

Oracle Corp. (ORCL)

\$57.49 (As of 10/26/20)

Price Target (6-12 Months): **\$61.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 03/18/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:C

Value: B

Growth: D

Momentum: B

Summary

Oracle's is gaining from rapid adoption of data cloud solutions and Autonomous Database. Strong uptake of cloud-based solutions, comprising NetSuite ERP, Fusion ERP and Fusion HCM, aided revenue growth. Also, companies like Xactly, 8x8 and Zoom Video Communications have selected Oracle Cloud Infrastructure services to address business needs, which is a testament to the strength of its cloud offerings. Solid demand for the Oracle Dedicated Region Cloud@Customer supported by ML is anticipated to drive the top line. Although the company's shares have underperformed on a year-to-date basis, these factors are expected to help it grow in 2020. However, coronavirus crisis led business impacts remain an overhang on renewals and payments. Rise in spend on product enhancements amid stiff competition in the cloud market is likely to weigh on margins.

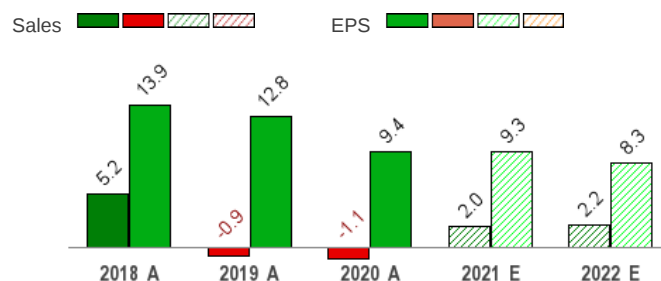
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$62.60 - \$39.71
20-Day Average Volume (Shares)	8,815,297
Market Cap	\$173.1 B
Year-To-Date Price Change	8.5%
Beta	0.79
Dividend / Dividend Yield	\$0.96 / 1.7%
Industry	Computer - Software
Zacks Industry Rank	Top 46% (113 out of 248)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	8.1%
Last Sales Surprise	2.4%
EPS F1 Estimate 4-Week Change	0.5%
Expected Report Date	12/10/2020
Earnings ESP	0.0%

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	9,561 E	10,005 E	10,162 E	10,953 E	40,705 E
2021	9,368 A	9,784 E	9,936 E	10,733 E	39,840 E
2020	9,220 A	9,615 A	9,797 A	10,441 A	39,072 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.99 E	\$1.08 E	\$1.13 E	\$1.35 E	\$4.56 E
2021	\$0.93 A	\$1.00 E	\$1.04 E	\$1.24 E	\$4.21 E
2020	\$0.81 A	\$0.90 A	\$0.97 A	\$1.20 A	\$3.85 A

*Quarterly figures may not add up to annual.

P/E TTM	14.4
P/E F1	13.7
PEG F1	1.4
P/S TTM	4.4

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 10/26/2020. The reports text is as of 10/27/2020.

Overview

Redwood City, CA-based Oracle Corporation was founded in 1977 and incorporated later in 2005. Oracle is one of the largest enterprise-grade database, middleware and application software providers.

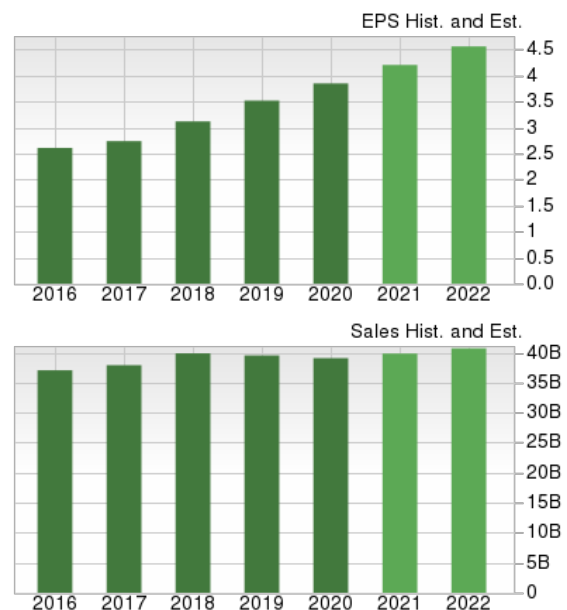
Oracle has expanded its cloud computing operations over the last couple of years. The company offers cloud solutions and services that can be used to build and manage various cloud deployment models. Built upon open industry standards such as SQL, Java and HTML5, Oracle Cloud provides access to application services, platform services and infrastructure services for a subscription. Through its Oracle Enterprise Manager offering, the company manages cloud environments.

Oracle's software and hardware products and services include Oracle Database, Oracle Fusion Middleware, Java and Oracle Engineered Systems. Oracle Engineered Systems include Exadata Database Machine, Exalogic Elastic Cloud, Exalytics In-Memory Machine, SPARC SuperCluster, Virtual Compute Alliance, Oracle Database Appliance, Oracle Big Data Appliance and ZFS Storage. Notably, with the acquisition of Sun Microsystems in Jan 2010, Oracle began selling hardware products and services, primarily comprising computer server and storage products.

Oracle reported revenues of \$39.07 billion in fiscal 2020. The company reports its new software licenses under its new Cloud license and on-premise license segment. Further, the company merged its Cloud SaaS, Cloud PaaS and IaaS along with its software license updates and product support into Cloud services and license support.

Total Cloud services and license support revenues came in at \$27.39 billion in fiscal 2020. Further, total cloud license and on-premise license came in at \$5.13 billion in fiscal 2020.

Oracle faces significant competition in most of its operational markets (database, applications, storage, cloud computing) from the likes of Dell, IBM, Hewlett-Packard, Microsoft, SAP, salesforce.com, Workday and Teradata.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ Oracle is gaining ground in its cloud business. Both its software-as-a-service (SaaS) and platform-as-a-service (PaaS) products should grow very strongly over the next few years as enterprises increasingly transition to the cloud. Bookings are also picking up. Overall, we believe that Oracle's new cloud-based offerings hold promise. Notably, companies like 8x8 and Zoom Video Communications have selected Oracle Cloud Infrastructure services to address business needs, which is a testament to the strength of its cloud offerings. Moreover, the cloud services offering has opened up a new source of recurring revenues (subscriptions), which is expected to improve visibility. Oracle is expected to benefit from the ongoing in-premise to cloud transitions leveraging its new technological developments. Additionally, the company is witnessing strong growth in Cloud HCM, which is being purchased as a part of an ERP cloud application suite. Also, the migration of several midsized SAP customers to Fusion ERP is an upside. Management announced that Fusion HCM, NetSuite ERP and Fusion ERP businesses were up 22%, 23% and 33%, respectively, in the fiscal first quarter. Fusion ERP has customer strength of more than 7,000. Fusion app business improved 26% with surge in Fusion retention rates.
- ▲ Oracle enjoys a dominant position in the enterprise software and database management system (DBMS) software market. Markedly, the company's enormous strength in cloud technology has been a key force behind growth in database business. Among infrastructure, DBMS is expected to record strong growth driven by Big Data and digitalization initiatives. We believe that Oracle's leading position in the DBMS software market will make it the primary beneficiary of this increased spending. The latest autonomous database supported by machine learning is expected to boost competitive position against the likes of AWS. The next-generation autonomous database launched by Oracle, supported by ML, is also gaining traction. New product introductions are likely to boost growth in this category. Also, autonomous database in Gen2 Infrastructure is witnessing rapid adoption. Markedly, autonomous database consumption revenues improved 64% and annualized consumption revenue for Oracle Cloud Infrastructure (OCI) services soared 130% in fiscal first quarter.
- ▲ Oracle remains very active on the acquisition front and chooses companies that can be easily integrated within its existing or new product lines. From time to time, the company also acquires organizations with competing technologies with the intention of killing rival products. The NetSuite acquisition helped the company to fast penetrate the ERP and small & medium companies' segment. Acquisitions like Maxymiser and CloudMonkey helped Oracle in developing cloud-based software and testing tools & platforms for mobile apps. To-date, it's most important acquisition remains that of Sun, which helped it to enter the hardware market. The company has aggressively pursued acquisitions that will boost its presence in the cloud computing and database markets, and enhance cloud data services. We believe that Oracle will continue to pursue strategic acquisitions to improve its market share and top line in the long haul. Apart from these, Oracle also boasts partnerships with Accenture and Microsoft for better harnessing cloud capabilities and expanding its clientele.
- ▲ Oracle has historically returned significant cash through a combination of share repurchases and dividend. Operating cash flow and free cash flow for the 12 months ended Aug 31, 2020 came in at \$13.092 billion and \$11.478 billion, respectively. Oracle repurchased 90 million shares worth approximately \$5 billion during the fiscal first quarter and paid out dividends worth \$3 billion during the 12 months ended Aug 31, 2020. Over the past 12 months, the company has repurchased 361 million shares worth \$19.2 billion. Over the last 10 years, Oracle has reduced the shares outstanding by nearly 40%. The company has also increased share repurchases authorization by \$15 billion. The company's ability to generate solid free cash flow is expected to help it sustain current dividend payout (0.27) level at least in the near term.

Oracle's growing cloud business and the latest autonomous database is expected to boost competitive position in the long haul.

Reasons To Sell:

- ▼ Although engineered systems are expected to drive growth, we believe that lower hardware volumes will continue to hurt Oracle's top-line growth over the next couple of years. Moreover, hardware is significantly a lower-margin business that will keep margins under pressure, going forward. Further, Oracle faces significant competition in most of its operational markets (database, applications, storage, cloud computing) from the likes of Dell-EMC, IBM, Hewlett-Packard, Microsoft, SAP, salesforce.com, Workday and Teradata. The trend toward consolidation is increasing competition for the company in most of these markets. To differentiate products here, large vendors are entering into alliances or partnerships to offer integrated and differentiating solutions. As a result, Oracle continues to face severe pricing pressure and lengthy sales cycles in its core business, which is hurting profitability. Moreover, stiff competition in the cloud is expected to hurt margins and will make revenue growth difficult to come by over the long run.
- ▼ Acquisitions have played an important part in Oracle's growth trajectory over the years. Being a late entrant in the cloud computing space, the company is trying to build its position through aggressive acquisitions. The company is making significant investment in these acquisitions in order to catch up with AWS, Microsoft Azure, salesforce and IBM. As the SaaS market is getting overcrowded, we believe that all acquisitions may not perform as per company expectations, which will eventually hurt profitability. Moreover, large acquisitions can negatively impact the company's balance sheet in the form of a high level of goodwill and intangible assets, which totaled \$47.27 billion or 41.6% of total assets as of Aug 31, 2020.
- ▼ Oracle has been embroiled in various legal tangles. In 2016, Oracle faced defeat in two of its most high-profile lawsuits. In December 2017, the company renewed the legal fight over Android against Alphabet. In the recent filing Oracle challenged the idea of "fair use," and alleged that Google lied when it said Android didn't compete directly with Oracle's ability to license its own products to customers. Moreover, lawsuit expenses pertaining to U.S. Department of Defense's (DoD) Joint Enterprise Defense Infrastructure (JEDI) cloud contract does not bode well for Oracle's business opportunities with DoD. This is likely to weigh on the company's bottom line and might impact the stock performance. We believe such high legal risks, if materialized, might wreak havoc on the company's financials.

Stiff competition, lawsuits and integration risks are likely to impact Oracle as it transitions from licensing to cloud.

Last Earnings Report

Oracle Q1 Earnings & Revenues Surpass Estimates

Oracle reported first-quarter fiscal 2021 non-GAAP earnings of 93 cents per share, beating the Zacks Consensus Estimate by 8.14%. Further, the bottom line was up 15% from the year-ago quarter (up 14% at constant currency or cc). Further, the reported figure surpassed the higher end of management's guided range of 85-89 cents.

Moreover, non-GAAP revenues improved 2% (up 2% at cc) year over year to \$9.368 billion, outpacing the Zacks Consensus Estimate by 2.39%. For first-quarter fiscal 2021, Oracle had anticipated total revenue growth rate on a year-over-year basis in the range of (1%) to 1% at USD and 0-2% at cc.

Top Line in Detail

Oracle reported total revenues (on a GAAP basis) of \$9.367 billion, up 2% (up 2% at cc) year over year, primarily led by improvement in cloud business.

Revenues by Offerings

Oracle's top line benefited from the ongoing cloud-based momentum. **Cloud services and license support** revenues (74% of total revenues) in the reported quarter increased 2% year over year (up 2% at cc) to \$6.947 billion.

Break up of Cloud services and license support revenues

Applications revenues (contributed 40.5% to total cloud services and license support revenues) amounted to \$2.816 billion, up 4% year over year (up 4% at cc).

Infrastructure related revenues (59.5%) were \$4.131 billion, up 1% on a year-over-year basis (up 1% at cc).

Meanwhile, **Cloud license and on-premise license** revenues (9%) improved 9% year over year (up 8% at cc) to \$886 million.

Hardware revenues (9%) were \$814 million, flat (flat at cc) on a year-over-year basis.

Services revenues (8%) declined 8% (down 8% at cc) to \$720 million.

Revenues by Geography

Revenues from **Americas** (representing 54.1% of total revenues) declined 1.6% year over year to \$5.068 billion.

Revenues from **Europe/Middle East/Africa** (29.2%) improved 7.2% from the year-ago quarter's figure to \$2.738 billion.

Revenues from **Asia Pacific** (16.7%) increased 3% from the year-ago quarter level to \$1.561 billion.

Expanding Clientele Holds Promise

Management announced that Fusion HCM, NetSuite ERP and Fusion ERP businesses were up 22%, 23% and 33%, respectively, in the fiscal first quarter. Fusion ERP has customer strength of more than 7,000.

Fusion app business improved 26% with surge in Fusion retention rates. Markedly, autonomous database consumption revenues improved 64% and annualized consumption revenue for Oracle Cloud Infrastructure (OCI) services soared 130%.

Additionally, the company is witnessing strong growth in Cloud HCM, which is increasingly being purchased as part of the company's ERP cloud application suite. Further, the migration of several mid-sized SAP customers to Fusion ERP and Fusion HCM remains a tailwind.

Expanding clientele is enabling the company to maintain leading position in cloud ERP market. Management is optimistic on latest ERP deal wins from companies including ICON Health & Fitness, DHL Supply Chain, Iron Mountain, and CTB, a Berkshire Hathaway Company. Key HCM wins include Albertsons, Randstad India, and skeyes.

Moreover, the next-generation autonomous database launched by Oracle, supported by ML, is gaining traction. In the reported quarter, Oracle added new Autonomous Database cloud customers. New product introductions are likely to bolster growth in this category. Markedly, autonomous database in Gen2 public cloud infrastructure is witnessing rapid adoption.

Oracle's latest Exadata Cloud@Customer service offering is also gaining traction among on-premise customers.

Noteworthy deal wins of OCI and autonomous database during the reported quarter include Xactly, United Breweries of India, Safaricom PLC, Schneider Electric, McDonald's, Rinna, Polycab India, Arterra Wines Canada, and Lahore University of Management Sciences.

Operating Details

Quarter Ending	08/2020
Report Date	Sep 10, 2020
Sales Surprise	2.39%
EPS Surprise	8.14%
Quarterly EPS	0.93
Annual EPS (TTM)	4.00

Non-GAAP operating expenses fell 4% year over year (down 3% at cc) to \$5.19 billion. As a percentage of non-GAAP revenues, the figure contracted 290 basis points (bps) to 55.4%.

Non-GAAP operating income during the reported quarter was \$4.178 billion, up 9% year over year (up 8% at cc).

Non-GAAP operating margin expanded 293 bps (expanded 268 bps at cc) on a year-over-year basis to 45%.

Balance Sheet & Cash Flow

As of Aug 31, 2020, Oracle had cash & cash equivalents, and marketable securities of \$42.279 billion, compared with \$43.057 billion as of May 21, 2020.

Operating cash flow and free cash flow for the 12 months ended May 21, 2020 came in at \$13.092 billion and \$11.478 billion, respectively.

Share Repurchases & Dividends

Oracle repurchased 90 million shares worth approximately \$5 billion during the fiscal first quarter and paid out dividends worth \$3 billion during the 12 months ended Aug 31, 2020.

Over the past 12 months, the company has repurchased 361 million shares worth \$19.2 billion. Over the last 10 years, Oracle has reduced the shares outstanding by nearly 40%.

On Sep 10, 2020, the company declared a quarterly dividend of 24 cents per share, payable on Oct 22, 2020, to shareholders as on Oct 8, 2020.

Guidance

For second-quarter fiscal 2021, Oracle anticipates total revenue growth rate on a year-over-year basis in the range of 1-3% at USD and 0-2% at cc.

Oracle expects non-GAAP earnings per share between 98 cents and \$1.02 at USD, and 96 cents and \$1 at cc.

Recent News

On Oct 15, Oracle unveiled the new generation of its Exadata Cloud Service, which runs on the Exadata X8M platform, in a bid to aid customers accelerate complex transaction processing and data analytics. The service will be available on Oracle Cloud Infrastructure.

On Oct 6, Oracle announced that Paytronix has selected cloud-based Oracle MICROS Symphony POS (point of sale) solutions to be integrated with its Order & Delivery platform. This will enable restaurateurs to augment digital experience for their patrons.

On Sep 29, Oracle announced that Zoom Video Communications and Sprinklr have selected its Oracle Fusion Cloud Customer Experience suite to provide customers with improved engagement and interaction. The company also updated its Oracle Unity platform to help B2B (business to business) and B2C (business to consumer) clients to improve customer interaction and boost revenues.

On Sep 25, Oracle announced addition of new tools — Cloud Guard and Maximum Security Zones — to its Oracle Cloud Infrastructure (OCI) to boost security for customers. The tools will be available across all its cloud commercial regions at no extra cost.

On Sep 22, Oracle announced that it has won the litigation against Office of Federal Contract Compliance Programs (OFCCP), as the Department of Labor Administration Law Judge ruled across the board in Oracle's favor and found no evidence whatsoever of discrimination at Oracle.

On Sep 21, Oracle announced that it has bagged a deal from Altair, a software and cloud solutions provider, for migrating the latter's high computing performance (HPC) workload to OCI.

On Sep 21, President Donald Trump announced that ByteDance, TikTok app's parent company, has received "a tentative approval" for a deal with the U.S. Government. Per the agreement, Oracle and Walmart will invest to acquire 12.5% and 7.5%, respectively, of the newly formed TikTok Global business. TikTok is now devising a new company, TikTok Global, through which all TikTok services will be offered to users in the United States and most of the users in the rest of the world. Moreover, Oracle will become TikTok's secure cloud provider, which will intensify competition in the cloud space.

On Sep 16, Oracle expanded Oracle Government Cloud regions with new National Security Regions for US Intelligence Community (IC) and Department of Defense (DoD) customers, to address IC and DoD needs at DISA Impact Level 6, Secret and Top Secret security levels, with robust security controls.

On Sep 15, Oracle announced that Xactly, a notable cloud-based sales performance management software provider, will utilize Oracle Cloud Infrastructure to run Incent SaaS application and boost performance.

On Sep 14, Oracle confirmed the statement by Secretary of the Treasury, Steven T. Mnuchin. Oracle is a part of the proposal submitted by ByteDance, TikTok app's parent company, to the Treasury Department, per which it will serve as the trusted technology provider.

On Sep 10, 2020, Oracle declared a quarterly dividend of 24 cents per share, payable on Oct 22, 2020, to shareholders as on Oct 8, 2020.

On Aug 13, Oracle announced that its Cloud Infrastructure and Autonomous Database is gaining traction across enterprises in Asia, driven by benefits comprising enhanced security and management, higher-performance and cost effectiveness. Key deal wins include Nissan, NRI, Hansol PNS and 7 Eleven in the Philippines.

On Aug 6, Oracle announced availability of Oracle Cloud VMware Solution. The latest offering is a dedicated, cloud-native VMware-based environment to aid enterprises shift production VMware workloads to Oracle Cloud Infrastructure.

On Aug 5, Oracle announced San Jose Cloud Region, which marks its 25th Cloud Region globally. The latest development is part of the company's plan to add 11 more Cloud Regions by Jul 21, bringing the total to 36.

Valuation

Oracle shares are up 5.2% in the year-to-date period and 8.5% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks

Computer & Technology sector are up 28.1% and 24.6% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are up 37.1% and 33.1%, respectively.

The S&P 500 index is up 5.8% in the year-to-date period and 12.3% in the past year.

The stock is currently trading at 13.77X forward 12-month earnings compared with 31.68X for the Zacks sub-industry, 26.46X for the Zacks sector and 21.84X for the S&P 500 index.

Over the past five years, the stock has traded as high as 19.31X and as low as 10.66X, with a 5-year median of 15.55X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$61 price target reflects 14.61X forward 12-month earnings.

The table below shows summary valuation data for ORCL

Valuation Multiples - ORCL					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	13.77	31.68	26.46	21.84
	5-Year High	19.31	35.41	28	23.47
	5-Year Low	10.66	19.26	16.95	15.27
	5-Year Median	15.55	25.54	19.95	17.68
P/S F12M	Current	4.49	7.38	4.15	4.05
	5-Year High	5.72	8.23	4.48	4.31
	5-Year Low	3.15	4.26	2.77	3.18
	5-Year Median	4.54	5.85	3.44	3.67
EV/Sales TTM	Current	5.24	8.4	4.9	3.91
	5-Year High	5.43	9.44	5.22	4.14
	5-Year Low	3.47	3.66	2.85	2.61
	5-Year Median	4.68	5.88	3.83	3.56

As of 10/26/2020

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Top 46% (113 out of 248)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Adobe Systems Incorporated (ADBE)	Neutral	3
salesforce.com, inc. (CRM)	Neutral	3
Hewlett Packard Enterprise Company (HPE)	Neutral	3
International Business Machines Corporation (IBM)	Neutral	4
Intel Corporation (INTC)	Neutral	3
Microsoft Corporation (MSFT)	Neutral	2
SAP SE (SAP)	Neutral	3
VMware, Inc. (VMW)	Neutral	3

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

Industry Comparison Industry: Computer - Software				Industry Peers		
	ORCL	X Industry	S&P 500	ADBE	IBM	MSFT
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	3	4	2
VGM Score	C	-	-	B	B	C
Market Cap	173.10 B	1.75 B	24.22 B	227.96 B	99.94 B	1,588.80 B
# of Analysts	12	4	14	11	7	14
Dividend Yield	1.67%	0.00%	1.61%	0.00%	5.81%	0.97%
Value Score	B	-	-	D	B	D
Cash/Price	0.23	0.08	0.07	0.02	0.15	0.08
EV/EBITDA	11.66	19.23	13.53	55.34	7.93	22.10
PEG F1	1.40	2.56	2.78	2.52	3.64	2.64
P/B	17.07	6.11	3.51	19.46	4.68	13.44
P/CF	12.29	23.12	13.40	58.03	5.68	27.85
P/E F1	13.72	33.01	21.48	47.80	11.94	33.01
P/S TTM	4.41	4.41	2.64	18.33	1.33	11.11
Earnings Yield	7.31%	2.94%	4.42%	2.09%	8.38%	3.03%
Debt/Equity	6.68	0.13	0.70	0.35	2.58	0.50
Cash Flow (\$/share)	4.68	1.26	6.93	8.19	19.75	7.54
Growth Score	D	-	-	B	B	B
Historical EPS Growth (3-5 Years)	10.02%	10.02%	10.39%	41.89%	-3.38%	19.44%
Projected EPS Growth (F1/F0)	9.22%	11.66%	-2.06%	26.31%	-26.60%	10.48%
Current Cash Flow Growth	-2.42%	0.87%	5.49%	27.62%	2.09%	17.66%
Historical Cash Flow Growth (3-5 Years)	-0.39%	8.51%	8.50%	41.64%	-3.76%	10.19%
Current Ratio	2.66	1.56	1.37	1.44	1.05	2.52
Debt/Capital	86.99%	23.10%	42.22%	26.00%	72.10%	33.49%
Net Margin	26.13%	6.57%	10.35%	31.05%	10.53%	30.96%
Return on Equity	85.71%	10.54%	14.80%	35.84%	48.69%	39.45%
Sales/Assets	0.37	0.59	0.50	0.58	0.49	0.50
Projected Sales Growth (F1/F0)	1.96%	1.96%	-0.53%	14.51%	-4.33%	8.60%
Momentum Score	B	-	-	B	F	D
Daily Price Change	-4.02%	-1.72%	0.57%	-2.72%	-3.26%	-2.84%
1-Week Price Change	-0.65%	-1.10%	0.02%	-2.85%	-7.89%	-1.56%
4-Week Price Change	-3.51%	0.00%	7.98%	-2.72%	-7.81%	0.31%
12-Week Price Change	2.70%	-1.69%	6.01%	6.08%	-9.73%	-2.98%
52-Week Price Change	5.22%	13.76%	4.67%	75.12%	-17.47%	45.70%
20-Day Average Volume (Shares)	8,815,297	84,948	1,824,341	2,190,333	6,723,759	26,682,964
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	-10.72%	0.00%
EPS F1 Estimate 4-Week Change	0.53%	0.00%	0.17%	0.28%	-15.02%	-0.42%
EPS F1 Estimate 12-Week Change	4.80%	2.42%	3.36%	2.22%	-15.02%	-0.35%
EPS Q1 Estimate Monthly Change	0.00%	0.00%	0.00%	0.00%	-42.91%	0.05%

Source: Zacks Investment Research

Zacks Stock Rating System

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

Zacks Recommendation

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

Zacks Rank

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

Zacks Style Scores

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

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

Value Score	B
Growth Score	D
Momentum Score	B
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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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.