

Hologic (HOLX) EQ Review

Current EQ Rating*	Previous EQ Rating
4-	na

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 initiate earnings quality coverage with a 4- (Acceptable) rating

We have no major concerns with HOLX's current earnings quality although its acquisition history has a large red mark in the form of its Cynosure deal. We also take a dim view of the company adding back its sizeable amortization of intangibles expense to its non-GAAP earnings and see a minor red flag with its declining depreciation expense. While these items are worthy of note, we do not view them as near-term problems that foreshadow a major disappointment. Specifically, we note:

- In 2017, HOLX acquired Cynosure for \$1.66 billion, booking the bulk of the acquisition price as goodwill and intangibles. Write-offs started very quickly as one product under development failed to receive approval and the FDA issued a negative letter on one of the company's key products. This led to an eventual write of \$685.7 million of goodwill and \$685.4 million in intangible assets associated with Cynosure which was recently sold for just over \$200 million.
- Even after the Cynosure write-offs, the company still has almost \$4 billion of goodwill and intangibles (almost 70% of total assets) on its balance sheet, much of which is

related to its \$6 billion + acquisition of Cytoc made in 2007. The company adds the amortization of the intangible assets back to its non-GAAP earnings figures. Before the Cynosure write-off, amortization was over 60% of non-GAAP earnings and after the Cynosure write-off it is still almost 50%. While it is typical for med tech companies to make such non-GAAP adjustments, we still view this as a significant distortion of true economic earnings as it ignores the true cost of these acquisitions.

- The company noted in the 3/20 10-Q that it performed a review of intangible assets in response to changes in the market induced by COVID. It determined that there was an “significant” cushion between fair value and carrying value to indicate there was not an impairment, but it warned that further deterioration could result in another review.
- Depreciation expense has been on the decline for the last few quarters despite increases in capex and a slightly rising PP&E balance. The fastest rising components of PP&E are Equipment and Equipment Under Customer Usage Agreements. The latter includes equipment which is owned by the company but placed at customer locations under agreements which provide for minimum purchases of disposables. These are the two largest categories of PP&E and have the lowest depreciable lives, so we would expect rising balances there to drive depreciation expense up. The concern is that the company could be increasing the period over which it is depreciating equipment at customer locations leading to an artificial suppression of expenses recognized over time under these contracts. At this point, the decline in depreciation expense is adding less than a penny to EPS. However, this should be monitored going forward and at the very least we would expect to begin to see an increase in depreciation expense as a result of rising capex.
- The company maintains a nonqualified Deferred Compensation Plan which allows certain executives the ability to defer portions of their compensation until retirement. These amounts are invested on behalf of the employee. The funds are marked to market every period with the impact reflected in operating expenses. The company also purchases group life insurance to partially fund the payments made to employees under these plans. Changes in the cash surrender value of these policies are recorded in other expense. Mark to market impacts were cited as a key benefit to R&D and G&A expenses in the 3/20 quarter but were not quantified. Changes in cash surrender to life insurance policies were a \$9 million loss recorded in other income versus a \$4.5 million gain in the year-ago period. Unfortunately, there is not enough information to determine the net impact of these factors.

Cynosure Write Off

HOLX has made regular, small acquisitions over the last three years but free cash flow after the buyback has more than covered the cost of these deals. However, the company's past acquisition history is far from pristine. In March of 2017, HOLX acquired Cynosure, a developer of treatment systems aimed at plastic surgeons and dermatologists for minimally invasive cosmetic procedures including removal of hair, treatment of varicose veins, and tattoo removal. The purchase price was \$1.66 billion with \$685.7 million of that originally designated as goodwill and another \$994 million designated as intangible assets which included \$107 million of in-process R&D related to three projects which were expected to be completed in 2018 and 2019. The company gave the following support for the booking of these intangible assets related to the Cynosure deal:

“The distribution agreement intangible asset relates to Cynosure's exclusive distribution rights for the MonaLisa Touch device in certain geographic regions. The customer relationships intangible asset pertains to Cynosure's relationships with its end customers and related service arrangements and distributors throughout the world. Trade names relate to the Cynosure corporate name and primary product names, and the Company used the Relief-from-Royalty Method to estimate the fair value of this asset.”

Likewise, goodwill was backed up with the following:

“The factors contributing to the recognition of goodwill were based on several strategic and synergistic benefits that were expected to be realized from the Cynosure acquisition. These benefits included the expectation that the Company's entry into the aesthetics market would significantly broaden the Company's offering in women's health. The combined company was expected to benefit from a broader global presence, synergistic utilization of Hologic's direct sales force, primarily its GYN Surgical sales force, with certain Cynosure products, and the Company's entry into an adjacent cash-pay segment.”

Unfortunately, cracks in the value of the transaction began to appear very quickly. Two quarters after the close of the acquisition, the company wrote off \$46 million of the in-process R&D after one of the three projects failed to obtain regulatory approval. However, the real collapse did not start until the 3/18 quarter when the company

noted it has identified indicators of impairment in the value of the goodwill which led to a \$685.7 million write-down of goodwill. Shortly after that, the company began to explore divesting the Cynosure assets which led to a write-off of \$685.4 million in the value of the intangible assets made in the 3/19 quarter. Finally, in November of 2019, the company reached an agreement to sell the Cynosure assets for just over \$200 million. So, in less than three years after the acquisition, the company wrote off almost all of the purchase price of the Cynosure deal. On a percentage basis, this exceeds Conagra's (CAG's) destruction of value from its 2013 Ralcorp deal in a similar time frame.

While the Cynosure chapter appears to be behind the company now, it highlights the unsure nature of intangible assets on any company's balance sheet. HOLX still has goodwill of \$2.59 billion (38% of assets) and \$1.33 billion (19.5% of assets) on its books from acquisitions made many years ago. However, the company recently conducted an impairment test of its goodwill and intangibles due to the COVID impact and found that there was a "significant" cushion between the fair value and carrying value of these assets, although it did not quantify the cushion. Below is the note from the 3/20 10-Q:

"In the second quarter of fiscal 2020, the Company reviewed its long-lived assets for indicators of impairment as a result of lowering its expectations for revenue and operating income in the short term from the impact of COVID-19 on its business as discussed in Note 1. The Company updated its long-term forecasts and performed an undiscounted cash flow analysis which indicated that the estimated future cash flows are sufficient to recover the carrying values of its asset groups. In addition, the Company had significant cushion from its most recent goodwill impairment test in each of its reporting units and believes, based on its procedures, current facts and expectations, that as of the date of this report it is not more likely than not that the fair value of each of its reporting units is below their respective carrying values. Given the current uncertainty of the duration and scope of the COVID-19 pandemic, the related economic impact, and the potential longer term impact on the Company's business, financial condition and results of operations, in the future the Company may be required to perform an interim impairment test, in addition to its annual test, and record an impairment charge."

Add Back of Intangibles Amortization Almost Half of Non-GAAP Earnings

On the subject of intangibles amortization, HOLX adds back the expense when calculating its non-GAAP earnings figures. The following table shows net income and amortization of intangible assets for the last eight quarters:

Table 1

	03/28/2020	12/28/2019	09/28/2019	06/29/2019
Adjusted Net Income	\$150.9	\$164.1	\$175.0	\$171.6
Amortization of Intangible Assets	\$73.0	\$72.7	\$90.5	\$90.5

	03/30/2019	12/29/2018	09/29/2018	06/30/2018
Adjusted Net Income	\$155.9	\$156.7	\$158.6	\$159.1
Amortization of Intangible Assets	\$94.5	\$95.1	\$95.3	\$94.7

We can see that before the write off the Cynosure intangibles in the 12/19 quarter, amortization expense was running about 60% of non-GAAP income, implying that earnings would have been less than half the non-GAAP figure if the cost of acquiring these intangibles was taken into consideration. Also, the write-off resulted in an approximate \$18 million decline in amortization expense which is providing an artificial tailwind to growth in GAAP earnings. Also, note that the bulk of the remaining intangible assets on HOLX's balance sheet relate to its \$6.2 billion 2007 acquisition of Cytoc. Amortization expense related to those assets has been gradually declining as they become fully amortized which can be seen in the approximate \$5 million YOY decline in the 9/19 and 6/19 quarters.

HOLX is certainly not alone among its med-tech peers in ignoring the cost of acquisitions in its adjusted results. However, we do note that even after the write off of the Cynosure intangibles, amortization expense is almost half of non-GAAP earnings which is on the high end of the company's peers.

Depreciation Is Declining and Lagging Capex

Depreciation expense has been declining as capital spending has been on the rise for the last several quarters. The following table shows the difference between the two on a trailing 12 basis for the last eight quarters:

Table 2

	3/28/2020	12/28/2019	9/28/2019	6/29/2019
T12 Depreciation	\$88.0	\$90.4	\$92.5	\$93.5
T12 Capex	\$120.3	\$118.0	\$109.1	\$109.8
difference	-\$32.3	-\$27.6	-\$16.6	-\$16.3

	3/30/2019	12/29/2018	9/29/2018	6/30/2018
T12 Depreciation	\$96.4	\$98.3	\$101.6	\$103.9
T12 Capex	\$108.7	\$106.4	\$105.6	\$107.1
difference	-\$12.3	-\$8.1	-\$4.0	-\$3.2

This clearly shows the rising trend in capital spending with a particular jump in the last two quarters while depreciation has been on the decline. Now, let's look at depreciation and capex on a quarterly basis compared to the components of the PPE account:

	3/28/2020	12/28/2019	9/28/2019	6/29/2019
Depreciation	\$20.7	\$21.6	\$22.8	\$22.9
3 Month Capex	\$31.6	\$31.5	\$31.4	\$25.8
Equipment	\$407.6	\$385.2	\$379.2	\$393.5
Equipment Under Usage Agreements	\$452.8	\$448.2	\$435.5	\$429.8
Buildings and Improvements	\$162.9	\$170.2	\$196.7	\$195.5
Leasehold Improvements	\$42.8	\$43.6	\$61.7	\$61.0
Land	\$40.6	\$40.4	\$46.3	\$46.3
Furniture and Fixtures	\$15.6	\$15.1	\$17.5	\$17.7
Gross PPE	\$1,122.3	\$1,102.7	\$1,136.9	\$1,143.8
Less-Accumulated Depreciation	-\$677.0	-\$651.0	-\$666.0	-\$674.0
Net PPE	\$445.3	\$451.7	\$470.9	\$469.8
	3/30/2019	12/29/2018	9/29/2018	6/30/2018
Depreciation	\$23.1	\$23.7	\$23.8	\$25.8
3 Month Capex	\$29.3	\$22.6	\$32.1	\$24.7
Equipment	\$386.8	\$387.3	\$380.3	\$378.1
Equipment Under Usage Agreements	\$422.9	\$408.5	\$399.6	\$390.1
Buildings and Improvements	\$189.4	\$188.7	\$188.3	\$173.5
Leasehold Improvements	\$64.3	\$63.1	\$63.0	\$62.3
Land	\$46.3	\$46.3	\$46.3	\$46.4
Furniture and Fixtures	\$17.5	\$17.3	\$16.8	\$20.7
Gross PPE	\$1,127.2	\$1,111.2	\$1,094.3	\$1,071.1
Less-Accumulated Depreciation	-\$657.5	-\$638.6	-\$616.1	-\$609.6
Net PPE	\$469.7	\$472.6	\$478.2	\$461.5

It is also helpful to consider that the company depreciates assets on a straight-line basis using the following schedule of useful lives:

Table 4

Equipment	3-10 years
Equipment Under Usage Agreements	3-8 years
Buildings and Improvements	20-35 years
Leasehold Improvements	Shorter of Lease Term or Useful Life
Land	na
Furniture and Fixtures	5-7 years

The first thing to note in Table 3 is that gross PPE has been essentially flat and has not been significantly impacted by write-offs, acquisitions, or divestitures other than the slight decline in buildings and improvements in the 12/19 quarter. Given the 20-35 year useful life range for this category, the decline in those assets would have had a minimal impact on depreciation expense. Also, note that accumulated depreciation has also risen steadily indicating there have not been significant retirements of fully depreciated assets.

Another point to take away is that the fastest-growing components of PPE, “Equipment” and “Equipment Under Customer Usage Agreements” also have the lowest range of estimated useful lives at 3-10 years and 3-8 years, respectively. Therefore, additions to those components should be reducing the average estimated life of the portfolio resulting in an increase in depreciation expense. The Equipment Under Customer Usage Agreements is of particular interest. Consider the company’s description of this account from its 10-Q:

“Equipment under customer usage agreements primarily consists of diagnostic instrumentation and imaging equipment located at customer sites but owned by the Company. Generally, the customer has the right to use the equipment for a period of time provided they meet certain agreed to conditions. The Company recovers the cost of providing the equipment from the sale of disposables. The depreciation costs associated with equipment under customer usage agreements are charged to cost of product revenues over the estimated useful life of the equipment. The costs to maintain the equipment in the field are charged to cost of product revenue as incurred.”

Elsewhere in its disclosures, the company indicates that this equipment is primarily related to tests and assays in the Diagnostics segment and handpieces in the GYN Surgical segment. We observe that the range of 3-8 years seems reasonable given some quick research we did into the useful lives of various pieces of medical equipment. However, the size of the range seems somewhat wide and the concern would be that the company has extended the range of useful lives on some of this equipment which has contributed to the observed decline in depreciation expense. At this point we consider this to be a minor concern given that the absolute decline in depreciation expense amounts to less than a penny per share. Still, as the company continues to spend more on capex we would expect the decline in depreciation expense to reverse in upcoming periods which will erase a minor tailwind to recent results.

Deferred Compensation Plan Impact

HOLX maintains a nonqualified Deferred Compensation Plan which allows certain executives the ability to defer portions of their compensation until retirement. These amounts are invested on behalf of the employee. These funds are marked to market every period with the impact reflected in operating expenses. The company also purchases group life insurance to partially fund the payments made to employees under these plans. Changes in the cash surrender value of these policies are recorded in other expense. Below is the company's disclosure regarding the treatment of these plans for reference:

“Effective March 15, 2006, the Company adopted its Nonqualified Deferred Compensation Plan (“DCP”) to provide non-qualified retirement benefits to a select group of executive officers, senior management and highly compensated employees of the Company. Eligible employees may elect to contribute up to 75% of their annual base salary and 100% of their annual bonus to the DCP and such employee contributions are 100% vested. In addition, the Company may elect to make annual discretionary contributions on behalf of participants in the DCP. Each Company contribution is subject to a three-year vesting schedule, such that each contribution vests one third annually. Employee contributions are recorded within accrued expenses.

Upon enrollment into the DCP, employees make investment elections for both their voluntary contributions and discretionary contributions, if any, made by the Company. Earnings and losses on contributions based on these investment elections are recorded as a component of compensation expense in the period earned. Annually, the Compensation Committee of the Board of Directors has approved a discretionary cash contribution to the DCP for each year. Discretionary contributions by the Company to the DCP are held in a Rabbi Trust. The Company records compensation expense for the DCP discretionary contributions ratably over the three-year vesting period of each annual contribution, unless the participant meets the plan retirement provision of reaching a certain age and years of service criteria in which case the expense is accelerated to match the required service period to receive such benefit. Under the DCP, the Company recorded compensation expense related to Company contributions of \$2.7 million, \$2.9 million and \$3.4 million in fiscal 2019, 2018 and 2017, respectively. The full amount of the discretionary

contribution, net of forfeitures, along with employee deferrals is recorded within accrued expenses and totaled \$51.9 million and \$49.8 million at September 28, 2019 and September 29, 2018, respectively.

*The Company has purchased Company-owned group life insurance contracts, in which both voluntary and discretionary Company DCP contributions are invested, to partially fund payment of the Company's obligation to the DCP participants. The total amount invested at September 28, 2019 and September 29, 2018 was \$44.6 million and \$44.2 million, respectively. The values of these life insurance contracts are recorded in other long-term assets. **Changes in the cash surrender value of life insurance contracts, which were not significant in fiscal 2019, 2018 and 2017, are recorded within other income, net.***

The company does not quantify the mark to market impact of investments made under these plans, but it did mention the beneficial impact as a key reason for the drop in R&D and G&A expenses in the 3/20 quarter. However, the benefit of the stock market drop on these operating expense categories was at least partially offset by a \$9 million loss on the cash surrender value of life insurance contracts recorded in other income in the 3/20 quarter compared to a \$4.5 million gain recorded in the year-ago quarter. The mark to market impact on operating expenses in quarters with big market moves is clearly material or it would not be so prominently featured in the management's discussion and analysis section of the 10-Qs. We believe it would be helpful for the company to disclose the exact impact of mark to market gains and losses to help investors quantify the impact.

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.

Disclosure

Behind the Numbers, LLC is an independent research firm structured to provide analytical research to the financial community. Behind the Numbers, LLC is not rendering investment advice based on investment portfolios and is not registered as an investment adviser in any jurisdiction. All research is based on fundamental analysis using publicly available information including SEC filed documents, company presentations, annual reports, earnings call transcripts, as well as those of competitors, customers, and suppliers. Other information sources include mass market and industry news resources. These sources are believed to be reliable, but no representation is made that they are accurate or complete, or that errors, if discovered, will be corrected. Behind the Numbers, LLC does not use company sources beyond what they have publicly written or discussed in presentations or media interviews. Behind the Numbers does not use or subscribe to expert networks. All employees are aware of this policy and adhere to it.

The authors of this report have not audited the financial statements of the companies discussed and do not represent that they are serving as independent public accountants with respect to them. They have not audited the statements and therefore do not express an opinion on them. Other CPAs, unaffiliated with Mr. Middleswart, may or may not have audited the financial statements. The authors also have not conducted a thorough "review" of the financial statements as defined by standards established by the AICPA.

This report is not intended, and shall not constitute, and nothing contained herein shall be construed as, an offer to sell or a solicitation of an offer to buy any securities referred to in this report, or a "BUY" or "SELL" recommendation. Rather, this research is intended to identify issues that investors should be aware of for them to assess their own opinion of positive or negative potential.

Behind the Numbers, LLC, its employees, its affiliated entities, and the accounts managed by them may have a position in, and from time-to-time purchase or sell any of the securities mentioned in this report. Initial positions will not be taken by any of the aforementioned parties until after the report is distributed to clients, unless otherwise disclosed. It is possible that a position could be held by Behind the Numbers, LLC, its employees, its affiliated entities, and the accounts managed by them for stocks that are mentioned in an update, or a BTN Thursday Thoughts.

