

Brokerage 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 (ADRs, or American Depositary Receipts, and ORDs, or Ordinaries).¹ For details on foreign stock trading, see the Foreign Stocks section. Large block orders requiring special handling, restricted stock orders, and certain directed orders may carry additional fees, which will be disclosed at the time of the transaction.

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 national securities associations, clearing agencies, national securities exchanges, and other self-regulatory organizations (collectively, “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. 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 in connection with your transactions. The Additional Assessment is in addition to the commissions we charge (i.e., the per trade charges identified above), and is included on your trade confirmation as a part of the Activity Assessment Fee. For the exact amount of the Additional Assessment charged on a particular transaction, please contact a Fidelity representative.

Fidelity Brokerage Services LLC (“FBS”) and/or NFS receives remuneration, compensation, or other consideration (such as financial credits or reciprocal business) for directing orders in certain securities to particular broker-dealers or market centers for execution. The payer, source, and nature of any compensation received in connection with your particular transaction will vary based on the venue that a trade has been routed to for execution and will

be disclosed upon written request to FBS. Please refer to Fidelity’s customer agreement for additional information about order flow practices and to Fidelity’s commitment to execution quality (http://personal.fidelity.com/products/trading/Fidelity_Services/Service_Commitment.shtml) for additional information about order routing. Also review FBS’s annual disclosure on payment for order flow policies and order routing policies.

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

Certain ETF sponsors pay an asset-based fee in support of their ETFs on Fidelity’s platform that supports services 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, and these ETF shares are not marginable for 30 days after purchase. Customers purchasing shares in a limited number of ETFs that are not supported by their providers will be subject to a \$100 service fee.

NEW ISSUE

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

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.

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 0¢ to 65¢ are commission-free and are not subject to per contract option fees. For trades placed on other channels, 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 but is subject to change at any time. You acknowledge, understand, and agree that Fidelity determines the amount of the Options Fee charged to you and its other customers in its sole and exclusive discretion, and that the Options Fee amount collected from you by Fidelity may differ from or exceed the ORF that Fidelity pays to OCC. These differences are caused by various factors, including, among other things, the rounding methodology used by Fidelity, the use of allocation accounts, transactions for which a fee may not be assessed, and differences between the dates of changes to the ORF rate. You understand, acknowledge, and agree that Fidelity has made no representation that the fees assessed to you will equal the fees assessed against Fidelity by the OCC in connection with your transactions. This Options Fee is in addition to your commission and is included on your trade confirmation as a part of the Activity Assessment Fee. For the exact amount of the Options Fee charged to you on a particular transaction, please contact a Fidelity representative.

¹A Financial Transaction Tax of 0.30% of principal per trade on purchases of French securities, 0.10% of principal per trade on purchases of Italian securities, and 0.20% of principal per trade on Spanish securities may be assessed.

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 65¢ 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

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

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

CDs

Securities	Range of Fees from Participation in Selling Group	Range of Fees from Underwriting
CDs — CDIPs (Inflation Protected)	• 0.1% to 2% of the investment amount	• 0.1% to 2.5% of the investment amount
Structured Products (Market-linked CDs)	• 0.05% to 5% of the investment amount	N/A

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 be available load waived.**

Short-term Trading Fees

Fidelity charges a short-term trading fee each time you sell or exchange shares of a FundsNetwork NTF fund held less than 60 days. This fee does not apply to Fidelity funds, money market funds, FundsNetwork Transaction Fee funds, FundsNetwork load funds, funds redeemed through the Personal Withdrawal Service, or shares purchased through dividend reinvestment. In addition, Fidelity reserves the right to exempt other funds from this fee, such as funds designed to achieve their stated objective on a short-term basis. The fee will be based on the following fee schedule:

Online **\$49.95 flat fee**

Fidelity Automated Service Telephone (FAST®): **0.5625% of principal** (25% off representative-assisted rates), maximum \$187.50, minimum \$75

Rep-Assisted: **0.75% of principal**, maximum \$250, minimum \$100

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

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

FundsNetwork Transaction-Fee Funds

Purchases:

Online: **\$49.95 or \$100 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

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

*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 countries.

Country	Rep Assisted Only*
Canada	Rep Assisted Commission
All Others	Rep Assisted Commission + \$50 non-DTC (Depository Trust Company) Fee

*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.

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

*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:

Total Foreign Exchange Amount	Cost
<\$100K	1.0% of principal
\$100K–<\$250K	0.75% of principal
\$250K–<\$500K	0.50% of principal
\$500K–<\$1M	0.30% of principal
\$1M+	0–0.20% of principal

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 \$50 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.

Country	Tax (Per Trade)
France*	Financial Transaction Tax (FTT) .30% of principal on purchases
Italy*	Financial Transaction Tax (FTT) .10% of principal on purchases
Spain*	Financial Transaction Tax (FTT) .20% of principal on purchases

*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 the selling group range from 1% to 4% of the public offering price. Fidelity may also receive compensation for reaching certain sales levels, which range from 0.001%–0.0025% of the monthly volume sold.

Precious Metals

Buy	Gross Amount	% Charged on Gross Amount	Sell	Gross Amount	% Charged on Gross Amount
\$0–\$9,999		2.90%	\$0–\$49,999		2.00%
\$10,000–\$49,999		2.50%	\$50,000–\$249,999		1.00%
\$50,000–\$99,999		1.98%	\$250,000+*		0.75%
\$100,000+*		0.99%			

*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. Fidelity does not charge foreign transaction fees; however, if you choose to pay a foreign debit card transaction in U.S. dollars, your transaction may be processed at a rate different than market exchange rate.

Fidelity debit cards are issued by PNC Bank, N.A. or Leader 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, and Fidelity is not affiliated with PNC Bank or BNY Mellon. The parent company of Fidelity has a minority percentage, noncontrolling interest in Leader Bank. Visa is a registered trademark of Visa International Service Association, and is used by PNC Bank and Leader 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 reregistered and shipped; waived for households that meet certain asset and trade minimums at Fidelity²

HSAs

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

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

Fee and Trading Policies

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

Fee Waiver Eligibility

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

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

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

If you believe there are eligible accounts within your household that are not being counted in our fee waiver eligibility process— for example, accounts held by immediate family members who reside with you—you may authorize Fidelity to consolidate these accounts into an aggregated relationship household and review them for eligibility. Any resulting fee waivers would extend both

²Households 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.

to you and to all immediate family members residing with you. Most customers receive only a single customer reporting statement from Fidelity and do not need to take any action. However, for more information, go to Fidelity.com/goto/commissions or call us at 800-544-6666.

Limits on Feature Eligibility

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

Prospectuses and Fact Sheets

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

Margin Fees

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

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

Interest Charged

Average Debit Balance	Interest Charged Above/Below Base Rate
\$0–\$24,999.99	+1.250%
\$25,000–\$49,999.99	+0.750%
\$50,000–\$99,999.99	–0.200%
\$100,000–\$249,999.99	–0.250%
\$250,000–\$499,999.99	–0.500%
\$500,000–\$999,999.99	–2.825%
\$1,000,000+	–3.075%

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 typically ranges from 5 to 65 basis points based on the average daily balance. As of 12/31/2023, 88% 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 2 to 20 basis points based on average daily assets. As of 12/31/2023, 86% of the mutual funds participating in the TF program had per-position fees in the \$12–\$19 per-position fee range or asset-based fees in the 8–12 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 start-up 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: amounts 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.