Interest Coverage Ratio: Unscrubbed Data Creates Misleading Credit Ratings

To demonstrate the difference our proprietary Adjusted Fundamental data makes, we continue our series of reports that show how our Credit Ratings are more reliable than legacy firms' ratings. This report explains how our "Adjusted" Interest Coverage ratio is better than the "Traditional" ratio because the Traditional ratio is based on unscrubbed financial data. Interest Coverage is one of the 5 ratios that drives our Credit Ratings. Get explanations and comparisons for the other four metrics here.

No Bias, More Coverage, and Better Analytics: A New Paradigm for Credit Ratings

Though legacy providers, e.g. Moody's, S&P, and Fitch, have dominated the credit ratings industry for some time, our Credit Ratings offer these advantages:

- more coverage: ~2,700 companies vs. ~1,500 for S&P
- more frequent updates: we update all ~2,700 of our credit ratings quarterly while S&P updates ratings for ~400 companies per year
- free of conflicts of interest that continue to taint legacy ratings.

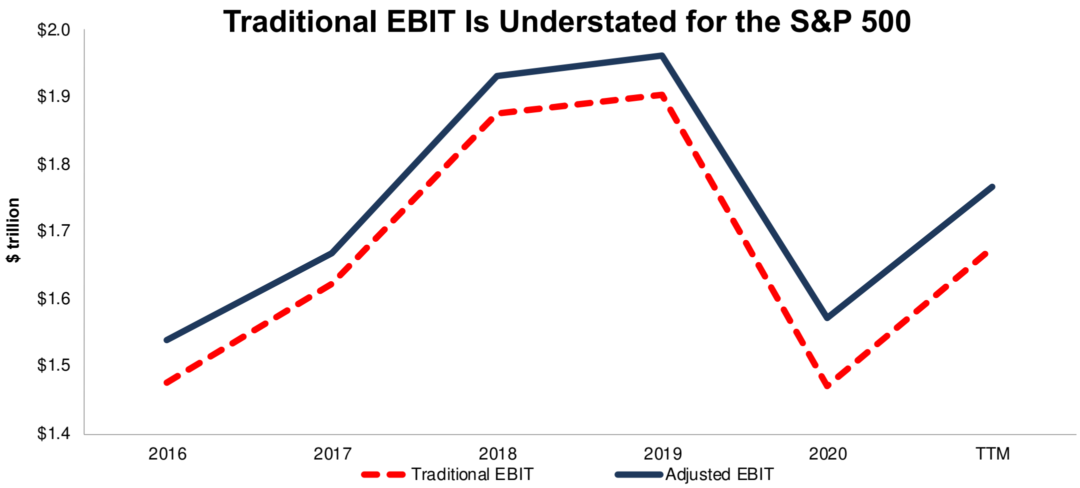
Most importantly, superior fundamental data drives material differences in our Credit Ratings and research compared to legacy firms' research and ratings. This report will show how Interest Coverage ratings for 6% of S&P 500 companies are misleading because they rely on unscrubbed data.

We also detail the differences that better data makes at the aggregate[1], i.e. S&P 500[2], level and the individual company level (see Appendix) so readers can easily quantify the benefits of our superior data.

Unscrubbed EBIT Is Understated by 5% for the S&P 500

We use EBIT as the numerator for the Interest Coverage ratio. Figure 1 shows the difference between Traditional EBIT and our Adjusted EBIT since 2016. Over the trailing twelve months (TTM), Traditional EBIT understates our Adjusted EBIT by $88 billion, or 5% of Traditional EBIT.

Figure 1: Traditional Vs. Adjusted EBIT for S&P 500



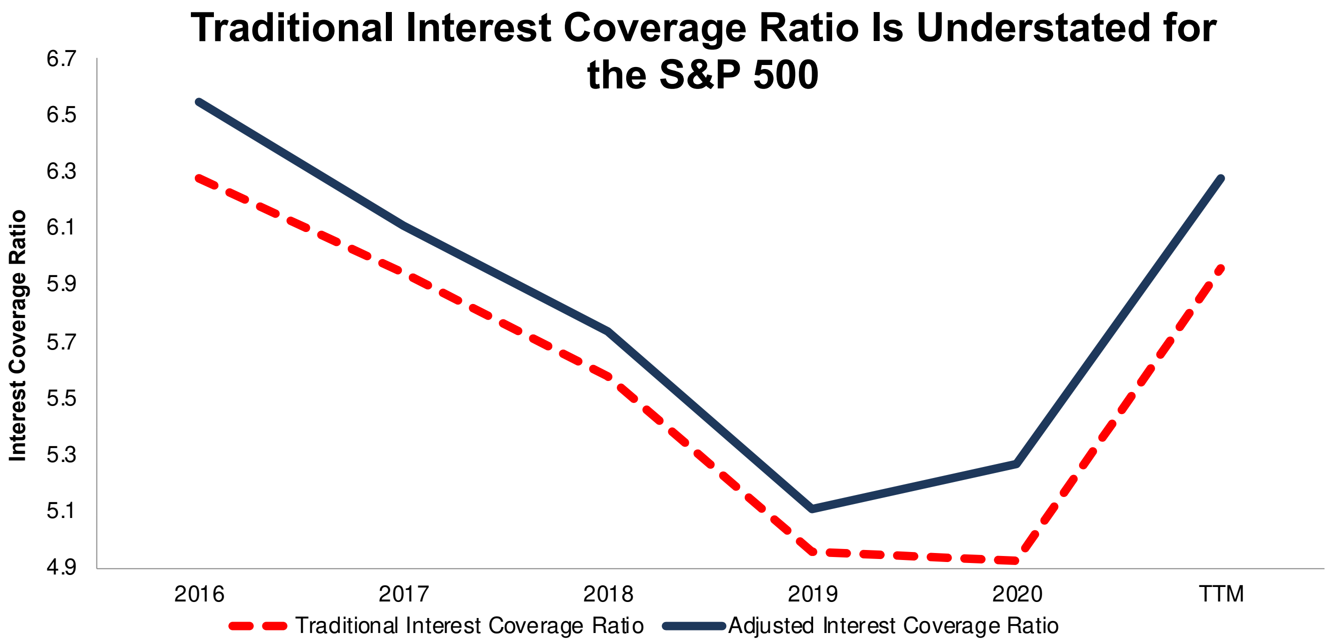
Sources: New Constructs, LLC and company filings.

[1] We calculate the S&P 500 Traditional and Adjusted EBIT by aggregating the results for all current members of the S&P 500.
[2] In this analysis, we use the 494 companies for which we have data back to 2016 and are currently in the S&P 500.

Traditional Interest Coverage Ratio Is Understated by 5% at the Aggregate Level

We use the same Interest Expense value as the denominator for both our Traditional and Adjusted Interest Coverage ratio, which means, the difference between Traditional and Adjusted EBIT drives the difference between the Traditional and Adjusted Interest Coverage ratios. Figure 2 shows that the Traditional Interest Coverage ratio has been understated since 2016. Over the TTM, the Traditional Interest Coverage ratio of 6.0 is lower than the Adjusted Interest Coverage ratio of 6.3 and is understated by 5%.

Figure 2: Traditional Vs. Adjusted Interest Coverage ratio for S&P 500



Sources: New Constructs, LLC and company filings.

Even Bigger Differences Emerge at the Individual Company Level

When analyzing individual companies, we see very large differences in Traditional and Adjusted EBIT and Traditional and Adjusted Interest Coverage ratios. For example, even though there is a 5% difference between Traditional and Adjusted EBIT at the aggregate level, at the company level, we find Traditional EBIT understated by as much as 1,157% and overstated by as much as 155%. 19% percent of the firms in the S&P 500 have Traditional EBIT that is over/understated by 10% or more.

Figure 3 shows the number of S&P 500 companies with understated and overstated Interest Coverage ratios. Understated ratios have negative Interest Coverage ratio distortion[3], and overstated ratios have positive distortion.

About 59% of S&P 500 firms' Traditional Interest Coverage ratios are understated, and 25% are overstated.

Figure 3: Number of S&P Companies with Under/Overstated Interest Coverage ratios: TTM

	# of Companies	Average Interest Coverage Ratio Distortion
Understated Ratio	295 companies	(24%)
Overstated Ratio	123 companies	6%
No difference	82 companies	n/a

Sources: New Constructs, LLC and company filings.

[3]Interest Coverage ratio Distortion equals (Traditional Interest Coverage ratio - Adjusted Interest Coverage ratio) / absolute value of Traditional Interest Coverage ratio.

Figure 4 lists ten S&P 500 companies with the most understated and overstated Interest Coverage ratios over the TTM.

Note: we detail the data and disclosures that drive the differences in Traditional versus Adjusted Interest Coverage for Raytheon Technologies (RTX) and Tesla Inc (TSLA) in the Appendix to this report.

Figure 4: Companies with Under/Overstated Interest Coverage ratios: TTM

Ticker	Name	Traditional Interest Coverage Ratio	Adjusted Interest Coverage Ratio	Interest Coverage Ratio Distortion
Most Understated				
RTX	Raytheon Technologies	(0.4)	4.4	(1,157%)
WBA	Walgreens Boots Alliance	(0.8)	3.9	(589%)
VNO	Vornado Realty Trust	0.3	2.1	(544%)
HBI	Hanesbrands Inc.	0.9	4.2	(347%)
VTRS	Viatris Inc.	(1.0)	2.0	(306%)
Most Overstated				
VLO	Valero Energy Corp	0.1	<0.0	155%
CINF	Cincinnati Financial Corp	72.2	17.0	76%
TSLA	Tesla Inc	3.3	1.1	65%
CARR	Carrier Global Corp	6.7	3.3	51%
UDR	UDR Inc.	1.1	0.7	34%

Sources: New Constructs, LLC and company filings.

Ratings Based on Traditional Ratios Are Misleading

Not surprisingly, differences between Traditional and Adjusted ratios drive differences in the Credit Ratings we derive for Interest Coverage.

Figure 5 shows how our Credit Ratings align with legacy firms' ratings systems and the percentage of Traditional Interest Coverage ratings that are different from ratings based on Adjusted ratios for companies in the S&P 500. Overall, 6% of the Traditional Interest Coverage ratings are different from our Adjusted Interest Coverage ratings because they rely on unscrubbed data.

As we explain in our Credit Ratings methodology, we set the Interest Coverage ratio thresholds so that the distribution of our ratings is comparable to the distribution of ratings for legacy firms. We use the Traditional version of the Interest Coverage ratio to set thresholds so that the difference in our ratings comes from the difference in our data.

Figure 5: S&P 500: Percent of Traditional Interest Coverage Ratings That Are Misleading

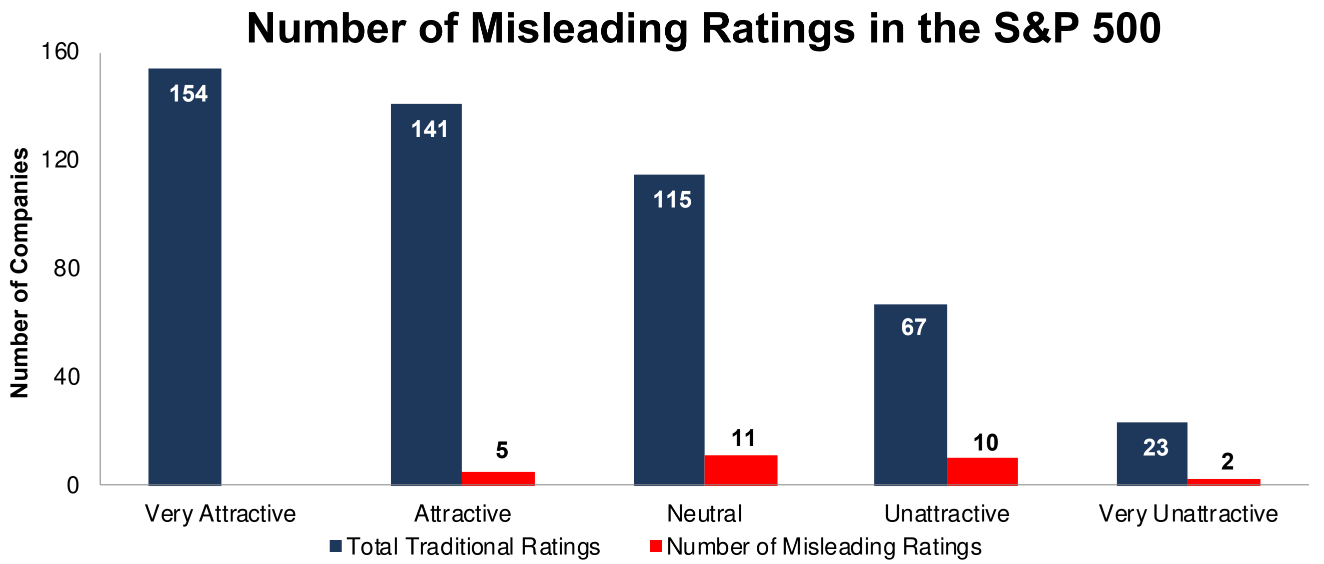
New Constructs Rating	Moody's Rating	S&P Rating	Fitch Rating	Traditional Interest Coverage Ratings That Are Misleading
Very Attractive	Aaa to Aa3	AAA to AA-	AAA to AA-	0%
Attractive	A1 to A3	A+ to A-	A+ to A-	4%
Neutral	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	10%
Unattractive	Ba1 to B3	BB+ to B-	BB+ to B-	15%
Very Unattractive	Caa1 to C	CCC+ to D	CCC to D	0%
Total				**6%**

Sources: New Constructs, LLC and company filings.

Figure 6 provides more details on the number of companies whose Traditional Interest Coverage ratings are different from the rating based on Adjusted Interest Coverage ratios.

For example, 10 out of 67 (15%) companies that earn an Unattractive Interest Coverage rating based on the Traditional ratio earn a different rating based on the Adjusted ratio.

Figure 6: S&P 500: Number of Misleading Traditional Interest Coverage Ratings



Sources: New Constructs, LLC and company filings.

We dedicate the Appendix of this report to showing readers exactly how our Adjusted values for EBIT and Interest Coverage ratios are different and better than the unscrubbed versions.

This article originally published on [July 13, 2021](#).

Disclosure: David Trainer, Kyle Guske II, Alex Sword, and Matt Shuler receive no compensation to write about any specific stock, style, or theme.

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Appendix: Auditing the Differences in Traditional Vs. Adjusted Values

This Appendix will show exactly how our Adjusted values for EBIT and Interest Coverage ratios differ from the Traditional versions for Raytheon Technologies and Tesla.

Raytheon Technologies: The Difference in Traditional Vs. Adjusted Values

Figure 7 shows the differences between Traditional and Adjusted EBIT for Raytheon Technologies. The difference between Raytheon Technologies' Traditional EBIT and Adjusted EBIT is -$6.6 billion, or -1,157% of the absolute value of Traditional EBIT.

Figure 7: Raytheon Technologies: Traditional Vs. Adjusted Interest Coverage Components

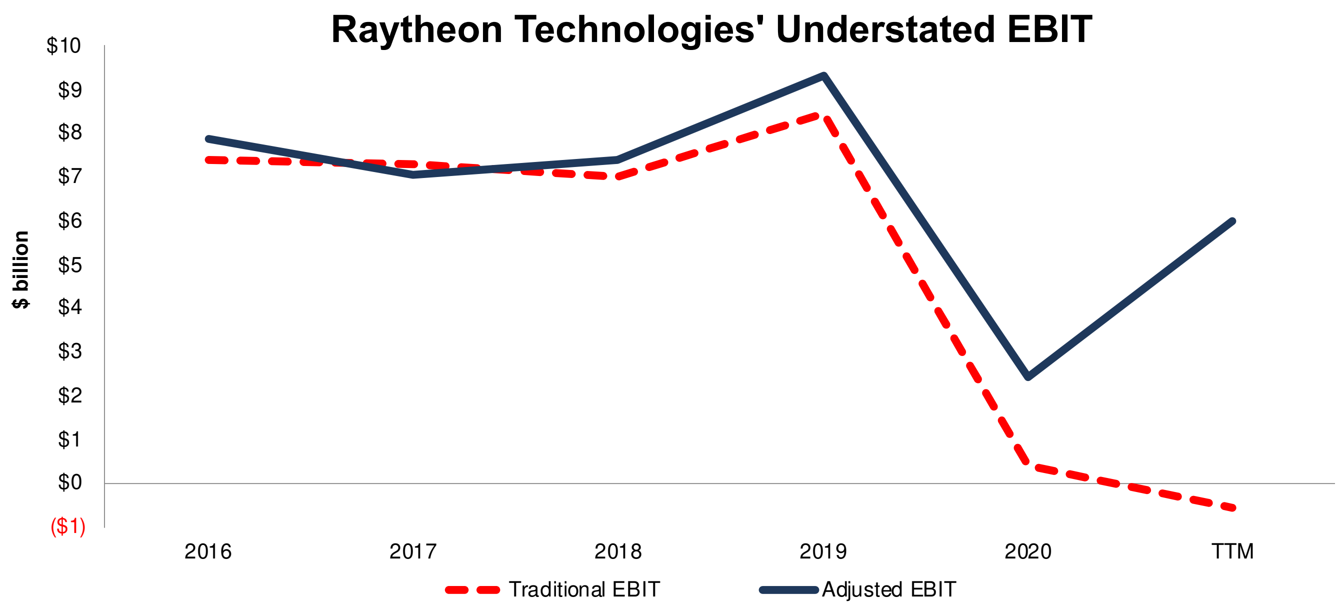
	EBIT ($mm)	Interest Coverage Ratio
Traditional	($569)	(0.4)
Adjusted	$6,017	4.9
Difference	($6,586)	(1,157%)[4]

Sources: New Constructs, LLC and company filings.

Reconciling Raytheon Technologies' Traditional and Adjusted EBIT

Raytheon Technologies' understated EBIT drives its understated Interest Coverage ratio. Figure 8 shows the firm's Traditional and Adjusted EBIT since 2016. Notice the large divergence between Traditional and Adjusted EBIT since 2020.

Figure 8: Raytheon Technologies: Traditional Vs. Adjusted Debt: 2016-TTM



Sources: New Constructs, LLC and company filings.

The -$6.6 billion difference between Raytheon Technologies' Traditional and Adjusted EBIT is driven by:

- $6.4 billion in hidden non-operating expense which includes
  - $5.7 billion in acquisitions and divestitures – Page 39 1Q21 10-Q
  - $397 million in restructuring charges recorded in cost of sales – Page 116 2020 10-K
  - $100 million in restructuring charges recorded within selling, general & administrative costs – Page 116 2020 10-K

[4] This number is the Interest Coverage ratio Distortion, which equals (Traditional Interest Coverage ratio - Adjusted Interest Coverage ratio) / absolute value of Traditional Interest Coverage ratio.

  - $142 million in integration costs – Page 89 2020 10-K
  - $23 million in aggregate transaction costs recorded in selling, general and administrative costs – Page 91 2020 10-K
  - $23 million in restructuring charges recorded in selling, general and administrative costs – Page 23 1Q21 10-Q
  - $20 million in restructuring charges recorded in cost of sales – Page 12 1Q21 10-Q
  - $17 million in merger-related costs – Page 23 1Q21 10-Q
- $243 million in hidden asset write-downs – Page 76 2020 10-K
- -$51 million amortization of prior service cost – Page 107 2020 10-K

Figure 9 reconciles Raytheon Technologies' Traditional and Adjusted EBIT and details each of the adjustments listed above.

Figure 9: Raytheon Technologies: Adjusted Vs. Traditional EBIT Detailed Comparison

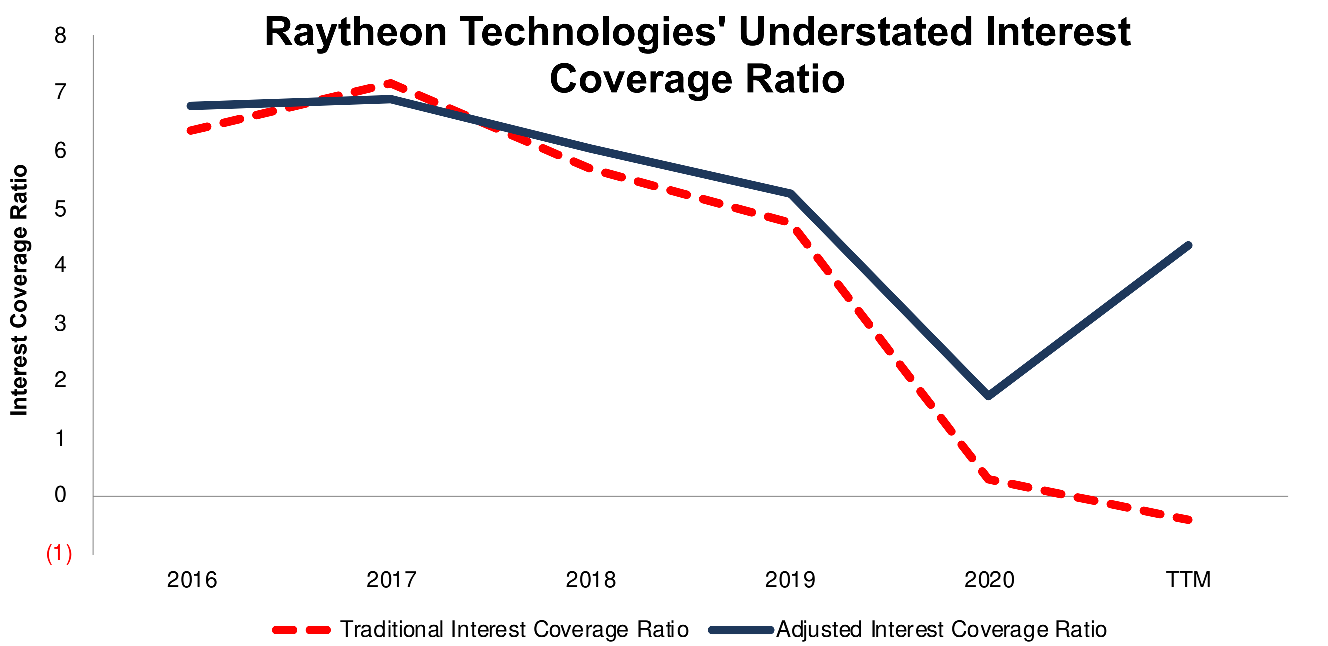
Adjusted EBIT (TTM)		Traditional EBIT (TTM)		Difference ($mm)
Item	**$ (mm)**	**Item**	**$ (mm)**	
Total Revenue	$53,628	Total Revenue	$53,628	
- Operating Expense	$54,197	- Operating Expense	$54,197	
+ Net Non-Operating Expense Hidden in Operating Earnings	$6,394			
+ Asset Write-Downs Hidden in Operating Earnings	$243			
+ Amortization of Prior Service Cost in Non-Operating Items	($51)			
= Adjusted EBIT	**$6,017**	**= Traditional EBIT**	**($569)**	**($6,586)**

Sources: New Constructs, LLC and company filings.

Raytheon Technologies' Interest Coverage Ratio Is Understated

With large understated Traditional EBIT, Raytheon Technologies' Interest Coverage ratio is one of the most understated of all companies in the S&P 500. Per Figure 10, Raytheon Technologies' Interest Coverage ratio has grown increasingly understated since 2019.

Figure 10: Raytheon Technologies: Traditional Vs. Adjusted Interest Coverage Ratio: 2016-TTM



Sources: New Constructs, LLC and company filings.

Tesla: The Difference in Traditional Vs. Adjusted Values

Figure 11 shows the differences between Traditional and Adjusted EBIT for Tesla. The difference between Tesla's Traditional and Adjusted EBIT is $1.4 billion, or 65% of Traditional EBIT.

Figure 11: Tesla: Traditional Vs. Adjusted Interest Coverage Components

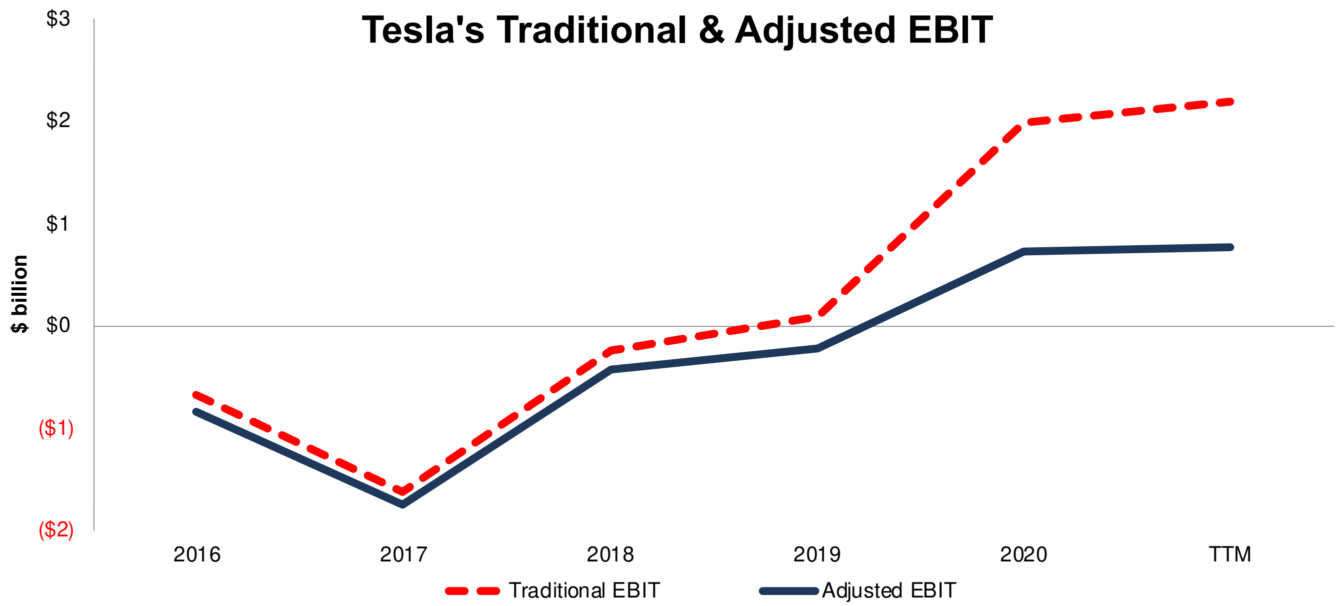
	EBIT ($mm)	Interest Coverage Ratio
Traditional	$2,204	3.3
Adjusted	$776	1.1
Difference	**$1,428**	**65%**[5]

Sources: New Constructs, LLC and company filings.

Reconciling Tesla's Traditional and Adjusted EBIT

Tesla's overstated EBIT drives its overstated Interest Coverage ratio. Figure 12 shows the firm's Traditional EBIT has grown increasingly overstated since 2017.

Figure 12: Tesla: Traditional Vs. Adjusted EBIT: 2016-TTM



Sources: New Constructs, LLC and company filings.

The $1.4 billion difference between Tesla's Traditional and Adjusted EBIT is driven by:

- $1.7 billion in hidden non-operating income which includes
  - $1.2 billion in sale of automotive regulatory credits – Page 41 2020 10-K
  - $518 million in automotive regulatory credits – Page 10 1Q21 10-Q
- $316 million in hidden asset write-downs which includes
  - $157 million in inventory and purchase commitments write-downs – Page 58 2020 10-K
  - $110 million in loss on disposals of fixed assets – Page 58 2020 10-K
  - $49 million in inventory and purchase commitments write-downs – Page 8 1Q21 10-Q

Figure 13 reconciles Tesla's Traditional and Adjusted EBIT and details each of the adjustments listed above.

[5] This number is the Interest Coverage ratio Distortion, which equals (Traditional Interest Coverage ratio - Adjusted Interest Coverage ratio) / absolute value of Traditional Interest Coverage ratio.

Figure 13: Tesla: Adjusted Vs. Traditional EBIT Detailed Comparison

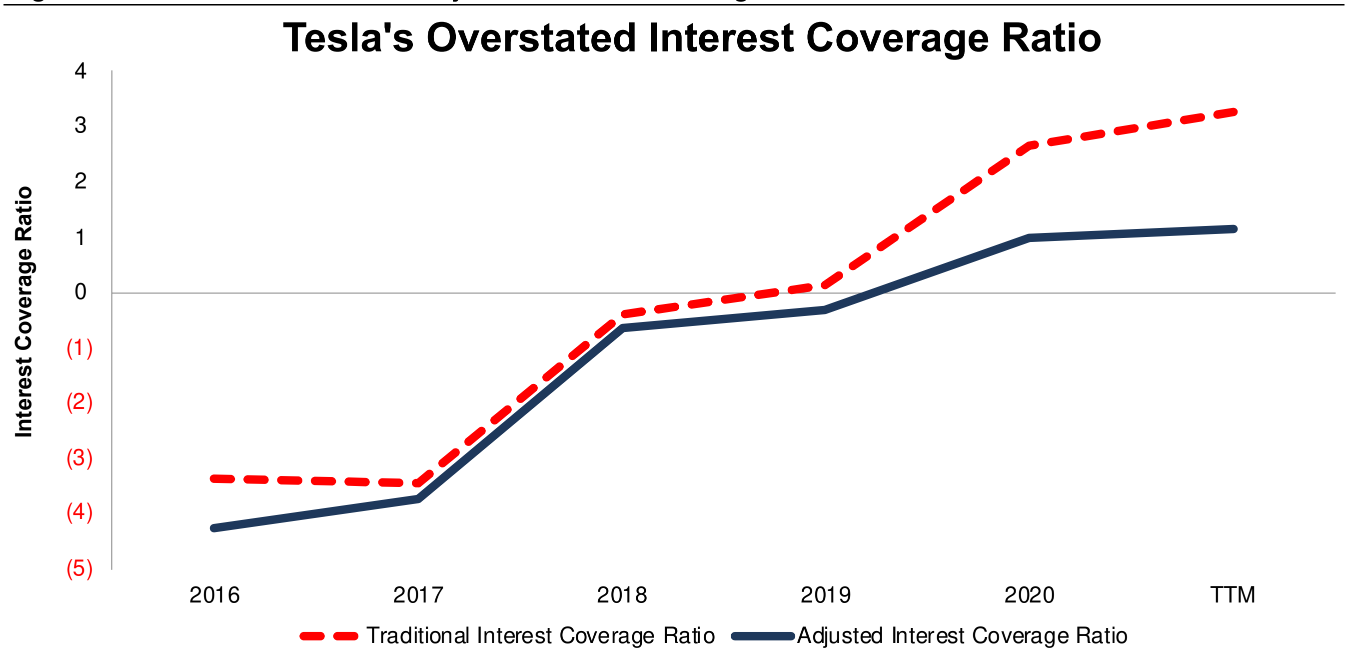
Adjusted EBIT (TTM) Item	$ (mm)	Traditional EBIT (TTM) Item	$ (mm)	Difference ($mm)
Total Revenue	$35,940	Total Revenue	$35,940	
- Operating Expense	$33,736	- Operating Expense	$33,736	
+ Net Non-Operating Expense (Income) Hidden in Operating Earnings	($1,744)			
+ Asset Write-Downs Hidden in Operating Earnings	$316			
= Adjusted EBIT	**$776**	**= Traditional EBIT**	**$2,204**	**$1,428**

Sources: New Constructs, LLC and company filings.

Tesla's Interest Coverage Ratio Is Overstated

With overstated Traditional EBIT, Tesla's Interest Coverage is one of the most overstated of all companies in the S&P 500. Per Figure 14, Tesla's Interest Coverage has become increasingly overstated since 2018.

Figure 14: Tesla: Traditional Vs. Adjusted Interest Coverage ratio: 2016-TTM



Sources: New Constructs, LLC and company filings.

It's Official: We Offer the Best Fundamental Data in the World

Many firms claim their research is superior, but none of them can prove it with independent studies from highly-respected institutions as we can. Three different papers from both the public and private sectors show:

1. Legacy fundamental datasets suffer from significant inaccuracies, omissions and biases.
2. Only our "novel database" enables investors to overcome these flaws and apply reliable fundamental data in their research.
3. Our proprietary measures of Core Earnings and Earnings Distortion materially improve stock picking and forecasting of profits.

Best Fundamental Data in the World

Forthcoming in The Journal of Financial Economics, a top peer-reviewed journal, Core Earnings: New Data & Evidence proves our Robo-Analyst technology overcomes material shortcomings in legacy firms' data collection processes to provide superior fundamental data, earnings models, and research. More details.

Key quotes from the paper:

- "[New Constructs'] *Total Adjustments* differs significantly from the items identified and excluded from Compustat's adjusted earnings measures. For example… 50% to 70% of the variation in *Total Adjustments* is not explained by *S&P Global's (SPGI) Adjustments* individually." – pp. 14, 1st para.
- "A final source of differences [between New Constructs' and S&P Global's data] is due to data collection oversights…we identified cases where Compustat did not collect information relating to firms' income that is useful in assessing core earnings." – pp. 16, 2nd para.

Superior Models

A top accounting firm features the superiority of our ROIC, NOPAT and Invested Capital research to Capital IQ & Bloomberg's in Getting ROIC Right. See the Appendix for direct comparison details.

Key quotes from the paper:

- "…an accurate calculation of ROIC requires more diligence than often occurs in some of the common, off-the-shelf ROIC calculations. Only by scouring the footnotes and the MD&A [as New Constructs does] can investors get an accurate calculation of ROIC." – pp. 8, 5th para.
- "The majority of the difference…comes from New Constructs' machine learning approach, which leverages technology to calculate ROIC by applying accounting adjustments that may be buried deeply in the footnotes across thousands of companies." – pp. 4, 2nd para.

Superior Stock Ratings

Robo-Analysts' stock ratings outperform those from human analysts as shown in this paper from Indiana's Kelley School of Business. Bloomberg features the paper here.

Key quotes from the paper:

- "the portfolios formed following the buy recommendations of Robo-Analysts earn abnormal returns that are statistically and economically significant." – pp. 6, 3rd para.
- "Our results ultimately suggest that Robo-Analysts are a valuable, alternative information intermediary to traditional sell-side analysts." – pp. 20, 3rd para.

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We believe every investor deserves to know the whole truth about the profitability and valuation of any company they consider for investment. More details on our cutting-edge technology and how we use it are here.

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