CFRA

Microsoft Corporation

Recommendation	Price	12-Mo. Target Price	Report Currency	Investment Style
STRONG BUY ★★★★★	USD 336.06 (as of market close Nov 05, 2021)	USD 388.00	USD	Large-Cap Growth

Equity Analyst John Freeman

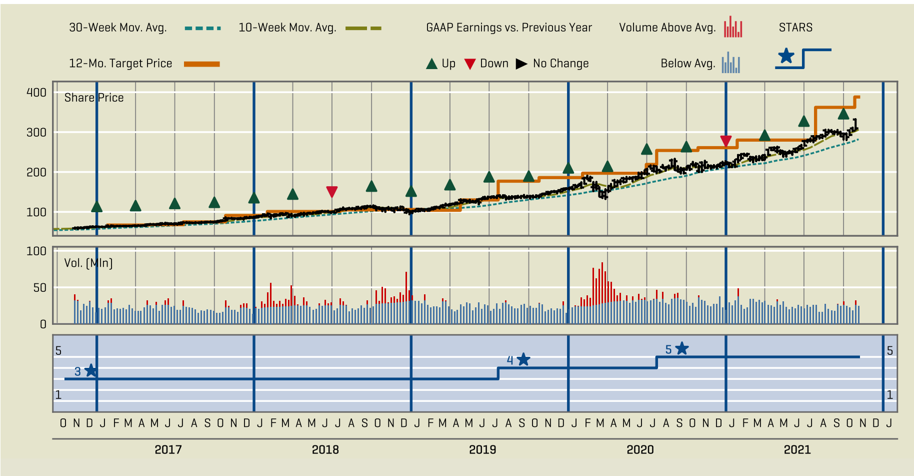
GICS Sector Information Technology
Sub-Industry Systems Software

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 336.44 - 210.11**	Oper.EPS2022**E**	**USD 9.32**	Market Capitalization[B]	**USD 2523.13**	Beta	**0.80**
Trailing 12-Month EPS	**USD 8.94**	Oper.EPS2023**E**	**USD 11.12**	Yield [%]	**0.74**	3-yr Proj. EPS CAGR[%]	**19**
Trailing 12-Month P/E	**37.59**	P/E on Oper.EPS2022**E**	**36.06**	Dividend Rate/Share	**USD 2.48**	SPGMI's Quality Ranking	**A-**
USD 10K Invested 5 Yrs Ago	**55,841.0**	Common Shares Outstg.[M]	**7,508.00**	Institutional Ownership [%]	**72.0**		

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 Oct 27, 2021 12:43 AM ET, when the stock traded at **USD 311.22**.

Highlights

▶ We forecast a 3-year revenue CAGR of 17%, driven primarily by: 1) Azure Cloud, which grew 50%+ in FY 21 (June) and in 1Q '22 to what we estimate to be ~21% of revenue and is set to grow 35%+ annually through '24 as more legacy apps move to the cloud, especially those originally built on MSFT's .NET framework; 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 we project to grow 20%+ through '23; and 4) Xbox consoles 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 in November 2020.

▶ 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 $9.32 for '22, $11.12 for '23, and $13.27 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 $388 target is the product of our '23 EPS forecast of $11.12 and a 34.9x P/E (2-year mean, +10% due to a strong balance sheet with $67B in net cash and a 0.8% dividend yield).

Analyst's Risk Assessment

LOW | **MEDIUM** | HIGH

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** 268,136
2023	**E** 53,036	**E** 57,683	**E** 57,388	**E** 63,244	**E** 231,351
2022	45,317	**E** 49,842	**E** 49,211	**E** 53,695	**E** 198,075
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** 13.27
2023	**E** 2.57	**E** 2.81	**E** 2.82	**E** 2.92	**E** 11.12
2022	2.71	**E** 2.30	**E** 2.30	**E** 2.45	**E** 9.32
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	Sep 14	Nov 17	Nov 18	Dec 09 '21
0.5600	Jun 16	Aug 18	Aug 19	Sep 09 '21
0.5600	Mar 16	May 19	May 20	Jun 10 '21
0.5600	Dec 02	Feb 17	Feb 18	Mar 11 '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.

Microsoft Corporation

Business Summary Oct 27, 2021

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 Louts 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 base 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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Officers

President, Chief Legal Officer & Vice Chairman
B. L. Smith

Chairman & CEO
S. Nadella

Executive VP & CFO
A. E. Hood

President, Chief Legal Officer & Vice Chairman
B. L. Smith

Corporate VP of Finance & Administration and Chief Accounting Officer
A. L. Jolla

Chairman & CEO
S. Nadella

Board Members

A. C. Nygart	P. S. Pritzker
B. L. Smith	P. Warrior
C. W. Scharf	R. G. Hoffman
E. N. Walmsley	S. E. Peterson
H. F. Johnston	S. Nadella
J. W. Stanton	T. L. List-Stoll
J. W. Thompson	

Domicile
Washington

Auditor
Deloitte & Touche LLP

Founded
1975

Employees
181,000

Stockholders
89,291

Microsoft Corporation

Quantitative Evaluations

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 311.30**	Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that MSFT is overvalued by USD 24.76 or 7.37%
Volatility		**LOW** | AVERAGE | HIGH
Technical Evaluation	**NEUTRAL**	Since October, 2021, the technical indicators for MSFT have been NEUTRAL"
Insider Activity		UNFAVORABLE | **NEUTRAL** | FAVORABLE

Expanded Ratio Analysis

	2021	2020	2019	2018
Price/Sales	12.26	10.93	8.25	6.96
Price/EBITDA	25.50	23.89	19.04	17.10
Price/Pretax Income	28.99	29.48	23.77	21.07
P/E Ratio	33.65	35.33	26.47	46.30
Avg. Diluted Shares Outstg. (M)	7608.00	7683.00	7753.00	7794.00

Figures based on fiscal year-end price

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 Research has a positive fundamental outlook for the Systems Software sub-industry, as we also have for the Software Applications sub-industry. Though the constituents differ, in an increasingly "cloud world" that is moving away from the clear demarcations of the client-server architecture and based more on a distributed micro-services architecture, the distinction between applications and systems software becomes fuzzier and less relevant from an investor's perspective. As of 9/14/21, trailing 12-month S&P 500 Software Industry revenue was $392B, up 17.5% year-over-year (Y/Y), with growth accelerating in 2H '20 as many enterprises delayed projects and cut spending due to the initial uncertainty at the start of the Covid-19 pandemic. We forecast S&P 500 Software industry revenue to grow 16% in 2021, continuing to benefit Covid-19-related spending, decelerating to 12% in 2022, driven primarily by the ongoing migration of enterprise apps to the cloud, partially offset by declining revenue from legacy client-server software revenue that consists primarily of sales of maintenance and support contracts and secondarily of license sales. Compared to the S&P 500 software industry, the larger overall global software industry, which grew 3% Y/Y in 2020 to $575B, contains many smaller, niche-oriented, or country-specific vendors that are more dependent on maintenance revenue from legacy client-server apps (and even from lingering mainframe software). We project the overall global software industry to grow ~11% in '21 and ~9% in '22 to $638B and $700B, respectively.

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 a decade, though, in our view, only cloud migration is now hitting "peak impact." Just as it was during the Great Financial Crisis of '08-'09, Covid-19's impact on the overall economy, especially on energy, travel, restaurants, and other areas within brick-and-mortar retail, led to a dip in IT spending growth in 2020.

Yet, like the Great Financial Crisis, Covid-19 has accelerated these trends as enterprises react to the pandemic with aggressive cost-cutting and streamlining for greater operational agility. On top of that, the massive surge in remote workers during the pandemic and increased need to serve customers while minimizing physical contact catalyzed faster adoption of cloud computing and greater investment in digital transformation projects, aka substituting software for labor and capital in the means of production (e.g., Uber's software substitutes for taxi dispatch systems and dispatchers). However, once again, similar to the Great Financial crisis, we have seen a lag of three to four quarters between the initial catalyst and its full positive impact on industry revenue, which we see likely peaking in 2H '21 to 1H '22.

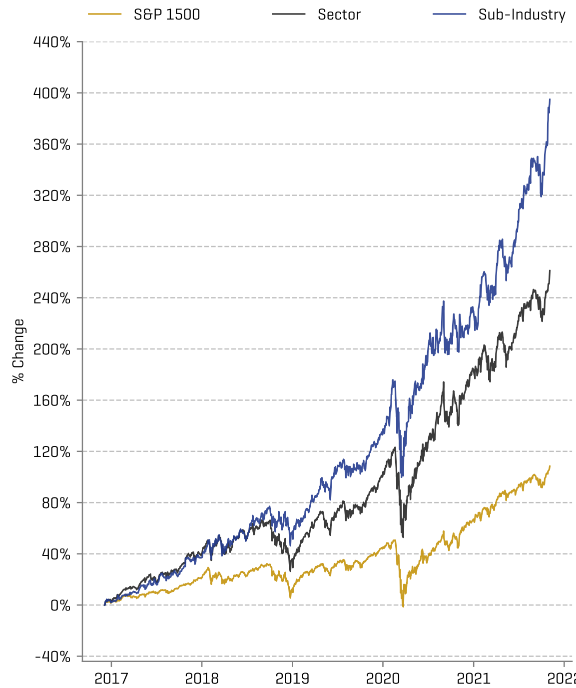
As of 9/14/21, the S&P 500 Systems Software sub-industry is up 19.9% YTD vs. 19.0% for the S&P 500 overall. With a 36.9x (LTM) P/E, the S&P 500 Systems Software sub-industry looks expensive, especially vs. the overall S&P 500 with a P/E of 28.7x, until one considers that Systems Software's trailing 3-year EPS CAGR is 53%, vs. 9% for the overall S&P 500.

/ John Freeman

Industry Performance

GICS Sector: **Information Technology**
Sub-Industry: **Systems Software**

Based on S&P 1500 Indexes
Five-Year market price performance through Nov 06, 2021



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**	**336.44**	**2,525,985.0**	**16.5**	**55.5**	**42.0**	**311.30**	**0.7**	**47.1**	**31.9**
CrowdStrike Holdings, Inc.	CRWD	NasdaqGS	USD	279.62	63,807.0	14.2	105.1	NM	N/A	N/A	-11.5	46.6
Fortinet, Inc.	FTNT	NasdaqGS	USD	338.40	55,268.0	13.4	191.1	116.0	N/A	N/A	44.4	3.7
GitLab Inc.	GTLB	NasdaqGS	USD	119.03	17,023.0	N/A	N/A	NM	N/A	N/A	-79.4	N/A
Oracle Corporation	ORCL	NYSE	USD	95.63	261,422.0	4.5	69.3	21.0	74.64	1.3	147.3	84.0
Palo Alto Networks, Inc.	PANW	NasdaqGS	USD	493.83	48,405.0	3.8	110.0	NM	N/A	N/A	-57.5	46.7
SentinelOne, Inc.	S	NYSE	USD	69.27	18,359.0	34.9	N/A	NM	N/A	N/A	-84.5	11.2
ServiceNow, Inc.	NOW	NYSE	USD	701.73	139,641.0	10.8	36.6	1189.0	350.87	N/A	4.8	41.5
UiPath Inc.	PATH	NYSE	USD	57.51	29,533.0	12.1	N/A	NM	N/A	N/A	-30.0	3.2
VMware, Inc.	VMW	NYSE	USD	128.27	53,830.0	-14.6	-4.1	26.0	109.04	N/A	25.6	39.3
Zscaler, Inc.	ZS	NasdaqGS	USD	331.90	46,046.0	28.4	128.4	NM	N/A	N/A	-51.7	63.3

*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

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

August 03, 2020
08:54 AM ET... CFRA Adds Microsoft to the High-Quality Capital Appreciation Portfolio (MSFT 205.01*****):
We are adding MSFT to the portfolio on the belief that the company remains well-equipped to thrive with or without a 'second wave' of the pandemic. Either way, we think the difficult macroeconomic environment that could lie ahead will force enterprises to devote a greater emphasis on cloud migrations, which play to MSFT's strengths, as cloud subscriptions recently topped ~60% of total revenues. Benefits from MSFT's indelible brands (Azure and Office 365) should drive attractive growth and profitability, with a projected a 3-year CAGR (FY 20 to FY 23) for revenues of 14% and EPS of 20%, on a wider operating margin from 37% to 45% during the same time frame. MSFT will replace Gentex (GNTX 27 ***) in the High-Quality Capital Appreciation Portfolio. Shares of GNTX were downgraded on the belief that the company's recently issued outlook could set a high bar for sales and margins to achieve in future quarters, especially when factoring in the potential risk of prolonged weakness from automakers. / David Holt

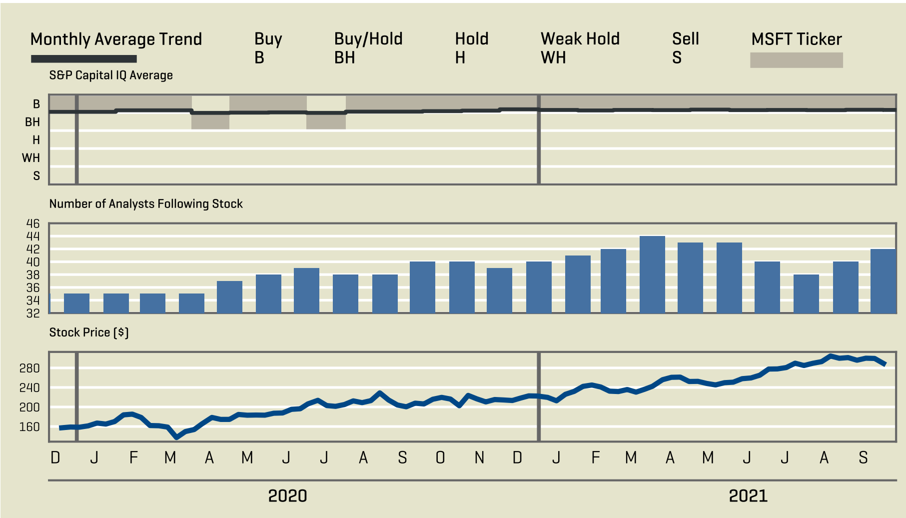
July 24, 2020
08:11 AM ET... CFRA Upgrades Shares of Microsoft Corporation To Strong Buy From Buy (MSFT 211.75*****):
We upgrade to Strong Buy from Buy and raise our target by $35 to $254 based on Q4 FY 20 (June) results, which in our view is quite strong despite Covid-19. It appeared to also hit commercial revenue (~70% of total vs. consumer) moderately across the board, but is increasingly offset by the cloud transition tailwind building momentum with subscription revenue at ~60% of total, 23% growth in RPO (a leading indicator of cloud subscription growth), and accelerating traction in several digital transformation subtrends with considerable long-term potential (e.g., HoloLens for industrial apps and use cases). Our $254 target is the product of our 2022 EPS forecast of $8.44, and a 30.1x multiple (2-year mean, +10% due to a strong balance sheet and a 1% dividend yield). Q4 FY 20 revenue of $38.0B beat consensus by $1.5B and was up 13% YoY and EPS of $1.46 beat consensus by $0.09 and was up $0.08 YoY. We raise our EPS forecasts by $0.03 to $6.96 for 2021 and by $0.16 to $8.44 for 2022, and we initiate 2023 at $9.89. / John Freeman

June 30, 2020
10:26 AM ET... CFRA Maintains Buy Rating on Shares of Microsoft, Inc. (MSFT 198.44****):
We maintain our Buy rating and raise our target to $219 from $197 as we increasingly view MSFT as likely benefitting more from the surge in telecommuting than we had expected, especially the cloud (i.e., 365) versions of Office and related Teams and SharePoint apps for collaboration. Our $219 target is the product of our new FY 21 (Jun.) EPS forecast of $6.93, up from $6.60, and a 31.6x multiple (two-year mean, +15% due to $54B/$138B net/gross cash positions, formidable competitive advantages, and 1% dividend yield). We also raise our EPS forecasts by $0.03 to $5.79 for '20 and by $0.30 to $8.28 for '22. We are now more confident in our projected three-year revenue CAGR of 14%, driven by our forecast of 27% annual growth through '22 for "Commercial Cloud" (primarily Azure, Office/Dynamics 365), which was 38% of Q3'20 revenue and was up 39% YoY. Gross margin for Commercial Cloud is still 2% below corporate at 69%, but it is expanding rapidly, +4% YoY in Q3'20, as Azure generates greater scale efficiencies. / 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.

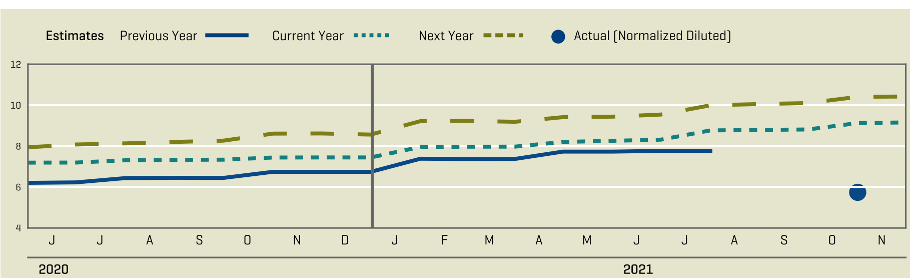
Microsoft Corporation

Analysts Recommendations



	No. of Recommendations	% of Total	1 Mo.Prior	3 Mos.Prior
Buy	29	67	28	25
Buy/Hold	10	23	10	9
Hold	2	5	2	2
Weak hold	0	0	0	0
Sell	0	0	0	0
No Opinion	2	5	2	2
Total	43	100	42	38

Wall Street Consensus Estimates



Fiscal Year	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2023	10.42	11.43	9.10	33	32.29
2022	9.16	9.72	8.61	27	36.74
2023 vs. 2022	**▲ 14%**	**▲ 18%**	**▲ 6%**	**▲ 22%**	**▼ -12%**
Q2'23	2.63	2.83	2.34	19	127.76
Q2'22	2.30	2.46	2.22	26	146.13
Q2'23 vs. Q2'22	**▲ 14%**	**▲ 15%**	**▲ 5%**	**▼ -27%**	**▼ -13%**

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.

Wall Street Consensus Opinion

Buy

Wall Street Consensus vs. Performance

For fiscal year 2022, analysts estimate that MSFT will earn USD 9.16. For fiscal year 2023, analysts estimate that MSFT's earnings per share will grow by 13.81% to USD 10.42.

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 capsulize 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 Depository Receipts (ADRs) and American Depository 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.

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 seof the report for detailed methodology and the definition of Quantitative rankings.

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STARS Stock Reports:

Global STARS Distribution as of March 05, 2021

Ranking	North America	Europe	Asia	Global
Buy	40.3%	32.5%	40.0%	38.7%
Hold	49.6%	57.1%	53.1%	51.7%
Sell	10.1%	10.3%	6.9%	9.6%
Total	100.0%	100.0%	100.0%	100.0%

Analyst Certification:

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