This document describes the features, policies, fees, and risks associated with your Fidelity Account®.

The first section is the agreement, or contract, for your account. The second section includes a copy of the current fee schedule and other account-related information.

Please review this document and keep it for your records. Do not mail it in with your application.

CUSTOMER AGREEMENT

About This Agreement
An introduction that includes a summary of Fidelity's responsibilities and the responsibilities you agree to accept in using your account.

Account Features
Descriptions of the basic features of your account and several optional features, such as cash management features.

Account Policies
Information on policies that affect how your account works, how orders are processed, and other account functions.

Borrowing on Margin
How a margin account works, the terms and conditions of its use, and a discussion of risks associated with margin borrowing.

Disclosures
Information on liability, certain regulations, and predispute arbitration.

ADDITIONAL INFORMATION

Fees
Fidelity’s brokerage fee schedules, fees for various features and services, and margin borrowing charges.

Privacy Notice

Fidelity
INVESTMENTS
Things to Know
Before Using Your Account

The information in this box is only a summary. Please read the agreement for more complete information.

Using your brokerage account involves risks, for which you assume full responsibility.
As the account owner, you are fully responsible for monitoring your account and for all investment decisions and instructions concerning your account.
Placing orders during times when markets are volatile can be risky, particularly when you are using electronic services to access information or to place orders through your Fidelity Account® brokerage account.
Before you start using your account or any account feature, it's essential that you understand the terms, conditions, and policies that apply.
A joint owner or any one of multiple trustees can place any order in a joint account or trust account (including removing all of the assets) without the approval of the other owner(s) or trustee(s) and without any obligation on Fidelity's part to question the action.

There are certain situations in which it is essential that you get in touch with us.
You need to tell us immediately if any of the following occur:
• You notice anything incorrect or suspicious concerning your orders, account activity, or statements.
• Your financial circumstances or goals change.
• You become subject to laws or regulations concerning corporate insiders, the reporting of certain investments, or employment in the securities industry.
Disputes between you and Fidelity are settled by arbitration.
As with most brokerage accounts, the parties agree to waive their right to sue in court, and agree to abide by the findings of an arbitration panel established in accordance with an industry self-regulatory organization.

How to Contact Us
For matters concerning your account, including questions, changes, and notification of errors, reach us:

By Phone  In Writing
800-544-6666  Fidelity Investments
Online  Client Services
Fidelity.com  P.O. Box 770001
            Cincinnati, OH 45277-0045

Who’s Who in This Agreement
In this document, “Fidelity,” “us,” and “we” include Fidelity Brokerage Services LLC (“FBS”) and National Financial Services LLC (“NFS”) and their employees, agents and representatives, as the context may require. “You” and “account owner” refer to the owner indicated on the account application; for any account with more than one owner or authorized person (such as a joint or trust account), “you” and “account owner” or “account owners” refer to all owners, collectively and individually.

About This Agreement

Fidelity’s Commitments to You
Under this agreement, Fidelity has certain rights and responsibilities. When we accept your account application, we are agreeing to serve as your broker and to maintain an account for you. We agree, subject to our acceptance of an authorized order, to buy, sell, or otherwise dispose of, or acquire, securities for you according to your instructions. We also agree to provide, or acquire, various services and features, as described on the following pages.

Your Commitments to Fidelity
Many of these commitments are spelled out more completely on the following pages, but in general, when you sign the account application, you agree:
• to accept full responsibility for the content and accuracy of all authorized instructions placed on your account, and for all results and consequences of these instructions, including all investment decisions, trading orders, tax consequences, and instructions placed by you or any other person you authorize
• to pay all fees, charges, and expenses incurred on your account, in accordance with the provisions of this agreement and the fee schedule in effect at the time (a current schedule is provided with this agreement); for services we perform at your request that are not covered in our current fee schedule, you agree to pay the applicable fee
• to maintain enough assets in your account to satisfy all obligations as they become due, and to understand that we may take whatever steps we consider necessary to resolve unpaid debts or other obligations
• to use the account and its features according to this agreement and for your own personal purposes only
• if you use any of our electronic services, or if you provide us with your email address to have your personal financial information transmitted electronically, and to receive your initial notice of our privacy policy electronically
• to keep secure your account number, username, and password, and any devices, such as mobile phones or pagers, you use in connection with your account
• to let us monitor and/or record any phone conversations with you
• to let us create a digital representation of your voice—a “voiceprint”—that may be used for verifying your identity when you contact Fidelity
• to let us verify the information you provide and obtain credit reports and other credit-related information about you at any time, such as payment and employment information (whether for margin or any other purpose), and to permit any third-party financial service provider to do likewise
• to resolve disputes concerning your relationship with us (other than class actions) through arbitration rather than in a court of law
• if applying for margin, to authorize Fidelity to lend property of yours that has been pledged as collateral, and to comply with all provisions of this agreement concerning margin, including determining that margin borrowing is appropriate for you, based on your own careful examination of your financial resources, investment objectives, and risk tolerance
• if applying for any other optional features or services, to understand and accept the terms associated with them
• to protect Fidelity against losses arising from your usage of market data and other information provided by third parties
• to understand that, whenever you invest in, or exchange into, any mutual fund (including any fund chosen for your core position), you are responsible for reading that fund’s prospectus, including its description of the fund, the fund’s fees and charges, and the operation of the fund
• to notify us in writing any time there is a material change in your financial circumstances or investment objectives
• to be bound by the current and future terms of this agreement, from the time you first use your account or sign your application, whichever happens first
• that if you have authorized someone to act on your behalf in your account, any and all disclosures, required or otherwise, may be provided solely to the individual acting on your behalf as part of the scope of his or her authority.

FIDELITY ACCOUNT CUSTOMER AGREEMENT
Account Features

The Fidelity Account® brokerage account offers access to a range of integrated financial services, making it a versatile investment and cash management tool. Certain features and services are standard with your account. Others are optional, and may be added either when you open your account or later. Note that some features and fees vary depending on the nature of your relationship with Fidelity. Industry regulations require that Fidelity Brokerage Services LLC (FBS) and its clearing firm, National Financial Services LLC (NFS), allocate between them certain functions regarding the administration of your account. The following is a summary of the allocation of those functions performed by FBS and NFS.

FBS is responsible for:

• Obtaining and verifying account information and documentation.
• Opening, approving and monitoring trading and other activity in your account.
• Acceptance of orders and other instructions from you regarding your account, and for promptly and accurately transmitting those orders and instructions to NFS.
• Determining the suitability of investment recommendations and advice, and that those persons placing instructions for your account are authorized to do so. NFS will not give you advice about your investments and will not evaluate the suitability of investments made by you, your investment representative or any other party.
• Operating and supervising your account and its own activities in compliance with applicable laws and regulations, including compliance with federal, industry and NFS margin rules pertaining to your margin account and for advising you of margin requirements,
• Maintaining the required books and records for the services it performs.
• Investigating and responding to any questions or complaints you have about your account(s), confirmations, your periodic statement or any other matter related to your account(s). FBS will notify NFS with respect to matters involving services performed by NFS.
• NFS is responsible, at the direction of FBS, for:
  • The clearance and settlement of securities transactions.
  • The execution of securities transactions, in the event NFS accepts orders from FBS.
  • Preparing and sending transaction confirmations and periodic statements of your account (unless FBS has undertaken to do so).
  • Acting as custodian for funds and securities received by NFS on your behalf.
  • Following the instructions of FBS with respect to transactions and the receipt and delivery of funds and securities for your account.
  • Extending margin credit for purchasing or carrying securities on margin.
  • Maintaining the required books and records for the services it performs.

Standard Features

Securities Trading

This account is a brokerage account that allows the trading and holding of many securities that are publicly traded in the United States, such as most securities in these categories:

• stocks, including common and preferred
• bonds, including corporate, municipal, and government
• convertible securities
• mutual funds, including Fidelity funds, non-Fidelity funds, and closed-end funds such as exchange-traded funds (ETFs)
• options, including stock and index options, and in some cases options offered through an employee stock option program (ESOP)
• certificates of deposit (CDs)
• unit investment trusts (UITs)

In addition, the account can be used to trade certain foreign securities (either directly or as depositary receipts) and precious metals. Fidelity may make non-personal historical trading data available to institutional clients on an aggregate basis for analysis purposes (such as trending).

Some investments that cannot be traded through your Fidelity Account® are futures and commodities.

When you place a trade, you may have a choice of order types, including market orders, limit orders, stop orders, and stop-limit orders. To find out how these different types of orders work, and for other helpful information, go to Fidelity.com/Brokerage.

Foreign Securities Trading

Fidelity offers you two different ways to trade foreign stocks. You can utilize either Fidelity’s “International Trading” functionality or its “Foreign Ordinary Share Trading” service. International Trading allows you to trade most common stocks and exchange-traded funds (ETFs) directly in the local market with an option to settle your trade in U.S. dollars or in the local currency. Foreign Ordinary Share Trading allows you to trade shares in foreign corporations in the over-the-counter (OTC) market through a U.S. market maker. If you are using Fidelity’s International Trading functionality, you will be subject to the terms and conditions of the International Trading Supplement. However, all customers trading foreign securities should be aware of certain risks described below:

Trading in foreign securities, including direct investments in foreign markets, involves various investment risks, including foreign exchange risk (the possibility that foreign currency will fluctuate in value against the U.S. dollar), increased volatility as compared to the U.S. markets, political, economic, and social events that may influence foreign markets or affect the prices of foreign securities, lack of liquidity (foreign markets may have lower trading volumes and fewer listed companies, shorter trading hours, and restrictions on the types of securities that foreign investors may buy and sell), and less access to information about foreign companies. Emerging markets, in particular, can be subject to greater social, economic, regulatory, and political uncertainties, and can be extremely volatile.

Trading in foreign securities also may be subject to various credit, settlement, operational, financial, and legal risks. These risks may include but are not limited to:

Physical Markets. Certain markets may have less regulated or less liquid securities markets. In addition, some countries still rely on physical markets that require delivery of properly endorsed share certificates to effect trades. As a result, the settlement process can be lengthy (and erratic in some markets) and carries an increased risk of failure, including, but not limited to, the failure of the counterparty to deliver securities in exchange for payment.

Misidentification of Securities. Foreign companies may have multiple classes of securities, including “foreign” and “local” shares. Inadequate understanding of a foreign company’s capital structure or imprecision in placing orders can result in a purchase of the wrong securities.

Trading Days and Hours. Differences in trading days and hours can also create operational issues, trading delays, and complicate clearance and settlement. Foreign securities orders will not be sent to the local market except during market hours in such country. Orders entered during such nonmarket hours may be held until the local market is open.

Cross-Border Settlement. Cross-border settlement involves the interaction of different settlement systems and differing (and potentially inconsistent) laws in each of the affected countries. In addition, participation in shareholder voting and/or dividend payments in non-U.S. securities is subject to the rules and regulations of the non-U.S. market in which the security was issued and may require the disclosure of your personal information, including but not limited to, name, address and country of citizenship and/or residence.

Tax Treatment. There may be negative tax consequences as a result of trading in certain countries. You should consult a tax advisor for further information.
Foreign securities positions that are not in the custody or control of NFS are not covered by SIPC or any additional insurance secured by NFS.

Fidelity may limit, restrict, or terminate ability to trade in certain foreign securities at any time and in Fidelity’s sole discretion. Please refer to Additional Information for more on Fidelity’s brokerage fee schedules, fees for various features and services, and margin borrowing charges. Note that foreign jurisdictions may impose additional fees, taxes, or other charges from time to time, which may not be reflected in the fee schedule in effect at that time. By placing a trade in a foreign security, you agree to pay any such applicable fees, taxes, or other charges, regardless of notice.

**Core Account**

Your Fidelity Account® includes a core account that holds assets awaiting investment or withdrawal. Any amount in your core account will be held in the core position specified (including by default) or selected by you on your Fidelity Account® application. Depending on the type of Fidelity Account®, the available options for your core position may include a money market mutual fund, a bank sweep, or a free credit balance. For purposes of the Core Account section of this Agreement, the free credit balance is referred to as the “Taxable Interest Bearing Option.” Please note that this is different from the Intra-day Free Credit Balance described in the Credits to Your Account section of this Agreement. More details about the money market mutual fund and bank sweep can be found, respectively, in the money market mutual fund’s prospectus or the FDIC Insured Deposit Sweep Program Disclosure, both of which will be made available to you when applicable. Like any free credit balance, the Taxable Interest Bearing Option represents an amount payable to you on demand by Fidelity. Subject to applicable law, Fidelity may use this free credit balance in connection with its business. Fidelity may, but is not required to, pay you interest on this free credit balance, provided that the accrued interest for a given day is at least half a cent. Interest, if paid, will be based upon a schedule set by Fidelity, which may change from time to time at Fidelity’s sole discretion. Fidelity reserves the right to make changes to the available options and/or the options available to you for your core position.

**If You Reside Outside the United States**

If we determine that you reside outside the United States in any country other than Canada (as described in the Residing Outside the United States section of this Agreement) at the time you open your Fidelity Account®, or at any point in time after you open your Fidelity Account® (e.g., as a result of a subsequent move), your core account will not operate as described above. Instead, during such time as we believe you reside outside the United States, the following will apply:

1. **New Fidelity Accounts.** If you select the Taxable Interest Bearing Option as your core position (or if you subsequently change your election to the Taxable Interest Bearing Option), your core account will operate as otherwise described in this Agreement except that you will be unable to change your core position election, even if other options are available to you.

If you select or default into any option for your core position other than the Taxable Interest Bearing option, the process of sweeping the Intra-day Free Credit Balance to your core account (as described in the Credits to Your Account section of this Agreement) will be suspended. As a result, all uninvested cash in your Fidelity Account® will be held in the Intra-day Free Credit Balance. You will also be unable to make any change to the option you selected or were defaulted into for your core position during the account opening process, except that you may change your election to the Taxable Interest Bearing Option, if that option is available to you. Should you make that change, your core account will operate as if you selected the Taxable Interest Bearing Option as your core position during the account opening process (as described in the immediately preceding paragraph).

2. **Existing Fidelity Accounts.** If you have a Fidelity Account® that utilizes the Taxable Interest Bearing Option as your core position (or if you subsequently change your election to the Taxable Interest Bearing Option), your core account will operate as otherwise described in this Agreement, except that you will be unable to change your core position election, even if other options are available to you.

If you have a Fidelity Account® that utilizes any option for your core position other than the Taxable Interest Bearing Option, the process of sweeping the Intra-day Free Credit Balance to your core account will be suspended. You will be able to liquidate that position should you elect to do so, but you will generally be unable to add to it for as long as we believe you reside outside the United States, except for automatically reinvested dividends on money market mutual fund positions and the deposit of accrued interest in the case of a bank sweep. As a result, all new deposits to your Fidelity Account® or settlement proceeds from transactions in your Fidelity Account® will be held in the Intra-day Free Credit Balance. You will also be unable to make any change to your core position election, except that you may change your election to the Taxable Interest Bearing Option, if that option is available to you. Should you make that change, your core account will operate as if you had an existing Fidelity Account® that utilizes the Taxable Interest Bearing Option (as described in the immediately preceding paragraph).

Should we determine you no longer reside outside the United States, if your Fidelity Account® was subject to a suspension, this suspension will be lifted, the Intra-day Free Credit Balance will be swept to your core account and held in the core position that you selected or were defaulted into, and, going forward, your Fidelity Account® will operate as otherwise described herein.

**Statements**

We will send an account statement to the address of record:

- every calendar quarter, at a minimum
- for any month when you have trading or cash management activity

Your account statements will show all activity in your account for the stated period, including securities transactions, cash and margin balances, credits and debits, and all fees paid directly from your account. We will also send out a confirmation for every securities transaction in your account. The only exceptions are automatic investments, automatic withdrawals, dividend reinvestments, and transactions that involve your core position, or the Intra-day Free Credit Balance, for these activities, your regular account statement serves in place of a confirmation.

To receive your account statements and confirmations faster, you can arrange to have them delivered electronically instead of through the mail. This option is free, and you can switch to or from it any time upon request.

If you live with immediate family members who also have eligible Fidelity accounts, you can “household” those accounts to potentially qualify for enhanced services and features. You may elect to have your Fidelity accounts householded by completing the information requested at https://www.fidelity.com/customer-service/how-to-relationship-householding. You may also elect to have your Fidelity accounts combined or householded by completing the information requested at https://www.fidelity.com/customer-service/how-to-combine-statements. By electing to participate in householding, you agree that Fidelity may provide the employers of any householded account holders with account statements, trade confirmations, or other documents as required by applicable regulations.

**Account Protection**

The securities in your account are protected in accordance with the Securities Investor Protection Corporation (SIPC) for up to $500,000 (including up to $250,000 for uninvested cash). We also provide additional coverage above these limits. Neither coverage protects against a decline in the value of your securities, nor does either coverage extend to certain securities that are considered ineligible for coverage.

For more details on SIPC, or to request an SIPC brochure, visit www.sipc.org or call 202-371-8300.
Optional Features
You can set up these services using your account application. To add them to your existing account, contact Fidelity. Some of these features are covered by their own customer agreements, provided by third parties and/or are incorporated into this agreement by reference (are legally considered part of this agreement) and will be provided to you as applicable. Note that some services are not available for certain types of accounts.

Checkwriting
Checkwriting is available on many types of registration; exceptions include certain retirement plans. Note that cancelled checks are not returned to you, although check imaging may be available.

Debit and Credit Cards; ATM Withdrawals
These cards can be used to make withdrawals at any ATM that accepts that type of card. Below are the types of cards you may apply for in connection with your Fidelity Account:

**Fidelity® Debit Card:** All transactions are debited against your account the same day you make them. Fidelity currently covers the entire annual card fee.

**Credit Cards:** There are several different cards available to you. Each card has different features, including the ability to earn cash back rewards, while providing convenient access to credit. These credit cards are issued and administered by a third party. For information about rates, fees, and other costs and benefits associated with the credit card program, visit Fidelity.com/creditcards.

Fidelity BillPay®
Fidelity BillPay service is free and allows you to pay your bills online. It can be set up to make fixed payments automatically, and you can also use it to send variable periodic payments on demand to designated payees.

Fidelity MyVoice®
Fidelity MyVoice is a free security service. When you call Fidelity, you’ll no longer have to enter PINs or passwords because Fidelity MyVoice helps you interact with us securely and more conveniently. Through natural conversation, MyVoice will detect and verify your voiceprint in the first few moments of the call. A voiceprint is a combination of your physical and behavioral voice patterns. Like a fingerprint, it’s unique to you.

Mobile Phone Number Security Check
In order to protect your account, we may review any changes made to your mobile phone number to ensure that a newly entered number is not associated with any known fraudulent activity. You authorize your mobile provider to disclose information about your mobile phone account, such as subscriber status, payment method (whether your account is prepaid or is subject to monthly billing), and device details, if available, to support identity verification and fraud avoidance, and for other security purposes for the duration of your business relationship with us. This information may also be shared with certain third-party companies whose services we utilize for security to support your transactions with us, and for identity verification and fraud avoidance purposes.

Transferring Money Electronically
Options for transferring cash in and out of your account electronically include bank wires, which use the Federal Reserve wire system, and electronic funds transfer (EFT), which works like an electronic check. You can also set up your account to receive periodic transfers by activating the Automatic Investment feature. In addition, you can buy and sell shares of Fidelity mutual funds by telephone and use your bank account (via electronic funds transfer) to settle the transaction.

Margin Account
A margin account lets you borrow money from NFS, using as collateral eligible securities that are in your account. A margin account is designed primarily to finance additional purchases of securities, although it can also provide overdraft protection for your cash management activities. For information on the benefits, costs, and risks of margin, see “Important Information about Margin and Its Risks.”

Dividend Reinvestment
In addition to reinvestment of mutual fund dividends, reinvestment of dividends from eligible equities and closed-end funds is an option for most Fidelity accounts, including retirement accounts and those with margin. You can choose to have the service apply to all eligible securities in your account, or only to certain ones. You can request this feature online, by phone, or in writing.

Accessing Your Account
There are a variety of ways you can place orders, access your account, get market and investment information, or contact Fidelity. Online choices include Fidelity.com, Fidelity Active Trader Pro®, alerts and wireless trading services, and other interactive services for computers or handheld devices. Some of these services are offered by Fidelity directly, others are offered by outside providers. Telephone choices include Fidelity Automated Service Telephone (FAST®) as well as Fidelity’s telephone representatives. Both services are generally available 24 hours a day, 7 days a week. Please note that our telephone lines may be recorded, and, by signing the account application, you are consenting to such recording. If you do not wish to be recorded, you should contact Fidelity via another means. You can also speak with a Fidelity Representative in person, during business hours, at any of our Fidelity Investor Centers around the country.

Account Policies

**Account Registration**

**Joint Registration**
With joint registration accounts, any obligations or liabilities resulting from one account owner’s actions are joint and several (i.e., are the responsibility of each account owner, both individually and jointly). We may enforce this agreement against all account owners or against any owner individually.

Each owner of a joint account may act as if he or she were the sole owner of the account, with no further notice or approval necessary from any joint owner. For example, a joint owner can write checks, buy and sell securities, withdraw assets, transfer assets into or out of the account, borrow against the account (such as through short sales or margin), arrange for account statements, notices, confirmations, and communications of every kind to be sent only to him or her and set the delivery preferences to electronic for the receipt of such communications pursuant to the terms of the Electronic Delivery Agreement, which is incorporated herein by reference, view all available historical account documents or change the account’s features and services (although no account owner may remove another’s name from the account).

In addition, with joint accounts, the principle of “notice to one is notice to all” applies. We are legally considered to have fulfilled an obligation to the account if we fulfill it with respect to just one account owner (e.g., sending statements or other required communications to just one account owner).

Note also that we have no obligation to question the purpose or propriety of any instruction of a joint account owner or authorized person that appears to be authentic, or to let other owners know about any changes an owner has made to the account, unless we have received written notice to the contrary, from an authorized person and in good order, at the address referenced earlier under “How to Contact Us.” We do reserve the right to require, at any time,
the written consent of all account owners and/or authorized persons before acting on an instruction from any account owner or authorized person, but we use this right only at our own discretion and for our own protection.

Laws covering joint or community property vary by state. You are responsible for verifying that the joint registration you choose is valid in your state. You may want to consult your lawyer about this. For joint tenants with rights of survivorship and tenants by the entirety, on the death of an account owner the entire interest in the account generally goes to the surviving account owner(s), on the same terms and conditions. For tenants in common, a deceased account owner’s interest (which equals that of the other account owner(s) unless specified otherwise) goes to that account owner’s legal representative. Tenants in common are responsible for maintaining records of the percentages of ownership.

Trust Accounts

The provisions in the foregoing section applicable to joint registration accounts shall likewise apply to trust accounts with multiple trustees, with one trustee having the rights and responsibilities of one joint account owner. In addition, applying for a trust account is considered to be a statement from the trustees that they are authorized, under the terms of the trust and applicable law, to open and direct a brokerage account on behalf of the trust, to receive notices, confirmations, account statements, and communications of every kind and set the delivery preferences to electronic for the receipt of such communications pursuant to the terms of the Electronic Delivery Agreement, which is incorporated herein by reference, and that their orders and transactions will be governed by the terms and conditions of all applicable trust agreements, and that Fidelity is authorized to accept instructions from any trustee.

Custodial Registration

For accounts opened under the Uniform Gifts/Transfers to Minors Acts, you, the account owner, are the custodian. By opening this type of account, you agree that all assets belong to the minor and that you will only use them for the minor’s benefit—even after the assets have been removed from the account.

Account Usage

First Use of Core Account

If a money market mutual fund is your core position, making your first investment into that fund is your acknowledgment that you have received and read a prospectus for that fund.

Prohibited Uses and Actions

You are strictly prohibited from using your account in conjunction with any business as a broker-dealer, trader, agent, or advisor in any type of security, commodity, future, or contract, or in any business or organization connected with individuals performing these functions. You are also prohibited from publicizing or sharing with anyone any information you obtain through your account (such as securities quotes). In addition, be aware that we may freeze your account or suspend certain privileges, features, or services at any time without notice.

Limits on Mutual Fund Trades

Because excessive trading in mutual fund shares can be detrimental to a fund and its shareholders, we may block account owners or accounts that engage in excessive trading from making further transactions in fund shares. A block on trading fund shares may be temporary or permanent, and may apply only to certain mutual funds or all mutual funds, including Fidelity funds. The decision to impose a block may originate with a mutual fund company or may be made by Fidelity at the brokerage account level, if Fidelity believes such a block is warranted. To see what a given fund company’s definition of “excessive trading” is, check the fund’s prospectus.

In addition, we may restrict or limit any transaction in any mutual fund or other investment company that we or an affiliate manages or advises if we believe the transaction could adversely affect the investment company or its shareholders.

How Transactions Are Settled

Credits to Your Account

During normal hours when the market is open ("Intra-day"), any new deposit to your Fidelity Account® or settlement proceeds from a sale in your Fidelity Account®, are held as a free credit balance (the "Intra-day Free Credit Balance"). Each business day, the Intra-day Free Credit Balance is automatically swept into your core account, where it is handled as described in the Core Account section of this Agreement, except as otherwise noted therein. Like any free credit balance, the Intra-day Free Credit Balance represents an amount payable to you on demand by Fidelity. Subject to applicable law, Fidelity may use this free credit balance in connection with its business. Fidelity may, but is not required to, pay you interest on this free credit balance provided that the accrued interest for a given day is at least half a cent. Interest, if paid, will be based upon a schedule set by Fidelity, which may change from time to time at Fidelity’s sole discretion.

Interest paid on your Intra-day Free Credit Balance will be labeled “Credit Interest” in the Investment Activity section of your account statement. Interest is calculated on a periodic basis and credited to your account on the next business day after the end of the period. This period typically runs from approximately the 20th day of one month to the 20th day of the next month, provided, however, that the beginning and ending periods each year run, respectively, from the 1st of the year to approximately the 20th of January, and approximately to 20th of December to the end of the year. Interest is calculated by multiplying your average Intra-day Free Credit Balance during the period by the applicable interest rate, provided, however, that if more than one interest rate is applicable during the period, this calculation will be modified to account for the number of days each period during which each interest rate is applicable.

Each check deposited is promptly credited to your account. However, the money may not be available to use until up to six business days later, and we may deposit any debit that is applied against the money before the deposited check has cleared. If a deposited check does not clear, the deposit will be removed from your account, and you are responsible for returning any interest you received on it. Note that we can only accept checks denominated in U.S. dollars and drawn on a U.S. bank account (including a U.S. branch of a foreign bank). We cannot accept third-party checks. In addition, if we have reason to believe that assets were incorrectly credited to your account, we may restrict such assets and/or return such assets to the account from which they were transferred.

Debits to Your Account

All debit items (including checks, debit card transactions, bill payments, securities purchases, electronic transfers of money, levies, court orders or other legal process payments) are paid daily to the extent that sufficient funds are available. Note that debit fees to resolve securities transactions (including margin calls) or the payment of account fees will be given priority over other debits, such as checks or debit card transactions.

As an account owner, you are responsible for satisfying all debits on your account, including any debit balance outstanding after all assets have been removed from an account, any margin interest (at prevailing margin rates) that has accrued on that debit and any costs (such as legal fees) that we incur in collecting the debit. You are also responsible for ensuring that checks issued to you representing distributions from your account are promptly presented for payment. If a check issued to you from your account remains uncashed and outstanding for at least six months, you authorize and instruct Fidelity, in its sole discretion, to cancel the check and return the underlying proceeds to you by depositing the proceeds into your account.

To help ensure the proper discharge of debits, it is our policy (unless we agree to do otherwise) to turn to the following sources, in this order, when settling debits against your account:
  • the Intra-day Free Credit Balance
  • the core account
  • any shares of a Fidelity money market fund held in the account that maintain a stable ($1.00/share) net asset value and are not subject to a liquidity fee or a similar fee or assessment
  • if you have a margin account, any margin credit available

FIDELITY ACCOUNT CUSTOMER AGREEMENT
In addition to the foregoing, we may turn to the following sources:

- any shares of a Fidelity money market fund held in another non-retirement account with the same registration (which you authorize us to sell for this purpose when you sign the application)
- any securities in any other account at Fidelity in which you have an interest

If you want to opt out of the foregoing, please contact Fidelity for more information.

In the event that your account does not contain sufficient cash, Fidelity may liquidate securities to satisfy a court order, levy, or any other legal process payment. Money market fund shares used to pay debits are redeemed at the share price in effect at the time. For disclosures concerning money market funds, see “Money Market Fund Investments.”

Resolving Unpaid Obligations or Other Obligations

If certain of the sources listed above in “Debits to Your Account” (which are defined as your “available balance” for purposes of this agreement) are not enough to satisfy a given debit, we reserve the right to take action as we see fit, including any of the following:

- advance funds to your account from your credit card
- decline to honor the debit, which may result in fees (such as a returned check fee) or other consequences for you
- if you have a margin account and the unsatisfied debit is for a securities purchase, draw on the available balance of another account of yours at Fidelity

If you have a margin account, we may transfer to that account any unresolved debit from other accounts of yours.

Note that at any time, we may reduce your available balance to cover obligations that have occurred but not yet been debited, including but not limited to withholding taxes that should have been deducted from your account.

It is important to understand that we do have additional choices for resolving unsatisfied obligations. Like many other securities brokers, we reserve the right to sell or otherwise use assets in an account to discharge any obligations the account owner(s) may have to us (including unmatured and contingent obligations), and to do so without further notice or demand. For example, if you have bought securities but not paid for them, we may sell them ourselves and use the proceeds to settle the purchase.

We may also use property to satisfy a margin deficiency or other obligation, whether or not we have made advances in connection with this property. This provision extends to any property held by you or carried for you in an account of yours, including any credit balances, assets, and contracts, as well as shares of any mutual funds or other investment companies for which Fidelity or an affiliate provides management or administrative services. Although Fidelity may use other methods when it determines they may be more appropriate, Fidelity reserves the right to use the provisions described in this section at any time, except in cases involving retirement accounts when these provisions would conflict with the Employee Retirement Income Security Act of 1974 (ERISA) or the Internal Revenue Code of 1986, both as amended.

Transaction Settlement Deadlines

Generally, you need to pay for all transactions or deliver all securities by 2 p.m. Eastern time on the settlement date. We reserve the right to cancel or liquidate, at your risk, any transaction not settled in a timely way. Unless we require otherwise, margin calls are due on or before the date indicated, regardless of the settlement date of the transactions, also by 2 p.m. Eastern time.

Non-Transferable Securities

In the event that any securities in your account become non-transferable, NFS may remove them from your account without prior notice. Non-transferable securities are those where transfer agent services may no longer be available or any other legal process payment. Money market fund shares used to pay debits are redeemed at the share price in effect at the time. For disclosures concerning money market funds, see “Money Market Fund Investments.”

If the position is held in a retirement account, we will not report the removal of the position as a taxable distribution and any reinstatement of the position will not be reported as a contribution.

If transfer agent services become available sometime in the future, NFS will use its best efforts to have the position reinstated in your account.

• Positions removed from your account will appear on your next available account statement following such removal as an “Expired” transaction.

By opening and maintaining an account with us, you consent to our actions as we have described them above, and you waive any claims against us arising out of such actions. You also understand that we do not provide tax advice concerning your account or any securities that may be the subject of removal from or reinstatement into your account, and you agree to consult with your own tax advisor concerning any tax implications that may arise as a result of any of these circumstances.

Policies on Optional Features

Debit Cards and Fidelity BillPay® Service

These features are available to nonretirement accounts that have individual or joint registrations. Some cards may be available for trust or retirement registrations. On joint accounts, a co-owner may apply for an additional card in his or her own name. As an account owner, you are responsible for all usage of these features.

Each of these features is covered by its own customer agreement, which collectively are incorporated herein by reference (are legally considered part of this agreement). The appropriate agreement will be provided to you when you apply for a feature. For each feature you choose, it is your responsibility to understand the terms of its agreement before you begin using the feature. In the case of credit or debit cards, it is also your responsibility to advise any other card holders on your account that these agreements will apply to them, that they may be responsible for paying any charges you or other card holders fail to pay, and that their credit records may be affected by any activity on the account, whether attributable to them or not.

Total debit card transactions generally are limited to your available balance.

Note that on any account, we typically reduce your available balance at the time you make a debit card transaction, rather than waiting for the transaction to be posted to your account.

Bank Wires and Electronic Funds Transfer (EFTs)

Bank wire transfers to your bank are normally processed the same day, depending on the time received. A wire normally may be for between $10,000 and $999,999.

EFTs are normally completed within three business days of your request. Money deposited via EFT is normally not available for withdrawal for four to six business days. An EFT transfer may be for between $10 and $100,000. For the EFT feature to be established, at least one common name must match exactly between your Fidelity and bank accounts. To send and receive EFT transactions, your bank must be a member of the Automated Clearing House (ACH) system.

For EFT transactions, you hereby grant us limited power of attorney for purposes of redeeming any shares in your accounts (with the right to make any necessary substitutions), and direct us to accept any orders to make payments to an authorized bank account and to fulfill these orders through the redemption of shares in your account. You agree that the above appointments and authorizations will continue until we receive written notice of any change, although we may cease to act as agents to the above appointments on 30 days’ written
Trading in Volatile Markets—Understand the Risks

Volatile markets can present higher trading risks, especially when you are using electronic services to access information or place orders. Ways to manage some of these risks include:

Consider placing limit orders instead of market orders. In certain market conditions or with certain types of securities offerings (such as IPOs and technology stocks), price changes may be significant and rapid during regular or after-hours trading. In these cases, placing a market order could result in a transaction that exceeds your available funds, meaning that Fidelity would have the right to sell other assets in your account. This is especially a risk in accounts that you cannot easily add money to, such as retirement accounts.

- Be aware that quotes, order executions, and execution reports could be delayed. During periods of heavy trading or volatility, quotes that are provided as “real time” may be stale—even if they appear not to be—and you may not receive every quote update. Security prices can change dramatically during such delays.
- When cancelling an order, be sure your original order is actually cancelled before entering a replacement order. Order cancellations are performed on a “best efforts” basis. There is no guarantee that an open order can be cancelled, in whole or in part. Don’t rely on a receipt for your cancellation order; that order may have arrived too late for us to act on.
- Use other ways to access Fidelity during peak volume times. Phone or computer capacity limitations could mean delays in getting information or placing orders. If you are having problems with one method, try another.
- The chances of encountering these risks are higher for individuals using day-trading strategies. In part for this reason, Fidelity does not promote day-trading strategies.
- For more information on trading risks and how to manage them, visit Fidelity.com or contact Fidelity.

Dividend Reinvestment Program

With this feature, all dividends paid by eligible securities that you designate for reinvestment are automatically reinvested in additional shares of the same security. (For purposes of the Dividend Reinvestment Program, “dividends” means cash dividends and capital gain distributions, late ex-dividend payments, and special dividend payments, but not cash-in-lieu payments.) In designating any eligible security for reinvestment, you authorize us to purchase shares of that security for your account.

To be eligible for this feature, a security must satisfy all of the following:

- be a closed-end fund, common stock, or foreign security (generally American depositary receipts (ADRs))
- be margin eligible (as defined by NFS)
- be held in street name by NFS (or at a securities depository on its behalf)
- not be held as a short position

Dividends are reinvested on shares that satisfy all of the following:

- the security is eligible
- you own the shares on the dividend record date
- you own the shares on the dividend payable date (even if you sell them that day)
- your position in the security has been settled on or before the dividend record date
- the shares are designated for reinvestment as of 9 p.m. Eastern time on the dividend record date

Shares purchased through the Dividend Reinvestment Program will generally be placed in your account as of the dividend payable date. Note, however, that the stock price at which your reinvestment occurs is not necessarily the same as the price that is in effect on the dividend payable date. This is because we generally buy the shares of domestic companies two business days before the dividend payable date, at the market price(s) in effect at the time, in order to help ensure that we have shares on hand to place in your account on the dividend payable date. Other factors may require the purchase of the shares on a different business day, which may be before, on, or after the dividend payable date, e.g., dividends of foreign companies. Shares of securities that have an irregular ex-dividend date are purchased on the ex-dividend date and placed in your account on the second business day following the ex-dividend date. Therefore, you may end up receiving more or fewer shares than if your dividend had been reinvested on the dividend payable date itself, particularly if there are significant changes in the market price of a security just before its dividend payable date. If several purchase transactions are necessary to reinvest your and other customers’ dividends in a particular security, the price per share will be the weighted average price per share for all shares purchased. If sufficient shares are unavailable in the market to satisfy all customers’ requirements for dividend reinvestment for a security, the dividend will not be reinvested. The reinvestment of dividends may be delayed in certain circumstances. NFS reserves the right to suspend or completely remove securities from participation in dividend reinvestment and credit such dividends in cash at any time without notice. Automatic reinvestments often involve purchase of fractional shares, calculated to three decimal places. Partial shares pay prorated dividends and can be sold if you sell your entire share position, and will be liquidated automatically in transfers and certain other situations, but otherwise typically cannot be sold.

Although for dividend reinvestments your regular account statement takes the place of a trade confirmation, you can generally obtain status information the day after the reinvestment date by contacting Fidelity.

If you transfer or reregister your account within Fidelity (for example, by changing from a Traditional IRA to a Roth IRA), you need to re-designate any securities whose dividends you want reinvested.

DTC’s Dividend Reinvestment Program

For certain securities, dividend reinvestment may occur through DTC’s (Depository Trust Company) dividend reinvestment program (DRP). This plan may be utilized if an issuer offers reinvestment at a discount. Eligibility for a security to be enrolled in the DRP or the Fidelity dividend reinvestment program is determined by Fidelity and may change without notice. A DRP transaction will post to your account when the shares are made available to Fidelity by DTC. Such transactions are generally posted within 15 days after pay date. Note that dividend reinvestment does not ensure a profit on your investments and does not protect against loss in declining markets. If you sell your dividend-generating shares before the posting date, the dividend will not be reinvested.

Optional Dividends

At times certain issuers that pay dividends may offer shareholders an opportunity to elect to receive stock or cash, or a combination of both. This is known as an “Optional Dividend.” The issuer will assign a default if no instruction is received. For example, the default option could be cash, stock, or a combination of both. You have the opportunity up until the applicable deadline to make an election to receive the payment of your choice. Please be advised, if you do
not make an election prior to the deadline, your account will be assigned a default election based on the dividend reinvestment program instructions you established with respect to your account. This default election will be utilized in lieu of the issuer’s default option being applied to your account.

Fidelity Stock Plan Services

If you are a participant in equity compensation plans (“Stock Plans”) and associated equity compensation rights under those Stock Plans (collectively “Rights”) of your employer (together with its affiliates the “Issuer”) for which Fidelity Stock Plan Services provides record-keeping and administrative services (the “Stock Plan Services”), then with respect to the Stock Plan Services and your individual brokerage account identified to be used in connection with the Stock Plan Services, you agree as follows:

• You acknowledge that the terms of the Stock Plans and of your Rights are determined by the Issuer, and that you have received, reviewed, and understand the information distributed to you by the Issuer in connection with such Stock Plans and Rights, including any applicable prospectus, grant, or enrollment agreement, or other Stock Plan document (collectively “Plan Documents”).
• You acknowledge that various federal and state laws or regulations may be applicable to your transactions, including, without limitation, Rule 144 under the Securities Act of 1933 and Section 16(b) of the Securities Exchange Act of 1934, and you agree to conduct these transactions in conformity with all applicable laws and regulations.
• You acknowledge that your rights and obligations with respect to the Rights (including, without limitation, quantities, vesting dates, and expiration dates) are determined under the Plan Documents, and that if any information provided by Fidelity to you (whether verbally or in writing) conflicts with the provisions of the Plan Documents, the information in the Plan Documents will control.
• You acknowledge that certain events may affect your rights and obligations with respect to the Rights (including, without limitation, changes in your employment relationship with the Issuer), and that you are responsible for understanding your rights and obligations with respect to the Rights.
• You authorize Fidelity to act on your instructions (given in writing, by telephone, or electronically) with respect to Rights in connection with the Issuer, including, without limitation, to exercise, purchase shares, or take other actions with respect to the Rights on your behalf, or to hold, transfer, or sell shares in your account.
• You authorize and direct Fidelity to act on instructions given on your behalf by the Issuer to Fidelity with respect to Rights in connection with the Issuer, including, without limitation, to exercise, purchase shares, to take other actions with respect to the Rights on your behalf, or to hold, transfer, or sell shares in your account.
• You authorize and direct Fidelity to act on instructions given on your behalf by the Issuer to Fidelity with respect to Rights in connection with the Issuer, including, without limitation, to exercise, purchase shares, to take other actions with respect to the Rights on your behalf, or to hold, transfer, or sell shares in your account.
• You understand that your instructions to Fidelity are irrevocable, except in the case of an unexecuted limit order, which you may attempt to cancel.
• You authorize the Issuer or its agent to rely without further investigation on this authorization as conclusive evidence of your irrevocable election to authorize Fidelity to act on your behalf with respect to the Rights, including exercising your Rights in accordance with and subject to the terms, provisions, and conditions of the Issuer’s Stock Plans and the Plan Documents.
• You agree to indemnify Fidelity for any loss we may suffer as a result of our compliance with the authorizations set forth herein and any instructions given by you.

Precious Metals

Precious metals are not covered by SIPC account protection, but are insured by the depository at market value if stored through us. When trading precious metals, note that because they can experience sudden and rapid price changes, they are risky as investments, and we cannot guarantee you an advantageous price when you trade them. If you take delivery of precious metals, delivery charges, sales and use taxes, and storage fees will apply.

Closing Your Account

We can close your account, or terminate any optional feature, at any time, for any reason, and without prior notice. You can close your account, or terminate any optional feature, by notifying us in writing or calling us on a recorded line. We may automatically close accounts with zero balances. Regardless of how or when your account is closed, you will remain responsible for all charges, debit items, or other transactions you initiated or authorized, whether arising before or after termination. Note that a final disbursement of assets may be delayed until any remaining issues have been resolved. If your account has a balance of less than $100 and no account activity has occurred for a 6-month period, you authorize Fidelity to sell the securities in the account, send a check for all the proceeds and any other cash to your address of record, and close your account.

Monitoring Your Account and Notifying Us of Errors

As an account owner, you are responsible for monitoring your account. This includes making sure that you are receiving transaction confirmations, account statements, and any other expected communications. It also includes reviewing these documents to see that information about your account is accurate and contains nothing suspicious.

Note that so long as we send communications to you at the physical or electronic address of record given on the application, or to any other address given to us by an authorized person, the communications are legally presumed to have been delivered, whether you actually received them or not. In addition, confirmations and statements are legally presumed to be accurate unless you specifically tell us otherwise.

If you have not received a communication you expected, or if you have a question or believe you have found an error in any communication from us, telephone us immediately, then follow up with written confirmation.

You agree to notify us immediately if:
• you placed an order electronically but did not receive a reference number for it (an electronic order is not considered received until we have issued an acknowledgment)
• you received confirmation of an order you did not place, or any similar conflicting report
• there is any other type of discrepancy or suspicious or unexplained occurrence relating to your account
• your password or access device is lost or stolen, or you believe someone has been using it without authorization

If any of these conditions occurs and you fail to notify us immediately, neither we nor any other Fidelity affiliate will be liable for any consequences. If you do immediately notify us, our liability is limited as described in this agreement.

With any feature or service that is governed by a separate agreement (such as a credit card agreement), note that different policies concerning error resolution and liability may apply, as described in the separate agreement.

If, through any error, you have received property that is not rightfully yours, you agree to notify us and return the property immediately. If we identify an error in connection with property you have received from or through us or a Fidelity affiliate and determine it is not rightfully yours, you agree that we may take action to correct the error, which may include returning such property to the rightful owner.

Complying with Applicable Laws and Regulations

In keeping with federal and state laws, and with securities industry regulations, you agree to notify us in writing if any of the following occur (with all terms in quotes defined as being within the meaning of the Securities Act of 1933):
• if you are, or later become, an employee or other “associated person” of a stock exchange, a member firm of an exchange or the Financial Industry Regulatory Authority (FINRA), a municipal securities dealer, or Fidelity or any Fidelity “affiliate”
• if you are, or later become, an “affiliate” or “control person” with respect to any security held in your account
• if any transactions in your account regarding securities whose resale, transfer, delivery, or negotiation must be reported under state or federal laws

You also agree to:
• if you are, or later become, an “associated person” of a member firm of an exchange or FINRA, that you have obtained consent of the “employer member,” and you authorize Fidelity upon request by an employer member to transmit copies of confirmations and statements, or the transactional data contained therein, with respect to all of your accounts, including all accounts subject to FINRA rules and unit investment trusts, municipal fund securities, and qualified programs pursuant to Section 529 of the Internal Revenue Code.
• to ensure that your account transactions comply with all applicable laws and regulations, understanding that any transaction subject to special conditions may be delayed until those conditions are met
• to comply with all policies and procedures concerning “restricted” and “control” securities that we may require
• to comply with any insider trading policies that may apply to you as an employee or “affiliate” of the issuer of a security

We will assume that any securities or transactions in your account are not subject to the laws and regulations regarding “restricted” and “control” securities unless you specifically tell us otherwise.

If you or another individual associated with your account resides outside the U.S., Fidelity may at any time in its sole discretion terminate that relationship, or modify your rights to access any or all account features, products or services. By opening or maintaining an account with Fidelity, you acknowledge that Fidelity does not solicit offers to buy or sell securities, or any other product or service, to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the laws of such jurisdiction.

Limits to Our Responsibility

Although we strive to ensure the quality and reliability of our services, including electronic services (such as online, wireless, and automated telephone services), neither we nor any third party whose services we arrange for are responsible for the availability, accuracy, timeliness, completeness, or security of any service related to your account. You therefore agree that we are not responsible for any losses you incur (meaning claims, damages, actions, demands, investment losses, or other losses, as well as any costs, charges, attorneys’ fees, or other fees and expenses) as a result of any of the following:
• the acceptance and processing of any order placed on your account, whether received electronically or through other means, as long as the order reasonably appears to be authentic
• cancellation of an accepted/executed trade in which Fidelity reasonably determines, in its sole discretion, that there was a data, clerical or other similar error in the handling or processing of the trade, including but not limited to situations where a third-party caused such error
• cancellation of an accepted/executed trade when dealers and/or contra-parties notify Fidelity that they are unable to deliver the bonds because the order was filled in error
• investment decisions or instructions placed on your account, or other such actions attributable to you or any authorized person
• occurrences related to governments or markets, such as restrictions, suspensions of trading, or high market volatility or trading volumes
• uncontrollable circumstances in the world at large, such as wars, earthquakes, power outages, or unusual weather conditions
• occurrences related to computers and communications, such as a network or systems failure, a message interception, or an instance of unauthorized access or breach of security
• with respect to electronically provided market data or other information provided by third parties, any flaw in the timing, transmission, receipt, or substance (such as any inaccuracy, error, delay, omission, or sequence error, any nonperformance, or any interruption of information), regardless of who or what has caused it to occur
• the storage and use of information about you and your account(s) by our systems and transmission of this information between you and us, these activities occur entirely at your risk
• the usage of information received by you or us through any electronic services
• telephone requests for redemptions, so long as we transmit the proceeds to you or the bank account number identified
• difficulties receiving information or accessing your account that are due to the equipment you use, including difficulties resulting from technical incompatibilities, malfunctions, inherent limitations, or interruptions in service
• any checks or other debits to your account that are not honored because the account has insufficient funds

If any service failure is determined to be our responsibility, we will be liable only for whatever benefit you would have realized up to the time by which you should have notified us, as specified earlier in “Monitoring Your Account and Notifying Us of Errors.” Fidelity reserves the right to restrict your account from withdrawals and/or trades if there is a reasonable suspicion of fraud, diminished capacity, or inappropriate activity. Fidelity also reserves the right to restrict your account from withdrawals and/or trades if Fidelity is put on reasonable notice that the ownership of some or all of the assets in the account is in dispute.

Indemnification

You agree to indemnify us from, and hold us harmless for, any losses (as defined in “Limits to our Responsibility”) resulting from your actions or failures to act, whether intentional or not, including losses resulting from actions taken by third parties.

If you use any third-party services or devices in connection with your account (such as Internet service or wireless devices), all service agreements and payments for these are your responsibility. Rates and terms are set by the service providers and are not Fidelity’s responsibility.
Note that beyond taking reasonable steps to verify the authenticity of instructions, we have no obligation to inquire into the purpose, wisdom, or propriety of any instruction we receive.

**Terms Concerning This Agreement**

**Applicability**
This agreement is the only agreement between you and us concerning its subject matter, and covers all accounts that you, at whatever time, open, reopen, or have opened with us. In addition, if you have already entered into any agreements concerning services or features that relate to this account (such as the usage agreement for Fidelity.com), or if you do so in the future, this agreement incorporates by reference the terms, conditions, and policies of those agreements. In the case of any conflict between this agreement and an agreement for a particular service or feature, the service or feature agreement will prevail.

**Governing Laws and Policies**
This agreement and its enforcement are governed by the laws of the Commonwealth of Massachusetts, except with respect to its conflicts-of-law provisions.

All transactions through Fidelity are subject to the rules and customs of the marketplace where they are executed, as well as applicable state and federal laws. In addition, the services below are subject to the following laws and policies:

- Securities trades: any Fidelity trading policies and limitations that are in effect at the time
- Online services: the license or usage terms posted online
- Checkwriting: the applicable provisions of the Uniform Commercial Code and the terms governing the service

**Modification and Enforcement**
We may amend or terminate this agreement at any time. This may include changing, dropping, or adding fees and policies, changing features and services or the entities that provide them (such as the bank that provides clearing services for checkwriting), and limiting the usage or availability of any feature or service, within the limits of applicable laws and regulations. Although it is our policy to send notice to account owners of any material changes, we are not obligated to do so in most cases. Outside of changes originating in these ways, no provision of this agreement can be amended or waived except in writing by an authorized representative of Fidelity. Fidelity may transfer its interests in this account or agreement to any of its successors and assigns, whether by merger, consolidation, or otherwise. You may not transfer your interests in your account or agreement (including de facto transferal by giving a nonowner access to the account using a password) except with the prior written approval of Fidelity, or through inheritance, corporate dissolution, or similar circumstance, as allowed by law, in which case any rights and obligations in existence at the time will accrue to, and be binding on, your heirs, executors, administrators, successors, or assigns.

We may enforce this agreement against any and all account owners. In addition, any securities exchanges or associations that provide information to you through your account may enforce the terms of this agreement directly against you. Although we may not always enforce certain provisions of this agreement, we retain our full right to do so at any time.

If any provision of this agreement is found to be in conflict with applicable laws, rules, or regulations, either present or future, that provision will be enforced to the maximum extent allowable, or made to conform, as the case may be. However, the remainder of this agreement will remain fully in effect.

Fidelity may use the electronically stored copy of your (or your agent’s) signature, any written instructions or authorizations, the account application and this agreement as the true, complete, valid, authentic and enforceable record, admissible in judicial, administrative or arbitration proceedings to the same extent as if the documents and records were originally generated and maintained in printed form. You agree to not contest the admissibility or enforceability of the electronically stored copies of such documents in any proceeding between you and Fidelity.

**Borrowing on Margin**

While margin can be a beneficial tool for investors, it involves significant risks (see the box “Important Information about Margin and Its Risks”) and is not suitable for all investors. Margin is not available on retirement accounts.

If your account is approved for margin, you agree that all marginable assets will be held in a margin account, unless you tell us to the contrary (precious metals are not marginable). The Intra-day Free Credit Balance, money in the core account, and any cash dividends paid on marginable securities, are automatically applied to your margin debt every month, unless you tell us otherwise.

When you borrow on margin, you agree to maintain the level of margin collateral we require (which we may change in our sole discretion at any time without prior notice).

Should we believe it necessary to protect our interests, we may take any or all of the following steps at any time without prior notice:

- sell assets, or contracts relating to these, that are in your account
- buy assets, or contracts relating to these, of which your account or accounts may be short, in order to close out in whole or in part any commitment on your behalf
- place stop orders with respect to these securities

How and when we can take these steps:

- at any time, during regular market hours or otherwise
- for any cause, including but not limited to:
  - if the value of your account equity falls
  - if you fail to meet—or indicate that you intend to fail to meet—any call for additional collateral
  - high market volatility
  - an account owner’s death or petition for bankruptcy
  - an attachment or court order
  - any other situation which, in Fidelity’s sole discretion, believes such action is warranted to prevent the account from going deficit
  - with or without notifying you that a call is due and even if you have notified Fidelity that you will be providing additional collateral for your Account

We may sell your securities or other assets without contacting you. Some investors mistakenly believe that Fidelity must contact them for a margin call to be valid, and that Fidelity cannot liquidate securities or other assets in their accounts unless Fidelity has contacted them first. This is not the case. Fidelity may attempt to notify you of margin calls, but is not required to do so. In addition, even if Fidelity has contacted you and provided a specific date by which you can meet a margin call, Fidelity can still take the necessary steps to protect its financial interest prior to that date, including immediately selling the securities without notice to you. You understand that if Fidelity contacts you in advance in certain instances, Fidelity is not obligated to do so and such action will not be deemed a waiver of Fidelity’s rights under this agreement.

In addition, short positions are subject to buy-in at any time and you bear sole responsibility for the buy-in price.

You understand and agree that you are responsible for any losses in your account that may arise as a result of the actions outlined above. Note that property in a margin account may be pledged or repledged, hypothecated (loaned) or rehypothecated, either separately or in common with any other property, for as much as your obligation to us or more, without our having to retain a like amount of similar property in our control for delivery. Also, we may at any time, and without notice to you, transfer any property between any of your accounts, whether individual or joint, or from any of your accounts to any account you guarantee. As permitted by law, we may use certain securities for, among other things, settling short sales and lending securities for short sales and as a result may receive compensation in connection therewith.
Credit-Related Information

For the name and address of any credit reporting agency from whom we or a third-party service provider has obtained information about you, send a written request to us or the service provider, as applicable.

If you apply for a debit or credit card, we may share information about you and other card applicants with card issuers, which are not affiliated with Fidelity. If you don’t want a third-party service provider to share information about you with other entities in turn, it is your responsibility to inform the card issuer of this.

Consumer Reporting Agencies

We may report information about your account to credit bureaus. Late payments, missed payments, or other defaults on your account may be reflected in your credit report.

We may also provide information about you and your account as well as the activity in your account to one or more consumer reporting agencies. If you believe that information Fidelity has provided about you or your account or the activity in your account is not accurate, you may notify us at:

Fidelity Investments
Attn: Customer Data Disputes
P.O. Box 770001
Cincinnati, OH 45277-0045

In order for us to investigate any dispute that you may submit to us with respect to information that we have provided, please provide us with the following information:

1. Your name, address, and account number;
2. An identification of the specific information that you believe is not accurate; and
3. An explanation of the basis for your dispute.

Service Providers

Brokerage account and margin credit services are provided by NFS, an affiliate of FBS. Bonds may be traded through NFS (which may choose to act as principal or agent) or through external dealers. Services available through this account are the property of Fidelity or the third parties from which Fidelity has obtained rights. Market data provided by national securities exchanges or associations remain the property of those entities.

Routing of Orders

FBS routes most customer orders to its affiliated broker-dealer, NFS, which in turn sends orders to various exchanges or market centers for execution. In deciding where to send an order, NFS looks at a number of factors, such as size of order, trading characteristics of the security, favorable execution prices (including the opportunity for price improvement), access to reliable market data, availability of efficient automated transaction processing, and execution cost. Some market centers may execute orders at prices superior to the publicly quoted market. Although you can instruct us to send an order to a particular marketplace, our order-routing policies are designed to result in transaction processing that is favorable for you. NFS reserves the right to wait for the primary exchange to open before commencing trading in a particular security.

Certain Fees We Receive

Fidelity and its affiliates receive fees for providing certain products and services. Below is a partial list of affiliates and the services they are paid for:

• Fidelity Management & Research Company—fee for serving as an investment advisor to the Fidelity funds.
• FBS and/or NFS—receives remuneration, compensation, or other consideration (such as financial credits or reciprocal business) for directing orders in certain securities to particular broker-dealers or market centers for execution. In addition to sales loads and 12b-1 fees described in the prospectus, FBS and/or NFS receives other compensation in connection with the purchase of certain mutual fund shares and/or the ongoing maintenance of those positions in your brokerage account. This additional compensation may be paid by the mutual fund, its investment advisor, or one of its affiliates. FBS, NFS, or their affiliates may also receive compensation in connection with the purchase and/or ongoing maintenance of positions in certain mutual funds in your account. FBS, NFS, or their affiliates may also receive compensation for such things as systems development necessary to establish a fund on their systems, a fund’s attendance at events for FBS’ clients, and/or representatives and opportunities for the fund to promote its products and services. This compensation may take the form of sales loads and 12b-1 fees described in the prospectus, as well as program participation and maintenance fees, start-up fees, and infrastructure support paid by the fund, its investment advisor, or an affiliate. Additional information about the source(s) and amount(s) of compensation as well as other remuneration received by FBS and/or NFS will be furnished to you upon written request.

Warranty Disclaimer

Neither we nor any third party makes any representations or warranties express or implied, including, without limitation, any implied warranties of merchantability or fitness for a particular purpose in respect of any services provided in connection with this account, or any information programs or products obtained from, through, or in connection with these services. In no event will we or any third party be liable for direct, indirect, incidental, or consequential damages resulting from any defect in or use of these services.

Money Market Fund Investments

You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Fidelity Investments and its affiliates, the fund’s sponsor, have no legal obligation to provide financial support to money market funds and you should not expect that the sponsor will provide financial support to the fund at any time.

Redemption Features/Callable Securities

Certain debt securities may have redemption features in addition to those disclosed on the trade confirmation including, for example, special mandatory redemption features such as sinking funds provisions. It is the customer’s obligation to review all disclosure documents the customer may receive, and to understand the risks of calls or early redemptions, which may affect yield. Issuers may, from time to time, publish notices of offers to redeem callable securities within limited time, price, and tender parameters. NFS is not obligated to redeem customers of such published calls. Information about whether a municipal security is callable can be accessed via the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access ("EMMA") website (www.emma.msrb.org).

FIDELITY ACCOUNT CUSTOMER AGREEMENT
When street name or bearer securities held for you are subject to a partial call or partial redemption by the issuer, NFS may or may not receive an allocation of called/redeemed securities by the issuer, transfer agent, and/or depository. If NFS is allocated a portion of the called/redeemed securities, NFS utilizes an impartial lottery allocation system, in accordance with applicable rules, that randomly selects the securities within customer accounts that will be called/redeemed. NFS’ allocations are not made on a pro rata basis and it is possible for you to receive a full or partial allocation, or no allocation. You have the right to withdraw uncalledfully paid securities at any time prior to the cutoff date and time established by the issuer, transfer agent, and/or depository with respect to the partial call, and also to withdraw excess margin securities, provided your account is not subject to restriction under the Federal Reserve’s Regulation T or such withdrawal will not cause an undermargined condition. If you have bought or sold a security, and prior to the settlement of your trade, the issuer initiates a call of the security, NFS reserves the right to cancel your trade. Customers are responsible for covering any outstanding short positions, as well as any other resulting costs in their account, that result from the lottery.

For more information and an example of the impartial lottery process, please go to: http://personal.fidelity.com/products/fixedIncome/FI_Common_Risk.shtml.

Residents of Louisiana

If you are opening a joint account in Louisiana, you should be aware that Louisiana does not recognize certain types of joint account registrations. As a result, Fidelity will only establish a joint account when directed by you to do so and only when you direct Fidelity to establish such account as tenants in common. In connection with your direction to establish this type of joint account, each account owner expressly and irrevocably renounces the right to concur in the disposition or alienation of the account by the other account owner for the entire time the account is open, or the longest term allowed by applicable law.

Texas House Bill 1454 “Designated Representative”

For Texas residents (or those using a Texas address as a legal address), under Texas House Bill 1454 Act No. 350, you, as an account owner of shares of a mutual fund, may designate a representative for the purpose of receiving a due diligence notice; however, you are not required to designate a representative. If you add a designated representative, you acknowledge that:

- Fidelity is required to mail written notice to the representative, in addition to mailing the notice to the owner, upon presumption of abandonment of the account.
- The designated representative does not have any rights to the mutual fund shares and may not access the shares.

The process by which you select a designated representative is done through a written form, which may be accessed online or requested by phone.

Wisconsin Marital Property Act

Married Wisconsin residents should be aware that no provision of any marital property agreement, unilateral agreement, or court decree under Wisconsin’s Marital Property Act will adversely affect a creditor’s interest unless, prior to the time credit is granted, the creditor is furnished a copy of, or given complete information about, that agreement or decree.

Residing Outside the United States

If we determine that you reside outside the United States, you will be subject to certain limitations. While we generally make this determination by looking at the address information on our books and records (including the addresses maintained by the account owner and certain individuals with control over the account), we reserve the right to consider other information when making this determination and/or subjecting you to these limitations. Generally speaking, regardless of where you reside, you will be subject to certain limitations. These include, but are not limited to, the following: (i) we will provide you with only ministerial or administrative services, which means that, among other things, our representatives will not engage in discussions with you about such topics as asset allocation, income planning, or portfolio composition; and (ii) you will not be permitted to purchase additional shares of any U.S. mutual fund (except pursuant to a dividend reinvestment program or in other limited circumstances), which among other things will affect the operation of your core account (please refer to the Core Account section of this Agreement for further details).

In addition to the foregoing, depending on where you reside, you may be subject to additional restrictions (for example, margin lending or options trading may not be permitted) up to and including restrictions that will prevent you from making additional deposits or purchasing additional securities positions (e.g., you will be prohibited from doing anything in your account other than selling your existing holdings and withdrawing the proceeds).

Notwithstanding the above, special rules govern your relationship with us if you live in Canada. Because of this, and because every situation is unique, you should contact Fidelity if you have questions about how you may be affected. If you notify us that you do not reside outside the U.S., these limitations may be lifted.

Unclaimed Property

Your account balance and certain uncashed checks issued from your account may be transferred to a state unclaimed property administrator if no activity occurs in the account or the check remains outstanding within the time period specified by the applicable state law.

FINRA BrokerCheck

As part of the Financial Industry Regulatory Authority (FINRA) BrokerCheck program, you have access to the FINRA BrokerCheck hotline at 800-289-9999 and the FINRA website at finra.org. You can call or email your inquiries and request a brochure that includes information detailing the BrokerCheck program.

MSRB Investor Brochure

Fidelity Brokerage Services LLC is registered with the U.S. Securities and Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB). An investor brochure may be obtained at msrb.org that describes the protections that may be provided by the MSRB and how to file a complaint with an appropriate regulatory authority.
Important Information about Using Margin and Its Risks

When you buy securities in your account, you may pay for them in full or you may borrow part of the purchase price from us, using a margin account. In addition, having margin on your account allows you to establish a short position.

When you borrow on margin, the securities in your account become our collateral for the loan to you. A decline in the value of these securities is therefore a decline in the value of the collateral. We can respond in a variety of ways, as described below.

Before you make use of margin in any way, it’s essential to fully understand the risks involved. These risks include:

You can lose more money than you deposited in your margin account. If securities you bought on margin go down in price, you may face a “margin call,” meaning you have to deposit more money or marginable securities.

Fidelity can set stricter margin requirements than the industry minimum, and can increase these “house” requirements in its sole discretion without advance notice. An increase may take effect immediately and may trigger a maintenance margin call without prior notice.

If you cannot meet a margin call, Fidelity can force the sale of assets in your account(s). If the equity in your account falls below either industry minimums or Fidelity’s house requirements, Fidelity can cover the deficiency by selling securities or other assets in any account of yours at Fidelity (including accounts at other Fidelity affiliates) without prior notice. If these assets are insufficient, you will be responsible for making up any shortfall, and potentially for paying Fidelity’s costs for collecting the shortfall as well.

Fidelity can sell assets in your account without contacting you. While Fidelity generally attempts to notify customers of margin calls, it is not required to do so. Even if you are notified, Fidelity can still sell assets before the time indicated in the notice, if it believes such action is warranted. You understand that if we contact you in advance in certain instances, we are not obligated to do so and such action will not be deemed a waiver of our rights under this agreement.

You are not entitled to choose which securities are sold to meet a margin call. Because your accounts form Fidelity’s collateral for its loan to you, the choice of what to sell is Fidelity’s.

You are not entitled to a time extension on a margin call. If Fidelity may grant you an extension, it is not required to do so. Granting an extension on a margin call does not waive Fidelity’s right to decline to grant an extension in the future.

Short selling is a margin account transaction and not only entails the same risks as described above, but also entails additional risks. Short selling allows you to integrate a number of different strategies into your investment approach so that you may potentially profit from downward moves in a particular stock. However, if the price of the security that you have sold short goes up, you may incur a loss and that loss may be unlimited. In addition, you may be charged a short interest fee on the securities that you have borrowed to sell short and those fees may change, sometimes significantly, without warning. All short sale orders are subject to the availability of the stock being sold, which must be confirmed by Fidelity prior to the order being entered. Fidelity can use your account to buy securities to cover a short position without contacting you. If you don’t have sufficient assets, you are responsible for the shortfall and collection costs.

Fidelity can loan out (to itself or others) the securities that collateralize your margin borrowing. If it does, you may not be entitled to receive, with respect to securities that are lent, certain benefits that normally accrue to a securities owner, such as the ability to exercise voting rights, or to receive interest, dividends, or other distributions. Although you may receive substitute payments in lieu of distributions, these payments may not receive the same tax treatment as actual interest, dividends, or other distributions, and you may therefore incur additional tax liability for substitute payments. Fidelity may allocate substitute payments by lottery or in any other manner permitted by law, rule, or regulation. Please note that any substitute payments Fidelity makes are voluntary, and may be discontinued at any time.

In addition to market volatility, factors specific to your portfolio, such as concentration, liquidity, and marketability of securities, may increase the risk of a margin call. Use of features such as checkwriting, bank cards, and bill payment services may also increase the risk of a margin call.

In the absence of (i) an Intra-day Free Credit Balance, (ii) money in the core account, (iii) shares of certain Fidelity money market funds held as positions outside the core account, or (iv) cash dividends paid on marginable securities, any debits that are posted to your account will drive up your margin balance. Be sure to read the margin account policies in “Borrowing on Margin” within this customer agreement. If you have any questions or concerns about your margin account or margin generally, please contact Fidelity.

By applying for a margin account, you acknowledge that you have independently analyzed the risks of short selling as an investment strategy, and understand that Fidelity does not recommend or solicit the purchase of short sale orders. To the extent you will have or have had communications with any Fidelity representatives about short selling, you agree that you are not relying on those communications as recommendations or solicitations, that you are not relying today and will not rely in the future on Fidelity to monitor your investments in short sales nor advise you concerning them; and that you have not and will not rely on Fidelity or any Fidelity representative for advice, information, or recommendations regarding short selling strategies or their suitability for you.
Resolving Disputes—Arbitration

This agreement contains a pre-dispute arbitration clause. Under this clause, which you agree to when you sign your account application, you and Fidelity agree as follows:

A. All parties to this agreement are giving up the right to sue each other in court, including the right to a trial by jury, except as provided by the rules of the arbitration forum in which a claim is filed.

B. Arbitration awards are generally final and binding, a party’s ability to have a court reverse or modify an arbitration award is very limited.

C. The ability of the parties to obtain documents, witness statements, and other discovery is generally more limited in arbitration than in court proceedings.

D. The arbitrators do not have to explain the reason(s) for their award unless, in an eligible case, a joint request for an explained decision has been submitted by all parties to the panel at least 20 days prior to the first scheduled hearing date.

E. The panel of arbitrators may include a minority of arbitrators who were or are affiliated with the securities industry.

F. The rules of some arbitration forums may impose time limits for bringing a claim in arbitration. In some cases, a claim that is ineligible for arbitration may be brought in court.

G. The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this agreement.

All controversies that may arise between you and us concerning any subject matter, issue or circumstance whatsoever (including, but not limited to, controversies concerning any account, order, distribution, rollover, advice interaction, or transaction, or the continuation, performance, interpretation or breach of this or any other agreement between you and us, whether entered into or arising before, on or after the date this account is opened) shall be determined by arbitration through the Financial Industry Regulatory Authority (FINRA) or any United States securities self-regulatory organization or United States securities exchange of which the person, entity or entities against whom the claim is made is a member.

The commencement of arbitration through a particular self-regulatory organization or securities exchange is not integral to the underlying agreement to arbitrate. You understand that judgment upon any arbitration award may be entered in any court of competent jurisdiction.

No person shall bring a putative or certified class action to arbitration, nor seek to enforce any predispute arbitration agreement against any person who has initiated in court a putative class action; or who is a member of a putative class action who has not opted out of the class with respect to any claims encompassed by the putative class action until: (i) the class certification is denied; or (ii) the class is decertified; or (iii) the customer is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate shall not constitute a waiver of any rights under this agreement except to the extent stated herein.
Guide to Brokerage and Investment Advisory Services at Fidelity Investments

This brochure highlights important differences between the brokerage and investment advisory services that may be provided to you as part of your relationship with Fidelity Investments (“Fidelity”, “we”, or “us”). Depending on your individual goals and investment objectives, our representatives may assist you with brokerage services, investment advisory services, or both.

It is important for you to understand that Fidelity's brokerage services and investment advisory services are separate and distinct. Our brokerage products and services are subject to different sets of laws and regulations from our investment advisory products and services, and our obligations and duties to you are different for each. Although you may have a relationship with a dedicated Fidelity representative who serves as your primary point of contact for the services you receive from Fidelity, when you receive multiple services from us, each service will be governed by the terms of the applicable agreement, as well as the laws and regulations applicable to that type of service.

Fidelity’s Brokerage Services
Our brokerage products and services are provided to you through Fidelity Brokerage Services LLC (“FBS”), a broker-dealer that is registered with the Securities and Exchange Commission (“SEC”) and that is a member of the Financial Industry Regulatory Authority (“FINRA”), the New York Stock Exchange (“NYSE”), and Securities Investor Protection Corporation (“SIPC”).

When providing brokerage products and services, as described in your Fidelity Account® Customer Agreement or other applicable customer agreement, and/or for services in connection with certain workplace savings plans as described in an agreement with your employer or other applicable document, we will accept orders and execute transactions in your Fidelity brokerage account based on your instructions. You, or your authorized representative, are responsible for all investment decisions in your Fidelity brokerage account. As a broker, we also offer you other services incidental to our brokerage services which can take the form of education, research, access to tools available on Fidelity.com, and guidance or advice designed to assist you in making decisions regarding the various products available to you. No separate fees are charged for these other services incidental to our brokerage services. Some of our brokerage representatives also hold insurance licenses that allow them to sell life insurance and annuities issued by our affiliated life insurance companies and certain unaffiliated life insurance companies.

When we act as your broker-dealer, we are held to the legal standards under applicable federal and state securities laws, and the rules of self-regulatory organizations for broker-dealers such as FINRA. We are also subject to state insurance laws relative to the sale of life and annuity products. Among other things, these regulations require broker-dealers to:

- Execute your trades with diligence and competence and seek to provide best execution in light of prevailing market conditions;
- Have reasonable grounds for believing that any security that we specifically present to you is suitable given your investment objectives, risk tolerance, financial and tax status, and other financial information you have disclosed to us; and
- Treat you in a manner characterized by principles of fair dealing and high standards of honesty and integrity.
How you are charged for Fidelity’s Brokerage Services
Your costs for brokerage services are typically based on a transaction charge, often called a commission, for each trade you make in your account. Other costs and charges will also apply to your account, and these costs and charges are outlined in your Fidelity Account Customer Agreement or through other notification. Life insurance and annuity product sales will result in a commission payment to us from the affiliated and non-affiliated insurance companies for the insurance products we sell.

Fidelity’s Investment Advisory Services
Our investment advisory services are provided through Fidelity Personal and Workplace Advisors, LLC (“FPWA”), an investment adviser registered with the SEC under the Investment Advisers Act of 1940 (the “Advisers Act”). For workplace savings accounts, advisory services are provided jointly between FPWA and Strategic Advisers LLC (“Strategic Advisers”), another affiliated SEC-registered investment adviser. Generally, the advisory services we offer include nondiscretionary financial planning, and/or discretionary investment management, or a referral to an unaffiliated investment advisory firm.

We will provide investment advisory services pursuant to a written agreement (“Client Agreement”) with you (or in the case of workplace savings accounts, with your sponsor) that describes our investment advisory relationship and our obligations under the Client Agreement. You also will receive a disclosure document required by Form ADV, Part 2A (“Program Fundamentals”), describing the specific investment advisory service we will be providing to you. These documents explain the types of services we provide, the applicable advisory fees, and any potential conflicts between our interests and yours. You will also receive additional disclosure documents as required by Form ADV, Part 2B which provide details regarding the business background of the personnel responsible for delivering investment advice to you.

Please note that our investment advisory services are limited strictly to those services for which you or your plan sponsor has entered into a Client Agreement with FPWA and, with respect to workplace savings plans, Strategic Advisers. The fact that we provide discretionary investment management of some of your accounts, or that we provide financial planning with respect to certain of your goals, does not mean that we are under any obligation to provide investment advisory services for other accounts or assets you may have, either at Fidelity or with another financial institution. Where we provide financial planning services as an investment adviser, you are responsible for determining whether, and how, to implement any financial planning recommendations presented, including asset allocation suggestions, and for paying applicable fees. Financial planning through FPWA does not constitute an offer to sell, a solicitation of any offer to buy, or a recommendation of any security by Fidelity Investments or any third party. We will act as a broker-dealer or an investment adviser with respect to any implementation depending on the products or services you select, and such products or services may be subject to separate charges, fees, and expenses.

When providing services as an investment advisor, we owe you a fiduciary duty under the Advisers Act with respect to the specific investment advisory service provided. Our fiduciary duty includes the obligation to:

• Ensure that investment advisory services are suited to your specific investment objectives, needs, and circumstances;
• Make full and fair disclosure of all material facts about our services and our relationship;
• Place your interests before our own when providing the investment advisory service to you;
• Disclose conflicts of interest, including compensation received by us or our affiliates in connection with the investment advisory program;
• Obtain your consent before engaging in transactions with you for our own, an affiliate’s, or another client’s account; and
• Not give an unfair advantage to one advisory client to the disadvantage of another.
How you are charged for Fidelity’s Investment Advisory Services
Fees for investment advisory services are described in the applicable Program Fundamentals and Client Agreement. Typically, with respect to discretionary investment management services, your fee for such services will be a percentage of the assets held in an account over which we have investment discretion. As an example, the discretionary investment management fee typically covers both the investment management services and the trading costs associated with the account (note that other costs are not included as detailed in your Client Agreement, Program Fundamentals and/or other notification). This fee is expressed as an annual percentage, but is charged to your account on a quarterly basis in arrears. With respect to nondiscretionary financial planning services, our advisory fees may instead be in the form of a fixed annual payment amount or may be included as part of your annual discretionary investment management fee.

Additional information applicable to Retirement Accounts
Unless otherwise agreed to by a Fidelity Investments company in writing, information, including analytics, provided to you with regard to your workplace savings account(s) or individual retirement account(s) (together, your “Retirement Accounts”), is educational in nature and should not be relied on as a primary basis for your decisions regarding investing in, purchasing or selling securities or other property for your Retirement Account(s). In applying any asset allocation suggestion to your individual situation, be sure to consider other assets, income and investments (e.g., home equity, savings accounts or other retirement accounts) in addition to your Retirement Account(s).

How Fidelity representatives are compensated
As compensation for the services they provide, our representatives receive base pay and may also be eligible to receive variable compensation. Fidelity representatives may have a financial incentive to recommend your participation in an investment advisory service where this compensation is greater than what the representative would receive if you purchased certain other products or enrolled in other services offered by Fidelity. More information about our representatives’ compensation is available upon request, or can be found online at www.fidelity.com/repcompensation and in the Program Fundamentals associated with each advisory service.

Additional information
Fidelity representatives’ use of any specific title or designation does not imply that they are providing you with any specific service, such as financial planning or other investment advisory services. Whether you are a brokerage or investment advisory client is dictated by the actual services that are agreed upon and provided to you.

If at any time you would like clarification on the nature of services provided to you, please speak with a Fidelity representative, or visit our website at Fidelity.com. We also urge you to carefully read the account agreements and disclosures that we provide to you for our brokerage and advisory services, copies of which can be found at www.fidelity.com/customer-service/forms-applications/overview or can be obtained from your Fidelity representative.

Advisory services are provided for a fee through Fidelity Personal and Workplace Advisors LLC, and, with respect to workplace savings accounts, Strategic Advisers LLC. Both are registered investment advisers and Fidelity Investments companies.
Brokerage services are provided by Fidelity Brokerage Services LLC. Custody and other services are provided by National Financial Services LLC. Both are Fidelity Investments companies and members of NYSE and SIPC.
Fidelity Brokerage Services LLC, Member NYSE and SIPC, 900 Salem Street, Smithfield, RI 02917
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FEES AND COMPENSATION

Fidelity brokerage accounts are highly flexible, and our cost structure is flexible as well. Our use of “à la carte” pricing for many features helps to ensure that you only pay for the features you use.

About Our Commissions and Fees

The most economical way to place trades is online, meaning either through Fidelity.com, Fidelity Active Trader Pro®, or Fidelity Mobile®. The next most economical way is Fidelity Automated Exchange-Traded Funds (ETFs), and U.S.-traded foreign securities (ADRs, or American Depository Receipts, and ODRs, or Ordinaries).¹ For details on foreign stock trading, see the Foreign Stocks section.

In addition to the commission, there is an assessment charged on all sell orders. This assessment, which typically ranges from $0.01 to $0.03 per $1,000 of principal, is intended to cover what is sometimes referred to as a “regulatory fee” or “Section 31 Fee.” Fidelity remits these fees to certain self-regulatory organizations and national securities exchanges, which in turn make payment to the SEC. These fees are intended to cover the costs incurred by the government, including the SEC, for supervising and regulating the securities markets and securities professionals. Because the fees may vary over time, and because these variations may not be immediately known to Fidelity, you acknowledge and agree that Fidelity shall have the right to determine the amount of such assessment in its sole and exclusive discretion, that the assessment may differ from or exceed the actual amount of the fee applicable to your transaction, and that Fidelity may retain any such excess for its benefit.

Fidelity Brokerage Services LLC (“FBS”) and/or NFS receives remuneration, compensation, or other consideration (such as financial credits or reciprocal business) for directing orders in certain securities to particular broker/dealers or market centers for execution. The payer, source, and nature of any compensation received in connection with your particular transaction will vary based on the venue that a trade has been routed to for execution and will be disclosed upon written request to FBS. Please refer to Fidelity’s customer agreement for additional information about order flow practices and to Fidelity’s commitment to execution quality (http://personal.fidelity.com/products/trading/Fidelity-Services/Service_Commitment.shtml) for additional information about order routing. Also review FBS’s annual disclosure on payment for order flow policies and order routing policies.

FBS has entered into a long-term, exclusive and significant arrangement with the advisor to the iShares Funds that includes but is not limited to FBS’s promotion of iShares funds, as well as in some cases purchase of certain iShares funds at a reduced commission rate (“Marketing Program”). FBS receives compensation from the fund’s advisor or its affiliates in connection with the Marketing Program. FBS is entitled to receive additional payments during or after termination of the Marketing Program based upon a number of criteria, including the overall success of the Marketing Program. The Marketing Program creates significant incentives for FBS to encourage customers to buy iShares funds. Additional information about the sources, amounts, and terms of compensation is described in the ETF’s prospectus and related documents.

Brokerage Commission and Fee Schedule

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Fidelity Brokerage Services LLC (“FBS”) and/or NFS receives remuneration, compensation, or other consideration (such as financial credits or reciprocal business) for directing orders in certain securities to particular broker/dealers or market centers for execution. The payer, source, and nature of any compensation received in connection with your particular transaction will vary based on the venue that a trade has been routed to for execution and will be disclosed upon written request to FBS. Please refer to Fidelity’s customer agreement for additional information about order flow practices and to Fidelity’s commitment to execution quality (http://personal.fidelity.com/products/trading/Fidelity-Services/Service_Commitment.shtml) for additional information about order routing. Also review FBS’s annual disclosure on payment for order flow policies and order routing policies.

FBS has entered into a long-term, exclusive and significant arrangement with the advisor to the iShares Funds that includes but is not limited to FBS’s promotion of iShares funds, as well as in some cases purchase of certain iShares funds at a reduced commission rate (“Marketing Program”). FBS receives compensation from the fund’s advisor or its affiliates in connection with the Marketing Program. FBS is entitled to receive additional payments during or after termination of the Marketing Program based upon a number of criteria, including the overall success of the Marketing Program. The Marketing Program creates significant incentives for FBS to encourage customers to buy iShares funds. Additional information about the sources, amounts, and terms of compensation is described in the ETF’s prospectus and related documents.

Free commission offer applies to online purchases of Fidelity ETFs and select iShares ETFs in a Fidelity brokerage account. The sale of ETFs is subject to an activity assessment fee (of between $0.01 and $0.03 per $1,000 of principal).

NEW ISSUE

Fidelity makes certain new issue products available without a separate transaction fee. Fidelity may receive compensation for participating in the offering as a selling group member or underwriter. The compensation Fidelity receives from issuers when acting as both underwriter and selling group member is reflected in the “Range of Fees from Underwriting” column. When Fidelity acts as underwriter but securities are sold through other selling group members, Fidelity receives the underwriting fees less the selling group fees.

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<th>Range of Fees from Underwriting</th>
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<td>• 3% to 4.2% of the investment amount</td>
<td>• 5% to 7% of the investment amount</td>
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<td>Follow-Ons</td>
<td>• 1.8% to 2.4% of the investment amount</td>
<td>• 3% to 4% of the investment amount</td>
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Please refer to the applicable pricing supplement or other offering document for the exact percentage sales concession or underwriting discount.

OPTIONS

Online $4.95 per trade + 65¢ per contract
FAST® $12.95 per trade + 65¢ per contract
Rep-Assisted $32.95 per trade + 65¢ per contract

Buy-to-close trades: commission-free online when the contract price is 10¢ or less; regular online stock rates apply when the contract price is 11¢–65¢; or regular options rates (as above) apply when the contract price exceeds 65¢.

Maximum charge: 5% of principal (subject to a minimum charge of $4.95 for Online trades, $12.95 for FAST trades, and $32.95 for Rep-Assisted trades).

Exercises and assignments: regular online stock rates apply.

Multi-Leg Option orders are charged only one base commission, plus a per contract charge for the total number of contracts executed in the trade. The Options Regulatory Fee applies to both option buy and sell transactions. This fee is in addition to your commission, and is included on your trade confirmation in the Activity Assessment Fee. The cumulative fee charged by participating options exchanges is $0.0388 per contract and is subject to change at any time. In addition, other options exchanges may decide to impose similar fees. If so, these fees will also be included in the Activity Assessment Fee. All fees collected by Fidelity are passed on to the appropriate regulatory body to meet this requirement.

BONDS AND CDs

New Issues, Primary Purchases (all other fixed-income securities except U.S. Treasury)

Fidelity makes certain new issue products available without a separate transaction fee. Fidelity may receive compensation from issuers for participating in the offering as a selling group member and/or underwriter. The compensation Fidelity receives from issuers when acting as both underwriter and selling group member is reflected in the “Range of Fees from Underwriting” column. When Fidelity acts as underwriter but securities are sold through other selling group members, Fidelity receives the underwriting fees less the selling group fees.

¹A Financial Transaction Tax of 0.30% of principal per trade on purchases of French securities and 0.10% of principal per trade on purchases of Italian securities may be assessed.
### BONDS

<table>
<thead>
<tr>
<th>Securities</th>
<th>Range of Fees from Participation in Selling Group</th>
<th>Range of Fees from Underwriting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency/GSE</td>
<td>N/A</td>
<td>0.05% to 1.00% of the investment amount</td>
</tr>
<tr>
<td>Corporate Notes</td>
<td>0.01% to 2.5% of the investment amount</td>
<td>0.01% to 3.0% of the investment amount</td>
</tr>
<tr>
<td>Corporate Bond</td>
<td>0.01% to 2.5% of the investment amount</td>
<td>0.05% to 3.0% of the investment amount</td>
</tr>
<tr>
<td>Municipal Bonds and Taxable Municipal Bonds</td>
<td>0.1% to 2% of the investment amount</td>
<td>0.1% to 2.5% of the investment amount</td>
</tr>
<tr>
<td>Structured Products (Registered Notes)</td>
<td>0.05% to 5.0% of the investment amount</td>
<td>N/A</td>
</tr>
<tr>
<td>Fixed-Rate Capital</td>
<td>2% of the investment amount</td>
<td>3% of the investment amount</td>
</tr>
</tbody>
</table>

Please refer to the applicable pricing supplement or other offering document for the exact percentage sales concession or underwriting discount.

### CDs

<table>
<thead>
<tr>
<th>Securities</th>
<th>Range of Fees from Participation in Selling Group</th>
<th>Range of Fees from Underwriting</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDs — CDIPs (Inflation Protected)</td>
<td>0.1% to 2% of the investment amount</td>
<td>0.1% to 2.5% of the investment amount</td>
</tr>
<tr>
<td>Structured Products (Market-linked CDs)</td>
<td>0.05% to 5% of the investment amount</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### U.S. Treasury, including TIPS — Auction Purchases

- **Online**: No charge
- **Rep-Assisted**: $19.95 per trade

### SECONDARY MARKET TRANSACTIONS

Mark-ups for all secondary bond (fixed-income) trades are listed below.

### Fidelity Funds

#### All Methods

- **No transaction fee**

#### FundsNetwork Funds

Through FundsNetwork, your account provides access to over 10,000 mutual funds. At the time you purchase shares of funds, some shares will be assigned either a transaction fee (TF), a non transaction fee (NTF) or a load status. When you subsequently sell those shares, any applicable fees will be assessed based on the status assigned to the shares at the time of purchase.

Fidelity Brokerage Services LLC, or its affiliates, may receive compensation in connection with the purchase and/or the ongoing maintenance of positions in certain mutual funds in your account. FBS may also receive compensation for such things as systems development necessary to establish a fund on its systems, a fund’s attendance at events for FBS’s clients and/or representatives, and opportunities for the fund to promote its products and services. This compensation may take the form of sales loads and 12b-1 fees described in the prospectus, as well as program participation and maintenance fees, start-up fees, and infrastructure support paid by the fund, its investment advisor, or an affiliate.

### FundsNetwork No Transaction Fee Funds

- **All Methods**: No transaction fee
- **Most NTF Funds will have no load. Certain NTF Funds will be available load waived.**

#### Short-term Trading Fees

Fidelity charges a short-term trading fee each time you sell or exchange shares of a FundsNetwork NTF fund held less than 60 days. This fee does not apply to Fidelity funds, money market funds, FundsNetwork Transaction Fee funds, FundsNetwork load funds, funds redeemed through the Personal Withdrawal Service, or shares purchased through dividend reinvestment.

In addition, Fidelity reserves the right to exempt other funds from this fee, such as funds designed to achieve their stated objective on a short-term basis. The fee will be based on the following fee schedule:

- **Online**: $49.95 flat fee
- **Fidelity Automated Service Telephone (FAST)**: 0.5625% of principal (25% off representative-assisted rates), maximum $187.50, minimum $75
- **Representative-Assisted**: 0.75% of principal, maximum $250, minimum $100

Keep in mind that the short-term trading fee charged by Fidelity on FundsNetwork NTF funds is different and separate from a short-term redemption fee assessed by the fund itself. Not all funds have short-term redemption fees, so please review the fund’s prospectus to learn more about a potential short-term redemption fee charged by a particular fund.

*Fidelity reserves the right to change the funds available without transaction fees and reinstate the fees on any funds.

#### FundsNetwork Transaction-Fee Funds

**Purchases:**
- **Online**: $49.95 or $75 per purchase. To identify any applicable transaction fees associated with the purchase of a given fund, please refer to the “Fees and Distributions” tab on the individual fund page on Fidelity.com.
- **FAST**: 0.5625% of principal per purchase; maximum $75, minimum $187.50
- **Representative-Assisted**: 0.75% of principal per purchase; minimum $100, maximum $250

**Redemptions:**

Fidelity does not charge a transaction fee on any redemption of shares of a transaction-fee fund that were purchased with no load. A fund’s own redemption fees may apply.

You can buy shares in a transaction-fee fund from its principal underwriter or distributor without a Fidelity transaction fee.

#### FundsNetwork Load Funds

A fund’s sales charges may apply. Fidelity does not charge a transaction fee on a load fund. A fund’s own redemption fees may apply.

### FOREIGN STOCKS

Fidelity offers you two different ways to trade foreign stocks. You can utilize either Fidelity’s “International Trading” functionality or its “Foreign Ordinary Share Trading” service. Depending on the service, different commissions, taxes and fees may apply as more fully described below. You can also call a Fidelity representative for further detail.

#### International Trading

International Trading allows customers to trade stocks from 25 countries and exchange between 16 currencies. These trades are placed using a root symbol, followed by a colon (:) and then the two-letter country code for the market the customer wants to trade in. The commission and additional charges that may apply for International Trading will vary as noted below, depending on the market and whether the trade is placed online or through a representative. Please also note that if a security trading on an exchange

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**U.S. Treasury, including TIPS — Auction Purchases**

- **Online**: No charge
- **Rep-Assisted**: $19.95 per trade

**SECONDARY MARKET TRANSACTIONS**

Mark-ups for all secondary bond (fixed-income) trades are listed below.

**U.S. Treasury, including TIPS**

- **Online**: No charge
- **Rep-Assisted**: $19.95

**All Other Bonds**

- **Online**: $1.00 per bond
- **Rep-Assisted**: $1.00 per bond

Please note that a $250 maximum applies to all trades and is reduced to a $50 maximum for bonds maturing in one year or less.

Bond orders cannot be placed through FAST.

The offering broker, which may be our affiliate National Financial Services (“NFS”), may separately mark up or mark down the price of the security and may realize a trading profit or loss on the transaction. If NFS is not the offering broker, Fidelity compensation is limited to the prices above.

**Foreign Fixed-Income Trading**

When purchasing a foreign currency–denominated fixed-income security for settlement in USD, the following additional charges will apply:

- **<$1M**: 0.30% of principal
- **$1M–$5M**: 0.20% of principal
- **>$5M**: negotiated rate

**MUTUAL FUNDS**

This section only describes fees associated with your account. Fees charged by a fund itself (for example, expense ratios, redemption fees [if any], exchange fees [if any], sales charges [for certain load funds]) are in the fund’s prospectus. Read it carefully before you invest.
in one of the markets noted below is only listed for trading in a currency other than that country’s local market’s currency, then the commissions and fees that will be charged will be based on the currency the security is trading in instead of the local market’s currency. The list of countries, currencies, taxes and fees provided below is subject to change without notice.

**Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, and Spain**

Online: 19 EUR per trade
Rep-Assisted: 50 EUR per trade

*Note: There may be additional fees or taxes imposed on transactions in certain securities including: Financial Transaction Tax 0.30% of principal per trade on purchases of French securities and 0.10% of principal per trade on purchases of Italian securities.*

**Stamp Tax**

0.10% of principal per trade on purchases of French securities and 0.04% of principal per trade on purchases of Italian securities.

**Online United Kingdom**

**Online Switzerland**

**Online Sweden**

**Online Singapore**

**S. Africa**

**Online Mexico**

**Online New Zealand**

**Online Hong Kong**

**Rep-Assisted Online Denmark**

**Rep-Assisted Online Canada**

**Rep-Assisted Online Japan**

**Rep-Assisted Online Korea**

**Rep-Assisted Online New Zealand**

**Rep-Assisted Online Norway**

**Rep-Assisted Online Poland**

**Rep-Assisted Online S. Africa**

**Online United Kingdom**

**Note:** There may be additional fees or taxes imposed on transactions in certain securities including: Financial Transaction Tax 0.30% of principal per trade on purchases of French securities and 0.10% of principal per trade on purchases of Italian securities.

**Stamp Tax**

1.00% of principal per trade on purchases of Irish securities.

**Australia**

Online: $32 AUD per trade
Rep-Assisted: $70 AUD per trade

**Canada**

Online: $19 CAD per trade
Rep-Assisted: $70 CAD per trade

**Denmark**

Online: 160 DKK per trade
Rep-Assisted: 420 DKK per trade

**Hong Kong**

Online: HK$250 HKD per trade
Rep-Assisted: HK$600 HKD per trade

**Note:** Additional fees or taxes imposed on transactions in Hong Kong securities include:
- Transaction Levy 0.001% of principal per trade
- Trading Fee 0.005% of principal per trade
- Stamp Duty 0.10% of principal per trade

**Online Japan**

Online: ¥3,000 JPY per trade
Rep-Assisted: ¥8,000 JPY per trade

**Online Mexico**

Online: $360 MXN per trade
Rep-Assisted: $960 MXN per trade

**Online Singapore**

Online: $35 SGD per trade
Rep-Assisted: $90 SGD per trade

**Online S. Africa**

Online: 225 ZAR per trade
Rep-Assisted: 600 ZAR per trade

**Note:** Additional fees or taxes imposed on transactions in S. African securities include:
- Securities Transfer Tax 0.25% of principal on purchases

**Singapore**

Online: $35 SGD per trade
Rep-Assisted: $90 SGD per trade

**Note:** Additional fees or taxes imposed on transactions in Singapore securities include:
- Clearing fee 0.04% of principal per trade

**Sweden**

Online: kr180 SEK per trade
Rep-Assisted: kr480 SEK per trade

**Switzerland**

Online: CHF25 CHF per trade
Rep-Assisted: CHF65 CHF per trade

**United Kingdom**

Online: £9 GBP per trade
Rep-Assisted: £30 GBP per trade

Note: Additional fees or taxes imposed on transactions in UK securities include: PTM Levy £1 GBP per trade where principal amount is >£10,000 GBP. Stamp Duty 0.50% of principal only on purchases.

There may also be further fees, taxes, or other charges assessed when conducting transactions in foreign securities beyond those described here. Details regarding these charges are available from a Fidelity representative.

**Foreign Currency Exchange**

In addition to the commissions, taxes, fees, and other charges noted above, a currency exchange fee (in the form of a mark-up or mark-down on the exchange rate) will be charged based on the size of the currency conversion, pursuant to the following schedule:

- < $100k: 1.0% of principal
- $100k–$250k: 0.75% of principal
- $250k–$500k: 0.50% of principal
- $500k–$1M: 0.30% of principal
- $1M+: 0–0.20% of principal

**Foreign Ordinary Share Trading**

Foreign Ordinary Share Trading allows customers to trade shares in foreign corporations on the over-the-counter (OTC) market using a five-character symbol ending in “F.” Trades in foreign ordinary shares can be placed online or through a Fidelity representative. In either case, the domestic commission schedule for stocks/ETFs will apply. A $50 fee will also be charged on each transaction in any foreign ordinary stock that is not Depository Trust Company eligible. Depending on the security and the market, additional charges will apply, as described below. There may also be further fees, taxes, or other charges assessed when conducting transactions in foreign securities beyond those described here. Details regarding these charges are available from a Fidelity representative.

These fees and taxes, if any, will be disclosed on the trade confirmation (either individually or in the aggregate) and/or may be incorporated into the execution price.

**Canada**

When trading in Canadian stocks, orders are generally routed to brokers in Canada. However, dually listed Canadian stocks may be routed to a Canadian broker or U.S. market center for execution. If the order is routed to a Canadian broker, a local broker’s fee of $0.0015 CAD per share if the price of the stock is less than or equal to $0.10 CAD, $0.0025 CAD per share if the price of the stock is greater than $0.10 and less than $1 CAD, and $0.005 per share if the price of the stock is greater than or equal to $1 CAD, and a foreign exchange fee of up to 0.01% of the principal may also be incorporated into the execution price.

**All Other Countries**

For every country other than Canada, shares will be traded on the over-the-counter market through a U.S. market maker, unless you direct otherwise when you place your trade through a representative. In that situation (that is, if you direct that the transaction occur other than on the over-the-counter market), an additional foreign exchange fee of up to 0.30% of principal per trade may be incorporated into the execution price.

**OTHER INVESTMENTS**

**Commercial Paper**

$50 per transaction

**Unit Investment Trusts (UITs)**

$35 minimum per redemption; no fee to purchase. Fidelity makes certain new issue products available without a separate transaction fee. Fidelity receives compensation for participating in the offering as a selling group member. Fees from participating in the selling group range from 1% to 4% of the public offering price. Fidelity may also receive compensation for reaching certain sales levels, which range from 0.001%–0.0025% of the monthly volume sold.

**Precious Metals**

<table>
<thead>
<tr>
<th>Buy</th>
<th>Gross Amount</th>
<th>% Charged on Gross Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0–$9,999</td>
<td>2.90%</td>
<td></td>
</tr>
<tr>
<td>$10,000–$49,999</td>
<td>2.50%</td>
<td></td>
</tr>
<tr>
<td>$50,000–$99,999</td>
<td>1.98%</td>
<td></td>
</tr>
<tr>
<td>$100,000+*</td>
<td>0.99%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sell</th>
<th>Gross Amount</th>
<th>% Charged on Gross Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0–$49,999</td>
<td>2.00%</td>
<td></td>
</tr>
<tr>
<td>$50,000–$249,999</td>
<td>1.00%</td>
<td></td>
</tr>
<tr>
<td>$250,000+*</td>
<td>0.75%</td>
<td></td>
</tr>
</tbody>
</table>

*delivery charges and applicable taxes if you take delivery

Fidelity charges a quarterly storage fee of 0.125% of the total value or $3.75, whichever is greater. Storage fees are pre-billed based on the value of the precious metals in the marketplace at the time of billing.
For more information on these other investments and the cost of a specific transaction, contact Fidelity at 800-544-6666. Minimum fee per precious metals transaction: $44. Minimum precious metals purchase: $2,500 ($1,000 for IRAs). Precious metals may not be purchased in a Fidelity Retirement Plan (Keogh), and are restricted to certain types of investments in a Fidelity IRA.

OTHER FEES AND COMPENSATION

All Accounts

Foreign Currency Wires up to 3% of principal; charged when converting USD to wire funds in a foreign currency

Foreign Dividends/Reorganizations 1% of principal; charged when a dividend is paid or a reorganization event occurs on a foreign asset held in an account in USD

Nonretirement Accounts

Debit Card and ATM Fees There is no annual fee for the Fidelity® Debit Card or the Fidelity HSA® debit card. You may be charged separate fees by other institutions, such as the owner of the ATM. Note: You cannot use the Fidelity HSA® debit card at an ATM.

If you qualify for Premium, Private Client Group, or have household annual trading activity of 120 or more stock, bond, or options trades, Fidelity will reimburse itemized domestic fees charged when using the card at ATMs displaying the Visa®, Plus®, or Star® logos. Eligibility for these fee waivers and reimbursements is determined based on asset levels as of the end of each business day, and will be applied the following day. If your eligibility changes, your account may be charged the applicable fees without notice. Any reimbursements will be credited to your account the same day an ATM fee is debited from your account. In rare instances, ATM owners may not itemize fees, which may cause disruption of individual automatic rebates. Should this occur, please contact Fidelity. Note: There is a foreign transaction fee of 1% that is not waived or reimbursed, and will be included in the amount charged to your account.

The Fidelity® Debit Card and Fidelity HSA® debit card are issued by PNC Bank, NA, and administered by BNY Mellon Investment Servicing Trust Company, which are not affiliated with Fidelity.

Transfer and Ship Certificates $100 per certificate; applies only to customers who have certificate shares reregistered and shipped; waived for households that meet certain asset and trade minimums at Fidelity

HSAs

Annual fees For Fidelity HSAs that are opened through, or serviced by, an intermediary, or in connection with your workplace benefits, Fidelity may deduct:

• an administrative fee of up to $12 per quarter ($48 annually) from your Fidelity HSA, unless it is paid by your employer (may be waived for households that were established before a certain date and meet certain asset minimums at Fidelity).

Fee and Trading Policies

Commissions will be charged per order. For commission purposes, orders executed over multiple days will be treated as separate orders. Unless noted otherwise, all fees and commissions are debited from your core account.

Fee Waiver Eligibility

To determine your eligibility for fee waivers, we group the assets and trading activity of all of the eligible accounts shown on your periodic account statement.

Eligible accounts generally include those maintained with Fidelity Service Company, Inc., or FBS [such as 401(k), 403(b), or 457 plan assets] or held in Fidelity Investments Life Insurance Company accounts, Fidelity Portfolio Advisory Service® or Fidelity® Personalized Portfolios accounts. Assets maintained by Fidelity Personal Trust Company, FSB, are generally not included. We may include other assets at our discretion.

We will review your account periodically to confirm that your household is receiving the best fee waivers it qualifies for, and may change your fee waiver eligibility at any time based on these reviews. We update fee waiver eligibility across household accounts promptly after a daily review of trading activity, and monthly after a review of household assets. All trading activity is measured on a rolling 12-month basis.

If you believe there are eligible accounts within your household that are not being counted in our fee waiver eligibility process—for example, accounts held by immediate family members who reside with you—you may authorize Fidelity to consolidate these accounts into an aggregated relationship household and review them for eligibility. Any resulting fee waivers would extend both to you and to all immediate family members residing with you. Most customers receive only a single customer reporting statement from Fidelity and do not need to take any action. However, for more information, go to Fidelity.com/goto/commissions or call us at 800-544-6666.

Limits on Feature Eligibility

Retirement accounts and Fidelity BrokerageLink® accounts cannot trade foreign securities or sell short, are not eligible for margin loans, and may be subject to other rules and policies. Please see the literature for these accounts for details.

Prospectuses and Fact Sheets

Free prospectuses are available for UITs, Fidelity funds, and Fidelity FundsNetwork® funds. Fact sheets are available for certificates of deposit. To obtain any of these documents, and for other information on any fund offered through Fidelity, including charges and expenses, call 800-544-6666 or visit Fidelity.com.

Margin Fees

Understanding how margin charges are calculated is essential for any investor considering or using margin. The information below, provided in conformity with federal securities regulations, is designed to help you understand the terms, conditions, and methods associated with our margin interest charges.

For all margin borrowing—regardless of what you use it for—we charge interest at an annual rate that is based on two factors: our base rate, and your average debit balance. We set our base rate with reference to commercially recognized interest rates, industry conditions regarding margin credit, and general credit conditions. The table below shows the premiums and discounts we apply to our base rate depending on the average debit balance:

<table>
<thead>
<tr>
<th>Interest Charged Above/Below Base Rate</th>
<th>Average Debit Balance</th>
<th>Interest Charged</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0–$24,999.99</td>
<td>+1.250%</td>
<td></td>
</tr>
<tr>
<td>$25,000–$49,999.99</td>
<td>+0.750%</td>
<td></td>
</tr>
<tr>
<td>$50,000–$99,999.99</td>
<td>-0.200%</td>
<td></td>
</tr>
<tr>
<td>$100,000–$249,999.99</td>
<td>-0.250%</td>
<td></td>
</tr>
<tr>
<td>$250,000–$499,999.99</td>
<td>-0.500%</td>
<td></td>
</tr>
<tr>
<td>$500,000–$999,999.99</td>
<td>-2.825%</td>
<td></td>
</tr>
<tr>
<td>$1,000,000+</td>
<td>-3.075%</td>
<td></td>
</tr>
</tbody>
</table>

In determining your debit balance and interest rate, we combine the margin balances in all your accounts except short accounts and income accounts. We then compute interest for each account based on the rate resulting from averaging the daily debit balances during the interest period. Interest is charged from the date we extend you credit.

Your rate of interest will change without notice based on changes in the base rate and in your average debit balance. When your interest rate is increased for any other reason, we will give you at least 30 days’ written notice. If the base rate is stated as a range, we may apply the high end of the range.

3Households with $1 million or more in assets or $25,000 or more in assets + 120 trades a year. For details, see Fee Waiver Eligibility section above.
For any month where your monthly margin charges are $1 or more, your monthly statement will show both the dollar amount and the rate of your interest charges. If your interest rate changed during the month, separate charges will be shown for each rate. Each interest cycle begins the first business day following the 20th of each month.

Other Charges
You may be assessed separate interest charges, at the base rate plus two percentage points, in connection with any of the following:

- Payments of the proceeds of a security sale in advance of the regular settlement date (such prepayments must be approved in advance)
- When the market price of a “when-issued” security falls below your contract price by more than the amount of your cash deposit
- When payments for securities purchased are received after the settlement date

How Interest Is Computed
Interest on debit balances is computed by multiplying the average daily debit balance of the account by the applicable interest rate in effect and dividing by 360, times the number of days a daily debit balance was maintained during the interest period.

Marking to Market
The credit balance in the short account will be decreased or increased in accordance with the corresponding market values of all short positions. Corresponding debits or credits will be posted to the margin account. These entries in the margin account will, of course, affect the balance on which interest is computed. Credits in your short account, other than marking to market, will not be used to offset your margin account balance for interest computation.
**FACTS**

What do Fidelity Investments and the Fidelity Funds do with your personal information?

**WHY?**
Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.

**WHAT?**
The types of personal information we collect and share depend on the product or service you have with us. This information can include:
- Social Security number and employment information
- Assets and income
- Account balances and transaction history

When you are no longer our customer, we continue to share your information as described in this notice.

**HOW?**
All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers’ personal information, the reasons Fidelity Investments and the Fidelity Funds (hereinafter referred to as “Fidelity”) choose to share, and whether you can limit this sharing.

**REASONS WE CAN SHARE YOUR PERSONAL INFORMATION**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Does Fidelity Share?</th>
<th>Can You Limit This Sharing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>For our everyday business purposes — such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For our marketing purposes — to offer our products and services to you</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For joint marketing with other financial companies</td>
<td>No</td>
<td>We don’t share</td>
</tr>
<tr>
<td>For our affiliates’ everyday business purposes — information about your transactions and experiences</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>For our affiliates’ everyday business purposes — information about your creditworthiness</td>
<td>No</td>
<td>We don’t share</td>
</tr>
<tr>
<td>For nonaffiliates to market to you</td>
<td>No</td>
<td>We don’t share</td>
</tr>
</tbody>
</table>

**QUESTIONS?**
Call 800-544-6666. If we serve you through an investment professional, please contact them directly. Specific Internet addresses, mailing addresses, and telephone numbers are listed on your statements and other correspondence.
### WHO WE ARE

**Who is providing this notice?**

Companies owned by Fidelity Investments using the Fidelity name to provide financial services to customers, and the Fidelity Funds. A list of companies is located at the end of this notice.

### WHAT WE DO

**How does Fidelity protect my personal information?**

To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings.

**How does Fidelity collect my personal information?**

We collect your personal information, for example, when you
- open an account or direct us to buy/sell your securities
- provide account information or give us your contact information
- tell us about your investment portfolio

We also collect your personal information from others, such as credit bureaus, affiliates, or other companies.

**Why can't I limit all sharing?**

Federal law gives you the right to limit only
- sharing for affiliates’ everyday business purposes—information about your creditworthiness
- affiliates from using certain information to market to you
- sharing for nonaffiliates to market to you

State laws and individual companies may give you additional rights to limit sharing.

### DEFINITIONS

**Affiliates**

Companies related by common ownership or control. They can be financial and nonfinancial companies.

- Fidelity Investments affiliates include companies with the Fidelity name (excluding the Fidelity Funds), as listed below, and other financial companies such as National Financial Services LLC, Strategic Advisers LLC, and FIAM LLC.

**Nonaffiliates**

Companies not related by common ownership or control. They can be financial and nonfinancial companies.

- Fidelity does not share with nonaffiliates so they can market to you.

**Joint marketing**

A formal agreement between nonaffiliated financial companies that together market financial products or services to you.

- Fidelity doesn’t jointly market.

### OTHER IMPORTANT INFORMATION

If you transact business through Fidelity Investments life insurance companies, we may validate and obtain information about you from an insurance support organization. The insurance support organization may further share your information with other insurers, as permitted by law. We may share medical information about you to learn if you qualify for coverage, to process claims, to prevent fraud, or otherwise at your direction, as permitted by law. You are entitled to receive, upon written request, a record of any disclosures of your medical record information. Please refer to your statements and other correspondence for mailing addresses.

If you establish an account in connection with your employer, your employer may request and receive certain information relevant to the administration of employee accounts.

If you interact with Fidelity Investments directly as an individual investor (including joint account holders), we may exchange certain information about you with Fidelity Investments financial services affiliates, such as our brokerage and insurance companies, for their use in marketing products and services as allowable by law. Information collected from investment professionals’ customers is not shared with Fidelity Investments affiliates for marketing purposes, except with your consent and as allowed by law.

The Fidelity Funds have entered into a number of arrangements with Fidelity Investments companies to provide for investment management, distribution, and servicing of the Funds. The Fidelity Funds do not share personal information about you with other entities for any reason, except for everyday business purposes in order to service your account. For additional information, please visit Fidelity.com.

### WHO IS PROVIDING THIS NOTICE?

Fidelity Investments companies: Fidelity Brokerage Services LLC; Fidelity Distributors Corporation; Fidelity Investments Institutional Operations Company, Inc.; Fidelity Investments Institutional Services Company, Inc.; Fidelity Management Trust Company; Fidelity Personal Trust Company, FSB; Fidelity Personal and Workplace Advisors LLC; Fidelity Investments Life Insurance Company; Empire Fidelity Investments Life Insurance Company; Fidelity Insurance Agency, Inc.; National Financial Services LLC; Strategic Advisers LLC; FIAM LLC.

The Fidelity Funds, which include funds advised by Strategic Advisers LLC.
Fidelity is committed to providing continuous customer service and support; however, we recognize that there are potential risks that could disrupt our ability to serve you. We are confident that we have taken the necessary steps that will allow us to reduce or eliminate the impact of a business disruption.

Fidelity recognizes the responsibility we have to our customers. We have implemented a business continuity management program with a strong governance model and commitment from senior management. Our continuity program’s primary objectives are to meet the needs of our customers, maintain the wellbeing and safety of our employees, and meet our regulatory obligations. The planning process is risk based and involves the understanding and prioritization of critical operations across the firm, the anticipation of probable threats, and the proactive development of strategies to mitigate the impact of those events.

Our continuity planning teams work closely with local governments and officials in the event of an outage impacting our operations. Additionally, Fidelity has identified three large scale scenarios that require particular focus: pandemics, events impacting stock and bond market operations, and cyber events. Detailed response plans have been developed and cross-discipline teams have been trained to address both day-to-day disruptions as well as these specific events.

Each Fidelity department has developed the capabilities to recover both operations and systems. All continuity plans are designed to account for disruptions of various lengths and scopes, and to ensure that critical functions are recovered to meet their business objectives. Critical business groups operate from multiple sites. Dedicated teams within our technology organizations ensure that critical applications and data have sufficient redundancy and availability to minimize the impact of an event. Key components of Fidelity’s continuity and technology recovery planning include:

- Alternate physical locations and preparedness
- Alternative means to communicate with our customers
- Back-up telecommunications and systems
- Employee safety programs

Plans are tested regularly to ensure they are effective should an actual event occur. Fidelity’s Business Continuity Plans are reviewed no less than annually to ensure the appropriate updates are made to account for operations, technology, and regulatory changes. Material changes will be reflected in an updated “Notice of Business Continuity Plan.” You may obtain a copy of this notice at any time by contacting a Fidelity Representative.