

# **Microsoft Corporation (MSFT)**

\$183.63 (As of 05/19/20)

Price Target (6-12 Months): \$195.00

Long Term: 6-12 Months	Zacks Recommendation:	Neutral			
	(Since: 03/30/20)				
	Prior Recommendation: Outperform				
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Short Term: 1-3 Months	Zacks Rank: (1-5)	2-Buy			
Short Term: 1-3 Months	Zacks Rank: (1-5) Zacks Style Scores:	VGM:B			

## **Summary**

Microsoft's fiscal third-quarter results benefited from momentum in Azure, impressive Teams user growth led by coronavirus-induced work-from-home wave and uptick in Surface devices. Moreover, the company is benefiting from growing user base of its different applications like Office 365 commercial, and Dynamics. Azure's expanding customer base remains a key catalyst. Furthermore, it is well poised to expand the total addressable market through acquisitions of GitHub and PlayFab. Notably, shares have outperformed the industry in the past year. However, weak job market and lower spend on advertising due to the coronavirus outbreak are likely to weigh on LinkedIn and Search revenues. Further, delays in consulting business contract renewals and supply chain constraints in China are anticipated to limit growth.

## Price, Consensus & Surprise



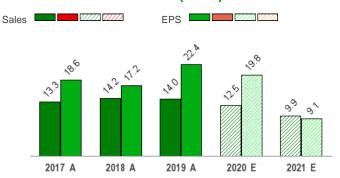
## **Data Overview**

P/S TTM

52 Week High-Low	\$190.70 - \$119.02
20 Day Average Volume (sh)	36,534,004
Market Cap	\$1,392.5 B
YTD Price Change	16.4%
Beta	0.95
Dividend / Div Yld	\$2.04 / 1.1%
Industry	Computer - Software
Zacks Industry Rank	Top 29% (74 out of 254)

Last EPS Surprise	10.2%
Last Sales Surprise	3.4%
EPS F1 Est- 4 week change	2.1%
Expected Report Date	07/16/2020
Earnings ESP	-0.4%
P/E TTM	32.4
P/E F1	32.3
PEG F1	2.6

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



## Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	35,914 E	40,614 E	38,442 E	40,374 E	155,505 E
2020	33,055 A	36,906 A	35,021 A	36,638 E	141,520 E
2019	29,084 A	32,471 A	30,571 A	33,717 A	125,843 A

## **EPS Estimates**

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.47 E	\$1.55 E	\$1.53 E	\$1.63 E	\$6.21 E
2020	\$1.38 A	\$1.51 A	\$1.40 A	\$1.40 E	\$5.69 E
2019	\$1.14 A	\$1.10 A	\$1.14 A	\$1.37 A	\$4.75 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 05/19/2020. The reports text is as of 05/20/2020.

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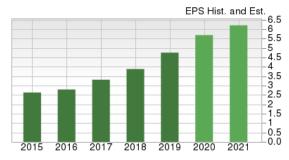
#### Overview

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 (laaS) 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 \$125.84 billion in fiscal 2019. The company reports operations under three segments: Productivity & Business Processes, Intelligent Cloud and More Personal Computing.

Productivity & Business Processes accounted for 32.7% of fiscal 2019 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 30.9% of fiscal 2019 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 36.4% of fiscal 2019 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.



## **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-

The enterprise refresh cycle, new subscription model, Azure and promising new products will continue to generate sizeable cash flows.

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. With Windows 10, Microsoft is able to offer a seamless experience across devices, further improving its BYOD prospects. The enterprise PC market has been impacted over the last two years by supply chain issues, the drive to transfer computing operations to the cloud, tablet cannibalization, as well as weak macro conditions. Of these, the strongest challenge was related to tablets and independent research companies have said that this shift may have run its course. It is worth noting that despite the many pressures, Microsoft's dominant position in the traditional PC market and successive iterations of Windows platforms continue to generate solid revenues and cash flows for the company. This strength may be expected to continue as enterprise adoption of Windows 10 and consumer shift to Windows-as-a-service gathers momentum.

- ▲ 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. This has opened the market to build suitable cloud infrastructure, where Microsoft with its Azure platform is second only to Amazon. Microsoft also offers a hybrid cloud solution that enables the integration of existing IT infrastructure with the public cloud. It is also increasingly entering into strategic collaborations with competitors like salesforce, Oracle AT&T and even Google to improve the experience of Microsoft platforms. The company is also pursuing growth in the SMB segment through partnerships with infrastructure providers such as GoDaddy. We think that growth prospects here are extremely bright, as organizations increasingly rely on private, public or hybrid clouds.
- ▲ 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. Xbox One, the latest of its game consoles had a relatively weak start and is unlikely to catch up with Sony's market-leading platform PS4 despite Microsoft's adding games and features including the Cortana personal assistant for quick access to and interaction with desired content and people, and Windows 10 integration that will allow streaming on connected Windows 10 computing devices. Recently, Microsoft also made a slew of announcements at the E3 2019. The company showcased a plethora of new games, comprising 11 world premieres and 14 from Xbox Game Studios as part of Xbox Briefing. Microsoft has long since dissociated Kinect from the device, which allowed it to lower the price. This platform has assumed greater importance for Microsoft because it marks its entry into the living room.
- ▲ Microsoft's Bing search engine is taking market share largely from smaller rivals and benefiting from its agreement with Yahoo. Strategic actions, such as the agreement with HP to put Bing as the default search engine on its PCs have also helped. Also, Apple and Google are increasingly competing in the mobile segment, which is proving to be of strategic importance to Microsoft. With iOS 9, Apple is making its personal assistant Siri central to the iOS experience and Siri uses Bing to a certain extent. It's very likely that Apple will want to reduce reliance on any other company for search, but until it is able to do the requisite indexing, Bing is likely to remain a part of the story. Facebook has also chosen Bing to support its "Graph Search". While Office is the window to capture work-related consumption of Microsoft services, a search engine is an important window to capture personal consumption. Also, Microsoft has tied Bing into its Windows 10 OS, such that it will become the default search cum assistant for users. Since it will become hard to avoid Bing for daily use, it can be an effective tool to steal share from Google.
- ▲ Management execution has been good in recent times. This has helped Microsoft build cash and short-term investments balance of \$137.63 billion as of Mar 31, 2020, up from \$134.25 billion from the previous quarter. As of Mar 31, 2020, total debt (long-term plus current portion) came in at \$73.86 billion compared with \$76.8 billion at the end of the prior quarter. This translates to net-cash position of \$63.77 billion as of Mar 31, 2020, compared with \$57.45 billion at the end of the prior quarter. The strong cash balance provides the flexibility required to pursue any growth strategy, whether by way of acquisitions or otherwise. Notably, total debt to total capital of 39.2% is lower than the industry's figure of 42.9%. Further, times interest earned is 21.3X, compared with the industry's figure of 17.5X. Also, the company reported operating cash flow of \$17.5 billion in the third quarter of fiscal 2020, compared with \$10.7 billion reported in the previous quarter. Free cash flow came in at \$13.7 billion, compared with \$7.1 billion reported in the prior quarter. In the fiscal third quarter, the company returned \$9.87 billion to shareholders in the form of share repurchases and dividends. 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 (0.36) level at least in the near term.

#### Reasons To Sell:

✓ 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. The distribution story is still a work in progress however although Microsoft has made some headway with important alliances with companies like HP and Dell, as well as other smaller distributors. Emerging markets remain a positive, although they are essentially price sensitive, so Microsoft is likely to see stiff competition from Android and Chrome at multiple price points while Apple will make things difficult at the high end.

Microsoft's business reorganization and "cloud-first mobile-first" execution risks remain. Competition is stiff and its dominant position in the PC market continues to be challenged.

- ▼ 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 now interested in not just search, but also other digital goods, cloud infrastructure and hardware while Microsoft is targeting search advertising to make good some of the losses resulting from the emergence of Android/Chrome while also entering new devices. 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. We are particularly concerned since the PC market in developed nations is mature, while that in developing nations is cost-sensitive. Microsoft could lose out due to lack of market growth in developed nations and the cost of its OS in developing nations (Windows 10 will have a positive effect on consumer adoption, but the enterprise story is unlikely to change much). 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. Apple has also tied with IBM and SAP, which should have a positive impact on its enterprise penetration. 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.
- ▼ We note that the Microsoft currently has a trailing 12-month P/B ratio of 12.16X. 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 10.66X and is near the high end of the valuation range in this period. Consequently, valuation looks slightly stretched from a P/B perspective.

## **Last Earnings Report**

## Microsoft Q3 Earnings Beat Estimates, Azure Strength Drives Top Line

Microsoft reported third-quarter fiscal 2020 non-GAAP earnings of \$1.40 per share, which beat the Zacks Consensus Estimate by 10.2%. The figure also surged 23% on a year-over-year basis (up 27% at constant currency or cc).

Revenues of \$35.02 billion improved 15% from the year-ago quarter (up 16% at cc). Further, the figure surpassed the Zacks Consensus Estimate by 3.4%.

Quarter Ending	03/2020
Report Date	Apr 29, 2020
Sales Surprise	3.44%
EPS Surprise	10.24%
Quarterly EPS	1.40
Annual EPS (TTM)	5.66

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 increased 7% (12% at cc), courtesy of robust renewal implementation. Commercial remaining performance obligation came in at \$89 billion, up 24% year over year at cc. Commercial revenue annuity mix was 92%, increasing 2% year over year.

Commercial cloud revenues were \$13.3 billion, surging 39% year over year (40% at cc).

## **Segmental Details**

**Productivity & Business Processes** segment, which includes the Office and Dynamics CRM businesses, contributed 33.5% to total revenues. Revenues increased 15% (up 16% at cc) on a year-over-year basis to \$11.74 billion.

Office Commercial business (products + Microsoft 365 & related cloud services) revenues were up 13% from the year-ago level (up 15% at cc). Office 365 commercial revenues climbed 25% (27% at cc), driven by strong installed base growth and average revenues per user (ARPU) expansion. Office 365 Commercial seats improved 20% to nearly 258 million, driven by improving mix from Microsoft 365.

Office Consumer products and cloud services revenues increased 15% (up 17% at cc), driven by growth in Office 365 subscription revenue and Office 2019. Office 365 Consumer subscribers came in at 39.6 million, up from 37.2 million reported in the prior quarter, benefiting from the coronavirus crisis-led increased demand courtesy of work-from-home wave.

Dynamics business improved 17% (up 20% at cc). Dynamics 365 revenues surged 47% (49% at cc). Dynamics adoption is improving with companies like C3.ai, Patagonia and American Express, selecting the application to securely digitize critical business processes.

LinkedIn revenues advanced 21% from the year-ago quarter (up 22% at cc) to \$2.05 billion. LinkedIn sessions were up reflecting acceleration in engagement. However, slowdown in advertising limited growth.

Microsoft is gaining from expanding user base of different applications like Microsoft 365 and Teams. Both solutions continue to witness record adoption. Notably, Microsoft Teams boasts of more than 75 million daily active users, up from 20 million daily active users reported in the prior quarter. The uptick can be attributed to coronavirus-led work-from-home, stay-at-home, telehealth and online learning wave.

Windows 10 has more than 1 billion monthly active devices, up 30% on a year-over-year basis, with significant demand for Windows 10 PCs.

Intelligent Cloud segment, which includes server, and enterprise products and services, contributed 35.1% to total revenues. The segment reported revenues of \$12.28 billion, up 27% (up 29% at cc) year over year.

Server product and cloud services revenues rallied 30% year over year (up 32% at cc) to \$10.49 billion. The high point was Azure's revenues, which surged 59% year over year (up 61% at cc), driven by robust growth in consumption-based business.

On-premise server products revenues increased 11% (up 12% at cc), driven by customer demand for hybrid solutions, and premium server versions. Further, robust demand from end of support for Windows server 2008 was a positive.

Further, enterprise mobility installed base revenues improved 34% to more than 134 million seats, driven by continued benefit from Microsoft 365.

Moreover, enterprise service revenues increased 6% (up 7% at cc) in the reported quarter, on account of growth in Premier Support Services. However, delays in consulting limited growth.

**More Personal Computing** segment, which primarily comprises Windows, Gaming, Devices and Search businesses, contributed 31.4% to total revenues. Revenues were up 3% (up 4% at cc) year over year to almost \$11 billion.

Windows revenues increased 5.6% to \$5.22billion backed by growth in Windows Commercial. Windows commercial products and cloud services revenues increased 17% year over year (up 18% at cc), on the back of higher customer adoption of Microsoft 365 offerings and robust improvement in advanced security solutions.

Windows OEM pro revenues improved 5% on a year-over-year basis, primarily due to better-than-expected Windows 10 demand. Increase in demand from remote work and online learning wave also contributed to the upside. However, supply chain constraints in China limited growth.

Windows OEM non-Pro revenues decreased 10% year over year, primarily owing to coronavirus crisis-led supply chain constraints in China.

Search advertising revenues, excluding traffic acquisition costs (TAC), grew 1% (up 1% at cc) to \$1.99 billion. Reduced spend on advertising from the industries highly impacted by coronavirus-induced economic crisis limited growth.

Surface revenues improved 1% from the year-ago quarter to \$1.34 billion, driven by remote work and online learning-led demand increase. However, supply chain constraints in China limited growth.

Gaming revenue decreased 1% to \$2.35 billion. Xbox hardware revenue declined 20%, owing to a decrease in price of consoles sold. Xbox content and services revenue increased 2%(up2% at cc) year over year. The increase was driven by increased engagement led by stay-at-home wave.

#### **Operating Results**

Non-GAAP gross margin of 69% expanded 200 basis points (bps) on a year over year, driven by higher commercial cloud margins and favorable sales mix.

Productivity & Business Process gross margin increased 1 point year over year primarily due to improvements in LinkedIn and Office 365 margin expansion, which more than offset unfavorable cloud mix.

Moreover, Intelligent Cloud segment gross margin was up 2 points year over year, attributable to material improvement in Azure gross margin which was more than offset by growing mix of Azure laaS and PaaS revenue.

More Personal Computing gross margin increased 2 points year over year on account of favorable sales of higher-margined products.

Commercial cloud gross margin was 67%, up 4 percentage points year over year, due to improvement in Azure gross margin and gains from coronavirus-induced supply chain constraints.

Operating expenses of \$11.1 billion were up 10% from the year-ago quarter (up 9% at cc) on the back of higher investments in cloud and AI engineering, and LinkedIn. Notably, reduced spend on travel and marketing in March led to lower expenses.

Operating margin expanded 320 bps on a year-over-year basis to 37%.

Productivity & Business Process operating income grew 20% (up 23% at cc) to \$4.79 billion. Intelligent Cloud operating income surged 42% (up 46% at cc) to \$4.56 billion. More Personal Computing operating income rallied 15% (up 17% at cc) to \$3.63 billion.

#### **Cash Flow**

Operating cash flow during the reported quarter came in at \$17.5 billion compared with \$10.7 billion reported in the previous quarter. Free cash flow during the quarter came in at \$13.7 billion, compared with \$7.1 billion reported in the prior quarter.

In the reported quarter, the company returned \$9.87 billion to shareholders in the form of share repurchases and dividends.

## Guidance

For fourth-quarter fiscal 2020, Productivity and Business Processes revenues are anticipated between \$11.65 billion and \$11.95 billion, backed by low-double-digit growth in Dynamics, low-single-digit revenue growth in Office consumer and mid-single-digit revenue growth in LinkedIn. Weak job market and lower spend on advertising are likely to weigh on LinkedIn and Search revenues.

Intelligent Cloud revenues are anticipated between \$12.9 billion and \$13.15 billion. Azure's revenue growth is likely to reflect continued strength in the consumption-based services. However, delays in consulting business and increasing size of the installed base are anticipated to limit growth.

More Personal Computing revenues are expected between \$11.3 billion and \$11.7 billion. The company expects OEM revenues to improve in "low to mid-single digits." Windows commercial products and cloud services revenues are expected to grow "mid-single digit" amid weakness in transactional business. Surface revenues are anticipated to increase in the "low-teens" year over year on strong demand. Search advertising revenues, excluding TAC are anticipated to decline "in the mid 20% range."

Gaming revenues are anticipated to be up in the high-teens year over year on momentum in user engagement.

Management expects COGS between \$11.55 billion and \$11.75 billion, and operating expenses in the range of \$11.8 billion to \$11.9 billion.

## **Recent News**

On May 19, Microsoft unveiled a slew of solutions and product enhancements at Build 2020 conference, including Azure Synapse Link, responsible ML tools in Azure Machine Learning, and updates to Fluid Framework and Teams apps. The company also launched industry-specific Microsoft Cloud for Healthcare to offer enhanced experience, insights, and care. Moreover, the company announced the acquisition of Softomotive to gain advanced robotic process automation (RPA) capabilities.

On May 18, Microsoft and Sony Semiconductor Solutions announced collaboration to offer Al-driven smart cameras and aid businesses enterprises generate new business opportunities.

On May 18, Microsoft and FedEx announced collaboration to deliver an enhanced commerce experience and help businesses with shipment tracking and visibility into the supply chain.

On May 15, Microsoft announced collaboration with UnitedHealth Group to launch ProtectWell Protocol and App to aid employers in bringing employees back to workplace in a secure setting.

On May 14, Microsoft inked deal to acquire Metaswitch Networks, a virtualized network software provider, in a bid to expand presence in 5G edge cloud computing market.

On Apr 27, Microsoft and C3.ai teamed up to enhance C3.ai's customer experience and improve sales performance. C3.ai has implemented Dynamics 365 Sales and Microsoft Teams to boost remote selling by streamlining sales operations, and collaborate on a real time basis, and create new business avenues.

On Apr 27, Microsoft and The Coca-Cola Company announced a five-year agreement to standardize The Coca-Cola Company's business operations. Per the deal, Microsoft Azure, Dynamics 365 and Microsoft 365, will be leveraged by The Coca-Cola Company to gain new insights from data, and boost customer and employee experience.

On Apr 16, Microsoft announced that it has inked a deal with the National Basketball Association (NBA) to become the official Al, Cloud and laptop partner for the NBA and the Women's National Basketball Association (WNBA), NBA G League and USA Basketball starting from the 2020-21 season. Per the deal, the company will develop a direct-to-consumer platform on Microsoft Azure, which will utilize Al and machine learning (ML) to enhance the online experience of NBA fans.

On Apr 14, Microsoft announced collaboration with various nonprofit organizations and private companies to roll out the Protecting People Everywhere initiative via the HealthEquip app. The app is an attempt to combat the shortage of personal protective equipment (PPE) by matching PPE donors with potential recipients.

On Apr 9, Microsoft announced that its Teams Communication platform has witnessed a robust surge in usage owing to the coronavirus-induced demand. Notably, the company stated that Teams recently set a new daily record of 2.7 billion meeting minutes, up 200% from 900 million minutes on Mar 16. The platform is also being used by 183K users from 175 countries for educational purposes. Moreover, the number of video calls increased 1000% in March, with most of the growth coming from Norway, Netherlands, Australia and Italy.

### **Valuation**

Microsoft shares are up 16.5% in the year-to-date period and 45.5% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 10.2% and 1.2% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and the sector are up 25.4% and 15.2%, respectively.

The S&P 500 index is down 8.2% in the year-to-date period and up 3% in the past year.

The stock is currently trading at 29.87X forward 12-month earnings, which compares with 29.49X for the Zacks sub-industry, 23.79X for the Zacks sector and 21.51X for the S&P 500 index.

Over the past five years, the stock has traded as high as 31.16X and as low as 15X, with a 5-year median of 22.58X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$195 price target reflects 31.72X forward 12-month earnings.

The table below shows summary valuation data for MSFT

Valuation Multiples - MSFT						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	29.87	29.49	23.79	21.51	
P/E F12M	5-Year High	31.16	29.49	23.79	21.51	
	5-Year Low	15	18.62	16.71	15.23	
	5-Year Median	22.58	24.85	19.26	17.49	
	Current	9.05	7.31	3.61	3.34	
P/S F12M	5-Year High	9.43	7.31	3.61	3.44	
	5-Year Low	3.47	3.88	2.32	2.53	
	5-Year Median	5.89	5.51	3.1	3.01	
	Current	9.55	7.43	4.08	2.88	
EV/Sales TTM	5-Year High	10.22	8.11	4.43	3.46	
	5-Year Low	2.74	3.19	2.58	2.15	
	5-Year Median	5.9	5.66	3.58	2.82	

As of 05/19/2020

## Industry Analysis Zacks Industry Rank: Top 29% (74 out of 254)

#### ■ Industry Price Industry Price *[*\_180 -120 -40

## **Top Peers**

Company (Ticker)	Rec R	ank
Apple Inc. (AAPL)	Neutral	2
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	4

Industry Comparison Industry: Computer - Software			Industry Peers			
	MSFT	X Industry	S&P 500	AAPL	AMZN	ORCL
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutra
Zacks Rank (Short Term)	2	-	-	2	3	3
VGM Score	В	-	-	В	D	В
Market Cap	1,392.55 B	1.53 B	19.91 B	1,357.25 B	1,221.67 B	165.06 E
# of Analysts	14	4	14	12	14	12
Dividend Yield	1.11%	0.00%	2.14%	1.05%	0.00%	1.83%
Value Score	С	-	-	В	F	В
Cash/Price	0.10	0.10	0.07	0.07	0.04	0.15
EV/EBITDA	22.82	17.70	12.09	17.27	32.00	10.92
PEG Ratio	2.60	2.65	2.68	2.39	5.01	1.23
Price/Book (P/B)	12.16	5.20	2.75	17.31	18.72	11.09
Price/Cash Flow (P/CF)	28.90	21.40	10.68	20.52	36.53	11.87
P/E (F1)	32.27	29.31	19.96	25.45	120.25	13.55
Price/Sales (P/S)	10.04	4.36	2.01	5.06	4.12	4.15
Earnings Yield	3.10%	3.16%	4.83%	3.93%	0.83%	7.37%
Debt/Equity	0.61	0.16	0.76	1.14	0.36	3.31
Cash Flow (\$/share)	6.35	1.18	7.01	15.26	67.05	4.41
Growth Score	С	-	-	В	С	С
Hist. EPS Growth (3-5 yrs)	18.74%	9.72%	10.87%	9.79%	102.38%	7.82%
Proj. EPS Growth (F1/F0)	19.70%	-4.40%	-10.48%	3.50%	-11.48%	9.73%
Curr. Cash Flow Growth	19.70%	8.84%	5.51%	-3.74%	31.33%	-0.35%
Hist. Cash Flow Growth (3-5 yrs)	11.99%	8.71%	8.55%	7.40%	49.26%	-1.03%
Current Ratio	2.90	1.47	1.28	1.50	1.08	2.12
Debt/Capital	37.98%	23.05%	44.46%	53.18%	26.42%	76.82%
Net Margin	33.36%	6.84%	10.59%	21.35%	3.56%	27.06%
Return on Equity	40.37%	11.18%	16.27%	64.49%	17.83%	64.68%
Sales/Assets	0.49	0.63	0.55	0.81	1.42	0.39
Proj. Sales Growth (F1/F0)	12.46%	1.82%	-2.49%	0.71%	23.48%	-0.01%
Momentum Score	С	-	-	D	С	Α
Daily Price Chg	-0.69%	0.00%	-1.38%	-0.58%	0.95%	-1.52%
1 Week Price Chg	-0.82%	-2.88%	-4.56%	-0.78%	1.27%	-1.21%
4 Week Price Chg	9.42%	11.08%	6.08%	16.68%	5.21%	2.01%
12 Week Price Chg	9.26%	-4.71%	-13.96%	8.70%	24.16%	2.71%
52 Week Price Chg	44.70%	2.00%	-7.85%	67.81%	31.86%	-3.38%
20 Day Average Volume	36,534,004	129,672	2,586,392	36,282,496	4,672,583	10,659,946
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	2.14%	-1.77%	-4.62%	1.17%	-29.19%	-0.42%
(F1) EPS Est 12 week change	0.82%	-8.56%	-16.58%	-9.82%	-28.53%	-0.01%
(Q1) EPS Est Mthly Chg	1.49%	-1.36%	-10.10%	0.31%	-71.25%	-1.36%

## **Zacks Stock Rating System**

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

## **Zacks Recommendation**

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

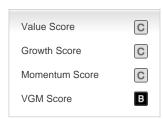
## **Zacks Rank**

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

## **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.



As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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