

## Intl Business Machines (IBM)

**\$116.76** (As of 04/21/20)

Price Target (6-12 Months): **\$127.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 10/09/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**3-Hold**

Zacks Style Scores:

VGM:D

Value: B

Growth: D

Momentum: D

### Summary

IBM's Q1 earnings and revenues declined year over year. Notably, adoption of cognitive applications and transaction processing platforms in March was affected by the coronavirus outbreak. For 2020, IBM has withdrawn guidance, citing uncertainty pertaining to coronavirus crisis. Nevertheless, improving position in the hosted cloud, security and analytics domains bodes well. Moreover, Red Hat acquisition has helped IBM to enhance containerized software capabilities and strengthen competitive position in the hybrid cloud market. Further, growing cloud of Watson Health and growth in Payer, Provider, Imaging and Life Sciences verticals are noteworthy. Also, gains from z15 hold promise. Notably, IBM stock has outperformed the industry in the past year. However, stiff competition in the cloud computing market and high-debt levels remain woes.

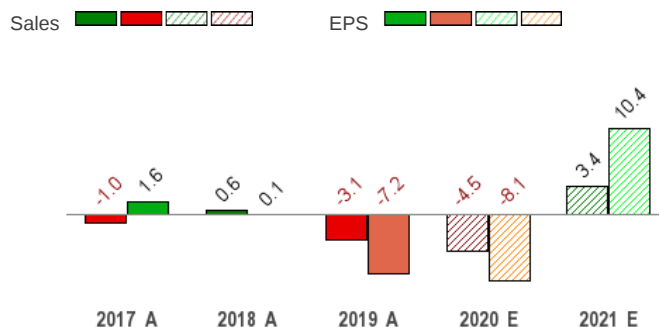
### Price, Consensus & Surprise



### Data Overview

|                            |                                                      |
|----------------------------|------------------------------------------------------|
| 52 Week High-Low           | <b>\$158.75 - \$90.56</b>                            |
| 20 Day Average Volume (sh) | <b>6,214,587</b>                                     |
| Market Cap                 | <b>\$103.7 B</b>                                     |
| YTD Price Change           | <b>-12.9%</b>                                        |
| Beta                       | <b>1.26</b>                                          |
| Dividend / Div Yld         | <b>\$6.48 / 5.5%</b>                                 |
| Industry                   | <b><a href="#">Computer - Integrated Systems</a></b> |
| Zacks Industry Rank        | <b>Bottom 32% (173 out of 253)</b>                   |

### Sales and EPS Growth Rates (Y/Y %)



|                           |                   |
|---------------------------|-------------------|
| Last EPS Surprise         | <b>3.4%</b>       |
| Last Sales Surprise       | <b>-1.4%</b>      |
| EPS F1 Est- 4 week change | <b>-14.0%</b>     |
| Expected Report Date      | <b>07/15/2020</b> |
| Earnings ESP              | <b>-7.5%</b>      |

### Sales Estimates (millions of \$)

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2021 |          |          |          |          | 76,181 E |
| 2020 | 17,571 A | 18,202 E | 17,795 E | 21,319 E | 73,700 E |
| 2019 | 18,182 A | 19,161 A | 18,028 A | 21,777 A | 77,147 A |

### EPS Estimates

|      | Q1       | Q2       | Q3       | Q4       | Annual*   |
|------|----------|----------|----------|----------|-----------|
| 2021 | \$2.26 E | \$3.16 E | \$3.57 E | \$5.22 E | \$13.00 E |
| 2020 | \$1.84 A | \$2.51 E | \$2.93 E | \$4.49 E | \$11.77 E |
| 2019 | \$2.25 A | \$3.17 A | \$2.68 A | \$4.71 A | \$12.81 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 04/21/2020. The reports text is as of 04/22/2020.

## Overview

International Business Machines Corporation has gradually evolved as a provider of cloud and data platforms.

Red Hat acquisition, in particular, has helped IBM in strengthening competitive position in the hybrid cloud market. With Red Hat buyout, the company offers Linux operating system — Red Hat Enterprise Linux — and hybrid cloud platform — Red Hat OpenShift — that aids enterprises with digital transformation.

Besides, the company provides advanced information technology solutions, computer systems, quantum computing and super computing solutions, enterprise software, storage systems and microelectronics.

Moreover, IBM has the leading position with the highest number of patent wins, which is a testament to its technical expertise in innovative research and development. In 2019, the company maintained the lead spot for the 27th year, with 9,262 patents.

Armonk, NY-based, IBM reported revenues of \$77.15 billion in 2019.

The company's five reporting segments are as follows:

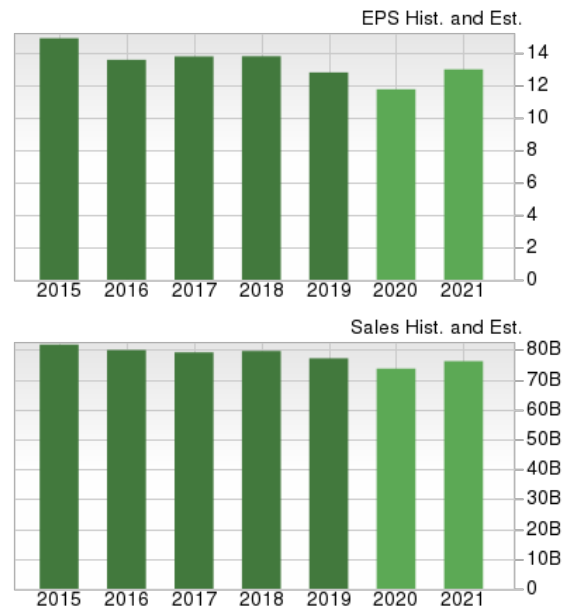
Cloud & Cognitive Software segment (30% of 2019 revenues) includes cloud and data platform, Cognitive application and transaction processing. Watson Platform, Watson Health and Watson Internet of Things (IoT) are notable offerings, which are included in Solutions Software.

Global Business Services segment (21.6%) includes consulting, global process services, application management. These professional services offer value and innovation to clients through solutions that leverage industry, technology and business strategy and process know-how.

Global Technology Services segment (35.5%) includes infrastructure services, technical support services, integration software. It provides comprehensive IT infrastructure and platform services that helps to build business value for clients.

Systems segment (9.9%) includes systems hardware and operating systems software. It offers clients with infrastructure platforms to help address the new requirements of hybrid cloud and enterprise.

Global Financing (1.8%) includes financing, primarily conducted through IBM Credit LLC (IBM Credit) and used equipment sales.



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## Reasons To Buy:

- ▲ IBM's growth is expected to be driven primarily by analytics, cloud computing, and security in the long haul. A combination of a better business mix, improving operating leverage through productivity gains and increased investment in growth opportunities will drive profitability. IBM's research and development (R&D) initiatives set it apart from its peers. On an annual basis, the company invests around 7-8% on R&D for reaping the high growth and high-value opportunities. Notably, the company was awarded the maximum number of U.S. patents for the 27th consecutive year in 2019, totaling 9,262 patents, reflecting a year-over-year rise of 2%. The patents represent inventions in artificial intelligence, cloud, cybersecurity and other strategic growth areas.
- ▲ With the strength of its global on-demand model (responding to customer demand with flexibility and speed), IBM has been gaining a lot of traction in emerging markets. As growth and investment opportunities in developed countries continue to slow down, we believe that emerging economies will play a key role for the company.
- ▲ IBM has been building its portfolio through strategic acquisitions (over 150 companies since 2000), which are generating incremental revenues, strengthening its technology leadership, and resulting in a more favorable mix of business. The company's strategy of making accretive acquisitions that can be easily integrated into its current business has expanded its product portfolio into higher-growth segments, such as cloud computing, analytics, and security. The acquisitions have also increased its scale of operations globally.
- ▲ IBM has completed the acquisition of Red Hat for \$34 billion in cash on Jul 9, 2019. Notably, the deal is one of the notable software-based acquisitions, surpassing Microsoft's LinkedIn buy for \$26.2 billion. The deal is part of the company's efforts to bolster Open Hybrid Architecture Initiative. The deal marks IBM's largest acquisition ever and the combined company is likely to alter the dynamics of "the cloud market for business." Specifically, IBM hopes to leverage Red Hat to help it become the world's largest hybrid cloud platform provider. The company anticipates Red Hat buyout to improve revenue growth approximately by a CAGR of two points over a five-year period. IBM Cloud remains the key to winning back investors' optimism regarding strength of the company's business model. IBM's cloud revenue as a percentage of total revenue has increased from 4% in 2013 to 25% in 2019. In fact, revenues from Red Hat in the first quarter improved 20% (at cc) on a normalized basis. Currently, more than 2,200 clients are utilizing Red Hat and IBM's hybrid cloud platform. We believe IBM's attempt to bolster its hybrid cloud business is likely to pave the way for the company's growth prospects. Apart from the aforementioned factors, Red Hat's expanding foothold across Asia Pacific is also anticipated to bolster IBM's TAM.
- ▲ IBM has been returning cash to shareholders for over a decade. From 2000 to 2018, IBM has returned more than \$175 billion to shareholders in the form of dividends and share repurchases. In 2019, IBM returned \$7.1 billion to shareholders through dividends and share repurchases. In first-quarter 2020, IBM returned \$1.4 billion to shareholders through dividends. Strong free cash flow generation is expected to provide the financial flexibility required for strategic investments in the changing business environment. Considering the company's liquidity and emphasis on profitability, we believe IBM's solid growth rates will be sustainable in the long run.

Expanding product portfolio, accretive acquisitions, strong free cash flow generating ability and aggressive share buyback are key positives.

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## Reasons To Sell:

- ▼ IBM is having a tough time, given the ongoing and heavily time-consuming business model transition to cloud. Though IBM's Strategic Imperatives are performing well but these are not enough yet to make up for the weakness in its traditional business. Further, foreign exchange volatility is a significant concern.
- ▼ IBM faces stiff competition in most of its markets. In the hardware enterprise servers and storage segment, the company competes against Dell, Oracle, Hewlett-Packard, and NetApp. The IT services business is also becoming increasingly competitive due to its high-margin nature and the company is facing pricing pressure from Hewlett-Packard. Although it possesses massive data centers, we believe that the company will continue facing tough competition from Amazon Web Services (AWS) and Microsoft's Azure. In the services and software space, the company competes with Accenture, Hewitt Associates, Computer Sciences and FDC. The company competes with Oracle in the middleware software market. Although IBM continues to extend and build its capabilities in the analytics arena, competition from Oracle in this space is intensifying.
- ▼ Higher profit on lower revenues indicates that the company has been lowering costs to maintain profits. We believe that the scope for further cost cutting is limited. Consequently, if costs are further reduced, there could be a negative impact on product quality. It could also delay the launch of new products, causing it to lag its peers.
- ▼ Moreover, highly leveraged balance sheet has been troubling IBM over time. At the end of first-quarter 2020, total debt amounted to \$64.3 billion compared with total cash and marketable securities of \$12 billion.

Time consuming transition to cloud, weakness in traditional businesses, cash crunch and increasing competition are primary headwinds.

## Last Earnings Report

### IBM Q1 Earnings Top Estimates, Revenues Miss

International Business Machines Corporation (IBM) reported first-quarter 2020 non-GAAP earnings of \$1.84 per share, which surpassed the Zacks Consensus Estimate by 3.4%. However, the bottom line fell 18% on a year-over-year basis.

Revenues of \$17.57 billion missed the Zacks Consensus Estimate by 1.4% and declined 3.4% on a year-over-year basis. At constant currency (cc), the top line remained flat. However, adjusting for currency and divested businesses, the top line improved 0.1%.

Markedly, total Cloud revenues came in at \$5.4 billion during the quarter, up 19% year over year. Adjusting for currency and divested businesses, total cloud revenues increased 23%.

Revenues from signings increased 19% (at cc) in the first quarter to \$8.9 billion. Backlog remained flat (at cc) on a year-over-year basis and amounted to \$107.8 billion.

### Synergies from Red Hat Acquisition

Revenues from Red Hat in the first quarter rallied 20% (at cc) on a normalized basis. Infrastructure for Red Hat continued to grow in double-digits. Moreover, OpenShift and Ansible have supported advancements in application and technology developments.

Further, the buyout has helped IBM to enhance containerized software capabilities and accelerate service engagement. Currently, more than 2,200 clients are using Red Hat and IBM's hybrid cloud platform.

### Geographic Revenue Details

Revenues from Americas remained flat year over year (excluding divestiture impacts) and came in at \$8.2 billion. Revenues from Europe, Middle-East and Africa were \$5.5 billion, up 1% year over year. Meanwhile, revenues from Asia-Pacific remained flat on a year-over-year basis and came in at \$3.9 billion.

### Cloud & Cognitive Software Segment

Cloud & Cognitive Software segment's revenues-external rose 5.5% year over year (up 6.8% on cc basis) to \$5.2 billion. The upside can be attributed to synergies from Red Hat acquisition and growth in cloud, Data & AI, security and IoT solutions. Markedly, cloud revenues soared 86% to \$1.3 billion.

Revenues in the Cloud and Data platforms increased 34% year over year to \$2.5 billion. The platform is gaining from Red Hat's acquisition synergies and traction in Cloud Paks suite.

International Business Machines Corporation price-consensus-eps-surprise-chart | International Business Machines Corporation Quote

Adoption of cognitive applications and transaction processing platforms in March was affected by the coronavirus outbreak. Revenues from the Cognitive Applications declined 3% year over year to reach \$1.2 billion. Revenues from the Transaction Processing Software, which includes software that runs mission-critical workloads, declined 15% on a year-over-year basis to reach \$1.5 billion.

### Global Business Services Segment

Revenues in the Global Business Services-external segment totaled \$4.14 billion, which declined 0.5% (up 0.9% at cc) from the year-ago quarter's figure.

Consulting revenues increased 5% year over year at cc on solid performance of IBM's digital business to \$2.1 billion. Application Management and Global Process Services revenues declined 2% and 7% (at cc) year over year to reach \$1.8 billion and \$0.2 billion, respectively.

### Global Technology Services Segment

Revenues from Technology Services-external fell 5.9% (down 4% at cc) from the year-ago quarter to \$6.47 billion.

Segmental revenues pertaining to cloud advanced 12% at cc from the prior-year quarter's reported figure to \$2.3 billion.

Infrastructure & Cloud Services and Technical Support Services revenues declined 4% and 5% (at cc) year over year to \$4.9 billion and \$1.6 billion, respectively.

### Systems Revenues

Systems revenues-external rose 3% (up 4.1% at cc) on a year-over-year basis to \$1.4 billion, primarily owing to growth in the IBM Z and Storage Systems.

Systems Hardware revenues increased 10% (at cc) year over year to \$1 billion. Operating Systems Software declined 9% (at cc) year over year to \$0.4 billion.

IBM Z revenues surged 61% year over year owing to gains from z15 and higher demand for data privacy and resiliency solutions across hybrid cloud. However, Power revenues fell 32% from the year-ago quarter's tally.

Quarter Ending 03/2020

| Report Date      | Apr 20, 2020 |
|------------------|--------------|
| Sales Surprise   | -1.38%       |
| EPS Surprise     | 3.37%        |
| Quarterly EPS    | 1.84         |
| Annual EPS (TTM) | 12.40        |

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Storage revenues improved 19% year over year owing to growth in high-end storage systems.

Segmental revenues pertaining to cloud advanced 10% at cc from the prior-year quarter's reported figure, to \$0.4 billion.

Finally, **Global Financing** (includes financing and used equipment sales) revenues-external fell 26.2% year over year and 24.9% at cc to \$299 million.

#### **Operating Details**

Non-GAAP gross margin expanded 150 basis points (bps) year over year and came in at 46.2%. The gross margin benefited from synergies from Red Hat acquisition, high-value software, and systems contributions.

Non-GAAP R,D&E expenses increased 13.4% year over year to \$1.63 billion.

Non-GAAP selling, general and administration (S,G&A) expenses increased 24.2% year over year to \$5.67 billion.

Non-GAAP pre-tax income margin from continuing operations came in at 3.9%, from 12.3% reported in the year-ago period.

#### **Balance Sheet & Cash Flow Details**

As of Mar 31, 2020, IBM had \$12 billion in total cash and marketable securities compared with \$9 billion as of Dec 31, 2020.

Total debt (which includes \$22.3 billion from Global Financing debt) was \$64.3 billion, compared with \$62.9 million reported in the last reported quarter.

The company reported cash flow from operations of \$4.5 billion and generated free cash flow of \$1.4 billion in the first quarter.

Moreover, the company returned \$1.4 billion to shareholders through dividends.

#### **Withdraws Guidance for 2020**

For 2020, IBM has withdrawn guidance, citing uncertainty pertaining to coronavirus crisis. The company stated that it will reassess its financial position "based on the clarity of the macroeconomic recovery at the end of the second quarter."

The company had earlier projected non-GAAP earnings per share to be at least \$13.35.

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## Recent News

On Apr 9, it was announced that IBM Services were adopted by Prysmian Group to enhance its technological infrastructure. Per the terms of the three-year deal, Prysmian will utilize IBM Cloud capabilities and implement a hybrid cloud strategy.

On Apr 9, IBM announced three-year collaboration with the National University of Singapore to advance quantum computing research and training.

On Apr 3, IBM announced that its Public Cloud has been adopted by Movius to help its clients with regulatory and data protection solutions. Notably, Movius will host its MultiLine application on IBM's cloud, which will enable its clients to leverage IBM's highly efficient and secure cloud services to protect sensitive data.

On Mar 25, IBM rolled out free tools, based on legitimate information, which will help people in the United States track the spread of the coronavirus pandemic and help them stay informed. The new offerings include an online dashboard, run on IBM's public cloud, which analyses data from WHO and several national, state and local governments leveraging IBM Watson.

On Mar 11, IBM announced new Natural Language Processing (NLP) capabilities to IBM Watson, with an aim to enhance business value of data.

On Jan 28, IBM added AI capabilities to its TRIRIGA solution to help real estate and facility management professionals better utilize office space and deliver a more engaging workplace experience.

On Jan 23, IBM and Yara announced collaboration in a bid to develop an open data exchange for farm and field data, aimed at improving efficiency, transparency and sustainability of global food production.

## Valuation

IBM shares are down 12.9% in the year-to-date period and 16.8% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are down 18% and 6.3% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry is down 19.9%, while the sector is up 0.9%.

The S&P 500 index is down 12.5% in the year-to-date period and 4.2% in the past year.

The stock is currently trading at 9.47X forward 12-month earnings, which compares with 8.99X for the Zacks sub-industry, 21.29X for the Zacks sector and 19.23X for the S&P 500 index.

Over the past five years, the stock has traded as high as 13.12X and as low as 7.32X, with a 5-year median of 10.49X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$127 price target reflects 10.3X forward 12-month earnings.

The table below shows summary valuation data for IBM

| Valuation Multiples - IBM |               |       |              |        |         |
|---------------------------|---------------|-------|--------------|--------|---------|
|                           |               | Stock | Sub-Industry | Sector | S&P 500 |
| P/E F12M                  | Current       | 9.47  | 8.99         | 21.29  | 19.23   |
|                           | 5-Year High   | 13.12 | 18.34        | 21.91  | 19.34   |
|                           | 5-Year Low    | 7.32  | 7.93         | 16.71  | 15.19   |
|                           | 5-Year Median | 10.49 | 10.33        | 19.21  | 17.45   |
| P/S F12M                  | Current       | 1.32  | 1.19         | 3.19   | 3.14    |
|                           | 5-Year High   | 2.19  | 1.87         | 3.59   | 3.44    |
|                           | 5-Year Low    | 1.12  | 0.76         | 2.32   | 2.54    |
|                           | 5-Year Median | 1.73  | 1.53         | 3.09   | 3.01    |
| EV/EBITDA TTM             | Current       | 8.78  | 7.83         | 10.48  | 10.31   |
|                           | 5-Year High   | 11.85 | 10.86        | 12.84  | 12.87   |
|                           | 5-Year Low    | 5.4   | 3.92         | 7.56   | 8.28    |
|                           | 5-Year Median | 8.57  | 8.42         | 10.61  | 10.78   |

As of 04/21/2020

## Industry Analysis Zacks Industry Rank: Bottom 32% (173 out of 253)



## Top Peers

| Company (Ticker)             | Rec        | Rank |
|------------------------------|------------|------|
| HP Inc. (HPQ)                | Outperform | 2    |
| Accenture PLC (ACN)          | Neutral    | 3    |
| Amazon.com, Inc. (AMZN)      | Neutral    | 3    |
| Blackbaud, Inc. (BLKB)       | Neutral    | 3    |
| salesforce.com, inc. (CRM)   | Neutral    | 3    |
| Microsoft Corporation (MSFT) | Neutral    | 3    |
| Oracle Corporation (ORCL)    | Neutral    | 3    |
| SAP SE (SAP)                 | Neutral    | 3    |

| Industry Comparison Industry: Computer - Integrated Systems |           |            |           | Industry Peers |            |            |
|-------------------------------------------------------------|-----------|------------|-----------|----------------|------------|------------|
|                                                             | IBM       | X Industry | S&P 500   | AMZN           | HPQ        | MSFT       |
| Zacks Recommendation (Long Term)                            | Neutral   | -          | -         | Neutral        | Outperform | Neutral    |
| Zacks Rank (Short Term)                                     | 3         | -          | -         | 3              | 2          | 3          |
| VGM Score                                                   | D         | -          | -         | B              | A          | B          |
| Market Cap                                                  | 103.73 B  | 296.98 M   | 18.60 B   | 1,160.63 B     | 20.62 B    | 1,276.45 B |
| # of Analysts                                               | 6         | 2.5        | 14        | 12             | 5          | 14         |
| Dividend Yield                                              | 5.55%     | 0.00%      | 2.28%     | 0.00%          | 4.89%      | 1.22%      |
| Value Score                                                 | B         | -          | -         | D              | A          | C          |
| Cash/Price                                                  | 0.08      | 0.19       | 0.05      | 0.05           | 0.19       | 0.10       |
| EV/EBITDA                                                   | 8.39      | -5.60      | 11.41     | 30.22          | 4.40       | 20.89      |
| PEG Ratio                                                   | 2.51      | 1.78       | 2.13      | 3.60           | 2.97       | 2.35       |
| Price/Book (P/B)                                            | 5.15      | 2.29       | 2.52      | 18.67          | NA         | 11.59      |
| Price/Cash Flow (P/CF)                                      | 5.91      | 7.67       | 10.05     | 34.72          | 5.15       | 26.41      |
| P/E (F1)                                                    | 9.92      | 8.76       | 17.41     | 83.48          | 6.43       | 30.22      |
| Price/Sales (P/S)                                           | 1.36      | 1.36       | 1.98      | 4.14           | 0.35       | 9.51       |
| Earnings Yield                                              | 10.08%    | -0.68%     | 5.58%     | 1.20%          | 15.53%     | 3.31%      |
| Debt/Equity                                                 | 2.62      | 0.17       | 0.71      | 0.38           | -2.41      | 0.64       |
| Cash Flow (\$/share)                                        | 19.75     | 0.34       | 7.01      | 67.05          | 2.80       | 6.35       |
| Growth Score                                                | D         | -          | -         | A              | B          | B          |
| Hist. EPS Growth (3-5 yrs)                                  | -3.50%    | 0.13%      | 10.92%    | 110.19%        | -8.88%     | 17.68%     |
| Proj. EPS Growth (F1/F0)                                    | -8.13%    | -12.74%    | -4.01%    | 21.20%         | 0.09%      | 16.92%     |
| Curr. Cash Flow Growth                                      | 2.09%     | -1.75%     | 5.93%     | 31.33%         | 8.32%      | 19.70%     |
| Hist. Cash Flow Growth (3-5 yrs)                            | -3.76%    | -3.63%     | 8.55%     | 49.26%         | -18.40%    | 11.99%     |
| Current Ratio                                               | 0.96      | 1.72       | 1.24      | 1.10           | 0.73       | 2.80       |
| Debt/Capital                                                | 72.36%    | 14.69%     | 42.91%    | 27.39%         | NA         | 39.05%     |
| Net Margin                                                  | 11.78%    | -4.01%     | 11.57%    | 4.13%          | 5.16%      | 33.02%     |
| Return on Equity                                            | 57.55%    | -1.00%     | 16.74%    | 21.07%         | -261.23%   | 40.41%     |
| Sales/Assets                                                | 0.50      | 0.88       | 0.54      | 1.41           | 1.81       | 0.48       |
| Proj. Sales Growth (F1/F0)                                  | -4.47%    | -2.23%     | -0.39%    | 20.02%         | -5.98%     | 11.64%     |
| Momentum Score                                              | D         | -          | -         | C              | F          | B          |
| Daily Price Chg                                             | -3.03%    | -0.80%     | -2.84%    | -2.74%         | -6.12%     | -4.14%     |
| 1 Week Price Chg                                            | -1.14%    | -1.12%     | 0.42%     | 16.26%         | -2.82%     | 8.15%      |
| 4 Week Price Chg                                            | 10.69%    | 10.04%     | 10.78%    | 20.00%         | -6.79%     | 13.13%     |
| 12 Week Price Chg                                           | -16.33%   | -32.31%    | -22.58%   | 25.62%         | -33.36%    | 1.43%      |
| 52 Week Price Chg                                           | -16.86%   | -17.37%    | -16.41%   | 21.02%         | -28.22%    | 33.78%     |
| 20 Day Average Volume                                       | 6,214,587 | 139,481    | 2,973,334 | 5,791,247      | 14,864,682 | 52,451,728 |
| (F1) EPS Est 1 week change                                  | -7.71%    | 0.00%      | 0.00%     | 0.00%          | 0.00%      | -0.28%     |
| (F1) EPS Est 4 week change                                  | -14.03%   | -14.52%    | -6.75%    | 1.72%          | -6.78%     | -1.36%     |
| (F1) EPS Est 12 week change                                 | -13.89%   | -26.26%    | -11.09%   | 6.50%          | -1.88%     | 3.65%      |
| (Q1) EPS Est Mthly Chg                                      | -24.74%   | -24.74%    | -9.83%    | -5.46%         | -12.42%    | -3.39%     |

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## Zacks Stock Rating System

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

### Zacks Recommendation

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

### Zacks Rank

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

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### Zacks Style Scores

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

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

|                |          |
|----------------|----------|
| Value Score    | <b>B</b> |
| Growth Score   | <b>D</b> |
| Momentum Score | <b>D</b> |
| VGM Score      | <b>D</b> |

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.

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### Disclosures

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