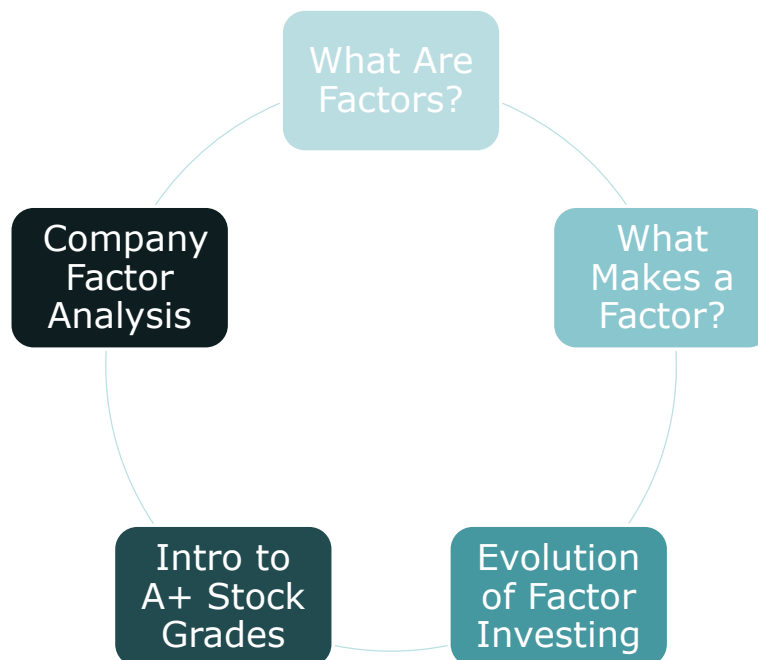

Making the Grade: Factor Investing With A+ Investor

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Development
AAII



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Discussion Overview



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What Are Factors?

- A factor is a characteristic or set of characteristics common across a broad set of securities that both explains performance and provides above-market returns

Beware the “Factor Zoo”



What Makes a Factor?

- Unique source of risk and return
- Delivers a premium (higher returns)
- Persistent
- Pervasive
- Robust
- Investable
- Intuitive

Unique Source of Risk & Return

- For a factor to be considered for investment, it must provide additional explanatory power to the cross sector of returns
- Its risk & return is not explained away by other factors already in use

Delivers a Premium

- Must deliver higher returns

Persistence

- Factor holds over long periods of time and different phases of the economic cycle
 - Reduces the likelihood of the factor being a lucky outcome specific to one short period of time

Pervasive

- Factor holds across countries, regions, sectors and asset classes (where applicable)

Robust

- The factor holds for various definitions
 - A value premium exists whether it is measured by price to book value, price to earnings, price to sales, etc.
 - It is not dependent on one formation that may have been a result of data mining

Investable

- The factor not only works in theory, but also delivers higher returns in real-world portfolios after considering such things as trading costs

Intuitive

- There are logical, risk-based or behavioral-based explanations for the premium and why it should continue to exist
 - Risk-based explanations cannot be arbitrated away
 - However, well-documented limits to arbitrage can prevent sophisticated investors from correcting overvaluations
 - Overvaluation requires shorting and bearing the risks of unlimited losses
 - Undervaluation merely requires buying the undervalued asset in order to correct

The Evolution of Factor Investing



Source: Fidelity Investments.

Graham & Dodd: The Original Factor Investors





Capital Asset Pricing Model Formula

$$R_a = R_{rf} + B_a (R_m - R_{rf})$$

Fama & French



Common Factors Today

- Market beta
- Value
- Momentum
- Profitability
- Size
- Term
- Carry
- Quality
- Growth
- Dividend yield
- Estimate revisions & earnings surprises
- Low volatility

AN INTRODUCTION TO A+ INVESTOR STOCK GRADES

Value



- Been around since at least 1930s
- Extensive research shows that inexpensive stocks should outperform expensive ones
- Value investing involves buying stocks trading well below their fundamental value based on sales, earnings, cash flow, dividends, etc.
- Research from James O'Shaughnessy shows that creating a "composite" of value factors yields better, more consistent and less volatile results



Growth

- Focus on businesses that have the greatest potential for growth in both size and importance in their industry
- Stocks of companies exhibiting strong, consistent and prolonged growth outperform slower-growth firms
- Growth stocks tend to look expensive, but investors are willing to pay more for the potential for extraordinary returns
- Growth tends to be riskier, because when growth stocks fail, they often fail spectacularly



Value

- Buy Cheap, Sell Dear
- Investors do not always act rationally, often assess information emotionally, creating price distortions that can be exploited
- Locate stocks whose market values are low relative to valuation measures such as dividends, earnings and assets
- Horizon: Typically longer term, less need to monitor stocks tick-by-tick

Growth

- Buy High, Sell Higher
- High sales and earnings growth will continue to attract more investors, pushing up the multiple investors will pay for a stock
- Locate companies and industries in stage of rapid and expanding growth with earnings momentum
- Horizon: Typically shorter term, higher turnover, need to monitor stocks closely

Momentum



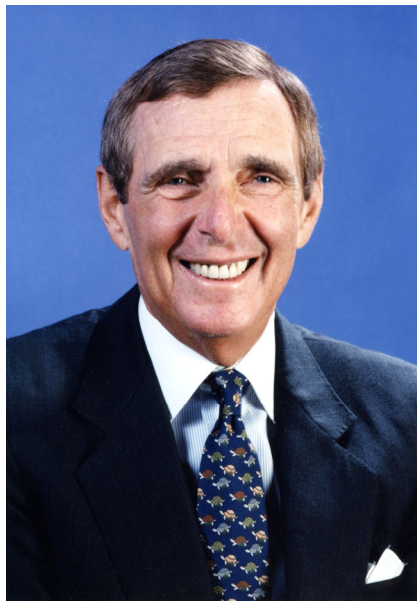
- Momentum investing involves identifying and buying stocks in a strong, upward price move and staying with them as long as the upward move continues
- Momentum is as significant a characteristic to seek as any other factor
- Compare stock movement to that of a market index such as the S&P 500
- Works especially in conjunction with value

Quality

- Probably the most subjective factor
- “High-quality” firms typically have low debt, stable earnings and high profitability
- High ROE and low accruals are also usually signs of a quality company



Estimate Revisions & Earnings Surprises



- Stock prices are established through expectations, and prices react when expectations are missed or exceeded
- Changes in expectations can also impact stock prices
- Lower-valuation stocks react more favorably to positive surprises and upward estimate revisions, while higher-valuation stocks react more adversely when expectations are missed, or estimates are revised downward

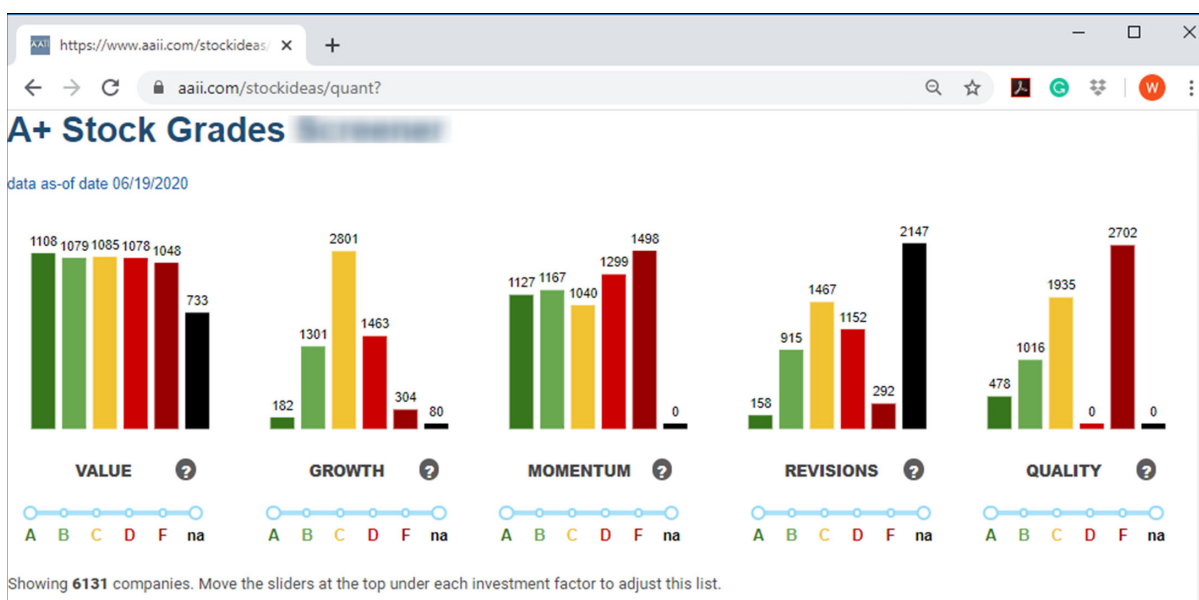


A+ INVESTOR FACTOR ANALYSIS TOOLS

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A+ Stock Grades



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A+ Stock Grades

- Value
- Growth
- Momentum
- Revisions
- Quality

Value

- Based on James O'Shaughnessy's research into a value "composite," AAI created a Value Grade metric
 - Price to sales
 - Price to earnings
 - Price to book
 - Enterprise value to EBITDA
 - Price to free cash flow
 - Shareholder yield (dividend yield + rate of share repurchases)

Growth

- Examining both the short-term and long-term growth profile of a company
- Sales, earnings per share and operating cash flow growth
 - Year-over-year basis for the latest reported fiscal quarter
 - Annualized basis over the last five years

Momentum

- Stock's weighted four-quarter relative strength rank
 - Weighted relative strength for the last four fiscal quarters
 - Q1 40%
 - Q2 20%
 - Q3 20%
 - Q4 20%

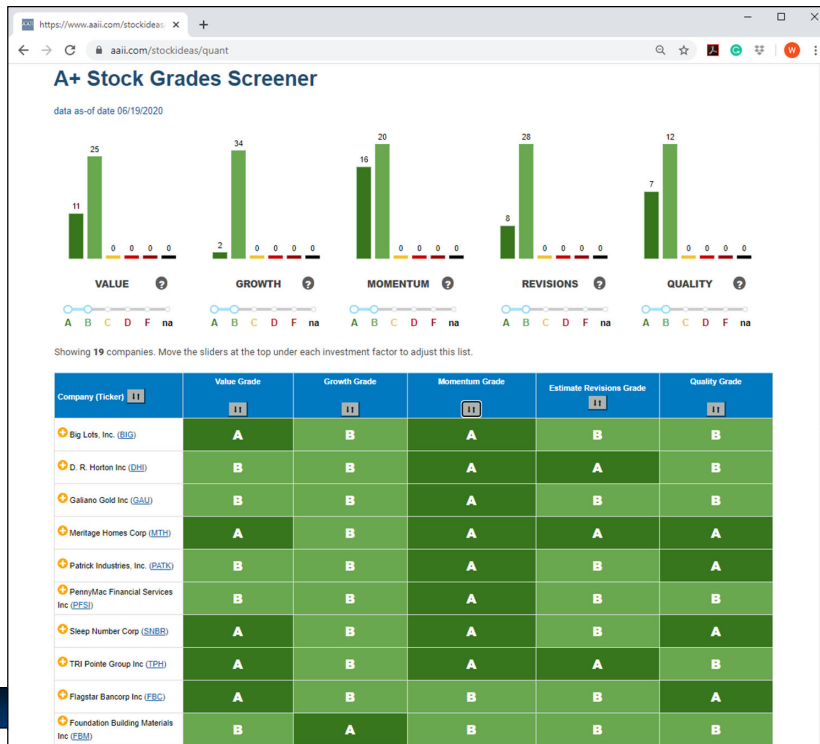
Revisions

- Strength of earnings surprises for the last two fiscal quarters
 - Measured by SUE score
 - $\$ \text{ surprise} \div \text{Standard deviation of estimates}$
 - Higher SUE scores indicate more meaningful surprises
- Percentage change in the consensus estimate for the current fiscal quarter over the last 30 and 90 days

Quality

- Combination of five components used to assess the “quality” of a stock
 - The components consider management’s financial decisions (accruals and change in asset turnover)
 - Whether the interests of shareholders are being recognized (share buybacks and dividends)
 - Whether analysts are more optimistic than they were previously about the stock (earnings estimate revisions)
- Stocks receive better grades for passing more of the quality sub-components and worse grades for passing fewer of the quality sub-components.

A+ Stock Grades Screener



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COMPANY FACTOR ANALYSIS

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A+ Stock Evaluator

https://www.aaai.com/stock/ticker/PATK

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Stock Evaluator: Patrick Industries, Inc. (PATK) [Follow This Stock](#)

POWERED BY STOCK INVESTOR PRO

Snapshot Charts News & Events **Grades** Valuation Growth Ratios Analysts Earnings Financials Insiders

A+ Stock Grade Summary:

VALUE: **B**

GROWTH: **B**

MOMENTUM: **A**

EPS REVISIONS: **B**

QUALITY: **A**

About A+ Stock Grades

A+ Stock Grades is a stock-grading system based on percentile rankings of multiple key metrics within five investment factors: Value, Growth, Momentum, EPS Revisions, and Quality. They represent a summary of a company's fundamentals.

[Click here](#) to find out more about how Patrick Industries, Inc. got its grades.

Patrick Industries, Inc. (PATK) Competitors

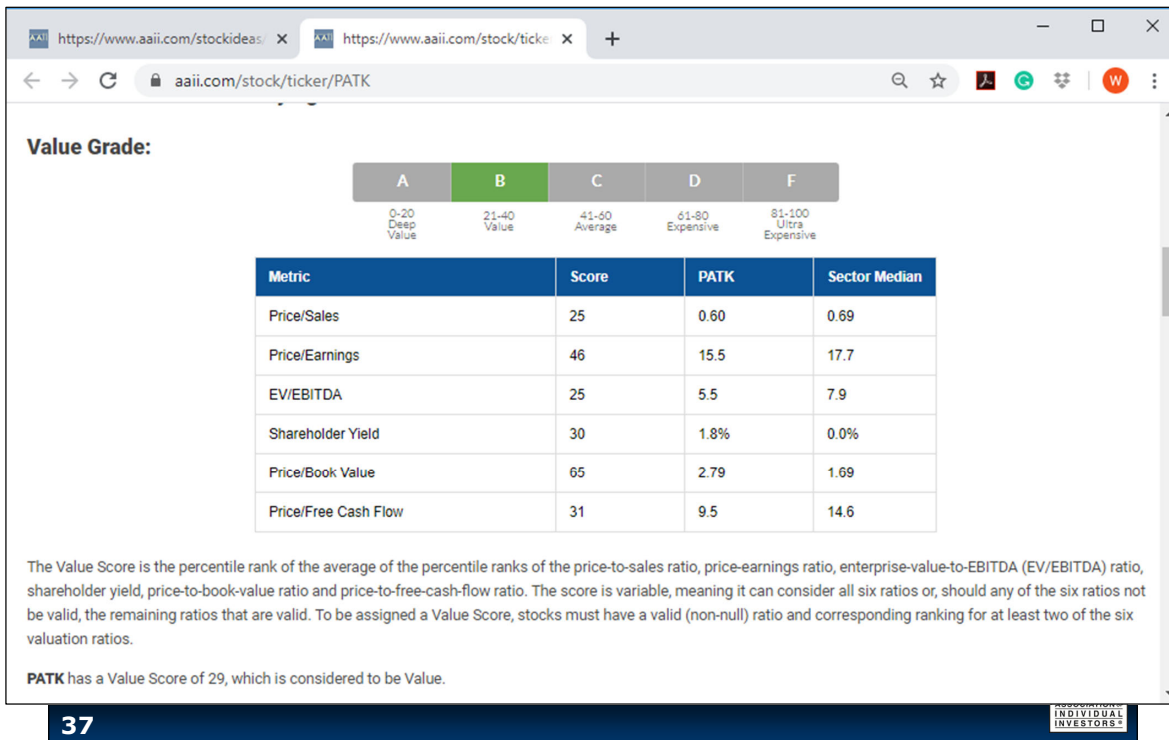
Companies similar to Patrick Industries, Inc. in the Construction Supplies & Fixtures industry.

Ticker	Price	Market Cap	Value	Growth	Momentum	EPS Revisions	Quality
AMWD	\$70.600	\$1.19B	B	B	B	F	C
ROCK	\$46.970	\$1.52B	C	B	C	B	C
JELD	\$15.870	\$1.59B	C	C	B	D	F
DOOR	\$67.950	\$1.66B	B	B	B	C	C
BMCH	\$25.080	\$1.68B	B	C	B	B	C

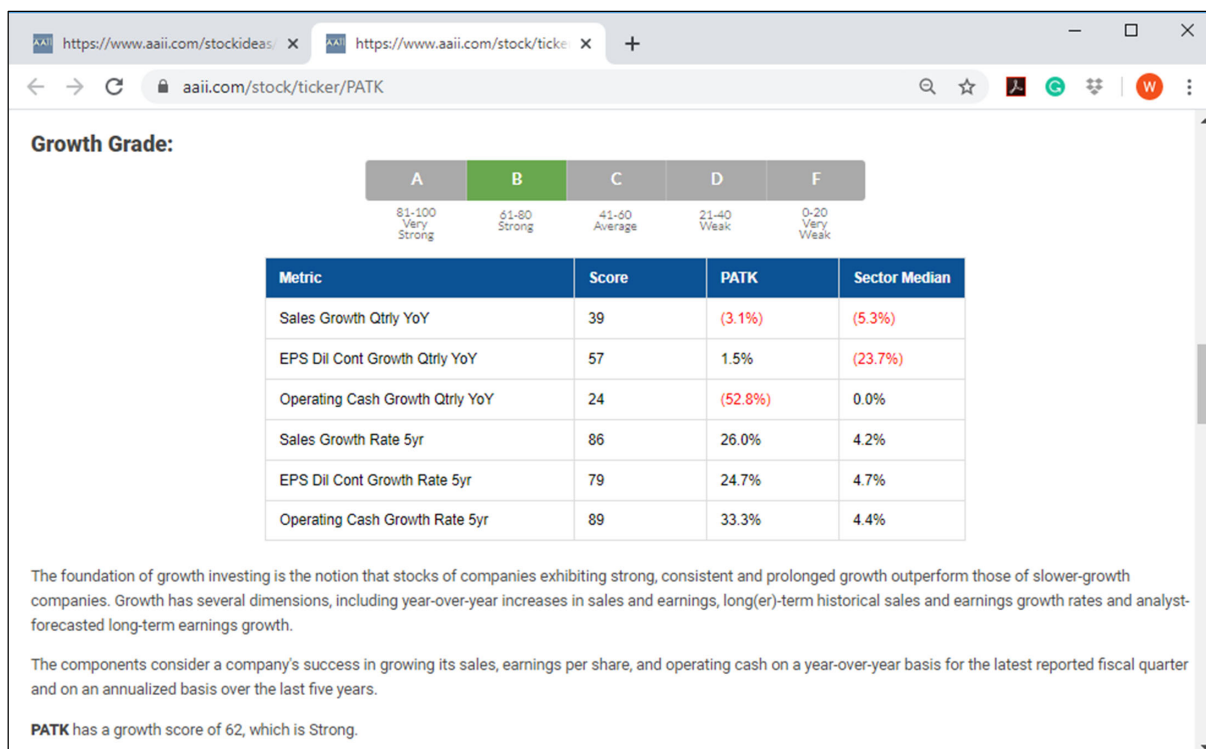
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Value Grade



Growth Grade



Momentum Grade

Momentum Grade:

A	B	C	D	F
81-100 Very Strong	61-80 Strong	41-60 Average	21-40 Weak	0-20 Very Weak

Metric	Score	PATK	Sector Median
Relative Price Strength (weighted 4 qtr)	91	38.0%	7.0%

The weighted four-quarter relative strength rank is the relative price change for each of the past four quarters. The most recent quarterly price change is given a weight of 40% and each of the three previous quarters given a weighting of 20%.

Momentum is based on the price change of a stock over a specified period relative to all other stocks. It is considered to be an anomaly in the analysis of stock returns because stocks with high relative levels of momentum tend to continue to outperform, while stocks with low relative levels of momentum tend to continue underperforming.

PATK has a momentum score of 91, which is Very Strong.



Earnings Estimates & Surprises Grade

Estimate Revisions Grade:

A	B	C	D	F
81-100 Very Positive	61-80 Positive	41-60 Neutral	21-40 Negative	0-20 Very Negative

Metric	Score	PATK	Sector Median
Quarterly Surprise SUE Latest Qtr	83	2.1	0.0%
Quarterly Surprise SUE Prior Qtr	78	2.2	0.5%
EPS Est Current Year % Rev Last Month	91	12.7%	0.0%
EPS Est Current Year % Rev 3 Mos	29	(49.7%)	(53.8%)

Investing based on analyst estimates looks for revisions in the consensus estimates as well as earnings surprises (actual earnings deviating from the consensus estimate). Academic studies have shown that companies that have seen strong upward earnings revisions or have reported significant earnings surprises can see an impact on share prices for up to a year.



Quality Grade

Quality Grade:

A	B	C	D	F
81-100 Very Strong	61-80 Strong	41-60 Average	21-40 Weak	0-20 Very Weak

Metric	Passes
Accruals	✓
Asset Turnover Improvement	✗
Buyback Yield	✓
Dividend Growth	✓
Earnings Estimates	✓

The Quality Score is a combination of five components used to assess the "quality" of a particular stock. A higher quality stock possesses traits associated with upside potential and reduced downside risk.

The components consider management's financial decisions (accruals and change in asset turnover), whether the interests of shareholders are being recognized (share buybacks and dividends) and whether analysts are more optimistic than they were previously about the stock (earnings estimate revisions).

Stocks receive better grades (higher scores) for passing more of the quality sub-components and worse grades (lower scores) for passing fewer of the quality sub-components.

PATK has a quality score of 92, which is Very Strong.

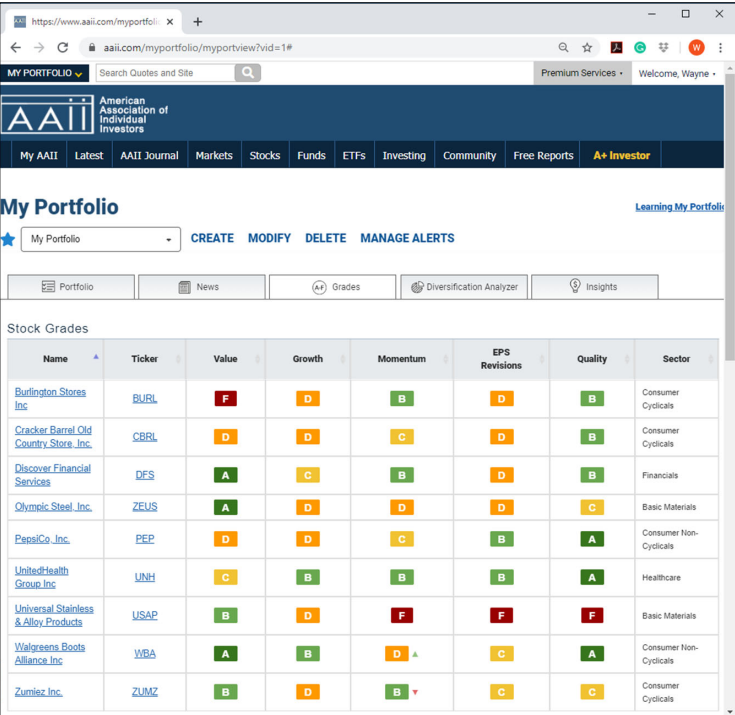
A+ Investor Upgrades/Downgrades

Stock Upgrades & Downgrades

Stocks with at least two upgrades or downgrades across all quant factors. Data as of 6/19/2020, compared to previous trading day. Looking for more stocks? Try our [A+ Stock Grades Screener](#)

COMPANY NAME	TICKER	VALUE	GROWTH	MOMENTUM	EPS REV.	QUALITY	SECTOR
American Resources Corp	AREC	NA	F	C	B ▲	B ▲	Energy
Cabot Corp	CBT	B	D	B ▲	C ▲	A	Basic Materials
Continental Resources, Inc.	CLR	A	D	A	C ▲	A ▲	Energy
Diageo plc (ADR)	DEQ	D	C	D	B ▲	B ▲	Consumer Non-Cyclicals
Daseke Inc	DSKE	A	D	A	C ▲	B ▲	Industrials
Flagstar Bancorp Inc	FBC	A	B	B	B ▲	A ▲	Financials
1-800-Flowers.Com Inc	FLWS	C ▲	B	B ▼	A ▲	B	Consumer Cyclicals
F.N.B. Corp	FNB	A	C	D ▲	B ▲	B ▲	Financials
Level One Bancorp Inc	LEVL	C	B	F	A ▲	B ▲	Financials
Olin Corporation	OLN	A	D	F	C ▲	B ▲	Basic Materials

My Portfolio Stock Grades



My Portfolio

Learning My Portfolio

CREATE MODIFY DELETE MANAGE ALERTS

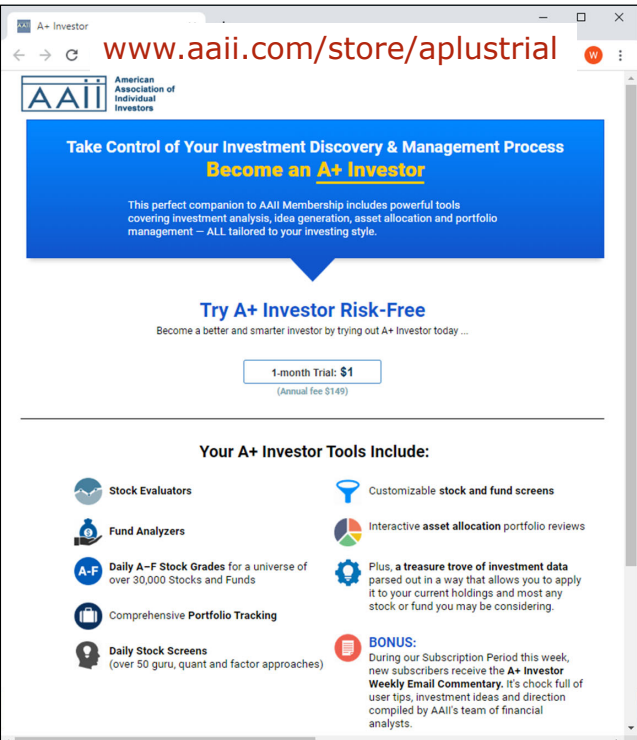
Portfolio News Grades Diversification Analyzer Insights

Stock Grades

Name	Ticker	Value	Growth	Momentum	EPS Revisions	Quality	Sector
Burlington Stores Inc.	BURL	F	D	B	D	B	Consumer Cyclical
Cracker Barrel Old Country Store Inc.	CBRL	D	D	C	D	B	Consumer Cyclical
Discover Financial Services	DFS	A	C	B	D	B	Financials
Olympic Steel Inc.	ZEUS	A	D	D	D	C	Basic Materials
PepsiCo Inc.	PEP	D	D	C	B	A	Consumer Non-Cyclical
UnitedHealth Group Inc.	UNH	C	B	B	B	A	Healthcare
Universal Stainless & Alloy Products	USAP	B	D	F	F	F	Basic Materials
Walgreens Boots Alliance Inc.	WBA	A	B	D	C	A	Consumer Non-Cyclical
Zumiez Inc.	ZUMZ	B	D	B	C	C	Consumer Cyclical

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Thank You!

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