

Agent Authorization

To grant another person (agent) full or limited authority to act on your accounts

Review the following important information before choosing the extent of authority to grant to your agent(s).

Note that granting full agent authority (Option A) empowers the agent(s) to act with the same authority you have on your accounts.

What your agent(s) can do	Option A Full agent	Option B Limited agent
Change your address.	X	
Change your beneficiary designations—even designate himself or herself as beneficiary.	X	
Exchange your assets among your Vanguard and Vanguard Brokerage Services® accounts.	Χ	X
Obtain information on your account online or by phone.	Χ	X
Redeem your assets and have the proceeds mailed in your name only.	Χ	X
Redeem your assets and have the proceeds mailed in anyone's name, including the agent's.	Χ	
Transfer your assets to a new or different registration.	Χ	
View beneficiary information online.	X	
View statements online.	Χ	X
Write checks on your account.	Χ	

Types of accounts that allow agent access	Option A Full agent	Option B Limited agent
Individually owned nonretirement accounts.	X	X
Joint accounts.	Х	X
IRAs (traditional, Roth, SEP, SIMPLE, rollover, and inherited).	X	X
Non-ERISA 403(b)(7) accounts.	Х	X
ERISA 403(b)(7) accounts.*		X
Individual 401(k) and/or Individual Roth 401(k).*		X
Organization and corporate accounts.		X
Trust registrations.		X
UGMA/UTMA accounts, custodial accounts, and education savings accounts.		Х
Vanguard Retirement Investment Program.**		X

^{**}The plan sponsor must sign in Section 8.



^{*}The administrator must sign in Section 5.

Mailing information

Make a copy of your completed form for your records.

Mail your completed form and any attached information in the enclosed postage-paid envelope.

If you do not have a postage-paid > P.O. Box 1110

| Vanguard

envelope, mail to: Valley Forge, PA 19482-1110

For overnight delivery, mail to: Vanguard

455 Devon Park Drive Wayne, PA 19087-1815

Reminders

- The agent(s) must complete Section 6 and sign in Section 7.
- The administrator for ERISA 403(b)(7) or Individual 401(k) plans must sign in Section 5.
- All trustees must sign in Section 8.
- If you are naming an organization as agent, please attach a completed Organization Resolution.
- If you are naming a trust as agent, please attach a completed Trustee Certification.



Agent Authorization

Use this form to grant another person (agent) full or limited authority to act on your accounts.

If you use this form to authorize a full agent, any full agent you previously authorized will be replaced by the new full agent. If you use this form to authorize one or more limited agents, any limited agent(s) you previously authorized will be replaced by the new limited agent(s).

Each account owner or trustee must complete a separate form.

Print in capital letters and use black ink.

Questions?

Call 800-662-2739.

If you need other forms or want to complete this form online, visit our website at www.vanguard.com/serviceforms.

1. Notice

THE PURPOSE OF THIS POWER OF ATTORNEY IS TO GIVE THE PERSONS YOU DESIGNATE (YOUR "AGENTS") BROAD POWERS TO HANDLE YOUR PROPERTY, WHICH MAY INCLUDE POWERS TO SELL OR OTHERWISE DISPOSE OF ANY REAL OR PERSONAL PROPERTY WITHOUT ADVANCE NOTICE TO YOU OR APPROVAL BY YOU. THIS POWER OF ATTORNEY DOES NOT IMPOSE A DUTY ON YOUR AGENTS TO EXERCISE GRANTED POWERS, BUT WHEN POWERS ARE EXERCISED, YOUR AGENTS MUST USE DUE CARE TO ACT FOR YOUR BENEFIT AND IN ACCORDANCE WITH THIS POWER OF ATTORNEY. YOUR AGENTS MAY EXERCISE THE POWERS GIVEN HERE THROUGHOUT YOUR LIFETIME, EVEN IF YOU BECOME INCAPACITATED, UNLESS YOU EXPRESSLY LIMIT THE DURATION OF THESE POWERS, YOU REVOKE THESE POWERS, OR A COURT ACTING ON YOUR BEHALF TERMINATES YOUR AGENTS' AUTHORITY.

YOUR AGENTS MUST KEEP YOUR FUNDS SEPARATE FROM THEIR FUNDS.

A COURT CAN TAKE AWAY THE POWERS OF YOUR AGENTS IF IT FINDS YOUR AGENTS ARE NOT ACTING PROPERLY.

THE POWERS AND DUTIES OF AN AGENT UNDER A POWER OF ATTORNEY ARE EXPLAINED MORE FULLY IN 20 PA.C.S. Ch. 56.

IF THERE IS ANYTHING ABOUT THIS DOCUMENT THAT YOU DO NOT UNDERSTAND, YOU SHOULD ASK A LAWYER OF YOUR OWN CHOOSING TO EXPLAIN IT TO YOU.

2. Account Owner Information

may be required.

Name of Owner, Minor, Trust, or Organization

Provide the full, legal name.	Name first, middle initial, last or Trust or Organ	ization	
	Last Four Digits of Social Security Number or En	mployer ID Number	Zip Code
If owner is a minor, trust, or organization, provide the name	Daytime Phone area code, number, extension	Evening Phone area code, num	ber, extension
of the person who will sign this > authorization.	Name of Custodian, Trustee, Authorized Person, or Authorized Representative		
Additional documentation			



3. Agent Access Information

Review this section thoroughly before choosing the extent of account access you want to grant to the agent.

Check either Option A (below) or Option B (on page 3) and provide the necessary account information. If you check both options, we will not be able to process the form.

This option empowers the agent to act with the same authority you have on your accounts.



Subject to Vanguard policies and procedures, I want the agent to have authority to perform the following transactions by mail, by phone, and online:

For my Vanguard mutual fund accounts.

- 1. Invest my assets in Vanguard funds and exchange my assets among Vanguard funds.
- Redeem shares from my fund accounts and, subject to Vanguard policies and procedures, have the proceeds made payable to anyone, including the agent, and sent to any address or any bank account the agent designates.

Note: Telephone distributions are permitted only for SIMPLE and SEP-IRAs, and for Vanguard Retirement Investment Program accounts. Distributions from a 403(b)(7) plan for which Vanguard is the custodian must be requested in writing. Distributions from an ERISA 403(b)(7) plan for which Vanguard is the custodian must be requested in writing and approved by the plan administrator.

- 3. Transfer shares from my fund accounts to any account, including in my agent's name.
- 4. Make, draw, sign, endorse, initiate, cash, deliver, and stop payment on any checks drawn on a Vanguard account with checkwriting privileges.
- 5. Change the address of record or the bank account information on my account.
- 6. Add, change, or delete any beneficiary designation I have on file with Vanguard, *including the* authority to name the agent as my beneficiary.
- 7. Sign or e-sign a new account application or otherwise open a new registration.
- 8. Enter into all other lawful transactions on any account to which this authorization applies.

For my Vanguard Brokerage Services accounts (if any).

- 9. Purchase, sell (including short sales), and trade in stocks, bonds, and other securities and contracts relating to the same.
- 10. Engage in margin and option trading. I understand that the eligibility of my brokerage accounts for option and margin trading will be based on my own financial position and not that of my agent.
- 11. Request distributions from my account payable to anyone, including the agent, and sent to any address or any bank account the agent designates.
- 12. Transfer securities from my accounts to the agent's name or direct that sales or redemption proceeds be issued in the agent's name and sent to the agent's address or a bank account the agent designates.
- 13. Make, draw, sign, endorse, initiate, cash, deliver, and stop payment on any checks drawn on an account with checkwriting or check card privileges.
- 14. Change the address of record on my account.
- 15. Sign or e-sign a new account application or otherwise open a new brokerage account.
- 16. Enter into all other lawful transactions on any account to which this authorization applies.



	Option	В.	Limited	agent	authority
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Subject to Vanguard policies and procedures, I want the agent to have authority to perform the following transactions by mail, by phone, and online:

- For my Vanguard mutual fund accounts. (1) Invest my assets in Vanguard funds and exchange my assets among Vanguard funds; and (2) redeem shares from my fund accounts and have the proceeds payable to me and sent to my address or bank account of record. Any distributions are subject to the terms and conditions of the plan type.
- For my Vanguard Brokerage Services accounts (if any). (1) Purchase, sell (including short sales), and trade in stocks, bonds, and other securities and contracts relating to the same; (2) engage in margin and option trading; and (3) request that distributions from my account be payable to me and sent to my address or bank account of record, all in accordance with procedures established by Vanguard Brokerage Services. I understand that the eligibility of my brokerage accounts for option and margin trading will be based on my own financial position and not the financial position of my agent.

I understand that the agent will *not* have authority to conduct transactions that would change the ownership of my accounts or assets, including:

- 1. Change the address of record or bank information on my accounts.
- 2. Transfer or invest assets into a different registration.
- 3. Redeem assets by phone, online, or by wire transfer to anyone other than me or my address of record.
- 4. Use checkwriting privileges on my accounts.
- 5. Add, change, or delete beneficiary designations.
- 6. Sign or e-sign a new account application or otherwise open a new registration on my behalf.

4. Types of Accounts You Want the Agent to Have Access to

You may give your agent authority to conduct transactions on any existing and future account registrations established under the Social Security or employer ID number referenced in Section 2 and checked below.

Options available to full agents and limited agents

Check all that apply.

separate sheet.

	☐ All my individually owned nonretirement accounts.
	☐ All my IRAs (traditional, Roth, SEP, SIMPLE, rollover, and inherited).
	☐ All my non-ERISA 403(b)(7) accounts.
List name below. > To list additional	All accounts owned jointly by me and the following individual(s). <i>Important:</i> This form grants the agent authority to act only for you. If the joint owner also wants the agent to act on his or her behalf, the joint owner must complete and submit a separate Agent Authorization.
co-owners, provide the > information on a	Name of Joint Owner first, middle initial, last



Options available to limited agents applies only if you chose Option B in Section 3

The following options are available only if you are granting an agent limited authority to act on your accounts.

Check all that apply.

	☐ All my ERISA 403(b)(7) accounts. Note: The administrator must sign in Section 5.
	☐ The following Vanguard Retirement Investment Program account(s). Note: All trustees must sign in Section 8. By signing, each trustee confirms that he or she has the authority to appoint agents and to delegate authority under the trust document and/or applicable law.
	Account Number include all 11 digits
	Account Number include all 11 digits
If you need more space to list	Account Number include all 11 digits
additional account numbers, photocopy > this page or provide	Account Number include all 11 digits
the numbers on a	
separate sheet.	☐ All my Individual 401(k) and/or Individual Roth 401(k) accounts. Note: The plan administrator must sign in Section 5.
	As custodian or authorized person, all UGMA/UTMA accounts, custodial accounts, and education savings accounts held for the minor or owner indicated in Section 2.
	As trustee, all trust registrations held under the Social Security or employer ID number referenced in Section 2. Note: All trustees must sign in Section 8. By signing, each trustee confirms that he or she has the authority to appoint agents and to delegate authority under the trust document and/or applicable law.
	As authorized representative, all accounts of the corporation or organization registered under the employer ID number referenced in Section 2. Note: You may be required to provide additional documentation; contact Vanguard at 800-662-2739 for more information.

5. Approval of Administrator for ERISA 403(b)(7) plans and Individual 401(k) plans

Note: If Vanguard is the custodian for the ERISA 403(b)(7) plan, the appropriate fiduciary is the plan administrator as designated on the plan's Vanguard 403(b)(7) Plan Authorization Form. If Vanguard is not the custodian, the appropriate fiduciary is the plan's designated custodian or trustee.

I authorize The Vanguard Group, Inc., Vanguard Marketing Corporation, and Vanguard Fiduciary Trust Company to accept instructions from the agent above in accordance with the terms and conditions of this Agent Authorization.

Signature of Plan Fiduciary	Date mm/dd/yyyy



6. Agent Information

- If you are naming multiple agents to have the same authority indicated in Section 3, copy and complete Sections 6 and 7 for the other agents to complete and mail with this form. Any one of those agents will have the authority you have granted in Section 3, unless you indicate otherwise in writing to Vanguard by attaching a letter of instruction to this form.
- All agents must sign in Section 7. We must have the signatures of all agents on file and all agents must sign written requests. Telephone and online requests can be made by any one of the agents.
- If you are naming an organization as agent, the organization must complete and submit an
 Organization Resolution. If you are naming a trust as agent, the trustee(s) must complete and
 submit a Trustee Certification.

Provide the	Provide the full, legal name. Name first, middle initial, last			
iuii, iegai name.	Birth Data mandaldian	Г M-: I A-I-I		
	Birth Date mm/dd/yyyy	E-Mail Addres	ss optional	
If the agent has	Daytime Phone area code, number,	, extension	Evening Phone area co	de, number, extension
applied for an SSN or EIN but has not received it, enter the date on which the	Social Security Number (SSN) or E	mployer ID Nເ	umber (EIN)	
agent applied.	Street Address A P.O. box or rura	l route is not a	accentable: address can b	ne military APO or FPO
	Street			
	City, State, Zip			Country if not U.S.
	Affiliation If you are authorizing a apply, regardless of employment or r			es account, check all that
	☐ The agent, or the agent's sp	ouse, is a Va	nguard employee.	
	☐ The agent is affiliated with or exchange, FINRA, or a munic			mber firm of an
	If this box is checked, the agen- compliance officer along with the employer, we send duplicate co	nis Agent Autho	orization. Upon written req	uest from the agent's
	Failure to include an approval let approval letter is not required for	ter may delay t	the processing of this appl	ication. An account
	☐ The agent is a "control personal Description of the largest of	on" or "affilia	te" of a nublic company	, as defined in
	Securities and Exchange Cor			as defined in
	This would include, but is not necessarily limited to, 10% shareholders, policymaking executives, and members of the Board of Directors.			
	If this box is checked, the agent below. If the agent is a "control additional companies and their t	person" or "af	filiate" of more than one o	
	Name of Company			Trading Symbol

Note: The agent must sign on the next page.



7. Agent Acknowledgment

The agent must sign below. The signature does not need to be notarized. If you are naming more than one agent, copy this page for the other agent(s) to complete and mail with this form.

I, the agent identified in Section 6 of this Agent Authorization, have read the attached power of attorney and am the person identified as the agent for the principal. I hereby acknowledge that, in the absence of a specific provision to the contrary in the power of attorney or in 20 PA.C.S. Ch. 56, when I act as agent:

- I shall exercise the powers for the benefit of the principal.
- I shall keep the assets of the principal separate from my assets.
- I shall exercise reasonable caution and prudence.
- I shall keep a full and accurate record of all actions, receipts, and disbursements on behalf
 of the principal.

I understand that I may resign my position as agent at any time by notifying the principal and Vanguard in writing.

☐ Check here if you would like to receive copies of account statements.	
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For Vanguard Brokerage Option Accounts only:

I understand the investment objectives and trading plan of the registered account owner(s) and will only use trading strategies that are consistent with these objectives and plans.

I acknowledge that I have received from the registered account owner(s) (or I already possess) copies of the Vanguard Option Application and Vanguard Brokerage Option Account Agreement (Option Agreement), and I have read and understand them. I also acknowledge that if the registered account owner(s) are approved for options trading, they will be sent the booklet, *Characteristics and Risks of Standardized Options*. I agree to read the booklet prior to conducting any trades in the registered account owner's(s') account. I also accept all the terms and conditions of the Option Agreement.

I acknowledge receiving a copy of the Option Agreement, which contains a predispute arbitration clause highlighted in paragraphs 14 and 15 on page 3. By signing this authorization, I agree to be bound by the terms of the Option Agreement.

Signature of Agent	Date mm/dd/yyyy

If the agent is an organization, provide the following information. Also complete an Organization Resolution and mail it with this form.

Name of Organization	Name and Title of Authorized Representative
Signature of Authorized Representative	Date mm/dd/yyyy



8. Authorization of Account Owner

I agree that none of The Vanguard Group, Inc., Vanguard Fiduciary Trust Company, Vanguard Marketing Corporation, or any of their affiliates will be held responsible for my decisions or for the investment recommendations or decisions of my agent(s), and is under no duty whatsoever to question any instructions received from the agent(s) or the suitability of any transactions requested by him/her/them.

I agree to indemnify and hold The Vanguard Group, Inc., Vanguard Fiduciary Trust Company, Vanguard Marketing Corporation, their affiliates, and each of the investment company members of The Vanguard Group and their respective officers, employees, and agents (collectively, Vanguard) harmless from acting on instructions, whether oral, written, or online, reasonably believed by Vanguard to have originated from my agent(s), and from all acts of my agent(s) involving the Vanguard mutual fund accounts or Vanguard Brokerage Services accounts covered by this authorization.

In the event of my disability or incapacity, this authorization will remain in full force and effect. This authorization will terminate only when one of the following occurs:

- Vanguard receives notice of my revocation. I understand that I have the right to revoke this
 authorization at any time and, if I have named multiple agents, any revocation will revoke the
 authority of all the agents. I further understand that each authorization covering the same accounts
 submitted to Vanguard will revoke any prior authorization 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 such notice.
- Vanguard receives notice of my death. I understand that the authority granted under this
 authorization terminates at my death. My death will not affect any liability resulting from
 transactions initiated before Vanguard has had a reasonable amount of time to act upon such notice.

I have read this authorization and the notice in Section 1 in their entirety or had them explained to me, and I understand their contents.



If you need more space for additional signatures, photocopy this page.

Do not sign until you are in the presence of the person notarizing your signature below.

For Vanguard
Retirement Investment
Program accounts, all
trustees must sign.
For all other plans and
accounts, the account
owner/participant
must sign.

Signature of Account Owner/Trustee	Date mm/dd/yyyy

Notarization/Affidavit of Account Owner

The notary seal must be dated within 30 days of receipt of this document by Vanguard.	Date mm/dd/yyyy On	Name of Owner or Authorized Person
	County or State	has appeared before me, has proven to be the
	individual named in Section 2, and has acknowledged that this authorization is his/her wish.	
	Signature of Notary Public	Notary Seal
	Commission Expiration Date mm/dd/yyyy	

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