

Alphabet Inc. (GOOGL)

\$1,582.16 (As of 10/12/20)

Price Target (6-12 Months): **\$1,643.00**

Long Term: 6-12 Months

Zacks Recommendation:
Neutral

(Since: 02/17/19)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: C

Growth: B

Momentum: A

Summary

Alphabet's strengthening cloud unit is aiding substantial revenue growth. Moreover, expanding data centers will continue to bolster its presence in the cloud space. Further, major updates in its search segment are enhancing the search results, which is a major positive. Moreover, Google's robust mobile search is gaining solid momentum. Additionally, strong focus on innovation of AI techniques and the home automation space should aid business growth in the long term. Further, its deepening focus on wearables category remains a tailwind. However, the company's growing litigation issues and increasing expenses might hurt profitability. Further, the company faces persistent pressure from advertisers to tighten controls on YouTube video service. Notably, the stock has underperformed the industry it belongs to on a year-to-date basis.

Price, Consensus & Surprise

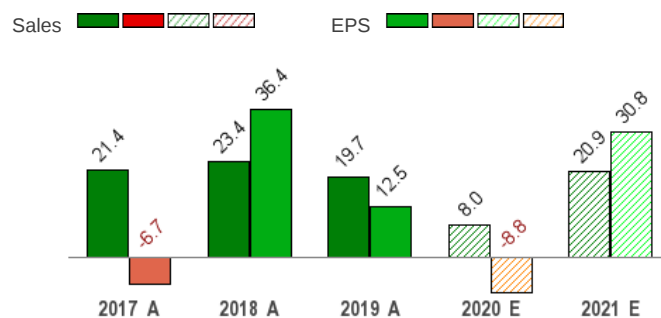


Source: Zacks Investment Research

Data Overview

52-Week High-Low	\$1,726.10 - \$1,008.87
20-Day Average Volume (Shares)	1,768,867
Market Cap	\$1,064.2 B
Year-To-Date Price Change	16.8%
Beta	1.10
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Internet - Services
Zacks Industry Rank	Bottom 23% (195 out of 254)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	20.2%
Last Sales Surprise	3.3%
EPS F1 Estimate 4-Week Change	0.2%
Expected Report Date	10/26/2020
Earnings ESP	10.2%
P/E TTM	34.4
P/E F1	35.3
PEG F1	2.0
P/S TTM	6.4

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	38,533 E	40,902 E	41,963 E	48,382 E	172,136 E
2020	33,707 A	31,603 A	35,220 E	41,605 E	142,352 E
2019	29,479 A	31,706 A	33,009 A	37,574 A	131,768 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$12.97 E	\$13.14 E	\$14.19 E	\$16.31 E	\$58.66 E
2020	\$9.87 A	\$10.13 A	\$11.37 E	\$13.66 E	\$44.84 E
2019	\$11.90 A	\$14.21 A	\$10.12 A	\$15.35 A	\$49.16 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 10/12/2020. The reports text is as of 10/13/2020.

Overview

Alphabet is one of the most innovative companies in the modern technological age. Over the last few years, the company has evolved from primarily being a search-engine provider to cloud computing, ad-based video and music streaming, autonomous vehicles, healthcare providers and others.

In the online search arena, Google is a monopoly with more than 94% of the online search volume and market. Over the years, the company has witnessed increase in search queries, resulting from ongoing growth in user adoption and usage, primarily on mobile devices, continued growth in advertiser activity, and improvements in ad formats.

The company is gaining market share in the cloud-computing, driven by continued strength in Google Cloud Platform and G Suite offerings.

Alphabet also enjoys a dominant position in the autonomous vehicles market, thanks to Waymo's relentless efforts. Also, it has bolstered its footprint in the healthcare industry with its life science division, Verily.

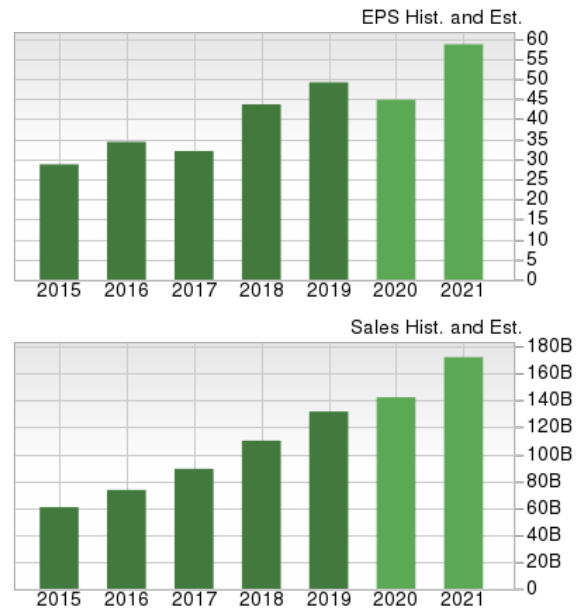
The company has also become a renowned name in the world of entertainment. YouTube came up with \$15.15 billion advertising revenues in 2019.

Total revenues were \$161.9 billion in 2019. The company reports revenues under two broad heads, Google and Other Bets, which generated 99% and 1% of total revenues, respectively.

The Google segment includes products such as ads, Android, Chrome, hardware, Google Cloud, Google Maps, Google Play, Search and YouTube.

The Other Bets segment includes Access, Calico, CapitalG, GV, Verily, Waymo and X, among others.

Alphabet has many competitors in the form of internet pioneers, streaming platforms, technology giants, cloud computing and customer relationship companies.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ Alphabet has been showing **increased appetite in the Home Assistant space**. The company made its foray into this market in 2016 with the launch of Google Home. Google Home performs an array of tasks such as playing music, reading books, managing calendars, answering queries, searching places, calling over cabs, controlling smart home devices and so on. It runs on Google's new voice assistant. As voice is being seen as the next big thing in computer interaction, these products could help Google expand its revenue going forward. As per Gartner, 3.3% of global households are expected to adopt a VPA-enabled wireless speaker by 2020. The strong growth projection for the personal assistant market is a key growth catalyst for Google. As a booming future is being predicted for the home assistant market, Google's home assistant devices could quite well add to their top and bottom-line figures going forward.
- ▲ Google has entered into a definitive agreement to acquire wearable fitness company Fitbit for roughly \$2.1 billion. The move ramps up competition in the wearables space. Google has substantially invested in artificial intelligence. Fitbit, with 28 million users worldwide, is likely to be a very good fit for Google. Also, the Fitbit acquisition gives Google a bridge to the \$3 trillion health care market. The buyout expands Google's presence in the lucrative health care market, as it can provide valuable insights to medical professionals about broader health trends.
- ▲ Alphabet focuses on **innovation**, launching products and services for multiple industries. The development and enhancements of its search technology over time has created win-win situations wherein buyers, sellers and the public at large were benefited. The success of this strategy led to very strong growth since inception. But Google has continued to adapt and change on the strength of its technological prowess. Not only did it take the mobile market transition in its stride, but it also started developing machine learning and artificial intelligence for a time in the future when the intricacies of human behavior would require even more accurate patterns. As a result, it was able to turn over some search functions to its AI systems. Because Alphabet generates significant cash from operations and also holds a huge cash balance, management has the flexibility to pursue growth in any area that exhibits true potential. This flexibility, along with its technological prowess allowed it to pursue opportunities in different markets until it became necessary to restructure itself into a conglomerate. Some of the innovations outside the core search business include technology for high-speed Internet (its Fiber and Balloon initiatives), healthcare, genomics, self-driving cars, drones, glass and others. We believe that the company has the financial muscle to overcome any short-term adverse conditions to continue pursuing these initiatives.
- ▲ Google has been growing rapidly in this **fast-growing highly-competitive cloud market**. The company has signed many partnerships and has been opening data centers to extend its cloud footprint worldwide. Alphabet and Cisco announced a partnership per which the duo will deliver an open hybrid cloud solution. The solution will enable usage and management of applications and services across on-premises setups and the Google Cloud Platform. These partnerships will help Google to keep its position in the computing race
- ▲ The **Google search** engine is advanced, simple and adaptable, all at once. This is the main reason for its leading search market share. A January 2020 global desktop search market share report from netmarketshare.com stated that Google had 74.1% of market share, followed by 12.7% for Baidu, 7.9% for Bing and 3.6% for Yahoo. In mobile, Google was even more dominant than Baidu and Bing with a 94.9% share of the search market globally. Market leader Alphabet has held its own despite concerted efforts by competitors to grab share. Google is the dominant search engine in Canada, Latin America and most Asia/Pacific countries. It is also the dominant search engine in Europe, with leading market shares in the U.K., France, Germany and Spain. Alphabet's increasing push into wearables and Google Now are positives for search revenue growth.
- ▲ Although the desktop was the most popular computing device in the past, **mobile search** is now equally if not more popular. That is because there is a growing tendency among users to look for information at the exact time the need arises, whether it's about a cup of coffee or a new home. The plethora of mobile Internet devices that are making their way to the market is making it easier on the device front. And Alphabet is helping the process with initiatives like its Mobile Friendly algorithm change, product listings, flight search, Google Now and the Chrome browser. Alphabet's opportunity lies in consumers and enterprises choosing mobile over desktops and the billions of new users entering the market, especially in the emerging regions. While it's blocking by the Chinese government pushed search market share to local player Baidu, it's also true that the growing number of local players is resulting in stiff competition in China, eating into their individual profits.
- ▲ Online and mobile video consumption is soaring and Alphabet remains strongly positioned here with the **YouTube platform**. In its race to target TV ad dollars, Alphabet allowed third-party (Nielsen and comScore) tagging of YouTube videos to determine the effectiveness of ads on YouTube versus ads shown on TV. The Google Preferred program pulls out the top 5% of the most engaging content on YouTube for advertisers. Alphabet has also promised to advertise this content itself in order to boost traffic. So Google Preferred is attracting spending on the platform. Mobile revenue on YouTube continues to grow and TrueView (where advertisers pay only when consumers see the ad) also continues to do well.

Google has shown good execution to date. Its dominant search market share is a positive. Its focus on innovation, strategic acquisitions and Android OS should continue to generate strong cash flow.

Reasons To Sell:

- ▼ Alphabet faces significant **litigation** all over the world as a result of its dominant position in search. Regulatory scrutiny continues to worsen with the competition commission issuing several statements of objections (which precedes judicial proceedings unless settled). Google's alleged wrong doing constitutes the leveraging of Android to unfairly promote its own search service with the compulsory pre-installation of its app bundle.
- ▼ Alphabet is likely to see an **escalation in costs**. The company is targeting new technologies and markets, which generally require increased spending. Google has focused on sales and marketing (S&M expenses were around 9.5% of sales in 2017, going up to around 12% in each of the next five years). This greatly increased its brand value, indicating that it has captured mind share. Whether this will convert to revenue will be seen from the growth in its new device and digital sales. R&D has also increased steadily over the same time period as Google invests in future growth. Management has said however that the Other Bets segment, particularly Alphabet's Fiber initiative would require additional capex investments this year. If fixed costs increase without a corresponding increase in revenue, margins could continue to trend down, particularly since revenue growth has moderated in the last three years.
- ▼ There are also **some other margin pressures**. The most significant at the moment is related to currency, which continued to impact Alphabet's results in the last quarter despite the fact that it has a hedging program in place. Other pressures include fast-paced international growth, a growing volume of lower-priced YouTube clicks and the strength on the mobile platform.
- ▼ Alphabet has made numerous attempts to build a position in the **social segment**. This is because social networking through websites, such as Facebook and Twitter are places where people are sharing a lot of personal information and preferences that may be used to develop more customized results and thereby enable better targeting of advertisements. The fact that people are spending more time on social networks means that they are spending less time on the browser. This tends to reduce traffic to Alphabet search services although Alphabet is still unparalleled in search. So far, Alphabet's attempts have all been flops, so social networks, particularly Facebook has really grown. Alphabet doesn't have a good social platform to boost the amount of location-based commerce it generates through mobile devices.

Alphabet's diversification strategy involves significant investment in mobile, cloud, devices and digital goods. Growing competition and legal hassles are other headwinds.

Last Earnings Report

Alphabet Q2 Earnings and Revenues Beat Estimates

Alphabet Inc.'s non-GAAP earnings of \$10.13 per share for second-quarter 2020 surpassed the Zacks Consensus Estimate of \$8.43. Earnings increased 2.6% sequentially but decreased 28.7% year over year.

Net revenues — excluding total traffic acquisition cost or TAC (TAC is the portion of revenues shared with Google's partners, and amounts paid to distribution partners and others who direct traffic to the Google website) — came in at \$31.60 billion. The figure was down 6.2% sequentially and 0.3% year over year.

The decrease in advertising revenues was due to the coronavirus pandemic, which in turn resulted in a decline in consumer and business spending.

However, net revenues outpaced the Zacks Consensus Estimate by 3.3% driven by strength in the company's cloud and YouTube businesses.

Notably, primary drivers of the Google business haven't changed. Yet, pricing remains under pressure, both on account of nagging FX concerns, and persistent strength in mobile and TrueView.

Nonetheless, Google continues to enjoy strength in the cloud business. The company's Google Cloud recorded 43.2% year-over-year revenue growth in the quarter. It is to be noted that the firm will continue to invest in this space.

YouTube remains a strong contributor to the company's growth. More than a thousand creators are currently engaged in the platform, bringing in a thousand subscribers every day. However, time and again it faces continuous pressure from advertisers to tighten controls on the fast-growing YouTube video service, in a bid to avoid adult or offensive content.

Numbers in Detail

Revenues

Gross total revenues of \$38.3 billion decreased 7% sequentially and 1.7% year over year (flat year over year in constant currency). The decrease was due to lower search and advertising revenues.

Google Segment

The segment includes search, advertising, Play, hardware, and Cloud & Apps.

Beginning fourth-quarter 2019, Alphabet disaggregated revenue segments, including Search, YouTube ads and Cloud.

Coming to the search business, revenues from Google-owned and partner sites declined 7.8% and 9.8% year over year, accounting for 65.6% and 12.4% of quarterly revenues, respectively. This resulted in a year-over-year decrease of 8.1% in total advertising revenues.

YouTube grew 5.8% year over year to \$3.8 billion, accounting for 10% of quarterly revenues. Google other revenues — which consist of YouTube non-advertising revenues — were \$5.1 billion for the second quarter, up 25.6% year over year.

In addition, Google cloud grew 43.2% year over year to \$3 billion, accounting for 7.9% of quarterly revenues.

Other Bets Segment

Other Bets revenues were \$148 million, up 9.6% sequentially but down 8.6% year over year, accounting for 0.4% of total second-quarter revenues.

Total traffic acquisition cost or TAC was down 10.2% sequentially and 7.5% year over year.

Operating Results

Operating margin was 16.7%, up 690 basis points from the year-ago quarter.

Operating expenses (including research and development, sales and marketing, as well as general and administrative expenses) were \$13.4 billion, up 7.2% from the year-ago quarter.

The increase in expenses was a result of heavy investment in the cloud-computing business, artificial intelligence and consumer hardware, among others.

Balance Sheet

At second quarter-end, Alphabet had a solid balance sheet, with cash & cash equivalents, and marketable securities of \$121.1 billion, up from \$117.2 billion in the comparable prior-quarter period.

The company generated \$14 billion cash from operations in the second quarter and spent \$5.4 billion on capex, netting a free cash flow of \$8.6 billion.

Quarter Ending	06/2020
Report Date	Jul 30, 2020
Sales Surprise	3.33%
EPS Surprise	20.17%
Quarterly EPS	10.13
Annual EPS (TTM)	45.47

Recent News

On **Oct 2, 2020**, Google unveiled the latest Pixel smartphones, Pixel 4a and Pixel 5. Priced at \$499, Pixel 4a comes with ultrawide lens, 6.2-inch Full HD and OLED display, 3.5mm headphone jack and a Snapdragon 765G processor. On the contrary, Pixel 5 comes in a 100% recycled aluminum body and is priced at \$699. It offers 8GB RAM and 128GB of internal storage, with a 6 inch display.

On **Sep 15, 2020**, the company announced its plans to run its offices and data centers fully on carbon-free electricity by 2030. It aims to achieve the goal by utilizing renewable energy solely. The company is considering utilizing batteries stored with solar energy and geothermal reservoirs among others to meet its aim.

On **Sep 1, 2020**, Alphabet's Waymo plans to start the company's road testing of its driverless fleet in a new hub in Dallas, TX. The fleet will consist of Peterbilt 18-wheelers complete with cameras, lidar and on-board computers.

On **Aug 25, 2020**, Alphabet's Google Cloud said that it is investing \$100 million in Amwell — a telehealth company that enables seamless virtual doctor visits. Notably, Amwell, which has filed for IPO, chose Google Cloud as its preferred cloud partner and will migrate some of its video performance capabilities to it.

Additionally, the company will shift parts of its business that are currently loaded on Amazon's AWS to Google Cloud.

On **Aug 3, 2020**, Google has agreed to buy a 6.6% stake in security-monitoring provider ADT Inc. for \$450 million. The deal will help Google to further bolster its hardware business and expand its presence in the smart-home security products market.

On **Jul 10, 2020**, Alphabet announced that Loon is utilizing Internet beaming balloons to provide high-speed Internet to the people residing in the rural areas of the country. Reportedly, the project plans to use a fleet of 35 or more balloons to provide 4G LTE service. Initially, the internet service will cover 50,000 square kilometers in the western and central parts of Kenya.

On **Jul 7, 2020**, Alphabet's division Google agreed to sign a long-term partnership with Deutsche Bank, the largest bank in Germany. Per the new alliance, Deutsche Bank will leverage Google's cloud services to build technology-based financial products for clients and deliver enhanced cloud services. These financial products will be based on growing technologies like Artificial Intelligence, data science and machine learning.

On **Jun 30, 2020**, Alphabet's division Google recently eliminated ads, which were misleading users searching for voting related information. Reportedly, users searching with terms like register to vote, vote by mail and other related terms were getting directed to ads that charged them huge fees especially the ones providing registration information.

On **Jun 26, 2020**, Alphabet's Waymo has partnered with Volvo to develop a new self-driving electric vehicle for use in a ride-hailing service. Per the deal, Volvo will take care of the design and manufacture of the vehicles, while Waymo will work on artificial intelligence. Apart from AI, these vehicles will be modified with certain hardware like radar, LiDAR sensors and cameras to ensure proper safety requirements.

On **Jun 3, 2020**, Alphabet's self-driving project, Waymo will reportedly relaunch its fleet of self-driving minivans, taking into account all safety measures. The tests will resume in the roads of San Francisco Bay Area starting Jun 8, which almost came to a halt in March because of the COVID-19 pandemic. Reportedly, these self-driving cars will currently not be used for any commercial purposes. These vans will deliver packages, including art kit deliveries for local children and services for the Blind and Visually Impaired.

On **Jun 2, 2020**, Alphabet's division Google faces fresh allegations regarding privacy of the users. A lawsuit of \$5 billion has been filed in the federal court of San Jose, CA against the company for illegally tracking the Internet activities of users via the Incognito mode to collect data from their browsing sites and what they view online. Notably, Incognito mode is known for allowing users to search through Google Chrome in private without getting their browsing history recorded.

On **May 29, 2020**, Alphabet's division Google is reportedly in early stages of talks with the British telecom company, Vodafone, to acquire 5% stake in the latter's India business unit – Vodafone Idea.

On **May 21, 2020**, Alphabet's division Google unveiled Action Blocks app for the Android users on the Global Accessibility Awareness Day. The app is now available on Play Store for free. It allows users to create shortcuts to various apps on the home screen of the smartphone, thus making those apps easily accessible.

On **May 21, 2020**, Alphabet's Google and Apple released the initial version of their COVID-19 contact-tracing app. The companies said that authorities of 23 countries across five continents have sought access to their contact-tracing technology.

On **May 13, 2020**, Alphabet partnered with Vodacom, an Africa-based mobile network operator. Per the partnership, Loon's Internet beaming balloons will be leveraged by Vodacom to offer mobile network access to un-served and under-served parts of Mozambique — Cabo Delgado and Niassa provinces.

Valuation

Alphabet shares are up 16.8% in the year-to-date period and 28.4% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 22.2% and 29.7% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector are up 33% and 42.8%, respectively.

The S&P 500 index is up 9.8% in the year-to-date period and 19.4% in the past year.

The stock is currently trading at 28.11X forward 12-month earnings, which compares to 30.07X for the Zacks sub-industry, 27.7X for the Zacks sector and 22.97X for the S&P 500 index.

Over the past five years, the stock has traded as high as 33.78X and as low as 19.09X, with a 5-year median of 25.44X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$1,643 price target reflects 29.52X forward 12-month earnings.

The table below shows summary valuation data for GOOGL

Valuation Multiples - GOOGL					
		Stock	Sub-Industry	Sector	S&P 500
P/E F 12M	Current	28.11	30.07	27.7	22.97
	5-Year High	33.78	43.63	28	23.47
	5-Year Low	19.09	22.21	16.95	15.27
	5-Year Median	25.44	32.92	19.95	17.68
P/S F12M	Current	6.42	6.55	4.33	4.23
	5-Year High	8.54	14.87	4.48	4.31
	5-Year Low	4.57	5.08	2.77	3.18
	5-Year Median	6.59	7.78	3.44	3.67
EV/EBITDA TTM	Current	20.76	21.91	15.4	15.52
	5-Year High	23.03	37.3	15.78	15.68
	5-Year Low	12.14	10.33	8.24	9.55
	5-Year Median	17.01	20.55	11.84	13.09

As of 10/12/2020

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 23% (195 out of 254)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Yelp Inc. (YELP)	Outperform	2
Apple Inc. (AAPL)	Neutral	3
Amazon.com, Inc. (AMZN)	Neutral	4
Alibaba Group Holding Limited (BABA)	Neutral	3
Baidu, Inc. (BIDU)	Neutral	4
Facebook, Inc. (FB)	Neutral	3
Microsoft Corporation (MSFT)	Neutral	3
Yandex N.V. (YNDX)	Neutral	4

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

Industry Comparison Industry: Internet - Services				Industry Peers		
	GOOGL	X Industry	S&P 500	AMZN	BIDU	YNDX
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	4	4	4
VGM Score	B	-	-	A	A	D
Market Cap	1,064.18 B	779.96 M	23.69 B	1,724.53 B	44.17 B	19.99 B
# of Analysts	13	3	13	16	3	3
Dividend Yield	0.00%	0.00%	1.59%	0.00%	0.00%	0.00%
Value Score	C	-	-	D	C	D
Cash/Price	0.12	0.14	0.07	0.04	0.50	0.17
EV/EBITDA	18.42	1.92	13.64	45.13	9.83	35.79
PEG F1	2.02	2.15	2.95	3.59	-8.95	2.61
P/B	5.13	3.44	3.55	23.39	1.83	4.69
P/CF	22.53	16.38	13.58	51.35	9.54	34.31
P/E F1	35.28	38.64	22.44	108.23	17.91	73.57
P/S TTM	6.41	2.60	2.67	5.36	2.96	7.32
Earnings Yield	2.87%	0.36%	4.29%	0.92%	5.58%	1.36%
Debt/Equity	0.02	0.13	0.70	0.45	0.35	0.26
Cash Flow (\$/share)	69.45	0.06	6.93	67.05	13.39	1.79
Growth Score	B	-	-	A	A	D
Historical EPS Growth (3-5 Years)	22.11%	15.57%	10.41%	97.34%	8.61%	20.74%
Projected EPS Growth (F1/F0)	-8.78%	0.00%	-2.99%	38.25%	-4.64%	-26.61%
Current Cash Flow Growth	12.62%	-2.71%	5.49%	31.33%	-9.22%	15.59%
Historical Cash Flow Growth (3-5 Years)	19.91%	19.91%	8.51%	49.26%	10.85%	7.26%
Current Ratio	3.41	1.74	1.35	1.18	2.85	6.68
Debt/Capital	1.90%	15.49%	42.91%	31.00%	26.16%	23.78%
Net Margin	18.99%	-7.80%	10.28%	4.10%	3.56%	4.24%
Return on Equity	15.62%	-1.82%	14.79%	20.47%	9.55%	8.62%
Sales/Assets	0.61	0.59	0.51	1.42	0.35	0.56
Projected Sales Growth (F1/F0)	8.03%	0.00%	-0.59%	31.89%	-2.71%	2.54%
Momentum Score	A	-	-	A	A	A
Daily Price Change	3.58%	0.00%	0.65%	4.76%	0.97%	1.02%
1-Week Price Change	3.77%	0.88%	4.06%	5.17%	1.50%	-2.51%
4-Week Price Change	3.70%	3.70%	3.76%	10.96%	4.79%	-1.65%
12-Week Price Change	0.05%	1.01%	8.70%	7.70%	2.71%	9.54%
52-Week Price Change	28.48%	22.36%	6.31%	98.28%	21.11%	103.14%
20-Day Average Volume (Shares)	1,768,867	92,572	2,117,216	5,279,243	2,523,765	3,168,480
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.24%	0.00%	0.00%	0.07%	-6.88%	0.00%
EPS F1 Estimate 12-Week Change	7.87%	4.37%	3.69%	58.41%	22.77%	-26.55%
EPS Q1 Estimate Monthly Change	0.14%	0.00%	0.00%	-0.09%	-7.94%	0.00%

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	B
Momentum Score	A
VGM Score	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.

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 a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ($3/35 = 0.0857$) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.