarter (quarter-end ten largest stock holdings with weightings) online at *vanguard.com,* in the "Portfolio" section of the fund's Portfolio & Management page, 15 calendar days after the end of the calendar quarter. Each Vanguard index fund generally will seek to disclose the fund's ten largest stock portfolio holdings and the percentage of the fund's total assets that each of these holdings represents as of the end of the most recent month (month-end ten largest stock holdings with weightings) online at *vanguard.com,* in the "Portfolio" section of the fund's Portfolio & Management page, 15 calendar days after the end of the month. In addition, Vanguard funds generally will seek to disclose the fund's ten largest stock portfolio holdings and the aggregate percentage of the fund's total assets (and, for balanced funds, the aggregate percentage of the fund's equity securities) that these holdings represent as of the end of the most recent month (month-end ten largest stock holdings) online at *vanguard.com,* in the "Portfolio" section of the fund's Portfolio & Management page, 10 business days after the end of the month. Together, the quarter-end and month-end ten largest stock holdings are referred to as the ten largest stock holdings. Online disclosure of the ten largest stock 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.

Online Disclosure of Complete Portfolio Holdings

Each actively managed Vanguard fund, unless otherwise stated, generally will seek to disclose the fund's complete portfolio holdings as of the end of the most recent calendar quarter online at *vanguard.com* 30 calendar days after the end of the calendar quarter. 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.* 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. Vanguard Market Neutral Fund and Vanguard Alternative Strategies Fund generally will seek to disclose the Fund's complete portfolio holdings as of the end of the most recent calendar quarter online at *vanguard.com* 60 calendar days after the end of the calendar quarter. Each Vanguard index fund, other than those Vanguard index funds relying on Rule 6c-11 under the 1940 Act, generally will seek to disclose the fund's complete portfolio holdings as of the end of the most recent month online at *vanguard.com,* in the "Portfolio" section of the fund's Portfolio & Management page, 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, for legitimate business purposes, may disclose Vanguard fund complete portfolio holdings at times it deems necessary and appropriate to rating and ranking organizations; financial printers; proxy voting service providers; pricing information vendors; issuers of guaranteed investment contracts for stable value portfolios; third parties that deliver

analytical, statistical, or consulting services; and other third parties that provide services (collectively, Service Providers) to Vanguard, Vanguard subsidiaries, and/or the Vanguard funds. Disclosure of complete portfolio holdings to a Service Provider is conditioned on the Service Provider being subject to a written agreement imposing a duty of confidentiality, including a duty not to trade on the basis of any material nonpublic information.

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

Currently, Vanguard discloses complete portfolio holdings 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.; Charles River Systems, Inc.; FactSet Research Systems Inc.; Innovation Printing & Communications; Institutional Shareholder Services, Inc.; Intelligencer Printing Company; Investment Technology Group, Inc.; Lipper, Inc.; Markit WSO Corporation; McMunn Associates, Inc.; Reuters America Inc.; R.R. Donnelley, Inc.; State Street Bank and Trust Company; and Trade Informatics LLC.

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

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

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

Currently, Vanguard discloses complete portfolio holdings to the following Affiliates and Fiduciaries as part of ongoing arrangements that serve legitimate business purposes: Vanguard and each investment advisor, 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, administrator, or custodian for a Vanguard fund may, for legitimate business purposes within the scope of its official duties and responsibilities, disclose portfolio holdings (whether partial portfolio holdings or complete portfolio holdings) and other investment positions that make up the fund to any trading counterparty, including one or more broker-dealers or banks, during the course of, or in connection with, normal day-to-day securities and derivatives transactions with or through such trading counterparties subject to the counterparty's legal obligation not to use or disclose material nonpublic information concerning the fund's portfolio holdings, other investment positions, securities transactions, or derivatives transactions without the consent of the fund or its agents. The Vanguard funds have not given their consent to any such use or disclosure and no person or agent of Vanguard is authorized to give such consent except as approved in writing by the Boards of the Vanguard funds. Disclosure of portfolio holdings or other investment positions by Vanguard to broker-dealers 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 (Creation Units), 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 Enterprise Financial Services unit 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* in the "Portfolio" section of a fund's Portfolio & Management page. 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.

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 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, Vanguard 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.

In addition to making PCFs available to the NSCC, as previously described, Vanguard's Enterprise Financial Services unit may disclose the PCF for any ETF Fund to any person, or online at *vanguard.com* to all categories of persons, if (1) such disclosure serves a legitimate business purpose and (2) such disclosure does not constitute material nonpublic information. Vanguard's Enterprise Financial Services unit must make a good faith determination whether the PCF for any ETF Fund constitutes material nonpublic information, which involves an assessment of the particular facts and circumstances. Vanguard believes that in most cases the PCF for any ETF Fund would be immaterial and would not convey any advantage to the recipient in making an investment decision concerning the ETF Fund, if sufficient time has passed between the date of the PCF and the date on which the PCF is disclosed. Vanguard's Enterprise Financial Services unit may, at its sole discretion, determine whether to deny any request for the PCF for any ETF Fund made by any person, and may do so for any reason or for no reason. Disclosure of a PCF must be authorized by a Vanguard fund officer or a Principal in Vanguard's Enterprise Financial Services unit.

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 Enterprise Financial Services 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 or Office of the General Counsel.

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 Vanguard, 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 by any affiliated person of the investment advisor.

INVESTMENT ADVISORY AND OTHER SERVICES

The Trust currently uses two investment advisors:

- Wellington Management Company LLP (Wellington Management) provides investment advisory services to Vanguard Global Capital Cycles Fund, Vanguard Global ESG Select Stock Fund, Vanguard Dividend Growth Fund, Vanguard Health Care Fund, and Vanguard Energy Fund.
- Vanguard provides investment advisory services to Vanguard Dividend Appreciation Index Fund and Vanguard Real Estate Index Fund.

Vanguard provided investment advisory services for a portion of Vanguard Energy Fund until July 31, 2020.

For funds that are advised by independent third-party advisory firms unaffiliated with Vanguard, the board of trustees of each fund hires investment advisory firms, not individual portfolio managers, to provide investment advisory services to such funds. Vanguard negotiates each advisory agreement, which contains advisory fee arrangements, on an arm's length basis with the advisory firm. Each advisory agreement is reviewed annually by each fund's board of trustees, taking into account numerous factors, which include, without limitation, the nature, extent, and quality of the services provided; investment performance; and the fair market value of the services provided. Each advisory agreement is between the Trust and the advisory firm, not between the Trust and the portfolio manager. The structure of the advisory fee paid to each unaffiliated investment advisory firm is described in the following sections. In addition, each firm has established policies and procedures designed to address the potential for conflicts of interest. Each firm's compensation structure and management of potential conflicts of interest are summarized by the advisory firm in the following sections for the fiscal year ended January 31, 2023.

A fund is a party to an investment advisory agreement with each of its independent third-party advisors whereby the advisor manages the investment and reinvestment of the fund's assets. In this capacity, each advisor continuously reviews, supervises, and administers the fund's investment program. Each advisor discharges its responsibilities subject to the supervision and oversight of Vanguard's Portfolio Review Department and the officers and trustees of the fund. Vanguard's Portfolio Review Department is responsible for recommending changes in a fund's advisory arrangements to the fund's board of trustees, including changes in the amount of assets allocated to each advisor and recommendations to hire, terminate, or replace an advisor.

I. Vanguard Dividend Appreciation Index Fund and Vanguard Real Estate Index Fund

Vanguard, through its Equity Index Group, provides investment advisory services to Vanguard Dividend Appreciation Index Fund and Vanguard Real Estate Index Fund. The compensation and other expenses of Vanguard's advisory staff are allocated among the funds utilizing these services.

During the fiscal years ended January 31, 2021, 2022, and 2023, the Funds incurred the following approximate advisory expenses:

Vanguard Fund	2021	2022	2023
Vanguard Dividend Appreciation Index Fund	$2,683,000	$2,331,000	$1,751,000
Vanguard Real Estate Index Fund	2,729,000	2,354,000	1,611,000

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 January 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Walter Nejman	Registered investment companies[1]	40	$ 2.5T	0	$0
	Other pooled investment vehicles	12	$121B	0	$0
	Other accounts	0	$ 0	0	$0
Gerard C. O'Reilly	Registered investment companies[1]	18	$ 2.1T	0	$0
	Other pooled investment vehicles	0	$ 0	0	$0
	Other accounts	0	$ 0	0	$0

1 Includes Vanguard Dividend Appreciation Index Fund and Vanguard Real Estate Index Fund which collectively held assets of $148 billion as of January 31, 2023.

2. Material Conflicts of Interest

At Vanguard, individual portfolio managers may manage multiple accounts for multiple clients. In addition to mutual funds, these accounts may include separate accounts, collective trusts, and 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. Vanguard manages potential conflicts between funds or accounts through allocation policies and procedures, internal review processes, and oversight by trustees and independent third parties. Vanguard 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

All Vanguard portfolio managers are Vanguard employees. This section describes the compensation of the Vanguard employees who manage Vanguard mutual funds. As of January 31, 2023, a Vanguard 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. 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. One factor is gross, pre-tax performance of a fund relative to expectations for how the fund should have performed, given the fund's investment objective, policies, strategies, and limitations, and the market environment during the measurement period. This performance factor is not based on the amount of assets held in any individual fund's portfolio. For Vanguard Dividend Appreciation Index Fund and Vanguard Real Estate Index Fund, the performance factor depends on how closely the portfolio manager tracks the Fund's benchmark index over a one-year period. Additional factors include the portfolio manager's contributions to the investment management functions within the sub-asset class, contributions to the development of other investment professionals and supporting staff, and overall contributions to strategic planning and decisions for the investment group. The target bonus is expressed as a percentage of base salary. The actual bonus paid may be more or less than the target bonus, based on how well the manager satisfies the objectives previously described. The bonus is paid on an annual basis.

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

4. Ownership of Securities

As of January 31, 2023, Mr. Nejman and Mr. O'Reilly did not own any shares of the Funds.

II. Vanguard Global Capital Cycles Fund, Vanguard Global ESG Select Stock Fund, Vanguard Dividend Growth Fund, Vanguard Health Care Fund, and Vanguard Energy Fund

Wellington Management is a Delaware limited liability partnership with principal offices at 280 Congress Street, Boston, MA 02210. As of January 31, 2023, the firm is owned by 204 partners, all fully active in the firm. Wellington Management is a professional investment counseling firm that provides investment services to investment companies, employee benefit plans, endowments, foundations, and other institutions. Wellington Management and its predecessor organizations have provided investment advisory services for over 80 years. Wellington Management is owned by the partners of Wellington Management Group LLP, a Massachusetts limited liability partnership.

Vanguard Global Capital Cycles Fund, Vanguard Global ESG Select Stock Fund, Vanguard Dividend Growth Fund, Vanguard Health Care Fund, and Vanguard Energy Fund each pay Wellington Management a base fee plus or minus a performance adjustment. The base fee, which is paid quarterly, is a percentage of average daily net assets under management during the most recent fiscal quarter. The base fee has breakpoints, which means that the percentage declines as assets go up. The performance adjustment, also paid quarterly, is based on the cumulative total return of the Fund relative to that of the S&P Global BMI Metals & Mining 25% Weighted Index (USD) (Custom) (for Vanguard Global Capital Cycles Fund) over a specific time period, the S&P U.S. Dividend Growers Index (for Vanguard Dividend Growth Fund) over the preceding 36-month period, the MSCI ACWI Health Care Index (for Vanguard Health Care Fund) over the preceding 36-month period, the FTSE All-World Index (for Vanguard Global ESG Select Stock Fund) over the preceding 60-month period, and the MSCI ACWI Energy + Utilities Index (for Vanguard Energy Fund) over the preceding 36-month period.

During the fiscal years ended January 31, 2021, 2022, and 2023, Vanguard Global Capital Cycles Fund incurred advisory fees of approximately $1,554,000 (before a performance-based decrease of $283,000), $1,919,000 (before a performance-based decrease of $153,000), and $2,037,000 (before a performance-based increase of $664,000) respectively.

During the fiscal years ended January 31, 2021, 2022, and 2023, Vanguard Dividend Growth Fund incurred advisory fees of approximately $55,249,000 (before a performance-based decrease of $5,940,000), $67,630,000 (before a performance-based decrease of $1,453,000), and $68,639,000 (before a performance-based increase of $14,424,000) respectively.

During the fiscal years ended January 31, 2021, 2022, and 2023, Vanguard Health Care Fund incurred advisory fees of approximately $68,484,000 (before a performance-based decrease of $6,559,000), $72,269,000 (before a performance-based decrease of $18,830,000), and $67,269,000 (before a performance-based increase of $1,628,000) respectively.

During the fiscal years ended January 31, 2021, 2022 and 2023, Vanguard Global ESG Select Stock Fund incurred advisory fees of approximately $375,000 (before a performance-based increase of $6,000), $1,331,000 (before a performance-based increase of $72,000), and $1,684,000 (before a performance-based increase of $174,000) respectively.

During the fiscal years ended January 31, 2021, 2022, and 2023, Vanguard Energy Fund incurred advisory fees of approximately $6,728,000 (before a performance-based decrease of $931,000), $7,205,000 (before a performance-based increase of $820,000), and $8,871,000 (before a performance-based increase of $3,520,000) respectively.

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 January 31, 2023 (unless otherwise noted):

Portfolio Manager		No. of accounts	Total assets	No. of accounts with performance-based fees	Total assets in accounts with performance-based fees
Keith E. White	Registered investment companies[1]	2	$ 1.7B	1	$ 1.5B
	Other pooled investment vehicles	4	$ 2.6B	4	$ 2.6B
	Other accounts	0	$ 0	0	$ 0
Donald J. Kilbride	Registered investment companies[2]	12	$65.2B	2	$ 53.8B
	Other pooled investment vehicles	8	$414M	2	$ 43M
	Other accounts	24	$ 3B	3	$ 719M
Jean M. Hynes	Registered investment companies[3]	1	$47.5B	1	$ 47.5B
	Other pooled investment vehicles	0	$ 0	0	$ 0
	Other accounts	0	$ 0	0	$ 0
Rebecca Sykes[7]	Registered investment companies[3]	16	$ 49B	2	$ 47.5B
	Other pooled investment vehicles	48	$ 6.5B	12	$442.5M
	Other accounts	57	$ 3.5B	12	$ 1.8B
Mark D. Mandel	Registered investment companies[4]	1	$869M	1	$ 869M
	Other pooled investment vehicles	6	$ 1.6B	0	$ 0
	Other accounts	2	$695M	0	$ 0
Yolanda C. Courtines	Registered investment companies[4]	1	$869M	1	$ 869M
	Other pooled investment vehicles	6	$ 1.6B	0	$ 0
	Other accounts	2	$695M	0	$ 0
G. Thomas Levering	Registered investment companies[5]	19	$ 7.8B	2	$ 6.1B
	Other pooled investment vehicles	40	$ 4.1B	17	$ 2.7B
	Other accounts	50	$ 1.5B	10	$ 314M
Peter C. Fisher[6]	Registered investment companies[2]	7	$57.3B	1	$ 53.5B
	Other pooled investment vehicles	5	$512M	1	$ 47M
	Other accounts	4	$390M	0	$ 0

1 Includes Vanguard Global Capital Cycles Fund which held assets of $1.5 billion as of January 31, 2023.
2 Includes Vanguard Dividend Growth Fund which held assets of $53.5 billion as of January 31, 2023.
3 Includes Vanguard Health Care Fund which held assets of $47.5 billion as of January 31, 2023.
4 Includes Vanguard Global ESG Select Stock Fund which held assets of $869 million as of January 31, 2023.
5 Includes Vanguard Energy Fund which held assets of $6.1 billion as of January 31, 2023.
6 Mr. Fisher began co-managing Vanguard Dividend Growth Fund on July 1, 2022.
7 Ms. Sykes began co-managing Vanguard Health Care Fund on May 25, 2023.

2. Material Conflicts of Interest

Individual investment professionals at Wellington Management manage multiple accounts for multiple clients. These accounts may include mutual funds, separate accounts (assets managed on behalf of institutions, such as pension funds, insurance companies, foundations, or separately managed account programs sponsored by financial intermediaries), bank common trust accounts, and hedge funds. Each Wellington Management Portfolio's or Fund's manager listed in a prospectus who is primarily responsible for the day-to-day management of the Wellington Management Portfolio or Fund (Portfolio Manager) generally manages accounts in several different investment styles. These accounts may have investment objectives, strategies, time horizons, tax considerations, and risk profiles that differ from those of the Wellington Management Portfolio or Fund. A Portfolio Manager makes investment decisions for each account, including the Wellington Management Portfolio or Fund, based on the investment objectives, policies,

practices, benchmarks, cash flows, tax, and other relevant investment considerations applicable to that account. Consequently, a Portfolio Manager may purchase or sell securities, including initial public offerings (IPOs), for one account and not another account, and the performance of securities purchased for one account may vary from the performance of securities purchased for other accounts. Alternatively, these accounts may be managed in a similar fashion to the Wellington Management Portfolio or Fund and thus the accounts may have similar—and in some cases nearly identical—objectives, strategies, and/or holdings to those of the Wellington Management Portfolio or Fund.

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

Wellington Management's goal is to meet its fiduciary obligation to treat all clients fairly and provide high-quality investment services to all of its clients. Wellington Management has adopted and implemented policies and procedures, including brokerage and trade allocation policies and procedures, which it believes address the conflicts associated with managing multiple accounts for multiple clients. In addition, Wellington Management monitors a variety of areas, including compliance with primary account guidelines, the allocation of IPOs, and compliance with the firm's Code of Ethics, and places additional investment restrictions on investment professionals who manage hedge funds and certain other accounts. Furthermore, senior investment and business personnel at Wellington Management periodically review the performance of Wellington Management's investment professionals. Although Wellington Management does not track the time an investment professional spends on a single account, Wellington Management does periodically assess whether an investment professional has adequate time and resources to effectively manage the investment professional's various client mandates.

3. Description of Compensation

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

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

Each Portfolio Manager is eligible to receive an incentive payment based on the revenues earned by Wellington Management from the Fund managed by the Portfolio Manager and generally each other account managed by such Portfolio Manager. Each Portfolio Manager's incentive payment relating to the relevant Fund is linked to the net pre-tax performance of the Fund compared to the S&P U.S. Dividend Growers Index (for Vanguard Dividend Growth Fund), the MSCI ACWI Health Care Index (for Vanguard Health Care Fund), the S&P Global BMI Metals & Mining 25% Weighted Index (USD) (Custom) (for Vanguard Global Capital Cycles Fund), the FTSE All-World Index (for Vanguard Global ESG Select Stock Fund), and the MSCI ACWI Energy + Utilities Index (for Vanguard Energy Fund) over one-, three-, and

five-year periods, with an emphasis on five-year results. Prior to October 21, 2020, the Portfolio Manager's incentive payment for Vanguard Energy Fund was linked to the net pre-tax performance of the MSCI ACWI Energy Index. Wellington Management applies similar incentive compensation structures (although the benchmarks or peer groups, time periods, and rates may differ) to other accounts managed by the Portfolio Managers, including accounts with performance fees.

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

4. Ownership of Securities

As of January 31, 2023, Mr. Kilbride owned shares of Vanguard Dividend Growth Fund in an amount exceeding $1 million, Ms. Hynes owned shares of Vanguard Health Care Fund in an amount exceeding $1 million, Ms. Sykes owned shares of Vanguard Health Care Fund in an amount exceeding $1 million, Mr. Mandel owned shares of Vanguard Global ESG Select Stock Fund in an amount exceeding $1 million, Mr. White owned shares of Vanguard Global Capital Cycles Fund within the $10,001–$50,000 range, Mr. Levering owned shares of Vanguard Energy Fund in an amount exceeding $1 million, and Mr. Fisher owned shares of Vanguard Dividend Growth Fund in an amount exceeding $1 million. As of January 31, 2023, the other named portfolio managers did not own any shares of the Fund they managed.

Duration and Termination of Investment Advisory Agreements

The current investment advisory agreements with Wellington Management are renewable for successive one-year periods, only if (1) each renewal is approved by a vote of the Fund's board of trustees, including the affirmative votes of a majority of the trustees who are not parties to the contract or "interested persons" (as defined in the 1940 Act) of any such party, cast in person at a meeting called for the purpose of considering such approval, or (2) each renewal is specifically approved by a vote of a majority of the Fund's outstanding voting securities. An agreement is automatically terminated if assigned, and may be terminated without penalty, at any time either (1) by vote of the board of trustees of the Fund upon thirty (30) days' written notice to the advisor, (2) by a vote of a majority of the Fund's outstanding voting securities upon 30 days' written notice to the advisor, or (3) by the advisor upon ninety (90) days' written notice to the Fund.

Vanguard provides investment advisory services to Vanguard Dividend Appreciation Index Fund and Vanguard Real Estate Index Fund pursuant to the terms of the Fifth Amended and Restated Funds' Service Agreement. This agreement will continue in full force and effect until terminated or amended by mutual agreement of the Vanguard funds and Vanguard.

Securities Lending

The following table describes the securities lending activities of each Fund (other than Vanguard Global ESG Select Stock Fund) during the fiscal year ended January 31, 2023. Vanguard Global ESG Select Stock Fund did not lend its securities during the fiscal year ended January 31, 2023.

Vanguard Fund	Securities Lending Activities
Vanguard Dividend Appreciation Index Fund	
Gross income from securities lending activities	$10,664
Fees paid to securities lending agent from a revenue split	$0
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	$27
Administrative fees not included in revenue split	$41
Indemnification fee not included in revenue split	$0
Rebate (paid to borrower)	$8,026
Other fees not included in revenue split (specify)	$0
Aggregate fees/compensation for securities lending activities	$8,094
Net income from securities lending activities	**$2,570**
Vanguard Dividend Growth Fund	
Gross income from securities lending activities	$440
Fees paid to securities lending agent from a revenue split	$0
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	$0
Administrative fees not included in revenue split	$7
Indemnification fee not included in revenue split	$0
Rebate (paid to borrower)	$0
Other fees not included in revenue split (specify)	$0
Aggregate fees/compensation for securities lending activities	$7
Net income from securities lending activities	**$433**
Vanguard Energy Fund	
Gross income from securities lending activities	$221,121
Fees paid to securities lending agent from a revenue split	$0
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	$1,170
Administrative fees not included in revenue split	$2,748
Indemnification fee not included in revenue split	$0
Rebate (paid to borrower)	$59,271
Other fees not included in revenue split (specify)	$0
Aggregate fees/compensation for securities lending activities	$63,189
Net income from securities lending activities	**$157,932**
Vanguard Global Capital Cycles Fund	
Gross income from securities lending activities	$326,449
Fees paid to securities lending agent from a revenue split	$0
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	$1,322
Administrative fees not included in revenue split	$3,189
Indemnification fee not included in revenue split	$0
Rebate (paid to borrower)	$187,161
Other fees not included in revenue split (specify)	$0
Aggregate fees/compensation for securities lending activities	$191,672
Net income from securities lending activities	**$134,777**

Vanguard Fund	Securities Lending Activities
Vanguard Health Care Fund	
Gross income from securities lending activities	$1,219,669
Fees paid to securities lending agent from a revenue split	$0
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	$406
Administrative fees not included in revenue split	$19,094
Indemnification fee not included in revenue split	$0
Rebate (paid to borrower)	$27,434
Other fees not included in revenue split (specify)	$0
Aggregate fees/compensation for securities lending activities	$46,934
Net income from securities lending activities	**$1,172,735**
Vanguard Real Estate Index Fund	
Gross income from securities lending activities	$2,329,248
Fees paid to securities lending agent from a revenue split	$0
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	$3,470
Administrative fees not included in revenue split	$31,857
Indemnification fee not included in revenue split	$0
Rebate (paid to borrower)	$247,932
Other fees not included in revenue split (specify)	$0
Aggregate fees/compensation for securities lending activities	$283,259
Net income from securities lending activities	**$2,045,989**

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 a Fund and then selects the brokers or dealers that will execute the trades on an agency basis or the dealers with whom the trades will be effected on a principal basis. For each trade, the advisor must select a broker-dealer that it believes will provide "best execution." Best execution does not necessarily mean paying the lowest spread or commission rate available. In seeking best execution, the SEC has said that an advisor should consider the full range of a broker-dealer's services. The factors considered by the advisor in seeking best execution include, but are not limited to, the broker-dealer's execution capability, clearance and settlement services, commission rate, trading expertise, willingness and ability to commit capital, ability to provide anonymity, financial responsibility, reputation and integrity, responsiveness, access to underwritten offerings and secondary markets, and access to company management, as well as the value of any research provided by the broker-dealer. In assessing which broker-dealer can provide best execution for a particular trade, the advisor also may consider the timing and size of the order and available liquidity and current market conditions. Subject to applicable legal requirements, the advisor may select a broker based partly on brokerage or research services provided to the advisor and its clients, including the Funds. The advisor may cause a Fund to pay a higher commission than other brokers would charge if the advisor determines in good faith that the amount of the commission is reasonable in relation to the value of services provided. 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 a Fund effects securities transactions may be used by the advisor in servicing all of its accounts, and some of the services may not be used by the advisor in connection with the Fund.

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

Vanguard Fund	2021	2022	2023
Vanguard Dividend Appreciation Index Fund	$ 853,000	$1,037,000	$ 645,000
Vanguard Dividend Growth Fund	3,675,000	2,593,000	2,539,000
Vanguard Energy Fund	2,743,000	781,000	778,000
Vanguard Global Capital Cycles Fund	954,000	917,000	1,028,000
Vanguard Global ESG Select Stock Fund	45,000	127,000	225,000
Vanguard Health Care Fund	8,751,000	5,749,000	7,858,000
Vanguard Real Estate Index Fund	800,000	900,000	1,078,000

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 advisors. If such securities are compatible with the investment policies of a Fund and one or more of an 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 Funds' board of trustees.

As of January 31, 2023, each Fund held securities of its "regular brokers or dealers," as that term is defined in Rule 10b-1 of the 1940 Act, as follows:

Vanguard Fund	Regular Broker or Dealer (or Parent)	Aggregate Holdings
Vanguard Dividend Appreciation Index Fund	Goldman Sachs & Co. LLC	$ 786,779,000
	J.P. Morgan Securities LLC	2,607,210,000
Vanguard Dividend Growth Fund	Credit Agricole Securities (USA) Inc.	100,100,000
	Natixis Securities Americas, LLC	558,800,000
	NatWest Markets Securities	519,400,000
	SG Americas Securities, LLC	266,200,000
Vanguard Energy Fund	—	—
Vanguard Global Capital Cycles Fund	—	—
Vanguard Global ESG Select Stock Fund	—	—
Vanguard Health Care Fund	Barclays Capital, Inc.	148,300,000
	BNP Paribas Securities Corp.	27,900,000
	BofA Securities, Inc.	61,500,000
	Credit Agricole Securities (USA) Inc.	8,000,000
	Natixis Securities Americas, LLC	21,900,000
	Nomura Holdings	197,000,000
	RBC Capital Markets, LLC	147,100,000
	Scotia Capital, Inc.	79,000,000
Vanguard Real Estate Index Fund	—	—

Portfolio turnover for Vanguard Energy Fund. Vanguard Energy Fund's portfolio turnover rate was 55% during its fiscal year ended January 31, 2021, and 14% during its fiscal year ended January 31, 2022. The Fund's turnover rate decreased during its most recent fiscal year as a result of the benchmark and manager transitions that took place in 2020.

PROXY VOTING

I. Proxy Voting Policies

Each Vanguard fund advised by Vanguard retains the authority to vote proxies received with respect to the shares of equity securities held in a portfolio advised by Vanguard. The Board of Trustees of the Vanguard-advised funds (the Board) has adopted proxy voting procedures and guidelines to govern proxy voting for each portfolio retaining proxy

voting authority, which are summarized in *Appendix A*. The Board of each Vanguard fund advised by a manager not affiliated with Vanguard has delegated the authority to vote proxies related to the portfolio securities held by each fund to its respective advisor(s). Each advisor will vote such proxies in accordance with its own proxy voting policies and procedures, which are summarized in *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 Board has adopted policies that will result in certain funds mirror voting a higher proportion of the shares they own in a regulated issuer in order to permit certain other funds (generally advised by managers not affiliated with Vanguard) to mirror vote none, or a lower proportion, of their shares in such regulated issuer.

II. Securities Lending

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

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

INFORMATION ABOUT THE ETF SHARE CLASS

Vanguard Dividend Appreciation Index Fund and Vanguard Real Estate Index Fund (collectively, the ETF Funds) offer and issue an exchange-traded class of shares called ETF Shares. Each 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 Funds' 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.

Each 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). Each 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 cash in addition to the securities, as described more fully on the following pages. Each ETF Fund reserves the right to issue Creation Units for cash, rather than in kind.

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 each ETF Fund as calculated by an information provider. The ETF Funds are not involved with or responsible for the calculation or dissemination of the IOPVs, and they make 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 an 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 an ETF Fund may convert those shares to ETF Shares of equivalent value of the same Fund. 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 his or her 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 his or her tax return (unless the shares are held in an IRA or other tax-deferred account). An investor should consult his or her 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 an 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 an 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 Funds 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.

Each 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 each 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 Funds have 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 Funds and discharging its responsibilities with respect thereto under applicable law. Under such circumstances, the ETF Funds 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 Funds make 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 Funds issue and sell ETF Shares only in Creation Units on a continuous basis through the Distributor, without a sales load, at their NAV next determined after receipt of an order in proper form on any business day. The ETF Funds do 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 an 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 an 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 an 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). Each 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.

In addition, each 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, Vanguard 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 appropriate ETF Fund, and the ETF Fund's determination shall be final and binding.

Procedures for Purchasing Creation Units. An Authorized Participant may place an order to purchase Creation Units from a stock ETF Fund either (1) through the Continuous Net Settlement (CNS) clearing processes of the NSCC as such processes have been enhanced to effect purchases of Creation Units, such processes being referred to herein as the Clearing Process, or (2) outside the Clearing Process. To purchase through the Clearing Process, an Authorized Participant must be a member of the NSCC that is eligible to use the CNS system. Purchases of Creation Units cleared through the Clearing Process will be subject to a lower transaction fee than those cleared outside the Clearing Process.

For all ETF Funds, to initiate a purchase order for a Creation Unit (either through the Clearing Process or outside the Clearing Process for stock ETF Funds), 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.

Purchase orders effected outside the Clearing Process are likely to require transmittal by the Authorized Participant earlier on the transmittal date than orders effected using the Clearing Process. Those persons placing orders outside the Clearing Process should ascertain the deadlines applicable to the DTC and the Federal Reserve Bank wire system by contacting the operations department of the broker or depository institution effectuating such transfer of Deposit Securities and Cash Component.

Neither the Trust, the ETF Funds, 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).

Placement of Purchase Orders Using the Clearing Process. For purchase orders placed through the Clearing Process, the Participant Agreement authorizes the Distributor to transmit through the transfer agent or index receipt agent to the NSCC, on behalf of an Authorized Participant, such trade instructions as are necessary to effect the Authorized Participant's purchase order. Pursuant to such trade instructions to the NSCC, the Authorized Participant agrees to deliver the requisite Deposit Securities and the Cash Component to the appropriate ETF Fund, together with such additional information as may be required by the Distributor.

An order to purchase Creation Units through the Clearing Process is deemed received on the transmittal date if (1) such order is received by the ETF Fund's designated agent before Closing Time on such transmittal date and (2) all other procedures set forth in the Participant Agreement are properly followed. Such order will be effected based on the NAV of the ETF Fund next determined on that day. An order to purchase Creation Units through the Clearing Process made in proper form but received after Closing Time on the transmittal date will be deemed received on the next business day immediately following the transmittal date and will be effected at the NAV next determined on that day. The Deposit Securities and the Cash Component will be transferred by the second NSCC business day following the date on which the purchase request is deemed received.

Placement of Purchase Orders Outside the Clearing Process. An Authorized Participant that wishes to place an order to purchase Creation Units outside the Clearing Process must state that it is not using the Clearing Process and that the purchase instead will be effected through a transfer of securities and cash directly through the DTC. An order to purchase Creation Units outside the Clearing Process is deemed received by the ETF Fund's designated agent on the transmittal date if (1) such order is received by the Distributor before Closing Time on such transmittal date and (2) all other procedures set forth in the Participant Agreement are properly followed.

If a fund deposit is incomplete on the second business day after the trade date (the trade date, known as "T," is the date on which the trade actually takes place; two business days after the trade date is known as "T+2") because of the failed delivery of one or more of the Deposit Securities, an 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. Each ETF Fund reserves the absolute right to reject a purchase order. By way of example, and not limitation, an 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 Vanguard, have an adverse effect on the Fund or any of its shareholders.
- Circumstances outside the control of the ETF Fund, the Trust, the transfer agent, the custodian, 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 Funds, the Trust, the transfer agent, the custodian, 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. Each ETF Fund may impose a transaction fee (payable to the 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 each 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 purchases of Creation Units effected outside the Clearing Process. When an 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.

Each 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 an 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 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 each 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. An 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.

Each 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 Funds, 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. Each ETF Fund may impose a transaction fee (payable to the 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 each 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 an ETF Fund permits (or requires) a redeeming investor to receive cash in lieu of one or more Redemption Securities, each 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.

Each 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 Using the Clearing Process. An Authorized Participant may place an order to redeem Creation Units of a stock ETF Fund either (1) through the CNS clearing processes of the NSCC as such processes have been enhanced to effect redemptions of Creation Units, such processes being referred to herein as the Clearing Process, or (2) outside the Clearing Process. To redeem through the Clearing Process, an Authorized Participant must be a member of the NSCC that is eligible to use the CNS system. Redemptions of Creation Units cleared through the Clearing Process will be subject to a lower transaction fee than those cleared outside the Clearing Process.

An order to redeem Creation Units through the Clearing Process is deemed received on the transmittal date if (1) such order is received by the ETF Fund's designated agent before Closing Time on such transmittal date and (2) all other procedures set forth in the Participant Agreement are properly followed. Such order will be effected based on the NAV of an ETF Fund next determined on that day. An order to redeem Creation Units through the Clearing Process made in proper form but received by an ETF Fund after Closing Time on the transmittal date will be deemed received on the next business day immediately following the transmittal date and will be effected at the NAV next determined on that day. The Redemption Securities and the Cash Redemption Amount will be transferred by the second NSCC business day following the date on which the redemption request is deemed received.

Placement of Redemption Orders Outside the Clearing Process. An Authorized Participant that wishes to place an order to redeem a Creation Unit outside the Clearing Process must state that it is not using the Clearing Process and that the redemption instead will be effected through a transfer of ETF Shares directly through the DTC. An order to redeem a Creation Unit of an ETF Fund outside the Clearing Process is deemed received on the transmittal date if (1) such order is received by the ETF Fund's designated agent 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 transfer 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.

After the transfer agent has deemed an order for redemption outside the Clearing Process received, the transfer agent will initiate procedures to transfer the Redemption Securities and the Cash Redemption Amount to the Authorized Participant on behalf of the redeeming Beneficial Owner by the second business day following the transmittal date on which such redemption order is deemed received by the transfer agent.

If on settlement date (typically T+2) 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.

Each 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. In addition, each ETF Fund reserves the right to redeem Creation Units partially for cash to the extent that the Fund could not lawfully deliver one or more Redemption Securities or could not do so without first registering such securities under federal or state law.

Suspension of Redemption Rights. The right of redemption may be suspended or the date of payment postponed with respect to an 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 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 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 January 31, 2023, appearing in the Funds' 2023 Annual Reports to Shareholders, and the reports thereon of PricewaterhouseCoopers LLP, an independent registered public accounting firm, also appearing therein, are incorporated by reference into this Statement of Additional Information. For a more complete discussion of each Fund's performance, please see the Funds' Annual and Semiannual Reports to Shareholders, which may be obtained without charge.

APPENDIX A

Summary of the Vanguard-Advised Funds Proxy Voting Policy

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

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

The voting principles and policies adopted by the Board provide a framework for assessing each proposal and seek to ensure that each vote is cast in the best interests of each fund. Under the voting policies, each proposal is evaluated on its merits, based on the particular facts and circumstances presented at the company in question. For more information on the funds' proxy voting policies, please visit *about.vanguard.com/investment-stewardship*.

I. Investment Stewardship Team

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

II. Investment Stewardship Oversight Committee

The Board, including a majority of the independent trustees, appoints the members of the Committee (which is comprised primarily of fund officers). The Committee works with the Investment Stewardship Team to provide reports and other guidance to the Board regarding proxy voting by the funds. The Committee has an obligation to exercise its decision-making authority in accordance with the Board's instructions as set forth in the funds' proxy voting procedures and voting policies and subject to the fiduciary standards of good faith, fairness, and Vanguard's Code of Ethics. The Committee may advise the Investment Stewardship Team on how to best apply the Board's instructions as set forth in the voting policies or refer the matter to the Board, which has ultimate decision-making authority for the funds. The Board reviews the procedures and voting policies annually and modifies them from time to time upon the recommendation of the Committee and in consultation with the Investment Stewardship Team.

III. Proxy Voting Principles

Vanguard's investment stewardship activities are grounded in four principles of good governance:

1) *Board composition:* We believe good governance begins with a great board of directors. Our primary interest is to ensure that the individuals who represent the interests of all shareholders are independent, committed, capable, and diverse in personal characteristics, skills, and experience.

2) *Oversight of strategy and risk:* We believe that boards are responsible for effective oversight of a company's long-term strategy and material risks, including environmental, social, and governance risks.

3) *Executive compensation:* We believe that performance-linked compensation (or remuneration) policies and practices are fundamental drivers of sustainable, long-term value.

4) *Shareholder rights:* We believe that companies should have in place governance structures that serve to safeguard and support foundational rights for shareholders.

IV. Evaluation of Proxies

For ease of reference, the procedures and guidelines often refer to all funds. However, the processes and practices seek to ensure that proxy voting decisions are suitable for individual funds. For most proxy proposals, particularly those involving corporate governance, the evaluation could result in the funds having a common interest in the matter and, accordingly, each fund casting votes in the same manner. In other cases, however, a fund may vote differently from other funds if doing so is in the best interest of the individual fund.

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

In evaluating proxy proposals, the Investment Stewardship Team considers information from many sources, which could include, but is not limited to, the perspectives of the company management or shareholders presenting a proposal, independent proxy research services, or proprietary research. Additionally, data and recommendations from proxy advisors serve as one of many inputs into our research process.

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

V. Conflicts of Interest

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

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

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

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

VI. Shareholder Proposals

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

VII. Voting in Markets Outside the United States

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

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

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

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

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

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

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

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

X. Securities Lending

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

- The subject of the vote and whether, based on our knowledge and experience, we believe the topic is potentially material to the corporate governance and/or long-term performance of the company;
- The Vanguard funds' individual and/or aggregate equity investment in a company, and whether we estimate that voting Vanguard funds' shares would affect the shareholder meeting outcome; and
- The long-term impact to our fund shareholders, evaluating whether we believe the benefits of voting a company's shares would outweigh the benefits of stock lending revenues in a particular instance.

APPENDIX B

Wellington Management Global Proxy Policy and Procedures

Wellington Management has adopted and implemented policies and procedures that it believes are reasonably designed to ensure that proxies are voted in the best interests of clients for whom it exercises proxy-voting discretion.

Wellington Management's Proxy Voting Guidelines (the "Guidelines") set forth broad guidelines and positions on common proxy issues that Wellington Management uses in voting on proxies. In addition, Wellington Management also considers each proposal in the context of the issuer, industry and country or countries in which the issuer's business is conducted. The Guidelines are not rigid rules and the merits of a particular proposal may cause Wellington Management to enter a vote that differs from the Guidelines. Wellington Management seeks to vote all proxies with the goal of increasing long-term client value and, while client investment strategies may differ, applying this common set of guidelines is consistent with the investment objective of achieving positive long-term investment performance for each client.

Statement of Policy

Wellington Management:

1) Votes client proxies for which clients have affirmatively delegated proxy-voting authority, in writing, unless it has arranged in advance with the client to limit the circumstances in which it would exercise voting authority or determines that it is in the best interest of one or more clients to refrain from voting a given proxy.

2) Votes all proxies in the best interests of the client for whom it is voting.

3) Identifies and resolves all material proxy-related conflicts of interest between the firm and its clients in the best interests of the client.

Responsibility and Oversight

The Investment Research Group ("Investment Research") monitors regulatory requirements with respect to proxy voting and works with the firm's Legal and Compliance Group and the Investment Stewardship Committee to develop practices that implement those requirements. Investment Research also acts as a resource for portfolio managers and research analysts on proxy matters as needed. Day-to-day administration of the proxy voting process is the responsibility of Investment Research. The Investment Stewardship Committee is responsible for oversight of the implementation of the Global Proxy Policy and Procedures, review and approval of the Guidelines, identification and resolution of conflicts of interest, and for providing advice and guidance on specific proxy votes for individual issuers. The Investment Stewardship Committee reviews the Global Proxy Policy and Procedures annually.

Procedures

Use of Third-Party Voting Agent

Wellington Management uses the services of a third-party voting agent for research, voting recommendations, and to manage the administrative aspects of proxy voting. The voting agent processes proxies for client accounts, casts votes based on the Guidelines and maintains records of proxies voted. Wellington Management complements the research received by its primary voting agent with research from another voting agent.

Receipt of Proxy

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

Reconciliation

Each public security proxy received by electronic means is matched to the securities eligible to be voted and a reminder is sent to any custodian or trustee that has not forwarded the proxies as due. This reconciliation is performed at the ballot level. Although proxies received for private securities, as well as those received in non- electronic format, are voted as received, Wellington Management is not able to reconcile these ballots, nor does it notify custodians of non-receipt.

Research

In addition to proprietary investment research undertaken by Wellington Management investment professionals, Investment Research conducts proxy research internally, and uses the resources of a number of external sources including third-party voting agents to keep abreast of developments in corporate governance and of current practices of specific companies.

Proxy Voting

Following the reconciliation process, each proxy is compared against the Guidelines, and handled as follows:

- Generally, issues for which explicit proxy voting guidance is provided in the Guidelines (i.e., "For", "Against", "Abstain") are voted in accordance with the Guidelines.
- Issues identified as "case-by-case" in the Guidelines are further reviewed by Investment Research. In certain circumstances, further input is needed, so the issues are forwarded to the relevant research analyst and/or portfolio manager(s) for their input.
- Absent a material conflict of interest, the portfolio manager has the authority to decide the final vote. Different portfolio managers holding the same securities may arrive at different voting conclusions for their clients' proxies.

Wellington Management reviews a subset of the voting record to ensure that proxies are voted in accordance with these *Global Proxy Policy and Procedures* and the Guidelines; and ensures that documentation and reports, for clients and for internal purposes, relating to the voting of proxies are promptly and properly prepared and disseminated.

Material Conflict of Interest Identification and Resolution Processes

Wellington Management's broadly diversified client base and functional lines of responsibility serve to minimize the number of, but not prevent, material conflicts of interest it faces in voting proxies. Annually, the Investment Stewardship Committee sets standards for identifying material conflicts based on client, vendor, and lender relationships, and publishes those standards to individuals involved in the proxy voting process. In addition, the Investment Stewardship Committee encourages all personnel to contact Investment Research about apparent conflicts of interest, even if the apparent conflict does not meet the published materiality criteria. Apparent conflicts are reviewed by designated members of the Investment Stewardship Committee to determine if there is a conflict and if so whether the conflict is material.

If a proxy is identified as presenting a material conflict of interest, the matter must be reviewed by designated members of the Investment Stewardship Committee, who will resolve the conflict and direct the vote. In certain circumstances, the designated members may determine that the full Investment Stewardship Committee should convene.

Other Considerations

In certain instances, Wellington Management may be unable to vote or may determine not to vote a proxy on behalf of one or more clients. While not exhaustive, the following are potential instances in which a proxy vote might not be entered.

Securities Lending

In general, Wellington Management does not know when securities have been lent out pursuant to a client's securities lending program and are therefore unavailable to be voted. Efforts to recall loaned securities are not always effective, but, in rare circumstances, Wellington Management may determine voting would outweigh the benefit to the client resulting from use of securities for lending and recommend that a client attempt to have its custodian recall the security to permit voting of related proxies.

Share Blocking and Re-registration

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

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

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

Additional Information

Wellington Management maintains records related to proxies pursuant to Rule 204-2 of the Investment Advisers Act of 1940 (the "Advisers Act"), the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and other applicable laws. In addition, Wellington Management discloses annually how it has exercised its voting rights for significant votes, as required by the EU Shareholder Rights Directive II ("SRD II").

Wellington Management provides clients with a copy of its Global Proxy Policy and Procedures, including the Guidelines, upon written request. In addition, Wellington Management will provide specific client information relating to proxy voting to a client upon written request.