BEHIND THE NUMBERS
Quality of Earnings Analysis

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TransDigm Group Incorporated (TDG)
Earnings Quality Update- 12/21 Qtr.

6- Exceptionally Strong
5- Strong
4- Acceptable
3- Minor Concern
2- Weak
1- Strong Concern
+ quality improving
- quality deteriorating

We are maintaining our earnings quality rating of TDG at 2+ (Weak) and our Top Sell rating.

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

Summary

TDG reported adjusted EPS for 1Q22 (ending January 1) of $3.00, which missed forecasts by 17-cents. It is worth pointing out that loss contract amortization of $12 million added 15-cents to adjusted EPS. It also added back the amortization of the asset account set up with acquisitions called Order Backlog. This was $4 million in January vs. $0 the year before and added 5 cents to EPS. It also benefitted from a $23 million swing in FX from a loss to a small gain and was 29 cents of adjusted EPS. The headwind for taxes continued rising from 23.0% to 26.3% due to TDG being unable to fully deduct its interest expense due to interest expense being too large of a percentage of operating income. That was a 13-cent headwind and is likely to continue with debt at 6.7x EBITDA and TDG is guiding to 26%-28% for this fiscal year.

- Loss contract reserves occur after an acquisition where TDG believes the contracts it purchased have negative gross margins. It books a loss for the total contract based on what TDG determines the current market price should be and sets up a reserve liability for the difference. GAAP records both the higher assumed market price and amortizes the reserve liability into income to offset that so the actual lower margin transaction is seen with GAAP. Adjusted EPS adds back the loss amortization which inflates income.

- We should note that even the auditor lists the use of these loss contract reserves as a critical audit matter: "*Auditing management's accounting for its acquisition of CAC was complex because the customer relationships and technology intangible assets and loss contract reserves recognized were material to the consolidated financial statements and the estimates of fair value involved subjectivity. The subjectivity was primarily due to the sensitivity of the respective fair values to underlying assumptions about the future performance of the acquired business.*"

- In our view, when the operating model of TDG is being a continual acquisition machine, this type of accounting gives a more favorable view of the process. If there are money-losing contracts, it should lower the price of the acquisition and the results should look poor with less cash flow to pay for the acquisition. A sports analogy comes to mind - trading for an injured player with extensive knee damage often doesn't cost much. Two years later, he may play great again. But the team doesn't get to estimate, "when healthy he should score 10 points a game for us – let's just add that this season."

- On the positive side, we did NOT see TDG generating earnings with material cuts to allowances for either tax valuations or bad debt.

- Inventory still looks like a problem area for TDG in our opinion. Already gross margin is declining sequentially again:

	1Q22	**4Q21**	**3Q21**	**2Q21**	**1Q21**	**4Q20**	**3Q20**	**2Q20**	**1Q20**
Gross Margin	55.4%	56.7%	53.8%	49.6%	48.7%	45.7%	48.0%	56.7%	54.7%
EBITDA Margin	47.3%	49.7%	45.9%	43.5%	42.8%	42.4%	41.5%	46.8%	46.5%

TDG is touting that it had lower defense sales y/y which are lower margin, which means its commercial aviation sales have picked up. However, it is guiding for margins to hold flat now at just over 47% for EBITDA for the year and does not expect the type of leap seen y/y in 1Q to be present in 2Q22.

We still believe some of the margin gain is coming from TDG using FIFO and average cost accounting which help boost margins during cost inflation. Plus, TDG is benefiting from its slow inventory turn of <2.0x and has not replaced inventory at the same rate it is being sold:

	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20
Raw Materials	$871	$850	$872	$865	$900	$881	$901	$867	$858
Work in Process	$335	$322	$347	$360	$360	$358	$381	$389	$373
Finished Goods	$206	$207	$203	$205	$213	$222	$224	$208	$197
Inventory Reserve	-$197	-$194	-$197	-$190	-$189	-$178	-$162	-$151	-$134
Total Net Inventory	$1,215	$1,185	$1,225	$1,240	$1,284	$1,283	$1,344	$1,313	$1,294
COGS	$553	$554	$563	$602	$567	$637	$531	$625	$664
Total DSI	201	195	199	188	207	184	231	192	178
Inventory Turn	1.8	1.9	1.8	1.9	1.8	2.0	1.6	1.9	2.1

Sales rose 8% y/y and COGS fell 2.5%. However, inventory fell 5.4%. Those are in dollar terms, but we would argue that the cost per unit of inventory is up significantly so that $871 million in raw materials now represents much less inventory than $900 million in 1Q21 or $858 million in 1Q20. With the slow inventory turn, TDG may be able to continue this for another quarter or two by avoiding the replacement of raw material stocks. However, TDG claims it needs a large supply of products on hand at all times as finished parts to deliver throughout the world. It is turning finished goods 10-11x annually. That should speed up the inflation impacts into COGS and finished goods are already ticking up in dollar terms but are likely lower than normal in unit terms.

There are easy margin comps coming for 2Q22, but even TDG is downplaying that. For 3Q and 4Q and 2023 the comps get much tougher on margin and by that point more of the inflation could be making an impact as a margin headwind as TDG is forced to replace inventory bought during Covid with new inventory at much higher prices.

- We have warned and so has TDG that it may have a tough time continually raising prices on parts. The 10-K says this and points to a fiscal 2019 settlement with the government:

> *"Our subsidiaries are periodically subject to pricing reviews and government buying agencies that purchase some of our subsidiaries' products are periodically subject to audits by the DOD Office of Inspector General ("OIG") with respect to prices paid for such products. In the third quarter of fiscal 2019, we voluntarily refunded $16 million to the U.S. Government following an OIG audit, and another OIG audit is underway. In addition, our defense-related business has been the subject of an ongoing Congressional inquiry by the House Oversight Committee and release of the current OIG audit report may prompt further Congressional inquiries."*

In December came news of another audit and management addressed this on the earnings call this week:

> *“Now shifting gears for a moment to non-financial matters. I'd like to touch on our DoD IG audit report, which was released in mid-December. As we expected and communicated, the audit scope and results were similar to prior audits. The report found no legal wrongdoing on behalf of TransDigm or any of our employees. The report asked for a purely voluntary refund of approximately $21 million.”*

These have not been major blows at this point, but we think the risk is still worth watching.

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 Concern)- 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 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 upcoming quarters. 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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