

Microsoft Corporation

Recommendation **HOLD** ★ ★ ★ ★ ★

Price
\$108.21 (as of Sep 07, 2018 4:00 PM ET)

12-Mo. Target Price
\$105.00

Report Currency
USD

Investment Style
Large-Cap Growth

Equity Analyst Scott Kessler

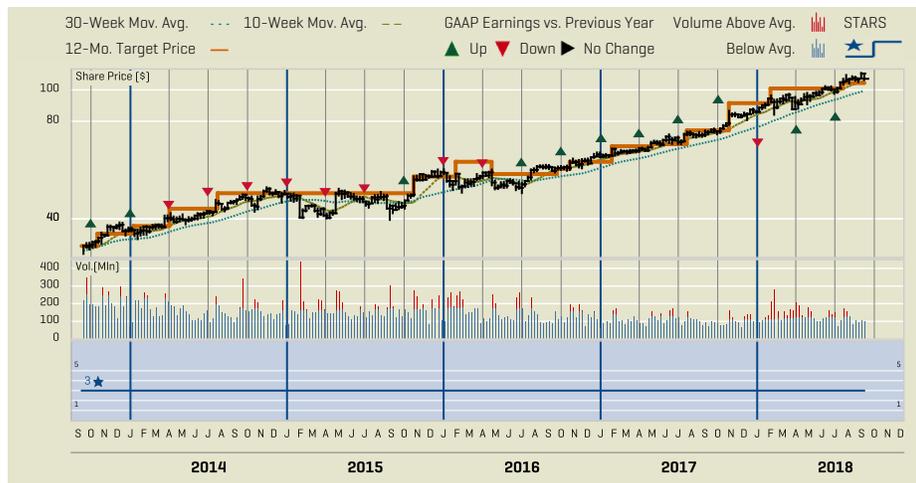
GICS Sector Information Technology
Sub-Industry Systems Software

Summary Microsoft, the world's largest software company, develops PC software, including the Windows operating system and the Office application suite.

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

52-Wk Range	\$112.78 - 72.92	Oper. EPS 2019E	4.03	Market Capitalization(B)	\$829.8	Beta	1.25
Trailing 12-Month EPS	2.13	Oper. EPS 2020E	4.69	Yield (%)	1.55	3-Yr Proj. EPS CAGR[%]	12
Trailing 12-Month P/E	51.05	P/E on Oper. EPS 2019E	26.98	Dividend Rate/Share	\$1.68	SPGMI's Quality Ranking	A-
\$10K Invested 5 Yrs Ago	\$39,287	Common Shares Outstg.(M)	7,668.2	Institutional Ownership [%]	73		

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 Equity Analyst **Scott Kessler** on Jul 20, 2018 03:11 PM, when the stock traded at **\$104.40**.

Highlights

- ▶ We see annual gains of 9% to 10% through FY 20 (Jun.). Cloud offerings have been aiding growth. With the April 2014 acquisition of Nokia's Devices and Services (NDS) business, revenues rose 12% in FY 14 and 8% in FY 15. Devices became more important, but that changed after Satya Nadella became CEO. In 2016, MSFT sold and wrote down NDS and acquired professional social networking company LinkedIn for \$26.2 billion. Revenues declined 2% in FY 16, but rose 5% in FY 17 and 14% in FY 18.
- ▶ We see gross margins around 65% through FY 20. MSFT's gross margin fell from 74% in FY 13 to 62% in FY 16, given a shift toward devices and the cloud. We think the gross margin bottomed in FY 16 -- without NDS and with cloud prices gaining traction. We see EBITDA margins widening annually through FY 20, reflecting continuing operational efficiencies.
- ▶ We project MSFT will generate EPS of \$4.03 in FY 19 and \$4.69 in FY 20. MSFT reported non-GAAP EPS of \$2.63 to \$2.65 in FY 13 to FY 15, \$2.79 in FY 16, \$3.31 in FY 17, and \$3.88 in FY 18. We foresee notable share repurchases and dividend increases.

Investment Rationale/Risk

- ▶ The company's focus on a "mobile-first, cloud-first" strategy has contributed significantly, notwithstanding considerable exposure to PCs, has contributed to overall growth acceleration driven by the Intelligent Cloud segment, and we note continued strong adoption of MSFT's Azure platform. We note growth-oriented acquisition activity, with the LinkedIn purchase in 2016 and the pending buy of software development platform GitHub for June 2018 (for \$7.5 billion), but we think MSFT will not be aggressive with integration and monetization.
- ▶ Risks to our recommendation and target price include lower-than-projected PC sales and a prolonged weakness in the global economy. Also, with the new focus on mobile and cloud, we see margins as vulnerable. We also note efforts to gain market share from other category leaders.
- ▶ Our 12-month target price is \$105. Peers recently had a median forward P/E of 26.4X and a P/E-to-growth ratio of 2.1. Using those multiples and averaging the outputs resulted in our target. In addition, we note strong cloud opportunities, as well as substantial financial flexibility, which is being used to fund growth and capital returns to shareholders.

Analyst's Risk Assessment

LOW	MEDIUM	HIGH
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Our risk assessment balances our view of the company's financial strength with our concerns about a sluggish recovery in enterprise IT spending, market share losses in smartphones and mobile devices as well as difficulties inherent in releasing new products in a timely manner.

Revenue/Earnings Data

Revenue (Million U.S. \$)	1Q	2Q	3Q	4Q	Year
2018	24,538	28,918	26,819	30,085	110,360
2017	21,928	25,826	23,212	25,605	96,571
2016	20,379	23,796	20,531	20,614	91,154
2015	23,201	26,470	21,729	22,180	93,580
2014	18,529	24,519	20,403	23,382	86,833
2013	16,008	21,456	20,489	19,896	77,849

Earnings Per Share (U.S. \$)

	1Q	2Q	3Q	4Q	Year
2020	E 1.02	E 1.18	E 1.14	E 1.25	E 4.69
2019	E 0.92	E 1.03	E 0.98	E 1.10	E 4.03
2018	0.84	-0.82	0.95	1.14	2.13
2017	0.72	0.80	0.70	1.03	3.25
2016	0.61	0.62	0.47	0.40	2.56
2015	0.54	0.71	0.61	-0.40	1.48

Fiscal year ended Jun 30. Next earnings report expected: Late Oct. EPS Estimates based on CFRA's Operating Earnings; historical GAAP earnings are as reported in Company reports.

Dividend Data

Amount (\$)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
0.42	Jun 13	Aug 15	Aug 16	Sep 13 '18
0.42	Mar 12	May 16	May 17	Jun 14 '18
0.42	Nov 29	Feb 14	Feb 15	Mar 08 '18
0.42	Sep 19	Nov 15	Nov 16	Dec 14 '17

Dividends have been paid since 2003. Source: Company reports.

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

Forecasts are not reliable indicator of future performance.

Microsoft Corporation

Business Summary July 20, 2018

CORPORATE OVERVIEW. Microsoft is the world's largest software maker, primarily as a result of its near-monopoly position in desktop operating systems and its Office productivity suite. The combination of these two strongholds poses a formidable barrier to entry for competitors, in our opinion. MSFT has used the strong cash flows from these businesses to fund research and development of other markets, including enterprise servers, home entertainment consoles, and Internet online advertising.

In July 2013, MSFT announced a restructuring to better integrate its offerings and to focus on its new mission of Devices and Services. In September 2013, the company announced its intent to purchase Nokia's (NOK) Devices and Services business for \$7.2 billion. The deal closed in April 2014.

The company has three operating segments: Productivity and Business Processes (which accounted for 33% of FY 18 (Jun.) revenues), Intelligent Cloud (29%), and More Personal Computing (38%). We think it is noteworthy that in FY 15, the More Personal Computing segment accounted for 46% of revenues.

Productivity and Business Processes includes Office, LinkedIn, and Dynamic CRM offerings. Intelligent Cloud includes server and cloud offerings like Azure. More Personal Computing includes Windows, gaming, Surface and digital advertising products and services.

CORPORATE STRATEGY. With the purchase of NOK's device business and intellectual property, we saw MSFT getting further into the device market than it had been in the past. The company had been slowly shifting its business strategy from a PC-centric computing environments to a platform in which diverse devices will access information via the Internet and mobile devices.

Businesses and their users have continued to be MSFT's stronghold. We see this in the dominance of Office productivity applications and penetration of Windows in companies. We also see the focus on productivity in its tablets.

However, after Satya Nadella became CEO in February 2014, he articulated a company mantra of "mobile-first, cloud-first." We have seen Nadella restructure and write down MSFT's mobile phone hardware operations and assets and buy LinkedIn for \$26 billion in December 2016. In June 2018, MSFT announced the proposed acquisition of software developer platform company GitHub for \$7.5 billion. MSFT's M&A strategy has been focused on market and product enhancements and growth. Nadella's changes have helped MSFT notable revenue growth and contributed to significant stock appreciation.

FINANCIAL TRENDS. MSFT's revenues grew from \$78 billion in FY 13 to \$110 billion in FY 18. Over the same period, earnings before taxes (excluding unusual items) increased from \$27 billion to \$36 billion.

MSFT closed FY 18 with \$134 billion in cash and short-term investments, with debt of \$82 billion.

Dividends have been increased consistently over the past decade or so. MSFT also announced \$40 billion share repurchase plans in September 2008, September 2013, and September 2016.

Corporate Information

Investor Contact

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Officers

Chief Technology Officer	CEO & Director
J. K. Scott	S. Nadella
Corporate VP of Finance & Administration and Chief Accounting Officer	Executive VP & CFO
F. H. Brod	A. E. Hood
Independent Chairman	President & Chief Legal Officer
J. W. Thompson	B. L. Smith
Executive VP and President of Microsoft Global Sales, Marketing & Operations	
J. Courtois	

Board Members

A. M. Sorenson	P. S. Pritzker
C. H. Noski	P. Warrior
C. W. Scharf	R. G. Hoffman
H. F. Johnston	S. E. Peterson
H. W. Panke	S. Nadella
J. W. Stanton	T. L. List-Stoll
J. W. Thompson	W. H. Gates

Domicile

Washington

Auditor

Deloitte & Touche LLP

Founded

1975

Employees

131,000

Stockholders

97,535

Microsoft Corporation

Quantitative Evaluations						Expanded Ratio Analysis																																											
Fair Value Rank	1	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	\$73.24	Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that MSFT is overvalued by \$34.97 or 32.3%.																																															
Volatility		LOW	AVERAGE	HIGH																																													
Technical Evaluation	BULLISH	Since April, 2018, the technical indicators for MSFT have been BULLISH.																																															
Insider Activity		UNFAVORABLE	NEUTRAL	FAVORABLE																																													
		<table border="1"> <thead> <tr> <th colspan="4">Key Growth Rates and Averages</th> </tr> <tr> <th colspan="2">Past Growth Rate [%]</th> <th>1 Year</th> <th>3 Years</th> <th>5 Years</th> </tr> </thead> <tbody> <tr> <td>Sales</td> <td></td> <td>14.28</td> <td>5.65</td> <td>7.23</td> </tr> <tr> <td>Net Income</td> <td></td> <td>-34.99</td> <td>10.77</td> <td>-5.39</td> </tr> <tr> <th colspan="2">Ratio Analysis [Annual Avg.]</th> <td></td> <td></td> <td></td> </tr> <tr> <td>Net Margin [%]</td> <td></td> <td>NM</td> <td>NM</td> <td>NM</td> </tr> <tr> <td>% LT Debt to Capitalization</td> <td></td> <td>45.71</td> <td>NA</td> <td>NA</td> </tr> <tr> <td>Return on Equity [%]</td> <td></td> <td>19.45</td> <td>NA</td> <td>NA</td> </tr> </tbody> </table>									Key Growth Rates and Averages				Past Growth Rate [%]		1 Year	3 Years	5 Years	Sales		14.28	5.65	7.23	Net Income		-34.99	10.77	-5.39	Ratio Analysis [Annual Avg.]					Net Margin [%]		NM	NM	NM	% LT Debt to Capitalization		45.71	NA	NA	Return on Equity [%]		19.45	NA	NA
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Company Financials Fiscal year ending Jun. 30										
Per Share Data [U.S. \$]	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Tangible Book Value	5.08	5.51	6.45	7.26	7.61	7.35	5.93	5.22	3.76	2.84
Free Cash Flow	4.19	4.05	3.15	2.90	3.26	2.93	3.49	2.90	2.51	1.78
Earnings	2.13	3.25	2.56	1.48	2.63	2.58	2.00	2.69	2.10	1.62
Earnings (Normalized)	2.73	2.40	2.04	2.11	2.05	2.04	2.06	2.01	1.73	1.42
Dividends	1.68	1.56	1.44	1.24	1.12	0.92	0.80	0.64	0.52	0.52
Payout Ratio [%]	77	46	54	81	40	34	38	22	24	31
Prices: High	102.69	72.89	56.85	50.05	42.29	35.78	32.95	29.46	31.58	28.50
Prices: Low	68.02	50.39	39.72	40.12	30.84	26.26	23.79	22.73	22.00	14.87
P/E Ratio: High	78.7	43.0	40.0	19.5	18.7	16.6	11.9	16.3	20.4	18.5
P/E Ratio: Low	26.4	25.3	17.3	14.6	12.1	10.4	8.8	10.6	10.9	8.1
Income Statement Analysis [Million U.S. \$]										
Revenue	110,360	96,571	91,154	93,580	86,833	77,849	73,723	69,943	62,484	58,437
Operating Income	35,058	31,622	27,188	28,172	27,886	27,497	27,956	27,161	24,098	20,693
Depreciation + Amortization	9,900	7,800	5,878	5,400	4,245	3,339	2,758	2,537	2,507	2,291
Interest Expense	2,733	2,222	1,243	781	597	429	380	295	151	38
Pretax Income	36,474	29,901	25,639	18,507	27,820	27,052	22,267	28,071	25,013	19,821
Effective Tax Rate	54.6	14.8	19.9	34.1	20.7	19.2	23.8	17.5	25.0	26.5
Net Income	16,571	25,489	20,539	12,193	22,074	21,863	16,978	23,150	18,760	14,569
Net Income (Normalized)	21,301	18,818	16,320	17,388	17,239	17,283	17,488	17,248	15,408	12,767
Balance Sheet and Other Financial Data [Million U.S. \$]										
Cash	133,669	132,901	113,041	96,391	85,146	76,410	62,044	51,371	36,559	29,785
Current Assets	169,662	162,696	139,660	122,797	114,246	101,466	85,084	74,918	55,676	49,280
Total Assets	258,848	250,312	193,468	174,472	172,384	142,431	121,271	108,704	86,113	77,888
Current Liabilities	58,488	55,745	59,357	49,647	45,625	37,417	32,688	28,774	26,147	27,034
Long Term Debt	77,810	81,445	40,557	27,808	20,645	12,601	10,713	11,921	4,939	3,746
Total Capital	170,226	183,238	126,538	115,467	112,987	95,234	79,138	70,221	52,329	47,008
Capital Expenditures	11,632	8,129	8,343	5,944	5,485	4,257	2,305	2,355	1,977	3,119
Cash from Operations	43,884	39,507	33,325	29,668	32,502	28,833	31,626	26,994	24,073	19,037
Current Ratio	2.90	2.92	2.35	2.47	2.50	2.71	2.60	2.60	2.13	1.82
% Long Term Debt of Capitalization	45.7	44.4	32.1	24.1	18.3	13.2	13.5	17.0	9.4	8.0
% Net Income of Revenue	15.0	26.4	22.5	13.0	25.4	28.1	23.0	33.1	30.0	24.9
% Return on Assets	8.6	8.9	9.2	10.2	11.1	13.0	15.2	17.4	18.4	17.2
% Return on Equity	19.4	31.9	27.0	14.4	26.2	30.1	27.5	44.8	43.8	38.4

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

Our fundamental outlook for the Systems Software sub-industry for the next 12 months is neutral. We expect revenues to increase at a modest pace in the coming quarters, in line with the overall information technology (IT) industry. IDC projected a compound annual growth rate (CAGR) in software revenue of 7% from 2016 to 2021, reflecting a strong 18% gain from subscriptions (reflecting a shift to cloud offerings), a modest 2% increase from maintenance, and a decline of 2% from licenses.

We see growth coming from enterprises, as companies upgrade/spend on data center infrastructure. We think systems software spending will be impacted by more interest in cloud computing, where we see related opportunities (e.g., new revenues) and risks (e.g., execution in light of multiple distribution and pricing models). We note that many major software companies have completed or made significant progress on transitions to cloud offerings, and as a result, we think pricing has been stable to higher. Nonetheless, we see slow PC unit sales at best, reflecting the category's weakness and challenges related to mobile.

From a corporate client perspective, we see potential benefits from a refresh cycle, as companies upgrade their aging computers along with operating systems to Microsoft's newer offerings, including Windows 10, which was released in July 2015. We note emerging markets have lower average selling prices than the global enterprise market segment.

We think sales of operating systems for servers will increase at a single-digit rate during the next 12 months. We also see moderate growth in virtualization software, as companies seek ways to reduce rising operational costs for their data centers caused by the proliferation of servers. We project that the virtualization

software market will continue to experience stable, yet somewhat uninspiring, growth. We think the systems software sub-industry will benefit from increased merger and acquisition activity in the IT industry, as many enterprise IT companies have been positioning themselves as "one-stop shops" that provide comprehensive solutions.

We think these companies will try to strengthen their offerings in cloud and security software, given the growing interest in broad and flexible functionality. In addition, many software companies have strong balance sheets with significant amounts of cash, in our view, and many have been buying back shares. Tax reform enacted in the U.S. in December 2017 has supported stock repurchase efforts.

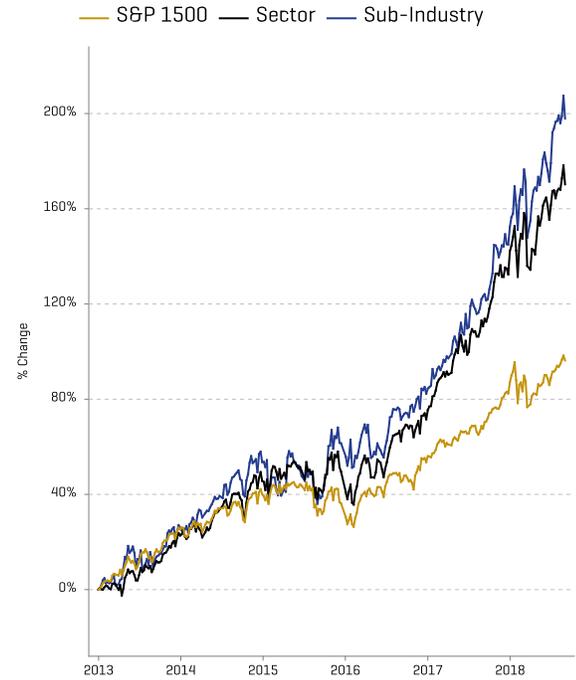
Year to date through June 30, 2018, the S&P 1500 Systems Software index rose 10.8% versus the S&P 1500's gain of 2.0%. In 2017 and 2016, the index increased 34.4% and 10.5% compared to the gains of 18.8% and 10.6% for the S&P 1500.

/Scott Kessler

Industry Performance

GICS Sector: Information Technology Sub-Industry: Systems Software

Based on S&P 1500 Indexes
Five-Year market price performance through Sep 08, 2018



NOTE: 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: 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	108.21	829,778	-1.2	45.6	51	73.24	1.6	19.4	45.7
CA, Inc.	CA	NasdaqGS	USD	43.88	18,349	0.4	32.0	40	38.56	2.3	8.2	28.5
Check Point Software Technologies Ltd.	CHKP	NasdaqGS	USD	115.42	18,030	1.8	3.6	23	134.93	Nil	22.6	NA
Fortinet, Inc.	FTNT	NasdaqGS	USD	85.52	14,465	17.1	129.0	NM	57.39	Nil	4.4	NA
Oracle Corporation	ORCL	NYSE	USD	47.81	190,339	-1.2	-7.6	53	39.52	1.6	7.6	52.6
Red Hat, Inc.	RHT	NYSE	USD	148.02	26,255	3.6	38.3	93	110.25	Nil	19.0	33.2
ServiceNow, Inc.	NOW	NYSE	USD	196.98	35,052	5.8	67.2	NM	NA	Nil	-30.7	35.8
Symantec Corporation	SYMC	NasdaqGS	USD	19.83	12,325	2.0	-35.2	11	30.07	1.5	26.9	49.9
Tableau Software, Inc.	DATA	NYSE	USD	113.90	9,447	12.3	57.7	NM	66.72	Nil	-24.0	NA
Trend Micro Incorporated	TMIC.Y	OTCPK	USD	62.55	8,681	3.6	36.3	36	NA	2.2	15.0	NA
VMware, Inc.	VMW	NYSE	USD	151.93	61,975	-0.6	42.7	42	150.35	Nil	7.1	35.3

*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

July 20, 2018

02:51 pm ET... CFRA REITERATES HOLD OPINION ON SHARES OF MICROSOFT CORPORATION [MSFT 104.4***]: We raise our 12-month target by \$4 to \$105. Peers have a median forward P/E of 26.4X and a P/E-to-growth ratio of 2.1. Applying these to MSFT and averaging the outputs results in our target. We slightly adjust our EPS estimates for FY 19 [Jun.] to \$4.03 from \$4.02 and for FY 20 to \$4.69 from \$4.71. MSFT posts non-GAAP June-quarter EPS of \$1.13 vs. \$0.98, \$0.05 above the S&P Capital IQ consensus. Revenues rose 17% [15% using constant currency], notably higher than we expected driven by the Intelligent Cloud segment up 23% [20%], with Productivity and Business Processes up 13% [10%] and More Personal Computing up 17% [16%]. MSFT continues to execute well and seize upon opportunities, especially regarding the cloud. However, we do not think June-quarter growth is sustainable. MSFT has been making some larger growth-oriented acquisitions -- LinkedIn [2016] and GitHub [pending]. With potentially peaking fundamentals, we do not think MSFT should trade at significant premiums to peers. /Scott Kessler

June 04, 2018

11:47 am ET... CFRA REITERATES HOLD OPINION SHARES OF MICROSOFT CORPORATION [MSFT 100.79***]: MSFT announces the pending purchase of GitHub, purveyor of a leading global software development platform "where more than 28 million developers learn, share and collaborate." MSFT would buy GitHub in a transaction valued at \$7.5 billion in stock, and we see the deal closing this year. We note GitHub is a very large open-source software code repository, and MSFT has historically been seen as an open-source antagonist; however, under CEO Satya Nadella, MSFT management and employees have become more open-minded and flexible about its software applications and platforms. The \$7.5 billion purchase price compares with a 2015 valuation of \$2 billion and recent possible M&A value of "\$5 billion more" per an unconfirmed CNBC report last week. We also note the all-stock purchase, given that MSFT recently had \$132 billion in cash/short-term investments and its shares have risen about 40% over the past year. We think one of MSFT's motivations is to build better relationships with developers. /Scott Kessler

April 27, 2018

10:37 am ET... CFRA REITERATES HOLD OPINION ON SHARES OF MICROSOFT CORP. [MSFT 94.26***]: We maintain our 12-month target price of \$101. Peers have a median forward P/E of 22.7X and a P/E-to-growth of 2.4. Applying these multiples and averaging the outputs resulted in our target. We raise our EPS estimates for FY 18 [Jun.] to \$3.84 from \$3.63 and FY 19 to \$4.02 from \$3.90, and set a FY 20 forecast of \$4.71. MSFT posts Q1 non-GAAP EPS of \$0.95 vs. \$0.73, \$0.10 above the S&P Capital IQ consensus. Revenues rose 16% [13% using constant currency], with strength across the operating segments. Productivity and Business Processes was up 17% [14%], Intelligent Cloud was up 17% [15%], and More Personal Computing was up 13% [11%]. Office 365 Commercial and Azure were up 42% [40%] and 93% [89%]. MSFT invested in particular in commercial sales capacity, cloud engineering and LinkedIn, but the operating margin still widened 190 basis points. The tax rate was 14% compared with the year-ago 23%, given U.S. tax reform. With a forward P/E of 25.1X, we see the stock as fully valued. /Scott Kessler

February 01, 2018

11:06 am ET... CFRA REITERATES HOLD OPINION ON SHARES OF MICROSOFT CORPORATION [MSFT 95.01***]: We raise our 12-month target by \$10 to \$101. Peers have a median forward P/E of 27.9X and a P/E-to-growth of 2.3. Applying these and averaging the outputs results in our target. We raise our EPS estimates for FY 18 [June] to \$3.63 from \$3.39 and FY 19's to \$3.90 from \$3.75. MSFT posts Dec-Q normalized EPS of \$0.96 vs. \$0.84, \$0.09 above the S&P Capital IQ consensus. With constant currency, revenues rose 11%, and we note the 15% increase in Intelligent Cloud. LinkedIn, bought in December 2016, also contributed \$1.3 billion. We see MSFT as fully valued, with a FY 18 P/E of 26.4X. /Scott Kessler

October 27, 2017

11:19 am ET... CFRA REITERATES HOLD OPINION ON MICROSOFT CORPORATION [MSFT 84.6252***]: We raise our 12-month target price to \$91 from \$75. Software peers have a median forward P/E of 28.1X and a P/E-to-growth of 2.2. Applying these multiples and averaging their output results in our target. We raise our EPS estimates for FY 18 [June] to \$3.39 from \$3.25 and FY 19 to \$3.

75 from \$3.66. MSFT posts Sep-Q EPS of \$0.84 vs. \$0.76, well above the \$0.72 S&P Capital IQ consensus. Revenues rose 12%, aided by the LinkedIn acquisition completed late last year, with accelerated Intelligent Cloud growth of 14%. We think MSFT continues to execute well, but is fully valued. /Scott Kessler

July 21, 2017

09:02 am ET... CFRA REITERATES HOLD OPINION ON SHARES OF MICROSOFT CORPORATION [MSFT 74.22***]: We raise our 12-month target by \$7 to \$75, rolling forward our analysis to FY 18 [Jun.] and on higher peer valuations. Peers have a median forward P/E of 26.1X and a P/E-to-growth of 1.9. Using these multiples and averaging the outputs results in our target. We cut our EPS estimates for FY 18 by \$0.09 to \$3.25 and FY 19 by \$0.10 to \$3.66. MSFT posts adjusted non-GAAP Jun-Q EPS of \$0.75 [including a \$0.23 tax benefit] vs. \$0.69, \$0.04 over the S&P Capital IQ consensus. Non-GAAP revenues rose 9% [4% without LinkedIn], led by Intelligent Cloud at 11%. We see MSFT as fully valued. /S. Kessler

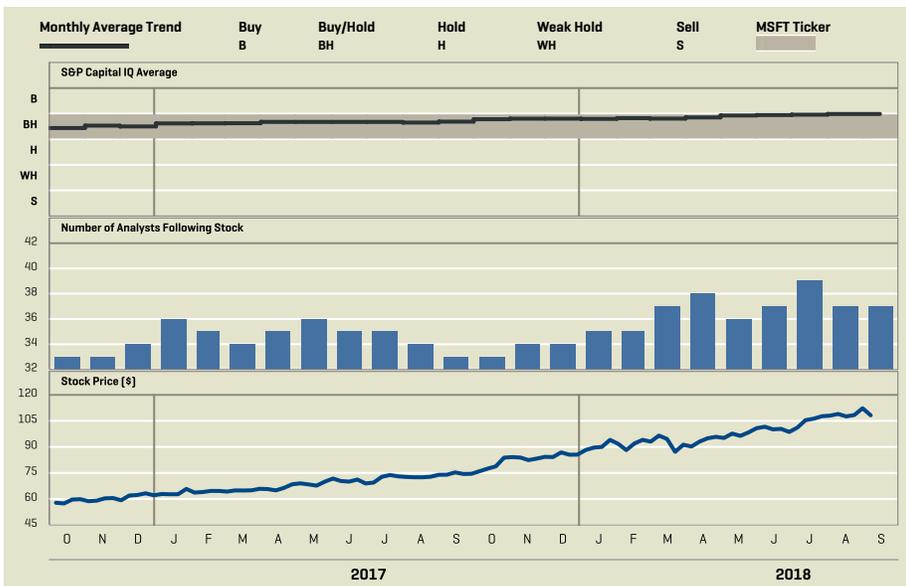
May 01, 2017

08:58 am ET... CFRA REITERATES HOLD OPINION ON SHARES OF MICROSOFT CORP. [MSFT 68.46***]: We raise our 12-month target price by \$1 to \$68. Peers have a median forward P/E of 22.0X and a P/E-to-growth of 2.0. Applying premiums given MSFT's brands and businesses, and averaging the outputs results in our target. We raise our EPS estimates by \$0.06 each for FY 17 [Jun.] to \$3.03 and FY 18 to \$3.34, and set FY 19's at \$3.76. MSFT posts non-GAAP Mar-Q EPS of \$0.73 vs. \$0.62, \$0.03 above the S&P Capital IQ consensus. Adjusted revenues rose 8%, but were below our expectations, with Intelligent Cloud up 11% and More Personal Computing down 7%. We see MSFT as fairly valued. /S. Kessler

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.

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Analysts' Recommendations



Wall Street Consensus Opinion

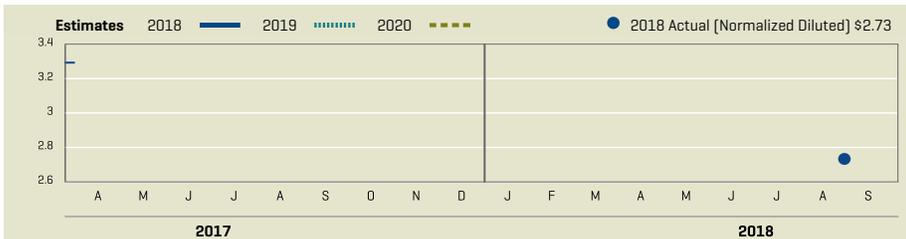
BUY/HOLD

Wall Street Consensus vs. Performance

For fiscal year 2019, analysts estimate that MSFT will earn USD \$4.28. For fiscal year 2020, analysts estimate that MSFT's earnings per share will grow by 15% to USD \$4.92.

	No. of Recommendations	% of Total	1 Mo. Prior	3 Mos. Prior
Buy	22	59	22	22
Buy/Hold	10	27	10	10
Hold	2	5	2	3
Weak Hold	0	0	0	0
Sell	1	3	1	1
No Opinion	2	5	2	1
Total	37	100	37	37

Wall Street Consensus Estimates



Fiscal Years	Avg Est.	High Est.	Low Est.	# of Est.	Est. P/E
2020	4.92	5.76	4.41	28	22.0
2019	4.28	4.59	4.12	31	25.3
2020 vs. 2019	▲15%	▲25%	▲7%	▼-10%	▼-13%
Q1'20	1.10	1.25	0.97	18	98.3
Q1'19	0.96	1.04	0.93	28	NM
Q1'20 vs. Q1'19	▲15%	▲20%	▲4%	▼-36%	NA

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.

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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 [S&P Asia 50 Index, S&P Europe 350® Index or S&P 500® Index]), based on a 12-month time horizon. STARS was designed to meet the needs of 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 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 encapsulate 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 Average	C	Lowest
B+	Average	D	In Reorganization
NR	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.

CFRA Equity Research

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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, with shares rising in price on an absolute basis.

★★★★★ 3-STARs (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months, with shares generally rising in price on an absolute basis.

★★★★★ 2-STARs (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months, and the share price is not anticipated to show a gain.

★★★★★ 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 S&P Europe 350 Index and the S&P Asia 50 Index, respectively.

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Quantitative Stock Reports:

Quantitative recommendations 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 recommendations 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 June 30, 2018

Ranking	North America	Europe	Asia	Global
Buy	39.1%	31.9%	37.3%	36.1%
Hold	54.6%	53.6%	50.6%	52.9%
Sell	6.3%	14.5%	12.1%	11.0%
Total	100.0%	100.0%	100.0%	100.0%

Analyst Certification:

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