

Charles Schwab Corp. (SCHW)

\$61.20 (As of 01/12/21)

Price Target (6-12 Months): **\$70.00**

Long Term: 6-12 Months

Zacks Recommendation:

Outperform

(Since: 11/25/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:F

Value: F

Growth: F

Momentum: A

Summary

Schwab's shares have outperformed the industry over the past six months. The company does not have an impressive earnings surprise history. Its earnings have surpassed the Zacks Consensus Estimate only once and missed thrice over the trailing four quarters. Schwab's opportunistic acquisitions over the past year will likely strengthen its position as a leading brokerage player and be accretive to earnings. Moreover, offering commission-free trading has been leading to higher client assets and rise in brokerage accounts, which in turn is improving the company's market share. While continued near-zero interest rates and no chance of any increase in the same in the near term along with persistently increasing expenses remain major concerns for the company, its efficient capital deployment activities reflect a solid balance sheet position.

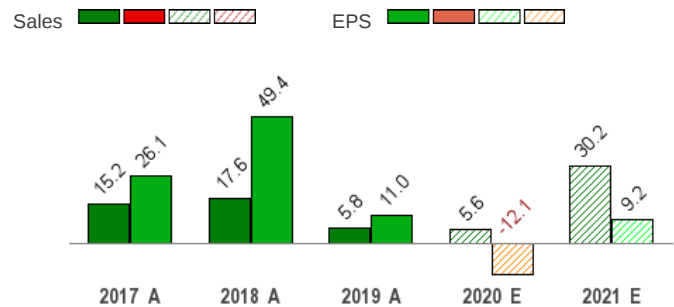
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$62.04 - \$28.00
20-Day Average Volume (Shares)	7,040,202
Market Cap	\$114.8 B
Year-To-Date Price Change	15.4%
Beta	1.17
Dividend / Dividend Yield	\$0.72 / 1.2%
Industry	Financial - Investment Bank
Zacks Industry Rank	Top 9% (23 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	8.5%
Last Sales Surprise	1.1%
EPS F1 Estimate 4-Week Change	6.5%
Expected Report Date	01/21/2021
Earnings ESP	0.0%
P/E TTM	26.8
P/E F1	23.5
PEG F1	3.0
P/S TTM	11.4

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	4,016 E	3,956 E	3,931 E	3,960 E	14,742 E
2020	2,617 A	2,450 A	2,448 A	4,132 E	11,324 E
2019	2,723 A	2,681 A	2,711 A	2,606 A	10,721 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.62 E	\$0.63 E	\$0.65 E	\$0.63 E	\$2.61 E
2020	\$0.60 A	\$0.54 A	\$0.51 A	\$0.70 E	\$2.39 E
2019	\$0.69 A	\$0.66 A	\$0.74 A	\$0.63 A	\$2.72 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 01/12/2021. The reports text is as of 01/13/2021.

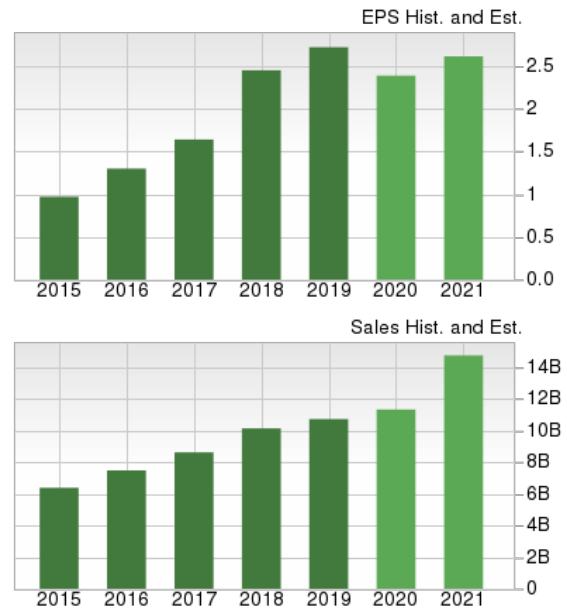
Overview

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 (constituting 71.1% of total net revenues in 2019) 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 (28.9%) offers custodial, trading and support services to independent investment advisors. It also provides retirement business services to independent retirement plan advisors and record-keepers.



In May 2020, Schwab acquired certain assets of USAA's Investment Management Company, including brokerage and managed portfolio accounts. In June, it acquired Motif's technology and intellectual property assets, while in July it acquired Naples, FL-based Wasmer, Schroeder & Company. In October, the company completed the buyout of TD Ameritrade, leading to the formation of a behemoth in the brokerage industry.

As of Sep 30, 2020, the company had 14.4 million active brokerage accounts, 1.5 million banking accounts and 1.7 million corporate retirement plan participants.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ Schwab remains focused on enhancing trading revenues, which was under pressure since the last few years. For this, the company has been undertaking 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. It launched Schwab Stock Slices, through which investors will be able to own shares of any company in the S&P 500 Index starting at \$5 each, even though these shares cost more. These efforts are aimed at building client base and 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 saw a four-year (2016-2019) CAGR of 9.4%, with the momentum continuing in the first three quarters of 2020. Despite the company lowering fees on certain advice solution products, revenues from the same increased as average client asset balances improved. Further, driven by the company's efforts, total client assets have witnessed a CAGR of 13.3% over the last four years (ended 2019). The uptrend in client assets continued in the first nine months of 2020. Also, the acquisitions of TD Ameritrade, USAA's Investment Management Company, Wasmer, Schroeder & Company, LLC and the acquisition of Motif's technology and intellectual property are expected to further strengthen Schwab's position in the brokerage industry and help diversify revenues.
- ▲ Schwab remains focused on maintaining a low-cost capital structure, which has been able to support its capital deployments. As of Sep 30, 2020, the company had cash and cash equivalents of \$27.5 billion, and total debt worth only \$7.8 billion. Also, its total debt to total capital of 20% at the end of the third quarter of 2020 declined sequentially. Notably, in January 2020, the company announced a 6% increase in quarterly dividend, following a hike in 2019 and twice in 2018. Further, it has a share repurchase program in place. At the end of third-quarter 2020, \$1.8 billion shares were remaining under the buyback authorization.
- ▲ Schwab's trailing 12-month return on equity (ROE) reflects its superiority in terms of utilizing shareholders' funds. The company's ROE of 13.52% compares favorably with 12.29% for the industry.
- ▲ Schwab's shares have outperformed the industry over the past year. Also, the company's earnings estimates for 2020 have been revised nearly 1% upward over the past seven days. Therefore, given the strong fundamentals and positive estimate revisions, the price performance is expected to keep improving, going forward.

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

Risks

- Given the near-zero interest rates, Schwab's net interest margin (NIM) is expected to remain under pressure in the quarters ahead. Further, with the Federal Reserve signaling no change in the interest rates till 2023, a similar trend is expected to continue. Hence, margin contraction will likely hurt the top line to some extent.
 - Continuously mounting operating expenses are expected to hurt the company's bottom line to an extent. Expenses witnessed a compound annual growth rate (CAGR) of 9.4% over the last four years (2016-2019) mainly due to rise in compensation and benefit costs. The uptrend continued in the first nine months of 2020 as well. Also, 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 almost 33% of net revenues in the first three quarters of 2020) and lower degree of capital intensity than 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 (7.5%) of net revenues.
 - Further, Schwab looks overvalued when compared with the broader industry. Its current price-earnings (F1) and price-book ratios are above the respective industry averages.
-

Last Earnings Report

Schwab Q3 Earnings Beat, Revenues Decline Y/Y

Charles Schwab's third-quarter 2020 adjusted earnings of 51 cents per share beat the Zacks Consensus Estimate of 47 cents. However, the bottom line decreased 27% from the prior-year quarter.

Results reflect solid client assets balance and a rise in new brokerage accounts. These were driven by solid client activity in the coronavirus outbreak-induced volatile markets. However, lower revenues and an increase in expenses acted as headwinds.

Results excluded acquisition and integration-related costs as well as the amortization of acquired intangibles. After considering these, net income available to common shareholders (GAAP basis) was \$615 million or 48 cents per share, down from \$913 million or 70 cents per share recorded in the year-ago quarter.

Revenues Decline, Expenses Rise

Net revenues were \$2.45 billion, down 10% year over year. The fall was due to a decline in trading revenues (down 12%) and net interest revenues (down 18%), partially offset by a 4% rise in asset management and administration fees and 31% growth in other revenues. The top line surpassed the Zacks Consensus Estimate of \$2.42 billion.

Total non-interest expenses rose 6% year over year to \$1.56 billion. All expense components, except for advertising and market development costs, and compensation and benefits, increased from a year ago.

Pre-tax profit margin declined to 36.3% from 45.6% in the prior-year quarter.

At the end of the third quarter, Schwab's average interest-earning assets jumped 45% year over year to \$385.6 billion.

Annualized return on equity as of Sep 30, 2020, was 10%, down from 20% at the end of the prior-year quarter.

Other Business Developments

As of Sep 30, 2020, Schwab had total client assets of \$4.4 trillion (up 17% year over year). During the reported quarter, net new assets — brought by new and existing clients — were \$51.2 billion, down 10%.

Schwab added 0.6 million new brokerage accounts, reflecting a 63% jump from the year-ago period. As of Sep 30, 2020, the company had 14.4 million active brokerage accounts, 1.5 million banking accounts and 1.7 million corporate retirement plan participants.

Guidance

Schwab is on track to achieve expense synergy target of \$1.8-\$2 billion by the end of year three following its acquisition of TD Ameritrade (TDA). The company has already started implementation of five early actions, which are expected to result in \$250-\$300 million in synergy.

These efforts include closure of approximately 500 previously open positions, team consolidation affecting around 1,000 roles and consolidation of nearly 200 branches of combined firm. Besides, the company stated that the combined branch footprint after the consolidation will be larger with more than 400 branches.

For 2020, Schwab expects revenues to grow 7.5-8%. This is based on the assumptions of modest market appreciation since the last week of October, continued elevated trading operations and stabilizing prepayment speed. Further, fourth quarter 2020 NIM is expected to be 150 bps range.

On cost front, adjusted total expense is anticipated to be up 15.5-16.5% for 2020. This includes nearly 4% rise for the legacy Schwab and also reflects the impact of the above-mentioned expense synergies.

Notably, the company currently projects roughly 30-35% of the total integration cost to occur in the first 12 months post-closing. Further, amortization of acquired intangibles is expected will be nearly \$145 million in the fourth quarter.

Thus, the company anticipates a 25% to 35% accretion in adjusted earnings relative to third quarter 2020.

Management expects 2020 balance sheet growth to be approximately 70-75%, based on the TDA acquisition as well as the continuation of modest client cash build. Moreover, TDA acquisition is expected to be accretive to capital levels and also creates additional flexibility, going forward.

Quarter Ending	09/2020
Report Date	Oct 15, 2020
Sales Surprise	1.07%
EPS Surprise	8.51%
Quarterly EPS	0.51
Annual EPS (TTM)	2.28

Recent News

Schwab November Metrics Improve on Upbeat Markets - Dec 14, 2020

Schwab announced its activity report for November 2020. In October, the company concluded the acquisition of TD Ameritrade. Thus, metrics for the reported month includes data for the combined company.

Total client assets for the reported month were \$6.42 trillion, up 9% from October 2020 and 63% from November 2019. Client assets receiving ongoing advisory services were \$3.17 trillion, up 8% from the prior month and 54% year over year.

Further, net new assets were \$32.1 billion, down 98% from the prior month but up 168% from the year-earlier month.

Schwab's average interest earning assets were \$466.7 billion at the end of November 2020, up 6% from October 2020 and 74% year over year. Additionally, average bank deposit account assets totaled \$162.3 billion, up 23% from the prior month.

Schwab opened 430,000 new brokerage accounts in the reported month. While this was significantly down from 14.7 million new accounts in October 2020, it surged substantially from 127,000 in November 2019.

Schwab's active brokerage accounts totaled 29.2 million at November-end, up 1% sequentially and 138% from the year-ago month. Further, clients' banking accounts were 1.50 million, rising 1% from October 2020 and 9% from November 2019. The number of retirement plan participants was 2.05 million, down 1% sequentially level but up 17% year over year.

Schwab October Metrics Improve on TD Ameritrade Buyout - Nov 13, 2020

Charles Schwab announced its activity report for October 2020. Notably, on Oct 6, it concluded the acquisition of TD Ameritrade. Thus, the metrics for the reported month represents data for the combined company.

Total client assets for the reported month were \$5.88 trillion, up 34% from September 2020 and 53% from October 2019.

Client assets receiving ongoing advisory services were \$2.93 trillion, up 31% from the prior month and 45% year over year. Net new assets were \$1.60 trillion, up significantly from the prior month as well as from the year-earlier month. The reported figure primarily included inflows related to the acquisition.

Schwab's average interest earning assets were \$442.1 billion at the end of October 2020, up 13% from September 2020 and 66% from October 2019. The company had 14.7 million new brokerage accounts in the reported month. This was significantly up from 184,000 new accounts in September 2020 and 142,000 in October 2019.

Schwab's active brokerage accounts totaled 29.01 million at October-end, up 102% sequentially and 138% from the year-ago month. Further, clients' banking accounts were 1.50 million, rising 1% from September 2020 and 9% from October 2019. The number of retirement plan participants was 2.07 million, up 20% from the prior-month level and 19% year over year.

Schwab to Cut 1,000 Jobs as Part of TD Ameritrade Integration - Oct 26, 2020

As part of TD Ameritrade integration process, Schwab has announced a reduction of nearly 1,000 positions or about 3% of the combined workforce. The company remains committed to provide full transition support to its employees and ensure the smoothest transition possible, including reemployment assistance and severance benefits.

These eliminations are part of Schwab's efforts to lower overlapping or redundant roles across the two firms. Yet the combined company will continue to hire in strategic areas critical to support growing client base.

Those employees whose roles are impacted by these changes will have an early access to all newly opened positions and be treated as internal candidates for the more than 1,000 currently open positions at Schwab through their 60-day notice period.

Besides, Schwab in the statement said, "While we don't have all of the answers right now, we can share that after this week, no additional company-wide reductions will be executed in 2020."

Schwab Closes TD Ameritrade Buyout, Creates a Broker Behemoth – Oct 6, 2020

Schwab has concluded the acquisition of TD Ameritrade Holding for roughly \$22 billion. This led to creation of a behemoth in online brokerage space with combined client assets of more than \$6 trillion and serving nearly 28 million brokerage accounts.

The all-stock deal, announced in November 2019, will deliver substantial scale to Schwab, helping it to drive long-term growth and serve a wide spectrum of customers at lower costs. Further, the company anticipates the buyout to reduce operating expenses as a percentage of client assets.

Schwab President and CEO Walt Bettinger said, "As we begin this next chapter, we remain focused on continuing to be the industry's most trusted leader in investment services. Looking forward, we intend to quickly and efficiently harness our complementary strengths in order to break down even more barriers for investors. In doing so, we intend to deliver a winning combination of low costs, great service and industry-leading technology to support our clients, and the advisors who serve them, across every phase of their financial journey."

Deal Terms & Other Details

As agreed previously, shareholders of TD Ameritrade received 1.0837 shares of Schwab for each share of TD Ameritrade, except The Toronto-

Dominion Bank (which had nearly 43% stake in TD Ameritrade). TD Bank got nearly 13.5% stake in Schwab, comprising 9.9% voting shares, and rest being non-voting common shares. These non-voting shares are convertible into voting shares upon transfer to a third party.

So, in aggregate, Schwab issued approximately 509 million voting shares and 77 million non-voting shares as part of merger consideration.

Effective the completion of merger, Todd M. Ricketts, Brian M. Levitt and Bharat B. Masrani were elected to Schwab's board of directors.

Additionally, Schwab announced that the change in location of its corporate headquarter to Westlake, TX from San Francisco is likely to be completed on Jan 1, 2021. While the company doesn't expect any major impact on San Francisco-based positions and is likely to continue hiring in the city, any real estate related decisions will be made as part of integration process.

Integration Timeline

The integration process is likely to take 18 to 36 months, despite the planning for the same being underway since the deal was announced last year. Until then, Schwab and TD Ameritrade will keep serving clients as separate broker-dealers.

Bettinger said, "We are committed to maintaining our sharp focus on seeing 'Through Clients' Eyes' as we begin to integrate our companies carefully and thoughtfully and prepare our plans to transition brokerage accounts at TD Ameritrade's broker-dealers to Schwab's broker-dealer in the future."

Following the integration, the combined company will be well poised to offer "a broader and more extensive range of services and solutions to Schwab and TD Ameritrade clients, including individual investors as well as the Registered Investment Advisors (RIAs) who custody their clients' assets with the companies."

As a part of this, in August, Schwab had announced plans to integrate TD Ameritrade's thinkorswim and thinkpipes trading platforms, and educational resources into its offerings for retail clients and independent advisors.

Moreover, Schwab intends to continue offering TD Ameritrade Institutional's customizable portfolio rebalancing solution iRebal to independent advisor clients. Also, several other products like wealth management platforms, RIA custody platforms and tools, investor education, retirement services, and banking and asset management will be part of the combined company.

Schwab Completes Acquisition of Wasmer Schroeder – Jul 1, 2020

Schwab completed the acquisition of Naples, FL-based Wasmer, Schroeder & Company, LLC. The deal, announced this February, will likely strengthen Schwab's position in the brokerage industry. The financials of the deal have not been disclosed yet.

Wasmer Schroeder is an independent investment manager of fixed-income separately managed accounts. Its team of more than 60 employees, including roughly 30 investment professionals, has significant experience in the fixed-income markets.

The deal is expected to enhance Schwab's fixed-income capabilities and expand its approximately \$90 billion in separately managed accounts. Also, the company will be able to meet increasing client demand for income in retirement.

At the time of announcement of the deal, Rick Wurster, executive vice president of Schwab Asset Management Solutions, stated, "Wasmer Schroeder's professionally managed portfolios and investment capabilities will help Schwab deliver on a wide range of fixed income investment needs and preferences, and complements the total wealth management offering we make available to our retail and RIA clients."

Dividend Update

On Oct 22, Schwab declared a regular quarterly dividend of 18 cents per share. The dividend was paid out on Nov 27 to shareholders on record as of Nov 13.

Valuation

Schwab's shares are up 77.2% in the past six months and 28.2% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Finance sector are up 51.7% and 24.2%, respectively, in the past six months. Over the past year, the Zacks sub-industry is up 32% while the sector is down 0.6%.

The S&P 500 index is up 19.6% in the past six months and 17.5% in the past year.

The stock is currently trading at 23.92X forward 12 months earnings, which compares to 15.10X for the Zacks sub-industry, 17.22X for the Zacks sector and 23.16X for the S&P 500 index.

Over the past five years, the stock has traded as high as 32.01X and as low as 11.05X, with a 5-year median of 20.01X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$70 price target reflects 27.34X forward earnings.

The table below shows summary valuation data for SCHW

Valuation Multiples - SCHW					
		Stock	Sub-Industry	Sector	S&P 500
D/F F12M	Current	23.92	15.1	17.22	23.16
	5-Year High	32.01	15.1	17.22	23.79

P/E F12M	5-Year High	32.01	15.1	11.22	23.19
	5-Year Low	11.05	5.58	11.59	15.3
	5-Year Median	20.01	11.08	14.53	17.83
P/TB TTM	Current	3.43	2.77	3.71	16.81
	5-Year High	5.45	3.2	4.06	16.93
	5-Year Low	1.85	1.32	2.05	7.42
	5-Year Median	3.59	2.25	3.55	10.92
P/S F12M	Current	7.82	4.9	7.14	4.52
	5-Year High	8.08	4.9	7.14	4.52
	5-Year Low	3.38	2.66	5.02	3.2
	5-Year Median	5.62	3.42	6.12	3.68

As of 01/12/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Top 9% (23 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
Piper Sandler Companies (PIPR)	Outperform	1
Cowen Group, Inc. (COWN)	Neutral	3
Interactive Brokers Group, Inc. (IBKR)	Neutral	2
LPL Financial Holdings Inc. (LPLA)	Neutral	2
Morgan Stanley (MS)	Neutral	3
Raymond James Financial, Inc. (RJF)	Neutral	2
Tradeweb Markets Inc. (TW)	Neutral	3
Virtu Financial, Inc. (VIRT)	Neutral	3

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

Industry Comparison Industry: Financial - Investment Bank				Industry Peers		
	SCHW	X Industry	S&P 500	IBKR	LPLA	RJF
Zacks Recommendation (Long Term)	Outperform	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	2	2	2
VGM Score	F	-	-	F	A	A
Market Cap	114.84 B	1.45 B	26.90 B	28.92 B	9.54 B	14.24 B
# of Analysts	7	2.5	13	1	4	2
Dividend Yield	1.18%	0.00%	1.41%	0.58%	0.83%	1.51%
Value Score	F	-	-	F	B	A
Cash/Price	0.52	0.52	0.06	1.74	0.17	0.72
EV/EBITDA	12.56	4.72	15.05	-18.09	10.08	5.34
PEG F1	2.98	2.27	2.62	NA	NA	NA
P/B	3.03	2.30	3.76	3.38	7.90	1.98
P/CF	17.19	12.59	14.67	127.57	12.59	13.73
P/E F1	23.45	14.27	20.85	32.43	18.36	14.83
P/S TTM	11.35	1.84	3.00	11.87	1.66	1.74
Earnings Yield	4.26%	7.01%	4.69%	3.08%	5.45%	6.74%
Debt/Equity	0.30	0.21	0.70	0.00	2.03	0.46
Cash Flow (\$/share)	3.56	1.86	6.93	0.54	9.56	7.54
Growth Score	F	-	-	F	A	B
Historical EPS Growth (3-5 Years)	25.53%	16.95%	9.72%	20.08%	40.71%	18.23%
Projected EPS Growth (F1/F0)	9.46%	14.29%	12.36%	-9.70%	4.59%	14.24%
Current Cash Flow Growth	9.66%	-12.86%	5.22%	15.90%	21.74%	-13.40%
Historical Cash Flow Growth (3-5 Years)	22.65%	9.17%	8.37%	28.50%	18.26%	14.39%
Current Ratio	0.28	1.22	1.38	1.11	1.30	0.98
Debt/Capital	20.01%	17.64%	41.97%	0.00%	67.04%	31.67%
Net Margin	29.80%	8.50%	10.44%	6.90%	8.50%	10.02%
Return on Equity	13.52%	12.29%	15.37%	2.24%	49.27%	12.29%
Sales/Assets	0.03	0.26	0.50	0.03	0.96	0.18
Projected Sales Growth (F1/F0)	30.19%	7.67%	6.00%	-5.63%	15.33%	5.92%
Momentum Score	A	-	-	A	A	B
Daily Price Change	1.58%	0.29%	0.57%	0.80%	3.07%	0.21%
1-Week Price Change	11.20%	4.67%	2.23%	14.71%	10.12%	6.62%
4-Week Price Change	19.88%	8.42%	3.70%	22.35%	18.99%	10.74%
12-Week Price Change	56.40%	31.37%	14.39%	39.36%	45.32%	31.37%
52-Week Price Change	28.27%	23.02%	7.96%	41.52%	23.25%	10.20%
20-Day Average Volume (Shares)	7,040,202	68,301	1,754,762	789,669	460,008	626,364
EPS F1 Estimate 1-Week Change	2.81%	0.72%	0.00%	0.00%	0.88%	1.09%
EPS F1 Estimate 4-Week Change	6.50%	3.99%	0.06%	3.38%	0.88%	9.83%
EPS F1 Estimate 12-Week Change	45.04%	10.81%	2.55%	15.68%	3.19%	16.33%
EPS Q1 Estimate Monthly Change	6.15%	3.39%	0.00%	3.77%	2.04%	12.66%

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	F
Growth Score	F
Momentum Score	A
VGM Score	F

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.

Additional Disclosure

This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

Returns quoted represent past performance which is no guarantee of future results. Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

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.