

## Microsoft Corporation (MSFT)

**\$211.80** (As of 12/09/20)

Price Target (6-12 Months): **\$244.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Outperform**

(Since: 12/09/20)

Prior Recommendation: Neutral

Short Term: 1-3 Months

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

**1-Strong Buy**

Zacks Style Scores:

VGM:D

Value: F

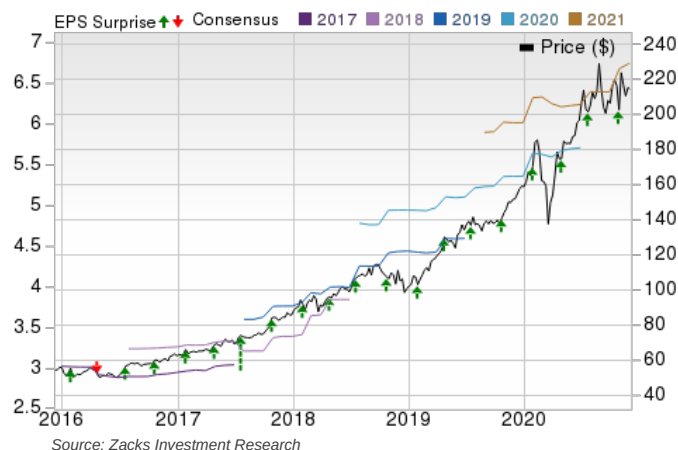
Growth: C

Momentum: B

### Summary

Microsoft is benefiting from momentum in Azure, impressive Teams user growth triggered by coronavirus-led digital transformation, work-from-home, online learning wave and tele healthcare trends. Solid uptake of Surface devices and Xbox Game Pass is expected to boost growth. Further, the company is gaining from growing user base of its different applications including Microsoft 365 suite, and Dynamics. Additionally, it is well positioned to expand the total addressable market through acquisitions of GitHub and ZeniMax Media. Markedly, shares of Microsoft have outperformed the industry on a year-to-date basis. However, broad-based macroeconomic weakness in job market and lower spend on advertising due to coronavirus pandemic are likely to put pressure on LinkedIn and Search revenues. Also, delays in consulting business are anticipated to limit growth.

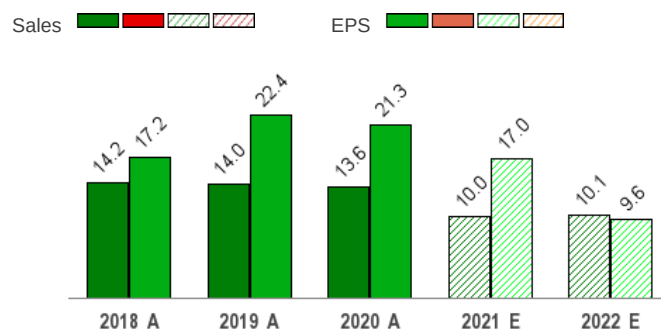
### Price, Consensus & Surprise



### Data Overview

|                                |                             |
|--------------------------------|-----------------------------|
| 52-Week High-Low               | \$232.86 - \$132.52         |
| 20-Day Average Volume (Shares) | 23,919,354                  |
| Market Cap                     | \$1,601.3 B                 |
| Year-To-Date Price Change      | 34.3%                       |
| Beta                           | 0.82                        |
| Dividend / Dividend Yield      | \$2.24 / 1.1%               |
| Industry                       | Computer - Software         |
| Zacks Industry Rank            | Bottom 24% (192 out of 254) |

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



|                               |            |
|-------------------------------|------------|
| Last EPS Surprise             | 19.0%      |
| Last Sales Surprise           | 4.2%       |
| EPS F1 Estimate 4-Week Change | 0.0%       |
| Expected Report Date          | 02/03/2021 |
| Earnings ESP                  | 0.1%       |
| P/E TTM                       | 34.2       |
| P/E F1                        | 31.4       |
| PEG F1                        | 2.5        |
| P/S TTM                       | 10.9       |

### Sales Estimates (millions of \$)

|      | Q1       | Q2       | Q3       | Q4       | Annual*   |
|------|----------|----------|----------|----------|-----------|
| 2022 | 40,784 E | 43,771 E | 42,595 E | 45,840 E | 173,246 E |
| 2021 | 37,154 A | 40,124 E | 38,538 E | 41,508 E | 157,334 E |
| 2020 | 33,055 A | 36,906 A | 35,021 A | 38,033 A | 143,015 A |

### EPS Estimates

|      | Q1       | Q2       | Q3       | Q4       | Annual*  |
|------|----------|----------|----------|----------|----------|
| 2022 | \$1.81 E | \$1.82 E | \$1.79 E | \$1.91 E | \$7.39 E |
| 2021 | \$1.82 A | \$1.64 E | \$1.57 E | \$1.71 E | \$6.74 E |
| 2020 | \$1.38 A | \$1.51 A | \$1.40 A | \$1.46 A | \$5.76 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 12/09/2020. The reports text is as of 12/10/2020.

## Overview

Redmond, WA-based Microsoft Corporation is one of the largest broad-based technology providers in the world. The company dominates the PC software market with more than 80% of the market share for operating systems. The company's Office 365 application suite is one of the most popular productivity software globally. It is also now one of the two public cloud providers that can deliver a wide variety of infrastructure-as-a-service (IaaS) and platform-as-a-service (PaaS) solutions at scale.

Microsoft's products include operating systems, cross-device productivity applications, server applications, business solution applications, desktop and server management tools, software development tools and video games. The company also designs and sells PCs, tablets, gaming and entertainment consoles, phones, other intelligent devices, and related accessories. Moreover, through Azure, it offers cloud-based solutions that provide customers with software, services, platforms and content.

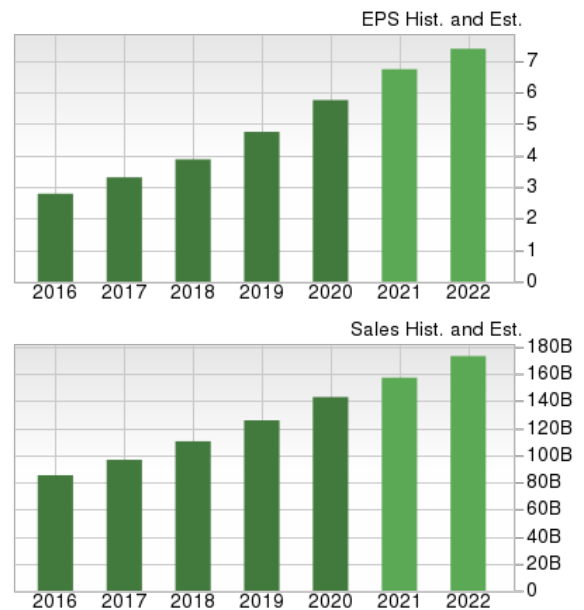
Microsoft reported revenues of \$143.02 billion in fiscal 2020. The company reports operations under three segments: Productivity & Business Processes, Intelligent Cloud and More Personal Computing.

Productivity & Business Processes accounted for 32.5% of fiscal 2020 revenues. The segment offers productivity and collaboration tools and services including Office 365, Dynamics business solutions, Teams, Relationship Sales solution, Power Platform and LinkedIn.

Intelligent Cloud, which include Azure cloud services, contributed to 33.8% of fiscal 2020 revenues.

On October 25, 2018, the company completed the acquisition of GitHub, which provides a collaboration platform and code hosting service for developers, for \$7.5 billion.

More Personal Computing represented 33.7% of fiscal 2020 revenues. The segment comprises mainly the Windows, Gaming (Xbox hardware and Xbox software and services), Devices (Surface, PC accessories, and other intelligent devices) and Search (Bing and Microsoft Advertising) businesses.



Source: Zacks Investment Research

---

## Reasons To Buy:

- ▲ Microsoft has a dominant position in the desktop PC market, with its operating systems being used in the majority of PCs worldwide. This is particularly true of the enterprise where the company generates much of its revenue and profits. But enterprise computing is undergoing changes with companies increasingly opting for the BYOD (bring-your-own-device) model. This has allowed competing platforms from Apple and Google with their strong mobile ecosystems to increase penetration at the enterprise. So, Microsoft is introducing new and improved Surface devices that could encourage enterprises to stick with Windows as they move toward BYOD and cloud computing. Microsoft's advantages in this respect are two-fold. First, the company has a very large installed base of Office users. Most legacy data are based on Office, so enterprises are usually reluctant to use other productivity solutions. Second, the BYOD model is dependent on security and cloud integration, both of which are Microsoft's strengths. As a result, Microsoft has been largely successful at retaining enterprise customers, which holds promise.
- ▲ Microsoft has doubled down on the cloud computing opportunity. In the cloud computing era, information and applications are increasingly stored, managed and protected in the cloud, from where only necessary amounts are accessed by devices of varying shapes, sizes, weights, functions and portability. As a result, software providers are increasingly offering their tools as-a-service based on subscriptions for specified periods. Further, Azure's increased availability in more than 60 announced regions globally, is expected to have strengthened Microsoft competitive position in the cloud computing market, dominated by Amazon's Amazon Web Services. Notably, Azure revenues surged 47% at constant currency on a year-over-year basis in first-quarter fiscal 2021, driven by robust growth in consumption-based business.
- ▲ Moreover, ongoing expansion in Microsoft Teams subscriber base is aiding the company in strengthening position in the enterprise communication market against Slack and Zoom. The company has enhanced its workspace communication offering — Teams — with a slew of new capabilities enabling users to work from home seamlessly amid the coronavirus crisis. These initiatives are expected to drive subscriber base, which in turn is likely to bolster top-line performance in the quarters ahead. Markedly, Teams has been witnessing a surge in usage owing to the coronavirus-induced demand. Moreover, out of Fortune 100 companies, 93 have implemented Microsoft Teams. Notably, Microsoft Teams has daily active user base of 115 million. The uptick can be attributed to coronavirus-led work-from-home, stay-at-home, telehealth and online learning wave.
- ▲ Microsoft is one of the three largest providers of gaming hardware. Its Xbox console was one of the first gaming devices of its kind. Microsoft supplemented the hardware with a number of popular video game titles. It also introduced the Xbox Live online gaming service, which enabled subscribers to play online Xbox games with each other and download new games directly onto the device. Non-gaming applications, such as Facebook, Twitter, Netflix, Last.fm, Sky, Canal and Zune were also made available through Xbox Live. Markedly, Gaming revenues increased 21% at cc in first-quarter of fiscal 2021, driven by increased engagement led by stay-at-home wave. Xbox content and services revenue increased 30% at cc year over year, driven by solid growth in Xbox Game Pass subscriber base and, third-party transactions and first-party titles. In fact, for fiscal second quarter, gaming revenues are anticipated to be up in the high 20% range year over year on solid demand following the launch of next generation Xbox Series X and S consoles, which in turn, are projected to boost hardware revenue growth of approximately 40%. Moreover, the latest acquisition will enable Microsoft to gain access to all ZeniMax's creative studios like Bethesda Softworks, Bethesda Game Studios, ZeniMax Online Studios, and Roundhouse Studios along with all their video game franchises. This brings the number of in-house development studios to 23 from 15 for Microsoft. The deal will help boost the subscriber base for Xbox Game Pass service as Microsoft will be adding Bethesda's popular AAA titles to its Game Pass roster. Also, combining Project xCloud and Xbox Game Pass benefits for Xbox Game Pass Ultimate members, at no additional cost, is likely to be a gamechanger for Microsoft and bolster its competitive position in the cloud gaming space.
- ▲ Management execution has been good in recent times. This has helped Microsoft build cash and short-term investments balance of \$137.98 billion as of Sep 30, 2020, compared with \$136.53 billion as of Jun 30, 2020. As of Sep 30, 2020, total debt (long-term plus current portion) was \$63.55 billion compared with \$63.33 billion as of Jun 30, 2020. This translates to net-cash position of \$74.4 billion as of Sep 30, 2020, compared with \$73.2 billion as of Jun 30, 2020. Notably, total debt to total capital of 34% is lower than the industry's figure of 40.6%. Further, times interest earned is 23.2X, compared with industry's 18.8X. The strong cash balance provides the flexibility required to pursue any growth strategy, whether by way of acquisitions or otherwise.
- ▲ We believe efforts to reward shareholders through share buybacks and dividend payments deserve a special mention. In the first quarter of fiscal 2021, the company returned \$9.5 billion to shareholders in the form of share repurchases and dividends. Also, the company reported operating cash flow of \$19.3 billion in first-quarter fiscal 2021, compared with \$18.7 billion in fourth-quarter fiscal 2020. Free cash flow came in at \$14.4 billion, compared with \$13.9 billion reported in the fiscal fourth quarter. The increasing cash flow trend reflect that the company is making investments in the right direction and is expected to help it sustain current dividend payout (0.33) level at least in the near term.

The enterprise refresh cycle, new subscription model, Azure and strength in Teams and Gaming segment will continue to generate sizeable cash flows.

---

## Risks

- Our immediate concern about Microsoft is regarding the softness in the core computing market. The company is dependent on this market for the largest chunk of its revenue. Microsoft continues to be impacted by the tablet and mobile cannibalization of computers. This is a secular negative for the company and the future growth of Windows is greatly dependent on its ability to build position in mobile devices, particularly tablets. Moreover, stiff competition from Android and Chrome at multiple price points with Apple making things difficult at the high end, remain a headwind.
  - Microsoft is the dominant provider of operating systems into the PC market. So, any new player, or any technology advancement in the space, unless by Microsoft itself, results in market share erosion. While Google Chromebooks/ Android tablets and Apple Macintosh/iPad are splitting the market, Microsoft's opportunity lies in its ability to transition rapidly to a cloud and mobile focus. To date, the sales of many Microsoft products are tied to the attach rates of its Windows OS, but as more of its products are made available under an as-a-service model (like Office 365) on even competing platforms, there can be new revenue streams compensating for the loss of Windows licensing fees. The transition period is not likely to be easy and execution will be key.
  - Microsoft is seeing increased competition from all quarters. Particularly, Google seems to be present in all its markets. Although Google's focus has in the past been on search and online advertising, while Microsoft's has been on selling its software, the two companies are increasingly pitted against each other because of the conditions in the market. Google is seeing tremendous success, with its Android OS emerging as the leading platform for smartphones and increasingly, tablets. Its Chromebooks are also seeing a good deal of success. Moreover, Apple's Macintosh has a loyal customer base, which is an additional pressure in the high-end computing market, while its iPads are tough competition in the tablet segment. Although Microsoft's Azure has been steadily gaining market traction for quite some time now, but Amazon's cloud computing arm, Amazon Web Services, leads the cloud computing space, which is a major headwind. Also, the gaming console market is also extremely competitive since Sony and Nintendo are equally strong. Moreover, there is severe price competition in this market and successful gaming titles are a must in order to push sales.
  - Coronavirus crisis-induced macroeconomic weakness is a headwind. Weak job market and lower spend on advertising are likely to weigh on LinkedIn and Search revenues at least in the near term. Moreover, decline in on-premises business, owing to sluggishness in transactional business across small and medium businesses is anticipated to affect growth. Also, Office consumer revenues are expected to bear the brunt of decline in transactional business.
  - We note that the Microsoft currently has a trailing 12-month Price/Book (P/B) ratio of 12.98X. This level compares unfavorably to some extent with what the industry saw over the last year. Additionally, the ratio is higher than the average level of 12.69X and is towards the high end of the valuation range in this period. Consequently, valuation looks slightly stretched from a P/B perspective.
-

## Last Earnings Report

### Microsoft Q1 Earnings Beat Estimates, Azure Strength Drives Top Line

Microsoft reported first-quarter fiscal 2021 non-GAAP earnings of \$1.82 per share, which beat the Zacks Consensus Estimate by 18.95%. The bottom line also surged 32% on a year-over-year basis (up 30% at constant currency or cc).

Revenues of \$37.153 billion improved 12% from the year-ago quarter (up 12% at cc). Further, the top line surpassed the Zacks Consensus Estimate by 4.15%.

Robust execution and better-than-expected demand from customers for commercial cloud offerings drove the quarterly results. Solid uptick in Teams on the back of coronavirus-led work-from-home, stay-at-home, telehealth and online learning wave remained noteworthy.

Moreover, strong Commercial business positively impacted earnings and revenues. Commercial bookings climbed 23% year over year (up 18% at cc), courtesy of consistent sales execution, and growth in big, long-term Azure contracts. Commercial remaining performance obligation came in at \$107 billion, up 24% year over year (up 23% at cc). Commercial revenue annuity mix was 93%, increasing 2% year over year, driven by ongoing shift to cloud infrastructure.

Commercial cloud revenues were \$15.2 billion, up 31% year over year.

### Segmental Details

**Productivity & Business Processes** segment, which includes the Office and Dynamics CRM businesses, contributed 33% to total revenues. Revenues increased 11% (up 11% at cc) on a year-over-year basis to \$12.32 billion.

Office Commercial products and cloud services revenues increased 9% (up 9% at cc) on a year-over-year basis backed by growth in Office 365 commercial revenues, which climbed 21% (up 20% at cc). The upside was driven by strong installed base growth and average revenues per user (ARPU) expansion. However, sluggishness in transactional licensing affected performance.

E5 revenue growth was driven by strength in advanced security, compliance, and voice components.

Office 365 Commercial seats improved 15%, driven by momentum in free trial conversions, growth across small and medium sized businesses and first-line worker offerings, and improving mix from Microsoft 365. Notably, Office 365 commercial accounted for more than 70% of existing Office Commercial paid installed base.

Office Consumer products and cloud services revenues improved 13% (up 13% at cc), driven by growth in Microsoft 365 subscription revenues and better than expected uptake of Office 2019. Microsoft 365 Consumer subscribers came in at 45.3 million, compared with 42.7 million reported in the prior quarter. The figure was up 27% year over year, driven by coronavirus crisis-led increased demand courtesy of work-from-home wave.

Notably, PricewaterhouseCoopers, Morgan Stanley, and Prudential Financial Insurance have selected Microsoft 365 E5, powered by differentiated security, compliance, voice, and analytics capabilities.

Dynamics business improved 19% (up 18% at cc). Dynamics 365 revenues surged 38% (37% at cc). Dynamics adoption is improving with companies like Walgreens Boots Alliance (WBA), Chipotle, American Electric Power (AEP), Ingram Micro, FedEx, Cleveland Clinic and St. Luke's Health Network, leveraging the application to securely digitize critical business processes.

LinkedIn revenues advanced 16% from the year-ago quarter (up 16% at cc). The better-than-expected performance was driven by growth in Marketing Solutions business.

Microsoft is gaining from expanding user base of different applications including Microsoft 365 E5 and Teams. Both solutions continue to witness record adoption. The uptick can be attributed to coronavirus-led work-from-home, stay-at-home, telehealth and online learning wave. Notably, the company noted that Microsoft Teams has daily active user base of 115 million, which came in at 75 million in third-quarter fiscal 2020.

Integration of Teams with Microsoft's various inhouse offerings including PowerPoint presentations, SharePoint, Stream, Dynamics 365 makes it a winner as it makes collaboration easy and engaging, while simultaneously driving outcomes and saving time.

The company is also witnessing significant demand for Windows 10 PCs with Windows 10 monthly active devices up double digits on a year-over-year basis across commercial, consumer, and education verticals.

**Intelligent Cloud** segment, which includes server, and enterprise products and services, contributed 35% to total revenues. The segment reported revenues of \$12.99 billion, up 20% (up 19% at cc) year over year.

Server product and cloud services revenues rallied 22% year over year (up 21% at cc). The high point was Azure's revenues, which surged 48% year over year (up 47% at cc), driven by robust growth in consumption-based business.

On-premise server products revenues declined 1%, on continued transactional weakness.

Further, enterprise mobility installed base revenues improved 27% to more than 152 million seats.

Enterprise service revenues improved 6% (up 5% at cc) in the reported quarter, on account of growth in Premier Support Services.

| Quarter Ending   | 09/2020      |
|------------------|--------------|
| Report Date      | Oct 27, 2020 |
| Sales Surprise   | 4.15%        |
| EPS Surprise     | 18.95%       |
| Quarterly EPS    | 1.82         |
| Annual EPS (TTM) | 6.19         |

---

**More Personal Computing** segment, which primarily comprises Windows, Gaming, Devices and Search businesses, contributed 32% to total revenues. Revenues were up 6% (up 6% at cc) year over year to \$11.85 billion, driven by work-from-home, web-based learning and online gaming trends.

Windows revenues decreased 1% owing to decline in Windows OEM, which partially offset growth in Windows Commercial. Windows commercial products and cloud services revenues increased 13% year over year (up 12% at cc), on the back of higher customer adoption of Microsoft 365 offerings and robust improvement in advanced security solutions. However, sluggishness in transactional licensing limited growth.

Windows OEM revenues decreased 5% on a year-over-year basis.

Windows OEM non-Pro revenue advanced 31%, on robust consumer PC demand driven by remote working and online learning wave.

However, Windows OEM Pro revenue declined 22%, owing to lower commercial demand.

Search advertising revenues, excluding traffic acquisition costs (TAC), declined 10% (down 11% at cc). Reduced spend on advertising by industries severely impacted by coronavirus-induced economic crisis led to the decline.

Surface revenues surged 37% (up 36% at cc) from the year-ago quarter to \$1.55 billion, driven by PC market demand triggered by remote work and online learning-led demand increase, and gains from product launch timing.

Gaming revenues increased 22% (up 21% at cc) driven by increased engagement led by stay-at-home wave. Xbox content and services revenues increased 30% year over year, driven by solid growth in Xbox Game Pass subscriber base, third-party transactions and first-party titles. However, revenues from Xbox hardware declined 27%, owing to a decrease in volume of consoles sold ahead of new console launches.

## Operating Results

Non-GAAP gross margin increased 15% (up 15% in cc) to \$26.2 billion. This can be attributed to revenue growth across Productivity & Business Processes, Intelligent Cloud and More Personal Computing segments. Non-GAAP gross margin (in percentage terms) of 70% expanded 200 basis points (bps) on a year-over-year basis, on change in accounting estimate.

Commercial cloud gross margin was 71%, up 500 bps year over year.

Operating margin expanded 400 bps on a year-over-year basis to 43%.

Productivity & Business Process operating income grew 19% to \$5.71 billion. Intelligent Cloud operating income surged 39% (up 38% at cc) to \$5.42 billion. More Personal Computing operating income rallied 18% to \$4.75 billion.

## Balance Sheet & Free Cash Flow

As of Sep 30, 2020, Microsoft had total cash, cash equivalents, and short-term investments balance of \$137.98 billion, compared with \$136.53 billion as of Jun 30, 2020. As of Sep 30, 2020, long-term debt (including current portion) was \$63.55 billion compared with \$63.33 billion as of Jun 30, 2020.

Operating cash flow during the reported quarter was \$19.3 billion compared with \$18.7 billion in the previous quarter. Free cash flow during the quarter was \$14.4 billion, compared with \$13.9 billion reported in the prior quarter.

In the reported quarter, the company returned \$9.5 billion to shareholders in the form of share repurchases and dividends.

## Guidance

For second-quarter fiscal 2021, Productivity and Business Processes revenues are anticipated between \$12.75 billion and \$13 billion,

Strong upsell opportunity for Microsoft E5 and momentum in Office 365 is expected to drive growth in Office commercial. However, decline of 30% in on-premises business, owing to sluggishness in transactional business and the ongoing customer shift to Office 365, is anticipated to affect growth.

Office consumer revenues are expected to grow in the mid-single digits on a year-over-year basis.

LinkedIn revenue growth is expected to be driven by recovery in advertising market and continued strong engagement on the platform. Revenues from Dynamics are projected to gain from continued Dynamics 365 momentum.

Intelligent Cloud revenues are anticipated between \$13.55 billion and \$13.8 billion. Azure's revenue growth is likely to reflect continued strength in the consumption-based services. However, increasing size of the enterprise mobility installed base is anticipated to limit growth in per-user business. Also, on-premises server business is anticipated to decline in low single digits as demand for hybrid and premium offerings gets impacted by continued transactional weakness.

However, in Enterprise Services, management expects revenues to be up in low single digits.

More Personal Computing revenues are expected between \$13.2 billion and \$13.6 billion. In Windows commercial products and cloud services business, annuity billings are expected to witness "healthy" growth driven by solid momentum in advanced security solutions.

The company expects overall revenues from Windows to decline in the high single digit range. OEM business is anticipated to witness strong

---

growth in OEM non-Pro. However, OEM Pro business is anticipated to be affected by the lower commercial demand.

Surface revenues are anticipated to remain flat on a year-over-year basis. Search advertising revenues, excluding TAC, are anticipated to decline "the mid to high-single digit range."

Gaming revenues are anticipated to be up in the high 20% range year over year on solid demand following the launch of next generation Xbox Series X and S consoles, which in turn, are projected to boost hardware revenue growth of approximately 40%. Increasing investments on enhancing life-time value of the new console platforms, is anticipated to negatively impact gross margin. Xbox content and services revenue are projected to grow in the low 20% range, on strong engagement and continued uptick in GamePass subscribers. Management noted that the outlook does not include contribution from ZeniMax, which is expected to close in the second half of fiscal 2021.

Management expects COGS between \$13.75 billion and \$13.95 billion, and operating expenses in the range of \$11.4-\$11.5 billion.

---



---

## Recent News

On Dec 10, Microsoft and Deutsche Telekom recently extended their collaboration to ramp up cloud migration for customers especially enterprise and midmarket.

On Dec 9, Microsoft announced that its cloud gaming service will be available on iOS devices and Windows PCs as a part of the Xbox Game Pass Ultimate subscription from spring 2021.

On Dec 8, Microsoft announced that it was teaming up with Johnson Controls to integrate the latter's OpenBlue Digital Twin with its Azure Digital Twins. The integration of the two platforms will enable clients to manage physical spaces digitally as well as increase efficiency.

On Dec 2, Microsoft announced quarterly dividend of 56 cents per share to be paid out on Mar 11, 2021 to shareholders of record as of Feb 18.

On Dec 1, Microsoft and Accenture announced collaboration with CNH Industrial in a bid to aid it in development of a global digital hubs network with enhanced digital capabilities.

On Nov 17, Microsoft unveiled Pluton security processor aimed at boosting the security for Windows PCs. The company is working alongside Advanced Micro Devices (AMD), Qualcomm and Intel for Pluton processor. Microsoft stated that Pluton will be built in the CPU processors from AMD, Intel and Qualcomm to offer more security against software bugs' attack and credential theft attempt for Windows PC platform.

On Nov 12, Microsoft announced collaboration with Bango to expand the customer reach for its Xbox Game Pass Ultimate subscription and Xbox All Access service.

On Nov 10, Microsoft announced the launch of Xbox Series X and Xbox Series S, in a bid to provide console gamers with immersive gaming experiences across the world.

On Oct 26, Microsoft, C3.ai and Adobe announced the roll out of C3 AI CRM, AI-first customer relationship management solution, powered by Microsoft Dynamics 365. It is integrated with Adobe Experience Cloud, and aimed at enabling enterprises to drive operations with predictive business insights.

On Oct 22, Microsoft announced collaboration with Honeywell, with an aim to aid the latter boost productivity for industrial clients and market its domain-specific applications, that are built on Microsoft's Azure cloud platform.

On Oct 19, Microsoft and Bentley Systems expanded partnership in a bid to focus on enhancing infrastructure for smart construction and smart city urban planning.

On Oct 8, Microsoft collaborated with GameStop to expand the market for its video gaming products ahead of the highly awaited launch of Xbox S and X series. GameStop has a vast store network and strong omnichannel capabilities.

On Oct 7, Microsoft partnered with ZEISS to ramp up digital transformation for the latter by migration to Microsoft Azure cloud platform. The migration to Azure will help ZEISS to accelerate productivity and improve customer experiences.

On Oct 6, Microsoft struck a five-year alliance with Rockwell Automation to develop industrial solutions to help clients in that vertical to enhance productivity and lower infrastructure costs.

On Sep 28, Microsoft announced it is working in collaboration with the telecommunications industry to develop a carrier-grade platform for edge and cloud — Azure for Operators. The company aims to aid operators in securing networks, lowering infrastructure costs, and creating revenue opportunities via new business models.

On Sep 22, Microsoft announced major developments to its Teams app, Azure cloud computing and Office productivity suite at its Ignite conference. Ignite conference 2020 is a three-day virtual event that commenced on Sep 22 and will culminate on Sep 24. One of the biggest highlights of the Ignite conference was the launch of Azure Communications Services platform.

On Sep 22, Microsoft and AT&T expanded partnership with focus on integration of secure cloud computing and network technology in a bid to enhance IoT networking. The companies aim to aid enterprises to make the most from simplification of IoT networking. Users will be able to seamlessly connect machines and equipment to the cloud with highly secure network connectivity.

On Sep 21, Microsoft announced its plan to acquire leading video game publisher Bethesda Softworks' parent company ZeniMax Media for an all-cash deal valued at \$7.5 billion. The acquisition will enable Microsoft to gain access to all ZeniMax's creative studios like Bethesda Softworks, Bethesda Game Studios, ZeniMax Online Studios, and Roundhouse Studios along with all their video game franchises. This brings the number of in-house development studios to 23 from 15 for Microsoft.

On Sep 16, Microsoft declared a quarterly dividend of 56 cents per share, suggesting a 9.8% rise from the prior rate of 51 cents. The increased dividend will be paid out on Dec 10 to shareholders of record as of Nov 19, 2020.

On Sep 15, Microsoft announced that it has integrated its video communications app, Teams with an ambient clinical intelligence (ACI) solution to boost telehealth consultancy experience for doctors and patients. Teams App workflows will now have Nuance Communications' Nuance Dragon Ambient eXperience (DAX) solution, which will facilitate a smooth physician-patient conversation. Markedly, DAX is built on Microsoft's Azure along with Nuance's Dragon Medical platform.

On Sep 8, Microsoft introduced its smallest Xbox ever — Xbox Series S — on its official Xbox Twitter account. It is 60% smaller in size compared with the consoles of the Xbox Series X. The console will be priced at \$299 and will be available on retail shelves on Nov 10.



On Sep 4, Microsoft was reaffirmed by the U.S. Department of Defense (DoD) as the winner for its Joint Enterprise Defense Infrastructure (JEDI) cloud deal. The decision was made following a re-assessment of the submitted bids. Notably, the contract is touted to be worth \$10-billion and spread over 10-years.

On Aug 25, Microsoft rolled out the transcribe feature for the web version of Word. Transcribe in Word aids users to record audio and convert it to text, thereby enabling them to save time. The company also introduced Immersive Reader service for software developers. Immersive Reader, a part of Azure's Cognitive Services, will aid developers to insert comprehension capabilities and text reading into applications.

## Valuation

Microsoft shares are up 34.3% in the year-to-date period and 39.6% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 32.8% and 38% in the year-to-date period, respectively. In the past year, the Zacks sub-industry and sector are up 35.4% and 42%, respectively.

The S&P 500 index is up 15.1% in the year-to-date period and 18.1% in the past year.

The stock is currently trading at 30.15X forward 12-month earnings compared with 31.79X for the Zacks sub-industry, 28.19X for the Zacks sector and 22.89X for the S&P 500 index.

Over the past five years, the stock has traded as high as 36.13X and as low as 16.82X, with a five-year median of 24.03X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$244 price target reflects 34.73X forward 12-month earnings.

The table below shows summary valuation data for MSFT

| Valuation Multiples - MSFT |               |       |              |        |         |
|----------------------------|---------------|-------|--------------|--------|---------|
|                            |               | Stock | Sub-Industry | Sector | S&P 500 |
| P/E F12M                   | Current       | 30.15 | 31.79        | 28.19  | 22.89   |
|                            | 5-Year High   | 36.13 | 35.41        | 28.19  | 23.47   |
|                            | 5-Year Low    | 16.82 | 19.26        | 16.94  | 15.27   |
|                            | 5-Year Median | 24.03 | 25.9         | 19.95  | 17.77   |
| P/S F12M                   | Current       | 9.74  | 7.49         | 4.51   | 4.31    |
|                            | 5-Year High   | 11.09 | 8.23         | 4.51   | 4.31    |
|                            | 5-Year Low    | 4.04  | 4.26         | 2.77   | 3.17    |
|                            | 5-Year Median | 6.31  | 6            | 3.47   | 3.68    |
| EV/Sales TTM               | Current       | 10.34 | 8.44         | 5.35   | 4.32    |
|                            | 5-Year High   | 11.72 | 9.44         | 5.35   | 4.32    |
|                            | 5-Year Low    | 3.59  | 3.66         | 2.85   | 2.62    |
|                            | 5-Year Median | 6.4   | 6            | 3.87   | 3.58    |

As of 12/09/2020

Source: Zacks Investment Research

## Industry Analysis Zacks Industry Rank: Bottom 24% (192 out of 254)



Source: Zacks Investment Research

## Top Peers

| Company (Ticker)                                  | Rec     | Rank |
|---------------------------------------------------|---------|------|
| Apple Inc. (AAPL)                                 | Neutral | 3    |
| Amazon.com, Inc. (AMZN)                           | Neutral | 3    |
| salesforce.com, inc. (CRM)                        | Neutral | 3    |
| Alphabet Inc. (GOOGL)                             | Neutral | 3    |
| International Business Machines Corporation (IBM) | Neutral | 4    |
| Oracle Corporation (ORCL)                         | Neutral | 3    |
| Sony Corporation (SNE)                            | 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 |            |           |
|---------------------------------------------------|------------|------------|-----------|----------------|------------|-----------|
|                                                   | MSFT       | X Industry | S&P 500   | AAPL           | AMZN       | ORCL      |
| Zacks Recommendation (Long Term)                  | Outperform | -          | -         | Neutral        | Neutral    | Neutral   |
| Zacks Rank (Short Term)                           | 1          | -          | -         | 3              | 3          | 3         |
| VGM Score                                         | D          | -          | -         | C              | B          | B         |
| Market Cap                                        | 1,601.31 B | 2.27 B     | 25.77 B   | 2,070.48 B     | 1,557.54 B | 179.84 B  |
| # of Analysts                                     | 15         | 4          | 14        | 12             | 16         | 12        |
| Dividend Yield                                    | 1.06%      | 0.00%      | 1.49%     | 0.67%          | 0.00%      | 1.61%     |
| Value Score                                       | F          | -          | -         | D              | D          | B         |
| Cash/Price                                        | 0.09       | 0.08       | 0.06      | 0.04           | 0.04       | 0.23      |
| EV/EBITDA                                         | 22.22      | 20.72      | 14.68     | 26.59          | 40.73      | 12.06     |
| PEG F1                                            | 2.53       | 2.61       | 2.77      | 2.64           | 3.09       | 1.58      |
| P/B                                               | 12.98      | 6.32       | 3.55      | 31.69          | 18.82      | 17.74     |
| P/CF                                              | 28.08      | 22.84      | 13.89     | 30.24          | 46.30      | 12.77     |
| P/E F1                                            | 31.42      | 33.09      | 22.00     | 30.34          | 90.28      | 14.20     |
| P/S TTM                                           | 10.88      | 4.61       | 2.84      | 7.54           | 4.48       | 4.59      |
| Earnings Yield                                    | 3.18%      | 2.75%      | 4.38%     | 3.29%          | 1.11%      | 7.03%     |
| Debt/Equity                                       | 0.46       | 0.11       | 0.70      | 1.51           | 0.40       | 6.68      |
| Cash Flow (\$/share)                              | 7.54       | 1.18       | 6.94      | 4.03           | 67.05      | 4.68      |
| Growth Score                                      | C          | -          | -         | B              | A          | C         |
| Historical EPS Growth (3-5 Years)                 | 20.46%     | 10.39%     | 9.69%     | 11.10%         | 85.35%     | 10.02%    |
| Projected EPS Growth (F1/F0)                      | 16.99%     | 9.94%      | 1.00%     | 22.36%         | 49.43%     | 9.22%     |
| Current Cash Flow Growth                          | 17.66%     | 7.44%      | 5.22%     | 0.98%          | 31.33%     | -2.42%    |
| Historical Cash Flow Growth (3-5 Years)           | 10.19%     | 8.71%      | 8.33%     | 1.15%          | 49.26%     | -0.39%    |
| Current Ratio                                     | 2.53       | 1.58       | 1.38      | 1.36           | 1.11       | 2.66      |
| Debt/Capital                                      | 31.62%     | 20.98%     | 42.00%    | 60.16%         | 28.46%     | 86.99%    |
| Net Margin                                        | 32.28%     | 6.77%      | 10.40%    | 20.91%         | 4.99%      | 26.13%    |
| Return on Equity                                  | 40.74%     | 11.24%     | 14.99%    | 75.15%         | 24.49%     | 85.71%    |
| Sales/Assets                                      | 0.50       | 0.58       | 0.50      | 0.84           | 1.41       | 0.37      |
| Projected Sales Growth (F1/F0)                    | 10.01%     | 1.99%      | 0.35%     | 16.53%         | 35.18%     | 1.99%     |
| Momentum Score                                    | B          | -          | -         | C              | C          | C         |
| Daily Price Change                                | -1.95%     | -0.30%     | -0.24%    | -2.09%         | -2.30%     | 1.19%     |
| 1-Week Price Change                               | -0.40%     | 0.59%      | 1.73%     | 4.85%          | -1.03%     | 3.81%     |
| 4-Week Price Change                               | -2.19%     | 4.86%      | 4.03%     | 1.92%          | -1.06%     | 4.42%     |
| 12-Week Price Change                              | 3.29%      | 3.10%      | 12.51%    | 8.61%          | 0.85%      | -1.16%    |
| 52-Week Price Change                              | 39.62%     | 16.19%     | 6.69%     | 79.90%         | 77.51%     | 6.07%     |
| 20-Day Average Volume (Shares)                    | 23,919,354 | 117,140    | 1,945,847 | 88,360,400     | 3,343,076  | 9,706,982 |
| EPS F1 Estimate 1-Week Change                     | 0.00%      | 0.00%      | 0.00%     | 0.00%          | 0.00%      | 0.00%     |
| EPS F1 Estimate 4-Week Change                     | 0.00%      | 0.00%      | 0.00%     | -0.15%         | 0.00%      | 0.00%     |
| EPS F1 Estimate 12-Week Change                    | 5.52%      | 2.90%      | 3.87%     | 0.41%          | 7.05%      | 4.16%     |
| EPS Q1 Estimate Monthly Change                    | 0.01%      | 0.00%      | 0.00%     | 0.07%          | 0.00%      | 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    | D |
| Growth Score   | C |
| Momentum Score | C |
| 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

**This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page.** Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.

---

## Additional Disclosure

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

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

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

## Glossary of Terms and Definitions

**52-Week High-Low:** The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

**20-Day Average Volume (Shares):** The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

**Daily Price Change:** This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

**1-Week Price Change:** This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

**4-Week Price Change:** This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

**12-Week Price Change:** This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

**52-Week Price Change:** This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

**Market Cap:** The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

**Year-To-Date Price Change:** Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

**# of Analysts:** Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

**Beta:** A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

**Dividend:** The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

**Dividend Yield:** The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

**S&P 500 Index:** The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

**Industry:** One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

---

**Zacks Industry Rank:** The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

**Last EPS Surprise:** The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

**Last Sales Surprise:** The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

**Expected Report Date:** This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

**Earnings ESP:** The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

**Periods:**

**TTM:** Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

**F1:** Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

**F2:** Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

**F12M:** Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

**P/E Ratio:** The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

**PEG Ratio:** The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

**P/S Ratio:** The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

**Cash/Price Ratio:** The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

**EV/EBITDA Ratio:** The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

**EV/Sales Ratio:** The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

**EV/CF Ratio:** The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

---

**EV/FCF Ratio:** The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

**P/EBITDA Ratio:** The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

**P/B Ratio:** The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

**P/TB Ratio:** The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

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

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

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

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

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

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

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

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

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

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

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

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



---

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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