Commission-Free trades for 60 days PLUS up to \$600 cash on qualifying accounts!¹

<Dear First Name, Last Name>,

Thank you for your interest in TD Ameritrade!

Whether you're a seasoned trader or a long-term investor, you may be able to benefit from a TD Ameritrade account. Here's why:

FREE daily access to third-party investment ideas and research from companies you know and trust: Morningstar®, Standard & Poor's®, TheStreet, and more!2

Powerful trading platform and tools, including Trade Architect, our advanced yet simple to use Web-based trading platform that gives you everything you need to strategize and make confident decisions in one place. Enjoy streaming news, NASDAQ level II quotes, and helpful trading specialists with no hidden fees.

Quality execution and low-cost trades! Our unique trading platform's high-speed connectivity allows us to seek the best available price.³ And you'll enjoy our straightforward pricing, with no share limits and no maintenance fees.⁴ Commissions, service fees, and exception fees still apply.

CDs, mutual funds, ETFs, bonds, and more! Balance out your portfolio with a full range of investment products—from CDs to mutual funds and ETFs, and even bonds—all in one seamless TD Ameritrade account.

Investment tools and resources. Access FREE online education, tools, and support—including valuable investment seminars, courses, webcasts and seminars, and sophisticated but easy to use portfolio planning tools and calculators.

It's easy. Simply complete the enclosed application and mail it along with your check for the initial deposit in the enclosed postage-paid envelope, or, for faster service, visit us online at tdameritrade.com.

If you have a question or need assistance, TD Ameritrade is here to help. Call us at 800-276-8746, anytime, 24 hours a day, seven days a week, or send an email to **starting@tdameritrade.com**.

Sincerely,

Carrie Braxdale

Managing Director, Investor Services

Carrie Brazodale

TD Ameritrade

P.S. Open a new qualified TD Ameritrade account with \$3,000 or more and enjoy 60 days of commission-free online equity, ETF, and options trades. Fund with \$25,000 or more and also receive a cash bonus up to \$600.

(see reverse for important information and offer details)



Market volatility, volume, and system availability may delay account access and trade executions.

- 1. Offer valid for one new Individual or Joint TD Ameritrade account opened by 03/31/2017 and funded within 60 calendar days of account opening with \$3,000 or more. To receive \$100 bonus, account must be funded with \$25,000 or more within 60 days of account opening. To receive \$300 bonus, account must be funded with \$100,000 or more within 60 days of account opening. To receive \$600 bonus, account must be funded with \$250,000 or more within 60 days of account opening. Offer is not valid on tax-exempt trusts, 401k accounts, Keogh plans, Profit Sharing Plan, or Money Purchase Plan. Offer is not transferable and not valid with internal transfers, accounts using advisory services from TD Ameritrade Investment Management, LLC, TD Ameritrade Institutional accounts, current TD Ameritrade accounts, or with other offers. Qualified commission-free Internet equity, ETF, or options trades will be limited to a maximum of 500 and must execute within 60 calendar days of account funding. Contract, exercise, and assignment fees still apply. Limit one offer per client. Account value of the qualifying account must remain equal to, or greater than, the value after the net deposit was made (minus any losses due to trading or market volatility or margin debit balances) for 12 months, or TD Ameritrade may charge the account for the cost of the offer at its sole discretion. TD Ameritrade reserves the right to restrict or revoke this offer at any time. This is not an offer or solicitation in any jurisdiction where we are not authorized to do business. Please allow 3-5 business days for any cash deposits to post to account. (Offer Code 220) Taxes related to TD Ameritrade offers are your responsibility. Retail values totaling \$600 or more during the calendar year will be included in your consolidated Form 1099. Please consult a legal or tax advisor for the most recent changes to the U.S. tax code and for rollover eligibility rules.
- 2. Research provided by unaffiliated third-party sources. TD Ameritrade is not responsible for the products, services, and policies of any third party.
- 3. TD Ameritrade is obligated to seek the best price available for your order taking into consideration current market conditions, such as the National Best Bid and Offer (NBBO), volume, and liquidity. Price can change quickly in fast market conditions, resulting in an execution price different from the one displayed at order entry.
- Trades partially executed over multiple trading days are subject to commission charges for each trading day.
 See https://www.tdameritrade.com/pricing.page for complete listing.

TD Ameritrade, Inc., member FINRA/SIPC. TD Ameritrade is a trademark jointly owned by TD Ameritrade IP Company, Inc. and The Toronto-Dominion Bank. © 2017 TD Ameritrade.

TDA 2127 L 01/17 exp 03/31/17



Standard Retail Pricing: Commissions, Rates, and Fees

PO Box 2760 - Omaha, NE 68103-2760

Fax: 866-468-6268

Our low, straightforward online trading commissions let you concentrate on executing your investment strategy...not on calculating fees.

Commissions

Stocks and Exchange Traded Funds (ETFs)

Trade Unlimited Shares (Market or Limit)	Price			
Internet	\$6.95			
Interactive Voice Response (IVR) Phone System	\$34.99			
Broker-Assisted	\$44.99	THE AN EXPLICATION OF THE PROPERTY OF THE PROP		

Orders executed in multiple lots on the same trading day will be charged a single commission. When an order is partially executed over multiple trading days, the order is subject to a separate commission charge for each trading day.

TD Ameritrade receives remuneration from certain ETFs that participate in the commission-free ETF program for shareholder, administrative, and/or other services.

Mutual Funds

Fund Type	Price No commission		
No-Transaction-Fee (NTF) Funds			
No-Load Funds	\$49.99		
Load Funds	No commission*		

^{*}The Fund Family will charge fees as detailed in the fund prospectuses.

No-transaction-fee (NTF) funds (except ProFunds and Rydex) held 180 days or less are subject to a Short-Term Redemption fee of \$49.99. This fee is in addition to any applicable transaction fees or fees addressed in the fund's prospectus.

TD Ameritrade receives remuneration from mutual fund companies, including those participating in its no-load, NTF program for recordkeeping, shareholder services, and other administrative and distribution services. The amount of TD Ameritrade's remuneration for these services is based in part on the amount of investments in such funds by our clients. NTF mutual funds and other funds offered through TD Ameritrade have other fees and expenses that apply to a continued investment in the fund and are described in the prospectus.

Options

Equity or Index, Market, and Limit Orders	Price
Internet	\$6.95 + \$0.75 fee per contract
Interactive Voice Response (IVR) Phone System	\$34.99 + \$0.75 fee per contract
Broker-Assisted	\$44.99 + \$0.75 fee per contract

Please note: Options exercises and assignments will incur a \$19.99 commission. Options involve risks and are not suitable for all investors.

Bonds and CDs

Product Type	Price		
Treasuries at Auction	\$25 flat fee		
Bond and CD Trades	On a net yield basis		

TD Ameritrade may act as principal on any fixed-income transaction. When acting as principal, we will add a markup to any purchase, and subtract a markdown from every sale. This markup or markdown will be included in the price quoted to you.

Cash Sweep Vehicles Interest Rates**

TD Ameritrade FDIC Insured Deposit Account (IDA) Rates

For current rates, please call 800-669-3900 or go to the TD Ameritrade website at: https://www.tdameritrade.com/pricing/margin-and-interest-rates.page. Subject to change without prior notice.

TD Ameritrade Cash Rates

For current rates, please call 800-669-3900 or go to the TD Ameritrade website at: https://www.tdameritrade.com/pricing/margin-and-interest-rates,page, Subject to change without prior notice.

**Interest rates paid on balances in the IDA and TD Ameritrade Cash are based on tiers. The previous day's closing balance determines eligibility for a particular tier each day. Simple interest is accrued daily, based on the interest rate tier applicable to each day's balance, and is credited to your account on the last business day of the month. In accordance with the Client Agreement, TD Ameritrade may change the tiers and rates at its discretion and without notice and is not obligated to pay different rates between tiers. Rate changes may vary by program, location, or arrangement.

TD Ameritrade receives a fee from the IDA Program Banks that ranges from 1.1 to 1.4%. TD Ameritrade has the right to waive all or part of this fee. The rate of the fee that TD Ameritrade receives may exceed the interest rate or effective yield that you receive in your IDA, and the payment of the fee reduces the yield that you receive. Other than the applicable fees charged on brokerage accounts, there will be no charges, fees, or commissions imposed on your account for this cash sweep feature. The current IDA interest rate will be disclosed on the TD Ameritrade website and may be changed without prior notice.

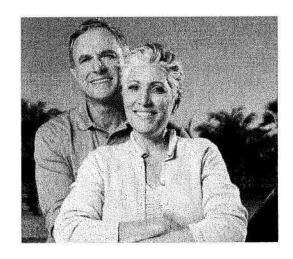
Fee Schedule

Service Fees†	
Certificate Withdrawal	
Delivery ^{††}	\$500
Checking	
Checkbook Reorder	No charge/100, IRA No charge/20
Copy of Check	\$15
Miscellaneous	and the stress experience deal, and are set of the second experience of
Overnight Delivery	Billed at cost
Stop Payment	\$25
Reorganization	\$38
Mandatory	\$38
Voluntary Tender Offer	400
Statements and Trade Confirmations	No charge
Electronic Statements	No charge: accounts with liquidation value ≥ \$10k
Paper Monthly Statements by U.S. Mail [†]	\$2: accounts with liquidation value < \$10k
Paper Quarterly Statements by U.S. Mail	No charge: accounts with liquidation value ≥ \$10k
Paper Quarterly Statements by 0.5. Mair	\$2: accounts with liquidation value < \$10k
Paper Trade Confirmations by U.S. Mail	No charge
Replacement Paper Statements by U.S. Mail	\$5
Replacement Paper Trade Confirmations by U.S. Mail	\$5
Transfers	
Outbound Full Account Transfer	\$75
Outbound Partial Account Transfer	No charge
Wires (Outgoing) Domestic/International	\$25
Exception Fees	4002
Commission-Free ETF Short-Term Trading Fee	\$13.90
Forced Margin Sellout	\$25 + broker commission
Foreign Security	\$15 + broker commission and all applicable local market charge
Removal of Non Marketable Security	No charge
Mutual Fund Short-Term Redemption Feett	\$49.99
Alternative Investments (AI) Custody Fee	\$250 per position
Alternative Investments (AI) Transaction Fee	\$100 per transaction
Regulation T Extension	\$25
Restricted Security Processing	\$250
Returned Check/Electronic Funding	\$25
Regulatory Fees	
"Section 31" Fee ¹	\$0.0000231 per \$1.00 of transaction proceeds
Options Regulatory Fee ²	\$0.0166 per options contract
Trading Activity Fee ³	\$0.000119 per equity share
2122 1222	\$0.002 per options contract
	\$0.00075 per bond
	\$0.00000075 x value per asset-backed security trade

All prices shown in U.S. dollars. Commission, rates, and fees may vary by program, location, or arrangements and are subject to change upon 30 days' notice to you.

- † All service fees are subject to change. Pass-through fees charged to TD Ameritrade will be passed on to the client's account.
- †† Certificate requests requiring extraordinary processing, including certificates for foreign securities and requests to break certificates into multiple denominations, may incur additional charges, which will be passed through to your account.
- \$\(\) Some accounts, such as options-approved accounts, are required to receive monthly statements either electronically (free) or via U.S. mail.
- Applies to certain sell transactions, assessed at a rate consistent with Section 31 of the Securities Exchange Act of 1934. TD Ameritrade remits these fees to certain self-regulatory organizations and national securities exchanges, which in turn make payment to the SEC. These fees are intended to cover the costs incurred by the government, including the SEC, for supervising and regulating the securities markets and securities professionals. The rate is subject to annual and mid-year adjustments which may not be immediately known to TD Ameritrade; as a result, the fee assessed may differ from or exceed the actual amount of the fee applicable to your transaction. Any excess may be retained by TD Ameritrade. Fees are rounded to the nearest penny.
- 2 This fee varies by options exchange, where an options trade executes, and whether the broker responsible for the trade is a member of a particular exchange. As a result, TD Ameritrade calculates a blended rate that equals or slightly exceeds the amount it is required to remit to the options exchanges.
- This fee is assessed at a rate consistent with Section 1 of Schedule A of FINRA's By-Laws for trading activity. Current rates are: \$0.000119 per share for each sale of a covered equity security, with a maximum charge of \$5.95 per trade; \$0.002 per contract for each sale of an option; \$0.00075 per bond for each sale of a covered TRACE-Eligible Security (other than an Asset-Backed Security) and/or municipal security, with a maximum charge of \$0.75 per trade; \$0.00000075 times the value, as reported to TRACE, of a sale of an Asset-Backed Security, with a maximum charge of \$0.75 per trade. Fees are rounded to the nearest penny.

Investment Products: Not FDIC Insured * No Bank Guarantee * May Lose Value



At TD Ameritrade, we know you value your independence as an investor. Whether you're an active trader, invest for the long term, or do a little bit of both, your ability to make your own investing decisions and trust your own judgment defines who you are.

Welcome to TD Ameritrade

By choosing TD Ameritrade as your brokerage firm, you'll be working with a leader in the brokerage industry and a company dedicated to supporting your spirit of independence.

You'll get access to independent, third-party research. A powerful trading platform. Sophisticated tools that are easy to use and understand. Straightforward pricing. And client service and support systems that are personal, accessible, and flexible.

We invite you to find out more about us. And how the spirit of independence, both yours and ours, can help you along the path to financial independence.

Everything You Need to Invest and Trade with Confidence



At TD Ameritrade, you'll find all the tools and resources you need to plan and invest for today and the future. From easy-to-use planners and screeners to online tutorials and portfolio monitoring tools—you'll have everything you need to help you pursue your investing goals, no matter what they may be.

Straightforward pricing:

- \$6.95 commissions for Internet stock trades.
- \$6.95 for Internet options trades plus \$0.75 fee per contract.
 - Options exercise and assignment commission \$19.99.
- No account maintenance fees. No annual IRA fees.
 - Commissions, service, and exception fees still apply.

Research

We offer one of the largest resources of independent information anywhere online—well-organized, and all in one place so it's quick and easy to access. Use it to help validate your own ideas by checking out how independent research providers like Standard & Poor's® and Morningstar® rate particular stocks and mutual funds. Or use it to come up with new ideas.

At TD Ameritrade, you decide what's in your best interest, and we support you with all the research and information you need.

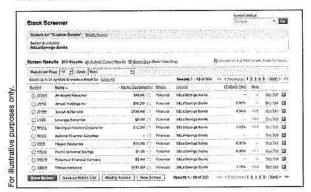
Investing Tools

Standard & Poor's tools

Arm yourself with the information you need to map out your own personal investing strategy—whether you're a seasoned investor or just starting out. Our Standard & Poor's tools are simple and powerful, making it even easier for you to learn about investing. Choose from a wide array of articles, calculators, and online seminars covering basic to complex information on everything from rollovers and retirement planning to college savings and tax planning.

Screening tools

You'll find a variety of screening tools that allow you to filter through thousands of mutual funds, Exchange Traded Funds (ETFs), and stocks based upon variables you set. It's a great way to identify potential investment choices that meet your individual needs.



Stock Screener

Tools like our stock screeners help you find potential investment ideas that may meet your individual investment strategy.



Third-party research and tools are obtained from sources deemed reliable, but TD Ameritrade does not guarantee their accuracy or completeness and makes no warranties with respect to results to be obtained from their use.

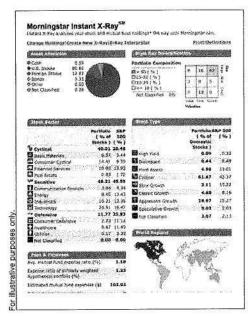
Mutual Funds

TD Ameritrade offers one of the widest selections of mutual funds, including major fund families such as Vanguard, Franklin, Janus, and Putnam. This diverse offering covers an array of investment objectives, goals, and strategies. We also offer powerful tools from Morningstar[®] to help you find the funds that fit your individual investment needs.*

Carefully consider the investment objectives, risks, charges, and expenses before investing. A prospectus, obtained by calling 877-TDAMERITRADE, contains this and other important information about an investment company. Read carefully before investing.

Bonds

TD Ameritrade offers a variety of Treasury, corporate, government and municipal bonds, and collateralized mortgage obligations (CMOs) to fit your fixed-income strategy. A licensed TD Ameritrade broker can assist you with placing a bond order.**



Morningstar® Instant X-Raysм

Did you know that there can be overlap among your mutual funds? Morningstar[®] Instant X-Ray^{®M} can show you where your investments overlap and tell you whether or not your portfolio is truly diversified.

Exchange Traded Funds

Exchange Traded Funds*** (ETFs) are becoming an increasingly popular investment choice because they combine the diversification of a mutual fund with the trading flexibility of a stock. If you're interested in adding ETFs to your portfolio, our ETF research pages can help you determine if they're the right investment for you. And you can use the ETF Screener to help find and trade them.



ETF Screener

^{*}Third-party research and tools are obtained from Morningstar, Inc., a third party not affiliated with TD Ameritrade. While the information is deemed reliable, TD Ameritrade does not guarantee their accuracy or completeness and makes no warranties with respect to results to be obtained from their use.

[&]quot;Investments in fixed-income products are subject to liquidity (or market) risk, interest rate risk (bonds ordinarily decline in price when interest rates rise and rise in price when interest rates fall), financial (or credit) risk, inflation (or purchasing power) risk, and special tax liabilities.

^{***}ETFs can entail risks similar to direct stock ownership, including market, sector, or industry risks. Some ETFs may involve international risk, currency risk, commodity risk, and interest rate risk. Trading prices may not reflect the net asset value of the underlying securities. Commission fees typically apply.

Astonishingly advanced. Surprisingly simple.

Trade Architect®

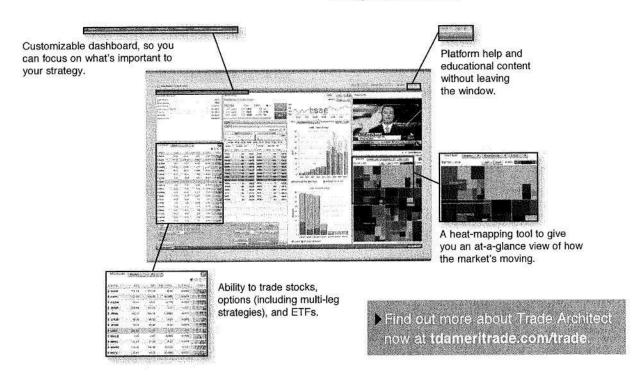
Trade Architect gives you all the trading functionality you want in one streamlined platform. Since it's web-based, no download is required, allowing you to access the platform from anywhere. Customize your desktop with tools that help you do more of what you do most, including:

Visual market monitoring – Use heat mapping, QuoteScope™, and profit/loss graphs to get a clear idea of market movement at a glance. It's a powerful way to quickly generate new trading ideas or validate ideas of your own.

In-depth analysis – Put some solid science behind your trading hunch with probability analysis, earnings analysis, and charts.

Real-time data – Catch every beat of the market using the latest information, including free* Level II Quotes and Streaming News. So you can be up to date before making a decision.

Help and education – Whether you have a question about the platform or need more information about a specific market sector, you can access the educational content you're looking for without leaving Trade Architect.



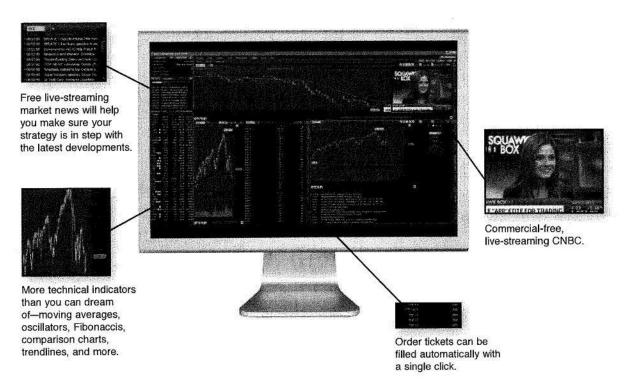
Past performance of a security does not guarantee future results.

Market volatility, volume, and system availability may delay account access and trade executions.

*Use of Trade Architect requires access to real-time market data, NASDAQ Level II data and Streaming News. Access to real-time market data is conditioned on acceptance of the exchange agreements. Streaming News is available for free to non-professional clients only. Subscription fees apply for professional access. For details, see our Professional Rates and Fees listing.

Probability analysis results are theoretical in nature, not guaranteed, and do not reflect any degree of certainty of an event occurring.

Our most advanced platform, no strings attached.



thinkorswim®

Want a powerful trading experience? Get thinkorswim. This feature-rich software is chock-full of innovative tools, real-time information, and comprehensive portfolio and trade analysis in one fully integrated platform.

- Place complex option trades online, including butterflies, condors, and other multi-leg strategies.¹
- Ability to trade futures and forex nonstop from market open on Sunday to market close on Friday.²
- Analyze up to 32 charts on a single page with hundreds of technical studies and drawing tools.
- Practice trading strategies with paperMoney® without risking a penny.
- Stay on top of the markets with live-streaming, commercial-free CNBC.
- Catch a market replay and conduct hypothetical trades using historical data with thinkOnDemand.
- Enjoy updates to your experience multiple times a year—we never stop innovating.

^{1.} Butterflies, condors, and other multi-leg option strategies can entail substantial transaction costs, including multiple commissions, which may impact any potential return. These are advanced option strategies and often involve greater risk, and more complex risk, than basic options trades. Options trading is not suitable for all investors and not all account holders will qualify.

^{2.} Futures and forex trading services provided by TD Ameritrade Futures & Forex LLC. Trading privileges subject to review and approval. Not all clients will qualify. Forex accounts are not available to residents of Ohio or Arizona.

Investment Choices

General Investments

- Stocks
- Options
- Mutual funds
- Exchange Traded Funds (ETFs)

Fixed-Income Products

- U.S. Treasury and Agency issues
- Municipal bonds
- Corporate bonds
- Convertible bonds
- Zero-coupon bonds
- Mortgage-backed securities (GNMAs)
- Certificates of Deposit (CDs)
- Unit Investment Trusts (UITs)

Other Investment Choices

■ Cash/money-market vehicles

Account Types

Standard Accounts

- Individual
- Tenants by the Entireties
- Tenants with Rights of Survivorship
- Community Property
- Corporate
- Estate
- Tenants in Common
- Investment Club
- Partnership
- Limited Liability Corporation
- Limited Liability Partnership
- Separate property

Individual Retirement Accounts

- Traditional IRA
- Roth IRA
- Rollover IRA
- IRA for a minor

College Savings Accounts

- Coverdell Education Savings Account (ESA)
- 529 College Savings Plan
- Custodial accounts (UGMA, UTMA)

Small Business Accounts

- Solo 401(k)
- SEP IRA
- SIMPLE IRA
- Profit-Sharing Plan
- Money Purchase Pension Plan

Trust Accounts

- Irrevocable trust
- Living trust
- Pension trust
- Personal trust
- Profit trust
- Retirement trust
- Revocable trust

Account Protection

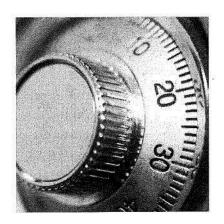
The Asset Protection Guarantee

If you lose cash or securities from your account due to unauthorized activity, we'll reimburse you for the cash or shares of securities you lost. We're promising you this protection, which adds to the provisions that already govern your account, in case unauthorized activity ever occurs and we determine it was through no fault of your own. Of course, unauthorized activity does not include actions or transactions undertaken by or at the request of you, your investment advisors or family members, or anyone else whom you have allowed access to your account or to your account information for any purpose, such as trading securities, writing checks or making withdrawals or transfers.

We promise this protection if you work with us in four ways:

- 1. Keep your personal identifying information and account information secure and confidential—because sharing your UserID, password, PIN, account number, or other standard means of authentication with other people means you authorize them to take action in your account.
- Keep your contact information up to date with us, so that we can contact you in case of suspected fraud;
- 3. Review your account frequently and your statements promptly and report any suspicious or unauthorized activity to us immediately in accordance with your Client Agreement.
- 4. Take the actions we request if your account is ever compromised and cooperate with our investigation.

If you help us protect you in these basic ways, we'll promise no fine print and no footnotes...just our commitment to protect the assets you entrust to us.



SIPC protection

TD Ameritrade is a member of the Securities Investor Protection Corporation ("SIPC"), which protects securities customers of its members up to \$500,000 (including \$250,000 for claims for cash). Explanatory brochure is available on request at www.sipc.org.

Additionally, TD Ameritrade provides each client \$149.5 million worth of protection for securities and \$2 million of protection for cash through supplemental coverage provided by London insurers. In the event of a brokerage insolvency, a client may receive amounts due from the trustee in bankruptcy and then SIPC. Supplemental coverage is paid out after the trustee and SIPC payouts and under such coverage each client is limited to a combined return of \$152 million from a trustee, SIPC, and London insurers. The TD Ameritrade supplemental coverage has an aggregate limit of \$500 million over all customers. This policy provides coverage following brokerage insolvency and does not protect against loss in market value of the securities.

TD Ameritrade, Inc., member FINRA/SIPC. TD Ameritrade is a trademark jointly owned by TD Ameritrade IP Company, Inc. and The Toronto-Dominion Bank. © 2017 TD Ameritrade.





Business Account Application

PO Box 2760 - Omaha, NE 68103-2760

Fax: 866-468-6268

Questions? Call a New Accounts representative at 800-276-8746. Please visit us at www.tdameritrade.com for more information about opening an account.

1. TYPE OF ACCOUNT	(Please select only one. Additi	onal pape	rwork may be	e required.)	
C Corporation					
S Corporation					
Foreign Corporation					
■Non-Incorporated Orga	nization				
Sole Proprietorship (p	roof of filing of assumed name is r	required)			
☐ Nonprofit/Charitable C	rganization				
	rification of tax-exempt status, may	/ require ac	lditional suppoi	rt documentation)
2. FUNDING YOUR AC			autių.		
Please consult the TD Am	eritrade Account Handbook for fund	ding guidel	ines.		
I will be funding with:					
	heck payable to TD Ameritrade Cl				
	ated after account opening. Please o				
					nd a copy of your most recent statement.
	ng TD Ameritrade account. Please co				
	e contact TD Ameritrade prior to sub count with physical stock certific		ificates. We wil	I require a comp	pleted Entity Authorized Agent Form if
3. ENTITY INFORMATI					
Title of Entity:					
Tax ID Number: (U.S. Social Security Number)	if applicable)			Date of Formation: (MM-DD-YYYY)	
Name Prefix (optional):	r. Mrs. Ms. Dr. Rev.	22 5450			
Contact Name: (for mailing purposes only)					
Business Address: (no PO box or mail drop)					
City:		State:		ZIP Code:	Country:
Mailing Address: (if different from above)			- T. Section of the s		
City:		State:		ZIP Code:	Country:
Primary Phone:	Check here if this is not a U.S. phor	ne number	Secondary Pho	one:	Check here if this is not a U.S. phone number
Fax Number:	<u> </u>		<u> </u>		
Email Address (required for e your account statement and to	lectronic delivery of rade confirmations):				
U.S. Entity Foreign En (complete a	tity – Country of Formation: appropriate Form W-8)		100 1155 (978-55	State/Province of	Formation:
Meeting/Resolution Date: (MM-DD-YYYY)					
Type of Business: (Please ch	oose from the list provided on page 10 th	he industry o	f occupation cod	e that most accura	tely describes your situation)
In the space provided, please	describe how your entity generates inco	ome:			
		812:0	Tienta et . ·	a authliah darah dari	among places area in the steel and half
Is this a Pooled Asset Vehicle	? □Yes □No		if this entity is a	a publiciy traded co	ompany, please specify the stock symbol;



4. AFFILIATIONS						
Check here if any Officer, their spouse, any member of their im directors, 10% shareholder, or policy-making officer of a publicl name, address, city, and state:	nmediate f ly traded o	amily, including par company, Specify th	rents, in-laws se name of th	, siblings, an e affiliated p	nd dependents is a merson/Officer, the con	ember of the board of mpany ticker symbol,
Check here if any Officer, their spouse, any member of their im associated with a broker-dealer firm, a financial services regulate for you to open this account, please provide a copy of the requ	r, securitie	es exchange, or mer	nber of a sec	urities excha	nge. If this affiliated er	ntity requires its approval
Check here if any Officer, their spouse, any member of their im or state registered Investment Advisor. Specify the name of the	mediate f e affiliated	amily, including par person/Officer and	ents, in-laws I Investment	siblings, an Advisor com	d dependents is, or is pany name:	employed by, a federal
Check here if any Officer, their spouse, any member of their imm sale or trading capacity. Specify the name of the affiliated pers	ediate fan on/Officer	nily, including paren	ts, in-laws, sit	olings, and de	ependents is using a l	icense in a professional
5. AUTHORIZED AGENT COMPENSATION						
Check here if any Authorized Agent (unaffiliated with the otherwise managing the account.	e entity)	is being compens	sated for pro	oviding inve	estment advice, plac	cing trades, or
6. PRESIDENT OR SOLE PROPRIETOR INFORM	IATION	的现在分类的				
☐ Check here if this is a domestic entity and this person of Check here if this is a foreign entity and this person ow ☐ I am the sole officer.	owns 259					
Name Prefix (optional): Mr. Mrs. Ms. Dr. Rev.	he was the k				CALLED TO THE STATE OF THE STAT	
Full Legal Name:						
Date of Birth: (MM-DD-YYYY)	Number	of Dependents:	U.S. Social (SSN)*	Security Nu	mber:	
Home Address: (no PO box or mail drop)						
City:	State:		ZIP Code:		Country:	
Please specify if you are: Employed Unemployed Retired Homemaker	Student	Self-Employed	Source of I	ncome (If Ur	nemployed, Retired, I	Homemaker, or Student):
Employer Name (If Self-Employed, provide the name of your business):		NN 245		2002000		
Please choose from the list provided on page 10 the occupation Occupation:	n code ar	id industry of occu Industry o	pation code of Occupation	that most ac	ccurately describes y	our situation.
Employer Street Address:						
City:	State:		ZIP Code:		Country:	
Check here if you are NOT a U.S. citizen.		Country of Citize	nship:			
Country of Dual or Secondary Citizenship:		Country of Birth:	Š			
Non-U.S. citizens:** Do you hold a current U.S. immigration visa'	? 	Specify visa type);	Visa Numb	oer:	Expiration:

[&]quot;Nonresident aliens must submit a copy of a current passport, and a copy of a bank or brokerage statement. If a U.S. address is listed, then attach a Letter of Explanation for U.S. Mailing Address/U.S. Phone Number Attachment to form W-8. This form can be found on the TD Ameritrade Forms Library: https://www.tdameritrade.com/form-library.

- Chook hold if the loa following it driftly and this	is person owns 25% person owns 10% o					
Name Prefix (optional): Mr. Mrs. Ms.	Or. Rev.	No No.			-20 USCANAVA-50 = 12 4-1	
Full Legal Name:		THE STATE OF THE S				
Date of Birth: (MM-DD-YYYY)	Number	of Dependents:	U.S. Socia (SSN)*	l Security Nu	imber:	
Home Address: (no PO box or mail drop)						
City:	State:		ZIP Code:		Country:	and the state of t
Please specify if you are: Employed Unemployed Retired Home	emaker Student	Self-Employed	Source of	Income (If Ui	nemployed, Retir	ed, Homemaker, or Student):
Employer Name (If Self-Employed, provide the name of your business):						
Please choose from the list provided on page 10 the Occupation:	occupation code an		pation code of Occupation		ccurately describ	es your situation.
Employer Street Address:						
City:	State:	AL II SEPARETIE	ZIP Code:		Country:	in the second
☐ Check here if you are NOT a U.S. citizen.		Country of Citize	enship:	i.v. El suntation		ALL MARKET STATE OF THE STATE O
Country of Dual or Secondary Citizenship:		Country of Birth:			3000	- Interven
Non-U.S. citizens:** Do you hold a current U.S. immig	gration visa? ☐Yes ☐No	Specify visa type	e:	Visa Numb	per:	Expiration:
Letter of Explanation for U.S. Mailing Address/U.S. Phttps://www.tdameritrade.com/form-fibrary. 8. TREASURER INFORMATION Check here if this is a domestic entity and the Check here if this is a foreign entity and this	is person owns 25%	% or more.				
Name Prefix (optional): ☐Mr. ☐Mrs. ☐Ms. ☐						
Full Legal Name:	V		EXTENSION OF THE PARTY OF THE P			
Date of Birth: (MM-DD-YYYY)	Number	of Dependents:	U.S. Social	I Security N	umber:	
Home Address: (no PO box or mail drop)				5884 \$180650000.V		DAMORAC POTE TO THE PROPERTY OF THE
City:	State:		ZIP Code:		Country:	
Please specify if you are: □Employed □Unemployed □Retired □Home	ernaker Student	Self-Employed	Source of	Income (If U	nemployed, Retir	ed, Homemaker, or Student).
Employer Name (If Self-Employed, provide the name of your business):						
provide the name of your business).	e occupation code an	d industry of occu	pation code of Occupation	that most a	ccurately descrit	es your situation.
Please choose from the list provided on page 10 the Occupation:	D- HI-WWW-WYOUNGBROADE WOOCA					
Please choose from the list provided on page 10 the						
Please choose from the list provided on page 10 the Occupation:	State:		ZIP Code:		Country:	
Please choose from the list provided on page 10 the Occupation: Employer Street Address:	State:	Country of Citize			Country:	
Please choose from the list provided on page 10 the Occupation: Employer Street Address: City:	State:	Country of Citize	enship:		Country:	

^{*}If none, I will submit a photocopy of my passport.

**Nonresident aliens must submit a copy of a current passport, and a copy of a bank or brokerage statement. If a U.S. address is listed, then attach a Letter of Explanation for U.S. Mailing Address/U.S. Phone Number Attachment to form W-8. This form can be found on the TD Ameritrade Forms Library: https://www.tdameritrade.com/form-library.

9. CONTROL PERSON (Required)							
Control Person means a single individual with significant res or senior manager (for example, a Chief Executive Officer, C Vice President, or Treasurer); or any other individual who re	chief Financial Officer, Ch	ief Operating Officer, Mar	ly customer, including an executive officer naging Member, General Partner, President,				
Name Prefix (optional): Mr. Mrs. Ms. Dr. Re	ev.						
Full Legal Name:							
Check here if you have already provided your contact inform	nation above in sections 6,	7, and 8.					
Home Street Address: (no PO box or mail drop)							
City:	State:	ZIP Code:	Country:				
Date of Birth: (MM-DD-YYYY)	U.S. Social Security Nu (SSN)	U.S. Social Security Number: (SSN)					
☐ Check here if you are NOT a U.S. citizen.	Country of Citizenship:						
Country of Dual or Secondary Citizenship:	Country of Birth:	A HILL AT A SHARE	A A A A A A A A A A A A A A A A A A A				
Non-U.S. citizens: Do you hold a current U.S. immigration visa?	Specify visa type:	Visa Number:	Expiration:				
Nonresident aliens must submit a copy of a current passport, a Explanation for U.S. Mailing Address/U.S. Phone Number Attahttps://www.tdameritrade.com/form-library. 10. BENEFICIAL OWNERS (This section should be	chment to form W-8. This to completed by only bea	form can be found on the 11	of Ameritrade Forms Library: not already listed in sections 6, 7, and 8.)				
Beneficial Owner means each individual, if any, who, direct more if the legal entity customer is foreign).	tly or indirectly, owns 25	% or more of the equity in	terest of a legal entity customer (10% or				
BENEFICIAL OWNER #1							
Name Prefix (optional): Mr. Mrs. Ms. Dr. Re	ev.		MASS SAME SAME				
Full Legal Name:							
Home Street Address: (no PO box or mail drop)							
City:	State:	ZIP Code:	Country:				
Date of Birth: (MM-DD-YYYY)	U.S. Social Security (SSN)	Number:					
☐ Check here if you are NO T a U.S. citizen.	Country of Citizenship	p:					
Country of Dual or Secondary Citizenship:	Country of Birth:		Control of the Contro				
Non-U.S. citizens: Do you hold a current U.S. immigration visa		Visa Number:	Expiration:				

Nonresident aliens must submit a copy of a current passport, and a copy of a bank or brokerage statement. If a U.S. address is listed, then attach a Letter of Explanation for U.S. Mailing Address/U.S. Phone Number Attachment to form W-8. This form can be found on the TD Ameritrade Forms Library: https://www.tdameritrade.com/form-library.

BENEFICIAL OWNER #2	WARRANT CONTRACTOR CON		
Name Prefix (optional): Mr. Mrs. Ms. Dr. Rev.	AUSCIE 5 8861	300	
Full Legal Name:			
Home Street Address: (no PO box or mail drop)			
City:	State:	ZIP Code:	Country:
Date of Birth: (MM-DD-YYYY)	U.S. Social Security Nun (SSN)	nber:	
Check here if you are NOT a U.S. cilizen.	Country of Citizenship:		
Country of Dual or Secondary Citizenship:	Country of Birth:		Account
Non-U.S. citizens: Do you hold a current U.S. immigration visa? Yes No	Specify visa type:	Visa Number:	Expiration:
Nonresident aliens must submit a copy of a current passport, and Explanation for U.S. Mailing Address/U.S. Phone Number Atlach https://www.tdameritrade.com/form-library. BENEFICIAL OWNER #3	ment to form W-8. This for	rage statement. If a U.S. admorate TD A	dress is listed, then attach a Letter of meritrade Forms Library:
Name Prefix (optional): Mr. Mrs. Ms. Dr. Rev.		S Parties - Committee - Commit	
Full Legal Name:			
Home Street Address: (no PO box or mail drop)		200	
City:	State:	ZIP Code:	Country:
Date of Birth: (MM-DD-YYYY)	U.S. Social Security Nur (SSN)	mber:	
Check here if you are NOT a U.S. citizen.	Country of Citizenship:		
Country of Dual or Secondary Citizenship:	Country of Birth:		
Non-U,S. citizens: Do you hold a current U.S. immigration visa? Yes No	Specify visa type:	Visa Number:	Expiration:
Nonresident aliens must submit a copy of a current passport, and Explanation for U.S. Mailing Address/U.S. Phone Number Attach https://www.tdameritrade.com/form-library. BENEFICIAL OWNER #4	i a copy of a bank or broke ment to form W-8. This for	rage statement. If a U.S. ad m can be found on the TD A	dress is listed, then attach a Letter of meritrade Forms Library:
Name Prefix (optional): Mr. Mrs. Ms. Dr. Rev.			
Full Legal Name:		The state of the s	
Home Street Address: (no PO box or mail drop)			
City:	State:	ZIP Code:	Country:
Date of Birth: (MM-DD-YYYY)	U.S. Social Security Nur (SSN)	mber:	
Check here if you are NOT a U.S. citizen.	Country of Citizenship:		
Country of Dual or Secondary Citizenship:	Country of Birth:	Employee to the second	
Non-U.S. citizens: Do you hold a current U.S. immigration visa?	Specify visa type:	Visa Number:	Expiration:

Nonresident aliens must submit a copy of a current passport, and a copy of a bank or brokerage statement. If a U.S. address is listed, then attach a Letter of Explanation for U.S. Mailing Address/U.S. Phone Number Atlachment to form W-8. This form can be found on the TD Ameritrade Forms Library: https://www.tdameritrade.com/form-library.

If additional beneficial owners need to be disclosed, please copy this page as needed.

11. TRADE CONFIRMATIONS AND	ACCOUNT STATEMENTS			
I understand that I will receive monthly a provide a valid email address, I will rece (such as options trading) require a mont with a total liquidation value of \$100,000 statement and confirmation delivery.	ive a quarterly paper statemen hly statement, either electronic	t or a monthly p ally or via U.S. i	paper statement. Certain type mail. I will be responsible for a	s of accounts or activity any fees that apply. Accounts
If I elect to receive either electronic state	ments or electronic confirmation	ns, I will receive	shareholder information electr	onically when available.
Account Statement:	Paper Monthly (\$2 fee may appl	y each month)	Paper Quarterly (\$2 fee m	ay apply each quarter)
Trade Confirmation: Electronic	□Paper	2 Consequences (10004741101 - 14	Management of the State of the	
Unless I have checked this box, TD A additional corporate communications.		to corporations	s whose securities I hold in m	y account for the purpose of
12. VERBAL PASSWORD (Optional				
You may opt to add an additional level or purposes when you call in and speak with when calling, account access will not be	th a TD Ameritrade representa	dding a verbal p tive. Once estal	password. This verbal passwo blished, if the correct verbal p	rd will be used for verification assword is not provided to us
The verbal password must be no more to anything inappropriate, as determined by	han 24 characters, it can includ y TD Ameritrade in its sole disc	le letters and no cretion.	umbers, cannot contain speci	al characters, and cannot be
Verbal Password:				Sair 19 (9)(7)77
13. OFFER CODE (Optional)				
By entering an offer code in this field, yo offer code you enter is invalid, no offer w	u represent and warrant that yould be applied to your account.	ou have read ar If you have que	nd agree to the applicable Off estions regarding offer codes,	er Terms & Conditions. If the please call 1-800-454-9272.
Offer Code:				
14. TRUSTED CONTACT (Optional)				
By completing this section, you authorize or concerns about my whereabouts or he TD Ameritrade suspects that I might no trustee, authorized trader, or holder of a account(s) held at TD Ameritrade. Pleasuses this information.	ealth status; if TD Ameritrade : longer be able to handle my fin power of attorney; or if TD Am	suspects that I i ancial affairs; to neritrade has ar	may be a victim of fraud or fir o confirm the identity of any le ny other concerns or is unable	nancial exploitation; if egal guardian, executor, to contact me about my
NOTE: Your Trusted Contact must be by completing and signing additional		ount owner. You	u may provide more than tw	o Trusted Contact Persons
First Name:		Middle Initial:	Last Name:	
Relationship:	and the second s	Line to the second		
Primary Telephone Number:	Transference (Control of Control	Email Address:	A CONTRACT OF THE CONTRACT OF	
Mailing Address:				
City:	. And the second	State:	I TOTAL DESCRIPTION OF THE PROPERTY OF THE PRO	ZIP Code:
First Name:	eon sais il Cara se service i	Middle Initial:	Last Name:	
Relationship:				
Primary Telephone Number:		Email Address:		
Mailing Address:	and the state of t		A SHARWAY COLOR OF THE COLOR OF	
City:		State:		ZIP Code:

Page 6 of 10

15. INVESTMENTS PER						
The undersigned certify that well as other types of transa	t the entity may open a broke actions indicated below:	erage account and	enter into puro	chases and sales of s	securities in a cash ac	count as
☐Margin	Options: Write covered Purchase option		☐Create spreads ☐Write uncovered options			
16. INVESTMENT OBJE	CTIVES					
For definitions regarding inv	estment objectives, please s	ee page 9 of the a	pplication.	A STATE OF THE PARTY OF THE PAR		Transaction of the second
Select the degree of risk you are	e willing to take with the assets in Conservative	n this account:	☐Aggressive	Speculative		
Select the primary investment o	bjective for this account: Conservative	☐Moderate	☐Moderate G	rowth Growth	Aggressive Growth	h
Select the secondary investmen (Check at least one or all that a		■Moderate	☐Moderate G	rowth Growth	☐Aggressive Growth	h None
Select the liquidity needs for this (Check only one that applies.)	account: Within 3 months	4 - 6 months	☐7 - 9 months	s10 - 12 months	s More than 1 year	
Select the investment time horiz	Less than 1 year	□1 - 3 years	☐4 - 6 years	7 - 9 years	10 - 12 years 13 ye	ears or more
17. FINANCIAL INFORM	ATION lowing financial information.					
margin accounts. A margin value of your securities may to potentially unlimited risk. Account Handbook.	n account allows you to borro y require you to provide addit To learn more about the poto	ow from TD Amerit tional funds, or force ential benefits of m	rade against or be the sale of s nargin borrowin	ertain securities as y securities in your acc	our collateral. A declir ount. Selling short car	ne in the n expose you
	ne margin privileges and o				400 000 8040 000	Tearn non.
Annual Net Profit:		\$25,000-\$49,999			100,000-\$249,999	\$250,000+
Approximate Net Worth: (not including place of business)		\$15,000-\$49,999 \$500.000-\$999,999			2,000.000+	
Approximate Liquid Net Worth: (cash, stocks, etc.)		\$15,000-\$49,999 \$500,000-\$999,999		001919601100011001100000	100,000-\$249,999 52,000,000+	Steel Hillians
18. OPTIONS ACCOUNT Due to the risks involved in completed to be considered	options, I understand you are	e required to obtain	n the following	information. The Fin	ancial Information sec	ction must be
☐ Check this box to decline	options privileges.				zak sostankozekozekoz	MANAGORA DE LA MANAGO
19. OPTIONS OBJECTIV	/ES					
For definitions regarding op	tions objectives, please see	page 9 of the appl	ication. (Comp	leted on behalf of th	e entity)	
Types of Transactions: (Check all that apply.)	Stocks	Bonds		Options		
What Are Your Options Investment Objectives? (Check all that apply.)	□Growth	Speculative		□Income	☐ Conservati	ion of Capital
What Type of Activity Do You Plan to Conduct in Your Options Account?	Tier 1 - Covered Write covered calls Write cash-secured puts	Tier 2 - Sta Purchase c Write cove Write cash-	ptions	Tier 2 - Standard M Create spreads Purchase options Write covered puts Write covered call: Write cash-secure Requires Margin A	Write unco Create spr s Purchase of write cove d puts Write cove	overed options reads options red puts
20. CASH SWEEP VEH	ICLE CHOICES (Please s	select only one.)				
You offer me choices in ma account through your Cash make a selection, my cas available for clients with a statement will include swee	naging all aspects of my por Balance programs. See the h balances will be swept to a household value greater to p transactions involving mon	tfolio. This include Client Agreement the TD Ameritra than \$500,000 and	s offering differ for a complete de FDIC Insur d cash balanc	description of the Ca ed Deposit Account es of more than \$10	ash Sweep program. t. Other sweep choic 00,000. I understand r	If I do not ces are
☐ TD Ameritrade FDIC Insu ☐ TD Ameritrade Cash (Pro		stor Protection Corp	ooration [SIPC])		

Page 7 of 10 TDA 1086 A 02/18

21. ACCOUNT AGREEMENT

I have received and read the Client Agreement, which is incorporated by this reference, that will govern my account.

In this agreement, "Account Owner," "I," and "my" refer to the entity for which this account is established and/or the natural person(s) authorized to represent and act on behalf of the entity. I release and agree to indemnify and hold harmless TD Ameritrade, Inc., its divisions and affiliates thereof ("TD Ameritrade") from any and all liability and claims for damages resulting from any action taken pursuant to this Agreement. By my signature below, I attest that I am of legal age to contract and that the information contained in this application is true and correct. I hereby request, subject to acceptance by TD Ameritrade, an account be opened in the name(s) set forth above. All securities, dividends, and proceeds will be held at TD Ameritrade Clearing, Inc. unless otherwise instructed. I understand that TD Ameritrade may obtain a current consumer or credit report to determine my eligibility, or continuing eligibility, for credit or for other legitimate business purposes. Any decision by TD Ameritrade to extend credit may be based on information contained in a consumer or credit report, as well as the policies of TD Ameritrade Clearing, Inc. I understand that TD Ameritrade may relate information regarding this account, including account delinquency and voluntary closures, to consumer or credit reporting agencies. Upon my request, TD Ameritrade shall inform me of each consumer or credit reporting agency from which they have obtained and/or reported my consumer or credit report. TD Ameritrade agrees to notify the consumer or credit reporting agencies if I dispute the completeness or accuracy of the information furnished by TD Ameritrade. By my signature below, I authorize TD Ameritrade to obtain consumer or credit reports for the name(s) set forth below. I understand that nondeposit investments purchased through TD Ameritrade are not insured by the Federal Deposit Insurance Corporation (FDIC), are not obligations of or guaranteed by any financial institution, and are subject to investment risk and loss that may exceed the principal invested. Unless I have declined the margin feature, I acknowledge that securities securing loans from TD Ameritrade may be lent to TD Ameritrade and lent by TD Ameritrade to others. I also acknowledge that if I trade "on margin," I am borrowing money from TD Ameritrade and that I understand the requirements and risks associated with margin as summarized in the Margin Handbook and Margin Disclosure Document.

Important information about procedures for opening a new account:

To help the government fight the funding of terrorism and money laundering activities, federal law requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account.

What this means for you: When you open an account, we will ask for your name, address, date of birth, and other information that will allow us to identify you. We may also utilize a third-party information provider for verification purposes and/or ask for a copy of your driver's license or other identifying documents. By my signature below, I attest that I am of legal age to contract, and I certify, to the best of my knowledge that the information provided on this application is complete and correct.

All Authorized Agents and Officers must provide their signatures below.

If an options account has been requested, we (Authorized Agents) agree to abide by the rules of the listed options exchanges and the Options Clearing Corporation, and will not violate current position and exercise limits. We are aware of the risks involved in options trading and represent the fact that the Entity is financially able to bear such risks and withstand options-trading losses.

If this is a Sole Proprietorship account, I certify that I am engaged in business under the assumed name, tax ID, and address listed in Section 3 of this application. I am the sole proprietor of the business so conducted, and no other person, partnership, or corporation has any ownership interest therein. All securities and other property in the name of the sole proprietorship are owned solely by me.

If I am a U.S. person for tax purposes:

Under penalties of perjury, I certify that: (1) the number shown on this form is my correct taxpayer identification number; (2) I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Services (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; (3) I am a U.S. citizen or other U.S. person; and (4) the FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

If I have been notified by the IRS that I am subject to backup withholding because I have failed to report all interest and dividends on my tax return, I must cross out (2) in this certification.

If I am not a U.S. Person for tax purposes:

I am submitting the applicable Form W-8 with this form to certify my foreign status.

The IRS does not require your consent to any provision of this document other than the certifications required to avoid backup withholding. The Client Agreement applicable to this brokerage account contains a predispute arbitration clause. By signing this agreement, the parties agree to be bound by the terms of the Client Agreement, including the arbitration agreement located in Section 12 of the Client Agreement on page 8.

President's Signature:	Date:
Vice President's Signature:	Date:
X Treasurer's Signature:	Date:

Original signatures required; electronic signatures andlor signature fonts are not authorized.

I hereby certify I am the Secretary of the above-named corporation (or nonincorporated association) duly organized and existing under the laws of the above-named state, and that the following is a true copy of a resolution duly adopted by the board of directors of said corporation (or nonincorporated association) at a meeting held on the date stated in Section 3, at which meeting a quorum was present and acting throughout, or by unanimous consent of the board of directors, and that such resolution has not been rescinded or modified and is in full force and effect.

RESOLVED, that the President, Vice President, and the Treasurer of this corporation (or nonincorporated association), or any one of such officers, are hereby fully authorized and empowered to open a brokerage account, transfer, endorse, sell, assign, set over, and deliver any and all shares of stock, bonds, debentures, notes, evidences of indebtedness, or other securities (including short sales) now or hereafter standing in the name of or owned by this corporation (or nonincorporated association), to purchase stocks, bonds, debentures, notes, evidences of indebtedness, and other securities (on margin or otherwise), and to make, execute, and deliver, under the corporate seal of this corporation, any and all written instruments necessary or proper to effectuate the authority hereby conferred.

I further certify that the authority hereby conferred is consistent with the charter or bylaws of this corporation (or nonincorporated association). Unless indicated above that I am a sole officer, the previous is a true and correct list of the officers of this corporation (or nonincorporated association) as of the present date and a record of the officers' signatures:

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of said corporation (or nonincorporated association) this date:

Secretary's Signature (or sole officer):	Date:	
Printed Name of Secretary:		

Original signature required; electronic signatures andlor signature fonts are not authorized.

INVESTMENT OBJECTIVES DEFINITIONS

Conservative:

Reflects your desire to seek very low risk and minimize potential loss of principal. You may seek income from your investments while understanding that returns may not keep pace with inflation. You may also intend to invest over a short period of time.

Moderate

Reflects your desire to seek lower risk and fluctuation in your portfolio, while striving to achieve more stable returns on your investments. It may also mean that you plan to invest over a short period of time.

Moderate growth:

Reflects your desire to seek growth in your portfolio by typically using a balance of growth and conservative investment types. It may also mean that you are moderately tolerant of risk and plan to invest for a medium to long period of time.

Growth:

Reflects your desire to seek the potential for investment growth, as well as your tolerance for more significant market fluctuations and risk of loss. It may also mean that you plan to invest over a long period of time.

Aggressive Growth:

Reflects your desire for potentially substantial investment growth, as well as your tolerance for large market fluctuations and increased risk of loss. It may also mean that you plan to invest over a long period of time.

OPTIONS OBJECTIVES DEFINITIONS

Growth:

Investors are seeking the potential for investment growth and have a tolerance for more significant market fluctuations and risk of loss.

Speculative:

Investors are seeking short-term market gains that generally have above average, maximum risk, but offer the potential for short-term, maximum gains. These strategies also have the potential for significant losses and investors understand they could lose most, or all, of the money they have invested.

Income:

Investors are seeking income with a modest degree of risk. These investors are typically willing to accept lower potential returns in exchange for lower risk and volatility, and understand their returns may not keep pace with inflation.

Conservation of Capital:

Investors are seeking to avoid risk and minimize potential loss of principal.

Investment Products: Not FDIC Insured * No Bank Guarantee * May Lose Value

	upation Codes	000	Compliance/Populatory Destactive of	NO4	Nurse
	Accountant/Auditor/Bookkeeper		Compliance/Regulatory Professional		Nurse Office Associate
	Adjuster		Consultant		Other; If Other, include a description
	Advertiser/Marketer/PR Professional		Counselor/Therapist	OZI	
100150	Air Traffic Controller		Customer Service Representative	D04	in the Occupation box. Pharmacist
	Ambassador/Consulate Professional		Dealer Dentist		
	Analyst	100 A TO A			Physical Therapist Pilot
	Appraiser		Distributor		Police Officer/Firefighter/
	Architect/Designer		Doctor/Surgeon/Physician	FJZ	Law Enforcement Professional
	Artist/Performer/Actor/Dancer		Driver	DAG	
	Assistant/Executive Assistant		Engineer		Politician
	Athlete		Exterminator		Project Manager
	Attorney/Judge/Legal Professional		Factory/Warehouse Worker		Real Estate Professional
	Auctioneer	100000000000000000000000000000000000000	Farmer/Rancher		Researcher
	Banker/Lending Professional		Financial Planner/Advisor		Salesperson
	Barber/Beautician/Hairstylist		Flight Attendant		Scientist Communication Communication
	Broker/Registered Rep	0.000	Human Resources Professional		Seamstress/Tailor
	Business Executive (VP, Director, etc.)	141	Importer/Exporter		Security Guard
	Business Owner	151	Inspector/Investigator		Social Worker
	Caregiver	181	Investor		Teacher/Professor
C91	Carpenter/Construction Worker/	191	IT Professional/IT Associate		Technician
	Contractor	15000000	Janitor		Teller
	Cashier		Jeweler		Tradesperson/Craftsperson
	Chef/Cook		Laborer		Trainer/Instructor
	Chiropractor		Landscaper		Underwriter
C52	Civil Servant		Mechanic		Veterinarian
C62	Clergy		Military, Officer or Associated	W21	Writer/Journalist/Editor
C72	Clerk	M32	Mortician/Funeral Director		
Indu	stry of Occupation Codes		La constitution of the con		and the second s
A11	Accounting	F11	Fashion/Clothing	031	Other; If Other, include a description
	Advertising/Marketing	F21	Financial Services		in the Industry of Occupation box
	Aerospace/Defense	F51	Firearms and Explosives	P11	Parking and Car Washes
	Agriculture/Forestry		Gaming/Casino/Card Club	P21	Pawn Shops/Brokers
	Amusement and Recreation		Government/Public Administration	P31	Personal Care/Hygiene (Beauty,
	Animal Services and Veterinary		Grocery/Supermarket		Salon, Cosmetics, Massage, etc.)
	Architecture/Design		Healthcare/Medical Services	P41	Pharmaceuticals
	Arts/Antiques		Hotel/Hospitality	P51	Printing/Publishing
	Athletics/Fitness	111	Import/Export		Professional/Civic Organizations
	Automotive	121	Information Technology (IT)		(Non-Retail)
	Aviation	131	Insurance	R11	Real Estate
THE PARTY	Bar/Nightclub/Adult Entertainment Club	J11	Jewelry, Gems, and Precious Metals		Religious Organization
	Childcare	\$2.00 E.S.	Legal Services/Public Safety		Repair Services - Home, Auto,
	Cleaning/Janitorial/Housekeeping		Logistics/Supply Chain	2000000	and Other
	Communications/Telecommunications		Manufacturing	R41	Restaurant/Food Service
	Construction/Carpentry/Landscaping		Maritime		Retail Sales/Retail Trade
	Convenience Store/Liquor Store/		Media/Entertainment		Science and Biotechnology
001	Gas Station		Mining, Oil, and Gas		Security
	TANG 1970 - 30 - 30 - 420-420 - 74		Money Services Businesses (Check		Transportation
074	Customer Service and Support	IVIJ	Cashing, Money Transmitting, Payday		Travel
			odarning, money manamilling, rayuay		
E11	Education		Loans Currency Eychangel	[111	Utilities (Public)
E11 E21	Embassy/Consulate	NAA	Loans, Currency Exchange)		Utilities (Public) Wholesale Sales/Trade
E11 E21 E31		N11	Loans, Currency Exchange) Non-Profit/NGO (Non-Government Agency)/Charity		Utilities (Public) Wholesale Sales/Trade

Page 10 of 10 TDA 1086 A 02/18



Client Agreement

PO Box 2760 - Omaha, NE 68103-2760

Fax: 866-468-6268

1. INTRODUCTION

This Agreement governs all brokerage accounts that I open with you, all transactions in my Account, the use of your websites, the Brokerage Services, the TD Ameritrade Content, and the Third-Party Content; is binding on my heirs, executors, administrators, successors, and assigns; and will inure to the benefit of your successors. By opening an Account with you, I acknowledge that I have received, read, and understand this Agreement and agree to be bound by its terms. Accounts opened with the TD Ameritrade Institutional Division are governed by a separate agreement.

"I," "me," "my," or "account owner" means each account owner who signs the Account Application. "You," "You," or "TD Ameritrade" means TD Ameritrade, Inc., a wholly owned subsidiary of TD Ameritrade Holding Corporation, and, when applicable, TD Ameritrade Clearing, Inc. ("Clearing"), TD Ameritrade's clearing broker-dealer.

2. DEFINITIONS

- "Account" means each brokerage account I open with you or have an interest in.
- "Agreement" means these terms and conditions as well as any supplemental agreements and disclosures that apply to my Account, as amended from time to time.
- "Applicable Rules" means all applicable federal and state laws, rules and regulations, rules of any self-regulatory organization, and the constitution and applicable rules, regulations, customs, and usages of the exchange or market and its clearinghouse.
- "Brokerage Services" means your website and related services that you provide other than TD Ameritrade Content, which I need to place trades in my Account.
- "Business Day" means Monday through Friday, excluding market holidays.
- "Services" means, collectively, the websites, the Brokerage Services, the TD Ameritrade Content, and the Third-Party Content. This Agreement applies to the Services provided by you regardless of how I access them (for example, in person, phone, Internet, or by mobile device).
- "TD Ameritrade Content" means all information, tools, and services available on your website, other than Brokerage Services provided by you, and not by a third party.
- "Third-Party Content" means all information, tools, and services available on your website that are provided by a third party ("Third-Party Provider"), including financial and investment tools, market data, reports, alerts, calculators, access to online conferences, telecasts, bulletin boards, tax preparation, or account management tools.
- "websites" means the Internet sites of TD Ameritrade, whose domain name is registered as http://www.tdameritrade.com, and others, and through which you offer Services.

3. MY ACCOUNT AND RELATIONSHIP WITH YOU

- a. Self-Directed Account. I understand that Accounts opened with you are self-directed. I am responsible for all purchase and self orders, decisions to continue with an investment strategy or to hold an investment, and instructions placed in my Account. Unless you provide advice to me that is clearly identified by you as an individualized recommendation for me, any investment decision that I make or investment strategy that I utilize, including the decision to hold any and all of the securities or derivatives in the Account, is based on my own investment decisions or those of my agent and is at my own risk. All investments involve risk, and unless you provide individualized recommendations to me, I or my agent are responsible for determining the suitability of any trade, investment, investment strategy, and risk associated with my investments. TD Ameritrade Content or Third-Party Content I access through you does not constitute a recommendation to invest in any security or derivative, or to utilize any investment strategy.
- b. Fees and Commissions. I will pay commissions, charges, taxes, and other fees applicable to my Account. Current commission pricing and other fees are on the websites. You may change your fees and commissions at any time by posting changes on the websites or by other means.

You reserve the right to vary commissions among clients in connection with special offers or combinations of services or in other circumstances. You or Clearing may pay a portion of the revenues or fees derived from servicing my Account to third parties that provide services to you or Clearing. If my Account is an IRA or other retirement plan account, my Account may be charged fees that the particular plan has authorized to be paid to service providers other than you or Clearing.

c. Statements and Confirmations. It is my obligation to review trade confirmations and Account statements promptly upon receipt. These documents will be considered binding on me unless I notify you of any objections within five days from the date confirmations are sent and within 10 days after Account statements are sent.

d. Instructions.

- 1. General. You may accept and act on instructions from me, my agent, or any person authorized on my Account. You may refuse any order, or delay placing any order, if you determine that an order requires clarification from me. I will not hold you responsible for any losses caused by the rejection or delay. You will not receive any order or instruction transmitted by my agent or me until you have actual knowledge of the order or instruction. You do not determine the validity of my agent's status or capacity, the appropriateness of, or the authority or actions by such person.
- 2. Wire Transfers. By initiating a wire transfer from my Account with or without a letter of instruction, I agree that you may use security procedures for accepting and acting upon wire transfer instructions. I agree that such security procedures may include one, some or all of the following, depending on the type, amount, and frequency of the wire transfer request: requestor and/or account owner identification and verification; requestor and/or account owner signature comparison or verification; confirmation of receiving bank and/or account designation; notice provided via email, message center, or phone to account owner and/or authorized agent; account surveillance and/or trending analysis. In some circumstances, you may place limits on the portability of funds and additional documentation may be required.

I agree that the above security procedures are commercially reasonable under the circumstances. I agree to be bound by instructions to initiate a wire transfer, with or without a letter of instruction, whether in fact authorized or unauthorized, which you implement in compliance with these procedures, unless I have given you prior notice of possible unauthorized activity in my Account and you have a reasonable opportunity to act on such notice.

- e. No Endorsement of Day Trading Strategy. You do not recommend, endorse, or promote a "day trading" strategy, which may involve significant financial risk to me.
- f. Clearing Agreement. You and Clearing have entered into a clearing agreement in which Clearing is the clearing agent for securities transactions for your clients. You transmit client instructions to Clearing which causes such instructions to be executed. Clearing carries my Account on a fully disclosed basis. All securities, dividends, and proceeds will be held at Clearing unless otherwise instructed.
- g. Account Protection. You are a member of the Securities Investor Protection Corporation ("SIPC"), which protects securities customers of its members up to \$500,000 (including \$250,000 for claims for cash). An explanatory brochure is available on request at www.sipc.org. Additionally, you provide each client \$149.5 million worth of protection for securities and \$2 million of protection for cash through supplemental coverage provided by London insurers. In the event of a brokerage insolvency, a client may receive amounts due from the trustee in bankruptcy and then SIPC. Supplemental coverage is paid out after the trustee and SIPC payouts and under such coverage each client is limited to a combined return of \$152 million from a trustee, SIPC, and London insurers. The TD Ameritrade supplemental coverage has an aggregate limit of \$500 million over all customers. This policy provides coverage following brokerage insolvency and does not protect against loss in market value of the securities.

To obtain information about the SIPC, including the SIPC brochure, I can contact the SIPC at:

Securities Investor Protection Corporation 805 15th St, N.W., Suite 800 Washington, D.C. 20005-2215 Tel: 202-371-8300 Fax: 202-371-6728 Email: asksipc@sipc.org Website: www.sipc.org

- h. Beneficiary Designation. Changes in the relationship between the account owner and designated beneficiary (such as, marriage, divorce, or adoption) will not automatically add or revoke beneficiary designations. For example, if an account owner designated a spouse as beneficiary and they subsequently divorced, the former spouse will remain beneficiary on the Account unless the account owner submits a new beneficiary designation to you.
- i. Compliance with Laws. I agree to comply with all laws, rules, and regulations applicable to my Account.

4. ABOUT ME

- a. Legal Capacity, I am of legal age in the jurisdiction in which I reside and have the capacity and authority to enter into this Agreement.
- b. Accuracy of Information. All the information I provide you is true and correct. I will promptly notify you in writing within 10 Business Days after any change in such information. You may rely upon all information I provide you.
- c. Interest in Account, I represent that no one except me (us) has an interest in any of my (our) Account(s) (unless I am opening the Account as a fiduciary).
- d. Multiple Owners. If there is more than one Account owner, then the provisions of the Agreement apply to each owner. Accounts of husbands and wives in community property states will be held in the name of husband and wife as community property unless we instruct you otherwise; any other Joint Account will be held jointly with rights of survivorship unless I notify you of a different form of ownership and provide such documentation as you require. You will have no liability for any loss that may arise due to taking instructions from one owner or requiring instructions from all owners. If I am married, I may establish an account with my spouse as tenants by entirety. I will notify you if I become legally divorced.
- e. Rights, Terms, and Obligations of Securities in Account. Except as required by Applicable Rules, you are not obligated to notify me of any events involving my securities positions, nor do you have the responsibility to take any actions on my behalf with respect to such events without specific instructions from me. I am responsible for knowing the rights, terms, and obligations of securities in my Account and for monitoring the occurrence of any events involving my securities positions or securities for which I intend to place an order.

5. PRIVACY AND CONFIDENTIALITY

- a. Privacy. You will take reasonable measures to protect the privacy and confidentiality of information in your possession about my Account and me. Your Privacy Statement explains how you collect and protect my information. The Privacy Statement is incorporated into this Agreement by reference.
- b. Account Number, PIN, or Password. I will receive a password and/or access number (collectively "PINs") that provides electronic access to my Account. Account numbers, UserIDs, and PINs are confidential, and I am responsible for the confidentiality, protection, and use of them. Subject to the TD Ameritrade Asset Protection Guarantee, I agree to be responsible for all activities in my Account. You may be assured that I have authorized any orders or instructions that are received under my Account number and PIN or by initiating an electronic transfer of funds, with or without a letter of instruction.
- c. TD Ameritrade Asset Protection Guarantee. If I lose cash or securities from my Account due to unauthorized activity, you will reimburse me for the cash or securities I lose. You promise me this protection if unauthorized activity causes losses and you determine it was through no fault of my own. You promise this protection if I do four things: (1) keep my personal identifying information and Account information secure and confidential—because sharing my UserID, password, PIN, Account number, or other standard means of authentication with other people means I authorize them to take action in my Account; (2) keep my contact information up-to-date with you, so that you can contact me in case of suspected fraud; (3) review my Account frequently and my statements promptly and report any suspicious or unauthorized activity to you immediately in accordance with this Agreement; and (4) take the actions you request and cooperate with any investigation. I agree that unauthorized activity does not include any actions or transactions undertaken by or at the request of me, my investment advisors or family members, or anyone else whom I have allowed access to my Account or to my Account information for any purpose, such as trading securities, writing checks, or making withdrawals or transfers.
- d. Phone Conversations and Electronic Communications. You may record and monitor any telephone, video, or electronic communications with me.
- e. Credit Reports. I authorize you to request my credit reports to verify my creditworthiness and to provide information to credit agencies. Upon request, you will inform me whether a report was requested and provide me with the name and address of the credit-reporting agency that furnished the report. Negative credit information may be submitted to a credit-reporting agency if I fail to fulfill the terms of my credit obligations.

- f. Disclosure of Account Information to Third Parties. Consistent with your Privacy Statement, you and your agents are specifically authorized to disclose information about my Accounts and me to third parties.
- g. Trusted Contact Authorization. If I elect to provide Trusted Contact information to you, you are authorized to communicate, verbally and in writing, with the Trusted Contact Person(s) named on the applicable Trusted Contact Authorization Form, or by other such means as I may provide Trusted Contact information to you. I understand that any communication with the Trusted Contact Person(s) may include information about any of the Account Owners, the account for which the Trusted Contact information was provided, any other accounts at TD Ameritrade in which any of the Account Owners has an interest, or any other information the Account Owners may have provided to TD Ameritrade.

I understand that you may contact the Trusted Contact Person(s) for the following reasons: (1) if there are questions or concerns about my whereabouts or health status; (2) if you suspect that I may be a victim of fraud or financial exploitation; (3) if you suspect that I might no longer be able to handle my financial affairs; (4) to confirm the identity of any legal guardian, executor, trustee, authorized trader, or holder of a power of attorney; or (5) if you have any other concerns or are unable to contact me about my Account(s) held with you. If my Account is an Entity or other Non-natural person Account, you may also contact any Authorized Agent named on the Account for the foregoing reasons.

I further agree that: (1) the Trusted Contact Authorization does not impose any obligation that you communicate with my Trusted Contact Person(s); (2) the Trusted Contact Authorization does not authorize the Trusted Contact Person(s) to make any investment decisions or transact any business with you on my behalf; (3) the Trusted Contact Authorization is optional and I may change or withdraw it at any time by notifying you in writing; (4) all named Trusted Contact Person(s) are 18 years of age or older; (5) you are released and discharged from all claims, causes of action, damages, losses, expenses, costs, and liabilities of any kind that may arise out of, relate to, or are in connection with the release of, or failure to release, personal and/or account information to the Trusted Contact Person(s).

6. CLIENT COMMUNICATIONS

- a. Addresses. You may send communications to the mailing address, email, telephone number, or facsimile number that I provide. You also may deliver information verbally or via the Secure Message Center on your website. Communications shall be deemed delivered to me whether or not I actually receive them.
- b. Electronic Signatures. My use of electronic signatures to sign your documents legally binds me in the same manner as if I had manually signed. The use of an electronic version of these documents fully satisfies any requirement that they be provided to me in writing. If I sign electronically, I represent that I have the ability to access and retain a record of the documents, I am responsible for understanding these documents and agree to conduct business with you by electronic means, I am obliged to review periodically the websites for changes or modifications.
- c. Consent. By consenting to the electronic delivery of all information relating to my Account, I authorize you to deliver all communications to me by the following means: (1) by email at the email address specified by me; (2) by posting the communication on the websites or other sites on the Internet where the communication can be read and printed; (3) by sending me an email that includes a hyperlink to the websites or an address on the Internet where the information is posted, and can be read and printed; and (4) by sending me a notice that directs me to an address on the Internet or a place within the websites where the communication is posted and from which it can be read and printed. Such delivery will be an effective delivery to me for the purpose of any Applicable Rules whether or not I access or review the communication. Although I consent to electronic delivery, you may elect to deliver communications by other means which shall not affect my consent. I will notify you of any change in my address. I may revoke my consent to electronic delivery of communications and receive documents on paper. You have a reasonable period to effect such a change and may charge a reasonable fee for sending paper copies.
- d. Equipment. If I agree to electronic delivery, I must have a computer with Internet access, an email address, and the ability to download and save or print communications to retain for my records. I am responsible for obtaining and maintaining all equipment and services required for online access of my Account.

7. ELECTRONIC SERVICES

a. Availability. You do not guarantee that any media will be available to me at a particular time. Access to the websites may be limited or unavailable during periods of peak demand, market volatility, system upgrades, or other reasons.

You reserve the right to suspend and deny access to the Services, without prior notice or for any reason. I recognize that Account activity may be conducted through several different media (for example, Interactive Voice Response phone system [IVR] and phone); and if a certain medium is not available, I will use another medium to conduct Account activity. You will not be liable for the unavailability, delay, or failure of any of the media at any particular time or for the accessibility of, transmission quality, outages to, or malfunction of any telephone circuits, computer system, or software.

b. Use of Services. I will use the Services for lawful purposes, for my personal and noncommercial use, and as permitted by this Agreement. I will not transmit through the websites any material that violates or infringes in any way upon the rights of others or would encourage conduct that may give rise to civil or criminal liability. I will not modify, copy, publish, transmit, license, participate in the transfer or sale of, reproduce, create derivative works from, distribute, redistribute, display, or in any way exploit the Services. I will not upload, post, decompile, reverse engineer, disassemble, modify, copy, distribute, transmit, reproduce, republish, license, display, sell or transfer, or create derivative products from the Services. Software accessed on the websites is subject to U.S. export controls and may not be downloaded by any person prohibited from doing so by Applicable Rules.

I may download software on a single computer for personal, noncommercial use, provided I keep intact all copyright and other proprietary notices. You and Third-Party Providers reserve the right to revise, modify, change, upgrade, suspend, impose limitations or restrictions on, deny access to, remove, or discontinue the Services at any time without prior notice. Third-Party Providers may enforce this Agreement against me and take action against me for my breach of this Agreement.

c. Limitation of Liability. The Services are provided "as is" and "as available." You, your affiliates, the Third-Party Providers and their respective licensors, employees, distributors, or agents make no representations with respect to the system and expressly disclaim all warranties. Subject to Applicable Rules, in no event will you, your affiliates, the Third-Party Providers or their respective licensors, employees, distributors, or agents be liable to me or any third party for any direct, incidental, special, punitive, or consequential losses or damages of any kind with respect to the Services.

I am solely responsible for my investment research, and neither you nor any Third-Party Provider make any representations, warranties, or other guarantees as to the accuracy or timeliness of any market data; nor do you or any Third-Party Provider make any representations, warranties, or other guarantees as to the present or future value or suitability of any sale, trade, or other transaction involving any particular security or any other investment.

- d. Intellectual Property. My use of the Services will not confer any title, ownership interest, or intellectual property rights to me. The Services are protected under U.S. patent, copyright laws, international treaties or conventions and other laws, and will remain the exclusive property of you or Third-Party Providers. Company names, logos, and all related product and service names, design marks, and slogans of you or your affiliates or any Third-Party Provider are the property of the respective company. I am not authorized to use any such name or mark in any advertising, for publicity, or in any other commercial manner.
- e. Cookies. You use cookies on websites and my browser will need to accept all cookies for it to perform fully. Certain features of the websites may also require the acceptance of cookies.
- f. Hyperlinks. The websites may include hyperlinks to websites, owned or operated by affiliated or unaffiliated third parties. Neither you nor Third-Party Providers are responsible for the content or availability of such other websites, and shall not be responsible or liable for any loss in connection with reliance on such sites.

8. BROKERAGE SERVICES

- a. Order Routing and Executions. Unless I specify the market for execution, you decide where to route my orders for execution. You consider a wide variety of factors in determining where to direct my orders, such as execution price, opportunities for price improvement (which is when an order is executed at a price that is more favorable than the displayed national best bid or offer), market depth, order size and trading characteristics of the security, efficient and reliable order handling systems and market center service levels, speed, efficiency, accuracy of executions, and the cost of executing orders at a market. If I instruct you to route my order to a particular market for execution ("Direct Routing"), and you accept my order and instruction, you are not required to make a best execution determination beyond executing the order promptly and in accordance with the terms of my order. Instructions to direct my order to certain market centers could incur additional fees.
- b. Deposit and Order Refusal; Account Restrictions. You reserve the right not to accept the deposit of funds or particular securities into my Account and may refuse any of my orders. You also reserve the right to place trading, disbursement, and other restrictions on my Account. You may restrict my Account from withdrawals or trading if there is a reasonable suspicion of fraud, diminished capacity, inappropriate activity, or if you receive reasonable notice that the ownership of some or all of the assets in my Account is in dispute. I will not hold you liable for any loss I may incur due to your refusal to permit any deposit, withdrawal, or transaction.
- c. Trade Execution and Price. You route orders to markets for prompt execution in view of prevailing market conditions, but there can be delays in the processing of orders. I understand and agree with the following:
 - · The quoted price may not reflect the trading activity from all markets.
 - High volumes of trading at the market open or intraday may cause delays in executions and result in prices significantly different from the price quoted at the time the order was entered.
 - · Markets may handle orders manually and may reduce size guarantees during periods of volatility, resulting in possible delays in order execution, and losses.
 - The execution price I receive may be impacted by numerous factors beyond your control and responsibility, including the type of security, liquidity, and
 the size of my order. For example, large or "block" orders or orders involving illiquid securities may take additional time to execute and may execute at
 prices significantly different from the quoted price.
 - The execution of market and stop-market orders may be at a price significantly different from the quoted price of that security. Limit orders will be
 executed only at a specified price or better, but there is the possibility that the order will not be executed.
 - Securities traded in over-the-counter bulletin board and pink sheet securities and other thinly traded securities present particular trading risks in that
 they are often more volatile and generally less liquid than securities traded on exchanges. You reserve the right to place restrictions on the trading of
 such securities without prior notice.
 - I may suffer market losses during periods of volatility in the price and volume of a particular stock when systems issues result in an inability to place buy or sell orders.
- d. Payment for Order Flow. You may receive remuneration from markets for directing orders to them. The source and amount of these payments are available upon written request. Markets may act as principals to buy, sell or hold securities for their own accounts, and they may make money when executing your trade.
- e. Payment for Transactions. All orders that I authorize will be processed with the understanding that I will pay for any purchase and deliver certificates to cover all sales on or before the settlement date. All sell orders that I place will be for securities that I own ("long") and in deliverable form at the time I place the order, unless I inform you otherwise.

You reserve the right to require full payment, or an acceptable equity deposit, prior to the acceptance of any order. I will have the required cash, available funds, or equity in my Account prior to the execution and/or settlement of a purchase or short sale transaction, and the required securities in my Account prior to the execution and/or settlement of a long sale. If I do not have sufficient funds or securities in my Account, you have the right to liquidate or buy in securities at my expense, and I will be responsible for any cost or loss.

- f. Payment of Indebtedness Upon Demand. I will be liable for the payment upon your demand of any obligations owing in my Account, including the reasonable costs incurred in collecting such amounts.
- g. Security for Indebtedness. I consent to you having a continuing security interest in, right of set-off to and lien on all securities, cash, investment property, and other property in my Account ("Collateral"). Subject to Applicable Rules, and without prior notice to me, you may sell or transfer the Collateral to satisfy my obligations. You also have the discretion to determine which securities and other properties are to be sold and which contracts are to be closed. You have all the rights of a secured party under the Uniform Commercial Code.
- h. Short Sales, I will designate any sell order as a "short" sale if at the time I place the order I do not own the security I intend to sell or am unable to deliver the security before settlement. All short sales will be executed in a Margin Account.
- i. Mutual Funds and ETFs. I authorize you to custody mutual fund holdings that I purchase directly through you. When purchasing a mutual fund, I acknowledge that I have received and read the fund prospectus. Mutual fund purchases may be subject to investment minimums, and some mutual funds sold through you impose a charge on the purchase of shares, called a "sales load." I may be able to purchase mutual fund shares through you without paying a front-end sales load, but I may be charged a fee, called a "contingent deferred sales charge," when I sell or redeem my shares. You may receive part or the entire sales load.

Some mutual funds offer reductions in front-end sales loads ("breakpoints"), for purchases over certain amounts or purchased through Letters of Intent or Rights of Accumulation. I am responsible for determining and obtaining any breakpoints, or providing you with sufficient information to assist me in obtaining a breakpoint.

You may receive remuneration from fund companies for providing recordkeeping and other shareholder services. Some mutual funds impose a distribution or service fee known as a "12b-1 fee." You may receive the 12b-1 fees in connection with my investment in such fund's shares. If I invest online in no-transaction-fee mutual funds ("NTF funds") directly through you, I will not pay a transaction fee. I also may be able to purchase mutual funds directly from the fund's distributor or underwriter without incurring a transaction fee. You receive remuneration from fund companies participating in the NTF fund program. NTF funds have other fees and expenses that apply to continued investment in the fund that are described in the prospectus. TD Ameritrade receives remuneration from certain ETFs (exchange-traded funds) that participate in commission-free ETF program for shareholder, administrative, and other services.

j. Sweep Program. My available cash may be swept into a sweep vehicle pending investment of the cash. The alternatives available under the Sweep Program are referred to as "Sweep Choices," and the one I select is referred to as the "Designated Sweep Vehicle." You will notify me of the Sweep Choices and the Designated Sweep Vehicle. I agree that at account opening my Designated Sweep Vehicle will be the TD Ameritrade FDIC Insured Deposit Account (described below), unless I select a different Sweep Choice.

Cash will be automatically invested or deposited in the Designated Sweep Vehicle, according to a sweep schedule determined by you. Proceeds from the sale of securities will be swept into the Designated Sweep Vehicle following settlement if the securities sold have been received in good deliverable form by the settlement date. The proceeds of any checks that I deposit to my Account will be swept to the Designated Sweep Vehicle on the Business Day after receipt by you and will begin earning dividends or interest on that day. Access to such funds may be withheld for up to six Business Days to assure that such checks have not been returned unpaid. I may instruct you to change my Designated Sweep Vehicle at any time to another of the Sweep Choices, and acknowledge that such instruction shall constitute my authorization to liquidate balances in my Designated Sweep Vehicle and transfer such balances to the new Designated Sweep Vehicle. I authorize you to automatically withdraw cash or redeem securities maintained in a Designated Sweep Vehicle to satisfy my obligations. I authorize you to act as my agent to purchase and redeem balances in the Designated Sweep Vehicles, and authorize you to select and use agents as you deem appropriate.

The Sweep Choices may include money market funds or an FDIC-insured deposit account ("IDA") for which you or your affiliates receive, to the extent permitted by Applicable Rules, transaction, and other fees for providing services. These fees will vary depending on the money market fund (or share class) or IDA used. No portion of these fees will reduce or offset the fees otherwise due to you unless required by Applicable Rules.

There may be certain minimum requirements for initial and subsequent investments in the Designated Sweep Vehicles. You may change the eligibility criteria or replace the Sweep Choices available to me. You will give me advance notice of any such change in Sweep Choices. Unless I notify you of an objection to such change, I authorize you to withdraw cash or redeem securities held in the prior Designated Sweep Vehicle and to invest or deposit the proceeds in the replacement Designated Sweep Vehicle.

If my Designated Sweep Vehicle is a money market fund or IDA, and my Account is flagged as a "Pattern Day Trader," on the next Business Day, you may change my Designated Sweep Vehicle to TD Ameritrade Cash (described below).

1. TD Ameritrade FDIC Insured Deposit Account. If the IDA is my Designated Sweep Vehicle, the available cash in my Account will be automatically deposited into an IDA at one or more banks ("Program Banks"). Two of the Program Banks are TD Bank, N.A. ("TD Bank") and TD Bank USA, N.A. ("TD Bank USA"), both affiliates of you. You will maintain a list of the current Program Banks on your website. The IDAs at the Program Banks are money market deposit accounts held in the name of Clearing for the benefit of its customers. You have arranged the IDAs and account records in such a way that "pass through" FDIC insurance is available to me as if I had opened the IDAs directly in my own name. As a result, my funds at each Program Bank will be eligible for FDIC insurance in an amount equal to \$250,000 for principal and accrued interest per depositor in each recognized legal capacity (for example, Individual, Joint, IRA). By utilizing multiple banks, the bank sweep program has been structured to provide me with a maximum FDIC insurance of \$500,000 per depositor in each recognized legal capacity (for example, up to \$500,000 for individual accounts and \$1,000,000 for joint accounts). Such insurance will cover my money in each IDA, together with any other deposits held at each Program Bank in the same legal capacity (for example, Individual, Joint, IRA). Questions about FDIC insurance coverage may be directed to you. Information also may be obtained by contacting the FDIC, by letter (550 17th Street NW, Washington, D.C. 20429), by phone (877-275-3342, 800-925-4618 (TTY), by email (dcainternet@fdic.gov), or by accessing the FDIC website at www.fdic.gov.

My available cash will be deposited into an IDA at one or more Program Banks. You will deposit up to \$247,500 in the Program Banks, per depositor per legal capacity, except for "the Excess Bank" which will receive deposits without limit, even if the amount in the IDA exceeds the FDIC insurance available to me. The list of Program Banks including "the Excess Bank" is included on your website at www.tdameritrade.com/idaprogrambanks. Any deposits (including certificates of deposit) that I maintain in the same insurable capacity directly with a Program Bank, or through an intermediary (such as us or another broker), will be aggregated with deposits in my IDA at such Program Bank for purposes of determining my maximum FDIC insurance amount. I am responsible for monitoring the total amount of deposits that I maintain at the Program Banks in order to determine the extent of FDIC coverage available to me. I acknowledge that the IDAs constitute an obligation of the Program Banks and are not your obligation. I can obtain publicly available financial information concerning each Program Bank at www.ffiec.gov/nic or by contacting the FDIC Public Information center by mail at L. William Seidman Center, Virginia Square, 3501 North Fairfax Drive, Arlington, VA 22226 or by phone at 703-562-2200. You do not guarantee in any way the financial condition of the Program Banks or the accuracy of any publicly available financial information concerning the Program Banks. You will not be responsible for any insured or uninsured portion of the IDAs. Cash in my Account will be automatically swept on a daily basis to the IDAs at the Program Banks. As required by federal regulations, the Program Banks reserve the right to require seven days' prior notice before permitting a withdrawal out of the IDAs. Currently, the Program Banks do not intend to exercise this right. In addition, the IDAs have transfer limits that prevent using the IDAs as a transaction account. The following applies to the IDAs:

- When available cash is available for deposit, you will deposit available cash from my Account into an IDA at one or more Program Banks. Your bank sweep
 vehicles will periodically rebalance so the total amount of my funds in the IDA at Program Banks remains below applicable FDIC insurance limits (except
 for the Excess Bank, which has no limit).
- All withdrawals necessary to satisfy debits in my Account will be made by Clearing, as my agent. A debit will be created when I purchase securities or request a withdrawal of funds from my Account.
- My account statement will display the name of each Program Bank with which I have deposits, the balance of deposits at each Program Bank, any
 withdrawals made during the month, and the applicable interest rate and amount of interest earned on my deposits.

- The deposit limit at the Program Banks is set slightly below FDIC-insurance thresholds to allow for accrued interest on deposits. The deposit limit at the Program Banks is set at \$247,500 (\$495,000 for Joint Accounts), which may be reset from time to time based on FDIC-insurance limits and the interest rate environment. If interest paid on my funds in the IDA at one of the Program Banks results in my total funds in the IDA exceeding the deposit limit at another Program Bank, the IDAs will be rebalanced the next day and the amounts in excess of the deposit limit will be transferred to another Program Bank.
- I may not change the Program Banks, the order in which funds are deposited into the Program Banks, or the maximum deposit amount at any Program Bank. I may withdraw from the bank sweep program at any time and use another Sweep Choice.
- Interest rates earned in the IDAs will vary over time, but will be the same from each Program Bank. I understand that rates may vary based on the particular offering or the level of my assets held with you. The interest rates paid with respect to the IDAs may be higher or lower than the interest rates available to depositors making deposits directly with the Program Banks or other depository institutions in comparable accounts. The current interest rate will be available on the websites, or I may contact you to obtain the current rate. Interest will accrue on balances from the day they are deposited into the IDAs through the Business Day preceding the date of withdrawal from the IDA. Interest will be accrued daily and credited on the last Business Day of each month. You use the daily balance method to calculate interest on my Account.
- Clearing will act as my agent in depositing funds into the IDAs and withdrawing funds from the IDAs. No evidence of the IDAs, such as a passbook or certificate, will be issued to me. Ownership of the IDAs at the Program Banks will be evidenced by a book entry on the records of the Program Banks, and by records maintained by Clearing. I will contact you if I believe there has been any unauthorized activity between my Account and the IDAs, or if I have any complaints regarding the IDAs at the Program Banks.
- You may terminate my use of the IDA sweep feature, If you terminate my use of the IDA sweep feature, or do not wish to continue to act as my agent with respect to the IDA, I may deal directly with the Program Banks, subject to their rules, with respect to establishing and maintaining deposit accounts. In the event you terminate my use of the IDA sweep feature, you will inform me of the replacement sweep vehicle. Similarly, if I decide to terminate my use of the IDA sweep feature, or that I no longer wish to have Clearing act as my agent with respect to the IDAs, I may establish a direct depository relationship with the Program Banks, subject to the Program Banks' rules. Establishing a direct depository relationship with the Program Banks will result in the separation of my deposit balances at the Program Banks from my Account.
- The Program Banks use IDA balances to fund current and new investment and lending activity. The Program Banks seek to make a profit by achieving a positive spread between their cost of funds (for example, deposits) and the return on their assets, net of expenses. You receive a fee from the Program Banks that ranges from 1.1 to 1.4%. You have the right to waive all or part of this fee. The rate of the fee that you receive may exceed the interest rate or effective yield that I receive in my balances in the IDAs, and the payment of the fee reduces the yield that I receive. Other than the applicable fees charged on brokerage accounts, there will be no charges, fees, or commissions imposed on my Account for this cash sweep feature. The current IDA interest rate will be disclosed on your website and may be changed without prior notice.
- My deposit into IDAs at the Program Banks may need to be limited if one or more Program Banks stop accepting deposits. You will provide advance notification via the website, or other reasonable means, if any Program Bank is removed from the bank sweep program, and if advance notice is not practicable, you will notify me as soon as is reasonably practicable. If a Program Bank ceases to make its IDA available through the IDA sweep feature, I will be given an opportunity to establish a direct relationship with that Program Bank outside of the IDA sweep feature, or to transfer funds to another Program Bank participating in the IDA sweep feature, if available.
- In the event that FDIC insurance payments become necessary, the FDIC is required to pay principal plus unpaid and accrued interest to the date of the closing of the relevant Program Bank, as prescribed by applicable laws and regulations. Because there is no specific time period during which the FDIC must make available such insurable payments, I should be prepared for the possibility of an indeterminate delay in obtaining insurable payments. In addition, I may be required to provide certain documentation to the FDIC and you, such as affidavits and indemnities, before any insurance payouts are released to me. For example, if the IDA balances are held by me as trustee for the benefit of trust participants, I may be required to furnish an affidavit to that effect.
- · You may change the bank sweep program terms and conditions by providing me 30 days' advance notice.
- 2. TD Ameritrade Cash. If I selected TD Ameritrade Cash as my Designated Sweep Vehicle, you will pay interest on available cash in my Account, the rate of which may be changed without prior notice. Interest will be accrued daily and credited on the last Business Day of each month. You may vary interest rates among clients in connection with special offers or combinations of services or in other circumstances. TD Ameritrade Cash represents balances pending investment and is not maintained solely for receiving credit interest. You segregate customer cash consistent with the Securities and Exchange Commission rules and regulations.
- 3. Money Market Funds. Investments in money market funds are subject to restrictions, charges, and expenses described in the prospectus. Money market funds are securities that may increase or decrease in value. They are not insured or guaranteed by the FDIC, any other government agency, or you, and there can be no assurance that such funds will be able to maintain a stable net asset value of \$1 per share. I understand that I will receive period statements for sweep transactions involving money market funds in lieu of immediate confirmations.
- k. Callable Securities. I consent to your lottery system for allocation of partial redemption or calls. A description of your procedures for callable securities is available on your website, or hard copies are available upon request.

9. MARGIN TRADING

- a. Margin Account. When I purchase securities on margin, I am borrowing money from you and pledging all securities and other property in my Account as collateral for these loans, I agree to evaluate my own financial situation, resources, investment objectives, and other relevant circumstances to determine whether margin transactions are appropriate for me. You will not make this determination. Even if I determine that margin is appropriate for me, you determine whether to make such loans to me, I also understand that trading securities on margin involves a variety of risks, including the following:
 - 1. <u>I can lose more funds than I deposit in the margin Account.</u> A decline in the value of securities that I purchase on margin may require me to provide additional funds to you to avoid the forced sale of those securities or other securities or assets in my Account. I could lose more than the amount I deposit in my Account.
 - 2. You can force the sale of securities or other assets in my Account. If the equity in my Account falls below the maintenance margin requirement, or any higher "house" requirements, you can sell the securities or other assets in any of my Accounts to cover the margin deficiency. I also will be responsible for any shortfall in the Account after such a sale.

Page 6 of 9 AMTD 182 F 04/18

- 3. You can sell my securities or other assets without contacting me. Some investors mistakenly believe that a firm must contact them for a margin call to be valid, and that the firm cannot liquidate securities or other assets in their accounts to meet the call unless the firm has contacted them first. This is not the case. Although you may attempt to notify me of margin calls, you are not required to do so, and even if you have contacted me and provided a specific date by which I can meet a margin call, you can still take necessary steps to protect your financial interests, including immediately selling securities without notice to me.
- 4. <u>I am not entitled to choose which securities or other assets in my Account are liquidated or sold to meet a margin call.</u> Because the securities are collateral for my margin loan, you have the right to decide which securities to sell in order to protect your interests.
- 5. You can increase your "house" maintenance margin requirements at any time, and you are not required to provide me advance written notice of the change. These changes to your policy often take effect immediately and may result in the issuance of a maintenance margin call. My failure to satisfy the call may cause you to liquidate or sell securities in my Account.
- 6. I am not entitled to an extension of time on a margin call. While an extension of time to meet margin requirements may be available to clients under certain conditions, I do not have a right to any extension. You will determine whether to provide an extension.
- b. Initial Margin and Margin Maintenance Requirements. There are rules and regulations covering margin loans, including the initial and margin maintenance requirements for margin Accounts. You may impose more stringent margin requirements, which may change without notice to me.

To trade on margin, my Account must maintain at least \$2,000 in minimum equity. I will meet the margin requirement in my margin Account before entering any order and will satisfy any additional requirements you may require. You may apply all premiums received from options writing against my margin requirements. I have the obligation to monitor the balances in my margin Account to ensure that I maintain sufficient amounts to meet margin requirements at all times. I agree to read carefully the TD Ameritrade Margin Handbook before purchasing securities on margin.

You may decline to extend credit to me for any reason, subject to Applicable Rules. There may be times when you have extended credit on certain securities, but due to market or other conditions, you may require additional cash or securities.

- c. Margin Interest. I will pay interest on any credit provided to me for the purpose of purchasing, carrying, or trading in any security.
- d. Margin Interest Rates. You utilize a base rate ("Base Rate") to set margin interest rates. My margin interest rate will vary based on the Base Rate and the margin balance ("Balance") in my margin Account during the interest period. The Base Rate may be changed without prior notice to me. You will post on the websites any changes to the Base Rate.
- e. Interest Calculation. For each day there is a debit balance in my Account, the interest charged for that day is calculated by multiplying the applicable interest rate by my debit balance, with the result divided by 360. The sum of the daily interest charges is totaled at the end of each Account statement period and is posted to my Account on the last Business Day of the Account statement period. I will not earn interest on credit balances in my short Account.
- f. Short Sales. Sales designated as "short" are done in my margin Account, and are subject to different margin maintenance requirements than securities purchased on margin. Short sales are subject to certain regulatory rules and cannot be executed under certain market conditions. You may not always have the securities available to facilitate my short sale. You may, without notice, "buy-in" securities to cover any short security position in my Account. I will reimburse you for any losses that you may incur. You may require me to deposit Collateral if the Collateral in my Account becomes insufficient. Short sale proceeds are part of the Collateral that secures your loan to me. I am also liable for all dividends paid, and all other distributions of cash or property, on securities that I have sold short.
- g. Pledge of Securities and Other Property. You may pledge, repledge, hypothecate, or re-hypothecate, without notice to me, all securities and other property that you hold, carry, or maintain or for any of my margin or short Accounts. You may do so without retaining in your possession or under your control for delivery the same amount of similar securities or other property. The value of the securities and other property that you may pledge, repledge, hypothecate, or re-hypothecate may be greater than the amount I owe you, and any losses, gains, or compensation that result from these activities will not accrue to my Account.
- h. Loan of Securities. You are authorized to lend to yourself or others any securities you hold in my Account and to carry all securities lent as general loans. In connection with such loans, you may receive compensation and retain certain benefits that I will not be entitled to, such as interest on Collateral posted for such loans. In certain circumstances, such loans may limit my ability to exercise voting rights with respect to the securities lent. I may request that fully paid securities not be used in connection with short sales. I understand that in certain situations in which you have borrowed my securities, I may receive a "payment in lieu" of the dividend issued (see Margin Handbook for more details).

10. OPTIONS TRADING

If I elect to engage in options transactions, I will be bound by the following additional terms:

a. Suitability. Options are not suitable for all investors. Options trading has inherent risks and I am prepared financially to undertake such risks and to withstand the losses that may be incurred. I acknowledge I have received or have been given access to the "Characteristics and Risks of Standardized Options" by the Options Clearing Corporation (OCC).

b. General Terms.

- I am responsible for knowing the rights and terms of all options in my Account. I agree to be bound by the FINRA, OCC, and exchange rules applicable to the trading of options contracts.
- · If my options trading occurs in a margin Account, it is subject to the terms and conditions applicable to margin trading.
- Settlement on options cleared through the OCC is the Business Day after the trade date. I shall not exceed the position and exercise limits imposed by the rules of the OCC.
- · I am responsible for instructing you as to my intention to exercise options contracts before the expiration date,
- · You collect information only to establish option trading permission and not for the purpose of monitoring Account holdings or option positions.
- · You and Clearing are authorized to take steps to protect their position and any obligation they have assumed at my request without notifying me.
- If I write (short) a call options contract that requires the delivery of securities to be sold, I may be required to keep the securities in my Account until
 the expiration of the options period and may not be allowed to sell or withdraw the securities.

- If I write (short) a put options contract that requires payment for securities to be purchased, I may be required to keep sufficient funds in my Account
 to make the payment until the expiration of the options period, and may not be allowed to withdraw the funds or use them for any other purpose. If I
 am assigned on the options, Clearing may use the funds for the purchase of the securities without prior notice to me.
- All short equity and some index options positions are available for assignment. Exercise assignment notices for equity or index options are randomly
 allocated among all clients' short positions.

11, INITIAL PUBLIC AND FOLLOW-UP OFFERINGS

You may participate as underwriter or a member of the selling group of, and provide access to, Initial Public Offerings (IPOs) and follow-up offerings. If I participate in such, I will be bound by additional terms.

12, ARBITRATION

This Agreement contains a predispute arbitration clause. By signing an arbitration clause, the parties agree as follows:

- All parties to this Agreement are giving up their right to sue each other in court, including the right to jury trial, except as provided by the
 rules of the arbitration forum in which a claim is filed.
- · Arbitration awards are generally final and binding; a party's ability to have a court reverse or modify an arbitration award is very limited.
- The ability of the parties to obtain documents, witness statements, and other discovery is generally more limited in arbitration than in court proceedings.
- 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.
- . The panel of arbitrators may include a minority of arbitrators who were or are affiliated with the securities industry.
- 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.
- . The rules of the arbitration forum in which the claim is filed, and any amendments thereto, shall be incorporated into this Agreement.
- No person will bring a putative or certified class action to arbitration, nor seek to enforce any predispute arbitration agreement against
 any person who has initiated in court a putative class action; or who is a member of a putative class who has not opted out of the class
 with respect to any claims encompassed by the putative class action until: (1) the class certification is denied; (2) the class is decertified;
 or (3) the client is excluded from the class by the court. Such forbearance to enforce an agreement to arbitrate will not constitute a waiver
 of any rights under this Agreement except to the extent stated herein.

I agree that any controversy between you and your affiliates, any of their respective officers, directors, employees, or agents and me (including any of my officers, directors, employees, or agents) arising out of or relating to this Agreement, our relationship, any Services provided by you, or the use of the Services, and whether arising before or after the date of this Agreement, shall be arbitrated and conducted under the provisions of the Code of Arbitration of the FINRA. If any party unsuccessfully resists confirmation or enforcement of an arbitration award rendered under this Agreement, then that party shall pay all costs, attorneys' fees, and expenses incurred by the other party or parties in confirming or enforcing the award. Arbitration must be initiated by service upon the other party of a written demand for arbitration or notice of intention to arbitrate. Judgment, upon any award rendered by the arbitrator, may be entered in any court having jurisdiction.

13. ADVICE

- a. Unless otherwise noted by you in writing, you will act only as broker-dealer and not as an investment advisor governed by the Investment Advisers Act of 1940.
- b. When I act as a self-directed investor, I am responsible for determining the suitability of any particular investment strategy, transaction, or security. You have no responsibility for any such determination unless you otherwise agree in writing, or you or your representative gives advice directly to me that is identified clearly as a recommendation by you to enter into a particular transaction or to buy or sell a particular security or securities.
- c. From time to time, in connection with my Account, you may provide investment-related guidance and recommendations to me. I agree that when you make a recommendation to me, you determine its suitability for me at the time of the recommendation. If the recommended transaction is not effected contemporaneously with your recommendation, I agree you will have no liability if I choose to effect such transaction in the future. Furthermore, when you are acting as broker-dealer for my Account, I agree that you have no ongoing duty to ensure a recommendation continues to be suitable for me. Rather, I have an affirmative duty to monitor profits and losses in my Account, along with my investment goals and risk tolerance and to modify my trading decisions accordingly.
- d. Unless otherwise agreed to in writing, you do not have discretionary authority over my Account or an obligation to review or make recommendations for the investment of securities or cash in my Account.
- e. Any research, analysis, news, or other information made available by you does not constitute an individualized recommendation by you to buy or sell a particular security.
- f. You do not provide legal, tax, or estate planning advice.

14. MISCELLANEOUS

- a. Severability. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws, such provisions shall be fully severable. In such event: (1) this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision has never comprised a part of this Agreement or was modified to be legal, valid, and enforceable; and (2) the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid or unenforceable provisions or by its severance from this Agreement, to the extent permitted by Applicable Rules.
- b. Account Handbook. The Account Handbook provided to me upon account opening, and available on your websites, contains important information about my Account, I will refer to the Account Handbook to learn additional information about the handling of trade orders, the receipt and delivery of funds, account policies, and other general account information.

- c. Entirety of Agreement. This Agreement, any attachments hereto, the addenda and other agreements referred to in this Agreement and the terms and conditions contained in the Account statements and confirmations contain the entire agreement between you and me; and it supersedes all prior or contemporaneous communications and proposals, whether electronic, oral, or written, between me and you, provided, however, any and all other agreements if any, between me and you and your affiliates, not inconsistent with this Agreement will remain in full force and effect, and if there are any conflicts between this Agreement and any attachments or other agreements, this Agreement shall prevail.
- d. Assignment and Escheatment. I may not assign this Agreement or any rights or obligations under this Agreement without first obtaining your prior written consent. You may assign, sell, or transfer my Account and this Agreement, or any portion thereof, at any time, without my prior consent. The assets in my Account may be transferred to the appropriate state if no activity occurs in my Account within the time period specified by state law.
- e. Amendment. You reserve the right to amend this Agreement without prior notice to me or as required by Applicable Rules. The current version of the Agreement will be posted on the websites and my continued Account activity after such amendment constitutes my agreement to be bound by all amendments to the Agreement, regardless of whether I have actually reviewed them. You are not bound by any verbal statements that seek to amend the Agreement.
- f. Termination. You may terminate this Agreement, or close, deactivate, or block access to my Account. If you decide to close my Account and I fail to transfer it to another broker, you may liquidate my Account and send me the proceeds. I will remain responsible for the payment of all obligations incurred in my Account or otherwise. I may terminate this Agreement after paying any obligations owed upon written notice. The Agreement survives termination of the Account.
- g. Force Majeure. You will not be liable for loss caused directly or indirectly by conditions beyond your reasonable control, including but not limited to Force Majeure events. "Force Majeure" means events that are beyond the reasonable control of a party, including but not limited to the following: disasters, extraordinary weather conditions, earthquakes or other acts of God, war, insurrection, riot, labor strikes, terrorist acts, government restrictions, exchange or market rulings, suspension of trading, computer or communication line failure, or failure of market centers or transmission facilities.
- h. Indemnification. I agree to indemnify and hold harmless you, your affiliates, and Third-Party Providers and their respective officers, directors, employees, agents, and representatives from any and all liabilities, losses, costs, judgments, penalties, claims, actions, damages, expenses, or attorney's fees (collectively "Losses") resulting or arising directly or indirectly from my use of the Services.
- i. Waiver. Your failure to insist on compliance with this Agreement will not constitute a waiver of any of its rights.
- j. Admissibility of Documents in Proceedings. All documents in any format are considered to be true, complete, valid, authentic, and enforceable records of the applicable document, admissible in judicial or administrative proceedings to the same extent as if the documents and records were originally generated and maintained in printed form. I will not contest the admissibility or enforceability of your copy of the documents in any proceeding arising out of this Agreement.
- k. Governing Law, Jurisdiction, and Venue. This Agreement will be governed by the laws of the State of Nebraska, but not its conflicts of law provisions. I hereby consent to the jurisdiction of and venue within the State of Nebraska for all disputes arising out of or relating to this Agreement.
- I. NJ State Law. New Jersey law prohibits contractual provisions that violate the legal rights of a NJ consumer or responsibility of a seller. No provision in this Agreement shall apply to any NJ consumer if it violates any such right or responsibility, including grounds for redress based on: (i) your tortious actions; (ii) the NJ Punitive Damages Act; (iii) the NJ Uniform Commercial Code; or (iv) your failure to protect reasonably against criminal acts of third parties.
- m. Worthless Securities. You may remove a worthless security from my account including, and without limitation to, the following circumstance: your primary custodian, the Depository Trust Company, has deemed the security eligible for removal and you have reviewed and determined, to the best of your ability, that the security has no market value. I agree to waive any claim to any future distribution from the security and agree to indemnify and hold you harmless from any claims, liability, or damages resulting from the removal of such security. If I provide you with evidence of the value of the security from an independent third party within 60 days of receiving your account statement noting the removal, you will review and, if able to, reinstate my position.

Investment Products: Not FDIC Insured * No Bank Guarantee * May Lose Value

TD Ameritrade, Inc. and TD Ameritrade Clearing, Inc., members FINRA/SIPC. TD Ameritrade, Inc., TD Bank, N.A., and TD Bank, USA are affiliated through their parent companies. TD Ameritrade is a trademark jointly owned by TD Ameritrade IP Company, Inc. and The Toronto-Dominion Bank. © 2018 TD Ameritrade.

			v.	
	10			
				.88