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Microsoft Corporation (MSFT-US)

Software

- We reiterate our Buy rating on MSFT as strong gains in cloud services, operating system, and Office 365 continue to drive accelerating Business Performance trends.
- Increasing demand for hybrid cloud and growing demand for its operating system and key applications, including Office 365 continue to drive accelerating Business Performance.
- MSFT's Intelligent Cloud continues to be a key driver of growth and profitability.
- MSFT's Productivity and Business Processes continues to drive increasing incremental growth.
- MSFT's More Personal Computing saw strong incremental gains in the most recent quarter.
- MSFT's strong balance sheet and cash flow will continue to fund ongoing growth and acquisition initiatives while enhancing shareholder returns through ongoing dividend increases and share repurchases.

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Company Note
Microsoft Corporation (MSFT-US)

Software

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Research Action:

Reiterate rating

Rating: Buy

Prior Rating: Buy

Price 07/19/2019: \$136.62

52 Week High / Low: \$140.67 / \$93.96

Key Data: (TTM as of Jun-19)

Excess Cash per Share: \$16.67

Annual Dividend: \$1.84

Dividend Yield: 1.35%

Avg. Volume (30 Day): 24.0M

Shares Outstanding: 7,643.0M

Float: 117.0M

Short Interest: 48.0M

SI % / Float 41.03%

Equity MV: \$1,044,186.6M

Sales TTM: \$125,597.0M

Beta: 1.03

EBITDAR: \$74,634.2M

NOPAT: \$38,616.8M

Total Invested Capital: \$200,292.0M

Return on Capital: 21.00%

Cost of Capital: 6.44%

Economic Profit: \$26,777.9M

Market Value Added: \$930,516.6M

Current Operations Value: \$595,212.3M

Future Growth Value: \$535,596.3M

- We reiterate our Buy rating on MSFT as strong gains in cloud services, operating system, and Office 365 continue to drive accelerating Business Performance trends.** MSFT reported another strong quarter of growth as it continues to see a steady flow of new cloud customers. Commercial Azure cloud and Office 365 revenue increased 39% Y/Y to \$11 billion, while gross profit margins increased by six percentage points to 65%. Microsoft continues to benefit from a strong IT spending backdrop and its leading position in key IT secular themes, including cloud, hybrid cloud, productivity, and gaming. Worldwide public cloud services revenue is expected to grow 17.5% this year to almost \$215 billion according to Gartner. Microsoft also returned \$7.7 billion to shareholders between buybacks and dividends in the current quarter. MSFT continues to benefit from a growing user base of its industry and market-leading applications including Dynamics, Office 365, and most importantly, Azure cloud adoption. Ongoing Artificial Intelligence continues to drive increasing Azure adoptions and collaborations with key cloud service providers. Azure's growing customer base continues to be a significant catalyst. MSFT will continue to generate increasing Economic Profit and greater shareholder value creation. We believe further upside exists from current levels and continue to recommend purchase.
- Increasing demand for hybrid cloud and growing demand for its operating system and key applications, including Office 365 continue to drive accelerating Business Performance.** For the 12 months ending June 2019, Net Sales Revenue increased 14% Y/Y from \$110.18 billion to \$125.60 billion. We forecast a further increase of 11.3% to \$139.76 billion over the NTM. Economic Operating Cash Flow (EBITDAR) increased 16.82% Y/Y from \$46.29 billion to \$74.63 billion over the LTM. We forecast a further increase of 9.6% to \$81.83 billion over the NTM. Net Operating Profit After Tax (NOPAT) increased 34.85% Y/Y from \$28.64 billion to \$38.32 billion over the LTM. We forecast a further increase of 10% to \$42.13 billion over the NTM. Return on Capital increased from 17.0% to 20.84% over the LTM. We forecast a further increase to 20.89% over the NTM. Economic Profit (EP) increased 60.78% Y/Y from \$16.47 billion to \$26.48 billion over the LTM. We forecast a further increase of 12.36% to \$29.76 billion over the NTM. MSFT's ability to continue to produce a Return on Capital of over 20% and drive greater Economic Profit will continue to drive increasing shareholder value creation.

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- **MSFT's Intelligent Cloud continues to be a key driver of growth and profitability.** New customers continue to migrate to Azure at a record pace. Azure remains the only hyperscale scalable cloud platform with a consistent computing stack that extends from the data center to the edge. MSFT continues to see a steady flow of new cloud deals as it narrows its gap with cloud service leader Amazon (AMZN-US, Buy Rated). Cloud services and server products revenue increased by 22% Y/Y driven by Azure growth of 64% Y/Y. Enterprise Services grew 4% Y/Y. Enterprise mobility installed user base increase by 41% Y/Y to over 116 million. MSFT continues to close a record number of multimillion-dollar commercial cloud agreements and add leading customers. Azure is currently the most advanced and secure cloud offering on the market, offering industry-leading development capabilities with integrated AI functionality and a high level of compliant security. Azure continues to help companies create value as developers play an increasing role in value creation and rely heavily on MSFT's GitHub to drive development. GitHub is currently used by over 36 million developers, in the world's largest enterprise, including the majority of Fortune 50 companies. MSFT has introduced new cloud edge solutions, including Azure Stack and Azure Sphere, that are driving strong customer demand. MSFT continues to improve Azure's data analytics capabilities and AI functionality with Azure Cognitive Services, Azure Machine Learning, and new data services including Azure Cosmos DB to help its customers develop new insights and predictive abilities from their data sets.
- **MSFT's Productivity and Business Processes continues to drive increasing incremental growth.** Office Commercial revenue increased 14% Y/Y driven by a 31% Y/Y gain in Office 365 Commercial revenue. Office Consumer increased 6% Y/Y, and Office 365 Consumer subscribers hit 34.8 million. LinkedIn revenue increased by 25% Y/Y driven by record levels of engagement highlighted by LinkedIn sessions growth of 22%. Dynamics revenue increased 12% Y/Y driven by a 45% Y/Y gain in Dynamics 365. LinkedIn continues to be a key contributor to growth as it sees record levels of user engagement and job postings. The increasing quality of newsfeeds drives the increased engagement of LinkedIn along with video content, messaging, and significant increases in mobile usage. MSFT will continue to invest in driving further growth of LinkedIn to make it the world's professional interactive platform. MSFT continues to integrate LinkedIn within its other products, including Sales Navigator, Dynamic 365 for Sales, and Dynamics for Talent Search, along with the launch of Profile Card that brings personalized LinkedIn insights directly into Office 365, and its new Resume Assistant that helps people build resumes online in LinkedIn.

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- **MSFT's More Personal Computing saw strong incremental gains in the most recent quarter.** Windows OEM revenue increased by 9% Y/Y, and Windows Commercial increased by 13% Y/Y. Sales of Surface increased 14% Y/Y driven by several key new product introductions, including the success of the Surface Pro 6. Search advertising revenue net of TAC (Traffic Acquisition Costs) increase by 9% Y/Y. While Gaming revenue declined 10% Y/Y with Xbox software down 3%, long-term, MSFT's leading gaming position should make increasingly positive contributions as MSFT's Xbox One X remains the most technologically advanced and powerful gaming console ever built and is outselling competitors' gaming console offerings. MSFT's continues to invest to empower the world's 2 billion gamers to provide them the ability to play any game they want with anyone, anywhere, and on any device with its new game streaming service. Project xCloud will launch this fall with public trials, and Xbox Live now has a record 65 million users with the highest number of PC and mobile users to date.
- **MSFT's strong balance sheet and cash flow will continue to fund ongoing growth and acquisition initiatives while enhancing shareholder returns through ongoing dividend increases and share repurchases.** MSFT currently has over \$130 billion, \$17.01 per share, in excess cash and will generate Economic Operating Cash Flow (EBITDAR) of almost \$82 billion over the NTM, which will continue to drive ongoing growth initiatives and strategic acquisitions as well as the ongoing return of cash to shareholders. In June 2018, MSFT increased its quarterly dividend 9.5% from \$0.42 to \$0.46. In May of this year, MSFT announced an additional \$1.5 billion open market purchase of shares. In FY2018, MSFT repurchased \$8.6 billion worth of shares and returned \$7.7 billion to shareholders in the most recent quarter, up 45% Y/Y, with \$4.2 billion and share repurchases and paid \$3.5 billion in dividends.

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Investment Thesis

MSFT continues to drive greater revenue growth through an evolving software as a service (SaaS) model with the launch of Office 365 and its industry-leading Azure cloud platform. MSFT is expanding its innovative capabilities to drive greater in-home and enterprise presence. MSFT is expanding its focus and presence away from the consumer and moving toward more profitable enterprise and cloud-based services. Enterprise services now account for more than half of MSFT's total revenue driven by its strong market share across cloud, database, office, and OS. MSFT continues to gain a dominant position in the enterprise space, driven by its increasingly broad and powerful line of cloud-based product offerings. MSFT also benefits from incremental growth drivers, including LinkedIn, gaming, and hardware sales through its innovative Surface product line. MSFT's increasing margins through service-based offerings which will continue to drive greater Economic Profit and increasing shareholder value creation.

Company Overview

Microsoft Corp. (MSFT-US) develops, sells, licenses, and supports operating systems, server applications, business, and consumer applications, software development tools, and intranet and internet software. Microsoft also manufactures the Xbox video game console, the Surface line of tablets and laptops, and other computer peripherals.

Microsoft operates the industry-leading cloud computing platform Azure offering application development and management through a hosted global network of Microsoft managed data centers. Microsoft operates several online and media services including the MSN network, MSNBC, and Xbox 360 Live. Microsoft produces the world's leading business productivity software suite, Microsoft Office 365.

Microsoft competes and sells its products globally, and its customers include the world's largest corporations, global governments, small businesses, and consumers.

In 2016 Microsoft acquired business social network LinkedIn, increasing its capabilities to compete with relationship-oriented software by providers such as Salesforce. LinkedIn is part of Office 365 in the Windows ecosystem.

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Microsoft operates and reports revenue under three Business Segments:

Intelligent Cloud: (29.2% of revenues) includes server and enterprise products and services.

More Personal Computing: (38.3% of revenues) includes the Windows operating system, Xbox 360 game console, Xbox 360 live online gaming platform, Surface, and its Bing search business.

Productivity & Business Processes: (32.5% of revenues) includes the Office business productivity suite and Dynamics CRM businesses.

Microsoft reports revenue by two Geographic Segments: United States (51% of revenue) and Other Countries (49% of revenue).



Company Report – Research Update

Microsoft Corporation (MSFT-US)

Software

Financial Data

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	06/30/2014	06/30/2015	06/30/2016	06/30/2017	06/30/2018	06/30/2019	06/30/2020	Average	Average	Trend
Net Sales Revenue	\$86,729.0	\$92,972.0	\$84,695.0	\$89,395.0	\$110,175.0	\$125,597.0	\$139,758.3	\$100,566.8	\$108,389.0	\$132,677.6
Sales Growth	11.69%	7.20%	-8.90%	5.55%	23.25%	14.00%	11.28%	8.22%	14.26%	12.64%
Sales Growth Trend	9.13%	8.99%	-2.46%	-0.23%	16.17%	17.70%	12.36%	8.03%	11.21%	15.03%
Economic Operating Cash Flow (EBITDAR)	\$46,236.7	\$47,508.0	\$41,442.9	\$48,316.7	\$63,882.8	\$74,634.2	\$81,828.5	\$55,156.9	\$62,277.9	\$78,231.3
EBITDAR Margin	53.31%	51.10%	48.93%	54.05%	57.98%	59.42%	58.55%	54.30%	57.15%	58.99%
EBITDAR Growth	9.70%	2.75%	-12.77%	16.59%	32.22%	16.83%	9.64%	11.12%	21.88%	13.23%
Net Operating Profit Before Tax (NOPBT)	\$28,769.7	\$28,516.0	\$21,832.9	\$25,432.7	\$37,310.8	\$42,994.2	\$46,931.6	\$31,217.3	\$35,245.9	\$44,962.9
NOPBT Margin	33.17%	30.67%	25.78%	28.45%	33.87%	34.23%	33.58%	30.60%	32.18%	33.91%
NOPBT Growth	5.49%	-0.88%	-23.44%	16.49%	46.70%	15.23%	9.16%	10.82%	26.14%	12.20%
Cash Operating Income Tax	\$5,942.2	\$6,630.0	\$3,598.1	\$2,136.9	\$8,674.8	\$4,674.4	\$4,801.1	\$5,142.8	\$5,162.0	\$4,737.7
Economic Tax Effective Rate	20.65%	23.25%	16.48%	8.40%	23.25%	10.18%	10.23%	16.31%	13.94%	10.21%
Net Operating Profit After Tax (NOPAT)	\$22,827.5	\$21,886.0	\$18,234.8	\$23,295.9	\$28,636.0	\$38,319.8	\$42,130.5	\$26,074.5	\$30,083.9	\$40,225.1
NOPAT Margin	26.32%	23.54%	21.53%	26.06%	25.99%	30.75%	30.15%	25.57%	27.60%	30.45%
NOPAT Growth	3.57%	-4.12%	-16.68%	27.75%	22.92%	34.85%	9.94%	12.94%	28.51%	22.40%
Cash & Equivalents	\$100,306.0	\$108,579.0	\$123,671.0	\$139,004.0	\$135,630.0	\$136,468.0	\$153,341.2	\$128,670.4	\$137,034.0	\$144,904.6
Total Assets	\$172,384.0	\$176,223.0	\$193,694.0	\$241,086.0	\$258,848.0	\$286,556.0	\$321,986.3	\$231,281.4	\$262,163.3	\$304,271.2
Non - Interest Bearing Liabilities (NIBLs)	\$52,851.0	\$53,264.0	\$59,935.0	\$71,160.0	\$79,295.0	\$94,043.0	\$105,670.6	\$71,539.4	\$81,499.3	\$99,856.8
Net Assets	\$119,533.0	\$122,959.0	\$133,759.0	\$169,926.0	\$179,553.0	\$192,513.0	\$216,315.7	\$159,742.0	\$180,664.0	\$204,414.3
Economic Asset Adjustments	\$4,692.6	\$6,400.6	\$8,869.0	\$6,737.9	\$7,621.6	\$7,779.0	\$8,740.9	\$7,481.6	\$7,379.5	\$8,259.9
Net Operating Assets	\$124,225.6	\$129,359.6	\$142,628.0	\$176,663.9	\$187,174.6	\$200,292.0	\$225,056.5	\$167,223.6	\$188,043.5	\$212,674.3
Debt & Debt Equivalents	\$26,557.6	\$39,854.6	\$59,469.0	\$95,526.9	\$94,285.6	\$86,622.0	\$97,332.1	\$75,151.6	\$92,144.9	\$91,977.1
Equity & Equivalents	\$89,784.0	\$80,083.0	\$71,997.0	\$72,394.0	\$82,718.0	\$102,330.0	\$114,982.3	\$81,904.4	\$85,814.0	\$108,656.1
Total Capital - Financing Sources	\$116,341.6	\$119,937.6	\$131,466.0	\$167,920.9	\$177,003.6	\$188,952.0	\$212,314.4	\$157,056.0	\$177,958.9	\$200,633.2
Capital Adjustments	\$780.0	\$1,838.0	\$3,087.0	(\$82.0)	\$844.0	\$984.0	\$1,105.7	\$1,334.2	\$582.0	\$1,044.8
Net Capital Financing Sources	\$117,121.6	\$121,775.6	\$134,553.0	\$167,838.9	\$177,847.6	\$189,936.0	\$213,420.1	\$158,390.2	\$178,540.9	\$201,678.1
Net Working Capital	(\$3,346.6)	(\$1,620.4)	(\$7,297.3)	(\$13,723.3)	(\$1,808.3)	(\$3,663.2)	(\$4,116.1)	(\$5,622.5)	(\$6,398.2)	(\$3,889.6)
Cost of Net Working Capital	(\$104.8)	(\$163.2)	(\$256.7)	(\$675.7)	(\$546.6)	(\$176.1)	(\$197.9)	(\$363.7)	(\$466.1)	(\$187.0)
% of Revenue	-0.12%	-0.18%	-0.30%	-0.76%	-0.50%	-0.14%	-0.14%	-0.37%	-0.46%	-0.14%
Operational Capital	\$13,577.0	\$17,673.2	\$16,840.8	\$16,830.7	\$41,115.4	\$46,987.9	\$52,797.6	\$27,889.6	\$34,978.0	\$49,892.7
Cost of Operational Capital	\$888.7	\$1,026.8	\$993.3	\$1,082.3	\$2,039.3	\$2,836.0	\$3,186.7	\$1,595.6	\$1,985.9	\$3,011.4
% of Revenue	1.02%	1.10%	1.17%	1.21%	1.85%	2.26%	2.28%	1.52%	1.77%	2.27%
Productive Capital	\$40,685.0	\$39,447.2	\$38,445.8	\$62,058.7	\$84,851.4	\$96,763.9	\$108,728.0	\$64,313.4	\$81,224.7	\$102,745.9
Cost of Productive Capital	\$2,419.6	\$2,633.0	\$2,241.8	\$3,230.5	\$5,170.2	\$5,846.2	\$6,569.0	\$3,824.4	\$4,749.0	\$6,207.6
% of Revenue	2.79%	2.83%	2.65%	3.61%	4.69%	4.65%	4.70%	3.69%	4.32%	4.68%
Total Operating Capital	\$28,256.0	\$25,429.2	\$23,191.8	\$42,129.7	\$57,053.4	\$70,103.9	\$78,771.7	\$43,581.6	\$56,429.0	\$74,437.8
Cost of Total Operating Capital	\$1,621.6	\$1,764.0	\$1,399.4	\$2,099.6	\$3,490.5	\$4,093.2	\$4,599.3	\$2,569.4	\$3,227.8	\$4,346.2
% of Revenue	1.87%	1.90%	1.65%	2.35%	3.17%	3.26%	3.29%	2.47%	2.93%	3.27%
Non - Operating Capital	\$95,969.6	\$103,930.4	\$119,436.3	\$134,534.3	\$130,121.3	\$130,188.2	\$146,284.9	\$123,642.1	\$131,614.6	\$138,236.5
Cost of Non - Operating Capital	\$6,143.1	\$6,568.5	\$6,428.7	\$8,163.4	\$9,314.0	\$8,379.4	\$9,415.4	\$7,770.8	\$8,618.9	\$8,897.4
% of Revenue	7.08%	7.06%	7.59%	9.13%	8.45%	6.67%	6.74%	7.78%	8.09%	6.70%
Total Capital	\$124,225.6	\$129,359.6	\$142,628.0	\$176,663.9	\$187,174.6	\$200,292.0	\$225,056.5	\$167,223.6	\$188,043.5	\$212,674.3
Cost of Total Capital	\$7,764.7	\$8,332.5	\$7,828.1	\$10,263.1	\$12,804.5	\$12,472.6	\$14,014.7	\$10,340.2	\$11,846.7	\$13,243.6
% of Revenue	8.95%	8.96%	9.24%	11.48%	11.62%	9.93%	10.03%	10.25%	11.01%	9.98%
Cost of Capital (WACC)	6.83%	6.57%	5.76%	6.43%	7.04%	6.44%	6.44%	6.45%	6.64%	6.44%
Capital Structure										
Debt & Debt Equivalents	\$26,557.6	\$39,854.6	\$59,469.0	\$95,526.9	\$94,285.6	\$86,622.0	\$97,332.1	\$75,151.6	\$92,144.9	\$91,977.1
Debt & Debt Equivalents % of Market Value	7.16%	10.11%	12.88%	15.24%	11.07%	7.78%	7.78%	10.90%	10.67%	7.78%
Preferred Equity	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Preferred Equity % of Market Value	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Market Value of Common Equity	\$344,459.2	\$354,392.1	\$402,220.1	\$531,312.4	\$757,640.2	\$1,026,511.1	\$1,153,430.8	\$614,415.2	\$771,821.3	\$1,089,971.0
Common Equity % of Market Value	92.84%	89.89%	87.12%	84.76%	88.93%	92.22%	92.22%	89.10%	89.33%	92.22%
Total Economic Market Value (MV)	\$371,016.8	\$394,246.6	\$461,689.1	\$626,839.4	\$851,925.8	\$1,113,133.2	\$1,250,763.0	\$689,566.8	\$863,966.1	\$1,181,948.1
Total %	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Excess Cash	\$95,969.6	\$103,930.4	\$119,436.3	\$134,534.3	\$130,121.3	\$130,188.2	\$146,284.9	\$123,642.1	\$131,614.6	\$138,236.5
Economic Enterprise Value	\$275,047.2	\$290,316.2	\$342,252.8	\$492,305.1	\$721,804.6	\$982,945.0	\$1,104,478.1	\$565,924.8	\$732,351.6	\$1,043,711.6
Average Capital	\$107,158.7	\$119,448.6	\$128,164.3	\$151,196.0	\$172,843.3	\$183,891.8	\$201,678.1	\$151,108.8	\$169,310.4	\$192,784.9
Capital Δ	\$19,925.7	\$4,654.0	\$12,777.4	\$33,285.9	\$10,008.7	\$12,088.4	\$23,484.0	\$14,562.9	\$18,461.0	\$17,786.2

Source: Company Data, Financial statements and Tigress Research

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Company Report – Research Update

Microsoft Corporation (MSFT-US)

Software

Financial Analysis

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	06/30/2014	06/30/2015	06/30/2016	06/30/2017	06/30/2018	06/30/2019	06/30/2019	06/30/2020	Average	Average	Trend
Return on Market Value (NOPAT / MV)	6.15%	5.55%	3.95%	3.72%	3.36%	3.44%	3.87%	4.00%	4.00%	3.51%	3.66%
Return on Enterprise Value (NOPAT / EV)	8.30%	7.54%	5.33%	4.73%	3.97%	3.90%	4.38%	5.09%	5.09%	4.20%	4.14%
Return on Capital (NOPAT / Average Capital)	21.30%	18.32%	14.23%	15.41%	16.57%	20.84%	20.89%	17.07%	17.07%	17.60%	20.86%
Cost of Capital (WACC)	6.83%	6.57%	5.76%	6.43%	7.04%	6.44%	6.44%	6.44%	6.45%	6.64%	6.44%
Economic Return Spread	14.48%	11.75%	8.47%	8.98%	9.53%	14.40%	16.18%	10.63%	10.63%	10.97%	15.29%
Capital Charge	\$7,316.2	\$7,849.9	\$7,377.4	\$9,719.9	\$12,165.7	\$11,839.0	\$13,302.8	\$9,790.4	\$9,790.4	\$11,241.5	\$12,570.9
Economic Profit (EP)	\$15,511.3	\$14,036.1	\$10,857.4	\$13,576.0	\$16,470.3	\$26,480.8	\$29,765.0	\$16,284.1	\$16,284.1	\$18,842.4	\$28,117.9
Economic Profit Improvement (EPI)	(\$421.7)	(\$1,475.2)	(\$3,178.7)	\$2,718.6	\$2,894.3	\$10,010.5	\$3,274.1	\$2,193.9	\$2,193.9	\$5,207.8	\$6,642.3
EP Growth	-2.65%	-9.51%	-22.65%	25.04%	21.32%	60.78%	12.36%	15.00%	15.00%	35.71%	36.57%
Economic Profit Margin on Sales	17.88%	15.10%	12.82%	15.19%	14.95%	21.08%	21.29%	15.83%	15.83%	17.07%	21.19%
Economic Profit Per Share	\$1.87	\$1.72	\$1.37	\$1.75	\$3.45	\$3.88	\$2.99	\$2.09	\$2.09	\$2.45	\$3.66
GAAP Earnings Per Share	\$2.66	\$1.47	\$2.09	\$2.73	\$2.14	\$5.11	\$5.21	\$2.71	\$2.71	\$3.33	\$5.16
Excess Cash Per Share	\$11.64	\$12.89	\$15.23	\$17.44	\$16.94	\$17.01	\$17.01	\$15.90	\$15.90	\$17.13	\$18.06
Performance Drivers											
Sales Growth	11.69%	7.20%	-8.90%	5.55%	23.25%	14.00%	11.28%	8.22%	8.22%	14.26%	12.64%
Sales Growth Trend (ROC Sales Growth)	9.13%	8.99%	-2.46%	-0.23%	16.17%	17.70%	12.36%	8.03%	8.03%	11.21%	15.03%
EBITDAR Margin	53.31%	51.10%	48.93%	54.05%	57.98%	59.42%	58.55%	54.30%	54.30%	57.15%	58.99%
EBITDAR Growth	9.70%	2.75%	-12.77%	16.59%	32.22%	16.83%	9.64%	11.12%	11.12%	21.88%	13.23%
NOPBT Margin	33.17%	30.67%	25.78%	28.45%	33.87%	34.23%	33.58%	30.60%	30.60%	32.18%	33.91%
NOPBT Growth	5.49%	-0.88%	-23.44%	16.49%	46.70%	15.23%	9.16%	10.82%	10.82%	26.14%	12.20%
NOPAT Margin	26.32%	23.54%	21.53%	26.06%	25.99%	30.75%	30.15%	25.57%	25.57%	27.60%	30.45%
NOPAT Growth	3.57%	-4.12%	-16.68%	27.75%	22.92%	34.85%	9.94%	12.94%	12.94%	28.51%	22.40%
Economic Profit Margin on Sales (EP / Sales)	17.88%	15.10%	12.82%	15.19%	14.95%	21.08%	21.29%	15.83%	15.83%	17.07%	21.19%
Economic Profit Growth	-2.65%	-9.51%	-22.65%	25.04%	21.32%	60.78%	12.36%	15.00%	15.00%	35.71%	36.57%
Economic Return Spread (ROC-WACC)	14.48%	11.75%	8.47%	8.98%	9.53%	14.40%	14.45%	10.63%	10.63%	10.97%	14.43%
Economic Return Ratio (ROC / WACC)	312.01%	278.81%	247.17%	239.67%	235.38%	323.68%	324.48%	264.94%	264.94%	266.24%	324.08%
Economic Profit Momentum (ΔEP/Capital)	-0.36%	-1.21%	-2.36%	1.62%	1.63%	5.27%	1.53%	0.99%	0.99%	2.84%	3.40%
Economic Profit Momentum Margin (ΔEP/Sales)	-0.49%	-1.59%	-3.75%	3.04%	2.63%	7.97%	2.34%	1.66%	1.66%	4.55%	5.16%
Capital Growth	20.50%	3.97%	10.49%	24.74%	5.96%	6.80%	12.36%	10.39%	10.39%	12.50%	9.58%
Capital Turns	0.74X	0.76X	0.63X	0.53X	0.62X	0.66X	0.65X	0.64X	0.64X	0.60X	0.66X
EVC Acceleration Margin	-0.54%	-1.70%	-3.42%	3.21%	3.24%	9.09%	2.61%	1.57%	1.57%	5.18%	6.13%
EVC Acceleration Spread	-0.47%	-1.38%	-2.66%	2.12%	1.91%	5.79%	1.78%	1.09%	1.09%	3.45%	3.92%
Risk Factors											
Free Cash Flow (NOPAT - Δ Capital)	\$2,901.8	\$17,232.0	\$5,457.4	(\$9,990.1)	\$18,627.3	\$26,231.4	\$18,646.4	\$11,511.6	\$11,511.6	\$11,622.9	\$22,438.9
Free Cash Flow Rate (FCF / Capital)	2.48%	14.15%	4.06%	-5.95%	10.47%	13.81%	8.74%	7.31%	7.31%	6.11%	11.27%
Free Cash Flow Yield (FCF / MV)	0.78%	4.37%	1.18%	-1.59%	2.19%	2.36%	1.49%	1.70%	1.70%	0.98%	1.92%
Total Debt / Total Capital	22.68%	32.73%	44.20%	56.92%	53.01%	45.61%	45.61%	46.49%	46.49%	51.85%	45.61%
Total Debt / EBITDAR	57.44%	83.89%	143.50%	197.71%	147.59%	116.06%	118.95%	137.75%	137.75%	153.79%	117.50%
Excess Cash	\$95,969.6	\$103,930.4	\$119,436.3	\$134,534.3	\$130,121.3	\$130,188.2	\$0.0	\$123,642.1	\$123,642.1	\$131,614.6	\$65,094.1
Financial Leverage (Total Debt - Excess Cash) / Pension Leverage (Net Pension Liability / MV)	-18.71%	-16.25%	-12.99%	-6.22%	-4.21%	-3.91%	7.78%	-8.72%	-8.72%	-4.78%	1.93%
Equity Risk Index (S&P 500 = 1.00)	1.02	1.02	1.02	1.02	1.02	1.03	1.03	1.02	1.02	1.03	1.03
Stock Price Volatility	3.04	3.52	3.63	2.81	2.20	2.67	2.67	2.97	2.97	2.56	2.67
Sales Index (NL Sales)	11.37	11.44	11.35	11.40	11.61	11.74	11.85	11.51	11.51	11.58	11.79
Market Value Index (NL Market Value)	12.82	12.88	13.04	13.35	13.66	13.92	14.04	13.37	13.37	13.64	13.98
Size Index (NL Sales: MV)	12.10	12.16	12.19	12.37	12.63	12.83	12.94	12.44	12.44	12.61	12.89
Beta	1.03	1.03	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
TFP Adjusted Beta	1.02	1.02	1.02	1.02	1.02	1.03	1.03	1.02	1.02	1.03	1.03
Stock Price Volatility	3.04	3.52	3.63	2.81	2.20	2.67	2.67	2.97	2.97	2.56	2.67
Valuation Measures											
Total Economic Market Value (MV)	\$371,016.8	\$394,246.6	\$461,689.1	\$626,839.4	\$851,925.8	\$1,113,133.2	\$1,250,763.0	\$689,566.8	\$689,566.8	\$863,966.1	\$1,181,948.1
Economic Enterprise Value	\$275,047.2	\$290,316.2	\$342,252.8	\$492,305.1	\$721,804.6	\$982,945.0	\$1,104,478.1	\$565,924.8	\$565,924.8	\$732,351.6	\$1,043,711.6
Equity Market Value	\$344,459.2	\$354,392.1	\$402,220.1	\$531,312.4	\$757,640.2	\$1,026,511.1	\$1,153,430.8	\$614,415.2	\$614,415.2	\$771,821.3	\$1,089,971.0
Total Capital	\$124,225.6	\$129,359.6	\$142,628.0	\$176,663.9	\$187,174.6	\$200,292.0	\$225,056.5	\$167,223.6	\$167,223.6	\$188,043.5	\$212,674.3
Market Value Created MVC (MV - Capital)	\$246,791.2	\$264,887.1	\$319,061.1	\$450,175.4	\$664,751.2	\$912,841.1	\$1,025,706.5	\$522,343.2	\$522,343.2	\$675,922.6	\$969,273.8
MVC Margin (MVC / Sales)	284.55%	284.91%	376.72%	503.58%	603.36%	726.80%	733.91%	519.40%	519.40%	623.61%	730.55%
MVC Spread (MVC / Capital)	198.66%	204.77%	223.70%	254.82%	355.15%	455.76%	455.76%	312.36%	312.36%	359.45%	455.76%
Current EVC Value (EP / WACC)	\$227,191.0	\$213,582.7	\$188,620.2	\$211,179.2	\$234,000.0	\$411,320.5	\$462,176.9	\$252,598.5	\$252,598.5	\$283,980.9	\$436,748.7
Current Operations Value COV	\$334,349.7	\$333,031.3	\$316,784.5	\$362,375.2	\$406,843.3	\$595,212.3	\$663,855.0	\$403,707.3	\$403,707.3	\$453,291.3	\$629,533.7
Current Operations Value Per Share	\$40.29	\$40.73	\$39.97	\$46.78	\$52.84	\$77.57	\$83.63	\$51.47	\$51.47	\$58.82	\$81.14
Future Growth Value (MVC - EVA Value)	\$36,667.0	\$61,215.4	\$144,904.6	\$264,464.2	\$445,082.5	\$517,920.8	\$586,908.0	\$285,859.6	\$285,859.6	\$410,674.8	\$552,414.4
Future Growth Value Reliance (FGV / MV)	9.88%	15.53%	31.39%	42.19%	52.24%	46.53%	46.92%	41.45%	41.45%	47.53%	46.74%
Share Price	\$41.70	\$44.15	\$51.17	\$68.93	\$98.61	\$133.96	\$133.96	\$79.36	\$79.36	\$100.50	\$133.96
Dividend Yield	2.69%	2.81%	2.81%	2.26%	1.70%	1.37%	1.37%	0.76%	0.76%	0.76%	0.76%
Total Shareholder Return (TTM)	23.40%	8.68%	18.71%	36.97%	44.76%	37.22%	0.00%	-40.76%	-40.76%	26.63%	33.29%
MV to IC Ratio	2.99X	3.05X	3.24X	3.55X	4.55X	5.56X	5.56X	4.12X	4.12X	4.59X	5.56X
EV / EBITDAR Multiple	9.55X	6.11X	8.26X	10.19X	11.30X	13.17X	13.50X	10.26X	10.26X	11.76X	13.34X
EV / NOPBIT Multiple	9.56X	10.18X	15.68X	19.36X	19.35X	22.86X	23.53X	18.13X	18.13X	20.78X	23.21X
EV / NOPAT Multiple	12.05X	13.26X	18.77X	21.13X	25.21X	25.65X	26.22X	21.70X	21.70X	24.34X	25.95X
EV / EP Multiple	17.73X	20.68X	31.52X	36.26X	43.82X	37.12X	37.12X	31.70X	31.70X	38.87X	37.12X
Future Growth Value (% of MV)	9.88%	15.53%	31.39%	42.19%	52.24%	46.53%	46.92%	41.45%	41.45%	47.53%	46.74%
Current Operations Value (% of MV)	90.12%	84.47%	68.61%	57.81%	47.76%	53.47%	53.08%	58.55%	58.55%	52.47%	53.26%
Market Value (COV + FGV %)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Basic Shares Outstanding	8,299.0	8,177.0	7,925.0	7,746.0	7,700.0	7,673.0	7,844.2	7,844.2	7,844.2	7,706.3	7,758.6

Source: Company Data, Financial statements and Tigress Research

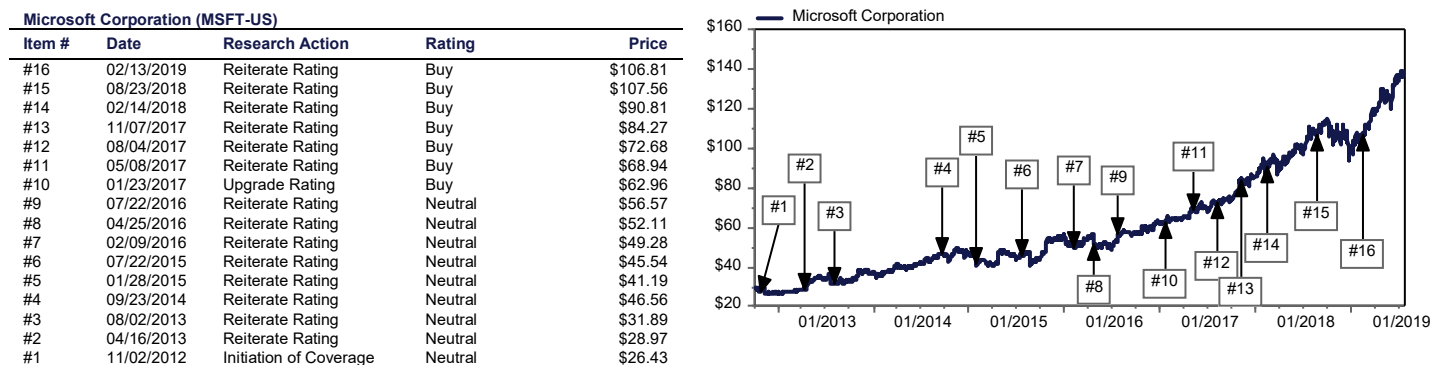
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Microsoft Corporation (MSFT-US)
Software
Ratings History

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We make key adjustments to reported financial data eliminating GAAP-based accounting distortions and measuring all companies on a cash operating basis.

Our proprietary research framework is a multi-factor model that scores and ranks companies based on their risk-adjusted ability to create Economic Profit relative to their current market value focusing on three key components:

Business Performance: Measuring economic profitability, growth and operating efficiency.

Risk: Measuring business sustainability, volatility, strength, and consistency.

Valuation: Linking business performance to market value. Measuring value created relative to capital employed and enterprise multiples of economic profit and cash flow.

We score and rank 24 key measurements of performance, risk, and value into relative market and industry investment recommendations.

Glossary of Key Terms and Measures

Excess Cash per Share:	Excess Cash per Share is the amount of excess cash divided by basic shares outstanding. Excess Cash consists of all cash and short-term securities less operating cash needed to run the business. Operating Cash is 5% of TTM net sales revenue.
EBITDAR:	Earnings Before Interest, Taxes, Depreciation, Amortization, and Restructuring and Rent Costs. This is especially important when comparing companies that use a significant amount of leased assets like restaurants and retailers.
NOPAT:	Net Operating Profit after Tax represents a company's after-tax cash operating profit excluding financing costs.
Total Invested Capital:	Total Invested Capital the total cash investment that shareholders and debt holders have made during the life of the company.
Return on Capital:	Return on Capital equals NOPAT divided by Total Invested Capital. It is a key measure of operating efficiency. ROC quantifies how well a company generates cash flow relative to the capital invested in its business.
Cost of Capital:	Is the proportionately weighted cost of each category of capital – common equity, preferred equity and debt.
Economic Profit:	Economic Profit is the net operating income after tax less the opportunity cost of the total capital invested. It is the most important driver of shareholder value.
Current Operations Value:	Current Operations Value is the portion of market value based on the discounted present value of the current earnings stream assuming it remains constant forever.
Future Growth Value:	Future Growth Value is the portion of market value based on un-earned Economic Profit

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		Companies Under Coverage		Relationship Companies Under Coverage*		
		#	%	#	%	
Strong Buy:	Expect significant price gains in the price of the stock relative to its industry peer group and general market over the next 12 months.	16	14%	1	15%	
Buy:	Expect out-performance for the price of the stock relative to its industry peer group and general market over the next 12 months.	54	45%	5	70%	
Neutral:	Expect little or no outperformance opportunity over the next 12 months.	44	37%	1	15%	
Underperform:	Expect underperformance for the price of the stock relative to its industry peer group and general market over the next 12 months.	5	4%	0	0%	
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Not Rated	No Current Research Rating	NA	NA	65	NA	
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