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EARNINGS QUALITY & DIVIDEND SUSTAINABILITY RESEARCH

BTN Research

August 28, 2020 | www.btnresearch.com

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Microsoft (MSFT) EQ Update- 6/20 Qtr.

Current EQ Rating*	Previous EQ Rating
4-	4-

6- "Exceptionally Strong"
5- "Strong"
4- "Acceptable"
3- "Minor Concern"
2- "Weak"
1- "Strong Concerns"

Note that a "+" sign indicates the earnings quality improved in the most recent quarter while a "–" sign indicates deterioration

*For an explanation of the EQ Review Rating scale, please refer to the end of this report

We maintain our earnings quality rating at 4- (Acceptable)

- Intelligent Cloud unearned revenue fell slightly despite an increase in revenue. This drove unearned revenue on a days of sales basis down by almost 23 days versus a year ago after 21-day and 16-day declines in the 3/20 and 12/10 quarters, respectively. The company continues to cite a larger portion of revenue growth coming from longer-term commercial deals and hybrid contracts which have a larger percentage of revenue recognized upfront as being a factor. Nevertheless, revenue growth is currently getting a boost from more revenue from these deals being booked upfront and when this trend decelerates, it could take a material source of recent growth with it.

- MSFT noted in its 10-K that it will extend its estimate for the useful life of network equipment in calculating depreciation to 4 years from 3 in FY 2021. This will boost operating income by $2.7 billion which amounts to about 28 cps or roughly 7% of FY 2020 adjusted EPS. This is a material, non-operating benefit to earnings growth that will end after FY 2021 and is especially helpful given that the company has accelerated its capital spending to build out its cloud network. We give kudos to

management for its disclosure of the move and its discussion of it in the conference call. We also do not view 4 years as a glaringly long time to expect network equipment to last. However, given the size of the benefit and the fact that depreciation is currently running just over 60% of capex, we do question the need for and the timing of the move.

Decline in Unearned Revenue

Deferred revenue for the Intelligent Cloud segment declined YOY despite an increase in revenue as seen in the following tables:

Revenue by Segment	6/30/2020	3/31/2020	12/31/2019	9/30/2019
Productivity and Business Processes	$11,752	$11,743	$11,826	$11,077
Intelligent Cloud	$13,371	$12,281	$11,869	$10,845
More Personal Computing	$12,910	$10,997	$13,211	$11,133
Total Revenue	$38,033	$35,021	$36,906	$33,055
Unearned Revenue by Segment				
Productivity and Business Processes	$18,643	$14,077	$14,266	$15,560
Intelligent Cloud	$16,620	$12,984	$13,766	$15,255
More Personal Computing	$3,917	$3,336	$3,189	$3,211
Total Unearned Income	$39,180	$30,397	$31,221	$34,026

Revenue by Segment	6/30/2019	3/31/2019	12/31/2018	9/30/2018
Productivity and Business Processes	$11,047	$10,242	$10,100	$9,771
Intelligent Cloud	$11,391	$9,649	$9,378	$8,567
More Personal Computing	$11,279	$10,680	$12,993	$10,746
Total Revenue	$33,717	$30,571	$32,471	$29,084
Unearned Revenue by Segment				
Productivity and Business Processes	$16,831	$12,679	$12,635	$13,753
Intelligent Cloud	$16,988	$12,531	$12,551	$13,298
More Personal Computing	$3,387	$2,925	$2,898	$3,191
Total Unearned Income	$37,206	$28,135	$28,084	$30,242

Intelligent Cloud deferred revenue days of sales fell by almost 23 days YOY in the 6/20 quarter which follows 21-day and 16-day YOY declines in the 3/20 and 12/19 quarters, respectively as seen in the following table:

Unearned Days of Revenue by Segment	6/30/2020	3/31/2020	12/31/2019	9/30/2019
Productivity and Business Processes	144.4	109.1	111.0	129.2
Intelligent Cloud	113.1	96.2	106.7	129.4
More Personal Computing	27.6	27.6	22.2	26.5
Total Unearned Income	93.7	79.0	77.8	94.7

Unearned Days of Revenue by Segment	6/30/2019	3/31/2019	12/31/2018	9/30/2018
Productivity and Business Processes	138.6	111.4	115.1	129.5
Intelligent Cloud	135.7	116.9	123.1	142.8
More Personal Computing	27.3	24.6	20.5	27.3
Total Unearned Income	100.4	82.8	79.6	95.7

As we discussed in our original review, MSFT recognizes revenue under cloud contracts over time while perpetual software licenses are recognized upfront. However, the company has been signing longer-term commercial hybrid contracts as well as usage-based contracts that tend to have more revenue recognized upfront. The company has warned that the mix of hybrid contracts will result in "volatility in commercial unearned" in past discussions of results. Management did not directly address the drop in unearned revenue in the quarter but it did discuss results of the growth sources of the Intelligent Cloud segment:

> *"Next, the Intelligent Cloud segment. Revenue was $13.4 billion, increasing 17 percent and 19 percent in constant currency, slightly ahead of expectations, driven by continued customer* ***demand for our differentiated hybrid offerings.*** *On a significant base, server products and cloud services revenue increased 19 percent and 21 percent in constant currency.* ***Azure revenue grew 47 percent and 50 percent in constant currency, in line with expectations, driven by continued strong growth in our consumption-based business. In our per-user business, growth continued to moderate given the size of our enterprise mobility installed base, which grew 26 percent to over 147 million seats.***
>
> *And our on-premises server business was relatively unchanged and grew 1 percent in constant currency, ahead of expectations, driven by strong renewal execution and the continued demand for our hybrid and premium solutions.*
>
> *Enterprise Services revenue was relatively unchanged and grew 2 percent in constant currency as growth in Premier Support Services offset consulting delays."*

It is reasonable that disproportionate growth in hybrid contracts along with growth in consumption-based Azure contracts could result in more revenue being recognized upfront.

The typical concern with a decline in deferred revenue days is the possibility that it could mean either management is becoming more aggressive in recognizing revenue or the pace of signing up new deals is declining. We do not see evidence of either given that booking growth remains strong and it is coming disproportionately from areas that could conceivably have a higher degree of revenue recognized at the beginning of the contract term. In its 10-Ks, the company gives an estimate of the amount of current deferred revenue that will be recognized by quarter throughout the following year. The disclosure from the last two 10-Ks is shown below:

	from 6/20 10-K:		from 6/19 10-K:	
unearned revenue to be recognized in:	est. in FY 2021		est. in FY 2020	
1Q	$13,884	37.3%	$12,353	33.2%
2Q	$10,950	29.4%	$9,807	26.4%
3Q	$7,476	20.1%	$6,887	18.5%
4Q	$3,690	9.9%	$3,629	9.8%
Thereafter	$3,180	8.5%	$4,530	12.2%
	$39,180		$37,206	

We can see from the above that the company has already predicted that it will be recognizing a noticeably higher percentage of the existing unearned revenue balance in the early quarters of FY 2021 compared to its expectations for deferred revenue at the beginning of FY 2020.

Also, the company reports the remaining performance obligation (RPO) related to commercial contracts which includes Intelligent Cloud. This number is essentially backlog and represents the amount of future revenues that the company has signed but has not booked as revenue yet. Some of this would be included in deferred revenue, but some is more than a year out and has not been recognized in the financial statements yet. Note that RPO includes non-Intelligent Cloud components such as Office 365 Commercial, but Intelligent Cloud is a major component.

	6/30/2020	3/31/2020	12/31/2019	9/30/2019
Commercial Remaining Performance Obligations	$107,000	$89,000	$90,000	$86,000

	6/30/2019	3/31/2019	12/31/2018	9/30/2018
Commercial Remaining Performance Obligations	$87,000	$72,000	$69,000	$68,000

RPO is still growing in 20%+ rate which is another indicator that there is plenty of backlog left to be recognized as revenue in future quarters. This fact is why we choose, for now, to maintain our rating rather than drop it to a 3 (Minor Concern).

However, even though there may be a reasonable explanation for the unearned revenue decline, the fact remains that revenue growth is likely receiving a material boost from a shift in the type of contract being signed. We have no way to tell when that shift will end, but when it does decelerate, a material tailwind to growth will be gone.

Change in Depreciable Life Will Provide Material Boost to FY 2021

MSFT noted in the 10-K that it will be lengthening its estimate of useful lives for calculating depreciation on its server and network equipment from 3 years to 4 years:

> *"In July 2020, we completed an assessment of the useful lives of our server and network equipment and determined* ***we should increase the estimated useful life of server equipment from three years to four years and increase the estimated useful life of network equipment from two years to four years****. This change in accounting estimate will be effective beginning fiscal year 2021. Based on the carrying amount of server and network equipment included in "Property and equipment, net" as of June 30, 2020, it is estimated this change will increase our fiscal year 2021 operating income by $2.7 billion."*

The $2.7 billion benefit amounts to just under 30 cps or about 7% of the FY'20 adjusted EPS figure. In addition to the above note in the 10-K, the company also prominently made note of it in the conference call.

We do not have a problem with using 4 years to depreciate server equipment and network equipment. However, MSFT has been at this a long time and we question the timing of the change, particularly the doubling of the useful lives for network equipment. We note that the change produces a huge benefit, particularly as the company continues to invest in equipment as it builds out its cloud infrastructure. The following table shows depreciation expense as a percentage of capital spending for the last three fiscal years:

	FY 2020	FY 2019	FY 2018
Capital Spending	$15,441	$13,925	$11,632
Depreciation Expense	$10,700	$9,700	$7,700
	69.3%	69.7%	66.2%

Capital spending growth is elevated, but depreciation expense comfortably trails it and the gap actually increased in FY 2020. Taking $2.7 billion out of the FY 2020 number would have dropped FY 2020 depreciation expense to under 70% of the capital spending figure from FY 2018. Therefore, we question the need for the change. Either way, this will be a significant tailwind to EPS growth that analysts should remember will only last through FY 2021.

Explanation of EQ Rating Scale

6- "Exceptionally Strong"	Indicates uncommonly conservative accounting policies to the point that revenue and earnings are essentially understated relative to the company's peers. Higher possibility of reporting positive earnings surprises
5- "Strong"	Indicates the company has no areas of concern with its reported results and we see very little risk of the company disappointing due to recent results being overstated from aggressive reporting in recent periods.
4- "Acceptable"	Indicates the company may have exhibited a minor "red flag", but the severity of the issue is not yet a concern. Minimal risk of an earnings disappointment resulting from previous earnings or cash flow overstatement
3- "Minor Concern"	Indicates the company has exhibited either a larger number of or more serious warning signs than companies receiving a 4. The likelihood of an immediate earnings or cash flow disappointment is not considered to be high, but the signs mentioned deserve a higher degree of attention in the future.
2- "Weak"	Indicates the company's recently reported results have benefitted materially from aggressive accounting. Follow up work should be performed to determine the nature and extent of the problem. There is a possibility that upcoming results could disappoint as the impact of unsustainable benefits disappears.
1- "Strong Concerns"	Indicates that the company's recent results are significantly overstated and that we view a disappointment in upcoming quarters is highly likely.

In addition to the numerical rating, the EQ Review Rating may also include either a minus or plus sign. A minus sign indicates that our analysis shows the overall earnings quality of the company has worsened since the last review and there is a possibility the numerical rating will fall should the problem continue into the next quarter. Likewise, a positive sign indicates that the overall earnings quality is improving, and the company may see an upgrade in its numerical rating should the trend continue.

Key Points to Understand About the EQ Score

The EQ Review Rating is much more than a blind, quantitative scoring method. While we utilize proprietary adjustments, ratios, and methods developed over decades of earnings quality analysis, the foundation of all of our analysis is reading recent SEC filings, press releases, conference call transcripts and in some cases, conversations with managements.

The EQ Review Rating is not comparable to a traditional buy/sell rating. The Rating is intended to specifically convey the extent to which reported earnings may be over/understated. Fundamental factors such as forecasts for future growth, increasing competition, and valuation are not reflected in the rating. Therefore, a high score does not in itself indicate a company is a buy but rather indicates that recent results are a good indication of the underlying earnings and cash generation capacity of the company. A low score (1-2) will likely result in us performing a more thorough review of fundamental factors to determine if the company warrants a full-blown sell recommendation.

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