



## COMPANY UPDATE / TARGET CHANGE ESTIMATE CHANGE

### Key Metrics

MSFT - NASDAQ - as of	2/6/18	\$91.33
Price Target		\$93.00
52-Week Range	\$63.22 -	\$96.07
Diluted Shares Outstanding (mil)		7,700
Market Cap. (\$mil)		\$703,222.1
1-Mo. Average Daily Volume		28,547,034
Institutional Ownership		75.4%
Debt/Total Capital (net) %	FQ2'18	0%
ROE	FQ2'18	16%
Book Value / Share		\$10.16
Price / Book Value		9.0x
Indicated Dividend / Yield	\$1.68	1.8%
LTM EBITDA Margin		37.8%

### GAAP EPS FY 6/30

	Prior	Current		Prior	Current
	2017A	2018E		2019E	2019E
1Q	\$0.76	\$0.84	A	\$0.95	\$0.92
2Q	\$0.83	\$0.96	A	\$0.91	\$0.99
3Q	\$0.73	\$0.78		\$0.86	\$0.91
4Q	\$0.98	\$0.87		\$0.88	\$1.04
Year	\$3.31	\$3.34		\$3.60	\$3.86
P/E	27.6x	24.8x			23.7x

### Revenue (\$bn)

	Prior	Current		Prior	Current
	2017A	2018E		2019E	2019E
1Q	\$22.3	\$24.5	A	\$26.2	\$26.4
2Q	\$26.1	\$28.9	A	\$29.3	\$30.9
3Q	\$23.5	\$25.1		\$26.3	\$28.2
4Q	\$24.7	\$27.1		\$27.8	\$30.0
Year	\$96.7	\$104.9		\$109.6	\$115.6

\*Figures may not equal due to rounding

**Company Description:** Redmond, Washington based Microsoft is the world's leading software developer. Microsoft was founded in 1975 and historically benefitted from the success of the Windows operating system which currently runs on >90% of all PCs. As of the most recent quarter, the company derived a significant portion of total operating income from Productivity and Business Processes which includes Office and Dynamics. Other highly valued products and services include, Xbox, Azure, Server & cloud services, Surface, Bing, and Enterprise services.

## Microsoft Corp.

MSFT - NASDAQ – Neutral - 1

### Strong FQ2 Results; Commercial Cloud Revenue +56%; Increasing PT to \$93

- Results.** Microsoft reported EPS of \$0.96 vs. \$0.83 in the prior year period. This was above our \$0.85 estimate. Revenue totaled \$28.9 billion, up 12% y/y, beating our \$28.2 billion estimate. The EPS beat benefitted from an improving margin profile from faster growing cloud businesses. Microsoft's commercial bookings growth slowed considerably, increasing 4% y/y vs. 12% reported last year. Commercial unearned revenue increased 18% y/y to \$20.2 billion. Commercial cloud revenue increased 56% y/y to \$5.3 billion, while commercial cloud gross margin continues to expand as it gains scale, expanding to 55% vs. 48% last year.
- Segment Highlights. More Personal Computing** revenue increased 2% y/y to \$12.17 billion. The segment was negatively impacted by non-Pro Windows revenue declining 5% y/y. The segment was boosted by strength in Search and Gaming revenue. Windows Pro revenue outperformed the PC market on revenue growth of 11%. Windows commercial products & cloud services revenue declined 4% y/y. Search revenue increased 15% y/y, while Surface revenue was flat. Segment operating income of \$2.51 billion declined 2% y/y due to higher expenses from the launch of Xbox One X. **Productivity & Business Processes** revenue of \$8.95 billion increased 25% y/y following the acquisition of LinkedIn. Office commercial & cloud revenue grew 10% y/y; Dynamics revenue grew 10% y/y; and Office consumer and cloud revenue grew 10% y/y as Office 365 consumer subscribers increased to 29.2 million vs. 28 million last quarter. LinkedIn revenue increased to \$1.3 billion. Segment operating income of \$3.34 billion increased 9% y/y. The **Intelligent Cloud** segment grew revenue 15% y/y to \$7.8 billion on strong Server and cloud service revenue growth of 18% y/y, within this Azure revenue increased a better than expected 98% and server products grew a better than expected 4%. Azure premium services grew triple digits and as we noted continues to boost profitability. Operating income jumped 24% y/y as Microsoft leverages premium cloud offerings.
- Opinion.** We maintain our Neutral-1 rating. Our price target increases to \$93 from \$86.

**Note Important Disclosures on Pages 7-8**  
**Note Analyst Certification on Page 7**

**ADDITIONAL DISCUSSION**

Microsoft's commercial business is doing well with strong revenue growth, while the commercial cloud business continues to gain leverage improving underlying profitability. Commercial cloud gross margin expanded 700 basis points y/y due to improvement with Azure, Office 365, and Dynamics 365. We are also impressed with LinkedIn's performance, which we find compelling as a way Microsoft can onboard small businesses providing the company a new sales pipeline.

On the consumer side of the business, gaming revenue increased 8% on the back of the Xbox One X launch. The One X was the best-selling high end console over the holiday period. Xbox Live subscribers increased 7% y/y to 59 million. Office consumer products and cloud revenue grew 12%. Office 365 consumer subscribers increased 17% y/y to 29.2 million. Search revenue jumped 15%. Surface revenue of \$1.335 billion was largely flat y/y.

Cash, cash equivalents, and short & long-term investments totaled \$153.5 billion. Net cash was \$64.2 billion or \$8.33 per share. Fiscal Q2 operating cash flow of \$7.8 billion increased 25% y/y, while free cash flow of \$5.2 billion increased 23% y/y. The company repurchased \$1.8 billion of company stock during the quarter and paid \$3.2 billion in dividends.

**OUTLOOK**

Fiscal Q3'18 revenue guidance was provided between \$25.25 billion to \$25.95 billion, above our prior \$25.1 billion view. We maintain our positive opinion of Microsoft's cloud performance and believe it is a competitive advantage setting the company up for continued strength going forward. Our Neutral rating is based on valuation and our opinion that Microsoft will be limited in future operating expense cutting but nonetheless expect margin improvement along with high margin cloud adoption. We believe Microsoft is squarely positioned to outperform enterprise IT peers with Azure, Office 365, LinkedIn, and other cloud offerings. We continue to view MSFT shares as a core holding. We believe shares are no longer aggressively priced and are instead near fair value following the recent market decline as well as our improved outlook.

Our FY'18 outlook improves as we expect higher revenue and continued operating margin expansion. We forecast FQ3'18 EPS of \$0.91 vs. our prior view of \$0.78. Our FY'18 EPS estimate increases to \$3.68 from \$3.34. We increase our revenue forecast from \$104.9 billion to \$107.3 billion. Our FY'19 EPS outlook increases to \$3.86 from \$3.60.

Our Longer-term outlook remains positive as we expect new cross-sell and up-sell opportunities from LinkedIn and premium cloud services to boost Microsoft's customer base, revenue opportunities, and profitability. We note our margin expansion thesis is not based on record margins, our view is based on a normalization of margins to a level still below its historical average. This can be achieved through cloud sales boosting revenue and expanding margins over time. While we don't expect operating margin in the high 30s, we do expect mid-30s longer term vs. our FY'19 view of 30.9%, up from 30% in FY'17. We maintain our positive opinion of the company's industry leadership position and ongoing shift to enterprise cloud services and a consumer subscription strategy. Microsoft is a well-managed organization deserving of its premium valuation, in our opinion.

**VALUATION & OPINION**

We increase our price target to \$93 from \$86 based on strong operating performance with continued strong revenue growth, operating expense management, and earnings growth above recent historical rates. We derive our \$93 price target by multiplying our improved FYE'19 EPS estimate of \$3.86 by a 24x multiple. Our 24x multiple is in line with the sector multiple and below Microsoft's current 25x forward multiple.

## MSFT Forward P/E Multiple vs. Technology Sector



Source: Thomson Reuters

We also calculate our price target using our discounted cash flow model. We believe the Street is now properly discounting Microsoft's future cash flows following FY'17's strong FCF growth based on our DCF model. We view current cash flow expectations as achievable and valuation near fair value as based on a discounted cash flow model. However, we do not currently recommend the purchase of shares as a return of +20% would imply compound annual free cash flow growth above that which we find achievable longer term throughout a full economic cycle. As we previously noted above, Microsoft's free cash flow yield of 4.6% remains strong on a relative basis, but this represents a cyclical low to levels not experienced since the early 2000s as the stock price has climbed to record highs. For reference, Microsoft's free cash flow yield was a record high 11.33% in 2012. We maintain our Neutral rating on shares of MSFT. We believe Microsoft is a leader in the enterprise cloud and is well positioned among industry peers for future growth. Microsoft's fundamental outlook is strong, in our opinion, providing investors a solid core holding within the Technology sector. We would hold shares within well-diversified portfolios.

### SUITABILITY

We assign shares of MSFT a suitability rating of 1 on our scale of 1-4 (1 = most conservative, 4 = most aggressive). A 1 rating is given based on Microsoft's long history as a public company, diverse revenue base, strong operating metrics, solid balance sheet, and significant cash flow generation. We believe a suitability rating of 1 incorporates these attributes. We believe revenue and EPS revisions as a result of restructuring charges, write-downs, acquisitions, and/or accounting changes, as we continue to experience, does not affect our 1-suitability rating as Microsoft's backlog, recurring revenue, cash flows, and cash balance provide a level of safety which we view as secure. Shares of MSFT are suitable for conservative growth oriented investors seeking long-term capital appreciation and income growth, in our view.

### RISKS & CONSIDERATIONS

Risks to owning Microsoft shares include but are not limited to:

- Intense competition from other software/hardware/cloud providers. In our view, other competing operating systems on multiple device types could lead to market share losses in Microsoft's traditionally safe PC business. If competitors are successful in marginalizing Microsoft's operating system software this could have an impact on profitability.
- Lack of support, poor execution, and a highly competitive environment for Microsoft's new cloud-based computing model
- Macroeconomic issues, including a decline in business or consumer spending and changes in consumer behavior
- Consumer and business user preference of PCs to other forms of mobile computing devices
- Global piracy issues, including Microsoft's ability to protect intellectual property rights and secure its licensing revenue
- Software security threats could lead to reduced revenues

- Regulatory oversight and continued business scrutiny from the U.S. Department of Justice and the European Commission could lead to less risk taking and slower growth
- The ability of Microsoft management to hire and retain top talent
- Lack of product innovation or timely product development
- Business integration risk following several recent acquisitions and disruptions from suppliers
- Loss of strategic partnerships key to Microsoft, including sales from OEMs

## Microsoft Corp. (MSFT) (\$'s in millions) FYE June

Balance Sheet	FY'05	FY'06	FY'07	FY'08	FY'09	FY'10	FY'11	FY'12	FY'13	FY'14	FY'15	FY'16	FY'17	Q1'18	Q2'18
<b>Assets</b>															
Current assets															
Cash & cash equivalents	\$ 4,851	\$ 6,714	\$ 6,111	\$ 10,339	\$ 6,076	\$ 5,505	\$ 9,610	\$ 6,938	\$ 3,804	\$ 8,669	\$ 5,595	\$ 6,510	\$ 7,663	\$ 6,884	\$ 12,859
Short-term investments	32,900	27,447	17,300	13,323	25,371	31,283	43,162	56,102	73,218	77,040	90,931	106,730	125,318	131,587	129,921
Total cash & short-term investments	37,751	34,161	23,411	23,662	31,447	36,788	52,772	63,040	77,022	85,709	96,526	113,240	132,981	138,471	142,780
Accounts receivable, net	7,180	9,316	11,338	13,589	11,192	13,014	14,987	15,780	17,486	19,544	17,908	18,277	19,792	14,561	18,428
Inventories	491	1,478	1,127	985	717	740	1,372	1,137	1,938	2,660	2,902	2,251	2,181	3,211	2,003
Deferred income taxes	1,701	1,940	1,899	2,017	2,213	2,184	2,467	2,035	1,632	1,941	1,915	-	-	-	-
Other	1,614	2,115	2,393	2,989	3,711	2,950	3,320	3,092	3,388	4,392	5,461	5,892	4,897	4,788	4,422
Total current assets	48,737	49,010	40,168	43,242	49,280	55,676	74,918	85,084	101,466	114,246	124,712	139,660	159,851	161,031	167,633
Property & equipment, net	2,346	3,044	4,350	6,242	7,535	7,630	8,162	8,269	9,991	13,011	14,731	18,356	23,734	24,809	26,304
Equity & other investments	11,004	9,232	10,117	6,588	4,933	7,754	10,865	9,776	10,844	14,597	12,053	10,431	6,023	12,187	10,710
Goodwill	3,309	3,866	4,760	12,108	12,503	12,394	12,581	13,452	14,655	20,127	16,939	17,872	35,122	35,389	35,355
Intangible assets, net	499	539	878	1,973	1,759	1,158	744	3,170	3,083	6,981	4,835	3,733	10,106	9,598	9,034
Deferred income taxes	3,621	2,611	1,389	949	279	-	-	-	-	-	-	-	-	-	-
Other long-term assets	1,299	1,295	1,509	1,691	1,599	1,501	1,434	1,520	2,392	3,422	2,953	3,642	6,250	6,083	6,967
Total assets	70,815	69,597	63,171	72,793	77,888	86,113	108,704	121,271	142,431	172,384	176,223	193,694	241,086	249,097	256,003
<b>Liabilities &amp; stockholders' equity</b>															
Current liabilities															
Accounts payable	2,086	2,909	3,247	4,034	3,324	4,025	4,197	4,175	4,828	7,432	6,591	6,898	7,390	6,866	7,850
Short-term debt	-	-	-	-	2,000	1,000	-	1,231	2,999	2,000	7,484	12,904	10,121	9,220	15,912
Accrued compensation	1,662	1,938	2,325	2,934	3,156	3,283	3,575	3,875	4,117	4,797	5,096	5,264	5,819	4,108	4,427
Income taxes	2,020	1,557	1,040	3,248	725	1,074	580	789	592	782	606	580	718	920	788
Short-term unearned revenue	7,502	9,138	10,779	13,397	13,003	13,652	15,722	18,653	20,639	23,150	23,223	27,468	34,102	22,778	21,309
Securities lending payable	-	3,117	2,741	2,614	1,684	182	1,208	814	645	558	92	294	97	203	26
Other	3,607	3,783	3,622	3,659	3,142	2,931	3,492	3,151	3,597	6,906	6,766	5,949	6,280	7,520	7,787
Total current liabilities	16,877	22,442	23,754	29,886	27,034	26,147	28,774	32,688	37,417	45,625	49,858	59,357	64,527	51,615	58,099
Long-term debt	-	-	-	-	3,746	4,939	11,921	10,713	12,601	20,645	27,808	40,783	76,073	76,255	73,348
Long-term unearned revenue	1,665	1,764	1,867	1,900	1,281	1,178	1,398	1,406	1,760	2,008	2,095	6,441	10,377	2,126	2,500
Deferred income taxes	-	-	-	-	-	229	1,456	1,893	1,709	2,728	2,835	696	531	5,513	33,236
Other long-term liabilities	4,158	5,287	6,453	4,721	6,269	7,445	8,072	8,208	10,000	11,594	13,544	14,420	17,184	23,941	10,460
Total liabilities	22,700	29,493	32,074	36,507	38,330	39,938	51,621	54,908	63,487	82,600	96,140	121,697	168,692	159,450	177,643
Commitments & contingencies															
Stockholders' equity															
Common stock & paid in capital	60,413	59,005	60,557	62,849	62,382	62,856	63,415	65,797	67,306	68,366	68,465	68,178	69,315	69,419	70,192
Retained earnings (deficit)	(12,298)	(18,901)	(29,460)	(26,563)	(22,824)	(16,681)	(6,332)	566	9,895	17,710	9,096	2,282	2,648	19,702	8,567
Accumulated other comprehensive income									1,743	3,708	2,522	1,537	431	526	(399)
Total stockholders' equity	48,115	40,104	31,097	36,286	39,558	46,175	57,083	66,363	78,944	89,784	80,083	71,997	72,394	89,647	78,360
Total liabilities & stockholders' equity	\$ 70,815	\$ 69,597	\$ 63,171	\$ 72,793	\$ 77,888	\$ 86,113	\$ 108,704	\$ 121,271	\$ 142,431	\$ 172,384	\$ 176,223	\$ 193,694	\$ 241,086	\$ 249,097	\$ 256,003

Source: Company data

## Microsoft Corp. (MSFT) (\$'s in millions) FYE Jun.

Income Statement Analysis	FY'06	FY'07	FY'08	FY'09	FY'10	FY'11	FY'12	FY'13	FY'14	FY'15	FY'16	FY'17	Q1'18	Q2'18	Q3'18E	Q4'18E	FY'18E	FY'19E
Revenue (adjusted)	\$44,282	\$51,122	\$60,420	\$58,437	\$62,484	\$69,943	\$73,723	\$77,849	\$86,833	\$93,580	\$92,071	\$96,657	\$24,538	\$28,918	\$26,350	\$27,550	\$107,356	\$115,600
Cost of Revenue	7,650	10,693	11,598	12,155	12,395	\$15,577	17,530	20,249	\$26,934	\$33,038	\$32,780	\$34,261	8,278	11,064	9,150	9,200	\$37,692	\$40,700
Gross Profit	36,632	40,429	48,822	46,282	50,089	54,366	56,193	57,600	59,899	60,542	59,291	62,396	16,260	17,854	17,200	18,350	69,664	74,900
<b>Operating Expenses</b>																		
Research & Development	6,584	7,121	8,164	9,010	8,714	9,043	9,811	10,411	11,381	12,046	11,988	13,037	3,574	3,504	3,650	3,775	14,503	15,475
Sales & Marketing	9,818	11,455	13,260	12,879	13,214	13,940	13,857	15,276	15,811	15,713	14,697	15,539	3,812	4,562	4,320	4,550	17,244	18,500
General & Administrative	3,758	3,329	5,127	4,030	4,063	4,222	4,569	5,149	4,821	4,611	4,563	4,481	1,166	1,109	1,250	1,400	4,925	5,200
Restructuring and other charges							6,193	-	127	10,011	6,751	306	-	-	-	-	-	-
Total Operating Expenses	20,160	21,905	26,551	25,919	25,991	27,205	28,237	30,836	32,013	42,381	37,999	33,363	8,552	9,175	9,220	9,725	36,672	39,175
Operating Income	16,472	18,524	22,271	20,363	24,098	27,161	27,956	26,764	27,886	18,161	21,292	29,033	7,708	8,679	7,980	8,625	32,992	35,725
Other Investment Income (expense)	1,790	1,577	1,543	(542)	915	910	504	288	61	346	(431)	823	276	490	300	200	1,266	1,200
Income before income taxes	\$18,262	\$20,101	\$23,814	\$19,821	\$25,013	\$28,071	\$28,460	\$27,052	\$27,820	\$18,507	\$20,861	\$29,856	\$7,984	\$9,169	\$8,280	\$8,825	\$34,258	\$36,925
Provision for income taxes	5,663	6,036	6,133	5,252	6,253	4,921	5,289	5,189	5,746	6,314	(1,251)	4,864	1,408	15,471	1,325	1,412	19,616	7,479
Net income	\$12,599	\$14,065	\$17,681	\$14,569	\$18,760	\$23,150	\$23,171	\$21,863	\$22,074	\$12,193	\$22,112	\$24,992	\$6,576	\$(6,302)	\$6,955	\$7,413	\$14,642	\$29,446
<b>Earnings per share:</b>																		
GAAP EPS (diluted)	\$ 1.20	\$ 1.42	\$ 1.87	\$ 1.62	\$ 2.10	\$ 2.65	\$ 2.00	\$ 2.59	\$ 2.63	\$ 1.48	\$ 2.06	\$ 2.71	\$ 0.84	\$(0.82)	\$ 0.91	\$ 0.97	\$ 1.90	\$ 3.86
Earnings per share: (adjusted diluted)							\$ 2.79	\$ 2.70	\$ 2.67	\$ 2.67	\$ 2.76	\$ 3.31	\$ 0.84	\$ 0.96	\$ 0.91	\$ 0.97	\$ 3.68	\$ 3.86
Weighted average shares outstanding:																		
Diluted	10,531	9,886	9,470	8,996	8,927	8,593	8,460	8,450	8,385	8,237	8,002	7,831	7,799	7,710	7,685	7,650	7,711	7,621
Cash Dividend per share	\$ 0.34	\$ 0.39	\$ 0.43	\$ 0.52	\$ 0.52	\$ 0.64	\$ 0.80	\$ 0.92	\$ 1.12	\$ 1.24	\$ 1.44	\$ 1.56	\$ 0.42	\$ 0.42	\$ 0.42	\$ 0.42	\$ 1.68	\$ 1.80
<b>Year/Year Growth Rates</b>																		
Adjusted Revenue	11.3%	15.4%	18.2%	-3.3%	6.9%	11.9%	5.4%	5.6%	11.5%	7.8%	-1.6%	5.0%	9.9%	10.9%	11.9%	11.5%	11.1%	7.7%
Cost of Revenue	26.8%	39.8%	8.5%	4.8%	2.0%	25.7%	12.5%	15.5%	33.0%	22.7%	-0.8%	4.5%	5.5%	11.7%	13.5%	8.8%	10.0%	8.0%
Gross Profit	8.5%	10.4%	20.8%	-5.2%	8.2%	8.5%	3.4%	2.5%	4.0%	1.1%	-2.1%	5.2%	12.2%	10.4%	11.0%	13.0%	11.6%	7.5%
R&D Expense	8.0%	8.2%	14.6%	10.4%	-3.3%	3.8%	8.5%	6.1%	9.3%	5.8%	-0.5%	8.8%	15.1%	14.4%	8.8%	7.4%	11.2%	6.7%
Sales & Marketing	14.7%	16.7%	15.8%	-2.9%	2.6%	5.5%	-0.6%	10.2%	3.5%	-0.6%	-6.5%	5.7%	17.9%	12.1%	11.4%	4.5%	11.0%	7.3%
General & Administrative	-17.2%	-11.4%	54.0%	-21.4%	0.8%	3.9%	8.2%	12.7%	-6.4%	-4.4%	-1.0%	-1.8%	11.6%	26.2%	4.0%	3.3%	9.9%	5.6%
Total Operating Expenses	5.0%	8.7%	21.2%	-2.4%	0.3%	4.7%	3.8%	9.2%	3.8%	32.4%	-10.3%	-12.2%	15.8%	14.5%	9.3%	2.0%	9.9%	6.8%
Operating Income	13.1%	12.5%	20.2%	-8.6%	18.3%	12.7%	2.9%	-4.3%	4.2%	-34.9%	17.2%	36.4%	8.5%	6.5%	13.0%	28.5%	13.6%	8.3%
Net Income	2.8%	11.6%	25.7%	-17.6%	28.8%	23.4%	0.1%	-5.6%	1.0%	-44.8%	81.3%	13.0%	0.1%	-196.7%	21.7%	-3.3%	-41.4%	101.1%
Earnings Per Share	6.5%	18.9%	31.2%	-13.3%	29.8%	25.9%	5.4%	-3.3%	-1.1%	0.1%	3.4%	19.8%	10.9%	15.4%	23.7%	-1.3%	11.2%	5.1%
Diluted Shares Outstanding	-3.4%	-6.1%	-4.2%	-5.0%	-0.8%	-3.7%	-1.5%	-0.1%	-0.8%	-1.8%	-2.8%	-2.1%	-1.0%	-1.5%	-1.6%	-2.0%	-1.5%	-1.2%
<b>Percentage of Revenue</b>																		
Cost of Revenue	17.3%	20.9%	19.2%	20.8%	19.8%	22.3%	23.8%	26.0%	31.0%	35.3%	35.6%	35.4%	33.7%	38.3%	34.7%	33.4%	35.1%	35.2%
R&D Expense	14.9%	13.9%	13.5%	15.4%	13.9%	12.9%	13.3%	13.4%	13.1%	12.9%	13.0%	13.5%	14.6%	12.1%	13.9%	13.7%	13.5%	13.4%
Sales & Marketing	22.2%	22.4%	21.9%	22.0%	21.1%	19.9%	18.8%	19.6%	18.2%	16.8%	16.0%	16.1%	15.5%	15.8%	16.4%	16.5%	16.1%	16.0%
General & Administrative	8.5%	6.5%	8.5%	6.9%	6.5%	6.0%	6.2%	6.6%	5.6%	4.9%	5.0%	4.6%	4.8%	3.8%	4.7%	5.1%	4.6%	4.5%
Total Operating Expenses	45.5%	42.8%	43.9%	44.4%	41.6%	38.9%	38.3%	39.6%	36.9%	45.3%	41.3%	34.5%	34.9%	31.7%	35.0%	35.3%	34.2%	33.9%
<b>Margin Analysis</b>																		
Gross Profit	82.7%	79.1%	80.8%	79.2%	80.2%	77.7%	76.2%	74.0%	69.0%	64.7%	64.4%	64.6%	66.3%	61.7%	65.3%	66.6%	64.9%	64.8%
Operating Income	37.2%	36.2%	36.9%	34.8%	38.6%	38.8%	37.9%	34.4%	32.1%	19.4%	23.1%	30.0%	31.4%	30.0%	30.3%	31.3%	30.7%	30.9%
Net Income	28.5%	27.5%	29.3%	24.9%	30.0%	33.1%	31.4%	28.1%	25.4%	13.0%	24.0%	25.9%	26.8%	-21.8%	26.4%	26.9%	13.6%	25.5%

Source: Company data and Hilliard Lyons estimates



Additional information is available upon request.

### Analyst Certification

I, Stephen Turner, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject company(ies) and its (their) securities. I also certify that I have not been, am not, and will not be receiving direct or indirect compensation in exchange for expressing the specific recommendation(s) in this report.

### Important Disclosures

Hilliard Lyons' analysts receive bonus compensation based on Hilliard Lyons' profitability. They do not receive direct payments from investment banking activity.

### Suitability Ratings

- 1 - A large cap, core holding with a solid history
- 2 - A historically secure company which could be cyclical, has a shorter history than a "1" or is subject to event driven setbacks
- 3 - An above average risk/reward ratio could be due to small size, lack of product diversity, sporadic earnings or high leverage
- 4 - Speculative, due to small size, inconsistent profitability, erratic revenues, volatility, low trading volume or a narrow customer or product base

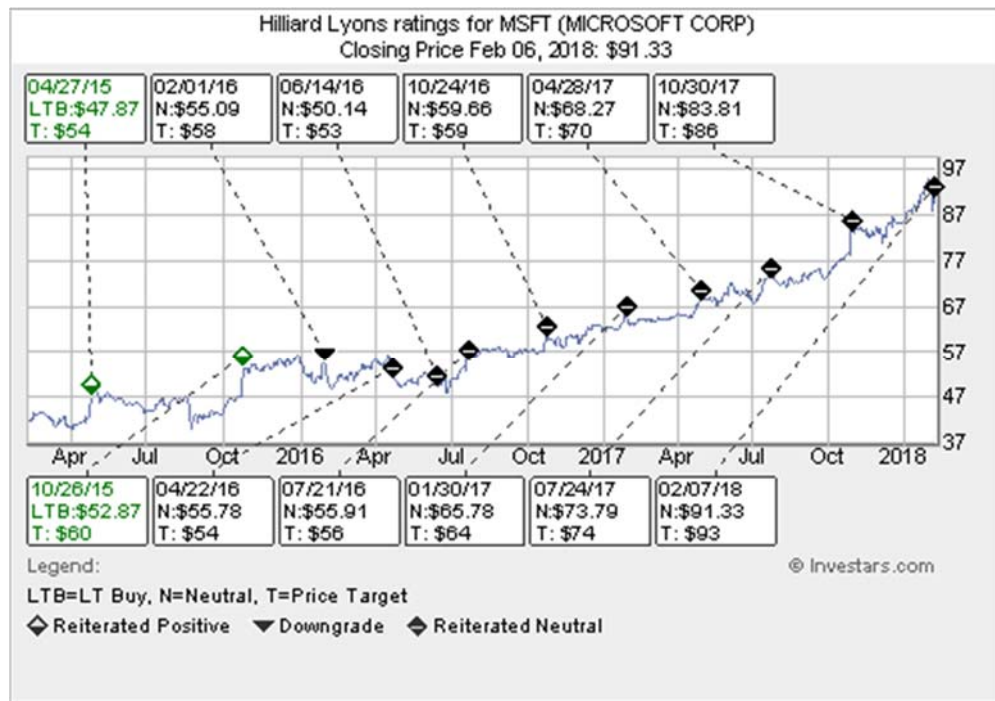
### Investment Ratings

**Buy** - We believe the stock has significant total return potential in the coming 12 months.

**Long-term Buy** - We believe the stock is an above average holding in its sector, and expect solid returns to be realized over a longer time frame than our Buy rated issues, typically 2-3 years.

**Neutral** - We believe the stock is an average holding in its sector, is currently fully valued, and may be used as a source of funds if better opportunities arise.

**Underperform** - We believe the stock is vulnerable to a price setback in the next 12 months.



	Hilliard Lyons Recommended Issues		Investment Banking Provided in Past 12 Mo.	
	# of Stocks Covered	% of Stocks Covered	Banking	No Banking
<b>Rating</b>				
<b>Buy</b>	31	28%	10%	90%
<b>Hold/Neutral</b>	75	67%	9%	91%
<b>Sell</b>	6	5%	0%	100%

*As of 8 January 2018*

#### Other Disclosures

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