

The Charles Schwab (SCHW)

\$47.80 (As of 01/10/20)

Price Target (6-12 Months): \$56.00

Long Term: 6-12 Months	Zacks Recor (Since: 12/13/1	Outperform	
Short Term: 1-3 Months	Zacks Rank: (1-5)		3-Hold
	Zacks Style Scores:		VGM:A
	Value: C	Growth: B	Momentum: A

Summary

Shares of Schwab have outperformed the industry over the past six months. Its earnings have surpassed the Zacks Consensus Estimate in three of the trailing four quarters. Also, earnings estimates have remained stable ahead of its fourth quarter 2019 results. The company's planned acquisition of TD Ameritrade will create a behemoth in online brokerage industry. Also, deal to buy USAA's Investment Management Company, strong balance sheet position and improving operating efficiency bode well for the future. While dismal interest rate scenario and rising costs (mainly related to compensation costs and regulatory charges) remain key concerns and will likely put pressure on financials, it intends to further strengthen trading business by offering commission free trading, which will likely result in higher client assets and brokerage accounts.

Data Overview

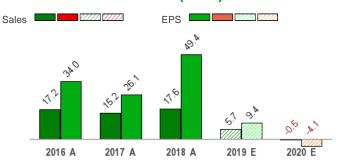
52 Week High-Low	\$51.65 - \$34.58
20 Day Average Volume (sh)	7,994,568
Market Cap	\$61.3 B
YTD Price Change	0.5%
Beta	1.39
Dividend / Div Yld	\$0.68 / 1.4%
Industry	Financial - Investment Bank
Zacks Industry Rank	Top 26% (65 out of 254)

Last EPS Surprise	13.9%
Last Sales Surprise	2.2%
EPS F1 Est- 4 week change	0.4%
Expected Report Date	01/15/2020
Earnings ESP	0.3%
P/E TTM	17.4
P/E F1	18.6
PEG F1	2.4
P/S TTM	5.7

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2020	2,591 E	2,600 E	2,678 E	2,722 E	10,657 E
2019	2,723 A	2,681 A	2,711 A	2,588 E	10,707 E
2018	2,398 A	2,486 A	2,579 A	2,669 A	10,132 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2020	\$0.63 E	\$0.63 E	\$0.66 E	\$0.67 E	\$2.57 E
2019	\$0.69 A	\$0.66 A	\$0.74 A	\$0.64 E	\$2.68 E
2018	\$0.55 A	\$0.60 A	\$0.65 A	\$0.65 A	\$2.45 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 01/10/2020. The reports text is as of 01/13/2020.

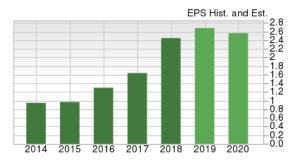
Overview

Headquartered in San Francisco, CA, The Charles Schwab Corporation is a savings and loan holding company, providing wealth management, securities brokerage, banking, asset management, custody and financial advisory services.

The company's main subsidiaries include Charles Schwab & Co. (securities broker-dealer), Charles Schwab Investment Management (an investment advisor for Schwab's proprietary mutual funds and Schwab's exchange-traded funds) and Charles Schwab Bank (a federal savings bank).

Schwab provides financial services to individuals and institutions through two reportable segments – Investor Services and Advisor Services.

- The Investor Services segment (comprising 52% of total client assets in 2018) includes Schwab's retail brokerage and banking operations as well as retirement plan and corporate brokerage services. Through this segment, the company offers research, analytic tools, online portfolio planning tools, performance reports, market analysis and educational material to its clients.
- The Advisor Services segment (48%) offers custodial, trading and support services to independent investment advisors. It also provides retirement business services to independent retirement plan advisors and record-keepers.





As of Sep 30, 2019, the company had 12.1 million active brokerage accounts, 1.4 million banking accounts and 1.7 million corporate retirement plan participants.



Reasons To Buy:

- ▲ Schwab is focused on enhancing trading revenues, which has been under pressure for the last few years. For this, the company has been taking several initiatives, including lowering its basic online equity and ETF trade commissions to zero and reducing fees for the Schwab market cap-weighted index mutual funds. Though the efforts are expected to hurt revenue growth to some extent, these are aimed at building client base and thus will likely lead to improvement in trading income, going forward.
- ▲ Schwab continues to benefit from aggressive efforts to increase client base in advisory solutions. The advice solution revenues recorded a four-year CAGR of 8.2% (2015-2018). Despite the company lowering fees on certain advice solution products, revenues from the same increased in the first nine months of 2019 as average client assets balance improved.

Schwab's inorganic growth efforts and initiatives to augment trading revenues will continue to boost profitability. Further, its enhanced capital deployment plan reflects a strong balance sheet.

- Further, driven by the company's efforts, total client assets witnessed a four-year CAGR of 9% (ended 2018), with momentum continuing in the first three quarters of 2019. Also, its deals to acquire TD Ameritrade and USAA's Investment Management Company will help further diversify revenues and be accretive to earnings.
- ▲ Schwab remains focused on a low-cost capital structure and targets to maintain a long-term debt-to-total financial capital ratio of less than 30%. Given the favorable capital position, the company announced shares repurchase authorization worth \$4 billion in January. As of Sep 30, 2019, buyback authorization worth nearly \$2 billion remained. Further, management has been able to continuously pay dividends. In January 2019, the company hiked its quarterly dividend by 31%, following two hikes announced in 2018. The company targets cash dividend in a range of 20-30% of net income.
- ▲ Further, Schwab's trailing 12-month return on equity (ROE) reflects its superiority in terms of utilizing shareholders' fund. The company's ROE of 20.81% compares favorably with 12.06% for the industry.
- ▲ Schwab's shares have outperformed the industry so far this year. Also, its 2019 earnings estimates have been revised slightly upward over the past 60 days. Therefore, given the strong fundamentals and positive estimate revisions, the stock has upside potential.

Risks

- Schwab is expected to witness pressure on net interest margin (NIM) in the quarters ahead owing to unfavorable rate environment, deposit
 pricing aspects and asset pre-payment speeds. The company believes that the current rate outlook makes further improvement in NIM
 challenging. On the assumptions of December rate cut, management expects NIM to be in mid-230 basis points (bps) range, down from
 prior outlook of mid-to-upper 230 bps by fourth-quarter 2019.
- A continuous rise in operating expenses remains a concern for Schwab. The company witnessed an increase in the same over the last four years (2015-2018) at a CAGR of 10.7%, mainly due to a rise in compensation and benefit costs. Operating expenses continued to increase in first nine months of 2019 as well. Costs related to compensation and regulatory spending as well as ongoing investments to drive operating efficiency are expected to keep expenses high in the upcoming quarters.
- We remain apprehensive about Schwab's significant dependence on fee-based revenue streams (asset management and administration fees constituted 29.1% of net revenues in first nine months of 2019) and lower degree of capital intensity compared to its peers. Though the company is undertaking measures that have resulted in higher trading revenues, these will not be sufficient for boosting overall revenues, as trading revenues constitute only a small portion (6.5%) of its net revenues.
- Further, Schwab seems overvalued when compared with the broader industry. Its current price/book and price/earnings (F1) ratios are above the respective industry averages.

Last Earnings Report

Schwab Q3 Earnings & Revenues Beat, Expenses Rise

Charles Schwab's third-quarter 2019 adjusted earnings of 74 cents per share beat the Zacks Consensus Estimate of 65 cents. Also, the bottom line increased 14% from the prior-year quarter. Results in the reported quarter included severance charges of \$62 million (4 cents per share) related to position eliminations.

Revenue growth and an increase in total client assets aided the results. However, higher expenses, lower rates and lower trading revenues acted as headwinds.

Net income available to common shareholders was \$913	13 million, increasing 3% vear over vear
---	--

09/2019		
Oct 15, 2019		
2.17%		
13.85%		
0.74		
2.74		

Revenue Growth Offset by Rise in Expenses

Net revenues were \$2.71 billion, up 5% year over year. The rise was supported by net interest revenues (up 7%), asset management and administration fees (up 2%) and other revenues (up 24%), partially offset by 2% fall in trading revenues. The reported figure surpassed the Zacks Consensus Estimate of \$2.65 billion.

Total non-interest expenses increased 8% year over year to \$1.48 billion. All expense components, except regulatory fees and assessments costs, and other costs, increased on a year-over-year basis.

Pre-tax profit margin declined to 45.6% from 47.3%.

At the end of the third quarter, Schwab's average interest-earning assets grew 3% year over year to \$265.2 billion.

Annualized return on equity as of Sep 30, 2019, came in at 20%, stable year over year.

Other Business Developments

As of Sep 30, 2019, Schwab had total client assets of \$3.77 trillion (up 6% year over year). Also, net new assets — brought by new and existing clients — were \$56.6 billion, up 6%.

Schwab added 363,000 new brokerage accounts in the reported quarter. As of Sep 30, 2019, the company had 12.1 million active brokerage accounts, 1.4 million banking accounts and 1.7 million corporate retirement plan participants.

Share Repurchase Update

Schwab repurchased 19.9 million shares for \$770 million during the quarter.

Outlook

Management expects revenues to grow 5-6% for 2019.

Further, expenses are projected to increase nearly 5% for 2019, given significant investments to upgrade technology and support business expansion. In addition to typical fourth-quarter expense seasonality, the company projects realization of a full-quarter impact of recent lowering of trading commission and position reductions.

Notably, over the long term, expenses are expected to rise in the low-to-mid single digits rate.

For 2019, balance sheet is expected to contract around 3-4% as client cash sorting dynamics continue to wane.

Recent News

Schwab Reports Improvement in November Client Assets - Dec 13, 2019

Schwab has released the monthly activity report for November 2019. Total client assets were \$3.94 trillion, up 2% from October and 15% from the year-ago month.

Client assets receiving ongoing advisory services were \$2.06 trillion, up 2% from the prior month and 15% year over year. Net new assets of \$12 billion, however, declined 66% from the previous month and 23% year over year.

Schwab's average interest earning assets were \$268.3 billion at the end of November, up 1% from both October 2019 andNovember 2018. The company opened 127,000 new brokerage accounts in the reported month, down 11% sequentially but up10% year over year.

Schwab's active brokerage accounts totaled 12.2 million at the end of November, on par with the October 2019 level. The figure was up 6% from the year-ago month.

Further, clients' banking accounts were 1.4 million, rising 1% from October 2019 and 7% from November 2018. The number of retirement plan participants was relatively on par with the prior-month level but increased 6% year over year to 1.7 million.

Schwab to Acquire TD Ameritrade - Nov 25, 2019

Charles Schwab has inked an all-stock deal to acquire TD Ameritrade Holding for roughly \$26 billion. This will create a behemoth in online brokerage space with combined client assets worth more than \$5 trillion and serving nearly 24 million brokerage accounts.

Schwab President and CEO Walt Bettinger said, "With this transaction, we will capitalize on the unique opportunity to build a firm with the soul of a challenger and the resources of a large financial services institution that will be uniquely positioned to serve the investment, trading and wealth management needs of investors across every phase of their financial journeys."

Exchange Ratio, New Headquarter & Other Details

Under the deal terms, shareholders of TD Ameritrade will receive 1.0837 Schwab shares for each TD Ameritrade share. This represents a 17% premium over the 30-day volume weighted average price exchange ratio as of Nov 20, 2019.

The transaction, still subject to regulatory approvals and consent of shareholders of both the companies, is expected to close in the second half of 2020. The integration process will start immediately thereafter, which is likely to take around 18-36 months.

As part of this process, the combined company's headquarter will be shifted to Westlake, TX from Schwab's current base in San Francisco. Nearly \$1.6 billion charge related to the integration is expected to be incurred over three years after closing.

The deal has been approved by the board of directors of both the companies as well as the Strategic Development Committee of TD Ameritrade's board (formed to supervise and conduct the process and all negotiations concerning the transaction).

Following the deal closure, The Toronto-Dominion Bank, which has nearly 43% stake in TD Ameritrade at present, is likely to have an ownership position of roughly 13% in the combined company. Other TD Ameritrade stockholders and existing Schwab stockholders will hold approximately 18% and 69% stake, respectively.

Moreover, TD Bank will have two new seats on the combined company's board, while TD Ameritrade will have one.

Further, TD Ameritrade has halted previously announce process of searching for new CEO and named Stephen Boyle, the company's EVP and CFO, as interim President and CEO.

A deal as big as this is likely to face a fair share of hurdles. Further, as two of the biggest online brokers are involved, the transaction could face tough antitrust scrutiny.

Nonetheless, Bettinger downplayed the antitrust risks for the deal. In the conference call following the announcement, he said, "We have numerous competitors, many of which are far larger than us today and far larger than a combined organization. They're going to continue to come right after us, as they are now in all aspects of the business."

Accretive to Earnings, Cost Synergies

The deal is expected to result in substantial strategic benefits for the combined firm. Also, clients of both Schwab and TD Ameritrade will benefit from enhancement of "investing and trading experience."

Boyle said, "Partnering with Schwab on this transformative opportunity makes the right strategic and financial sense for TD Ameritrade."

The deal is expected to be single digit percentage accretive to operating cash earnings in the first-year post closing and 15-20% accretive in the third year. Further, it is projected to be 10-15% accretive to GAAP earnings in the third year, post completion.

Also, the deal is estimated to result in \$3.5-\$4.0 billion in total synergies. This will be mainly derived from expense savings and the Insured Deposit Account renegotiation transaction between Schwab and TD Bank.

On cost front, the current projection is for nearly \$1.8-\$2 billion run rate expense synergies, representing about 18-20% of combined company's cost base. A part of this synergy is expected to be realized from "elimination of overlapping and duplicative roles."

More synergies are likely to be generated through real estate, administrative and other savings. Nonetheless, no details related to these were

provided at present.

Overall, all these are anticipated to reduce operating expenses as a percentage of client assets and help further diversify revenues. Notably, the deal is expected to increase percentage of trading related fees to total revenues to about 19% from nearly 9% for Schwab at present.

Moody's Ratings Action

Schwab's senior unsecured debt ratings have been affirmed at A2 by Moody's Investors Service following the announcement of the deal. Moreover, the rating outlook remains stable.

Moody's is of the opinion that if the transaction takes place smoothly and Schwab is able to successfully realize the cost and revenue synergies associated with the deal, the firm's pre-tax margin and debt metrics will improve.

Moreover, per Moody's, the acquisition will further expand Schwab's scale within the wealth management business. Also, the rating agency believes, that in the long run, Schwab's credit profile will benefit significantly from the increased earnings that it will be able to realize on TD Ameritrade's client cash balances under its own cash deposit sweep programs, provided the merger integration takes place successfully.

The above-mentioned factors formed the basis behind the ratings affirmation for Schwab.

Moreover, its stable outlook reflects its continued adherence to conservative financial policies, which is clear from the fact that the company has chosen the all-stock funding mode for the deal.

Charles Schwab Records Increase in October Metrics - Nov 14, 2019

Charles Schwab has released the monthly activity report for October 2019. Total client assets were \$3.85 trillion, up 2% from the prior month and 14% from the year-ago month.

Client assets receiving ongoing advisory services were \$2.02 trillion, up 2% from the prior month and 14% year over year. Net new assets of \$35.2 billion improved significantly from the previous month as well as year over year.

Schwab's average interest earning assets were \$266.1 billion at the end of October, down marginally from the September 2019 level but up 1% from October 2018. The company opened 142,000 new brokerage accounts in the reported month, up 31% sequentially and 7% year over year.

Schwab's active brokerage accounts totaled 12.2 million at the end of October, up 1% sequentially and 6% from the year-ago month. Further, client's banking accounts were 1.4 million, rising 1% from September 2019 and 7% from October 2018. The number of retirement plan participants was up 1% from the prior-month level and 6% year over year at 1.7 million.

Schwab's Commission Free Trading to Hurt Revenues, Moody's Lowers Outlook - October 2019

With an aim to garner further market share, Schwab has announced commission free trading. The plan was effective Oct 7.

The company is lowering U.S. stock, ETF and options online trading commissions to \$0 from \$4.95. Further, there will be no minimum account size to avail "full featured Schwab brokerage account." Nonetheless, the company will be charging 65 cents per contract for option trading.

Schwab's Chief Financial Officer Peter Crawford in a statement said, "...we are seeing new firms trying to enter our market – using zero or low equity commissions as a lever." Further, he added. "It has seemed inevitable that commissions would head towards zero, so why wait?"

Also, Crawford in his statement noted that zero-commission trades are likely to have 3-4% adverse impact on quarterly net revenues.

Following this, Moody's Investors Service downgraded the outlook for Schwab to stable from positive. Per Moody's, relatively lower interest rates and flattening of the yield curve are already adversely impacting Schwab's financials. Now, with this fee cut, the profitability is likely to be hurt even more.

Also, Moody's affirmed the company's ratings. The company's senior unsecured debt rating has been affirmed at A2 while its commercial paper rating has been affirmed at P-1.

Over the past few years, Schwab has witnessed a significant improvement in its pre-tax margin, aided by rising equity market values and net client inflows, per Moody's. Its planned acquisition of USAA's Investment Management Company, efforts to strengthen trading business and improvement in operating efficiency bode well for the future.

Schwab to Buy Assets of USAA's Investment Management Company - Jul 25, 2019

With an aim to diversify revenues amid challenging operating backdrop, Schwab inked a deal to acquire certain assets of USAA's Investment Management Company, including brokerage and managed portfolio accounts. The all-cash deal, valued at \$1.8 billion (to be funded by available corporate cash), is expected close during 2020.

Notably, following the closure of the deal, both the companies will likely enter into a long-term referral agreement, which will make Schwab the exclusive wealth management and brokerage provider for USAA members. This is expected to provide "incremental organic growth opportunity for Schwab"

For Schwab, the deal, still subject to regulatory approvals, will add scale to its Investor Services segment with the addition of more than 1 million new accounts and roughly \$90 billion in client assets.

Walt Bettinger, president and CEO of Schwab, said, "We are honored to be entrusted with serving the financial needs of USAA's members. We have long admired USAA's mission to enhance the financial security of our country's military service men and women and their families."

Additionally, Schwab intends to offer roles to a significant number of USAA employees to continue serving its members.

Other Deal Benefits

Schwab projects the transaction to be low-to-mid single digit accretive to its cash earnings in the first year following the completion and mid-single digit accretive on GAAP basis by second year. Additionally, management expects some revenue synergies, mainly driven by the migration of client cash to the Schwab balance sheet.

Further, expense synergies are expected from a reduction of clearing fees and other operating costs. Also, Schwab expects to have sufficient capital at the time of closing for proforma Tier 1 Leverage ratio is expected to remain in line with its 6.75-7% target range.

Schwab expects to incur approximately \$140 million in one-time integration and transaction-related spend largely in 2020. Also, the company anticipates incremental amortization expense of \$85 million annually.

On a run-rate basis, Schwab expects the deal to be accretive to the pre-tax margin of Investor Services segment.

Dividend Update

On Oct 23, Schwab declared a regular quarterly dividend of 17 cents per share. The dividend was paid on Nov 22 to shareholders on record as of Nov 8.

Valuation

Schwab's shares are up 9.1% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Finance sector are up 14.2% and 14.4% over the past year, respectively.

The S&P 500 index is up 25.6% in the past year.

The stock is currently trading at 18.56X forward 12 months earnings, which compares to 11.98X for the Zacks sub-industry, 14.88X for the Zacks sector and 18.88X for the S&P 500 index.

Over the past five years, the stock has traded as high as 32.01X and as low as 13.10X, with a 5-year median of 21.55X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$56 price target reflects 21.71X forward earnings.

The table below shows summary valuation data for SCHW

Valuation Multiples - SCHW						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	18.56	11.98	14.88	18.88	
P/E F12M	5-Year High	32.01	15.3	16.21	19.34	
	5-Year Low	13.1	6.05	12.01	15.17	
	5-Year Median	21.55	11.42	13.98	17.44	
	Current	3.3	2.26	2.82	4.46	
P/B TTM	5-Year High	4.92	3	2.89	4.47	
	5-Year Low	2.45	1.47	1.83	2.85	
	5-Year Median	3.57	2.19	2.5	3.61	
	Current	5.75	3.63	6.53	3.5	
P/S F12M	5-Year High	8.08	4.53	6.61	3.5	
	5-Year Low	3.88	2.8	5.2	2.54	
	5-Year Median	5.78	3.63	6.04	3	

As of 01/10/2020

Industry Analysis Zacks Industry Rank: Top 26% (65 out of 254) ■ Industry Price 75 – Industry ■ Price _60 -55 ____20 2020

Top Peers

TD Ameritrade Holding Corporation (AMTD)	Outperform
LPL Financial Holdings Inc. (LPLA)	Outperform
E*TRADE Financial Corporation (ETFC)	Neutral
GAIN Capital Holdings, Inc. (GCAP)	Neutral
Raymond James Financial, Inc. (RJF)	Neutral
Tradeweb Markets Inc. (TW)	Neutral
Virtu Financial, Inc. (VIRT)	Neutral

Industry Comparison	Industry: Financial - Inve	estment Bank		Industry Peers		
	SCHW Outperform	X Industry	S&P 500	AMTD Outperform	ETFC Neutral	RJF Neutra
VGM Score	А	-	-	E	В	
Market Cap	61.29 B	499.67 M	24.03 B	27.09 B	11.33 B	12.88
# of Analysts	5	3.5	13	6	3	
Dividend Yield	1.42%	0.35%	1.78%	2.48%	1.21%	1.599
Value Score	C	-	-	D	В	A
Cash/Price	0.60	0.38	0.04	0.50	0.17	0.5
EV/EBITDA	6.73	4.61	14.04	5.22	6.52	5.1
PEG Ratio	2.37	1.40	2.02	1.51	1.67	N.
Price/Book (P/B)	3.37	1.93	3.32	3.15	1.93	1.9
Price/Cash Flow (P/CF)	15.51	8.66	13.52	10.66	9.06	11.0
P/E (F1)	18.60	10.30	18.82	16.88	12.46	11.4
Price/Sales (P/S)	5.68	1.59	2.63	4.50	3.85	1.6
Earnings Yield	5.38%	9.71%	5.31%	5.92%	8.03%	8.729
Debt/Equity	0.40	0.41	0.72	0.41	0.24	0.4
Cash Flow (\$/share)	3.08	2.42	6.94	4.69	5.11	8.4
Growth Score	В	-	-	С	D	(
Hist. EPS Growth (3-5 yrs)	28.77%	11.59%	10.56%	28.24%	39.06%	21.66°
Proj. EPS Growth (F1/F0)	-4.34%	10.47%	7.49%	-28.25%	-4.31%	9.46
Curr. Cash Flow Growth	38.26%	32.67%	14.83%	17.86%	46.38%	13.40
Hist. Cash Flow Growth (3-5 yrs)	23.74%	15.78%	9.00%	21.50%	11.88%	17.54
Current Ratio	0.30	1.29	1.23	1.17	0.28	1.1
Debt/Capital	25.81%	28.79%	42.99%	29.23%	17.67%	29.33
Net Margin	35.12%	4.69%	11.08%	36.72%	35.79%	12.89
Return on Equity	20.81%	12.06%	17.16%	27.18%	18.41%	16.51
Sales/Assets	0.04	0.22	0.55	0.15	0.05	0.2
Proj. Sales Growth (F1/F0)	-0.47%	5.30%	4.20%	-12.56%	-9.14%	5.309
Momentum Score	Α	-	-	F	С	(
Daily Price Chg	-0.64%	0.00%	-0.33%	-0.63%	-0.34%	0.03
1 Week Price Chg	-2.75%	0.00%	-0.30%	-2.22%	-0.39%	-1.20°
4 Week Price Chg	-6.40%	0.01%	1.71%	-6.45%	0.59%	2.079
12 Week Price Chg	21.17%	4.60%	6.05%	37.64%	18.60%	12.66
52 Week Price Chg	9.36%	-2.85%	22.39%	-2.96%	-2.85%	21.35
20 Day Average Volume	7,994,568	90,202	1,580,816	3,904,419	1,906,034	507,63
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	-0.11%	0.43%	0.00
(F1) EPS Est 4 week change	0.45%	0.00%	0.00%	-0.22%	0.76%	0.00
(F1) EPS Est 12 week change	2.07%	-2.11%	-0.50%	-5.16%	-2.55%	0.00
(Q1) EPS Est Mthly Chg	0.40%	0.00%	0.00%	0.28%	0.20%	N

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 have an excellent 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.



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

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.