



AN OVERVIEW OF SELECT FINANCIAL SERVICES COMPANIES

By Eleanor Akers



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This document provides some descriptive information on some of the better-known financial services companies offering retail financial services in the United States. The information covers the types of products offered, as well as links to some online tools and financial education resources offered by each company.

Our perspective in covering these firms is agnostic: we are not setting out to provide critical reviews. But you should feel free to leave comments reflecting your thoughts or experiences with these providers.

Surveyed companies include (in alphabetical order):

- Ally Financial
- Charles Schwab
- E*TRADE
- Fidelity
- Interactive Brokers
- Merrill Edge
- TD Ameritrade
- Vanguard

Inclusion of a company in this coverage does not imply endorsement of any kind. The material is provided for informational purposes only. The tools included herein have not been subjected to rigorous examination: some may require estimates or assumptions, and some may be overly simplistic.

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Introduction

This document provides descriptive information on some of the better-known financial services companies offering retail financial services in the United States.

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- E*TRADE
- Fidelity
- Interactive Brokers
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Ally Financial

Description: Ally Financial is a digital financial services and bank holding company. It operates the online bank: Ally Bank and Ally Banks' home loan division, Ally Home. Ally Auto is a division of Ally Financial offering vehicle financing and insurance. The investment brokerage division of Ally Financial is Ally Invest. Ally Invest facilitates self-directed investing and offers managed portfolios.[1]

Ally Financial also operate a corporate finance arm that provides a source of capital to equity sponsors and middle market companies.[1]

Ally Financial grew out of the auto financing division of GM and was rebranded as Ally Financial in 2010. Ally Bank, the company's direct banking subsidiary, was converted from GMAC Bank in 2009.[1,2]

Tags: online bank; online brokerage; managed portfolios; robo-advising; auto financing; home loans; savings accounts; auto insurance; margin trading; retirement accounts; checking accounts; financial education; business accounts

Ticker Symbol: ALLY (NYSE)

Countries active in: United States

Website: www.ally.com

Services and Products Provided: banking, investing, lending and insurance services are available through the Ally website. The website also hosts financial education resources. Ally Financial's four main subdivisions: Ally Bank, Ally Auto, Ally Home and Ally Invest each have a section on the website.

Ally Bank: is a digital-only bank; customers can speak to a representative over the phone 24/7, but there are no physical branches. Accounts are managed through the website and mobile app. Accounts can be linked to Amazon's Alexa, allowing customers to ask Alexa for their account balances and manage their accounts. Ally Bank offers checking and savings accounts, CDs (certificates of deposit) and IRAs.[1,2]

Checking & Saving: accounts offered by Ally Bank are all FDIC-insured; none require a minimum opening deposit, nor do they have monthly maintenance fees. Ally offer savings, checking and money market accounts. Money in all these accounts, including the checking account, accrue interest.[1,2,3]

CDs: certificates of deposit with varying terms and interest rates can be purchased from Ally Bank. These CDs have no minimum opening balance nor maintenance fee and all are FDIC insured.[1,2,3]

IRAs: cash held in the IRA accounts offered by Ally Bank can be used to purchase CDs or invested in a variable interest rate Ally IRA Online Savings account.[1]

Ally Home: the online mortgage-lending arm of Ally Financial. Ally Home offer fixed rate and adjustable rate mortgages over various terms. Ally Home also offer mortgage

refinancing and Jumbo mortgages. All mortgage products are offered by Ally Bank Equal Housing Lender.[1,4]

Ally Invest: Ally Financial purchased the web-based trading platform TradeKing in 2016 and rebranded it as its online brokerage Ally Invest. The platform allows investors to create customized charts to track the performance of securities and provides access to research and market data. It also provides tools to model option chains.[1]

Investors can trade in the following securities through Ally Invest:

- Bonds
- ETFs (Exchange Traded Funds)
- Forex
- Mutual Funds
- Options
- Stocks^{1,5,6}

Brokerage account holders can apply for a margin account. Securities held in a margin account can be used as collateral to against funds borrowed, at an agreed interest rate, from Ally Invest for either withdrawal or the purchase of more securities.[1]

Taxable Brokerage Accounts: the securities listed above can be traded through Ally's individual, joint and custodial brokerage accounts.[1]

IRA Accounts: Ally offer a range of IRA brokerage accounts, including Rollover and SEP.[1]

Entity: brokerage accounts for businesses of all sizes, ranging from sole proprietors to corporations. Accounts for Trusts and Investment Clubs are also available.[1]

Managed Portfolio: robo-advisory service that helps investors create and maintain a managed portfolio of ETFs. Investments are automatically rebalanced. Account management fees vary by portfolio allocation. Ally Invest provides information on social responsibility rating, tax optimization, risk and income levels to assist investors in selecting and optimizing a portfolio. There is no tax loss harvesting.[1,7]

Ally Auto: offers vehicle financing and warranty extension products through participating dealerships.[1,8]

Vehicle Financing: lease loans and buyer loans are available to both individuals and small businesses for new vehicles and for used cars. These loans are issued by Ally Bank.[1,8]

Vehicle Protection: Ally Auto offer roadside assistance and extended warranty products. They also offer vehicle maintenance plans and auto insurance.[1]

Learn: Educational articles and tools are offered throughout the website. The tools and calculators offered are shown in the table below.

Name	Description	Account Required to Access?
Ally Emergency Fund Calculator	Compares an individual household's monthly income to monthly expenses to calculate how much money is available to save and how long it will take to build an emergency fund at different savings rates.	Not required
Ally See Where You Stand Retirement Planning	Tool allowing individuals to see how their retirement savings compare to others of a similar age and income bracket surveyed by Ally.	Not required
Ally Wallet Wise Worksheet	Budgeting worksheet breaking sources of income and expenses into subcategories.	Not required
Ally CD Ladder	Tool to model out the returns of a CD ladder strategy. Tool is presented alongside a step-by-step guide.	Not required
Ally Savings Goal Calculator	Calculator showing how much an individual must save each month to reach a specified savings goal.	Not required
Ally Monthly Payment Calculator	Tool estimating monthly loan, property tax and insurance payments for a property based on location and price.	Not required
Ally Refinancing Calculator	Estimate of the effect of mortgage refinancing on monthly payments.	Not required
Ally Monthly Payment Calculator	Estimate of monthly car loan payments based on the proposed loan amount, term and interest rate.	Not required

The Ally Wallet Wise section offers free online courses and live events on topics such as "Budgeting" and "Banking and Investing." This section of the site also contains games designed to help children learn about finances.[1]

Last updated: 1/4/2020

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[8] Malm L. (Aug 5th, 2019). Ally Bank auto loan review: A wide range of options. Credit Karma. Retrieved from <https://www.creditkarma.com/auto/i/ally-bank-auto-loan-review/>

Charles Schwab

Description: Online brokerage platform and bank accessible through the website and mobile app. The trading platform StreetSmart Edge(R) can be downloaded to a desktop or accessed online through the cloud and used to stream real-time data, create and save multiple layouts and use customizable tools to develop and execute a trading strategy. No minimum account balance required to open an account and access the website, mobile app and StreetSmart Edge(R).[1,2,3,4]

Schwab provides account holders with access to its own equity ratings and reports from Morningstar, Credit Suisse, Market Edge, Ned Davis and others. In addition to self-directed trading, Schwab offers advisory and robo-advisory services.[1,2,3]

Investors have 24/7 access to customer support over chat, telephone and in person, by appointment, in Schwab branches located throughout the United States. A one-hour personalized, complimentary consultation is available to investors.[1,2]

Note, at time of writing, Charles Schwab is in the process of buying TD Ameritrade's online brokerage. This transaction is expected to close in the second half of 2020, in the meantime the two firms will operate autonomously. Schwab expects the merger of its platforms and services to take place within 3 years of the close of the deal.[4]

Tags: online bank; online brokerage; managed portfolios; robo-advising; savings accounts; margin trading; retirement accounts; checking accounts; financial education; physical branches; credit card; life insurance; disability/long-term care insurance; business accounts; annuities

Ticker Symbol: SCHW

Countries active in: Argentina, Australia, Austria, Bahamas, Belgium, Brazil, British Virgin Islands, Cayman Islands, Chile, China, Colombia, Costa Rica, France, Germany, Guam, Guatemala, Guernsey, Hong Kong, India, Ireland, Isle of Man, Israel, Italy, Jersey, Malaysia, Mexico, Netherlands, Panama, Peru, Philippines, Qatar, Singapore, Spain, Sweden, Switzerland, Taiwan, Thailand, UAE, United Kingdom, United States, Uruguay, U.S. Virgin Islands and Venezuela.

Website: www.schwab.com

Services and Products Provided: the following securities can be traded in Schwab's brokerage and retirement accounts:

- Bonds
- CDs (Certificates of Deposit)
- Closed End Funds
- ETFs (Exchange Traded Funds)

- Futures
- Mutual Funds: both Schwab Mutual Funds and funds from other fund managers
- Options
- Stocks

In addition to brokerage and retirement accounts, Charles Schwab offers banking and insurance services, as well as financial education.[1]

Brokerage & Trading: range of taxable brokerage accounts available to individuals and organizations. Schwab's Global Account allows U.S. investors to trade in foreign markets in local currencies.[1]

Robo & Dedicated Advice: Schwab offers three levels of advisory service: Schwab Intelligent Portfolios(R), Schwab Intelligent Portfolios PremiumTM and Schwab Private ClientTM. Schwab is also able to refer clients with specialized needs to a local independent investment advisor.

Schwab Intelligent Portfolios(R) is a robo-advisory service that builds a portfolio of ETFs (many managed by Schwab) according to the results of a questionnaire. The portfolio can only be customized by adjusting the risk tolerance and the actual ETFs are not visible until the portfolio is funded. The portfolio is monitored and rebalanced daily using Schwab's algorithms. The account can be a standard taxable account or an IRA account; there are no management fees for either. Clients with higher account balances can enroll in tax-loss harvesting. Investors have access to Schwab's research and investing professionals.[1,5]

The premium product, Schwab Intelligent Portfolios PremiumTM, provides more goal setting tools as well as unlimited access to a dedicated financial planner. This portfolio has a higher account minimum and a flat monthly subscription fee.[1,5]

Ongoing wealth management services are available through Schwab Private ClientTM. This service has a higher investment minimum than Schwab's portfolio management services and an annual fee that is a percentage of the investment.[1]

Education & Custodial: Schwab offers 529 College Saving accounts, tax deferred Education Savings Accounts and Custodial Accounts.[1]

Retirement: in addition to individual IRA accounts, Schwab offers a Custodial IRA for investors under 18. Schwab also offers a Personal Choice Retirement Account, a self-directed brokerage account for employee-sponsored retirement plans.[1]

Small Business Retirement: Schwab offers a variety of retirement accounts for owner-only and small businesses.

Checking & Savings: as a bank, Schwab offers FDIC insured checking and savings accounts. These accounts come with a visa debit card and ATM fee rebates.[1]

Credit Cards: Schwab issues credit cards from American Express.[1]

Lending: Schwab’s home lending program, provided by Quicken Loans(R), provides mortgages, mortgage refinancing and Home Equity Line of Credit (lending backed by home equity). Schwab Bank offers Pledged Asset Line – to allow investors to borrow against securities held in their accounts.[1]

Trust & Estate: Schwab offers accounts designed to manage the distribution of assets from an estate or within a trust.[1]

Charitable Giving: account designed for tax efficient charitable donations.[1]

Annuities: a range of annuities are available for purchase from Schwab.[1]

Insurance: life, disability and long-term care insurance are available through Schwab.[1]

Schwab Knowledge Center: this section of the website contains educational articles, research and investment tools and calculators. Dates and locations of workshops and seminars run by Schwab are listed here. The table below lists the tools and calculators made available in this section of the website, some of which are only available to account holders:

Name	Description	Account Required to Access?
Schwab Retirement Savings Calculator	Summary of current progress towards retirement goals and suggested adjustments to savings plan.	Not required
Schwab College Savings Calculator	Estimates projected costs of a college education for multiple students based on attendance timeframe. Estimates monthly savings required to be able to fund a specified portion of the total cost per student.	Not required
Schwab Roth vs. Traditional IRA Calculator	Provides maximum contributions in a specified tax year to Roth and Traditional IRAs, depending on the investor’s income, filing status and age. Shows what contributions to a Traditional IRA are tax deductible. Entering assumptions on long-term growth and future tax brackets into the tool allows the investor to compare the future value of investments in both account types.	Not required
Schwab RMD Calculator	Separate calculators for Traditional/Rollover/SEP/SIMPLE IRAs and Inherited IRAs, allow investors to calculate	Not required

Note calculator may still assume RMDs must begin at age 70.5. Recent tax-law changed this age to 72.	the minimum annual distribution required from their retirement account once they reach 70.5 years of age.	
Schwab Roth IRA Conversion Calculator This requires a number of assumptions, including estimate of federal tax rate when you retire, number of years to retirement, and annual expected return on IRA investments.	Models out tax effects of converting a Traditional IRA to a Roth IRA.	Not required
Schwab Retirement Income Quiz	Quiz designed to educate investors on retirement planning concepts.	Not required
Schwab Retirement Needs Worksheet	Worksheet to help investors plan how much they need to invest now to be ready for retirement.	Not required.
Schwab Investor Profile Questionnaire	Questionnaire to help investors assess their investment timeline and risk tolerance and select an investment strategy in line with these.	Not required
Schwab Market Research	U.S. and international market analyses and research reports from Schwab and independent research providers such as Morningstar and Ned Davis Research.	Required; samples available to non-account holders.
Schwab Stocks Research	Stock quotes, research and screening tools. Research into individual stocks is provided both by Schwab and independent researchers. Stocks can be filtered by criteria such as dividend yield, analyst rating and valuation. Screening criteria can be saved.	Required
Schwab ETF Research	ETF quotes, prospectuses and report cards, research and screening tools. Research into ETFs is provided both by	Required

	Schwab and independent researchers. ETFs can be filtered by criteria such as inception date, fund family, analyst ratings and valuation. Screening criteria can be saved.	
Schwab Mutual Funds Research	Mutual Fund quotes, prospectuses and report cards, research and screening tools. Research provided both by Schwab and independent researchers. Mutual Funds can be filtered by criteria such as gross expense ratio, total return and valuation using predefined screens, basic screens and advanced screens. Basic and advanced screening criteria can be saved.	Required
Schwab Options Research	Options trade assessor, full option chain quotes, customizable screeners, predefined screeners and options calculators. Schwab also provide options webinars and commentary.	Required
Schwab Bonds and Fixed Income Research	Bonds can be filtered by maturity, yield, rating and coupon. Research from Schwab and independent researchers on bonds, new issues, CDs, bond funds, bond ETFs and other products is available.	Required

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[1] www.schwab.com

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[3] Reinkensmeyer B. (Jan 3rd, 2020). Charles Schwab Review. StockBrokers.com. Retrieved <https://www.stockbrokers.com/review/charlesschwab>

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E*TRADE

NOTE: In February 2020, Wall Street firm Morgan Stanley announced its acquisition of E*TRADE.

Description: Full service online broker with three trading platforms: E*TRADE Web, Power E*TRADE and E*TRADE Pro. Financial advisors can be accessed over the phone and in brick-and-mortar locations.[1,2,3]

E*TRADE Web offers free streaming of market data, real-time quotes, live market commentary, analyst research and more, it is accessed from the main website.[1,2,3]

Power E*TRADE is a separate web platform, resulting from the acquisition of OptionsHouse, offering real-time data, more than 100 technical studies, drawing tools, streamline trade tickets and trading ladders. Power E*TRADE provides an overview of portfolio risk and asset allocation over all accounts held with E*TRADE.[1,2,3]

E*TRADE Pro is a desktop platform that is slowly being withdrawn from use, in favor of E*TRADE; the platform is hidden to new customers who must contact the customer support team to gain access.[1,2,3]

A mobile version of E*TRADE Web: E*TRADE: Invest. Trade. Save. is available in the Apple and Google play app stores. Power E*TRADE – Advanced Trading is the mobile version of Power E*TRADE.[1]

The website hosts a library of articles categorized as: Investing Basics, Advanced Trading, Retirement Planning and Tax Planning. The company also hosts free, educational webinars on a range of topics. Customer service and help is available over phone and e-mail.[1,3]

Tags: online bank; online brokerage; managed portfolios; robo-advising; savings accounts; margin trading; retirement accounts; checking accounts; financial education; physical branches; business accounts

Ticker Symbol: ETFC (NASDAQ)

Countries active in: United States

Website: www.etrade.com

Services and Products Provided: the following securities can be traded across a range of account types using E*TRADE's web and mobile trading platforms:[1]

- Bonds
- CDs (Certificates of Deposit)
- ETFs (Exchange Traded Funds)
- Futures

- Mutual Funds
- Options
- Stocks

Securities can be traded in taxable brokerage and retirement E*TRADE accounts.[1]

Brokerage accounts: E*TRADE offer individual, joint and custodial brokerage accounts. Accounts with balances above a certain threshold (currently \$1,000) are eligible for a debit card, issued by Mastercard.[1]

Retirement accounts: in addition to offering a variety of Individual Retirement Accounts (IRAs), E*TRADE offers an IRA for minors as well as products to manage inherited IRAs.[1]

Managed Portfolios: Managed Portfolios are managed by professional investors at E*TRADE Capital Management. Portfolios are monitored and re-balanced using E*TRADE's algorithms. E*TRADE offers three levels of advisory services: robo; hybrid and in-person advising.

Investors can use E*TRADE's robo-advisory service to select and customize one of a range of portfolios (Core Portfolio) designed and curated by E*TRADE; robo-advising has the lowest associated fees and minimum required account balances of E*TRADE's managed portfolios.

A hybrid product (Blend portfolio) offering a combination of robo-advising and access to a Financial Consultant is available for higher fees and higher minimum account balances. E*TRADE also has offerings designed for investors seeking dedicated Financial Consultants and more actively managed portfolios. Accounts with access to Financial Consultants include tax harvesting services; these accounts have higher minimum balances and fees.

Small Business: E*TRADE enables small business to offer retirement plans to their employees. Funds can either be managed by E*TRADE Capital Management or invested in a choice of mutual funds, ETFs, stocks and other securities. A variety of account types, including SIMPLE and SEP IRAs and Profit-Sharing Plans are available.[1]

Bank: E*TRADE offers FDIC insured bank accounts that can be integrated with E*TRADE's investing accounts, allowing users to view and manage accounts through one platform. Transfer Money is a service that allows users to transfer money between E*TRADE accounts and outside financial institutions. Checking and savings accounts, as well as lines of credit against securities held in an E*TRADE brokerage account, are available.[1]

Knowledge: this section of the E*TRADE website contains in-depth articles, videos and how-to guides on a range of financial topics.[1]

Last updated: 1/4/20

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[4] Carey T. (Sept 20th, 2019). E*TRADE Core Portfolios Review. Investopedia. Retrieved from <https://www.investopedia.com/e-trade-core-portfolios-review-4692597>

Fidelity

Description: Online brokerage company that builds its own mutual funds and provides advisory services and research tools. Securities, including mutual funds built by Fidelity, can be traded on Fidelity's website or on the Active Trader Pro platform. The Active Trader Pro platform can be downloaded to a computer or a mobile device or accessed online at www.ActiveTraderPro.com. The platform shows real-time information and visual snapshots.[1,2,3,4]

Fidelity provides free trading tools and research to account holders from 20+ independent advisors. Customer support can be accessed over the phone 24/7 and investors can talk to a professional investor through an online chat application. Fidelity also has brick and mortar Investment Centers located around the country and regularly holds financial education seminars at these locations.[1,2,3,4]

Tags: online brokerage; financial advisory services; managed portfolios; robo-advising; margin trading; retirement accounts; financial education; physical branches; credit card; life insurance; annuities; cash management accounts

Ticker Symbol: privately held; not traded

Countries active in: United States and separate subsidiaries offering services in Austria, Canada, France, Germany, Hong Kong, Japan, Netherlands, Spain, Sweden, Switzerland, Taiwan and the United Kingdom.

Website: www.fidelity.com

Services and Products Provided: the securities shown in the table below can be traded through Fidelity's brokerage and retirement accounts [1]

- Bonds
- CDs (Certificates of Deposit)
- ETFs (Exchange Traded Funds)
- Mutual Funds: both Fidelity Mutual Funds and funds from other fund managers
- Options
- Stocks

Investing and Trading: Fidelity offer brokerage accounts for individuals and businesses. They also offer an FDIC insured cash management account (not a bank account) that comes with a visa debit card and credit card that can be used in conjunction with Fidelity's individual brokerage account. Brokerage account holders have access to investment research from 20+ independent advisors and access to the full gamut of Fidelity's investment planning tools.[1]

Saving for Retirement: Fidelity offer a range of retirement accounts for individuals, including rollover IRAs, Roth IRAs, Traditional IRAs and IRAs for kids and inherited

IRAs. Retirement accounts designed for self-employed individuals and small businesses are also available.[1]

Managed Accounts: Fidelity provides three levels of investing advice: robo-advising, hybrid advising and in person advising through its managed accounts offerings. Investors have access to proprietary Fidelity mutual funds and all the Fidelity planning tools available through the Fidelity Planning and Guidance Center.[1]

Their signature robo-advising account, Fidelity Go, uses questionnaires to help investors select an investment profile and automatically manages the portfolio according to the selected strategy. This account can be opened without funding, allowing investors to use Fidelity's planning tools without committing funds. A minimum of \$10 is required to make an investment, after which investors can set target dollar amounts in target timeframes. Fidelity Go estimates the likelihood of these goals being reached and offers suggestions to improve the likelihood of success.[1,5]

Fidelity's hybrid offering (Fidelity Personalized Planning & Advice) combines access to their robo-advising services with access to a team of advisors and 1-on-1 financial coaching. The third level of advisory is available through products for investors seeking actively managed strategies tailored to their needs and more frequent access to personal Financial Advisors.[1]

Tax-Deferred Savings Accounts: are offered by Fidelity to allow investors to use tax-advantaged investment vehicles to save for specific purposes. In addition to education and health care costs, Fidelity offers products designed to facilitate investments for charitable giving and disability-related expenses.[1]

Estate Planning: investment products offered by Fidelity allow individuals to manage brokerage accounts on behalf of trusts or estates.[1]

Annuities: Fidelity offers several annuity products.[1]

Life Insurance: Massachusetts Mutual Life Insurance products are available through Fidelity.[1]

Investor Tools: investors can set up the trading platform Active Trader Pro using preset templates or completely from scratch. Fidelity's other trading tools and Bloomberg TV can be integrated into the platform.[1,3]

Trading tools include:

- Real-time Analytics: tool providing real-time trade signals based on historical price movements. Alerts are generated when a stock hits a new high or low, crosses a key technical level or shows some other unusual activity.[1,3]
- Trade Armor: charting tool allowing trading opportunities to be displayed on a chart. Alerts can be set to track price movements and determine prices to get in and out of a position. Order can be entered directly from the tool.[1,3]
- Daily Dashboard: pop-up providing real-time earnings and economic news relating to the investor's portfolio upon Active Trader Pro launch.[1,3]

Other investing, retirement planning and calculation tools, described in the table below, can be accessed from Fidelity’s website. Some tools are available to non-account holders, guest accounts provide a 30-day free trial of many of Fidelity’s investment tools.[1]

Name	Description	Account Required to Access?
Fidelity Planning & Guidance Center	Template for creating and maintaining a financial plan and investing strategy.	Required or trial with guest account
Fidelity Guided Portfolio Summary SM	Analysis of current portfolio and identification of areas in need of more attention.	Required
Fund Picks From Fidelity(R)	Quarterly screening of funds managed by both Fidelity and other fund companies to provide lists of funds meeting Fidelity’s selection criteria in categories such as “small growth U.S. Equity Funds” and “Europe Stock International Equity Funds”.	Not required.
Fidelity Mutual Fund Evaluator	Tool to select funds by class/category or risk. Funds can also be screened according to whether they are Fidelity Funds, Fidelity Picks or whether they have accompanying transaction costs.	Not required
Fidelity ETF/ETP Screener	Customizable pre-built ETF/ETP screener.	Required or trial with guest account
Fidelity Stock Screener	Search for publicly traded stock using pre-selected or custom criteria.	Required or trial with guest account
Fidelity Options Screener	Pre-built options screener.	Required or trial with guest account

Fidelity Bond Ladder Tool	Model potential income streams from bonds with varying maturity dates.	Required or trial with guest account
Fidelity Hypothetical Trade Tool	Model the effect of a hypothetical trade on your portfolio asset allocation	Required or trial with guest account
Fidelity Price-Yield Calculator	Calculate estimated yield or price of a bond; accrued interest, invoice price, yield-to-maturity and yield to call of a bond.	Not required
Fidelity Social Security Benefits Calculator	Estimates monthly and lifetime benefits at different claiming ages and models the effect of factors such as current salary on benefits amount.	Not required
The Fidelity Retirement Score(SM)	Provides an estimate of monthly retirement income and a retirement plan rating (0-150). Effect of changing retirement age and monthly contributions can also be modelled.	Not required
Fidelity IRA Contribution Calculator	Tool to estimate the amount an individual can contribute to an IRA each year and what portion is tax deductible.	Not required
Fidelity Roth Conversion Calculator	Tool calculating the tax effect of converting money from another IRA type (e.g. SEP) to a Roth IRA vs leaving the money in the original account.	Not required.
Fidelity Required Minimum Distribution Calculator Some providers have not updated their calculators to account for the higher age (72) at which RMDs must begin.	Estimates minimum annual required distribution from retirement saving once the retirement account holder is over 70.5.	Not required
Fidelity Guaranteed Income Estimator	Estimates guaranteed income payments from a fixed income annuity.	Not required.

<p>Fidelity Inherited IRA RMD Calculator</p> <p>Some providers have not updated their calculators to account for the higher age (72) at which RMDs must begin.</p>	<p>Calculates the minimum required distribution from retirement saving for holders of inherited IRA accounts.</p>	<p>Not required</p>
<p>Fidelity Substantially Equal Periodic Payments/ 72(t) Calculator</p>	<p>Models how holders of retirement savings accounts can access funds early using the Internal Revenue Code section 72(t).</p>	<p>Not required</p>

Last updated:1/4/20

References:

[1] www.fidelity.com

[2] O’Shea A. (Jan 2nd, 2020). Fidelity Investments Review 2020: Pros, Cons & How It Compares. Nerdwallet. Retrieved from <https://www.nerdwallet.com/reviews/investing/brokers/fidelity>

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[5] Carey T. (Sep 20th, 2019). Fidelity Go Review 2019. Investopedia. Retrieved from <https://www.investopedia.com/fidelity-go-review-4691305>

Interactive Brokers

Description: Online brokerage and dealer able to trade securities in 125 markets worldwide. Interactive Brokers offers two levels of account: Interactive Brokers Lite and Interactive Brokers Pro. Interactive Brokers Pro is geared toward advanced traders; an inactivity fee is charged for this tier. Both tiers have a \$0 account minimum and allow purchase of fractional shares of stock.[1,2,3]

Investors with Interactive Brokers Lite accounts can trade using the Client Portal: a web-based platform that can also be accessed through a mobile app. The Interactive Brokers Pro account provides access to a downloadable platform, Traders Workstation, with extensive charting, modelling and trading capabilities.[2,3]

Tags: online brokerage; managed portfolios; robo-advising; margin trading; retirement accounts; business accounts; cash management accounts; advanced trading strategies

Ticker Symbol: IBKR

Countries active in: Australia, Canada, China, Estonia, Hong Kong, Hungary, India, Japan, Russia, Switzerland, United Kingdom and United States.

Website: www.interactivebrokers.com

Services and Products Provided: Interactive Brokers have brokerage accounts for individuals, professionals (e.g. Advisors, Broker and Compliance Officers), small businesses and institutional investors. The following securities can be traded in these accounts:

- Bonds
- ETFs (Exchange Traded Funds)
- Forex
- Futures
- Metals
- Mutual Funds
- Options
- Stocks (including fractional share ownership)

The following accounts and services are available to individuals and small businesses:

Brokerage Accounts: are available to individual and joint account holders. U.S. residents can also open accounts on behalf of a minor.[1]

Integrated Investment Management Account: available to individuals: paychecks can be directly deposited into this account and invested in securities. The account comes with a Mastercard debit card. Cash held in accounts with balances over

\$10,000 earns interest. Investors can borrow against securities held in this account. Bill Pay can be used to pay expenses such as electricity bills and credit card bills.[1]

Retirement: Interactive Brokers offer IRA accounts to US tax residents only.[1]

Trust: securities can be held and traded in a trust account.[1]

Small Business Accounts: brokerage account for small businesses.[1]

Interactive Advisors: robo-advisory service that allows investors to mirror a portfolio manager. This is an unusual offering, most other robo-advisors run algorithms based on Modern Portfolio Theory to manage a portfolio. A wide range of portfolios, both actively and passively managed are offered. Each portfolio comes with a performance summary. Portfolio selection is highly customizable.[4]

Traders' University: educational offerings include courses, webinars, and videos. Tools and widgets to help traders plan and execute options strategies are available through this section of the website.[1]

Tools: Interactive Brokers offer the trading management tools shown in the table below.[1]

Name	Description	Account Required to Access?
PortfolioAnalyst	Create and monitor a summary of all financial accounts, including those not held in Interactive Brokers. Investors can create customized benchmarks.	Required; free trial available.
Interactive Brokers Probability Lab This is an advanced capability which is not needed for passive investors.	Interactive probability distribution generator. Allows investors to build and test options strategies against a range of probability distributions.	Not required
IBot	Virtual assistant: quick access to account information, quote generation and trading tools.	Required

Interactive Broker accounts can also be integrated with a range of third-party portfolio management, order management and post trade allocation tools.

Last updated: 1/5/2020

References:

[1] www.interactivebrokers.com

[2] Coombes A. (Jan 2nd, 2020). Interactive Brokers Review 2020: Pros, Cons & How It Compares. Nerdwallet. Retrieved from <https://www.nerdwallet.com/reviews/investing/brokers/interactive-brokers>

[3] Carey T. (Oct 7th, 2019). Interactive Brokers Review 2019. Investopedia. Retrieved from <https://www.investopedia.com/interactive-brokers-review-4587904>

[4] Carey T. (Sep 24th, 2019). Interactive Advisors Review 2019. Investopedia. Retrieved from <https://www.investopedia.com/interactive-advisors-review-4685247>

Merrill Edge

Description: Online brokerage platform that can be linked to a Merrill investing or Bank of America bank account. Balances in Merrill Edge contribute to both Merrill investing and Bank of America rewards programs. Customer service can be accessed 24/7 through live chat, e-mail and telephone. Customers can access in person customer support at Bank of America branches.[1,2]

Investors in Merrill Edge have access to Merrill's in-house research; educational articles and financial planning tools. Securities can be traded through the Merrill Edge website. Account holders who make more than 15 trades per quarter or maintain balances above \$50,000 across their Bank of America and Merrill Edge Investment accounts also have access to the downloadable Merrill Edge MarketPro platform. The platform allows investors to build watchlists, set alerts, get streaming quotes and access financial news and access research from BofA Merrill Lynch Global Research investment research firm.[1,2,3]

Tags: online brokerage; financial advisory services; managed portfolios; robo-advising; margin trading; retirement accounts; financial education; physical branches; business accounts

Ticker Symbol: MTTX (Parent company Merrill, a Bank of America Company)

Countries active in: United States

Website: www.merrilledge.com

Services and Products Provided: the following securities can be traded through the Merrill website and the MarketPro platform:

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

Options traders may only trade 2-legged strategies on the website, the MarketPro platform supports more sophisticated options strategies.[1,4]

General Investing: Merrill Edge Self-Directed individual, joint and custodial investment accounts. These accounts have no annual fee and no minimum investment requirement.[1]

Guided Investing: Merrill offers two levels of guided investing: Merrill Guided Investing and Merrill Guided Investing with an Advisor.

Merrill Guided Investing is an all-digital service which incurs an annual fee that is a percentage of the value of the investment. This service provides planning tools,

including goal setting for retirement. If the investor’s progress falls off track, Merrill Guided Investing provides suggestions designed to help the investor achieve their goals. Once the account has been set up by defining a goal and providing information about other accounts being used to save for this goal, investors are offered a suggested portfolio, the contents of which cannot be seen until the account has been funded. It is not possible for investors to modify the suggested portfolio.[1,5]

Merrill Guided Investing with an Advisor provides the same service with the added benefit that investors can talk to a financial advisor at any time. This account has higher annual fees and minimum account balances.[1,5]

Retirement: Rollover, Traditional, Roth and SEP IRA accounts can be held with Merrill Edge.[1]

College Planning: Merrill Edge offers 529 and Custodial accounts.[1]

Small Business Accounts: small businesses can open 401(k), IRA and brokerage accounts through Merrill Edge.[1]

Help When You Want It: checklists and articles designed to help investors adapt their investment strategies to events such as marriage, unemployment, large purchases (e.g. houses and cars) and health related events. Available to non-account holders through the Merrill Edge website.[1]

Tools and Calculators: Merrill Edge’s website hosts a selection of tools, listed in the table below, to help investors plan for retirement and specific savings goals, such as education. Some tools are only available to account holders; others are available to the general public through the Merrill Edge website.[1]

Name	Description	Account Required to Access?
Merrill Edge Select(TM) Funds	Screen mutual funds using criteria such as “domestic” and/or “mid-cap”. Each quarter, Merrill Edge highlights up to 5 mutual funds in each category.	Not required to screen (required to invest in the funds).
Merrill Edge Asset Allocator(TM)	Compare actual portfolio asset allocation to a targeted allocation and get customized reallocation recommendations.	Required
Merrill Edge Personal Retirement Calculator	Projection based on current income, investments and retirement goals. The	Not required.

	effect of strategy changes can be modelled.	
Merrill Edge IRA Selector Tool Calculator may still assume RMDs must begin at age 70.5. Recent tax-law changed this age to 72.	Shows investors the maximum amount they can contribute to a Traditional or Roth IRA in a given tax year and provides information on the different features of these accounts.	Not required
Merrill Edge Retirement Evaluator(TM)	Estimates retirement income needs and compares these to an analysis of the existing portfolio held in Merrill accounts and outside accounts. The full portfolio is evaluated against the investor's risk appetite, investment horizon and liquidity needs.	Required
Merrill Edge 401(k) Rollover Calculator	Taxes, fees, withdrawals and other implications of rolling over a 401(k) to an IRA/New Employer Plan vs remaining in former employer's plan.	Not required
Merrill Edge Cash Distribution Calculator	Model the potential effects, including tax effects, of taking a cash distribution today from a retirement plan on current and future savings.	Not required
Merrill Edge Portfolio X-Ray	Review and analyze investment portfolio held with Merrill Edge and measure risk and exposure levels.	Required
Merrill Edge Bond Income Calculator	Review the payment schedule and estimated income that can be expected from a bond or CD held with Merrill.	Required
Merrill Edge Taxable Equivalent Yield	Model the effect of federal and state taxes on income from bonds.	Not required
Merrill Edge Annuity Contribution Calculator	Calculates the amount that needs to be contributed to a tax-deferred annuity to achieve desired level of retirement income.	Not required
Merrill Edge Annuity Accumulation and Payout	Calculate the value at retirement on an existing annuity and the annual payment	Not required

	that can be expected over a defined period.	
Merrill Edge Annuity Tax Savings	Model tax savings that could accrue from investing in a tax-deferred annuity rather than a taxable account.	Not required
Merrill Edge Benchmark Return Calculator	View historic returns on exchange traded funds, index funds, bond indexes and U.S. treasury bills. Data is available from January 1973 or the inception of the fund. These historic returns are designed to be used as a benchmark for self-directed investments.	Not required
Merrill Edge After-Tax Return	Shows effect of federal taxes on returns on stock, bond and money market investments held for different periods.	Not required
Merrill Edge Dollar Cost Averaging	Models out the effect of changing security prices on a regular monthly investment.	Not required
Merrill Edge Projected Taxes on Investment Income	Models the effect of federal taxes on investment returns.	Not required
Merrill Edge College Planning Calculator	Estimates the projected costs of a college education for multiple students based on attendance timeframe. Estimates monthly savings required to achieve goals.	Not required
Merrill Edge 529 Plan State Tax Calculator	Estimates state tax savings net of federal tax, of saving in a 529 Plan by state.	Not required
Merrill Edge Cash Flow Estimator	Budgeting tool helping individuals to visualize their monthly income and expenses by category.	Not required.
Merrill Edge Net Worth Estimator	Estimates net worth (assets minus debts) by manually adding information on investments, real estate and personal assets held outside of Merrill to information on assets held in Merrill accounts. Further add in mortgage, credit	Required

	card balances, loans and other debts to calculate net worth.	
Merrill Edge Refinancing Calculator	Estimates total impact of refinancing a mortgage. Lays out impact of changes in term, interest rates, closing points and fees on total repayment, principal repayment and interest repayments.	Not required
Merrill Edge Estate Tax Calculator	Estimates the tax an estate will need to pay upon the death of the estate holder.	Not required

Last updated: 1/5/2020

References:

[1] www.merrilledge.com

[2] Coombes A. (Jan 2nd, 2020). Merrill Edge Review 2020: Pros, Cons and How it Compares. Nerdwallet. Retrieved from <https://www.nerdwallet.com/reviews/investing/brokers/merrill-edge>

[3] Royal J. (2019). Merrill Edge® Review 2019. Bank Rate. Retrieved from <https://www.bankrate.com/investing/brokerage-reviews/merrill-edge/>

[4] Carey T. (Oct 2nd, 2019). Merrill Edge Review 2019. Investopedia. Retrieved from <https://www.investopedia.com/merrill-edge-review-4587910>

[5] Carey T. (Sep 19th, 2019). Merrill Edge Guided Investing Review 2019. Investopedia. Retrieved from <https://www.investopedia.com/merrill-edge-guided-investing-review-4691675>

TD Ameritrade

Description: Online broker that can be accessed through the website's trading platform, the downloadable trading platform Thinkorswim and the mobile apps TDA Mobile (iOS only) and TDA Mobile Trader (comparable to Thinkorswim platform). There are no minimum balances required to open an account and access these trading platforms.[1]

The web-based platform provides access to financial research from TD Ameritrade as well as independent research from Morningstar, Market Edge and CRFA. The landing page is fully customizable and the site hosts security screening tools and a Portfolio Planner tool. The Portfolio Planner tool helps investors to create a target asset allocation plan and track asset allocation of existing portfolios. TD Ameritrade also provides a GainsKeeper tool which tracks capital gains and losses for the purpose of tax reporting.[1,2]

TD Ameritrade also offers desktop-based platform paperMoney – a virtual simulator that provides \$100,000 in practice “money” and access to a margin account. This allows traders to back test strategies. The virtual simulator can be downloaded from both the web-based platform and Thinkorswim; paperMoney is available to non-account holders for a free 60-day trial.[1,2]

Note, at the time of writing, Charles Schwab is in the process of buying TD Ameritrade's online brokerage. This transaction is expected to close in the second half of 2020, in the meantime the two firms will operate autonomously. Schwab expects the merger of its platforms and services to take place within 3 years of the close of the deal.[3]

Tags: online brokerage; financial advisory services; managed portfolios; robo-advising; margin trading; retirement accounts; financial education; physical branches; business accounts; annuities

Ticker Symbol: AMTD

Countries active in: Canada, China, Hong Kong, Malaysia, Singapore, Taiwan, United States.

Website: www.tdameritrade.com

Services and Products Provided: The following securities can be traded in TD Ameritrade's brokerage and retirement accounts:

- Bonds
- Cryptocurrency
- ETFs (Exchange Traded Funds)
- Forex
- Futures

- IPOs (Initial Public Offerings) – when TD Ameritrade is a member of a selling group, its customers can purchase stock at the IPO price[1]
- Options
- Mutual Funds
- Stock

TD Ameritrade offers automatic stock, ETF and mutual fund dividend reinvestment through many of their accounts, allowing investors to automatically use their dividends to purchase individual or fractional shares. TD Ameritrade also sells annuities.[1]

Brokerage Accounts: TD Ameritrade offers individual brokerage accounts and a range of joint accounts. Some joint accounts are only available to married couples and some are only available in certain states. Some accounts allow investments to be made on behalf of a minor.[1]

Retirement Accounts: in addition to offering a variety of individual IRA accounts, including Rollover IRA accounts, TD Ameritrade offers both Minor IRAs and retirement products for small businesses.[1]

Education Savings Accounts: TD Ameritrade offers a variety of saving for education accounts with different tax implications.[1]

Managed Portfolios: TD Ameritrade offers three levels of guided investment portfolios: Essential Portfolios; Selective Portfolios and Personalized Portfolios. Essential Portfolios have the lowest account minimums and lowest fees. A robo-advising service recommends one of five investment portfolios to investors based on a questionnaire designed to understand the investor's goals and risk tolerances. Asset allocation is maintained using TD Ameritrade's algorithms and tax-loss harvesting is performed. Portfolios cannot be viewed until the account is funded, nor can they be customized.[1,4]

For higher minimum investments and fees, Selective Portfolios provide access to a broader range of portfolios and a Financial Consultant. The Financial Consultant works with investors to define the investment goals and risk tolerance. Tax loss harvesting is available on some portfolios.[1]

Personalized Portfolios provide investors with tailored advice and portfolio construction. Investors work with a dedicated Financial Consultant and a Portfolio Consultant. This type of portfolio management has the highest minimum account balances and fees of TD Ameritrade's three offerings.

Business: in addition to offering retirement accounts for individual and small businesses, TD Ameritrade offers brokerage accounts for limited partnerships and investment clubs.[1]

Trusts: TD Ameritrade offer brokerage accounts for existing trusts and personal trusts.[1]

Education: free immersive courses on topics such as “Income Investing” and “Technical Analysis” are available through the education tab in thinkorswim and the website’s Education Center. Webinars, articles and schedules for in-person training events are also available.[1]

Name	Description	Account Required to Access?
TD Ameritrade Retirement Calculator	Calculates likelihood of a specified amount of money lasting throughout retirement based on estimated life expectancy, retirement spending goals, assets in existing retirement accounts and planned additions. Tool also demonstrates the effect of a market crash on value of a portfolio and provides recommended next steps to improve likelihood of money lasting throughout retirement.	Not required
TD Ameritrade Securities Screening	Screen securities by industry, performance, analyst rating. Access to independent third-party research.	Required

Last updated: 1/5/2020

References:

[1] www.tdameritrade.com

[2] O’Shea A. (Jan 2nd, 2020). TD Ameritrade Review 2020: Pros, Cons and How It Compares. Nerdwallet. Retrieved from <https://www.nerdwallet.com/reviews/investing/brokers/td-ameritrade>

[3] Carey T. (Nov 25th, 2019). TD Ameritrade Review 2019. Investopedia. Retrieved from <https://www.investopedia.com/td-ameritrade-review-4587925>

[4] Carey T. (Nov 25th, 2019). TD Ameritrade Essential Portfolios Review 2019. Investopedia. Retrieved from <https://www.investopedia.com/td-ameritrade-essential-portfolios-review-4691307>

Vanguard

Description: Investment advisor that manages mutual funds and ETFs as well as offering brokerage services, financial planning services and retirement accounts. Vanguard is best known for its low-cost index funds; index funds were invented by Vanguard founder Jack Bogle in 1975. Vanguard's target audience is long-term investors with significant investment funds.[1,2,3]

Although trades can be made through Vanguard's website, Vanguard routes trades elsewhere for execution. There are no streaming quotes, the screen must be refreshed to get updates and there are no customization options. Options trading is limited to a single leg online, investors must call a broker to place more complex orders. Vanguard's mutual funds and ETFs have lower expense ratios than the industry average but tend to have higher account minimums than other brokers.[2,3,4]

Vanguard's advising service: Personal Advisor Services (PAS) provides algorithmic and human investment advice for client funds held in Vanguard Marketing Corporation. Entry requires a minimum investment and an annual management fee.[5]

Tags: online brokerage; financial advisory services; managed portfolios; robo-advising; retirement accounts; financial education

Ticker Symbol: Vanguard has a somewhat unique structure. It does not have publicly traded equity. Rather, it is owned by its funds. Thus, the investors in its funds own the funds that own the company.

Countries active in: Australia, Canada, China, France, Germany, Hong Kong, Ireland, Japan, Mexico, Netherlands, Switzerland, United Kingdom and United States.

Website: <https://investor.vanguard.com/home/>

Services and Products Provided: While Vanguard's specialty is low-cost mutual funds and ETFs, other securities can be traded through its website; transaction fees may apply. The full list of tradeable securities is:

- Bonds
- CDs (Certificates of Deposit)
- ETFs (Exchange Traded Funds): both Vanguard ETFs and ETFs from other providers
- Money market funds
- Mutual Funds: both Vanguard Mutual Funds and funds from other fund managers
- Options[1]

Retirement Accounts: Vanguard offers a full range of retirement accounts for individuals, including Rollover IRAs and SEP IRAs. They also offer a Solo 401(k) for businesses employing a single individual.[1,2]

College Savings Accounts: in addition to offering a variety of college savings accounts, Vanguard’s website contains information on how best to use these savings accounts to pay for an individual’s own education, their child’s education or a grandchild’s education.[1]

Taxable Accounts: investors in taxable accounts can invest in funds, stocks, Money Markets and CDs.[1,2]

Investor Education: this section of Vanguard’s website contains podcasts and articles containing investor education on topics such as taxes and retirement. It also contains lessons, comprising of videos, readings and questionnaires on topics such as “How should I save for college?” and “I’ve left my job. What happens to my plan?”. The website also contains the tools and calculators shown in the table below.[1]

Name	Description	Account Required to Access?
Vanguard Retirement Income Calculator	Visual representation of predicted monthly income in retirement compared to projected monthly needs. Projection is calculated using current age, planned retirement age, current salary, predicted % of current salary needed for retirement, existing retirement savings, current annual retirement savings, estimated return on investment, estimated Social Security benefit and pension benefits.	Not required
Vanguard Retirement Nest Egg Calculator	Calculates the likelihood of retirement savings lasting for a specified period, using current savings balance, projected annual expenditure and investment allocation.	Not required
Vanguard Retirement Plan Loan Calculator	Side by side comparison of cost of borrowing from an employer retirement plan (including the lost investment returns) with an alternative loan.	Not required
Vanguard IRS Savings Limit Calculator	Calculate how much to contribute each pay period to reach the IRS limit by year end. Use actual year-to-date contributions or current contribution rate to estimate.	Not required

Vanguard Save for Retirement Calculator	Tool to model the effect of changing contribution levels to employer pension plans and IRAs on both retirement income and current paycheck.	Not required
Vanguard: The Power of Compounding	Interactive graphic showing account value at 10, 20, and 30-year horizons of monthly investments. Users can see the effect of changing the monthly contribution and annualized rate of return.	Not required.
Vanguard College Savings Planner	Tool to estimate the projected costs of a college education for multiple students based on attendance timeframe and current age. Estimates monthly savings required to be able to fund a specified portion of the total cost per student.	Not required
Vanguard Mutual Fund and ETF Screener	Screen mutual funds and ETFs by asset class, minimum deposit, risk level, share class and tax efficiency.	Required
Vanguard Portfolio Watch	Portfolio analysis tool providing insight into asset allocation and overall costs of taxes and risk associated with portfolio. Automated recommendations.	Required

Last updated: 1/7/2020

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[1] <https://investor.vanguard.com/home/>

[2] Ludwig L. (Jan 6th, 2020) Vanguard Review 2020 – The Best Option For All Investors? Investor Junkie. Retrieved from <https://investorjunkie.com/reviews/vanguard/>

[3] Coombes A. (Jan 2nd, 2020). Vanguard Review 2020: Pros, Cons & How It Compares. Nerdwallet. Retrieved from <https://www.nerdwallet.com/reviews/investing/brokers/vanguard>

[4] Carey T. (Oct 29th, 2019). Vanguard Review. Investopedia. Retrieved from <https://www.investopedia.com/vanguard-review-4587932>

[5] Farley A. (Sep 24th, 2019). Vanguard Personal Advisor Services Review. Investopedia. Retrieved from <https://www.investopedia.com/vanguard-personal-advisor-services-review-4692536>