Fidelity Brokerage Services LLC ("FBS") is a registered broker-dealer with the U.S. Securities and Exchange Commission. Brokerage and investment advisory services and fees differ, and it is important for you to understand these differences. Free and simple tools are available to research firms and financial professionals at Investor.gov/CRS, which also provides educational materials about broker-dealers, investment advisers, and investing.

What investment services and advice can you provide me?
FBS offers brokerage accounts and services to retail investors, including for personal and retirement investing, and cash management services (such as bill pay, checkwriting, and margin lending). FBS accounts allow you to invest in mutual funds, exchange-traded funds ("ETFs"), stocks, bonds, college savings plans and insurance products, among others. We do not limit our offerings to Fidelity funds, specific asset classes, or funds of sponsors or investment managers who compensate us. There is no minimum investment to open an account; there are minimums to purchase some types of investments. FBS works with its affiliated clearing broker, National Financial Services LLC, along with other affiliates to provide you with these investment services. For additional information, see Fidelity.com/information.

With an FBS brokerage account, unless we agree otherwise in writing, you are solely responsible for deciding how you want to invest, placing orders, and monitoring your account. FBS, either by itself or through an affiliate, can provide you with tools and information to help you make decisions and can provide you with investment recommendations for certain investments upon request. Investment advisory services are provided through our affiliated investment advisers, including Fidelity Personal and Workplace Advisors ("FPWA") and Fidelity Institutional Wealth Adviser LLC ("FIWA"), typically for a fee, and documents describing these advisory services can be found at Fidelity.com/information, including the FPWA and FIWA client relationship summaries.

FBS brokerage accounts are also available to you when you work with a third-party adviser such as a registered investment adviser, retirement plan administrator, bank or family office ("intermediaries"). If you open your FBS brokerage account through an intermediary, you or your intermediary will make all decisions regarding the purchase or sale of investments; FBS will not provide recommendations or monitor your investment decisions, or your intermediary, for you. Some intermediaries limit the investment products and services available to you. Please contact us or your intermediary for more information on the available services and investments, conflicts of interest, and any fees you will pay.

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

What fees will I pay?
The fees that you will pay depend on whether you work directly with FBS or through an intermediary. If you establish a retail relationship directly with FBS, there are no commissions charged on online transactions for U.S. stocks, ETFs, options, new issue bonds and certificates of deposit ("CDs"). Online transactions in other securities are charged a commission. Sell orders for equities are charged an activity assessment fee and options have a per-contract fee. Transactions placed over the telephone or in a branch office are charged a commission. If you open an investment advisory account with one of our affiliates, your fees will be identified in the contract and disclosure document provided by that affiliate. If you work with FBS through an intermediary, please contact your intermediary for details on the fees that you will pay for your brokerage activities, as online commissions may apply.

There is no transaction fee or sales load (which is a fee charged on your investment at the time you buy a mutual fund share) for either the purchase or sale of Fidelity’s retail mutual funds. Other mutual funds either have a transaction fee or no transaction fee, and some of these funds will have sales loads. These fees can vary depending on how long you hold the fund. Holding funds for less than 60 days can result in additional trading fees. Mutual funds, ETFs, insurance products, and similar investment products typically charge their own separate management fees and other expenses in addition to any fees charged by FBS. When commissions apply, you will be charged more when there are more trades in your account, and FBS therefore has an incentive to encourage you to trade more often and in larger amounts. FBS will also collect fees for margin loans based on current interest rates and your average margin loan balance.
You will pay fees and costs whether you make or lose money on your investments. Fees and costs will reduce any amount of money you make on your investments over time. Please make sure you understand what fees and costs you are paying. Information about brokerage fees and costs for different account types, products and services is available at Fidelity.com/information.

**Conversation Starter. Ask your FBS financial professional:**
- Help me understand how these fees and costs might affect my investments. If I give you $10,000 to invest, how much will go to fees and costs, and how much will be invested for me?

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

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

- FBS or its affiliates typically earn more when you invest in a product that we or one of our affiliates advise, manage, sponsor, or refer you to, such as a Fidelity mutual fund, ETF, or managed account. This creates an incentive for us to recommend our investment products over those offered by another company.
- FBS earns more on your investments in some third-party funds and ETFs, including through fees and other compensation (including sales loads, 12b-1 fees, maintenance fees, start-up fees and infrastructure support) paid by the fund, its investment adviser or an affiliate to FBS. This creates an incentive for us to recommend these products over others.
- For investments that we buy from you or sell to you for or from our own accounts (“principal trades”), we can earn more than when we buy and sell investments for your account in the open market (“agency trades”). This creates an incentive to execute trades with our own accounts rather than in the open market.

For further details on these conflicts, see Fidelity.com/information.

**Conversation Starter. Ask your FBS financial professional:**
- How might your conflicts of interest affect me, and how will you address them?

**How do your financial professionals make money?**
FBS representatives also work for our affiliates, including FPWA or FIWA, for a salary and either an annual bonus or variable compensation. In some cases, they earn more from some products and services (including certain investment advisory services) than from others. In such cases, our representatives have an incentive to recommend that you select a program or product that pays them more compensation than those that will pay them less. For further details, see Fidelity.com/information.

**Do you or your financial professionals have legal or disciplinary history?**
Yes. Visit Investor.gov/CRS for a free and simple search tool to research us and our financial professionals.

**Additional Information:**
For more information about our brokerage and investment advisory services, or to obtain a copy of this Form CRS, or the Form CRS for FPWA or FIWA, go to Fidelity.com/information. If you work directly with FBS, to request up-to-date information, the latest Form CRS or a hard copy of materials that are hyperlinked above, call 1.800.FIDELITY (1-800-343-3548).

**Conversation Starter. Ask your FPWA financial professional:**
- Who is my primary contact person? Is he or she a representative of an investment adviser or broker-dealer? Who can I talk to if I have concerns about how this person is treating me?
What investment services and advice can you provide me?

FPWA offers investment advisory services to retail investors that include “wrap fee” advisory programs, discretionary advisory programs, financial planning, and referrals to third-party investment advisers. Our wrap fee programs offer investment advice from FPWA and other investment advisers, as well as securities trades and custody services from our broker-dealer affiliates. In our wrap fee programs and our discretionary advisory programs, a subadviser we hire (which is typically an FPWA affiliate) will have discretion to buy and sell mutual funds, exchange-traded products (ETPs), and/or other securities for your account without your consent to each trade. The subadviser (not FPWA) will monitor your account and investments periodically based on the flexibility of the program and investment strategy you have selected. You must meet an account minimum to open and maintain an advisory account in most of our programs. Current account minimums are described at Fidelity.com/information. (Retail advisory offerings available through Fidelity Personal and Workplace Advisors.) In some of our programs, you can only invest in Fidelity mutual funds and ETPs; in other programs, a significant percentage to substantially all of your account will be invested in Fidelity mutual funds and ETPs, depending on the investment strategy you select.

We provide financial planning to clients enrolled in certain discretionary programs and, for clients at certain asset levels, on a stand-alone basis. Our financial planning services help you evaluate your ability to meet identified goals and can also provide suggestions for changes to your asset allocation. Whether and how to implement any asset allocation or other recommendation provided as part of our financial planning services is your responsibility and is distinct from our discretionary advisory services. Our financial plans are not monitored or updated after they are provided to you. In addition, we provide referral services, which include recommendations to third-party investment advisers to help you with your investment and financial needs. We do not monitor these third-party investment advisers.

For more information regarding our retail advisory offerings, please see documents under the heading “Fidelity retail investment advisory services” at Fidelity.com/information. Specifically, you should review FPWA’s Form ADV Part 2A Brochure. Our affiliated broker-dealer, Fidelity Brokerage Services LLC (“FBS”), also offers brokerage accounts and services to retail investors, as described in the FBS Form CRS accompanying this document. Please see Fidelity.com/information.

Conversation Starters. Ask your FPWA financial professional:

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

What fees will I pay?

Your fees will depend on the investment advisory program you select. See the respective program disclosure document for specific fees at Fidelity.com/information. Each wrap fee program charges an advisory fee, typically based on the amount of assets that you have in the program, which covers the ongoing management of your account(s), as well as brokerage, clearing, and custody services provided by FBS and other broker-dealer affiliates and can cover assistance from our representatives and access to financial planning services. Fees are typically deducted from your account after the end of each quarter. Wrap program fees include most transaction costs and fees to FBS and are generally higher than a typical asset-based advisory fee that does not include transaction costs for brokerage services. Our other discretionary advisory programs also charge asset-based fees or a subscription fee depending on the program. Typically, the more assets there are in your program account, the more you will pay in fees, and we have an incentive to encourage you to increase the assets in your account. The following fees are in addition to the wrap program fees: (1) underlying expenses of mutual funds and ETPs purchased for your account (though note that we credit certain revenue we receive from your mutual fund and ETP investments to your program account as explained in your Client Agreement); (2) certain charges resulting from transactions for your account executed with or through unaffiliated broker-dealers; (3) fees of investment advisers we refer you to; and (4) some incidental fees and expenses. In some wrap fee programs we charge an extra fee if your assets are invested in individual securities through a separately managed account. We charge a fixed fee for our stand-alone financial planning, and we receive a fee from advisers to whom we refer clients.
You will pay fees and costs whether you make or lose money on your investments. Fees and costs will reduce any amount of money you make on your investments over time. Please make sure you understand what fees and costs you are paying. For additional information regarding program fees, please see Fidelity.com/information, specifically, FPWA's Form ADV Part 2A Brochure.

Conv...ation Starter: Ask your FPWA financial professional:

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

What are your legal obligations to me when acting as my investment adviser? How else does your firm make money and what conflicts of interest do you have?

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

- FPWA or its affiliates typically earn more when you invest in a product that we or one of our affiliates advise, manage, sponsor, or refer you to, such as a Fidelity mutual fund or ETP. This creates an incentive for us and our affiliates to recommend and invest your assets in our investment products over those offered by another company.
- FPWA or its affiliates earn more on your investments in some third-party funds and ETPs, and therefore have an incentive to recommend and invest your assets in these funds and ETPs over others.
- Our investment advisory programs charge different fees. This creates an incentive for us or our affiliates to recommend advisory programs that pay us or our affiliates higher fees over other programs.

Conv...ation Starter: Ask your FPWA financial professional:

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

For more details on conflicts, please see Fidelity.com/information.

How do your financial professionals make money?

FPWA representatives also work for our affiliated broker-dealer, FBS, for a salary and either an annual bonus or variable compensation. They earn more from some advisory programs than from other programs, or from providing brokerage services through FBS. Our representatives have an incentive to recommend that you select a program or product that pays them more compensation than those that will pay them less. For more details on compensation, please see Fidelity.com/information.

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

Yes. Visit Investor.gov/CRS for a free and simple search tool to research us and our financial professionals.

Conv...ation Starter: Ask your FPWA financial professional:

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

For more information about our investment advisory and brokerage services, or to obtain a copy of this Form CRS, or the Form CRS for FBS, go to . To request up-to-date information, the latest Form CRS, or a hard copy of materials that are hyperlinked above, call 1.800.FIDELITY (1-800-343-3548).

Conv...ation Starter: Ask your FPWA financial professional:

- Who is my primary contact person? Is he or she a representative of an investment adviser or broker-dealer? Who can I talk to if I have concerns about how this person is treating me?
SUPPLEMENTAL INFORMATION

Please review and keep for your records.
Do not mail with the application.

Customer Agreement
Privacy Notice
Notice of Business Continuity Plans
Commission Schedule and Schedule of Fees
FIDELITY BROKERAGE INVESTMENT-ONLY NON-PROTOTYPE RETIREMENT ACCOUNT CUSTOMER AGREEMENT

*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 attached hereto and incorporated herein); 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
- to conduct business with Fidelity and its affiliates electronically, which necessarily includes having your personal financial information transmitted electronically, and to electronic delivery of all documents (including your initial notice of our privacy policy) and communications related to this and all your other Fidelity accounts as detailed in the Electronic Delivery Agreement, which is incorporated herein by reference. Since electronic (including wired and wireless) communications may not be encrypted, you acknowledge that there is a risk that data, including email, electronic and wireless communications, and personal data, may be accessed by unauthorized third parties when communicated between you and Fidelity or between you and other parties
- to provide and maintain as current both your mobile phone number and email address as both are required for account security, transactional alerts, and delivery of other communications. You consent to Fidelity’s use of your email address and/or mobile phone number to message, call, or text you for these purposes. Message and data rates apply and frequency may vary. For help with texts, reply HELP. To opt out of texts, reply STOP. You acknowledge that you can update your contact information through your profile on Fidelity.com
- 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 the 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 read the fund’s prospectus, including its description of the fund, the fund’s fees and charges, and the operation of the fund, whenever you

*FIDELITY BROKERAGE INVESTMENT-ONLY NON-PROTOTYPE RETIREMENT ACCOUNT CUSTOMER AGREEMENT*
invest in, or exchange into, any mutual fund (including any fund used for your core position)
• 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 may be provided solely to you or the individual acting on your behalf as part of the scope of his or her authority
• to the terms related to investment-only non-prototype accounts as described in the Account Policies section of this Agreement.
• that we are authorized by you to use information related to you or any of your accounts, including information that Fidelity or its affiliates obtain in connection with services to or through your employer or a workplace plan or other benefit.

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.
• 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.
• NFS will not give you advice about your investments and will not evaluate the suitability or best interest (if applicable) of investments made by you, your investment representative, or any other party.

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, exchange-traded funds (ETFs), and closed-end funds
• 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)

The account can be used to trade certain foreign securities (either directly or as depositary receipts) and precious metals. Aggregate, non-personal data may be made publicly available on our websites, online services, and/or mobile applications. Aggregate, non-personal data may also be shared with clients, affiliates, and other third parties consistent with applicable law.

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. Fidelity may refuse to accept or execute any order or instruction related to your account, for any reason and at any time, in its sole discretion.

Trading Foreign Securities

Fidelity offers you different ways to trade foreign stocks: “International Trading,” “Dollarized International Trading,” or “Foreign Ordinary Share Trading.” 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. 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. Trading in foreign securities also may be subject to various credit, settlement, operational, financial, and legal risks. Emerging markets, in particular, can be subject to greater social, economic, regulatory, and political uncertainties, and can be extremely volatile.

These risks may include but are not limited to:

Physical Markets. Certain countries may have less regulated or less liquid securities markets. Some countries still rely on physical markets that require delivery of properly endorsed share certificates to complete 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 purchasing the wrong securities.

Non-DVP Transactions. Local trading and settlement customs frequently require non-DVP (“delivery versus payment”) transactions.
Unlike DVP transactions, which involve a simultaneous exchange of securities and payment, non-DVP transactions can increase counterparty risk because the purchaser pays before securities are delivered or the seller delivers securities before payment is made.

Trading Days and Hours. Differences in trading days and hours can also create operational issues, trading delays, and complicate clearance and settlement. Unless indicated otherwise, all online trading hours are reflected in U.S. Eastern time. Foreign securities orders will not be sent to the local market except during market hours in the specified country. Orders entered during such nonmarket hours will be released to the local market before it opens. Foreign exchange orders for a given trade date may be entered up until 5 p.m. Eastern time. Any orders submitted after this time will be submitted for execution on the following trade date. Generally, the settlement date for orders placed together for foreign securities and foreign exchange corresponds to the settlement date for the underlying security, absent differences in bank and local market days of operation.

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.

Dividend and Reorganization Payments. Dividend and reorganization payments are paid when funds are received from local market custodians, which may or may not coincide with the actual announced payment date. 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.

Trading Restrictions and Market Operations. Foreign markets often operate differently from U.S. markets. For example, there may be different periods for clearance and settlement of transactions, and investments in foreign securities may be subject to local market trading restrictions and fees. Certain markets may impose restrictions regarding repatriation of monies or limit certain investment activities. Fidelity is not responsible for notifying customers of each country's specific requirements. Customers agree to conduct appropriate due diligence to understand specific limitations in each country.

Margin Privileges. Extension of margin credit in foreign securities may result in greater risk than U.S. securities. Foreign securities may be eligible for margin privileges when a brokerage account has been opened and the customer has applied and been approved for margin trading.

Limited Recourse Under Local Law. A U.S. investor may not be able to sue a foreign issuer or a Foreign Executing Broker, or to enforce a judgment in U.S. courts. The only available remedy may be the legal remedies that are available under foreign law, and those remedies may be limited.

Tax Treatment. There may be negative tax consequences when 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 your 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.

Foreign Currency Exchange Risk Disclosure Statement

While this brief statement cannot disclose all risks associated with trading in foreign currency, when considering whether to trade or authorize someone else to trade foreign currency for you, you should be aware of the following:

The Risk of Loss in Trading Foreign Currency Can Be Substantial. You should, therefore, carefully consider whether trading foreign currency is suitable for you in light of your financial condition, risk tolerance, and understanding of foreign markets.

Cash Held in Foreign Currency. To the extent that you hold all or a portion of your cash assets in a currency other than your local currency, you may suffer currency losses from unfavorable exchange rate movements that reduce the value of your cash assets compared to your local currency. These potential losses could leave you without sufficient cash to pay planned expenses or other liabilities.

Impossible to Liquidate. Under certain market conditions, you may find it difficult or impossible to liquidate an investment. This can occur, for example, when a currency is deregulated or fixed trading bands are widened. Certain currencies may not be available to invest in, hold, or sell through, or hold at Fidelity. Exchange practices, including currency controls, may change from time to time without notice. As a result, it is important that you understand the practices in the foreign markets in which you trade.

Currency Trading Is Speculative and Volatile. Currency prices are highly volatile. Price movements for currencies are influenced by, among other things, changing supply-demand relationships; trade, fiscal, monetary, exchange control programs and policies of governments; U.S. and foreign political and economic events and policies; changes in national and international interest rates and inflation; currency devaluation; and sentiment of the marketplace. None of these factors can be controlled by you or any individual advisor, and no assurance can be given that you will not incur losses from such events.

Currency Trading Presents Unique Risks. Fidelity, through its affiliate Fidelity FOREX, LLC ("Fidelity FOREX"), may refuse to quote prices for certain currencies or quote wide spreads for currencies that are experiencing high levels of volatility.

Broker Compensation. Fidelity serves as agent rather than principal to the foreign currency transaction. Fidelity sends the transaction to Fidelity FOREX for the foreign exchange transaction.

Fidelity FOREX is an affiliate of Fidelity. Fidelity FOREX acts as a principal on the currency exchange. Fidelity FOREX imposes a commission, or markup, to the price they receive from the interbank market, which may result in a higher price to you. Fidelity FOREX may in turn share a portion of any foreign exchange commission or markup with Fidelity. More favorable exchange rates may be available through third parties not affiliated with NFS. Larger transactions for foreign currency may receive more favorable rates than smaller transactions.

Foreign Currency Balances. Customers acknowledge that credit balances in foreign currency may or may not earn interest.

Extended-Hours Trading Risk Disclosure Statement

Trading in the extended hours (outside of the standard market hours, generally 9:30 a.m. to 4 p.m. Eastern time) may pose greater risks than the risks you take when you trade during standard market hours. You should review and understand these risks prior to engaging in extended-hours trading.

Liquidity, Volatility, and Price Spreads. Prices are based on the supply and demand created by other sellers and buyers. Because there are generally fewer participants trading during the extended-hours sessions, there may be wider price spreads, reduced liquidity, and higher volatility. These conditions may prevent your orders from being executed, in whole or in part, or you may receive a less favorable price than you might receive during standard market hours. Additionally, the prices of investments traded in extended-hours trading may not reflect the prices at the end of regular trading hours, or at opening the next morning.

Communication Delays. If there is a high volume of orders, increased number of communications being sent, or other computer system problems, you may experience delays or failures in communication that cause delays in or prevent access to current information about the investments you’re considering, or in executing your order.

Time and Price Priority of Orders. Orders in the extended-hours sessions are generally handled in a price/time priority manner. Orders are first prioritized according to price, with the

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orders at the same price ranked based on the time the order was submitted. There is no trade through protection during the extended-hours sessions, so price/time priority is set by each market center, not across market centers. This may prevent your order from being executed, in whole or in part, or prevent you from receiving as favorable a price as you might receive during standard market hours. If you change your order, your change is treated as a cancellation and replacement, which may cause it to lose its time priority.

Access to Other Markets and Market Information. Not all market centers are connected in extended-hours trading sessions, and not all market centers offer extended-hours trading during the same time periods. This means there may be greater liquidity or a more favorable price for a particular security in another market center. Access to quotes and trading information in other market centers may be limited during extended-hours sessions. Normally, issuers make news announcements that may affect the price of their securities after regular trading hours. Similarly, important financial information is frequently announced outside of regular trading hours. Keep in mind that news stories and related announcements, coupled with lower liquidity and higher volatility, may cause an exaggerated and unsustainable effect on the price of a security.

Trading Options Securities. There is a risk of lack of calculation or dissemination of the underlying index value or Intraday Indicative Value (and lack of regular trading in securities based on your underlying index). For certain products, an updated underlying index, portfolio value, or IIV will not be calculated or publicly disseminated during Extended Trading Hours. Because the underlying index or portfolio value and IIV are not calculated or widely circulated during extended trading hours, an investor who is unable to calculate implied values for certain products during extended trading hours may be at a disadvantage to market professionals. Securities underlying the indexes or portfolios will not be regularly trading as they are during regular trading hours, or may not be trading at all. This may cause prices during extended trading hours to not reflect the prices of those securities when they open for trading.

Penny Stock Trading Risk Disclosure Statement
Low-priced securities, or penny stocks, generally trade for less than $5 per share and have a relatively small market capitalization. Before engaging in penny stock trading, you should carefully review and consider the following risks, which can be exacerbated in periods of market volatility.

Lack of Public Information. Reliable, publicly available information about the penny stock you’re considering may not be available or as reliable as information about securities that trade on major exchanges. This can include information about the management, operations, financials, and other aspects of a company may not be available. As a result, it is less likely that quote prices will be based on full and accurate information about the company.

No Minimum Listing Standards. Companies that trade on major exchanges like the New York Stock Exchange or Nasdaq must meet minimum standards for the amount of net assets they have and the numbers of shareholders invested in their companies. In contrast, companies that trade as penny stocks in the OTC market may be subject to reduced or no minimum listing standards.

Liquidity Risk. Demand may not be constant for penny stocks, which means you may not be able to sell when you want to. You should carefully consider that you may have difficulty selling the stock, and that this could impact the sale price.

High Volatility. Penny stocks are susceptible to and can experience large price swings in a short amount of time. These swings may be exacerbated during periods of overall market volatility.

Fraud. Since reliable, publicly available information on penny stock is often limited and there is generally less liquidity and trading volume, these stocks can be a target for price or volume manipulation and other fraudulent activity.

For more information on penny stocks and their risks, see the three-part Investor Bulletin: Microcap Stock Basics from the SEC.

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 on your Fidelity Account® application or as otherwise selected by you.
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. Note that, to the extent these options are available in your account type, some may not be made available until after the account is established. With respect to both investment yield and compensation to Fidelity, results will typically vary across available core options. Generally, Fidelity earns more compensation when your funds are invested in products or services offered by an affiliate of Fidelity. The core option specified in the account application may not always provide the highest yield, based in part on the then-current interest rate environment. See the applicable mutual fund prospectus or FDIC-Insured Deposit Sweep Program Disclosure, as applicable, for more information. For purposes of the Core Account section of this Agreement, the free credit balance is referred to as the “Taxable Interest Bearing Option.” 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.

Fidelity may, at its sole discretion, subject to applicable law, change the core position to another available option, and inform us otherwise within the time frame specified in the notice, you will be deemed to (i) consent to such change and (ii) direct Fidelity to withdraw your funds from the core position you currently use and place those funds in the new 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 elsewhere in this Agreement. Instead, during such time as we believe you reside outside the United States, the following will apply:

1. New Fidelity Accounts.
If the Taxable Interest Bearing Option is your core position, 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 made available to you.

If any option is utilized as your core position other than the Taxable Interest Bearing option, the process of sweeping the Intra-day and After-hours Free Credit Balances 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 as Intra-day and After-hours Free Credit Balances. You will also be unable to make any change to your core position, except that you may change 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 the Taxable Interest Bearing Option is your core position (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, your core account will operate as otherwise described in this Agreement, except that you will be unable to change your core position, 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 and After-hours Free Credit Balances 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 as Intra-day and After-hours Free Credit Balances. You will also be unable to make any change to your core position, except that you may change 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 and After-hours Free Credit Balances will be swept to your core account as specified on your application or as otherwise selected by you, 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.
If you live with immediate family members who also have eligible Fidelity accounts, Fidelity may “household” those accounts to potentially qualify for enhanced services and features and to send statements and disclosures together to a common address. You may also elect to have your statements combined or householded by completing the information requested at Fidelity.com/customer-service/how-to-combine-statements. By participating 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.
In addition, by signing the account application, you consent to have only one copy of Fidelity mutual fund shareholder documents, such as prospectuses and shareholder reports (“Documents”), delivered to you and any other investors sharing your address. Your Documents will be householded indefinitely; however, you may revoke this consent at any time by contacting Fidelity. Additional details regarding your consent are provided in the account application.

Account Protection
The securities in your account (including any amounts in the MMKT Overdraft) 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 an 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. These cards have 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.

Marginal

Margin Account
A margin account lets you borrow money from NFS, using eligible securities that are in your account as collateral. A margin account is designed primarily to finance additional purchases of securities, although it can also provide overdraft protection for your cash management activities.

Margin with Debt Protection
In a margin account, you may enable the Margin Debt Protection feature to help avoid the account from trading into a debit balance. This feature will impose limits similar to a cash account and prevent you from using margin in many circumstances. However, even with this feature enabled and the use of margin restricted, the account will be administered as a margin account.

For information on the benefits, costs, and risks of margin, see “Important Information about Using 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, the Fidelity Investments mobile app, 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 they 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 them and consent to electronic delivery of such communications in accordance with 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 consent to electronic delivery of such communications in accordance with 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 to Minors Act (UGMA) or Uniform Transfers to Minors Act (UTMA), 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. You agree that at any time, Fidelity may, in its sole discretion and without prior notice to you, disclose information about the account to the beneficiary.

You also agree that once the minor reaches the age of termination, you will transfer the assets in the account in an appropriate and timely manner consistent with applicable state law. In the event the assets are not transferred, Fidelity may in its sole discretion and
without prior notice, (i) restrict the account to prevent further activity including trading and/or (ii) if you are unable and/or unwilling to transfer the assets, unilaterally transfer the custodial property to the beneficiary. You agree to indemnify and hold harmless Fidelity and its officers, directors, employees, agents and affiliates from and against any and all losses, claims or financial obligations that may arise from any such restrictions to the account and/or the transfer of the custodial property by Fidelity, including without limitation any claims you may or could have for any expenses incurred in the performance of your custodial duties and/or compensation for services that you have not already deducted from the UGMA/UTMA account prior to such restrictions and/or transfer.

Investment-Only Non-Prototype Retirement Accounts
For investment-only non-prototype retirement accounts, you understand that the account is an investment-only retirement account. You maintain all fiduciary responsibility with respect to the account. You understand that we do not provide, and are not responsible for, any recordkeeping, plan or account administration, tax withholding or tax preparation or reporting services in connection with this account. In addition, you understand that we are not responsible in any way for the purpose, propriety, or tax treatment of any contribution to, or distribution from, the account.

Authorization and Direction to Obtain and Use Information Related to You
You authorize us to obtain and use information related to all of your accounts, workplace plans or other benefits, or other information related to you that may be maintained by us or any of our affiliates, including without limitation information related to your accounts, participation, or benefits that we or any Fidelity affiliate may obtain in connection with providing services to or through your employer or a workplace plan or other benefit. We may use this information for any purpose not prohibited by law, such as in the provision of enhanced or integrated services or more personalized communications, but the information shall not be required to be used for any specific purpose.

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.

How Transactions Are Settled
Credits to Your Account
During normal business hours ("Intra-day"), activity in your account such as deposits and the receipt of settlement proceeds are credited to your account and may be held as a free credit balance (the "Intraday Free Credit Balance"). Activity in your account such as deposits and the receipt of settlement proceeds may also occur after the cut-offs described above, or on days the market is not open and the Fedwire Funds Service is not operating (collectively "After-hours"). Those amounts are credited to your account and may be held as a free credit balance (the "After-hours Free Credit Balance").

Like any free credit balance, the Intra-day and After-hours Free Credit Balances represent amounts payable to you on demand by Fidelity. Subject to applicable law, Fidelity may use these free credit balances in connection with its business. Fidelity may, but is not required to,
pay you interest on free credit balances held in your account overnight, 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 free credit balances 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 the 20th of December to the end of the year. Interest is calculated by multiplying your average overnight 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.

If You Utilize a Fidelity Money Market Fund as Your Core Position
If you utilize a Fidelity money market fund as your core position, the Intra-day Free Credit Balance, if any, generated by activity occurring prior to the market close each business day (or 4 p.m. Eastern time on business days when the market is closed and the Fedwire Funds Service is operating) is automatically swept into your core account and invested in your core position at the market close. There will be additional automatic sweeps into your core account early in the morning prior to the start of business on each business day that will also be invested in your core position at that time. These will include your After-hours Free Credit Balance along with credit amounts attributed to certain actual or anticipated transactions that would otherwise generate an Intra-day Free Credit Balance on such business day.

If You Utilize the Bank Sweep as Your Core Position
If you utilize the Bank Sweep as your core position, the Intra-day Free Credit Balance, if any, as well as any After-hours Free Credit Balance generated by activity occurring prior to Fidelity’s nightly processing cycle are automatically swept into your core account as part of that nightly cycle (the “Evening Bank Sweep”) and reflected in your Account as Program Deposits (as defined infra.) in anticipation of the deposit process described below occurring on the next business day. There will be an additional automatic sweep into your core account early in the morning prior to the start of business on each business day that will also be invested in your core position at that time (the “Morning Bank Sweep”). This will include credit amounts attributed to certain actual or anticipated transactions that would otherwise generate an Intra-day Free Credit Balance on such business day.

The total amount of the Evening Bank Sweep and the Morning Bank Sweep is referred to as your Cash Balance. In the morning of the business day of the Morning Bank Sweep, your Cash Balance will be deposited in an FDIC-insured interest-bearing account (a “Program Deposit Account”) at one or more participating banks (each, a “Program Bank”). The amounts on deposit are collectively referred to as your Program Deposits, and Program Deposits are eligible for FDIC insurance up to certain limits. Please note that in the event you have cash balances greater than either a) amount that the bank sweep program can place at the participating banks, or b) amounts that exceed the total FDIC insurance offered by the Program, excess funds will be swept into a money market mutual fund (this feature is known as the “Money Market Mutual Fund Overflow” or the “MMKT Overflow” component of the Bank Sweep program). Please see the FDIC Insured Deposit Sweep Program Disclosure for more details.

If You Utilize the Interest Bearing Option as Your Core Position
If you utilize the Interest Bearing option as your core position, the Intra-day Free Credit Balance, if any, as well as any After-hours Free Credit Balance generated by activity occurring prior to Fidelity’s nightly processing cycle is automatically swept into your core account as part of that nightly cycle and held in the Interest Bearing option.

Check and ACH Deposits
Each check or Automated Clearing House (ACH) deposit 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 decline to honor any debit that is applied against the money before the deposited check or ACH has cleared. If a deposited check or ACH 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 debits to resolve securities transactions (including margin calls) 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 do the following when settling debits against your account.

If You Utilize a Fidelity Money Market Fund as Your Core Position
If you utilize a Fidelity money market fund as your core position and there are debits in your account generated by account activity occurring prior to the market close each business day (or 4 p.m. Eastern time on business days when the market is closed and the Fedwire Funds Service is operating), these debits will be settled at the market close using the following sources, in this order:

• any Intra-day Free Credit Balances
• redemption proceeds from the sale of your core position at the market close
• redemption proceeds from the sale of any shares of a Fidelity money market mutual fund held in the account that maintains a stable (i.e., $1.00/share) net asset value and is not subject to a liquidity fee or similar fee or assessment
• if you have a margin account, any margin surplus available, which will increase your margin balance

There will be additional sweeps early in the morning prior to the start of business on each business day, and certain unsettled debits in your account along with debits associated with certain actual or anticipated transactions that would otherwise generate a debit in your account during the business day will be settled using redemption proceeds from the sale of your core position early in the morning prior to the start of business.

If You Utilize the Bank Sweep as Your Core Position
If you utilize the Bank Sweep as your core position and there are debits in your account generated by account activity occurring prior to Fidelity’s nightly processing cycle, these debits will be settled using the following sources, in this order:

• any Intra-day Free Credit Balances
• proceeds from the sale of any shares of the MMKT Overflow held in the core account
• if you have a margin account, any margin surplus available, which will increase your margin balance

FIDELITY BROKERAGE INVESTMENT-ONLY NON-PROTOTYPE RETIREMENT ACCOUNT CUSTOMER AGREEMENT
• proceeds from the withdrawal of Program Deposits occurring on
  the next business day (not including bank holidays or days on which
  the New York Stock Exchange is closed, such as Good Friday)
• redemption proceeds from the sale of any shares of a Fidelity
  money market mutual fund held in the account that maintains a
  stable (i.e., $1.00/share) net asset value and is not subject to a
  liquidity fee or similar fee or assessment
• if you have a margin account, any margin surplus available, which
  will increase your margin balance

In addition, early in the morning prior to the start of business on each
business day, certain unsettled debits in your account along with
debts associated with certain actual or anticipated transactions that
would otherwise generate a debit in your account during the business
day will be settled using proceeds from the withdrawal of Program
Deposits occurring that business day (not including bank holidays
or days on which the New York Stock Exchange is closed, such as
Good Friday). Debts associated with certain actual or anticipated
transactions that would otherwise generate a debit in your account
during the business day will be settled using proceeds first from the
sale of any shares of the MMKT Overflow and then the withdrawal of
Program Deposits occurring that business day.

If You Utilize the Interest Bearing Option as
Your Core Position

If you utilize the Interest Bearing option as your core position and
there are debits in your account generated by account activity
occurring prior to Fidelity’s nightly processing cycle, these debits will
be settled using the following sources, in this order:
• any Intra-day or After-hours Free Credit Balances
• funds held in the Interest Bearing option
• redemption proceeds from the sale of any shares of a Fidelity
  money market mutual fund held in the account that maintains a
  stable (i.e., $1.00/share) net asset value and is not subject to a
  liquidity fee or similar fee or assessment
• if you have a margin account, any margin surplus available,
  which will increase your margin balance

In addition to the foregoing, we may turn to the following sources:
• redemption proceeds from the sale of 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.

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 any 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, Fidelity reserves the right to use the provi-
sions 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.

Transfer of Securities—Dividends

When dividends are paid on securities that are transferred from a
brokerage account (other than in settlement of brokerage transac-
tions), such as transfers between accounts and gifts of securities,
Fidelity will apply the same “ex-dividend date” rules that apply to
brokerage transactions so that transfers before an ex-dividend date
will transfer the dividend to the transferee, and transfers on or after
the ex-dividend date will not transfer the dividend to the transferee.

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.

Nontransferable Securities

In the event that any securities in your account become nontrans-
ferable, NFS may remove them from your account without prior notice.
Nontransferable securities are those where transfer agent services
have not been available for six or more years. A lack of transfer
agent services may be due to a number of reasons, including that
the issuer of such securities may no longer be in business and may
even be insolvent. NFS may remove nontransferable securities from
your account pursuant to a Securities and Exchange Commission
approved program that permits our custodian for these securities to
no longer maintain the physical certificates representing the positions
in these securities. Please note the following:
• There are no known markets for these securities.
• We are unable to deliver certificates to you representing these
  positions.
• These transactions will not appear on Form 1099 or any other
tax-reporting form.
• If the position is held in a retirement account, we will not report
  the removal of the position as a taxable distribution and any reinstate-
  ment 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 avail-
  able 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. Fidelity has no responsibility for determining if
the sale of either a limited partnership or master limited partnership
would generate unrelated business taxable income in your IRA or
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 notice to your account’s address of record. You further understand that Fidelity may notify you electronically or by phone when the EFT feature is set up or EFT transactions are initiated on your account.

If you have arranged to have direct deposits made to your account, at least once every 60 days from the same person or company, you can call Fidelity at 800-343-3548 to find out whether or not the deposit has been made.

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 depository 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. Also, 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 redesignate 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 DCP 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.

Fractional Share Trading
Fidelity’s fractional share trading functionality allows you to buy and sell fractional share quantities and dollar amounts of certain securities (“Fractional Trading”). Fractional Trading presents unique risks and has certain limitations that you should understand before placing your first trade.

Trading
Orders to buy or sell may be entered using either a fractional share quantity (e.g., 2,525 shares) or a dollar value (e.g., $250.00). Share quantities can be specified to three decimal places (.001). Dollar-value orders will be converted into share quantities for execution, again, to three decimal places. In all cases, when converting dollar-value orders into share quantities, the share quantities will be rounded down. For a variety of reasons, including but not limited to this conversion convention, the actual amount of an executed dollar-value trade may be different from the requested amount. The actual amount of an executed order to buy or sell a dollar value of a security may also be lower than the price at the time you placed your order. In the case of a purchase of the fractional component of any order, if Fidelity has sufficient principal inventory, that purchase will also be executed at the then current NBBO. However, if Fidelity does not have sufficient principal inventory, that purchase will be executed at the price received in the market. For orders placed prior to market open, Fidelity may wait for the primary exchange to open before commencing trading in a particular security. When trading as principal for its own account, Fidelity may make a profit or incur a loss on each trade.

Additionally, Fidelity may be required to correct or adjust trades that (for a variety of reasons) have been executed in amounts that either exceed or fall short of the amounts requested. These trade corrections and adjustments could arise in connection with either or both of the agency and principal components of the executed orders.

Regardless, these trade corrections and adjustments will be executed by Fidelity in a principal capacity, and when trading as principal for its own account, Fidelity may make a profit or incur a loss.

Shareholder Rights
Fractional share interests in an NMS security generally have different rights from full share interests of the same NMS security. Please read the following information carefully to understand your rights regarding your fractional share interests.

Fractional share positions cannot be transferred or certificated. The Automated Customer Account Transfer System does not support fractional share positions. If you want to transfer your account or specific share positions to another broker, you must sell your fractional positions and transfer the cash proceeds.

You hereby direct Fidelity, and Fidelity hereby agrees, not to vote or take any discretionary or voluntary action with respect to any fractional share position. Accordingly, while Fidelity may notify you of issuer meetings, Fidelity will not solicit proxies in connection with fractional share positions, and you cannot vote proxies for fractional share positions. Fractional shareholders will not be able to provide instruction in connection with voluntary corporate actions (e.g., tenders), except for optional dividends, and Fidelity will not vote proxies for any fractional shares it holds as principal and will not affirmatively participate in any voluntary corporate actions.

In the case of a dividend paid on, or a redemption of, an NMS security, the dividend or redemption proceeds will be passed along to you in proportion to your ownership interest, inclusive of fractional share interests. Fidelity will only support payments that are equal to or greater than $.01 per share. Amounts smaller than that, or nondiscretionary amounts (based on the .001 rounding convention described above), will be handled in accordance with the process described in the section titled “Undistributable Interests” below.

Holders of fractional share positions may participate in dividend reinvestment programs (“DRIPS”) to the same extent as if they owned a
full share (adjusted for their fractional share interest in the dividend). In the event that the amount is too small to be reinvested (based on the .001 rounding convention described above), but large enough to be distributed as cash (i.e., at least $0.01), it will be paid to you. Smaller amounts will be handled in accordance with the process described in the section titled “Undistributable Interests” below.

For mandatory reorganizations, such as mergers and acquisitions, or other involuntary corporate actions, such as stock splits or stock dividends, typically NFS will distribute interests in proportion to your ownership interest, inclusive of fractional share interests. NFS will distribute interests in fractional amounts to three decimal places. Amounts smaller than that, or nondivisible amounts, will be handled in accordance with the process described in the section titled “Undistributable Interests” below. The foregoing notwithstanding, these situations are in all cases subject to the terms contained in the materials prepared by the issuer describing the corporate action, as well as NFS’s applicable policies and procedures, which may result in a different outcome from what is described herein.

Because of the unpredictable nature of corporate actions, there may be situations that arise that are not described previously. Generally, these situations will be handled in accordance with the concepts applicable to dividends and reorganizations. Interests will be divided and distributed where possible in proportion to your ownership interest, and anything that cannot be divided will be handled in accordance with the process described in the section titled “Undistributable Interests” below. The foregoing notwithstanding, these situations are in all cases subject to the terms contained in the materials prepared by the issuer describing the corporate action, as well as NFS’s applicable policies and procedures, which may result in a different outcome from what is described above.

**Undistributable Interests**

NFS will only support payments that are equal to or greater than $0.01 per share. Amounts smaller than that, or nondivisible amounts (based on the .001 rounding convention described above), will not be distributed. Instead, it is generally but not always the case that when the aggregate value to be distributed is less than or equal to $1.00, it will be retained by NFS, and when it exceeds $1.00, it will be escheated.

**Tax Treatment**

NFS and you agree to treat you as the owner of all fractional share interests allocated to your account, to file all tax returns in accordance with such treatment, and to take no action inconsistent with such treatment.

**Additional Considerations**

Fractional share positions may be illiquid. NFS does not guarantee that there will be a market for fractional share positions and makes no representations or warranties about its ability or willingness to continue to trade as principal in fractional share quantities. If your account is closed, your fractional shares may be liquidated and the proceeds distributed to you as cash.

**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 those positions will be handled like any other fractional share position acquired using Fractional Trading (i.e., you will need to affirmatively sell those fractional share positions if you wish to sell your entire position in that security).
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.

In general, precious metals and other collectibles within the meaning of Section 408(m) of the Internal Revenue Code may not be purchased in a retirement account except as otherwise permitted under ERISA and the Internal Revenue Code, as applicable, and to the extent permitted by Fidelity. To the extent that collectibles, including precious metals, are held in an underlying trust or other investment vehicle such as an exchange-traded fund, it is your responsibility to determine whether or not such an investment is appropriate for a retirement account and whether the acquisition of such investment may result in a taxable distribution from such account under Section 408(m).

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. Please note that, unless we have otherwise contractually agreed to do so, we do not have an ongoing responsibility to monitor an investment strategy, account type, or securities bought, sold, or held in your account, even in cases where we have made a recommendation.

Note that as 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 you or any other 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 (or an authorized person on your account) 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 (or an authorized person on your account) 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.

No provision of this Agreement shall apply to any retirement account to the extent that such application would be in conflict with any provision of the Employee Retirement Income Security Act of 1974 (“ERISA”), as amended, or the Internal Revenue Code of 1986, as amended, relating to retirement accounts or any related rules or regulations.

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, or the refusal to accept or execute any order, instruction, or transfer as Fidelity may elect to do at any time
• 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, natural disasters, power outages, unusual weather conditions, or government restrictions
• 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 non-performance, 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 direct 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 provider 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 or Terms of Use for Fidelity.com, accessible on the footer on 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 as evidence of Fidelity’s responsibility.

**Borrowing on Margin**

While margin can be a beneficial tool for investors, it involves significant risks (see the box “Important Information about Using 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 and After-hours Free Credit Balance, money in the core account, and any cash dividends paid on marginable securities, are automatically applied to your margin debt, 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
Disclosures

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
PO 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.

Conflicts of Interest and Compensation
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—for 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 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, marketing, engagement, and analytics program participation fees; maintenance fees; start-up fees; and platform support paid by the fund, its investment advisor, or an affiliate. Information about the source(s) and amount(s) of compensation as well as other remuneration received by FBS and/or NFS and other affiliates is also more fully described in the FBS Form CRS and the Prospectus, Services, and Conflicts of Interest disclosure document, available online at Fidelity.com/Reg-BIDisclosure, and information about the foregoing is also available 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 Lottery
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 notify 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).

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 uncalled fully 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 (i.e., 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 the shortfall and collection costs.
- **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. While 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 market-ability of securities, may increase the risk of a margin call. Use of features such as checkwriting, debit cards, and bill payment services may also increase the risk of a margin call.

In the absence of (i) an Intra-day or After-hours 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.

Enabling Margin Debt Protection will reduce, but not eliminate, your ability to incur a margin debit. It will not prevent all scenarios under which you could incur a margin debit. The Margin Debt Protection feature does not alter your obligation under the margin agreement to pay off any margin debit incurred.
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, as you may designate. If you commence arbitration through a United States self-regulatory organization or United States securities exchange and the rules of that organization or exchange fail to be applied for any reason, then you shall commence arbitration with any other 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. If you do not notify us in writing of your designation within five (5) days after such failure or after you receive from us a written demand for arbitration, then you authorize us to make such designation on your behalf. 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.
Fidelity Brokerage Services LLC

PRODUCTS, SERVICES, AND CONFLICTS OF INTEREST

This important disclosure information about Fidelity Brokerage Services LLC ("FBS") is provided to comply with the federal securities laws. It does not create or modify, amend or supersede any agreement, relationship, or obligation between you and FBS (or your financial intermediary). Please consult your account agreement with us and other related documentation for the terms and conditions that govern your relationship with us. Please go to Fidelity.com/information for further information.

Introduction

This document provides retail customers (referred to as “you” or “your”) with important information regarding your relationship with FBS (referred to as “we,” “us,” or “our”), a broker-dealer registered with the U.S. Securities and Exchange Commission (“SEC”), and a member of the Financial Industry Regulatory Authority (“FINRA”), the New York Stock Exchange (“NYSE”), and Securities Investor Protection Corporation (“SIPC”). Within this document, you will find information regarding the products and services FBS offers, including their material limitations and risks. In addition, this document describes our best interest obligations and fiduciary status when we make recommendations for retirement accounts. This document also describes the conflicts of interest that arise in FBS’s business, including those conflicts that arise from compensation received by FBS, its affiliates, and its registered representatives (“Representatives”), and how we address those conflicts.

FBS offers brokerage accounts and services for personal investing, including retail, retirement (such as Individual Retirement Accounts (“IRAs”)) and cash management services (credit and debit cards, checkwriting, etc.). These brokerage accounts generally allow you to invest in mutual funds, exchange-traded funds, stocks, bonds, options, college savings plans, insurance and annuity products, and more. FBS also offers brokerage accounts and services for Workplace Savings Plans, which are discussed in “Retirement and Other Tax-Advantaged Accounts” below. FBS works with its affiliated clearing broker, National Financial Services LLC (“NFS”), along with other affiliates, to provide you with these brokerage accounts and services.

Your FBS brokerage account (“FBS Account”) is self-directed. This means that you or someone you designate are solely responsible for deciding whether and how to invest in the securities, strategies, products, and services offered by FBS. You or your designee are also solely responsible for the ongoing review and monitoring of the investments held in your FBS Account, even if FBS has made a recommendation to you. It is important you understand that FBS is not an investment advisor and is not required to update any previously provided recommendations, and that unless specifically agreed to in writing, FBS will not monitor any investment recommendation made to you or the investments held in your Account. You are responsible for independently ensuring that the investments in your FBS Account remain appropriate given your Investment Profile.

When providing brokerage services to you, FBS is required to:

- Have reasonable grounds to believe that any security, investment strategy, or account type that we specifically recommend to you as an individual investor is in your best interest after taking into account factors relevant to your personal circumstances, such as your age, other investments, financial situation and needs, tax status, investment objectives, investment experience, investment time horizon, liquidity needs, risk tolerance, and other financial information you have disclosed to us (your “Investment Profile”) and the cost associated with our recommendation (this is our “best interest obligation”);
- Ensure that your trades are executed with diligence and competence and seek to provide best execution in light of prevailing market conditions; and
- Treat you in a manner consistent with principles of fair dealing and high standards of honesty and integrity.

There is no minimum required to open an FBS Account, but there are minimums to purchase some types of investments. All transaction charges will be identified to you in the confirmation of a transaction and/or in the account statement FBS sends to you on a periodic basis. Please see the FBS Account Customer Agreement (“Customer Agreement”) and the FBS Brokerage Commission and Fee Schedule (“Schedule”) for information regarding the transaction fees and other charges that apply to your FBS Account, including trade execution, clearing, and other services provided by our affiliate, NFS, as well as the terms and conditions applicable to your FBS Account, which can be found at Fidelity.com/information.

- **FBS Accounts and Intermediaries:** You may have an FBS Account in connection with services provided by an investment advisor affiliated with FBS including Fidelity Personal and Workplace Advisors LLC (“FPWA”), Fidelity Institutional Wealth Adviser LLC (“FIWA”) or a third party, such as a registered investment advisor, retirement plan administrator, bank, or family office (collectively referred to as an “Intermediary” or “Intermediary Accounts”). While FBS and its affiliates provide services to Intermediary Accounts, FBS generally does not provide recommendations to Intermediary Accounts and does not monitor Intermediary Accounts or the investments held therein. Your Intermediary may offer different investment services and products from those offered by FBS. Please contact your Intermediary for more information on the services offered, conflicts of interest, and the fees you will pay.
How We Recommend Investments

FBS Representatives use various tools and methodologies to help you choose your investments, investment strategies, and accounts. In addition, many of these tools are available to you directly on our websites and mobile applications. FBS tools and methodologies use information you provide about your financial goals, investment objectives, and financial situation (“Investment Profile”). When developing a recommendation that is in your best interest, we consider your Investment Profile as well as the potential risks, rewards, and costs associated with the investment, strategy, or account recommendation. Although cost is a factor that we consider in making recommendations to you, it is only one of several factors. As a result, we do not necessarily recommend the lowest-cost investment option, and lower-cost alternatives might be available with the same, similar, or different risk and return characteristics. In addition, we do not consider every investment, product, or service offered by FBS when making a recommendation; certain investments and products are only available for self-selection (i.e., without an FBS recommendation). We are not obligated to provide a recommendation to you.

Retirement and Other Tax-Advantaged Accounts

We offer a variety of retirement and other tax-advantaged accounts (including IRAs, workplace savings plan accounts, Health Savings Accounts (“HSAs”), and other similar accounts, collectively “Retirement Accounts”). We have a best interest obligation when we provide a recommendation as part of our brokerage services to your Retirement Account.

When we provide investment advice to you regarding your Retirement Account within the meaning of Title I of the Employee Retirement Income Security Act (“ERISA”) and/or the Internal Revenue Code (“IRC”), as applicable, we are a fiduciary within the meaning of these laws governing retirement accounts. The way we make money creates some conflicts with your interests, so when we provide such investment advice, we operate under special rules that require us to act in your best interest and not put our interest ahead of yours.

Under these special rules, we must:

• Meet a professional standard of care when making investment recommendations (give prudent advice);
• Never put our financial interests ahead of yours when making recommendations (give loyal advice);
• Avoid misleading statements about conflicts of interest, fees, and investments;
• Follow policies and procedures designed to ensure that we give advice that is in your best interest;
• Charge no more than is reasonable for our services; and
• Give you basic information about conflicts of interest.

The above fiduciary acknowledgement applies solely with respect to the following types of recommendations (each a “Covered Recommendation”):

• **Transfer and Account Recommendations.** From time to time, we may recommend that you transfer or roll over assets from a Workplace Savings Plan to a brokerage or an advisory IRA (or another Workplace Savings Plan). We may also recommend that you transfer assets in your Workplace Savings Plan to an advisory program or transfer IRA assets to an advisory program.

• **Investment Recommendations.** If you have a Retirement Account with us, we may, from time to time, recommend that you buy, sell, or hold securities or other investment property for your Account. We may also recommend that you hire third parties to provide you with investment advice for your IRA.

It is important to understand that we will not be a fiduciary in connection with all of our interactions with you regarding your Retirement Account. Specifically, we provide non-fiduciary assistance and education regarding Retirement Accounts and this information is not intended to be individualized to your particular circumstances and should not be considered as a primary basis for your investment decisions. This type of assistance includes:

• Execution of self-directed, or unsolicited, transactions or trades;
• General descriptions, information and education about our products and services or with respect to plan distribution or rollover decisions;
• Communications that are not an individualized/personalized suggestion for you to take a particular course of action with respect to your retirement assets;
• Assistance for workplace savings plan accounts that are not subject to Title I of ERISA (e.g., certain plans maintained by governmental or tax-exempt employers and non-qualified deferred compensation plans);
• Recommendations with respect to accounts other than Retirement Accounts that you maintain with us; or
• Any communications that are not fiduciary investment advice (as defined by ERISA or the IRC).

Rollovers from an Employer-Sponsored Retirement Plan

You can open or contribute to an IRA with assets that are “rolled over” from a 401(k) or other employer-sponsored retirement plan. Our affiliates provide recordkeeping and other services to employer-sponsored retirement plans (“Workplace Savings Plans”) and assets held in a Workplace Savings Plan Account can be rolled over to an FBS IRA. Similarly, assets held in a third-party retirement plan can also be rolled over to an FBS IRA.

If you are a participant in a Workplace Savings Plan, we can provide you with information and/or recommendations regarding your plan distribution options. Certain FBS Representatives can discuss the financial and nonfinancial factors to consider when deciding whether to stay in your Workplace Savings Plan, roll over to another Workplace Savings Plan, or roll over to an FBS IRA. When discussing IRAs in connection with a rollover transaction, Representatives will only discuss the features of an FBS IRA. Other financial services firms may offer rollover IRAs that have different features.
Our plan distribution assistance process can include providing you with information to help you understand the factors to consider and the trade-offs with each distribution option so you can make an informed decision. Our Representatives can answer questions you might have about any of these factors.

If you are a participant in an employer-sponsored retirement plan or maintain an IRA that is not record kept by an affiliate of FBS and you are eligible to roll over retirement assets to an IRA, we can provide you with information regarding the factors that are important for you to consider when deciding whether to remain in your current plan or IRA or transfer all or part of such plan or IRA to an FBS IRA. We do not make recommendations with respect to whether you should roll over from an employer-sponsored retirement plan or IRA that is not record kept by an affiliate of FBS.

Conflicts of Interest

Conflicts of interest arise because the products and services we offer have different costs to you and different levels of compensation earned by us, our affiliates, and our Representatives. Generally, FBS and our affiliates earn more compensation when you select a product or service offered by us or one of our affiliates (i.e., a “proprietary” product or service), as compared to a product or service offered by a third party. FBS may also receive compensation from third parties in connection with the securities you purchase. As a result, when working with you, FBS has a financial incentive to recommend the accounts, products, and services that result in greater compensation to FBS. Most FBS Representatives receive variable compensation based on the type of product or service you select, but FBS Representatives’ compensation is not affected by whether you purchase a proprietary product or service, or a similar third-party product or service offered through us.

We seek to address these conflicts in multiple ways. For example:

- We primarily use standardized methodologies and tools to provide advice so that recommendations made for your FBS account are in your best interest, based on your needs and financial circumstances.
- We train, compensate, and supervise FBS Representatives appropriately to provide you with the best client experience, which includes offering products and services that are in your best interest based on your financial situation and needs. As described in the “How We Pay Our Representatives” section below, products and services that require more time and engagement with a customer and/or that are more complex or require special training or licensing typically provide greater compensation to a Representative. Based on these neutral factors, the compensation received by a Representative in connection with certain products and services offered by us or our affiliates, including certain investment advisory programs offered through our investment advisor affiliate FPWA, is greater than the compensation Representatives receive for other products and services that we offer.
- We disclose information to you about any important conflicts of interest that are associated with a recommendation in advance of providing you with a recommendation so that you can make informed decisions.

How We Pay Our Representatives

- FBS takes customer relationships very seriously and has processes in place to help ensure that when we recommend products and services to you, what we recommend is in your best interest. FBS Representative compensation is designed to ensure that our Representatives are appropriately motivated and compensated to provide you with the best possible service, including providing recommendations that are in your best interest, based on your stated needs. This section generally describes how we compensate FBS Representatives. Compensation to FBS and its Representatives for the products and services we offer is described in the “Investment Products and Services” section below.
- Fidelity Representatives receive a portion of their total compensation as base pay—a predetermined and fixed annual salary. Base pay varies between Fidelity Representatives based on experience and position. In addition to base pay, FBS Representatives are also eligible to receive variable compensation or an annual bonus, and certain Representatives are also eligible to receive longer-term compensation. Whether and how much each FBS Representative receives in each component of compensation is generally determined by the Representatives role, responsibilities, and performance measures and is also impacted by the type of product or service you select. These compensation differentials recognize the relative time required to engage with a customer and that more time is required to become proficient or receive additional licensing (for example, insurance and annuity products or investment advisory services) as compared to, for example, a money market fund. Products and services that require more time to engage with a client and/or that are more complex generally provide greater compensation to our Representatives, FBS, and/or our affiliates. Although we believe that it is fair to base the compensation received by our Representatives on the time and complexity involved with the sale of products, this compensation structure creates a financial incentive for Representatives to recommend and that a client maintain investments in these products and services over others. Depending on the specific situation, the compensation received by Fidelity Representatives in connection with you maintaining an FBS Account could be less than the compensation received by Fidelity Representatives in connection with you choosing to participate in a Fidelity advisory program. FBS addresses these conflicts of interest by training and supervising our Representatives to make recommendations that are in your best interest and by disclosing these conflicts so that you can consider them when making your financial decisions.
- For additional information about FBS Representative compensation, please see Important Information Regarding Representatives’ Compensation at Fidelity.com/information.

Investment Products and Services Offered by FBS

General Investment Risks

All investments involve risk of financial loss. Historically, investments with a higher return potential also have a greater risk potential. Events that disrupt global economies and financial markets, such as war, acts of terrorism, the spread of infectious illness or other public health issues, and recessions, can magnify an investment’s inherent risks.
The general risks of investing in specific products and services offered by FBS are described below. Detailed information regarding a specific investment’s risks is also provided in other disclosure and legal documents we make available to you, including prospectuses, term sheets, offering circulars, and offering memoranda. As stated previously, you are responsible for deciding whether and how to invest in the securities, strategies, products, and services offered by FBS. You should carefully consider your investment objectives and the risks, fees, expenses, and other charges associated with an investment product or service before making any investment decision. The investments held in your Account (except for certificates of deposit (“CDs”) or a Federal Deposit Insurance Corporation (“FDIC”) insured deposit account bank sweep) are not deposits in a bank and are not insured or guaranteed by the FDIC or any other government agency.

**Fees and Charges**

Details regarding the fees, charges, and commissions and/or markups associated with the investment products and services described below are available at Fidelity.com/information.

If you work with an intermediary, your intermediary determines with FBS the fees, charges, commissions and/or markups you pay to FBS and its affiliates for their services. Contact your intermediary for more information.

**Available Securities**

This section generally describes the securities offered by FBS, the fees you will pay, how we and/or our affiliates are compensated, the associated risks and Representative compensation. If you are investing through your workplace retirement plan, the securities available to you will be determined by your plan sponsor and generally do not include all of the securities discussed in this document.

**Bonds, Municipal Securities, Treasuries, and Other Fixed Income Securities**

FBS offers fixed income securities including, among others, corporate bonds, U.S. Treasuries, agency and municipal bonds, and CDs. You can purchase fixed income securities from us in two ways: directly from the issuer (new issues) in the primary market and through broker-dealers, including affiliates of FBS, in the secondary market. FBS also offers brokered CDs issued by third-party banks.

FBS makes certain new issue fixed income securities available without a separate transaction fee. New issue CDs are also offered without a transaction fee. With respect to fixed income securities purchased or sold through the secondary market, the cost for the transaction (commonly called a “markup” for purchases or “markdown” for sales) is included in the purchase or sale price. In addition to any markup or markdown, an additional transaction charge can be imposed by FBS when you place your order through an FBS Representative, depending on the type of fixed income security you purchase.

FBS or its affiliates receive compensation from the issuer for participating in new issue offerings of bonds and CDs. Information about the sources, amounts, and terms of this compensation is contained in the bond’s or CD’s prospectus and related documents. For secondary market transactions, FBS and/or its affiliate, NFS, receive compensation by marking up or marking down the price of the security.

In general, the bond market is volatile and fixed income securities carry interest rate risk (i.e., as interest rates rise, bond prices usually fall, and vice versa). Interest rate risk is generally more pronounced for longer-term fixed income securities. Very low or negative interest rates can magnify interest rate risks. Changing interest rates, including rates that fall below zero, can also have unpredictable effects on markets and can result in heightened market volatility. Fixed income securities also carry inflation risk, liquidity risk, call risk, and credit and default risks for both issuers and counterparties. Tax code changes can impact the municipal bond market. Lower-quality fixed income securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Foreign fixed income investments involve greater risks than U.S. investments, and can decline significantly in response to adverse issuer, political, regulatory, market, and economic risks. Fixed income securities sold or redeemed prior to maturity are subject to loss.

Certain FBS Representatives are compensated in connection with the purchase of fixed income securities in your FBS Account. Representative compensation is not affected by whether the security is purchased or sold as a new issue or in a secondary market transaction and is paid irrespective of whether our Representative recommended the transaction to you. Representative compensation is based on the type of fixed income security that you purchase, with compensation for CDs and U.S. Treasury bonds being lower than for other types of fixed income securities. As a result, these Representatives have a financial incentive to recommend certain fixed income products over others. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, supervising our Representatives, and disclosing these conflicts so that you can consider them when making your financial decisions.

**Exchange-Traded Products (ETPs)**

ETPs include a range of security types, including exchange-traded funds (ETFs) and other securities, which are not considered a form of mutual fund. FBS offers ETPs sponsored by an FBS affiliate and ETPs and ETFs sponsored by third parties.

FBS does not charge a commission or other transaction fee for ETPs purchased online but will charge you a transaction fee if purchased through an FBS Representative. You will pay a fee on the sale of any ETP, which will be identified in a transaction confirmation sent to you.

FBS and its affiliate NFS receive compensation from BlackRock Fund Advisors, the sponsor of the iShares® ETFs, in connection with a marketing program that includes promotion of iShares® ETFs and inclusion of iShares funds in certain FBS and NFS platforms and investment programs. This marketing program creates an incentive for FBS to recommend the purchase of iShares ETFs. Additional information about the sources, amounts, and terms of this compensation is contained in the iShares ETP’s prospectuses and related documents. FBS and its affiliate NFS also have commission-free marketing arrangements with several other sponsors of active and smart beta ETFs under which we are entitled to receive payments. Certain ETF sponsors also pay FBS and NFS an asset-based fee in support of their ETPs on Fidelity's platform, including related shareholder support services, the provision of calculation and analytical tools, as well as general investment research and educational materials regarding ETFs. Fidelity does not receive payment from these ETF sponsors to promote any particular ETF to its customers.

For the specific risks associated with an ETP, please see its prospectus or summary prospectus and read it carefully.
Certain FBS Representatives are compensated in connection with the purchase of ETPs in your FBS Account, regardless of whether the Representative recommended the transaction to you. Representatives receive no additional compensation for purchases of iShares ETFs versus other ETFs.

**Insurance and Annuities**

FBS and its affiliates offer proprietary and nonproprietary life insurance and annuities issued by FBS-affiliated insurance companies and third-party insurance companies.

Insurance companies charge fees that are either explicitly disclosed or incorporated into the product's benefits or credits (referred to as a “premium”). The fees for these products vary depending on the type of insurance product purchased, any available options selected, and surrender charges incurred, if any. Any explicit fees are disclosed in the applicable prospectus, contract, and/or marketing materials. FBS or its affiliates receive a commission from the issuing insurance companies for sales of their insurance and annuity products.

Life insurance and annuity products are subject to various risks, including the claims-paying ability of the issuing insurance company, which are detailed in the applicable prospectus, contract, and/or marketing materials.

Certain Representatives are compensated in connection with your purchase of insurance and annuity products. This compensation is not affected by the type of insurance or annuity product you purchase or whether you purchase a proprietary or third-party product, but this compensation is higher than the compensation received in connection with the sale of other less complex types of investments offered by FBS. As a result, these Representatives have a financial incentive to recommend insurance and annuity products over other types of investments. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, supervising our Representatives, and disclosing these conflicts so that you can consider them when making your financial decisions.

**Mutual Funds**

FBS offers proprietary mutual funds that do not have a transaction fee or third-party mutual funds that do not have a transaction fee or that FBS makes available on a load-waived basis (collectively “no transaction fee” or “NTF” funds). In addition, FBS offers third-party mutual funds available with a sales load and/or a transaction fee (“transaction fee” or “TF” funds). FBS and its Representatives will only recommend NTF funds, and do not make recommendations regarding TF funds or consider them when making recommendations to you. As discussed below, FBS and its affiliates receive greater compensation for holdings in NTF funds than TF funds.

FBS does not charge a fee for the purchase or sale of NTF funds. FBS will impose a short-term trading fee for sales of all nonproprietary, NTF funds made within 60 days of purchase. For TF funds, FBS charges a fee for all purchases. Load funds have a sales charge imposed by the third-party fund company that varies based on the share class of the fund, which is described in each fund’s prospectus.

FBS and its affiliates earn the following compensation from mutual fund transactions:

- FBS affiliates earn compensation from the ongoing management fees for proprietary funds, as identified in the funds’ prospectuses.
- FBS or its affiliates receive a portion of the sales load paid to a third-party fund company in connection with your purchase of a load fund.
- FBS and its affiliates receive compensation from certain third-party fund companies or their affiliates for (i) access to, purchase or redemption of, and maintenance of their mutual funds and other investment products on Fidelity’s platform, and (ii) other related shareholder servicing provided by FBS or its affiliates to the funds’ shareholders. This compensation may take the form of 12b-1 fees described in the prospectus and/or additional compensation such as shareholder servicing fees, revenue sharing fees, training and education fees, or other fees paid by the fund, its investment adviser, or an affiliate. This compensation can also take the form of asset and position-based fees, fund company and fund start-up fees, infrastructure support fees, fund company minimum monthly fees, and fund low platform asset fees.
- FBS and its affiliates also receive compensation through a fixed annual fee from certain third-party fund companies that participate in an exclusive marketing, engagement, and analytics program. The only third-party fund companies eligible to participate in this program are those that have adequately compensated FBS or its affiliates for shareholder servicing and that have demonstrated consistent customer demand for their funds.

For more information about the specific investment objectives, risks, charges, fees and other expenses, including those that apply to a continued investment in a mutual fund, please read the mutual fund’s prospectus carefully. You should also understand that sometimes a third-party fund company makes both a no-transaction-fee share class and a transaction fee share class of a fund available for purchase. In this situation, the expense ratio associated with the TF fund could be lower than the NTF fund. You can find more information about mutual fund fees and costs by visiting Fidelity.com/information.

Certain FBS Representatives are compensated in connection with the purchase of mutual funds in your FBS Account, regardless of whether the Representative recommended the transaction to you or if you purchase an NTF or TF fund. Representative compensation is not affected by whether you purchase a proprietary or third-party fund, or by the amount of compensation received by FBS or its affiliates in connection with a proprietary or third-party fund.

**Private Funds and Alternative Investments**

FBS offers certain proprietary and third-party privately offered funds and other alternative investments.

Investing in private funds and alternative investments are subject to certain eligibility and suitability requirements. The fees for purchasing these types of investments are typically higher than for mutual funds or ETPs. For details regarding a specific private fund or alternative investment, including fees and risks, please read its offering materials carefully.
FBS receives compensation from its affiliates and third parties for distributing and/or servicing alternative investments. FBS affiliates also earn compensation from the ongoing management fees for proprietary alternative investments.

Certain Representatives are compensated in connection with your purchase of proprietary alternative investments, regardless of whether the Representative recommended the transaction to you. Representative compensation, where received, will be higher than the compensation received in connection with the sale of other less complex types of investments offered by FBS. As a result, Representatives have a financial incentive to introduce and assist you with your purchase of proprietary alternative investments over other types of investments. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, supervising our Representatives, and disclosing these conflicts so that you can consider them when making your financial decisions.

**Stocks and Options**

FBS makes available for purchase and sale the stocks of publicly traded companies listed on domestic and international exchanges, as well as options on many of these securities. FBS and its Representatives do not make recommendations regarding stocks or options.

FBS does not charge you a commission for online U.S. stock transactions but will charge you a commission when a stock purchase order is placed over the phone or through a Representative. An activity assessment fee is charged when a stock is sold, either online or through the phone or a Representative. There are also specific commissions, fees, and charges that apply to transactions in stocks listed on international exchanges. Options have a per-contract fee when traded online and a commission and per-contract fee apply if traded over the phone or through a Representative. The per-contract fee and/or commission charged for options strategies involving multiple purchases and sales of options, such as spreads, straddles, and collars, is higher than the fee and/or commission charged for a single options trade. In addition, all options trades incur certain regulatory fees that are included in the Activity Assessment Fee on the transaction confirmation. FBS and/or NFS receives remuneration, compensation, or other consideration for directing customer stock and option orders to certain market centers. Such consideration can take the form of financial credits, monetary payments, rebates, volume discounts, or reciprocal business. The details of any credit, payment, rebate, or other form of compensation received in connection with the routing of a particular order will be provided upon your request. For additional information on our best execution and order entry procedures, please refer to the “Order Routing and Principal Trading by FBS Affiliates” section of this document and to our Fidelity Account Customer Agreement, which you can find at Fidelity.com/information.

Stock markets are volatile and can fluctuate significantly in response to company, industry, political, regulatory, market, infectious illness, or economic developments. Investing in stocks involves risks, including the loss of principal. Stocks listed on foreign exchanges involve greater risks than U.S. investments, including political and economic risks and the risk of currency fluctuations, all of which may be magnified in emerging markets.

Options trading entails significant risk and is not appropriate for all investors. Before you make use of options in any way, it's essential to fully understand the risks involved, and to be certain that you are prepared to accept them. Your account must be approved for options trading. Before trading options, please read Characteristics and Risks of Standardized Options, which can be found by visiting Fidelity.com/information.

For information regarding trading and order routing practices, including compensation, see the “Order Routing and Principal Trading by FBS Affiliates” section below.

Certain FBS Representatives are compensated in connection with the aggregate value of stock held in your account but are not compensated when you purchase stock or make an options transaction.

**Additional FBS Account Services, Features, and Types**

**Checkwriting Services**

You can set up checkwriting within your FBS account. Checks are issued through a bank that we have entered into an arrangement with to provide checkwriting services. Checkwriting is not available for certain Retirement Accounts.

**Credit and Debit Cards**

**Credit Cards**

FBS has an arrangement with a third-party service provider that allows the service provider to issue several different versions of a co-branded credit card. Most of these credit cards offer cash back rewards, among other features. If you are an FBS customer and choose to have one of these credit cards, you have the option of depositing these rewards into your FBS account. FBS or its affiliates share the revenue attributable to these credit cards with the issuer, and FBS or its affiliates receive additional revenue from the credit card network.

**Debit Cards**

FBS has entered into an arrangement with third-party service providers that provide FBS customers with a debit card to access the uninvested cash in their FBS Accounts. The service provider charges FBS fees in exchange for its services. However, those fees are offset by revenue generated in connection with customers’ use of these cards, and FBS or its affiliates receive additional revenue from the debit card network. FBS or an affiliate could have an ownership interest in certain of the third-party service providers offering debit cards; any such interest will be disclosed to you.

**College Savings Accounts/Plans, ABLE Plans, and Other Custodial Accounts**

FBS or its affiliates offer a variety of state-sponsored 529 college savings plans (“529 Plans”), at both the state and national level, and ABLE disability account savings plans (“ABLE Plans”).
There is no annual account fee or minimum required to open a 529 Plan or ABLE Plan account at Fidelity. Some states offer favorable tax treatment to their residents only if they invest in their own state’s Plan. Before making any investment decision, you should consider whether your state or the designated beneficiary’s home state offers its residents a Plan with alternate state tax advantages or other state benefits, such as financial aid, scholarship funds, and protection from creditors.

FBS or its affiliates receive program manager fees as well as portfolio management and underlying fund fees from the 529 Plans and program manager fees and underlying fund fees from the ABLE Plans as compensation for services provided to the Plans. The fees associated with these Plans are described in each Plan’s Disclosure Document.

Investments in 529 and ABLE Plans are municipal fund securities and are subject to market fluctuation and volatility. See the Plan’s Disclosure Document for additional information regarding risks.

Certain FBS Representatives are compensated for sales of 529 and ABLE Plans. This compensation is the same regardless of the 529 or ABLE product you choose to purchase, but this compensation is higher than the compensation received in connection with certain other types of investments offered by FBS, such as money market funds, equities, and CDs. As a result, these Representatives have a financial incentive to recommend these types of Plans over other types of investments. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, by supervising our Representatives, and by disclosing these conflicts so that you can consider them when making your financial decisions.

You can also invest on behalf of a minor through a custodial account (also known as an UGMA or UTMA account, based on the Uniform Gifts/Transfers to Minors Acts). Funds in a custodial account are irrevocable gifts and can only be used for the benefit of the minor. Securities discussed in this document can be purchased through these custodial accounts, and our Representatives are compensated in connection with your purchase of such securities.

**Fully Paid Lending Program**

Subject to certain eligibility and suitability requirements, you may choose to participate in our Fully Paid Lending Program (“Lending Program”). The Lending Program is available to customers holding positions in eligible U.S. equities that are difficult to borrow. You will enter into a separate agreement with our affiliate NFS, if you choose to participate in the Lending Program.

FBS and NFS earn revenue in connection with borrowing your securities and lending them to others in the securities lending market and/or facilitating the settlement of short sales.

Certain FBS Representatives can recommend the use of the Lending Program but are not compensated in connection with your participation in the Lending Program.

**Health Savings Account (HSA)**

An HSA is a tax-advantaged account that can be used by individuals enrolled in an HSA-eligible health plan to make contributions and take current or future distributions for qualified medical expenses. The Fidelity HSA® is a brokerage account that can be opened directly with FBS or through an Intermediary. For an HSA, FBS and its Representatives will only recommend investment management services provided by FPWA, proprietary mutual funds and mutual funds that participate in the exclusive marketing, engagement, and analytics program as described in the “Investment Products and Services” section above. Note that HSAs offered in connection with your workplace benefits program are described in the “Workplace Savings Plan Accounts” section below. There are no fees to open an HSA account with FBS, and our Representatives are not compensated when you open an HSA directly with FBS.

Certain of the securities discussed in this document can be purchased through an HSA, and our Representatives are compensated in connection with your purchase of such securities.

**IRAs and Other Retirement Accounts**

We offer traditional IRAs and Roth IRAs to individual investors to make investments on a tax-advantaged basis. We also offer other retirement accounts for those who are self-employed (Self-Employed 401(k)s, SIMPLE IRAs, etc.) and to small-business owners.

There are no fees to open IRAs or other Retirement Accounts with FBS, and our Representatives are not compensated when you open these accounts. Certain of the securities discussed in this document can be purchased through an IRA or other Retirement Account, and our Representatives are compensated in connection with your purchase of such securities.

**Margin**

The use of margin involves borrowing money to buy securities. If you use margin to buy eligible securities in your Account, you will pay interest on the amount you borrow. Retirement accounts are not typically eligible for margin.

Margin trading entails greater risk, including, but not limited to, risk of loss and incurrence of margin interest debt, and is not suitable for all investors. Please assess your financial circumstances and risk tolerance before trading on margin. If the market value of the securities in your margin account declines, you may be required to deposit more money or securities to maintain your line of credit. If you are unable to do so, we may be required to sell all or a portion of your pledged assets. Your account must be approved for trading on margin. We can set stricter margin requirements than the industry required minimum and can institute immediate increases to our margin requirements which can trigger a margin call.

FBS Representatives are not compensated in connection with the use of margin in your FBS Account and do not make recommendations regarding the use of margin. Please refer to the Client Agreement, which can be found at [Fidelity.com/information](http://Fidelity.com/information), for more information concerning margin.
Sweep Options
Your FBS Account includes a “core position” that holds assets awaiting further investment or withdrawal. Depending on the type of account, and how it is opened, the available sweep options made available and presented to you include one or more of the following: Fidelity money market mutual funds, an FDIC-insured bank sweep, or a free credit balance. For more information, please refer to the Customer Agreement at Fidelity.com/information. If you work with an Intermediary, only certain core options are available. Contact your Intermediary for more information. If you use a free credit balance, FBS’s affiliates earn interest by investing your cash overnight and can earn additional compensation through the use of unsettled funds that can generate earnings, or “float.” These funds can also be used for other business purposes including funding margin loans. If you use a Fidelity money market fund, FBS’s affiliates earn management and other fees as described in the fund’s prospectus. If your cash is swept to an FDIC-insured deposit bank sweep account, FBS’s affiliates receive a fee from the bank receiving deposits through the bank sweep program. FBS or an affiliate could have an ownership interest in certain of the banks participating in the program and any such interest will be disclosed to you. For more information, please refer to the FDIC-Insured Deposit Sweep Program Disclosures document at Fidelity.com/information.

Third-Party Lending Solutions
Securities-backed lines of credit are available, which allow you to borrow funds from banks using the securities in your FBS Account as collateral. FBS or an affiliate could have an ownership interest in certain of the banks offering these lines of credit and any such interest will be disclosed to you. FBS Representatives are compensated when you draw down a loan on your securities-backed line of credit.

Additionally, FBS Representatives may refer you to banks in which it or an affiliate have an ownership interest and any such interest will be disclosed to you. FBS Representatives do not receive compensation for such referrals.

Accounts Offered by Affiliates of FBS Charitable Giving
Fidelity Investments Charitable Gift Fund (“Fidelity Charitable”) is an independent public charity that offers the Fidelity Charitable® Giving Account®, a donor-advised fund. FBS and its affiliates provide services to Fidelity Charitable® and are compensated in connection with those services.

Certain FBS Representatives are compensated for referrals to Fidelity Charitable.

Investment Advisory Services
Brokerage accounts and investment advisory services offered to you by FBS and its affiliates are separate and distinct. These offerings are governed by different laws and regulations and have separate agreements with different terms, conditions, and fees that reflect the differences between the services provided. It is important for you to understand that a self-directed FBS brokerage account differs from a discretionary investment advisory service where FPWA or another FBS affiliate is responsible for deciding which investments will be purchased or sold. FPWA also offers nondiscretionary investment advisory services that include financial planning, profiling, and, as appropriate, referrals to third-party investment advisors. Please refer to the “Guide to Brokerage and Investment Advisory Services at Fidelity Investments” (available at Fidelity.com/information) for more information regarding our roles and responsibilities when providing brokerage and advisory services.

Investment advisory accounts typically charge an ongoing fee for the investment, advice, and monitoring services provided which, in the case of FPWA discretionary advisory services, also include costs of brokerage execution and custody. Fees for these investment advisory services vary based on the scope of services provided and the value of the assets for which the services are provided. Information regarding each of the investment advisory programs offered by FPWA, including the fees charged, can be found at Fidelity.com/information. FPWAs discretionary investment advisory services are only provided with respect to the specific accounts or assets that are identified in the agreement(s) you enter into with FPWA. FPWA does not provide investment advisory services for other accounts or assets you have, either at FBS, an FBS affiliate, or with another financial institution.

FBS does not receive separate commissions in connection with FPWAs discretionary investment advisory services; however, FBS is reimbursed for the brokerage and other services provided to FPWA.

Certain FBS Representatives also act as investment advisory representatives of FPWA. Your Representative will be acting as a registered representative for FBS when providing services to your self-directed brokerage accounts or providing a recommendation for an FPWA investment advisory service. Once a client enrolls in an FPWA investment advisory service, the Fidelity Representative will be providing FPWA services and will be acting as an investment advisory representative for FPWA when providing discretionary and nondiscretionary investment advisory services. FBS Representatives are compensated in their capacity as investment advisory representatives of FPWA when providing investment advisory services to you. This compensation varies based on the investment advisory service you select and can be greater than the compensation received in connection with the sale of other less complex types of investments offered by FBS. As a result, these Representatives have a financial incentive to recommend your enrollment and continued maintenance of an investment in FPWAs investment advisory services over other types of investments offered by FBS. We address this conflict by providing our Representatives with appropriate training and tools to ensure that they are making recommendations that are in your best interest, by supervising our Representatives, and by disclosing these conflicts so that you can consider them when making your financial decisions. Please review the Program Fundamentals Brochure for the FPWA service being offered to you, which is available at Fidelity.com/information, for more information about Fidelity’s compensation and conflicts of interest.

Additionally, FBS’s affiliate FIWA offers advisory services to Intermediaries and to retail investors who work with Intermediaries and can be referred by FBS. Generally, you must have a relationship with an Intermediary to receive the advisory services from FIWA. Please refer to FIWA’s Form CRS for more information at Fidelity.com/information.
Workplace Services

FBS and its affiliates can provide a range of services to your Workplace Savings Plan. These services include investment advisory, transfer agent, brokerage, custodial, recordkeeping, and shareholder services for some or all of the investment options available under your Workplace Savings Plan. FBS can provide you with recommendations with respect to the investments held in your Workplace Savings Plan account as permitted by your plan sponsor, either online or through an FBS Representative. Any such recommendations provided to you will be limited to those investment options selected in your Plan’s investment lineup (including investment advisory services offered by FBS’s affiliate, FPWA), and will not consider investment options that may be available only through the Plan’s self-directed brokerage window.

FBS can provide recommendations concerning a Workplace HSA. Any recommendations provided to you for a Workplace HSA will be limited to investment management services provided by FPWA, proprietary mutual funds, and mutual funds that participate in the exclusive marketing, engagement, and analytics program as described in the “Investment Products and Services” section above. Please refer to your HSA Customer Agreement and our Schedule for additional account maintenance fees that can be charged by your employer.

Our Representatives are not compensated when you participate in a workplace savings plan or open an HSA.

If you have opened an FBS Account in connection with your participation in your employer’s equity compensation plan where our affiliate Fidelity Stock Plan Services, LLC, provides recordkeeping and administrative services (“Stock Plan Services”), then FBS will provide you with brokerage account services as described in your Customer Agreement at Fidelity.com/information. You are also subject to the terms and conditions of your employer’s equity compensation plan, including any applicable prospectus, grant or enrollment agreement, or other documentation. We can also provide information regarding your employee benefits.

FBS can also provide Executive Services to certain employees and/or participants in Workplace Savings Plans and/or through Stock Plan Services. Executive Services typically include customized equity compensation analysis, assistance with retirement planning, income protection, investment strategies, and access to products and services offered by FBS.

Third-Party Services through Marketplace Solutions and Other Programs

We have entered into certain arrangements to make the services of various third-party vendors available to our customers and Intermediaries. These services are generally, but not exclusively, accessed via hyperlinks on our website and mobile apps, as well as application programming interfaces and data transmissions. These connections allow customers and Intermediaries to connect directly with a vendor to obtain that vendor’s services. In other cases, we refer and/or introduce Intermediaries to third-party vendors who might be of interest to them. We receive compensation from these vendors when you decide to use their services. This compensation can take a variety of forms, including, but not limited to, payments for marketing and referrals, as well as sharing in a vendor’s revenue attributable to our customers’ usage of the applicable vendor’s products or services.

FBS Representatives are not compensated in connection with these vendor relationships and do not make recommendations regarding the use of these vendors.

Additional Conflicts of Interest

Agreements and Incentives with Intermediaries

If you work with FBS through an Intermediary, you have authorized your Intermediary to enter into an agreement with FBS that includes a schedule of applicable interest rates, commissions, and fees that will apply to your Intermediary Account. In these arrangements, FBS and the Intermediary agree to pricing for the respective Intermediary Accounts based on the nature and scope of business that Intermediary does with FBS and its affiliates, including the current and future expected amount of assets that will be custodyed by the Intermediary with an FBS affiliate, the types of securities managed by the Intermediary, and the expected frequency of the Intermediary’s trading. Intermediaries select from among a range of pricing schedules and/or investment products and services to make available to Intermediary Accounts. Additionally, FBS can change the pricing, investment products and services, and other benefits we provide if the nature or scope of an Intermediary’s business with us, or our affiliates, changes or does not reach certain levels. The pricing arrangements with Intermediaries can pose a conflict of interest for FBS and for Intermediaries and influence the nature and scope of business the Intermediaries obtain from FBS and its affiliates. For more information on the pricing that applies to your Intermediary Account, contact your Intermediary.

In addition, if you work with an Intermediary, FBS or its affiliates provide your Intermediary with a range of benefits to help it conduct its business and serve you. These benefits can include providing or paying for the costs of products and services to assist the Intermediary or direct payment to your Intermediary to defray the costs they incur when they do business. In other instances, Fidelity makes direct payments to Intermediaries in certain arrangements including business loans, referral fees, and revenue sharing. Examples of the benefits provided include (i) paying for technology solutions for Intermediaries; (ii) obtaining discounts on our proprietary products and services; (iii) assisting Intermediaries with their marketing activities; (iv) assisting Intermediaries with transferring customer accounts to our platform and in completing documentation to enroll their clients to receive our services; (v) making direct payments to reimburse for reasonable travel expenses when reviewing our business and practices; (vi) making direct payments for performing backoffice, administrative, custodial support, and clerical services for us in connection with client accounts for which we act as custodian; and (vii) making referral payments to Intermediaries, their affiliates, or third parties for referring business to FBS. These benefits provided to your Intermediary do not necessarily benefit your Intermediary Account. The benefits and arrangements vary among Intermediaries depending on the business they and their clients conduct with us and other factors. Please discuss with your Intermediary the details regarding its relationship with FBS and its affiliates. Further, FBS administers certain business to business introductory and referral programs to benefit the Intermediaries. As part of these programs, when new business relationships result, from time to time FBS collects program and referral fees.
Order Routing and Principal Trading by FBS Affiliates

When you place a purchase or sale order for individual stocks or bonds in your FBS Account, FBS typically will route the order to its affiliated clearing broker-dealer NFS, which in turn either executes the order from its own account (a “principal trade”), or sends the order to various exchanges or market centers for execution. NFS can also direct customer orders to exchanges or market centers in which it or one of its affiliates has a financial interest. Any order executed for your FBS Account is subject to a “best execution” obligation. If NFS executes the order from its own account through a principal trade, it can earn compensation on the transaction. This creates an incentive for NFS to execute principal trades with its own account. In deciding where to send orders received for execution, NFS considers a number of factors including the size of the order, trading characteristics of the security, favorable execution prices (for example, the opportunity for price improvement), access to reliable market data, availability of efficient automated transaction processing, and execution cost. Some market centers or broker-dealers may execute orders at prices superior to publicly quoted market prices. Although you can instruct us to send an order to a particular marketplace, NFS order routing policies are designed to result in transaction processing that is favorable for you. Please refer to the “Stocks and Options” section of this document for a description of the remuneration, compensation, or other consideration received by FBS and/or NFS for directing customer orders to certain market centers. For additional information on our best execution and order entry procedures, please refer to our Fidelity Account Customer Agreement, which you can find at Fidelity.com/information.

FBS Representative compensation is not affected by NFS’s order routing practices or whether we execute transactions on a principal basis.

For more information, including copies of any document referenced, please go to Fidelity.com/information or contact your FBS Representative.
How Fidelity Brokerage Services LLC (“FBS”) Can Help You with Your Retirement Accounts

This important disclosure information about Fidelity Brokerage Services LLC (“FBS”) supplements the FBS Products, Services, and Conflicts of Interest document and is provided to comply with applicable federal law. In addition to reviewing and educating you on available options for your workplace savings plan assets after you leave your employer or are eligible for a distribution, this supplement further describes FBS’s best interest obligations when providing investment advice, where applicable, including when making a recommendation regarding options for your workplace savings plan assets after you leave your employer.

FBS can help you in this area in a variety of ways:

• We can help you invest assets held in a Fidelity Individual Retirement Account (“Fidelity IRA”).
• We can also help you with your choices for assets held in a workplace savings plan, such as a 401(k) or 403(b) plan, if you are leaving or have already left an employer. (Workplace savings plans are referred to in this supplement as “plans”; accounts in plans are referred to in this supplement as “Workplace Savings Plan Accounts.”)
• If your Workplace Savings Plan Account(s) are held at Fidelity, we can assist you:
  o with your Workplace Savings Plan Account(s) only, or
  o with all your retirement and other planning needs, including your Workplace Savings Plan Account(s).
• If your Workplace Savings Plan Account(s) are held at a third party, we can provide certain other services.

Important Information about Your Choices after Leaving Your Employer

You generally have four options for your Workplace Savings Plan Account assets after you leave your employer:

• Stay in your Workplace Savings Plan Account
• Roll over to an IRA
• Roll over to another Workplace Savings Plan Account, if available
• Take a cash-out distribution*

*Note that a cash-out distribution from a Workplace Savings Plan Account may be subject to 20% mandatory federal tax withholding. Additionally, if the distribution is taken before age 59½, an additional 10% early withdrawal tax penalty may apply. Also, following a cash-out distribution, your money won’t have the potential to continue to grow tax deferred unless rolled over to an IRA or another employer plan.

Some plans may allow you to combine these options (for example, rolling over some money and keeping some in your Workplace Savings Plan Account) or offer additional options, such as periodic installment payments. It is important that you understand the specific options available for your Workplace Savings Plan Account assets.

Factors to Consider

You should consider the following factors, including applicable fees and costs, when deciding whether to stay in your existing Workplace Savings Plan Account or roll over to an IRA (or to another Workplace Savings Plan Account, if available):

• A Workplace Savings Plan Account may provide features not available outside the plan. While you can’t contribute to the Workplace Savings Plan Account of a prior employer, remaining in the plan (if permitted) lets you keep access to the plan’s investments and continue tax-deferred growth potential. If the following factors are important to you, you may want to consider keeping your assets in a Workplace Savings Plan Account (or rolling over to another Workplace Savings Plan Account, if available).
  o If you retire early and need access to your plan assets before age 59½: You can avoid paying the 10% early withdrawal tax penalty on Workplace Savings Plan Account distributions if you leave your job during or after the calendar year you turn 55. (For a public safety employee, these retirement plan withdrawals can begin without penalty as early as age 50.) This exception to the early withdrawal tax penalty is not available for distributions before age 59½ from an IRA.
  o If you are concerned about asset protection from creditors: Generally speaking, Workplace Savings Plan Accounts have unlimited protection from creditors under federal law, while IRA assets are protected only in bankruptcy proceedings. State laws vary in the protection of IRA assets in lawsuits. If creditor protection is important to you, this factor favors remaining in (or rolling over to) a Workplace Savings Plan Account.
  o If you would like to defer Required Minimum Distributions: Once an individual reaches age 73, the rules for both Workplace Savings Plan Accounts and IRAs generally require the periodic withdrawal of certain minimum amounts known as required minimum distributions or RMDs. If you intend to work past the age of 73, however, keeping assets in a Workplace Savings Plan Account may allow you to defer RMDs until you retire. (Note: If you own 5% or more of the employer, RMD deferral is not available.)
  o If your plan offers unique investment options: If you want continued access to such options, consider keeping your assets in the Workplace Savings Plan Account. Examples of unique investment options your plan might provide include:
• **Institutional (lower cost) funds/share classes** or stable value funds not available outside your plan.

• **Low-cost managed account options** or a self-directed brokerage account with an array of investment options. (Compare whether a self-directed brokerage account would charge the same fees and commissions as charged in an IRA.)

• **Institutional or group annuities** issued by insurance companies not available outside your Workplace Savings Plan Account. Note that annuities are insurance products, and any income guarantees depend on the annuity provider’s financial strength and ability to pay.

  • If you have **appreciated employer stock** in your Workplace Savings Plan Account, there are special issues that you should consider. On the one hand, excessive concentrations in a particular investment, including employer stock, may be risky. On the other hand, transferring or rolling over employer stock to an IRA as opposed to making an in-kind transfer to a non-retirement account, can result in unfavorable tax consequences. Consult your tax advisor for details.

  • **Special benefits:** If continued participation in your plan provides you with special benefits such as supplemental healthcare or housing allowances, that factor would align with retaining assets in your current Workplace Savings Plan Account.

  • **Plan loans:** If you are paying back a plan loan or need future loans, check your plan’s loan rules before deciding what to do with your Workplace Savings Plan Account. Loans are not available from, and cannot be rolled over to, IRAs.

• **An IRA may provide features and investment options not available for a Workplace Savings Plan Account.** IRAs from different providers may have different services and investment options. If the investment options and services available for your Workplace Savings Plan Account do not offer what you need, you may want to consider the options and services available in an IRA, which may include:

  • **Broader investment options:** An IRA may provide a broader range of investment options than may be available for your Workplace Savings Plan Account. For example, an IRA may offer the ability to invest in individual stocks and bonds or a range of managed account offerings.

  • **Consolidation:** You may be able to consolidate several Workplace Savings Plan Accounts into an IRA.

  • **Services:** If you invest through an IRA, you may have access to a range of services and support not available for your Workplace Savings Plan Accounts, including access to various forms of assistance in planning for your retirement and other financial goals.

  • **Special rules for early withdrawals from an IRA:** If you are under age 59½ and you want to take distributions to cover a first-time home purchase, educational expenses, or health insurance when you are unemployed, you can take certain withdrawals (for a home purchase up to $10,000 for individuals/$20,000 for married couples) from your IRA and avoid the early withdrawal penalty. You may also want to consult your tax advisor about your situation, as taxes still apply.

• **Rolling over to another Workplace Savings Plan Account,** if available, also lets you consolidate your existing and new Workplace Savings Plan Accounts into one plan while continuing tax-deferred growth potential. Investment options vary by plan. Check the rules applicable to your current employer’s plan to see if you can roll over from another Workplace Savings Plan Account into that plan.

As you decide among your options, consider the **fees and costs for each option**. There are generally three types of fees that you should consider:

• **Investment expenses:** A range of expenses are associated with investment options that you select. These can be the largest component of overall costs associated with your account.

• **Advisory fees:** If you have selected a managed account or investment advisory service, investment advisory fees are generally charged in addition to underlying investment expenses.

• **Plan or account fees:** There may be a periodic administrative or recordkeeping fee associated with your Workplace Savings Plan Account. In some cases, employers pay for some or all of these expenses. If considering an IRA, there may be a periodic custodial or trustee fee. Fidelity does not currently charge an IRA custodial fee.

### Distribution Decision Support for Participants with a Workplace Savings Plan Account Held at Fidelity

When helping you consider your distribution options from a Workplace Savings Plan Account held at Fidelity, our approach is to first assist you in identifying and assessing your needs and preferences. Initially, we ask whether you want to discuss only your distribution options for your Workplace Savings Plan Account or, in the alternative, whether you want to discuss your broader planning and investment needs, including needs related to your Workplace Savings Plan Account. Each approach is discussed below and applies only if your Workplace Savings Plan Account is held at Fidelity.

In either case, we will then help you understand your Workplace Savings Plan Account distribution options by reviewing the factors described in the two sections immediately above. Most participants can decide which distribution option is best for them based on their unique financial situation after reviewing this information and considering the factors that are important to them. If, however, you are not able to select a distribution option, we can make a recommendation based on the information you provide to us. Note that we only consider Fidelity Workplace Savings Plan Accounts and Fidelity IRAs when providing investment advice.

**If you request information regarding distribution options for your Workplace Savings Plan Account only:**

• We can make a recommendation in your best interest to stay in your current Workplace Savings Plan Account, roll over to another Workplace Savings Plan Account at Fidelity (if you have one), or roll over to a Fidelity IRA. If you identified that one or more of the following “Stay in Plan Factors” apply, we will recommend that you stay in your current Workplace Savings Plan Account or
roll over to another Workplace Savings Plan Account, rather than rolling over to an IRA: (1) you terminated employment at or after age 55 (age 50 for eligible employees) and anticipate needing funds from your Workplace Savings Plan Account before age 59½; (2) creditor protection is important to you; and/or (3) you participate in or are eligible to participate in a plan associated with a tax-exempt organization eligible for special benefits. Otherwise, when considering a rollover, we will base our recommendation on a cost comparison of the following options: (1) staying in your current Workplace Savings Plan Account and investing in the least expensive age-appropriate target date mutual fund available in that plan; (2) if available, rolling over your assets to a new Workplace Savings Plan Account at Fidelity and investing in the least expensive age-appropriate target date mutual fund available in that plan; and (3) rolling over your assets to a Fidelity IRA and investing in Fidelity Go®, which is a Fidelity investment advisory service available in the Fidelity IRA. We will recommend the least expensive of these options. When we make a recommendation, our cost comparison considers workplace plan assets, whether your plan offers revenue credits and certain estimated credit assumptions when comparing the cost of those assets between the (1) lowest cost age-appropriate target date fund available in your current or new workplace plan recordkept at Fidelity, and (2) Fidelity Go®. Please note that, when making this recommendation, we will not evaluate any other investment options available for your current Workplace Savings Plan Account (or for any other Workplace Savings Plan Account that may be available to you), nor will we consider any other investment options available through a Fidelity IRA (or other IRA). There may be other investment options that cost more or less than the investments that we will consider.

If you request information regarding your broader planning and investment needs, including your Workplace Savings Plan Account(s):

- We will work with you to develop a plan for your future retirement or other needs; recommend investments that are in your best interest; and, in certain circumstances described below, we can make a recommendation in your best interest to stay in your Workplace Savings Plan Account, roll over to another Workplace Savings Plan Account at Fidelity (if available), or roll over to the Fidelity IRA.

- When we provide you with investment advice in connection with discussions regarding your broader planning and investment needs, we may make a recommendation that you roll over your Workplace Savings Plan Account to a Fidelity IRA when (1) none of the Stay in Plan Factors listed above apply, and (2) we recommend certain investment advisory services available in a Fidelity IRA that are not available to you through your Fidelity Workplace Savings Plan Account. In such circumstances, additional information about the basis for our investment and rollover recommendations will be provided in the enrollment materials for the recommended investment advisory service. In all other circumstances, if our discussion regarding your broader planning and investment needs results in a recommendation about how to invest your assets outside of a Workplace Savings Plan Account, we will provide you with information regarding the investment or service recommended, including information about fees and expenses, as well as information about the Factors to Consider described above so that you can make your own decision about whether to roll over the assets in your Workplace Savings Plan Account to a Fidelity IRA.

Distribution Decision Support for Participants with a Workplace Savings Plan Account(s) Not Held at Fidelity

We will not make a recommendation about whether to roll over from your non-Fidelity Workplace Savings Plan Account. We can discuss investment options available through a Fidelity IRA, and, as appropriate, we can recommend investments or advisory services if you choose to open a Fidelity IRA. So that you can make your own decision about whether to roll over the assets in your non-Fidelity Workplace Savings Plan Account to a Fidelity IRA, we can provide you with information regarding any investment or advisory service recommended for a Fidelity IRA, including information about fees and expenses, as well as information about the Factors to Consider described above.

Best Interest Rationale for Certain Investment Recommendations

A variety of products and services are available through a Fidelity IRA, including mutual funds, exchange-traded funds, investment advisory services, individual bonds, and annuities. Information regarding these products and services is provided in the Fidelity Brokerage Services LLC Products, Services, and Conflicts of Interest document. When we recommend certain fee-based investment advisory services, federal rules require that we provide you with the reasons that the recommendation is in your best interest. Our recommendation process begins with understanding whether you want to manage your own investments, or whether you want Fidelity to manage your assets. If you want Fidelity to manage your assets, we will ask you a series of questions designed to identify whether you have unique needs that require more investment personalization than is available through investment in a target-date mutual fund. If so, then based on your need for investment customization, as well as your identified investment strategy and need for financial planning and support of a Fidelity Representative, we will recommend one of the following advisory services offered by our affiliate, Fidelity Personal and Workplace Advisors LLC, as described below. All recommendations are subject to investment eligibility, which can include meeting certain investment minimums.

- Fidelity Wealth Services—Wealth Management (“FWS”). FWS is recommended where you would benefit from a diversified portfolio of mutual funds and ETFs that is actively managed through different market conditions; access to a dedicated Fidelity Personal Investing associate for financial planning and other services; and/or help with broader financial planning across your goals, which can include access to more complex planning topics. See the FWS Program Fundamentals for details regarding the services provided and costs of FWS advisory offerings.

- FWS—Advisory Services Team (“FAST”). FAST is recommended where you would benefit from a diversified portfolio of mutual funds and ETFs that is actively managed through different market conditions; access to a team of Fidelity Personal Investing associates for financial planning and other services; and/or help with essential financial planning topics including investing, retirement income, buying a home, or reducing debt. See the FWS Program Fundamentals for details regarding the services provided and costs of FWS advisory offerings, including FAST.
• **Fidelity Strategic Disciplines (“FSD”).** FSD is recommended where you would benefit from a portfolio of individual stocks or bonds managed for you, and access to a dedicated Fidelity Personal Investing associate for investment planning and other services. See the *FSD Program Fundamentals* for details regarding the services provided and costs of the FSD advisory offering.

• **Fidelity Go (“FGO”).** FGO is recommended where you would benefit from a diversified portfolio of mutual funds designed to replicate the performance of relevant market indexes. For clients with at least $25,000 to invest, FGO may also be appropriate if you desire to couple such a mutual fund portfolio with access to a team of Fidelity Personal Investing associates that can discuss with you foundational financial planning topics, such as budgeting, investing, retirement planning, or reducing debt, or help with other services. See the *FGO Program Fundamentals* for details regarding the services provided and costs of the FGO advisory offering.

• **Fidelity Managed FidFolios (“FMF”).** FMF is recommended where you would benefit from a portfolio of individual stocks managed for you but do not need access to Fidelity Representatives or help with financial planning. See the *FMF Program Fundamentals* for details regarding the services provided and costs of the FMF advisory offering.
**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.

<table>
<thead>
<tr>
<th>REASONS WE CAN SHARE YOUR PERSONAL INFORMATION</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/privacy.

### WHO IS PROVIDING THIS NOTICE?

Empire Fidelity Investments Life Insurance Company®; FIAM LLC; Fidelity Brokerage Services LLC; Fidelity Distributors Company LLC; Fidelity Diversifying Solutions LLC; Fidelity Funds, which include funds advised by Strategic Advisers LLC and Fidelity Diversifying Solutions LLC; Fidelity Health Insurance Services, LLC; Fidelity Institutional Wealth Adviser LLC; Fidelity Insurance Agency, Inc.; Fidelity Investments Institutional Operations Company LLC; Fidelity Investments Life Insurance Company; Fidelity Management Trust Company; Fidelity Personal and Workplace Advisors LLC; Fidelity Personal Trust Company, FSB; Fidelity Wealth Technologies LLC; National Financial Services LLC and Strategic Advisers.

The FIAM privately offered funds, which include funds advised by FIAM LLC and under general partner/managing member FIAM Institutional Funds Manager, LLC.
### NOTICE OF BUSINESS CONTINUITY

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 telecommunication 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.
Brokers Commission and Fee Schedule

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 Service Telephone (FAST®). This automated service is available around the clock and can be accessed from a touch-tone phone.

The fees described in this document apply to the Fidelity Account®, Non-Prototype Retirement Accounts, Health Savings Accounts (HSAs), and Fidelity Retirement Accounts (including Traditional, Roth, Rollover, SEP-IRA, SIMPLE IRAs, and Fidelity Retirement Plans (Keogh and SE 401(k)), and inherited IRAs and inherited Keogh accounts). Note that for Stock Plan Services Accounts, a different fee schedule located on NetBenefits.com may apply for Exercise-and-Sell Fees for Stock Option Plans and Sale of Company Stock. This Fidelity Brokerage Commission and Fee Schedule applies to all other transactions. The fees described in this document may change from time to time without notice. Before placing a trade, consider Fidelity’s most recent Brokerage Commission and Fee Schedule, available at Fidelity.com or through a Fidelity representative.

STOCKS/ETFs

| Online | $0.00 per trade |
| FAST® | $12.95 per trade |
| Rep-Assisted | $32.95 per trade |

The remuneration that Fidelity receives and keeps as described in this section applies to transactions and activities involving securities, including, but not limited to, domestic (U.S.) equities traded on national exchanges, short sales, exchange-traded funds (ETFs), and U.S.-traded foreign securities (ADR, American Depository Receipts, and ORDs, or Ordinaries).

In addition to the per trade charges identified above, Fidelity’s remuneration also includes a fee that is charged on all sell orders ("Additional Assessment"). The Additional Assessment, which typically ranges from $0.01 to $0.03 per $1,000 of principal, is charged by Fidelity. Fidelity uses the Additional Assessment to pay certain charges imposed on Fidelity by the SROs. You understand, acknowledge, and agree that Fidelity has made no representation that the Additional Assessment charged to you will equal the fees assessed against Fidelity by the SROs. You understand, acknowledge, and agree that Fidelity has made no representation that the Additional Assessment charged to you will equal the fees assessed against Fidelity by the SROs. You understand, acknowledge, and agree that Fidelity has made no representation that the Additional Assessment charged to you will equal the fees assessed against Fidelity by the SROs.

The SROs in turn pay the SEC using the money they collect from Fidelity and other broker-dealers. The Additional Assessment that Fidelity charges you is designed to offset the charges imposed on Fidelity by the SROs, which in turn are intended to cover the costs incurred by the government, including the SEC, for supervising and regulating the securities markets and securities professionals. You acknowledge, understand, and agree that Fidelity determines the amount of the Additional Assessment in its sole and exclusive discretion, and that the Additional Assessment may differ from or exceed the charges imposed on Fidelity by the SROs. These differences are caused by various factors, including, among other things, the rounding methodology used by Fidelity, the use of allocation accounts, transactions or settlement movements for which a fee by the SROs may not be assessed, and differences between the dates of changes to rates charged by the SROs.

In addition to the per trade/contract fees described above, 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 an 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.

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

OPTIONS

| Online | $0.00 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 orders placed online for options priced 0x to 65¢ are commission-free and are not subject to per contract option fees. For trades placed on other exchanges, you will not be charged a per contract fee when the contract price is 65¢ or less. Regular option rates (as shown above) apply when the contract price exceeds 65¢.

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

Exercises and assignments are commission-free and are not charged a per contract fee.

In addition to the per trade/contract fees described above, Fidelity’s remuneration also includes fees it charges you (“Options Fee”) that are designed to offset the Options Regulatory Fee (“ORF”) that the Options Clearing Corporation ("OCC") charges Fidelity through various options exchanges. The ORF applies to any transaction to buy or sell options contracts and represents the cumulative charges imposed by all the participating options exchanges. The ORF has ranged from $0.02 to $0.04 per contract 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 and order routing policies.

FBS has entered into a long-term, exclusive and significant arrangement with 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 ETFs’ prospectus and related documents.

Certain ETF sponsors pay an asset based fee in support of their ETFs on Fidelity’s platform, including related shareholder support services, the provision of calculation and analytical tools, as well as general investment research and education materials regarding ETFs. Fidelity does not receive payment from these ETF sponsors to promote any particular ETF to its customers.

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 an 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.

Securities | Range of Fees from Participation in Selling Group | Range of Fees from Underwriting
--- | --- | ---
IPOs | 3% to 4.2% of the investment amount | 5% to 7% of the investment amount
Follow-Ons | 1.8% to 2.4% of the investment amount | 3% to 4% of the investment amount

Please refer to the applicable pricing supplement or other offering document for the exact percentage sales concession or underwriting discount.
Multi-Leg Option orders placed online are charged a per contract Options Fee for the total number of contracts executed in the trade. Multi-Leg Option orders placed through other channels are charged a commission and the $5 per contract fee.

An “Additional Assessment” is also charged on any order to sell options contracts. Please refer to the discussion of the “Additional Assessment” in the Stocks/ETFs section of this document for additional information.

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.

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</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>Municipal Bonds</td>
<td></td>
<td>N/A</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.

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*
*Rep-Assisted $19.95 minimum

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

Commercial Paper
Generally, our affiliate NFS will receive compensation in the form of a mark-up or mark-down when facilitating transactions in commercial paper.

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.

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, those shares will be assigned either a transaction fee (TF), a no 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; marketing, engagement, and analytics program participation fees; maintenance fees; start-up fees, and platform 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 have a 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 fees available without notification to the funds 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; minimum $75, maximum $187.50

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.
Rep-Assisted: 0.75% of principal per purchase; minimum $100, maximum $250. These fees may be waived for certain types of periodic investment accounts.

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 three different opportunities to trade foreign stocks. You can utilize “International Trading,” “Dollarized International Trading,” or Fidelity’s “Foreign Ordinary Share Trading” services. Depending on the service, different commissions, taxes, and fees may apply as more fully described below. You may also call a Fidelity representative for further detail. The International Trading team at Fidelity is available Monday through Friday, from 5 a.m.–7 p.m. ET.

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 the two-letter country code for the market the customer wants to trade in. The commission charged by Fidelity is dependent on the market in which the order is placed and whether the trade is placed online or with the assistance of a representative as noted in the table below.

Country-Specific Taxes and Fees

Additional country-specific taxes and fees may be charged as detailed in the table below for International Trading and Dollarized International Trading. The list of countries, currencies, taxes, and fees provided below is subject to change without notice. There may also be further fees, taxes, or other charges assessed by intermediaries when conducting transactions in foreign securities beyond those described here, which could change at any time based on the country or exchange directive. Details regarding these charges are available from a Fidelity representative.

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 three different opportunities to trade foreign stocks. You can utilize “International Trading,” “Dollarized International Trading,” or Fidelity’s “Foreign Ordinary Share Trading” services. Depending on the service, different commissions, taxes, and fees may apply as more fully described below. You may also call a Fidelity representative for further detail. The International Trading team at Fidelity is available Monday through Friday, from 5 a.m.–7 p.m. ET.

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<table>
<thead>
<tr>
<th>Country</th>
<th>Online*</th>
<th>Rep Assisted*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>$32 AUD</td>
<td>$70 AUD</td>
</tr>
<tr>
<td>Austria</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Belgium</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Canada</td>
<td>$19 CAD</td>
<td>$70 CAD</td>
</tr>
<tr>
<td>Denmark</td>
<td>160 DKK</td>
<td>420 DKK</td>
</tr>
<tr>
<td>Finland</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>France</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>$250 HKD</td>
<td>$600 HKD</td>
</tr>
<tr>
<td>Germany</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Greece</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Ireland</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Italy</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Japan</td>
<td>3,000 JPY(¥)</td>
<td>8,000 JPY(¥)</td>
</tr>
<tr>
<td>Mexico</td>
<td>360 MXN</td>
<td>960 MXN</td>
</tr>
<tr>
<td>Netherlands</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>$35 NZD</td>
<td>$90 NZD</td>
</tr>
<tr>
<td>Norway</td>
<td>160 NOK</td>
<td>400 NOK</td>
</tr>
<tr>
<td>Poland</td>
<td>90 PLN</td>
<td>235 PLN</td>
</tr>
<tr>
<td>Portugal</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Singapore</td>
<td>$35 SGD</td>
<td>$90 SGD</td>
</tr>
<tr>
<td>South Africa</td>
<td>225 ZAR</td>
<td>600 ZAR</td>
</tr>
<tr>
<td>Spain</td>
<td>19 EUR(€)</td>
<td>50 EUR(€)</td>
</tr>
<tr>
<td>Sweden</td>
<td>180 SEK</td>
<td>480 SEK</td>
</tr>
<tr>
<td>Switzerland</td>
<td>25 CHF</td>
<td>65 CHF</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>9 GBP(£)</td>
<td>30 GBP(£)</td>
</tr>
</tbody>
</table>

*Per trade

Note that retirement account registrations are ineligible for this service. Please also note that if a security trading on an exchange in one of the markets noted above is only listed for trading in a currency other than that country’s local market's currency, then the commission that will be charged will be based on the currency the security is trading in instead of the identity of the local market.

Dollarized International Trading

Dollarized International Trading allows customers to execute stocks on foreign exchanges in retirement and non-internationally enabled accounts using a five-character symbol ending in “F” for settlement in U.S. Dollars. Trade amounts are calculated and posted in U.S. Dollars by incorporating a foreign currency exchange. This service is only available through the International Trading team at Fidelity and orders will execute during the respective countries’ regular market hours. At a minimum, all the same countries listed above for the International Trading offering are available, but please inquire with your Fidelity representative if you have a question about the availability of any additional counties.

<table>
<thead>
<tr>
<th>Country</th>
<th>Rep Assisted Only*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Rep Assisted Commission</td>
</tr>
<tr>
<td>All Others</td>
<td>Rep Assisted Commission + $50 non-DTC (Depository Trust Company) Fee</td>
</tr>
</tbody>
</table>

*Per trade

Country-Specific Taxes and Fees

Additional country-specific taxes and fees may be charged as detailed in the table below for International Trading and Dollarized International Trading. The list of countries, currencies, taxes, and fees provided below is subject to change without notice. There may also be further fees, taxes, or other charges assessed by intermediaries when conducting transactions in foreign securities beyond those described here, which could change at any time based on the country or exchange directive. Details regarding these charges are available from a Fidelity representative.

<table>
<thead>
<tr>
<th>Country</th>
<th>Tax (Per Trade)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Financial Transaction Tax (FTT) .30% of principal on purchases</td>
</tr>
<tr>
<td>Italy</td>
<td>Financial Transaction Tax (FTT) .10% of principal on purchases</td>
</tr>
<tr>
<td>Spain</td>
<td>Financial Transaction Tax (FTT) .20% of principal on purchases</td>
</tr>
<tr>
<td>Ireland</td>
<td>Stamp Tax 1.00% of principal on purchases</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Transaction Levy 0.0027% of principal Trading fee 0.005% of principal Stamp Duty 0.10% of principal</td>
</tr>
<tr>
<td>South Africa</td>
<td>Securities Transfer Tax .25% of principal on purchases</td>
</tr>
<tr>
<td>Singapore</td>
<td>Clearing fee of 0.04% of principal</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>PTM Levy 1 GBP where principal amount is &gt; £10,000 Stamp Duty 0.50% of principal on purchases</td>
</tr>
</tbody>
</table>

*Certain securities based on market capitalization

Please also note that if a security trading on an exchange in one of the markets noted above is only listed for trading in a currency other than that country’s local market’s currency, then the fees that will be charged will be based on the currency the security is trading in instead of the identity of the local market.

Foreign Currency Exchange

In addition to the commissions, taxes, fees, and other charges for International Trading and Dollarized International Trading, a currency exchange fee (in the form of a markup or markdown on the exchange rate) will be charged based on the size of the currency conversion, pursuant to the following schedule:

<table>
<thead>
<tr>
<th>Total Foreign Exchange Amount</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$100K</td>
<td>1.0% of principal</td>
</tr>
<tr>
<td>$100K–&lt;$250K</td>
<td>0.75% of principal</td>
</tr>
<tr>
<td>$250K–&lt;$500K</td>
<td>0.50% of principal</td>
</tr>
<tr>
<td>$500K–&lt;$1M</td>
<td>0.30% of principal</td>
</tr>
<tr>
<td>$1M+</td>
<td>0-0.20% of principal</td>
</tr>
</tbody>
</table>

Note: The Foreign Currency Exchange Fees above are applied to orders filled in the local country markets listed above. Rates may vary for additional currencies in available countries not listed in this schedule. Details are available from a Fidelity representative.
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 through the domestic equity order ticket or through a Fidelity representative. In either case, the domestic commission schedule for stocks/ETFs will apply. A $30 fee will also be charged on each transaction in any foreign ordinary stock that is not Depository Trust Company eligible. Retirement and non-retirement accounts are eligible for this service.

Country-Specific Taxes and Fees

Additional country-specific taxes and fees may be charged as detailed in the table below for Foreign Ordinary Share Trading. The list of countries, taxes, and fees provided below is subject to change without notice. There may also be further fees, taxes, or other charges assessed by intermediaries when conducting transactions in foreign securities beyond those described here, which could change at any time based on the country. Details regarding these charges are available from a Fidelity representative.

<table>
<thead>
<tr>
<th>Country</th>
<th>Tax (Per Trade)</th>
</tr>
</thead>
<tbody>
<tr>
<td>France*</td>
<td>Financial Transaction Tax (FTT) .30% of principal on purchases</td>
</tr>
<tr>
<td>Italy*</td>
<td>Financial Transaction Tax (FTT) .10% of principal on purchases</td>
</tr>
<tr>
<td>Spain*</td>
<td>Financial Transaction Tax (FTT) .20% of principal on purchases</td>
</tr>
</tbody>
</table>

*Certain securities based on market capitalization

Note: The taxes and fees, if any, will be disclosed individually on the trade confirmation.

OTHER INVESTMENTS

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 separate transaction fee. Fidelity receives compensation for participating to purchase. Fidelity makes certain new issue products available without a separate transaction fee. Fidelity receives compensation for participating to purchase without a separate transaction fee.

Precious Metals

<table>
<thead>
<tr>
<th>Buy Gross Amount</th>
<th>% Charged on Gross Amount</th>
<th>Sell Gross Amount</th>
<th>% Charged on Gross Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0–$9,999</td>
<td>2.90%</td>
<td>$0–$49,999</td>
<td>2.00%</td>
</tr>
<tr>
<td>$10,000–$49,999</td>
<td>2.50%</td>
<td>$50,000–$249,999</td>
<td>1.00%</td>
</tr>
<tr>
<td>$50,000–$99,999</td>
<td>1.98%</td>
<td>$250,000–$499,999</td>
<td>0.75%</td>
</tr>
<tr>
<td>$100,000+</td>
<td>0.99%</td>
<td></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.

For Fidelity Account® owners coded Premium, Private Client Group, Wealth Management, or with household annual trading activity of 120 or more stock, bond, or options trades, your account will automatically be reimbursed for all ATM fees charged by other institutions while using the Fidelity® Debit Card at any ATM displaying the Visa®, Plus®, or Star® logos. The reimbursement will be credited to the account the same day the ATM fee is debited. In rare instances, ATM owners may not itemize fees, which may cause disruption of individual automatic rebates. Should this occur, please contact Fidelity. Please note there may be a foreign transaction fee of 1% included in the amount charged to your account.

Fidelity debit cards are issued by PNC Bank, N.A., and the debit card programs are administered by BNY Mellon Investment Servicing Trust Company. These entities are not affiliated with each other or with Fidelity. Visa is a registered trademark of Visa International Service Association, and is used by PNC Bank pursuant to a license from Visa U.S.A. Inc.

Transfer and Ship Certificates $100 per certificate; applies only to customers who have certificate shares registered 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 plans) 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/go/to/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.

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

In the event that we have to take action in your account to meet a margin call, you will be charged the Rep-Assisted rate for such transactions.

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.

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.
Addendum to
Brokerage Commission and Fee Schedule

FundsNetwork®
FBS and/or NFS has contracted with certain mutual funds, their investment advisors, or their affiliates and certain ETF investment advisors to receive other compensation in connection with the purchase and/or the ongoing maintenance of positions in certain mutual fund shares and ETFs in your brokerage account. This additional annual compensation may be paid with respect to the mutual fund by the mutual fund, its investment advisor, or one of its affiliates and with respect to the ETF by its investment advisor or its affiliates.

- **FundsNetwork No Transaction Fee (NTF) Funds and ETFs**
  - For funds participating in the NTF program and certain ETFs, Fidelity receives compensation that can typically range from 0 to 50 basis points based on the average daily balance. As of 12/31/2022, 68% of the mutual funds currently in the NTF program are in the 35–40 basis point range. For NTF funds with a 12b-1 fee, the fund family may use the 12b-1 fee as part of its NTF payment.

- **FundsNetwork Transaction Fee (TF) Funds**
  - For funds participating in the TF program, Fidelity receives compensation based on: (1) per-position fees that typically range from $3 to $25 per brokerage account or (2) asset-based fees that typically range from 0 to 20 basis points based on average daily assets. As of 12/31/2022, 63% of the mutual funds participating in the TF program are in the $12–$19 per-position fee range or 8 to 12 basis point range. TF compensation is in addition to any 12b-1 fees as described in the fund's prospectus.

- Fidelity receives fees from certain unaffiliated product providers to compensate Fidelity for maintaining the infrastructure required to accommodate unaffiliated product providers' investments products in one or more of Fidelity's distribution channels, including retail, workplace and intermediary channels. These fees vary by providers, but in each case the fee is a fixed amount that is less than .07% of the product provider's assets in the Fidelity distribution channel(s) for which it applies. In addition, certain unaffiliated product providers may pay Fidelity initial startup fees, product add, maintenance, access to certain distribution channels, and provider minimum monthly fees as well as a flat, uniform, annual fee related to an exclusive marketing, engagement, and analytic program.

- Fidelity may receive a payment from American Fund Distributors (AFD) for among other things, to compensate Fidelity for providing them access to financial intermediaries and investors in certain Fidelity channels, a platform to support the provision of investment guidance and service to such financial intermediaries and investors, when applicable, and to promote operational efficiencies. As described in American Fund prospectuses, AFD has discretion as to the amount of the payment, if any; the criteria to determine any payment includes sales, assets, and cash flows as well as qualitative factors. It is anticipated that the payment would not exceed .08% annually of American Fund assets in all retail, workplace and intermediary channels maintained by Fidelity, subject to certain exclusions.

- Fidelity may receive an annual product fee of up to $2,000 if aggregate assets held in that product across all retail, workplace and intermediary channels maintained by Fidelity are less than $1.5 million.

- If you would like more information on any of the mutual funds in the FundsNetwork program, please call Fidelity at 800-544-5373.

**Use of funds held overnight**

FBS is the introducing broker-dealer for Fidelity brokerage accounts ("Accounts"). Its affiliate, NFS, provides clearing and other related services on Accounts. As compensation for services provided with respect to Accounts, NFS receives use of funds from the sale of securities prior to settlement; amounts that are deposited in the Accounts before investment; and disbursement amounts made by check prior to the check being cleared by the bank on which it was drawn. Any of the above amounts will first be netted against outstanding Account obligations. The use of such amounts may generate earnings (or "float") for NFS or instead may be used by NFS to offset its other operational obligations. Information concerning the time frames during which NFS may have use of such amounts and rates at which float earnings are expected to accrue is provided as follows:

1. **Receipts.** The deposit of amounts that settle from the sale of securities or that are deposited into an Account (by wire, check, ACH [Automated Clearing House] or other means) will generally be purchased into the Account's core sweep vehicle by close of business on the business day that NFS receives such funds. NFS gets the use of such amounts from the time it receives funds until the core sweep vehicle purchase settles on the next business day. Note that amounts disbursed from an Account (other than as referenced in Section 2 below) or purchases made in an Account will result in a corresponding "cost" to NFS. This occurs because NFS provides funding for these disbursements or purchases one day prior to the receipt of funds from the Account's core sweep vehicle. These "costs" may reduce or eliminate any benefit that NFS derived from the receipts described previously.

2. **Disbursements.** NFS gets the use of amounts disbursed by check from Accounts from the date the check is issued by NFS until the check is presented and paid.

3. **Float Earnings.** To the extent that such amounts generate float earnings, such earnings will generally be realized by NFS at rates approximating the Effective Federal Funds Rate.

**Fidelity Defined Contribution Retirement Plan Accounts (including Profit Sharing, Money Purchase, and Self-Employed 401(k) plans) for Customers who Reside Outside the United States**

If you reside outside the United States in any country other than Canada (as described in the Residing Outside of the United States section of the Fidelity Brokerage Retirement Customer Account Agreement ["Agreement"]), deposits to your Fidelity retirement account will be held in the Intraday Free Credit Balance as more fully described in the Agreement. Any interest paid as a result of the Intraday Free Credit Balance will be labeled "Credit Interest" in the Activity section of your account statement. To the extent such amounts generate earnings, such earnings will be realized by NFS at rates approximating the Effective Federal Funds Rate. NFS’s compensation is the amount of earnings reduced by any interest paid to Accounts.