



Adam Burke, Fund Manager
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Investment Summary and Highlights

Valuation

Shareprice & yield	\$300	0.87%
5yr fair value	\$325	\$360
Expected HPR	8%	20%
WACC range	6%	7%
TV/EBITDA range	18.5x	21.0x
TV/EBIT range	24.0x	26.5x
Growth rate range	2.50%	4.00%
Conviction		Buy

Market profile

52 week range	\$184.0 - \$263.0
Market cap (\$ mln)	\$1,942,000
Net debt (\$ mln)	\$114,587.4
Enterprise value (\$ mln)	\$2,260,191
Beta (5 year)	0.79

Metrics	2022E	2023E	2024E
Revenue	\$175,966	\$197,082	\$202,994
EBITDA	\$60,150	\$67,328	\$69,343
EPS	\$7.90	\$8.85	\$9.11
P/E	32x	33x	37x

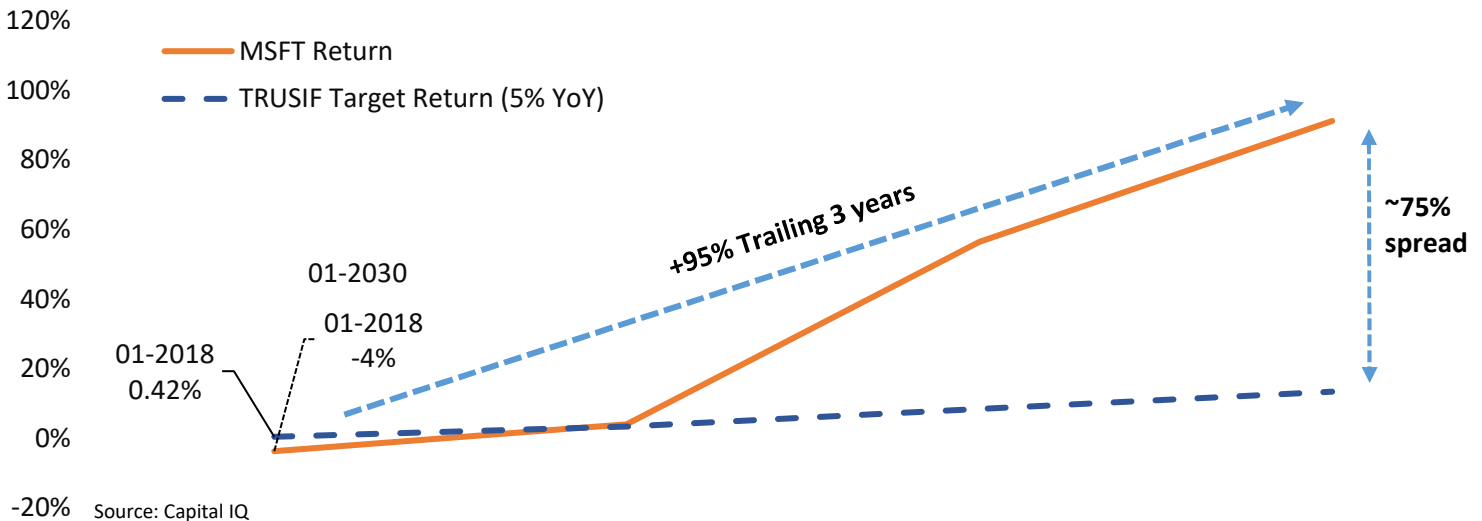
Below is coverage on MSFT (NASDAQ: MSFT). We suggest a buy recommendation, expecting MSFT to outperform its sector and the broader market over the next five years. We will go into more detail below; however, our implied 5-yr return for the company is in the ballpark of +20%. MSFT is a well-positioned company, at the forefront of much change in the software realm. How MSFT is leveraging its Windows OS dominance to bring advancements in general office efficiency tells us that MSFT's niche (in business) is something that the company is moving at full speed to continue dominating and expanding to new horizons. For many firms, the pandemic was crushing, but companies like MSFT helped prove an entirely new concept: virtual work and education environments. Product offerings from companies such as MSFT made it possible for virtual work and education to happen.

- ➔ MSFT's broad portfolio of on-premise server products, public cloud, and SAS applications are making it a leader in the cloud.
- ➔ Azure's profitability is increasing and starting to reach out into the health care space.
- ➔ Continued success on the company's Office 365 front.
- ➔ The exciting acquisition of ZeniMax, and the potential deal with health care tech giant, Nuance, valued at ~\$19.5 bln.

Company Overview

Founded in 1975, MSFT's mission is to enable people and businesses worldwide to realize their full potential by creating technology that transforms the way people work, play, and communicate. MSFT develops and markets software, services, and hardware that deliver new opportunities, greater convenience, and enhanced value to people's lives. MSFT does business worldwide and has offices in more than 100 countries. The company generates revenue by developing, licensing, supporting a wide range of software, designing and selling hardware, and delivering relevant online advertising to a global customer audience.

Exhibit: Historical trading performance



Management

Satya Nadella, Chief Executive Officer (CEO) & Director: Mr. Nadella has been the Chief Executive Officer (CEO) and Director of MSFT since February 2014 and is also currently the Vice President of the MSFT Business Division. Satya's total compensation is \$44.32mIn per year. Before CEO, he held leadership roles in both enterprise and consumer businesses across the Company. Since joining MSFT in 1992, he's been Executive Vice President of Cloud and Enterprise, President of Server and Tools, Senior Vice President of Online Services Division and Senior Vice President of Search, Portal, and Advertising.

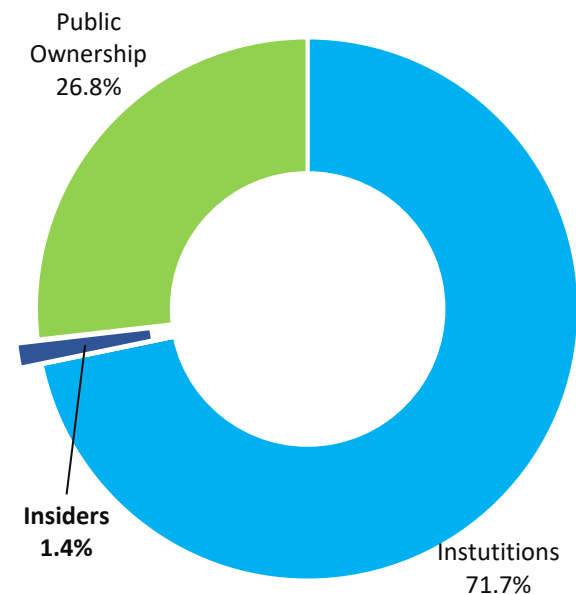
Bradford Smith, President & Chief Legal Officer (CLO): Mr. Smith joined MSFT in 1993 and is currently President and Chief Legal Officer of MSFT. Bradford's total compensation is \$16.67mIn per year. Before becoming General Counsel and Executive Vice President of Legal and Corporate Affairs in 2002, he spent three years leading the Legal and Corporate Affairs team in Europe, then five years serving as the Deputy General Counsel.

Amy Hood, VP & Chief Financial Officer (CFO): Ms. Hood has been with MSFT since 2002 and has been the Chief Financial Officer (CFO) and Executive Vice President of MSFT since July 2013. Amy's total compensation is \$19.63mIn per year. Before this role, she was CFO of MSFT's Business Division, responsible for the Company's productivity applications and services, including MSFT Office 365, Office, SharePoint, Exchange, Dynamics ERP and Dynamics CRM. During her time in the Business Division, she helped lead the transition to the Company's Office 365 service, and she was deeply involved in the successful acquisitions of Skype and Yammer.

Jean-Phillip Courtois, VP, President of MSFT Global Sales, Marketing & Operations: Mr. Courtois joined MSFT France in 1984 as a Channel Sales Representative. Currently, he's the Executive Vice President of MSFT and has been President of Global Sales, Marketing and Operations since July 2016. Jean-Philippe's total compensation is \$13.95mIn per year. He leads sales, marketing, and services for all regions outside the United States.

Alice Jolla, Corporate VP of Finance & Administration and Chief Accounting Officer (CAO): Ms. Jolla has been the Corporate Vice President of Finance and Administration and Chief Accounting Officer at MSFT since July 31, 2020. She served as Corporate Controller for MSFT from 2014 to July 31, 2020; also served as Senior Director, Financial Planning and Analysis, from 2012 to 2014, and as Senior Director, Corporate Accounting from 2008 to 2012.

Exhibit: MSFT ownership breakdown



Source:Capital IQ

Exhibit: MSFT ROA vs sector

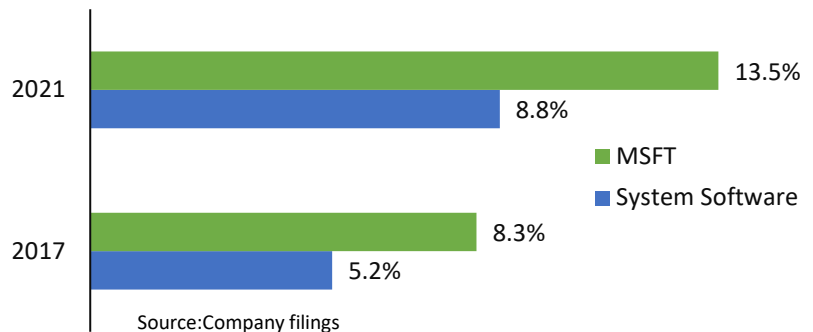


Exhibit: MSFT ROIC vs sector

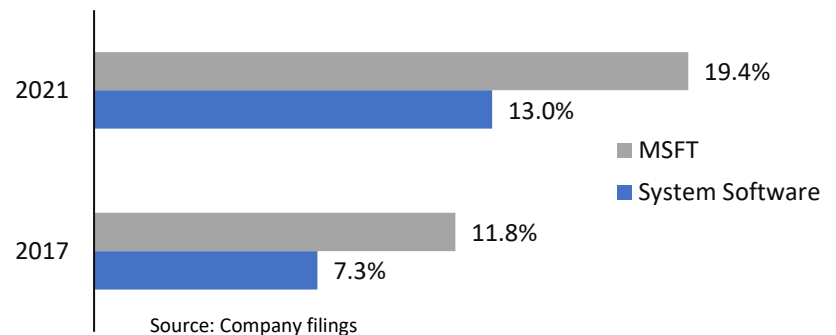
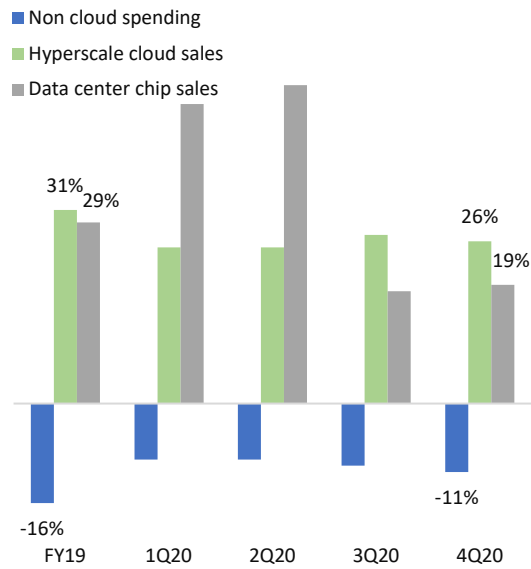


Exhibit: Company IOT spending habits

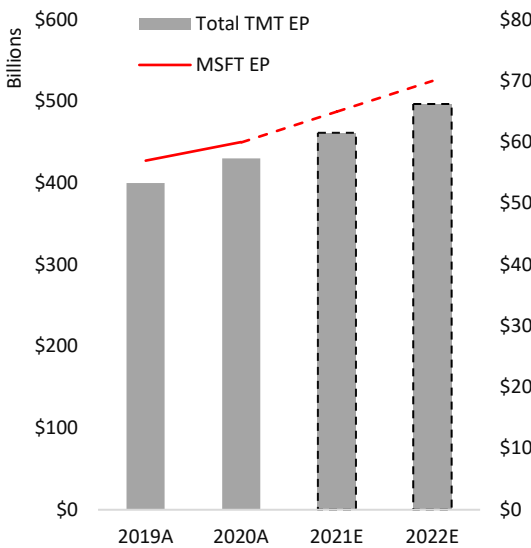


Source: Deloitte TMT Sector Overview

Industry Overview

A crowded space: MSFT operates in the Systems Software sector, an industry that is dynamic and highly competitive, with frequent changes in both technologies and business models. Each industry shift is an opportunity to conceive new products, new technologies, or new ideas that can further transform the industry and the business. MSFT pushes the boundaries of what is possible through a broad range of research and development activities that seek to identify and address the changing demands of customers and users, industry trends, and competitive forces. MSFT's competitors are developing new software and devices while also deploying competing cloud-based services for consumers and businesses. The devices and form factors customers prefer evolve rapidly and influence how users access services in the cloud, and in some cases, the user's choice of which suite of cloud-based services to use. MSFT must continue to evolve and adapt over an extended time in pace with this changing environment. Aggregate demand for software, services, and devices is correlated to global macroeconomic and geopolitical factors, which remain dynamic. MSFT's international operations provide a significant portion of the company's total revenue and expenses. As a result, and seen historically, changes in foreign exchange rates have (and still can) significantly affect revenue and expenses.

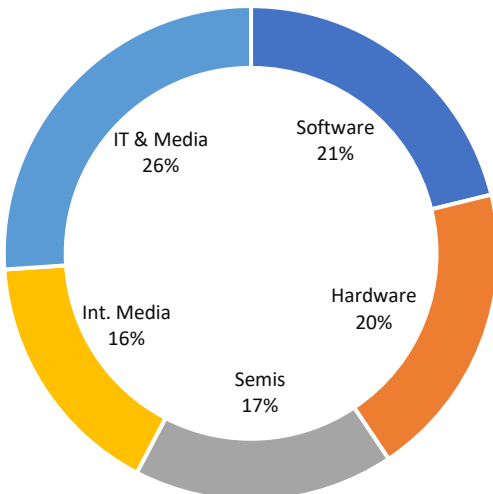
Exhibit: 2020 TMT sector EP



Source: Credit Suisse TMT Sector 2020 EP Generated

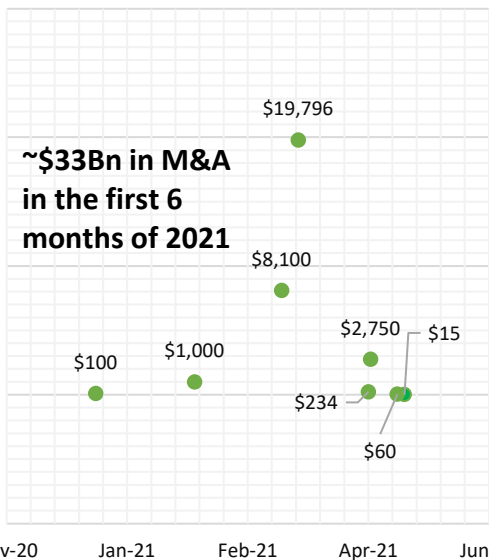
The technology space is still new: Many of us have grown up around technology, and much of it, has become a part of everyday life. Because of this reality, we take for granted just how much change is still to come. When looking at the TMT spaces economic profit (EP) (where EP = net cashflow – capital charge) generated, it becomes impressive and displays exponential growth patterns. Since 2005, the EP of the TMT sector went from \$60 bln to over ~\$430B (in 2020). In those 15 years, the TMT space went from being worth 10% of total US EP, to over 50%. Assuming a relatively constant EP generation rate for the next 5 years, the TMT space will outsize the entire U.S EP (in 2020 dollars) by ~2025. With that said, this space is going to push our economies to new levels. MSFT is a firm that is at the forefront of this growth. The size of companies today is a significant indicator of who will continue to dominate over the next decade. Of the 20 largest TMT companies, MSFT's (in the software portion) EP was worth more than 10% of total TMT EP generated over FY20. MSFT's generated EP is projected to reach ~\$65B and ~\$70B during FY21 and FY22. The firm's EP market share can be seen skyrocketing shortly after Nadella's rise in 2014. Nadella's push towards software was the companies saving grace, and so far, it has been very successful.

Exhibit: Drivers of TMT EP FY20



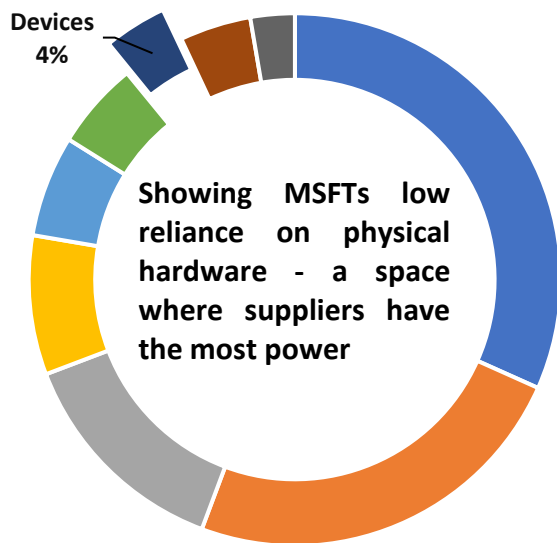
Source: Credit Suisse TMT Sector 2020 EP Generated

Exhibit: MSFT M&A activity since 2021



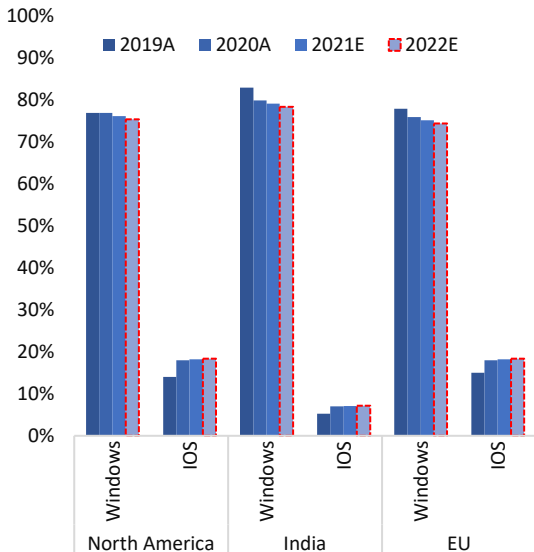
Source: CAPIQ, MSFT M&A

Exhibit: MSFTs full segment breakdown



Source: MSFT 3Q21 10Q

Exhibit: Windows and IOS market share



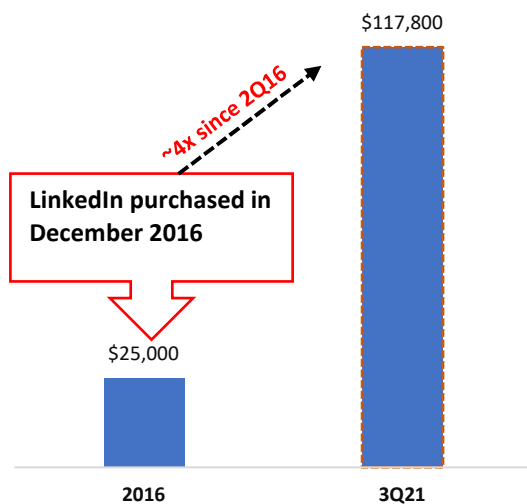
Source: Statista, Global OS Market Share

Barriers to entry (MEDIUM): We found that a “MEDIUM” rating was appropriate for MSFT. We chose this rating based on the reality that their operating segments are no easy feat to conquer. Software is a tricky space to operate in; therefore, we are (in the short term) not worried about small companies threatening MSFT, but instead, existing companies. These existing threats (in the software realm) are Alphabet (NDAQ: GOOG), International Business Machines (NDAQ: IBM), and Adobe (NDAQ: ADBE). Software is rigid because (1) it is costly to create/operate/maintain, and (2) the proprietary knowledge needed to build software to scale is few and far between. As smaller software companies appear, MSFT is well positioned to potentially acquire them due to their ~\$125 bln in cash and short-term investments. Though the competition in the software area can be challenging, it is still much easier to update and maintain. Software is much less likely to phase out with trends, unlike hardware.

Power of suppliers (LOW): Because of MSFT reliance on software and considering that software is intangible, this portion of the analysis received a “LOW” threat rating. As mentioned in the previous paragraph, MSFT is only ~4% reliant on physical hardware. Essentially all of MSFTs software is in-house, meaning that MSFT is its supplier for more than 80% of the companies revenue, giving MSFT more control. The space for hardware is highly competitive (as mentioned above), making suppliers' power low. A ton of companies provide physical computing hardware, driving costs down, leaving a high degree of purchasing power for the consumer.

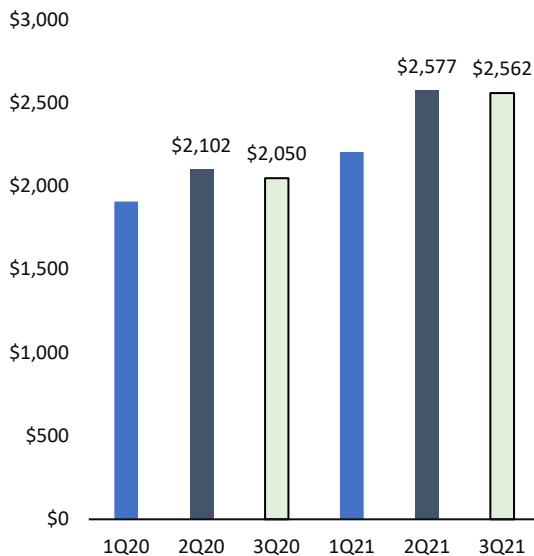
Power of customers (MODERATE): It is not common for customers in this space to switch software. The reasoning for the lack of switching is that there aren't many alternatives; essentially, the options are AAPL IOS or Windows OS, and switching comes at a cost. The cost is not high at a micro-scale but, instead, a macro. Consider the cost of a business switching platforms, it would need to re-train and re-integrate everything, which is no small feat to take on. The power is ultimately in the hands of the consumers here, but due to the inconvenience of switching, there would have to be a strong catalyst for change. The clever part of Windows is how universal it is. Most start using the Windows OS at a very young age, and marketers know the importance of gaining brand dependency early on. Almost all publicly/privately sourced computers have Windows pre-installed. If you are not buying a Mac computer, there is a near certainty that Windows will be the pre-installed OS. In November of 2020, it was found that 70% of PCs (worldwide) have Windows 10 installed. MSFT has raised costs slightly on their Office product line many times in the past, and user numbers didn't flinch – showing satisfaction with MSFT offerings.

Exhibit: LinkedIn as % of enterprise value



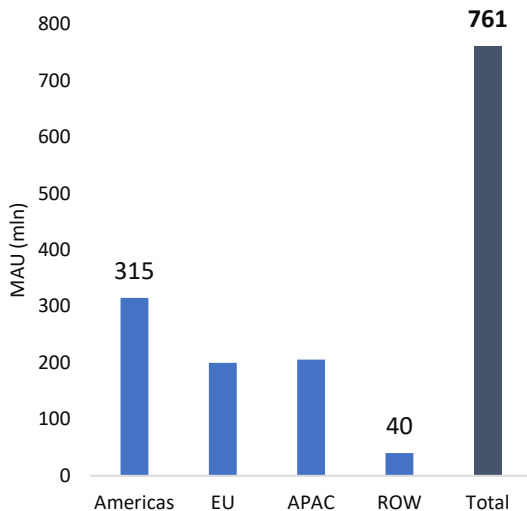
Source: MSFT 3Q21 10Q

Exhibit: LinkedIn QoQ revenue



Source: Company filings

Exhibit: LinkedIn global monthly users



Source: LinkedIn statistics; company filings

Threat of substitutes (LOW): Substitutes for MSFT are few and far between. MSFT has ~1.3 bln devices using Windows, meaning MSFT has a strong data advantage which is in many ways priceless. Few things can set up a company for future success more than software coupled with a vast user base. Software can now be updated by simply clicking an “update now button.” With near real-time data, MSFT can pay attention to their customer usage trends at a very micro scale, allowing them to pivot quickly towards new customer behaviour. Data also allows the company to test new initiatives and receive quick feedback and analytics on its success, making the company much more likely to find the next trend in software.

Competitive Advantages

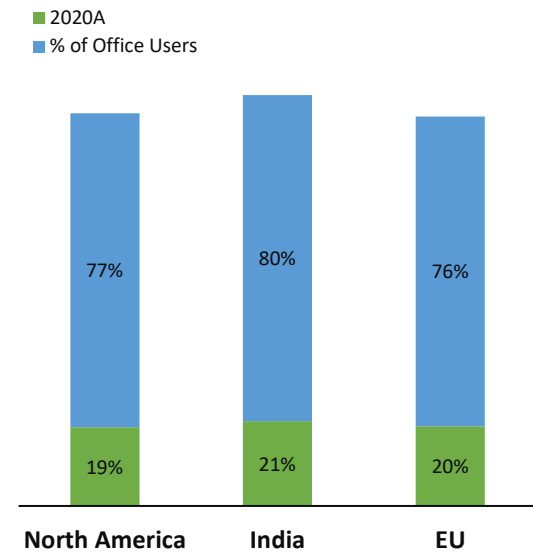
Social networking: In December 2016, MSFT purchased LinkedIn for ~\$26 bln. LinkedIn is now ranked as the 90th most powerful brand name globally, followed by its parent company, MSFT, ranked 3rd. LinkedIn accounts for about ~6% of MSFTs total revenues, but TRUSIF views the platform as an ace up the companies sleeve. YoY LinkedIn revenue has increased by ~25% (as of Q3/2021).

Paid social media: LinkedIn is proving some exciting concepts, particularly the option for users to pay for a premium version. LinkedIn is the only social media company that offers a subscription. Considering the price of subscribing, it is something people are willing to pay a premium to have.

LinkedIn has changed how people seek jobs: LinkedIn is a more “formal” type of social media that has rethought how companies can recruit. LinkedIn is a real-time resume and virtual recruiting agency with more than 55 mln companies listed on the site and ~14 mln jobs open. Already, 87% of recruiters regularly use the platform. LinkedIn has ~770 mln total users with ~310 mln using the platform monthly.

Three more reasons: (1) The type of data that it is gathering. LinkedIn is tracking/collecting “professional data.” People post their current and past jobs, high schools, universities, and skills and interests. LinkedIn is the only social media site that people actively keep their “resume information” up-to-date on. (2) The lack of scrutiny from regulators. LinkedIn is not suffering from the same scrutiny that Facebook or Google are. It is not to say that LinkedIn is immune to similar attention in the future, but for now, the spotlight is far off MSFT, allowing them to continue to grow noise-free (relatively speaking). (3) The network effect. The network effect is evident with LinkedIn and is reflected in their job posting and hiring statistics (mentioned above). Like other social media giants, the more people that use the site, the more effective it becomes.

Exhibit: MSO users as % of Windows users



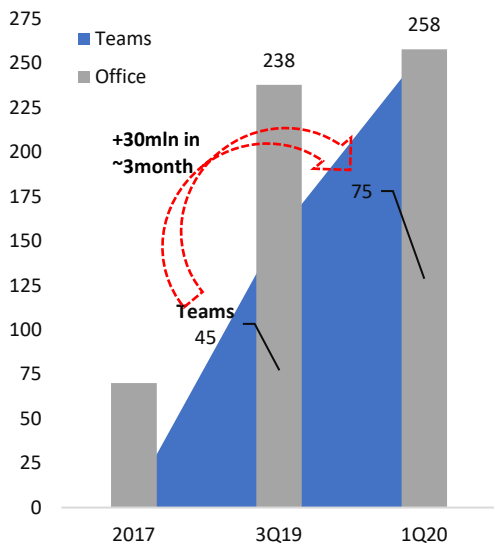
Source: Company filings; investor presentation

The Office Suite: As mentioned previously, ~70% of all desktops currently use the Windows OS, making it deeply embedded in both business and personal PCs/laptops. About 25% of all Windows users also use the MS Office product suite. Most professionals use Office, making it easier for you to use it too, which has created a type of network effect. In the Office product line, MSFT has conveniently integrated its OneDrive and Azure programs into it, making MSFT a one-stop-shop for business productivity- a significant catalyst for the company.

Office MAUs: Since 2015, Office users went from ~60 mln to more than ~258 mln in 2020. Since the pandemic, MS Teams MAUs went from ~45 mln to ~75 mln (in a mere 3 months from February until April). Moreover, MS Teams users went from ~2 mln users in 2017 (around the product's release) to that ~75 mln 2020 number. Teams ranked number one for team video conferencing in 2021 by KLAS.

New product integration: We view the Office suite as a breeding ground for new software integration and AI training for business and productivity uses. The future implications of AI are mostly unknown; still, one thing is clear: whoever possesses the most data and users will likely continue to dominate with AI as it inevitably becomes used more.

Exhibit: Teams & Office MAUs



Source: Company filings; investor presentation

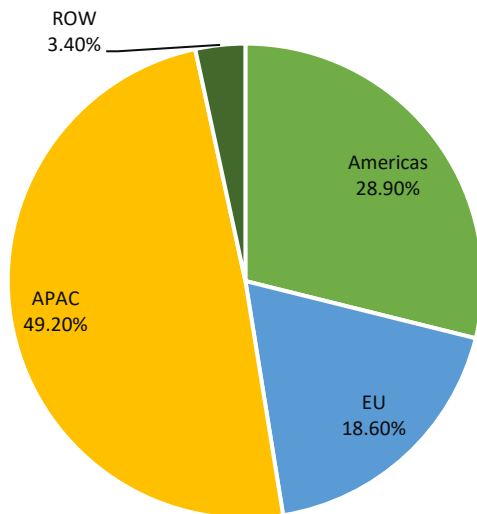
MS Teams MAU (mln)

Investment Summary

Recent Developments:

ZeniMax Media: In March 2021, MSFT purchased ZeniMax Media Inc (ZMM) for USD ~8 bln, done primarily with cash, painting an exciting future for MSFT's gaming segment. This acquisition was the second largest in the gaming industry. ZMM is an American video game holding company based in Rockville, Maryland, founded in 1999. The company owns id Software, Arkane Studios, MachineGames, Tango Gameworks, publisher Bethesda Softworks with its Bethesda Game Studios and ZeniMax Online Studios. Some of the more famous names to come out of this space are the Fallout franchise, Elder Scrolls, and DOOM. Gaming is going to become much more prominent over the next generations.

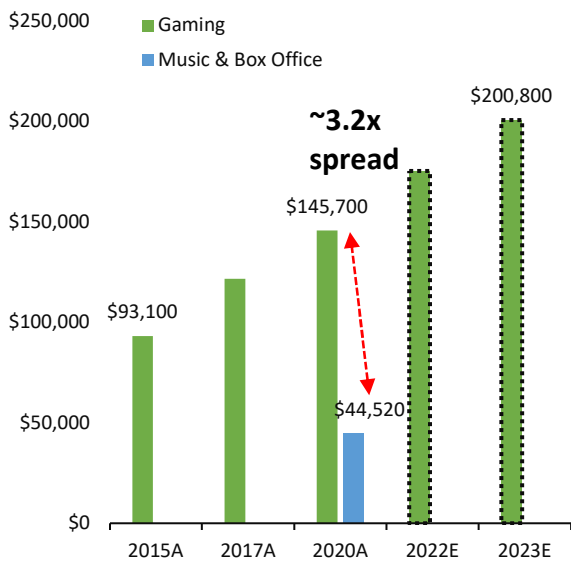
Exhibit: % of gamers by location



Source: WePC; Statista

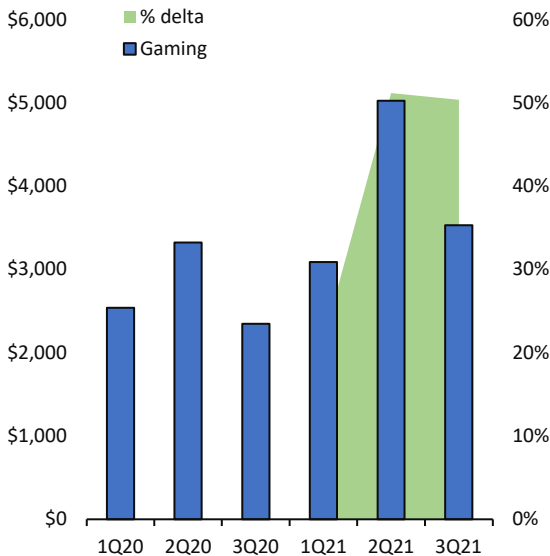
Why the ZeniMax deal matters: The gaming industry is not just for teens anymore. Product placement is relatively new, and has huge potential for in-game advertising. Gaming has become a force that has grown far beyond PC and consoles into smart phones and personal devices too. MSFT's gaming revenues (as of 3Q21) account for ~8% of total revenue, but continue to drive the company's operating segment, More Personal Computing. Gaming revenue increased \$1.2 bln (+50% YoY), driven by growth in Xbox content and services and Xbox hardware. Xbox content and services revenue increased \$739 mln (+34% YoY), driven by growth in third-party titles, Xbox Game Pass subscriptions, and first-party titles. Xbox hardware revenue increased 232%, driven by higher price and volume of consoles sold due to the Xbox Series X|S launches.

Exhibit: 2020 value of the gaming industry



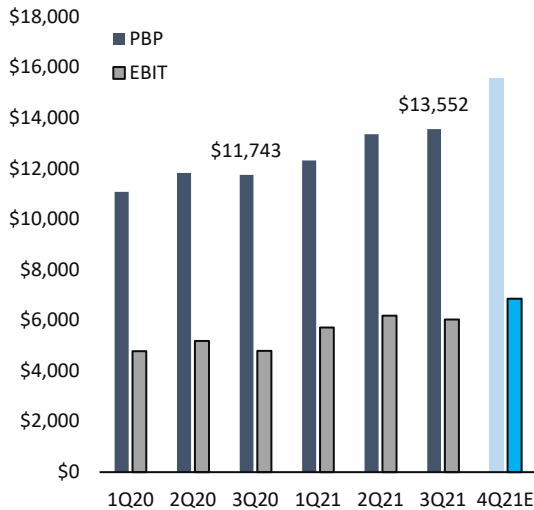
Source: WePC; Statista

Exhibit: YoY gaming sales delta



Source: Company filings; investor presentation

Exhibit: PBP sales and EBIT YoY



Source: Company filings; investor presentation

Health care augmented and virtual reality (A/VR): HoloLens is an AR/VR system that MSFT has developed, enabling users to overlay contextualized high-quality graphics. Using HoloLens, a doctor could look at a 3D render of a patient's brain to see where a tumour is and interact with the hologram in a way that was never feasible before. HoloLens is also useful for doctor collaborative interactions, as doctors can meet in a VR/AR setting to diagnose a patient. For example, a doctor unsure of a diagnosis can call in a specialist on their HoloLens, giving the specialist the "eyes-and-ears" to care for the patient remotely.

Health care M&A: MSFT has a pending acquisition of a company called Nuance, valued at \$19.7 bln. Nuance is a leading provider of conversational AI and cloud-based ambient clinical intelligence for healthcare providers. This transaction, along with Cloud for Healthcare, places MSFT as a major player in Big Tech's race to enter healthcare. Nuance's solutions are heavily integrated with healthcare systems such as EHRs, and their solutions are used by 55% of US physicians, 75% of US radiologists, and 77% of US hospitals, making it a strong entryway for Microsoft to further expand its reach across the healthcare industry.

Military contracts: MSFT entered into a contract with the US military worth, in the neighborhood of USD ~\$22 bln over 10 years to create 120,000 HoloLens augmented reality (AR) headsets for US Marines. The program is called the Integrated Visual Augmentation System (IVAS).

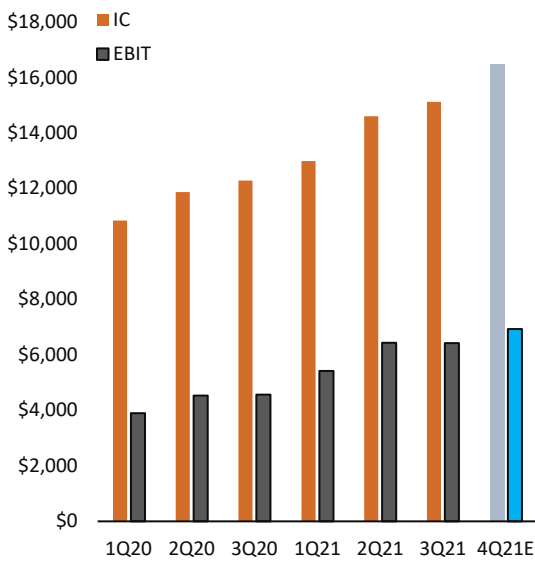
How IVAS works: IVAS aggregates multiple technologies into an architecture that allows the soldier to fight, rehearse, and train using a single platform. The suite of capabilities leverages existing high-resolution night, thermal, and soldier-borne sensors integrated into a unified heads up display to provide the improved situational awareness, target engagement, and informed decision-making.

Earnings overview and guidance

Productivity and business processes (PBP): Revenue from PBP was \$13.6 bln and grew 15%. The segment's growth can be attributed to Office 365 and LinkedIn. Office co mercial revenue grew 14%, whereas Office 365 co mercial revenue grew 22%, again driven by installed base expansion across all workloads and customer segments. Paid Office 365 co mercial users growing 15% YoY to nearly 300 mln. Accelerated cloud adoption negatively impacted Office co mercial licensing, which declined 25%, missing company expectations. However, MSFT 365 consumer subscriptions grew to 50 mln installed users, up 27% YoY. Dynamics revenue grew 26%, better than management guidance. Performance was driven by 365 revenue growth of 45%. LinkedIn revenue also increased 25%, ahead of expectations. Marketing Solutions accelerated to 64% revenue growth

Driving trends for PBP: MSFT saw strong demand for high-value security, compliance, and voice offerings which drove strong momentum over the quarter. MSFT had accelerated demand for the cloud from small and medium businesses due to the pandemic forcing many to work from a distance.

Exhibit: IC sales & EBIT YoY

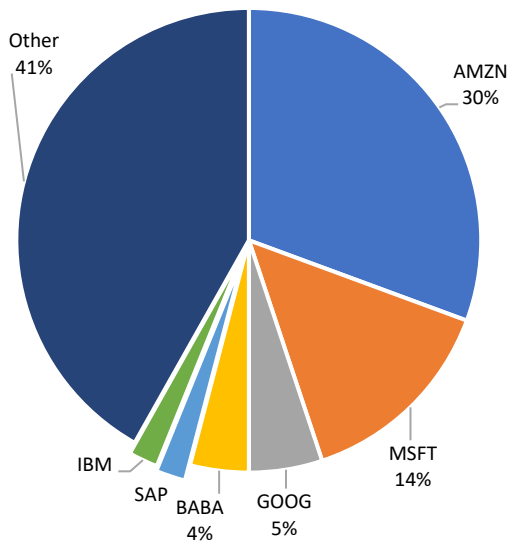


Source: Company filings; investor presentation

PBP guidance: Office consumer revenue is expected to see 15% to 20% revenue growth, driven by continued momentum in MSFT 365 consumer subscriptions. A 30% to 35% revenue growth rate is expected for LinkedIn. On-premises business revenue is expected to decline to the 10% to 12% range, consistent with the ongoing customer shift to the cloud.

Intelligent cloud (IC): Intelligent cloud (IC): Revenue was ~\$15 bln, ahead of expectations, translating to ~23% YoY growth for the segment. Server products and cloud services revenue increased 26%, beating expectations. Azure revenue grew 50%, better than anticipated, driven by continued strength in the company's consumption-based business, such as the Office product suite. MSFT's user growth, the company's enterprise mobility and security installed base were up again, totalling 174 mln users, a 30% YoY increase. Additionally, MSFT's on-premises server business increased 3%, and Enterprise Services revenue grew 10% with better-than-expected performance in MSFT Consulting Services. Revenue expectations for IC are around \$16 bln riding on continued (strong) Azure revenue growth rates.

Exhibit: Market share of big 5 cloud players

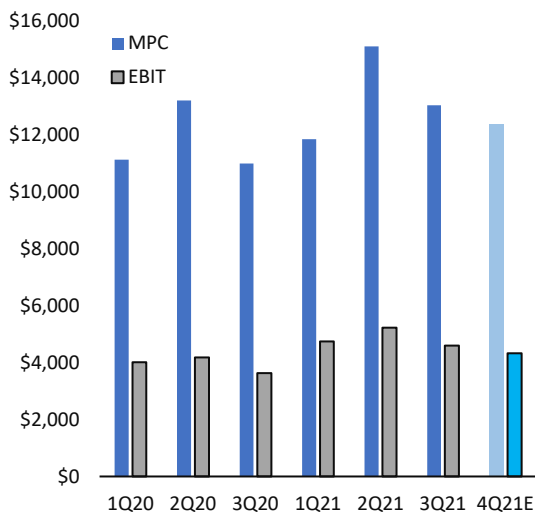


Source: Company filings; investor presentation

IC guidance: MSFTs expects revenue growth to be around the 3% range for their on-premise server business, driven by continued demand for hybrid and premium annuity offerings. The Per-user business should continue to benefit from the MSFT 365 momentum, though there is some expected moderation in growth rates given the size of the installed base already.

More personal computing (MPC): Revenue was \$13 bln, increasing 19%, driven by better-than-expected performance in Gaming, Windows OEM, and Search. The PC market has been strong, and it resulted in overall OEM revenue growth of 10%, and OEM non-Pro revenue grew 44%. Commercial products and cloud services revenue grew 10%. Search revenue was substantial, and up 17%, mainly benefitting from the improved advertising market. Finally, MSFTs Gaming revenue increased 50% YoY; credit here was the ultra-successful launch of the new Xbox. Xbox hardware revenue increased a whopping 232% because of the console release. The Xbox content and services revenue also grew 34%.

Exhibit: MPC sales and EBIT YoY

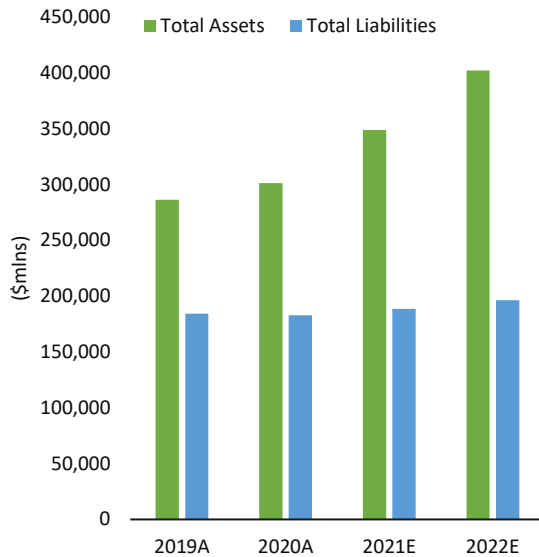


Source: Company filings; investor presentation

MPC Challenges: Ongoing supply chain impacts could partially offset PC performance, and for Surfaces, MSFT expects revenue to decline down to the 10% range as the company works through execution challenges. Surface revenue underperformed due to some execution challenges the company faced in its commercial segment.

MPC guidance: MPC revenue expectations are in the neighbourhood of \$14 bln. Management is calling for Windows overall revenue to grow in the 5% range. Windows growth will be driven by Windows commercial products and cloud services and continued demand for PCs. Moreover, Search revenue is expected to grow in the mid 40% range due to continued improvements in the advertising market. Management is anticipating a cool down in new console sales and is calling for Gaming revenue growth to be around 15%. The Xbox Series X/S will continue to be constrained by supply concerns, and as a result, MSFT expects Xbox content and services revenue to decline to the 13% range.

Exhibit: MSFT Total Liabilities & Assets

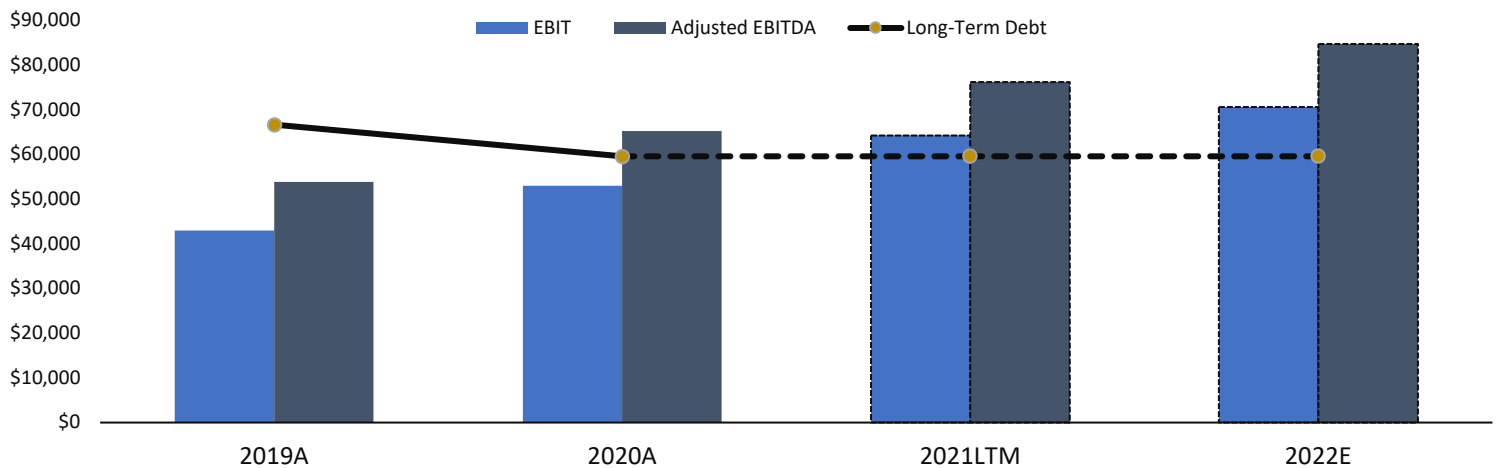


Source: Company filings

Financial positioning:

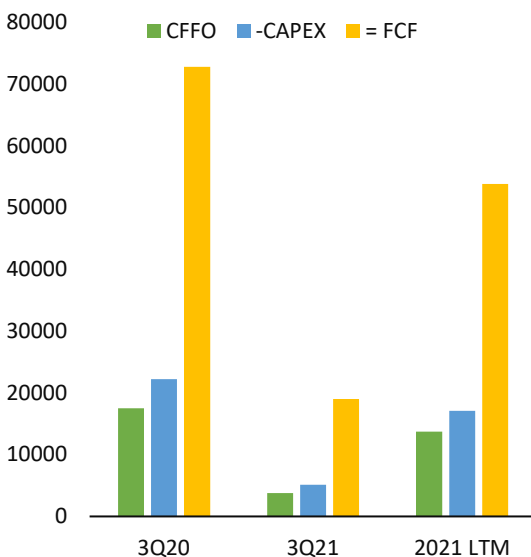
Balance sheet quality: MSFT takes leads over its comps in ROA, ROC, ROE, sitting at 14%, 20%, and 45%, whereas competitors (on average) are 9%, 13%, and 33%, respectively (LTM basis). MSFT's debt-to-capital and current ratio have led the industry over the past 5-years. A high-quality balance sheet supports MSFT, AAA rated, which is a plus for investors seeking growth and safety. The company's total debt is worth ~\$50 bln (as of 3Q21), but refinancing debt is not out of the question because of MSFTs' balance sheet quality. Consider the following, MSFTs Debt to FY EBITDA and FY EBIT is about 1x, 1.5x, its dry powder, worth ~\$125 bln, is ~1.5x its total debt amount. All of this paints an investor-friendly picture. Not only is debt not a concern for the company, but MSFTs dry powder amount also points to continued dividend hikes, more ad hoc buybacks, and future M&A. Out of 224 firms within the software industry, MSFT is in the 26 that pay a yield. Its yield growth is perfectly in line with the software industry (out of the 26 companies); however, its payout ratio is below the industry average, at ~31%.

Exhibit: MSFT debt coverage by EBIT/EBITDA



Source: Company filings

Exhibit: MSFT FCF generation YoY/LTM



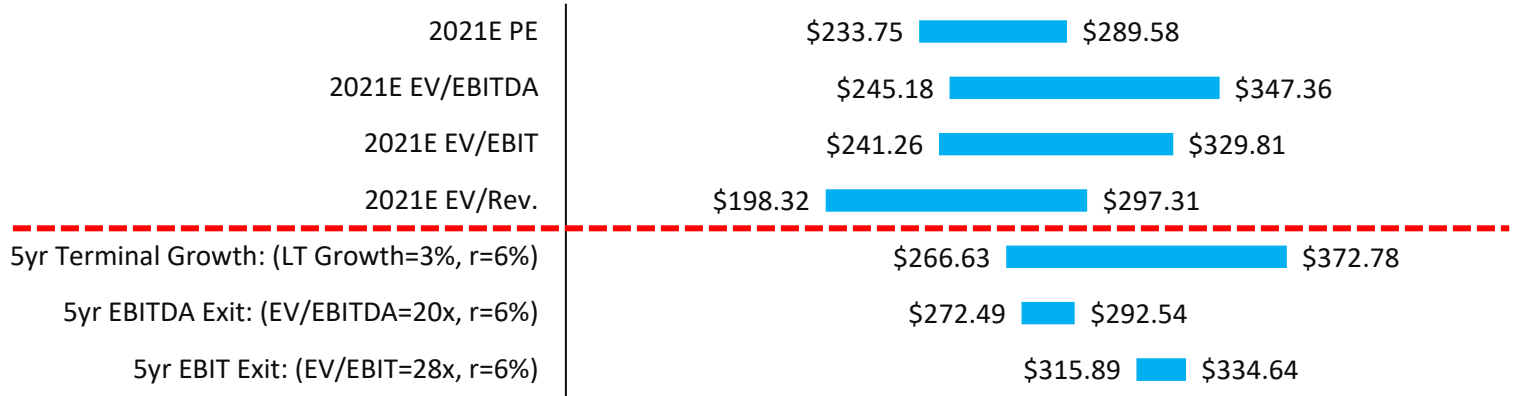
Source: Credit Suisse TMT Sector 2020 EP Generated

Free cash flow: MSFT produced \$17.09 bln in 3Q21 free cash flow (FCF). 3Q21 cash flow from operations (CFFO) was \$22.179 bln (less CAPEX spending of \$5.089 bln), resulting in \$17.09 bln in FCF. This FCF was 24.4% higher than a year ago. In the 3Q20, the company produced \$17.504 bln in CFFO, less CAPEX spending of \$3.767 bln, which meant the firm generated \$13.737 bln in total FCF. So the 3Q21 \$17.09 bln FCF was 24% higher than the \$13.737 bln FCF a year ago. All the more significant is that MSFT did not crimp out on CAPEX spending. It rose from \$3.8 bln to \$5.1 bln, or 34.4% YoY. In addition, MSFTs' LTM FCF was \$53.789 bln. This, again, is seen by subtracting the LTM \$18.9 bln in CAPEX spending from \$72.7 bln in CFFO. But from now on, MSFT can expect to make a run rate of \$17.09 bln in quarterly FCF. That works out to \$68.36 bln annually. But this will be 27% higher than its first-quarter LTM FCF of \$53.789 bln. In other words, the company's inherent growth will power the company's FCF higher, implying huge ramifications for expected future shareholder value.

Valuation

Overview: Our 5-year target price (range) was found using 75% of a discounted cash flow (DCF) and 25% of a comparable multiple analysis. For valuing MSFT relatively, we looked at P/E, EBIT, EBITDA, and sales against the following companies Oracle (NYSE: ORCL), Adobe (NDAQ: ADBE), Alphabet (NDAQ: GOOG), IBM (NDAQ: IBM), Salesforce (NYSE: CRM), VMWARE (NDAQ: VMW) and Citrix (NDAQ: CTXS). To determine MSFTs intrinsic value, we used a growth, EBIT, and EBITDA exit (equally weighted).

Exhibit: Valuation football field



Blue sky scenario: is contingent on the company delivering better than expected traction in Commercial Cloud, exceeding \$110 bln in sales over the next 5-years. Moreover, to achieve our blue sky target, MSFT would need to demonstrate continued operational efficiencies driven by economies of scale, resulting in uFCF CAGR of ~12% through FY 2026.

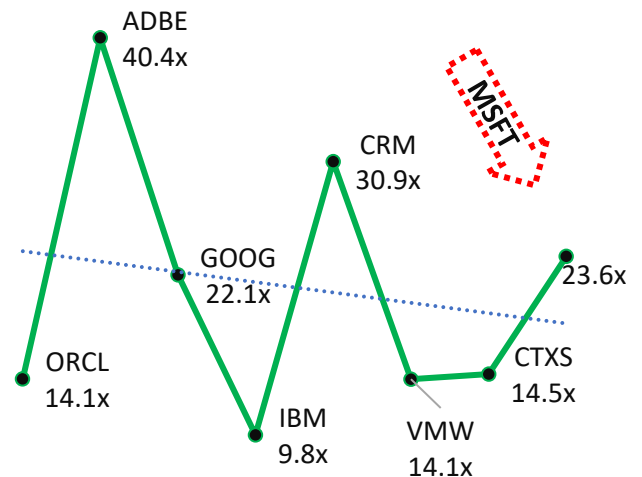
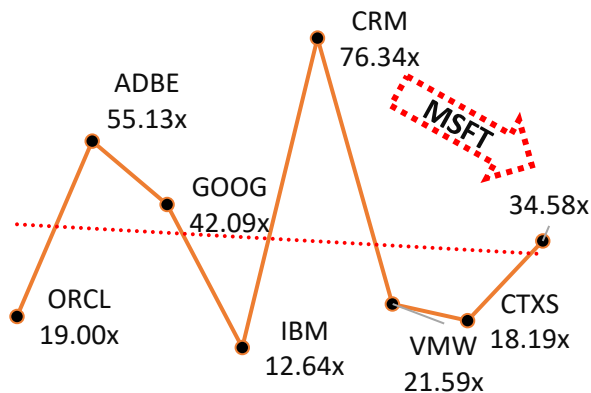
Grey sky scenario: is based on increased competition, particularly in the public cloud vs Amazon Web Services resulting in uFCF CAGR of 7% by FY 2026. Risks to our target price ranges, outlined below, are primarily based on macroeconomic uncertainty and growing competitive threats in the hybrid cloud space, which are unknown.

P/E: MSFTs LTM P/E has traded in the multiple range of 30x to 37x, compared with the large-cap software peer group average of ~30x. Our target P/E range will be north of 32x up to 37x, our low estimate is at the top end of the sector average. Our P/E window for MSFT implies are target price range of \$255 to \$290, a 1% to 12% premium to MSFTs current trading price.

EV/EBITDA: MSFTs LTM EV/EBITDA traded in a 20x to 25x multiple range, whereas the industry average has been trading in the ~23x range. We have placed a targeted EV/EBITDA range of 24x to 32x, implying a target price range of \$270 to \$350.

Exhibit: Comp forward PE

Exhibit: Comp forward EV/EBITDA

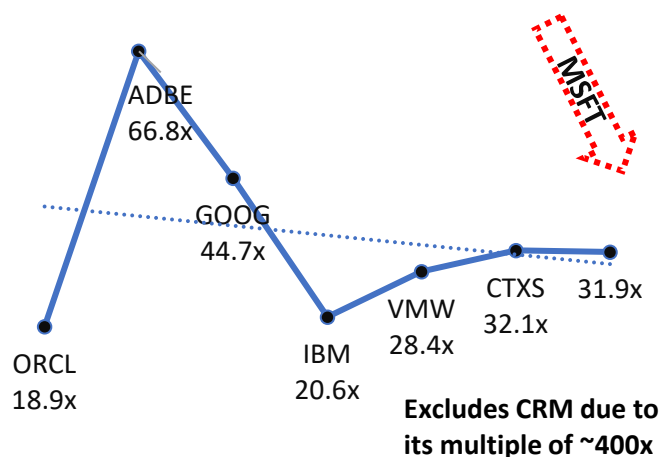


Source: Capital IQ; company filings

Source: Capital IQ; company filings

EV/EBIT: More emphasis was placed on this comparative metric due to the cost structure it accounts for in the wide array of companies covered in the systems software sector. We found that MSFT has been trading in a 25x to 30x window over the LTM. Going forward, we see the company sitting somewhere around the 27x to 37x range which equals a target price of \$280 to \$340.

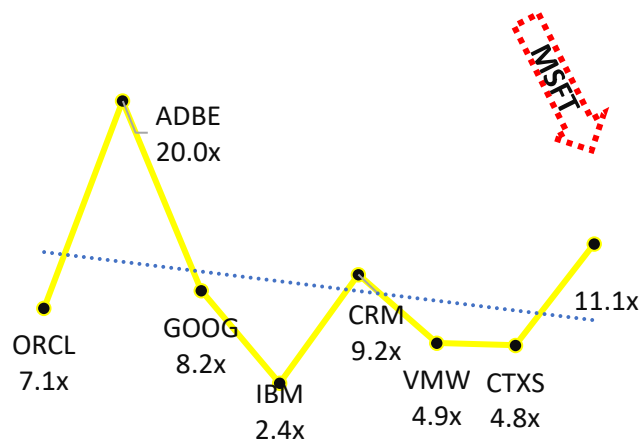
Exhibit: Comp forward EV/EBIT



Source: Capital IQ; company filings

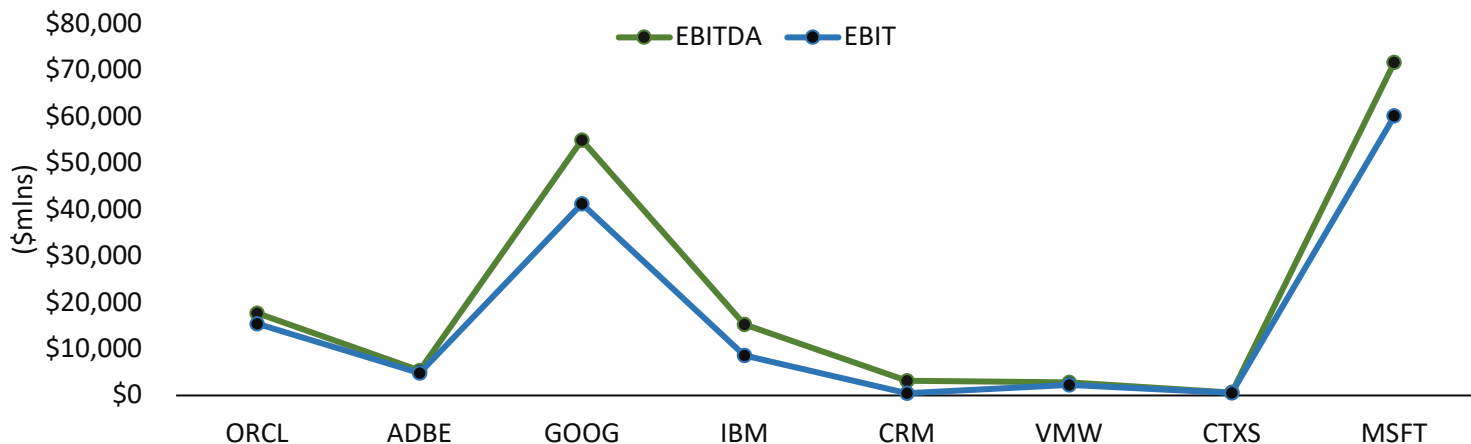
EV/Sales: Less emphasis was placed on this comparative metric as TRUSIF believes that it doesn't consider enough of the cost structure of the companies. However, we found that over LTM MSFT traded in the 8x to 10x range. Going forward, we view MSFT trading closer to the 9x to 13x range which implies a target price range of \$250 to \$300.

Exhibit: Comp forward EV/Sales



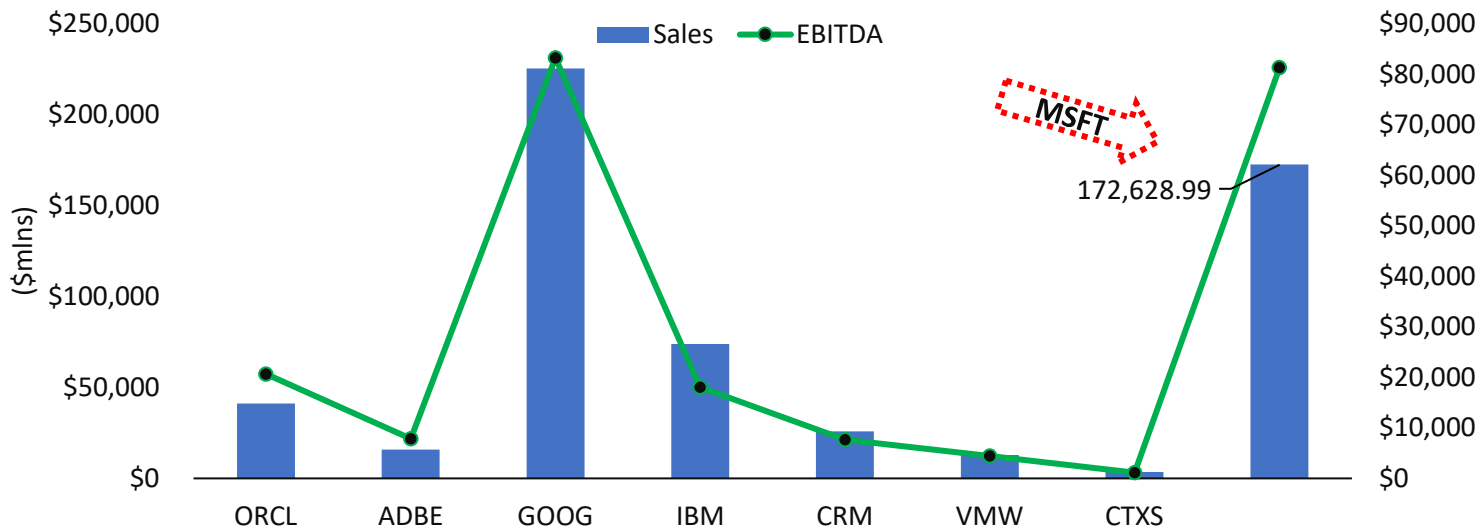
Source: Capital IQ; company filings

Exhibit: Comp LTM 2021 EBITDA & EBIT



Source: Capital IQ; company filings

Exhibit: Comp NTM EBITDA & Sales



Source: Capital IQ; company filings

Terminal growth exit: We exited MSFT with a targeted 3% to 3.5% terminal growth rate along with a 6% to 7% discount rate range. Our 5-year target price is between \$260 to \$360.

		Terminal FCF Growth Rate:										
		2.50%	2.65%	2.80%	2.95%	3.10%	3.25%	3.40%	3.55%	3.70%	3.85%	4.00%
(WACC):	6.0%	\$320.81	\$334.08	\$348.60	\$364.55	\$382.15	\$401.67	\$423.44	\$447.88	\$475.50	\$506.98	\$543.11
	6.1%	311.19	323.67	337.28	352.19	368.59	386.71	406.85	429.36	454.69	483.38	516.18
	6.2%	302.10	313.84	326.63	340.59	355.90	372.78	391.45	412.25	435.54	461.80	491.64
	6.3%	293.48	304.56	316.58	329.68	344.01	359.75	377.12	396.38	417.86	441.98	469.24
	6.4%	285.31	295.77	307.10	319.41	332.84	347.56	363.74	381.63	401.50	423.71	448.70
	6.5%	277.55	287.44	298.13	309.72	322.33	336.11	351.23	367.88	386.31	406.83	429.81
	6.6%	270.17	279.53	289.63	300.56	312.43	325.35	339.50	355.03	372.17	391.17	412.37
	6.7%	263.14	272.02	281.57	291.89	303.07	315.22	328.48	343.00	358.97	376.62	396.23
	6.8%	256.44	264.86	273.91	283.67	294.22	305.66	318.11	331.71	346.62	363.05	381.24
	6.9%	250.05	258.05	266.63	275.87	285.84	296.62	308.33	321.09	335.05	350.38	367.29
7.0%	243.94	251.55	259.70	268.46	277.89	288.07	299.10	311.10	324.18	338.51	354.27	

EV/EBITDA exit: We used a multiple range of 19x to 20x, a tight window, and on the low end of our relative EV/EBITDA multiple ranges; however, we wanted to manage expectations. We expect a 5-year target price range of \$270 to \$300 from the company.

		Terminal EBITDA Multiple:										
		18.50x	18.75x	19.00x	19.25x	19.50x	19.75x	20.00x	20.25x	20.50x	20.75x	21.00x
(WACC):	6.0%	\$279.09	\$282.40	\$285.71	\$289.02	\$292.33	\$295.64	\$298.96	\$302.27	\$305.58	\$308.89	\$312.20
	6.1%	277.62	280.91	284.21	287.50	290.79	294.09	297.38	300.67	303.97	307.26	310.55
	6.2%	276.16	279.44	282.71	285.99	289.26	292.54	295.81	299.09	302.36	305.64	308.91
	6.3%	274.71	277.97	281.22	284.48	287.74	291.00	294.26	297.51	300.77	304.03	307.29
	6.4%	273.27	276.51	279.75	282.99	286.23	289.47	292.71	295.95	299.19	302.43	305.67
	6.5%	271.83	275.05	278.28	281.50	284.72	287.95	291.17	294.39	297.62	300.84	304.06
	6.6%	270.41	273.61	276.82	280.02	283.23	286.44	289.64	292.85	296.05	299.26	302.47
	6.7%	268.99	272.18	275.37	278.56	281.74	284.93	288.12	291.31	294.50	297.69	300.88
	6.8%	267.58	270.75	273.92	277.10	280.27	283.44	286.61	289.78	292.96	296.13	299.30
	6.9%	266.18	269.34	272.49	275.65	278.80	281.96	285.11	288.27	291.42	294.58	297.73
7.0%	264.79	267.93	271.07	274.21	277.34	280.48	283.62	286.76	289.90	293.04	296.17	

EV/EBIT exit: Do to MSFTs cost structure, we also wanted to value MSFT considering their D&A expense, sitting at ~\$11 bln (as of FY2020, ~20% of company earnings). We expect MSFTs EV/EBIT to be in the neighbourhood range of 28x to 36x coupled with a WACC of 6% to 7% translating to a value range of \$300 to \$330.

		Terminal EBIT Multiple:										
		24.00x	24.25x	24.50x	24.75x	25.00x	25.25x	25.50x	25.75x	26.00x	26.25x	26.50x
(WACC):	6.0%	\$324.34	\$327.05	\$329.75	\$332.46	\$335.16	\$337.87	\$340.57	\$343.28	\$345.99	\$348.69	\$351.40
	6.1%	322.79	325.48	328.17	330.87	333.56	336.25	338.94	341.63	344.32	347.01	349.70
	6.2%	321.25	323.93	326.61	329.28	331.96	334.64	337.31	339.99	342.67	345.34	348.02
	6.3%	319.72	322.38	325.05	327.71	330.37	333.03	335.70	338.36	341.02	343.68	346.35
	6.4%	318.20	320.85	323.50	326.15	328.79	331.44	334.09	336.74	339.39	342.04	344.68
	6.5%	316.69	319.32	321.96	324.59	327.23	329.86	332.50	335.13	337.76	340.40	343.03
	6.6%	315.19	317.81	320.43	323.05	325.67	328.29	330.91	333.53	336.15	338.77	341.39
	6.7%	313.70	316.30	318.91	321.51	324.12	326.73	329.33	331.94	334.54	337.15	339.76
	6.8%	312.21	314.80	317.40	319.99	322.58	325.17	327.77	330.36	332.95	335.54	338.13
	6.9%	310.74	313.32	315.89	318.47	321.05	323.63	326.21	328.79	331.37	333.94	336.52
7.0%	309.27	311.84	314.40	316.97	319.53	322.10	324.66	327.23	329.79	332.35	334.92	

In sum: Based on the above intrinsic and relative assumptions, we expect to see the company trading in the \$300 to \$360 range over the next 5-years, implying a return of up to ~40%. Though MSFT appears to trade at a premium, we see the risk-reward trade-off as palatable since we believe MSFT is a high-quality name. MSFT is a name that we plan on holding for the long term, but continuing to monitor regularly to re-evaluate our current assumptions.

Investment Risks

Business model competition: Competition comes from competitors developing and offering free applications, online services, and content and making money by selling third-party advertising. These competitors provide services to users at no or little cost, competing directly with revenue-generating products.

Evolution of business: Significant investments in products and services may not achieve expected returns due to market dynamics and customer interest. Even if products become profitable, the margins may not be as high as historically. M&A involves significant challenges and risks, such as impairing the business strategy, unsatisfactory ROI, integrating and retaining new employees, and management distraction.

Cybersecurity threats: As MSFT advances, concerns of hackers and sophisticated organizations could threaten customers, cloud services, and IT operations. Attacks can vary from deploying malicious software or exploiting vulnerabilities in products to gaining access to our networks and data centers.

Supply chain threats: Products like the Xbox and Surface and other products are pretty complex and may cause supply chain problems. This, in return, will influence profit margins and product liability claims.

Data concerns: Data handling practices across all products and services will continue to be under scrutiny and perceptions of mismanagement, driven by regulatory activity or adverse public reaction to practices or product experiences, which could negatively impact product and feature adoption, product design, and product quality.

Environmental, Social and Governance

Carbon emissions: MSFT has reduced 586,683 metric tons of CO₂ and another 1.3 mln metric tons of carbon removed in 2020. To help achieve this goal, \$50 mln has been invested in Impact Partners' focus on green tech. MSFT has also started to place data centers in the ocean; these servers have failed at 1/8th to the land-based control group. Also, they have run on 100% renewable energy and have started to be colonized by species of sea life.

Water mandate: MSFT invested \$10 mln in Emerald Technology Fund's global water impact fund to support innovative technologies for conservation, access, and water quality. MSFT increased its replenishment project portfolio by nearly 700% from FY19; in FY20, they increased their water replenishment by 1,621,629m³. This has had a direct impact on their Arizona campus which saved 350 mln liters of water. They also launched water accessibility work to help 1.5 mln people access safe drinking water and sanitation. Nearly \$200 mln has been set aside for microfinance loans to support water and sanitation access projects.

Energy & waste efficiency: In 2018, MSFT attained 100% carbon-neutral operations and surpassed its goal of sourcing 50% of the electricity consumed by its data centers from renewable energy sources. MSFT achieved the zero-waste certificate for Dublin and Boydton data centers. And diverted more than 60,000 tons of waste from landfills from campuses and data centers. MSFT also invested roughly \$30 mln to organizations to fund the acceleration of recycling.

Social contributions: Within MSFT, women account for 29.2% of the workforce; Black employees account for 4.4%, Latinx 6.2% and Asian 33.3%. MSFT donated more than \$1.4 bln in software and services to NGOs around the world that are engaged in addressing critical societal challenges. Employees donated more than \$158 mln to NGOs serving communities in their localities. MSFT contributed another \$30 mln in cash and technological resources to companies serving refugees and other humanitarian causes. The company also spent above \$3 bln to help minority, disabled, veteran, LGBTQ, and women-owned businesses in FY18.

Exhibit: Water availability (m³)

