

EQUITY RESEARCH

26 July 2023

Microsoft Corp

Cloud migration to uplift margins despite weak macro

Company Overview

Microsoft Corp (MSFT) develops, manufactures, licenses, & supports a wide range of software products. It has transformed from a component driven (PC, server) to one driven by the need for cloud capacity. Its Azure platform is thriving & is placed 2nd in public cloud in terms of market share. MSFT has three businesses - Productivity & Business Processes (Office, LinkedIn, Dynamics), Intelligent Cloud (Server Products & Cloud Services, Azure, and Enterprise Services) & More Personal Computing (Windows, Devices, Gaming, Search).

Investment Overview

MSFT is the market leader in productivity software market. With a market share of 85% in productivity software, MSFT enjoys certain key competitive advantages over its peers. This is due to its industry-leading product range, widespread market presence and deep C-level relationships. According to ResearchAndMarkets.com, the global productivity software market is predicted to expand at a 14% CAGR over 2022-2026 to US\$98bn while during the same period, cloud-based office productivity software market is expected to grow at a 25.5% CAGR to US\$52bn by 2026. Consensus forecast revenue CAGR of 12% over FY23-26 for MSFT's productivity and business process segment which includes (Office, LinkedIn, Dynamics).

Azure is the key growth driver although weak macro may moderate near-term growth. Consensus expects Azure to deliver CAGR of 19% over FY23F-26F, reaching US\$147bn revenue in FY26F, rising from 38% of group revenue in FY22 to 47% in FY26F. MSFT holds 21% market share (AMZN 32%) in the cloud services. Operating margin for cloud stood at 43% in FY22 vs 35% margin in the PC segment (30% of group revenue). So, MSFT is likely to see an uplift in its margins when customers switch from its on-premises install bases (e.g.: Windows and Gaming) to its cloud platform. However, in 3Q23 Azure revenue grew 27% y-o-y, but a drop from 31% y-o-y growth in 2Q23. Growth in Azure continued to moderate, and higher energy costs are impacting the gross margin. Management indicated a drop of 4%-5% growth in 4Q23 for Azure. Hence, there can be tactical weaknesses in business during the near term due to weaker macro environment, however on the long term the growth looks resilient.

MSFT eyes a bigger pie in ad market with AI powered search engine but declining PC shipment is a near term worry. Revenue from personal computing segment which includes Windows, Xbox, Surface and advertising from the Bing search engine continues to drop. Sales of Windows licenses dropped 28% y-o-y in 3Q23 due to decline in PC shipments (-30% in March quarter 2023-Gartner). MSFT announced a new AI powered copilot for the web on Bing and Edge. According to eMarketer, Digital advertising market was US\$570bn in FY22, of which 40% was search advertising and the ad market is expected to grow at a CAGR of 10% over FY22-26F. MSFT noted that for every one point of share gain in the search advertising market, it's a US\$2bn revenue opportunity. Currently MSFT's market share in advertising is less than 3% (GOOGL 30%) and is expected to increase with usage.

BUY MSFT with a higher TP of US\$400 (prev US\$390). Our TP for MSFT is based on 36x 12m-forward blended net profit of US\$82.7bn (prev US\$80.7). Our valuation peg for MSFT is at a 20% premium to peers 12m forward PE of 30x and translates to a premium of 22% to AAPL's 29.5x. Higher TP is due to rolling forward of 12m blended net profit by 2 months. According to street, MSFT offers FY23F-26F earnings CAGR of 15.2% higher than 7.4% for AAPL. MSFT enjoys a large mix of recurring revenue than AAPL's higher mix of transactional revenue while MSFT has lower exposure to cyclical revenue streams such as advertising, devices, etc., compared to its peers.

Risks

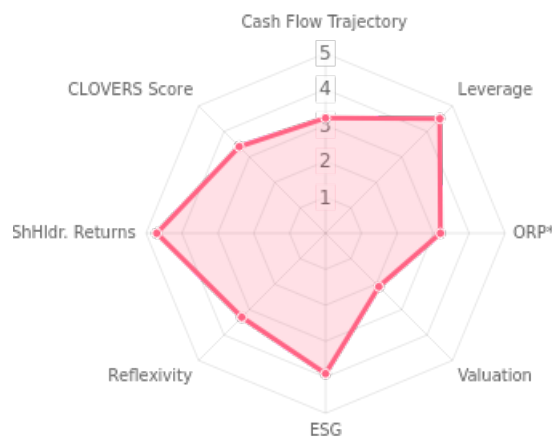
Key risks. Enterprise application spending is cyclical, given the more discretionary nature of applications projects. During an economic slowdown, when firms are faced with shrinking IT budgets, projects involving application upgrades, migrations or new installations are often deferred. This could present a higher degree of risk for Microsoft, in the event of an economic slowdown. Slower-than-expected commercial cloud growth, slowing cloud spend, foreign currency risk, negative economic conditions, inability to hire, increasing competition, and PC or Server market decelerate faster than expected are also some downside risks for MSFT.

Key financial data based on the closing price

Bloomberg Ticker	MSFT US
Sector	Software & Services
Share Price (USD)	350.98
DBS Rating	BUY
12-mth Target Price (USD)	400.0
Market Cap (USD\$b)	2609.71
Volume (m shares)	0.00
Free float (%)	100.00
Dividend yield (%)	0.75
Net Debt to Equity (%)	0
Fwd. P/E (x)	31.6
P/Book (x)	12.85
ROE (%)	38.68

Source: Bloomberg Finance L.P.

CLOVERS Diagram



Source: Company, DBS Bank

CLOVERS Factors

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Source: Company, DBS Bank

WHAT'S NEW

4Q23 meet expectations, AI revenue in 2H24F

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- 4Q23 normalised operating income of US\$23.5bn (+14% y-o-y) was inline with street estimates.
- AI related revenue will be more visible in 2H24F as Copilots reach general availability dates
- Guides 1Q24F revenue growth of 8.3% y-o-y, inline with street estimates.

4Q23 normalised operating income of US\$23.5bn (+14% y-o-y) was inline with street estimates. Microsoft Corporation (MSFT) reported normalized operating income (excluding the increase of US\$804m due to change in estimate for useful life of server and network equipment) of US\$23.5bn (+14% y-o-y) in 4Q23, inline with street estimates. 4Q23 normalised net income of US\$19.4bn (+16% y-o-y) excluding the increase of US\$653m due to change in accounting estimate was also inline with street estimates. **4Q23 revenue of US\$56.2bn (+8.3% y-o-y) was inline with street estimates** of US\$55.5bn. Intelligent Cloud business segment, generated US\$24.0bn in 4Q23 (+15% y-o-y) driven by Azure. Azure revenue grew 26% y-o-y in 4Q23 compared to 27% y-o-y in 3Q23. The Productivity and Business Processes revenue rose 10% y-o-y to US\$18.3bn driven by Office 365, where growth in revenue per user helped MSFT to achieve 15% more revenue from commercial Office 365 productivity software subscriptions. Personal computing (PC) segment reported US\$13.9bn (-3.8% y-o-y) revenue in 4Q23 due to fall in sales of windows OS licenses to device makers. Gartner estimated that PC shipments declined 17% y-o-y in June quarter vs 30% y-o-y drop in March quarter.

1Q24F revenue guidance is inline with street, implies an 8.3% y-o-y growth. MSFT expects US\$53.8bn-US\$54.8bn in revenue for 1Q24F, inline with street estimate of US\$54.9bn. MSFT's implied operating margin for 1Q24F would be around 44.3%, higher than street's 43.8%. MSFT has given outlook for the three segments, where at the mid-range Intelligent Cloud/Productivity and Business Segment is expected to grow 5%/10% y-o-y, while PC segment is expected to decline by 5% y-o-y. Management indicated that Azure revenue growth for 1Q24F to be 25% to 26% in constant currency similar to 4Q23 growth including roughly 2 percent points from all Azure AI services. **AI related revenue will be more visible in 2H24.** Growth from AI services will be gradual as Copilots reach general availability dates. MSFT's Azure OpenAI Service now has over 11,000 customers, up from over 4,500 in May 2023. MSFT noted that the returns from the investments in AI in the form higher revenue will be in 2H24F rather than 1H24F. MSFT has not confirmed when the Copilot assistant for its Microsoft 365 productivity applications will become available for customers. Those capabilities will cost US\$30 per person per month in addition to existing subscriptions to Microsoft 365. That's a big premium over the cost of the existing Microsoft 365 plans right now. Microsoft charges US\$36 per user per month for Microsoft 365 E3 and US\$12.5 for Business Standard.

CLOVERS FACTORS

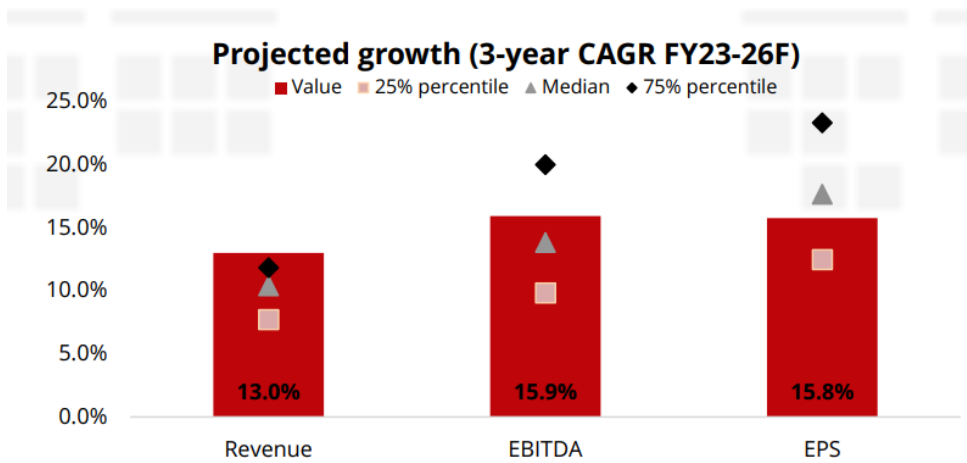
Cash Flow Trajectory

The cash flow trajectory factor look at a company's inherent ability to generate free cash flow. Apart from looking at a company's track record in growing its revenue, earnings and free cash flows, the factor also takes into account the company's profitability and growth prospects.

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MSFT's cash flow trajectory score is above par, where forecasted EPS growth over FY23F-26F period is 15.8% which is lower than peer average of 17.7%, and five-year historical average EPS growth of 22% is better than peer median of 21%. Forecasted EBITDA growth during FY23F-26F of 15.9% is above peer average of 13.9%. Furthermore, projected free cashflow to sales ratio (FY25F) is at 30% which is also above peer median of 25% which places it in the top 30th percentile.

Cash Flow Trajectory



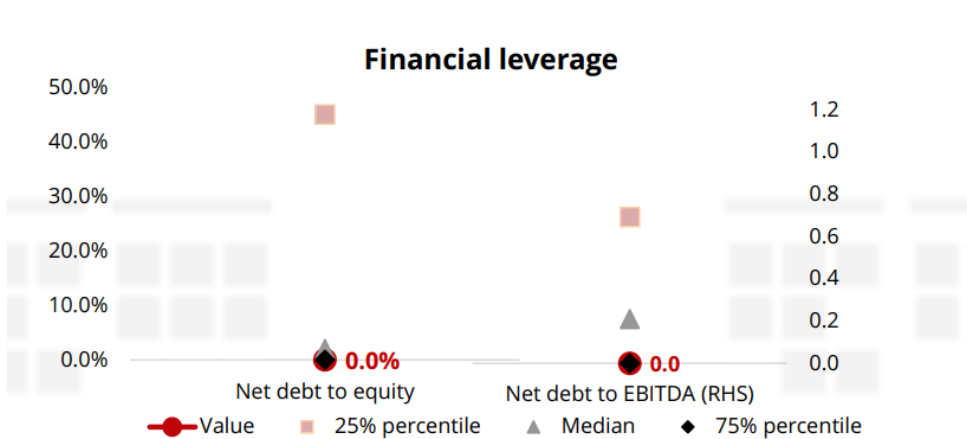
Leverage

Leverage primarily assesses the company's level of indebtedness, including its short-term liquidity positions.

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MSFT's leverage score is above peer's average. Credit metrics wise, MSFT has a net cash position of more than US\$43.9bn as at 3Q23. Furthermore, short term liquidity metrics are above peers at 2.0x compared to the peer median of 1.3x.

Leverage



Operating Risk Profile

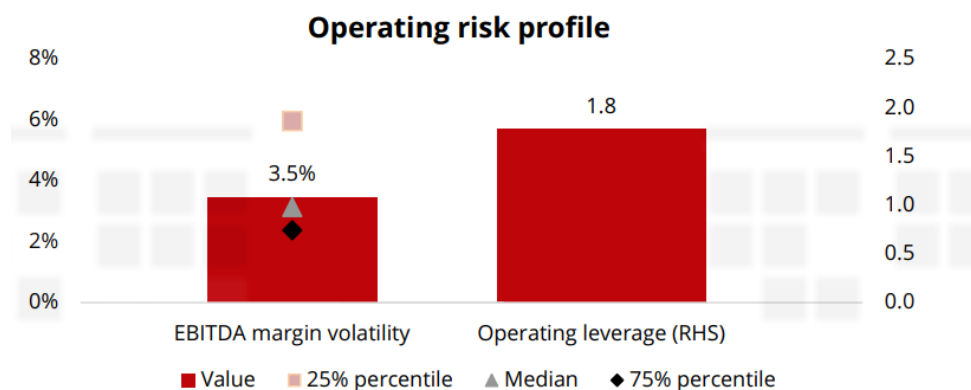
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The operating risk profile segment evaluates the degree of operating leverage present in a company's business model, and the historical volatility of a company's operating margins.

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MSFT's operating risk profile score is marginally below peer average. Margin volatility of 3.5% is high compared to the peer average of 3.1% bringing down the score. MSFT has been able to execute consistent revenue and EBITDA growth in the past 7 years. Furthermore, operating leverage at 1.8x, is marginally below peer average of 1.9x

Operating Risk Profile



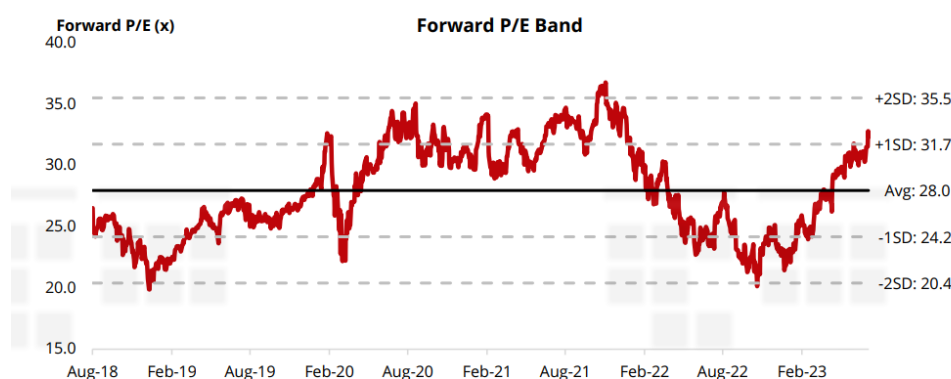
Valuation

The valuation factor takes into account several metrics to determine if a company is under or over valued, by taking into account its justified valuation relative to its fundamentals and the company's current valuation relative to its historical band.

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On the valuation front, MSFT's score is below peer average. The company is currently trading at 12m forward PE of 32.6x which is at a 9% premium to peer median of 30x. Furthermore, MSFT is currently trading at 12m forward EV/EBITDA of 22.2x, while peer median is 18.3x. Furthermore, 12m forward FCF yield is at 2.7% marginally below peer median of 2.8%. Hence, at current prices, trading multiples are more than 1.3sd below its +2SD of 35.5x.

Valuation



ESG

The ESG factor looks into a company's performance across various ESG barometers, as ESG is becoming increasingly pertinent in today's world given

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the shift towards ESG investing.

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On the ESG front, MSFT's score is above par. The average ESG score for the peer group is around 2.8, whereas MSFT is at 3.9 according to Refinitiv ESG scoring methodology. MSFT has scored well in all the ESG pillars as per Refinitiv ratings system.

ESG

Refinitiv ESG Scores	30 Jun 2020	30 Jun 2021	30 Jun 2022
Environment	77.9	77.9	78.1
Social	97.5	97.0	88.8
Governance	94.6	94.5	94.3
Combined	93.4	93.2	89.9
Controversies Score	4.2	5.0	4.7
Combined	48.8	49.1	47.3

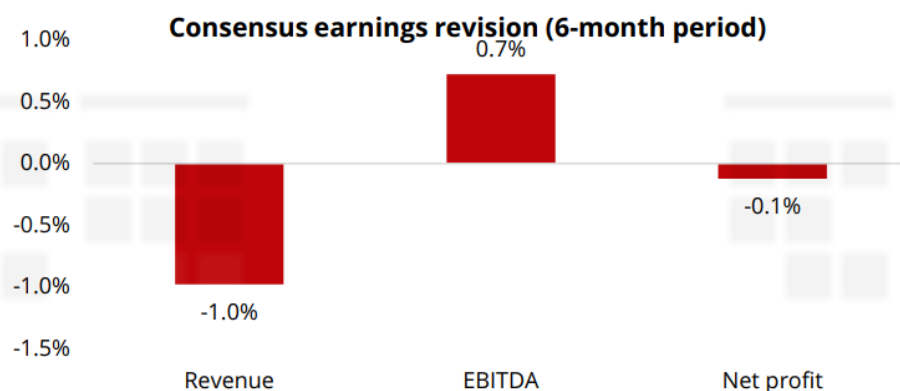
Reflexivity

Reflexivity takes into account live and higher frequency data points that reflects the sentiment of the market and the street on a company. In this factor, we consider technical indicators, changes in short interests and revisions to analysts estimates.

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On the reflexivity front, MSFT's scores are above average. Change in analyst projections are lower than peers over the next two years. Share price volatility of 26% is below peer median of 30%. While RSI which is at 70 is similar to peer median

Reflexivity



Shareholder Returns

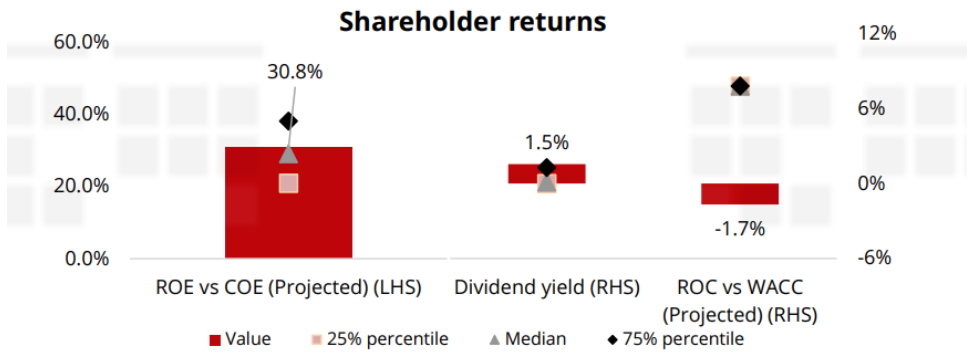
Shareholder returns measures a company's ability to create value for shareholders by evaluating the company's track record in generating returns in excess of its cost of capital returning capital to shareholders via both dividends and share repurchases.

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MSFT scores above average in terms of shareholder returns. This is because the dividend yields are around 1.5% above peer average of 0.1%, as the company pays dividend consistently. ROE vs COE, while staying healthy and above peer average, is also projected to improve from 19.8% historical levels to above 30% over the next two years.

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Shareholder Returns

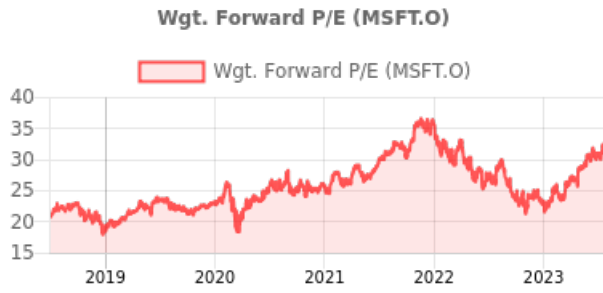


PROFILE

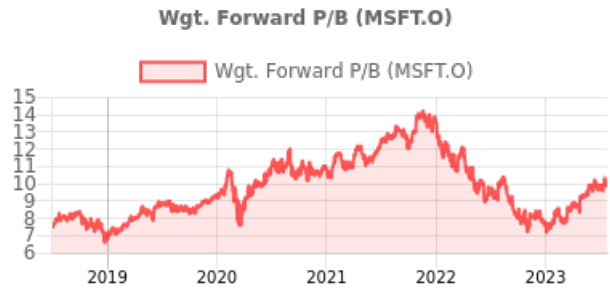
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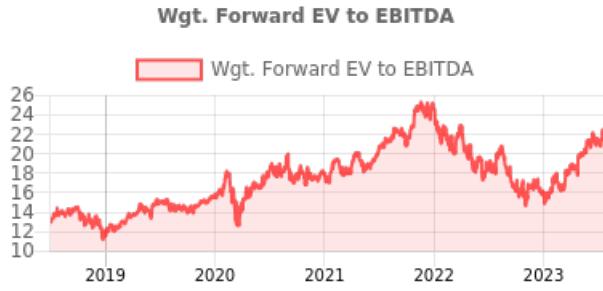
Wgt. Forward P/E (MSFT.O)



Wgt. Forward P/B (MSFT.O)



Wgt. Forward EV to EBITDA



Wgt. Forward Dividend Yield



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BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return, i.e., > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable share price catalysts within this time frame)

*Share price appreciation + dividends

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Target Price & Ratings History



Analysts: Sachin Mittal

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