

CI in the Journal

For more Best of the Web sites, visit the Guides area of AAI.com at www.aai.com/guides/best-of-web.

Investor's Best of the Web 2018

By Jaclyn N. McClellan

One challenge to integrating the vast amount of information, data and technology available on the internet into an investment selection process is the sheer volume of data.

This article is designed to point you to some of the most useful financial websites.

AAII's *Computerized Investing* (CI) product is merging with overall AAI membership, and this is the first of our new CI periodic columns. All AAI members will have access to CI's historical articles and read new CI in the Journal columns.

Due to the space constraints, we are not able to cover in print the best sites for every investing category. The box on page 25 shows which categories we cover on AAI.com (www.aai.com/guides/best-of-web). More detailed descriptions of each site are also available online.

STOCKS

When determining which sites to include, I looked for trustworthy sources with frequently updated data and content. Screening options listed are web-based screening tools (downloadable software programs were excluded).

One of the best places to get started with screening can often be your **discount broker**. Discount brokers have significantly enhanced their online tools over the last several years and provide these free tools to their clients.

After you've narrowed down your desired investable universe, your next step will be analysis. One of the best ways to research an individual company is to check out its **Investor Relations page** online. Most investor relations webpages

provide event presentations, access to the company's SEC filings, an archive of press releases, dividend history and more.

Stock Screening

FinViz www.finviz.com
Free – \$39.50/year

- Solid balance of valuation and technical analysis metrics
- Doesn't offer ability to lag fields or include percentile ranks
- "Elite" version: fundamental charts, intraday data, email alerts, 100 screener presets, export results, custom screening ranges, statistical views and more
- Free version is a good starting place

GuruFocus www.gurufocus.com
\$499/year for U.S. markets

- 60,000+ U.S. and international stocks; 200+ screening variables
- Built-in metrics used by investment "gurus," like Warren Buffett, and hedge fund, mutual fund or global gurus
- Valuation ranks and customizable screening fields. Data covers U.S. and select international markets
- Offers an Excel add-in
- No free screening option

Morningstar www.morningstar.com
Free – \$199/year

- Premium: 500+ screening criteria; 15,000 stocks. Custom fields and views
- Screen on proprietary ratings and grades, including Morningstar star rating, fair value, economic moat, stewardship, growth, profitability and financial health
- Premium screener more comprehensive than free one

Portfolio123 www.portfolio123.com
\$38 – \$200/month (15-day trial)

- Backtest up to 15 years with 400+ benchmarks
- 1,300+ screening parameters—one of the largest libraries of fundamental variables and predefined screens
- Custom screening variables, universes, ranking systems and lists
- 9,000+ U.S. (6,000+ with fundamentals) and 1,600+ Canadian stocks
- 64 predefined screens and 41 predefined ranking systems; can customize

Proftspi www.proftspi.com
Free – \$62.96/month

- Primarily a technical analysis screening tool. U.S. exchange, Canada TSX and TSX Venture stocks
- Free: save five custom screens; Premium: save unlimited number of screens
- Visitors can use all site functions, but data and customizations are held for duration of visit only.
- 50+ technical indicators and 40+ fundamental metrics. Custom fields are not free form and users have the ability to lag fields.
- Predefined scans cover 18 different candlestick patterns.
- Backtest screen criteria and trading strategies across a range of dates (up to 15 years, free users only one month with two-week-old data)
- Data updated daily

Stock Rover www.stockrover.com
\$279.99/year (AAII discount)

- No free screening; standard screener starts with the lowest-priced plan
- 300+ metrics for Premium and 400+ metrics for Premium Plus
- Premium Plus includes ETF screen

- Custom views: 30 for Premium, 60 for Premium Plus. Views can be shared.
- Custom screens; modify built-in screens
- Premium screener: add weight to criteria in order to generate a ranking of stocks, write custom equations and filter on historical data

Stock Valuation

Finbox.io www.finbox.io Free – \$300/year (pricing specials)

- Fair value estimate tool
- Spreadsheet add-on: Excel or Google
- Valuation models: discounted cash flow analysis, dividend discount model, earnings power value, comparable companies analysis, cost of capital and return on equity analysis (editable in web browser)
- Create a customized watchlist
- Offers a stock screener
- Free use includes all the features above, but data will only populate for a small subset of companies and metrics.

Old School Value www.oldschoolvalue.com \$588/year

- No free features available in web-based version
- Only supports U.S. stocks
- Excel spreadsheet analyzer and stock screener
- Stock grades and stock ranks
- Valuation models: discounted cash flow analysis (DCF), reverse DCF, Graham's formula, EBIT valuation, Piotroski, Altman Z, Beneish M, customizable competitive analysis
- 10 years and 16 quarters of financial data

ValuEngine www.valuengine.com \$11.95 – \$99.95/month (14-day trial)

- Free ValuEngine daily and weekly articles, newsletters and blogs
- Research on 4,000+ U.S. and 1,000 Canadian stocks
- Stock valuation analysis and recommendations, fair market valuations and forecasted target prices
- Industry and sector group analysis
- Portfolio wizard: build list of stocks to fit specific investment goals
- Smart Ratings display how attractive investment might be to different investors
- Stock screener
- Professional: three model portfolios

Stock Research and Data

EDGAR (SEC) www.sec.gov/edgar.shtml Free

- Archive of all publicly traded company's SEC forms and filings
- Tutorial for search and access

Morningstar.com www.morningstar.com Free – \$199/year

Where to find: Type in a stock ticker in the quote box. For stock articles, click the More tab then select the Stocks subtab under Investments.

- Free: 10 years of key ratios, five years of financial statement data
- Information exportable to Excel
- Premium: 10 years of data, in-depth fund & stock analysis & commentary, Morningstar ratings, fair value estimate
- Free: Stock Quickrank tool and Asset Allocator tool (requires download of Microsoft Silverlight)

Reuters.com www.reuters.com Free

Where to find: Type a ticker in the search box, then choose company name on the next page.

- Multiples, growth rates, profitability, financial strength, efficiency and management effectiveness ratios as well as sales and earnings figures—compared to company's industry and sector
- Extensive analyst information

Seeking Alpha www.seekingalpha.com Free – \$200/year

Where to find: For conference call transcripts, enter ticker in search box, click the "earnings" tab, then the "transcripts" subtab.

- Free conference call transcripts
- Large collection of opinion articles
- Active community commentary

Stock Rover www.stockrover.com Free – \$279.99/year (AAII discount)

- 10,000+ stocks listed on the NYSE, Nasdaq and Toronto exchanges
- 240+ stock metrics for free, 360+ for Premium and 500+ for Premium Plus
- Five years of historical data for free, 10+ years for Premium and Premium Plus
- Customizable tables and shareable views
- Charting capabilities (logarithmic, candlestick and dividend-adjusted return)
- Ideas section with investment articles, screening strategies and insights
- Earnings calendar

- Premium and Premium Plus: stock ratings, data export to Excel
- Color-code and tag tickers and integrated note-taking

TipRanks www.tipranks.com Free – \$49.95/month (AAII discount)

- Historical track record and accuracy of financial bloggers and analysts
- Aggregates analyst recommendation
- 12-month price target based on analysts' projections
- Premium: insider activity, hedge fund activity, five most recent upgrades and more
- Basic stock and ETF screeners

Honorable Mentions: AllocateSmartly, Investor's Business Daily, Motley Fool, Nasdaq.com, The Street, Dividend.com, FastGraphs

Charting and Technical Analysis

FreeStockCharts www.freestockcharts.com Free – \$50/month (additional add ons available)

- Streaming real-time charts from BATS
- 8,000+ stocks; 25 years' history
- 100+ customizable technical indicators, drawing tools and overlays. Draw custom trendlines
- Sync portfolios with TD Ameritrade account
- Registered users can create and save chart layouts
- Major downside: Service only works with Internet Explorer on Windows or Safari on Mac. Requires Microsoft Silverlight

StockCharts.com www.stockcharts.com Free – \$39.95/month (plus add-ons)

- ChartSchool: wide array of charting, scanning and educational content
- Over 50 technical indicators and overlays
- Add annotations and technical lines
- Free real-time data from BATS
- Line, bar, Renko, candlestick, Ichimoku, OHLC and point & figure charting
- Free: max of three indicator overlays. Basic, Extra and Pro versions: 25 technical overlays per chart

TradingView www.tradingview.com Free – \$59.95/month, 30-day trial

- Custom indicators using Pine scripting

- language
- Pro Plus and Premium users: bars, candles, hollow candles, Heikin Ashi, line, area, Renko, line break, Kagi and point & figure. Intraday Renko, Kagi, line break and point & figure charts; free and Pro users see end-of-day charts.
- 100+ free predefined technical indicators, 50+ free drawing tools
- Free real-time cryptocurrency data
- Share, comment on and rate charts with members of the community
- Follows stocks, futures, indexes, currencies, bonds, cryptocurrencies and CFDs (contracts for difference)
- Fee-based subscriptions: real-time intraday data direct from exchanges. Add on individual markets for fee.
- iOS app

FUNDS

This section covers the best websites for analyzing, researching and screening mutual funds, exchange-traded funds (ETFs) and closed-end funds (CEFs).

Many investors use their **discount broker's** website and tools to search for and analyze funds. This may be particularly helpful if your brokerage offers commission-free funds, because that will likely be an available screening field.

One of the best places to start when researching a fund is the **fund's actual website** for detailed information about the fund and the prospectus.

CEF Connect www.cefconnect.com Free

- Share prices and ranges, interactive charts and fund basics: net assets, shares outstanding, category and daily volume, distributions, pricing history, performance and portfolio characteristics
- Sort funds by discount, premium, distribution rate, total assets and year-to-date return
- Education center with articles on closed-end fund basics, types and strategies, plus advanced topics

Closed-End Fund Association

www.cefa.com
Free

- Daily fund leaders with the highest one-day net asset value appreciation. Separates CEFs by asset classes, including leverage funds section

- Lipper market averages and the number of funds within each Lipper category to compare individual CEFs with the market average for asset class
- Weekly average premium/discount scorecard for equity and bond CEFs
- News relating to closed-end funds; includes an audio section
- Upcoming offerings section

ETF.com www.etf.com Free

- Data on 2,160 ETFs, including fund flows data
- Free account allows custom screen fields and an ETF watchlist
- ETF newsletters, industry perspective, whitepapers and articles, as well as educational content and analysis
- Sector, index and world heat maps
- ETF ratings provided by FactSet
- ETF-specific reports/stat pages; data typically updated daily

Investment Company Institute (ICI)

www.ici.org
Free

- Industry data on ETFs, mutual funds, closed-ends funds, unit investment trusts (UITs) and retirement plans
- ICI Viewpoints blog

Morningstar.com www.morningstar.com Free – \$199/year

Where to find: Go to the main Morningstar website, then click the More tab. Select Mutual Funds, ETFs or the Tools subtab. To search a particular fund, type the ticker in the search box.

- Free screener: fund type, cost and purchase, ratings and risk, returns and fund portfolio. Five built-in screens. Premium screener: larger selection of metrics and 10 prebuilt screens
- Free Fund Compare and Quickrank tools
- Premium: Cost Analyzer tool, Similar Funds tool, fair value estimate, valuation rating, consider buying/selling price, expected return, expected excess return, fund analysis and commentary
- Thorough breakdown of fund's portfolio and performance: 10 years of performance data (free), historical performance rank against a fund's category and 15-year annualized return data
- Risk statistics (R-squared, alpha, etc.), fees, expense and ownership information, links to SEC filings

More Investing Best of Web

Go to the Guides area of AAIL.com (www.aail.com/guides/best-of-web) for more best sites in the following categories:

529 Plans
ADRs/ADSs
Annuities
Charitable Giving
DRIP/DRP Plans
Economic News and Data
Education
E-Newsletter
Estate Planning
Financial Blogs
Financial News and Analysis
Insurance
Master Limited Partnerships (MLPs)
Medicare
Options/Futures
Personal Finance
Podcasts
Real Estate
Research
Return and Index Data
Taxes

- Educational articles and commentary
- Closed-end fund returns table and Quickrank tool, plus news and announcements page

Reuters.com www.reuters.com Free

Where to find: Hover over the Markets tab, then select the Fund Screener subtab. To search a particular fund, type the ticker in the search box.

- Free basic fund screener: 26,800 mutual funds and 2,100+ ETFs. Select 15 screening metrics at once
- Screener includes the Lipper Leaders criteria
- Screen for ETFs, mutual funds or both
- Comprehensive risk and return information for individual funds
- Lipper research reports, including fund market, flows and industry insight reports, and Lipper ratings

Zacks Investment Research

www.zacks.com

Free – \$2,995/year (\$1 30-day trial)

Where to find: Click the Funds tab at the top of the page. Subtabs are available for screening tools.

- Free basic mutual fund screener: 50

data points

- Premium: export screens, save screens and access to additional fields, like Zacks “ranking” and rating criteria
- Basic ETF screener: six pre-built filters
- Broad coverage of ETFs and mutual funds: educational opinion and video commentaries
- Search Similar Mutual Funds tool
- Free ETF reports

Honorable Mentions: mutualfunds.com, etfdb.com, xtf.com, etftrends.com

BONDS

EMMA www.emma.msrb.org

Free

- Electronic Municipal Market Access (EMMA) contains municipal disclosures, market transparency data and educational materials about muni bonds
- Real-time pricing, interest rates and historical information for trades back to 2005. Bond size, source of refunding and maturity
- Personalized email alerts
- New issue calendar, economic calendar, yield curves and indices, price discovery tool and market statistics

FINRA Bond Market Data

www.finra.org/investors/bonds

Free

- General bond market information
- Bond price data with intraday transaction prices (delayed 15 minutes) for corporate bonds, municipal bonds, U.S. Treasury and government agency bonds, found in Bonds section of the Market Data Center
- Bond screen: search by issuer name, CUSIP, type, maturity, yield, coupon type, trade activity and more
- Watchlist: up to 100 issues at a time
- Educational content

TreasuryDirect www.treasurydirect.gov

Free

- Buy Treasury securities online from the government commission-free
- Can reinvest interest payments and maturing securities and sell Treasuries before maturity
- Comprehensive information on all Treasury securities and U.S. savings bonds
- Users can determine current redemption value.

PORTFOLIO TRACKING AND OPTIMIZATION

Portfolio trackers provide useful insights into the performance of your portfolio. Portfolio optimization goes a step further, using analytics to give even deeper insights to make your portfolio more efficient. When determining which sites to include, I looked for tools that can track more than just stocks, have unique analytics, can link directly to a broker or offer other unique features.

Macroaxis

www.macroaxis.com

Free – \$199/year

- Optimization engine scores portfolio efficiency
- Correlation analysis for equities and portfolios, volatility-adjusted portfolio return analysis
- Idea-driven portfolio origination and thematic optimization
- Fast portfolio “quick fix” rebalancing module
- 500+ different fundamental, technical and predictive indicators
- Cryptocurrency center tools: screeners, digital portfolio optimization, arbitrage map, coin correlations

Morningstar

www.morningstar.com

Free – \$199/year

- Free: basic portfolio tracking tool, Instant X-Ray, stock compare tool and investment radar tool
- Instant X-Ray shows basics on portfolio allocation, stock types, fees and expenses, stock style diversification and geographic diversification and stock stats
- Stock Compare and Fund Compare tools: See different stocks and funds side-by-side
- Premium: Portfolio X-Ray tool offers a more in-depth analysis and Portfolio Monitor tool

Personal Capital www.personalcapital.com

Free

- Track spending, saving and retirement goals (links to accounts to budget and manage cash flow)
- Link to brokerage accounts or input manually
- Aggregated tracking of portfolios with different brokers
- Performance compared to indexes

- Fee Analyzer tool
- Resources tab: investing, retirement planning, estate planning and personal finance articles
- Mobile app and robo-advisory service

PortfolioCharts www.portfoliocharts.com

Free

- Helpful “how to manage your portfolio” information
- Free calculators include annual returns, drawdowns, financial independence, heat map, long-term returns, portfolio finder, portfolio growth, retirement spending, rolling returns, start date sensitivity, target accuracy and withdrawal rates.
- Library: basic concepts, goals and milestones, investing psychology, portfolio theory, retirement income and tools and data

Portfolio Visualizer

www.portfoliovisualizer.com

Free

- Portfolio optimization tools: mean variance optimization, minimize conditional value-at-risk, minimize maximum drawdown, maximize Sortino ratio, maximize Omega ratio, risk parity and maximize diversification, Black-Litterman Model, rolling optimization, historical and forecasted efficient frontier
- Portfolio analysis tools: Monte Carlo simulation, asset class allocation backtesting tool, financial goals and portfolio backtesting tool
- Asset analytics: fund screener, fund performance, asset correlations and asset class correlations
- Factor analysis: factor regression, match factor exposure, fund and ETF factor regression and factor performance attribution
- Market timing: market timing models, core-satellite

SigFig

www.sigfig.com

Free

- Simple and clean design
- Easy to link brokerage accounts or manually add holdings
- Risk questionnaire
- Allows customizable views of portfolio
- Offers robo-advisory service

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suggestions, but they should give you an idea of the types of things to build sell rules around.

Whatever rules you decide on, write them down before the decision to sell needs to be made.

Written sell rules are effective for two reasons. First, they provide much needed clarity about when to sell and when to hold. Secondly, they counteract the endowment effect. The endowment effect is the premium value we assign to something we own. It can cause us to succumb to other behavioral errors, including confirmation bias (only paying attention to information that supports our decision to own an investment and

downplaying information that is counter to our opinions). Your sell rules counteract the endowment effect by reframing how you view the investment. The rules lead you to evaluate the investment based on the criteria you've specified.

Refer Back to What You Write

Journals, checklists, guidelines and rules only work if you refer back to them regularly. It does little good to keep notes, establish rules and create checklists if you never look at them. On the other hand, the more you use these tools, the more they will become part of your investing routine. A well-thought-out

checklist, for instance, can become so effective that you may find not relying on it is more time-consuming than using it is.

When starting the process of using the power of the written word, don't try to get things perfect. Your strategy and knowledge will evolve over time; as should your rules, guidelines, systems and checklists.

If you find yourself making new mistakes or falling for the same behavioral mistakes, keep adjusting your approach as necessary. Over time, you'll find that the incremental changes you make will end up having a big positive impact. ▲

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TipRanks www.tipranks.com
\$49.95/month (AAIL discount)

- Stocks, ETFs and mutual funds
- Link to select brokerages or enter holdings manually
- Email notifications and alerts
- Compare and share portfolios
- Separates news into "bullish" and "bearish" categories
- Portfolio earnings calendar
- Portfolio analytics page: portfolio beta, dividends and price-earnings ratio
- Management fees tool finds similar funds to your current holdings that have lower fees

Honorable mentions: Stock Rover, Next Capital and FeeX

FINANCIAL PLANNING

Highlighted here are retirement planning sites. Go to AAIL.com for estate

planning, personal finance and tax sites. I looked for sites with frequently updated information, tools and/or calculators and meaningful, useful content.

Retirement Planning

BankRate Retirement Planning Resources www.bankrate.com
Free

- Basic retirement planning calculators
- Articles on retirement planning
- Retirement planning blog

MarketWatch www.marketwatch.com
Free

- Interactive high-quality retirement planning tools and calculators
- How-to guides like "how to invest for retirement" and "how to write a will"
- Wide range of video and up-to-date article content on retirement

NewRetirement www.newretirement.com
Free – \$210/month (AAIL discount)

- Helpful basic calculators and tools
- More-involved planning tools with PlannerPlus: personal retirement plan
- Easy-to-understand content
- Analysis charts with suggestions on optimizing your retirement plan
- Adds new tools often and receptive to user feedback

Social Security Administration
www.ssa.gov
Free

- Apply for and manage benefits online
- "Retirement toolkit" PDF
- Educational content available as PDF or audio and in different languages
- Tool for estimating retirement benefits

ThinkAdvisor www.thinkadvisor.com
Free

- Geared to financial advisers, but offers a section on retirement planning

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