

Broker-Dealer Client Relationship Summary (Form CRS)

September 3, 2024

Vanguard Marketing Corporation (VMC)

Registered with the Securities and Exchange Commission (SEC) as a Broker-Dealer.

The services provided by a broker-dealer and other financial services providers, like an investment advisor, will differ, as well as the fees charged by such providers. It's important to understand who can provide you with the level of financial services and investment support you need at a price reasonable to you. The SEC makes free and simple tools and educational materials available to research firms and financial professionals at investor.gov/CRS.

What investment services and advice can you provide me?

VMC, doing business as Vanguard Brokerage Services® (VBS), is a registered broker-dealer that provides a brokerage platform for retail clients. Through VBS, you can open a Vanguard Brokerage Account to 1) buy and sell mutual funds, ETFs, stocks, fixed income products (such as corporate, agency and municipal bonds, U.S. Treasury securities, and certificates of deposit), and options; and 2) participate in margin or fully paid lending, if eligible. You can open general investment taxable accounts or tax-deferred retirement accounts, including traditional IRAs or Roth IRAs. You can also open a Vanguard Cash Plus Account, a brokerage account designed to operate as a cash management account. All brokerage accounts include a sweep program that transfers (sweeps) any uninvested funds in that account, such as new deposits or the proceeds from securities transactions, into a sweep option. See the [Vanguard Brokerage Account Agreement](#) and [Vanguard Bank Sweep Products Terms of Use](#) for details regarding the sweep program options. There are no account minimum requirements to open or maintain a brokerage account; however, certain brokerage products and mutual funds may impose minimum initial investment amounts.

For more information about account and brokerage services, visit vanguard.com.

We also provide point-in-time recommendations for certain brokerage products, accounts and services, and relating to account transfers and rollovers. Unless we affirmatively state that we are making a recommendation, we aren't providing a recommendation. VBS does not provide ongoing monitoring services and doesn't exercise discretion over VBS accounts.

Conversation starters: Consider these questions before engaging a financial services provider. You can find responses at investor.vanguard.com/CRSFAQ or call one of our representatives at the number provided below.



- Given my financial situation, should I choose a brokerage service? Why or why not?
- How will you choose investments to recommend to me?
- What is your relevant experience, including your licenses, education, and other qualifications? What do these qualifications mean?

What fees will I pay?

When trading with VBS, certain fees and costs may apply depending on 1) the type of securities you trade (e.g., mutual fund expense ratios, purchase and redemption fees, options contract fees, or commissions); 2) how you trade those securities (online or assisted on the phone by a broker-dealer representative) and other brokerage features, options, or services you use (e.g., wire transfers); and 3) your account level, which is generally based on the amount of your qualifying Vanguard assets. The fees and costs you pay may change. If we change fees at our discretion, we'll provide advance notice before such changes, which will be represented in the commission schedule. Visit vanguard.com/commissions for more information about VBS commission and fee schedules.

If a broker-dealer receives transaction-based fees, a retail investor would be charged more when there are more trades in their account. Therefore, the firm may have an incentive to encourage a retail investor to trade often. When we provide a recommendation, we mitigate this conflict by considering costs and fees in our analysis, where relevant.

You will pay fees and costs whether you make or lose money on your investments. Fees and costs will reduce any amount of money you make on your investments over time. Please make sure you understand what fees and costs you're paying.



Help me understand how these fees and costs might affect my investments. If I give you \$10,000 to invest, how much will go to fees and costs, and how much will be invested for me?

What are your legal obligations to me when providing recommendations? How else does your firm make money and what conflicts of interest do you have?

When we provide you with a recommendation, we must act in your best interest and not put our interest ahead of yours. At the same time, the way we make money creates some conflicts with your interests. You should understand and ask us about these conflicts because they can affect the recommendations and services we provide you. Here are some examples to help you understand what this means:

We receive payments for our brokerage services through three main sources: clients, third-party funds and service providers, and our parent company, VGI.

Direct client compensation to VBS comes in the form of fees paid related to securities traded, types of transactions, and other broker services used. See the information above about fees.

We receive payments from third parties in the form of 12b-1 and shareholder servicing payments from non-Vanguard mutual funds available through us, and interest or other fees from service providers. These payments may be related to your activities but are paid directly by the service providers and not from your investment. VBS will also generate revenue from the fully paid lending and bank sweep programs. For more details about the bank sweep program's conflicts, see the [Vanguard Bank Sweep Products Terms of Use](#).

We receive compensation from VGI for marketing, distribution, and shareholder servicing services provided by us and our registered representatives in support of Vanguard products. We also receive compensation from VGI associated with offering brokerage services to our clients. This compensation is generally indirectly derived from investments in Vanguard proprietary products and payment of the funds' expense ratios to VGI or other affiliates.

We don't receive any payment for equities or options order flow, nor do we receive any monetary payments or other direct or indirect benefit that would result in compensation or consideration in return for the routing of client orders.



How might your conflicts of interest affect me, and how will you address them?

How do your financial professionals make money?

Our broker-dealer representatives servicing clients are not compensated for, or on the basis of, any recommendation or sales of specific securities. Our representatives are paid base compensation and are eligible for an annual payment from an enterprise-wide compensation plan. Certain sales representatives are also eligible to receive variable compensation that is measured using either discretionary or discretionary and non-discretionary factors. These variable compensation practices create conflicts of interest due to the incentives they create for both our sales representatives and VBS. Please see the "How might your conflicts of interest affect me, and how will you address them?" section of VMC's Form CRS Conversation Starters, available [here](#).

Do you or your financial professionals have legal or disciplinary history?

Yes. For more information related to legal or disciplinary history disclosure, visit investor.gov/CRS. You'll find a free and simple search tool to research VMC and its financial professionals.



As a financial professional, do you have any disciplinary history? For what type of conduct?

Where can I find additional information?

You can obtain additional information about VBS by visiting investor.vanguard.com. You can also call one of our representatives at 877-662-7447 to request a copy of this Form CRS.



Who is my primary contact person? Are they a representative of an investment advisor or a broker-dealer? Who can I talk to if I have concerns about how this person is treating me?

Vanguard Brokerage Services[®] commission & fee schedules

Effective July 1, 2024

Stay focused on your financial goals with confidence that you're not paying too much.

Vanguard ETFs (exchange-traded funds)

Assets invested in Vanguard ETFs & mutual funds	Online	Broker-assisted*
Less than \$1 million	\$0	\$25 per trade
\$1 million or more	\$0	\$0

*The broker-assisted commission does not apply to brokerage accounts enrolled in a Vanguard-affiliated advisory service.

All ETFs are subject to management fees and expenses; refer to each ETF's prospectus for more information. All ETF sales are subject to a securities transaction fee. Account service fees may also apply; refer to **Fees for other services** on page 7 for details.

Stocks & ETFs from other companies

Assets invested in Vanguard ETFs & mutual funds	Online	Broker-assisted
Less than \$1 million	\$0	\$25 per trade
\$1 million or more	\$0	\$0

These also apply to sales of leveraged and inverse ETFs and ETNs (exchange-traded notes).

Vanguard Brokerage Services ("Vanguard Brokerage") reserves the right to change the non-Vanguard ETFs included in these offers at any time. All ETFs are subject to management fees and expenses; refer to each ETF's prospectus for more information. All stock and ETF sales are subject to a securities transaction fee. Account service fees may also apply; refer to **Fees for other services** on page 7 for details.

Vanguard mutual funds

Assets invested in Vanguard ETFs & mutual funds	Online	Broker-assisted*
Less than \$1 million	\$0	\$25 per trade
\$1 million or more	\$0	\$0

*The broker-assisted commission does not apply to brokerage accounts enrolled in a Vanguard-affiliated advisory service. For Vanguard mutual fund exchanges, the commission will be charged on the "from" side of the transaction based on the total number of trades placed. For some mutual fund transactions, the commission will be deducted as a separate sweep from your settlement fund. It will not apply to some complex Vanguard mutual fund transactions, including those across registration types.

A few Vanguard mutual funds charge special purchase and/or redemption fees that are paid directly to the funds to help cover higher transaction costs and protect long-term investors by discouraging short-term, speculative trading. Those fees vary from 0.25% to 1.00% of the amount of the transaction, depending on the fund. Visit vanguard.com/purchaseredemptionfees for details.

- Account service fees may apply; refer to **Fees for other services** on page 7 for details.

Minimum investment requirements

- **Target Retirement Funds and STAR® Fund:** \$1,000.
- **Most index mutual funds:** \$3,000 for Admiral™ Shares (Investor Shares not available).
- **Most actively managed mutual funds:** \$3,000 for Investor Shares; \$50,000 for Admiral Shares.
- **Most sector-specific index mutual funds:** \$100,000 for Admiral Shares (Investor Shares not available).

Some mutual funds have higher minimums to protect the funds from short-term trading activity. Visit vanguard.com/mutualfundlist for fund-specific details, which you can find in each fund's profile.

Mutual funds from other companies

No-transaction-fee (NTF) mutual funds

Assets invested in Vanguard ETFs & mutual funds	Online	Broker-assisted
Less than \$1 million	\$0	\$25 per trade
\$1 million or more	\$0	\$0

You'll also pay a \$50 early redemption fee for all sales executed within 60 calendar days of the trade date of your most recent purchase of the same fund.

Transaction-fee (TF) mutual funds

Assets invested in Vanguard ETFs & mutual funds	Online	Broker-assisted
Less than \$1 million	\$20 per trade	Online rate + \$25 per trade
\$1 million to \$5 million	\$0 for first 25 trades;* \$8 per trade thereafter	\$0 for first 25 trades* \$8 per trade thereafter
\$5 million or more	\$0 for first 100 trades;* \$8 per trade thereafter	\$0 for first 100 trades* \$8 per trade thereafter

*Commission-free eligibility applies to the first 25 transactions for clients with at least \$1 million to \$5 million in qualifying Vanguard assets and the first 100 transactions for clients with at least \$5 million or more in qualifying Vanguard assets in each calendar year for any combination of options and transaction-fee (TF) mutual funds. The number is limited to 25 per client with at least \$1 million to \$5 million in qualifying Vanguard assets and 100 per client with at least \$5 million or more in qualifying Vanguard assets as identified by the primary Social Security number on the account. Subsequent transactions are the rates shown in the applicable fee schedule. Vanguard Brokerage reserves the right to end these offers anytime.

These also apply to sales of leveraged and inverse mutual funds.

Fees apply per trade for all purchases, sales, and exchanges, regardless of order size. A purchase fee is added to an order's cost. A sales fee is subtracted from an order's proceeds. If you exchange shares of a fund for another fund in the same fund family and share class, the transaction fee will be paid from your settlement fund.

Load mutual funds

Security type	Fee type	Amount
Class A shares	Front-end load (purchase fee)	Varies by fund or fund family; may be as high as 5.75%; discounts may be available
Class B shares	Back-end load (redemption fee, also known as a contingent deferred sales charge)	Decreases to 0% over a period of years
Class C shares	Back-end load (redemption fee, also known as a contingent deferred sales charge)	Smaller than a Class B redemption fee; decreases to 0% after 1 year
All share classes	Sales charges and minimum purchases	Schedule for specific load fund may vary—sometimes significantly—from general description shown here; check fund's prospectus for details

Vanguard Brokerage doesn't charge additional fees for a purchase, a sale, or an exchange of any load mutual fund offered through our program.

Minimum investment requirements

NTF mutual funds

- **Initial purchase:** For most funds, \$500 for nonretirement accounts and \$500 for IRAs.
- **Additional purchases:** \$500 for any type of account.
- **Dollar-cost-averaging purchases:** \$100 for any type of account (minimum 2 transactions).

TF mutual funds

- **Initial purchase:** \$500.
- **Additional purchases:** \$500.
- **Dollar-cost-averaging purchases:** \$100 (minimum 2 transactions, \$3 per transaction).

NTF, TF, and load mutual funds are subject to the greater of the minimum investment requirements or those identified in the fund's prospectus. Vanguard Brokerage may negotiate fund minimum investment requirements that are greater than or less than the program standards noted above. Individual fund families may impose additional minimums, fees, or charges. For complete information, read the fund's prospectus carefully before investing. The offering conditions of the various funds included in Vanguard Brokerage's program are subject to change at any time, including, but not limited to, fee classification (NTF, TF, or load) and transfer eligibility.

Options

Assets invested in Vanguard ETFs & mutual funds

Online or broker-assisted

Less than \$1 million	\$0 + \$1-per-contract fee
\$1 million to \$5 million	\$0 for first 25 trades;* \$0 + \$1-per-contract fee thereafter
\$5 million or more	\$0 for first 100 trades;* \$0 + \$1-per-contract fee thereafter

*Commission-free eligibility applies to the first 25 transactions for clients with at least \$1 million to \$5 million in qualifying Vanguard assets and the first 100 transactions for clients with at least \$5 million or more in qualifying Vanguard assets in each calendar year for any combination of options and transaction-fee (TF) mutual funds. The number is limited to 25 per client with at least \$1 million to \$5 million in qualifying Vanguard assets and 100 per client with at least \$5 million or more in qualifying Vanguard assets as identified by the primary Social Security number on the account. Subsequent transactions are the rates shown in the applicable fee schedule. Vanguard Brokerage reserves the right to end these offers anytime.

All options exercises and assignments are commission-free.

CDs (certificates of deposit) & bonds

Investment type	New issues	Secondary market*
CDs, U.S. government agency securities, and corporate bonds	\$0	\$1 per \$1,000 face amount (\$250 maximum)
U.S. Treasury securities	\$0	\$0
Municipal bonds	Not available	\$1 per \$1,000 face amount (\$250 maximum)
Mortgage-backed securities	Not available	\$35 per trade
Unit investment trusts (UITs)	Not available	\$35 per trade

*A \$25 broker-assisted commission will be assessed on fixed income transactions traded on the secondary market by telephone, in addition to the rate identified above. It will not be assessed for clients who hold \$1 million or more in Vanguard ETFs and Vanguard funds or for fixed income products that are unavailable for trading online.

All online sales of CDs before they mature are commission-free.

Vanguard Brokerage may act as either an agent (executing your order at cost plus a commission) or a principal (adding markups to purchase prices or subtracting markdowns from sale prices). When acting as a principal for a primary market issue, Vanguard Brokerage generally receives a fee concession from the issuer.

CD and bond prices are available at vanguard.com/buycdsbonds and are price indications only. Online prices for all secondary-market CDs and bonds are before commissions.

Minimum investment requirements

- **U.S. government agency securities and corporate bonds:** New issues and secondary market: \$1,000.
- **CDs and U.S. Treasury securities:** New issues and secondary market: \$1,000.
- **Municipal bonds:** Secondary market: \$5,000; also subject to dealer minimums.

What determines your commissions & fees

Discounts and fee waivers from standard commissions may be available. Vanguard Retirement Investment Program pooled plan accounts are not eligible for discounts from standard commissions and fees. Additional information regarding discount eligibility is available at vanguard.com/benefitsataglance.

A separate commission is charged for each security bought or sold. Orders that execute over multiple days are charged separate commissions. In addition, a separate commission is charged for each order placed for the same security on the same side of the market (buying or selling) on the same day. Orders that are changed by the client and executed in multiple trades on the same day are charged separate commissions. These commission and fee schedules are subject to change.

For more information, visit investor.vanguard.com or contact Vanguard Brokerage Services.

Fees for other services

Fee type	Description and amount
Account closure and full transfer out fee	Vanguard Brokerage may charge a \$100 processing fee for each account closure and full transfer of account assets to another firm. Electronic Bank Transfers and ACH are not subject to this fee. The fee will not be assessed for clients who hold at least \$5 million in qualifying Vanguard assets or brokerage accounts enrolled in a Vanguard-affiliated advisory service.
Account service fee	Vanguard Brokerage charges a \$25 annual account service fee. We don't charge the fee to any of the following: <ul style="list-style-type: none"> • Clients who have an organization or a trust account registered under an employee identification number (EIN). • Clients who've elected e-delivery of statements and annual privacy policy notice; confirmations; reports, prospectuses and proxy materials; and notices, amendments and other important account updates. • Clients enrolled in an advisory program serviced by an affiliate of Vanguard. • Clients with at least \$5 million in qualifying Vanguard assets.
American Depositary Receipts (ADRs)	Banks that custody ADRs are permitted to charge ADR holders certain fees, as detailed in the ADR prospectuses. "Pass through" ADR fees are collected from Vanguard Brokerage Services by the Depository Trust Company (DTC) and will be automatically deducted from your brokerage account and shown on your account statement. Other fees—including dividend processing fees—may be withheld by the DTC from the amount paid by the issuer.
Broker-assisted (closing transactions)	A \$25 broker-assisted commission may be assessed on closing transactions placed by Vanguard Brokerage on behalf of clients to cover a margin call or debit obligation. The commission will not be assessed for clients who hold at least \$1 million in qualifying Vanguard assets or brokerage accounts enrolled in a Vanguard-affiliated advisory service.
Class Action Service	A fee of 20% will be deducted from any class action settlement funds recovered on your behalf prior to the deposit of proceeds into your brokerage account. See the Vanguard Brokerage Account Agreement for more information about the service.
Deposit of physical certificates	Vanguard Brokerage charges a \$100 processing fee (per CUSIP) for the deposit of physical certificates. The fee does not apply to Certificates of Deposit (CDs).
Foreign securities and ADR dividends	Vanguard Brokerage charges a fee of 1% on the gross dividend amount, up to \$100 per dividend payment, when foreign tax withholding relief is received on a dividend of a foreign or ADR asset held in US dollars (USD).
Foreign securities transactions	\$50 processing fee for non-DTC-eligible securities (not applicable to ADRs) plus commission. If a trade executes over multiple days, the commission will be charged for each day on which an execution occurs. Additional fees may apply for trades executed directly on local markets.
Restricted security legend removal	Vanguard Brokerage may charge a \$250 processing fee for research and removal of a restriction on a security held in your brokerage account.
Wire transfers	Vanguard Brokerage charges a \$10 wire fee for each holding you're redeeming. However, this fee is waived for clients with at least \$1 million in qualifying Vanguard assets. While Vanguard Brokerage doesn't charge a fee for Electronic Bank Transfers, your bank may charge you a fee.
Tax filing for Master Limited Partnerships (MLPs) in an IRA	Vanguard Fiduciary Trust Company (VFTC), the custodian for IRAs held at Vanguard Brokerage Services, is responsible for IRS 990-T tax filings for MLPs. Effective June 1, 2024, VFTC charges a fee of \$500 per account for these filings.* Vanguard Brokerage will facilitate collection of the fee by deducting the fee amount from your brokerage account when a filing is required.
Miscellaneous	Other securities transaction or maintenance fees may apply. Call us for additional information.

*The fee applies to tax filings for the tax year 2020 and thereafter. The fee will not be assessed for clients who hold at least \$1 million in qualifying Vanguard assets or brokerage accounts enrolled in a Vanguard-affiliated advisory service.

For more information about Vanguard ETFs, Vanguard mutual funds, or non-Vanguard ETFs or mutual funds offered through Vanguard Brokerage Services, visit investor.vanguard.com to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

You must buy and sell Vanguard ETF Shares through Vanguard Brokerage Services (we offer them commission-free online) or through another broker (which may charge commissions). Vanguard ETF Shares are not redeemable directly with the issuing fund other than in very large aggregations worth millions of dollars. ETFs are subject to market volatility. When buying or selling an ETF, you will pay or receive the current market price, which may be more or less than net asset value.

All investing is subject to risk, including the possible loss of the money you invest. Investments in bonds are subject to interest rate, credit, and inflation risk.

Advice services are provided by Vanguard Advisers, Inc., a registered investment advisor, or by Vanguard National Trust Company, a federally chartered, limited-purpose trust company.

Options are a leveraged investment and are not suitable for every investor. Options involve risk, including the possibility that you could lose more money than you invest. Prior to buying or selling options, you must receive a copy of Characteristics and Risks of Standardized Options issued by OCC. A copy of this booklet is available at theocc.com. It may also be obtained from your broker, from any exchange on which options are traded, or by contacting OCC at 125 S. Franklin Street, Suite 1200, Chicago, IL 60606 (888-678-4667 or 888-OPTIONS). The booklet contains information on options issued by OCC. It is intended for educational purposes. No statement in the booklet should be construed as a recommendation to buy or sell a security or to provide investment advice. Call The Options Industry Council (OIC) Helpline at 888-OPTIONS or visit optionseducation.org for more information. The OIC can provide you with balanced options education and tools to assist you with your options questions and trading.

Brokerage assets are held by Vanguard Brokerage Services, a division of Vanguard Marketing Corporation, member FINRA and SIPC.



Vanguard Cash Plus Account

Application for Organizations

Effective March 2025

Use this application to open one or more Vanguard Cash Plus Accounts for an organization. To be eligible for a Cash Plus Account, the organization must have been established in the U.S. and must maintain a legal U.S. address.

Don't use this application to update authorized signers on an existing identically-registered account.

This combined application and resolution authorizes persons to conduct transactions on this account. The resolution within this application remains in effect until Vanguard receives a new Vanguard Organization Resolution form from your organization that revokes the resolution. *You must file a Vanguard Organization Resolution form each time there's a change in the identity of individuals authorized to act for your organization.*

Please include a current copy of your organization's document confirming that each of the individuals listed in Section 3 are authorized to act or sign on this new account. For example, this could be your corporate secretary's certificate, operating agreement, board minutes, or a similar document with language stating that the individual is authorized to transact for the organization.

To avoid delays in establishing your account, be sure to include all required documentation. Sole proprietors must complete the **Sole proprietor organization owner supplement** (Section 8).

See the most recent **Vanguard Brokerage Services commission and fee schedules** for any fees that may apply.

Print in capital letters and use black ink.

Note: This application may be used to open multiple Cash Plus Accounts. Each account will be identically registered using the information provided in this application. Please indicate the number of accounts to open using this application: _____ (*maximum of 4*). **If no number is provided, only one account will be opened using this application.**

Questions?

Call 877-662-7447.

1. Investment objectives and source of funds *Required*

Industry regulations require us to collect the information below

Review and select your investment objectives for this account from the list that follows. Then select your funding sources for the account.

- **Capital preservation.** Seeking to keep the original investment amount (the principal) from decreasing in value.
- **Income.** Seeking current cash flow in exchange for a reduction in potential capital appreciation.
- **Growth.** Seeking investments with capital appreciation potential in exchange for a reduction in income and increased volatility.
- **Speculative investing.** Seeking capital appreciation. This objective involves investments that can have significant fluctuations in value. It involves a high level of risk, which can lead to a significant loss of principal.

Required for all new accounts

Note: If you're using this application to open more than one account and the investment objectives and source of funds differ for each account, attach a separate sheet with the information for each account.

Check here if each account being opened will have different investment objectives and sources of funds.

Primary investment objective *Required. Check only one.*

Capital preservation Income Growth Speculative investing

Secondary investment objective *(optional) Check only one.*

Capital preservation Income Growth Speculative investing

Source of funds *Required. Check all that apply.*

Income <i>salary, employment, Social Security benefits, retirement, pension, etc.</i>	Gift/Inheritance
Savings <i>general, retirement, bank, etc.</i>	Corporate income
Investment gains	Sale of property/business
Legal/Insurance <i>divorce, accident, death, etc.</i>	Working capital
Choice not listed <i>(must specify)</i> _____	

Return ALL pages of this application, even if some sections are left blank.

2. Organization information

Important: Only U.S. organizations can open a Cash Plus Account.

Identity of organization

You must provide
the organization's
name and its
Tax ID number.

Name of organization <i>as shown on your income tax return</i>	
Tax ID number	Please provide the organization's exempt payee code on page 4, if applicable to the organization registration type.

Organization mailing address

This will be the
primary address
for any mailings.

Street or P.O. box
City, state, zip

Organization primary residence

This is required if
the street address
is different from the
mailing address.

Street address <i>A P.O. box or rural route number is not acceptable; address can be military APO or FPO.</i>
City, state, zip

Organization phone numbers

Organization phone <i>area code, number, extension</i>
Additional organization phone <i>area code, number, extension</i>

If the account is for an organization, you must provide the documentation indicated next to your selected registration type.

Registration type *Check one.*
Required external documentation

Corporation	Articles of incorporation, state-issued charter, or certificate of good standing. <i>Check one. If you don't fill in a circle, we'll treat your organization as an S corporation for tax-reporting purposes.</i> C corporation S corporation
Non-profit corporation	Articles of incorporation, state-issued charter, or certificate of good standing.
Endowment	Pages in the trust document that show the name of the endowment and a listing of all trustees and their signatures.
Foundation Check this box if tax-exempt.	Articles of incorporation or trust document to form foundation.
Partnership	Partnership agreement.
Limited liability company (LLC) <i>This application CANNOT be used to establish a Cash Plus Account for a single-member LLC disregarded for tax purposes.</i>	Articles of association, certificate of organization, or similar document. <i>Check one box to indicate federal tax classification of LLC.</i> C corporation S corporation Partnership
Sole proprietorship	Document filed to form the proprietorship. Must complete the Sole proprietorship owner supplement found in Section 8 of this application.
Other Specify type. _____	Document filed to form, or evidencing the existence of, the organization or enterprise (if incorporated), or organization bylaws or similar document (if not incorporated).

Organization description *Check any that describe the organization.*

National bank	Mutual fund	State-regulated bank
Government agency or instrumentality		
Publicly traded on the Nasdaq (except small-cap issues), NYSE, or NYSE Arca		Ticker symbol

Exempt payee code

If the organization is exempt from backup withholding, provide the applicable exempt payee code from the list of exempt payee codes and definitions found on page 20.	Code
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Return ALL pages of this application, even if some sections are left blank.

3. Organization authorized signatories

*This section **MUST** be completed.*

You must provide all of the requested information for each authorized signatory.

Only the authorized signatory listed on page 9 will be given authority to consent to e-delivery of account-related information for the entity. Notice of availability of that information will be sent only to that individual's email address.

Authorized signatories

When acting on an organization's account or if the organization serves as a trustee or guardian/conservator, the individuals listed on the following pages can:

- Sign documents related to Vanguard Cash Plus Accounts owned by the organization.
- Invest the assets of the organization.
- Obtain account information and give instructions for the purchase, sale, exchange, or transfer of securities.

Number of signatures required	<i>Indicate how many signatures are required on documents other than checks. If you don't provide a number, Vanguard will assume only one authorized signatory must sign.</i>
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Supporting documents must list the following individuals as authorized to act or sign on behalf of the organization.

Important: All authorized signatories must sign in Section 9 to establish the account.

Authorized signer 1Provide the full
legal name. >Name of authorized signatory *first, middle initial, last***Contact information**Birth date *mm dd yyyy*

Social Security number or individual taxpayer ID number

Email address *required for e-delivery*Daytime phone *area code, number, extension*

Mobile

Evening phone *area code, number, extension*

Mobile

Primary residenceStreet address *A P.O. box or rural route number is not acceptable; address can be military APO or FPO.*

City, state, zip

Country *if not U.S.***Association** *Check all that apply.*

Check this box if you are a Vanguard employee.

Check this box if your spouse is a Vanguard employee.

Check this box if:

- an employee of FINRA,
- or a person associated with a member of a stock exchange, FINRA member firm, or a municipal securities dealer ("associated person"),
- or such associated person's spouse,
- or such associated person's minor children, will have a financial interest in or trading/discretionary authority over this account.

If you check this box, you must provide a letter of account approval from a compliance officer of such member firm along with this application to open this account. Failure to include the required approval letter may delay the processing of your request to open this account. Upon written request of the member firm, we'll automatically send the firm duplicate copies of confirmations, statements, and other information.

Vanguard has a letter from my firm on file.

By way of example, account approval is required whenever an employee of a broker-dealer, or such employee's spouse or minor children, seeks to open an account with us, or when such employee is a custodian or trustee or granted investment authority under a power of attorney for an account. An account approval letter isn't required for FINRA, NYSE, or Vanguard employees to open an account.

Name of FINRA member firm you are associated with

Name of associated person *if not self***Control person** *Check if applicable.*

Check this box if you are, or a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but is not limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.

Name of company

Trading symbol

Name of company

Trading symbol

Authorized signer 2Provide the full
legal name. >Name of authorized signatory *first, middle initial, last***Contact information**Birth date *mm dd yyyy*

Social Security number or individual taxpayer ID number

Email address *required for e-delivery*Daytime phone *area code, number, extension*

Mobile

Evening phone *area code, number, extension*

Mobile

Primary residenceStreet address *A P.O. box or rural route number is not acceptable; address can be military APO or FPO.*

City, state, zip

Country *if not U.S.***Association** *Check all that apply.*

Check this box if you are a Vanguard employee.

Check this box if your spouse is a Vanguard employee.

Check this box if:

- an employee of FINRA,
- or a person associated with a member of a stock exchange, FINRA member firm, or a municipal securities dealer ("associated person"),
- or such associated person's spouse,
- or such associated person's minor children, will have a financial interest in or trading/discretionary authority over this account.

If you check this box, you must provide a letter of account approval from a compliance officer of such member firm along with this application to open this account. Failure to include the required approval letter may delay the processing of your request to open this account. Upon written request of the member firm, we'll automatically send the firm duplicate copies of confirmations, statements, and other information.

Vanguard has a letter from my firm on file.

By way of example, account approval is required whenever an employee of a broker-dealer, or such employee's spouse or minor children, seeks to open an account with us, or when such employee is a custodian or trustee or granted investment authority under a power of attorney for an account. An account approval letter isn't required for FINRA, NYSE, or Vanguard employees to open an account.

Name of FINRA member firm you are associated with

Name of associated person *if not self***Control person** *Check if applicable.*

Check this box if you are, or a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but is not limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.

Name of company

Trading symbol

Name of company

Trading symbol

Authorized signer 3Provide the full
legal name. >Name of authorized signatory *first, middle initial, last***Contact information**Birth date *mm dd yyyy*

Social Security number or individual taxpayer ID number

Email address *required for e-delivery*Daytime phone *area code, number, extension*

Mobile

Evening phone *area code, number, extension*

Mobile

Primary residenceStreet address *A P.O. box or rural route number is not acceptable; address can be military APO or FPO.*

City, state, zip

Country *if not U.S.***Association** *Check all that apply.*

Check this box if you are a Vanguard employee.

Check this box if your spouse is a Vanguard employee.

Check this box if:

- an employee of FINRA,
- or a person associated with a member of a stock exchange, FINRA member firm, or a municipal securities dealer ("associated person"),
- or such associated person's spouse,
- or such associated person's minor children, will have a financial interest in or trading/discretionary authority over this account.

If you check this box, you must provide a letter of account approval from a compliance officer of such member firm along with this application to open this account. Failure to include the required approval letter may delay the processing of your request to open this account. Upon written request of the member firm, we'll automatically send the firm duplicate copies of confirmations, statements, and other information.

Vanguard has a letter from my firm on file.

By way of example, account approval is required whenever an employee of a broker-dealer, or such employee's spouse or minor children, seeks to open an account with us, or when such employee is a custodian or trustee or granted investment authority under a power of attorney for an account. An account approval letter isn't required for FINRA, NYSE, or Vanguard employees to open an account.

Name of FINRA member firm you are associated with

Name of associated person *if not self***Control person** *Check if applicable.*

Check this box if you are, or a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but is not limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.

Name of company

Trading symbol

Name of company

Trading symbol

Designation of e-consenter required if applicable

This Section designates an authorized signer as the e-consenter. The e-consenter is the ONLY authorized signer that will be able to establish secure access to the organization's accounts online (through the organization's separate login), provide consent for electronic delivery, and maintain the delivery settings. Only one authorized signer from Section 3 can be designated as the e-consenter.

The e-consenter will need to set up these services separately once we've processed this form. Not all organization accounts are eligible for e-delivery; the e-consenter will be able to enroll in e-delivery for any eligible accounts after registering for online access and providing consent for electronic delivery. A group email address is NOT permitted.

If by submitting this form the organization is removing or replacing the previously designated e-consenter, online access and mailing preferences will be reset. The new e-consenter will need to take additional steps to re-establish online access and select delivery preferences.

Note: All authorized signatories listed in Section 3 can view and transact on the organization account through their personal login on vanguard.com.

Name of designated authorized signatory

Name <i>first, middle initial, last</i>
Email address of designated authorized signatory <i>This CANNOT be a group email address</i>

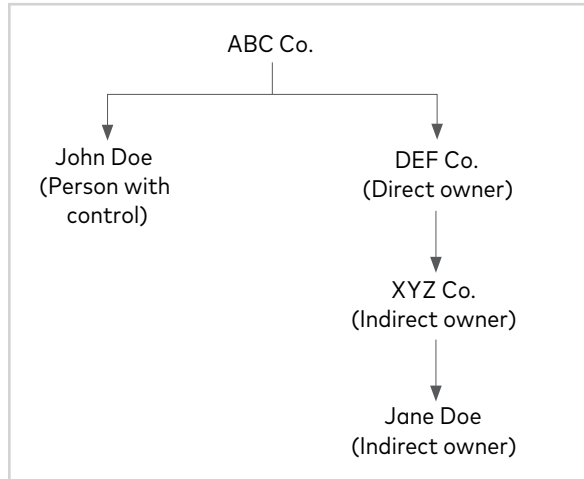
This will be the email address for the account; all email notifications will be sent here. If you need to change the email address, you'll need to first request a PIN, which will be sent to the email address before you can change it.

Return ALL pages of this application, even if some sections are left blank.

Please review this information before completing Section 4

The Vanguard Group, Inc., and certain of its affiliates (collectively, "Vanguard") are required by federal law to obtain from each person who opens a new account, and in some cases, regarding each owner or trustee, certain personal information—including name, primary residence, and taxpayer identification number, among other information—that will be used to verify identity. If you don't provide us with this information, we won't be able to open the account. If we're unable to verify your identity, Vanguard reserves the right to close your account or take other steps we deem reasonable.

Example organization structure

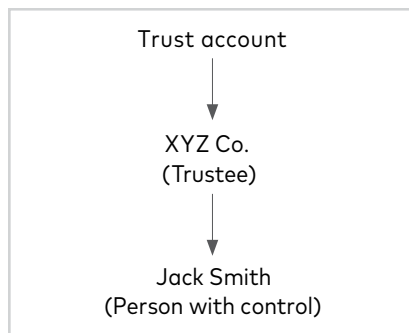


You're John Doe, a person with control establishing an account for ABC Co. DEF Co. is a direct owner of ABC Co. XYZ Co. and Jane Doe are indirect owners of ABC Co. Jane Doe is the ultimate indirect owner of ABC Co.

Information we require:

- DEF Co.: Name, employer ID number (EIN), and primary residence
- XYZ Co.: Name, EIN, and street address
- John Doe: Name, taxpayer ID number (TIN), date of birth (DOB), and street address
- Jane Doe: Name, TIN, DOB, and street address

Example trust structure



You're opening a trust account in which XYZ Co. (organization) is the sole trustee of the trust. Jack Smith is the person with control of XYZ Co.

Information we require:

- XYZ Co.: Name, EIN, and street address
- Jack Smith: Name, TIN, DOB, and street address

4. Certification of beneficial owners

This section is to identify a person with control and beneficial owner(s) of your organization. Once your organization account has been opened, you must file Vanguard's *standalone* **Certification of Beneficial Owners** form each time there is a change in a person with control or beneficial owner(s).

Person with control

A person with significant responsibility for managing the organization such as an executive officer, senior manager, or any other individual who regularly performs similar functions.

Name <i>first, middle initial, last</i>	
Birth date <i>mm dd yyyy</i>	Phone <i>area code, number, extension</i>
Social Security number or individual taxpayer ID number	

Citizenship and tax residency

Check and complete only one.

U.S. citizen		
Resident alien	Country of citizenship	
Nonresident alien	Country of citizenship	Country of tax residence

Primary residence

Street address <i>A P.O. box or rural route number is not acceptable; address can be military APO or FPO.</i>	
City, state, zip	Country <i>if not U.S.</i>

Beneficial owners

On the following pages, list all organizations, individuals, or trusts who directly or indirectly hold at least 25% ownership in the organization for which this Vanguard account is being opened. **Pooled investment vehicles or nonprofit corporations are exempt from this requirement.**

If the direct or indirect owner is a trust or organization, provide information on the trustee(s) or individual who owns the organization if that individual also holds at least 25% ownership. In certain circumstances, you may be required to provide information about additional beneficial owners with a 10% ownership threshold.

Note: If there are more than two beneficial owners, copy page 13 and attach the additional copies with all of the requested information for each additional beneficial owner.

Check this box if there are no beneficial owners who hold at least 25% (10% in some instances).

Please provide the beneficial owner information on the following page(s).

Return ALL pages of this application, even if some sections are left blank.

Is the Person with Control as named on previous page also a Beneficial Owner of the Organization?

Yes No

Beneficial owner

Check one and provide the required information.

Beneficial owner – Individual

Provide information about this individual below under Beneficial owner information.

Beneficial owner information

Name <i>first, middle initial, last</i>	
Birth date <i>mm dd yyyy</i>	Phone <i>area code, number, extension</i>
Social Security number or individual taxpayer ID number	

Citizenship and tax residency

Check and complete only one.

U.S. citizen		
Resident alien	Country of citizenship	
Nonresident alien	Country of citizenship	Country of tax residence

Primary residence

Street address *A P.O. box or rural route number is not acceptable; address can be military APO or FPO.*

City, state, zip	Country <i>if not U.S.</i>
------------------	----------------------------

Beneficial owner – Organization or trust

*Provide information about the organization or trust below. If any individual or trustee owns at least 25% of the organization, also provide their name and other information under **Beneficial owner information**.*

Name of organization or trust
Tax identification number
Street address <i>A P.O. box or rural route number is not acceptable.</i>
City, state, zip

Beneficial owner

Check one and provide the required information.

Beneficial owner – Individual

Provide information about this individual below under **Beneficial owner information**.

Beneficial owner information

Name <i>first, middle initial, last</i>	
Birth date <i>mm dd yyyy</i>	Phone <i>area code, number, extension</i>
Social Security number or individual taxpayer ID number	

Citizenship and tax residency

Check and complete only one.

U.S. citizen		
Resident alien	Country of citizenship	
Nonresident alien *	Country of citizenship	Country of tax residence

Primary residence

Street address <i>A P.O. box or rural route number is not acceptable; address can be military APO or FPO.</i>	
City, state, zip	Country <i>if not U.S.</i>

Beneficial owner – Organization or trust

Provide information about the organization or trust below. If any individual or trustee owns at least 25% of the organization, also provide their name and other information under **Beneficial owner information**.

Name of organization or trust
Tax identification number
Street address <i>A P.O. box or rural route number is not acceptable.</i>
City, state, zip

*If the beneficial owner is a nonresident alien, he or she must complete an IRS Form W-8 electronically to certify his or her tax status, and to claim treaty benefits if applicable. We'll mail you instructions for completing the electronic Form W-8 once the account has been established.

Return ALL pages of this application, even if some sections are left blank.

5. Your initial deposit

You can make periodic deposits—or set up recurring deposits—from a linked U.S. bank account any time after your account is opened.

To link a bank account to your new Cash Plus organization account, complete and submit our [Electronic Bank Transfer Form](#).

6. Bank sweep program

Vanguard Cash Plus (bank sweep program) is the exclusive sweep option for the Vanguard Cash Plus Account, which means it will be used to sweep money into and out of the account.

The enclosed Vanguard Bank Sweep Products Terms of Use contains important information about the sweep program.

7. Dividends and other distributions

If you add any of the available Vanguard money market funds to your account after it's opened, we'll reinvest your dividends and other distributions (at no charge). If you prefer to have your money market fund earnings deposited to your bank sweep, you can change your distribution election by logging in to your account at vanguard.com, navigating to **Profile & account settings**, and selecting **Holding level dividend & capital gains elections**.

8. Sole proprietor organization owner supplement *For sole proprietorships only*

Provide the following information for the sole proprietor.

Provide the full
legal name. >

You must complete
this entire section and
provide at least one
phone number. >

Name of owner <i>first, middle initial, last (as shown on your income tax return)</i>			
Birth date <i>mm dd yyyy</i>		Email address <i>required for e-delivery</i>	
Daytime phone <i>area code, number, extension</i> Mobile		Evening phone <i>area code, number, extension</i> Mobile	
Social Security number or individual taxpayer ID <i>XXX-XX-XXXX</i>		Gender <i>optional</i> Male Female	

Citizenship and tax residency

Check and complete only one.

U.S. citizen	
Resident alien	Country of citizenship

Primary residence

Street address <i>A P.O. box or rural route number is not acceptable; address can be military APO or FPO.</i>	
City, state, zip	Country <i>if not U.S.</i>

Employment of sole proprietor *The following information is required by industry regulations.*

Check only one.

Employed	Self-employed	Retired	Not employed	Vanguard employed
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If you checked **Employed**
or **Self-employed**,
you must complete this
entire section. If you
don't, we won't be able to
process your application. >

Occupation	
Name of employer, or nature of your business if self-employed	
Street address of employer or your business	
City, state, zip	Country <i>if not U.S.</i>

Association *Check all that apply.*

Check this box if you are a Vanguard employee.	
Check this box if your spouse is a Vanguard employee.	
<p>Check this box if:</p> <ul style="list-style-type: none"> • an employee of FINRA, • or a person associated with a member of a stock exchange, FINRA member firm, or a municipal securities dealer ("associated person"), • or such associated person's spouse, • or such associated person's minor children, will have a financial interest in or trading/ discretionary authority over this account. <p>If you check this box, you must provide a letter of account approval from a compliance officer of such member firm along with this application to open this account. Failure to include the required approval letter may delay the processing of your request to open this account. Upon written request of the member firm, we'll automatically send the firm duplicate copies of confirmations, statements, and other information.</p> <p>Vanguard has a letter from my firm on file.</p> <p>By way of example, account approval is required whenever an employee of a broker-dealer, or such employee's spouse or minor children, seeks to open an account with us, or when such employee is a custodian or trustee or granted investment authority under a power of attorney for an account. An account approval letter isn't required for FINRA, NYSE, or Vanguard employees to open an account.</p>	
Name of FINRA member firm you are associated with	Name of associated person <i>if not self</i>

Control person *Check if applicable.*

<p>Check this box if you are, or a household member is, a control person or an affiliate of a public company, as defined in SEC Rule 144 (this would include, but is not limited to, 10% shareholders, policymaking executives, and members of the board of directors). If this box is checked, you must provide the names and trading symbols of the companies for which such person serves as a control person or an affiliate.</p>	
Name of company	Trading symbol
Name of company	Trading symbol

Industry regulations require us to collect the information below

Annual income Required <i>Check one. Include ALL sources of income.</i>	Less than \$20,000	\$100,000–\$499,999
	\$20,000–\$49,999	\$500,000–\$999,999
	\$50,000–\$74,999	\$1,000,000 or above
	\$75,000–\$99,999	
Liquid net worth (cash, securities, etc.) Required <i>Check one. Don't include your home.</i>	Less than \$20,000	\$100,000–\$499,999
	\$20,000–\$49,999	\$500,000–\$999,999
	\$50,000–\$74,999	\$1,000,000 or above
	\$75,000–\$99,999	

Return ALL pages of this application, even if some sections are left blank.

9. Certification, indemnification, and authorization

Important information about opening a new account. Vanguard Marketing Corporation is required by federal law to obtain from each person who opens an account, and in some cases, regarding each owner or trustee, certain personal information—including name, street address, and taxpayer identification number, among other information—that will be used to verify identity. If You do not provide Us with this information, We will not be able to open the account. If We are unable to verify Your identity, Vanguard Marketing Corporation reserves the right to close Your account or take other steps We deem reasonable.

Important: All authorized signatories must sign in this section. For Vanguard Cash Plus Accounts, these individuals must be named in a supporting document.

Read this section and sign on page 19 exactly as indicated in Section 3.

You are opening a Vanguard Cash Plus Account, a brokerage account offered by Vanguard Brokerage Services® (VBS), a division of Vanguard Marketing Corporation (VMC), member FINRA and SIPC.

When you open a Vanguard Cash Plus Account, you are enrolled in the Vanguard Cash Plus program which sweeps Eligible Balances to program banks. Eligible Balances that are swept to program banks are not securities: they are not covered by the SIPC but are eligible for Federal Deposit Insurance Company (FDIC) insurance. Eligible Balances swept to program banks are the obligations of each program bank, and are not cash balances held by VBS.

By signing this Vanguard Cash Plus Account Application for Organizations (Application), You acknowledge that:

1. You have received and read a copy of the attached Vanguard Brokerage Account Agreement (Agreement), which contains a **predispute arbitration agreement**. You acknowledge that Your signature signifies and constitutes Your agreement that this Account and Your relationship with Vanguard Brokerage Services will be governed by and consists of the terms set forth in the Agreement and incorporates the terms set forth in the Vanguard Brokerage Services commission and fee schedules, and the other disclosures, terms, and agreements relating to Your Account or to particular features or services offered in connection with Your Account, each as amended from time to time. You understand there are fees associated with maintaining and engaging in transactions in and transferring assets out of this Account.
2. You have received and read a copy of the attached Vanguard Bank Sweep Products Terms of Use which contains important information about the Vanguard Cash Plus bank sweep program described in Section 6 of this Application and supplements account information provided in the Agreement.
3. You understand that even if an account has more than one authorized signatory listed in Section 3 or on a valid Organization Resolution form, Vanguard can accept online or phone instructions from any one authorized signatory.

4. You confirm that the organization is in existence and that You have full authority to enter into investment transactions on behalf of the organization and to execute and deliver documents on its behalf.
5. Each of the authorized signatories identified in Section 3 is duly authorized by resolution of the board of directors or other governing body of the organization, or under the organization's charter or other organizing document, to act on behalf of the organization in connection with any Vanguard Cash Plus Accounts owned by the organization. Each such signatory is authorized to invest the assets of the organization; obtain information and give instructions for the purchase, sale, exchange, or transfer of securities; and execute any necessary documents in connection with those securities and/or Vanguard Cash Plus Accounts owned by the organization.
6. The organization is solely responsible for informing Vanguard Brokerage of any changes in the authority or identity of any of the authorized signatories identified in Section 3.
7. If this application is used to open more than one account, You understand that each account will be identically registered using the information provided in this application.

For all organizations submitting this application and resolution

The organization agrees to indemnify and hold The Vanguard Group, Inc., Vanguard Marketing Corporation, their affiliates, each of the investment company members of The Vanguard Group, and their respective officers, employees, and agents (collectively, Vanguard) harmless from and against all losses, claims, and expenses (including attorney's fees) of any kind incurred by Vanguard for relying in good faith upon information provided in this resolution and for acting on instructions believed by Vanguard to have originated from any authorized signatory identified in Section 3, as the case may be. This resolution remains in full force and effect until revoked by an authorized signatory of the organization. Each Organization Resolution filed with Vanguard revokes a corporate/organization resolution previously filed with Vanguard in its entirety. Any revocation will not affect any liability resulting from transactions initiated before Vanguard has had a reasonable amount of time to act upon the revocation.

The undersigned are authorized to certify this information on behalf of the organization and confirm that these provisions conform to the charter or other organizing document of our organization.

For purposes of this Application and the attached Vanguard Brokerage Account Agreement and Vanguard Bank Sweep Products Terms of Use, the terms "You," "Your," and "Account Owner" refer to each person who signs this Application. The terms "We," "Us," and "Our" refer to Vanguard Brokerage Services, a division of Vanguard Marketing Corporation, and its affiliates.

You must sign on the next page.

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer ID number (or I am waiting for a number to be issued to me); and

2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and

Important: Cross out item 2 if You have been notified by the IRS that You are currently subject to backup withholding because You have failed to report all interest or dividends on Your tax return.

3. I am a U.S. citizen or other U.S. person (as defined in the IRS Form W-9 instructions); and

4. FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

If I am not a US citizen or other US person, I will complete the appropriate Form W-8 electronically to certify my foreign status, including my FACTA status, and to claim treaty benefits, if applicable.

If you are submitting this Application for an account you/Organization holds in the U.S., item (4) above does not apply.

The Internal Revenue Service does not require Your consent to any provision of this document other than the certification required to avoid backup withholding.

NOTE THAT SECTION f ON PAGE 18 OF THE ATTACHED AGREEMENT CONTAINS A PREDISPUTE ARBITRATION CLAUSE.

Important: All authorized signatories must sign below. These individuals must be listed in the supporting documents as authorized to act or sign on behalf of the organization.

The authorized signatories signing below, hereby certify, to the best of their knowledge, that the information provided on this application form is complete and correct.

The first authorized signer listed in Section 3 must sign with today's date here.

Signature of authorized signer 1	Today's date <i>mm dd yyyy</i>
X	M M - D D - Y Y Y Y
Print name	

The second authorized signer listed in Section 3 must sign with today's date here.

Signature of authorized signer 2	Today's date <i>mm dd yyyy</i>
X	M M - D D - Y Y Y Y
Print name	

The third authorized signer listed in Section 3 must sign with today's date here.

Signature of authorized signer 3	Today's date <i>mm dd yyyy</i>
X	M M - D D - Y Y Y Y
Print name	

If additional signatures are required, copy this page.

Important: If your organization is a sole proprietorship, you'll also need to complete the **Sole proprietor owner supplement** (Section 8) on pages 15 and 16.

Exempt Payee Code Definitions for Organizations

Type of organization	Exempt payee code
An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2).	1
The United States or any of its agencies or instrumentalities.	2
A state, the District of Columbia, a U.S. commonwealth or territory, or any of their political subdivisions, agencies, or instrumentalities.	3
A foreign government or any of its political subdivisions, agencies, or instrumentalities.	4
A corporation.	5
A dealer in securities or commodities required to register in the United States, the District of Columbia, a U.S. commonwealth or territory.	6
A futures commission merchant registered with the Commodity Futures Trading Commission.	7
A real estate investment trust.	8
An entity registered at all times during the tax year under the Investment Company Act of 1940.	9
A common trust fund operated by a bank under section 584(a).	10
A financial institution as defined under section 581.	11
A middleman known in the investment community as a nominee or custodian.	12
A trust exempt from tax under section 664 or described in section 4947.	13

The following chart shows types of payees that are exempt from backup withholding.

If the payment is for ...	Then the payment is exempt for ...
Interest and dividend payments	All exempt payees except for 7.
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they're exempt only for sales of noncovered securities acquired prior to 2012.
Payments over \$600 required to be reported	Generally, exempt payees 1 through 5.

Return ALL pages of this application, even if some sections are left blank.

Mailing information

Keep a copy of your completed form for your records.

Return all pages of this form/application, even if some sections are left blank.

Mail your completed form and any attached information to the most appropriate address listed below.

Mail to: > Vanguard
P.O. Box 982901
El Paso, TX 79998-2901

**For registered or
certified mail, or
overnight delivery,
mail to:** > Vanguard
5951 Lockett Court, Suite A1
El Paso, TX 79932-1882

Reminders

Attach copies of the documentation required in Section 2.

Include a current copy of your organization's document that confirms the individuals listed in Section 3 are authorized to act on behalf of the organization.

To link a bank account so you can set up periodic or recurring deposits

Complete our [Electronic Bank Transfer Form](#) and submit it with this application.

This page is intentionally left blank



Electronic Bank Transfer Form

Use this form to add a U.S. bank account to your Vanguard account so that you can easily move money between the bank account and your Vanguard account by electronic bank transfer.

How to get started

You may be able to add a bank online without having to use a form. Log in to your account at vanguard.com. From the menu, choose the **person icon** and select **profile & account settings**. Then select **banking** to add a new bank.

If you choose to submit this form to add a bank, you'll need to provide the following documentation:

- **A voided check, preprinted deposit slip, statement, or letter from the bank** (see Section 2). The bank must be a member of the ACH network.
- **Signatures of all Vanguard account owners (or their full agents) and bank account owners** (see Section 3). Check with the bank if you have questions about who must sign to provide authorization for this service. If the appropriate signatures aren't provided, the bank account may not be linked to your Vanguard account.

Important: If the name(s) on the Vanguard account and the bank account(s) aren't the same, all owners must have their signatures individually notarized.

Mail the form to:

Vanguard
P.O. Box 982901
El Paso, TX 79998-2901

For overnight delivery:

Vanguard
5951 Lockett Court, Suite A1
El Paso, TX 79932-1882

Allow approximately one week after we receive this form in good order for the bank account information to be added to your Vanguard account.

Set up automatic transfers

Once you've received confirmation that the bank account has been linked to your Vanguard account, you can set up automatic transfers between the accounts. Simply log on to your account at vanguard.com. From the menu, choose the **person icon** and select **profile & account settings**, then either **automatic investment** or **automatic withdrawal**. If you need assistance, call us.

Electronic Bank Transfer Document Checklist

Use the chart below to ensure that all required parties have signed the Electronic Bank Transfer form.

Signatures

All Vanguard and bank account owners/authorized signers must sign. If there is not a common owner between the Vanguard account and bank account, then all signatures must be notarized.

Common non-identical registration examples

Example	How to sign the form	Is a notary required?
There is an additional signer(s) on the external bank account and there is at least one common owner for both the Vanguard and the external bank account	All Vanguard and bank account owners must sign this form	No notary is required
The Vanguard account and the bank account have different registrations and there are no common owners/authorized signers for the Vanguard and the external bank account	All Vanguard and bank account owners must sign this form	All signatures must be notarized



Electronic Bank Transfer Form

Effective May 2025

Use this form to add a U.S. bank account to your Vanguard account so that you can easily move money between the bank account and your Vanguard account by electronic bank transfer.

Print in capital letters and use black ink.

Questions?

Call 877-662-7447.

1. Vanguard account you're adding bank account information to

Only full agents can add bank information; limited agents aren't permitted.

Note: Vanguard may add the bank information to other accounts that list you as an owner, including any future accounts you open.

Vanguard account number *Enter eight or eleven digits*

Account owner information

Name of Vanguard account authorized signer *first, middle initial, last*

Last four digits of taxpayer ID number

Zip code

2. Bank account information

You must provide this information. >

Bank routing number *Enter all nine digits*

Account type *Check one*

Checking

Savings

You must also provide the following:

Please use the chart below to help identify what bank documentation is required.

We do not accept starter checks, direct deposit forms, or alterations to supporting documents.

Required documentation	Provide one of the following:
	<ul style="list-style-type: none"> • A voided check • A deposit slip • A bank account statement • Letter from your external bank that contains all of the following: <ul style="list-style-type: none"> – Printed on bank letterhead – Full account registration – Full account number – Name(s) of the authorized signer(s) required to authorize debit and credit entries on behalf of the bank account

The documentation provided must show the full bank account number.

The documentation provided must show the name(s) of ALL bank account owners.

Return ALL pages of this form, even if some sections are left blank.

3. Signatures

All Vanguard and bank account owners/authorized signers must sign below.

If the Vanguard account owners/authorized signers aren't the same as the bank account owners/authorized signers, everyone's signature must be notarized. If the signer's name on the bank account and the Vanguard account don't match exactly, the signer is required to sign with both names AND both signatures must be notarized (e.g., John Smith vs. John Smith Jr. or Jane Smith vs. Jane Smith-Jones).

If I am/we are the owner(s)/authorized signer(s) of the Vanguard account, I/we:

- Authorize The Vanguard Group, Inc., and/or Vanguard Marketing Corporation, and any affiliates of either (individually or collectively, "Vanguard"), to add the bank account information provided in this form to my/our Vanguard account(s).
- Authorize Vanguard to send redemption proceeds to the bank account identified in this form as I/we, or someone I/we have authorized, direct, or to secure payment by electronic bank transfer of amounts invested by me/us or someone I/we have authorized.
- Agree that Vanguard will not incur any loss, liability, cost, or expense for adding bank account information to my/our Vanguard account(s), or for sending money to, or taking money from, that bank account if directed to do so by me/us, or someone I/we have authorized.
- Understand that this authorization may be terminated by me/us at any time by written notification to Vanguard. The termination request will be effective as soon as Vanguard has had a reasonable amount of time to act upon it.

If I am/we are the owner(s) and/or authorized signer(s) of the bank account, I/we:

- Authorize The Vanguard Group, Inc., and/or Vanguard Marketing Corporation, and any affiliates of either (individually or collectively, "Vanguard") to make credit or debit entries ("ACH transactions") to my/our bank account at the direction of a Vanguard account owner or other authorized person.
- Authorize the bank to accept any such ACH transactions without responsibility for their correctness.
- Acknowledge that the origination of ACH transactions to my/our bank account must comply with U.S. law.
- Understand that I/we may terminate this authorization at any time by written notification to the bank and to Vanguard. The termination will be effective as to Vanguard as soon as Vanguard has had a reasonable amount of time to act on it.
- Represent and warrant that I am/we are the owner(s) or authorized signer(s) of the bank account identified in this form, and that no other owner or authorized signer of the bank account is required to sign to authorize the initiation of ACH transactions to the bank account.

I acknowledge that I have read the information above.

Return ALL pages of this form, even if some sections are left blank.

3a. Vanguard account owner(s)

If you need more space for additional signatures and notarizations, provide an additional copy of this page.

If you're required to have your signature notarized, do NOT sign until you're in the presence of a notary public.

First name <i>required</i>	MI	Last name <i>required</i>	Suffix
Signature X		Today's date <i>mm dd yyyy</i> M M - D D - Y Y Y Y	

Notarization required only if the signers for the Vanguard account and bank account are different individuals.

Acknowledgment of signature

The notarization must be dated within 30 days of receipt of this document by Vanguard.

State of	and	County of
On this, the day of , 20 ,		Name of individual:
has appeared before me, proven to be the person whose name is signed above and acknowledged that this authorization is their wish.		
Signature of notary public	Notary seal <i>if state requires seal</i>	
Commission expiration date <i>mm dd yyyy</i>		

If you're required to have your signature notarized, do NOT sign until you're in the presence of a notary public.

First name <i>required</i>	MI	Last name <i>required</i>	Suffix
Signature X		Today's date <i>mm dd yyyy</i> M M - D D - Y Y Y Y	

Notarization required only if the signers for the Vanguard account and bank account are different individuals.

Acknowledgment of signature

The notarization must be dated within 30 days of receipt of this document by Vanguard.

State of	and	County of
On this, the day of , 20 ,		Name of individual:
has appeared before me, proven to be the person whose name is signed above and acknowledged that this authorization is their wish.		
Signature of notary public	Notary seal <i>if state requires seal</i>	
Commission expiration date <i>mm dd yyyy</i>		

Return ALL pages of this form, even if some sections are left blank.

3b. Bank account owner(s)

If you need more space for additional signatures and notarizations, provide an additional copy of this page.

If you're required to have your signature notarized, do NOT sign until you're in the presence of a notary public.

First name <i>required</i>	MI	Last name <i>required</i>	Suffix
Signature X		Today's date mm dd yyyy M M - D D - Y Y Y Y	

Notarization required only if the signers for the Vanguard account and bank account are different individuals.

Acknowledgment of signature

The notarization must be dated within 30 days of receipt of this document by Vanguard.

State of	and	County of
On this, the day of , 20 , Name of individual:		
has appeared before me, proven to be the person whose name is signed above and acknowledged that this authorization is their wish.		
Signature of notary public	Notary seal <i>if state requires seal</i>	
Commission expiration date mm dd yyyy		

If you're required to have your signature notarized, do NOT sign until you're in the presence of a notary public.

First name <i>required</i>	MI	Last name <i>required</i>	Suffix
Signature X		Today's date mm dd yyyy M M - D D - Y Y Y Y	

Notarization required only if the signers for the Vanguard account and bank account are different individuals.

Acknowledgment of signature

The notarization must be dated within 30 days of receipt of this document by Vanguard.

State of	and	County of
On this, the day of , 20 , Name of individual:		
has appeared before me, proven to be the person whose name is signed above and acknowledged that this authorization is their wish.		
Signature of notary public	Notary seal <i>if state requires seal</i>	
Commission expiration date mm dd yyyy		

Return ALL pages of this form, even if some sections are left blank.



Vanguard Brokerage Account Agreement

Effective September 2024

Vanguard Brokerage Services

Vanguard Brokerage Account Agreement

1. About the Vanguard Brokerage Account

- a. Introduction
- b. Digital Interaction Expectations

2. How to Contact VBS

3. FINRA's BrokerCheck

4. Account Protection

- a. SIPC Coverage
- b. Eligibility for FDIC Insurance

5. Definitions

6. General Terms of the Vanguard Brokerage Account

- a. Sweep Program
- b. Trading or Disbursement Restrictions
- c. Requests for Transactions and Order Entry Services
- d. Changing or Canceling Orders
- e. Payment, Equity Deposit, and Settlement
- f. Security for Indebtedness for Non-Retirement Accounts
- g. Checks, EBTs, or Other Items Returned Unpaid, Recalled, or Dishonored
- h. Foreign Securities Trading, Settlement, and Custody
- i. Securities Held in Street Name
- j. Corporate Actions
- k. Disclosure of Account Information
- l. Delivery of Required Information, Other Documents, and Notices About Your Account
- m. Provision of Market Data
- n. Extended-Hours Trading
- o. Best Execution and Payment for Order-Flow Practices
- p. Certificates of Deposit (CDs)
- q. Fractional Shares
- r. Class Action Service (applicable only if You have not opted out)

7. Your Role

- a. Account Information
- b. Paying for Transactions and Account Fees, and Return of Overpayments or Uncollected Fees
- c. Authority to Transact on an Account
- d. Compliance With Policies, Rules, and Laws
- e. Control or Restricted Securities

- f. Identifying as a Large Trader

- g. Understanding Terms of Securities and Other Property, and for Trading Decisions

- h. Account Security, Fraud, Identity Theft, and Reporting Inaccuracies and Discrepancies in Your Account

- i. Lost Securities

- j. Liens and Levies

- k. Complaints

- l. Closing an Account, Terminating Optional Features or Services

8. VBS' Role

- a. Identity and Credit Verification and Reporting
- b. Confirmations, Courtesy Trade Status Reports, Statements, and Other Account- Related Communications
- c. Satisfying Legal Obligations by Releasing Account Information or Liquidating Securities and Other Property; Account Restrictions and Closing an Account
- d. Investment Advice
- e. Tax Information, Including Withholding and Mandatory Cost Basis Reporting
- f. Phone Access to VBS Associates; Recording Phone Calls and Monitoring Conversations
- g. Authorized Access to an Account
- h. Market Volatility

9. Contractual Terms

- a. Governing Law
- b. Assignment
- c. Liability
- d. Severability
- e. Entire Agreement, Amendment, and Waiver
- f. Arbitration

1. About the Vanguard Brokerage Account

a. Introduction

Vanguard Brokerage Services® (VBS®) is a division of Vanguard Marketing Corporation (VMC) and was created to offer retail brokerage services to clients. VMC, a broker-dealer, is a member firm of the Financial Industry Regulatory Authority (FINRA). VBS offers its clients a brokerage Account, the Vanguard Brokerage Account, in which clients may hold, as well as buy and sell, mutual funds, ETFs, stocks, bonds, options (collectively, "Securities"), and Other Property. This document, the Vanguard Brokerage Account Agreement ("the Agreement" or "this Agreement"), contains terms and conditions, disclosures, and other important information about the Vanguard Brokerage Account and a client's relationship with VBS. This Agreement also explains some of the features and services available for Vanguard Brokerage Accounts.

When You submit an Application to open a Vanguard Brokerage Account (hereafter referred to as "an Account," "the Account," "Your brokerage Account," or "Your Account"), You agree that Your Account, if opened, and any product or service relating to it, and Your relationship with VBS, will be governed by the terms, conditions, disclosures, and other information in this Agreement and in any service- or feature-specific form or brochure. In addition, You agree to be bound by policies that can be found on vanguard.com or in other documents We provide to You, such as Vanguard Brokerage Services commission and fee schedules, VBS' Privacy Policy, Frequent-Trading Policy, Market-Timing Policy, After-Hours Trading Policy, Dividend Reinvestment Program Policy, etc. VBS may amend this Agreement, change or alter its policies, or separately add, remove, or change any of the features and services offered on an Account. This Agreement supersedes any previous Agreement You, any of Your joint Account Owners, or any of Your Representatives (including fiduciaries appointed for You or Your estate) may have entered into with VMC or VBS relating to Your Account or Your relationship with VBS. Therefore, You should read this and other documents We provide to You carefully and retain them for future reference. If You do not understand any of the terms, conditions, or disclosures in this Agreement, please contact Us or seek the advice of Your attorney.

b. Digital Interaction Expectations

VBS proactively evolves Our offerings and technologies to enable Us to better deliver on Our mission to help clients achieve investment success; core to achieving that is using more modern digital platforms. VBS is committed to helping You navigate toward simpler, more effective digital channels and practices that have proven to be quicker, safer, and more cost-effective.

We strongly urge all VBS Account holders to web register and use digital channels like vanguard.com and Our mobile application to manage Your Account.

To assist with Your understanding of VBS' digital-first service model, VBS has put together the following list of digital interaction expectations of which, by applying for an Account, You acknowledge Your understanding:

1. VBS expects You primarily use digital channels for interactions and communication regarding Your Account, inclusive of e-delivery. VBS provides You with various options to do so, including but not limited to vanguard.com, Our mobile app, instant chat, secure message center, and other electronic means to facilitate efficient and convenient interactions.
2. VBS expects You to provide Your mobile phone number and email address, so that We can contact You via text messaging and other digital means (e.g., secure messages, e-delivery) to service Your Account.
3. VBS expects that You access and use vanguard.com, Our mobile app, or Our automated answering system to perform certain tasks, including but not limited to Account management (e.g., checking Account balances), transaction execution (e.g., placing trades), and research (e.g., requesting quotes). On vanguard.com VBS provides FAQs, tutorials, and more to assist You in this process.
4. You understand that excessive reliance on Our phone associates for tasks that can be accomplished online may negatively impact Your customer service experience including but not limited to delayed response times, additional fees, and possible Account termination.
5. As set forth in Section 8(f) of this Agreement, VBS reserves the right to resolve Non-Trade Inquiries exclusively on its website or other available channels as opposed to providing such information by phone. Furthermore, at its discretion, consistent with Section 8(c) of this Agreement, VBS reserves the right to close Your Account, or terminate any feature or service at any time, for any reason, and without prior notice, inclusive of not meeting Our Digital Interaction Expectations.

2. How to Contact VBS

Online: vanguard.com

Many account interactions and communications can be accomplished efficiently using digital channels.

By mail: P.O. Box 982901
El Paso, TX 79998-2901

By phone: 800-992-8327

If You have a complaint about the services VBS provides You, You should direct it to:

Complaints
Vanguard Brokerage Services
P.O. Box 982901
El Paso, TX 79998-2901

3. FINRA's BrokerCheck

FINRA sponsors a program, called BrokerCheck, designed to give investors convenient access to information about the professional background, business practices, and conduct of FINRA member firms and brokers formerly or currently registered with FINRA or a national securities exchange. The BrokerCheck hotline number is 800-289-9999. You may obtain a brochure that describes BrokerCheck by calling the hotline number or at finra.org.

4. Account Protection

a. SIPC Coverage

Securities held in Your Account are held in custody by VBS, a division of VMC. VMC is a member of the Securities Investor Protection Corporation (SIPC), which protects securities customers of its members up to \$500,000 (including \$250,000 for claims for cash). Securities in Your brokerage account are eligible for SIPC coverage. To obtain information about SIPC, including an explanatory SIPC brochure, please contact SIPC at sipc.org or 202-371-8300.

VBS maintains additional coverage through an insurer that supplements the SIPC coverage available to Securities. Account protection, either under SIPC or the additional insurance maintained by VBS, does not cover fluctuations in the market value of the investments in Your Account. Any positions You may have in Securities held away from VBS are not in VBS' custody or control and are not covered by SIPC or VBS' additional insurance.

b. Eligibility for FDIC Insurance

Clients with eligible Accounts may choose to enroll in Vanguard's Bank Sweep Product which automatically sweeps Free Credit Balances in an Account into one or more participating program banks (each a "Program Bank"), where they earn interest, and are eligible for insurance provided by the Federal Deposit Insurance Corporation ("FDIC").

FDIC insurance provides protection against the loss of Your Sweep Deposits, up to allowable limits, in the event the Program Bank fails. FDIC deposit insurance is backed by the full faith and credit of the United States. Specifically, FDIC deposit insurance coverage is available for deposits subject to the Bank Sweep Product up to the FDIC standard maximum deposit insurance amount ("SMDIA"), which is currently \$250,000 per insurable category of account ownership at that Program Bank, when aggregated with all other deposits held by You at such bank and in the same insurable category of account ownership. Balances subject to the Bank Sweep Product will be eligible for FDIC insurance once they are transferred to and are held at the Program Banks as Sweep Deposits. If you have questions about basic FDIC insurance coverage, you may wish to seek advice from Your own attorney, including concerning FDIC insurance coverage of deposits held in more than one insurable capacity. You may also obtain information by contacting the FDIC, Deposit Insurance Outreach, Division of Depositor and

Consumer Protection, by letter (550 17th Street, N.W., Washington, D.C. 20429), by phone (877-275-3342 or 800-925-4618 (TDD)), by visiting the FDIC Website at fdic.gov/deposit/index.html, or by e-mail using the FDIC's On-line Customer Assistance Form available on its website. Disclosures regarding FDIC insurance coverage are summary only, do not state all of the requirements and conditions of FDIC insurance, and are subject to, and qualified in their entirety by, regulations and guidance of the FDIC.

5. Definitions

We define certain terms throughout this Agreement. Others are defined below:

- **Account:** The Vanguard Brokerage Account, including a Retirement Account, governed by this Agreement. The Account is opened on Your completion, and Our approval, of the appropriate Application.
- **Account Owner:** Each person who has an ownership interest in the Account. If the Account holds community property, an Owner's spouse, whether listed in the registration or not, may be considered an Account Owner.
- **Application or Brokerage Account Application:** The form (paper or electronic) used to open an Account.
- **Bank Sweep Product:** One of the options of VBS' Sweep Program. An FDIC-insured product that may be made available to invest Free Credit Balances and to pay for transactions and receive the proceeds from trades and other transactions in Your Account.
- **Brokerage Activity:** Trades, dividends, interest, and corporate actions activity that occurs in Your Account. Dividend reinvestment in a money market fund may not be considered Brokerage Activity.
- **Control or Restricted Security:** Securities defined in Rule 144 under the Securities Act of 1933 (the '33 Act) as "restricted securities" or Securities issued by an issuer of which You are an "affiliate" (as that term is defined by Rule 144 of the '33 Act) or Securities that are being sold in reliance on Rule 701 or 145(d) under the '33 Act or Securities of which You and the issuer, or its underwriter, have entered into an agreement restricting the transferability of such Securities.
- **Debit Balance:** The amount of money You owe to VBS.
- **Discretionary Trading Authority:** Authority given by the Owner(s) of an Account to a third party (for example, a registered representative or an investment advisor), which permits the third party to decide which Securities to buy or sell in an Account and to make other transactions.
- **EBT:** Electronic Bank Transfer is an electronic movement of money or information using the Automated Clearing House (ACH) Network.
- **FDIC:** The Federal Deposit Insurance Corporation.
- **FINRA:** The Financial Industry Regulatory Authority.
- **Free Credit Balance:** The uninvested cash in Your Account, less what is needed to pay for unsettled purchase transactions, charges to Your Account, or

credit balances designated as collateral. Free Credit Balances are payable on demand.

- **Fund Your Account:** Incoming money intended to be credited to an Account. If there is no Debit Balance, or if the outstanding Debit Balance is less than the incoming money, the funding (or the funding less the debit amount) will Sweep under the Sweep Program.
- **Good Delivery:** The delivery to VBS of freely transferable Securities (that is, properly registered, endorsed, and fully negotiable).
- **Marginable Securities:** Any registered Security, Over-the-Counter (OTC) margin stock, OTC margin bond, or National Market System (NMS) Security.
- **Market Data:** The last sale transaction data, bid and ask quotations, news reports, analysts' reports or research, or other information relating to Securities and the Securities markets.
- **Market Volatility:** Trading conditions characterized by heavy trading, illiquidity, fast markets, unpredictable or steep price fluctuations, or other volatile market conditions that may result in trading disruptions, suspensions, halts or other restrictions impacting either individual Securities or the market as a whole.
- **Other Property:** An investment in Your Account that is not commonly known as a Security.
- **Representative(s):** A person who has been properly appointed as a full or limited agent for a principal, or a fiduciary of, for example, an incompetent person, a trust, a minor, or an estate, or an officer or authorized signatory for an organization.
- **Retirement Account:** A tax-advantaged Account, either an individually owned Account, such as an Individual Retirement Account, or IRA, or one held as part of an employer-sponsored plan, intended to be used primarily as a savings vehicle to provide income in retirement. A Retirement Account can be opened using the appropriate retirement Application and agreeing to the terms in this Agreement and any other agreement that is specific to the type of Account opened, such as the Vanguard Custodial Account Agreement and the Disclosure Statement applicable to an IRA. A Retirement Account may be part of a retirement plan.
- **Security or Securities:** Any note, stock, bond, option, mutual fund, exchange-traded fund (ETF), unit investment trust (UIT), or other instrument of investment commonly known as a security.
- **Settlement Fund:** Together, the money market fund and/or Bank Sweep Product options under VBS' Sweep Program to or from which Free Credits are swept.
- **Sweep:** A transaction that moves cash under the Sweep Program.
- **Sweep Program:** The service VBS may provide to its clients to move Free Credit Balances into or out of money market funds and/or Bank Sweep Products.
- **USPS:** The United States Postal Service.
- **Vanguard Fund:** Any mutual fund in the Vanguard family of mutual funds.

- **We/Us/Our/VBS:** Vanguard Brokerage Services, a division of Vanguard Marketing Corporation, and its affiliates.
- **You/Your/Yourself:** An Account Owner and his, her, or its properly authorized Representative.

6. General Terms of the Vanguard Brokerage Account

To open an Account, You must complete and submit the appropriate Application, and VBS must approve Your Application. You do not have an Account until VBS processes and approves Your Application. Once the Account is opened, You are responsible for complying with the terms of this Agreement.

This section of the Agreement explains VBS' Sweep Program, how to enter orders, how to pay for orders, and other information about Your Account and the Securities and Other Property held in it.

a. Sweep Program

VBS has a Sweep Program and may sweep Free Credit Balances into or out of money market funds and/ or Bank Sweep Products. Unless stated otherwise, VBS' default Sweep Program moves free credits in Your Settlement Fund into a money market fund. Clients with eligible Accounts may also choose to enroll in Vanguard's Bank Sweep Product which automatically sweeps Free Credit Balances in Your Settlement Fund into one or more Program Banks. Balances swept to a money market fund may be covered by SIPC, whereas balances under the Bank Sweep are eligible for FDIC insurance. See **Account Protection** for more information. Only cash can move into and out of the Sweep Program; if VBS receives directions to move something other than cash into the Sweep Program, including a direction to transfer shares in kind to or from Your Settlement Fund, VBS will treat the directions as an instruction to transfer cash.

There is no guarantee that cash will Sweep into or out of the Sweep Program. VBS's Sweep Program may decline to accept a purchase for any reason, including, for example, if the size of the purchase may negatively impact a Sweep Program option's operation or performance. If the Sweep Program declines Your purchase, the Sweep will not be processed and no Sweep Program option will be credited. VBS will attempt to notify You if the Sweep Program declines a purchase and to obtain alternative investment instructions. If VBS does not receive alternative investment instructions, or if it cannot process Your alternative investment instructions, the amount of Your attempted purchase will result in a Free Credit Balance in Your Account (which is another sweep option). VBS will not be liable for lost profits, or other losses and damages that allegedly result from a failure or delay to Sweep.

You agree that VBS may, on prior written notice to You, limit, change, or add options to its Sweep Program or end a Sweep Program. If a sweep option under

the Sweep Program is temporarily made unavailable (because, for example, a money market fund closes or a fund determines that a customer is not an eligible investor or a Program Bank refuses deposits), then VBS may sweep to another available option under the Sweep Program or it may opt to reflect cash as a Free Credit Balance in Your Account. If the current money market fund is eliminated or restricted as an option in the Sweep Program, VBS may seek a new money market mutual fund, considering such factors as yield, fees, investment objectives, risks, and current market conditions, or VBS may make available or use another available option or combination of options under the Sweep Program, such as an FDIC-insured Bank Sweep Product or Free Credit Balances in Your Account.

After notice, whenever feasible, VBS may change Your investment made through the Sweep Program from one Sweep Program option to another. Pending payments and proceeds and payments and proceeds for trades placed after a Sweep Program option is eliminated, assuming the Sweep Program has not ended, will Sweep into or out of the alternative Sweep Program option and/or be reflected as a Free Credit Balance in Your Account. See **Corporate Actions** for additional information on actions a fund or its transfer agent may take, and **Payment, Equity Deposit, and Settlement** for information on paying for trades.

Cash not swept under the Sweep Program will be reflected as a free credit or a Free Credit Balance in Your Account. VBS expects to receive compensation based on the amount of Free Credit Balances in VBS Accounts.

b. Trading or Disbursement Restrictions

VBS is not required to accept any trade, or take any funding, and it may place trading, funding, disbursement, or other restrictions on an Account or on one or more Securities. These restrictions could relate to or result from many factors, including, without limitation, court orders, tax levies, or garnishments; Market Volatility; requests from, or sanctions or similar restrictions related to the purchase, sale, or transfer of any Securities imposed by a government agency or law enforcement authority; a failure to pay for trades in a timely manner or for trading or trade-related violations; notice of a dispute between Account Owners; if VBS believes that doing so will prevent fraud, financial exploitation or abuse, or to protect vulnerable investors; or VBS' knowledge or suspicion that a violation of any law may or could occur without the restriction. You agree to abide by any such restriction and not to initiate trades or transactions that would violate the restriction. VBS may also eliminate or restrict Your ability to purchase particular Securities or Other Property. VBS also has no obligation to facilitate the sale or transfer of any Securities if it concludes that taking such action(s) is likely to violate applicable laws, regulations, orders, or similar restrictions.

c. Requests for Transactions and Order Entry Services

VBS will accept online or verbal orders from You. You must place all orders electronically at vanguard.com or through VBS' mobile app; or verbally with one of VBS' brokerage associates. VBS will not accept written orders for the purchase or sale of Securities or Other Property. Online trading is the most efficient way to place trades.

Important information about written orders.

If VBS receives a written instruction accompanied by funding (for example, a check), VBS may treat the instruction as a request to Fund Your Account, with the proceeds (after satisfying outstanding debits) to Sweep.

VBS may accept wires to Fund Your Account, with the proceeds to Sweep. Generally, however, VBS will not accept wires for the purchase of a Security or Other Property. If You send VBS a wire with instructions to purchase a Security or Other Property, including a Vanguard Fund, VBS may, at its discretion, treat the wire as a request to Fund Your Account with the proceeds (after satisfying outstanding debits) to Sweep.

Orders for the purchase or sale of Vanguard Funds may require notification to and/or approval from the Vanguard Fund's manager. Please contact VBS before attempting to place a large transaction.

If a check, EBT, or other item You send to pay for a purchase or to Fund Your Account is returned to Us unpaid, recalled, or otherwise not honored, We may debit Your Account and/or charge Your Account a fee.

VBS may restrict Your ability to withdraw funds recently credited to Your Account.

Additional information for clients who transferred their Vanguard Funds into their Accounts:

Instructions to purchase received by The Vanguard Group, Inc., after You have transferred Vanguard Fund holdings to Your Account. You agree that VBS, at its sole discretion, may treat any instruction received by The Vanguard Group, Inc., for the purchase of a Vanguard Fund as an instruction to VBS to Fund Your Account, with the proceeds to Sweep. VBS' decision to treat any such instruction received by The Vanguard Group, Inc., as an instruction to VBS does not mean that VBS has an ongoing obligation to treat all such instructions received by The Vanguard Group, Inc., as instructions to VBS.

You agree to instruct Your bank to pay on checks made payable to "Vanguard," or any reasonable variation of "Vanguard," when presented to Your bank for payment by either The Vanguard Group, Inc.'s, or VBS' bank. If Your bank dishonors the check for any reason, You agree to pay for the transaction in accordance with the **Payment, Equity Deposit, and Settlement** information noted below.

You agree that The Vanguard Group, Inc., or VBS, or any affiliate of any of them, will not be responsible for any costs or fees incurred by You as a result of Vanguard's or VBS' bank's presentment of a check as described above.

Checkwriting drafts received by The Vanguard Group, Inc., and presented for payment within the 45 days following the transfer of the position to Your Account.

If You have transferred Your Vanguard Fund(s) into Your Account, *immediately upon the transfer of Your Vanguard Funds into Your Account You agree to cease using the checkwriting drafts (CWRs) issued on Your Vanguard Funds and to destroy any unused checks.* If You have written CWRs on a Vanguard Fund You transferred to Your Account, and those CWRs remain outstanding and unpaid at the time of the transfer, You agree that VBS may, in its sole discretion, elect to treat any CWR received by The Vanguard Group, Inc., or its bank in the 45 calendar days following the date You transferred Your Vanguard Funds into Your Account as an instruction to sell sufficient shares of the same Vanguard Fund that the CWR was originally written against to cover the CWR. If at the time the CWR is presented for payment, the balance in the Vanguard Fund that the CWR was originally written against is not sufficient to cover the entire CWR, You agree that VBS may, at its sole discretion, elect to treat the CWR as an instruction to redeem shares from the Vanguard Fund that the CWR was written against and cover the remainder of the CWR by free credit, if any, and/or a redemption of shares from Your Sweep Program or any money market position in Your Account. You agree that You are responsible for any tax consequences associated with the sale of shares to cover the CWR.

If You do not have sufficient shares in the Vanguard Fund the CWR was originally written against, Your Sweep Program and/or any money market position in Your Account to cover the check in its entirety, VBS will not accept the instruction and will direct The Vanguard Group, Inc., to instruct its bank to dishonor (that is, "bounce") the check. You agree that The Vanguard Group, Inc., VBS, or any affiliate of either, will not be responsible for any costs or fees You may incur as a result of a dishonored CWR.

VBS may accept instructions from The Vanguard Group, Inc., to reverse and/or reprocess the transfer of Your Vanguard Funds to Your Account to correct errors made prior to the transfer.

d. Changing or Canceling Orders

It may not be possible for You to cancel an order once You have placed it. If You attempt to cancel or change an order, Your attempt will be treated as a request to cancel or change. VBS will process Your request on a best-efforts basis, but if VBS cannot cancel or change Your order, You will be bound to the terms of the original order You placed.

For VBS' protection, it may, without prior notice, decline, cancel, modify, or reverse Your orders or instructions.

e. Payment, Equity Deposit, and Settlement

You agree to pay for all authorized transactions made in Your Account, including any commissions or fees that VBS might charge. When You purchase Securities and Other Property on a cash basis, You agree to pay for the Securities and Other Property by settlement date.

VBS may use available funds in Your Account or in any account with its affiliates to settle a transaction. Note: For Retirement Accounts, VBS will only use available funds in Your Retirement Account, or in an account with its affiliates that is part of the same Retirement Account or plan, to settle a transaction.

VBS may require an equity deposit or a full payment before it accepts Your order. When You place an order to sell a Security long, You must own the Security at the time You place the order. You agree to make Good Delivery of the Security You are selling by settlement date. Proceeds of any sale will not be paid until VBS has received Good Delivery of the Security and settlement is complete.

You agree to promptly satisfy any Debit Balance or other indebtedness or outstanding obligation related to Your Account, including, but not limited to, any such indebtedness that results from instructions provided to VBS by You or an Investment Advisor authorized to make transactions in Your Account. We may elect at any time, with or without notice, to make any Debit Balance or other indebtedness or outstanding obligation related to Your Account immediately due and payable.

VBS generally will not accept a tender of Control or Restricted Securities as collateral for an obligation You owe VBS. VBS may, however, in its sole discretion, approve such a tender. VBS' approval of such tenders must be in writing and be given in advance.

If You incur a debt to VBS or any of our affiliates as a result of activity in Your non-Retirement Account, and You do not promptly pay VBS the amount due, You agree that VBS may, at its discretion and without prior demand or notice, sell Securities in the non-Retirement Account that incurred the debt to satisfy the debt, or if there are not enough assets in that non-Retirement Account to satisfy the full amount of the debt, to sell or otherwise liquidate any or all Securities or Other Property in any other non-Retirement Account with VBS or with any of its affiliates in which You have an interest, regardless of whether there are other Account Owners on the other Account(s), and use the sale proceeds to cover the debt. You understand that the other Account(s) may be charged a commission as a result of any such sale.

VBS may also transfer Securities and Other Property from any non-Retirement Account or in any non-Retirement Accounts with its affiliates in which You have an interest to any other non-Retirement Account in which You have an interest, regardless of whether there are other Account Owners on the other Account(s), in order to satisfy deficiencies in any such

Account or if VBS thinks Your obligations in any such non-Retirement Account are not adequately secured.

Important Note for Retirement Accounts: If You incur a debt to VBS or any of our affiliates as a result of activity in Your Retirement Account, You must promptly pay VBS the amount due. If You do not, You agree that VBS may sell Securities in the Retirement Account that incurred the debt to satisfy the debt. If You do not have sufficient assets in the Retirement Account held with VBS to satisfy the amount You owe, You agree that VBS may require You to sell Securities that You hold in other Accounts (and You agree to execute all documents and/or give oral instructions as necessary to effect the sale), whether held with VBS or with its affiliates, that are part of the same retirement plan and use the proceeds to cover the debt. You understand that Your Account may be charged a commission as a result of any such sale.

To satisfy a Debit Balance in a Retirement Account with a sale of Securities or Other Property, VBS may only sell Securities that are in the Retirement Account that incurred the debit or in an Account held with an affiliate that is part of the same retirement plan. If VBS sells Securities or Other Property to satisfy a Debit Balance, Your Account and any other account held with an affiliate that are part of the same retirement plan are responsible for all costs and commissions related to such a sale.

You understand that VBS may apply any dividends, capital gains payments, interest payments, or other funds coming into an Account, such as incoming funds by check, EBT, wire, or Direct Deposit, or funds that would otherwise be invested through the Vanguard Brokerage Dividend Reinvestment Program, to cover fees or other indebtedness to VBS. Debit Balances in Your Account will be charged interest in accordance with VBS' established rules and policies.

f. Security for Indebtedness for Non-Retirement Accounts

As security for the repayment of all present or future indebtedness owed to VBS by each Account Owner, each Account Owner grants to VBS a first, perfected, and prior lien on, a continuing security interest in, and right of set-off with respect to, all Securities and Other Property that is, now or in the future, held, carried, or maintained for any purpose in or through VBS, and, to the extent of such Account Owner's interest in or through, any present or future account with VBS or its affiliates in which the Account Owner has an interest. You agree to indemnify VBS for any loss or expense that VBS may incur in enforcing its lien or any other remedies available to it, including the reasonable cost of collection. This paragraph does not apply to assets in a Retirement Account.

g. Checks, EBTs, or Other Items Returned Unpaid, Recalled, or Dishonored

If a check, EBT, or other item You remit to VBS is returned unpaid, recalled, or otherwise not honored,

VBS may charge a fee to Your Account. Also, for VBS' protection, VBS may restrict Your ability to withdraw funds recently added to Your Account by check or EBT.

VBS may restrict Your ability to use recently added funds to settle a Securities transaction, and/or decline to accept orders until recently added funds are collected or otherwise validated.

h. Foreign Securities Trading, Settlement, and Custody

VBS may act as agent for foreign Security orders traded in local markets. VBS' policy is to settle foreign Security trades in U.S. dollars. Foreign account activity, including, but not limited to, trades, transfers, dividends, and other corporate actions, may be automatically converted to or from U.S. dollars. VBS has an established partnership with JPMorgan (JPM) to facilitate the clearance and settlement of foreign Security transactions. Your foreign Securities may be custodied through JPM or any subcustodian located in a particular local market and will be held at JPM in an account established for the exclusive benefit of customers of VBS.

i. Securities Held in Street Name

Securities and Other Property that are held for Your Account and that are in "street name," or are being held by a Securities depository in VBS' name, may be commingled with the same Securities being held for other clients of financial organizations and for VBS' own clients. VBS is responsible for ensuring that its records reflect Your ownership of these Securities and Other Property. For Accounts other than a Retirement Account, You have the right at any time to request delivery to You of any such Securities or Other Property that are fully paid for or are in excess of margin requirements.

j. Corporate Actions

Mutual Fund Mergers, Share Conversions, or Other Fund Actions

A mutual fund, or its transfer agent, may merge fund shares held in Your Account to another fund pursuant to a fund merger, convert shares from one class to another, or take other actions as described in each fund's prospectus. VBS will accept the direction of a fund or its transfer agent to merge, convert Your shares, or take other action.

Interest, Dividend, and Other Payments

If You are entitled to receive dividend, interest, or other payments on the Securities held in Your Account, VBS will allocate distributions to Your Account.

Optional Dividends

When a company offers its shareholders a choice to receive a dividend either in cash or stock, VBS will use the dividend reinvestment election(s) on Your Account as the basis for choosing cash or stock. Accounts that have elected to have dividends reinvested (either at the Account level or for the specific Security) will be

credited with stock, while Accounts that have elected to receive dividends in cash (either at the Account level or for the specific Security) will receive cash.

Callable Securities

Many bonds allow the issuer to redeem or call an issue prior to maturity date. Certain preferred Securities can also be called by the issuer. Some calls are "partial" calls, meaning that only some shares are called. If a Security that You and other clients of VBS hold is partially called, VBS will determine, through a random selection procedure, which Securities will be submitted for redemption without regard to unsettled sales. If the Securities held in Your Account are selected and redeemed, Your Account will be credited with the redemption proceeds.

Should You wish to opt Your non-Retirement Account(s) out of this random selection process, You must instruct VBS to deliver Your Securities to You. We will deliver the Securities provided that they are unencumbered and they have not already been called by the issuer. The probability of one of Your Securities being called is the same whether they are held by You or by VBS for You. You cannot opt out of the random selection process for assets held in a Retirement Account because We cannot deliver assets held in a Retirement Account to You.

To review VBS' procedures for the client allocation of Securities selected for redemption in the event of a partial redemption, visit [vanguard.com](https://investor.vanguard.com). To request a free, printed copy of VBS' allocation procedures, contact VBS.

Nontransferable Securities

If You hold nontransferable Securities in Your Account, VBS may remove the Securities from Your Account without prior notice. Securities become nontransferable when there are no transfer agent services available for the Securities. If nontransferable Securities are removed from Your Account, You should consult with Your tax advisor about any potential tax implications. The position removal will be documented on Your subsequent Account statement.

Credits to Your Account

VBS credits to Your Account funds belonging to You such as dividends, interest, redemption proceeds, or the proceeds of corporate reorganizations on the day such funds are received by VBS. An issuer or an intermediary may earn interest on funds held in its possession. If an issuer or intermediary passes such interest along to VBS, VBS will keep the payment.

VBS can provide further information on when Your Account will be credited with funds due to You, when those funds are available to You, and/or when You begin earning interest on those funds.

k. Disclosure of Account Information

We may disclose Your name and/or information about Your Account or Your transactions consistent with Our Privacy Policy and pursuant to Rule 14b-1 under

the Securities Exchange Act of 1934 to companies whose Securities You hold unless We receive Your written objection. Different rules apply for European Union domiciled Securities, and You may not be able to opt out of Our disclosure of shareholder identifying information to issuers of such Securities. For additional information about Our Privacy Policy, visit Our Privacy Center at <https://investor.vanguard.com/privacy-center>. In addition, if You request a large transaction in a Vanguard Fund, including in Your Settlement Fund (if it uses the money market fund Sweep Program option), VBS may disclose information about You and/or Your Vanguard Fund holdings to The Vanguard Group, Inc.

l. Delivery of Required Information, Other Documents, and Notices About Your Account

You may consent to receive Confirmations, Statements, and other Account information electronically.

E-delivery is an efficient way to facilitate Account communications. If You do not consent to e-delivery, VBS or its mailing vendor will use the USPS to deliver the information to You. However, to receive certain VBS products, services, or offers, including, for example, online trading, VBS may require that You consent to electronic delivery of certain documents.

VBS will direct communications to the mailing address, email address, or phone number We have for You in Our files (that is, the contact information You provided on Your Account Application or later updated). Any communication (required or otherwise) that VBS directs to such a mailing address, email address, or phone number will be considered delivered to You, whether or not the communication is actually received.

m. Provision of Market Data

We may provide You with Market Data, and may charge You a fee for doing so. We obtain Market Data from Securities exchanges, markets, and from parties that transmit Market Data ("Market Data Provider" or collectively, "Market Data Providers"). All Market Data are protected by copyright laws. We provide Market Data for Your personal noncommercial use; You may not sell, market, or distribute Market Data unless You have entered into a written agreement with the appropriate Market Data Provider that allows You to sell, market, or distribute the data.

We receive the Market Data from industry sources that are believed to be reliable. However, neither VBS nor the Market Data Providers can guarantee the accuracy, completeness, timeliness, suitability for use, or correct sequencing of the Market Data. Neither VBS nor the Market Data Providers will be liable to You for interruptions in the availability of Market Data or Your access to Market Data.

The Market Data are provided "as is" and on an "as available" basis. There is no warranty of any kind, express or implied, regarding the Market Data. We are not responsible for, and You agree not to hold VBS liable for, lost profits, trading losses, or any other damages resulting from Market Data or Your use of

the data. In any case, Our liability arising from any legal claim (whether in contract, tort, or otherwise) relating to the Market Data will not exceed the amount You have paid for use of the services or Market Data. You agree that We may correct any execution reported to You that was based on inaccurate Market Data provided to VBS by an exchange, market center, or other provider.

n. Extended-Hours Trading

VBS offers online access to participate in extended-hours trading sessions. If You participate in extended-hours trading, You agree to terms and conditions that are disclosed on the website and that You understand the risks of trading in an extended-hours session.

o. Best Execution and Payment for Order-Flow Practices

VBS routes equity and options orders to various market participants. VBS uses a top-down approach in selecting the market participants with which We will establish a relationship. This approach includes a review of system availability, quality of service, and financial and regulatory standing. The designated market participants to which orders are routed are selected based on the consistent high quality of their executions in one or more market segments. In analyzing quality of executions, VBS considers factors such as liquidity enhancement, price improvement, execution speed, and overall effective price compared with the national best bid and offer (NBBO). VBS regularly conducts analysis and reviews reports for quality of execution purposes.

VBS is required to make publicly available quarterly reports that disclose the venues to which orders were routed as well as the nature of Our routing relationships, including any payment for order-flow arrangements. You can access this information by visiting vanguard.com.

In addition to the publicly available reports, VBS, upon written request, will provide information related to Your orders that were routed for execution in the past six months. This information will include the venue to which Your order(s) was (were) routed, whether the order(s) was (were) directed or nondirected, and the time of the transactions.

VBS does not receive compensation for directing order flow in equity Securities. Similarly, VBS does not receive compensation for directing options Securities to Our execution partners, but reserves the right to do so in the future.

Access to Tradeweb Markets LLC

VBS provides availability to the Alternative Trading Systems operated by Tradeweb Markets LLC ("Tradeweb") and to other content provided by Tradeweb. Tradeweb provides access to certain municipal bond information from DPC DATA. Tradeweb and DPC DATA are third parties and are not affiliated with VBS. While VBS provides access to Tradeweb's Alternative Trading Systems, VBS has no control

over actions taken by Tradeweb. All content, with the exception of new issue municipal content, is provided by Tradeweb and DPC DATA; VBS is not responsible for the accuracy of content provided by Tradeweb or DPC DATA. New issue municipal content on the Tradeweb pages is provided by VBS. All offerings are subject to market conditions, prior sale, and/or Tradeweb's clearly erroneous policy.

p. Certificates of Deposit (CDs)

All brokered CDs will fluctuate in value between purchase date and maturity date. CDs may be sold on the secondary market prior to maturity, subject to market conditions, which may be limited. Any CD sold prior to maturity may be subject to a substantial gain or loss. VBS does not make a market in brokered CDs. The original face amount of the purchase is not guaranteed if the position is sold prior to maturity. CDs are subject to availability. All CDs are federally insured up to \$250,000 per bank. In determining the applicable insurance limits, the FDIC aggregates accounts held at the issuer, including those held through different broker-dealers or other intermediaries. For additional details regarding coverage eligibility and insurance limits for other types of accounts, visit fdic.gov. The minimum purchase for new issues is \$10,000. Yields are calculated as simple interest, not compounded. Brokered CDs do not need to be held to maturity, charge no penalties for redemption, and have limited liquidity in a secondary market. If a CD has a step rate, the interest rate of the CD may be higher or lower than prevailing market rates. Step-rate CDs are subject to secondary market risk and often will include a call provision by the issuer that would subject the investor to reinvestment risk. The initial rate of a step-rate CD cannot be used to calculate the yield to maturity. If a CD has a call provision, the issuer has sole discretion whether to call the CD. If an issuer calls a CD, there is a risk to the investor that the investor will be forced to reinvest at a less favorable interest rate. VBS makes no judgment as to the creditworthiness of the issuing institution and does not recommend or endorse CDs in any way. For additional information with respect to CDs, visit vanguard.com. Additional information is available at fdic.gov.

q. Fractional Shares

As a VBS client, You may acquire a fractional share interest in a single Security (a "Fractional Share") in several ways. For example, You may receive a Fractional Share: (a) as a result of the reinvestment of a dividend if You participate in VBS' dividend reinvestment program; (b) as a divided interest in whole shares resulting from a life event, such as divorce or inheritance; (c) as a result of placing a Dollar-Based Trade (as defined in VBS' Dollar-Based Trading Terms of Use); or (d) as a result of the conversion of conventional mutual fund shares issued by a Vanguard Fund to ETF Shares of equivalent value of the same Vanguard Fund (refer to Vanguard ETF prospectuses for further information regarding the conversion privilege). Fractional Shares present unique risks

and have certain limitations and may have different rights from a whole share of the same Security. For information on Dollar-Based Trading, refer to VBS' Dollar-Based Trading Terms of Use available by logging in to [vanguard.com](https://www.vanguard.com) and searching **Buy stocks & ETFs online** and selecting **Trade Help** under **Buy & sell stocks & ETFs**.

IMPORTANT: The Fractional Share rights and limitations described below apply to certain Securities, but do not apply to mutual funds. For further information on rights and restrictions related to mutual funds, please consult the mutual fund prospectus and statement of additional information.

- i. *Eligibility for Dividends and Dividend Reinvestment.* You will receive dividends on Fractional Shares unless Your prorated amount of the dividend is less than one half of one cent (\$0.005). Fractional Shares are eligible for automatic reinvestment of cash dividends received, at Your election, subject to the terms of VBS' dividend reinvestment program. If You participate in dividend reinvestment and Your dividend for a particular Security would equate to less than .0005 shares, then You will receive Your dividend in cash.
- ii. *Corporate Actions.* The eligibility of Fractional Shares to participate in corporate actions may be different than whole shares. For mandatory reorganizations, such as mergers and acquisitions, stock splits, or spin-offs, typically VBS will distribute Your interest in proportion to Your ownership interest, inclusive of any Fractional Shares. However, only whole shares, and not Fractional Shares, are eligible to participate in voluntary corporate actions, including tender offers and certain rights offerings. If You are to receive Fractional Shares as the result of a stock split or other corporate action for a Security held in Your Account, VBS, in its sole discretion, may either sell the shares on the open market or to the issuer or transfer agent. You are entitled to receive Your pro rata portion of the proceeds of any such sale. If sold on the open market, Fractional Shares may receive a price that differs from that offered to certain registered owners by the issuer or transfer agent.
- iii. *Voting Rights.* VBS works with a vendor that aggregates any proxy votes for Fractional Shares of VBS' clients with all votes reported to the issuer or issuer's designated vote tabulator. VBS' vendor will report such proxy votes on Fractional Shares, but the issuer or tabulator may not fully count such Fractional Share votes.
- iv. *Stock Certificates.* Stock certificates cannot be issued for Fractional Shares.
- v. *Transferability.* Fractional Shares are not currently transferrable to another brokerage firm. If, for example, You own 10.5 shares of an individual stock and You transfer the Securities in Your VBS Account to another firm, 10 shares will be transferred.

Your 0.5 Fractional Share will be acquired and liquidated by VBS, and will receive the closing price from the trading day immediately preceding the transfer of Your whole share(s). VBS will distribute these proceeds in Your Account and will provide confirmation of the Fractional Share liquidation on Your periodic statement. Since Your Fractional Shares cannot be transferred, Your overall SIPC coverage may be affected.

- vi. *Auto-Liquidation of Certain Fractional Shares.* Unless you have established a position in an Eligible Security (as defined in VBS' Dollar-Based Trading Terms of Use) via Dollar-Based Trading, You generally may not hold only a Fractional Share without at least one corresponding whole share. VBS will automatically sell ("Auto-Liquidate") Your Fractional Share under the following two scenarios:
 1. "Sell-All" Trades. If You own whole shares and a Fractional Share in a Security, VBS will Auto-Liquidate Your Fractional Share holding when You place a share-based order to sell Your entire whole share position. For example, if You own 10.2 shares in a Security and sold all 10 shares, VBS would Auto-Liquidate the remaining .2 Fractional Share. That Fractional Share will receive the same price as the corresponding whole shares, and will be prorated to reflect Your Fractional Share ownership in that Security. VBS will place the proceeds of that sale into Your Account.
 2. "Orphaned" Fractional Shares. As a result of certain actions, Your Account may own a Fractional Share without a corresponding whole share position in a Security. For example, as described above, Fractional Shares cannot be transferred to another firm. Therefore, if You own whole shares and a corresponding Fractional Share in a Security and transfer those Securities to another firm, VBS will transfer the whole shares, and then Auto-Liquidate any remaining Fractional Share. Under these circumstances, You will receive the previous day's closing price for any "Orphaned" Fractional Share Auto-Liquidated by VBS, prorated to reflect Your Fractional Share interest.
- vii. *Auto-Liquidation and Dollar-Based Trading.* If You establish a new position in an Eligible Security through a Dollar-Based Trade, VBS will turn off the Auto-Liquidate feature for that Eligible Security in the Account in which You placed that trade. Further information on Auto-Liquidation and its impacts on Fractional Shares acquired by Dollar-Based Trades is available in VBS' Dollar-Based Trading Terms of Use.
- viii. *Capacity.* VBS may trade the Fractional Share component of any Security trade You place (or placed on Your Behalf) on a principal or agency basis. Refer to Your trade confirmation or periodic statement, as applicable, for specific capacity.

r. Class Action Service (applicable only if You have not opted out)

You understand and agree that eligible Vanguard Brokerage Accounts are automatically enrolled in VBS' Class Action Service (the "Class Action Service"). Closed Account(s) are not included in the Class Action Service. If Your Account(s) is excluded from the Class Action Service, You may still participate in a class action lawsuit by submitting a paper-based claim form directly to the claims administrator.

You understand and agree that the enrollment of Your Account(s) in the Class Action Service authorizes VBS to automatically file a claim on Your behalf if We receive notice of a potential class action lawsuit that impacts Securities purchased in Your Account(s) ("Impacted Security"). You may cancel Your enrollment in the Class Action Service at any time by notifying Us. If You cancel Your enrollment in the Class Action Service and wish to reenroll, You will be required to agree to the terms and conditions for the Class Action Service in effect at the time of reenrollment. Canceling Your enrollment in the Class Action Service or closing Your Account(s) after a claim has been filed on Your behalf will not remove You from participation in that particular class action lawsuit. VBS reserves the right to terminate the Class Action Service at any time with notice to You.

If You are entitled to any class action settlement, You will receive a credit to the Account(s) in which the purchase of the Impacted Security took place if the Account(s) remains open or, if a settlement is received after You close the Account(s) in which the purchase of the Impacted Security took place, a check will be mailed to the most recent address that We have on file for Your closed Account(s) irrespective of whether You still have other open Accounts enrolled in the Class Action Service.

VBS uses a vendor to facilitate the Class Action Service. In exchange for administering the Class Action Service, a fee will be deducted from any class action settlement payment received on Your behalf as part of the Class Action Service prior to deposit of proceeds into Your Account. Refer to the Vanguard Brokerage Services commission and fee schedules for details regarding the fee.

You agree that You cannot separately bring a lawsuit on Your own behalf, either contemporaneously or in the future against any named defendant in connection with such particular class action lawsuit. You further understand and agree that once the Class Action Service files a class action claim on Your behalf, You will not assert: (a) any dissenters' or similar rights under any applicable law, rule, or regulation; (b) any right to require partition or appraisal of any company that is the subject of a potential class action lawsuit or of any of said company's assets or to cause the sale of such company's property; or (c) any right to maintain any action for partition or to compel any sale with respect to shares held by other shareholders or with respect to any of said company's property.

Enrollment of Your Account(s) in the Class Action Service does not guarantee that You will receive a settlement payment for any given class action lawsuit. Neither VBS nor our affiliates take any responsibility for the outcome of any given class action lawsuit, and You agree to indemnify and hold VBS and Our affiliates harmless for all actions taken in connection with the Class Action Service. You further understand that the greater the number of clients enrolled in the Class Action Service, the smaller any potential settlement payment received by each client will be in the event of any class action settlement recovery.

7. Your Role

As an Account Owner, or his, her, or its properly authorized Representative, You have certain responsibilities. For example, You are responsible for providing accurate and complete information on the Application and for submitting any additional information documents that VBS requires at the time Your Account is opened or at any time afterward. Once Your Account is opened, You are responsible for fulfilling the obligations arising under this Agreement or relating to the Account. If there is more than one Account Owner, each Account Owner is jointly and severally liable for obligations arising under the Agreement or relating to the Account. You should also refer to the confirmations and statements We send to You, the current VBS commission and fee schedules, as well as any brochures and forms that describe Account services and features for additional information about Your responsibilities and obligations.

a. Account Information

If any of the information You provided on Your Application changes, You should notify VBS immediately. You should notify Us, for example, if You, or a household member, becomes a control person or an affiliate of a public company (such as, but not limited to, a member of a board of directors, a 10% shareholder, or a policymaking executive), or if You or Your spouse becomes an employee of FINRA or becomes associated with a member of a stock exchange, a FINRA member firm, or a municipal securities dealer.

You should also notify Us immediately if Account authority changes. For example, if You revoke a third party's authority or a Representative's authority to act or inquire on Your Account, or for jointly owned Accounts, a joint Account Owner dies, You should notify Us.

If You provide us with a mobile phone number, You agree and consent that VBS and its affiliates may contact You at that mobile number with telephone calls that may use an autodialer and by text messages for the purposes of servicing of Your Account(s) or investigating and preventing fraud. We will not use texts or autodialed calls to contact You for marketing purposes unless we receive Your prior express written consent. You do not have to agree to receive autodialed calls or texts to your mobile phone number in order to use the products and services offered by Vanguard.

You may unsubscribe from receiving text messages by texting STOP, CANCEL, UNSUBSCRIBE, QUIT or END in response to a Vanguard text. Additionally, you can contact VBS and an associate can unsubscribe you. Standard telephone minute and text charges may apply. Vanguard's Activity and Appointment Alerts Terms and Conditions of Use are available at vanguard.com.

Please pay close attention to the mailing address, email, phone number, and banking information on Your Account. You are responsible for keeping this information up to date.

Delivery of Distributions/Withdrawals: If You request a distribution or withdrawal from Your Account, but We are unable to deliver the funds as instructed or We have questions on the instructions, VBS will attempt to contact You for corrected or revised delivery instructions or for additional information. If You do not provide VBS with corrected or revised delivery instructions or the requested information promptly, VBS may return the funds to Your Account with the proceeds to Sweep. For Retirement Accounts: If funds are returned to Your Account for one of the reasons noted above, Your Account records (including the tax records) will reflect that the distribution did not occur.

Dormant Accounts, Uncashed Checks: You should periodically log on to Your Account at vanguard.com or through Our mobile app or contact VBS about Your Account, even if You do not wish to make a transaction. If Your Account has had no activity in it for a period of time or You have not contacted Us about the Account, VBS may be required to transfer it to a state under the state's unclaimed property laws. Also, VBS may be required to turn over uncashed checks as unclaimed property; You should promptly cash or deposit any check VBS sends to You and instruct third parties to whom You direct VBS to send checks to do the same.

b. Paying for Transactions and Account Fees, and Return of Overpayments or Uncollected Fees

You are responsible for paying for all authorized transactions made in Your Account, including paying the commissions, processing, or other fees associated with the transactions. You are also responsible for paying any service or other fees imposed on Your Account. Our commissions and fees are detailed in the VBS commission and fee schedules, which are incorporated by reference into this Agreement. Certain clients, individually or as members of a category of clients, may pay different commissions and fees, or none at all, based on assets or activities in their Accounts. VBS reserves the right to change or waive commissions and fees at its discretion. If VBS is required to do so, it will notify You of the changes made to its commissions and fees. Your continued use of Your Account or the applicable service following such a change means You have consented to the change.

If You do not pay for Your transactions or the fees associated with Your Account, then VBS may, on its

own behalf and on behalf of its affiliates, cancel Your transactions, liquidate assets, restrict Your Account, or take other appropriate action in seeking payment for the transactions and/or fees. You will be responsible for satisfying all debits and for paying all costs, commissions, and/or losses arising from any actions VBS takes to liquidate or close transactions in Your Account, or from Your failure to make timely Good Delivery of Securities and Other Property. See also **Payment, Equity Deposit, and Settlement** for additional information.

And, if You know or suspect that You have received an overpayment of funds or Securities or Other Property, or if You know or suspect that VBS failed to collect a fee You incurred, You are responsible for notifying VBS as soon as You learn of the overpayment or uncollected fee. You agree not to remove the overpayment or the uncollected fee from the Account. If You do remove the overpayment or uncollected fee, You are responsible for promptly returning the full overpayment or fee to VBS. If You fail to do so, You will be liable to VBS not only for the amount of the overpayment or uncollected fee, but also for all interest, costs, and expenses associated with its recovery.

c. Authority to Transact on an Account

Generally, an adult Account Owner, and/or his, her, or its properly authorized Representative, has authority to transact on his, her, or its individually owned Account. If an Account has more than one Owner, each Account Owner has authority, acting individually and without notice to any other Account Owner, to deal with VBS as fully and completely as if the Account Owner was the sole Account Owner. Notwithstanding the preceding, VBS may, from time to time or for certain transactions, require the consent of all Account Owners.

If Your Representative's authority is revoked, You are responsible for providing VBS with notice of the revocation in a form and manner acceptable to VBS. You remain responsible for transactions effected in Your Account after a Representative's authority has been revoked but before VBS was provided notice and had an opportunity to react to the notice of revocation. See also the **Authorized Access to an Account** and **Liability** sections of this Agreement for additional information.

d. Compliance With Policies, Rules, and Laws

You, and the transactions You make or attempt in Your Account, must comply with the policies that can be found on vanguard.com or in other documents We provide to You, such as VBS' Privacy Policy, Frequent-Trading Policy, Market-Timing Policy, After-Hours Trading Policy, Dividend Reinvestment Program Policy, etc., as well as Our house trading rules and policies, as these rules and policies may be amended from time to time. In addition, You and the transactions You make or attempt in Your Account must comply with all applicable rules, regulations, customs, and usage of any exchange, market, or clearinghouse where the transactions are executed, as well as with any applicable laws, rules, regulations, or guidance of any international, federal, state, or self-regulatory agency

or instrumentality. If VBS places a restriction on Your Account, You agree to abide by the restriction and to not initiate trades or transactions that would violate the restriction.

e. Control or Restricted Securities

You agree to tell Us whether You hold any Control or Restricted Securities in Your Account, and their statuses, and whether there are any other contractual lockup, blackout, or additional restrictions on Your ability to sell such Securities. You also must furnish promptly whatever information and documents VBS might need to comply with its regulatory obligations relating to the Control or Restricted Security. Furnishing the information that VBS might need on Control or Restricted Securities is not an order to sell those Control or Restricted Securities; orders to sell must be placed by available order entry means, preferably online, meaning through vanguard.com or Our mobile app. You agree that You are responsible for all costs, including the cost to repurchase Securities if You sell Securities that are later found to be restricted or nontransferable. You further acknowledge that proceeds from the sale of Control or Restricted Securities will not Sweep or be made available to You for withdrawal or trading purposes until VBS receives what it, in its sole opinion, considers to be adequate verification that Your Control or Restricted Securities have been transferred or cleared for transfer.

Because Control or Restricted Securities transactions require special handling by both VBS and third parties, processing transactions in those Securities could take several weeks or longer, during which time the price of the Control or Restricted Securities may fluctuate. You understand that You, and not VBS, bear the risk of such market fluctuations, as well as for delays in the sale (or settlement of such sale) of Your Control or Restricted Securities that result from the failure of issuer's counsel to issue or approve any necessary legal opinion, the failure of the transfer agent to process Your shares, or any other third party's action or failure to act.

You cannot tender Control or Restricted Securities as collateral for an obligation You owe VBS unless You have obtained, in writing, VBS' preapproval of such a tender.

f. Identifying as a Large Trader

If Your transactions in NMS Securities equal or exceed two million shares or \$20 million a day, or 20 million shares or \$200 million a month, You are a Large Trader and You must identify Yourself as such with the Securities and Exchange Commission (SEC). These thresholds apply not only to Accounts that You own but also to Accounts over which You have investment discretion, such as agent authority. If You meet the definition of a Large Trader, You must file Form 13H with the SEC (available at sec.gov) to obtain from the SEC a unique ID number. You must provide this unique ID to all broker-dealers with which You trade, including VBS, so that the broker-dealers can provide accurate trading records to an appropriate regulator upon the regulator's request.

g. Understanding Terms of Securities and Other Property, and for Trading Decisions

You are responsible for knowing the rights and terms of Your Securities and Other Property, and for taking action to realize the value of Your Securities and Other Property. You agree that VBS is not liable for any decrease in the value of Your Securities and Other Property or other losses resulting from Your failure to give VBS instructions on how to respond to a tender offer, exchange offer, or other offer or transaction.

However, VBS may, at its discretion, and absent instructions from You, take action for You if Your Security or Other Property is about to expire worthless or be redeemed, exchanged, converted, tendered, or exercised in such a way that You would be left with significantly less value than if You had given VBS instructions to take action. VBS may charge You a brokerage commission and/or fee for any such action it takes on Your behalf, and You are responsible for paying the commission and/or fee.

You understand that, notwithstanding the above, You are solely responsible for investment decisions made in Your Account, including whether to buy or sell a particular Security, unless You receive a recommendation from VBS. VBS provides point-in-time recommendations for certain brokerage products, accounts and services, and relating to account transfers and rollovers. However, unless VBS affirmatively states that it is making a recommendation, it is not providing a recommendation. You are responsible for using multiple sources of information in making investment decisions for Your Account and, absent an explicit affirmative recommendation from VBS, You should not rely solely on any information VBS may provide for any decisions You make or that are made on Your behalf. You agree and understand that any research, analysis, news, or other information VBS may make available to You in any format does not constitute a recommendation to You to buy, sell, or hold a particular Security. Further, You are responsible for monitoring Your Account on an ongoing basis and for modifying Your trading decisions accordingly.

You are responsible for obtaining Your own legal and tax advice as needed, and understanding that VBS does not, and will not, provide personalized legal or tax advice.

h. Account Security, Fraud, Identity Theft, and Reporting Inaccuracies and Discrepancies in Your Account

VBS may ask any caller, any online user, or any person who sends in written requests to provide certain information or to answer security questions to verify that he or she is authorized to act on an Account, and You agree (if You are the person calling, writing, or using Our online systems) to provide the information We request, including, for example, signature guaranteed, notarized, or otherwise authenticated instructions, or other supporting documentation. You understand that VBS is not obligated to approve or open any Account, take any trade, or effect

any transaction, and that it may place trading, disbursement, or other restrictions on Your Account.

You are responsible for taking precautions to protect against fraud and identity theft, such as creating strong online credentials and taking other steps to ensure the confidentiality and security of Your Account number and other Account information. You are responsible for reviewing any statements, confirmations, or other Account information that VBS provides to You, and for promptly notifying Us if You become aware of any unauthorized use, theft, or loss of any of Your Account information (including, without limitation, Your Account number), or if You receive a confirmation for an order or transaction that You did not place, or if You receive an inaccurate confirmation of an order, or its execution, that You did place. If You do not promptly, and in writing, report inaccuracies or discrepancies (including unauthorized trading) to VBS, You waive any objection to the trade, position, funds transfer, check, disbursement, fee, and/or other information set forth on the confirmation and/or statement. Important note: While You may call VBS to discuss inaccuracies and discrepancies, You must confirm Your verbal communication in writing to fully protect Your rights, including any right You might have under the Securities Investor Protection Act (SIPA).

If You use a number or password to access Your Account, You agree to keep the access number or password private and secure.

You are responsible for any Account losses resulting from activity that VBS reasonably believes was authorized, as well as any losses associated with restrictions VBS may have placed on Your Account to protect against unauthorized activity.

i. Lost Securities

If You do not receive Securities that VBS forwarded to You, You should notify VBS immediately. If VBS receives Your notice within one hundred and twenty (120) days after the date the Securities were mailed to You (as reflected on Your statement), We will replace the Securities free of charge. If VBS does not receive notice within 120 days, it may charge You a fee to replace the Securities.

j. Liens and Levies

If a lien or levy on Your Account has been stayed or quashed, or the levying authority has otherwise released the levy or lien, it is Your responsibility to promptly provide VBS with appropriate documentation of the release. See **How to Contact VBS** for mailing instructions.

k. Complaints

If You have a complaint about the services VBS provides You, You should direct it to:

Complaints
Vanguard Brokerage Services
P.O. Box 982901
El Paso, TX 79998-2901

I. Closing an Account, Terminating Optional Features or Services

You may close Your Account, or terminate any optional features or services of the Account, by notifying VBS. The closure of Your Account or termination of a feature or service will be effective after VBS has received Your notice and had a reasonable period of time to act upon it. Even after You have notified Us that You wish to close Your Account or terminate an optional feature or service, You remain responsible for satisfying all obligations associated with the Account (for example, a Debit Balance) or with the feature or service. See also **Satisfying Legal Obligations by Releasing Account Information or Liquidating Securities and Other Property; Account Restrictions and Closing an Account.**

8. VBS' Role

VBS will provide its clients with services relating to their Accounts, including, among others, order entry, online Account access, and tax and cost basis reporting. VBS is under no obligation to approve any Application, open any Account, take any trade, or effect any transaction.

VBS is required by federal law to obtain from each person who opens an Account certain personal information that will be used to verify that person's identity. If You do not provide this information, VBS will not be able to approve Your Application.

a. Identity and Credit Verification and Reporting

By submitting an Application to open a Vanguard Brokerage Account, You authorize VBS to verify the identity, creditworthiness, and other information for You, Your authorized Representative(s), and Your spouse, if You live in a Community Property state. To verify creditworthiness, We may, but are not obligated to, contact employers, obtain consumer and credit reports, and/or make other inquiries. VBS may refuse to open an Account or may decline to offer You certain features and services otherwise available for any lawful reason.

After Your Account has been opened, We may also obtain consumer and credit reports at any time for reasons including, but not limited to, the following:

- To collect a Debit Balance in Your Account;
- To investigate, detect, and help prevent fraud involving You or Your Account;
- To help VBS evaluate whether to grant, extend, or modify the terms and conditions of any credit You have applied for or received;
- If a deposit of Securities or Other Property to Your Account is returned.

We may report information about Your Account to credit bureaus, regulators, or law enforcement. If We report information to a credit bureau, items such as late payments, missed payments, or other defaults on Your Account may be reflected in Your credit report. On Your written request, VBS will inform You whether it

has obtained credit reports and, if so, will provide You with the name and address of the reporting agency that furnished the reports.

If VBS approves Your Application and opens Your Account but later is not able to verify Your identity, it reserves the right to close Your Account or take other steps it deems reasonable.

VBS may require a minimum balance to open an Account. If VBS does require a minimum balance, You can submit the minimum amount needed by methods acceptable to VBS, including by sending a check, an EBT, a Federal funds wire, and/or a deposit of Marginable Securities.

b. Confirmations, Courtesy Trade Status Reports, Statements, and Other Account-Related Communications

VBS is required to send You written confirmation of the trades that are executed in Your Account. VBS may elect to send a monthly statement, in lieu of an immediate confirmation, for transactions executed pursuant to a periodic plan or an investment company plan, for transactions executed in shares of any open-end registered money market mutual fund, or for certain fractional share liquidations. VBS will send confirmations to You by USPS or e-delivery, depending on Your delivery elections. E-delivery is an efficient way to facilitate Account notifications.

VBS is not legally obligated to provide any trade status report other than a written confirmation, but it may choose to do so as a courtesy. VBS is not liable for any loss that You claim resulted from a delay or failure by VBS to issue a courtesy trade status report.

If, in any given month, there is Brokerage Activity in Your Account, VBS will send You a statement reflecting the activity at month-end. VBS will send You a statement after each calendar-year quarter-end, regardless of whether there was Brokerage Activity in Your Account. Information about all systematic or scheduled transactions, such as mutual fund dollar-cost-averaging purchases or reinvestment of dividends, will be included on Your statement for the periods during which the transactions occurred.

You are responsible for reviewing any statements, confirmations, or other Account information that We provide to You, and for promptly notifying Us if You become aware of any unauthorized use, theft, or loss of any of Your Account information, or if You receive a confirmation for an order or transaction that You did not place, or if You receive an inaccurate confirmation of an order, or its execution, that You did place. If You do not promptly, and in writing, report inaccuracies or discrepancies (including unauthorized trading) to VBS, You waive any objection to the trade, position, funds transfer, check, disbursement, fee, and/or other information set forth on the confirmation and/or statement. Important note: You may call VBS to discuss inaccuracies and discrepancies, but You must confirm Your verbal communication in writing to fully protect

Your rights, including any right You might have under the Securities Investor Protection Act (SIPA).

VBS may combine communications sent by USPS—such as statements, confirmations, and other written communications related to Account activity for Your Accounts—in a manner that reduces the number of envelopes mailed to You. Combined communications for Accounts that have more than one Account Owner may be, and generally will be, addressed to the name listed first in Your Account registration. VBS also may choose to address combined communications to any one Account Owner, or to all Account Owners.

c. Satisfying Legal Obligations by Releasing Account Information or Liquidating Securities and Other Property; Account Restrictions and Closing an Account

VBS is responsible for complying with its legal obligations, including those obligations that involve or relate to a client or his, her, or its Account. This means that VBS may release information about You and Your Account and the activity in it pursuant to a properly authorized request, or liquidate Securities and Other Property in Your Account to satisfy a court order, garnishment, tax levy, or other legal obligation imposed by a court, government agency, or office or self-regulatory body that has jurisdiction over VBS or You. VBS may also impose trading or disbursement restrictions on Your Account if it is required to do so, or if VBS knows or suspects that a violation of any law may or could occur without the restriction. VBS will not be liable for trading losses, lost profits, tax obligations, or other damages You claim may or did result from any trading or disbursement restriction placed on Your Account. Nor will VBS be liable for any trading losses, lost profits, tax obligation, or other damages resulting from liquidations made in connection with a court order, tax levy, garnishment, or other legal proceeding. You agree We may debit Your Account a reasonable processing fee for each garnishment, subpoena, court order, tax levy, or other legal process on Your Account.

VBS is not required to take any trade. And it may place trading, disbursement, or other restrictions on Your Account. These restrictions could be due to, for example, Your failure to pay for trades in a timely manner or for trading or trade-related violations, or notice of a dispute between or among Account Owners.

VBS reserves the right to close Your Account, or terminate any Account feature or service, at any time, for any reason, and without prior notice. Reasons for Account closure may include, but are not limited to, a zero or low balance Account with no Account activity; use of inappropriate or abusive statements or actions; not meeting Our Digital Interaction Expectations as stated in this Agreement; and use of algorithmic or software programs to facilitate Account opening or trading. Such closure or termination may include order rejections and liquidation of Your Account. Any action that VBS takes may affect any or all Account Owners even if not all Account Owners are aware of, or involved

with, the activity that prompts VBS to take action. If VBS closes Your Account or terminates any Account feature or service, You agree that VBS is authorized to liquidate Securities and Other Property in Your Account and provide You with the proceeds of such transactions, net of any outstanding debits or obligations. VBS is not responsible for any losses or lost profits resulting from such liquidation. You remain responsible for any outstanding charges, debits, or other transactions pending or settling in Your Account. We may delay a final disbursement, if any, until all obligations You owe Us are satisfied.

d. Investment Advice

VBS will not act as Your investment advisor, and VBS does not have any Discretionary Trading Authority over Your Account or any obligation to review or make recommendations for the investment of Securities and Other Property in Your Account. VBS provides point-in-time recommendations for certain brokerage products, accounts and services, and relating to account transfers and rollovers. However, unless VBS affirmatively states that it is making a recommendation, it is not providing a recommendation. Further, VBS has no affirmative duty to monitor Your Account on an ongoing basis. Any research, analysis, news, or other information that may be made available to You is not a recommendation to You to buy, sell, or hold a particular Security or Other Property.

e. Tax Information, Including Withholding and Mandatory Cost Basis Reporting

VBS may, but is not required to, provide its clients with general tax information. The information VBS provides may not apply to Your specific circumstances and will not take into account Your comprehensive tax or estate planning situation. For information or advice specific to Your situation, You must consult with Your own tax or legal advisor.

VBS may be required to withhold taxes from certain distributions and may require that the amount of tax be available at the time the distribution is processed. It may also restrict the types of distributions available to certain clients; for example, clients who are nonresident aliens may not be permitted to take in-kind distributions.

VBS is required to report to You and the IRS cost basis and certain other information (jointly, "Cost Basis Information") for stock and investment company shares held in Your non-Retirement Accounts (the "Cost Basis Rules"). The Internal Revenue Service (IRS) requires VBS to report Cost Basis Information for: (i) stock acquired on or after January 1, 2011; (ii) shares of a Regulated Investment Company (RIC) or stock acquired through a Dividend Reinvestment Plan (DRP) if the acquisition was on or after January 1, 2012; (iii) options and certain less complex debt instruments (such as an obligation with a fixed yield and maturity) acquired on or after January 1, 2014; and (iv) most other debt obligations acquired on or after January 1, 2016.

You may choose a preferred cost basis method for Your Securities. The options may vary based on the Account and Security. If a preferred cost basis method is not established for Your Securities, Vanguard will default them to First-In, First-Out (FIFO) for all Securities other than mutual funds, for which the default is average cost. It is Your responsibility to choose the appropriate cost basis method for Your tax situation. For more information, visit vanguard.com.

Cost basis information reported to You and the IRS may differ in some cases from the information You are required to report on Your income tax return. You are responsible for correct tax reporting of Your Securities transactions.

VBS Cost Basis Accounting Service

While VBS may also track the cost basis of some or all of Securities or Other Property held in Your Account that are not subject to the Cost Basis Rules (for example, stock acquired before December 31, 2010, which You purchased through VBS or transferred in to VBS from another broker), it does so for information purposes only and does not report the information to the IRS.

The VBS Cost Basis Accounting Service may also be provided for Retirement Accounts for information purposes only. For Retirement Accounts, FIFO is the default method for all Securities other than mutual funds, for which the default method is average cost.

Access to Cost Basis Information

You must be a registered user of vanguard.com to view cost basis information and information provided under the VBS Cost Basis Accounting Service.

f. Phone Access to VBS Associates; Recording Phone Calls and Monitoring Conversations

Although many account servicing needs can be accomplished online, VBS offers clients toll-free phone access to its associates that is generally available during regular business hours. However, at times when call volumes are high (such as during times of Market Volatility), You may have to wait to speak to an associate. At such times, VBS may route Your call to an automated answering system and/or play recorded informational messages. During nonbusiness hours, or when VBS is upgrading or performing maintenance on Our systems, You may not be able to reach an associate. Note that most tasks, including but not limited to Account management (i.e., checking Account balances), transaction execution, and research can be accomplished using vanguard.com, Our mobile app, or Our automated answering system. On vanguard.com VBS provides FAQs, tutorials, and more to assist You. VBS frequently receives client inquiries by phone that are not likely (in VBS' judgment) to require immediate market access ("Non-Trade Inquiries"). VBS reserves the right to limit the communication channels in which it resolves Non-Trade Inquiries and may choose to resolve such inquiries primarily or exclusively on its website or other available channels, as opposed to providing such

information by phone. VBS may also implement call routing strategies to support resolution of clients' Non-Trade Inquiries based on external factors (such as during times of Market Volatility), or client-specific factors, such as client assets under management, their trading history, and/or the nature and volume of their calls to VBS.

VBS may, but is not required to, record any or all incoming or outgoing phone calls, or monitor conversations Our associates may have relating to Your Account. We may record or monitor calls to gauge the quality of the service We provide, and/or to verify Securities transaction information. Not all phone calls are recorded, and not all conversations are monitored, and We do not guarantee that We will make or retain recordings of any particular phone call. Any recording that VBS does make is VBS' property, and VBS will decide, at its sole discretion, whether to, at Your request, play back any recording.

g. Authorized Access to an Account

VBS generally will take trades and other instructions only from the Account Owner, and his, her, or its Representative. VBS may require You to provide certain information, answer security questions, or use a number or password to access Your Account. Additional information on authority is noted below.

Agents

VBS may accept trading instructions from a limited or a full agent but will accept instructions to change the beneficial Owner of the assets in an Account only from an agent who has been granted that authority (generally, only full agents have such authority). VBS will recognize an agent's authority if it has appropriate documentation in its files. You may go online at vanguard.com or contact Us for additional information on agents and for a description of appropriate documentation (for example, appropriate documentation could include a letter of Account approval).

We reserve the right, but are not obligated, to place trading, disbursement, and other restrictions on an Account in the event We receive notice of a dispute among, or in Our opinion, conflicting instructions from, any of the multiple agents You may have appointed, or if VBS reasonably believes that the agent's authority has been revoked and that notice of the revocation is forthcoming.

Any notice VBS sends to an agent will be deemed to be notice to the Account Owner.

Fiduciary(ies)

If You, or a court, has appointed a fiduciary with authority to transact on Your Account, VBS may accept the fiduciary's instructions without responsibility for determining whether the fiduciary's action or inaction satisfies the standard of care applicable to such fiduciary's handling of the Account. If two or more fiduciaries have been authorized to make decisions on Your Account, VBS will accept and honor instructions received from one of the fiduciaries. Notwithstanding

the foregoing, VBS may, at its discretion, require that instructions be signed or otherwise authorized by some or all of the fiduciaries named on Your Account before it takes any action requested by one or some of the fiduciaries. We reserve the right, but are not obligated, to place trading, disbursement, and other restrictions on an Account in the event We receive notice of a dispute among, or in Our opinion conflicting instructions from, jointly serving fiduciaries.

Any notice We send to one fiduciary will be deemed to be notice to all fiduciaries.

Joint Account Owners

VBS may accept trading instructions from any one Account Owner of a jointly owned Account or his, her, or its Representative. We may, however, require all Account Owners to authorize, in writing or otherwise, certain transactions.

We reserve the right, but are not obligated, to place trading, disbursement, and other restrictions on an Account in the event We receive notice of a dispute among, or in Our opinion conflicting instructions from, joint Account Owners.

Any notice VBS sends to one Account Owner will be deemed to be notice to all Account Owners.

Plan Sponsors and Vanguard Fiduciary Trust Company

If Your Account is held in a Vanguard Brokerage Option of an employer-sponsored Plan, VBS may accept transaction and other instructions from the Plan Sponsor, named fiduciary or investment manager of the Plan, or from the Plan trustee.

h. Market Volatility

During periods of Market Volatility, there may be disruptions, suspensions, or halts in trading in individual Securities, or at some or all exchanges or other venues that trade Securities. As a result, there may be delays in executing Your order, and there may be a significant difference in the quote You receive at the time You place Your trade and the execution price You receive. You may also receive partial executions of Your order at different prices. During periods of Market Volatility and at all other times, VBS may, in its sole discretion and without prior notice, limit the types of orders it accepts, or prevent Securities from being traded through VBS' services. If You attempt to place a trade during periods of Market Volatility, then You accept the risks that may result, and waive any claim to losses, including, without limitation, lost profits or damages resulting from the inability to place orders for impacted Securities.

9. Contractual Terms

This section outlines the contractual terms of this Agreement. If You do not understand them, please contact Us or seek advice from Your attorney. This Agreement and its terms and conditions are binding, without limitation, on You and Your heirs, executors, administrators, successors, and assignees.

a. Governing Law

Disputes arising out of or in connection with Your Account or this Agreement will be decided and enforced in accordance with the laws of the State of New York (regardless of the choice of law rules thereof).

b. Assignment

VBS may assign its rights and obligations under this Agreement to its parent or to any of its subsidiaries, affiliates, or successors without notice to You. VBS may assign its rights and obligations under this Agreement to any other entity (one that is not a parent, subsidiary, affiliate, or successor) after giving You thirty (30) days' written notice. You may not assign Your rights and obligations under the Agreement without first obtaining VBS' written consent.

c. Liability

VBS is not responsible for determining whether a person is eligible to serve, or capable of serving, as Your Representative, or for transactions effected in an Account after a Representative's authority has been revoked but before VBS was provided written notice of the revocation and an opportunity to react to the notice. You agree to hold VBS, and any of its parents, subsidiaries, or affiliates, and any of their officers, directors, employees, and agents harmless from any liability, claim, or expense (including attorneys' fees) for the actions or inactions of Your Representative. Neither VBS nor any of its parents, affiliates, or subsidiaries, or any of their respective employees, officers, or directors (collectively, "VBS entities"), will be liable to You or to any third parties for any expenses, losses, damages, liabilities, demands, charges, and claims of any kind or nature whatsoever (including without limitation any legal expenses and costs or expenses relating to investigating or defending any demands, charges, and claims) (collectively, "Losses") by or with respect to the Account. The VBS entities will not be liable for any Losses or damages caused directly or indirectly by: government restrictions; exchange or market rulings; Market Volatility

or disruptions in order trading on any exchange or market; suspension of trading; war; strikes; severe weather; natural disasters; other acts of God; failure of computer or other electronic or mechanical equipment or communication lines; acts of terrorism; failure of third parties to follow instructions; or other conditions and occurrences beyond the VBS entities' control.

d. Severability

If any provision or condition of this Agreement shall be held to be invalid or unenforceable by any court or regulatory or self-regulatory agency or body, such invalidity or unenforceability shall attach only to such provision or condition. The validity of the remaining provisions and conditions shall not be affected thereby, and this Agreement shall be valid and enforceable as if any such invalid or unenforceable provision or condition were not contained herein.

e. Entire Agreement, Amendment, and Waiver

This Agreement incorporates into it any terms and conditions contained on the Brokerage Account Application as well as any terms and conditions contained on the Account statements and confirmations We send to You. This Agreement, with incorporations and as amended from time to time, contains the entire understanding between You and VBS concerning Your Account and Our provision of services relating to that Account.

Upon notice to You, VBS may modify or rescind existing provisions or add new provisions to the Agreement, and You agree to abide by the Agreement, as amended from time to time. VBS may waive its rights under this Agreement. Any waivers by VBS under this Agreement must be expressed in writing and signed by VBS. A waiver will apply only to the particular circumstance giving rise to the waiver and will not be considered a continuing waiver in other similar circumstances unless VBS states, in writing, that its intention is to make the waiver a continuing waiver. VBS' failure to insist on strict compliance with the Agreement is not a waiver of any of its rights under the Agreement.

f. Arbitration

This Agreement contains a predispute arbitration clause. Under this clause, which You agree to when signing Your Account Application, the parties to this Agreement agree as follows:

- All parties to this Agreement are giving up the right to sue each other in court, including the right to a trial by jury, except as provided by the rules of the arbitration forum in which a claim is filed.
- Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited.
- The ability of parties to obtain documents, witness statements, and other discovery is generally more limited in arbitration than in court proceedings.
- The arbitrators do not have to explain the reason(s) for their award unless, in an eligible case, a joint request for an explained decision has been submitted by all parties to the panel at least 20 days prior to the first scheduled hearing date.
- The panel of arbitrators may include a minority of arbitrators who were or are affiliated with the securities industry.
- The rules of some arbitration forums may impose time limits for bringing a claim in arbitration. In some cases, a claim that is ineligible for arbitration may be brought in court.
- The rules of the arbitration forum in which the claim is filed and any amendments thereto shall be incorporated into this Agreement.

You agree to settle by arbitration any controversy between or among You and VBS arising out of or relating to VBS' business or this Agreement. Such arbitration will be conducted by, and in accordance with, the securities arbitration rules and regulations then in effect of FINRA or any national securities exchange that provides a forum for the arbitration of disputes, provided that VBS is a member of such national securities exchange at the time the arbitration is initiated. Your demand for arbitration shall be made within the time prescribed by those rules and will be subject to the applicable state or federal statutes of limitations as though filed in court. The award of the arbitrator will be final and binding, and judgment on the award may be entered in any court having jurisdiction. No person shall bring a putative or certified class action to arbitration, nor seek to enforce any predispute arbitration agreement against any person who has initiated in court a putative class action; or who is a member of a putative class who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) the class certification is denied; (ii) the class is decertified; or (iii) the customer is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this Agreement except to the extent stated herein.

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Vanguard Brokerage Services

P.O. Box 982901
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Connect with Vanguard® > vanguard.com

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VBSAACP 092024

Vanguard Bank Sweep Products Terms of Use

Updated December 2023

The following Terms and Conditions ("Terms") govern Your participation in Vanguard's bank sweep products (the "Bank Sweep") offered by Vanguard Brokerage Services ("VBS"), a division of Vanguard Marketing Corporation, to the owners of brokerage accounts that meet certain eligibility requirements described below (each an "Account"). The Bank Sweep consists of "Vanguard Cash Deposit" in the Vanguard Brokerage Account and "Vanguard Cash Plus" in the Vanguard Cash Plus Account. The Bank Sweep is designed to "sweep" (that is, to automatically transfer) the Free Credit Balances in Your Account ("Eligible Balances") into deposit accounts at one or more participating Bank Sweep Program Banks (each a "Program Bank"), where they may be eligible for insurance provided by the Federal Deposit Insurance Company ("FDIC"), as described below.

These Terms provide You with important information about how the Bank Sweep works. Further, while enrolled in the Bank Sweep, these Terms supplement the terms and conditions contained in the Vanguard Brokerage Account Agreement ("Brokerage Agreement") and related documents. Any capitalized terms used but not defined in these Terms shall have the meaning set forth in Your Brokerage Agreement and related documents.

1. Bank Sweep Eligibility and Enrollment

1.1 Eligible Accounts. Only certain types of Accounts and clients are eligible to participate in the Bank Sweep. For a complete list of Accounts eligible to enroll in the Bank Sweep, visit https://personal.vanguard.com/pdf/111821_Bank_Sweep_Eligibility_Requirements.pdf for Vanguard Cash Deposit or <https://investor.vanguard.com/accounts-plans/vanguard-cash-plus-account> for Vanguard Cash Plus. VBS reserves the right, in its sole discretion, to modify or delete the types of clients and/or brokerage accounts that are eligible to enroll in the Bank Sweep.

1.2 No Minimum Balance Requirements. There is no minimum Eligible Balance amount required to either enroll in the Bank Sweep or continue to participate in the Bank Sweep. There is also no minimum period that Your funds held in the Bank Sweep must remain on deposit with any Program Bank, and no limitation on the number or amount of withdrawals under the Bank Sweep. There are maximum balance limits depending on Program Bank capacity and other factors.

1.3 For Vanguard Brokerage Accounts. Once You complete Your enrollment into Vanguard Cash Deposit, VBS will sell Your shares of Vanguard's Federal Money Market Fund ("Money Market Fund")

in Your Account and transfer the sale proceeds, net debits, to the Bank Sweep program, which will become your default investment option for Eligible Balances. If You wish to invest in the Money Market Fund as an investment holding in Your Account, You may do so by buying shares of the fund after You have enrolled in the Bank Sweep. **Important: investments in Vanguard's Money Market Fund are not guaranteed or insured by the FDIC, but are securities eligible for SIPC coverage.**

2. Bank Sweep Deposit Accounts.

2.1 Omnibus Accounts. Under the Bank Sweep, Eligible Balances are automatically swept by VBS into interest-bearing deposit accounts ("Deposit Accounts") at one or more Program Banks. These Deposit Accounts are comprised of an omnibus interest bearing Demand Deposit Account ("Omnibus DDA"), an omnibus Money Market Demand Account ("Omnibus MMDA" or "MMDA"), and/or, for qualifying Brokerage Accounts, an omnibus Negotiable Order of Withdrawal Account ("Omnibus NOW Account" or "NOW"), and are held in each case in the name of VBS (or its authorized representative) as agent for the exclusive benefit of VBS' customers, acting for themselves and others, or a similar designation (together, the "Omnibus Accounts"). The Omnibus

NOW Account and Omnibus DDA function as transaction accounts ("TAs") for purposes of processing deposits and withdrawals, but you will earn the same rate of interest (summarized below) regardless of the Omnibus Account in which Your Sweep Deposits are held.

2.2 The Subaccount. You will have an interest in the Omnibus Accounts equal to the aggregate amount of Your Sweep Deposits at each Program Bank, plus the interest that accrues on Your Sweep Deposits. (Your interest in each Omnibus Account is referred to as Your "Subaccount"). The Subaccount will be evidenced by an entry on records maintained by VBS, and not directly on the records of any Program Bank.

2.3 Account Transfer Restrictions. There are no legal restrictions on the number of transfers that may be made from an MMDA. In the event of a change in law or regulations that imposes any such restrictions, We may update these Terms to reflect such change in law or regulations.

3. Program Banks and Excess Banks.

3.1 Program Bank Information. Under the Bank Sweep, Your Eligible Balances will be swept into Deposit Accounts at one or more Program Banks based on the deposit capacity of Program Banks and other factors. VBS maintains a list of participating Program Banks on its website at the following address: https://personal.vanguard.com/pdf/Bank_Sweep_Participating_Banks.pdf. VBS does not guarantee the financial condition of any Program Bank, or the accuracy of any publicly-available information concerning any Program Bank. Your Sweep Deposits are a direct obligation of the Program Bank that holds them and are not, either directly or indirectly, guaranteed by VBS, its parent company, or any of its subsidiaries or affiliates. You can obtain publicly-available financial information about each Program Bank at the FDIC's website at [fdic.gov](https://www.fdic.gov).

We will provide You written notification of the addition of any Program Banks, or if any Program Bank will no longer participate in the Bank Sweep. Prior written notice of other changes will be provided as soon as practicable, and will be posted on our website ([vanguard.com](https://www.vanguard.com)) prior to becoming effective. The Program Bank(s) that hold Your Eligible Balances will also appear on Your periodic statements. It is Your responsibility to review the list of Program Banks periodically, and to inform VBS of any Program Banks that you do not wish to receive Your Eligible Balances.

Your Eligible Balances will not be swept in a prioritized or sequential order to a subset of Program Banks participating in VBS' Bank Sweep. Certain Program Banks limit Your Eligible Balances.

3.2 Opting out of a Program Bank. You may designate a Program Bank as ineligible to receive Your Eligible Balances. In addition, You may at any time instruct us to remove Your funds from a Program Bank, close Your Deposit Accounts with the Program Bank and designate the Program Bank as ineligible to receive future Eligible Balances. Requests received in good order will be processed as soon as practicable, but delays can occur.

You must allow funds to be swept into at least one Program Bank, subject to certain conditions, including but not limited to each Program Bank's available capacity and FDIC insurance coverage limits. Otherwise, VBS will unenroll Your Account from the Bank Sweep. Refer to Sections 9 and 10 below for more information on Bank Sweep suspensions and terminations and Account closing.

3.3 Excess Banks. Under the Bank Sweep, one or more Program Banks will accept Your funds without limit and without regard to the Standard Maximum Deposit Insurance Amount (SMDIA, currently \$250,000) for federal deposit insurance ("Excess Banks"). You may not designate all of the Excess Banks as ineligible to receive Your excess funds (if any). Funds placed with the Excess Banks in excess of the SMDIA will not be eligible for FDIC deposit insurance. VBS reserves the right to designate Excess Banks in its sole direction without prior notice.

4. Deposit Procedures.

4.1 Daily Sweep. Each Business Day (as defined below), VBS will sweep the Eligible Balances in Your Account to the Program Bank(s). For purposes of these Terms, "Business Day" means any day that is not (a) a Saturday or a Sunday or (b) a bank holiday specified in the banking holiday calendar published by the Federal Reserve Bank of New York. Depending on the time You enroll or VBS receives additional Eligible Balances for Your Account, it may take up to two (2) Business Days for Your Eligible Balances to be deposited at one or more Program Banks. In some instances, delays can occur.

4.2 Program Bank Deposit Limit. VBS will deposit Eligible Balances in Your Account into Deposit Accounts in each Program Bank up to the Program Bank Deposit Limit of \$247,500 in order to permit the greatest

amount of Your Eligible Balances to be eligible for FDIC insurance coverage. Once \$250,000 has been deposited in each Program Bank, any additional funds will be deposited into a designated "Excess Bank," without limit and without regard to maximum available FDIC insurance coverage.

5. Withdrawal Procedures.

5.1 Withdrawal Consent. When You enroll in the Bank Sweep, You consent to have Your Sweep Deposits automatically withdrawn from one or more Program Bank(s) in the event of a net debit position in Your Account, including as a result of the settlement of purchase transactions or other charges posted to Your Account (e.g., wire transfers). Checks, ACH payments, wire transfers, and other transactions and items for Your Account are processed through Your VBS Account rather than directly with any Program Bank under the Bank Sweep. VBS will withdraw Your Sweep Deposits with the Program Banks to satisfy any net debit position in your Account on the Business Day following the debit's posting.

5.2 Withdrawal Sequence. VBS will process all withdrawals from Your TA at the Program Banks; You cannot directly add cash to or directly withdraw from a Program Bank account. If funds in the TA at a Program Bank from which funds are being withdrawn are insufficient to satisfy a debit, funds in the related MMDA at that Bank will be transferred to the TA to satisfy the debit, plus funds to maintain any TA threshold amount We or the Program Bank establish from time to time. We are permitted to withdraw funds from Your Deposit Accounts in any order. If there are insufficient funds in Your Deposit Accounts to satisfy the debit, VBS will withdraw funds from other available sources as described in Your Brokerage Agreement.

5.3 Accessibility of Eligible Balances. Pursuant to federal banking regulations, the Program Banks must reserve the right to require seven days' prior written notice before funds are withdrawn or transferred from a NOW account or an MMDA. DDAs are not subject to this restriction. In addition, in the event of a failure of a Program Bank, access to Your Sweep Deposits at that Program Bank may be restricted.

5.4 Maintaining Threshold Balances. VBS will deposit Eligible Balances from Your Account into the MMDA at each Program Bank as set forth above. As necessary to satisfy withdrawals, funds will be transferred from Your MMDA to the related TA at each Program Bank and withdrawals will be made

from the TA. The Program Bank and VBS in their discretion may determine a minimum, or "threshold", amount to be maintained in Your TA to satisfy debits in Your Account.

6. Bank Sweep Records.

6.1 Access via Your Bank Sweep Account. Although Your Sweep Deposits are a direct obligation of the respective Program Bank, You will receive no separate evidence of ownership from any Program Bank, and you will only have access to Your funds deposited in Program Banks through the Sweep transaction process. Your Bank Sweep account records and information will be evidenced by an entry on records maintained by VBS, as the custodian of Your Account assets. If You have any questions or comments related to the Bank Sweep, including questions related to any Program Bank, You should contact VBS, and not the Program Bank directly.

6.2 Account Statements. Your periodic VBS Account statement will summarize account activity related to the Bank Sweep, including Your ending balance, as well as deposit, withdrawal, and interest information related to Your Eligible Balances at Program Banks for the period covered. You will not receive a separate statement from any Program Bank. Please retain Your Account statements for Your records.

6.3 Directly Held Accounts at a Program Bank. You have the right to establish a direct deposit relationship with any Program Bank, subject to the rules of such Program Bank for establishing and maintaining such a direct deposit relationship.

7. Yield on Your Eligible Balances.

7.1 Yield. You will earn yield that will accrue daily based on the Sweep Deposits at each Program Bank. At this time, VBS will pass along the same yield on Sweep Deposits, regardless of which Program Bank holds the assets. However, that could change in the future. The amount of the annual percentage yield ("APY") earned on Your Sweep Deposits will be stated on Your VBS Account statement and accessed under Current APY Information below. The yield will be credited and paid by the Program Bank: (a) at the end of each month, (b) on the date Your Account closes, or (c) when You withdraw all of Your Sweep Deposits.

7.2 Accrual. Yield will begin to accrue on the day Your Sweep Deposits are credited to the Program Bank and will accrue up to—but not including—the day on which Your Sweep Deposits are withdrawn from any Program Bank.

7.3 Determination of APY. Yield on Your Sweep Deposits will be paid by the Program Bank(s). The yield You will earn on Sweep Deposits varies and may change at any time. It may be tiered based on the balance of Your Sweep Deposits that have been placed with Program Banks, plus the value of any additional Accounts or assets held at VBS that in the future may be added for purposes of qualifying for a particular yield tier, as well as other criteria that can be established by VBS and disclosed to you from time to time ("Eligible Assets"). The yield for each tier may be based on a number of factors, including general economic and business conditions. VBS can offer different products or services that offer different yields. Customers with higher amounts of Eligible Assets generally will receive higher interest rates on their Bank Sweep Deposits than customers with lower amounts of Eligible Assets.

7.4 Current APY Information. To find out current APY information for the Bank Sweep, You may visit <https://investor.vanguard.com/vanguard-cash-deposit> for Vanguard Cash Deposit and <https://investor.vanguard.com/accounts-plans/vanguard-cash-plus-account> for Vanguard Cash Plus.

8. Conflicts of Interest.

8.1 VBS/VMC. Program Banks pay a fee to VBS for Sweep Deposits that is retained by VBS as revenue. The fee that VBS receives: (i) is set by VBS, (ii) may vary from Program Bank to Program Bank, (iii) may be changed by VBS at any time, and (iv) will affect the yield clients receive from the Bank Sweep. Clients that enroll in the Bank Sweep receive a lower yield on deposits under the Bank Sweep than if Vanguard had not earned this fee because Program Banks reduce the amount of interest they are willing to pay depositors by the amount of the fee they pay to VBS. Clients that enroll in the Bank Sweep typically receive a lower yield than the Program Banks pay to some other customers who make deposits directly at the Program Banks. Based on the fee set by VBS, the return You receive on Eligible Balances under the Bank Sweep can be higher or lower than that offered under VBS' alternative Sweep Program for the Vanguard Brokerage Account: the Vanguard Federal Money Market Fund. Money market mutual funds have a fiduciary duty to seek to maximize the return paid to clients, subject to the fundamental investment policies of the money market mutual funds. By contrast, a bank is not required to seek to maximize the interest rate paid on client deposits.

Transfers Between VBS Accounts. If You own more than one VBS Account and You transfer funds from

a VBS Account using the Money Market Fund Sweep to an Account using the Bank Sweep, VBS will liquidate your Money Market Fund investments on the day of transfer, and then deposit these funds in the Bank Sweep the next day. You will not receive a dividend or interest on the day Your money market funds are liquidated.

8.2 Program Banks. The Program Banks will use Your Sweep Deposits in the Omnibus Accounts to support their investment lending and other activities. The profitability of each Program Bank is determined in part by the difference between the interest it pays on the Omnibus Accounts (and other costs incurred), and the interest or other income it earns on loans, investments and other assets. Program Banks will receive substantial deposits from the Bank Sweep at a price that may be less than alternative funding sources. Sweep Deposits in the Omnibus Accounts held at a Program Bank provide a stable source of funds for such bank. None of the Program Banks are affiliated with Vanguard.

9. Suspension/Termination of Bank Sweep by VBS.

9.1 Suspension of Bank Sweep. In its sole discretion, VBS can determine that it is necessary or advisable to suspend Your participation in the Bank Sweep, or to suspend making the Bank Sweep program generally available to any group of or all of its clients. If Your Account is subject to a suspension of Bank Sweep, then VBS will notify You in advance (if practicable). During any suspension, You authorize VBS to sweep any Eligible Balances that would otherwise be subject to the Bank Sweep into an alternative Sweep Program, or to maintain it as a Free Credit Balance. The Eligible Balances held through an alternative Sweep Program may not be FDIC-insured. Once the suspension is concluded, VBS will then seek to re-deposit such Eligible Balances. During any such suspension, You will earn any interest or yield on the alternative sweep vehicle selected by VBS, and VBS will not compensate you for any difference between what You may have earned in the Bank Sweep absent such temporary suspension. A temporary suspension will also not revoke Your enrollment in the Bank Sweep.

9.2 Termination of Bank Sweep Enrollment by VBS.

VBS reserves the right to terminate Your participation in Bank Sweep. In such event, it will notify You in advance if practicable, and then transfer Your Sweep Deposits to an alternative Sweep Program or maintain Your Eligible Balances as a Free Credit Balance. The Eligible Balances held through an alternative Sweep Program may not be FDIC-insured.

10. Bank Sweep Termination and Account Closing by You.

10.1 Termination by You. You may terminate Your participation in the Bank Sweep at any time. If you unenroll in Bank Sweep, VBS will sweep Your Deposits at each Program Bank to an alternate Sweep Program option, or hold all or a portion of them as Free Credit Balance. The Eligible Balances held through an alternate Sweep Program may not be FDIC-insured. For Vanguard Cash Deposit within Vanguard Brokerage Accounts, if You do not want any Program Banks to receive Your Eligible Balances, You should not enroll in the Bank Sweep or unenroll from the Bank Sweep by selecting the alternative Sweep Program at vanguard.com. For Vanguard Cash Plus within Vanguard Cash Plus Accounts, if you do not want any Program Banks to receive Your Eligible Balances, you should close Your Account.

10.2 Closing Your Account. If You close Your Account by transferring or redeeming all of the assets, Your Sweep Deposits from each Program Bank will be swept and the balance, net debits, will be paid out as You instruct. Vanguard Brokerage Accounts and Vanguard Cash Plus Accounts must have a zero dollar balance to be closed.

11. Limitations of "Beta" Program.

By enrolling, You are agreeing to participate in a "pilot" or "beta version" of the Bank Sweep that is still under development, and has not been released for sale, distribution or use by the general public. As a result, the Bank Sweep available in "beta version" is not the final Bank Sweep product or offer, and it is likely that certain additional Bank Sweep capabilities that will be available in the future are not available in the "beta version" made available to You at this time.

12. Electronic Notice and Delivery of Bank Sweep Disclosures.

VBS anticipates that several documents related to the Bank Sweep may change frequently, particularly any amendments to these Terms and changes to the Program Bank List (collectively, "Bank Sweep Disclosures"). VBS will provide You with prior written notice of changes to the Bank Sweep Disclosures by sending You an electronic message, including via email or Vanguard's Secure Message Center, available on Vanguard's website when you log in. The notice will also provide You with electronic delivery of the Bank Sweep Disclosures and any changes to them by providing links to updated documents in portable document format ("PDF") on Vanguard's website.

By enrolling, You agree to receive notice and electronic delivery of the Bank Sweep Disclosures as described above. You also agree that You have access to the hardware and software required to access the electronic notification and any related links on Vanguard's website, and to download or print the Bank Sweep Disclosures. This provision relates solely to notice and electronic delivery of the Bank Sweep Disclosures: VBS will continue to follow Your mail preferences (that is, e-delivery or U.S. mail) for all other records related to Your Account. You may request paper copies of current Bank Sweep Disclosures by contacting VBS.

13. Your Responsibility to Monitor Your Eligible Cash Investment Options.

Neither VBS nor any of its agents or service providers have any obligation to monitor Your Eligible Balance, including monitoring for FDIC insurance limits at Program Banks, Your decision whether to participate in the Bank Sweep, or Your decision whether to opt out of one or more Program Banks holding Your assets. As Your personal financial circumstances and other factors change, it may be in Your interest to change Your Sweep Program options or to invest cash from Your Brokerage Account in other investment vehicles. You can review Your investment options and other investments, as well as the current rates and returns of each by visiting vanguard.com.

14. Impacts to Asset Protection: SIPC Insurance vs. FDIC Insurance.

14.1 Securities Investor Protection Corporation ("SIPC").

When assets are swept into one or more Program Banks under the Bank Sweep, they are not covered by SIPC; instead, when they are received by the Program Banks, they are eligible for FDIC insurance, discussed below. Assets held at a Program Bank are not securities. Refer to the Brokerage Agreement for additional information about SIPC and how it applies to Your Account.

14.2 FDIC-insured Accounts. The Bank Sweep seeks to provide You with the security of FDIC insurance for Your Eligible Balances held on deposit at Program Banks ("Sweep Deposits"). FDIC insurance provides protection against the loss of Your Sweep Deposits, up to allowable limits, in the event the Program Bank fails. FDIC deposit insurance is backed by the full faith and credit of the United States. Specifically, as noted in Section 4b of the Brokerage Agreement, FDIC deposit insurance coverage is available for Your Sweep Deposits up to the FDIC standard

maximum deposit insurance amount ("SMDIA"), which is currently \$250,000 per insurable category of account ownership at that Program Bank, when aggregated with all other deposits held by You at such bank and in the same insurable category of account ownership. Special FDIC rules apply to insurance of trust accounts as well as certain other types of accounts. VBS will aggregate and allocate Bank Sweep deposits for trust accounts at the account level and not at the beneficiary level. Your Eligible Balances will be eligible for FDIC insurance once they are transferred to and are held at the Program Banks as Sweep Deposits. If the total amount of deposits that You hold at a Program Bank in the same insurable category of account ownership (including deposits made through the Bank Sweep at an Excess Bank (defined above), deposits You hold outside of the Bank Sweep product and other Accounts that enroll in the Bank Sweep) exceeds applicable FDIC insurance limits, the excess amount will not be eligible for FDIC insurance and You will be exposed to the credit risk of the Bank with respect to the amount of the excess.

14.3 Your Responsibility to Monitor FDIC Insurance

Limits. The Bank Sweep program establishes a maximum amount of Your Eligible Balances that may be placed for deposit through the Bank Sweep at all Program Banks (the "Maximum Eligible Deposit Balance Amount"), as well as a maximum amount of Your Eligible Balances that may be placed at any one Program Bank through the Bank Sweep (the "Program Bank Deposit Limit"). Eligible Balances in Your Account up to the Program Bank Deposit Limit then in effect may be deposited through the Bank Sweep program with a Program Bank even if the amount of Your Sweep Deposits with the Program Bank, when aggregated with other funds that You maintain in the same insurable category of ownership with the Program Bank, exceeds the SMDIA. **You are solely responsible for monitoring the aggregate amount that You have on deposit with each Program Bank in connection with FDIC insurance limits, including through other accounts with VBS.** As described in Section 3 above, You have the right to designate Program Banks as ineligible to receive Your Eligible Balances. (As described in Section 3 above, we will notify you of the addition of any Program Banks participating in the Bank Sweep.) If You have other funds on deposit at a Program Bank (outside of the Bank Sweep), You should consider designating that Program Bank as ineligible to receive Your Eligible Balances. VBS

does not monitor or take any responsibility for any funds or deposits You may have at any Program Bank outside the Bank Sweep for the specific VBS Account. Money You hold on deposit with any Program Bank that is separate from Your Sweep Deposit, including any other deposit product offered through VBS or its affiliates that qualifies for FDIC insurance (e.g., certificates of deposit), will not be taken into account in determining whether to sweep Your Eligible Deposit Balances to the Bank through the Bank Sweep product.

In addition, if You have more than one Account with the same category of account ownership, the Sweep Deposits in all such Accounts that enroll in the Bank Sweep will be aggregated in order to determine the amount covered by FDIC insurance. For example, if the SMDIA is \$250,000 and You have \$30,000 in Sweep Deposits in Account 1 and \$30,000 in Sweep Deposits in Account 2 at a particular Program Bank, as well as \$200,000 on deposit with that Program Bank outside of Your Accounts, only \$250,000 of Your \$260,000 will be eligible to be insured by the FDIC. If You have questions about basic FDIC insurance coverage, You may wish to seek advice from Your own attorney, including concerning FDIC insurance coverage of deposits held in more than one insurable capacity. You may also obtain information by contacting the FDIC, Deposit Insurance Outreach, Division of Depositor and Consumer Protection, by letter (550 17th Street, N.W., Washington, D.C. 20429), by phone (877-275-3342 or 800-925-4618 (TDD)), by visiting the FDIC Website at www.fdic.gov/deposit/index.html, or by e-mail using the FDIC's On-line Customer Assistance Form available on its website. Disclosures regarding FDIC insurance coverage in these Terms are summary only, do not state all of the requirements and conditions of FDIC insurance, and are subject to, and qualified in their entirety by, regulations and guidance of the FDIC.

15. Additional Vanguard Cash Plus Account Features.

This section sets forth additional information about Your Vanguard Cash Plus Account (the "Cash Plus Account").

15.1 Certain Features and Limitations of the Cash

Plus Account. The Cash Plus Account is a separate brokerage account that complements Your Vanguard Brokerage Account ("VBA") by helping You manage Your cash assets. Although it is a brokerage account, there are features of the VBA that are not available in the Cash Plus Account at this time, including, without limitation the following:

Available Sweep Options. The only Sweep option available for Your Cash Plus Account is the Bank Sweep.

Trading/Holding Securities. The Cash Plus Account currently offers the ability to invest in eligible Vanguard money market funds. For more information, visit <https://investor.vanguard.com/accounts-plans/vanguard-cash-plus-account>. VBS reserves the right to reject incoming non-eligible Securities transfers or remove any non-eligible Securities that post to a Cash Plus Account.

No Check Writing. Check writing is not an available feature on the Cash Plus Account.

15.2 Transfer Capabilities in the Cash Plus Account.

The Cash Plus Account includes money transfers to and from Your Cash Plus Account using the routing and account number provided by VBS ("Cash Plus Transfers").

Direct Deposits. You can have Your employer, retirement plan or government agency send funds to Your Cash Plus Account. These funds may include, without limitation, some or all of Your wages, Social Security and other government payments, pension and/or 401(k) disbursements, and tax and other refunds.

Direct Payments. You may authorize a third party to pull funds from Your Cash Plus Account by giving the third party the routing and account number. Examples of Direct Payments include, without limitation, paying monthly bills, donating to a charity, and paying businesses for their products or services online or by phone. The third parties You authorize must be located in the United States.

All Cash Plus Transfers will be credited or debited to or from Your Cash Plus Account as a transfer of funds processed through the Electronic Payments Association's ACH network ("ACH Transactions"). These credits and debits are normally subject to the rules of the electronic payments network that processes them, such as the rules of the ACH network. All ACH Transactions must be made between United States banks located in the United States. You cannot request international ACH Transactions. If the available cash in Your Cash Plus Account is insufficient to cover a transaction, VBS will decline it.

15.3 Initial Disclosures Required by Regulation E.

Consumer Liability. Tell Us AT ONCE if You believe the username and password associated with Your Cash Plus Account on vanguard.com ("Your Online Credentials") have been lost or stolen, or if You believe that an unauthorized transaction has been made without Your permission using Your Online Credentials. Telephoning is the best way of keeping Your possible losses down. You could lose all the money in Your Cash Plus Account. If You tell Us within 2 Business Days after You learn of the loss or theft of Your Online Credentials, You can lose no more than \$50 if someone used them without Your permission.

If You do NOT tell Us within 2 Business Days after You learn of the loss or theft of Your Online Credentials, and We can prove We could have stopped someone from using Your Online Credentials without Your permission if You had told Us, You could lose as much as \$500.

Also, if Your statement shows ACH Transactions that You did not make, including those made by the use of Your Online Credentials or other means, tell Us at once. If You do not tell Us within 60 days after the statement was mailed to You, You may not get back any money You lost after the 60 days if We can prove that We could have stopped someone from taking the money if You had told Us in time. If a good reason (such as a long trip or a hospital stay) kept You from telling Us, We may extend the time periods.

Contact in event of unauthorized transaction. If You believe Your Online Credentials have been lost or stolen, call VBS at 800-242-7455 or write to Us at Vanguard Brokerage Services, Attn: Investment Services, P.O. Box 982901, El Paso, TX 79998-2901. You should also call if You believe an unauthorized transaction has been made without Your permission.

Business Days. For purposes of these disclosures, Our Business Days are any day that is not (a) a Saturday or a Sunday or (b) a bank holiday specified in the banking holiday calendar published by the Federal Reserve Bank of New York.

Transfer types and limitations.

Account access. You may, subject to limitations: (i) withdraw from Your Cash Plus Account, (ii) make deposits to Your Cash Plus Account, (iii) transfer funds between Your Cash Plus Account and certain

other brokerage accounts, and (iv) pay bills directly by telephone or electronically from Your Cash Plus Account through third party providers.

Limitations on frequency of ACH Transactions in Your Cash Plus Account. There are no limits on the frequency of ACH Transactions at this time. VBS reserves the right to limit the frequency of ACH Transactions You may perform for security or other reasons, and will notify You of any such restrictions as appropriate.

Limitations on dollar amounts of ACH Transactions in Your Cash Plus Account. Vanguard may restrict the dollar amount of withdrawals from or deposits to Your Cash Plus Account(s). Generally, We will limit withdrawals requested on Our website, or deposits requested on Our website, to \$100,000 in a single Business Day. If You request multiple withdrawals or deposits on our website in a single day, We will process them in the order in which We receive them (including any preauthorized debits You may have established), and We will reject the ACH Transactions that would cause You to exceed the limits as outlined above.

Fees. VBS will not charge You for Cash Plus Transfers. Your bank or a third party payor may charge You fees.

Confidentiality. We will disclose information to third parties about Your Cash Plus Account or the transactions You make:

- Where it is necessary for completing transactions, or
- In order to verify the existence and condition of Your account for a third party, such as a credit bureau or merchant, or
- In order to comply with government agency or court orders, or
- In conformance with Our Privacy Policy, or
- If You give Us Your written permission.

Documentation.

- **Preauthorized Credits and Debits.** If You have arranged to have credits or debits made directly to/from Your Cash Plus Account, You can log on to Your account at vanguard.com or call VBS at 800-242-7455 to find out whether or not the credit or debit has been made.
- **Periodic statements.** You will get a monthly Cash Plus Account statement, unless there is no Brokerage Activity in a particular month. In any case, You will get a statement at least quarterly.

Preauthorized payments. VBS will not accept instructions from You to make regular payments out of Your Cash Plus Account on Your behalf. You may, however, be permitted to schedule preauthorized payments with a third party. You may place stop payments on recurring debits for Your Cash Plus Account by calling or writing VBS. You should also notify the third party to whom You gave authorization for the recurring debits to cancel that authorization. If You notify VBS at least 3 Business Days in advance of the scheduled payment, and give Us sufficient information to identify the recurring payment, We will either refuse the debit or refund the amount debited. You may call VBS at 800-242-7455 or write to Us at Vanguard Brokerage Services, Attn: Investment Services, P.O. Box 982901, El Paso, TX 79998-2901.

VBS' Liability. If We do not complete an ACH Transaction to or from Your Cash Plus Account on time or in the correct amount according to Our agreement with You, or if, after proper notice, We do not stop a preauthorized recurring payment, We will be liable for Your losses or damages. However, there are some exceptions. We will not be liable, for instance:

- If, through no fault of Ours, the amount of the ACH Transaction You attempt exceeds the available cash and sweep fund balances in Your Cash Plus Account, excluding those balances that are subject to VBS' seven-day hold or that otherwise have been placed on hold to ensure payment of previously authorized transactions, or are otherwise restricted;
- If the ACH Transaction You attempt exceeds the maximum daily ACH Transaction amount, as described above;
- If circumstances beyond Our control (such as fire, inclement weather, flood or other natural disaster) prevent the ACH Transaction, despite reasonable precautions that We have taken.
- There may be other exceptions stated in Our agreement with You.

15.4 Error Resolution Notice. In cases of errors or questions about Your ACH Transactions notify Us as soon as possible, including if You think Your statement or confirmation is wrong or if You need more information about an ACH Transaction listed on the statement or confirmation. We must hear from You no later than 60 days after We sent the FIRST statement on which the problem or error appeared. You may call VBS at 800-242-7455 or

write to Us at Vanguard Brokerage Services, Attn: Investment Services, P.O. Box 982901, El Paso, TX 79998-2901.

- Tell Us Your name and account number.
- Describe the error or the ACH Transaction You are questioning and explain as clearly as You can why You believe it is an error or why You need more information.
- Tell Us the dollar amount of the suspected error.

If You tell Us orally, We may require that You send Us Your complaint or question in writing within 10 Business Days.

We will determine whether an error occurred within 10 Business Days after We hear from You and will correct any error promptly. If We need more time, however, We make take up to 45 days to investigate Your complaint or questions. If We decide to do this, We will credit Your account within 10 Business Days for the amount You think is in error, so that You will have the use of the money during the time it takes Us to complete Our investigation. If We ask You to put Your complaint or question in writing and We do not receive it within 10 Business Days, We may not credit Your account.

For errors involving new accounts, We may take up to 90 days to investigate Your complaint or questions. For new accounts, We may take up to 20 days to credit Your account for the amount You claim is in error.

We will tell You the results within three Business Days after completing Our investigation. If We decide there was no error, We will withdraw any credit we made to Your account and send You a written explanation. You may ask for copies of the documents that We used in Our investigation.



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Marketing Corporation, member FINRA and SIPC.

Business continuity planning and disaster recovery at Vanguard

Continuity planning

To help give our clients the best chance at investment success, we must plan carefully to ensure a quick, smooth recovery in the event of a disaster or emergency. To that end, Vanguard has invested significant resources and is committed company-wide—from Chief Executive Officer Salim Ramji to each employee—to ensuring that your assets are safe and that our service to you continues without interruption.

Our approach is simple. We think of our business as a chain. Each link—people, facilities, processes, infrastructure, and information—is an important component of our operation and must be accounted for and tested as part of an overall business continuity program.

To accomplish this, we established the Business Continuity Management (BCM) group within our Global Risk & Security Division. BCM is dedicated to leading and coordinating the planning, development, testing, and execution of a global program designed to ensure the recovery and restoration of critical operations following a disruption.

Our approach includes three major components: (1) detailed, written business continuity plans; (2) data security and technology recovery; and (3) business continuity tests.

Business continuity plans

- We have developed plans to respond to a range of incidents, from worst-case scenarios—such as loss of a data center, buildings, or staff—to occurrences such as a power outage or unprecedented phone volumes.
- We work with our business teams to refine plans for short-, medium-, and long-term pandemic, cybersecurity, and other crisis scenarios.
- We assess the design of mission-critical suppliers' and business partners' business continuity programs.
- We assist Vanguard's human resources, global security, environmental and occupational safety, and compliance teams in coordinating with appropriate law enforcement authorities, health and safety experts, and regulators.
- We work with Vanguard's communications teams and others to ensure employees receive training and necessary information about alternate business processes, external developments, and health and safety precautions.

Data security and recovery

- The security of our clients' accounts is extremely important to us. Accordingly, we have implemented a variety of sophisticated measures designed to protect client assets and account information.
- We ensure, through our information technology team, that systems are equipped with the appropriate hardware and software to secure client data. To mitigate computer virus attacks and other acts of cyberterrorism, we have implemented best-in-class controls monitored by a dedicated team of information security specialists.
- We maintain redundant systems and off-site data storage to enable recovery of data in the event of a disaster.

Business continuity tests

- We conduct continuity and recovery plan tests for all Vanguard business units throughout the year. These include communication (phone tree and emergency notification system) tests and alternate workspace exercises.
- We conduct workshops, tabletop exercises, and crisis response drills. These have included Vanguard-only exercises as well as collaborations with law enforcement to validate our ability to work together during an emergency.
- We assess response and recovery capabilities with key business partners, critical vendors, and other external organizations through periodic tabletop exercises.
- We conduct disaster recovery simulations with our information technology division to gauge readiness in the event of an emergency.

Continuing to serve our clients

In addition to regular planning and testing, Vanguard uses several routine business strategies to ensure that our operations are both flexible and resilient.

To reduce the potential impact of global events (such as a pandemic) and regional incidents (such as a major power outage or winter storm), we maintain geographic diversification by running key business functions from multiple locations. Moreover, significant buildings have redundant or emergency power-supply capabilities. In addition, we are able to shift our operating model to manage business-as-usual operations remotely in most cases. This ensures that our most critical resources and employees are available to all clients during an emergency.

Complementing our multiple campus locations in the U.S., Vanguard offices outside the country offer additional recovery options. Our global locations can transfer trading between regions as necessary (which also facilitates follow-the-sun trading) and provide critical support functions such as IT incident management and cybersecurity operations. Should events warrant, our executive enterprise incident response and communications teams are prepared to lead our response.

Business disruption information

In the event of a significant business disruption, please visit our website at vanguard.com for additional information, including instructions to ensure prompt access to your assets.

Ascensus notice of business continuity plans

For clients of Vanguard Brokerage Services® and Ascensus College Savings

The following is a general description of plans in place at Vanguard, Vanguard Brokerage Services ("Vanguard Brokerage"), and Ascensus College Savings to maintain business continuity in the event that operations are disrupted for any reason.

At Ascensus*, we know how much our Plan participants rely on our systems and services. We also recognize that business disruptions of varying scope can and do occur. Ascensus wants you to know that we have plans in place designed to safeguard your assets and protect vital account information in the event of a business disruption. Ascensus and its affiliated companies have developed plans to recover from situations including, but not limited to, facilities failures that may cause business interruption. These plans are designed to account for interruptions of varying length and scope and require that Ascensus is able to recover mission-critical functions according to their time criticality. In order to maintain secure and effective plans, Ascensus does not provide the specific details in this notice, but you should be aware that Ascensus' corporate disaster recovery planning includes the following:

1. Identification of all mission critical systems and backup facilities and arrangements
2. Setup of alternate communication channels between Ascensus and its customer and business partners
3. Alternate physical site location and preparedness
4. An ongoing review of financial and operational risks
5. Employee safety strategies and communications

Ascensus mitigates risks to reduce the potential impact on customer service. In addition to following the guidelines stated above, Ascensus' recovery plans also include the following:

- **Designated Contingency Sites**—Ascensus maintains designated contingency sites to provide for the backup and recovery of data, maintenance of mission critical applications, and business resumption activities for key business personnel and critical business functions.
- **Notification to Clients**—Procedures for notifying Plan Participants have been established for Ascensus associates to follow in the event of an outage. Notification will include information regarding length of outage, instructions for contacting Ascensus, and support information (e.g., where to send faxes, and issues pertaining to data transmissions and communications).
- **Access to Your Funds**—A site outage should not impact your ability to access your investments, as Ascensus' business continuity plans are designed to facilitate sustained service. However, your ability to trade securities may be impacted by market events outside of Ascensus' control. Our business continuity plans are designed to ensure necessary personnel are available to assist with transactions.

Please note that Ascensus' business continuity plans are reviewed as necessary, and at least annually, to ensure they account for technology, business, and regulatory changes, operations, structure, or location. The plans are subject to change, and material changes will be reflected in an updated "Notice of Business Continuity Plans" that will be posted on our website, <https://www2.ascensus.com/college-savings-plans-ascensus-inc/>. You may obtain a current written copy of this notice by contacting an Ascensus representative or by visiting our website at <https://www2.ascensus.com/college-savings-plans-ascensus-inc/>.

*Ascensus consists of Ascensus College Savings Recordkeeping Services, LLC, Ascensus Investment Advisors, LLC, and Ascensus Broker Dealer Services, LLC.