BEHIND THE NUMBERS

EARNINGS QUALITY & DIVIDEND SUSTAINABILITY RESEARCH

BTN Research

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March 7, 2019

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Ball Corp. (BLL) EQ Update-12/18 Quarter

Current EQ Rating*	Previous EQ Rating
2-	2-

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

We maintain our earnings quality rating of 2- (Weak).

- Factored receivables outstanding at the end of the 12/18 period almost doubled from a year ago driving factored DSOs to 34.1 from 18.6. We estimate that this increase could have added as much as $400 million to cash flow growth for the year.

- Trade receivables DSO adjusted for outstanding factored receivables rose by 3 days over the 12/17 quarter. This could indicate that more generous terms were granted to customers to drive sales in the period. Management's comment in the 10-K that its DSOs were down in the period does not account for the factored receivables.

- Payables continued to rise, jumping over ten days from the end of last year by our calculation.

- If the cash flow boost from rising factoring and payables gives out in 2019, management's forecast of an increase in operating cash flow could prove optimistic.

- Management warned that its Asia Pacific and AMEA beverage packaging unit goodwill is at risk of a future write-down.

Rapid Increase in Receivables Factoring Continues

We have noted in past reviews that BLL has increased its receivables factoring program in recent quarters. This trend continued into the 12/18 period.

Just looking at balance sheet receivables, it appears that days of sales (DSO) increased by 5 days over the year-ago quarter. However, there are many adjustments we must make to BLL's receivables to get an accurate view of revenue recognition and cash flow trends.

First, BLL's adoption of ASC 606 had a minor impact on sales but resulted in significant amounts being shifted from inventory to unbilled receivables which is recorded under accounts receivables in the balance sheet. BLL discloses current balances for these accounts as if they had been calculated under the old revenue recognition method which we can use to compare to historical periods.

In addition to trade receivables and unbilled receivables, the balance sheet receivables numbers contain an "other receivables" segment which includes tax receivables, certain vendor rebate receivables, and other miscellaneous receivables. This segment is not relevant to revenue recognition trends and we therefore remove it from balance sheet receivables to calculate DSOs. We assume that these amounts were not materially impacted by the new revenue recognition standards.

Finally, as we have noted in past reviews, BLL maintains a receivables factoring program which results in the removal of sold receivables from the balance sheet. It is necessary to add back receivables that have been sold but are still outstanding at the end of the period to get a clear picture of BLL's revenue recognition trends. BLL does not disclose an exact amount of receivables sold and outstanding, but it does disclose the limits on its factoring program and the amounts available under the program at the end of each quarter which we can use to generate an estimate of sold receivables outstanding as shown in the following table:

	12/31/2018	09/30/2018	06/30/2018	03/31/2018
Limit of Factoring Facility	$1,200	$1,150	$977	$800
Available for Sale	$178	$208	$139	$211
Implied Amount Sold and Outstanding	$1,022	$942	$838	$589

	12/31/2017	09/30/2017	06/30/2017	03/31/2017
Limit of Factoring Facility	$1,000	$1,000	$1,000	$865
Available for Sale	$439	$354	$342	$323
Implied Amount Sold and Outstanding	$561	$646	$658	$542

We put all these pieces together to calculate an adjusted balance sheet receivables DSO, a factored receivables DSO, and a total adjusted receivables DSO shown in the following table:

	12/31/2018	9/30/2018	6/30/2018	3/31/2018
Sales Under Pre 606	$2,734	$2,985	$3,143	$2,752
Receivables Under Pre-606 Accounting Method	$1,485	$1,622	$1,722	$1,745
Other Receivables	$522	$472	$373	$339
Receivables moved to "held for sale"	$0	$0	$78	$0
Adjusted Balance Sheet Receivables	$963	$1,150	$1,427	$1,406
Adjusted Balance Sheet Trade Sheet Receivable DSOs	***32.1***	***35.2***	***41.4***	***46.6***
Receivables Sold and Outstanding	$1,022	$942	$838	$589
Outstanding Factored Receivables DSOs	***34.1***	***28.8***	***24.3***	***19.5***
Adjusted Receivables	$1,985	$2,092	$2,265	$1,995
Adjusted Receivables DSOs	**66.3**	**64.0**	**65.8**	**66.1**

	12/31/2017	9/30/2017	6/30/2017	3/31/2017
Sales Under Pre 606	$2,747	$2,908	$2,855	$2,473
Receivables Under Pre-606 Accounting Method	$1,634	$1,793	$1,637	$1,695
Other Receivables	$291	$368	$305	$341
Receivables moved to "held for sale"	$0	$0	$0	$0
Adjusted Balance Sheet Receivables	$1,343	$1,425	$1,332	$1,354
Adjusted Balance Sheet Trade Sheet Receivable DSOs	***44.6***	***44.7***	***42.6***	***50.0***
Receivables Sold and Outstanding	$561	$646	$658	$542
Outstanding Factored Receivables DSOs	***18.6***	***20.3***	***21.0***	***20.0***
Adjusted Receivables	$1,904	$2,071	$1,990	$1,896
Adjusted Receivables DSOs	**63.2**	**65.0**	**63.6**	**70.0**

Total trade receivables DSOs (factored and remaining on the balance sheet) rose by 3 days over the 12/17 period and over 2 days sequentially. This could be an indication that the company extended more generous terms to suppliers in order to pull revenue into the 12/18 quarter at the expense of the 3/19 quarter. However, we temper this conclusion with the observation that the company's aerospace division (approximately 10% of sales) does a large part of its business with the federal government and collections could have conceivably been impacted late in the year by the government shutdown. Regardless, we take issue with the company's comment in the liquidity and capital resources section if its 10-K:

> *"Cash flows provided by operations were higher in 2018 compared to 2017, primarily due to higher earnings and lower pension contributions, partially offset by lower working capital inflows. Excluding the impact of the new revenue recognition standard and the sale of the U.S. steel food and steel aerosol packaging business**, the impact of a reduction of days sales outstanding from 45 to 32 days**, a reduction of inventory days on hand from 61 to 58 days and an increase in days payable outstanding from 110 to 112 days was partially offset by increases in other receivables."*

Clearly, management's reference to the DSO decline from 45 to 32 days is directed at the adjusted balance sheet receivables amount. This leaves readers with the impression that the company became more strict on its collection policies which drove up cash flow. However, the increase in our total adjusted receivables DSO number indicates that was not the case. Total receivables rose noticeably faster than sales in the period and cash flow improvement from receivables came from an increase in factoring activity which drove factored receivable DSOs to 34.1 from 18.6. Just looking at the outstanding factored receivables at the end of each period, it appears that cash from operations could have received a boost of around $400 million in 2018 from the increased pace of factoring.

Meanwhile, payables continue to rise. While the company's above commentary indicates days payable jumped to 112 from 110, this appears to be calculated on a trailing-12 average basis. When we calculate the ratio with ending period payables and quarterly cost of sales, we get that days payable jumped from 118 to almost 129. This jump was key to payables being a source of cash of $592 million in 2018.

BLL contributed about $65 million to pension plans in 2018, down $144 million from the $209 million contributed in 2017. Pension contributions are actually expected to be up to $92 million in 2019, implying an approximate $30 million drag on cash from operations in the next year.

The company is forecasting operating cash flow of about $1.60 billion in 2019, up slightly from the 2018 figure of $1.56 billion. However, this target may be difficult to hit if the sizeable boosts from increased factoring and payables extension lose steam. Keep in mind that factored receivables have almost doubled from last year and now exceed what is left on the balance sheet. In addition, payable days have been well over 100 for the last 5 quarters. How much room is left for improvement?

Warning of Potential Goodwill Write-down

Management provided the following warning in its 10-K related to a possible future goodwill write-down to its Asia Pacific and AMAE beverage packaging segments.

> *"We continue to see the industry supply of beverage packaging exceed demand in China, resulting in significant pricing pressure and negative impacts on the profitability of our beverage packaging, Asia Pacific, reporting unit. The worsening business climate in Saudi Arabia has resulted in negative impacts to the profitability of our beverage packaging, AMEA, reporting unit. If it becomes an expectation that these situations will continue for an extended period of time, it may result in a noncash impairment of some or all of the goodwill associated with these reporting units, totaling $78 million and $100 million, respectively, at December 31, 2018. The company's annual goodwill impairment test completed in the fourth quarter of 2018 indicated the estimated fair value of the beverage packaging, Asia Pacific, and beverage packaging, AMEA, reporting units exceeded their carrying amounts, including goodwill, by 11 percent and 15 percent, respectively. The goodwill associated with the beverage packaging, Asia Pacific, reporting unit predominantly relates to the China beverage packaging facilities. On December 13, 2018, we announced an agreement to sell our beverage packaging facilities in China. The transaction is expected to close during the second half of 2019."*

While the company is in talks to sell its Chinese beverage packaging unit which is the source of most of the Asia Pacific goodwill, this deal has not closed at the time of writing and the company elected not to disclose the operations as discontinued at the end of the year due to the possibility of the deal not going through.

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 recent 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

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