Vanguard®

Global investment stewardship orinciples

Vanguard funds



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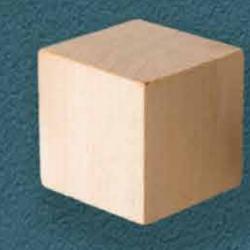
Table of contents

Investment Stewardship philosophy	(1)
Principle I: Board composition and effectiveness	Z
Principle II: Oversight of strategy and risk	6
Principle III: Executive compensation	9
Principle IV: Shareholder riahts	1-









Investment Stewardship philosophy

Vanguard is one of the world's largest investment management companies, serving more than 30 million investors worldwide. Our Investment Stewardship program has a clear, consistent, and compelling mandate: to serve as a voice for our investors and to promote long-term value creation at the companies in which our funds invest. In doing so, we are guided by Vanguard's core purpose: To take a stand for all investors, to treat them fairly, and to give them the best chance for investment success.

Vanguard index funds are practically permanent investors of the companies in which they invest, holding a stock indefinitely—or as long as it is included in the benchmark index. This long-term perspective informs every aspect of our Investment Stewardship program. We employ a principles-based approach to stewardship and follow best practices in corporate governance.

On behalf of the Vanguard funds, Vanguard's Investment Stewardship team executes its mandate through three types of activities:¹

Engagement: Direct company engagement is the foundation of our Investment Stewardship program. It helps us understand how boards and management are overseeing material risks to long-term investors and what steps they are taking to manage those risks. We have a strong conviction

that candid dialogue during engagements can be more productive than our vote alone.

Public advocacy: We encourage the adoption of corporate governance practices and the development of governance codes and regulatory environments that promote and safeguard shareholder value. We support governance-focused organizations, speak at conferences, advocate for—and in some cases provide consultation on—governance codes and standards and regulatory frameworks, and we share our perspectives with interested stakeholders.

Proxy voting: The most visible sign of Vanguard's engaged ownership is our funds' proxy voting at portfolio company shareholder meetings. The Investment Stewardship team determines votes at each portfolio company meeting on a fund-byfund basis and in the best long-term interest of each internally managed Vanguard fund, based on our research and analysis and consistent with our published voting guidelines. Because of our advocacy and engagement efforts, companies should be aware of our position by the time we cast our funds' votes.

Corporate governance norms vary by region, and our expectations of companies in which our funds invest take into account the legal and regulatory frameworks and prevailing market practices within local jurisdictions. That said, we believe there are fundamental, universal corporate governance

principles with which all companies should align. Vanguard's investment stewardship activities are grounded in four such principles of good governance:

- (I) board composition and effectiveness;
- (II) oversight of strategy and risk;
- (III) executive compensation;
- (IV) shareholder rights.

These global principles are articulated in the following pages. To understand how we apply them to our voting practices, please see our regional and market-specific voting policies on Vanguard regional websites.

3

¹The Board of Trustees (the Board) of each Vanguard fund advised by Vanguard has retained proxy voting authority for each respective portfolio advised by Vanguard. The Board has adopted proxy voting procedures and guidelines to govern proxy voting for each portfolio retaining proxy voting authority. The Boards of Trustees of Vanguard's externally managed funds have granted full proxy voting privileges for those funds to their respective external managers.

Principle I: Board composition and effectiveness

Good governance starts with a company's board of directors. Board members are elected to represent the interests of all shareholders, and they have key responsibilities that are critical to companies setting themselves up to stay relevant today, tomorrow, and well into the future. These responsibilities include planning for the succession of company management, overseeing strategy and risk, setting executive pay, establishing a strong foundation of corporate governance, and engaging with shareholders. Such responsibilities directly affect the long-term interests of Vanguard investors.

A well-composed board is in the best position to execute effective decisions on behalf of shareholders. For this reason, we take a board-centric approach to our investment stewardship efforts. Our primary focus is to ensure that the individuals who represent the interests of all shareholders are independent, come from diverse backgrounds, and are suitably experienced and committed.

Expectations

Independent: We expect boards to be appropriately independent of company management in both form and substance. Independence at the board level

supports a structure of shareholder representatives who are independent in mindset and able to fulfill their role to properly challenge management. In practice, this generally means that boards should be majority independent, with key committees composed of independent directors only. In markets where majority independence is not the norm, we expect companies to move in the direction of greater board independence.

We also support independent leadership in the boardroom. That may take the form of an independent chair or a lead independent director. Regardless of title, the role's responsibilities should be robust and clearly defined through company disclosure.

We generally define independence in accordance with the relevant exchange listing standards or local corporate governance codes or both.

Diverse: We expect boards to reflect both diversity of personal characteristics (such as gender, race, age, and ethnicity) and diversity of skill, experience, and opinion. We believe that a variety of unique experiences meaningfully contributes to a board's ability to serve as effective, engaged stewards of shareholders' interests. We are not prescriptive about age limits, tenure limits, board size, or overall composition. We believe that boards should determine the composition best suited to their

company while considering market best practices, expectations, and risks.

In practice, companies should publish their perspectives on diversity so that shareholders can better understand how a board considers diversity in its composition. As a best practice, we expect to see board composition disclosure, at least in aggregate. We also expect companies to conduct a sufficiently broad search for director candidates. This search should go beyond traditional candidate pools and purposely consider candidates who will bring diverse perspectives into the boardroom.

Suitably experienced: We expect boards to be fit for purpose. This means having a thoughtfully composed board with the right mix of skills and experience, enabling directors to fulfill their role to oversee company strategy and risk. The board's composition should therefore reflect expertise related to company strategy and risk, as well as in corporate backgrounds outside the company's core business.

We also expect board composition to evolve with company strategy. For this reason, companies should be thoughtful in their approach to board evolution and should refresh directors, as needed, to bring new perspectives and skill sets into the boardroom. We believe that regular and meaningful evaluations enable boards to analyze their current

composition and identify opportunity areas. Our preference is that companies disclose to shareholders key findings of these evaluations, along with directors' skills and personal traits, to enable them to make more informed proxy voting decisions.

Committed: The role of public company directors is complex and time-consuming, and we believe that directors should maintain sufficient capacity to effectively carry out their responsibilities to shareholders. For this reason, directors should appropriately limit their board and other commitments to ensure that they are accessible and responsive to both routine and unexpected board matters (including their attending board and relevant committee meetings). Any exceptions to their participation/attendance should be appropriately disclosed.

Our expectations at a glance

Independence:

- Majority independent board
- ✓ Independent key committees
- ✓ Independent leadership

Diverse:

- Diversity of skills, experience, opinion, and personal characteristics
- ✓ Published perspectives on diversity
- ✓ Broad search for director candidates

Appropriately experienced:

- Mix of skills
- Board evolution and refreshment
- Regular board evaluation
- ✓ Inclusion of external perspectives
- Disclosure about directors' skills and personal traits

Committed:

- Appropriately limited number of boards on which a director serves
- Attendance at board and committee meetings



Principle II: Oversight of strategy and risk

Strategy and risk are two sides of the same coin: Every strategy involves risk, and every risk can present strategic opportunities. We believe that boards are responsible for effective oversight of a company's long-term strategy and any relevant and material risks, including sustainability opportunities or concerns. Directors should bring a wealth of experience to the boardroom, and we look for highly effective boards that can both support and challenge their management teams' direction of strategy and oversight of risks.

For these reasons, we believe that boards should engage in strategy formation and that companies should maintain robust processes for their boards to evaluate and mitigate material risks. In addition, information on the procedures surrounding the board's oversight of strategy and risk should be publicly disclosed, and members of management and the board should be able to discuss these topics with shareholders.

Investors also benefit when the market has better visibility into the long-term sustainability of a company's business. The disclosure of material risks to a business—which arise from a range of factors, including environmental and social concerns—results in a more accurate valuation of the company. Over time, accurate valuations are critical to ensuring that our fund shareholders are appropriately compensated for the investment risks they assume.

Vanguard's view on sustainability

For Vanguard, sustainability is synonymous with long-termism. We start with the premise that our equity index funds typically hold companies' stock for long periods and are near-permanent investors in just about every public company and every industry. With this indefinite horizon, our funds must focus on how companies are setting themselves up for success today, next year, and well into the future. We expect that the companies in which our funds invest, and their boards, have a similar focus.

Expectations

Oversight of strategy: We expect boards to be meaningfully involved in the oversight and formation of strategy. We also expect boards to educate themselves by seeking out varied internal and external perspectives and continuously taking part in dialogue with management teams. Directors should be knowledgeable about the risks and opportunities that stem from a company's strategy, how the company creates value, and how it will remain relevant over the coming decades. Vanguard does not seek to dictate company strategy. Rather, we want to know that critical issues are being addressed. A board should be consulted on and involved in overseeing the company's strategic direction and progress toward attaining its objectives.

Focus on material risks: We expect companies to approach risk from a long-term material economic standpoint. Companies should consider risks that may harm their long-term value, including traditional

business risks as well as material environmental and social matters.

The risks that a company faces are not static. Rather, they evolve with changes to business strategy, regulations, and the political and societal climate. We look for boards to educate themselves and seek out third-party perspectives and information on current and potential material risks. This knowledge will support the evaluation of risks, and the related business opportunities, in strategic decision-making.

Disclosure: Directors should communicate their approach to risk oversight to shareholders through engagement and written disclosure.

We encourage companies to provide full disclosure on material risks. Because required disclosures will not always tell the whole story, we encourage companies to use widely recognized industry disclosure frameworks to guide their presentation of information in a way that is consistent, comparable, and relevant to investors. This includes both historical data and forward-looking information so that the market has context for what companies have done, what they plan to do, and how their governance structures enable successful decision-making. We suggest that companies adhere to reporting structures such as the Value Reporting Foundation (formed by the merger of the Sustainability Accounting Standards Board and the International Integrated Reporting Council), the Task Force on Climate-related Financial Disclosures (TCFD), or other broadly accepted industry-specific frameworks.

Engagement: The oversight of strategy and risk is not an area that frequently manifests itself directly in voting; therefore, we expect companies and their boards to be prepared to engage on this topic. Given that we are primarily interested in how the board is involved in oversight, we prefer that such discussions include an independent director.

Capital structure, mergers, acquisitions, and other financial transactions: As with all board decisions, we expect the board's consideration of capital-raising, mergers, acquisitions, and other financial transactions to be determined based on the long-term interests of company shareholders.

Capital-raising can be an important growth enabler for a company. Although we believe that this generally falls within the domain of management, boards should maintain oversight of key transactions.

We expect clear disclosure of the rationale for the transaction, oversight of the deal, and, in the case of mergers and acquisitions, valuation determination processes. Boards also should ensure that such transactions are considered by an independent body that is free from conflicts of interest.

Climate-related risk: Climate change presents a profound risk to companies and their long-term investors. Few, if any, companies will be exempt from its far-reaching implications. As a fiduciary, Vanguard views climate risk through the lens of materiality, seeking to determine whether climate-related factors pose a meaningful threat to long-term shareholder value. We support comprehensive and effective emissions disclosures and climate-related metrics and

mitigation targets, such as those aligned with the goals of the Paris Agreement.

Boards should be fully aware of climate risks and opportunities as part of a foundation for making the most sustainable long-term decisions. We look for companies to exhibit sound climate change risk management, including:

- Climate-competent boards. Boards need to get smart on climate risk. This means having directors with relevant expertise, participating in ongoing climate education, and maintaining perspectives that are independent of management. We expect active, independent monitoring of climate issues and integration of climate risks into strategic and financial planning.
- Effective disclosure. Our interest is in transparency; when the market has relevant information, a company's stock price will more accurately reflect climate-related risk and opportunity. Climate-related disclosures should be aligned with investor-oriented frameworks such as those set forth by the TCFD, so that they may be compared over time and across peers.
- **Risk mitigation.** Since 2015, the goals set forth in the Paris Agreement have become a widely accepted standard for countries and companies aiming to address climate change. Where climate change is a material risk, Vanguard encourages companies to set targets that align with these goals and to disclose them clearly.

Social risk: It has become increasingly important for companies to understand and mitigate the potential social risks that can affect their communities, human rights, and society at large. A company's social risks can be assessed by how well it manages its relationships with stakeholders such as employees, customers, and the communities in which it operates. If managed poorly, social risks can manifest themselves as, for example, reputational, competitive, legal, or regulatory risks; can affect a company's social license to operate; and can erode long-term shareholder value. We expect boards to be fully engaged and knowledgeable about monitoring and governing such risks.

Diversity, equity, and inclusion: Vanguard's views on diversity extend beyond the boardroom to leadership teams and workforces. As firms compete for employees with the right skills and experience, they face greater pressure about how they attract, develop, and retain their workforces.

Many companies' most valuable asset isn't a patent or a product. It's their people. Boards oversee strategy and risk, but the workforce executes that vision. Companies and their boards should demonstrate how workforce diversity is integrated into their broader talent strategy, as well as their oversight of human capital management risks. Companies should provide disclosure that demonstrates the board's oversight and objectives related to the company's diversity, equity, and inclusion priorities. With consideration for market norms and regulations, companies should disclose relevant metrics, including workforce demographics,

in order to monitor current state and year-over-year progress.

Where market-appropriate and legally permissible, Vanguard expects the disclosure of these metrics to reflect gender, race, and ethnicity diversity measures at the executive, non-executive, and overall workforce levels, providing adequate accommodations in cases where an individual may choose not to disclose, may identify by another category, or is not legally permitted to disclose. Human capital management matters are critical to a company's long-term success, and boards should demonstrate appropriate oversight of these risks.

Activism: When shareholders share their perspectives, regardless of whether they are activist investors or more traditional shareholders, we expect the company to listen and consider their perspectives. In instances where an activist advocates for a strategic shift, we also expect boards to seek the other shareholders' input on the activist's proposals. Ultimately, we expect the company to make an informed decision that is in the best long-term interest of all shareholders.

Our expectations at a glance

Oversight of strategy:

- Boards should be involved in oversight and formation of strategy
- Boards and management should identify strategic risks and opportunities

Focus on material risks:

- Boards should have a long-term economic and material viewpoint
- Boards should evaluate relevant environmental and social matters
- ✓ Boards and company executives should identify risks and put in place mitigation plans
- Boards should stay educated about evolving risks

Disclosure:

- Disclosure related to approach to risk oversight
- Disclosure that is consistent, comparable, and decision-useful
- Disclosure that utilizes generally accepted reporting frameworks

Engagement:

Company leaders should engage with shareholders on oversight of strategy and risk

Capital structure, mergers, acquisitions, and other financial transactions:

- ✓ Plans are based on the long-term interests of company shareholders
- ✓ Boards have robust oversight process for transactions
- Company publishes clear disclosure that is decision-useful
- Policies and practices are considered by an independent body

Climate risk:

- ✓ Directors with appropriate knowledge and skill set should oversee climate-related risks
- Climate-related disclosures should align with internationally recognized and investor-oriented frameworks
- Company leaders must identify climate-related risks and develop appropriate risk mitigation
- Target setting allows for progress checks across many years

Social risk:

Directors must demonstrate a thorough understanding of a company's social risks and communicate a coherent risk mitigation strategy

Diversity:

✓ Boards must develop a human capital management strategy that incorporates workforce diversity

Activism:

- Boards should review and consider changes outlined in shareholder proposals
- ✓ Boards should seek the input of all shareholders
- ✔ Boards should determine what is in the best interest of all shareholders when analyzing the merits of shareholder proposals



Principle III: Executive compensation

We believe that performance-linked executive pay (compensation or remuneration) policies and practices are fundamental drivers of sustainable, long-term value. We look for pay plans that incentivize outperformance versus industry peers over the long term.

We do not believe there is a one-size-fits-all approach to executive compensation; norms and expectations vary by industry type, company size, company maturity, and region. Boards should consider the following best practices when setting compensation.

Expectations

Relative pay for performance: Board committees that oversee executive pay (compensation or remuneration committees) should create and implement plans that encourage and reward the creation of sustainable financial value for shareholders. We consider performance in both relative and absolute terms but believe that pay

should ultimately align with performance compared with a relevant peer group. An outsized peer group or peers that do not seem comparable from a business or strategy perspective would lead us to question whether these practices are intended to inflate executive pay.

Long-term focus: It is important that a plan emphasizes long-term value creation and does not unduly reward short-term performance. We prefer to see incentive plans that consider at least a three-year performance measurement period and that set long-term holding periods for any equity awards. In addition, we believe that, at a minimum, a plan's fixed pay should not exceed the portion of variable or "at risk" pay.

Plan structure: To further emphasize the long-term focus of pay plans, compensation or remuneration committees should consider incorporating performance metrics that align with long-term corporate strategy and performance. Because pay should ultimately align with relative performance, we emphasize the importance of integrating relative metrics and benchmarking into the plan. When absolute metrics are included in a plan, we

seek disclosure to help us understand how this pay design maintains alignment between relative pay and performance. We expect all metrics, whether relative or absolute, to be set at rigorous but achievable objectives, with total pay targets set at reasonable and competitive market levels.

We support a board's choice to apply positive or negative discretion where appropriate. However, we are cautious about supporting one-time special awards, which may overemphasize short-term performance. Where deviations in plan structure or payouts arise from the use of discretion, we expect disclosure to explain the reason for the award and the methodology used by the board to grant the award.

We also believe that pay plans should contain a clawback policy and, in situations that warrant it, that the board should exercise its discretion to invoke this policy.

Responsiveness and disclosure: Although Vanguard is mindful of local market requirements, we generally expect companies to present executive pay proposals to shareholders at every annual

general meeting. Shareholders also should be able to analyze executive pay and easily understand pay expectations and outcomes. A company's disclosure should therefore clearly articulate the plan's structure and the compensation/remuneration committee's processes for determining that structure. Where support for executive pay is low, boards should consider their shareholders' views and be responsive to such input. However, shareholder feedback or disapproval should not be the sole factor in initiating a review of a pay plan's structure. Boards should regularly evaluate and revise executive pay plans, to ensure that suitability is maintained.

Our expectations at a glance

Relative pay for performance:

- ✓ Pay-for-performance alignment
- ✓ Absolute and relative performance
- Relevant set of peers

Long-term focus:

- ✓ Long-term incentive plan with at least three-year measurement and holding periods
- At-risk pay that exceeds fixed pay

Plan structure:

- Metrics aligned with corporate strategy
- Rigorous goal setting
- Relative plan metrics
- ✓ Target pay in line with market levels
- ✓ Appropriate committee discretion
- Clawback policy implementation

Responsiveness and disclosure:

- Clear and transparent disclosure
- ✓ Board responsiveness to shareholder feedback



Principle IV: Shareholder rights

Shareholders should have the power to use their voice and vote to ensure the accountability of a company's board and management. We expect companies to adopt governance structures, such as annual director elections that require securing a majority of votes, to ensure that boards and management serve in the best interest of the shareholders they represent. We believe such governance structures can serve as a safety net to safeguard and support foundational rights for shareholders.

Expectations

Voting rights: Voting is the mechanism through which every shareholder has a voice. Therefore, certain matters that are material to a shareholder's investment should be put to a vote. Some examples include mergers or significant acquisitions, material changes to bylaws, and changes to governance structures.

Vanguard supports "one-share, one-vote" structures that grant shareholders voting rights in proportion to their economic interests. We are mindful, however, not to hinder public capital formation, and we appreciate that some companies choose to have multiple share classes upon their initial public offering. In those instances, we encourage firms to implement sunset provisions that adopt "one-share, one-vote" structures over time.

Shareholder rights: Boards should not unnecessarily limit the rights of shareholders. Such rights include the right to call special meetings and to place director nominees on a company's ballot (that is, proxy access). These rights improve director accountability and strengthen the shareholder voice in instances where the board appears resistant to shareholder input. We also expect material bylaw amendments to be put to a shareholder vote and ratified by a majority vote standard.

In contrast, antitakeover measures reduce board and company accountability and limit shareholder rights. Vanguard does not typically support such measures. Companies that choose to adopt an antitakeover device should explain why this is in the best interests of shareholders.

Director elections: We favor annual elections for directors and a majority vote standard to join or remain on the board. These conditions enable shareholders to evaluate the performance of directors annually and use their vote to either support the status quo or encourage change.

If majority support is not obtained, we expect the director to offer to resign. If the board chooses not to accept the resignation, it should disclose a compelling rationale why shareholders' wishes were contravened.

Our expectations at a glance

Voting rights:

- Shareholder vote on material matters
- One share, one vote

Shareholder rights:

- Right to call special meetings, act through written consent, use shareholder access
- ✓ Vote on amendments to company bylaws
- Right to nominate directors
- Antitakeover measure disclosure

Director elections:

- Annual elections for directors
- Majority vote standard
- Responsiveness to shareholders



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