CALCBENCH

Next Generation Financial Data Tools

Non-GAAP Reconciliations Study

In Collaboration with

Suffolk University's

Accounting Winternship Class of 2022

SUFFOLK UNIVERSITY
SAWYER BUSINESS SCHOOL

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Non-GAAP Reconciliations Study

What we did

For the second year in a row, we examine companies reporting non-GAAP Net Income or non-GAAP Earnings Per Share (EPS). This year we examined the 2021 earnings releases for 123 companies randomly chosen from the S&P 500. We further examine the specific adjustments companies made to reconcile non-GAAP Net Income with GAAP Net Income. We report the findings of this analysis and contrast it with our findings last year, where we examined the 2020 earnings releases for 59 companies from the S&P 500 that had the largest difference where non-GAAP exceeded GAAP.

Key Findings

- Adjusted (non-GAAP) Net Income was higher than GAAP Net Income by an average $460M per company, or about 14% of GAAP Net Income.
- When examining non-GAAP reconciliations, we found a total of 718 individual reconciling items for our sample, with a total value of almost $86B and an average value of almost $120M per item.
- The category of adjustments to GAAP Net Income with the highest value was Amortization of Intangibles, which account for more than half of the total adjustment ($45.5B).
- The second highest category was Stock-Based Compensation, which accounted for about 16% of total adjustment ($13.8B).
- These findings question the informative value of as-reported GAAP Net Income and raise questions about companies' motivations in reporting Adjusted Net Income.

Companies examined

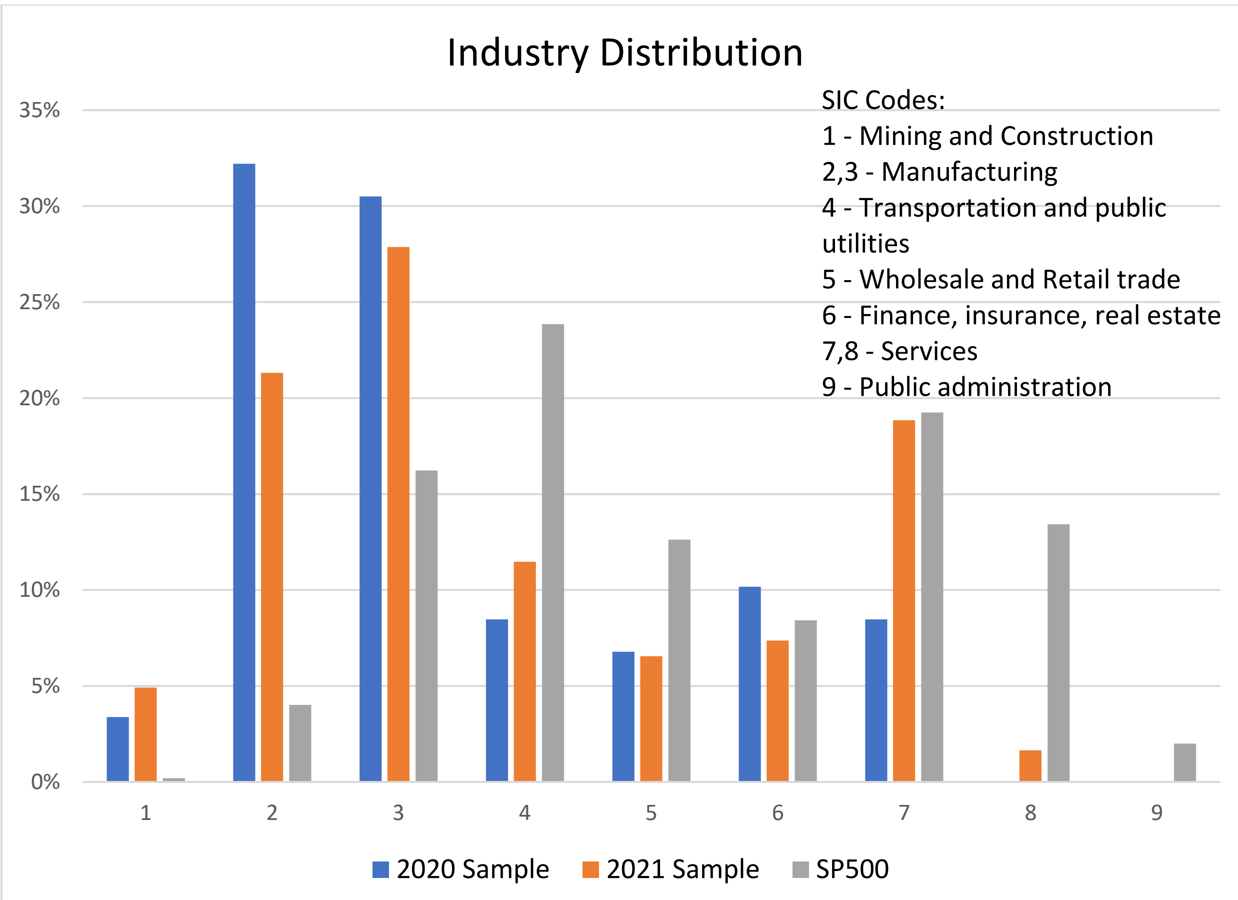
Sample (from S&P 500)	# of firms	Avg. Market Cap	Avg. GAAP Net Income	Avg. Difference non-GAAP to GAAP (% of NI)
2021 – random	123	$80,367,043,844 (12/31/2021)	$3,339,067,626	$459,776,016 (14%)
2020 – largest adjustments	59	$81,259,555,714 (12/31/2020)	$2,207,792,085	$1,746,385,475 (79%)

- The average size of companies examined was about $80B (based on end-of-year market cap).
- In our 2021 sample of random firms, non-GAAP Net Income was higher than GAAP Net Income by about 14%.
- In our 2020 sample of firms with the largest differences between GAAP and non-GAAP Net Income, non-GAAP Net Income was higher than GAAP Net Income by about 79%.

Industry analysis

- We compare the industry distribution (based on one digit SIC code) of the 2020 sample, the 2021 sample, and the entire S&P 500.

- As shown by the chart below, the distributions of firms for both the 2020 and 2021 sample seem similar. We see many companies in mining and manufacturing reporting non-GAAP income.
- It is interesting that mining and manufacturing companies are over-represented in both the 2020 and 2021 samples compared to their participation in the S&P 500 index. Meaning mining and manufacturing companies report non-GAAP income relatively more often, compared to other industries. Transportation, public utilities, and some service companies seem to report non-GAAP adjustments less frequently.

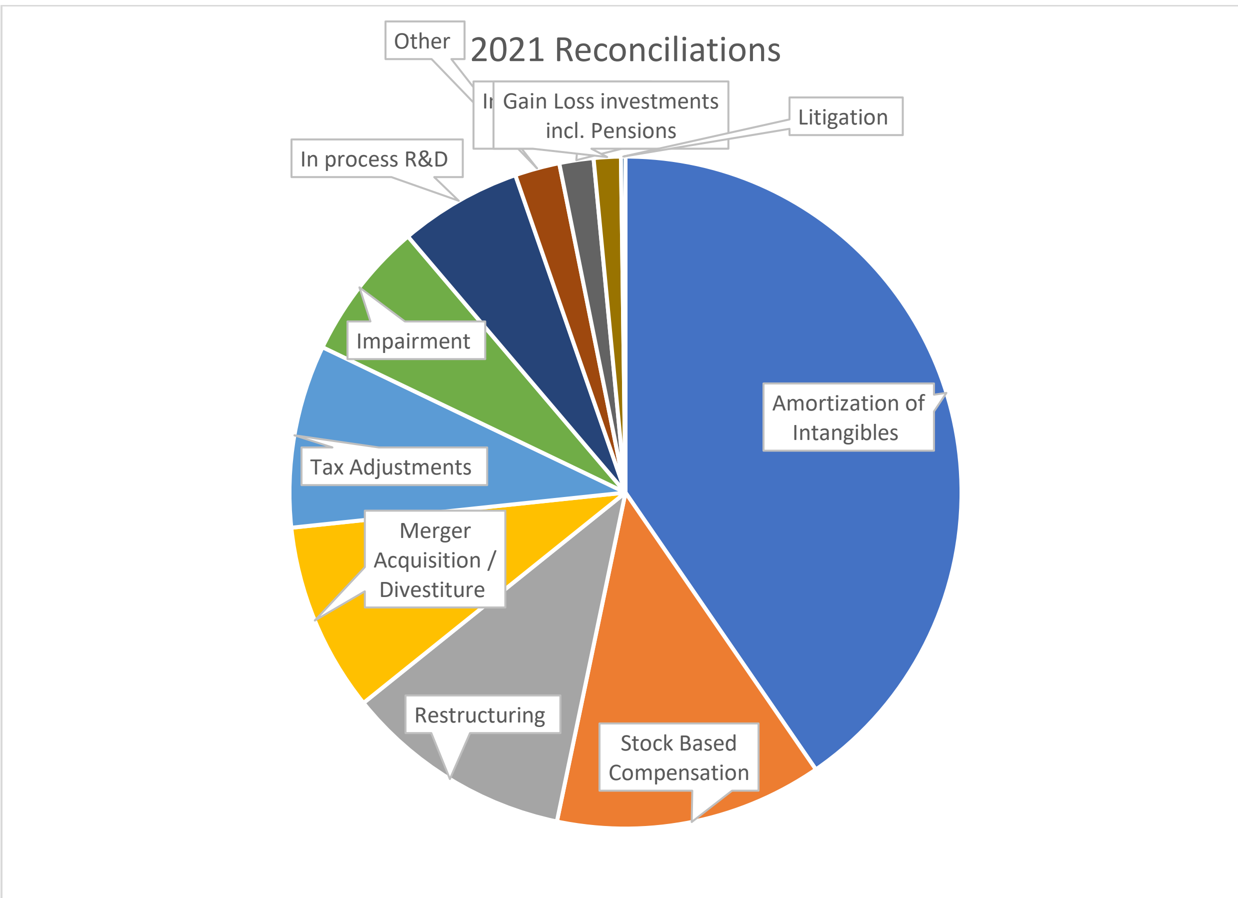


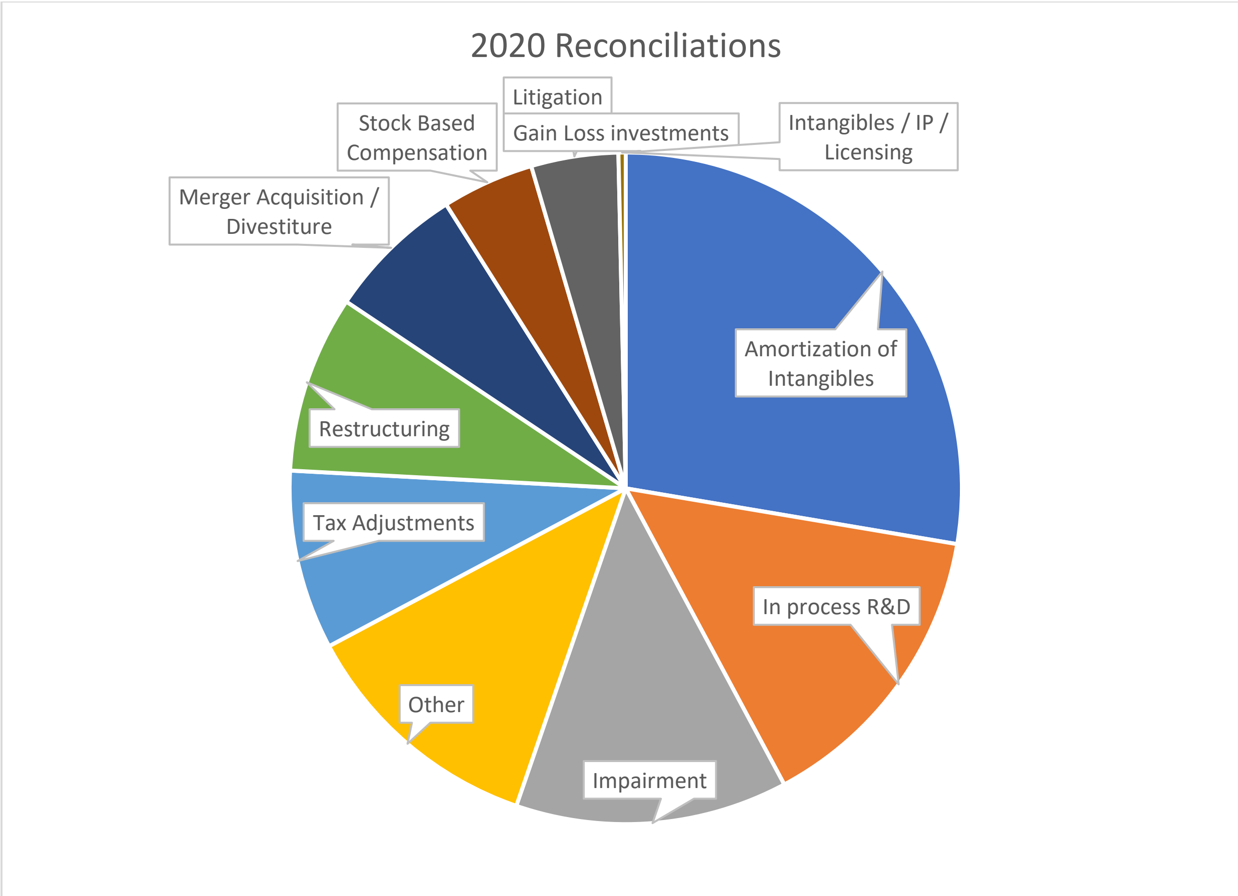
Adjustments Analysis

We examine the reconciliation between GAAP and non-GAAP Net Income and study the different reconciling items companies used. We classify the different reconciling items into 11 categories to study how common the different categories are.

- Average specific adjustment to GAAP Net Income was almost $120M (non-GAAP NI was higher). Last year, when focusing on the largest differences, the average adjustment was about $549M.
- Twice as many companies this year, three times as many adjustments:
    - An average of 5.8 adjustments per company in this year's sample;
    - An average of 4 adjustments per company in last year's sample.

- Amortization of intangibles continues to be the largest adjustment (50% of total amount adjusted this year, compared to 33% in last year's sample). The majority of this amount is coming from companies in the pharmaceutical industry (SIC 2834).
- This year, the second- and third-ranked categories, in terms of dollars adjusted, were stock-based compensation and restructuring costs. In last year's sample second and third place went to in-process R&D and impairment costs, respectively.
- Not much difference between samples in tax and M&A related adjustments in their portion of total adjustments.





2021 reconciliations

Category	Adjustment Count	Dollars Adjusted (in millions USD)	Percent of Total	Average Adjustment (in millions USD)
Amortization of Intangibles	64	43,505	50.63%	680
Stock Based Compensation	29	13,838	16.11%	477
Restructuring	48	11,799	13.73%	246
Merger Acquisition / Divestiture	71	9,794	11.40%	138
Tax Adjustments	112	(9,458)	-11.01%	(84)
Impairment	36	7,183	8.36%	200
In process R&D	12	6,339	7.38%	528
Other	185	2,320	2.70%	12
Intangibles / IP / Licensing	6	1,769	2.06%	295
Gain Loss investments incl. Pensions	128	(1,398)	-1.63%	(11)
Litigation	27	230	0.27%	9
Total	**718**	**85,922**	**100.00%**	**120**

2020 reconciliations

Category	Adjustment Count	Dollars Adjusted (in millions USD)	Percent of Total	Average Adjustment (in millions USD)
Amortization of Intangibles	33	40,074	33.35%	1,214
In process R&D	7	21,056	17.52%	3,008
Impairment	15	18,977	15.79%	1,265
Other	48	17,285	14.39%	360
Tax Adjustments	36	(12,506)	-10.41%	(347)
Restructuring	24	13,648	10.30%	569
Merger Acquisition / Divestiture	32	9,628	8.01%	301
Stock Based Compensation	13	6,430	5.35%	495
Litigation	14	6,068	5.05%	433
Gain Loss investments	19	(504)	-0.42%	(27)
Intangibles / IP / Licensing	0	0	0.00%	
Total	**241**	**120,156**	**100.00%**	**549**

What does it mean?

- Companies adjust GAAP earnings either because the adjusted (non-GAAP) earnings are more informative and useful for investors, or because companies are trying to show more positive results than presented by the GAAP earnings.

  Transitory vs. permanent
- Recurring earnings items are typically more significant in predicting a company's future earnings and assessing its value. A common approach to evaluating companies' earnings is separating transitory and permanent items.
- Some of the adjustment categories are more likely to be transitory (for example, Restructuring, Merger& Acquisition, or Divestiture). This would suggest that adjusting for those items may eliminate more transitory items from reported earnings.
- Some of the adjustment categories are more likely to be permanent (such as Amortization of Intangibles, Stock-Based Compensation, or even Tax Adjustments). If these are permanent items, eliminating them would not produce more informative earnings.
- Should companies disclose why they think the tax adjustments are unusual and transitory so investors can better evaluate them?

Should accounting rules change?

- With the amortization of intangibles being the largest category of adjustments, does this mean that the amortization of intangibles is not useful information for investors? Would adjusting GAAP Net Income to exclude the amortization make the adjusted Net Income more useful?
- If that is the case, should GAAP accounting rules change and not require the amortization of intangibles? Should they just be tested annually like goodwill? Maybe this change should be only for the pharmaceutical industry?

About this report

This report was prepared by Calcbench in collaboration with Suffolk University's Accounting Winternship Class of 2022, led by Professors Tracey Riley and Melissa Renschler. Students participating in the report include: Miguel Cruz, Nicholas Curtis, Cole Hamparian, Mikayla Hopkins, Joshua Keizer, Carmela Leo, Cherissa Leon, Hoang Ly, Emily Nguyen, Lam Nguyen, Alicia Poulin, Michael Power, Lissy Rodriguez, Jenna Rusconi, Robert Silva, Andrew Tham, and Michael Tracchia.