

What's inside:

- IRA Contribution Recharacterization Form

IRA Contribution Recharacterization Kit

To authorize the recharacterization of all or part of your IRA contributions for the current or prior tax year

A recharacterization allows you to change an IRA contribution from one type of IRA to another. The change will be recorded as if the contribution were originally made to the second IRA. Roth conversions made in 2018 or later are not permitted to be recharacterized. If you want to recharacterize a conversion made in 2017, contact Vanguard. The IRA Contribution Recharacterization Form cannot be used to recharacterize 2017 conversions.

Important information about earnings and losses

The IRS requires that a recharacterization of a contribution be adjusted for any earnings or losses starting with the original purchase date of the amount being recharacterized. The earnings/loss calculation performed by Vanguard is based on the performance of the holdings in the entire IRA in accordance with IRS regulations.

If the earnings calculation results in a gain, the principal amount being recharacterized and the associated earnings will be transferred to the receiving IRA. If the calculation results in a loss, the principal amount being recharacterized will be reduced by the negative earnings rate and then transferred to the receiving IRA.

For more information about earnings and losses, refer to IRS Publication 590-A.

Important tax information

Tax consequences

All recharacterizations are reported to the IRS. Vanguard will send you and the IRS two forms:

- **IRS Form 1099-R.** This form reports the amount you recharacterized and any income or loss on the investment. Refer to it when filing your income tax return.
- **IRS Form 5498.** This form reports the amount you moved to the receiving IRA. Keep it with your retirement account records.

For more information about recharacterization rules and IRS reporting requirements, refer to IRS Publication 590-A or IRS Form 8606 (available at [irs.gov](https://www.irs.gov)).

Tax-filing deadline

You can recharacterize a contribution anytime until the federal income tax-filing deadline (including extensions) for that particular tax year. If you've already filed your tax return or filed for an extension in a timely manner—without recharacterizing—the IRS will grant you an automatic six-month extension, from the standard April 15 tax deadline to October 15. However, you may need to file an amended tax return.

Assets previously held with another institution

If you initially made a contribution at another financial institution and then transferred those assets to Vanguard, please have that institution provide you with an earnings statement for the amount being recharacterized during the time it held those assets. The statement must include the amount of principal while at the institution along with any earnings or losses those amounts generated. Attach the earnings statement to this form when you mail it to us. If your previous financial institution won't provide you with an earnings statement, consult a tax advisor or refer to IRS Publication 590-A.

Questions?

Call us at 800-662-2739.



IRA Contribution Recharacterization Form

Effective October 2020

Use this form to authorize the recharacterization of all or part of your IRA contributions for the current or prior tax year. This transaction will be reported to you and the IRS on Forms 1099-R and 5498. If you're making multiple recharacterizations, complete a separate form for each account type.

Don't use this form for recharacterizations of 2017 conversions, or for SEP-IRA *employer* contributions or inherited traditional IRAs. Contact us for more information.

Important: Please hold off on making any trades in your IRA until your recharacterization is complete. For brokerage accounts, if you have any open orders on holdings you're recharacterizing from, we'll cancel those orders before removing the assets. Once the recharacterization is complete, you may reenter the orders. **If there's a debit balance in your brokerage IRA, your recharacterization may be delayed.**

Print in capital letters and use black ink.

Save time.

Open your IRA by going to vanguard.com/us/openaccount.

Questions?

Call 800-662-2739.

1. Account owner information

Provide the following information exactly as it's listed on the Vanguard IRA® where your assets are now.

Provide the full, legal name. >

Name <i>first, middle initial, last</i>	
Daytime phone <i>area code, number, extension</i> Mobile	Evening phone <i>area code, number, extension</i> Mobile
Last four digits of Social Security number	Zip code

2. IRA you want to recharacterize from

Existing IRA type *Check one.*

Traditional/Rollover IRA	Roth IRA	SEP-IRA (employee contribution)
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3. Information about your recharacterization

If you're recharacterizing a series of contributions, enter the initial date of the series below. If you don't provide a valid contribution date, the most recent contributions will be recharacterized first, until the total amount to be recharacterized is satisfied.

Recharacterization type *Check one.*

Contributions	Contributions made at another financial institution, then transferred to Vanguard. You must complete Section 4.
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Account number <i>Enter all digits.</i>	Contribution <i>mm/dd/yyyy</i>
Tax year of contribution <i>required</i>	Total amount to be recharacterized \$

4. Did your original contribution occur at Vanguard?

If the contribution was made at Vanguard, skip to Section 5. If the contribution was made at another firm and transferred to Vanguard, you **must** complete Section 4. This information is required because we need to know what your contribution earned (or lost) while it was at the other firm. Vanguard can't complete an earnings calculation for the assets while they were held elsewhere, so we can't accept statements from another firm.

Was the contribution made at Vanguard? *Check one.*

Yes <i>Skip to Section 5.</i>	No
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You're required to have the previous firm complete an earnings calculation. Simply enter the information from your earnings statement below. We'll combine that information with our calculation of the earnings (or losses) of the assets while they were at Vanguard.

If the previous firm won't complete the calculation, consult a tax advisor or refer to IRS Publication 590-A. Vanguard *won't* complete an earnings calculation on assets that were held at another firm.

Name of previous firm	Earnings at previous firm \$	<i>or</i>	Loss at previous firm \$
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Return pages 1–4 of this form, even if some sections are left blank.

5. How you'd like to remove the recharacterized amount from your IRA

You must provide all requested information for each holding the recharacterized amount should come from. Any amounts listed below will be adjusted for earnings/losses based on proportionate earnings/losses on the entire IRA.

- On a partial in-kind recharacterization from a brokerage account, the value of any holdings will be determined by the previous day's closing price. On a full in-kind recharacterization, the value of any holdings in a brokerage account will be determined by the current day's closing price.
- All recharacterizations from Vanguard mutual fund accounts will be determined by the current day's closing price.

Provide the holdings and amounts for the recharacterization. The total amount must match what was entered in Section 3.

If you need to list additional holdings, copy this page. >

Name of holding	Fund # or Ticker symbol	Amount \$
Name of holding	Fund # or Ticker symbol	Amount \$
Name of holding	Fund # or Ticker symbol	Amount \$
Name of holding	Fund # or Ticker symbol	Amount \$
Name of holding	Fund # or Ticker symbol	Amount \$
Name of holding	Fund # or Ticker symbol	Amount \$
Name of holding	Fund # or Ticker symbol	Amount \$
Name of holding	Fund # or Ticker symbol	Amount \$
		Total amount \$

6. Additional holding for remaining recharacterization amount

Important: Because of market fluctuations, the account balances of the holdings you indicate might not be enough to remove the contribution along with any earnings. As a result, you must indicate an additional holding from which any remaining recharacterized amount and attributable earnings should be withdrawn. This additional holding must be in the same IRA from which you contributed.

If you designate your brokerage account settlement fund for this purpose, shares will be liquidated and transferred in cash.

You MUST provide this information. >

Name, fund number, or ticker symbol of holding
--

You must sign on page 4.

7. IRA you want the assets recharacterized to

Important:

- Your recharacterized assets will be transferred in kind to the receiving IRA. Shares from your brokerage account settlement fund will be liquidated and transferred in cash.
- If you need to establish a new IRA, go to vanguard.com/us/openaccount.
- Contact us if you need to open an inherited IRA.

Type of IRA *Check one.*

<input type="checkbox"/> Traditional	<input type="checkbox"/> SEP-IRA (employee contribution)	<input type="checkbox"/> Roth IRA
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Account number

8. Authorization

I authorize The Vanguard Group, Inc., or Vanguard Brokerage Services® (collectively, "Vanguard") to recharacterize IRA assets according to the terms and conditions set forth in this IRA Contribution Recharacterization Form. I certify that all the information provided on this form is correct. I also certify that I'm requesting my recharacterization before the applicable IRS recharacterization deadline.

Sign and date here.
If the owner is a
minor, the custodian
must sign and date.

Signature of account owner or custodian X	Date <i>mm/dd/yyyy</i>
Print name	

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.

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

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

Reminders

Reestablishing account services

Most services will carry over from the original IRA to the receiving IRA during the recharacterization. Some services may not, so you'll need to reestablish them on the receiving IRA.

Tax-filing deadline

You can recharacterize a contribution anytime until the federal income tax-filing deadline (including extensions) for that particular tax year. For more information, refer to the inside cover of this kit.

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Important update for IRA owners

The Setting Every Community Up for Retirement Enhancement (SECURE) Act signed into law on December 20, 2019, includes several provisions that affect IRAs.

Highlights

- **IRA owners over age 70½ can contribute to traditional IRAs.** The age limit for contributing to a traditional IRA (including employee contributions to a SEP-IRA) has been eliminated. If you're still working, you may be able to contribute to your traditional IRA for 2020 and subsequent years, even after you reach age 70½ (provided that you're otherwise eligible to make IRA contributions).
- **IRA owners may be able to delay taking distributions until they reach age 72.** If you turn 70½ after December 31, 2019, the deadline for taking your first required minimum distribution (RMD) from your traditional IRA (including SEP and SIMPLE IRAs) is now April 1 of the year after the year you turn 72. (If you turned 70½ prior to January 1, 2020, this rule change doesn't apply to you, and you must continue taking RMDs).
- **IRA owners younger than age 59½ can take penalty-free distributions for the birth or adoption of a child.** Beginning January 1, 2020, you can take a penalty-free distribution from your IRA (including traditional, Roth, SEP, and SIMPLE IRAs) up to \$5,000 for the birth or adoption of a child. Such distributions must be made within one year from the date of the birth or adoption and can later be rolled back into an IRA. Special IRS reporting requirements apply.
- **Nonspouse beneficiaries (with certain exceptions) must take RMDs within ten years.** In general, nonspouse beneficiaries (with certain exceptions) who inherit IRAs (including traditional, Roth, SEP, and SIMPLE IRAs) from owners who die after December 31, 2019, must distribute the entire account balance by the end of the tenth year after the IRA owner's death. A spouse beneficiary and certain nonspouse beneficiaries (including beneficiaries who are chronically ill or disabled, minor children of the IRA owner, beneficiaries not more than ten years younger than the IRA owner, and certain trusts) must generally take RMDs annually over their own life expectancy. For more information about the RMD rules, refer to IRS Publication, 590-B, Distributions from Individual Retirement Arrangements (available at [irs.gov](https://www.irs.gov)).

Please note that the Vanguard Traditional and Roth IRA Custodial Account Agreement and Disclosure Statement and the Vanguard SIMPLE IRA Custodial Account Agreement and Disclosure Statement don't yet reflect the changes in the law. We'll notify you of the changes and how to access the updated documents after they're amended to reflect the new rules.

Learn more

For more information about the SECURE Act and its effect on IRA owners and their beneficiaries, visit investor.vanguard.com/inheriting-accounts/rmd-rules-for-inherited-iras.

If you have questions about how the new rules apply to your personal situation, we encourage you to consult a qualified tax advisor.

Thank you for belonging to the Vanguard community of investors.

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Vanguard®

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

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The Vanguard Traditional IRA, SEP-IRA, and Roth IRA

Disclosure Statement and Custodial Account Agreement

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Vanguard Traditional and Roth IRA Disclosure Statement

Introduction

This Disclosure Statement describes the general requirements and features of both a traditional and a Roth IRA, as well as the specific features of the Vanguard Traditional and Roth IRA Custodial Account Agreement. This Disclosure Statement is provided in accordance with Internal Revenue Service (IRS) regulations. (Where the requirements for a traditional and a Roth IRA are the same, this Disclosure Statement refers to both types of accounts as an "IRA.")

Section I

Revocation

You may revoke your Vanguard IRA® at any time within seven days after it is established by mailing or delivering a written notice of revocation to Vanguard, P.O. Box 982901, El Paso, TX 79998-2901. Any notice of revocation will be deemed mailed on the date of postmark (or if sent by certified or registered mail, the date of certification or registration) if it is deposited in the U.S. Postal Service in an envelope or other appropriate wrapper, first-class postage prepaid, properly addressed. Upon revocation, you will be entitled to a full refund of your entire IRA contribution without adjustment for administrative expenses, sales commissions (if any), or fluctuations in market value. If you have any questions concerning your right of revocation, please call 800-662-2739 during normal business hours.

Section II

Establishment of your account

A. Statutory requirements

An IRA is a trust or custodial account established for the exclusive benefit of you and your beneficiaries. The Internal Revenue Code of 1986, as amended, provides for several types of IRAs, including a "traditional" IRA and a "Roth" IRA. You must clearly designate on the forms establishing your IRA that your account is either a traditional IRA or a Roth IRA. An IRA must be created by a written document that meets all of the following requirements:

- 1. Bank trustee or custodian.** An IRA must be established with a qualified trustee or custodian, such as Vanguard Fiduciary Trust Company, which is a bank or other person approved by the IRS. You cannot be your own trustee or custodian.
- 2. Cash contributions up to annual contribution limit.** All contributions to your IRA, excluding rollover or conversion contributions as described in Sections V and VI, must be made in cash. The total amount of contributions, other than rollover or conversion contributions, for any taxable year to your traditional and Roth IRAs may not exceed the contribution limit in effect for such taxable year as described in Section III[A].
- 3. Nonforfeitable.** The balance of your IRA account must be fully vested and nonforfeitable at all times.

- 4. Prohibitions against life insurance and commingling.** No part of your IRA assets may be invested in life insurance contracts, nor may your IRA assets be commingled with other property except in a common trust fund or common investment fund.

- 5. Distribution rules.** Your IRA must comply with certain minimum distribution requirements, which are described in Section VIII. (No age 70½ distribution requirements apply for Roth IRAs.)

B. Tax consequences of traditional IRA

In general, the federal income tax consequences of establishing a traditional IRA are the following:

- 1. Tax-deferred earnings.** Earnings and gains on your traditional IRA contributions will not be subject to federal income taxes until they are actually distributed.
- 2. Deductible contributions.** You may be permitted to make contributions to your traditional IRA that are deductible for federal income tax purposes in an amount up to the lesser of the contribution limit in effect for such year or 100% of your current-year compensation. You are permitted to make deductible traditional IRA contributions if neither you nor your spouse is an active participant in an employer-maintained retirement plan, or if your adjusted gross income for the taxable year does not exceed certain dollar limits. To the extent that your traditional IRA contributions are not deductible, they may be treated as "nondeductible contributions" that must be reported on your federal income tax return. See Section III[D] for more information.
- 3. Taxable distributions.** Distributions from your traditional IRA will generally be taxable as ordinary income in the year of receipt, with the exception that if you have made any nondeductible contributions or after-tax rollover contributions to your traditional IRA, part of your traditional IRA distributions may be treated as a nontaxable return of your nondeductible traditional IRA contributions or after-tax rollover contributions. Any distributions you receive from your traditional IRA prior to age 59½ may be subject to an additional 10% tax (although exceptions may apply—see Section VII[C]). You must start receiving certain minimum distributions from your traditional IRA beginning by April 1 of the year following the year in which you attain age 70½ (see Section VIII[B]).
- 4. Tax-free rollovers.** You may be eligible to make a rollover contribution to your traditional IRA of cash or other assets you receive from another individual retirement plan or employer-maintained retirement plan. In addition, you may be eligible to roll over the taxable amount you withdraw from your traditional IRA to another individual retirement plan or an employer-maintained retirement plan. See Sections V and VI for more information.

5. **State taxes.** The state tax consequences of your traditional IRA will vary from state to state. You are strongly encouraged to consult a tax advisor to determine the state tax consequences of establishing a traditional IRA.

C. Tax consequences of a Roth IRA

In general, the federal income tax consequences of establishing a Roth IRA are the following:

1. **Tax-deferred earnings.** Earnings on contributions to a Roth IRA will accumulate on a tax-deferred basis and may ultimately be tax-free if the earnings are part of a "qualified distribution." (A "qualified distribution" is generally a distribution made to you after age 59½ and after you have held your Roth IRA account at least five years [see paragraph 3, below].)
2. **Nondeductible contributions.** Contributions to a Roth IRA are not deductible for federal income tax purposes.
3. **"Qualified" distributions are completely tax-free.** A distribution from a Roth IRA will be tax-free for federal income tax purposes as long as it is a "qualified distribution." A qualified distribution is a distribution from a Roth IRA: (1) made after a five-year holding period, and (2) made after age 59½, due to death or disability, or for the first \$10,000 of "qualified first-time home purchase expenses." See Section VIII[B] for more details.
4. **"Nonqualified" distributions are tax- and penalty-free return of contributions first; taxable earnings last.** Any distribution that is not a qualified distribution (for example, a distribution taken before you hold your Roth IRA for five years) is first considered a tax- and penalty-free distribution of your contributions to your Roth IRA. Once an amount equaling the cumulative contributions to your Roth IRA has been recovered tax-free, all further distributions that are not qualified distributions will be subject to both ordinary income tax and possibly an additional 10% penalty tax (if you are under age 59½). See Section VII[B] for more details.
5. **Rollovers.** You may be eligible to make a rollover contribution to your Roth IRA of cash or other assets you receive from another Roth IRA or from a designated Roth account in a 401(k) or 403(b) plan. In addition, you may be eligible to roll over the amount you withdraw from your Roth IRA to another Roth IRA. See Section V for more details.
6. **Conversions.** If you are not a married individual filing a separate tax return, you may roll over or "convert" a traditional IRA into a Roth IRA. Distributions from an eligible retirement plan can be rolled over (i.e., "converted") directly to a Roth IRA (subject to the same income limits as traditional to Roth IRA conversions).
7. **State taxes.** The state tax consequences of your Roth IRA will vary from state to state. You are strongly encouraged to consult a tax advisor to determine the state tax consequences of establishing a Roth IRA.

Section III

Contributions

A. Amount and timing of traditional and Roth IRA contributions

Maximum annual contributions to all IRAs. The total amount of contributions to all of your IRAs (both traditional and Roth IRAs) for any taxable year (excluding any rollover or conversion contributions as described in Sections V and VI) may not exceed the lesser of the contribution limit in effect for such taxable year as described below or 100% of your compensation for the taxable year. If you reach age 50 before the close of the tax year for which you are making a contribution, your annual contribution limit is increased by \$1,000 as described below. In addition, the maximum contribution permitted under a Roth IRA is phased out to \$0 for individuals earning above a certain level of adjusted gross income (see Section III[C]).

The annual IRA contribution limits for 2018 are shown below.

Maximum annual contribution Individuals under age 50	Maximum annual contribution Individuals age 50 or older
\$5,500	\$6,500

The contribution limit will be periodically adjusted for cost-of-living increases in \$500 increments.

Definition of compensation. For purposes of the IRA contribution limits, your compensation includes all wages, salaries, tips, professional fees, bonuses, and other amounts you receive for providing personal services, and any earned income from self-employment. It does not include earnings and profits from property such as dividends, interest, or capital gains, or amounts received as a pension or annuity, or as deferred compensation. Your compensation includes any taxable alimony or separate maintenance payments you may receive under a decree of divorce or separate maintenance. Compensation includes nontaxable combat pay received by a member of the U.S. Armed Services.

Repayment of qualified reservist distribution. If you receive a qualified reservist distribution from an IRA, 401(k), or 403(b) plan, you may repay the amount of the distribution at any time during the two-year period beginning on the day after the end of your active duty period or by August 17, 2008, if later. Such repayment contributions are not subject to the annual IRA contribution limits described above. No deduction is permitted for repayment contributions.

IRA for your spouse. If both you and your spouse earn compensation for a taxable year, you may each make contributions to a traditional or Roth IRA up to the lesser of the contribution limit in effect for such taxable year or 100% of your compensation for the taxable year, although your Roth IRA contribution limit may be phased out based on your adjusted gross income for the year (see Section III[C]). In addition, under a special rule for spousal IRAs (explained in Section III[E]), contributions of up to the contribution limit in effect for such taxable year may be made to either a traditional IRA or, subject to the adjusted gross income phase-out discussed in Section III[C], a Roth IRA of a spouse, regardless of the income level of the spouse,

provided the married couple files a joint tax return and has total compensation at least equal to their combined IRA contributions.

Contributions in cash. All contributions to your traditional or Roth IRA (other than rollover contributions as described in Section V) must be made in cash, check, or by electronic transfer. If you wish to use shares of a previously established Vanguard fund account for your annual IRA contribution, you must first redeem the amount of shares you wish to invest, and then use the cash proceeds as your IRA contribution.

Contributions up to the date your return is due (April 15). You may make contributions to your traditional or Roth IRA for a taxable year at any time during the year, either periodically or in a lump sum, or in the next year, up to the due date for filing your federal income tax return for the taxable year, not including extensions. For taxpayers who file on a calendar-year basis, the latest date for any year is April 15 of the following year. If you do not inform the Custodian of the year for which an IRA contribution is made, the Custodian will assume that the contribution is made for the year in which it is received.

Only Roth IRA contributions permitted after age 70½. If you are otherwise eligible, you are permitted to make Roth IRA contributions even after you have attained age 70½. You are not permitted to make traditional IRA contributions (either deductible or nondeductible) for the year you attain age 70½ and any subsequent years (other than rollover contributions as described in Section V).

Maximum contributions not required. You do not have to contribute to your traditional or Roth IRA every year, nor are you required to make the maximum contribution for any year. However, if you decide in any year not to make the maximum IRA contribution, you may not make up the missed contribution amount in later years. For both the Vanguard traditional and Roth IRAs, there is a minimum initial contribution required when you establish your account, as described in Section XII[D].

B. Traditional IRA: Deductible contributions

Contributions to your traditional IRA may be deductible in whole or in part for federal income tax purposes, as determined by the rules summarized below. Contributions to a Roth IRA are not deductible for federal income tax purposes. You should contact your tax advisor to determine the deductibility of IRA contributions for state income tax purposes.

Fully deductible contributions if you do not participate in an employer plan. If neither you nor your spouse is an active participant in an employer-maintained retirement plan, your annual traditional IRA contributions up to the lesser of the contribution limit in effect for the taxable year (as described in Section III[A]) or 100% of current-year compensation are generally fully deductible (regardless of your level of adjusted gross income).

Phase-out of deduction if you participate in an employer plan. If you are an active participant in an employer-maintained retirement plan for a taxable year, your traditional IRA deduction is phased out as your adjusted gross income approaches the upper limits of the applicable “phase-out range.” The phase-out ranges for joint and single filers are as follows:

Year	Joint filers Phase-out range	Single filers Phase-out range
2018	\$101,000–\$121,000	\$63,000–\$73,000

The dollar limits above will be periodically adjusted for cost-of-living increases in \$1,000 increments.

Formula for deduction phase-out for active participants.

As stated on the previous page, if you are an active participant in an employer-maintained retirement plan for a taxable year, your traditional IRA deduction limit for the year is phased out as your adjusted gross income exceeds the applicable adjusted gross income threshold for the tax year. This phase-out is accomplished as follows: Your maximum traditional IRA deduction is reduced by an amount, rounded down to the nearest \$10, that bears the same ratio to the maximum deductible amount as your “excess” adjusted gross income for the taxable year bears to \$10,000 for single filers or \$20,000 for joint filers.

Deduction limit for spouse. If you are married and file a joint return, and neither you nor your spouse is an active participant in an employer-maintained retirement plan, the traditional IRA contributions for each spouse for the taxable year will be fully deductible regardless of the level of your combined adjusted gross income.

If you are married and file a joint return and both you and your spouse are active participants in employer-maintained retirement plans, the traditional IRA deduction limit for each spouse for the taxable year is phased out as your combined adjusted gross income exceeds the applicable threshold (see the joint filer phase-out range above).

If you are married and file a joint return and you are an active participant in an employer-maintained retirement plan but your spouse is not, a higher adjusted gross income phase-out will apply for your spouse’s (but not your) deduction limit. The traditional IRA deduction limit for your spouse, who is not an active participant, is phased out if your combined adjusted gross income for the taxable year falls between \$150,000 and \$160,000, as adjusted for cost-of-living increases (i.e., \$189,000–\$199,000 for 2018). The deduction limit for you—the active participant in an employer-maintained plan—is phased out as your combined adjusted gross income for the tax year exceeds the applicable threshold (see the joint filer phase-out range above).

Special rules for married couples filing separate returns.

If you are a married individual filing a separate return and you or your spouse is an active participant in an employer-maintained retirement plan, the deduction for your traditional IRA contributions will be phased out as your adjusted gross income for the taxable year increases from \$0 to \$10,000.

However, if you and your spouse did not live together at any time during the taxable year, your filing status will be considered to be single for traditional IRA deduction purposes, and your traditional IRA deduction limit will be determined without regard to whether your spouse is an active participant in an employer retirement plan.

Active participant defined. For purposes of the traditional IRA deduction limits, you are considered an active participant in an employer-maintained retirement plan for a taxable year if you participate in a qualified pension, profit-sharing, stock bonus, or annuity plan (including a Keogh or 401(k) plan), a tax-sheltered annuity plan under Section 403(b) of the Internal Revenue Code, a simplified employee pension (SEP) plan, or a government plan (but not an eligible deferred compensation plan under Section 457(b) of the Code) during any part of the plan year ending with or within the taxable year. The determination of whether you are an active participant in an employer-maintained retirement plan is made without regard to whether your rights under the plan are nonforfeitable or vested. Under a defined contribution plan, you are generally considered an active participant if any employer contribution or forfeiture is allocated to your account during the taxable year. Under a defined benefit plan, you are considered an active participant if you are not excluded by the plan's eligibility requirements during any part of the plan year ending with or within your taxable year. However, if you have not satisfied the plan's minimum age or service conditions required for participation, you are not considered an active participant in the plan. The Form W-2 you receive from your employer each year should indicate whether you are an active participant in an employer-maintained retirement plan.

Adjusted gross income. For purposes of the traditional IRA deduction limits, your adjusted gross income is calculated by taking into account any taxable Social Security benefits and taxable IRA distributions you may receive for the year. However, your adjusted gross income is not reduced by any deductible traditional IRA contributions you may make for the taxable year, employer-provided adoption assistance that is otherwise not taxable, or proceeds of U.S. Savings Bonds used for higher-education expenses that are otherwise not taxable.

Minimum deduction limit of \$200. There is a special rule providing that if your adjusted gross income for any taxable year is within the "phase-out range," your traditional IRA deduction limit is never less than \$200.

C. Roth IRA: Maximum annual contribution

The maximum contribution permitted under a Roth IRA (excluding any rollover or conversion contributions as described in Sections V and VI) is generally the lesser of the contribution limit in effect for the taxable year as described in Section III[A] or 100% of your compensation for the taxable year (less any amount you also contribute to a traditional IRA). Furthermore, your Roth IRA contribution maximum is phased out as your adjusted gross income approaches the upper limits of the applicable "phase-out range." The applicable phase-out ranges are as follows:

- If you are single—your phase-out range is adjusted gross income of between \$120,000 and \$135,000 for 2018.
- If you are married filing jointly—your phase-out range is adjusted gross income of between \$189,000 and \$199,000 for 2018.
- If you are married filing separately—your phase-out range is adjusted gross income of between \$0 and \$10,000. However, if you and your spouse did not live together at any time during the taxable year, your filing status will be considered to be single for Roth IRA contribution purposes.

The dollar limits above for single filers and married filing jointly will be periodically adjusted for cost-of-living increases in \$1,000 increments.

Formula for contribution phase-out. As your adjusted gross income approaches the upper limit of the phase-out ranges described above, your Roth IRA contribution limit for the year is phased out to \$0. This phase-out is accomplished as follows: Your maximum Roth IRA contribution is reduced by an amount, rounded down to the nearest \$10, that bears the same ratio to the maximum IRA contribution limit in effect for the taxable year as your "excess" adjusted gross income for the taxable year bears to \$15,000 (\$10,000 in the case of a joint return or a married individual filing a separate return).

Adjusted gross income (AGI) for Roth IRA contribution phase-out purposes. For purposes of the Roth IRA contribution phase-out, your adjusted gross income is determined as it is for determining the traditional IRA deduction limit for active participants (see Section III[B]), except that your adjusted gross income is reduced by (1) any deductible traditional IRA contributions you may make for the taxable year, and (2) any amount included in gross income as a result of a traditional IRA to Roth IRA "conversion" discussed in Section VI.

Minimum contribution limit of \$200. There is a special rule providing that if your adjusted gross income for Roth IRA contribution phase-out purposes is within the "phase-out range," your Roth IRA contribution limit is never less than \$200.

D. Traditional IRA: Nondeductible contributions

You may wish to make "nondeductible contributions" to your traditional IRA to the extent that you are not eligible to make either deductible traditional IRA contributions or Roth IRA contributions (or if you do not wish to make deductible traditional IRA contributions). Remember, however, that the total amount of deductible and nondeductible contributions to all of your traditional and Roth IRAs for any taxable year may not exceed the lesser of the contribution limit in effect for the taxable year or 100% of your compensation for the year.

Tax advantage of nondeductible contributions.

The primary tax benefit associated with nondeductible contributions to a traditional IRA is that the earnings and gains on these contributions will not be subject to federal income tax until they are actually distributed to you.

Election to treat deductible contributions as nondeductible contributions. You are permitted to elect to treat your traditional IRA contributions, which would otherwise be deductible for any taxable year, as nondeductible contributions. You may wish to make such an election, for example, if you have no taxable income for the year after taking into account other deductions or tax credits, and you are not eligible for a Roth IRA contribution.

Designation of nondeductible contributions.

Your designation of traditional IRA contributions as nondeductible contributions for a taxable year is to be made by filing Form 8606, Nondeductible IRAs, with your federal income tax return for the taxable year. Nondeductible traditional IRA contributions for a taxable year may be made at any time during the taxable year, or in the next year, up to the due date for filing your federal income tax return for the taxable year, not including extensions. If you file an amended return, you may change your designation of your traditional IRA contributions from deductible contributions to nondeductible contributions or vice versa (although such a change may result in an increased or different tax liability).

E. Spousal IRAs

If your spouse has little or no income, your spouse may still be eligible to establish and contribute to an IRA under a special rule for spousal IRAs. To qualify for this rule, you and your spouse must file a joint return for the taxable year.

IRA contributions up to limit in effect. Under the special rule for spousal IRAs, contributions may be made to your spouse's traditional or Roth IRA for any taxable year in an amount up to the lesser of: (1) the contribution limit in effect for the taxable year, or (2) the combined compensation of you and your spouse for the taxable year, less the amount of any contributions you made to your IRA for the taxable year.

Deductibility of contributions for spouse. The deductibility of contributions to a traditional IRA for a spouse is generally determined by the rules discussed in Section III[B]. Thus, for example, if neither you nor your spouse is an active participant in an employer-maintained retirement plan, contributions to a spousal traditional IRA are fully deductible. However, if your spouse is an active participant in an employer-maintained retirement plan, your spouse's IRA deduction limit for the taxable year is phased out as your combined adjusted gross income for the tax year exceeds the applicable threshold provided in the chart in Section III[B].

If you participate in an employer-maintained retirement plan and your spouse does not, the spousal deduction limit is reduced by an amount that bears the same ratio to

the contribution limit in effect for the taxable year as your combined adjusted gross income over \$150,000, as adjusted for cost-of-living increases (i.e., \$189,000 for 2018), bears to \$10,000. Thus, for example, the deduction for contributions to a spousal traditional IRA for 2018 would be eliminated if your combined adjusted gross income exceeds \$199,000, although nondeductible traditional IRA contributions could still be made.

Contributions after age 70½ to traditional IRAs. You may make contributions to a traditional IRA for your spouse even after you reach age 70½ provided your spouse has not yet attained age 70½. However, you may not make contributions to a traditional IRA for your spouse (other than rollover contributions described in Section V) for the year your spouse reaches age 70½ or any subsequent year. Distributions from the account do not have to begin until April 1 of the calendar year following the calendar year in which the spouse for whom the account is maintained reaches age 70½. With the exception of the contribution limitations, all rules that apply to a traditional IRA generally apply to the traditional IRA for a spouse.

Roth IRA contributions for spouse. The amount of permitted contributions to a spousal Roth IRA is generally determined by the rules discussed in Section III[C]. Thus, if you are married filing a joint tax return, the spousal Roth IRA contribution limit in effect for the taxable year is reduced by an amount that bears the same ratio to the contribution limit in effect as your combined adjusted gross income over \$150,000, as adjusted for cost-of-living increases (i.e., \$189,000 for 2018), bears to \$10,000. For example, the contributions to a spousal Roth IRA for 2018 would be eliminated if your combined adjusted gross income exceeds \$199,000, although nondeductible traditional IRA contributions could still be made. Keep in mind that Roth IRA contributions on behalf of a spouse may be made regardless of whether you or your spouse is over age 70½.

F. Return of IRA contributions

Withdrawal of IRA contributions by the date your return is due. If you make a contribution to your IRA for a taxable year, you may withdraw the contribution amount and the earnings thereon at any time prior to the due date for filing your federal income tax return, including extensions, for the taxable year for which the contribution was made, or such later date as prescribed by the IRS. If the excess (and any earnings) is removed prior to the applicable deadline, the return of the contribution will not be includible in your gross income as an IRA distribution. However, the earnings on the contribution will be taxable income in the year in which the contribution was made and may possibly be subject to the 10% tax on early distributions if you are under age 59½ (see Section VII[C]).

G. Recharacterization of IRA contributions

You may elect to recharacterize all or part of a regular contribution (i.e., treat a contribution made to one IRA (the "First IRA") as made to a different type of IRA (the "Second IRA"). You may wish to recharacterize a

contribution because, for example, you realize you were not eligible to make the IRA contribution or for tax-planning reasons. For example, you may wish to recharacterize a contribution to a Roth IRA into a contribution to a traditional IRA because you decide that you want the tax deduction available for a traditional IRA contribution.

A recharacterization is accomplished by requesting, in a form and manner acceptable to the Custodian, a trustee-to-trustee transfer of the contribution made to the First IRA, adjusted for gains and losses, to the Second IRA. The recharacterized amount is treated as having been originally contributed to the Second IRA on the same date and (in the case of a regular contribution) for the same taxable year that the contribution was made to the First IRA. The recharacterization is permissible only if the contribution could have been made originally to the Second IRA. The recharacterization must be accomplished by the due date (including extensions) of your federal income tax return for the year for which the original contribution was made, or such later date as prescribed by the IRS.

Roth IRA conversions made after December 31, 2017, cannot be recharacterized.

H. Excess contributions to traditional or Roth IRA

Generally, an excess contribution is the amount of any contributions to your traditional or Roth IRA (other than a proper rollover or conversion contribution as described in Sections V and VI) for a taxable year that exceeds your IRA contribution limit for the taxable year. An excise tax equal to 6% of the amount of any excess contribution will be assessed for the year for which the excess contribution is made and for each subsequent year until the excess amount is eliminated.

Return of excess contribution by the date your return is due. If you make an excess contribution to your IRA for a taxable year, you may withdraw the contribution and the earnings thereon prior to the due date for filing your federal income tax return, including extensions, or such later date as may be prescribed by the IRS. If this withdrawal is made by the applicable deadline, the return of the contribution will not be subject to the 6% excise tax on excess contributions (assuming the contribution is not deducted on your return).

Return of excess contribution after tax return due date. If you make an excess contribution to your IRA for a taxable year and you withdraw the excess contribution after the due date for filing your federal income tax return (including extensions), the returned excess contribution will not be includible in your gross income as an IRA distribution (subject to possible premature distribution penalties) if (1) your total IRA contributions for the year did not exceed the contribution limit in effect for the taxable year, and (2) you did not deduct the excess contribution on your return (or if the deduction you claimed was disallowed by the IRS). However, you must pay the 6% excise tax on the excess contribution for each taxable year that it was still in your IRA at the end of the year. Under this procedure, you are not required to withdraw any earnings attributable to the excess contribution.

Applying excess contribution to subsequent year.

You may also eliminate an excess contribution from your IRA in a subsequent year by not contributing the maximum amount for that year and applying the excess contribution to the subsequent year's contribution. You may be entitled to a deduction for the amount of the excess contribution that is applied in the subsequent year provided you did not previously deduct the excess contribution (or if the deduction you claimed was disallowed by the IRS). However, if you incorrectly deducted an excess contribution in a closed taxable year (i.e., one for which the period to assess a deficiency has expired), the amount of the excess contribution cannot be deducted again in the subsequent year in which it is applied.

Section IV Transfers

This section discusses options for carrying out a trustee-to-trustee asset transfer of your existing IRA to another IRA of the same type (e.g., a transfer from traditional IRA to traditional IRA). For a discussion of recharacterizations of contributions to a different type of IRA, rollover options, and the option to "convert" your traditional IRA to a Roth IRA, see Sections III[G], V, and VI, respectively.

A. Tax-free transfer from existing IRA to Vanguard IRA

In order to give you greater investment flexibility, you are permitted to transfer IRA assets directly from one trustee or custodian to another on a tax-free basis. If you already have an IRA with another trustee or custodian, you may authorize a direct transfer of your IRA assets to a Vanguard IRA without paying taxes, subject to the rules and restrictions of your existing account. Transfers are only permitted between the same type of IRA plans (i.e., from a traditional IRA to traditional IRA or from a Roth IRA to Roth IRA). You may make such a transfer as often as you wish. Such a transfer of assets is not tax-deductible.

B. Tax-free transfer from Vanguard IRA

If you so direct in a form and manner acceptable to the Custodian, the Custodian will transfer all or any portion of the assets held in your Vanguard IRA directly to the trustee or custodian of another IRA established on your behalf, provided the trustee or custodian certifies that it will accept the direct transfer of assets and will deposit the transferred assets in the same type of IRA established on your behalf. Transfers are only permitted between the same type of IRA plans (i.e., from a traditional IRA to traditional IRA or from a Roth IRA to Roth IRA).

C. Transfer incident to divorce

All or any portion of your IRA assets may be transferred to a separate IRA for the benefit of your former spouse pursuant to a divorce decree or written instrument incident to divorce. The transfer will not result in a taxable increase for you or your former spouse. After the transfer, your former spouse will be considered the Owner of the IRA mentioned for his or her benefit.

Section V

Rollover contribution

A. Rollover from existing IRA to a Vanguard IRA

If you receive a distribution of assets from an existing IRA, you may make a rollover contribution of all or part of the assets you receive tax-free to a Vanguard IRA. Except in the case of a "conversion" from a traditional IRA to a Roth IRA, rollovers are only permitted between the same type of IRA plans (i.e., from a traditional IRA to traditional IRA or from a Roth IRA to Roth IRA). The rollover must be completed within 60 days after you receive the distribution from your existing IRA. You are limited to one such tax-free rollover within a one-year period (beginning on the date you receive the IRA distribution, not on the date you make the rollover contribution). You cannot make a tax-free rollover if you have already made a rollover from any of your IRAs in the preceding one-year period. IRA conversions are not taken into account for purposes of this limit. You may not roll over any minimum distribution amounts you are required to receive from your traditional IRA upon attaining age 70½ (see Section VIII[B]).

Note: A tax-free transfer of funds as described in Section IV[A] is not a rollover (since you do not actually receive any distribution from your IRA). Rather it is a direct transfer of your IRA funds from one trustee or custodian to another that is not affected by the 12-month waiting period applicable to IRA rollovers.

If your distribution consists of property other than cash, you must roll over to your new IRA the same property you received from your old IRA. If you wish to make a rollover contribution of property other than cash to your Vanguard IRA, you must obtain the prior approval of the Custodian.

B. Rollover from employer retirement plan to Vanguard traditional IRA

Eligible rollover distribution from employer's retirement plan to traditional IRA. If you receive an "eligible rollover distribution" from an "eligible employer plan," other than a designated Roth account, you may make a tax-free rollover contribution of the distribution to a Vanguard traditional IRA. An "eligible employer plan" includes a plan qualified under section 401(a) of the Code (including a 401(k), pension, profit-sharing, defined benefit, or stock bonus plan), a governmental 457 plan, a 403(a) annuity plan, or a 403(b) plan. An "eligible rollover distribution" generally includes any distribution or withdrawal from an eligible employer plan other than:

- (1) A distribution that is part of a series of periodic payments over a specified period of ten years or more, or over your life (or life expectancy), or over the joint lives (or joint life and last survivor expectancy) of you and your designated beneficiary;
- (2) Any portion of a distribution that represents a required minimum distribution to you after age 70½; or
- (3) A hardship distribution.

After-tax contributions. If a portion of your eligible rollover distribution from an employer's plan represents a return of after-tax contributions, you may roll over your after-tax contributions to a traditional IRA. If you elect to roll over after-tax contributions, it is your responsibility to keep track of these after-tax rollover amounts and to report such rollover amounts in accordance with IRS guidelines. Once you roll after-tax amounts into a traditional IRA, those amounts cannot later be rolled into an employer plan.

Direct rollover option. If you will be entitled to receive an eligible rollover distribution from an eligible employer plan, you may elect to have the plan roll over all or any part of your distribution directly to your Vanguard traditional IRA as a tax-free rollover contribution on your behalf. If you elect this direct rollover option, no federal income taxes will be withheld from your distribution to the extent it is transferred directly to your Vanguard traditional IRA. The plan administrator of your employer's plan must give you an explanation of your direct rollover option and the other tax rules affecting your eligible rollover distribution.

Payment option; 20% withholding. If you elect to have an eligible rollover distribution from an employer's qualified retirement plan paid directly to you, your distribution will be subject to 20% federal income tax withholding. You will still have the option of making a tax-free rollover contribution of your eligible rollover distribution to a Vanguard traditional IRA within 60 days of receipt of your distribution. You may roll over any amount up to 100% of your eligible rollover distribution (including an amount equal to the 20% that was withheld by coming up with additional money to make up for the withheld amount).

Rollover of property. If you receive an eligible rollover distribution from an employer retirement plan that consists of property other than cash, you may be permitted to roll over the property received to your traditional IRA. As an alternative, you may sell the property received and roll over the cash proceeds to your traditional IRA, in which case no gain or loss will be recognized on the sale if the entire proceeds are rolled over. If you wish to make an in-kind rollover contribution of property other than cash to your Vanguard traditional IRA, you must obtain the prior approval of the Custodian.

Rollover by surviving spouse. A surviving spouse of a deceased employee may be permitted to make a tax-free rollover contribution to a traditional IRA of all or any portion of an eligible rollover distribution from an employer retirement plan upon the employee's death.

Rollover by nonspouse beneficiary. A nonspouse designated beneficiary of a deceased employee may be permitted to make a direct rollover to an inherited IRA of an eligible rollover distribution upon the employee's death (if permitted under the deceased employee's plan).

Rollover pursuant to divorce or similar proceedings. If you are eligible to receive an eligible rollover distribution from an employer's qualified retirement plan pursuant to a "qualified domestic relations order" (within the meaning of Section 414(p) of the Internal Revenue Code) resulting from divorce or similar proceedings, you may have all or part of the distribution rolled over to your traditional IRA on a tax-free basis.

Separate traditional IRA account for certain rollovers from qualified plans. If you were born before January 1, 1936, and you receive an eligible rollover distribution from an employer's qualified retirement plan, you may prefer to roll over the distribution into a separate traditional IRA (frequently called a "rollover" or "conduit" IRA) to which no annual IRA contributions are made. In this manner, if you later roll over the assets to a new employer's qualified retirement plan you preserve any special tax treatment, such as ten-year averaging, that may be available on lump-sum distributions from the qualified plan.

C. Rollover from a designated Roth account under an employer plan to a Vanguard Roth IRA

Eligible rollover distribution from designated Roth account. If you receive an eligible rollover distribution from a designated Roth account under a 401(k) or 403(b) plan, you may roll over all or part of the distribution to a Vanguard Roth IRA. You cannot subsequently roll over from a Roth IRA back to a designated Roth account under an employer plan.

Five-year holding period. The holding period does not carry over from the designated Roth account to the Roth IRA. Assets that are rolled over from a designated Roth account to a Roth are subject to the five-year holding period applicable to the Roth IRA for purposes of determining a qualified distribution. (See Section VII[B] for more information on the five-year holding period.)

Roth IRA ordering rules. For purposes of the Roth IRA ordering rules described in Section VII[B], the entire amount of any qualified distribution rolled over from a designated Roth account is treated as contributions to the Roth IRA. In the case of a nonqualified distribution from a designated Roth account, the portion of the rollover that represents Roth basis is treated as contributions to the Roth IRA and any remaining amount is treated as earnings. If only a portion of a nonqualified distribution from a designated Roth account is rolled over, the amount rolled over is treated as consisting first of the portion of the distribution that represents earnings.

D. Rollovers from a Vanguard IRA

If you withdraw assets from your Vanguard IRA, you may roll over on a tax-free basis all or any portion of the assets you receive within 60 days of receipt to another IRA of the same type. You are limited to one such tax-free rollover within a one-year period regardless of the number of IRAs you own. You cannot make a tax-free rollover from one IRA to another if you have already made a rollover from any of your IRAs in the preceding one-year period. You may also roll over on a tax-free basis all or part of the taxable

portion of the assets you receive from your Vanguard traditional IRA within 60 days of receipt to an eligible employer plan that accepts such rollovers. If any portion of a distribution from your traditional IRA represents a return of nondeductible contributions or after-tax rollover contributions, such portion cannot be rolled over into an eligible employer plan. You cannot roll over any minimum distribution amount you are required to receive from a Vanguard traditional IRA (see Section VIII[B]). Distributions from a Roth IRA are not permitted to be rolled over into a designated Roth account under an employer plan. You should seek competent tax advice concerning IRA rollovers to employer retirement plans.

Section VI

Conversions to a Roth IRA

A. Traditional IRA to Roth IRA conversion: General Rules

If you are age 70½ or older, you must satisfy your required minimum distribution for the tax year prior to making a conversion contribution for such year. The conversion will be treated as a taxable distribution from your traditional IRA and a subsequent conversion contribution to a Roth IRA. Distributions from your traditional IRA will be includible in your gross income in the year of the distribution (except for the portion of the distribution that represents a tax-free return of your nondeductible contributions or after-tax rollover contributions) but will not be subject to the 10% additional tax on early distributions, regardless of whether you are under age 59½. If you make a Roth conversion after December 31, 2017, the conversion cannot be recharacterized. (See Section VI[D] for more information.)

B. Conversions of SEPs and SIMPLE accounts

Accounts held in a SEP-IRA or a SIMPLE IRA may be converted to a Roth IRA. However, a conversion of a SIMPLE IRA is permissible only after the expiration of the initial two-year holding period. (See your SIMPLE IRA materials for more details.) If you make a Roth conversion after December 31, 2017, the conversion cannot be recharacterized. (See Section VI[D] for more information.)

C. Employer plan to a Roth IRA

You can roll over (i.e., "convert") a distribution from an eligible employer plan (other than a designated Roth account) directly to a Roth IRA. If applicable, you must satisfy your required minimum distribution for the tax year prior to rolling a distribution from an eligible employer plan directly to a Roth IRA. In general, such rollover will be taxable in the year of the distribution (except for any portion of the distribution that represents a return of after-tax contributions) but will not be subject to the 10% additional tax on early distributions, regardless of whether you are under age 59½. If you make a Roth conversion after December 31, 2017, the conversion cannot be recharacterized. (See Section VI[D] for more information.) Please consult a tax advisor or refer to IRS Publication 590-A for more information.

D. No recharacterization of conversions

A conversion of a traditional, SEP, or SIMPLE IRA to a Roth IRA, and a rollover from any other eligible retirement plan to a Roth IRA, made in tax years beginning after December 31, 2017, cannot be recharacterized as having been made to a traditional IRA.

Section VII

Taxation of distributions

A. Traditional IRA: Tax treatment of distributions

In general, distributions from your traditional IRA are included in your gross income in the year of receipt. Exceptions to this rule include any distribution that is properly rolled over to another individual retirement arrangement or employer retirement plan as described in Section V, or any return or transfer of an IRA contribution as described in Section III[F], [G], and [H] and Section IV. In addition, distributions from a traditional IRA that contains “nondeductible contributions” (see Section III[D]) or after-tax rollover contributions (see Section V[C]) are treated partly as a nontaxable return of the nondeductible traditional IRA contributions or after-tax rollover contributions, and partly as a taxable distribution of traditional IRA earnings and any deductible IRA contributions, as explained below.

Ordinary income taxation. Distributions from your traditional IRA that are included in gross income will be taxed as ordinary income. Traditional IRA distributions are not eligible for the special tax treatment accorded to certain lump-sum distributions from qualified retirement plans, such as forward averaging taxation.

Distribution of nondeductible traditional IRA contributions. To the extent any distribution from your traditional IRA represents a return of your nondeductible contributions (see Section III[D]) or after-tax rollover contributions, the distribution will be treated as a tax-free return of basis. If you withdraw an amount from a traditional IRA during a taxable year and you have previously made nondeductible contributions or after-tax rollover contributions to a traditional IRA, then the amount excluded from income for the taxable year is the portion of the amount withdrawn that bears the same ratio to the amount withdrawn as your aggregate nondeductible traditional IRA contributions and after-tax rollover contributions bear to the aggregate balance of all your traditional IRAs as of the end of the year, plus the amount of the withdrawal. For these purposes, all traditional IRAs maintained on your behalf, including traditional rollover IRAs and SEPs, are required to be aggregated, and all distributions in a given year are treated as one distribution.

Example: An individual withdraws a total amount of \$3,000 from several traditional IRAs during a taxable year. At the end of the taxable year, the aggregate balance of all traditional IRAs maintained by the individual is \$21,000, and the aggregate amount of nondeductible contributions

not previously withdrawn by the individual is \$4,000. The amount of the individual’s \$3,000 traditional IRA withdrawal excludible from income is \$500 (or $\$4,000 \div \$24,000 \times \$3,000$), and the remaining \$2,500 is taxable.

Distributions rolled into an eligible employer plan.

The maximum amount of a traditional IRA distribution that you can roll over into an eligible retirement plan (other than an IRA), to the extent the plan permits rollover contributions, cannot exceed the portion of your traditional IRA distribution that would otherwise be taxable (without regard to the rollover). The portion of a distribution from your traditional IRA that represents a return of after-tax rollover contributions or nondeductible contributions is not eligible to be rolled over into an employer plan. If you roll over all or a portion of a distribution from a traditional IRA into an eligible employer plan (such as a 401(k) plan, governmental 457 plan, or 403(b) plan), the formula described above for determining the taxable and nontaxable portion of a distribution will not apply. Instead, the portion of the distribution that is rolled over to an eligible employer plan (other than an IRA) is attributable first to amounts other than after-tax rollovers and nondeductible contributions. Therefore, you may roll over a distribution from your traditional IRA to the extent the amount distributed does not exceed the taxable amount (e.g., deductible contributions and earnings) of all of your IRAs. You may wish to consult your tax advisor before rolling over a distribution into an eligible employer plan.

Note: If you roll over a portion of a traditional IRA distribution to an eligible employer plan, the formula used to determine the taxable portion of any withdrawal you receive during or subsequent to the year of the rollover must be adjusted in accordance with IRS guidelines.

B. Roth IRA: Tax treatment of distributions

Ordering rules. Distributions from your Roth IRA are treated as made in the following order:

- (1) From regular contributions;
- (2) From conversion contributions on a first-in, first-out basis; and
- (3) From earnings.

For this purpose, all distributions for each year are considered together, and all of your Roth IRA accounts are treated as one account.

Tax-free “qualified distributions.” Distributions from your Roth IRA that are “qualified distributions” are not included in your gross income and are generally not subject to the additional 10% penalty tax on early distributions. A qualified distribution from your Roth IRA is a distribution that is both (1) made after a five-year holding period (see details, below) and (2) described by any one of the following:

- (1) Made on or after the date you reach age 59½;
- (2) Made to your designated beneficiary after your death;
- (3) Made because of your permanent disability; or
- (4) A “qualified first-time homebuyer” distribution (subject to a \$10,000 lifetime limit). Qualified first-

time homebuyer distributions are distributions used to pay for certain acquisition costs (including the cost of acquiring, constructing, or reconstructing a residence, and reasonable settlement, financing, or other closing costs) of a principal residence for a first-time homebuyer, including you, your spouse, or any children, grandchildren, or ancestors of you or your spouse. Such distribution must be used within 120 days after it is received. You are considered a first-time homebuyer if you (and, if married, your spouse) have not owned a principal residence during the two-year period ending on the date of acquisition.

Nonqualified distributions first considered tax-free return of contributions. If a Roth IRA distribution is not a “qualified distribution” as just described, the distribution will be treated for tax purposes as first a tax-free return of your Roth IRA contributions (see “ordering rules” on previous page). To the extent a nonqualified distribution, when added to all of your previous Roth IRA distributions (whether qualified or nonqualified), is attributable to earnings (see “ordering rules”), it will be fully taxable.

Five-year holding period for Roth IRA distributions. In order for your Roth IRA distributions to be “qualified distributions,” you must have held your Roth IRA for at least five years prior to the distribution. This five-year holding period is generally measured by counting five years beginning with the earlier of the first year for which your first regular Roth IRA contribution relates (not necessarily the year in which your first regular Roth IRA contribution is made) or the first year in which you made a conversion contribution.

Separate five-year holding period for conversions. A separate five-year holding period applies with respect to the portion of a distribution that is properly allocable to a traditional-to-Roth IRA conversion or a rollover from an eligible employer plan (other than a designated Roth account) to a Roth IRA. For this portion of a distribution, the five-year period starts with the year in which the conversion (or rollover) contribution was made (which may be later than the year for which your first Roth IRA contribution was made). Even though the distribution of amounts attributable to the conversion (or rollover) may not be subject to income tax, they are subject to a 10% penalty tax if made during the five-year holding period (see Section VII(C)).

C. Additional 10% tax on early distributions from traditional IRAs and Roth IRAs

Your IRA is intended to provide you with retirement income. For this reason, the law generally imposes a nondeductible additional tax if you receive a distribution from either your traditional IRA or Roth IRA, unless certain exceptions apply. This additional tax is equal to 10% of the taxable amount of the distribution and is in addition to the ordinary income tax on the distribution. (Thus, the 10% penalty tax does not apply to the tax-free portion of any distributions you receive from your IRAs.) The additional tax may also apply if you are deemed to receive a distribution from your IRA before age 59½ as a result of

borrowing from your IRA or pledging your IRA as security for a loan, as described in Section XI. The law also imposes a tax equal to 10% of any distribution from a Roth IRA attributable to conversion contributions within the separate five-year holding period for conversion amounts.

The additional 10% tax will not be imposed, however, on the following types of distributions from your traditional or Roth IRA:

- Distributions after you reach age 59½.
- Distributions attributable to your total and permanent disability.
- Distributions made to your designated beneficiary after your death.
- Distributions that are part of a series of substantially equal periodic payments (not less frequently than annually) made for your life or life expectancy, or for the joint lives or life expectancies of you and your beneficiary.
- Distributions you receive to the extent such distributions do not exceed the amount of your deductible medical expenses for the taxable year.
- Distributions you receive following termination of employment to the extent such distributions do not exceed the amount of medical insurance premiums you paid for yourself, spouse, and dependents for the taxable year, provided that you have received at least 12 consecutive weeks of unemployment compensation during the current or prior taxable year.
- Distributions to pay for qualified higher-education expenses. Qualified higher-education expenses include tuition, fees, books, supplies, equipment, and room and board required for enrollment or attendance for you, your spouse, your children, or your grandchildren at an eligible postsecondary educational institution.
- Distributions up to \$10,000 used to pay for acquisition costs (including the cost of acquiring, constructing, or reconstructing) of a principal residence for a first-time homebuyer, including you, your spouse, or any children, grandchildren, or ancestors of you or your spouse. Such distribution must be used within 120 days after it is received. You are considered a first-time homebuyer if you (and, if married, your spouse) have not owned a principal residence during the two-year period ending on the date of acquisition. The aggregate amount of distributions you may take under this first-time homebuyer exception for the year of the distribution and all prior years is \$10,000.
- Distributions that are qualified reservist distributions. If you were a member of a reserve component and you were called to active duty after September 11, 2001, and before December 31, 2007, for a period of 179 days or more, distributions made after the date you were called to active duty and before the close of your active duty period are considered qualified reservist distributions.
- Distributions made on account of an IRS levy.

Section VIII

Methods of distribution

A. Distributions in general

Under either a Vanguard traditional IRA or Roth IRA, you may elect to have all or a portion of your account distributed in one or a combination of the following ways:

- (1) A partial payment.
- (2) A lump-sum payment.
- (3) Monthly, quarterly, semiannual, or annual installment payments over a period not extending beyond your life expectancy or the joint and last survivor life expectancy of you and your designated beneficiary.

The method of distribution you select for your traditional IRA must comply with the minimum distribution requirements described in Section VIII[B]. You may request a distribution from your Vanguard IRA in a form and manner acceptable to the Custodian.

Distributions in cash or in kind. Distributions from the Vanguard IRA will generally be made in cash, unless you notify the Custodian in writing that you wish to have a designated portion of your IRA assets distributed in kind. However, any assets in your Vanguard IRA that cannot be sold by the Custodian for cash in the ordinary course of business shall automatically be distributed to you in kind.

B. Traditional IRA: Age 70½ minimum distributions

Commencement of distribution at age 70½. You must begin receiving distributions from your traditional IRA no later than April 1 of the calendar year following the calendar year in which you attain age 70½. No age 70½ distribution requirements apply for Roth IRAs.

Minimum amount required to be distributed. The minimum amount required to be distributed from your traditional IRA for each calendar year, beginning with the year in which you attain age 70½, is determined by dividing the entire amount in your account as of December 31 of the preceding calendar year by the applicable distribution period. In most cases, the applicable distribution period is determined using the IRS's Uniform Lifetime Table. However, if your spouse is your sole beneficiary for the entire year, the applicable distribution period is the longer of the distribution period determined using the Uniform Lifetime Table, or the joint life expectancy of you and your spouse determined using the Joint Life and Last Survivor Table. See the Vanguard Traditional and Roth IRA Custodial Account Agreement and IRS Publication 590-B, Distributions from Individual Retirement Arrangements (IRAs), for more details including the life expectancy tables used to calculate required minimum distribution amounts. You must receive the required minimum distribution amount from your traditional IRA for the calendar year in which you attain age 70½ by April 1 of the following year. You must receive the required minimum distribution amount from your traditional IRA for each calendar year thereafter by December 31 of that year.

Penalty tax on insufficient distributions. A 50% excise tax may be imposed if the amount actually distributed from your traditional IRA beginning after you attain age 70½ is less than the minimum amount required to be distributed. The 50% tax is imposed on the difference between the amount actually distributed from your traditional IRA and the amount required to be distributed. This penalty tax may be waived in certain cases provided you can establish to the satisfaction of the IRS that the deficit in the amount distributed was due to reasonable error and you are taking steps to remedy the problem.

C. Distribution upon death for traditional IRAs and Roth IRAs

If you die prior to the complete distribution of your account, the remaining balance in your Vanguard IRA (either traditional or Roth IRA) will be distributed to your designated beneficiary, upon request in a form and manner acceptable to the Custodian, over a period selected by your beneficiary subject to the requirements stated below. In general, distributions your beneficiary receives from your IRA that are included in gross income will be taxed as ordinary income.

General rule for Roth IRAs and where required distributions had not begun from traditional IRAs. For all Roth IRAs and for traditional IRAs where a required distribution of your account had not commenced prior to your death, the general rule is that the balance of your Vanguard IRA must be distributed to your designated beneficiary over his or her life expectancy starting by December 31 of the calendar year following the year of your death, or if your sole beneficiary is your surviving spouse, by the later of December 31 of the calendar year following the year of your death or December 31 of the calendar year in which you would have attained age 70½. Instead of applying the general rule described above, your beneficiary may elect to apply the "five-year rule," under which your beneficiary must distribute the entire balance of your account by December 31 of the calendar year that contains the fifth anniversary of your death. If you do not have a beneficiary, or your beneficiary is not an individual (your estate, or a charity, for example), distributions must generally be made in accordance with the five-year rule. However, if your beneficiary is a trust and the trust meets certain requirements, the beneficiaries of the trust may be treated as designated beneficiaries for the purpose of determining the applicable distribution period. See IRS Publication 590-B or consult your tax advisor for more information on the special trust rules.

Where age 70½ minimum distributions from traditional IRA had already begun. If required minimum distributions from your traditional IRA had already commenced prior to your death, the balance of your Vanguard traditional IRA must be distributed to your designated beneficiary over his or her life expectancy, or if longer, over your remaining life expectancy, starting by December 31 of the calendar year following the year of your death. If you do not have a beneficiary, or your beneficiary is not an individual, distributions must be made over your remaining life expectancy. If your beneficiary is a trust and the

trust meets certain requirements, the beneficiaries of the trust may be treated as designated beneficiaries for the purpose of determining the applicable distribution period. See IRS Publication 590-B or consult a tax advisor for more information about the special trust rules. For these purposes, minimum distributions are considered to have begun prior to your death only if distributions were made on or after April 1 of the calendar year following the calendar year in which you attained age 70½.

Exception where surviving spouse is sole beneficiary.

An exception to the preceding two rules is that if the sole beneficiary of your Vanguard IRA is your surviving spouse, your spouse may elect to treat your Vanguard IRA as his or her own IRA. Your surviving spouse may elect to treat your Vanguard IRA as his or her own IRA either by making contributions to the IRA (including a rollover contribution) or by not taking required minimum distributions from the IRA as the IRA beneficiary in accordance with the rules summarized in this Section VIII[C]. In the case of a traditional IRA, if your surviving spouse makes the election to treat your Vanguard IRA as his or her own IRA, your spouse would be required to satisfy any minimum distribution requirements as the traditional IRA owner in accordance with the rules summarized in Section VIII[B].

Designation of beneficiary. Under a Vanguard IRA, you may designate one or more individuals or entities (such as a trust) as your beneficiary. You may also select other beneficiary designations deemed acceptable by the Custodian. You will initially designate your beneficiary by completing the Adoption Agreement for the Vanguard IRA. You may subsequently change or revoke your beneficiary designation at any time by notifying the Custodian in a form and manner acceptable to the Custodian. If you fail to designate a beneficiary or if your designated beneficiary (or each of your designated beneficiaries) predeceases you, your beneficiary will be your surviving spouse or, if you have no surviving spouse, your estate.

D. Federal estate and gift taxation

Gift tax consequences. Your designation of a beneficiary (or beneficiaries) to receive distributions from your IRA upon your death will not be considered a transfer of property for federal gift tax purposes.

Estate tax consequences. Generally, amounts remaining in your IRA after your death will be included in your gross estate for federal estate tax purposes. You are encouraged to consult with a financial planner or tax advisor when considering the estate tax consequences of your IRA assets.

E. Income tax withholding

The Internal Revenue Code requires the withholding of federal income tax on distributions from a traditional IRA unless the recipient affirmatively elects not to have withholding apply. The amount of federal income tax required to be withheld on any payment under the Vanguard traditional IRA will generally equal 10% of the amount of the distributions. Upon a request for a distribution under the Vanguard traditional IRA, the Custodian will notify the recipient of his or her right to

elect not to have withholding apply (or to revoke any prior election). If the distribution is delivered outside the United States, you may not elect out of federal income tax withholding. State income tax may be withheld from your IRA distributions, if applicable.

If you are a nonresident alien, the amount of federal income tax required to be withheld is 30% of the amount of the distribution. You may not elect out of withholding. If you are eligible to claim a reduced withholding rate under a tax treaty, you must send a valid Form W-8BEN prior to the distribution.

Section IX

Simplified employee pension

A simplified employee pension, or "SEP," is a special traditional IRA plan that permits employers to make deductible contributions to the separate traditional IRAs established for their employees. If your employer has adopted a SEP, your employer may make deductible SEP contributions directly to your Vanguard traditional IRA each year in an amount up to the lesser of 25% of your current-year compensation, or \$55,000 for 2018 (\$54,000 for 2017 and subject to cost-of-living adjustments for later years).

Exclusion from gross income. The amount of SEP contributions made by your employer to your traditional IRA will be excludible from your gross income provided it does not exceed the deduction limit described above. In addition, you may make your own annual contributions to either your traditional or Roth IRA each year up to the lesser of the contribution limit in effect for the taxable year or 100% of current-year compensation. For more information on the contribution limits and treatment of excess contributions, see IRS Publication 560.

Determination of compensation. For purposes of the 25% of compensation limit that applies to SEP contributions, you may take into account only the amount of your current-year compensation from the employer making the SEP contribution. In addition, you may not include the amount of the SEP contribution in the determination of your compensation. The maximum amount of compensation that may be taken into account on behalf of any SEP participant is subject to an indexed limit of \$275,000 for 2018.

Self-employed individuals. Any sole proprietor or partnership may be eligible to establish a SEP and make deductible SEP contributions to the separate traditional IRAs established by the sole proprietor or partners (as well as to the traditional IRAs of any common-law employees). In the case of a self-employed individual, the term "compensation" includes the individual's earned income from self-employment, reduced by the amount of deductible retirement plan contributions.

Contributions after age 70½. SEP contributions may be made to your IRA by your employer even after you have attained age 70½.

Elective deferrals. Prior to January 1, 1997, certain employers were permitted to establish a Salary Reduction SEP under which employees could make elective deferrals—or “pre-tax” salary reduction contributions—up to an indexed dollar limit each year. However, employers can no longer establish Salary Reduction SEPs after December 31, 1996 (although Salary Reduction SEPs in existence before January 1, 1997, can continue to receive contributions and cover new employees).

Section X

Income tax returns

If you are eligible to make deductible contributions to your traditional IRA, you may claim your deduction for traditional IRA contributions on your federal income tax return (Form 1040 or Form 1040A) even if you do not itemize deductions. Each year, the Custodian will send you IRS Form 5498, showing your preceding-year IRA contributions. If you make nondeductible contributions to your traditional IRA for a taxable year, or if you receive any distributions from your IRA during a taxable year that includes nondeductible contributions, you will be required to provide certain information concerning these transactions on Form 8606, to be included with your federal income tax return for the taxable year. If you make after-tax rollover contributions to your traditional IRA, you should report such contributions in accordance with IRS guidelines.

Penalty taxes. If one or more of the following situations occur, you may be required to file Form 5329, Additional Taxes on Qualified Plans (Including IRAs) and Other Tax-Favored Accounts, with the IRS:

- (1) Payment of a 6% excise tax because of an excess contribution.
- (2) Payment of a 10% additional tax because of an early distribution before age 59½.
- (3) Payment of a 50% excise tax because of an insufficient distribution from your IRA after age 70½.

Form 5329 need not be filed if the only activity in your IRA for the year consisted of proper (i.e., nonpenalized) contributions and distributions. If Form 5329 must be filed, it should be attached to your federal income tax return or should be filed separately if you are not required to file a federal income tax return.

Distributions. When you receive distributions from your Vanguard IRA, the Custodian will send you the required tax form (Form 1099-R). If you are a nonresident alien, the Custodian will send you Form 1042-S.

Unrelated business taxable income (“UBTI”). The Custodian of your IRA is required to file an Exempt Organization Business Income Tax Return (“Form 990-T”) on behalf of the IRA for each year in which the IRA has unrelated trade or business income of \$1,000 or more. The Custodian will calculate the tax due, if any, with respect to the IRA based on the Schedule K-1 received from the respective partnership(s), file the Form 990-T with the Internal Revenue Service, and pay the tax from funds available in the IRA.

By holding assets, such as partnerships, that generate UBTI, you agree to the following to facilitate the payment of any tax due:

- (1) Your IRA will contain funds within the Settlement Fund to pay any tax imposed on UBTI when due as well as the Custodian’s charges for preparing tax return, if any.
- (2) You will sell assets or contribute sufficient amounts to your IRA, if necessary, to satisfy your tax obligation.
- (3) To the extent funds are not available, the Custodian is authorized to sell any investments in your IRA necessary to generate the funds needed to satisfy your tax obligation.

The IRS requires the IRA to make quarterly estimated tax payments when the annual federal tax expected is \$500 or more. You understand and acknowledge that the Custodian will not make estimated tax payments. If your IRA has a tax liability, you agree to pay from your IRA any interest and penalties for the underpayment of the tax due.

Section XI

Prohibited transactions

Generally, a prohibited transaction is any improper use of your IRA. Examples of prohibited transactions include borrowing money from your account or selling property to the account.

Effect on IRA. Generally, if you engage in a prohibited transaction, your IRA will lose its tax-exempt status, and you will be required to include the entire value of the account in your gross income. If your account is disqualified before you reach age 59½, you may also be required to pay the 10% additional tax on early distributions referred to in Section VIII(C).

Pledging your IRA as security. Pledging your IRA as security for a loan will cause the portion pledged to be treated as a distribution to you, includible in gross income and subject to the 10% additional tax on early distributions if you are under age 59½.

Investment in collectibles. If your IRA is invested in collectibles, the amount invested will be considered a distribution to you in the year of investment. For this reason, the Vanguard IRA specifically precludes investments in collectibles, which include art works, rugs, antiques, metals, gems, stamps, coins (but not certain gold, silver, and platinum coins issued by the United States or gold, silver, platinum, or palladium bullion), alcoholic beverages, and certain other tangible personal property.

Section XII

Other information

A. The Custodian

The Custodian of your Vanguard IRA is Vanguard Fiduciary Trust Company, a trust company incorporated under Pennsylvania banking laws. Vanguard Fiduciary Trust Company is a wholly owned subsidiary of The Vanguard Group, Inc., of Valley Forge, Pennsylvania. The Vanguard Group will perform certain administrative services in

connection with the Vanguard IRA, for which The Vanguard Group may be reimbursed at cost by Vanguard Fiduciary Trust Company.

B. Amendments

The Custodian is specifically authorized to make any amendments to the Vanguard IRA necessary to comply with the applicable provisions of the Internal Revenue Code and any other such amendments as the Custodian deems appropriate. The Custodian will inform you of any such amendments. Notice of amendments may be provided electronically, provided that you have consented to electronic delivery thereof.

C. Vanguard IRA investments

Your Vanguard IRA may be invested in shares of the mutual funds offered by The Vanguard Group, Inc. (the "Vanguard funds"), or in other types of investments that the Custodian and/or any Vanguard affiliate may permit to be available investments under the Vanguard IRA from time to time.

Directed investments. Your Vanguard IRA will be invested and reinvested solely in accordance with your directions (or, following your death, the directions of your designated beneficiary). You may change your investment directions at any time by notifying the Custodian in writing or by telephone.

Reinvestment of earnings. All dividends and capital gains received on shares of a Vanguard fund held in your Vanguard IRA that are permitted to be reinvested in additional shares of the Vanguard fund shall, in the absence of investment directions by you to the contrary, be automatically reinvested in additional shares of the Vanguard fund. Otherwise, any distribution of earnings received with respect to assets held in your account shall be reinvested solely in accordance with investment directions furnished by you.

Growth in value. The growth in value of your Vanguard IRA will depend on the investment decisions made by you and is neither guaranteed nor projected.

D. Vanguard IRA minimums

Minimum contributions. For both the Vanguard traditional and Roth IRAs, the minimum initial contribution for each Vanguard fund established for an IRA is the minimum set forth in each fund's prospectus. However, certain Vanguard funds may require higher minimum contributions as set forth in their prospectuses.

E. Custodial fees and other expenses

Vanguard may charge reasonable custodial fees with respect to the establishment and maintenance of your Vanguard IRA at any time during the calendar year. Each Vanguard fund is subject to an account service fee that is described in the fund's prospectus.

F. Vanguard fund information

For complete information about the account service fees, advisory fees, and other expenses as well as the method of calculating the price per share for each Vanguard fund you may select for your Vanguard IRA, you should read the fund's prospectus. You may choose to use Vanguard Brokerage Services[®] to invest your Vanguard IRA directly in stocks, bonds, or options. A schedule of the brokerage commissions to be charged under Vanguard Brokerage Services will be furnished to you when you establish your account.

G. IRS approval

The form of your Vanguard IRA has been approved by the IRS. IRS approval is a determination only as to the form and does not represent a determination of the merits of the Vanguard IRA. For more information, please refer to IRS Publications 590-A and 590-B or contact the IRS.

Vanguard Traditional and Roth IRA Custodial Account Agreement

Introduction

By executing the Adoption Agreement, the Investor hereby establishes a traditional individual retirement account (Traditional IRA) as described in Section 408(a) of the Code or a Roth individual retirement account (Roth IRA) as described in 408A of the Code, in order to provide for retirement or for the support of his or her Beneficiary after death.

Article I

Definitions

The following terms when used herein with initial capital letters shall be defined as follows:

- 1.1 **Account** means the custodial account established by the Investor to which contributions may be made in accordance with the terms and conditions of this Agreement. All assets of the Account shall be held by the Custodian for the exclusive benefit of the Investor or, following his or her death, the Beneficiary.
- 1.2 **Adopted Person** means a person adopted through the legal process of the United States and/or any state, commonwealth, or possession of the United States. An Adopted Person shall be considered to be the descendant or issue of the adopting person.
- 1.3 **Adoption Agreement** means the agreement executed by the Investor in which the Investor designated the Account as a Traditional IRA or a Roth IRA for purposes of adopting the Agreement. The Adoption Agreement shall be considered an integral part of the Agreement as if set forth fully herein.
- 1.4 **Agreement** means the Vanguard Traditional and Roth IRA Custodial Account Agreement as set forth herein, including the provisions set forth in the Adoption Agreement and any Beneficiary designation filed with and acceptable to the Custodian, as each such document may be amended from time to time.
- 1.5 **Authorized Party** means the executor, administrator, or personal representative of the Investor's estate, the trustee of a trust Beneficiary, or any other person deemed appropriate by the Custodian to act on behalf of the Investor's Account after the Investor's death.
- 1.6 **Beneficiary** means the persons or entities designated in accordance with Article 4.4 to receive any undistributed amount credited to the Account at the time of the Investor's death, as well as persons or entities entitled to roll over a distribution from an eligible retirement plan of a deceased employee into an inherited IRA, as permitted under Section 402(c)(11) of the Code.
- 1.7 **Children** means descendants in the first generation below the individual, including those born within or out of wedlock, and those legally adopted by the individual. This term excludes stepchildren and foster children.
- 1.8 **Code** means the Internal Revenue Code of 1986, as amended from time to time, or any successor statute.
- 1.9 **Custodian** means Vanguard Fiduciary Trust Company, a trust company incorporated under Pennsylvania banking laws, or any successor thereto.
- 1.10 **Investor** means the individual who has adopted the Agreement by executing the Adoption Agreement. (This term does not include a Beneficiary who opens an account after the Investor's death.)
- 1.11 **Descendants** means all descendants of all generations of an individual.
- 1.12 **Grandchildren** means descendants in the second generation below the individual, including those born within or out of wedlock, and those legally adopted by Children of the Investor. This term excludes stepchildren and foster children.
- 1.13 **Issue** means all descendants of all generations of an individual.
- 1.14 **Per Stirpes** means a way of dividing the Account as follows: The Account shall be divided into as many equal shares as there are surviving descendants in the generation nearest to the decedent that contains at least one surviving descendant and deceased descendants in the same generation who left surviving descendants, if any. The share of each deceased descendant who leaves surviving descendants is divided in the same manner, with the subdivision repeating until the property is fully allocated among surviving descendants. A descendant who dies before the decedent and who leaves no surviving descendants is disregarded.
- 1.15 **Roth IRA** means an individual retirement account as described in section 408A of the Code.
- 1.16 **SEP Contribution** means a contribution on behalf of the Investor by his or her employer under a simplified employee pension as described in Section 408(k) of the Code.
- 1.17 **Successor Beneficiary** means the persons or entities designated in accordance with Article 4.4 entitled to receive any undistributed amount credited to the Account at the time of the Beneficiary's death.
- 1.18 **Traditional IRA** means an individual retirement account or annuity as described in section 408(a) of the Code.
- 1.19 **Vanguard** means The Vanguard Group, Inc., a Pennsylvania corporation, or any successor thereto.
- 1.20 **Vanguard Funds** means one or more of the regulated investment companies or mutual funds that are members of The Vanguard Group, and that the Custodian permits to be available investments under this Agreement.

Article II

Contributions to Account

2.1 **General limitations.** Contributions may be made by or on behalf of the Investor to the Account for any taxable year subject to the limitations set forth below.

(a) **Regular contributions.** Except in the case of a rollover contribution to a Traditional IRA (as permitted under Code Sections 402(c), 402(e)(6), 403(a)(4), 403(b)(8), 403(b)(10), 408(d)(3), and 457(e)(16), an employer SEP contribution as described in Code section 408(k), a qualified rollover contribution to a Roth IRA, or a recharacterized contribution described in Code section 408A(d)(6), all contributions to the Account by or on behalf of the Investor shall be made in cash, and the total of such contributions to all of the Investor's IRAs shall not exceed the lesser of the Investor's compensation (as defined in Article 2.6) or the applicable amount defined in (b) below. However, notwithstanding the dollar limits on contributions, an Investor may make a repayment of a qualified reservist distribution described in Code section 72(t)(2)(G) during the two-year period beginning on the day after the end of the active duty period or by August 17, 2008, if later.

(b) **Applicable amount.** The applicable amount is determined under (i) or (ii) below.

(i) If the Investor is under age 50, the applicable amount is \$5,000 for any taxable year beginning in 2008 and years thereafter. After 2008, the \$5,000 amount will be adjusted by the Secretary of the Treasury for cost-of-living increases under Code section 219(b)(5)(D). Such adjustment will be in multiples of \$500.

(ii) If the Investor is age 50 or older, the applicable amount under paragraph (i) above is increased by \$1,000 for any taxable year beginning in 2006 and years thereafter.

(iii) If the individual was a participant in a 401(k) plan of a certain employer in bankruptcy described in Code section 219(c)(5)(C), then the applicable amount under paragraph (i) above is increased by \$3,000 for taxable years beginning after 2006 and before 2010 only. An individual who makes contributions under this paragraph (iii) may not also make contributions under paragraph (ii).

(c) **Income limits for Roth IRA contributions.** If (i) and/or (ii) below apply, the maximum regular contribution that can be made to all of the Investor's Roth IRAs for a taxable year is the smaller of the amount determined under (i) or (ii).

(i) **Regular Roth contributions.** The maximum regular contribution that can be made to all of an Investor's Roth IRAs for the taxable year is gradually reduced to \$0 between certain levels of modified adjusted gross income (modified AGI), as defined in Article 2.7 below. For a single Investor (or head of household) the maximum

annual contribution is phased out between modified AGI of \$95,000 and \$110,000; for a married Investor who files jointly (or qualifying widower), between modified AGI of \$150,000 and \$160,000; and for a married Investor who files separately, between modified AGI of \$0 and \$10,000. If the Investor's modified AGI is in the phase-out range, the maximum regular Roth IRA contribution for the taxable year is rounded up to the next multiple of \$10 and is not reduced below \$200. The dollar amounts will be adjusted by the Secretary of the Treasury for cost-of-living increases under Code section 408A(C)(3). Such adjustments will be in multiples of \$1,000.

(ii) **Contributions to both Roth and traditional IRAs.** If the Investor makes contributions to both Roth IRAs and Traditional IRAs for a taxable year, the maximum regular contributions that can be made to all of the Investor's Roth IRAs for that taxable year is reduced by the regular contributions made to the Investor's non-Roth IRAs for the taxable year.

(d) **Qualified rollover contributions to Roth IRA.**

A "qualified rollover contribution" is a rollover contribution of a distribution from an IRA that meets the requirements of Code section 408(d)(3), except the one-rollover-per-year rule of Code section 408(d)(3)(B) does not apply if the rollover contribution is from an IRA other than a Roth IRA (a "non-Roth IRA"). For taxable years beginning after 2005, a qualified rollover contribution includes a rollover from a designated Roth account described in Code section 402A; and for taxable years beginning after 2007, a qualified rollover contribution also includes a rollover from an eligible retirement plan described in Code section 402(c)(8)(B). A rollover from an eligible retirement plan other than a Roth IRA or a designated Roth account cannot be made to a Roth IRA if, for the year the amount is distributed from the other plan, (i) the Investor is married and files a separate return, (ii) the Investor is not married and has modified AGI in excess of \$100,000, or (iii) the Investor is married and together the Investor and the Investor's spouse have modified AGI in excess of \$100,000. For purposes of the preceding sentence, a husband and wife are not treated as married for a taxable year if they have lived apart at all times during the taxable year and file separate returns for the taxable year. For taxable years beginning after 2009, the limits in this paragraph do not apply to qualified rollover contributions.

2.2 **Recharacterization.** A regular contribution to one type of IRA can be recharacterized pursuant to the rules in Section 1.408A-5 of the Regulations as a regular contribution to another type of IRA. A regular contribution to a non-Roth IRA that is recharacterized to a Roth IRA is subject to the limits in Article 2.1(c) above.

- 2.3 **Rollover contributions.** The Custodian may accept rollover contributions within the meaning of Sections 402(c), 403(a)(4), 403(b)(8), 403(b)(10), 408(d)(3), 457(e)(16), or 408A(e) of the Code that consist of cash or of such other assets that are acceptable to the Custodian and that are permissible investments under Section 408(a) of the Code. Before making a rollover contribution, the Investor shall provide any information the Custodian may require, in a form and manner acceptable to the Custodian. The Custodian shall be under no obligation to accept any rollover contribution consisting of assets other than cash. The Investor shall have the sole responsibility for determining whether any contribution to the Account qualifies as a rollover contribution.
- 2.4 **SEP Contributions.** SEP Contributions may be made to a traditional IRA on behalf of the Investor by his or her employer for any taxable year in an amount not to exceed the amount provided in Section 408(j) of the Code or any successor statutory provision thereto for such taxable year. Before making any SEP Contribution, the Investor shall execute such forms as the Custodian may require to certify that the Investor is covered under a simplified employee pension (as described in Section 408(k) of the Code) established by his or her employer and to provide other information as the Custodian may reasonably request. The Investor shall have the sole responsibility for determining whether any contribution to the Account qualifies as a SEP Contribution.
- 2.5 **SIMPLE contributions.** No contributions will be accepted under a SIMPLE IRA plan established by any employer pursuant to Code section 408(p). Also, no transfer or rollover of funds attributable to contributions made by a particular employer under its SIMPLE IRA plan will be accepted from a SIMPLE IRA; that is, an IRA used in conjunction with a SIMPLE IRA plan, prior to the end of the two-year period beginning on the date the individual first participated in that employer's SIMPLE IRA plan.
- 2.6 **Compensation.** For purposes of 2.1 above, compensation is defined as wages, salaries, professional fees, or other amounts derived from or received for personal services actually rendered (including, but not limited to commissions paid to salespersons, compensation for services on the basis of a percentage of profits, and commissions on insurance premiums, tips, and bonuses) and includes earned income, as defined in Section 401(c)(2) (reduced by the deduction the self-employed individual takes for contributions made to a self-employed retirement plan). For purposes of this definition, Section 401(c)(2) shall be applied as if the term trade or business for purposes of Section 1402 of the Code included service described in Subsection (c)(6). Compensation does not include amounts derived from or received as earnings or profits from property (including but not limited to interest and dividends) or amounts not includible in gross income. Compensation also does not include any amount received as a pension or annuity or as deferred compensation. The term

"compensation" shall include any amount includible in the individual's gross income under Code Section 71 with respect to a divorce or separation instrument described in Subparagraph (A) of Code Section 71(b)(2). In the case of a married individual filing a joint return, the greater compensation of his or her spouse is treated as his or her own compensation, but only to the extent that such spouse's compensation is not being used for purposes of the spouse making a contribution to a Roth IRA or a deductible contribution to a traditional IRA. Compensation includes nontaxable combat pay received by a member of the U.S. Armed Services.

- 2.7 **Modified adjusted gross income (modified AGI).** For purposes of Articles 2.1(c) and (d) above, an Investor's modified AGI for a taxable year is defined in Code Section 408A(c)(3)(C)(i) and does not include any amount included in gross income as a result of a rollover from an eligible retirement plan other than a Roth IRA (a "conversion").
- 2.8 **Timing of contributions.** For purposes of Article 2.1, any contribution to the Account by the Investor shall be deemed to have been made on the last day of the preceding taxable year if the contribution is made on account of such taxable year and is made not later than the date prescribed by law for filing the Investor's federal income tax return for such taxable year (not including any extensions thereof). The Investor shall have the sole responsibility for determining whether any contribution to the Account is deductible for federal income tax purposes.
- 2.9 **Responsibility of Custodian and Vanguard.** Neither the Custodian nor Vanguard shall have any responsibility for determining whether any contribution by or on behalf of the Investor to the Account qualifies as a Rollover Contribution or SEP Contribution, or whether any contribution to the Account is deductible by the Investor for federal income tax purposes.

Article III

Investment of Account

- 3.1 **Investment of contributions (including transfers).** The Custodian shall invest and reinvest all contributions to the Account in accordance with the investment directions of the Investor as set forth in the Adoption Agreement or in any subsequent investment directions furnished by the Investor pursuant to Article 3.2. If the Account contains any amount with respect to which the Investor has not furnished investment instructions or if the Investor has furnished investment instructions which, in the opinion of the Custodian, are unclear, incomplete, or otherwise not in good order, the Custodian may request additional investment instructions from the Investor. Pending receipt of such investment instructions, the Custodian may (i) hold all or a portion of such amount uninvested, (ii) invest all or a portion of the contribution amount in a Vanguard Money Market Fund, or a Vanguard Brokerage Services' Settlement Fund option or (iii) return all or a portion of the investment amount to the Investor without

liability for loss of income or appreciation pending receipt of proper investment directions.

3.2 Investment directions; available investments. The Investor or, following his or her death, the Beneficiary, shall be permitted at all times to direct, or retain an agent, investment advisor, or manager to direct the Custodian as to the investment or reinvestment of the assets of the Account. All such investment directions shall be made in a form or manner acceptable to the Custodian. Assets of the Account may be invested in shares of one or more of the Vanguard Funds or in other investments that are eligible for acquisition under Section 408(a) or 408A of the Code and that the Custodian and/or any Vanguard affiliate permits to be available investments under this Agreement. U.S.-domiciled Vanguard funds generally are not available for sale to Investors that reside outside of the United States. All investments of the Account shall be registered in the name of the Custodian or its nominee, or shall be retained unregistered or in a form permitting transfer by delivery, provided that the books and records of the Custodian shall at all times show such investments to be part of the Account.

3.3 Prohibitions concerning life insurance, collectibles, and commingling. Notwithstanding any provision of this Agreement to the contrary, no assets of the Account will be invested in life insurance contracts or in collectibles (within the meaning of Section 408(m) of the Code), nor will assets of the Account be commingled with other property except in a common trust fund or common investment fund (within the meaning of Section 408(a)(5) of the Code).

3.4 Responsibility of Custodian and Vanguard

(a) **Investments in general.** In making any investment or reinvestment of the assets of the Account, the Custodian shall be fully entitled to rely on the investment directions furnished to it by the Investor or Beneficiary in accordance with the terms and conditions of this Agreement, and shall be under no duty to make any inquiry or investigation with respect thereto. The Investor hereby acknowledges that neither the Custodian nor Vanguard undertakes to render any investment advice in connection with this Agreement, and that the assets of the Account are to be invested, reinvested, and controlled exclusively by the Investor or, following his or her death, the Beneficiary in accordance with the terms and conditions of this Agreement.

(b) **Vanguard Fund shares.** The Custodian shall be responsible for delivering to the Investor or, following his or her death, the Beneficiary, all shareholder notices, reports, and proxies relating to Vanguard Fund shares held in the Account. The Custodian shall vote any such shares at shareholder meetings of the Vanguard Funds in accordance with instructions received from the Investor or Beneficiary. By establishing (or by having

established) the Account, the Investor hereby directs the Custodian to vote any Vanguard Fund shares held in the Account for which no timely voting instructions are received in proportionately the same manner as shares timely voted by such fund's other shareholders. By directing that assets of the Account be invested in a Vanguard Fund, the Investor or Beneficiary shall be deemed to have acknowledged receipt of the current prospectus for such Vanguard Fund.

Article IV

Distribution of Account

4.1 General requirements.

(a) Notwithstanding any provision of this Agreement to the contrary, the distribution of the Investor's interest in the Account shall be made in accordance with the requirements of Code Sections 408(a)(6) (as modified by Section 408A(c)(5) for Roth IRAs), and the regulations thereunder, the provisions of which are incorporated herein by reference. The Custodian shall distribute the balance of the Account to the Investor or, after his or her death, the Beneficiary, at such times and in such manner as the Investor or Beneficiary shall direct, subject to the requirements set forth below.

(b) **Method of distribution.** The Investor, or after his or her death, the Beneficiary, may elect to have all or any portion of the Account distributed in one or a combination of the following ways:

(1) A partial payment.

(2) A lump-sum payment.

(3) Monthly, quarterly, semiannual or annual installment payments provided that the method of distribution satisfies the minimum distribution requirements of Article 4.2.

The Investor's or Beneficiary's request must be made in a form and manner acceptable to the Custodian. The Investor or Beneficiary may change his or her designated method of distribution upon proper notification to the Custodian.

(c) **Distribution in kind.** All distributions from the Account shall be made in cash, with the exception that the Investor or Beneficiary may elect to have all or any portion of the distribution made in kind, in which case the Custodian shall transfer such specific assets as the Investor or Beneficiary may direct into the name of the Investor or Beneficiary, and with the further exception that any assets held in the Account, which cannot be sold by the Custodian for cash in the ordinary course of business for purposes of making distributions from the Account, shall be distributed to the Investor or Beneficiary in kind.

4.2 Lifetime minimum distribution requirements

(a) Traditional IRA

- (i) **Required beginning date.** The entire value of the account of the Investor for whose benefit the Account is maintained must commence to be distributed no later than the first day of April following the calendar year in which the Investor attains age 70½ (the Investor's "required beginning date") over the life of the Investor or the lives of the Investor and his or her designated Beneficiary.
- (ii) **Annual minimum amount.** The amount to be distributed each year, beginning with the calendar year in which the Investor attains age 70½ and continuing through the year of death, may not be less than the amount determined by dividing the value of the IRA (as determined under Article 4.3(c) as of the end of the preceding year by the distribution period in the Uniform Lifetime Table in Q&A-2 of Section 1.401(a)(9)-9 of the Income Tax Regulations, using the Investor's age as of his or her birthday in the year. However, if the Investor's sole designated Beneficiary is his or her surviving spouse and such spouse is more than ten years younger than the Investor, then the distribution period is determined under the Joint and Last Survivor Table in Q&A-3 of Section 1.401(a)(9)-9 of the Income Tax Regulations, using the ages as of the Investor's and spouse's birthdays in the year.
- (iii) **Timing of minimum distributions.** The required minimum distribution for the year the Investor attains age 70½ can be made as late as April 1 of the following year. The required minimum distribution for any other year must be distributed no later than December 31 of that calendar year.
- (iv) **Aggregation of IRAs.** The Investor may satisfy the distribution requirements under Section 408(a)(6) of the Code by receiving a distribution from one IRA that is equal to the amount required to satisfy the minimum distribution requirements for two or more IRAs in accordance with Q&A-9 of Section 1.408-8 of the Income Tax Regulations.

- (b) **Roth IRA.** No amount is required to be distributed from a Roth IRA prior to the death of the Investor for whom the account was originally established.

4.3 Distributions upon death: Traditional and Roth IRAs.

In the event the Investor dies prior to the complete distribution of the Account, the remaining balance of the Account will be distributed to the Beneficiary at such time and in such manner as the Beneficiary shall direct, in a form and manner acceptable to the Custodian, subject to the following rules:

- (a) **Traditional IRAs where investor dies before required beginning date and all Roth IRAs.** For traditional IRAs where the Investor dies before his or her required beginning date and for all Roth IRAs, the Investor's interest must be distributed at least as rapidly as follows:

- (i) If the designated Beneficiary is someone other than the Investor's surviving spouse, the entire interest must be distributed, starting by December 31 of the calendar year following the calendar year of the Investor's death, over the remaining life expectancy of the designated Beneficiary, with such life expectancy determined using the age of the Beneficiary as of his or her birthday in the year following the year of the Investor's death, or, if elected, in accordance with paragraph (a)(iii) below.
- (ii) If the Investor's sole designated Beneficiary is the Investor's surviving spouse, the entire interest must be distributed, starting by December 31 of the calendar year following the calendar year of the Investor's death (or by the end of the calendar year the Investor would have attained age 70½, if later), over such spouse's life, or, if elected, in accordance with paragraph (a)(iii) below. If the surviving spouse dies before distributions are required to begin, the remaining interest must be distributed, starting by December 31 of the calendar year following the calendar year of the spouse's death, over the spouse's designated Beneficiary's remaining life expectancy determined using such Beneficiary's age as of his or her birthday in the year following the death of the spouse, or, if elected, in accordance with paragraph (a)(iii) below. If the surviving spouse dies after distributions are required to begin, any remaining interest will be distributed over the spouse's remaining life expectancy determined using the spouse's age as of his or her birthday in the year of the spouse's death.
- (iii) If there is no designated Beneficiary, or if applicable by operation of paragraph (a)(i) or (a)(ii) above, the remaining interest must be distributed by the end of the calendar year containing the fifth anniversary of the Investor's death (or of the spouse's death in the case of the surviving spouse's death before distributions are required to begin under paragraph (a)(ii) above).
- (iv) The amount that must be distributed under paragraphs (a)(i) or (ii) above is the amount determined by dividing the value of the IRA as of the end of the preceding year by the remaining life expectancy specified in such paragraph. Life expectancy is determined using the Single Life Table in Q&A-1 of Section 1.401(a)(9)-9 of the Income Tax Regulations. If distributions are being made to a surviving spouse as the sole designated Beneficiary, such spouse's remaining life expectancy for a year is the number in the Single Life Table corresponding to such spouse's age in the year. In all other cases, remaining life expectancy for a year is the number in the Single Life Table corresponding to the Beneficiary's age in the year specified in paragraph (a)(i) or (ii) and reduced by one for each subsequent year.

- (b) **Traditional IRAs where investor dies on or after required beginning date.** If the Investor dies on or after the required beginning date, the remaining portion of his or her interest in the Traditional IRA must be distributed at least as rapidly as follows:
- (i) If the designated Beneficiary is someone other than the Investor's surviving spouse, the remaining interest must be distributed over the remaining life expectancy of the designated Beneficiary, with such life expectancy determined using the Beneficiary's age as of his or her birthday in the year following the year of the Investor's death, or over the period described in paragraph (b)(iii) below if longer.
 - (ii) If the Investor's sole designated Beneficiary is the Investor's surviving spouse, the remaining interest must be distributed over such spouse's life or over the period described in paragraph (b)(iii) below if longer. Any interest remaining after such spouse's death must be distributed over such spouse's remaining life expectancy determined using the spouse's age as of his or her birthday in the year of the spouse's death, or, if the distributions are being made over the period described in paragraph (b)(iii) below, over such period.
 - (iii) If there is no designated Beneficiary or if applicable by operation of paragraph (b)(i) or (b)(ii) above, the remaining interest must be distributed over the Investor's remaining life expectancy determined in the year of the Investor's death.
 - (iv) The amount to be distributed each year under paragraph (b)(i), (ii), or (iii), beginning with the calendar year following the calendar year of the Investor's death, is the amount determined by dividing the value of the IRA as of the end of the preceding year by the remaining life expectancy specified in such paragraph. Life expectancy is determined using the Single Life Table in Q&A-1 of Section 1.401(a)(9)-9 of the Income Tax Regulations. If distributions are being made to a surviving spouse as the sole designated Beneficiary, such spouse's remaining life expectancy for a year is the number in the Single Life Table corresponding to such spouse's age in the year. In all other cases, remaining life expectancy for a year is the number in the Single Life Table corresponding to the Beneficiary's or Investor's age in the year specified in paragraph (b)(i), (ii), or (iii) and reduced by one for each subsequent year.
- (c) **Value of IRA.** The "value" of the IRA includes the amount of any outstanding rollover, transfer, and recharacterization under Q&A-7 and Q&A-8 of Section 1.408-8 of the Income Tax Regulations.
- (d) **Designated Beneficiary for minimum distribution purposes.** The "designated Beneficiary" for purposes of determining the distribution period for

required minimum distributions after the Investor's death is determined in accordance with Section 1.401(a)(9)-4 of the Income Tax Regulations. In general, the Investor's designated Beneficiary for required minimum distribution purposes is determined based on the Beneficiaries designated as of the date of the Investor's death who remain Beneficiaries as of September 30 of the calendar year following the Investor's death.

- (e) **Spousal election.** If the sole designated Beneficiary is the Investor's surviving spouse, the spouse may elect to treat the IRA as his or her own. This election will be deemed to have been made if such surviving spouse makes a contribution to the IRA or fails to take required distributions as a Beneficiary.

4.3A Required minimum distribution service

Vanguard may, but shall not be required to, offer a service for Investors and/or Beneficiaries providing calculation or calculation and distribution of required minimum distributions ("RMD Service"). Any such service shall be provided under the terms and conditions set forth in a Service Agreement, as such may be amended from time to time. By enrolling in the RMD Service, the Investor and/or Beneficiary shall be deemed to have consented to such terms and conditions of such Service Agreement, including any amendments thereto effective after the date of enrollment in the RMD Service.

4.4 Designation of Beneficiary

- (a) **General rules.** The Investor may designate from time to time any person or persons, entities, such as a trust, or other recipient acceptable to the Custodian as his or her primary and/or contingent Beneficiaries. To be entitled to receive any undistributed amounts credited to the Account at the Investor's death, any person or persons designated as a Beneficiary must be alive and any entity designated as a Beneficiary must be in existence at the time of the Investor's death. The surviving primary Beneficiaries shall be first entitled to receive any undistributed amounts credited to the Account at the Investor's death. If the Investor has designated more than one primary Beneficiary, the Beneficiaries shall be entitled to receive any undistributed amount credited to the Account at the time of the Investor's death in the proportions indicated by the Investor. In the event that the Investor has not indicated the proportions to which multiple Beneficiaries may be entitled or has indicated percentages that do not exactly equal 100%, payment will be made to the surviving Beneficiaries in equal shares. Except as described in the next sentence, if any primary Beneficiary has not survived the Investor, that Beneficiary's share of the Investor's Account will be divided proportionately among the surviving primary Beneficiaries. Notwithstanding anything to the contrary in this paragraph 4.4(a), if the Investor has indicated that any Beneficiary designation is made on a Per Stirpes

basis and the deceased primary Beneficiary has surviving Issue, the share of the deceased primary Beneficiary shall be divided into equal shares for each such surviving Issue. In the event that there are no surviving primary Beneficiaries at the time of the Investor's death, the contingent Beneficiaries, in the order indicated by the Investor (secondary, tertiary, etc.), shall be entitled to receive any undistributed amount credited to the Account at the time of the Investor's death and shall succeed to the rights of a primary Beneficiary in accordance with this Agreement. If multiple contingent Beneficiaries at the same level become entitled to any amounts credited to the Account, distribution shall be made in the same manner as if the Beneficiaries were multiple primary Beneficiaries. If no Beneficiary designation is in effect, or if there are no surviving Beneficiaries, at the time of the Investor's death, the Beneficiary shall be the Investor's surviving spouse, if any. If the Investor has no surviving spouse, the Investor's Beneficiary shall be the Investor's estate.

Any Beneficiary designation by the Investor shall be made in a form and manner prescribed by or acceptable to the Custodian and shall be effective only when received by the Custodian during the Investor's lifetime. The Investor may change or revoke his or her Beneficiary designation at any time prior to his or her death by making a new Beneficiary designation with the Custodian. Any such change will revoke all prior Beneficiary designations submitted to the Custodian in their entirety. Investor agrees that in the event of a dispute as to the Beneficiary of the Account, the Custodian, in its discretion, may rely upon an order of a court of competent jurisdiction determining the beneficiary provided that, all interested parties (1) had notice of and an opportunity to participate in the court proceeding, or (2) executed an agreement resolving the dispute. The Custodian reserves the right to ask a court of competent jurisdiction to resolve any beneficiary dispute and to recover its costs of doing so, including reasonable attorneys' fees, from the Account. Unless the Investor has indicated otherwise on the Beneficiary designation, any designation of a Spouse by name or by relationship shall be deemed revoked by the divorce of the Investor and such Beneficiary; provided that no such revocation shall be deemed final until documentary evidence of such divorce, in form and substance acceptable to Custodian, shall have been provided to Custodian, following the investor's death, and Custodian shall not be liable for any payment or transfer made to a Beneficiary in the absence of such documentation. For purposes of this Agreement, divorce shall mean a final decree of divorce, annulment, or dissolution of the marriage in effect in any jurisdiction.

- (b) **Minors.** If upon the death of the Investor, a Beneficiary known to the Custodian to be a minor is entitled to receive any undistributed assets of

the Account, the Custodian may, in its absolute discretion, transfer assets to an inherited Account for the benefit of the minor Beneficiary. So long as the Beneficiary is a minor, such inherited Account shall be controlled by such person or persons demonstrated to the Custodian's satisfaction to be authorized to act on behalf of the minor. Any person or entity representing his authority to act on behalf of a minor shall submit such information and documentation to authenticate such authority as the Custodian shall reasonably request. The minor Beneficiary's representative may be the guardian, conservator, or other legal representative of such minor Beneficiary, the natural parent of such Beneficiary (provided that if the minor's parents are divorced, the Custodian may deem only the parent having legal custody of the minor to be authorized to act on behalf of the minor), a custodian appointed for such Beneficiary under a Uniform Gift to Minors Act, Uniform Transfers to Minors Act, or similar act, a person appointed by the Investor to act as an authorized person for such minor Beneficiary with respect to the Account in a writing filed with the Custodian or in the Investor's last will and testament as admitted to probate or trust document as to which the Investor is grantor, or any person having control or custody of such minor Beneficiary.

Any minor Beneficiary shall be deemed to be a minor until the later of such Beneficiary reaching (1) the age of majority under the law of the state of the minor's domicile with respect to the right to own mutual funds and other investments or (2) a later age for termination of minor status, but in no event later than age 25, as designated by the Investor in a Beneficiary designation accepted by the Custodian with respect to the Account.

- (c) **Marital trusts.** The Investor or, as permitted by law, the spousal Beneficiary following the death of the Investor, may designate as Beneficiary a trust for the benefit of the surviving spouse intended to satisfy the conditions of Sections 2056(b) (pertaining to qualified terminable interest property trusts or "QTIP" trusts) or 2056A (pertaining to qualified domestic trusts or "QDOT" trusts) of the Code (collectively, referred to as "marital trusts"). To the extent such QTIP or QDOT trust is a Beneficiary of the Account, the following provisions shall apply until the earlier of the death of the surviving spouse or the termination of the Account: (1) all of the income of the Account shall be payable to the marital trust or directly to the surviving spouse, at the direction of the trustee of the marital trust, at least annually or at such more frequent intervals as may be directed by the trustee of the marital trust, and (2) no person, other than the surviving spouse, shall have the right to assign any part of the Account to any person other than the marital trust or the surviving spouse.
- (d) **Rights of primary Beneficiaries upon investor's death.** In addition to rights otherwise conferred

upon Beneficiaries under this Agreement, all individual Beneficiaries shall be entitled to designate Successor Beneficiaries of their inherited Account. Any Successor Beneficiary designation by the Beneficiary shall be made in accordance with the provisions of paragraph (a) above. If a Beneficiary dies after the Investor but prior to receipt of the entire interest in the Account and has Successor Beneficiaries, the Successor Beneficiaries shall succeed to the rights of the Beneficiary. If a Beneficiary dies after the Investor but prior to receipt of the entire interest in the Account and no Successor Beneficiary designation is in effect at the time of the Beneficiary's death, the beneficiary shall be the Beneficiary's estate. Upon instruction to the Custodian, each multiple Beneficiary may receive his, her, or its interest as a separate account, within the meaning of Regulation Section 1.401(a)(9)-8, Q&A-3, to the extent permissible by law. The trustee of a trust Beneficiary shall exercise the rights of such trust Beneficiary.

4.5 Responsibility of Custodian and Vanguard

- (a) **Identification of Beneficiaries.** The Custodian shall not be responsible for determining the identity or interest of any Beneficiary designated by relationship to the Investor. The Custodian is fully entitled to rely on any representations made by the Authorized Party or, if applicable, the Beneficiaries, with respect to the identity of the Beneficiaries of the Account, and shall be under no duty to make any inquiry or investigation thereto. The Custodian and Vanguard have no responsibility to locate or notify any Beneficiary or the personal representative of the Investor or any Beneficiary of the existence of the Account. It is the responsibility of the Beneficiary or personal representative of the Investor or of the Beneficiary to notify the Custodian of the death of the Investor or Beneficiary, and to provide the Custodian with such documentation as the Custodian deems necessary to transfer ownership of the Account. The Investor agrees that the Custodian and Vanguard shall have no liability for, and shall be fully indemnified against, any cost or damage they incur in connection with their good-faith reliance upon such representations.
- (b) **Distributions.** In making any distribution from the Account, the Custodian shall be fully entitled to rely upon the directions of the Investor or, following his or her death, the Beneficiary, and shall be under no duty to make any inquiry or investigation with respect thereto. The Custodian shall not have any responsibility to make any distribution, including a required minimum distribution, until it receives such directions in form and manner acceptable to the Custodian. Neither the Custodian nor Vanguard shall have any responsibility for the timing, propriety, or tax consequences of any distribution from the Account, which matters shall be the exclusive responsibility of the Investor or Beneficiary, as the case may be.

- (c) **Further obligations.** The Custodian shall not be responsible for (1) the interpretation of any formula clause or trust provision contained in any Beneficiary designation filed with the Custodian, (2) the determination of the legal effect of any disclaimer or renunciation made by any Beneficiary to the Account, or (3) the enforcement of any legal obligation, including tax obligations, of the Investor or any Beneficiary. The mere acceptance of any Beneficiary designation submitted by an Investor shall not limit the Custodian's rights or increase its responsibilities under this Agreement and under law. The Custodian is fully entitled to rely on any instructions or representations made by the Beneficiary or the Authorized Party with respect to any of the responsibilities identified in this Article 4.5(c). The Investor agrees that the Custodian and Vanguard shall have no liability for, and shall be fully indemnified against, any cost or damage they incur in connection with their good-faith reliance upon such representations.
- (d) **Additional information.** The Custodian reserves the right to request such additional information and documentation from the Investor, the Beneficiary, or the Authorized Party as the Custodian deems may be needed in respect of establishment, maintenance, and distribution of the Account.

Article V

Transfers

- 5.1 **Transfers to Account.** Assets held on behalf of the Investor in another individual retirement account may be transferred by the trustee or custodian thereof directly to the Custodian, in a form or manner acceptable to the Custodian, to be held in the Account on behalf of the Investor under this Agreement. Transfers are generally only permitted between the same type of IRA plans (e.g., traditional IRA to traditional IRA) or, if made after the Investor's death, to another inherited IRA of the same type from or in the name of the same decedent. In accepting any such direct transfer of assets, the Custodian assumes no responsibility for the tax consequences of the transfer, the responsibility for which rests solely with the Investor or the Beneficiary, as the case may be.
- 5.2 **Transfers from Account.** If so directed by the Investor, or in the event of a transfer made after the Investor's death by the Beneficiary, in a form or manner acceptable to the Custodian, the Custodian shall transfer assets held in the Account directly to the trustee or custodian of another individual retirement account established on behalf of the Investor or the Beneficiary, as the case may be. Transfers are generally only permitted between the same types of IRA plans (e.g., traditional IRA to traditional IRA) or, if made after the Investor's death, to another inherited IRA of the same type from or in the name of the same decedent. In making any such direct transfer of assets, the Custodian assumes no responsibility for the tax consequences of the transfer,

the responsibility for which rests solely with the Investor or the Beneficiary, as the case may be.

- 5.1 **Transfers incident to divorce.** All or any portion of the Investor's interest in the Account may be transferred to a former spouse pursuant to a divorce decree or written instrument incident to divorce as provided in Section 408(d)(6) of the Code, in which event the transferred portion of the Account shall be held as a separate individual retirement account for the benefit of such spouse in accordance with the terms and conditions of this Agreement.

Article VI

Reporting, disclosure, and fees

- 6.1 **Information by Investor.** The Investor shall furnish the Custodian with all information as may be necessary for the Custodian to prepare any reports required pursuant to Section 408(i) of the Code and the regulations thereunder.

- 6.2 **Annual reports by Custodian.** The Custodian shall render an annual report to the Investor, on or before January 31 of each calendar year, containing all information with respect to the preceding calendar year as is required to be furnished pursuant to Section 408(i) of the Code and the regulations thereunder and such information concerning required minimum distributions as is prescribed by the Commissioner of Internal Revenue. In addition, the Custodian shall submit all other reports to the IRS and the Investor (or, following his or her death, the Beneficiary) as may be prescribed by the IRS including any returns relating to unrelated business taxable income generated by the Account.

- 6.3 **Fees and expenses.**

- (a) **Custodian fees.** The Custodian shall be entitled to such reasonable fees with respect to the establishment and maintenance of the Account as are established by it from time to time, and to reimbursement for all reasonable expenses incurred by it in the management of the Account. The Custodian may change its fees payable under this Agreement at any time upon notice to the Investor. The Custodian shall be entitled to reimbursement for costs, including attorney's fees and other expenses, related to the Account.
- (b) **Investment management and advisory fees.** Notwithstanding anything contained herein to the contrary, the Investor may authorize the direct payment of investment management and/or advisory fees from the Account to the Custodian or other third party provided that the Account is solely liable for the payment of such fees.

Article VII

Amendment, termination, and assignment

- 7.1 **Amendment.** The Custodian is authorized to amend the Agreement in any respect and at any time (including retroactively) to comply with the applicable provisions of

the Code and the regulations thereunder. The Custodian is also authorized to amend this Agreement to reflect any other changes to the terms of this Agreement that the Custodian deems appropriate. Any such amendment to the Agreement shall be deemed effective upon the delivery of notice of the amendment to the Investor (or following the Investor's death, the Beneficiary).

Notice may be provided electronically, provided that the Investor or the Beneficiary has consented to electronic delivery of the Agreement and any and all amendments thereto. The Investor (or following the Investor's death, the Beneficiary) shall be deemed to consent to any such amendment if he or she fails to object thereto by notifying the Custodian, in a form and manner acceptable to the Custodian, within 30 calendar days from the date the notice is delivered, to terminate the Agreement. The terms of the Agreement in effect at the death of the Investor or the Beneficiary, as the case may be, will control the disposition of the assets.

- 7.2 **Resignation or removal of Custodian.** The Custodian may resign at any time upon 30 days' written notice to the Investor (or, following the Investor's death, the Beneficiary), which notice may be waived by the Investor (or, following the Investor's death, the Beneficiary), and may be removed by the Investor (or, following the Investor's death, the Beneficiary) at any time upon 30 days' written notice to the Custodian (which notice may be waived by the Custodian). Upon such resignation or removal, the Investor shall appoint a successor custodian under this Agreement. The successor custodian shall be a bank or other person qualified to serve as trustee of an individual retirement account under Section 408(a)(2) of the Code. Upon receipt by the Custodian of written acceptance of such appointment by the successor custodian, the Custodian shall transfer to the successor custodian the assets of the Account and all necessary records pertaining thereto, after reserving such reasonable amount as it deems necessary for payment of its fees and expenses. If within 30 days after the Custodian's resignation or removal, or such longer time as the Custodian may agree to, the Investor (or, following the Investor's death, the Beneficiary) has not appointed a successor custodian, the Custodian may terminate this Agreement in accordance with Article 7.3.

- 7.3 **Termination.** The Investor may at any time terminate this Agreement by delivering to the Custodian a written notice of termination. The Custodian may terminate this Agreement in the event the Investor (or, following the Investor's death, the Beneficiary) fails to appoint a successor custodian under circumstances described in Article 7.2. Upon termination of the Agreement, the assets in the Account shall be distributed to the Investor in a lump-sum payment of cash or in kind.

- 7.4 **Assignment of Agreement.** The Custodian reserves the right to assign and/or delegate any and all of its rights and obligations under this Agreement to an affiliate of the Custodian without the prior approval of the Investor or Beneficiary.

Article VIII

Miscellaneous

- 8.1 **Exclusive benefit and nonforfeitability.** The Account is established for the exclusive benefit of the Investor or, following his or her death, the Beneficiary. The interest of the Investor (or following the Investor's death, the Beneficiary) in the balance of the Account shall at all times be nonforfeitable.
- 8.2 **Prohibition against assignment of Account.** Except as may otherwise be provided in Article 5.3 or 8.3, no interest, right, or claim in or to any part of the Account or any payment therefrom shall be assignable, transferable, or subject to sale, mortgage, pledge, hypothecation, commutation, anticipation, garnishment, attachment, execution, or levy of any kind, and the Custodian shall not recognize any attempt to effect any of the preceding, except to the extent required by law.
- 8.3 **Escrow Account.** The Account may serve as an escrow arrangement to hold restricted distributions from defined benefit plans in accordance with an escrow agreement received by, and acceptable to, the Custodian in its sole discretion. Distributions from such Account will be restricted in accordance with the terms of the escrow agreement.
- 8.4 **Prohibited transactions.** The Investor (or following the Investor's death, the Beneficiary) shall not engage in any transaction with respect to the Account that is prohibited under Section 4975 of the Code and which, under Section 408(e)(2) of the Code, would cause the Account to no longer qualify as an individual retirement account.
- 8.5 **Governing law.** This Agreement shall be governed, administered, and enforced according to the laws of the Commonwealth of Pennsylvania, except to the extent preempted by federal law.
- 8.6 **Agreement controls.** In the event of any discrepancy between this Agreement and any other document or instrument filed with Vanguard in respect of the Account, the terms of this Agreement shall control. Except with respect to section 4.5(c), the terms of any Beneficiary designation accepted by the Custodian shall control over the terms of this printed Agreement to the extent of any inconsistency.
- 8.7 **Simultaneous death and slayer statutes.** In the event that the order of the deaths of the Investor and any primary Beneficiary or on inherited Accounts, of the Beneficiary and any primary Successor Beneficiary, cannot be determined or are deemed to have occurred simultaneously under the law of the state of Investor's or Beneficiary's domicile, as the case may be, the survivor shall be that person who is determined to survive in accordance with the law of that state at the time of the Investor's or Beneficiary's death, as the case may be. In the event that the death of the Investor or any Beneficiary is the result of criminal act involving any other Beneficiary, Vanguard may look to the law of the state of domicile, including any slayer or similar statute, to determine the rights of the Beneficiaries to the assets in the Account.

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