



T. Rowe Price Brokerage Services.
**WELCOME TO A POWERFUL TRADING
EXPERIENCE.**

A Fast, Reliable Website | Current Research | Lower Costs

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Introduction to Brokerage: Get more from your new account

Welcome to T. Rowe Price Brokerage. Your new account offers great value plus the opportunity to invest in a wide variety of securities. You can also take this opportunity to simplify your financial planning by bringing all of your investments together in one place.

It's easy to start building your portfolio. We've provided all the information you'll need, including clear instructions for using our website, online Brokerage platform, and Tele-Trader service. If you have any questions, call our representatives at **1-800-225-7720**.

Streamlined fees and great service.

To help you save on trading costs, we offer commissions as low as \$9.95 for online stock trades if you've made more than 30 executed trades in the prior 12 months. If you qualify for Select Client Services¹ with T. Rowe Price, you are entitled to the same \$9.95 rate for stock trades entered through all channels (online, via our Tele-Trader system, or over the phone with a T. Rowe Price Brokerage representative). Even if you don't qualify for the \$9.95 rate, you can still trade online for \$19.95.¹

In addition, you'll have the assurance of working with a respected company that's noted for its customer service. Our representatives are available to take questions and explain the full range of services we offer.

Go online and start trading.

You can begin trading with your new T. Rowe Price Brokerage account in just a few simple steps. For access, all you need is an existing account number:

- Go to **troweprice.com/access**
- Select "Register" and follow the instructions below.
- You'll be prompted to:
 - Enter your account information
 - Enter your personal information (full name, Social Security number/tax identification number, date of birth, ZIP code, and email address)
 - Create a user name and password
 - Select paperless preferences

All investments involve risk, including possible loss of principal. Diversification cannot assure a profit or protect against loss in a declining market.

Call 1-800-541-8803 to request a prospectus or, if available, a summary prospectus; each includes investment objectives, risks, fees, expenses, and other information that you should read and consider carefully before investing.

¹Customers with \$250,000 or more qualify for Personal Services, and customers with \$1,000,000 or more qualify for Enhanced Personal Services. Qualifying investments consist of T. Rowe Price mutual funds, T. Rowe Price Brokerage accounts, and T. Rowe Price College Savings Plan accounts that are directly owned; trust accounts for which you are a trustee; and UGMA/UTMA, T. Rowe Price College Savings Plan, and Education Savings Accounts for which you are a custodian. Assets held in a 401(k) plan, a Maryland College Investment Plan, or a University of Alaska College Savings Plan account are also eligible if you have a qualifying investment. Assets held in estate or corporate accounts are excluded. Your qualifying investment assets may be recognized with those of other eligible members of your household toward collective qualification for Select Client Services programs.

Everything you need for quick, convenient trading.

Our website and the enhanced online Brokerage platform make it easy to track your holdings and get the latest investment information. You can:

- Easily navigate throughout the site to review all your account information, including balances, current holdings, available cash, history, and any open orders.
- Access Quick Quotes to get delayed or real-time quotes, when available, for a specific security.
- View and analyze data from several industry-leading sources in one place in an easy-to-read format with graphical visualizations.
- Utilize a multi-compare tool to compare key information for stocks, exchange-traded funds (ETFs), and mutual funds.
- Choose from a variety of alerts to keep you informed on news, trades, prices, volume, watchlists, holdings, and other important data for delivery by email or to your mobile device.

Three ways to trade for less.

T. Rowe Price Brokerage lets you choose the trading method that works best for you:

- Online: **troweprice.com/brokerage**
- Tele-Trader: **1-800-638-8879**
- Through our representatives: **1-800-225-7720**

Introduction to Brokerage: More investment benefits with one convenient account

With your T. Rowe Price Brokerage account, you'll have the flexibility to diversify your investments and manage your assets with ease. The broad selection of products and benefits we offer provides you with a choice if you want an account to trade more than mutual funds.

No matter which one you use, you'll pay less than with full-service brokers and get the dependable service you expect from T. Rowe Price.

A wide range of investment choices.

You can trade stocks, options,¹ mutual funds, ETFs, corporate bonds, CDs, GNMA's, U.S. Treasuries, zero-coupon bonds, and municipal bonds through your new T. Rowe Price Brokerage account.

Free dividend reinvestment.

Most U.S. common stocks trading on major exchanges are eligible for our Dividend Reinvestment Service.

Money fund sweep feature.

A money market sweep fund is used to pay for all purchases and to receive all sales proceeds, dividends, and interest payments of securities held in your cash account and automatically transfers amounts that exceed, or fall short of, a certain level into a higher interest-earning investment option at the close of each business day. This convenient service lets you earn competitive money market yields on your credit balances.² You can even write checks (\$500 minimum) against your money market sweep. Checks only require one signature, regardless of whether the account has multiple owners or authorized signers.

Mutual Fund Screener.

Quickly access hundreds of non-T. Rowe Price mutual funds by performing a search using our Mutual Fund Screener tool available through our online Brokerage platform. Many of these are offered without transaction fees—including funds from American Century, Dreyfus, and Wells Fargo.³

Margin and options trading.

You can increase your investment flexibility by signing up for margin or options trading privileges.¹ Margin and

options trading involves greater risk and is not suitable for all investors.

Self-directed IRAs.

When you invest in a self-directed individual retirement account (IRA), any growth of your contributions and earnings is tax-deferred. You can choose from two different types of IRAs: Traditional and Roth. Depending on your earned income, contributions to a Traditional IRA may be tax-deductible. Earnings and any deductible contributions to Traditional IRAs are taxed upon withdrawal. Roth IRA contributions are nondeductible, but distributions from Roth IRAs are tax-free if you meet certain criteria.

You can contribute up to \$6,000 (\$7,000 if age 50 or older) in 2019. These dollar limits include combined contributions to both a Traditional and Roth IRA.

Investors who are at least 50 years old can make "catch-up" contributions of \$1,000 in addition to their normal contributions.

Account protection.

T. Rowe Price Investment Services, Inc., is a member of the Securities Investor Protection Corporation (SIPC), which provides our clients with up to \$500,000 worth of protection (\$250,000 for cash claims) against failure of the firm. Additional coverage is provided by Pershing (our clearing broker) through Lloyd's of London to an overall aggregate level of \$1 billion for assets in custody at Pershing and its London affiliate, Pershing Securities Limited, including \$1.9 million in cash. For more information regarding SIPC, including a SIPC brochure, visit sipc.org or call 202-371-8300. SIPC coverage does not protect against either (1) losses arising from changes in the market value of investments or (2) direct investments in precious metals.

Please call us at **1-800-225-7720** to request information on these services.

¹Margin and options trading involves additional risk and is not suitable for all investors. It is subject to the approval of T. Rowe Price Brokerage.

²An investment in a money market fund is not insured or guaranteed by any government agency. Yields and share prices are not guaranteed, and both yields and share prices may fluctuate.

³T. Rowe Price Investment Services, Inc., may receive fees in connection with no-transaction-fee mutual funds for activities such as recordkeeping and shareholder services. T. Rowe Price reserves the right to change the funds available with no transaction fees and reinstate the fees on any funds as well as the right to charge a transaction fee if your short-term trading becomes excessive. If you purchased a fund and paid a transaction fee, one will be charged upon its sale even if it becomes a no-transaction-fee fund after your purchase. Please review each prospectus carefully, as each fund family may have different share classes and costs to ensure that you select the share class most appropriate for you.

Commission and Fee Schedule

Effective January 1, 2018

Stocks and ETFs¹

ONLINE	<p>\$9.95 per trade for accounts with more than 30 executed trades in the prior 12 months or customers who qualify for the T. Rowe Price Select Client Services program²</p> <p>\$19.95 per trade for all other accounts</p> <p>\$0 commission on transactions for ETFs included in the FundVest[®] No-Transaction-Fee ETF program³</p>
TELE-TRADER	<p>\$9.95 per trade for customers who qualify for T. Rowe Price Select Client Services Program²</p> <p>\$35 per trade for up to 1,000 shares plus \$.02 for each share thereafter for all other accounts</p> <p>\$0 commission on transactions for ETFs included in the FundVest[®] No-Transaction-Fee ETF program³</p>
REPRESENTATIVE-ASSISTED	<p>\$9.95 per trade for customers who qualify for the T. Rowe Price Select Client Services program.²</p> <p>\$40.00 per trade for all other accounts.</p> <p>\$0 commission on transactions for ETFs included in the FundVest[®] No-Transaction-Fee ETF program.³</p>

Options

ONLINE	<p>\$9.95 plus \$1 per contract for accounts with more than 30 executed trades in the prior 12 months or customers who qualify for the T. Rowe Price Select Client Services program²</p> <p>\$19.95 plus \$1 per contract for all other accounts</p>
TELE-TRADER	10% off regular representative-assisted rates (subject to a minimum commission of \$35)
REPRESENTATIVE-ASSISTED	\$34.95 plus \$1 per contract

Orders partially executed across multiple trading days are subject to a separate commission charge for each day the order partially executes.

¹The commission charged for any stock trade will not exceed 3% of the principal value of the trade, subject to the applicable minimums listed above. Security markets have their own set of additional fees and/or taxes assessed by local governments and exchanges. These assessments are imposed on the financial services industry to cover the regulatory costs, and in all cases, the fees/taxes collected are passed on to the appropriate regulatory body or government agency. In addition, Agent Servicing fees may be imposed for American Depository Receipts (ADRs).

²Customers with \$250,000 or more qualify for Personal Services, and customers with \$1,000,000 or more qualify for Enhanced Personal Services. Qualifying investments consist of T. Rowe Price mutual fund, T. Rowe Price Brokerage account, and T. Rowe Price College Savings Plan accounts that are directly owned; trust accounts for which you are a trustee; and UGMA/UTMA, T. Rowe Price College Savings Plan, and Education Savings Accounts for which you are a custodian. Assets held in a 401(k) Plan, a Maryland College Investment Plan, or a University of Alaska College Savings Plan account are also eligible if you have a qualifying investment. Assets held in estate or corporate accounts are excluded. Your qualifying investment assets may be recognized with those of other eligible members of your household toward collective qualification for Select Client Services programs.

³FundVest[®] ETF is a no-transaction-fee (NTF) exchange-traded fund platform offered through Pershing LLC, member NYSE/FINRA/SIPC, a BNY Mellon Company. NTF shares purchased are subject to Section 11 of the Exchange Act. Purchasing on margin is prohibited within the FundVest[®] ETF platform, and all NTF-ETF shares must be held fully paid in the case account for 30 days from settlement before being considered margin eligible. ETF shares purchased prior to joining the platform will not be eligible for FundVest[®] ETF. Any shares held in an account that may have existed in a participating fund prior to the fund being on the platform will not be considered NTF; however, as long as an account holds at least one NTF share, any subsequent redemption of that fund will not incur a transaction fee.

Mutual Funds and UITs

NO-TRANSACTION-FEE (NTF) FUNDS¹	No charge ²
TRANSACTION-FEE FUNDS¹	\$35
LOAD FUNDS AND UITs	<p>Load Funds: No new purchases allowed—subsequent purchases and redemptions only. Subsequent purchases and redemptions subject to any applicable stated load.³</p> <p>UITs: No new or subsequent UIT purchases allowed—redemptions only.</p>

Short-Term Trading Fee

T. Rowe Price Brokerage charges a short-term trading fee equal to the greater of \$50 or 1%, not to exceed \$250, for no-load, and certain load, no-transaction-fee fund shares held for less than six months. A short-term trading fee of \$5 applies to those shares purchased systematically and held for less than six months. These fees are in addition to any redemption fee that a particular fund may charge. Short-term trading fees do not apply to T. Rowe Price funds; however, investors violating the T. Rowe Price fund excessive trading policy may be restricted from future purchases, as disclosed in the fund's prospectus.

Bonds and CDs

PRODUCT	COMMISSION ⁴
Treasury Auctions	\$50
Treasury Bills	\$50
Agency (FNMA, FHLMC), TIPS, Treasury and Coupon Notes and Bonds, Treasury 0% Coupon Bonds	\$1 per \$1,000 Bond
GNMAs and CMOs ⁴ (Minimum of \$25,000)	\$1 per \$1,000 Bond
Corporate Bonds	\$5 per \$1,000 Bond
Municipals (Minimum of \$5,000)	\$5 per \$1,000 Bond
PRODUCT	SALES CHARGE PER \$1,000 BOND
Certificate of Deposit (CD) (Minimum varies by issue)	CDs purchased at par (\$1,000)

¹If fund minimums are not met, certain fees may apply. If you hold no-transaction-fee fund positions along with transaction-fee fund positions, the no-transaction-fee fund positions will liquidate first.

²T. Rowe Price Investment Services Inc., may receive fees in connection with no-transaction-fee mutual funds for activities such as recordkeeping and shareholder services. T. Rowe Price reserves the right to change the funds available with no transaction fees and reinstate the fees on any funds as well as the right to charge a transaction fee if your short-term trading becomes excessive. If you purchased a fund and paid a transaction fee, one will be charged upon its sale even if it becomes a no-transaction-fee fund after your purchase. Please review each prospectus carefully, as each fund family may have different share classes and costs to ensure that you select the share class most appropriate for you.

³Effective January 1, 2018—T. Rowe Price will not accept new Load Fund or UIT purchases. Subsequent purchases of Load Funds already held will be permitted for breakpoint considerations, as well as redemptions of both Load Funds and UITs are permitted. Certain Fidelity Funds are also charged a \$35 transaction fee.

⁴Effective January 1, 2018—T. Rowe Price will not accept new CMO purchases. CMO redemptions and GNMA purchases and redemptions are subject to a \$35 minimum/\$250 maximum.

Precious Metals (Sale Transactions Only)⁵

Commissions for precious metal, bonds and CDs are for rep-assisted trading and can be traded by calling 1-800-225-7720.

PRODUCT	QUANTITY	COMMISSION ⁵
Gold, Silver, Palladium, and Platinum	Principal Value (PV)	Commission Charge (PV x %)
	\$0–\$9,999	.025
	\$10,000–\$49,999	.020
	\$50,000–\$99,999	.015
	\$100,000 and over	.0075

Fees for T. Rowe Price Brokerage Services*

ANNUAL ACCOUNT MAINTENANCE FEE	
\$30 Fee	<p>The \$30 fee is waived for:</p> <ul style="list-style-type: none"> ▪ T. Rowe Price customers who qualify for Select Client Services¹ ▪ Brokerage accounts in which five or more commission-generating trades are executed over the previous 12-month period (generally, September 1 through August 31 of each year) ▪ Brokerage customers who hold \$50,000 or more in T. Rowe Price mutual funds ▪ Brokerage Advantage customers subject to the \$40 cash management service fee (see below)
CASH MANAGEMENT SERVICE FEE	
\$40 Fee	<p>The \$40 fee will be charged:</p> <ul style="list-style-type: none"> ▪ For Brokerage Advantage accounts approved or activated for debit card or checkwriting services ▪ In the anniversary month of account opening

⁵Effective January 1, 2018—T. Rowe Price will not accept new purchases or incoming Precious Metals transfers. Commissions apply to sale transactions and are subject to a minimum commission of \$35.

* We no longer open Brokerage Advantage accounts. Fees applicable to existing Brokerage Advantage accounts.

¹Customers with \$250,000 or more qualify for Personal Services, and customers with \$1,000,000 or more qualify for Enhanced Personal Services. Qualifying investments consist of T. Rowe Price mutual fund, T. Rowe Price Brokerage account, and T. Rowe Price College Savings Plan accounts that are directly owned; trust accounts for which you are a trustee; and UGMA/UTMA, T. Rowe Price College Savings Plan, and Education Savings Accounts for which you are a custodian. Assets held in a 401(k) Plan, Maryland College Investment Plan, or University of Alaska College Savings Plan accounts also are eligible if you have a qualifying investment. Assets held in estate or corporate accounts are excluded. Your qualifying investment assets may be recognized with those of other eligible members of your household toward collective qualification for Select Client Services programs.

Fees for T. Rowe Price Brokerage Services* (Cont.)

MISCELLANEOUS FEES			
Account Transfer Out or Termination	\$50	Precious Metals Storage Fee	.75% of market value per annum, billed in arrears Minimum of \$5 per quarter
Returned Deposit Checks	\$20	Annual Custody Fee for Special Products (Limited Partnerships and Direct Participation Programs)	\$35 per position
Wire Transfer			
Out of Brokerage Account	\$15	Foreign Securities Transfers	Fee based on rate for country of origin. Up to \$75 for each foreign security transferred to or from T. Rowe Price Brokerage.
From Your Linked Money Market Option:			
\$5,000 or more	No fee	Foreign Securities Orders**	Fee based on rate for country of origin. Ranges from \$21.00–\$121.00 per purchase or sale, in addition to the applicable commission.
Less than \$5,000	\$5 per wire		
Certificates and Direct Registration Services (Register and Ship)	\$15 (Only available on a limited number of securities)		
Overnight Courier Per Item Delivery Fee	Standard = \$12.00 Saturday = \$18.00 International = \$25.00 <i>Waived for Brokerage clients who qualify for Select Client Services programs.</i>		
IRS Form 990T Filing (For RICs, REITs, Limited Partnerships)	\$200		
Physical Securities Processing	Transfer Agent processing fees for deposit, issuance, transfer, or cancellation of physical certificates. Fees vary by Transfer Agent, and are not eligible for waiver consideration.		

* We no longer open Brokerage Advantage accounts. Fees applicable to existing Brokerage Advantage accounts.

** Orders for foreign stocks that trade as an equivalent on U.S. OTC Bulletin Board or Pink Sheet Markets.

Margin Schedule

These services are available only to Brokerage and Brokerage Advantage* account clients

DEBIT BALANCES	PERCENTAGE ABOVE PERSHING'S BASE LENDING RATE
\$0–\$9,999	1.75% above the Pershing base lending rate
\$10,000–\$29,999	1.25% above the Pershing base lending rate
\$30,000–\$49,999	.75% above the Pershing base lending rate
\$50,000 and over	.25% above the Pershing base lending rate

Fees for Brokerage Advantage Account Clients*

CHECKING		VISA® GOLD ATM DEBIT/CHECK CARD	
Check Amount Minimum	None	ATM Withdrawal Fee ¹	None
Check Reorder Fee	No charge for first 40 checks; \$10 per 150 checks thereafter		
Copies of ATM, Sales, or Cash Advance Receipts	\$2.50	Daily Maximum ATM Withdrawal	The lesser of \$500 or your available balance ²
Stop Payments	\$10	Daily Maximum for VISA® Gold Card Transactions	The lesser of \$10,000 or your available balance ²
Returned Checks	\$15		
Check Copies	\$2.50		

* We no longer open Brokerage Advantage accounts. Fees applicable to existing Brokerage Advantage accounts.

¹Third-party ATM surcharges may apply to transactions performed at certain ATMs.

²Available balance includes a secured credit line backed by the value of the securities held in the margin account (provided account is approved for margin privileges)

VISA is a registered trademark of VISA U.S.A., Inc.

T. Rowe Price Brokerage is a division of T. Rowe Price Investment Services, Inc., member FINRA/SIPC. Brokerage accounts are carried by Pershing LLC (Pershing), member NYSE/FINRA/SIPC, a BNY Mellon company. T. Rowe Price mutual funds not held as positions in your Brokerage account are serviced by T. Rowe Price Services, Inc., and are not carried by Pershing.

Our easy-to-use website allows you to trade quicker and easier

Many independent investors rely on the Web as a trading tool and research platform, so we are continually enhancing our site to provide the most streamlined website possible.

It is now easier to access your Brokerage portfolio, complete transactions, perform research on the markets, and use investment tools.

Clear navigation makes getting everything you want a snap.

Our intuitive, user-friendly, navigation allows you to easily view your account information, including balances, current holdings, history, realized gains and losses, unrealized gains and losses, and projected cash flow.

Review your account and get the latest research—instantly.

The T. Rowe Price Brokerage website and our online Brokerage platform offer more of the features you need to make informed investing decisions. Here's a summary of what you'll find:

Overview page: This page provides a clean summary of holdings by asset class with access to quick-quote capabilities, recent news about companies in your portfolio, a list of the strongest and weakest performers, a recap of open orders and recently executed trades, and quick links to commonly viewed pages.

Industry-leading investment tools and research:

Access general market updates, news, and market movers, as well as stock, ETF, and mutual fund screeners, watchlists, and alerts.

Simplified Trading:

Initiate trades throughout the site. The easy-to-use Transact screen provides you with your funds available to trade, helpful definitions, a trade summary, and the ability to review your order before you submit.

Account History: Keep track of all your account activity for up to two years. You can search/filter by transaction type, ticker symbol, or CUSIP and can specify a time period or date range.

Quick Quotes Search: Obtain access to delayed or real-time quotes, when available, for a specific security.

Resource Center: Find answers to your questions and get information on your Brokerage account and services, including cost basis, access to forms, and commissions and fees.

Quick Links: Access commonly viewed pages like watchlists, markets, and news.

Balances page: View key values to get a clear picture of your account balances.

Holdings page: Get detailed information about the positions in your portfolio, including cost basis disposition and your dividend elections.

Unrealized/Realized Gains and Losses: Stay on top of your portfolio gains or losses.

Projected Cash Flow: Get projected cash flow for cash dividends and dividend reinvestment.

To take advantage of all these benefits:

- Go to troweprice.com/access
- Select "Register"
- Enter required information to set up online access to your accounts

Get the market information you need to make your own investment decisions

T. Rowe Price Brokerage is committed to making sure our clients have reliable research and market data at their fingertips whenever they need it.¹

We know that current information is essential for every independent investor, so we provide a wide range of material for you through the Web, phone, email, and mail. If you have any questions regarding our research services, representatives are available to help you from 8 a.m. to 8 p.m. ET, Monday through Friday.

Here's an overview of what's available:

T. Rowe Price Brokerage website

With clear, user-friendly navigation, it's easy to find the material you need to make your own investment decisions.

Online research and news

You get convenient access to the latest industry-leading investment tools and research. To access this service, you must have activated your account for online trading. You'll have access to:

Alerts: Set up various alerts to focus on news, trades, prices, volume, watchlists, positions, and other important data for delivery by email or to your mobile device.

Multi-quote compare tool: Access instant details on pricing, changes, and trends when analyzing multiple stocks, ETFs, or mutual funds.

Stock, Mutual Fund, and ETF Screeners: Perform a search for no-load mutual funds or for stocks and ETFs using the predefined and advanced screeners available through our online Brokerage platform.

Research: View data from several industry-leading sources in one place in an easy-to-read format with graphical visualizations.

Company News: Find the latest news on your stocks and other investments by keying in a company name or ticker symbol. Obtain charts and key financial data, including performance data.

SEC filings

View filings for companies, including annual and quarterly financials.

Additional research features

Company Financials: Review fundamentals and financials, including the latest quarter balance sheet, income, and cash flow statements.

Insider Activity: Review trading activity by company insiders.

Earnings: Compare annual and quarterly earnings and stay on top of upcoming earnings announcements.

Mutual Fund Compare Tool

Our Mutual Fund Compare Tool compares thousands of mutual funds based on a number of key measurements, such as performance, expenses and fees, fund characteristics, and volatility. Not all funds are available investments in your Brokerage account.

Visit our website at troweprice.com/brokerage and click on "Mutual Fund Compare Tool" in the Tools and Resources section to use this valuable resource.

¹Unless otherwise noted, the information provided through these services is prepared by independent investment research companies that are not affiliated with T. Rowe Price. While the information provided is deemed reliable, neither T. Rowe Price Brokerage nor the information providers guarantee the accuracy or completeness of the information or make any warranties with regard to the results obtained from its use.

Transaction guide: An introduction to trading with T. Rowe Price Brokerage

We want to make it as easy as possible for you to trade with T. Rowe Price Brokerage. The following pages will give you a clear overview of all the information you need, including:

- Funding your account
- Trading terms and procedures
- Settlement
- Additional transaction information
- Confirmations and statements
- Placing your trades:
 - Online account access
 - Tele-Trader
 - Placing orders through phone representatives
- Redemptions

Please refer to this section when you place your trade, or ask one of our representatives for assistance.

Funding your account

The best way to get money into and out of your account is to use your money market sweep fund. This method will ensure that you maximize the yield you earn on your money.

At the end of this section, you'll find instructions on how to quickly get money into your Brokerage account to settle a trade or for any other reason.

Subsequent investments into your money market sweep fund

1. Mail a check

You can use the sweep fund reinvestment slips you receive from us to make investments into your sweep fund account. Simply complete the reinvestment slip.

Brokerage customers should mail their slip to:

T. Rowe Price Brokerage
P.O. Box 17435
Baltimore, MD 21297-7435

T. Rowe Price Brokerage does not accept the following items: certified/cashier's checks under \$10,000, foreign checks, money orders, traveler's checks, third-party checks, checks drawn against credit lines, or cash.

2. Wire money from your bank

If you are wiring money into your sweep fund account, please provide the following information to your bank.

	For Brokerage and Brokerage IRA* Customers	For Brokerage Advantage* Customers
Receiving Bank	The Bank of New York	The Bank of New York
Receiving Bank ABA #	021000018	021000018
Beneficiary	T. Rowe Price [sweep fund name]	Pershing LLC
Account #	890-062480-9	890-051238-5 (Pershing LLC)
Originator to Beneficiary Information (OBI)	Your name as it appears on your sweep fund account and your sweep fund account number	Your name as it appears on your account and your Brokerage Advantage nine-character account number

* Instructions on how to purchase funds should be included in the OBI for IRAs, as the shareholder can specify current or prior-year contributions as well as rollover contributions.

* We no longer open Brokerage Advantage accounts. Fees applicable to existing Brokerage Advantage accounts.

3. Establish a systematic investing plan[†]

You can have all or a portion of your payroll, Social Security, or pension checks deposited directly into your money market sweep fund. Or you can have a set amount moved automatically each month from your bank checking account into your sweep account. Just call us and ask for an Account Services Form to establish a systematic investing plan into your sweep fund. For direct deposit services, Brokerage Advantage* customers should request a Brokerage Advantage Direct Deposit Form.

Redeem money from your sweep fund using the Automated Clearing House (ACH) network

Just access your account online and follow the directions, or call one of our representatives to redeem funds using ACH. The money will be sent electronically to your bank and should arrive within two to three business days.

If you did not establish this service when you completed your new account form, download an Account Services Form or call us at **1-800-225-7720** to request one. Complete, sign, and return the form, and we will add ACH service to your money market sweep fund account. **Once this service is added, you will also have the ability to perform ACH transactions online.**

[†]Investing through systematic investing cannot assure a profit or protect against loss in a declining market. Since it involves continuous investment regardless of fluctuating price levels, investors should consider their financial ability to continue purchases through periods of both high and low price levels.

*We no longer open Brokerage Advantage accounts. Fees applicable to existing Brokerage Advantage accounts.

Trading terms and procedures

This section will familiarize you with the terms used in trading and provide instructions you'll need to finalize your trades. Please refer to this section when placing your orders or asking one of our representatives for assistance.

Types of orders/qualifiers/duration

There are several types of orders you should know about:

Market orders are placed and executed immediately at the prevailing market price; they are subject to market fluctuations.

Limit orders are placed at a specified price. The order cannot be executed above the buy limit or below the sell limit. This may help you reduce some risk when trading stocks in fast-moving markets. There is no guarantee when or if a limit order will be executed.

Stop orders are customer orders that become market orders when the price of a security reaches or passes a specific price. These are available for some options but must be requested over the phone.

Sell-stop orders are entered at a price below the stock's current market price. If the stock falls to or below your sell-stop price, your order will become a market order and will execute at the next available price. This generally helps protect you against a large loss even if you're not constantly watching the market.

Buy-stop orders are entered at a price above the stock's current market price. If the stock rises up to or above your buy-stop price, it will become a market order and execute at the next available price. This generally helps you protect profit/loss on a short sale.

Stop-limit sell or buy orders are the same as stop orders, with one exception; when the stop price is reached, the order becomes a limit order instead of a market order. There is no guarantee that the order will be executed if it cannot be filled at the limit price.

Duration of order

Day orders stay in effect until the next market close. Most market orders are day orders.

Good-till-canceled orders are orders to buy or sell a security at a set price that is active until the trade is canceled, executed, or expires as per the predefined duration set by your firm.

Qualifiers on limit orders (if desired)

All-or-none orders are orders to buy or sell more than one "round lot" of stock, or more than one bond, at one time at a designated price or better. They are only executed when both conditions can be satisfied simultaneously.

Do-not-reduce (DNR) orders are orders to buy, stop orders to sell, or stop-limit orders to sell that are not to be reduced by the amount of a cash dividend on the ex-dividend date.

Please note: These order types/durations/qualifiers do not apply to mutual funds. Fund orders are processed at the next available price.

Settlement

For securities held in your cash account, your money market sweep fund will be used to pay for all purchases and to receive all sales proceeds, dividends, and interest payments.

Purchases

Your account balance (plus your buying power if you have a margin account) must be adequate to cover the total amount of your trade at the time you place the order. Purchases placed in your cash account will be funded by available cash or money market sweep fund balances. Purchases placed in your margin account will be funded by a margin loan (unless we are instructed otherwise). If you have a margin account and place the order in your cash account, the purchase will be funded by available cash or money market sweep fund balances. If these are insufficient to cover your trade, a margin loan will be extended. You will earn dividends up through, but not including, settlement day on sweep fund balances used to pay for your purchases. Your sweep account will also be debited on settlement date. Prior approval is required for establishing margin trading capability. Margin trading privileges are not available for IRAs.

Selling securities

The certificates for the securities you wish to sell must be in your Brokerage account at the time you place the order. This is most easily accomplished by holding all of your positions in street name. If you hold the physical certificates in your possession, you must endorse and deliver them to us prior to placing your order to sell. Please refer to page 16 for further instructions.

For customers holding securities in a margin account, sales proceeds will first reduce any margin debit balance your account may have. Once any outstanding margin loan balance is reduced to zero, you will begin to build up a credit balance in your margin account. No interest is earned on this credit balance. You can call us and instruct us to move this balance to your money market sweep fund where you will earn a competitive yield.

For securities held in a regular Brokerage cash account, your sales proceeds will be posted into your sweep fund the day after settlement and start to earn interest that day.

For securities held in a Brokerage Advantage* cash account, your sales proceeds will be posted into your sweep fund on the settlement date.

Note: Before any sale proceeds can be paid, the underlying securities must be held in “good deliverable form” in your account one business day before the settlement date.

Dividends and interest payments

For clients holding securities in a margin account, all cash dividends and interest payments will first reduce any margin debit balance your account may have. Once any outstanding margin loan balance is reduced to zero, you will begin to build up a credit balance in your margin account. No interest is earned on this credit balance. You can call us and instruct us to move this balance to your money market sweep fund where you will earn a competitive yield. For securities held in cash (i.e., non-margin) accounts, dividends and interest payments will be credited to your sweep fund, and you will begin earning sweep fund dividends the day after settlement.

* We no longer open Brokerage Advantage accounts. Fees applicable to existing Brokerage Advantage accounts.

Additional transaction information

Opening an option position

You must have cash in your account to cover the total cost of the transaction.

Margin account proceeds

Any security held in the margin account will be sold in the margin account. Proceeds from sales of securities held in margin are first applied to reduce or eliminate any debit balance in the margin account. Should a sale cause a credit balance in the margin account, T. Rowe Price must receive direct instructions to move this credit balance to your money market sweep fund. If you do not provide instructions, this balance will remain in your margin account and will earn no interest.

Certificates

How to endorse certificates

Before you send us any certificates, ensure that they are properly endorsed for your protection. Please refer to these instructions:

Instructions for endorsing certificates

1. Write your Brokerage account number in the upper right-hand corner.
2. Leave blank the section "For value received, _____, hereby sell, assign, and transfer unto"
3. Appoint "T. Rowe Price Investment Services, Inc." as attorney in the space provided after "Shares of the stock represented by the within certificate and do hereby irrevocably constitute and appoint _____."
4. Fill in the date in the space provided.
5. Sign on the signature line exactly as the name(s) appears on the face of the certificate. All parties whose names appear on the certificate must sign.

Please note: If the stock certificate is not registered identically as the registration appears on your Brokerage account, contact a financial representative for proper instructions.

Please mail certificates via USPS certified mail to:

**T. Rowe Price Brokerage
P.O. Box 17435
Baltimore, MD 21297-7435**

To receive certificates

If you wish to have a certificate sent to you, call **1-800-225-7720**. There is a fee for each certificate you request. See our Commission and Fee Schedule for details. Not all securities are available for certificate delivery.

If you asked to automatically receive certificates for every purchase, the fee will be shown on your monthly statement and deducted from your account before the certificate is mailed. If the funds are unavailable, mail your check and written request to:

**T. Rowe Price Brokerage
Attn.: Cashiering
P.O. Box 17435
Baltimore, MD 21297-7435**

Your written request should include your account number, the number of shares, and the name of the stock.

Note: The certificate(s) will not be mailed until the fee is received.

Confirmations and statements

What your trade confirmation will show

We'll mail you a confirmation of each trade one business day after the trade date. It will show:

- Type of trade and name of security or metal bought or sold
- Trade and settlement dates
- Quantity and price
- Principal amount of transaction
- Brokerage commission (if applicable)
- State tax or interest (if applicable)
- Other fees (if applicable)
- Net amount of transaction
- Details on callable securities

What your account statement will show

The first page of your statement presents a summary of your portfolio, including T. Rowe Price mutual funds not held in your Brokerage or Brokerage Advantage account. This section includes your portfolio value, activity summary (additions, deductions, transfers, and fluctuations), income summary, and a portfolio overview.

The remaining pages contain details of your monthly activity in individual accounts. The holding section includes month-end detail (quantity, price, estimated annual income, and yield). The Brokerage Income Summary details your earnings by tax status, and the activity sections show detailed transactions. There are also sections showing open orders and trades settling next month.

Periodically, you will receive service notices and investment slips.

Please note: Bond fund income distributions made on the last business day of the month may be reported as occurring on the first business day of the subsequent month. This is merely a processing delay associated with statement production. The shares you own and the value of your investment are not affected.

Go paperless

You can have instant access to your statements, confirmations, and more through our e-delivery. Just visit us at troweprice.com/paperless to take advantage of this free service. You'll not only save time and paperwork but also be able to review all your statements, confirmations, and other documentation in one place.

Cost basis reporting for Brokerage accounts

Understanding the implications of different cost basis methods on your personal tax strategy is important. Below are some key factors you should keep in mind when considering your strategy:

- Equities purchased on or after January 1, 2011, are considered "covered securities" for cost basis regulations. T. Rowe Price is required to report the cost basis information of shares sold on Tax Form 1099-B. You may choose a cost basis method for these stocks or you may use the IRS default method. The IRS default method for stocks is first in, first out (FIFO).
- Mutual funds and dividend reinvestment plan shares purchased on or after January 1, 2012, are covered securities. Mutual funds (through their transfer agents or T. Rowe Price) are required to report the cost basis of shares sold on Tax Form 1099-B. You may choose a cost basis method for your mutual fund shares or you may be defaulted to a method acceptable to the IRS. T. Rowe Price's default method is average cost. Note that if you decide to use average cost for a particular fund and you subsequently redeem shares of that fund, you must use average cost for those shares currently held in the fund, and changes to the cost basis method would only apply to prospective shares purchased.

- Certain less complex bonds, options, and other IRS-specified securities purchased on or after January 1, 2014, are covered securities. T. Rowe Price is required to report the cost basis information of those securities sold on Tax Form 1099-B. You may choose a cost basis method for these securities or T. Rowe Price may default you to a method acceptable to the IRS.
- More complex bonds and options purchased on or after January 1, 2016, are covered securities. T. Rowe Price is required to report the cost basis information of those securities on Tax Form 1099-B. You may choose a cost basis method for these securities or T. Rowe Price may default you to a method acceptable to the IRS.

If you reinvest dividends and capital gains, keeping good records of the cost basis is especially important. Distributions to you generally are taxable even if you reinvest them. The reinvested distributions increase the cost basis of your investment, so it is important to keep a record of all investments, including shares acquired by reinvestment of distributions.

Placing your trades

This section provides all the information you need to start trading with T. Rowe Price Brokerage. No matter how you place your order, you'll enjoy fast, responsive service at a price that saves you money compared with full-service brokerages.

You'll find clear instructions for trading through:

- The Web
- Tele-Trader
- Our phone representatives

Trading in fast-moving markets

At times, certain market segments can experience extremely high volume and high volatility. We urge you to exercise additional care should you decide to trade securities experiencing these unusual pressures. For instance, a characteristic of fast-moving market segments is that executions and subsequent confirmations can be delayed. Please consider using some of the techniques described in this Transaction Guide section, such as using limit orders, to help manage the heightened risk inherent in these markets. And while it is always important to keep your long-term investment goals and your risk tolerance in mind, it is particularly relevant during times of unusual market stress.

Placing your trades

You have everything you need to begin placing orders right now. Just refer to the cover letter sent with your welcome kit for your account number.

Margin orders: You must be approved for margin trading upon completion of a Margin Agreement.

Option orders: You must be approved for option trading after completing a separate Option Agreement.

To request a form for either of these services, please call **1-800-225-7720** or visit our website at **troweprice.com/brokerage**.

We encourage you to read through this section and refer to it whenever you have a trading question regarding the following:

- Certificates of deposit
- Common and preferred stocks
- Corporate bonds
- ETFs
- GNMA's
- Municipal bonds
- Options
- U.S. government securities
- Zero-coupon bonds

Online account access

Our Online Account Access system gives you all the tools you need to invest effectively.

You can:

- Get a snapshot of all your accounts
- Buy and sell stocks, mutual funds,* ETFs, options, and more
- Get quotes, news, and research
- View your trade confirmations, account statements, and tax forms
- View your account profile

Online security

At T. Rowe Price, safeguarding your online security and privacy is a high priority. We use strict controls to help ensure that your online communications and transactions are safe and reliable.

T. Rowe Price will not request personal information via email or text message. You should only provide account information via T. Rowe Price's secure website, when calling T. Rowe Price, or by U.S. mail/express delivery.

Two-factor authentication

T. Rowe Price offers Two-Factor Authentication, which requires you to enter your password plus a one-time access code to provide greater security during the login process.

When you log in, a unique access code is sent to you via text message to your mobile device. For investors with a T. Rowe Price Brokerage account, you can choose to receive access codes via digital token.

How to gain Online Account Access

With an online account, you can trade fast and trade for less. You can get started in just a few minutes:

- Go to troweprice.com/access
- Select "Register"
- Enter required information to set up online access to your accounts

Please note: If you are planning on using the Internet to make an online transaction, you must activate your account one business day in advance.

Very important: Check your browser

The T. Rowe Price website is compatible with most Web browsers. The following Web browsers are recommended based on your operating system.

Windows:

- Microsoft Internet Explorer 8.0 and higher and Edge
- Mozilla Firefox 17.x and higher
- Google Chrome 23.x and higher

Macintosh:

- Safari 4.x and higher
- Mozilla Firefox 17.x and higher
- Google Chrome 23.x and higher

Now you're ready to begin using T. Rowe Price Brokerage Online Account Access. All orders entered online are subject to T. Rowe Price Brokerage approval.

Although Online Account Access is an effective way to route your orders to T. Rowe Price Brokerage, it does not act as a direct link to any particular stock exchange or market center.

*Some limitations apply.

T. Rowe Price Brokerage Tele-Trader Guide

This flexible service, featuring voice recognition, can be accessed toll-free from any touch-tone telephone within the United States. It offers a \$35 flat commission for stock trades up to 1,000 shares, plus \$.02 per share thereafter and an extra 10% off of our regular representative-assisted commissions for option trades (subject to a minimum commission of \$35).

Tele-Trader offers you a wide variety of trading and account management options where you can:

Place orders for stocks, ETFs, options, and mutual funds: Enter market, limit, or stop orders for stocks or ETFs; enter market or limit orders for options; and enter market orders for mutual funds. You also may cancel open orders and replace existing orders for all of the above securities.

Access real-time quotes: Use for stocks and options and check on key market indicators.

Review account information: Confirm your buying power and money market sweep balance; confirm the total market or equity value of your account; and review individual stock, option, and mutual fund positions.

Create personal model portfolios: Monitor prices and trading volumes of selected securities.

In addition, you'll still get reliable executions and the opportunity to save compared with full-service brokers.

Getting started

Step 1: Call Tele-Trader directly at 1-800-638-8879 or Call T. Rowe Price Brokerage at 1-800-225-7720 and select option 1 after entering your information.

Step 2: Speak or enter your Brokerage account number.

Note: For touch-tone entry, simply select one number on the keypad to represent the alpha portion of your account number, and then verify the account prefix (30A, 30B, 30P, 30R, 30Q, or T3P).

Step 3: Enter your personal identification number (PIN).

Important: If you are using the system for the first time, your initial PIN is your date of birth in the format of mmdd. You should select a new four-digit PIN.

How to use Tele-Trader

Tele-Trader features intuitive voice prompts that make it easier for you to trade or get information. From the main menu, you can go to any point in the service by speaking or by pressing the corresponding key whenever you hear a command, and the system will promptly take you to your desired destination.

Anytime you want to return, simply say **Main Menu** or **press *1**. You can always say **Representative** or **press 0** to be transferred to T. Rowe Price Brokerage for assistance. To end your call, just hang up.

The menu on the following page provides quick, clear instructions for trading and other common account-related requests. For each, you can either speak your request or use the telephone keypad.

Tele-Trader Main Menu Overview

Option	Function
Say Trading or press 1	<ul style="list-style-type: none"> Place orders for stocks, mutual funds, ETFs, or options. Access open orders or orders executed the same business day. Change or cancel open orders.
Say Quotes or press 2	<ul style="list-style-type: none"> Get quotes for stocks, options, mutual funds, or levels of market indices. Create, review, update, or delete model portfolio watchlists.
Say Account Information or press 3	<ul style="list-style-type: none"> Retrieve account balances, positions, and recent trade history.
Say Preferences or press 4	<ul style="list-style-type: none"> Set up or change your callback preference when a trade executes in your account. Change your Tele-Trader PIN.
Say Change Account or press 5	<ul style="list-style-type: none"> Switch to another T. Rowe Price Brokerage account.

Help Menu Options

For more information, say **Help** or press **6** for a demonstration.

For a tutorial about available shortcuts, press **7**.

For a general tutorial, including instructions on using the keypad on your touch-tone phone, press ***9**.

For assistance, say **Representative** or press **0**.

What Tele-Trader can do

The following tutorial describes the Tele-Trader functions and includes instructions on using voice recognition or your touch-tone keypad to place orders, access account information, or get quotes.

To access the Trading menu—say “trading” or press 1

From the **Trading** menu, you may place stock, mutual fund, ETF, or option orders and access your open orders and any orders that executed in your account within the same business day.

Security types supported

Stocks
Mutual Funds
ETFs
Stock Options and Long-Term Equity Anticipation Securities (LEAPS)

Order qualifiers available

Day
90 Day
All or None
Do Not Reduce

Order types available

Market/Limit/Stop
Market
Market/Limit/Stop
Market/Limit

Account types supported

Cash
Margin

In the **Trading** menu, you can say a company name or a ticker symbol for the stock you want, or you can say **Options, Mutual Funds, Order Status, Change an Order, Cancel an Order, or Main Menu**. Please be sure there are sufficient funds (cash, money market sweep, buying power for margin accounts) or shares in your account before placing an order via Tele-Trader.

Stock or ETF Order

Say the company name or its ticker symbol or **press *9** to learn how to enter the symbol via your touch-tone phone. You will be prompted to choose an action (buy or sell) and designate the number of shares, type of order (market, limit, or stop), and account type (cash or margin). After entry, the order will be read back, and you will be prompted to say **Place the Order** to submit or **Cancel**. After the order is sent for processing, an order number will be provided, which you should retain for your reference.

Mutual Fund Order

Say **Buy Funds** or **Sell Funds** to begin your mutual fund order. You must then provide the name of the fund or its ticker symbol, verify that you have read and understand the fund prospectus, and indicate whether you wish to reinvest dividends. You must specify a dollar amount for the order.

After entry, the order will be read back, and you will be prompted to say **Place the Order** to submit or **Cancel**. After the order is sent for processing, an order number will be provided, which you should retain for your reference.

Option Order

Say the company name, underlying ticker symbol, or option root. Say an expiration month (for LEAPS, an expiration year), state a specific **Strike Price**, or say **List Price** for a valid list of available strike prices. Specify **Put** or **Call**, choose an action (buy to open, buy to close, or sell to close), and indicate the number of contracts and type of order (market or limit). After entry, the order will be read back, and you will be prompted to say **Place the Order** to submit or **Cancel**. After the order is sent for processing, an order number will be provided, which you should retain for your reference.

Order Status—Change or Cancel Orders

Say **Order Status** to access a list of open orders, orders executed on the current business day, or a combined list of open and executed orders. While listening to your orders, you can say any of the following commands:

Change—modify open orders

Cancel—submit request to cancel an open order

Next—skip ahead to another order

Repeat That—hear the same order again

Go Back—repeat the previous order

I'm Done—return to the main menu

The description of each order will include the order ID. You can say **Change** to adjust shares, order type, or time in force, or say **Cancel**.

All Tele-Trader orders are subject to prior approval by T. Rowe Price.

Open mutual fund orders cannot be changed or canceled via Tele-Trader; contact a T. Rowe Price representative for assistance.

If you prefer to enter symbols via the keypad on your touch-tone phone when placing orders, refer to the letter conversion table on the next page.

To access the “Quotes” menu—say Quotes or press 2

From the **Quotes** menu, you may obtain individual stock, mutual fund, option, or index quotes and create up to 20 **model portfolios**, each containing a total of

20 ticker symbols, for easy access to groups of symbols you wish to track.

Quotes Supported

- Exchange listed, Nasdaq, and OTC Bulletin Board stocks
- Mutual funds
- Stock options, index options, and LEAPS
- Major market indices, including Dow Jones Industrial, Nasdaq, and S&P 500

Stock Quotes

In the **Quotes** menu, you can say the name of the company or its ticker symbol to obtain a quick quote, including the symbol, bid, ask, last trade, and change from the previous day's closing price. Tele-Trader then asks if you want to place an order for that symbol, get details, or add the symbol to a model portfolio. If you choose to get details, an expanded quote is provided, including today's volume, opening price, and trading range.

Option Quotes

For option quotes, say **Options** from the **Quotes** menu to redirect to the option script. The next prompt will be for the company name, underlying ticker symbol, or option root. You will be asked to state the expiration month—or, for LEAPS, expiration year—or elect to hear a complete list of current expirations for the specified symbol. The next prompt will be for **Strike Price**, or you can elect to hear a complete list of valid strike prices. After you've identified the underlying stock or index, expiration month, and strike price, you will be prompted to specify whether you want a quote for a **Put** or **Call**. Option quotes include the bid, ask, and last trade. After the quote is provided, you will be asked if you want to **Place an Order**, **Get Details** (expanded quote, including volume, opening price, and trading range), or **Add Symbol** to a model portfolio.

Mutual Fund Quotes

For mutual fund quotes, say **Mutual Funds** from the **Quotes** menu to redirect to the mutual fund script. Say the fund name or ticker symbol to obtain the net asset value, or price, and change from the previous day's closing price. To enter a trade, you may say **Place an Order** or **Add Symbol** to add the fund to a model portfolio.

Index Quotes

To obtain the current level of the Dow Jones Industrial, Nasdaq, or S&P 500 Index, say **Indices** from the **Quotes** menu. You will then be prompted to say the index name or enter its symbol for a quote. You may also choose to say **How's the Market** for a current indication of all three indices or, if you wish, add to a model portfolio for easy retrieval next time.

Model Portfolio

This user-friendly model portfolio utility lets you create and access lists of ticker symbols for easy tracking, rather than entering individual symbols every time you call.

From the **Quotes** menu, say **Model Portfolio** to access an existing portfolio or create up to 20 new portfolios of 20 symbols each. While listening to your model portfolio, you can say any of the following commands:

Review—to hear the quotes in your list

Update—to add or delete symbols on an existing list

Create—to add a new list

Delete—to remove a list

Touch-tone symbol keypad entry

You may choose to use the keypad on your touch-tone phone to enter ticker symbols instead of speaking the symbol or company name. For instructions, please refer to the following tutorial and handy letter conversion table.

Using the tone symbol keypad entry

Step 1	Press the key that contains the letter.
Step 2	Press 1, 2, or 3 to indicate whether it's the first, second, or third letter on the key.
Step 3	After entering all letters in the symbol, press #.
	<p>Example: Using touch-tone keypad for a quote on IBM:</p> <p>I is on the 4 key and is the third letter—enter 4, 3.</p> <p>B is on the 2 key and is the second letter—enter 2, 2.</p> <p>M is on the 6 key and is the first letter—enter 6, 1.</p> <p>IBM symbol conversion = 43 22 61 #</p>

Letter Conversion

A = 21	J = 51	S = 73
B = 22	K = 52	T = 81
C = 23	L = 53	U = 82
D = 31	M = 61	V = 83
E = 32	N = 62	W = 91
F = 33	O = 63	X = 92
G = 41	P = 71	Y = 93
H = 42	Q = 77	Z = 99
I = 43	R = 72	Decimal point = *

Note: Letters Q and Z have a special Letter Conversion Code as they are considered special characters. Please do not follow the instructions in Steps 1 and 2 for these letters.

Using the Touch-Tone Keypad to Enter Special Symbols

Preferred or Class For preferred or class symbols, enter the stock symbol followed by 12#.

After the prompt for class designation, enter the two-digit code for the letter corresponding to the class, followed by the # sign.

For a preferred stock, enter **7172** followed by the two-digit code for the series, or if there is no series, enter **7172** followed by the # sign.

Example: BRK A or BRK B

Step Enter 22 72 52 12#

Step Hear prompt for class designation

Step Enter 21 for Class A or 22 for Class B

Decimal Points

To enter a decimal point, press the * key.

Example: 20.00

Enter 20*00

To access your account—say “account information” or press 3

From the **Account Information** menu, you can retrieve balances, positions, and recent trade history.

Balances

Say **Balances** from the **Account Information** menu for the following:

Balance Information	Definition
Total Account Balance	Total debit or credit balance from unsettled transactions, updated for intraday activity.
Money Market Fund Balance	Total balance of your money market sweep account.
Buying Power	For margin accounts only, total margin buying power as of previous business day's close.
Total Market Value	Total value of your long positions, excluding commercial paper, precious metals, options, and annuities.
Total Account Equity Value	Market value of your account plus or minus any debit or credit balance.

Positions

Say **Positions** from the **Account Information** menu to review individual positions with quantities updated as transactions occur. The quantity held, current quote, market value, and account type of each position are provided. When listening to your current positions, you may say **Close Position** to place an order to sell, **Next** to skip to the next position, **Repeat That** to hear a description of the position again, or **I'm Done** to return to the main menu.

Recent Trade History

Say **Recent Trade History** for a list of all trades executed in your account during the current and previous two business days. Trade details include action, quantity, symbol, price, and net amount.

To access the Preferences menu—say “preferences” or press 4

The **Preferences** menu allows you to elect to receive an automated callback when an order executes in your account and features a function to change your Tele-Trader PIN.

Callback Preference

Say **Callback** from the **Preferences** menu. Tele-Trader prompts you to enter the 10-digit phone number at which you wish to receive a computerized telephone call when a trade executes in your account. You may also change the phone number or cancel the callback provision through this function.

Change PIN

Say **Change PIN** to select a new PIN when accessing Tele-Trader. The system will prompt you to say or enter your current PIN, then enter your new PIN, and then reenter your new PIN for accuracy.

To access the Change Account menu—say “change account” or press 5

The **Change Account** menu allows you to access another T. Rowe Price Brokerage account without having to end your Tele-Trader session.

Change Account

You will be prompted for the new account number and asked to designate the account prefix and enter the appropriate PIN for the new account.

Placing orders through phone representatives

Step-by-step instructions for orders handled by representatives

Simply call us toll-free at **1-800-225-7720**. Our representatives are available weekdays from 8 a.m. to 8 p.m. ET.

When you call, tell us:

1. Your name, account number, and account registration
2. Account type—cash, margin, or short
3. Instructions to buy, sell, or sell short
4. Quantity (number of shares, face amount of bonds, or number of option contracts)
5. Type of order (see page 14 of this Transaction Guide for explanations)^{1,2}
 - Market order
 - Limit order
 - Stop order (sell-stop, buy-stop, stop-limit)³
6. Duration of order—one day or 90 days²
7. Any qualifiers (if desired)²
8. If it is an options trade, whether you are opening or closing a position

Sufficient funds and/or certificates must be in your account at the time you place your order.

Our representatives will record and repeat all of the order information. Please verify its accuracy or take this opportunity to make any corrections before your order is entered. A trade confirmation will also be mailed to you one business day after your order is executed. If you purchase a stock and want the certificate(s) sent to you, inform the representative at the time you place the order. (Note: There is a fee for each certificate sent to you.)

How to cancel/replace an order

If you call to change a previously placed open order, please remember to begin by telling the representative that you want to cancel and replace the existing order and then give the new instructions. This will help eliminate the risk that both orders will be executed. Your prior order will be canceled or, if it has already been executed, you will be notified that the subsequent order could not be placed. Under certain market conditions (e.g., fast-moving markets), it may not be possible to confirm the status of your original order until later in the trading day.

Please use caution when canceling an existing order and entering a new order—as opposed to using the cancel-and-replace option described above. Lack of immediate confirmation does not necessarily mean your order was not executed. Therefore, it is possible that entry of a subsequent order will result in the execution of both orders.

¹The above orders may not always be available due to exchange regulations or market conditions. Our representatives can assist with these stipulations.

²These order types/duration/qualifiers are not relevant for mutual fund orders; all mutual fund orders will be executed at the next available price.

³Stop orders are only available for certain option trades.

Redeeming money from your money market sweep fund

1. Use your sweep fund checks

One way to redeem funds from your sweep fund account is by using a check (minimum check amount: \$500). If you don't have this checkwriting service on your money market sweep fund, call us and we will send you the appropriate form so you may enjoy this feature.

2. We can send you a check for your account proceeds

You can redeem sweep fund shares online through Online Account Access, through Tele-Trader, or by calling one of our representatives. We will send a check to your address of record.

3. Redeem from your sweep fund using the Automated Clearing House (ACH) network

Just access your account online and follow the directions, or call one of our representatives to redeem using ACH. The money will be sent electronically to your bank and should arrive within two to three business days.

If you did not establish this service when you completed your new account form, download an Account Services Form or call us at **1-800-225-7720** to request one. Complete, sign, and return the Account Services Form, and we will add ACH service to your money market sweep fund. Once this service is added, you will be able to perform ACH transactions online.

4. Wire money out of your account

You can establish this service by completing an Account Services Form. Once you have an established wire transfer service, you can call a representative at **1-800-225-7720** to request a wire of funds to your bank account.[†]

[†]A \$5 fee applies for transfers less than \$5,000.

Brokerage Account Agreements

Effective February 1, 2018

T. Rowe Price Investment Services, Inc.

GENERAL INFORMATION

The Brokerage Customer Agreement, Precious Metals Agreement, and New Account Form Agreement (collectively “Account Agreements”) contain important terms and conditions. Please read the applicable Account Agreements carefully and retain them for future reference. If you have questions concerning any of the Account Agreements, please call customer service at **1-800-225-7720**.

The words “I,” “myself,” “me,” and “my” refer to the person(s) who signed the New Account Form. “Price” refers to T. Rowe Price Investment Services, Inc. “Price Funds” refers to mutual funds sponsored by T. Rowe Price Associates, Inc. “Pershing” refers to Pershing LLC, a subsidiary of The Bank of New York Mellon Corporation, Price’s clearing broker for my Account.

The term “Account” refers to my Brokerage account.

BROKERAGE CUSTOMER AGREEMENT

I agree as follows with respect to my Account:

1. Predispute Arbitration Clause.

These Account Agreements contain a Predispute Arbitration Clause. By signing an Arbitration Agreement, the parties agree as follows:

- 1. 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.**
- 2. Arbitration awards are generally final and binding; a party’s ability to have a court reverse or modify an arbitration award is very limited.**
- 3. The ability of the parties to obtain documents, witness statements, and other discovery is generally more limited in arbitration than in court proceedings.**
- 4. 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.**
- 5. The panel of arbitrators will typically include a minority of arbitrators who were or are affiliated with the securities industry.**
- 6. 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.**
- 7. The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this Agreement.**
- 8. No person shall bring a putative or certified class action to arbitration, or 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, (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.**

I agree to settle by arbitration any controversy between myself and Price; its parent or affiliates; and/or any such officers, directors, employees, agents, or Price’s clearing broker, Pershing, relating to the Account Agreements, this Account and all accounts with Price, or transactions, or in any way arising from my Brokerage relationship with Price, whether entered into prior to, on, or subsequent to this date. Such arbitration will be conducted before and according to the arbitration rules of the Financial Industry Regulatory Authority (FINRA), unless the choice of another arbitrator forum is required by applicable state law. I understand that this Predispute Arbitration Clause does not apply to any controversy or transaction involving T. Rowe Price funds unless they are held in my Brokerage Advantage Account.

Price or I may initiate arbitration by serving or mailing a written notice. If I do not designate the arbitration forum in my notice or respond in writing within five days after receipt of Price's notice, I authorize Price to designate the arbitration forum on my behalf. Judgment on any arbitration award may be entered in any court having jurisdiction, and I submit myself and my personal representative(s) to the jurisdiction of such court.

- 2. Authority and Ownership.** I am at least 18 years of age, have the required legal capacity to enter into this Agreement, and have provided or will provide Price with all necessary authorizations (from third parties, if necessary) to open an Account and effect transactions in securities and precious metals under this Agreement. I will be the owner of all securities and precious metals purchased, held, and sold by me through Price. I have accurately completed my New Account Form and will notify Price promptly if any of the information changes.
- 3. Appointment of Price as Agent.** I appoint Price as my agent for the purpose of carrying out my directions with respect to the purchase or sale of securities and precious metals. To carry out its duties, Price is authorized to open or close my Account, place and withdraw orders, provide information to third parties, and take such other steps as are reasonably necessary to carry out my directions.
- 4. Clearing Broker.** My Account is carried by Pershing, pursuant to a Clearing Agreement with Price. For a description of the functions performed for my Account by Price and Pershing, please consult the Brokerage Account Disclosure Statement.
- 5. No Advice.** I am responsible for determining the nature, potential value, and suitability for me of any particular security, transaction, or investment strategy. Price does not provide tax, legal, or investment advice or offer any opinion or recommendation with respect to the suitability or profitability of any security or order. All transactions will be executed only on my order or the order of my authorized delegate except as described in Section 12 and 20, or as otherwise disclosed in the Margin or Precious Metals Agreement, if applicable.
- 6. Understanding Terms of Securities.** Certain securities or transactions may offer rights that expire unless I take some action. For example, warrants and stock purchase rights typically may be exercised only on or before a specified expiration date. Some convertible redeemable securities will be redeemed automatically unless conversion rights are exercised before a specified date. Some bonds may be redeemed, at the holder's option, only during specified periods. Also, some securities may become the subject of tender or exchange offers, which are limited in time. I understand that I am responsible for knowing the rights and terms of my securities in my Account and for taking action to realize any value on my securities. I acknowledge, however, that Price is not obligated to notify me of impending expiration or redemption dates or the terms of any tender or exchange offers.
- 7. Money Market Sweep Fund Settlement Authorization.** Price requires all new accounts to select a T. Rowe Price money market fund as a sweep option. Price generally does not allow free credit balances to be maintained in my account. Price may change the products that are available as sweep options in the future. On the settlement date, Price may debit my designated money market sweep fund (Money Market Sweep Fund) for payment of securities purchased by me. I will earn dividends up to, but not including, the settlement date. My Account will be credited with the proceeds from the sale of securities, and I will begin earning dividends the next business day after the settlement date. I agree, if requested by Price, to have sufficient funds available in my Account by the trade date for payment for all securities purchased for my Account and that Price may refuse to execute an order, or may cancel an order, if such funds are not available. I also understand that Price may return a check unpaid or refuse any other transaction, including, where applicable, transactions initiated in my Brokerage Advantage Account with my Visa Gold ATM Debit/Check Card if funds are not available in my Account.
- 8. Money Market Fund Holdings.** I understand that I am only authorized to hold T. Rowe Price money market funds in my Account. I cannot hold money market funds issued by other mutual fund families in my Brokerage or Brokerage Advantage Account. As with any mutual fund, there can be no guarantee the fund will achieve its objective. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it is possible to lose money by investing in the fund. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency.
- 9. Dividend Reinvestment and Computer/Telephone Exchange and Redemption.** I understand that these features will automatically be activated upon the establishment of my Money Market Sweep Fund. I must contact Price if I wish to opt out of these features.
- 10. Fees, Charges, Commissions, and Transaction Limits.** I agree to the fees, charges, commissions, and transaction limits indicated on the Fee Schedule included, which may be amended by Price upon notice to me. Further, I agree to pay applicable fees to transfer my Account to another broker. I understand that such transfer will not include shares of Price funds, unless they are held in my Brokerage Advantage Account. However, if I have a Brokerage account registered as an

Individual Retirement Account, such transfer will include the proceeds in my designated Money Market Sweep Fund. I also understand that, as noted in Section 18 of this Agreement, I may be charged a fee if I request securities to be registered and shipped to me. If authorized by me, Price may charge my Account for any fees or charges that I may incur. Price may change the Fee Schedule and other charges from time to time and reserves the right to collect fees for excessive checkwriting. I understand and agree that Price may share with, remit to, or otherwise pay Pershing for its services from the fees charged by Price under this Agreement. I also understand that Price may receive remuneration from Pershing for over the counter securities transactions.

11. Deposit of Equity. Price reserves the right to require full payment or an acceptable equity deposit prior to the acceptance of any order.

12. Failure to Settle. Upon the purchase or sale of any security or precious metals, if Price is unable to settle the transaction by reason of my failure to make payment or deliver securities or precious metals in good form, I authorize Price or Pershing to take steps necessary to complete or cancel the transaction to minimize its loss, and I agree to reimburse Price for any and all costs, losses, or liabilities incurred by Price, including attorney's fees.

I recognize that Price may become liable to Pershing in connection with any Account by reason of various occurrences, including, but not limited to, my failure to (1) make payment or deliver securities in good form (including signature guarantees for co-owned securities), (2) maintain equity levels required by Pershing in any margin account, (3) pay margin interest to Pershing in accordance with any Margin Agreement between me and Pershing, and (4) make payment to cover an ATM or check card transaction. Should Price become indebted to Pershing in connection with my Account, or should I become indebted to Pershing or to Price directly in the operation of my Account, I agree that I will repay such indebtedness upon demand to the extent permitted by law. I AGREE THAT, IF I FAIL TO PAY THE INDEBTEDNESS AFTER DEMAND, PRICE OR PERSHING MAY CLOSE MY ACCOUNT AND/ OR LIQUIDATE ANY ASSETS IN MY ACCOUNT, OR OTHERWISE HELD BY PRICE OR ANY OF ITS AFFILIATES, INCLUDING PRICE FUNDS, IN AN AMOUNT SUFFICIENT TO PAY MY INDEBTEDNESS. Price may not use my IRA assets to cover an indebtedness in a non-IRA account or use non-IRA assets to cover an indebtedness in an IRA account.

To pay my indebtedness PRICE or PERSHING will first sell the security that incurred the indebtedness (if applicable). PRICE or PERSHING will then, on a best efforts basis, sell securities in an order generally designed to limit fees and/ or commissions. Neither Price nor Pershing intends to act in a fiduciary capacity when selling securities to pay my indebtedness pursuant to such transaction.

I agree to be responsible for the reasonable costs and expenses of the collection of any such indebtedness, including, but not limited to, attorney's fees. I understand that Price also reserves the right to provide information concerning my Account indebtedness to others, including credit reporting agencies.

13. Cash Accounts. Cash accounts may be subject, at Price's or Pershing's discretion, to interest on any debit balances resulting from failure to make payment in full for securities purchased, from failure to timely deliver securities sold, from proceeds of sales paid prior to settlement date, or for other charges which may be made to the account.

14. Recorded Conversations. For our mutual protection, Price will normally tape record our telephone conversations in order to permit the verification of data concerning transactions. Such recordings are the sole property of Price.

15. Provision of Market Data. I understand that Price may convey to me through telephone, electronic, or other means last sale transaction data, bid and ask quotations, and other information relating to securities and the securities markets (collectively referred to as "market data"). Price may charge a fee for providing this market data.

I understand that Price obtains market data from securities exchanges and markets and from parties that transmit market data (collectively referred to as "market data providers"). Price receives such market data from industry sources that are believed to be reliable. However, the accuracy, completeness, timeliness, or correct sequencing of the market data cannot be guaranteed either by Price or the market data providers. I understand that neither Price nor the market data providers will be liable for interruptions in the availability of market data or my access to market data or for any damages alleged to have resulted from the availability or nonavailability of such data. The market data are provided "as is" and on an "as available" basis. THERE IS NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, REGARDING THE MARKET DATA.

16. Order Entry Services. Price may make available services (referred to in this section as "the services") that allow me to use telephone, electronic, or other means to place orders and obtain market data and other information. The services may require me to use a number or password to access these features. I acknowledge that I am responsible for the confidentiality

and use of my access number, password, and Account number and for all securities and other transactions initiated through these means. I agree not to allow any other person or entity to use my Account for any purpose, including order entry, inquiry, or for quotes. Any orders communicated to Price through these means will be considered to have been sent by me. I agree to notify Price immediately if I (1) fail to receive a message that an order has been received or executed; (2) fail to receive accurate written confirmation of an order or its execution; (3) receive confirmation of an order I did not place; or (4) become aware of any loss, theft, or unauthorized use of my access number, password, or Account number or any unauthorized use of the services or the market data. Further, although Price may permit the entry of orders through the services, under no circumstances will Price accept any orders placed via electronic mail (email).

Price will not be liable for lost profits, trading losses, or other damages resulting from the delay or loss of use of the services or from defective or unavailable market data. In any case, Price's liability arising from any legal claim (whether in contract, tort, or otherwise) relating to the services or market data will not exceed the amount I paid for use of the services or market data associated with such claim.

- 17. Presumption of Receipt of Communications.** Communications will be sent to my address, including electronic address, given in the New Account Form unless I later notify Price of a change of address. All communications, whether sent by mail, telegraph, messenger, or otherwise, shall be considered delivered to me personally, whether actually received or not.
- 18. Custody of Securities.** Unless I instruct Price in writing otherwise, all of the securities in my Account shall be held in street name by Pershing. I understand that Price may charge a fee to register and ship such securities to me. Price Funds and non-Price funds do not issue certificates.
- 19. Restricted Securities.** I understand that I may not buy or sell any restricted securities in any account at Price unless Price waives this restriction at its sole discretion and only if such purchase or sale is in compliance with all applicable laws and regulations.
- 20. Security Interest.** All securities and other property now or hereafter held, carried, or maintained for me through Price, or an affiliate of Price, including shares in the Price Funds, shall be subject to a lien for the discharge of all my indebtedness and other obligations to Price and are to be held by Price as security for the payment of any liability or indebtedness of me to Price. Price, or any affiliate of Price, shall have the right to transfer securities and other properties so held through Price or any affiliate, including shares in the Price Funds, whenever in Price's judgment it considers such transfer necessary for its protection. In enforcing Price's lien, Price shall have the authority to determine which securities and property are to be sold and which contracts are to be closed as described in Section 12. Price may not use my IRA assets to cover an indebtedness in a non-IRA account or use non-IRA assets to cover an indebtedness in an IRA.
- 21. Joint Accounts.** If the Account is owned by more than one person, we jointly and severally agree that each co-owner of the Account has complete authority to act on behalf of all and to give instructions concerning trades in the Account, including the delivery of funds, securities, and precious metals to the co-owners. Unless you have notified Price to the contrary in writing and Price has accepted signed notification, all Accounts with joint registration shall be joint with right of survivorship. We understand that Price will only act upon the written instructions of both co-owners before closing the Account or changing the ownership of the Account. Unless otherwise agreed to by Price in its sole discretion, payments will be made to the owners jointly and will be mailed to the address for the Account indicated in its records. Liability with respect to the Account shall be joint and several, and each of us will be fully liable for any amounts due to Price or Pershing under this Agreement. If registered as Tenants in Common, each of us has an undivided interest in the Account. If we are registered as Joint Tenants with right of survivorship or a husband and wife are registered as Tenants by the Entireties and one of us dies, the entire Account shall become the property of the survivor(s). In the event of an owner's death, the survivor(s) shall immediately notify Price in writing and, along with the estate of the deceased, shall continue to be jointly and severally liable for any debit balance resulting from transactions initiated before Price receives the written notice of death. Price reserves the right to freeze any Account and temporarily suspend trading privileges or restrict withdrawals from an Account when notice has been received of a dispute between the registered or beneficial owners or there is reason to believe a fraudulent transaction may occur.
- 22. Extraordinary Events.** Price shall not be liable for loss or delay caused directly or indirectly by war, natural disasters, government restrictions, exchange or market rulings or conditions, interruptions of communications or data processing services, or other conditions beyond Price's control.
- 23. Margin, Options, and Precious Metals Account Agreements.** If I open such Account(s) with Price, I will execute and be bound by the terms and conditions of the Margin, Options, or Precious Metals Agreement with Pershing or any other

Price-designated clearing broker, as well as by the terms of this Agreement. If inconsistent, the Agreement with Pershing shall prevail.

- 24. Liens and Levies.** If for any reason my Account is subject to a lien or levy directed to Pershing, Pershing will abide by the directions of the federal, state, or other levying authority unless Pershing receives a court order staying or quashing the lien or levy or some other form of release from the levying authority. If Pershing receives a lien or levy on my Account, my Account may be assessed a reasonable processing fee.
- 25. Modification of This Agreement.** All transactions for the Account shall be subject to the constitution, rules, regulations, customs, and usages of the exchange or market (and its clearing house, if any) where the transactions are executed and to all applicable government acts and statutes (such as the Securities Exchange Act of 1934) and the rules and regulations promulgated under those governmental acts and statutes. No provision of this Agreement can be amended or waived except in writing, signed by an officer of Price. If any provision of this Agreement becomes inconsistent with any present or future law or regulation of any entity having regulatory jurisdiction over it, that provision will be deemed superseded or amended to conform with such law or regulation, but the remainder of this Agreement will remain in full force and effect. I understand that Price may be bound by certain restrictions Pershing may impose and reserves the right to reject any transaction prior to my receipt of the confirmation statement.
- 26. Separability.** If any provisions or conditions of this Agreement shall be held to be invalid or unenforceable, all other provisions and conditions will remain in full force.
- 27. Governing Law.** This Agreement and its enforcement shall be governed by the laws of the state of New York, without giving effect to its conflicts of laws provisions, and shall both bind and inure to the benefit of Price, its successors, and assigns, whether by merger, consolidation, or otherwise. This Agreement shall also be binding upon my heirs, executors, administrators, successors, and assigns.
- 28. Amendment Restrictions and Termination.** At its discretion, Price may amend this Agreement or terminate or restrict my Brokerage services or account at any time, effective upon notice to me at my address last given to Price. If I have signed up for electronic delivery of prospectuses or statements, I may receive amendments to this Agreement electronically. Termination may include specific Account services as well as the Account itself. Termination of my Account will result in the cancellation of all open orders and other features and/or privileges associated with the Account. Such features and privileges include those associated with my Money Market Sweep Fund. Restrictions may include restrictions in changes of account registration or type. I understand, however, that I will continue to be responsible for any obligation incurred by me prior to termination. In addition to other amendments, if any provision hereof is, or at any time should become, inconsistent with any present or future law, rule, or regulation of any securities exchange, or of any sovereign government or a regulatory body thereof and if any of these bodies have jurisdiction over the subject matter of this Agreement, said provision shall be deemed to be superseded or modified to conform to such law, rule, or regulation, but in all other respects this Agreement shall continue and remain in full force and effect. Price at its discretion may close my account without notice to me if I transfer my account holding(s) to another firm or do not maintain holdings within my account.
- 29. Federal and State Withholding for Retirement Accounts.** Subject to changes in prevailing rules, or changes in my circumstances, I may at any time designate or change the federal and state income tax withholding election for distributions from my IRA, 403(b)(7) custodial account or qualified retirement plan by contacting Price. I understand that if I do not have enough federal or state income tax withheld, I may be responsible for payment of estimated taxes, and penalties and interest may also apply.
- 30. Credit Interest.** I may receive interest on positive account balances, referred to as “free credit balances,” provided that the funds are awaiting reinvestment and are subject to certain minimum balances and time requirements. Pershing and Price may receive compensation based on the amount of free credit balances in its clients’ accounts. If I currently maintain free credit balances in my Account solely for the purpose of receiving credit interest, and have no intention of investing the funds in the future, I should contact Price to discuss my investment options. Price generally requires all accounts to have a money market fund sweep option selected.
- 31. Representations as to Capacity to Enter Into Agreement.** I, if an individual, represent that I am of full age. Unless otherwise disclosed to you in writing, I am not an employee of any exchange or of any corporation in which any exchange owns a majority of the capital stock; or of a member firm or member corporation registered; or any exchange; or of a bank, trust company, or insurance company; or of any corporation, firm, or individual engaged in the business of dealing either as a broker or as principal in securities, bills of exchange acceptances, or other forms of commercial paper. I further represent that no one except me has an interest in my Account(s) with you.
- 32. Headings Are Descriptive.** The heading of each provision hereof is for descriptive purposes only and shall not be deemed to modify or qualify any of the rights or obligations set forth in each such provision

- 33. Confirmation of Executions and/or Cancellations.** Confirmations of executions or cancellations may be delayed, erroneous (e.g., due to computer system issues), or cancelled/adjusted by an exchange or market center. Any reporting or posting error, including errors in execution prices or cancellations, will be corrected to reflect what actually occurred in the marketplace; I will be bound by such terms. The cancellation of an order is not guaranteed. The order will only be cancelled if the request to cancel is received by the market center to which the order was routed and matched with the order to be cancelled before it is executed. During market hours, it is rarely possible to cancel a market order or a marketable limit order, as such orders are subject to immediate execution. I should not assume that any order has been executed or cancelled until I have received a transaction or cancellation confirmation from Price or Pershing.
- 34. Money Market Mutual Fund Confirmations.** Confirmations for Money Market Mutual Fund purchases processed through the sweep platform are not sent pursuant to SEA Rule 10b-10(b)(1).
- 35. Predispute Arbitration Clause.** Refer to paragraph 1 of the Brokerage Account Agreement.
- 36. Fiduciary.** A fiduciary is a person or entity authorized to make decisions with respect to an account on behalf of an account's beneficial owner(s). I understand and agree that Price does not review any action or inaction by a fiduciary with respect to my Account and is not responsible for determining whether a fiduciary's action or inaction satisfies the standard of care applicable to such fiduciary's handling of my Account. I further understand and agree that Price is not responsible for determining the validity of a person's or entity's status or capacity to serve as a fiduciary. Price may require additional documentation before permitting a fiduciary on an existing account or when opening a new account. I agree to hold Price, its officers, directors, employees, agents, and affiliates harmless from any liability, claim, or expense (including attorneys' fees and disbursements), as incurred, for the actions or inactions of my fiduciary. If my Account has two or more fiduciaries authorized to make decisions, each fiduciary shall have full authority on my behalf to deal with Price, all without notice to the other fiduciary(ies), unless Price is otherwise notified in writing. Notwithstanding the foregoing, Price may, at its sole discretion, require joint instruction from some or all of the fiduciaries before taking action.

PRECIOUS METALS AGREEMENT

In consideration of Pershing accepting and maintaining one or more precious metals accounts for me and Pershing agreeing to act as custody and settlement agent for me, in addition to the terms in the Brokerage Account Agreement, I agree to the following terms and conditions with respect to the settlement and custody of precious metals and coins.

1. (a) "Precious Metals" shall mean gold, platinum, palladium, and silver bullion and coins that shall meet all qualifications as to hallmarks and fineness recognized to be acceptable to organized national U.S. commodity exchanges trading in the offered precious metals.
(b) "Ounces" shall mean fine ounces troy weight.
(c) "Coins" shall mean Canadian Maple Leafs, Mexican peso gold coins, U.S. silver coins, and any other precious metals coins purchased or sold through the depository.
(d) "Business Day" means a day on which both Pershing and the commodity exchanges are open in New York City for the transaction of business. "Business Day" for the depositories shall be days that the depositories are open to conduct business.
(e) "Bullion" means gold or silver bullion conforming to the fineness standards mentioned above.
(f) "Properly Executed" means signed by the account holder.
(g) "U.S. Dollar Value" of a number of ounces of precious metals (gold, silver, platinum, and palladium) on a given Business Day means the previous Business Day's New York spot closing price multiplied by the number of ounces.
(h) "Good funds" means U.S. currency or funds transferred by certified, bank cashier's, or teller's check drawn to the order of Pershing; wire transfer of funds to Pershing bank; or good funds on deposit with Pershing.
(i) "Settlement date" means the second Business Day following a transaction involving the purchase or sale of Bullion or Coin is affected for this account.
2. Pershing will open a Precious Metals account for me upon the receipt of this executed Agreement; a cash deposit sufficient to cover initial Precious Metals transactions; and the processing of the initial order for the purchase of Precious

Metals, through FidelityTrade, Inc., or its successors or assigns or other Pershing-designated Precious Metals dealer (Metals Dealer). I hereby authorize my introducing firm to place transactions for this account. The account shall be registered in accordance with my instructions and Pershing's policies and may be carried as an open ledger balance in any account which I may maintain with Pershing. The open ledger balance carried for the account shall confirm that I own the quantity of Precious Metals described therein in the form of a specific but undivided interest in a segregated identified fungible bulk of Precious Metals held by a designated recognized depository institution for me and other Pershing clients. If I own fabricated products such as Coins, the open ledger balance shall confirm that the designated recognized depository is storing such for me and other Pershing clients.

- 3.** Pershing may, from time to time, establish minimum ownership levels required to establish and maintain the account. I understand that no fractions of Ounces may be settled for or maintained in the account for specific but undivided interests in a segregated identified fungible bulk of Precious Metals. I acknowledge that Pershing has no obligation to enter any orders to purchase or sell Precious metals for my account.
- 4.** If I desire to take delivery of all or any portion of the Precious Metals in storage, I agree to submit a request through my introducing firm to Pershing for delivery. Pershing will arrange for transmittal of the delivery instructions to the depository. I recognize that the depository is not obligated to make such delivery unless the depository (or Pershing on its behalf) is paid (a) all storage fees due and owing under this Agreement; (b) all applicable sales or other taxes; (c) all applicable Bullion bar, Coin, or ingot fabrication fees (manufacturing costs) in accordance with the then-current market pricing structure; and (d) all applicable shipping costs. The obligation to deliver Bullion shall be discharged by the delivery of Bullion bars or ingot confirming to the fineness specifications stated in paragraph 1(a) totaling the quantity in Ounces specified in the delivery order but not exceeding the open ledger balance in my accounts.
- 5.** The number and size of bars, ingots, or Coins delivered shall be determined at my discretion. The obligation to deliver bars, ingots, or Coins shall be discharged by the delivery of all or a portion of the bars, ingots, or Coins represented in my account per my written instruction.
- 6.** Title to the Bullion or Coins purchased by me shall pass to me on the settlement date following payment in full for my purchase. If I fail to pay for any purchase on the settlement date, Pershing may sell all or any portion of the Bullion or Coins in the account without notice to me in order to satisfy such deficiency just as if I had given Pershing or its designated agent an order to sell such Bullion or Coins. The proceeds of such sale shall first be applied to the satisfaction of any fees owed and then to the satisfaction of the account payment obligation with any deficiency charged to my account.
- 7.** Reports of account statements of this account shall be conclusive if not objected to in writing within 10 days after Pershing mails them to the address of account title. Communications mailed to me at the address specified on the account statement shall, until Pershing has received notice in writing or a different address, be deemed to have been personally delivered to me, and I agree to waive all claims resulting from failure to receive such communications.
- 8.** I agree to prepay Pershing a storage fee covering storage, insurance, and other costs incurred by Pershing and Pershing's agents in accordance with the then-current storage fee schedule based upon the U.S. Dollar Value of the total balances in my account calculated as of the last Business Day of every quarter and payable as of the first Business Day of the new quarter, commencing in the quarter during which the undersigned establishes the account with Pershing. I acknowledge that the current prepaid quarterly storage fee will not be subject to a refund or any sale or delivery of Precious Metals prior to the end of the prepaid quarter. Pershing is authorized to charge the storage fee to my securities account provided Pershing notifies me of such charges.
- 9.** I may deliver into my account, and Pershing may receive subject to Pershing's approval, any Precious Metals already owned by me. I, in conjunction with my introducing firm, shall complete a packing slip provided by Pershing for all approved Coin and Bullion. Any such deliveries will be subject to inspection and may, at Pershing's discretion, require an assay and/or an authentication examination, the cost of which will be borne by me. I will be responsible for all costs involved in any such delivery. Pershing reserves the right, in sole discretion, to refuse to accept any such deliveries for any reason whatsoever.
- 10.** Pershing or its designated Metals Dealer shall not be liable for refusing to obey any instructions given by or for me with respect to my account or the property therein, which has been or becomes the subject of any attachment, sequestration,

lien, or judgment in any legal proceeding against or directly or indirectly involving my account or the property therein, and Pershing shall be under no obligation to contest the validity of such attachment, sequestration, lien, or judgment.

11. Pershing shall not be liable for losses or actions that are caused directly or indirectly by government restrictions, exchange or board of trade rulings, war, strikes, delays in the transmission or execution of orders due to transmission or communication failure, or other conditions beyond Pershing's control. Pershing is hereby authorized to take such action with respect to the account and property held therein, without notice to me, as Pershing may deem necessary to comply with directives issued by an exchange, board of trade, markets, clearing house, or governments.
12. I acknowledge that this account represents specific but undivided interests in a segregated identified fungible bulk of Precious Metals holdings in this account. I authorize Pershing and Pershing's agent, for convenience of safekeeping, to commingle such Bullion and Coins with that of other investors.
13. Pershing may terminate this Agreement upon 30 days' notice to me. I agree to arrange transfer of custody of my Precious Metals holdings to another custodian upon termination of this Agreement. Pershing will have no further obligations except to hold the Precious Metals in accordance with the terms of this Agreement, pending the timely receipt of written instructions from me regarding the further disposition of the Precious Metals.
14. Predispute Arbitration Clause. Refer to paragraph 1 of the Brokerage Account Agreement.

I HAVE READ AND FULLY UNDERSTAND THE TERMS AND CONDITIONS OF THIS PRECIOUS METALS CLIENT ACCOUNT CUSTODY AND SETTLEMENT AGREEMENT AND REPRESENT THAT I HAVE THE AUTHORITY TO SIGN THIS AGREEMENT. I RECOGNIZE THAT INVESTMENTS IN PRECIOUS METALS ARE HIGHLY SPECULATIVE, ARE SUBJECT TO VOLATILE PRICE MOVEMENTS, AND PAY NO INTEREST. METALS HELD IN MY ACCOUNT ARE NOT ELIGIBLE FOR USE AS COLLATERAL FOR MARGIN PURPOSES. FURTHERMORE, I ACKNOWLEDGE THAT THE PRECIOUS METALS BALANCE IN THIS ACCOUNT IS INELIGIBLE FOR SECURITIES INDUSTRY PROTECTION CORPORATION (SIPC) COVERAGE.

NEW ACCOUNT FORM AGREEMENT FOR YOUR RECORDS.

- I agree to read and be bound by the terms of the Account Agreements outlined in the Brokerage Account Welcome Handbook (which will be sent to me after I open an Account), which are incorporated herein. (Call to request a copy in advance). If I do not understand any provision therein, I will notify T. Rowe Price Investment Services, Inc. (TRPIS). I agree to be bound by the terms of the prospectus for each T. Rowe Price fund (fund) in which I am investing. I have the authority and legal capacity to purchase mutual funds, and am of legal age in my state.
- I authorize TRPIS to debit or credit my money market sweep fund for payment of securities purchased by me or credit to me for securities sold by me. This authorization includes all transactions in my account in the future.
- I authorize TRPIS, the Fund, and their agents to act on any instructions believed to be genuine for any service authorized on this form, including computer/telephone services. The Funds and TRPIS use reasonable procedures to verify the identity of the shareholder and the person(s) granted trading privileges, if applicable, when servicing an account by computer/phone. I understand that it is TRPIS' policy to accept transaction instructions from and provide account information to the registered account owner(s) only, unless the account owner(s) has provided authorization to TRPIS, in a form acceptable to TRPIS, to grant trading privileges or to provide (or permit access to) account information to another person. I further understand that it is my responsibility to monitor the activity in my Account and not to provide account information, including my online user name and password, to anyone. TRPIS, the Funds and their agents are not liable for any losses that may occur from acting on unauthorized instructions. All services are subject to conditions set forth in each fund's prospectus.
- I agree that computer/phone exchange and redemption services will be activated automatically when my account is opened. If I do not want these services, I will contact TRPIS to terminate service.
- I agree that for joint accounts or other types of accounts owned or controlled by more than one party, "I" refers to each owner/party and that each owner/party has complete authority to act on behalf of all and give instructions concerning the Account without notice to the others. TRPIS may, in its sole discretion and for its own protection, require written authorization from all owners/parties to act on the Account for certain transactions (for example, to transfer ownership).
- By adding a bank account, I hereby authorize TRPIS to initiate credit and debit entries to the account at the financial institution indicated and for the financial institution to credit or debit the same to such account through the ACH network, subject to

the rules of the financial institution, ACH, and the fund. TRPIS may correct any transaction error with a debit or credit to the financial institution account and/or fund account. This authorization, including any credit or debit entries initiated thereunder, is in full force and effect until I notify TRPIS of its revocation by phone or in writing and TRPIS has had sufficient time to act on it.

- I understand that to minimize fund expenses, it is TRPIS' policy to send only one copy of prospectuses, shareholder reports, and other documents (except account confirmations and statements) to all fund shareholders residing at the same address. I also understand that this applies to all existing fund accounts and any accounts I may open in the future. I consent to this policy, and I understand that I need to do nothing now. If I do not consent, I will call TRPIS after my Account is opened.
- I authorize TRPIS to obtain consumer credit reports (which contain information, including my creditworthiness, credit standing, and credit capacity) and other information to help verify my identity and to determine whether to open my Account, or after my Account is opened, whether to maintain my Account or restrict certain services. If, after making reasonable efforts, TRPIS is unable to verify my identity, TRPIS is authorized to take any action permitted by law, including closing my Account and liquidating shares at the current market value. Commission charges and certain fees will apply to liquidations. I have the right, upon written request made within a reasonable time, to receive from Price the names and addresses of the consumer credit reporting agencies that provided the reports. Price will not disclose this credit information to anyone other than me without my written permission.
- I understand that if my Account has no activity in it for a period of time, TRPIS may be required to transfer it to the appropriate state under abandoned property laws.
- I authorize TRPIS to use the cost basis method checked on this form for covered securities. I understand the tax consequences of selecting the cost basis method checked on this form and had the opportunity to consult with a tax advisor before making this selection.
- I acknowledge that dividends on my Money Market Sweep Fund will be automatically reinvested in the same class of shares.
- Unless I check the box below, TRPIS is required by the Securities and Exchange Commission to provide my name, address, and securities position at the request of the companies whose securities I own.

Do not release my name, address, and securities position to the securities issuer.

- I understand that, for my convenience, TRPIS will automatically hold all my securities purchased, transferred, or deposited in street name. If I prefer to have my Account handled otherwise, I will provide written instructions and return them with this form. A fee will be charged to have security certificates registered and shipped to me.
- I acknowledge that TRPIS will carry over any ACH network and/or systematic investing service from my identically registered funds being transferred into my Brokerage Advantage Account. Pershing will initiate ACH transactions at the discretion of myself and TRPIS.
- I acknowledge that securities not fully paid for by me may be loaned to Pershing or loaned to others. Pershing does not lend fully paid-for securities without my written permission. Fully paid-for securities held in a cash account are not loaned.

37. Entire Agreement. The Account Agreements and the Brokerage Account Disclosures, as well as the other agreements referenced therein, constitute the full and entire understanding between the parties with respect to the provisions herein, and there are no oral or other agreements in conflict herewith.

Brokerage Account Disclosures

Effective February 1, 2018

T. Rowe Price Investment Services, Inc.

GENERAL INFORMATION

The following disclosures contain important information. Please read the disclosures carefully and retain them for future reference. If you have questions concerning any of the disclosures, please call customer service at 1-800-225-7720.

The words “I,” “myself,” “me,” and “my” refer to the person(s) who signed the New Account Form. “Price” refers to T. Rowe Price Investment Services, Inc. “Price Funds” refers to mutual funds sponsored by T. Rowe Price Associates, Inc. “Pershing” refers to Pershing LLC, a subsidiary of The Bank of New York Mellon Corporation, Price’s clearing broker for my Account.

The term “Account” refers to my Brokerage account.

1. Additional Clearing Broker Information. Disclosure Required by FINRA Rule 4311. Price has retained Pershing to provide certain recordkeeping or operation services. These services—such as the execution and settlement of securities transactions, custody of securities and cash balances, and extension of credit on margin transactions—are provided under a written Clearing Agreement between Pershing and Price. As a member of FINRA, Pershing is required (under FINRA Rule 4311) to disclose to me the details of Pershing’s Clearing Agreement with Price, which are summarized below.

Responsibilities of Price

Price has the responsibility to:

- Approve the opening of my Account
- Obtain necessary documentation to help fight the funding of terrorism and money laundering activities (Note: U.S. law and international best practices require firms to obtain, verify, and record information that identifies each person who opens an account. This information may be used to perform a credit check and verify my identity through internal sources and third-party vendors)
- Service and supervise my Account through its own personnel in accordance with its own policies, procedures, applicable laws, regulations and rules.
- Know me and my stated investment objective
- Determine whether particular kinds of transactions—such as margin, options, and short sale—are appropriate for me
- Obtain the initial margin as required by Regulation T if a margin account is opened for me
- Accept and, in certain instances, execute securities orders
- Know the facts about any orders for the purchase or sale of securities in my Account
- Comply with fair pricing and disclosure responsibilities (if Price is a market maker in any securities or otherwise trades as principal with me)
- Correctly identify and promptly forward cash or securities intended for my Account to Pershing
- Supervise the activities of any individual who services my Account
- Resolve any complaints regarding the handling of my Account
- Manage the ongoing relationship that it has with me

Pershing has no involvement and assumes no responsibility in all of the above matters relating to the servicing of my Account.

Responsibilities of Pershing

To help the government fight the funding of terrorism and money laundering activities, financial organizations are required by Federal law to obtain, verify and record information that identifies each individual or entity that opens an account or requests credit. What this means for individuals: When an individual opens an account or requests credit, Price or Pershing will ask for my name, residential address, date of birth, tax identification number and other information that allows Price or Pershing to identify me. Price or Pershing may also ask to see a driver’s license, passport, or other identifying documents.

What this means for other legal entities: When a corporation, partnership, trust or other legal entity opens an account or requests credit, Price or Pershing will ask for the entity's name, physical address, tax identification number and other information that will all Price or Pershing to identify the entity. Price or Pershing may also ask to see other identifying documents, such as certified articles of incorporation, partnership agreements or a trust instrument.

In general, Pershing is only responsible for the services within the scope of the Clearing Agreement that is provided at the request of Price and contains specific direction regarding my Account. As such, Pershing may fulfill the following responsibilities on behalf of my Account:

- Create computer-based account records
- Process orders for the purchase, sale, or transfer of securities (Pershing is not obligated to accept orders directly from me and will do so only in exceptional circumstances)
- Receive and deliver cash and securities
- Record such receipts and deliveries according to information provided either by Price or directly, in writing, by me
- Hold securities and cash in custody (after it comes into Pershing's physical possession or control)
- Collect and disburse dividends, capital gains, and interest
- Process reorganization and voting instructions with respect to securities held in custody
- Prepare and transmit confirmations of trade to me (or provide facilities to Price to provide these functions) with the exception of the following transactions, which will alternatively appear on account statements:
 - Systematic purchase and redemption transactions of mutual funds or unit investment trusts
 - Purchase and redemption transactions of money market funds processed through Pershing's Cash Management platform, provided that there are no purchase and redemption fees
 - Dividend and other distribution reinvestment transactions of mutual funds, equities, and unit investment trusts
 - Dividend and other distribution reinvestment transactions of money market funds, provided that there are no reinvestment fees
- Prepare and transmit periodic account statements summarizing transactions
- Provide Price with written reports of all transactions processed for my Account to enable Price to carry out its responsibilities under the Clearing Agreement
- Assist me and Price with any discrepancies or errors that may occur in the processing of transactions

If Price opens a margin account for me, Pershing may:

- Loan me money for the purpose of purchasing or holding securities (subject to the terms of Pershing's written Margin Agreement, margin policies, and applicable margin regulations)
- Calculate the amount of maintenance margin required and advise me of those requirements (usually through Price)
- Calculate any interest charged on my debit balance

In connection with all of the functions that Pershing performs, Pershing maintains the books and records required by law and business practice.

The Clearing Agreement does not encompass transactions in commodities futures contracts or investments other than marketable securities, which Pershing normally processes on recognized exchanges and over-the-counter (OTC) markets. In furnishing Pershing's services under the Clearing Agreement, Pershing may use and rely upon the services of clearing agencies, automatic data processing vendors, proxy processing, transfer agents, securities pricing services, and other similar organizations.

This document addresses the basic allocation of functions regarding the handling of my Account. It is not meant as a definitive enumeration of every possible circumstance, but only as a general disclosure.

Pershing does not control, audit, or otherwise supervise the activities of Price or its employees.

Pershing does not verify information provided by Price regarding my Account or transactions processed for my Account.

Pershing does not undertake responsibility for reviewing the appropriateness of transactions entered by Price on my behalf.

Complaints—Complaints concerning services provided by Pershing may be directed to:

Complaints
Pershing LLC Legal Department
One Pershing Plaza, Tenth Floor
Jersey City, NJ 07399

2. Pershing Statement of Financial Condition. On December 31, 2016, Pershing's regulatory net capital of \$2.31 billion was 13.96% of aggregate debit balances and \$1.98 billion in excess of the minimum requirement. A complete copy of the December 31, 2016, Statement of Financial Condition is available at: pershing.com/footer/sofc.html. You may request a free printed copy by calling (888) 860-8510.

3. Payment for Order Flow Practices. The following statement is provided to me as required by Rule 607 of the Securities Exchange Act of 1934. Pershing sends certain equity orders to exchanges or broker-dealers during normal business hours and during extended trading sessions. Some of these market centers provide payments to Pershing or charge access fees depending upon the characteristics of the order and any subsequent execution. In addition, Pershing may execute certain equity orders as principal or route orders to an affiliate, called BNY Mellon Capital Markets, LLC, which may also execute as principal while facilitating the trade as a market maker. The details of these payments and fees are available upon written request. Pershing receives payments for directing listed options order flow to certain option exchanges through broker-dealers, which allows Pershing to access price improvement auctions on the various option exchanges. Compensation is generally in the form of a per-option contract cash payment. This disclosure only applies to orders directed to Pershing by Price. For a list of organizations that pay Pershing for order flow, please refer to orderroutingdisclosures.com.

Stop Order Election/Trigger. Equity odd-lot sales count toward consolidated and participant exchange volumes, but do not update the last-sale, open, close, high or low price. Since odd-lot executions are not last-sale eligible, they will not trigger non-directed stop, stop-limit or trailing-stop orders routed to Pershing for execution.

Best Execution. Notwithstanding the previous paragraph regarding payment for order flow, Pershing selects certain market centers for routing non-direct orders that offer the opportunity for the following:

- Provide automated execution of substantially all electronically transmitted orders in over-the-counter (OTC) and exchange-listed securities

The designated market centers to which orders are routed are selected based on the following:

- The consistent high quality of their executions in one or more market segments
- Their ability to provide opportunities for executions at prices superior to the national best bid or offer (NBBO)
- Service, accessibility and speed of execution
- Cost and counterparty credit worthiness.

Pershing also regularly reviews reports for quality of execution purposes.

4. T. Rowe Price Business Continuity Disclosure. T. Rowe Price Group, Inc., the ultimate parent company of T. Rowe Price, maintains Business Continuity Plans (Plans). The Plans will be updated as necessary and will be reviewed annually.

The Plans address how T. Rowe Price will handle disruptive events (Events) of varying scope (e.g., an internal business disruption, an external business disruption, an Event during business hours, or an Event during nonbusiness hours). The Plans include backup facilities for critical data and systems, as well as for critical employees. The Plans are designed to continue business operations if an Event should occur. T. Rowe Price has three call centers located in various areas of the country, which allows for continuation of communication with our customers if one or more sites are affected. T. Rowe Price offers three methods for accepting trades—online Account Access, Tele-Trader touch-tone order-entry system, and speaking to a registered representative. If any one method fails, the Plans provide adequate coverage to meet demands of T. Rowe Price customers to submit trade orders and inquire about other account service issues. Additionally, T. Rowe Price maintains daily off-site backup for critical systems and data.

If T. Rowe Price experiences a significant business interruption, T. Rowe Price customers may contact Pershing at 201-413-3635 for recorded instructions about the processing of limited trade-related transactions, cash disbursements, and security transfers.

5. Pershing Business Continuity Disclosure. To address interruptions to Pershing's normal course of business, Pershing maintains a business continuity plan, which includes geographically dispersed data centers and processing facilities. The plan is annually reviewed and updated as necessary. The plan outlines the actions Pershing will take in the event of a building, city, or regional incident, including:

- Continuous processing support by personnel located in unaffected facilities.
- Relocating technology or operational personnel to alternate regional facilities.
- Switching technology data processing to an alternate regional data center.

All Pershing operational facilities are equipped for resumption of business and are tested. Regarding all circumstances within Pershing's control, Pershing's recovery time objective for business resumption is four (4) hours or less, depending upon the availability of external resources. In the event Price experiences a significant business interruption, I may contact Pershing to process limited trade-related transactions, cash disbursements, and security transfers. Instructions to Pershing must be in writing and transmitted via facsimile at 201-413-5368 or by postal service to: Pershing LLC, P.O. Box 2065, Jersey City, NJ 07303-2065.

For additional information about how to request funds and securities when your firm cannot be contacted due to significant business interruption, please select the Business Continuity and Other Disclosures link at the bottom of the home page on the Pershing website at pershing.com. You may also call (201)413-3635 for recorded instructions. If you cannot access the instructions from the above website or telephone number, you may call (213)624-6100, extension 500, an alternate Pershing number for recorded instructions.

6. SIPC Contact Information. Information regarding SIPC, including a SIPC brochure, may be obtained by contacting SIPC via its website at sipc.org or by telephone at 202-371-8300.

7. FINRA BrokerCheck Program. An investor brochure that includes information describing FINRA BrokerCheck may be obtained from FINRA. The FINRA BrokerCheck Hotline Number is (800) 289-9999. The FINRA website address is finra.org.

8. Municipal Securities Rulemaking Board (MSRB) Investor Education and Protection. An investor brochure that described the protections available under MSRB rules and instructions on how to file a complaint with an appropriate regulatory authority can be found on the MSRB website, msrb.org.

Price and Pershing are registered with the Securities and Exchange Commission (SEC), MSRB and FINRA. Pershing is also registered with NYSE.

9. Lost Securities. If my periodic customer account statement indicates that securities were forwarded to me and I have not received them, I should notify Price or Pershing immediately. If notification is received within 120 days after the mailing date, as reflected on my periodic statement, replacement will be made free of charge. Thereafter, a fee for replacement may apply.

10. Special Note for Non-U.S. Accounts. With respect to assets custodied by Pershing on my behalf, income and capital gains or distributions to me from my Account may be taxable in my home jurisdiction and/or country of tax residence. I should consult my tax advisor for the appropriate tax treatment of my transaction.

11. Important Notice for California Residents. Pursuant to California state law (Part 3, Title 10, Chapter 7) Pershing, as custodian of my assets, may be required to transfer my assets to the State of California in the event that no activity occurs within the statutorily defined time period. The state law defines the time period as 24 to 30 months where there is no activity within the account, or communication between the account owner and the firm.

12. Escheatment of Account Assets. Pursuant to individual state laws Pershing, as custodian of my assets, may be required to transfer my assets to the State of my residence in accordance with state laws.

13. Electronic Confirmations. Certain customers receive electronic confirmations through Depository Trust Company (DTC) or other delivery systems in lieu of hard-copy confirmations. I should be aware that all of the terms, conditions, and disclosures set forth on such hard-copy confirmations will continue to apply to each confirmation processed electronically, including the following:

- Securities purchased on a cash or margin basis are, or may be, hypothecated and, under such circumstances, commingled with securities carried for other clients. Such securities will be withdrawn from hypothecation after receipt of payment.
- If sufficient funds are not already in my cash Account to cover a purchase transaction, it is agreed that I will (1) make full payment for the securities described on the confirmation no later than the stated settlement date and (2) not to sell such securities prior to making payment.

- If Pershing does not receive full payment for securities purchased by me, Pershing may, at its option, cancel the transaction without notice to me.
- If sold securities are not already held in my account with Pershing, it will act upon my representation that I or my principal own such securities. It is agreed that I will deposit the securities with Pershing no later than the transaction settlement date.
- If the securities sold by me are not delivered to Pershing in proper form on or after the first trading day after settlement date, Pershing may, at its option, cancel or otherwise liquidate the transaction without notice to me.
- I will be liable to Pershing for any loss without limitation, including all expenses, attorney's fees and other costs incurred by Pershing, and interest thereon, as a result of a cancelled or liquidated transaction.
- Call features may exist for securities. Call features for fixed income securities may affect yield. Complete information will be provided on request.
- The ratings that appear in the description of some fixed income securities have been obtained from rating services that Pershing believes to be reliable. However, Pershing cannot guarantee their accuracy. Securities for which ratings are not available are marked "UNRATED".
- With transactions involving a security that (1) has an interest in or is secured by a pool of receivables, or (2) is subject to continuous prepayment, such as asset-backed or collateralized mortgage obligations (CMOs), the actual yield of such security may vary according to the rate at which the underlying asset is prepaid. Information concerning the factors that affect yield (including estimated yield, weighted average life and the prepayment assumptions of underlying yield) will be furnished upon request.
- It is understood and agreed that all transactions are subject to the rules and customs of the exchange or market (and its clearing house, if any) where they are executed. The name of the broker or party and the time of execution will be furnished upon request.
- Commission rates are subject to negotiation. Any commission charged to you may be more or less than commissions charged to or by others in similar transactions. The source and amount of other commissions charged by Pershing in connection with the transaction will be furnished upon request.
- Provisions of agreements and contracts shall inure to any successor of Price or Pershing. Agreements and contracts are governed by the laws of the state of New York.

14. Float Disclosure. Pershing may obtain a financial benefit attributable to the cash balance in any account, (including Employee Retirement Income Security Act (ERISA) accounts) that are held by Pershing in accounts that it has with major money center banks (the names of which will be provided upon request). These cash balances result from (1) cash awaiting investment or (2) cash pending distribution. Pershing's financial benefit may be in the form of interest earned on such balances and/or reductions in interest expenses that Pershing would otherwise pay to such money center banks. To the extent that the financial benefit is in the form of interest paid to Pershing, it is often paid at the federal funds rate.

With respect to cash awaiting investment (e.g., new contributions), Pershing obtains such financial benefit until the funds are invested in a money market fund or are used to purchase securities. If an account agreement provides for the automatic investment into a money market fund, such investments will take place on the day after the receipt of cash (and the financial benefit will be one day), unless instructions are received to manually purchase money fund shares on the same day that the cash is received. Such instructions must be received before the cutoff time established by each money market fund available to the account. If the account agreement does not provide for automatic investment into a money market fund, such investment will take place on the day after the receipt of appropriate instructions.

When Pershing receives a request for a distribution by check, the account is charged (debited) on the date the check is written. Cash is transferred to a Pershing disbursement account maintained with a major money center bank on the day the check is presented for payment. Pershing mails disbursement checks on the same day that they are written. Pershing may obtain the financial benefit described above from the date the check is written until the date the check is presented for payment, the timing of which is beyond the control of Pershing. When a distribution is requested using an Automated Clearing House instruction, Pershing receives a one-day financial benefit in connection with the distribution. If the distribution is made using the Federal Reserve wire system, Pershing receives no financial benefit in connection with the distribution.

15. Important Information on Check Disbursements. In situations where I request a check disbursement from my Brokerage Advantage account, Pershing will receive and retain any interest or earnings generated on the amount of the check from the date that it is disbursed until its final settlement and payment.

- 16. Dollar-Cost-Averaging Transactions.** Price offers a dollar-cost-averaging program pursuant to which I can participate in dollar-cost-averaging transactions. Only certain securities are eligible for participation. If I participate in the program, Price will periodically purchase or sell shares of eligible securities on a monthly basis. I authorize Price to act as my agent on dollar-cost-averaging transactions and to receive compensation from a mutual fund company. I understand that participation in these transactions does not assure profits on my investments or protect against losses in declining markets.
- 17. Prohibition against Unlawful Internet Gambling.** In accordance with the Unlawful Internet Gambling Enforcement Act of 2006, transactions associated with unlawful Internet gambling are prohibited. Specifically, the Act prohibits any person engaged in the business of betting or wagering from knowingly accepting payments in connection with the participation of another person in unlawful Internet gambling. Accordingly, I must not initiate or receive wire transfers, checks, drafts, or other debits/credit transactions that are restricted by the Act. For more information, please refer to federalreserve.gov/newsevents/press/bcreg/20081112b.pdf.
- 18. Foreign Currency Transactions.** Pershing may execute foreign currency transactions as principal for my Account. Pershing's currency conversion rate will not exceed the highest interbank conversion rate identified from customary banking sources on the conversion date or the prior Business Day, increased by up to 1%, unless a particular rate is required by applicable law. Price may also increase the currency conversion rate. This conversion rate may differ from rates in effect on the date a dividend, interest payment or corporate action is credited or declared. Unless I instruct Price otherwise, Pershing may automatically convert foreign currency to or from U.S. dollars for dividends, interest or corporate actions.
- 19. Foreign Securities Trading.** Price allows me to trade on a foreign exchange. Price may act as agent for foreign security trades, which are settled in U.S. dollars as a matter of policy. Foreign account activity, including, but not limited to trades, transfers, dividends, and similar corporate actions, may be automatically converted to or from U.S. dollars. Trading in foreign securities, including direct investments in foreign markets, involves various investment risks, including foreign exchange risk (the possibility that foreign currency will fluctuate in value against the U.S. dollar), increased volatility as compared to the U.S. markets, political, economic, and social events that may influence foreign markets or affect the prices of foreign securities, lack of liquidity (foreign markets may have lower trading volumes and fewer listed companies, shorter trading hours, and restrictions on the types of securities that foreign investors may buy and sell), and less access to information about foreign companies. Emerging markets, in particular, can be subject to greater social, economic, regulatory, and political uncertainties, and can be extremely volatile. Trading in foreign securities also may be subject to various credit, settlement, operational, financial, and legal risks.
- 20. Canadian Activities.** Pershing LLC operates in Canada under an International Dealer Exception through the Ontario Securities Commission.
- 21. EU Securities Financing Regulation.** If Article 15 of the EU Securities Financing Transactions Regulation is applicable to me, I will refer to pershing.com/_global-assets/pdf/disclosures/per-eu-article-15-info-stmt.pdf for access to an information statement disclosing the risks and consequences of delivering non-cash collateral under a relevant collateral arrangement with Pershing LLC (including a margin account). This statement does not amend or supersede the express terms of any transaction or collateral arrangement, or otherwise affect your or our liabilities or obligations. Please contact your advisor if you have any questions.
- 22. Sponsorship Fees.** Third-party product and service providers (e.g., mutual fund companies, exchange-traded fund (ETF) providers, money managers, technology and business solution providers) offer marketing support in the form of sponsorship fee payments to Pershing (or third parties at Pershing's direction) in connection with educational conferences, events, seminars and workshops for broker-dealers or advisors. These payments may be for the expenses of educational materials or other conference-related expenses. For a listing of companies that pay sponsorship fees to Pershing for events, please refer to pershing.com/events/htm.
- 23. Alternative Investment Network Fees.** Pershing may receive servicing fees from managed future funds, non-traded real estate investment trusts (REITs), private equity, private debt, business development companies (BDCs), managed future funds, hedge funds, and fund-of-funds (collectively "alternative investments") that participate in Pershing's Alternative Investment Network no-fee program in lieu of transaction fees and special product fee charges to Price. These fees are calculated in accordance with an asset-based formula. Pershing also receives set-up fees from alternative investment providers or broker-dealers in the form of a one-time fee to add an alternative investment to the platform. The fee is a flat fee per CUSIP and is remitted to Pershing for its work to set up the alternative investment. For additional details regarding Pershing's Alternative Investment Network no-fee program or a listing of entities that pay fees to Pershing, please refer to pershing.com/alt_fees.htm.

24. Transactions in Listed Options. If I purchase options listed on the U.S. national options exchanges, I should review the Characteristics and Risks of Standardized Options disclosure published by the Options Clearing Corporation (OCC). I may obtain a copy of the options disclosure document from Price or by visiting the OCC website at optionsclearing.com/about/publications/character-risks.jsp.

25. Unit Investment Trust (UIT) Payments. When Pershing acts upon the instructions of Price to execute the purchase of a UIT, Pershing may receive a payment based on the volume of sales processed by Pershing. Price may receive a monetary concession for the sale of the UIT to me. Such payments are disclosed in the applicable UIT prospectus. Additional information regarding such payment is available at www.pershing.com/UIT_fees.html.

26. Auction Rate Securities Payments. Pershing may receive payments from the distribution agent for trades in municipal auction rate securities and closed-end fund/preferred auction rate securities executed by Pershing upon Price's instruction. These payments are not charged to or paid by me. Additional information regarding such payments is available at pershing.com/ARS_fees.html.

27. Pershing's Impartial Lottery Process: Partial Calls. Information about Pershing's impartial lottery process can be found on pershing.com/lottery.htm. You may also request a printed copy of this information by calling (888) 367-2536, option 3, then option 5. When a security is subject to a partial redemption, pursuant to FINRA Rule 4340, Pershing must have procedures in place that are designed to treat clients fairly in accordance with an impartial lottery process.

When an issuer initiates a partial call of securities, the depository holding such securities (typically, the Depository Trust and Clearing Corporation, or DTCC) conducts an impartial, computerized lottery using an incremental random number technique to determine the allocation of called securities to participants for which it holds securities on deposit (including Pershing). Because DTCC's lottery is random and impartial, participants may or may not receive an allocation of securities selected for redemption.

When Pershing is notified that it received an allocation of called securities, Pershing conducts a similar, computer-generated random lottery. The lottery determines the accounts that will be selected and the number of securities in the account that will be redeemed. Allocations are based on the number of trading units held in the account. The probability of any trading unit held by an account being selected as called in a partial call is proportional to the total number of trading units held through Pershing.

Once the lottery is complete, Pershing notifies introducing broker-dealers whose introduced accounts have received an allocation. Securities registered in my name, either in transit or held in custody, are excluded from the Pershing lottery process.

Pershing initiates the lottery process by identifying the accounts holding the called security, the total par value of the called securities held, and the trading unit of the security.

Example (unit of trade = \$25,000):

Client Account	Par Value	Number of Trading Units
ABC-123234	\$100,000	4
DEF-325465	\$75,000	3
EDR-567433	\$150,000	6
EGT-876574	\$50,000	2
EGT-888345	\$25,000	1
FRT-435234	\$25,000	1
FRT-658797	\$75,000	3

In brief, the allocation process involves the following steps:

- The number of trading units held in each account is identified.
- A sequential number is assigned to each trading unit (e.g., account EDR-567433 would be assigned six numbers).
- A random number is generated that will result in one of these trading units being the first unit in the selection process.
- Thereafter, the trading units participating in the allocation are based on an incremental random number technique until the number of trading units allocated to Pershing is exhausted.

Additional Information:

- The allocation of called securities is not made on a pro-rata basis. Therefore, it is possible that a client may receive a full or partial redemption of shares held. Conversely, it is also possible that a client may not have any securities selected for redemption at all.

- When a partial call is deemed favorable to the holders of the called security, Pershing will exclude certain accounts from the lottery. Excluded accounts will include Pershing's proprietary and employee accounts, as well as proprietary and employee accounts of introducing broker-dealers (if Pershing carries and clears those accounts). No allocation will be made to these proprietary and employee accounts until all other client positions at Pershing in such securities have been called. When a partial call is deemed unfavorable to holders of the called security, Pershing will not exclude any accounts from the lottery.
- If the partial call is made at a price above the current market price as captured in Pershing's price reporting system, Pershing will generally categorize the partial call as one that is favorable to the holders of such security. If the partial call is made at a price that is equal to or below the current market price of the security as captured in Pershing's price reporting system, Pershing will generally categorize that call as one that is unfavorable to holders of that security.
- Clients have the right to withdraw uncalled, fully paid securities from Pershing 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. Clients also have the right to withdraw excess margin securities, provided that the client account is not subject to restriction under Regulation T or that such withdrawal will not cause an under-margined condition.

28. Estimated Annual Income and Estimated Yield. The following disclosure pertains to estimated annual income (EAI) and estimated current yield (ECY) figures displayed on brokerage account statements. The EAI and ECY figures are estimates and for informational purposes only. These figures are not considered to be a forecast or guarantee of future results. These figures are computed using information from providers believed to be reliable; however, no assurance can be made as to the accuracy. Since interest and dividend rates are subject to change at any time, and may be affected by current and future economic, political and business conditions, they should not be relied on for making investment, trading or tax decisions. These figures assume that the position quantities, interest and dividend rates, and prices remain constant. A capital gain or return of principal may be included in the figures for certain securities, thereby overstating them.

The EAI figure for U.S. government, corporate and municipal securities is computed by multiplying the coupon rate by the quantity of the security and then dividing that figure by 100. The resulting figure is reflected on the brokerage account statement in the EAI field.

The EAI for equity, mutual fund, unit investment trust and exchange-traded fund securities is computed using either a historical methodology (HM) or projected methodology (PM), depending on the information from the issuer. The PM annualizes the latest regular cash dividend. The HM accumulates the regular cash dividends over the past twelve months. If there is less than one year of dividend history, the accumulated dividends are annualized. The EAI for preferred securities is computed using the PM. The HM or PM figure, whichever is calculated, is then multiplied by the quantity of the security and the resulting figure is reflected on the brokerage account statement in the EAI field.

The following are important caveats to the HM figure and PM figure.

- The figure is denominated in the same currency as the dividend announcement.
- The figure does not contemplate special or extra dividends.
- When a security pays its first dividend with no specificity as to dividend frequency, the initial dividend will be the reported figure.
- If a security announces a stock split and does not announce a new dividend rate, the figure will be adjusted on the ex-distribution/dividend date.
- For a called security, the figure will remain unchanged until the payment date, at which point it will revert to zero.
- The figure for Canadian securities is calculated the same way as for U.S. securities.
- The figure for mutual funds only includes dividends treated as income.
- The figure will be zero under the following scenarios: a security that has only paid capital gains during the preceding year; a security that has only had stock splits, stock (not cash) dividends or reverse stock splits during the preceding year; a security other than an open-end mutual fund (excluding a money market fund), ADR preferred, or exchange-traded fund which rescinds or omits a dividend payment; and a security from an issuer which is in arrears and uncertain about its ability to make a dividend payment.

The ECY figure is computed by dividing the EAI figure by the current market price of the security, which may be higher or lower than the purchase price, and then the figure is multiplied by 100. The resulting figure is reflected on the brokerage account statement in the ECY field. With specific regard to a fixed income security, the initial purchase confirmation oftentimes reflects yield to maturity, yield to call and/or yield to worst figures which are more relevant figures from the point of purchase.

29. Control Relationship Disclosure. Price is a subsidiary of T. Rowe Price Associates, which is a subsidiary of and controlled by T. Rowe Price Group, Inc., a publicly traded company (TROW).

30. No-Transaction-Fee Mutual Funds. I understand that Price is able to offer certain non-T. Rowe Price mutual funds without transaction fees because the fund companies or their distributors compensate Pershing and Price for providing certain shareholder services to its customers, such as transaction and dividend processing, delivery of account statements and confirmations, shareholder tax reporting, and responding to routine shareholder inquiries. The compensation received by Pershing and Price is based upon a percentage of the total assets invested by its customers in such non-Price Funds. Fund companies may compensate Pershing and Price for the aforementioned shareholder services through an administrative service fee, 12b-1 fee, or other shareholder service fee. Prospectuses for the mutual funds will be provided upon execution of a purchase order. Additional copies are available upon request to Price. I understand that it is my responsibility to read and understand the terms and conditions in the prospectus, including fees and charges that may apply, before placing mutual fund orders with Price. I also understand that shares in these non-Price Funds may be purchased at a lower minimum investment from the fund itself or its principal distributor. In the event that a fund is no longer a no-transaction-fee fund, I may be subject to transaction fees on future transactions.

31. Important Information Regarding Money Market Mutual Funds. Effective October 14, 2016, the SEC requires all non-government money market mutual funds that operate at a Net Asset Value of \$1.00 per share to adopt a “liquidity fees and redemption gates” regime. The regulation permits the board of directors of these non-government money market mutual funds to implement fees or gates if they determine it is in the best interest of shareholders to do so with the intent of protecting shareholders’ value in the fund in the event of heavy redemption activity during periods of market stress.

A liquidity fee is a fee (up to a maximum of 2%) on redemptions and a gate is a restriction on any redemption from a fund (up to a maximum of 10 business days). In the event a fee or gate is implemented by a fund’s board, Pershing will be required to take steps to implement protocols to comply.

If a fee was implemented pursuant to the regulation, it would result in a fee being charged for any redemption processed from that money market mutual fund. If a gate were implemented, it would mean the balance held in that fund would not be available to redeem until the expiration of the redemption gate period. It is important to note that both fees and gates may apply to money market funds available as a part of the sweep program during periods of market stress. In addition, while the regulation does not mandate these requirements for government funds, government funds may voluntarily impose fees and gates in times of stress, if permissible under the fund’s prospectus and if determined by the board to be in the best interest of shareholders. Some issuers have elected to restrict the use of liquidity fees and redemption gates in their government funds and have updated fund prospectuses accordingly. Carefully review the prospectus of a specific money market mutual fund prior to any purchase for additional information.

32. Mutual Fund Disclosure

Sales Charges, Breakpoints, Fees and Revenue Sharing Relating to Mutual Funds

Before investing in mutual funds, it is important that I understand the sales charges, expenses, and management fees that I will be charged as well as the breakpoint discounts to which I may be entitled. Understanding these charges and breakpoint discounts will assist me in identifying the best investment for my particular needs and may help me to reduce the cost of my investment. This section provides general background information about these charges and discounts; however, sales charges, expenses, management fees, and breakpoint discounts vary from mutual fund to mutual fund. Therefore, I should discuss these matters with Price and review each mutual fund’s prospectus and statement of additional information (which are available from Price) to obtain the specific information regarding the charges and breakpoint discounts associated with a particular mutual fund.

Mutual Fund Sales Charges

Investors who purchase mutual funds must make certain choices, including which funds to purchase and which share class is most advantageous in light of their specific investing needs. Each mutual fund has a specified investment strategy. I should consider whether the mutual fund’s investment strategy is compatible with my investment objectives. Additionally, many mutual funds offer different share classes. Although each share class represents a similar interest in the mutual fund’s portfolio, the mutual fund will charge me different fees and expenses depending upon my choice of share class. As a general rule, Class A shares carry a front-end sales charge or “load” that is deducted from my investment at the time I buy the fund shares. This sales charge is a percentage of my total purchase. As explained below, many mutual funds offer volume discounts to the front-end sales charge assessed on Class A shares at certain predetermined levels of investment, which are called breakpoint discounts. In contrast, Class B and Class C shares usually do not carry any front-end sales charges. Instead, investors who purchase

Class B or Class C shares pay asset-based sales charges, which may be higher or lower than the charges associated with Class A shares. Investors who purchase Class B or Class C shares also may be required to pay a sales charge known as a “contingent deferred” sales charge when they sell their shares, depending upon the rules of the particular mutual fund. This is known as a back-end sales charge or “load.”

Mutual Fund Breakpoint Discounts

Many mutual funds offer investors a variety of ways to qualify for breakpoint discounts on the sales charge associated with the purchase of Class A shares. In general, most mutual funds provide breakpoint discounts to investors who make large purchases at one time. The extent of the discount depends upon the size of the purchase. Generally, as the amount of the purchase increases, the percentage used to determine the sales load decreases. The entire sales charge may be waived for investors who make very large purchases of Class A shares. Mutual fund prospectuses contain tables that illustrate the available breakpoint discounts and the investment levels at which breakpoint discounts apply. Additionally, many mutual funds allow investors to qualify for breakpoint discounts based upon current holdings from prior purchases through Rights of Accumulation (ROA) and from future purchases based upon a Letter of Intent (LOI). Mutual funds have different rules regarding the availability of ROA and LOI. Therefore, I should discuss these matters with Price and review the mutual fund’s prospectus and statement of additional information to determine the specific terms upon which a mutual fund offers ROAs or LOIs.

Rights of Accumulation—Many mutual funds allow investors to include the value of previous purchases of the same fund, or another fund within the same fund family, with the value of the current purchase to qualify for breakpoint discounts. Moreover, mutual funds may allow investors to count existing holdings in multiple accounts, such as individual retirement accounts (IRAs) or accounts at other firms, to qualify for breakpoint discounts. Therefore, if I have accounts at other firms and wish to take advantage of the balances in those accounts to qualify for a breakpoint discount, I must advise Price about those balances. I may need to provide documentation if I wish to rely upon balances at another firm.

In addition, many mutual funds allow investors to count the value of holdings in accounts of certain related parties, such as spouses or children, to qualify for breakpoint discounts. Each mutual fund has different rules that govern when relatives may rely upon each other’s holdings to qualify for breakpoint discounts. I should consult with Price and review the mutual fund’s prospectus or statement of additional information to determine what these rules are for the fund family in which I am investing. If I wish to rely upon the holdings of related parties to qualify for a breakpoint discount, I should advise Price about these accounts. I may need to provide documentation to Price if I wish to rely upon balances in accounts at another firm. Mutual funds also follow different rules to determine the value of existing holdings. Some funds use the current net asset value (NAV) of existing investments in determining whether an investor qualifies for a breakpoint discount. However, a small number of funds use the historical cost, which is the cost of the initial purchase, to determine eligibility for breakpoint discounts. If the mutual fund uses historical costs, I may need to provide account records, such as confirmation statements or monthly statements, to qualify for a breakpoint discount based upon previous purchases. I should consult with Price and review the mutual fund’s prospectus and statement of additional information to determine whether the mutual fund uses either NAV or historical costs to determine breakpoint eligibility.

Letter of Intent—Many mutual funds allow investors to qualify for breakpoint discounts by signing an LOI, which commits the investor to purchase a specified amount of Class A shares within a defined period of time, usually 13 months. For instance, if an investor plans to purchase \$50,000 worth of Class A shares over a period of 13 months, but each individual purchase would not qualify for a breakpoint discount, the investor could sign an LOI at the time of the first purchase and receive the breakpoint discount associated with a \$50,000 investment on the first and all subsequent purchases. Additionally, some funds offer retroactive LOIs that allow investors to rely upon purchases in the recent past to qualify for a breakpoint discount. However, if an investor fails to invest the amount required by the LOI, the fund is entitled to retroactively deduct the correct sales charges based upon the amount that the investor actually invested. If I intend to make several purchases within a 13-month period, I should consult with Price and the mutual fund prospectus to determine if it would be beneficial for me to sign an LOI. As I can see, understanding the availability of breakpoint discounts is important because it may allow me to purchase Class A shares at a lower price. The availability of breakpoint discounts may save me money and may affect my decision regarding the appropriate share class in which to invest. Therefore, I should discuss the availability of breakpoint discounts with Price and carefully review the mutual fund’s prospectus and its statement of additional information when choosing among the share classes offered by a mutual fund. If I wish to learn more about mutual fund share classes or mutual fund breakpoints, I also can review the investor alerts that are available on the FINRA® website at finra.org/Investors/ProtectYourself/InvestorAlerts/MutualFunds/index.htm.

Mutual Fund Fees and Revenue Sharing

Pershing may receive servicing fees from mutual funds that participate in Pershing's mutual fund no-transaction-fee program in lieu of clearance charges assessed to Price. Participation by Price in this program is optional, and Price may share with Pershing in such fees. These fees may be considered revenue sharing, are a significant source of revenue for Pershing, and may be a significant source of revenue for Price. These fees are typically paid in accordance with an asset-based formula.

Pershing also receives operational reimbursements from mutual funds in the form of networking or omnibus processing fees. These reimbursements are based on a flat fee per holding, or a percentage of assets are remitted to Pershing for its work on behalf of the funds. This work may include, but is not limited to, subaccounting services, dividend calculation and posting, accounting and reconciliation, client confirmation and statement preparation and mailing, and tax statement preparation and mailing. These fees are a significant source of revenue for Pershing. For additional details regarding Pershing's mutual fund no-transaction-fee program or for a listing of funds that pay Pershing networking or omnibus fees, please refer to pershing.com/mutual_fund.htm.

33. Dividend Reinvestment Service Disclosure

Summary

The T. Rowe Price Brokerage Dividend Reinvestment Service is made available to my account through Pershing LLC (Pershing), a BNY Mellon company. Pershing is carrying my account as a clearing broker by arrangement with T. Rowe Price Brokerage. If I elect to participate, T. Rowe Price Brokerage will automatically reinvest my cash dividends (and certain other cash distributions) paid on eligible securities in my account in additional shares of the same securities. I may request automatic dividend reinvestment for all eligible securities in my account, or I may select individual stocks for dividend reinvestment. Pershing will act on my behalf on instruction from T. Rowe Price Brokerage. This service is provided to customers free of charge. Although Pershing or Price may in the future charge a fee.

- 1. Provision of Dividend Reinvestment Services**—My enrollment in the Dividend Reinvestment Service becomes effective on the first business day after I elect to enroll and T. Rowe Price receives my account application. When my enrollment becomes effective, I agree to be bound by these Dividend Reinvestment Service Terms and Conditions as well as any other Account Agreements that I have with T. Rowe Price Brokerage.

I may choose the Dividend Reinvestment Service for all eligible securities in my account, or I may select individual securities for automatic dividend reinvestment by calling T. Rowe Price Brokerage. If I request automatic dividend reinvestment for all eligible securities in my account, this standing instruction will apply to all present and future eligible securities. If, however, my original instructions were to reinvest dividends on specific eligible securities, and I purchase or deposit a new stock(s) into my account, I must give new instructions to enroll the stock(s) in the Dividend Reinvestment Service or dividends will not be reinvested. Any stock(s) not specified for dividend reinvestment will not be enrolled in the service. To add or remove the service with respect to securities in my account, I must notify a registered representative at least five business days prior to the day on which dividends or other eligible cash distributions are payable for those securities. Dividends are reinvested on all securities I have selected that I own on the record date for determining shareholders eligible to receive dividends, as long as I still own any whole shares of such securities on the dividend payable date. Dividend reinvestment does not assure profits on my investments and does not protect against loss in declining markets.

- 2. Eligible Securities**—Most securities listed on the New York Stock Exchange or the American Stock Exchange, or traded on the National Association of Securities Dealers Automated Quotation System (Nasdaq) are eligible for the Dividend Reinvestment Service. Nonlisted foreign securities, nonpublicly traded limited partnerships, preferred issues, and short positions are not eligible. However, Pershing reserves the right to make certain currently non-eligible securities eligible in the future without prior notification.
- 3. Eligible Cash Distribution for Reinvestment**—Most cash distributions on eligible securities (eligible cash distributions) selected for participation in the Dividend Reinvestment Service may be reinvested, including ordinary dividends and capital gain distributions. Cash-in-lieu payments and certain special dividend payments, however, cannot automatically be reinvested. I may not combine eligible cash distributions with any funds I deposit into my account to make automatic reinvestment purchases.
- 4. Dividend Reinvestment Transactions in Eligible Securities**—If the record date for the dividend is at least five business days prior to the dividend pay date, on the payable date my account will be credited the amount of the cash distribution. This amount will then be debited from my account, and the appropriate number of full and fractional shares will be credited to my account. However, if the record date for the dividend is less than four business days prior to the dividend pay date, Pershing will attempt to purchase

the reinvestment shares on the first trading day after the record date. On the settlement date, my account will be credited the amount of the cash distribution, debited the amount equal to the cost of the whole and fractional shares purchased, and subsequently allocated the appropriate number of reinvested shares. If shares cannot be purchased after three attempts, I will receive a cash distribution. I will not receive a confirmation for these transactions. I will be able to review all of the information about each transaction that would normally appear on my confirmation, along with my current reinvestment instructions, on my Brokerage statement. I may also contact T. Rowe Price on the payable date (or any date thereafter) for current information regarding the transactions.

The shares are purchased through open market purchases prior to the payable date. Pershing will calculate the number of shares to be purchased for the selected security by determining the cash distribution to be received by each individual requesting reinvestment. Pershing will then combine my cash dividend with other individuals requesting reinvestment in the same underlying security and purchase the amount of whole and fractional shares required to satisfy each individual. If the transaction cannot be completed in one trade, I will receive the average weighted price paid by Pershing. When I sell my entire position, I will receive the same price on my fractional portion as I did for my whole share portion. For transfers, only the whole share portion will be moved, and I will receive the previous business day's closing price for the fraction. Pershing may purchase the securities from Pershing LLC. Pershing may, without prior notification, choose to make a security eligible or non-eligible.

5. **Partial Shares**—Automatic reinvestment of my eligible cash distributions may give me an interest in partial shares, which T. Rowe Price or Pershing will calculate to five decimal places (only three decimal places will show on statements). I will be entitled to receive dividend payments proportionate to my partial shareholdings. If an account is transferred, if a stock undergoes a reorganization, or if stock certificates are ordered out of an account, partial share positions, which cannot be transferred, reorganized, or issued in certificate form, will be liquidated at prevailing market prices. No commission will be charged for these transactions. Timing is subject to T. Rowe Price or Pershing discretion. I will also be entitled to receive proxy voting materials and voting rights proportionate to my partial shares. In mandatory corporate reorganizations, my partial shares will be handled according to the terms of the particular reorganization. In voluntary reorganizations, my instructions will be applied only to my whole shares. In the event of a rights offering to holders of an eligible security, T. Rowe Price or Pershing will cause the rights accruing to all partial shares of that security to be sold.
6. **Confirmation and Statements**—All transactions made through the Dividend Reinvestment Service will be confirmed on my regular account statement. Pershing acts as agent in all dividend reinvestment transactions. I may obtain immediate information by calling a registered representative of T. Rowe Price Brokerage.

34. Brokerage Advantage Account Features. The features outlined below apply only to Brokerage Advantage Accounts. For information regarding similar features that may be available with a Brokerage account, please reference the prospectus of the Price Fund you chose as your Money Market Sweep Fund.

ACH Transactions. I understand that there are several types of electronic transactions I can authorize that are handled through the Automated Clearing House (ACH) network. The primary types of ACH transactions permitted for my Account are (a) purchases and redemptions I authorize Price to make between my Account and my bank account in amounts between \$100 to \$100,000; (b) deposits to my Account that I authorize a third party to make, such as payroll deposits by my employer; (c) recurring or one-time debits that I authorize another financial services company to make in order to transfer funds from my Account to an account I have at the other financial services company; (d) recurring payments at substantially regular intervals from my Account that I authorize a third party to initiate, such as to pay my mortgage or other bills; (e) one-time payments from my Account that I authorize a third party to initiate in accordance with the ACH rules for prearranged payment and deposit entries; (f) one-time payments from my Account that I authorize over the telephone for a merchant or other third party to make; and (g) recurring or one-time payments from my Account that I authorize over the Internet for a merchant or other third party to make. In addition to the terms of the Account Agreements, the rules of the ACH network will apply to all ACH transactions. Please see the Checkwriting section for certain types of ACH transactions involving checks that are not permitted.

Wire. I understand that I can conduct electronic transactions via bank wire. I acknowledge that there is currently a \$15 fee for wire redemptions from my Account and that my bank may charge for incoming or outgoing wire transfers regardless of size.

Sale (Redemption) Conditions. I understand that if I request a redemption of funds that I just deposited via check or ACH transfer, Price will generally delay sending me such funds for up to seven business days to allow the check or transfer to clear. If Price receives a check drawn against my Account during the clearing period and additional funds are not available, the check will be returned marked "uncollected." Other types of redemptions, such as an ACH debit initiated by a third party, also may be

rejected and returned unpaid under these circumstances. (These holding periods do not apply to purchases paid for by bank wire or automatic purchases through your paycheck).

My redemption could also be delayed if there are outstanding authorizations on my Visa Gold ATM Debit/Check Card. If I request a redemption and there are authorizations pending, Price will process my redemption to the extent that funds are available in my Account.

- Price will redeem shares from my Account to cover transactions in the following order, to the extent applicable to my Account:
- Visa Gold ATM Debit/Check Card transactions (including ATM withdrawals, merchandise purchases, and cash advances)
- Brokerage transactions occurring prior to presentments
- Checkwriting services on money market sweep accounts
- ACH transactions not initiated by Price

Between Cash and Margin. For all Brokerage Advantage Accounts that maintain a margin account and utilize the cash management features, Pershing will, on a weekly basis, transfer fully paid marginable securities held in my cash account to my margin account to maximize my available secured credit line.

Checkwriting. I understand that I will be permitted to write an unlimited number of checks against my Account balance and that funds will be drawn in the following order: (1) against any free credit balance in my Brokerage Advantage Account, (2) against the balance in my Money Market Sweep Fund, then (3) against the available free cash that I may borrow if I have a margin account. I understand that if margin free cash is used, I will be subject to margin interest and maintenance calls as disclosed in the Margin Agreement. There is no minimum check amount requirement, and canceled checks will not be returned to me by the bank. The check number, amount of each check, payee, and date posted will normally appear on my monthly statement.

Sometimes a merchant or other third party gives notice that information from a check I wish to write at a cash register or that I may send in for a bill payment may be used to make an electronic fund transfer instead, but certain types of checks, including those for my Account, are not eligible to be converted to electronic debits under the ACH network rules. I understand that I should not use my checks in these cases unless the third party offers an alternative that will not result in the check being converted to an electronic debit.

I understand that the use of my card (if applicable) is subject to the Agreement that was sent to me with my card, as amended from time to time (Card Agreement). I can call 1-800-222-7002 for a current copy of the Card Agreement. As to issues or questions involving my card or card usage, in the event of a conflict between these Account Agreements and the Card Agreement, the Card Agreement will control to the extent of the conflict.

Transactions Subject to the Electronic Funds Transfer Act. To the extent transactions for my Account are subject to the Electronic Funds Transfer Act (EFTA) and the regulations under the EFTA, the following provisions also apply:

Types of Electronic Funds Transfers. I can authorize a third party, such as a merchant or other company, to (a) initiate recurring payments at substantially regular intervals from my Account, such as to pay my mortgage or other bills; (b) initiate a one-time payment from my Account in accordance with the ACH rules for prearranged payment and deposit entries; (c) initiate a one-time payment from my Account for a transaction I am making by telephone; or (d) initiate recurring or one-time payments from my Account for a transaction I am making over the Internet (collectively, Transactions). The other types of ACH transactions I can make are listed in the section titled "ACH Transactions," but generally they are not subject to the EFTA.

Business Days. The term "Business Day" means Monday through Friday, excluding federal holidays. Although Price's offices may be open on certain federal holidays, these days are not considered Business Days for purposes relating to Transactions.

Periodic Statements. Price will send me an account statement every month in which a Transaction was made. In any case, I will get an account statement at least quarterly.

Recurring Payments—Stopping Payment; Notice of Varying Amounts. If I have authorized a third party to make recurring payment Transactions from my Account, I can stop any of these payments by calling or writing Price in time for Price to receive my request three Business Days or more before the payment is scheduled to be made. (See the following section titled "In Case of Errors or Questions About Transactions" for Price's telephone number and address). I must tell Price the exact amount of the payment I want stopped and any other identifying information requested. If I call, Price may also require me to put my request in

writing and get it to Price within 14 days after my call. If I order Price to stop one of these payments three Business Days or more before it is scheduled to be made and Price does not do so, Price will be liable for my losses or damages.

If these regular payments may vary in amount, the person I am going to pay should tell me, 10 days before each payment, when it will be made and how much it will be.

Liability for Failure to Complete Transactions. If Price does not complete a Transaction to or from my Account on time or in the correct amount according to the Account Agreements, Price will be liable for my losses or damages. However, there are some exceptions. Price will not be liable if:

- Through no fault of Price, I do not have a sufficient available balance to make the Transaction;
- Any computer or telephone system was not working properly and I knew about the breakdown when I started the Transaction;
- My Account is frozen (for example, because of a court order or other similar reason) and Price is not permitted to make the Transaction;
- Circumstances beyond Price's control (such as fire or flood) prevent the Transaction, despite the reasonable precautions it has taken;
- I failed to use the computer or telephone system in accordance with instructions;
- Price has limited or refused to complete Transactions for security reasons; or
- Price has reason to believe that the requested Transaction is unauthorized.

There may be additional exceptions stated elsewhere in the Account Agreements or as I have been otherwise notified. Price will not be responsible for any person's actions in refusing to honor or accept Transactions I have requested. In any case, Price will be liable only for actual proven damages if the failure to make the Transaction resulted from a bona fide error by Price despite its procedures to avoid such errors.

Confidentiality. Generally, Price will keep information concerning my Account and Transactions confidential. Price may reveal information to third parties about my Account and my Transactions (a) where it is necessary for completing my Transaction; (b) in order to verify the existence and condition of my Account for a third party, such as a credit bureau or merchant; (c) in order to comply with laws or with orders of subpoenas of government agencies or courts; (d) if I give Price written permission; (e) to other persons and entities in order to resolve problems or disputes arising from Transactions; (f) as otherwise stated in the Account Agreements; or (g) in the circumstances contemplated by Price's Privacy Policy, as furnished to Price separately and as updated or amended from time to time.

35. Regulation E. Regulation E of the Consumer Financial Protection Bureau establishes disclosures regarding electronic transfers. In addition to the disclosures in this section, I should review the account terms and conditions and other disclosures regarding electronic transfers that are provided to me by Price. Please note that this disclosure section is not applicable to international remittance transfers. I will contact Price in the event that I have any questions regarding international remittance transfers you have requested.

Electronic Transfers

Electronic transfers include:

- **Direct Deposits**—I provide my checking account information to a company (such as employer, Social Security Administration) and the company electronically sends deposits to my checking account, which credits the brokerage account.
- **Authorized Debits**—I provide my checking account information to a company (such as mortgage, utility) and the company electronically sends debits to my checking account, which debits the brokerage account.
- **Debit Card Transactions**—Any merchant purchase, automatic teller machine (ATM) withdrawal or cash advance done with the debit card issued from the account.
- **Electronic Check Conversion**—I authorize a merchant or other payee to make a one-time electronic payment from my checking account using information from my check to pay for purchases or to pay bills.

If I have any questions regarding electronic transfers, I can call Pershing's Asset Management Account Department at (800) 547-7008 or at (201) 413-4624.

I may also write to Pershing at:

Pershing LLC
Asset Management Account Department One Pershing Plaza, Fifth Floor
Jersey City, NJ 07399

Contact Pershing immediately if I think your statement or transfer receipt is incorrect, or if I need more information about a particular transfer. Pershing must hear from me within 60 days of the date of the first statement on which the transfer in question appeared. When contacting Pershing, please provide:

My name
Account number
Dollar amount of the transfer
Description of the transfer
Explanation indicating why I believe there is an error or why I need more information

If I notify Pershing verbally, it may request that I submit my inquiry in writing. If not received within 10 business days of Pershing's request, Pershing may not credit my account.

Pershing will inform me of the results of Pershing's investigation within 10 business days after it receives my inquiry and it will promptly correct any error.

If Pershing needs more time to investigate my inquiry, Pershing will credit my account in the amount of the transfer in question so that I have use of the funds during Pershing's investigation, which may take up to 45 days to complete.

Pershing will inform me of the results within three business days after completing its investigation. If Pershing decides that there was no error, it will send me a written explanation. I may request copies of the documents that Pershing uses in its investigation. If I have any questions, I can contact Price. I may also contact Pershing's Asset Management Account Department at (800) 547-7008 or (201) 413-4624 or by fax at (201) 413-5304.

36. Credit and Margin Disclosures

Cash Accounts—At Pershing's discretion, cash accounts may be subject to interest on any debit balances (in any currency) resulting from securities purchased and not paid for by the settlement date, untimely deliver securities sold, from proceeds of sales paid prior to the settlement date, or for other charges that may be made to the Account.

Margin Accounts—Purchases of securities on credit, commonly known as margin purchases, enable me to increase the buying power of my equity and thus increase the potential for profit or loss. A portion of the purchase price is deposited when buying securities on margin, and Pershing extends credit for the remainder. This loan appears as a debit balance on my monthly account statement. Pershing charges interest on the debit balance and requires me to maintain securities or cash to repay the loan and its interest.

Interest will be charged for any credit extended to me for the purpose of buying, trading, or carrying any securities; for any cash withdrawals made against the collateral of securities; or for payment made in advance of settlement on the sale of securities (from date of payment until settlement date). If any other charge is made to the Account for any reason, interest may be charged on the resulting debit balances. Interest I pay on the loan may be shared between Price and Pershing. If I have a margin account, pursuant to the Margin Agreement with Pershing, securities not fully paid for may be used by Pershing or loaned out to others, and as permitted by law, certain securities in my Account may be used for, among other things, settling short sales and lending the securities. As a result, Price and Pershing may receive compensation therewith. Further, fully paid-for securities held in a cash account (unless otherwise agreed to in a separate written Agreement) and fully paid-for securities held in a margin account in which there is no debit balance are not loaned.

In locating "hard to borrow" securities to support my short sales, I may be charged a fee. The rate may also include a charge above the fee Pershing assesses. This additional fee represents work done by Price on my behalf in connection with these transactions.

Interest Rates—Interest charged on any debit balances in cash accounts or credit extended in margin accounts may be up to 3% above the Pershing Base Lending Rate for that currency. The Pershing Base Lending Rate for each currency will be set with reference to commercially recognized interest rates, industry conditions relating to the extension of credit, and general credit

market conditions. For a loan in a currency other than U.S. dollars, the Pershing Base Lending Rate will be set based on the above referenced criteria in the country whose currency is the basis of the loan and can change without prior notice. When the Pershing Base Lending Rate for a particular currency changes during an interest period, interest will be calculated according to the number of days each rate is in effect during that period. If the rate of interest charged to me is changed for any reason other than stated above, I will be notified at least 30 days in advance. In compliance with the rules governing the protection of customer funds, Pershing earns money by investing my cash awaiting reinvestment or by lending it to other customers. In some cases, a portion of the interest earned on money credit balances held by Pershing may be shared with Price. Additionally, a portion of the interest paid to Pershing (for example, cash due interest) may be shared with Price.

Interest Period—The interest period begins on the 20th of each month and ends on the 19th of the following month. Accordingly, the interest charges for the period as shown on my monthly statement are based only on the daily net debit and credit balances for the interest period.

Method of Computation—At the close of each interest period during which credit was extended to me, an interest charge is computed (in each applicable currency) by multiplying the average daily debit balance by the applicable schedule rate and by the number of days during which a debit balance was outstanding and then dividing by 360. If there has been a change in the Pershing Base Lending Rate, separate calculations will be made computing the number of days within the interest period at each rate. If credit extended to my Account is not paid, the interest charge at the close of the period is added to the opening debit balance for that currency in the next period.

With the exception of credit balances in my short account, all other credit and debit balances in the same currency will be combined daily. Interest will be charged on the resulting average daily net debit balances for that currency for the period. Credit balances in one currency will not be combined or netted with debit balances in a different currency. If there is a debit in my cash account and I hold a margin account, interest will be calculated on the combined debit balance and charged to my margin account. Any credit balance in my short account is disregarded because such credit collateralizes the stock borrowed for delivery against the short sale. Such credit is disregarded even if I should be long the same position in my margin account (for instance, short sale against the box).

If the security that I sold short (or sold short against the box) appreciates in market price over the selling price, interest will be charged (in the appropriate currency) on the appreciation in value. Conversely, if the security that I sold short depreciates in market price, the interest charged will be reduced since my average debit balance will decline. This practice is known as “marking to market.” Each week, a closing price is used to determine any appreciation or depreciation of the security sold short. If my Account is short shares of stock on the record date of a dividend or other distribution (however such short position occurs), my Account will be charged the amount of the dividend or other distribution on the following business day.

General Margin Policies—The amount of credit that Pershing may extend and the terms of such extension are governed by rules of the Federal Reserve Board and FINRA. Within the guidelines of those rules and subject to adjustment required by changes in those rules and Pershing’s business judgment, Pershing’s margin account policies are summarized below:

- Pershing may require the deposit of additional acceptable collateral at any time.
- Margin account equity is the current market value of securities and cash less the amount owed Pershing for credit extended at its discretion.
- It is Pershing’s general policy to require margin account holders to maintain a certain level of regarding common stock: 30% of the current market value or \$3 per share, whichever is greater.
- Any security valued at less than \$5 per share may not be purchased in a margin account.
- From time to time, Pershing may deem certain securities ineligible for margin credit.

For information with respect to general margin maintenance policy for municipal bonds, corporate bonds, U. S. Treasury notes and bonds, and other securities, as well as information about the eligibility of particular securities for margin credit, please contact Price.

Notwithstanding the above general policies, Pershing reserves the right, at its discretion, to require the deposit of additional collateral and to set required margin at a higher or lower amount with respect to particular accounts or classes of accounts as it deems necessary. In making this determination, Pershing may take into account various factors, including but not limited to:

- Issues as to my securities, such as, among others, the liquidity of a position and concentration of securities in an account
- Considerations as to my status, including but not limited to a decline in creditworthiness

- The size of the account
- The general condition of the market
- Considerations as to the ability of Pershing to obtain financing
- Regulatory interpretations and guidelines.

If I fail to meet a margin call in a timely manner, some or all of my positions may be liquidated.

Deposits of Collateral, Lien on Accounts, and Liquidation—In the event that additional collateral is requested, I may deposit funds or acceptable securities into my margin account. If satisfactory collateral is not promptly deposited after a request is made, Pershing or Price may liquidate securities held in any of my Accounts. Pursuant to its Margin Agreement, Pershing may retain any asset held in my Accounts, including securities held for safekeeping as long as any credit extended remains outstanding.

Callable Securities—Securities held for my Account in street name, or by a securities depository, are commingled with the same securities held for Pershing's own clients and clients of other firms. My ownership of these securities is reflected in Pershing's records. I have the right at any time to require delivery of any securities that are fully paid for or are in excess of margin requirements.

The terms of many bonds allow the issuer to partially redeem or "call" the issue prior to the maturity date. Certain preferred stocks are also subject to being called by the issuer. Whenever any such security being held by Pershing is partially "called," Pershing determines the ownership of the securities to be submitted for redemption, through a random selection procedure as prescribed by FINRA Rules, without regard to unsettled sales. In the event that such securities owned by me are selected and redeemed, my Account will be credited with the proceeds.

If I do not wish to be subject to this random selection process, I must instruct Price to have Pershing deliver my securities to the transfer agent directly via Direct Registration System (DRS) or request a physical certificate issued in my name and mailed to me. There will be fees associated with the issuance of certificates or DRS positions, and not all issuers still offer certificates. To move a security, it must not have been called by the delivery date. When moving a security off the Pershing platform, it will no longer reflect on my brokerage statement. Also, the probability of one of my securities being called is the same whether they are held by me or by Pershing for me.

Miscellaneous Credits—Pershing credits Account funds that belong to me, such as dividends, interest, redemptions, and proceeds of corporate reorganizations, on the day such funds are received by Pershing. These funds come to Pershing from issuers and various intermediaries in which Pershing is a participant, such as the Depository Trust Company. Periodically, an intermediary will pass to Pershing some or all of the interest earned on funds while in the possession. To the extent Pershing receives such payments, Pershing retains them.

Price is responsible for providing me information regarding when Pershing credits my Account with funds due to me, when those funds are available to me, and/or when I begin earning interest on those funds.

Substitute Payments—As permitted under my Margin Agreement, Pershing may lend shares in my Account when my Account has a debit balance. Payment that I receive with respect to loaned securities will be reclassified as "substitute" payments. The tax consequences of substitute payments may differ from payments made directly from the security's issuer, such as qualified dividends. For instance, a qualified dividend received by an individual may be taxed at a preferential rate. If a substitute payment is received instead, the preferential rate will not apply. Individuals may also be affected if certain payments (such as exempt-interest dividends, capital gain distributions, return of capital, and foreign tax credit dividends) are reclassified as substitute payments. Corporate taxpayers could also be affected because the dividends-received deduction is not available with respect to substitute payments.

Substitute Payment Reimbursements—As permitted under my Margin Agreement, Pershing may lend shares in my account when my account has a debit balance. In the instance where my securities are on loan over an ex-dividend date, Pershing may issue a substitute payment to my Account in lieu of the dividend and, subsequently, a reimbursement to compensate me for the tax differential. A substitute payment received in lieu of a qualified dividend may be eligible for a reimbursement to the lender's account only if the Account is open on the reimbursement date. Please note that these reimbursements are (1) credited at Pershing's discretion, (2) subject to change, and (3) may be eliminated without advance notification. I understand that I should contact my tax advisor to discuss the tax treatment of substitute payments.

FACTS WHAT DOES **Pershing LLC** 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
- Account balances and account transactions
- Assets 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 Pershing LLC chooses to share; and whether you can limit this sharing.

Reasons we can share your personal information	Does Pershing LLC share?	Can you limit this sharing?
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	Yes	No
For our marketing purposes— to offer our products and services to you	No	No
For joint marketing with other financial companies	No	No
For our affiliates’ everyday business purposes— information about your transactions and experiences	Yes	No
For our affiliates’ everyday business purposes— information about your creditworthiness	No	No
For our affiliates to market to you	No	No
For non-affiliates to market to you	No	No

Questions? Call (201) 413-3333

Who we are

Who is providing this notice?	Pershing LLC, a subsidiary of The Bank of New York Mellon Corporation
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What we do

How does Pershing LLC 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 Pershing LLC collect my personal information?	<p>We collect your personal information, for example, when you</p> <ul style="list-style-type: none"> ▪ Open an account ▪ Provide account information ▪ Make deposits or withdrawals from your account ▪ Use your credit or debit card ▪ Make a wire transfer <p>We also collect your personal information from third parties, such as credit bureaus, affiliates, or other companies.</p>
Why can't I limit all sharing?	<p>Federal law gives you the right to limit only</p> <ul style="list-style-type: none"> ▪ Sharing for affiliates' everyday business purposes—information about your creditworthiness ▪ Affiliates from using your information to market to you ▪ Sharing for non-affiliates to market to you <p>State laws and individual companies may give you additional rights to limit sharing.</p>

Definitions

Affiliates	<p>Companies related by common ownership or control. They can be financial and non-financial companies.</p> <ul style="list-style-type: none"> ▪ Our affiliates include banks and companies whose names include "The Bank of New York," "BNY," "Mellon," or "Pershing," and other financial companies such as Lockwood Advisors, Inc., as well as non-financial companies such as Albridge Solutions and iNautix.
Non-affiliates	<p>Companies not related by common ownership or control. They can be financial and non-financial companies.</p> <ul style="list-style-type: none"> ▪ Pershing LLC does not share information with non-affiliates so they can market to you.
Joint marketing	<p>A formal agreement between non-affiliated financial companies that together market financial products or services to you.</p> <ul style="list-style-type: none"> ▪ Pershing LLC does not jointly market.

Other important information

This notice applies to individual consumers who are customers or former customers. This notice replaces all previous notices of our consumer privacy policy, and may be amended at any time. We will keep you informed of changes or amendments as required by law.

