

Associated Banc-Corp (ASB)

\$19.42 (As of 01/07/21)

Price Target (6-12 Months): **\$23.00**

Long Term: 6-12 Months

Zacks Recommendation:

Outperform

(Since: 12/21/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

Zacks Rank: (1-5)

1-Strong Buy

Zacks Style Scores:

VGM:C

Value: B

Growth: D

Momentum: C

Summary

Associated Banc-Corp's shares have outperformed the industry over the past six months. The company's earnings outpaced the Zacks Consensus Estimate twice and matched the same in the other two of the trailing four quarters. Decent demand for loans and efforts to focus on fee income are likely to continue aiding growth. While low interest rates will likely continue to put pressure on the company's margins, in turn hurting revenues in the near term and mounting costs and high debt levels along with its loan exposure to sectors that are hit hardest by the economic slowdown remain major concerns, business restructuring plans, efforts to improve operating efficiency and a solid balance sheet position are likely to support the bank's financials. Further, the bank's robust capital deployment activities will enhance shareholder value.

Data Overview

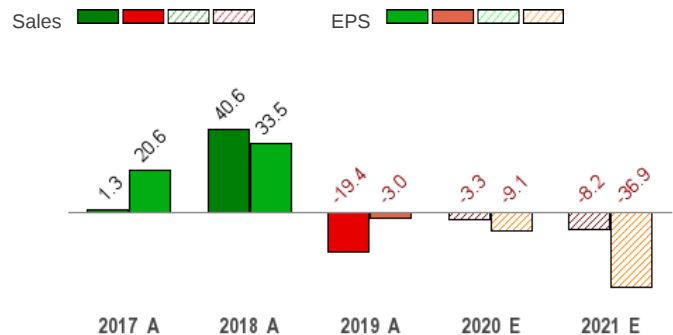
52-Week High-Low	\$21.49 - \$10.23
20-Day Average Volume (Shares)	980,859
Market Cap	\$3.0 B
Year-To-Date Price Change	13.9%
Beta	1.23
Dividend / Dividend Yield	\$0.72 / 3.7%
Industry	Banks - Midwest
Zacks Industry Rank	Top 34% (86 out of 253)

Last EPS Surprise	26.3%
Last Sales Surprise	-1.8%
EPS F1 Estimate 4-Week Change	5.6%
Expected Report Date	01/21/2021
Earnings ESP	1.8%
P/E TTM	15.8
P/E F1	17.2
PEG F1	2.5
P/S TTM	2.0

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	267 E	270 E	272 E	272 E	1,081 E
2020	305 A	448 A	258 A	271 E	1,177 E
2019	307 A	309 A	307 A	293 A	1,217 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.25 E	\$0.25 E	\$0.28 E	\$0.28 E	\$1.13 E
2020	\$0.28 A	\$0.26 A	\$0.24 A	\$0.29 E	\$1.79 E
2019	\$0.50 A	\$0.51 A	\$0.50 A	\$0.45 A	\$1.97 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 01/07/2021. The reports text is as of 01/08/2021.

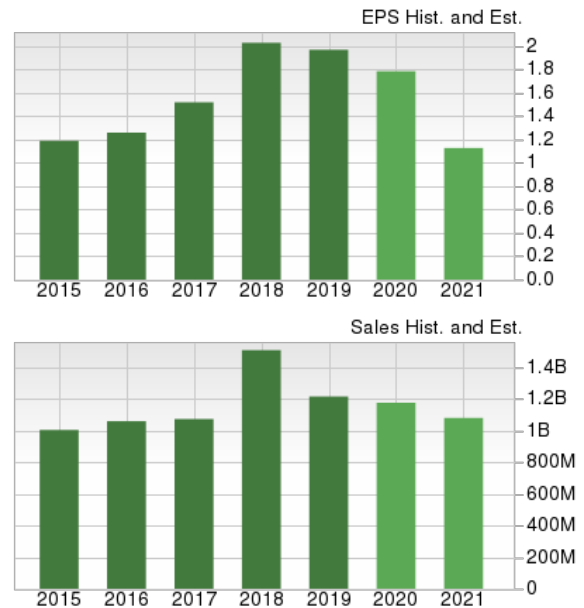
Overview

Associated Banc-Corp – founded in 1964 – is headquartered in Green Bay, WI. This bank holding company, through its subsidiaries Associated Bank, National Association and various non-banking subsidiaries, provides an array of banking and non-banking products and services.

The company provides a full range of financial products and services through 249 banking offices in Wisconsin, Illinois and Minnesota as well as commercial financial services in Indiana, Michigan, Missouri, Ohio and Texas.

Associated Banc-Corp operates through the following three business segments:

- **Corporate and Commercial Specialty** (constituting 35.2% of total revenues in 2019) offers lending solutions, deposit and cash management solutions and specialized financial services.
- **Community, Consumer, and Business** (61.2%) provides lending solutions, deposit and transactional solutions, investable funds solutions, benefits related products and services along with fiduciary services to individuals as well as small and mid-sized businesses.
- **Risk Management and Shared Services** (3.6%) includes Corporate Risk Management, Credit Administration, Finance, Treasury, Operations and Technology functions.



In 2015, Associated Banc-Corp acquired Ahmann & Martin Co and in 2017, it acquired Whitnell & Co. Further, in 2018, the company acquired Bank Mutual Corporation, Diversified Insurance Solutions and Anderson Insurance. In 2019, the bank acquired 32 Wisconsin branch locations from Huntington Bancshares. In February 2020, it acquired First Staunton Bancshares.

In June 2020, Associated Banc-Corp divested its insurance business – Associated Benefits & Risk Consulting.

As of Sep 30, 2020, Associated Banc-Corp had total assets of \$34.7 billion, net loans of \$24.6 billion, total deposits of \$26.7 billion and stockholders' equity of \$4 billion.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ Associated Banc-Corp is focused on its organic growth strategy, as evident from consistent growth in loans and deposit balances. While net interest income declined in 2019 and first three quarters of 2020, the same witnessed a compound annual growth rate (CAGR) of 4.2% over the last six years (2014-2019). Moreover, continuous change in the deposit mix due to rising non-interest-bearing deposit accounts (non-interest-bearing demand deposits, as a percentage of total deposits, were 28% as of Sep 30, 2020) is impressive.
- ▲ Associated Banc-Corp is growing inorganically as well. In February 2020, the company acquired First Staunton Bancshares and 32 branches in Wisconsin in June 2019. Earlier in the first half of 2018, it had acquired Anderson Insurance, Diversified Insurance Solutions and Bank Mutual. These deals are expected to be accretive to the company's earnings. It is well positioned to grow further on the back of opportunistic acquisitions, given a solid liquidity position.
- ▲ Additionally, Associated Banc-Corp has been undertaking measures to improve operating efficiency. Late last year, the company announced branch optimization efforts, which will result in annual cost savings. Further, in January, it signed a deal to sell its wealth management subsidiary Whitnell & Co. to Rockefeller Capital Management. Earlier, in June 2020, the company divested the insurance business, Associated Benefits & Risk Consulting. These initiatives are aimed at improving profitability going forward.
- ▲ We remain encouraged by Associated Banc-Corp's enhanced capital deployment activities. The company has been raising dividends on a regular basis. The latest hike of 5.9% was announced in October 2019. Further, in December 2019, the company had announced additional share repurchase authorization of up to \$150 million. Nonetheless, the bank has suspended share buybacks for the year to enhance liquidity amid coronavirus concerns. Given its earnings strength and efforts to improve the liquidity position, the company's capital deployment activities look sustainable.
- ▲ Shares of Associated Banc-Corp have outperformed the industry over the past three months. Also, the company's earnings estimates for 2020 have been revised marginally higher over the past seven days. Further, the stock seems undervalued than the broader industry. Its current price/book and price/sales ratios are below the respective industry averages. Also, the stock has a Value Score of B. Therefore, given the strength in fundamentals and positive estimate revisions, the stock has upside potential.

Associated Banc-Corp's organic and inorganic growth efforts are likely to enhance profitability. Further, solid loan and deposit growth, and efforts to restructure operations will support growth.

Risks

- While Associated Banc-Corp's net interest margin (NIM) increased from 2.80% in 2016 to 2.82% in 2017 and 2.97% in 2018, the same declined in 2019 to 2.86%. The trend continued in the first three quarters of 2020. Despite consistent growth in loans, the company's NIM is expected to be hurt by lower interest rates. Further, the Federal Reserve has signaled no change in rates in the near term.
 - As of Sep 30, 2020, Associated Banc-Corp had total debt of \$2.5 billion, while cash and due from banks was \$401.2 million. Further, the company's bank senior notes worth \$300 million are due in 2021 and short-term funding worth \$206.3 million are due within a year. Further, in September 2020, Moody's affirmed the company's ratings while lowering the outlook to negative. Also, the company's times-interest-earnings ratio of 4.7 at third quarter-end declined sequentially. Thus, such high levels of debt could become a matter of concern for the company in case the economic situation worsens.
 - Associated Banc-Corp has been witnessing a consistent rise in non-interest expenses. While expenses declined in 2019, the same witnessed a 3.2% CAGR over the last six years (2014-2019). The trend persisted in the first nine months of 2020. The rise was mainly due to higher personnel costs and technology expenses. Operating expenses are expected to remain elevated in the near term, given the company's inorganic growth efforts and investments in franchise.
 - A major part of Associated Banc-Corp's loan portfolio — 64.2% as of Sep 30, 2020 — comprised total commercial loans (commercial and business lending, as well as commercial real estate lending). Higher concentration on commercial loans may pose regulatory and market challenges for the company. Also, the company's exposure to some of the sectors — retailers, energy, restaurants and transportations — hit hardest by coronavirus-induced economic slowdown was 8.4% of total loans at third quarter-end.
 - Associated Banc-Corp's trailing 12-month return on equity (ROE) undercuts its growth potential. The company's ROE of 5.68% compares unfavorably with 8.98% for the industry. This reflects that it is less efficient in using shareholders' funds.
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Last Earnings Report

Associated Banc-Corp Q3 Earnings Beat, Provisions Up

Associated Banc-Corp's third-quarter 2020 adjusted earnings of 24 cents per share topped the Zacks Consensus Estimate of 19 cents. The bottom line, nevertheless, slumped 51% year over year.

Improvement in loan and deposit balances, and lower adjusted operating expenses supported the results. However, lower interest rates, decline in fee income and a significant rise in provisions were the headwinds.

Results excluded restructuring charges pertaining to optimization of operations and improving efficiency, and tax benefits. After considering these, net income available to common shareholders was \$40 million, down 50% year over year.

Revenues & Adjusted Expenses Fall

Net revenues were \$257.7 million, down 16% year over year. Moreover, the top line missed the Zacks Consensus Estimate of \$262.4 million.

Net interest income summed \$182.2 million, down 12% from the year-ago quarter. NIM was 2.31%, down 50 basis points (bps).

Non-interest income declined 25% to \$75.5 million. Decrease in insurance commissions and fees, and service charges and deposit account fees, along with net asset losses were the primary reasons for the fall.

Non-interest expenses increased 13% year over year to \$227.6 million. This included costs related to restructuring initiatives undertaken during the quarter. Excluding these, expenses declined 16% to \$167 million.

Efficiency ratio (on a fully tax-equivalent basis) was 83.25%, up from 64.78% in the prior-year quarter. A rise in efficiency ratio indicates deterioration in profitability.

As of Sep 30, 2020, both net loans and total deposits grew marginally on a sequential basis to \$24.6 billion and \$26.7 billion, respectively.

Credit Quality Deteriorates

Provision for credit losses were \$43 million, up substantially from \$2 million in the year-ago quarter. This rise was mainly due to a reserve build done to combat the coronavirus crisis. Also, the ratio of net charge-offs to annual average loans was 0.40% in the third quarter, up 26 bps from the year-ago quarter.

Moreover, as of Sep 30, 2020, total non-performing assets were \$251.5 million, up 63% year over year. Further, total non-accrual loans were \$231.6 million, jumping 80%.

Capital Ratios Improve & Profitability Ratios Down

As of Sep 30, 2020, Tier 1 risk-based capital ratio was 11.57%, up from the 11.26% recorded in the corresponding period of 2019. In addition, common equity Tier 1 capital ratio was 10.22% compared with 10.21% as of Sep 30, 2019.

Annualized return on average assets was 0.51%, down from the prior-year period's 1.00%. Moreover, return on average tangible common equity was 6.36% compared with the year-ago quarter's 13.27%.

Business Optimization Initiatives

During third-quarter 2020, Associated Banc-Corp started several initiatives that are expected to improve efficiency and earnings in 2021.

1. **Branch optimization:** Management plans to divest/consolidate roughly 9% of its branches following the changes in consumer behavior owing the coronavirus pandemic and rise in active mobile users. The company will be closing approximately 15 branches in Wisconsin with around \$380 million in total deposits. Most of these branches are within three-mile radius of each other. Also, the company expects to retain nearly 80% of these deposits and will likely incur \$4 million in restructuring charges.

Additionally, Associated Banc-Corp announced the sale of five Peoria branches to Morton Community Bank, with \$208 million worth of deposits. Further, the bank will be selling two branches in SW Wisconsin to Royal Bank with \$56 million in deposits. The company will be receiving a 4% premium on deposits transferred.

These efforts are projected to result in \$10 million in annual savings effective 2021 and generate net savings of \$5-\$7 million at close.

2. **Internal efficiency initiatives:** The company plans to strategically streamline corporate, managerial and back office functions, which will result in reduction in about 200 employees by 2020-end. Through this, management intends to save \$30 million in cost effective 2021.

3. **FHLB liability restructuring & Business Reorganization:** The company repaid \$950 million of Federal Home Loan Bank (FHLB) advances and incurred a \$45 million prepayment charge in the third quarter of 2020. Further, Associated Banc-Corp reorganized its securities and real estate lending subsidiaries, which generated net income tax benefit of \$49 million in the third quarter.

Notably, these initiatives are anticipated to improve NII by nearly \$20 million in 2021, and improve NIM by 6-7 bps in 2021 and 2022.

Quarter Ending	09/2020
Report Date	Oct 22, 2020
Sales Surprise	-1.78%
EPS Surprise	26.32%
Quarterly EPS	0.24
Annual EPS (TTM)	1.23

Outlook

Management expects NIM in fourth-quarter 2020 to be approximately 2.50%. Further, fee revenues are likely to continue growing through the end of 2020.

Expenses are expected to be \$175 million (including \$3 million related to restructuring charges) in the fourth quarter and \$685 million for 2021 (after taking in to consideration above-mentioned business optimization plan).

Effective tax rate is expected to be in low to mid-single digit for 2020 and 15-17% in 2021.

Recent News

Associated Banc-Corp to Sell Wealth Unit to Rockefeller - Jan 6, 2021

Associated Banc-Corp has signed a deal to divest its wealth management subsidiary Whitnell & Co. to Rockefeller Capital Management and enter into a partnership with the latter. Terms of the deal, expected to close in March 2021, were undisclosed.

Whitnell was acquired by Associated Banc-Corp in 2017 and is headquartered in Oak Brook, IL. With \$1.4 billion of client assets under management, it provides ultra-high-net-worth clients with wealth management services including financial planning, asset management, generational wealth transfer and family office services.

Per the agreement, Whitnell will be acquired by Rockefeller, whereas Associated Bank, NA will become a Midwest mortgage lending referral partner, and Associated Trust Company will become one of Rockefeller's third-party trust solutions providers.

Both the companies will work jointly to introduce select lending and asset management solutions to their respective clients. Also, upon completion, Whitnell will become the primary Midwest office for Rockefeller's family office services.

"Our organizations possess a shared appreciation of the needs and goals of our clients. This partnership positions us to leverage our core capabilities through Rockefeller's network of clients and relationships," said Philip B. Flynn, president and CEO at Associated Banc-Corp.

Headquartered in New York, Rockefeller delivers global family office, asset management and strategic advisory services to ultra-high-net-worth individuals and families, institutions and corporations.

Tim O'Hara, president of the Rockefeller Family Office said, "There are many aspects to this new partnership that support our expectations for success,". He also added, "Our decision to partner with Associated, coupled with a thoughtful approach to integration, will help ensure continuity of Whitnell's services during the transition, and access to additional client services moving forward."

Associated Banc-Corp Outlook Cut, Ratings Affirmed by Moody's – Sep 1, 2020

Associated Banc-Corp and its banking subsidiary Associated Bank, N.A.'s outlook has been downgraded to negative from stable by Moody's Investors Service. Moreover, the rating agency has affirmed the company's a3 standalone baseline credit assessment (BCA) and A1/Prime-1 for its long-term deposits. The holding company's issuer rating of Baa1 for long-term senior unsecured notes remains unchanged.

Reason Behind Downgrade of Outlook

The key reason behind the outlook downgrade is Associated Banc-Corp's weaker capital position compared with the other regional banks that have similar ratings. Moreover, the overall tough operating environment due to the coronavirus pandemic remains a major near-term concern for the bank.

Reasons for Affirming the Ratings

Per Moody's, Associated Banc-Corp's ratings affirmation is indicative of a strong market position and direct banking franchise network in its key Wisconsin market. This aids the bank's robust funding and liquidity position.

Further, the rating agency is of the opinion that the bank's asset quality performance prior to the pandemic was robust. Moreover, the company's tangible common equity (TCE) witnessed an improvement of about \$200 million as of Jun 30, 2020, following the sale of its insurance business to USI Insurance Services. Additionally, the bank's energy sector exposure has been declining over the past few years. Despite these, Associated Banc-Corp's above-average exposure to the real estate sector compared with its peers is a matter of concern. The bank's lending to the sector was roughly 2.5 times its TCE as of Jun 30, 2020. This continues to pose a challenge to its credit quality.

However, Associated Banc-Corp's profitability declined in the first half of 2020 compared with the prior-year period. This was mainly attributed to the CECL introduction and the overall grim economic situation due to the pandemic. Furthermore, Moody's believes that the bank's lower level of profitability over the years and relatively weak capital position makes it more vulnerable to the prevailing uncertain operating environment.

What Can Trigger a Change in Moody's Ratings?

Even though ratings upgrades are less likely in 12-18 months' time due to the negative outlook, ratings for Associated Banc-Corp can return to stable in case Moody's thinks that the bank has strengthened on asset quality and profitability fronts, and will prove to be resilient on all of the fronts.

At the same time, ratings can go down if the bank's capital position worsens compared with its peers. Moreover, deterioration in credit profile or any hint of declining profitability can lead to a ratings downgrade.

Associated Banc-Corp Closes Deal to Sell Insurance Business – Jun 30, 2020

Associated Banc-Corp has completed the sale of its insurance business – Associated Benefits & Risk Consulting to USI Insurance Services LLC for \$265.8 million in cash. The deal was announced in May.

Being a multi-line insurance agency with 400 employees, Associated Benefits & Risk Consulting provides employee benefits, retirement plans, compliance, business insurance, risk management and individual insurance solutions.

Associated Banc-Corp will record pre-tax book gain of roughly \$165 million related to the sale in the second quarter 2020.

Notably, at the time of announcing the transaction, the company had expected this would strengthen its capital base and lead to increase in tangible common equity by approximately \$210 million. It will lower \$99 million of goodwill and other intangible assets. Also, the bank's pro-forma efficiency ratio is projected to decline nearly 1%.

Headquartered in Valhalla, NY, USI Insurance Services is one of the largest insurance brokerage and consulting firms in the world. It delivers property and casualty, employee benefits, personal risk, program and retirement solutions to large risk management clients, middle market companies, smaller firms and individuals.

At the time of announcing the deal, Associated Banc-Corp's president and CEO, Philip B. Flynn, had stated, "This transaction allows us to monetize our investment in ABRC and further our strategic goals of enhancing shareholder value and being a source of strength for our customers, colleagues and communities."

He had further added "The capital provided from this transaction will support loan growth, create an added buffer during these trying economic times, and support our dividend policy."

Dividend Update

On Oct 27, 2020, Associated Banc-Corp announced a quarterly cash dividend of 18 cents per share. The dividend was paid out on Dec 15 to shareholders of record as of Dec 1.

Valuation

Associated Banc-Corp's shares are up 63.7% in the past six-months but down 8.2% in the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Finance sector are up 55.1% and 26.1% in the past six months, respectively. Over the past year, the Zacks sub-industry and the sector are down 4.1% and 0.8%, respectively.

The S&P 500 index is up 19.6% and 17.2% in the past six months and trailing 12-month period, respectively.

The stock is currently trading at 17.97X forward 12 months earnings, which compares to 14.47X for the Zacks sub-industry, 17.27X for the Zacks sector and 22.97X for the S&P 500 index.

Over the past five years, the stock has traded as high as 20.53X and as low as 6.28X, with a 5-year median of 13.89X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$23 price target reflects 21.30X forward earnings.

The table below shows summary valuation data for ASB

Valuation Multiples - ASB					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	17.97	14.47	17.27	22.97
	5-Year High	20.53	16.92	17.27	23.79
	5-Year Low	6.28	9.51	11.58	15.3
	5-Year Median	13.89	13.52	14.49	17.82
P/TB TTM	Current	1.21	2.71	3.68	16.57
	5-Year High	2.14	3.93	4.05	16.62
	5-Year Low	0.74	1.65	2.05	7.42
	5-Year Median	1.58	2.94	3.54	10.91
P/S F12M	Current	2.77	4.58	7.1	4.46
	5-Year High	3.83	6.04	7.1	4.46
	5-Year Low	1.42	3.15	5.02	3.21
	5-Year Median	2.79	4.82	6.11	3.67

As of 01/07/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Top 34% (86 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
Bank of Hawaii Corporation (BOH)	Neutral	2
Comerica Incorporated (CMA)	Neutral	3
First Republic Bank (FRC)	Neutral	3
New York Community Bancorp, Inc. (NYCB)	Neutral	2
Prosperity Bancshares, Inc. (PB)	Neutral	2
Signature Bank (SBNY)	Neutral	3
SVB Financial Group (SIVB)	Neutral	3
Zions Bancorporation, N.A. (ZION)	Neutral	3

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry: Banks - Midwest				Industry Peers		
	ASB	X Industry	S&P 500	BOH	FRC	SIVB
Zacks Recommendation (Long Term)	Outperform	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	1	-	-	2	3	3
VGM Score	C	-	-	F	C	C
Market Cap	2.98 B	423.82 M	27.00 B	3.31 B	27.57 B	22.34 B
# of Analysts	5	3	13	3	8	11
Dividend Yield	3.71%	2.56%	1.43%	3.25%	0.50%	0.00%
Value Score	B	-	-	C	D	C
Cash/Price	0.43	0.51	0.06	0.33	0.15	0.78
EV/EBITDA	7.11	7.11	14.94	6.60	25.73	4.74
PEG F1	2.39	2.15	2.64	2.39	2.87	3.18
P/B	0.81	1.10	3.75	2.43	2.84	2.93
P/CF	6.95	9.01	14.29	12.00	25.26	19.40
P/E F1	16.73	13.99	20.74	19.14	26.39	25.43
P/S TTM	2.00	2.52	2.97	4.41	6.23	5.95
Earnings Yield	5.82%	7.15%	4.71%	5.22%	3.79%	3.93%
Debt/Equity	0.61	0.38	0.70	0.04	1.58	0.11
Cash Flow (\$/share)	2.79	2.79	6.93	6.88	6.34	22.23
Growth Score	D	-	-	F	C	D
Historical EPS Growth (3-5 Years)	9.77%	11.32%	9.71%	6.38%	11.90%	35.61%
Projected EPS Growth (F1/F0)	-36.81%	-4.68%	12.21%	10.42%	6.43%	-11.71%
Current Cash Flow Growth	-1.86%	15.18%	5.22%	3.89%	10.31%	19.94%
Historical Cash Flow Growth (3-5 Years)	9.43%	15.89%	8.33%	4.36%	17.90%	34.83%
Current Ratio	0.95	0.93	1.38	0.69	1.03	0.66
Debt/Capital	35.80%	27.65%	41.97%	4.25%	57.39%	9.57%
Net Margin	20.66%	21.51%	10.40%	22.62%	22.95%	28.60%
Return on Equity	5.68%	8.98%	15.20%	12.73%	10.96%	15.40%
Sales/Assets	0.04	0.05	0.50	0.04	0.04	0.05
Projected Sales Growth (F1/F0)	-8.15%	-2.29%	5.91%	-1.43%	11.99%	-2.23%
Momentum Score	C	-	-	A	A	A
Daily Price Change	2.75%	0.44%	0.85%	1.73%	2.54%	3.81%
1-Week Price Change	0.06%	0.00%	1.16%	-0.52%	4.55%	3.15%
4-Week Price Change	17.84%	8.27%	3.64%	4.13%	22.87%	21.94%
12-Week Price Change	41.54%	26.80%	13.45%	49.80%	27.46%	57.78%
52-Week Price Change	-8.22%	-9.67%	8.02%	-12.30%	38.33%	68.42%
20-Day Average Volume (Shares)	980,859	50,249	1,694,173	228,516	835,697	333,956
EPS F1 Estimate 1-Week Change	5.05%	0.00%	0.00%	0.00%	0.08%	-0.54%
EPS F1 Estimate 4-Week Change	5.61%	0.30%	0.08%	0.52%	0.26%	2.10%
EPS F1 Estimate 12-Week Change	14.16%	14.78%	2.45%	5.19%	5.84%	10.90%
EPS Q1 Estimate Monthly Change	-4.81%	0.00%	0.00%	3.64%	0.11%	2.45%

Source: Zacks Investment Research

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	B
Growth Score	D
Momentum Score	C
VGM Score	C

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

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Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

EV/FCF Ratio: The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

P/EBITDA Ratio: The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

P/B Ratio: The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

P/TB Ratio: The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ($3/35 = 0.0857$) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.