

Microsoft Corporation

Recommendation **STRONG BUY** ★ ★ ★ ★ ★

Price USD 309.42 (as of market close Apr 01, 2022) **12-Mo. Target Price** USD 397.00 **Report Currency** USD **Investment Style** Large-Cap Growth

Equity Analyst John Freeman

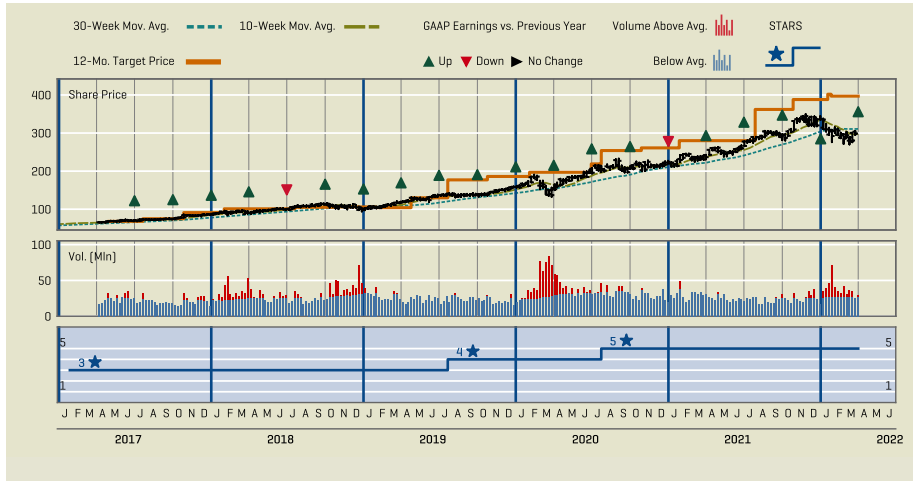
GICS Sector Information Technology
Sub-Industry Systems Software

Summary Microsoft is the world's largest software company. It is best known for Windows and Office and is rapidly expanding into cloud services such as Azure.

Key Stock Statistics (Source: CFRA, S&P Global Market Intelligence (SPGMI), Company Reports)

52-Wk Range	USD 349.67 - 238.05	Oper.EPS2022E	USD 9.66	Market Capitalization[B]	USD 2319.68	Beta	0.91
Trailing 12-Month EPS	USD 9.39	Oper.EPS2023E	USD 11.57	Yield [%]	0.8	3-yr Proj. EPS CAGR[%]	20
Trailing 12-Month P/E	32.96	P/E on Oper.EPS2022E	32.03	Dividend Rate/Share	USD 2.48	SPGMI's Quality Ranking	A-
USD 10K Invested 5 Yrs Ago	50,329.0	Common Shares Outstg.[M]	7,500.00	Trailing 12-Month Dividend	USD 2.98	Institutional Ownership [%]	71.0

Price Performance



Source: CFRA, S&P Global Market Intelligence

Past performance is not an indication of future performance and should not be relied upon as such. Analysis prepared by John Freeman on Jan 26, 2022 10:56 AM ET, when the stock traded at USD 288.36.

Highlights

- We forecast a three-year revenue CAGR of 20% [17% ex. ATVI acquisition], driven by: 1) Azure, which grew 46% in FY 2Q '22 to what we estimate to be ~18% of revenue and is set to grow 35%+ annually through '24 as more legacy apps move to the cloud, especially those first built on .NET; 2) Office, ~22% of revenue, benefiting from a cloud shift tailwind kicking in now that Office 365 cloud subscriptions are 2x+ license/support revenue; 3) strong momentum for LinkedIn, ~7% of revenue, which grew 37% in 2Q and we project to grow 20%+ through '23; and 4) Xbox and game content/services, ~10% of revenue, with growth accelerating to 25%+ through '23 due to higher engagement and demand reverberating from Covid-19-related sheltering-at-home and refreshed console hardware that began shipping more than one year ago.
- We see gross and operating margins improving to 76% and 52%, respectively, in '24, as loss leading Xbox hardware decreases as a percentage of revenue and cloud services continue to gain scale efficiencies.
- Our EPS forecasts are \$9.66 for '22, \$11.57 for '23, and \$13.84 for '24. We also expect continued steady increases over time to the dividend, which presently yields ~0.8%.

Investment Rationale/Risk

- Our Strong Buy is primarily based on MSFT's ongoing and, so far, very successful cloud transition, with strong traction for cloud versions of Office (i.e., "365"), Dynamics, Teams, and, of course, Azure cloud services. Revenue from cloud-based businesses also includes LinkedIn, Bing, and Xbox-Live and is now ~65% of total. As MSFT reaps greater scale efficiencies, we forecast operating margin to hit 50% in '23, up from 42% in '21, 45% in 1Q '22. We assume no revenue growth for Windows (we estimate ~12% of '21 revenue) through '23 but still expect higher contribution to net income from the Windows cash cow. We note tremendous upside potential in AR/VR, both for gaming and a growing number of industrial use cases well-suited to MSFT's HoloLens goggles and development platform.
- We see lower downside risk – both probability and magnitude – for MSFT vs. many of its faster growing peers, especially given its very strong balance sheet providing more downside cushion than most large cap stocks in any sector, in our view.
- Our \$397 target is the product of our EPS forecast for '23 of \$11.57 and a 34.3x P/E [two-year mean, +5% due to solid balance sheet, consistently healthy FCF, and a 0.8% dividend yield].

Analyst's Risk Assessment

LOW	MEDIUM	HIGH
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Our risk assessment balances our view of the company's leading global franchises, Windows, Office, SQL-Server, X-Box, and LinkedIn, considerable growth and success in cloud with "365" applications and Azure, and balance-sheet strength, with challenges related to PC growth, disruption from mobile computing, and MSFT's sheer size and the "law of large numbers problem."

Revenue/Earnings Data

Revenue (Million USD)	1Q	2Q	3Q	4Q	Year
2024	E 64,335	E 70,948	E 70,272	E 78,641	E 284,156
2023	E 54,312	E 60,248	E 59,782	E 66,051	E 240,403
2022	45,317	51,728	E 48,995	E 52,630	E 198,680
2021	37,154	43,076	41,706	46,152	168,088
2020	33,055	36,906	35,021	38,033	143,015
2019	29,084	32,471	30,571	33,717	125,843

Earnings Per Share (USD)

	1Q	2Q	3Q	4Q	Year
2024	E 3.11	E 3.58	E 3.54	E 3.57	E 13.84
2023	E 2.73	E 3.02	E 2.89	E 2.93	E 11.57
2022	2.71	2.48	E 2.38	E 2.53	E 9.66
2021	1.82	2.03	2.03	2.17	7.97
2020	1.38	1.51	1.40	1.46	5.76
2019	1.14	1.08	1.14	1.70	5.06

Fiscal Year ended Jun 30. EPS Estimates based on CFRA's Operating Earnings; historical GAAP earnings are as reported in Company reports.

Dividend Data

Amount (USD)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
0.6200	Mar 14	May 18	May 19	Jun 09 '22
0.6200	Dec 07	Feb 16	Feb 17	Mar 10 '22
0.6200	Sep 14	Nov 17	Nov 18	Dec 09 '21
0.5600	Jun 16	Aug 18	Aug 19	Sep 09 '21

Dividends have been paid since 2003. Source: Company reports

Past performance is not an indication of future performance and should not be relied as such.

Forecasts are not a reliable indicator of future performance. Dividends paid in currencies other than the Trading currency have been accordingly converted for display purposes.

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Microsoft Corporation

Business Summary Jan 26, 2022

CORPORATE OVERVIEW. Microsoft (MSFT) was co-founded by Bill Gates and Paul Allen in 1975 and initially built and sold meta-software, specifically apps and tools used to develop software running on an emerging class of “microprocessors”. While MSFT has remained active in meta-software [e.g., development kits, emulators, compilers, debuggers, etc.], the journey to becoming the world’s largest software company really took off when Gates inked two key deals back-to-back in 1981. The first was with IBM making MSFT the exclusive operating system (OS) supplier for IBM’s initial line of personal computers (PC’s). The second was its purchase of the PC operating system it supplied to IBM called “DOS”, on which MSFT cultivated an entire eco-system of developers and thousands of 3rd party applications.

CORPORATE STRATEGY. MSFT successfully extended its initial lead in PC operating systems with DOS into the next era of graphical or “GUI” operating systems similar to the Apple Macintosh – so similar, in fact, it prompted a lawsuit Apple famously lost, establishing that software’s “look and feel” was too abstract for copyright protection. At the same time, Intel, which supplied the PC microprocessor, now called a Central Processing Unit (CPU), standardized the PC motherboard in the late 80’s that, by the early 90’s, started a wave of companies building “IBM compatible” PC’s, ranging from IBM archrivals, NEC and DEC, to Michael Dell assembling made-to-order PC’s in his Austin, TX dorm room. With Windows 3.1 in 1992, MSFT and Intel solidified their control over most of the PC market and cemented their mutually beneficial WinTel duopoly. WinTel quickly expanded from “client-side” PC’s into an emerging server OS market with Windows NT, which included built-in networking and support for multi-user, shared file access, making stand-alone network OS’s redundant, most notably rival Novel’s Netware, effectively absorbing the market segment.

MSFT also parlayed the WinTel duopoly to selectively pick off the most broadly used Windows applications: word processor, spreadsheet, and e-mail and, later, category-defining, PowerPoint. With these four apps bundled and discounted, MS Office Suite quickly replaced leading incumbents in three major functional areas – Word for WordPerfect, Excel for Lotus 123, Outlook for Lotus Notes, with PowerPoint coming along for the ride. MSFT also expanded into databases, though progress there has been slower. Yet, by the late ‘00’s, MSFT moved ahead of IBM into the #2 share position with Access and SQL Server products, though still well behind Oracle, which dominates the mid-to-high end of the market. Through internal development in the ‘00’s, MSFT also expanded into video game consoles with Xbox, now in a duopoly with Sony.

GOVERNMENT REGULATION. Yet, even at the peak of its market influence, not everything went MSFT’s way. It was slow to react to the Internet, which exploded in popularity once navigation was made easy due to the graphical orientation of the Web. Gates rallied the troops with a now famous 1995 e-mail turning MSFT’s strategic focus to the web browser and competitive attention to Netscape. MSFT once again went to its bundling playbook by integrating Internet Explorer with Windows. This move, however, pushed the U.S. government to sue MSFT in 1997 for abusing its PC OS monopoly. With heightened scrutiny, MSFT was unable to expand via large-scale M&A. From 1997, MSFT’s first large scale acquisition was its moderately successful \$8.5B purchase of Skype in 2011, followed by its unsuccessful \$7B deal for Nokia’s mobile phone unit in 2014 and its very successful social media entre with its \$26B LinkedIn acquisition.

LEADERSHIP. In 2014, Satya Nadella became MSFT’s third CEO, taking over from Steve Ballmer. Nadella articulated a company mantra of “mobile-first, cloud-first”, though it appears now that he only meant the second part. Soon after taking over, he restructured and wrote down the mobile phone business MSFT just bought and mothballed most of MSFT’s mobile businesses, products, and projects. He then began to turn MSFT into a cloud computing giant, moving quickly away from its traditional model of selling user/seat software licenses, upgrades, and maintenance contracts. He invested more heavily in Azure, which evolved quickly to be competitive with Amazon AWS in both Infrastructure-as-a-Service (IaaS) and Platform-as-a-Service (PaaS) categories, finding many large enterprises eager to support a viable competitor to the dominant AWS. MSFT does not break out Azure specifically, but we estimate it grew from \$8B in ‘18, 7% of total, to \$30B in ‘21, 18% of our projected ‘21 total. We expect Azure, now MSFT’s 2nd largest revenue source, to grow 40%+ Y/Y through ‘22 and 25%+ through ‘23. MSFT’s largest revenue source, Office at ~20% of total, has grown in line with total revenue since ‘18, as 30%+ Y/Y growth in cloud-based Office 365 subscriptions were partially offset by declines in sales of legacy Office license/support. Now that the shift to Office 365 is largely complete for MSFT, we see Office 365 growing 20%+ Y/Y through ‘23, benefitting from a cloud-shift tailwind and higher monetization of non-paying users and supporting our overall 3-year revenue CAGR forecast of 15%.

FINANCIAL TRENDS. The impact of MSFT’s cloud transition on overall revenue started with annual revenue growth rates of 7.8% [2015], -1.7% [2016], and 5.1% [2017], reflecting the initial headwind usually encountered in the shift from a legacy model with large up-front sales of software installed and operated on the customer’s premises to one based on cloud delivery and subscription billing. Revenue growth hit 14%/year in each of the next three years, accelerating further to 18% in ‘21, due to a cloud shift tailwind that kicks in when subscriptions exceed ~50% to 65% of total. We see MSFT also benefitting from an accelerated migration of apps to the cloud as enterprises strive for greater operational agility and streamlining in reaction to the global pandemic. With ongoing gross margin improvement as cloud delivery scales and the overall operating leverage of MSFT’s model, we expect EPS growth to moderately exceed revenue growth through 2025.

Corporate information

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Officer & Vice Chairman

B. L. Smith

Corporate VP of Finance &

Administration and Chief

Accounting Officer

A. L. Jolla

President, Chief Legal

Officer & Vice Chairman

B. L. Smith

Chairman & CEO

S. Nadella

Executive VP & CFO

A. E. Hood

Chairman & CEO

S. Nadella

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R. G. Hoffman

S. E. Peterson

S. Nadella

T. L. List-Stoll

Domicile

Washington

Auditor

Deloitte & Touche LLP

Founded

1975

Employees

181,000

Stockholders

89,291

Microsoft Corporation

Quantitative Evaluations					Expanded Ratio Analysis					
Fair Value Rank	1	2	3	4	5					
	LOWEST			HIGHEST						
	Based on CFRA's proprietary quantitative model, stocks are ranked from most overvalued [1] to most undervalued [5].									
Fair Value Calculation	USD	296.71	Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that MSFT is overvalued by USD 12.71 or 4.11%							
Volatility	LOW	AVERAGE	HIGH							
Technical Evaluation	NEUTRAL	Since October, 2021, the technical indicators for MSFT have been NEUTRAL"								
Insider Activity	UNFAVORABLE	NEUTRAL	FAVORABLE							
	Key Growth Rates and Averages									
	Past Growth Rate [%]						1 Year	3 Years	5 Years	
	Net Income						38.37	54.63	24.43	
	Sales						17.53	15.06	13.02	
	Ratio Analysis [Annual Avg.]									
	Net Margin [%]						36.45	32.87	28.00	
	% LT Debt to Capitalization						31.86	37.26	41.14	
	Return on Equity [%]						47.08	43.21	36.20	

Company Financials Fiscal year ending Jun 30										
Per Share Data [USD]	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Tangible Book Value	11.24	8.97	6.88	5.08	5.51	6.45	7.26	7.61	7.35	5.93
Free Cash Flow	7.44	5.94	4.99	4.19	4.05	3.15	2.90	3.26	2.93	3.49
Earnings	8.05	5.76	5.06	2.13	3.25	2.56	1.48	2.63	2.58	2.00
Earnings [Normalized]	5.74	4.33	3.47	2.73	2.22	2.04	2.11	2.05	2.04	2.06
Dividends	2.24	2.04	1.84	1.68	1.56	1.44	1.24	1.12	0.92	0.80
Payout Ratio [%]	27.00	34.00	35.00	77.00	46.00	54.00	81.00	40.00	34.00	38.00
Prices: High	271.65	204.40	138.40	102.69	72.89	56.85	50.04	42.29	35.78	32.95
Prices: Low	196.25	130.78	93.96	68.02	50.39	39.72	40.12	30.84	26.26	23.79
P/E Ratio: High	33.70	35.50	27.40	48.20	22.40	22.20	33.80	16.10	13.90	16.50
P/E Ratio: Low	24.40	22.70	18.60	31.90	15.50	15.50	27.10	11.70	10.20	11.90
Income Statement Analysis [Million USD]										
Revenue	168,088	143,015	125,843	110,360	96,571	91,154	93,580	86,833	77,849	73,723
Operating Income	69,916	53,145	42,959	35,058	29,331	27,188	28,172	27,886	27,497	27,956
Depreciation + Amortization	10,900	12,300	11,600	9,900	7,800	5,878	5,400	4,245	3,339	2,758
Interest Expense	2,330	2,591	2,686	2,733	2,222	1,243	781.00	597.00	429.00	380.00
Pretax Income	71,102	53,036	43,688	36,474	29,901	25,639	18,507	27,820	27,052	22,267
Effective Tax Rate	13.80	16.50	10.20	54.60	14.80	19.90	34.10	20.70	19.20	23.80
Net Income	61,271	44,281	39,240	16,571	25,489	20,539	12,193	22,074	21,863	16,978
Net Income [Normalized]	43,669	33,244	26,900	21,247	17,386	16,320	17,388	17,239	17,283	17,488
Balance Sheet and Other Financial Data [Million USD]										
Cash	130,256	136,492	133,832	133,664	132,901	113,041	96,391	85,146	76,410	62,044
Current Assets	184,406	181,915	175,552	169,662	162,696	139,660	122,797	114,246	101,466	85,084
Total Assets	333,779	301,311	286,556	258,848	250,312	193,468	174,472	172,384	142,431	121,271
Current Liabilities	88,657	72,310	69,420	58,488	55,745	59,357	49,647	45,625	37,417	32,688
Long Term Debt	50,074	59,578	66,662	72,242	76,073	40,557	27,808	20,645	12,601	10,713
Total Capital	224,266	200,414	188,785	170,226	183,238	126,538	115,467	112,987	95,234	79,138
Capital Expenditures	20,622	15,441	13,925	11,632	8,129	8,343	5,944	5,485	4,257	2,305
Cash from Operations	76,740	60,675	52,185	43,884	39,507	33,325	29,668	32,502	28,833	31,626
Current Ratio	2.08	2.52	2.53	2.90	2.92	2.35	2.47	2.50	2.71	2.60
% Long Term Debt of Capitalization	31.90	38.00	41.90	48.10	45.80	32.70	24.10	18.30	13.20	13.50
% Net Income of Revenue	36.50	31.00	31.20	15.00	26.40	22.50	13.00	25.40	28.10	23.00
% Return on Assets	13.76	11.30	9.85	8.61	8.26	9.24	10.15	11.07	13.03	15.20
% Return on Equity	47.10	40.10	42.40	19.40	31.90	27.00	14.40	26.20	30.10	27.50

Source: S&P Global Market Intelligence. Data may be preliminary or restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends; EPS diluted. E-Estimated. NA-Not Available. NM-Not Meaningful. NR-Not Ranked. UR-Under Review.

Microsoft Corporation

Sub-Industry Outlook

CFRA has a positive fundamental outlook for the S&P 500 Systems Software sub-industry, as we also have for the S&P 500 Application Software sub-industry. In an increasingly "cloud world", the distinction between application and systems software becomes fuzzier and less relevant from an investor's perspective, as the client-server era's clear demarcations dissolve into an increasingly distributed and functionally federated micro-services architecture. Not to mention the fact that Microsoft and Oracle, which together make up 95% of the S&P 500 System Software sub-industry by market cap, generate less than 50% of their revenue from what would be considered "systems software".

Now including results from 4Q21, TTM revenue for the S&P 500 Software Industry constituents was \$459B, +19.9% Y/Y, accelerating from 19.2% growth in 3Q21 and 17.5% Y/Y growth in 2Q. Software industry growth has been accelerating since 2H20 as many enterprises delayed projects and cut spending due to the initial uncertainty at the start of the Covid-19 pandemic. We continue to forecast S&P 500 Software Industry revenue for 2022 to grow 16% Y/Y, primarily driven by cloud migration and Covid-19-related digital transformation projects and partially hindered by declining revenue from sales of legacy client-server software licenses and maintenance and support, decelerating only modestly to 14% in 2023.

Compared to the S&P 500 Software Industry, the larger overall global software industry, which grew 2.3% Y/Y in 2020 to \$571B, contains many smaller, niche-oriented, or country-specific vendors more dependent on legacy maintenance revenue from the client-server era (and even from lingering mainframe software). We project the overall global software industry to grow 10.7% in 2021 to \$632B (IDC's numbers for 2021 are expected to be published later in 2022) and 9.1% in 2022 to \$690. In August 2020, we formalized CFRA's "Four Key Trends in Enterprise Software," which we see as crucial to understanding the software industry and distilling investment-

relevant insights as it evolves: Cloud Migration, Digital Transformation, The Rise of Meta-Software, and Artificial Intelligence (AI). While the lingo has changed, the investment-relevant impact of these trends has been building for over a decade, though, in our view, only cloud migration is now hitting "peak impact." Similar to the financial crisis of 2008, Covid-19's impact on the overall economy, especially on energy, travel, restaurants, and many brick-and-mortar retailers, led to a dip in IT spending growth in 2020. Yet, like 2008, Covid-19 has accelerated these trends as enterprises reacted with aggressive cost-cutting and streamlining for greater operational agility. On top of that, the massive surge in remote workers and the sudden need to serve customers while minimizing physical contact catalyzed faster cloud adoption and greater investment in digital transformation projects, a.k.a. substituting software for labor and capital in the means of production (e.g., Uber's software substitutes for taxi dispatch systems and dispatchers).

Despite the sharp tech sell-off in the first week of 2022, the S&P 500 Systems Software sub-industry is still up 28.0% TTM vs. 14.8% for the overall S&P 500. At a P/E of 32.7x vs. the overall S&P 500 P/E of 22.3x, the relative valuation for this sub-industry is roughly in line with history, though it is on the high-side historically on an absolute basis.

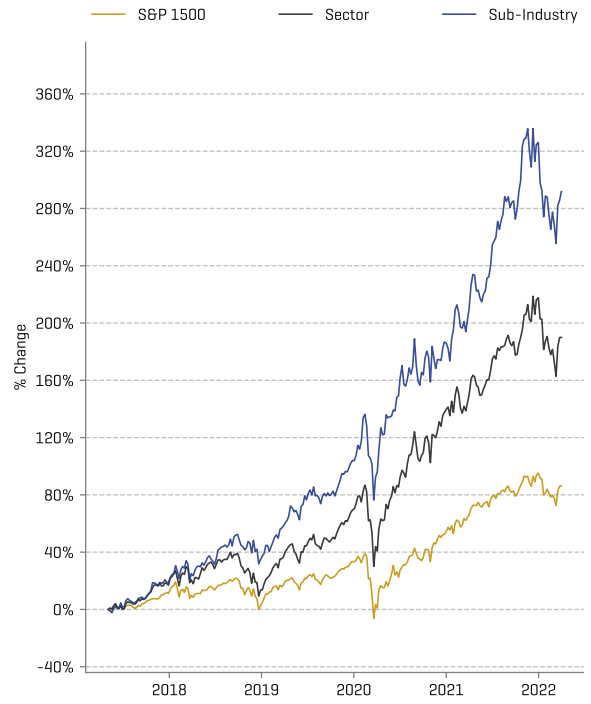
/ John Freeman

Industry Performance

GICS Sector: Information Technology Sub-Industry: Systems Software

Based on S&P 1500 Indexes

Five-Year market price performance through Apr 02, 2022



NOTE: A sector chart appears when the sub-industry does not have sufficient historical index data.

All Sector & Sub-Industry information is based on the Global Industry Classification Standard (GICS).

Past performance is not an indication of future performance and should not be relied upon as such.

Source: CFRA, S&P Global Market Intelligence

Sub-Industry: Systems Software Peer Group*: Systems Software

Peer Group	Stock Symbol	Exchange	Currency	Recent Stock Price	Stk. Mkt. Cap. [M]	30-Day Price Chg. [%]	1-Year Price Chg. [%]	P/E Ratio	Fair Value Calc.	Yield [%]	Return on Equity [%]	LTD to Cap [%]
Microsoft Corporation	MSFT	NasdaqGS	USD	309.42	2,319,680.0	3.1	27.7	33.0	296.71	0.8	49.1	30.1
Check Point Software Technologies Ltd.	CHKP	NasdaqGS	USD	139.23	18,489.0	-6.5	22.6	23.0	132.91	N/A	24.3	0.8
CrowdStrike Holdings, Inc.	CRWD	NasdaqGS	USD	227.85	52,580.0	12.9	21.8	NM	N/A	N/A	-24.3	42.2
Fortinet, Inc.	FTNT	NasdaqGS	USD	339.01	54,518.0	-1.7	81.9	93.0	249.41	N/A	73.3	55.5
NortonLifeLock Inc.	NLOK	NasdaqGS	USD	26.94	15,686.0	-9.0	25.8	17.0	N/A	1.9	-313.2	73.8
Oracle Corporation	ORCL	NYSE	USD	82.01	218,816.0	4.8	14.2	31.0	54.91	1.6	1060.3	102.8
Palo Alto Networks, Inc.	PANW	NasdaqGS	USD	611.11	60,185.0	5.0	86.3	NM	N/A	N/A	-79.9	6.9
ServiceNow, Inc.	NOW	NYSE	USD	548.69	109,738.0	-6.5	8.2	486.0	280.94	N/A	7.0	34.5
UiPath Inc.	PATH	NYSE	USD	22.18	11,650.0	-34.6	N/A	NM	15.26	N/A	-44.9	2.5
VMware, Inc.	VMW	NYSE	USD	114.21	48,089.0	-4.5	-25.1	26.0	100.65	N/A	44.5	105.6
Zscaler, Inc.	ZS	NasdaqGS	USD	246.21	34,737.0	-3.2	40.1	NM	N/A	N/A	-63.5	63.4

*For Peer Groups with more than 10 companies or stocks, selection of issues is based on market capitalization.

NA-Not Available; NM-Not Meaningful.

Note: Peers are selected based on Global Industry Classification Standards and market capitalization. The peer group list includes companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business.

Microsoft Corporation

Analyst Research Notes and other Company News

January 26, 2022

01:59 AM ET... CFRA Keeps Strong Buy Rating on Shares of Microsoft Corporation [MSFT 288.49*****]:

We trim our target by \$5 to \$397 after impressive FY 2Q 22 results that exceeded already elevated expectations, especially on the bottom line, benefitting not only from three quarters in a row of 20%+ Y/Y growth, the highest organic growth in a decade, but also modest 100bps Y/Y operating margin expansion. Our \$397 target is the product of our EPS forecast for '23 of \$11.57, \$0.08 higher, and a 34.3x P/E [2-year mean, +5% due to solid balance sheet, consistently healthy FCF, and a 0.8% dividend yield]. 2Q revenue grew 20% Y/Y to \$51.7B, about in line with consensus, while EPS of \$2.48 grew 22% Y/Y and beat by \$0.16. We also raise our EPS forecasts for '22 by \$0.34 to \$9.66 and for '24 by \$0.17 to \$13.84. Growth was led by Intelligent Cloud [+26% Y/Y to 35% of 2Q total], driven mostly by Azure, +46% Y/Y, though LinkedIn revenue grew a very impressive 37% Y/Y to ~9% of total and Dynamics 365 was up 45% to ~2% of total. Investors were also likely heartened by guidance implying 15% Y/Y revenue growth in 3Q. / John Freeman

January 18, 2022

04:01 PM ET... CFRA Maintains Strong Buy Rating on Shares of Microsoft Corporation [MSFT 304.22*****]:

We raise our target by \$14 to \$402 after MSFT announced a \$68B, all-cash plan to buy Activision Blizzard [ATVI] [\$62B given ATVI's \$6B in net cash], the leading video game publisher in what we see as a brilliant, bold move -- MSFT's largest by far [LinkedIn is now second at \$26B in 2016] and one we expect to be materially accretive to EPS. Our \$402 target is the product of our EPS forecast for '23 of \$11.49, now \$0.37 higher, and a 35.0x P/E [2-year mean, +8% due to historically strong balance sheet, consistently strong FCF generation, and a 0.8% dividend yield]. We leave '22 at \$9.32 but raise our EPS forecast for '24 by \$0.40 to \$13.67. We are concerned MSFT may jeopardize its Xbox platform as developers may not want to compete on a platform against the platform owner. However, in our view, the architectural similarity between the semi-custom AMD processors in both the Sony PS5 and Xbox Series X consoles encourages developers to make games for both, given the lower incremental effort of doing so. / John Freeman

December 07, 2021

09:36 AM ET... CFRA Raises Opinion on Information Technology to Overweight from Marketweight [MSFT 326.19*****]:

We raised our recommended exposure to the S&P 500 Information Technology sector to overweight from marketweight. We think cyclical sectors will be boosted now that the Omicron-induced sell-off has likely run its course. The pullback in prices resulted in an adjustment in multiples for decelerating tech sector growth in 2022, making the group more attractive relative to other sectors; secular drivers for the tech sector also remain very much intact. Finally, while the sector carries a neutral count of component companies with favorable CFRA STARS rankings versus all stocks in the S&P 500, it sports above-average cap-weighted aggregate CFRA STARS and market-leading relative strength. / Sam Stovall

October 27, 2021

12:13 AM ET... CFRA Maintains Strong Buy Rating on Shares of Microsoft Corporation [MSFT 310.12*****]:

We raise our target by \$26 to \$388 based on: 1) another quarter of outstanding results with Sep-Q ['21] revenue growth accelerating again to 22% Y/Y as MSFT's large subscription shift tailwind [+6 to 8% in Y/Y growth by our estimate] begins to hit peak impact, which we expect to last through FY 23 with a residual tailwind of +2% to 4% higher Y/Y growth likely lasting through FY 25; 2) another quarter of 50% Y/Y growth for Azure cloud, which is completely additive to total growth, driving 31% Y/Y higher Intelligent Cloud revenue to 37% of total; 3) continued strong operating margin expansion, up 200 bps Y/Y to 45%, despite gross margin declining 100bps Y/Y. Our \$388 target is the product of our '23 EPS forecast of \$11.12, now \$0.21 higher, and a 34.9x P/E [2-year mean, +10% due to \$67B in net cash and a 0.8% dividend yield]. Revenue of \$45.3B grew 22% Y/Y and beat consensus by \$1.33B; EPS of \$2.27, +25% Y/Y, beat by \$0.19. We also raise our EPS forecasts for '22 by \$0.14 to \$9.32 and for '24 by \$0.27 to \$13.27. / John Freeman

July 28, 2021

12:04 PM ET... CFRA Maintains Strong Buy on Shares of Microsoft Corporation [MSFT 286.54*****]:

We raise our target \$60 to \$362 based on 1) impressive Jun-Q ['21] results with

revenue growth accelerating to 21% Y/Y, driven primarily by a large cloud shift tailwind now gaining momentum [Commercial Office 365 +25% Y/Y; Dynamics 365, 2%-3% of total revenue, +49%], 51% Y/Y growth for the Azure cloud platform [closing in on 20% of total revenue] and secondarily by the return of ad spend for LinkedIn and Bing; and 2) continued strong operating margin expansion, up 600 bps Y/Y to 41%, boosted by 200 bps gross margin expansion to 70%, as cloud scales, partially offset by 162% Y/Y growth in low-margin, recently upgraded Xbox hardware. Our \$362 target is the product of our '23 EPS forecast of \$10.91, rolled forward from '22 and \$0.48 higher, and a 33.2x P/E [2-year mean, +10% due to \$63B in net cash and a 1% dividend yield]. 4Q revenue of \$46.2B was 21% Y/Y and beat consensus by \$1.85B; EPS of \$2.17, +49% Y/Y, beating by \$0.25. We also raise our EPS forecasts for '22 by \$0.08 to \$9.18 and initiate '24's at \$13.00. / John Freeman

January 27, 2021

02:50 PM ET... CFRA Maintains Strong Buy Rating on Shares of Microsoft Corporation [MSFT 232.45*****]:

We maintain our Strong Buy and raise our target by \$19 to \$280 based on another strong quarter, with 17% YoY revenue growth driven by: 1. a rising cloud-shift tailwind now that cloud-based revenue approaches 60% of total with Azure Cloud [-18% of Q2 revenue, CFRA estimate] reaccelerating to 50% YoY growth from the high 40's in FY Q4 20 [Jun.] and Q1 '21; 2. Nov. 11 Xbox Series X launch and surge in video game play/sales due to global sheltering-at-home drove 51% YoY growth for all X-box-related revenue [-10% of total]. Our \$280 target is the product of our now higher '22 EPS forecast of \$8.64 [+0.16] and a 32.1x multiple [2-yr. mean, +10% due to a strong balance sheet and 1% dividend yield]. 2Q revenue of \$43.1B was up 17% YoY and beat consensus by \$2.8B; EPS of \$2.03, +34% YoY, beat by \$0.39. We also raise our EPS forecasts for '21 to \$7.46 [+0.47] and for '23 to \$10.15 [+0.12], driven by our projected 3-yr. revenue CAGR of 15% and operating margin expansion to 48% in '23, vs. 37% '20 and 42% for Q2 '21. / John Freeman

October 28, 2020

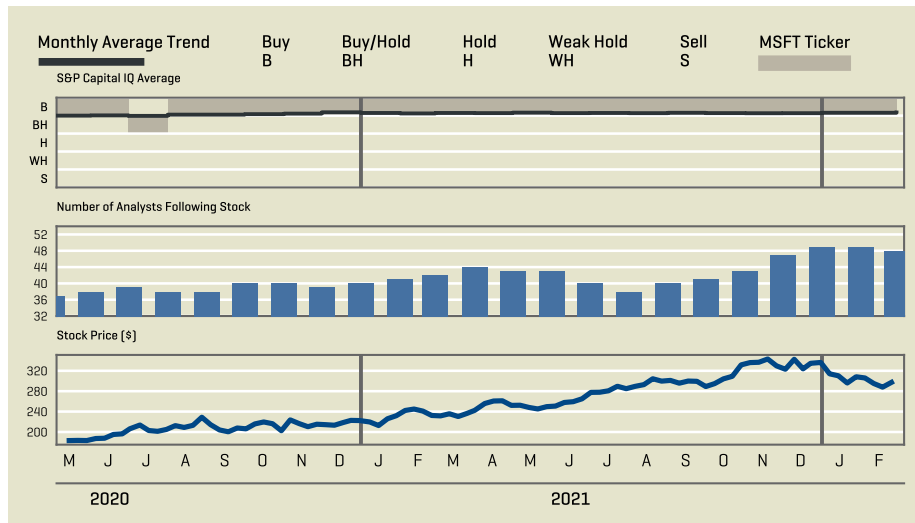
10:21 AM ET... CFRA Maintains Strong Buy Rating on Shares of Microsoft, Inc. [MSFT 213.25*****]:

We maintain our Strong Buy and raise our target by \$7 to \$261 based on strong Q1 FY 21 [Jun.] results, driven primarily by a cloud-shift tailwind gaining momentum now that cloud subscriptions are ~60% of revenue, and secondarily by Xbox, up 30% YoY -- surprisingly strong just before the November 11 launch of the new Xbox Series X, with completely re-designed hardware for a much more immersive and compelling experience, in our view. Our \$261 target is the product of our '22 EPS forecast of \$8.48, up by \$0.04, and a 30.8x multiple [2-year mean, +10% due to a strong balance sheet and a 1% dividend yield]. Q1 revenue of \$37.2B beat consensus by \$1.4B and was up 12% YoY; EPS of \$1.82, +32% YoY, beat by \$0.27. We also raise our EPS forecasts for '21 to \$6.99 [+0.03] and for '23 to \$10.03 [+0.14], driven by our projected 3-yr. revenue CAGR of 15%, and our forecasted expansion of operating margin to 47% in '23, vs. 37% for FY 20 and 43% for Q1 '21, as cloud delivery begins reaping considerable economies-of-scale. / John Freeman

Note: Research notes reflect CFRA's published opinions and analysis on the stock at the time the note was published. The note reflects the views of the equity analyst as of the date and time indicated in the note, and may not reflect CFRA's current view on the company.

Microsoft Corporation

Analysts Recommendations



	No. of Recommendations	% of Total	1 Mo.Prior	3 Mos.Prior
Buy	32	67	32	32
Buy/Hold	13	27	13	14
Hold	1	2	1	1
Weak hold	0	0	0	0
Sell	0	0	0	0
No Opinion	2	4	2	2
Total	48	100	48	49

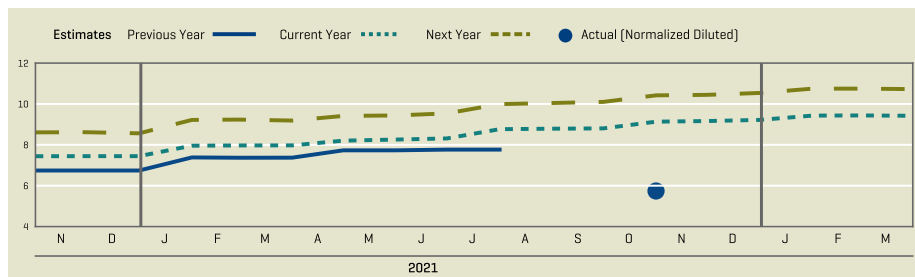
Wall Street Consensus Opinion

Buy

Wall Street Consensus vs. Performance

For fiscal year 2022, analysts estimate that MSFT will earn USD 9.42. For fiscal year 2023, analysts estimate that MSFT's earnings per share will grow by 13.82% to USD 10.72.

Wall Street Consensus Estimates



Fiscal Year	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2023	10.72	11.50	9.28	35	28.85
2022	9.42	10.45	9.07	29	32.84
2023 vs. 2022	▲ 14%	▲ 10%	▲ 2%	▲ 21%	▼ -12%
Q3'23	2.59	2.77	2.22	22	119.33
Q3'22	2.19	2.38	2.14	28	141.03
Q3'23 vs. Q3'22	▲ 18%	▲ 16%	▲ 4%	▼ -21%	▼ -15%

Forecasts are not reliable indicator of future performance.

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.

Note: For all tables, graphs and charts in this report that do not cite any reference or source, the source is S&P Global Market Intelligence.

Microsoft Corporation

Glossary

STARS

Since January 1, 1987, CFRA Equity and Fund Research Services, and its predecessor S&P Capital IQ Equity Research has ranked a universe of U.S. common stocks, ADRs [American Depositary Receipts], and ADSs [American Depositary Shares] based on a given equity's potential for future performance. Similarly, we have ranked Asian and European equities since June 30, 2002. Under proprietary STARS (Stock Appreciation Ranking System), equity analysts rank equities according to their individual forecast of an equity's future total return potential versus the expected total return of a relevant benchmark [e.g., a regional index [MSCI AC Asia Pacific Index, MSCI AC Europe Index or S&P 500® Index]], based on a 12-month time horizon. STARS was designed to help investors looking to put their investment decisions in perspective. Data used to assist in determining the STARS ranking may be the result of the analyst's own models as well as internal proprietary models resulting from dynamic data inputs.

S&P Global Market Intelligence's Quality Ranking

[also known as **S&P Capital IQ Earnings & Dividend Rankings**] - Growth and S&P Capital IQ Earnings & Dividend Rankings stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to capsize the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A+	Highest	B	Below Average
A	High	B-	Lower
A	Above	C	Lowest
B+	Average	D	In Reorganization
NC	Not Ranked		

EPS Estimates

CFRA's earnings per share (EPS) estimates reflect analyst projections of future EPS from continuing operations, and generally exclude various items that are viewed as special, non-recurring, or extraordinary. Also, EPS estimates reflect either forecasts of equity analysts; or, the consensus [average] EPS estimate, which are independently compiled by S&P Global Market Intelligence, a data provider to CFRA. Among the items typically excluded from EPS estimates are asset sale gains; impairment, restructuring or merger-related charges; legal and insurance settlements; in process research and development expenses; gains or losses on the extinguishment of debt; the cumulative effect of accounting changes; and earnings related to operations that have been classified by the company as discontinued. The inclusion of some items, such as stock option expense and recurring types of other charges, may vary, and depend on such factors as industry practice, analyst judgment, and the extent to which some types of data is disclosed by companies.

12-Month Target Price

The equity analyst's projection of the market price a given security will command 12 months hence, based on a combination of intrinsic, relative, and private market valuation metrics, including Fair Value.

Abbreviations Used in Equity Research Reports

CAGR	- Compound Annual Growth Rate
CAPEX	- Capital Expenditures
CY	- Calendar Year
DCF	- Discounted Cash Flow
DDM	- Dividend Discount Model
EBIT	- Earnings Before Interest and Taxes
EBITDA	- Earnings Before Interest, Taxes, Depreciation & Amortization
EPS	- Earnings Per Share
EV	- Enterprise Value
FCF	- Free Cash Flow
FFO	- Funds From Operations
FY	- Fiscal Year
P/E	- Price/Earnings
P/NAV	- Price to Net Asset Value
PEG Ratio	- P/E-to-Growth Ratio
PV	- Present Value
R&D	- Research & Development
ROCE	- Return on Capital Employed
ROE	- Return on Equity
ROI	- Return on Investment
ROIC	- Return on Invested Capital
ROA	- Return on Assets
SG&A	- Selling, General & Administrative Expenses
SOTP	- Sum-of-The-Parts
WACC	- Weighted Average Cost of Capital

Dividends on American Depositary Receipts (ADRs) and American Depositary Shares (ADSs) are net of taxes (paid in the country of origin).

Qualitative Risk Assessment

Reflects an equity analyst's view of a given company's operational risk, or the risk of a firm's ability to continue as an ongoing concern. The Qualitative Risk Assessment is a relative ranking to the U.S. STARS universe, and should be reflective of risk factors related to a company's operations, as opposed to risk and volatility measures associated with share prices. For an ETF this reflects on a capitalization-weighted basis, the average qualitative risk assessment assigned to holdings of the fund.

STARS Ranking system and definition:

★★★★★ 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a notable margin over the coming 12 months, with shares rising in price on an absolute basis.

★★★★ 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months.

★★★ 3-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months.

★★★ 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months.

★★★ 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a notable margin over the coming 12 months, with shares falling in price on an absolute basis.

Relevant benchmarks:

In North America, the relevant benchmark is the S&P 500 Index, in Europe and in Asia, the relevant benchmarks are the MSCI AC Europe Index and the MSCI AC Asia Pacific Index, respectively.

Microsoft Corporation

Disclosures

Stocks are ranked in accordance with the following ranking methodologies:

STARS Stock Reports:

Qualitative STARS rankings are determined and assigned by equity analysts. For reports containing STARS rankings refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

Quantitative Stock Reports:

Quantitative rankings are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative rankings refer to the Glossary section of the report for detailed methodology and the definition of Quantitative rankings.

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STARS Stock Reports:

Global STARS Distribution as of February 08, 2022

Ranking	North America	Europe	Asia	Global
Buy	43.8%	46.2%	40.0%	43.4%
Hold	50.0%	47.4%	55.7%	50.7%
Sell	6.2%	6.4%	4.3%	5.9%
Total	100.0%	100.0%	100.0%	100.0%

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