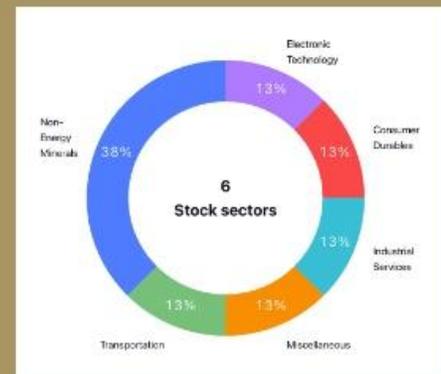


## Portfolio Intelligence Report (04.30.23): The End of Accounting In Practice (NRDY & SQ)

Recent Trade Alerts						
Trade	Ticker	Description	P/L (bps)	Date	Sector	Notes
SELL FULL	NQM2023	NASDAQ 100	-39	04-26-2023	FUTURES	CLOSED BELOW RP

### YTD Monthly Gain/Loss

### Portfolio Allocation



“The End of Accounting” is my favorite finance/accounting book. It highlights the fact that GAAP accounting information is less valuable than ever for three specific reasons:

- The rise and accounting of intangible assets
- The growing use of estimates in financial reports
- Unrecorded events that affect corporate value

This essay focuses on the rise of intangible assets and how we can reconstruct the balance sheet and income statement to reflect a company’s corporate value. We’ll use two Standby companies as examples: **Nerdy (NRDY)** and **Block, Inc. (SQ)**.

The goal of this exercise isn’t to convince ourselves that NRDY or SQ makes gobs of money after growth adjustments. Instead, it’s to reveal how the company’s current investments impact its P&L for better or worse and the resulting impact on ROIC.

By the end, you’ll have the tools and process to reconstruct any growth company’s balance sheet and income statement. So let’s get after it.

## Setting The Stage: Understanding The Basics of Growth Adjustments

Growth companies invest in R&D and SG&A to improve products/services and grow revenue and market share. But instead of recognizing those investments as assets to be amortized on the balance sheet, they're immediately expensed on the income statement like any other operating expense (rent, COGS, etc.).

The book argues, which we're practicing here, that **a portion of R&D investments and SG&A** should be recognized as assets and amortized over an appropriate lifespan.

This matters because adjusting for growth investments reduces expenses on the income statement and increases asset values on the balance sheet. The difference could be between overlooking a money-losing company or identifying the next high-growth, long-term winner.

How do we know what percentage of SG&A and R&D to amortize? And what's the average useful life? Luckily someone answered these questions for us.

In the whitepaper [“Value of Internally Generated Intangible Capital.”](#) authors Aneel Iqbal, Shivaram Rajgopal, Anup Srivastava, and Rong Zhao calculated the percentage of R&D and SG&A investment spending and useful life length for 42 industries (see below).

Industry	Investment Portions		Useful Lives	
	MainSG&A	R&D	MainSG&A	R&D
Precious Metals	80%	85%	3.3	6.9
Shipbuilding	79%	31%	4.1	1.7
Medical Equipment	78%	88%	2.7	6.1
Coal	75%	20%	1.7	5.5
Petroleum and Natural Gas	73%	57%	3.6	4.2
Food Products	73%	61%	0.9	4.1
Mining	72%	96%	3.6	6.9
Wholesale	69%	80%	3.6	4.0
Pharmaceutical Products	68%	89%	4.2	4.5
Automobiles and Trucks	67%	82%	2.8	5.7
Computers	66%	80%	3.3	4.4
Steel Works Etc.	66%	82%	5.0	3.2
Construction	65%	64%	3.6	5.8
Meals	63%	89%	4.8	5.3
Electronic Equipment	59%	77%	2.8	4.5
Communication	59%	56%	2.9	5.2
Machinery	58%	81%	4.3	3.7
Electrical Equipment	56%	77%	2.0	6.7
Business Services	54%	62%	4.4	6.7
Construction Materials	53%	72%	3.9	4.1
Rubber and Plastic Products	52%	80%	1.4	5.6
Fabricated Products	52%	73%	0.3	4.9
Measuring and Control Equipment	51%	72%	2.4	1.9
Candy & Soda	49%	93%	4.2	2.6
Apparel	49%	64%	2.9	4.5
Consumer Goods	42%	91%	4.8	6.4
Healthcare	41%	85%	2.8	2.9
Entertainment	38%	89%	4.5	6.0
Retail	38%	91%	2.4	3.9
Printing and Publishing	38%	91%	4.0	3.0
Textiles	35%	45%	2.1	4.1
Recreation	34%	70%	4.3	1.2
Chemicals	32%	61%	3.0	2.8
Agriculture	31%	88%	4.5	2.3
Aircraft	29%	80%	4.8	0.5
Personal Services	23%	31%	2.4	4.6
Tobacco Products	18%	86%	4.3	5.0
Defense	12%	7%	4.1	0.8
Business Supplies	11%	83%	4.9	4.9
Shipping Containers	9%	88%	0.6	1.3
Beer & Liquor	9%	98%	1.5	5.3
Transportation	0%	96%	2.6	3.5
<b>Weighted Average</b>	<b>54%</b>	<b>76%</b>	<b>3.3</b>	<b>4.4</b>

Source: Aneel Iqbal, Shivaram Rajgopal, Anup Srivastava, and Rong Zhao, "Value of Internally Generated Intangible Capital," Working Paper, February 2022.

The weighted average investment portion for SG&A and R&D is 54% and 76%, respectively. The useful life average is 3.3 years for SG&A and 4.4 years for R&D.

You can also see how these averages changed over time by industry. For example, “High-Tech” investments in SG&A have increased from 49% in the 1980s to 58% in the 2010s (see below).

**Table 3 Continued**  
**Panel D: Investment Portion and Useful Lives by Industry Sectors and Decades**

Industry Category	Decade	N	Investment Portion		Useful Lives	
			MainSG&A	R&D	MainSG&A	R&D
Consumer	1980s	6,966	0.49	0.73	2.32	3.19
	1990s	11,326	0.51	0.77	2.42	4.24
	2000s	9,829	0.49	0.83	3.17	4.79
	2010s	7,378	0.50	0.82	3.13	3.57
<b>Weighted Average</b>			<b>0.50</b>	<b>0.79</b>	<b>2.75</b>	<b>4.05</b>
Manufacturing	1980s	8,815	0.47	0.72	3.19	3.33
	1990s	11,378	0.52	0.72	3.64	3.70
	2000s	9,777	0.51	0.74	3.51	4.33
	2010s	8,160	0.57	0.67	4.17	4.13
<b>Weighted Average</b>			<b>0.52</b>	<b>0.71</b>	<b>3.62</b>	<b>3.87</b>
High-tech	1980s	5,927	0.49	0.59	3.13	4.14
	1990s	12,285	0.60	0.71	2.38	3.46
	2000s	15,523	0.58	0.74	3.56	4.81
	2010s	10,534	0.58	0.69	3.75	6.09
<b>Weighted Average</b>			<b>0.57</b>	<b>0.70</b>	<b>3.22</b>	<b>4.65</b>
Health	1980s	1,702	0.57	0.79	3.19	4.96
	1990s	5,071	0.63	0.86	3.11	3.13
	2000s	6,011	0.66	0.89	3.61	4.06
	2010s	5,504	0.75	0.90	4.07	5.38
<b>Weighted Average</b>			<b>0.67</b>	<b>0.88</b>	<b>3.57</b>	<b>4.28</b>

Let’s use a simple example to demonstrate the adjustments before diving into NRDY and SQ. Suppose Widget Company XYZ has the following income statement and balance sheet (note: we assume the company has no substantial liabilities for simplicity).

Income Statement		Balance Sheet		Return On Assets
Revenue	\$ 100.00	Cash	\$ 100.00	10.42%
COGS	\$ (25.00)	Inventory	\$ 25.00	
Gross Margin	\$ 75.00	A/R	\$ 15.00	
		<b>Current Assets</b>	\$ 140.00	
SG&A	\$ (50.00)	PP&E	\$ 125.00	
EBIT	\$ 25.00	Depreciation	\$ (25.00)	
Margin %	25.00%	Net PP&E	\$ 100.00	
		Intangibles	\$ -	
		<b>Total Assets</b>	\$ 240.00	

Company XYZ made \$25 in EBIT on \$240 in assets (~11% ROA) with \$50M of SG&A expense. Now let’s adjust the statements to reflect the company’s growth investments.

We use the above chart to assign **57% of SG&A to growth investment** across a **useful life of four years**.

Here’s how the statements look after adjusting for one year of operations (see below).

Adjusted Income Statement		Adjusted Balance Sheet		Adjusted ROA	17.74%
Revenue	\$ 100.00	Cash	\$ 100.00		
COGS	\$ (25.00)	Inventory	\$ 25.00		
<b>Gross Margin</b>	<b>\$ 75.00</b>	A/R	\$ 15.00		
		<b>Current Assets</b>	<b>\$ 140.00</b>		
SG&A (Core)	\$ (21.50)	PP&E	\$ 125.00		
SG&A (Growth)	\$ (7.13)	Depreciation	\$ (25.00)		
<b>EBIT</b>	<b>\$ 46.38</b>	Net PP&E	\$ 100.00		
Margin %	46.38%	Intangibles	\$ 28.50		
		Amortize	\$ (7.13)		
		Net Intangibles	\$ 21.38		
		<b>Total LT Assets</b>	<b>\$ 121.38</b>		
		<b>Total Assets</b>	<b>\$ 261.38</b>		

Notice how adjusting for growth investments changes Company XYZ's financials:

- EBIT increased by 86% to \$46
- Total SG&A expense decreased by ~43% to ~\$29
- Total Assets increased by ~9% to \$261.38
- Return On Assets increased by ~8% to 17.74%

This is why GAAP accounting fails companies that invest in growth. You can see the impact this has on valuations and multiples, too.

Now let's analyze our two Standby companies: **Nerdy (NRDY)** and **Block, Inc. (SQ)**.

## Growth-Adjusting Nerdy (NRDY) Financials

Nerdy (NRDY) is an online tutoring platform connecting students that need help with capable tutors desiring a part-time (or full-time) income. You can read our deep dive into the company [here](#).

Let's start with the income statement. Here's a snapshot of NRDY's trailing three-year PnL (via TIKR).

Income Statement   TIKR.com	12/31/20	12/31/21	12/31/22
Revenues ⓘ	103.97	140.66	162.67
<b>Total Revenues</b>	<b>103.97</b>	<b>140.66</b>	<b>162.67</b>
% <i>Change YoY</i> ⓘ	<b>14.9%</b>	<b>35.3%</b>	<b>15.6%</b>
Cost of Goods Sold ⓘ	(34.83)	(46.70)	(49.73)
<b>Gross Profit</b> ⓘ	<b>69.13</b>	<b>93.96</b>	<b>112.93</b>
% <i>Change YoY</i> ⓘ	<b>16.0%</b>	<b>35.9%</b>	<b>20.2%</b>
% <i>Gross Margins</i> ⓘ	<b>66.5%</b>	<b>66.8%</b>	<b>69.4%</b>
Selling General & Admin Expenses ⓘ	(87.07)	(187.41)	(202.26)
<b>Total Operating Expenses</b>	<b>(87.07)</b>	<b>(187.41)</b>	<b>(202.26)</b>
<b>Operating Income</b> ⓘ	<b>(17.94)</b>	<b>(93.45)</b>	<b>(89.33)</b>
% <i>Change YoY</i> ⓘ	<b>12.7%</b>	<b>421.0%</b>	<b>4.4%</b>
% <i>Operating Margins</i> ⓘ	<b>(17.3%)</b>	<b>(66.4%)</b>	<b>(54.9%)</b>

NRDY has lost nearly \$100M in the last two years without adjusting for growth investments. This isn't a huge issue, as the company has enough cash (and no debt) to sustain these losses.

But as CEO Chuck Cohn explains in the company's earnings calls, NRDY is in the growth stage of its company life cycle. It's investing in products, technology, and people through SG&A, which was \$202M in 2022.

In other words, the company *chooses to* lose money today in hopes of larger profits and market share tomorrow.

Then there's the balance sheet.

Balance Sheet   TIKR.com	12/31/20	12/31/21	12/31/22
Cash And Equivalents ⓘ	29.27	143.96	90.72
<b>Total Cash And Short Term Investments</b>	<b>29.27</b>	<b>143.96</b>	<b>90.72</b>
Accounts Receivable ⓘ	0.48	5.32	11.60
<b>Total Receivables ⓘ</b>	<b>0.48</b>	<b>5.32</b>	<b>11.60</b>
Prepaid Expenses ⓘ	0.57	3.59	3.71
Restricted Cash ⓘ	0.27	1.08	0.52
Other Current Assets	0.98	1.49	1.12
<b>Total Current Assets</b>	<b>31.56</b>	<b>155.45</b>	<b>107.66</b>
Gross Property Plant And Equipment ⓘ	22.84	28.47	39.09
Accumulated Depreciation ⓘ	(12.54)	(17.75)	(23.66)
<b>Net Property Plant And Equipment</b>	<b>10.30</b>	<b>10.72</b>	<b>15.43</b>
Goodwill ⓘ	5.72	5.72	5.72
Other Intangibles ⓘ	8.53	4.43	3.57
Other Long-Term Assets	1.17	0.83	0.32
<b>Total Assets</b>	<b>57.27</b>	<b>177.15</b>	<b>132.69</b>

NRDY has a clean balance sheet. The only real liability is deferred revenue; current cash covers total liabilities ~2x. But notice how the company only reports ~\$6M in intangible assets.

Let's see how the income statement and balance sheet change after adjustments.

### Adjusting NRDY's 2020 Statements

For this exercise, we'll classify NRDY as a "high-tech" software company. Using our reference chart above, we assign 57% of SG&A towards growth investments with a three-year useful life.

**Important Note:** We're analyzing the prior three years of income statement and balance sheet data. We add each year's amortization according to its useful life calculation.



<b>Income Statement</b>	<b>Unadjusted</b>	<b>Adjusted</b>	<b>% Increase/Decrease</b>	<b>Balance Sheet</b>	<b>Unadjusted</b>	<b>Adjusted</b>	
Revenues	140.66	140.66		Cash And Equivalents	143.96	143.96	
<b>Total Revenues</b>	<b>\$ 140.66</b>	<b>\$ 140.66</b>		<b>Total Cash And Short Term Investments</b>	<b>143.96</b>	<b>143.96</b>	
<b>% Change YoY</b>	<b>35.30%</b>	<b>35.30%</b>		Accounts Receivable	5.32	5.32	
Cost of Goods Sold	\$ (46.70)	\$ (46.70)		<b>Total Receivables</b>	<b>5.32</b>	<b>5.32</b>	
<b>Gross Profit</b>	<b>93.96</b>	<b>93.96</b>		Prepaid Expenses	3.59	3.59	
<b>% Change YoY</b>	<b>35.90%</b>	<b>35.90%</b>		Restricted Cash	1.08	1.08	
<b>% Gross Margins</b>	<b>66.80%</b>	<b>66.80%</b>		Other Current Assets	1.49	1.49	
SG&A (Core)	-187.41	-80.59	-57.00%	<b>Total Current Assets</b>	<b>155.45</b>	<b>155.45</b>	
SG&A (Growth)	0	-52.15					
<b>Total Operating Expenses</b>	<b>-187.41</b>	<b>-132.74</b>	<b>-29.17%</b>	Gross Property Plant And Equipment	28.47	28.47	
<b>Operating Income</b>	<b>-93.45</b>	<b>-38.78</b>	<b>-58.50%</b>	Accumulated Depreciation	-17.75	-17.75	
<b>% Operating Margins</b>	<b>-66.40%</b>	<b>-27.57%</b>	<b>58.48%</b>	<b>Net Property Plant And Equipment</b>	<b>10.72</b>	<b>10.72</b>	
				Goodwill	5.72	5.72	
				Other Intangibles	4.43	156.45	
				Accumulated Amortization	0	-52.15	
				Net Intangibles	4.43	104.30	
				Other Long-Term Assets	0.83	0.83	
	<b>Unadjusted</b>	<b>Adjusted</b>	<b>% Increase/Decrease</b>	<b>Total Assets</b>	<b>177.15</b>	<b>277.02</b>	<b>56.38%</b>
<b>Return On Assets</b>	-52.75%	-14.00%	73.46%				

Note how 2021's "SG&A (Growth)" includes 2020's \$16.54M amortization expense and 2021's \$35.61M amortization expense to reflect accumulated amortization based on each investment's useful life (3 years).

Total SG&A adjusted expenses reduced by 29% to \$133M, reflecting a 58% decrease in operating income losses (-\$39M in 2021). This resulted in a 73% increase in ROA from -53% to -14%.

Also, note how total assets grew by 56% to \$277M versus the unadjusted \$177M.

Finally, we have our 2022 adjusted financials.

## Adjusting NRDY's 2022 Statements

Our final adjustment year incurs the last \$16.51M amortized expense from 2020, our second \$35.61M amortized expense in 2021, and our first amortized expense in 2022.

The year's financials also have the final accumulated intangible asset value from the prior three years' growth investment, net of amortization.

Here's the result.

Income Statement	Unadjusted	Adjusted	% Increase/Decrease	Balance Sheet	Unadjusted	Adjusted	
Revenues	162.67	162.67		Cash And Equivalents	90.72	90.72	
<b>Total Revenues</b>	<b>\$ 162.67</b>	<b>\$ 162.67</b>		<b>Total Cash And Short Term Investments</b>	<b>90.72</b>	<b>90.72</b>	
% Change YoY	15.60%			Accounts Receivable	11.6	11.6	
Cost of Goods Sold	\$ (49.73)	\$ (49.73)		<b>Total Receivables</b>	<b>11.6</b>	<b>11.6</b>	
<b>Gross Profit</b>	<b>112.93</b>	<b>112.93</b>		Prepaid Expenses	3.71	3.71	
% Change YoY	20.20%			Restricted Cash	0.52	0.52	
% Gross Margins	69.40%	69.40%		Other Current Assets	1.12	1.12	
SG&A (Core)	-202.26	-86.97	-57.00%	<b>Total Current Assets</b>	<b>107.66</b>	<b>107.66</b>	
SG&A (Growth)	-90.55	-90.55		Gross Property Plant And Equipment	39.09	39.09	
<b>Total Operating Expenses</b>	<b>-202.26</b>	<b>-177.52</b>	-12.23%	Accumulated Depreciation	-23.66	-23.66	
<b>Operating Income</b>	<b>-89.33</b>	<b>-64.59</b>	-27.69%	<b>Net Property Plant And Equipment</b>	<b>15.43</b>	<b>15.43</b>	
% Operating Margins	-54.90%	-39.71%	27.67%	Goodwill	5.72	5.72	
				Other Intangibles	3.57	271.74	
				Accumulated Amortization	0	-90.55	
				Net Intangibles	3.57	181.19	
				Other Long-Term Assets	0.32	0.32	
				<b>Total Assets</b>	<b>132.7</b>	<b>310.32</b>	133.85%
	<b>Unadjusted</b>	<b>Adjusted</b>	<b>% Increase/Decrease</b>				
<b>Return On Assets</b>	-67.32%	-20.81%	69.08%				

Operating expenses declined by ~12% to \$173M, bringing Operating Income to -\$65M versus ~\$89M unadjusted.

I noticed how growth adjustments made less of an impact over time. For example, in 2020, adjusted operating expenses declined by 38%. In 2021, the difference was -29%. In other words, ramping SG&A expenses reduces the impact of investing for growth if revenue doesn't grow accordingly.

NRDY continued investing in growth despite revenue headwinds, which resulted in operating losses even after adjusting for growth and amortizing intangibles.

Finally, we can recreate a trailing three-year income statement and balance sheet to show adjusted growth (or decline) in assets (or expenses). See below.

Income Statement	2020	2021	2022	Balance Sheet	2020	2021	2022
Revenues	103.97	140.66	162.67	Cash And Equivalents	29.27	143.96	90.72
<b>Total Revenues</b>	<b>\$ 103.97</b>	<b>\$ 140.66</b>	<b>\$ 162.67</b>	<b>Total Cash And Short Term Investments</b>	<b>29.27</b>	<b>143.96</b>	<b>90.72</b>
% Change YoY	14.90%	35.30%	15.65%	Accounts Receivable	0.48	5.32	11.6
Cost of Goods Sold	\$ (34.83)	\$ (46.70)	\$ (49.73)	<b>Total Receivables</b>	<b>0.48</b>	<b>5.32</b>	<b>11.6</b>
<b>Gross Profit</b>	<b>69.13</b>	<b>93.96</b>	<b>\$ 112.93</b>	Prepaid Expenses	0.57	3.59	3.71
% Change YoY	16.00%	35.90%	20.19%	Restricted Cash	0.27	1.08	0.52
% Gross Margins	66.50%	66.80%	69.40%	Other Current Assets	0.98	1.49	1.12
SG&A (Core)	-37.44	-80.59	-86.97	<b>Total Current Assets</b>	<b>31.56</b>	<b>155.45</b>	<b>107.66</b>
SG&A (Growth)	-16.54	-52.15	-90.55	Gross Property Plant And Equipment	22.84	28.47	39.09
<b>Total Operating Expenses</b>	<b>-53.98</b>	<b>-132.74</b>	<b>-177.52</b>	Accumulated Depreciation	-12.54	-17.75	-23.66
<b>Operating Income</b>	<b>15.15</b>	<b>-38.78</b>	<b>-64.59</b>	<b>Net Property Plant And Equipment</b>	<b>10.30</b>	<b>10.72</b>	<b>15.43</b>
% Operating Margins	14.57%	-27.57%	-39.71%	Goodwill	5.72	5.72	5.72
				Other Intangibles	49.63	156.45	271.74
				Accumulated Amortization	-16.54	-52.15	-90.55
				Net Intangibles	33.09	104.3024	181.19
				Other Long-Term Assets	1.17	0.83	0.32
				<b>Total Assets</b>	<b>81.84</b>	<b>277.02</b>	<b>310.32</b>
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>YoY Growth</b>		238.51%	12.02%
<b>Return On Assets</b>	18.51%	-14.00%	-20.81%				

It's incredible how different NRDY looks once you properly view its growth investments as amortizable long-term assets, not immediate operating expenses.

## Growth-Adjusting Block, Inc. (SQ) Financials

Block (SQ) is a two-sided commerce ecosystem: **Square** and **Cash App**.

Square enables small businesses to sell goods and services, run payroll, receive short-term Square Capital Loans, and access Square Credit Cards.

Its Cash App business allows 50M+ users banking access with short-term loans (Cash App Borrow), direct deposit, automatic investing in stocks and bitcoin, and discounts on popular goods and services via Cash App Boost.

You can read our thoughts on SQ [here](#) and [here](#).

SQ is a highly innovative company that attracts the best talent in the fintech space, specifically in their Cash App business. This means they invest heavily in product development through the income statement in things like SG&A and R&D.

One quick note. SQ bought the BNPL platform Afterpay, which it records as Goodwill on its balance sheet. We will exclude the Afterpay purchase for our exercise to see SQ's core business adjustments.

We're treating SQ as a "high-tech" company, which means we attribute 70% of its R&D as investment spending with a useful life of five years (see reference chart above).

Let's run our growth-adjustment exercise on SQ's trailing three-year financials to see how the business model performs after accounting for the company's growth investments.

### Adjusting SQ's 2020 Statements

Here's SQ's adjusted 2020 income statement and balance sheet.

	Unadjusted	Adjusted	% Increase/Decrease		Unadjusted	Adjusted		Unadjusted	Adjusted
<b>Income Statement</b>				<b>Balance Sheet</b>					
Revenues	9,497.58	9,497.58		Cash And Equivalents	3,158.06	4,443.67	Gross Property Plant And Equipment	918.53	990.86
<b>Total Revenues</b>	<b>\$ 9,497.58</b>	<b>\$ 9,497.58</b>		Short Term Investments	695.11	869.28	Accumulated Depreciation	-228.12	-259.31
% Change YoY	101.50%	101.50%		<b>Total Cash And Short Term Investments</b>	<b>3,853.17</b>	<b>5,312.95</b>	<b>Net Property Plant And Equipment</b>	<b>690.41</b>	<b>731.55</b>
Cost of Goods Sold	\$(6,753.00)	\$(6,753.00)		Long-term Investments			Long-term Investments	872.72	1,608.35
<b>Gross Profit</b>	<b>2,744.58</b>	<b>2,744.58</b>		Accounts Receivable	1,066.86	1,261.31	Goodwill	316.7	519.28
% Change YoY	45.20%	45.20%		Other Receivables	148.61	228.91	Other Intangibles	137.61	257.05
% Gross Margins	28.90%	28.90%		Notes Receivable		91.45	SG&A Intangibles		962.66
SG&A (Core)	-1,688.87	-726.21	-57.00%	<b>Total Receivables</b>	<b>1,215.46</b>	<b>1,581.68</b>	SG&A Amortization		-320.89
SG&A (Growth)		-320.89		Inventory	61.13	77.06	Net SG&A Intangibles		641.77
R&D Expenses (Core)	-881.83	-264.55	-70.00%	Prepaid Expenses	34.28	63.34	R&D Intangibles		617.28
R&D Expenses (Growth)		-123.46		Loans Held For Sale	462.67	517.94	R&D Amortization		-123.46
Other Operating Expenses	-177.67	-187.99		Restricted Cash	30.28	18.78	Net R&D Intangibles		493.82
<b>Total Operating Expenses</b>	<b>-2,763.40</b>	<b>-1,623.09</b>	-41.26%	Other Current Assets	2,104.65	4,049.78	Other Long-Term Assets	90.48	288.62
<b>Operating Income</b>	<b>-18.82</b>	<b>1,121.49</b>	6059.01%	<b>Total Current Assets</b>	<b>7,761.63</b>	<b>11,621.52</b>	<b>Total Assets</b>	<b>9,869.55</b>	<b>16,161.97</b>
% Operating Margins	-0.20%	11.81%	6004.06%				<b>Return On Assets</b>	-0.19%	6.94%

Operating Income increased over 6,000% to \$1.1B for a nearly 12% EBIT margin. Adjusting for growth investments in R&D and SG&A reduced total operating expenses by 41%.

Balance sheet assets also increased by 64%, reflecting over \$1B in net SG&A and R&D growth assets.

Let's move to 2021's financial statements.

## Adjusting SQ's 2021 Statements

Check out the 2021 financial statements below. Note that 2021 includes the second amortization of 2020's investments *and* the first amortization of 2021's investments.

									Unadjusted	Adjusted	
<b>Income Statement</b>	<b>Unadjusted</b>	<b>Adjusted</b>	<b>% Increase/Decrease</b>	<b>Balance Sheet</b>	<b>Unadjusted</b>	<b>Adjusted</b>					
Revenues	17,661.20	17,661.20		Cash And Equivalents	4,443.67	4,443.67	Gross Property Plant And Equipment	990.86	990.86		
<b>Total Revenues</b>	<b>\$ 17,661.20</b>	<b>\$ 17,661.20</b>		Short Term Investments	869.28	869.28	<b>Net Property Plant And Equipment</b>	<b>731.55</b>	<b>731.55</b>		
<b>% Change YoY</b>	<b>86.00%</b>	<b>86.00%</b>		<b>Total Cash And Short Term Investments</b>	<b>5,312.95</b>	<b>5,312.95</b>	Long-term Investments	1,608.35	1,608.35		
Cost of Goods Sold	<b>\$ (13,218.74)</b>	<b>\$ (13,218.74)</b>		Accounts Receivable	1,261.31	1,261.31	Goodwill	519.28	519.28		
<b>Gross Profit</b>	<b>4,442.47</b>	<b>4,442.47</b>		Other Receivables	228.91	228.91	Other Intangibles	257.05	257.05		
<b>% Change YoY</b>	<b>61.90%</b>	<b>61.90%</b>		Notes Receivable	91.45	91.45	SG&A Intangibles		2444.66		
<b>% Gross Margins</b>	<b>25.20%</b>	<b>25.20%</b>		<b>Total Receivables</b>	<b>1,581.68</b>	<b>1,581.68</b>	SG&A Amortization		-814.89		
SG&A (Core)	-2,600.01	-1,118.00	-57.00%	Inventory	77.06	77.06	Net SG&A Intangibles		<b>1629.77</b>		
SG&A (Growth)		-814.89		Prepaid Expenses	63.34	63.34	R&D Intangibles		1585.97		
R&D Expenses (Core)	-1,383.84	-415.15	-70.00%	Loans Held For Sale	517.94	517.94	R&D Amortization		-317.19		
R&D Expenses (Growth)		-317.19		Restricted Cash	18.78	18.78	Net R&D Intangibles		<b>1268.78</b>		
Other Operating Expenses	-187.99	-187.99		Other Current Assets	4,049.78	4,049.78	Other Long-Term Assets	288.62	288.62		
<b>Total Operating Expenses</b>	<b>-4,171.84</b>	<b>-2,853.23</b>	-31.61%	<b>Total Current Assets</b>	<b>11,621.52</b>	<b>11,621.52</b>	<b>Total Assets</b>	<b>15,026.37</b>	<b>17,924.92</b>		19.29%
<b>Operating Income</b>	<b>270.63</b>	<b>1,589.24</b>	487.24%				<b>Return On Assets</b>	1.80%	8.87%		
<b>% Operating Margins</b>	<b>-0.20%</b>	<b>9.00%</b>	4599.25%								

A few things stand out:

- Total operating expenses decreased by 32% (again, less significant than 2020)
- Operating income increased by 487% to \$1.6B
- EBIT margins increased by nearly 5,000% to 9%
- Total Assets grew by 15% with a ~9% ROA

Onto 2022's adjusted financials.

## Adjusting SQ's 2022 Statements

Here are the adjusted 2022 financial statements.

									Unadjusted	Adjusted	
<b>Income Statement</b>	<b>Unadjusted</b>	<b>Adjusted</b>	<b>% Increase/Decrease</b>	<b>Balance Sheet</b>	<b>Unadjusted</b>	<b>Adjusted</b>					
Revenues	17,531.59	17,531.59		Cash And Equivalents	4,443.67	4,443.67	Gross Property Plant And Equipment	990.86	990.86		
<b>Total Revenues</b>	<b>\$ 17,531.59</b>	<b>\$ 17,531.59</b>		Short Term Investments	869.28	869.28	<b>Net Property Plant And Equipment</b>	<b>731.55</b>	<b>731.55</b>		
<b>% Change YoY</b>	<b>-0.70%</b>	<b>-0.70%</b>		<b>Total Cash And Short Term Investments</b>	<b>5,312.95</b>	<b>5,312.95</b>	Long-term Investments	1,608.35	1,608.35		
Cost of Goods Sold	<b>\$ (11,469.50)</b>	<b>\$ (11,469.50)</b>		Accounts Receivable	1,261.31	1,261.31	Goodwill	519.28	519.28		
<b>Gross Profit</b>	<b>6,062.09</b>	<b>6,062.09</b>		Other Receivables	228.91	228.91	Other Intangibles	257.05	257.05		
<b>% Change YoY</b>	<b>36.50%</b>	<b>36.50%</b>		Notes Receivable	91.45	91.45	SG&A Intangibles		4579.20		
<b>% Gross Margins</b>	<b>34.60%</b>	<b>34.60%</b>		<b>Total Receivables</b>	<b>1,581.68</b>	<b>1,581.68</b>	SG&A Amortization		-1526.40		
SG&A (Core)	-3,744.80	-1,610.26	-57.00%	Inventory	77.06	77.06	Net SG&A Intangibles		<b>3052.80</b>		
SG&A (Growth)		-1526.40		Prepaid Expenses	63.34	63.34	R&D Intangibles		3080.90		
R&D Expenses (Core)	-2,135.61	-640.68	-70.00%	Loans Held For Sale	517.94	517.94	R&D Amortization		-616.18		
R&D Expenses (Growth)		-616.18		Restricted Cash	18.78	18.78	Net R&D Intangibles		<b>2464.72</b>		
Other Operating Expenses	-550.68	-550.68		Other Current Assets	4,049.78	4,049.78	Other Long-Term Assets	288.62	288.62		
<b>Total Operating Expenses</b>	<b>-6,431.09</b>	<b>-4,944.21</b>	-23.12%	<b>Total Current Assets</b>	<b>11,621.52</b>	<b>11,621.52</b>	<b>Total Assets</b>	<b>15,026.37</b>	<b>20,543.89</b>		36.72%
<b>Operating Income</b>	<b>-369.00</b>	<b>1,117.88</b>	-402.95%				<b>Return On Assets</b>	-2.46%	5.44%		
<b>% Operating Margins</b>	<b>-0.20%</b>	<b>6.38%</b>	3288.20%								

Total Operating Expenses declined by 23% to ~\$5B. This gave SQ an adjusted Operating Profit of \$1.1B for a 6% margin. A combination of negative revenue growth and increased SG&A/R&D investments contributed to margin compression.

Finally, we can recreate a trailing three-year income statement and balance sheet to show adjusted growth (or decline) in assets (or expenses). See below.

Income Statement	2020	2021	2022	Balance Sheet	2020	2021	2022
Revenues	9,497.58	17,661.20	17,531.59	Cash And Equivalents	4,443.67	4,443.67	4,443.67
<b>Total Revenues</b>	<b>\$ 9,497.58</b>	<b>\$ 17,661.20</b>	<b>\$ 17,531.59</b>	Short Term Investments	869.28	869.28	<b>869.28</b>
<b>% Change YoY</b>	<b>101.50%</b>	<b>86.00%</b>	<b>-0.70%</b>	<b>Total Cash And Short Term Investments</b>	<b>5,312.95</b>	<b>5,312.95</b>	5,312.95
Cost of Goods Sold	<b>\$ (6,753.00)</b>	<b>\$ (13,218.74)</b>	<b>\$ (11,469.50)</b>	Accounts Receivable	1,261.31	1,261.31	1,261.31
<b>Gross Profit</b>	<b>2,744.58</b>	<b>4,442.47</b>	<b>6,062.09</b>	Other Receivables	228.91	228.91	228.91
<b>% Change YoY</b>	<b>45.20%</b>	<b>61.90%</b>	<b>36.50%</b>	Notes Receivable	91.45	91.45	91.45
<b>% Gross Margins</b>	<b>28.90%</b>	<b>25.20%</b>	<b>34.60%</b>	<b>Total Receivables</b>	<b>1,581.68</b>	<b>1,581.68</b>	1,581.68
SG&A (Core)	-726.21	-1,118.00	-1,610.26	Inventory	77.06	77.06	77.06
SG&A (Growth)	-320.89	-814.89	-1,526.40	Prepaid Expenses	63.34	63.34	63.34
R&D Expenses (Core)	-264.55	-415.15	-640.68	Loans Held For Sale	517.94	517.94	517.94
R&D Expenses (Growth)	-123.46	-317.19	-616.18	Restricted Cash	18.78	18.78	18.78
Other Operating Expenses	-187.99	-187.99	-550.68	Other Current Assets	4,049.78	4,049.78	4,049.78
<b>Total Operating Expenses</b>	<b>-1,623.09</b>	<b>-2,853.23</b>	<b>-4,944.21</b>	<b>Total Current Assets</b>	<b>11,621.52</b>	<b>11,621.52</b>	<b>11,621.52</b>
<b>Operating Income</b>	<b>\$1,121.49</b>	<b>\$1,589.24</b>	<b>\$1,117.88</b>	Gross Property Plant And Equipment	<b>990.86</b>	<b>990.86</b>	990.86
<b>% Operating Margins</b>	<b>11.81%</b>	<b>9.00%</b>	<b>6.38%</b>	Accumulated Depreciation	-259.31	-259.31	<b>-259.31</b>
				<b>Net Property Plant And Equipment</b>	<b>731.55</b>	<b>731.55</b>	<b>731.55</b>
	<b>2020</b>	<b>2021</b>	<b>2022</b>	Long-term Investments	1608.35	1608.35	1,608.35
<b>Return on Assets</b>	6.94%	8.87%	5.44%	Goodwill	519.28	519.28	<b>519.28</b>
				Other Intangibles	257.05	257.05	<b>257.05</b>
				SG&A Intangibles	962.66	2444.6616	4,579.20
				SG&A Amortization	<b>-320.89</b>	<b>-814.89</b>	-1,526.40
				Net SG&A Intangibles	641.7706	1,629.77	3,052.80
				R&D Intangibles	<b>617.281</b>	<b>1585.97</b>	3,080.90
				R&D Amortization	-123.4562	-317.1938	-616.18
				Net R&D Intangibles	493.8248	1268.7752	<b>2,464.72</b>
				Other Long-Term Assets	288.62	288.62	288.62
				<b>Total Assets</b>	<b>\$16,161.97</b>	<b>\$17,924.92</b>	<b>20,543.89</b>
				YoY Growth		10.91%	14.61%

Our growth investment-adjusted financials reveal that SQ earned *at least* \$1B+ in adjusted Operating Income each of the last three years.

**SQ was EBIT positive *after* accounting for Stock-Based Compensation (SBC) and Capital Expenditures** for the previous three years.

## Final Thoughts

I hope you enjoyed this exercise and learned a new way to view and analyze companies choosing to invest through their income statement.

Like any financial analysis tool, growth-adjusting financial statements is not a panacea. There are many assumptions made throughout the analysis. For example, changing the percentage of SG&A or R&D assigned as “growth investment” significantly alters adjusted opex, operating profits, and margins.

But that’s the point. This is a new tool to see companies in ways other investors don’t. And that might be the difference between investing in the next great opportunity or wishing you would’ve jumped on the boat ... if only you had the proper tools.