

HMS Holdings Corp.(HMSY)

\$36.75 (As of 02/01/21)

Price Target (6-12 Months): **\$39.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 02/26/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:C

Value: C

Growth: C

Momentum: F

Summary

HMS Holdings is well positioned to deliver value to clients while its business outlook for the fourth quarter of 2020 remains positive. The company witnessed revenue growth within its Coordination of Benefits (COB) and Payment Integrity (PI) segments during the quarter. A strong 2020 guidance also instills investor confidence in the stock. Also, the company witnessed expansion in both gross and operating margins in the September quarter. HMS Holdings ended third-quarter 2020 on a weak note with earnings in line with and revenues missing estimates. Also, the decline in Population Health Management (PHM) revenues during the period is concerning too. Cut-throat competition in the U.S. medical cost-containment space remains a dampener as well. Over the past six months, shares have underperformed the industry.

Price, Consensus & Surprise

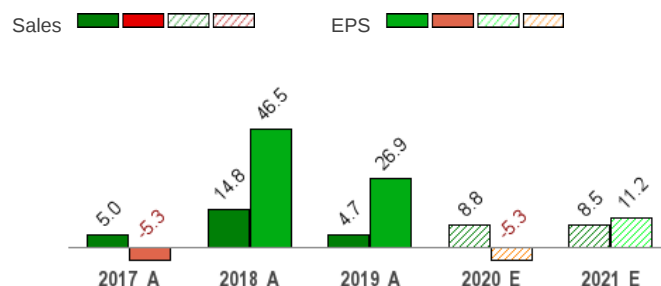


Source: Zacks Investment Research

Data Overview

52-Week High-Low	\$37.03 - \$18.20
20-Day Average Volume (Shares)	1,761,425
Market Cap	\$3.3 B
Year-To-Date Price Change	0.2%
Beta	0.81
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Medical Info Systems
Zacks Industry Rank	Bottom 6% (237 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	0.0%
Last Sales Surprise	-3.4%
EPS F1 Estimate 4-Week Change	0.0%
Expected Report Date	02/19/2021
Earnings ESP	0.0%
P/E TTM	34.1
P/E F1	26.4
PEG F1	2.4
P/S TTM	5.1

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	174 E	172 E	179 E	205 E	739 E
2020	171 A	143 A	165 A	201 E	681 E
2019	148 A	168 A	147 A	163 A	626 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.32 E	\$0.33 E	\$0.33 E	\$0.41 E	\$1.39 E
2020	\$0.32 A	\$0.19 A	\$0.30 A	\$0.44 E	\$1.25 E
2019	\$0.28 A	\$0.34 A	\$0.30 A	\$0.27 A	\$1.32 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 02/01/2021. The report's text and the analyst-provided price target are as of 02/02/2021.

Overview

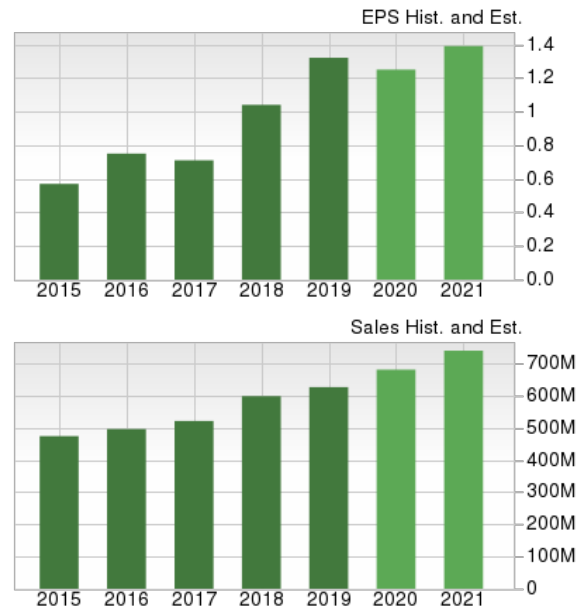
Based in Irving, TX, HMS Holdings Corp. (HMSY) offers cost containment solutions in the United States. The company also provides Coordination of Benefits ("COB") services to government and commercial healthcare payers.

Payment Integrity ("PI") comes under HMS Holdings' unique suite of Analytical Services apart from Population Health Management ("PHM") solutions. The PI segment maintained strong momentum, with first-quarter revenues improving 41.8% year over year. In the first quarter of 2020, the PHM segment saw an uptick in sales of Essette and Elli despite a revenue decline of 2.3% year over year.

The company's services enable customers to recover improper payments, reduce fraud, waste and misuse, improve outcomes, and increase retention apart from ensuring regulatory compliance.

HMS Holdings serves state Medicaid programs, commercial health plans, federal government health agencies, government and private employers, children's health insurance programs, and other healthcare payers and sponsors.

As of December 31, 2018, HMS Holdings covered over 40 state Medicaid programs and more than 325 health plans.



2019 at a Glance

Net revenues in 2019 amounted to \$626.4 million, up 4.7% on a year-over-year basis.

Analyzing the segments by product:

- Coordination of Benefits (COB) revenues - \$397.1 million (64.5%).
- Analytical Services revenues summed \$201.2 million (35.5%).



Source: Zacks Investment Research

Reasons To Buy:

- ▲ **Payment Integrity Solutions Hold Promise:** Payment Integrity ("PI") comes under HMS Holdings' unique suite of Analytical Services apart from Population Health Management ("PHM") solutions.

The company's PI services ensure healthcare payments are accurate and appropriate. These services are applicable to all customers HMS serves, including federal and state governments, commercial health plans and other at-risk or self-insured entities.

PI has been benefitting from greater throughput in the implementations process, expedited customer approvals for new PI edits, applied technology to streamline processes, increased coder productivity and accelerated revenue generation. Management expects PI to be a significant contributor to the Analytical Services wing in 2020. The company continues to witness expansion of its PI client footprint in both the commercial health plan and government markets.

Of late, the company has signed its second Medicaid managed care plan to leverage its population risk intelligence solution. The plan aims to target conditions like opioid abuse, at-risk pregnancies and chosen non-ADHD medications for those who were not receiving behavioral therapy.

Per management, HMS Holdings commenced a research project with an Australia-based digital health research organization with an aim to leverage leading U.S. and Australian Universities to research healthcare issues of critical importance. Notably, the company's work with Stanford University is focused on detecting potential risk factors for opioid abuse and misuse, which is an international healthcare crisis.

In the third quarter, PI revenues amounted to \$38 million, up 2.6% year over year. The segment experienced strong growth of more than 55% on a sequential basis as well as CMS and a number of states plus commercial clients began to lift restrictions that were in place to temporarily ease hospital administrative burdens during the pandemic. The company continued to witness more clients who are buying its prepayment clinical claims review.

- ▲ **Population Health Management Gaining Ground:** In the second quarter 2019 earnings call, HMS Holdings announced that the company has renamed its newest solution set as Population Health Management (PHM) to better align with market nomenclature. The set comes under HMS Holdings' unique suite of Analytical Services apart from PI solutions. The company's TPM services consist of population risk analytics, consumer engagement and care management solutions, which are the result of internal product development and acquisitions of Essette and Eliza in 2016 and 2017, respectively. TPM has been a significant top-line contributor for HMS Holdings.

In the third quarter, PHM revenues totaled \$13.4 million, down 11.9% on a year-over-year basis, but increased 6.2% sequentially. As the third quarter progressed, the company witnessed sales momentum in PHM with the same achieving better figures in the period than the first two quarters combined.

During the quarter, the company also had three clients go live on its new integrated platform, which combines Elli risk analytics with its Essette Care Management solution. This provides real-time data and information sharing to help enhance clinical outcomes.

The company expects the momentum in the PHM business line to continue in the near term as well. It also anticipates solid revenue growth on an annual basis driven by introduction of new and improved solutions and expansion of its share of important clients. The company continues to gain traction in the market with its sales pipeline being solid.

- ▲ **Stable Liquidity Position:** The company exited third-quarter 2020 with cash and cash equivalents and short-term investments of \$211 million, up from \$193 million sequentially. The company's long-term debt totaled \$240 million, which is flat sequentially, and is much higher than the cash and cash equivalents level. However, it exited the quarter with no current debt on its balance sheet. This is good news in terms of the company's solvency level as it has sufficient cash for debt repayment during such trying times. Moreover, the company's total debt-to-total capital of 20.8% shows a slight sequential improvement from 21.2%. The same is also lower than the industry's average of 43.4%.

HMS Holdings is likely to benefit from solid prospects in its Payment Integrity and TPM solutions. The company is consistently providing a boost to margins and profitability.

Reasons To Sell:

▼ **Shares Down:** Over the past six months, shares of the company gained 14.4% compared with the industry's rally of 34.2%. Depressed PHM revenues during the quarter are a woe along with intense competition in the cost-control space. Thus, the stock's performance remains stressed.

▼ **Strict Regulatory Environment:** HMS Holdings faces a highly regulated environment in almost every state it operates. Federal Acquisition Regulations, the U.S. Foreign Corrupt Practices Act, federal and state employment, equal opportunity and affirmative action laws, federal and state prompt pay statutes, healthcare fraud, waste and abuse laws, and more are the regulations that the company needs to comply with for carrying out its operations.

Furthermore, the company has to fulfill specific legal requirements everywhere that includes the tough antitrust regulations. Violating healthcare or other regulations under public law can result in extensive legal repercussions. These include the dismissal of important federal certifications, penalties, fines, recalls, increased costs (for fulfilling regulatory requirements), exclusion from reimbursement programs of the respective government health care system, or even a total or partial ban on business operations.

Adding to the concerns, changes in the law (especially relating to reimbursement) in such a difficult regulatory environment can also impact the company's fundamental business model and the implementation of strategy.

▼ **Cutthroat Competition in Cost-Containment Space:** The U.S. healthcare insurance benefit cost containment industry offers cost containment services, both directly and indirectly (through subcontracting). Competition is therefore robust in this dynamic industry as customers have many alternatives available to them.

The competitive environment for payment integrity services includes some of the companies that provide coordination of benefits services. Within the care management and risk analytics sector, HMS Holdings compete primarily with vendors who provide these and other population health management technology services.

HMS Holdings' primary competitors include Accenture plc, Cotiviti Corporation, DXC Technology Company, Equian LLC, EXL Service Holdings, Inc., Experian Health, IBM Watson Health, LexisNexis, MedHok, Inc. and more.

HMS Holdings faces a highly regulated environment in almost every state it operates. This apart, stiff competition in the U.S. healthcare insurance benefit cost containment industry is concerning for the company.

Last Earnings Report

HMS Holdings Earnings in Line with Estimates in Q3

HMS Holdings Corp reported adjusted earnings per share of 30 cents for third-quarter 2020, in line with the Zacks Consensus Estimate. However, the bottom line rose 20% from the year-ago quarter.

Revenues of \$165.2 million missed the Zacks Consensus Estimate by 3.4%. However, the top line rose 12.5% on a year-over-year basis.

Quarter Ending 09/2020

Report Date	Nov 06, 2020
Sales Surprise	-3.38%
EPS Surprise	0.00%
Quarterly EPS	0.30
Annual EPS (TTM)	1.08

Q3 Segmental Analysis by Product

Payment Integrity ("PI") revenues amounted to \$38 million, up 2.6% year over year.

Population Health Management ("PHM") revenues totaled \$13.4 million in the quarter under review, down 11.9% on a year-over-year basis.

Revenues at the Coordination of Benefits ("COB") segment amounted to \$113.9 million in the third quarter, up 20.3% year over year. Organic COB revenues, excluding Accent, rose 9% to \$103.1 million.

Margin Analysis

Gross profit came in at \$53.4 million, up 17.9% from the prior-year quarter. Gross margin was 32.3% of net revenues, up 149 basis points (bps) year over year.

Operating costs came in at \$26.2 million, down 7.1%.

Operating profit in the third quarter was \$27.2 million, up 59.4% from the year-ago quarter. Operating margin was 16.5%, up 484 bps from the prior-year quarter.

Financial Update

The company exited the third quarter with cash and cash equivalents of \$211 million, up from \$193.1 million at the end of the second quarter.

Cumulative net cash provided by operating activities at the end of the third quarter totaled \$92.9 million, compared with \$112.9 million a year ago.

2020 Guidance

The company has reaffirmed its 2020 guidance.

For 2020, the company reaffirmed revenue guidance at \$680-\$690 million, indicating growth of 10.5-12.1% from the year-ago figure. The Zacks Consensus Estimate for the same is pegged at \$680.7 million.

Net income is still expected in the band of \$66-\$74 million. The range suggests a decline of 4.3% to an increase of 7.2% from the year-ago period.

Valuation

HMS Holdings' shares are up 0% and 36% in the year to date and trailing 12-month periods, respectively. Stocks in the Zacks sub-industry are up 10.3% in the past six months, while that in the Zacks Medical sector are up 3.5%. Over the past year, the Zacks sub-industry and sector are up 31.7% and 7.4%, respectively.

The S&P 500 index is down 0.9% in the year to date period and 15.9% in the past year.

The stock is currently trading at 4.4X Forward 12-months sales, which compares to 4.3X for the Zacks sub-industry, 2.8X for the Zacks sector and 4.3X for the S&P 500 index.

Over the past five years, the stock has traded as high as 5.2X and as low as 1.8X, with a 5-year median 3.4X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$39 price target reflects 4.6X forward 12-months sales.

The table below shows summary valuation data for HMSY.

Valuation Multiples - HMSY					
		Stock	Sub-Industry	Sector	S&P 500
P/S F12M	Current	4.38	4.33	2.84	4.33
	5-Year High	5.16	4.33	3.17	4.34
	5-Year Low	1.77	1.62	2.26	3.20
	5-Year Median	3.35	2.19	2.84	3.68
P/B TTM	Current	3.57	4.96	4.49	6.34
	5-Year High	4.79	5.16	5.11	6.58
	5-Year Low	1.68	2.13	3.02	3.73
	5-Year Median	2.92	2.97	4.36	4.95

As of 02/01/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 6% (237 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
Accenture PLC (ACN)	Neutral	3
Cerner Corporation (CERN)	Neutral	4
Computer Programs and Systems, Inc. (CPSI)	Neutral	4
DXC Technology Company. (DXC)	Neutral	3
Allscripts Healthcare Solutions, Inc. (MDRX)	Neutral	3
NEXTGEN HEALTHCARE, INC (NXGN)	Neutral	3
International Business Machines Corporation (IBM)	Underperform	3
Inovalon Holdings, Inc. (INOV)	Underperform	2

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

Industry Comparison Industry: Medical Info Systems				Industry Peers		
	HMSY	X Industry	S&P 500	ACN	IBM	INOV
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Underperform	Underperform
Zacks Rank (Short Term)	3	-	-	3	3	2
VGM Score	C	-	-	B	C	D
Market Cap	3.26 B	556.20 M	26.43 B	159.40 B	106.13 B	3.79 B
# of Analysts	6	4	13	12	7	5
Dividend Yield	0.00%	0.00%	1.47%	1.46%	5.47%	0.00%
Value Score	C	-	-	C	A	D
Cash/Price	0.06	0.06	0.06	0.05	0.13	0.03
EV/EBITDA	20.66	-1.54	14.74	18.01	11.69	25.80
PEG F1	2.40	2.63	2.38	2.94	1.36	1.61
P/B	3.57	5.50	3.59	8.65	5.12	5.56
P/CF	22.24	26.70	14.94	23.53	7.42	22.72
P/E F1	26.45	20.77	19.57	29.44	10.60	33.05
P/S TTM	5.07	5.59	2.86	3.56	1.44	5.82
Earnings Yield	3.78%	-1.01%	4.98%	3.40%	9.44%	3.03%
Debt/Equity	0.26	0.03	0.68	0.00	2.62	1.33
Cash Flow (\$/share)	1.65	-0.05	6.83	10.52	16.24	1.13
Growth Score	C	-	-	A	D	C
Historical EPS Growth (3-5 Years)	17.03%	4.74%	9.46%	9.94%	-5.11%	3.34%
Projected EPS Growth (F1/F0)	11.20%	30.61%	12.64%	10.16%	29.64%	23.05%
Current Cash Flow Growth	-3.87%	3.19%	4.97%	17.75%	-17.30%	38.14%
Historical Cash Flow Growth (3-5 Years)	11.42%	10.83%	8.19%	12.30%	-4.81%	14.60%
Current Ratio	4.71	1.92	1.38	1.45	0.98	1.95
Debt/Capital	20.83%	6.57%	41.49%	0.32%	72.39%	57.06%
Net Margin	8.51%	-20.45%	10.61%	11.74%	7.59%	0.87%
Return on Equity	8.86%	-18.98%	15.23%	29.32%	37.52%	9.07%
Sales/Assets	0.51	0.52	0.50	1.24	0.48	0.34
Projected Sales Growth (F1/F0)	8.62%	26.64%	5.74%	8.13%	0.70%	12.83%
Momentum Score	F	-	-	D	F	F
Daily Price Change	-0.19%	1.54%	1.27%	2.34%	1.20%	4.88%
1-Week Price Change	0.23%	-2.29%	-4.02%	-5.04%	0.42%	-5.90%
4-Week Price Change	0.38%	26.01%	1.41%	-3.47%	-2.74%	38.92%
12-Week Price Change	23.65%	37.69%	5.46%	3.06%	4.34%	27.12%
52-Week Price Change	36.06%	48.65%	8.48%	19.14%	-17.59%	26.43%
20-Day Average Volume (Shares)	1,761,425	567,849	2,080,548	1,900,329	8,809,456	718,874
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.00%	0.00%	0.30%	0.00%	-2.97%	1.03%
EPS F1 Estimate 12-Week Change	2.42%	-0.48%	1.44%	2.37%	-3.99%	0.34%
EPS Q1 Estimate Monthly Change	0.00%	0.00%	0.12%	0.00%	-4.05%	6.00%

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	C
Growth Score	C
Momentum Score	F
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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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 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.