ACCOUNTING RED FLAGS PLAGUE CATALENT, INC.

NYSE: CTLT

GLASSHOUSE RESEARCH

CATALENT, INC.

NYSE: CTLT

SUMMARY

Initiation of Catalent, Inc. (CTLT) with a Strong Sell Opinion

Post-COVID, Catalent, Inc. has been using every accounting trick in the book to buoy its suspect financials.

Amidst a time of executive turnover, near record low insider ownership, declining backlog, $400 million worth of excess inventory, and concerns with SEC regarding revenue recognition, we believe CTLT will face material headwinds going forward.

Coupled with a significant drop off in future revenue and earnings, we believe a high probability of restatement exists as contract assets continue to skyrocket.

REPORT DATE
12/08/22

SHARE PRICE
$47.22

AVG DAILY VOLUME
2,806,001

MARKET CAP
$8.75 BILLION

SHORT INTEREST (2.23% OF FLOAT)

DAYS TO COVER
0.96

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Accounting Red Flags Plague Catalent After COVID Boost

Catalent, Inc. (CTLT) is a contract development and manufacturing organization, or CDMO. The company develops and manufactures solutions for drugs, protein-based biologics and gene therapies and distributes consumer health products. While the company does not break out its COVID-related sales, CTLT has recently enjoyed significant revenue growth in its Biologics segment due to its testing, manufacturing and packaging of COVID-19 related products.

This previous boon appears to be winding down as world vaccination rates have dwindled to levels below five million doses administered daily (40 million doses were administered daily at peak).[1] The sudden drop off in vaccination rates appears to have caught CTLT management off guard as they may have overinvested in this space during 2020 and 2021.[2] With the FY2020 and FY2021 COVID gains now turning into headwinds, we believe management has been using accounting gimmicks to aesthetically lift a deteriorating company.

Our short thesis revolves around the following:

- Contract assets have surged by 106% YOY inferring a premature recognition of revenue. We conservatively estimate a pull forward of $568.2 million of revenue recognized prematurely, or 12% of TTM sales.

- Relative to sales, customer advances fell to their lowest balance in the last five years. Coupled with the recent backlog decline of 24.3%, this implies a significant deterioration of quality of revenues in future periods.

- Management admits to holding approximately $400 million of excess inventory on its balance sheet.

- The company has enhanced margins by circumventing normal R&D expenses which have been reduced to 0.5% of total sales. Instead, the company has looked to "acquire" most of their R&D à la Valeant Pharmaceuticals in 2015.

- Corroborating our thesis, the SEC has sent the company correspondence letters examining changes to its revenue recognition policy. This is on top of recent executive turnover and one of the lowest balances of insider ownership ever reported.

[1] https://ourworldindata.org/covid-vaccinations

[2] Based on recent management comments at the Stephens Conference 11/16/22.

Surge in Contract Assets Imply Premature Recognition of Revenue

Catalent's contract assets (unbilled receivables) have been ripping upwards at a nosebleed pace dating back to FY2019. Without recent aesthetic boosts to earnings from unbilled receivables and inventories, sustainable earnings at Catalent would have been substantially lower over the TTM.

Due to account receivables and, more importantly, unbilled receivables, we believe that CTLT benefitted from a staggering TTM $568.2 million in suspect revenue.[3]

Before delving into contract assets specifically, let's analyze CTLT's receivables balance on a consolidated level. In our experience, the heightened balance in both receivables and inventory accounts (discussed in a later section) points to future share price degradation in the upcoming periods as the company works to normalize these accounts. As these accounts balloon on the balance sheet, this is a harbinger for both premature revenue and delayed expense recognition in order to cosmetically enhance earnings.

Here are Catalent's unfavorable receivable trends:

- In the most recent period, Catalent's total receivables balance jumped by 33.4% YOY to $1.41 billion. This greatly diverges from the recent quarterly revenue decline of 0.3% YOY. As a result, 3M days-sales-outstanding (DSO)[4] increased by 27.4% YOY to 128 days. This represented the highest level reached in the history of the firm (see Chart 1, Page 5).

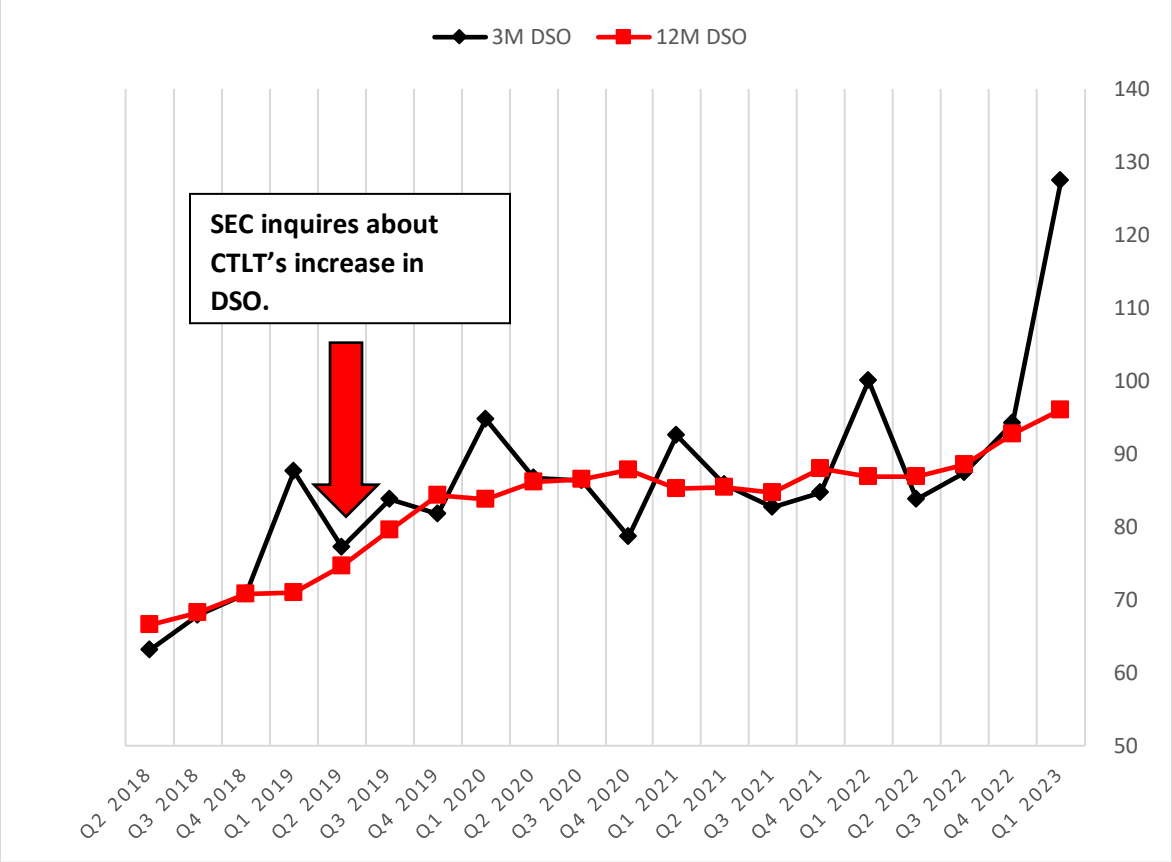
- Twelve-month DSO has not fared much better, growing by 10.6% YOY from 87 days to 96 days. This represents a new five-year high for the company.

- Receivables have increased 3,474 bps YOY to 137.7%, relative to quarterly sales. Longer-term metrics increased by 390 bps YOY to 29.2% at the end of Q1 FY2023. Both metrics now stand near their respective five-year high levels.

- Further detailed in the next section, CTLT's outsized levels of contract assets are the culprit for the persistent rise of total receivables over the last three fiscal years. This sub-line item is the most perilous type of receivable to store on the balance sheet.

[3] Analysis provided in the net contract assets section on Page 16.
[4] Three-month days sales outstanding (3M DSO) = Average receivables QOQ / 3M Sales * 91.25.

Chart 1: Three-Month and Twelve-Month DSO Trends



Catalent's Contract Assets Reach Historic Highs

Howard Schilit, one of the grandfathers of earnings quality, has always placed an emphasis on unbilled receivables (now referred to as contract assets) and how they impact future earnings. When contract assets surge and contract liabilities decline relative to historical norms, we predict:

- future shortfalls in sales and earnings
- delays and missed milestones are encumbering certain projects
- management may be recognizing revenue prematurely

Referencing Schilit's "Financial Shenanigans," he lists the warning signs of recording revenue prematurely.

The issue here is not that of a credit concern (although this may become one down the road), but rather the premature recording of revenue in far excess of work completed on contract.

Many of Schilit's "red flags" detailed herein are currently taking place at Catalent. Echoing the red flags listed to the right, CTLT added the highlighted portion of the following excerpt, pertaining to revenue recognition and estimates, to its FY2022 10K.

Warning Signs: Recording Revenue Too Soon

- Recording revenue before completing any obligations under the contract
- Recording revenue far in excess of work completed on a contract
- Up-front revenue recognition on long-term contracts
- Use of aggressive assumptions on long-term leases or percentage-of-completion accounting
- Recording revenue before the buyer's final acceptance of the product
- Recording revenue when the buyer's payment remains uncertain or unnecessary
- Cash flow from operations lagging behind net income
- Receivables (especially long-term and unbilled) growing faster than sales
- Accelerating sales by changing the revenue recognition policy
- Using an appropriate accounting method for an unintended purpose
- Inappropriate use of mark-to-market or bill-and-hold accounting
- Changes in revenue recognition assumptions or liberalizing customer collection terms
- Seller offering extremely generous extended payment terms

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Company's management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Such estimates include, but are not limited to, revenue recognition including determining the transaction price and associated constraint on variable consideration, allowance for credit losses, inventory and long-lived asset valuation, goodwill and other intangible asset valuation and impairment, equity-based compensation, income taxes, derivative valuation, and pension plan asset and liability valuation. Actual amounts may differ from these estimated amounts.

As COVID vaccine revenue declined, CTLT changed its revenue recognition policy concurrent with unbilleds skyrocketing. We believe that without this pulling forward of sales, reported revenues would have plummeted.

The company could possibly justify its increased contract assets if a larger percentage of sales came from long-term contracts. But according to our research, the opposite has been the case. CTLT details the following about long-term contracts in the footnotes of its FY2022 10K:

Long-Duration Relationships Provide Sustainability

Our broad and diverse range of technologies closely integrates with our customers' molecules to yield safe and effective final formulations and dose forms, and this generally results in the inclusion of Catalent in our customers' prescription product regulatory filings. Both factors translate to long-duration supply relationships at an individual product level, to which we apply our expertise in contracting to produce long-duration commercial supply agreements. These agreements typically have initial terms of three to seven years with regular renewals of one to three years (see "— Contractual Arrangements " for more detail). Approximately two-thirds of our fiscal 2022 net revenue from our product development and delivery offerings and related services were covered by such long-term contractual arrangements. We believe this base provides us with a sustainable competitive advantage.

This "two-thirds" ratio is down about 840 bps from the 75% ratio reported in the FY2021 10K. As long-term revenue growth decreases, we expect contract assets to decrease as well. As shown in the analysis below, the contract assets did the opposite.

Outsized Contract Assets Suggest a Pull-Forward of $568.2 million

Over the last two fiscal years, our analysts tracked a salient rise in contract assets (AKA unbilled receivables) at Catalent, giving us grave cause for concern. Due to CTLT's client base, this is not a credit concern, but a revenue recognition red flag, which we deem to be much worse. Thus, the focus of our research is mainly on unbilled, rather than billed, receivables. These risky types of receivables represent revenue already recognized by management; however, the client has yet to be billed or agreed on any type of pricing.

Contract assets represent revenue that has been recognized by management on the income statement but has not been invoiced or agreed upon by the client yet. This recognized revenue is totally subjective and up to CTLT management's decision making.

Curiously, management chose to classify its contract assets not separately on the balance sheet next to billed receivables, but lumped in with "Prepaid Expenses and other". A reader would need to go into the footnotes of the firm's filings to find the number (see below).

Prepaid expenses and other

Prepaid expenses and other current assets consist of the following:

(Dollars in millions)	June 30, 2022	June 30, 2021
Prepaid expenses	$ 61	$ 46
Short-term contract assets	398	181
Spare parts supplies	22	30
Prepaid income tax	26	22
Non-U.S. value-added tax	48	50
Other current assets	70	47
Total prepaid expenses and other	$ 625	$ 376

Further convoluting receivable numbers, Catalent introduced "Long-term Contract Assets" as of the FY 2022 10K. Again, these extremely risky form of subjective revenue is being classified under "Other long-term assets" and not broken out separately. Specifically, these "receivables" have been counted as revenue by management, however neither scope nor pricing have been agreed upon by the customer and the company believes they will receive the cash in over a year!

Below, we lay out the company's unfavorable contract assets trends, which will be a threat to future persistence of revenues:

- In the latest period (Q1 FY2023), three-month revenue was lackluster, declining 0.3% YOY to $1.02 billion while contract assets surged 105.8% YOY to $461.0 million. This is bad. It is *extremely rare* to have such a bifurcation between revenue and receivable trends in the same period.

- Three-month unbilled DSO[5] rose by 123.4% YOY to a five-year-high of 40 days. Longer-term trends display 12M unbilled DSO rising by 85.6% YOY to 27 days, representing a five-year high for the company (see Table 1, below).

- Unbilled receivables now account for over 31.8% of accounts receivable at the end of Q1 FY2023, the highest value reported by CTLT in the history of the company (five-year average of 10.8%).

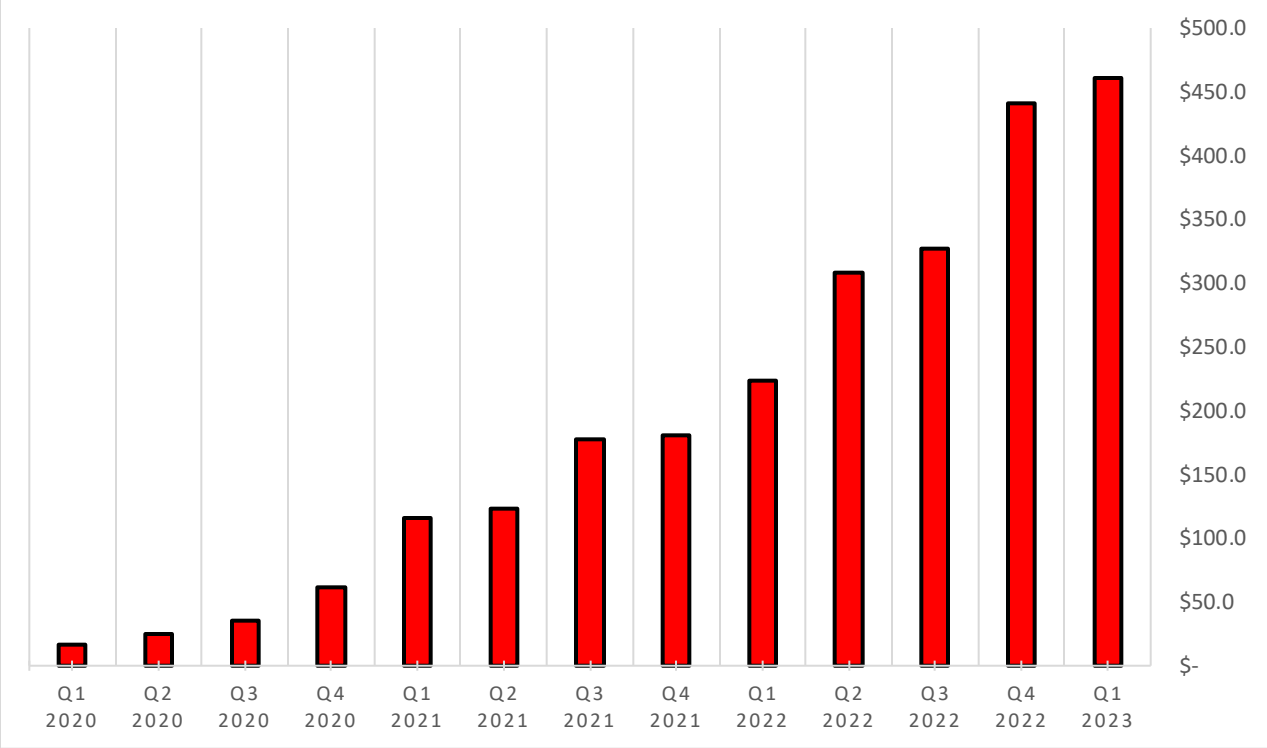
- Relative to 3M sales, unbilled receivables increased by 2,325 bps YOY to 45.1%, this now stands at a new five-year high reported in any quarterly period. Twelve-month trends reported a similar trend rising 419 bps YOY to 9.6%; also a five-year high.

Table 1: Unbilled Receivables/Contract Assets Metrics
($ in millions)

Period Ended:	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
Contract Assets / Unbilleds	$461.0	$441.0	$327.0	$308.0	$224.0
Contract Assets to Total AR (%)	31.8%	29.6%	26.0%	26.1%	21.2%
Unbilled-to-3M Sales	45.1%	33.6%	25.7%	25.3%	21.9%
Unbilled-to-12M Sales	9.6%	9.1%	7.0%	6.9%	5.4%
YOY					
Contract Assets (%)	105.8%	143.6%	84.3%	150.6%	105.8%
Contract Assets to Total AR (bps)	1,056	1,439	845	1,238	1,056
Unbilled-to-3M Sales	2,325	1,835	884	1,182	2,325
Unbilled-to-12M Sales	419	461	223	332	419

[5] Three-month unbilled days sales outstanding (3M unbilled DSO) = Average current contract assets QOQ / 3M Sales * 91.25. Twelve-month unbilled days sales outstanding (12M DSO) = Average current contract assets YOY / 12M Sales * 365.

Chart 2: Unbilled Receivables Trends



Management's Explanations for Spike in Contract Assets

With the rise of contract assets detailed over the previous fiscal years, we searched for a justified reason for the exponential rise. First turning to the FY2022 10K footnotes, very plainly we observe that the surge was primarily related to the Biologics segment and services related to the COVID-19 vaccines.

Contract Assets

Contract assets primarily relate to the Company's conditional right to receive consideration for development services that have been performed for a customer as of June 30, 2022 but had not yet been invoiced as of June 30, 2022. Contract assets are transferred to trade receivables, net when the Company's right to receive the consideration becomes unconditional. Contract assets totaled $ 441 million and $ 181 million as of June 30, 2022 and 2021, respectively. Contract assets expected to transfer to trade receivables within 12 months are accounted for within Prepaid expenses and other. Contract assets expected to transfer to trade receivables longer than 12 months are accounted for within Other long-term assets.

As of June 30, 2022, the Company's aggregate contract asset balance was $ 441 million, an increase of $ 260 million compared to June 30, 2021. The majority of this increase is related to large development programs in the Biologics segment, such as manufacturing and development services for COVID-19 vaccines, where revenue is recorded over time and the ability to invoice customers is dictated by contractual terms. As of June 30, 2022, there were no reserves recorded against the Company's aggregate contract asset balance.

Digging deeper, management stated in the Q4 FY2022 earnings call,

> As of June 30, 2022, our contract asset balance was $441 million, an increase of $260 million compared to June 30, 2021. The overwhelming majority of this increase is related to some notably large development programs, such as for some of the COVID vaccines, where revenue is recorded based on a percentage of completion versus entirely on batch release as it is for commercial programs. This difference in approach affects when we are able to invoice customers, thereby delaying cash realization and negatively affecting free cash flow.

Couple things to note here, while management does attribute the contract asset rise to percentage-of-completion accounting. This reasoning does not paint the full picture at Catalent. For example, we believe that management is subjectively recognizing revenue prematurely in the revenue recognition process. We can make that assumption based on if CTLT were truly hitting milestones in terms of progress on long-term contracts, then they would be able to invoice the client.

CFO Thomas Castellano also discussed contract assets at the recent Stephens Conference (11/16/22):

> Yes. This is another one that we're going after pretty aggressively. I think we need to change the way we contract with customers around contract assets here, be in a position to invoice at different stages of the revenue recognition process versus when batches are released for those development-related programs. We need to shorten the cycle time as well in terms of releasing those batches. So, a huge focus area for the company, for my team and cross-functionally with our operations supply chain teams as well. And this is another area where we expect to improve as we get further into the year.

Put another way, management cannot prematurely invoice a client before "batches are released" otherwise they would not pay the bill. However, they can prematurely recognize revenue on their own income statement to hit sales targets even though they are behind on batches. We believe that is the case here with the persistent rise of contract assets at Catalent.

Another issue we have is that the increase is related to the COVID-19 vaccines that CTLT produces. It has been well documented in the media and at the company that these programs are winding down across the world.[6] If management already recognized revenue from COVID-19 vaccines before the milestones were met, this could be a disastrous scenario for CTLT if they need to restate earnings in future periods.

We believe there is a high likelihood of financial restatement occurring based on past correspondence letters with the SEC. In a letter dated 05/28/19, a few comments made by the SEC relates to our premature revenue recognition thesis:

- In the second paragraph under this heading, as well as under the header 'Clinical Supply Services Revenue', you state "In other arrangements, revenue is recognized when the customer has taken legal title to or accepted the product or service deliverable and the Company has a right to payment based on the terms of the arrangement."

  Please clarify for us when the customer takes legal title and what determines whether control is transferred when customer has taken legal title versus when it has accepted the product or service deliverable.

[6] https://ourworldindata.org/covid-vaccinations

- Your timing of revenue recognition from when the product is delivered to when the product quality release testing procedures are completed changed upon adoption of ASC 606, as it appears this is the point in time you have determined that control has been transferred to the customer.

- You state that one of the factors that caused the decrease in your cash provided by operating activities for the six months ended December 31, 2018 was due to a higher collection of receivables during the corresponding prior-year period.

  In this regard, it appears that your days sales outstanding rose significantly from the quarter ended December 31, 2017 to the quarter ended December 31, 2018. Please explain to us, in reasonable detail the reason(s) for the change in days sales outstanding.

We believe that the SEC was not satisfied with CTLT's revenue recognition policy regarding its Clinical Supply and Manufacturing & Commercial Product Supply. The SEC was also concerned about CTLT's DSO balance at the end of 12/31/18. Chart 1 on Page 5 shows that 12M DSO stood at a balance of 75 days, representing an increase of eight days from the same period in FY2017.

As stated earlier, this metric lies at 96 days in the latest period, approximately 30% higher than when the SEC first raised concerned about its heightened levels. Due to the SEC warnings and our earnings quality analysis, we believe it's highly likely that the CTLT will have to restate earnings in future periods.

Contract Assets Spike as Contract Liabilities Plummet

When analyzing companies that have a spiking unbilled receivables balance, we also review the firm's customer advances/contract liabilities on the balance sheet. If the firm is pulling in more cash in the form of customer advances, this usually alleviates most our concern for the unbilled AR increase. This is not the case for Catalent. Here are CTLT's recent adverse contract liabilities (CL) trends:

- When analyzing contract liability balances, we calculate that total CL decreased by 51.5% YOY to only $145.0 million. We find this balance to be extremely diminutive relative to the company's history and total sales. From a quality of revenue standpoint, CTLT managers and outside analysts should hope for this number to be greatly increasing, as it represents future revenues on the income statement.

- Relative to 3M sales, CL has decreased by 1,498 bps YOY to only 14.2% of sales; representing the lowest seasonal ratio in the last five years (see Table 2, Page 15). Longer-term metrics report similar disparaging trends with CL falling 415 bps YOY to only 3.0% of 12M sales; again, the lowest reported figures in the last five years.

- Three-month Days-of-deferred revenues (DDR)[7] also reported material degradation by falling 45.2% YOY to only 15 days. This value represented a new seasonal five-year low.

- While management has been mostly mute about this concerning trend in contract liabilities, finally in the latest earnings call, CFO Castellano stated,

> "As a final point regarding our free cash flow, I note that the decrease in contract liabilities also had a negative impact. Our contract liabilities arise predominantly within our Biologics segment and are linked to upfront cash proceeds related to our gene therapy programs."

- We see the above excerpt as a fancy way of saying that the firm recognized most of the balance as revenue already on its income statement and the company has not replenished it with new customer advances. As accountants, we view this as a material headwind for the persistence of earnings.

[7] Three-month days of deferred revenue (3M DDR) = Average total customer advances QOQ / 3M Sales * 91.25.

- In FY2022, total backlog declined by a substantial 24.3% to $2.85 billion, down from its recent high of $3.77 billion in FY2021. This significant decline corroborates our risk to the persistence of revenue thesis.

- Digging deeper into backlog figures, we calculate that the Clincical Supply Services segment should have reported a backlog figure of $557.0 million as of Q4 FY2022.[8] However, CFO Castellano disclosed a figure of only $540.0 million on the Q4 FY2022 earnings call. This suggests that CTLT may be experiencing heightened cancellations on top of their weak backlog trends.

Table 2: Customer Advances/Contract Liabilities Metrics
($ in millions)

Period Ended:	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
Contract Liabilities (CL)	$145.0	$194.0	$198.0	$289.0	$299.0
CL-to-3M sales	14.2%	14.8%	15.6%	23.7%	29.2%
CL-to-12M sales	3.0%	4.0%	4.2%	6.4%	7.2%
3M DDR	15	14	17	22	28
12M DDR	17	20	22	24	25
YOY					
Contract Liabilities	–51.5%	–39.6%	–34.1%	5.8%	22.6%
CL-to-3M sales	–1,498	–1,224	–1,299	–623	34
CL-to-12M sales	–415	–401	–379	–144	–29
3M DDR	–45.2%	–42.9%	–29.8%	–14.9%	10.7%
12M DDR	–32.3%	–20.6%	–7.5%	4.0%	11.4%

[8] We calculate CSS Ending Backlog ($557 million) as CSS Beginning Backlog ($529 million) + CSS New Awards ($132 million) – CSS Revenue ($104 million) in Q4 FY2022.

Net Contract Assets Spike 66.9% YOY to $1.26 billion

We evaluate both contract asset and contract liability trends to get a full picture of a firm's quality of revenues. In most cases, a company with a net balance near $0 or negative would signal positive earnings quality, meaning the firm's customer advances are above unbilled AR. This is not the case for CTLT, as shown by our calculations below:

- We calculate Catalent's net contract assets (NCA) as total receivables minus total contract liabilities. NCA reached its highest absolute value in company history surging to $1.26 billion in Q1 FY2023, representing a 66.9% YOY increase.

- As a result, NCA jumped by 4,973 bps YOY to 123.5% relative to quarterly sales, representing the highest ratio reached in any period over the past five years (seasonal average of 81.9%). Net contract assets-to-12M sales also reported the highest value reached in the last five years at 26.2%.

- We can reverse engineer Catalent's NCA balance using the firm's NCA relative to sales from the prior period to quantify the impact of recognizing this revenue earlier than the historical standard. We calculate that CTLT recognized a massive $568.2 million gain in questionable revenue (also pure margin gains) over the TTM.[9]

  Breaking this down by period, that denotes a revenue boost of $285.1 million, $160.7 million, $130.0 million, and –$7.6 million in periods Q1 FY2023, Q4, Q3, and Q1 FY2022, respectively.

- Without this $568.2 million artificial tailwind, reported revenue would have declined greatly over the TTM, missing the consensus outlook by a mile (see Table 3, Page 17). As a result, this aesthetically increased EPS over the TTM as well. This earlier boost now will turn into a material headwind for Catalent going forward.

[9] With a net contract asset value of 95.6% in Q4 FY2022 ($1,255 million of NCA / $1,273 million in 3M sales), this assumes that NCA should equate to a normalized balance of $976.9 million versus the stated $1,262 million balance in Q1 FY2023. We performed this same calculation from the prior three periods to get our full TTM figure of $568.2 million.

Chart 3: Net Contract Assets Trends
($ in millions)

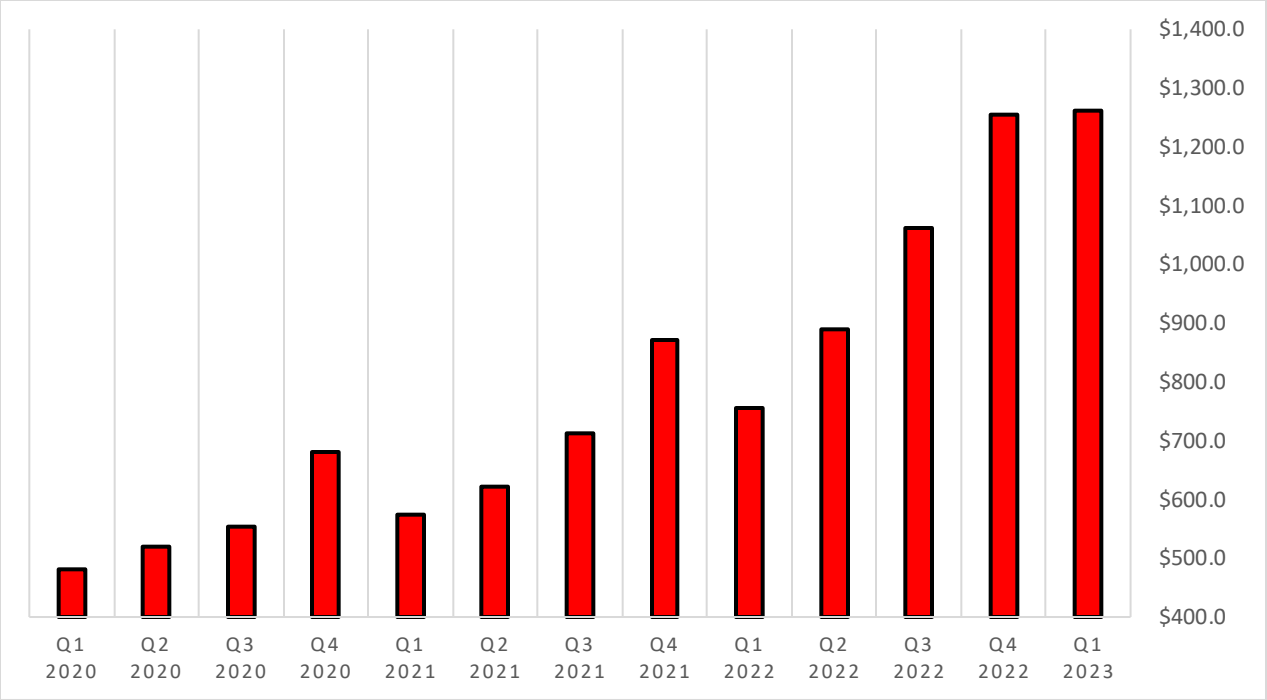


Table 3: Adjusted Revenue Metrics Vs. Estimates
($ in millions)

Period Ended:	Q1 2023	Q4 2022	Q3 2022	Q2 2022
Reported Revenue	$1,022.0	$1,313.0	$1,273.0	$1,217.0
Consensus Estimates	$1,082.4	$1,325.4	$1,220.2	$1,150.1
GlassHouse Adjusted Revenue	$736.9	$1,152.3	$1,143.0	$1,124.6
Difference from Actual (%)	–27.9%	–12.2%	–10.2%	0.6%

"Bullwhip Effect" Bites Catalent's Inventory

Last month at the Stephens Conference (11/16/22), CFO Castellano dropped a bombshell regarding the firm's inventory that we believe the market has not priced into the stock. Near the end of the call, the CFO remarked:

> Our inventory levels in the month of November -- in the month of September for the Q1 close were higher than they've ever been before in excess of $700 million. We absolutely need to improve that. Obviously, a lot of this has been driven by supply chain challenges and disruptions.
>
> I would say, additional challenges that continue to pop up every day. So, we're not quite out of the woods here. So, I would say this is an area that I would expect to improve as we get further into the fiscal year. If we're talking about what the historical level of inventory has been, it's -- we're probably about $400 million too high right now.
>
> I don't think we'll see $400 million of a reversal here in the fiscal year, but this is an area we should certainly be in a position to continue to pull back from as we get further into '23. [underline added]

CTLT's current inventory stands at $732.0 million, therefore management believes that number should be closer to $332.0 million today. Based on the current market environment, we believe much of this excess balance will need to be discounted or deemed obsolete in order to move it from their bloated balance sheet.

Inventories

Inventory is stated at the lower of cost or net realizable value, using the first-in, first-out (" FIFO ") method. The Company provides for cost adjustments for excess, obsolete, or slow-moving inventory based on changes in customer demand, technology developments or other economic factors. Inventory consists of costs associated with raw material, labor, and overhead.

The company already has begun to increase its inventory obsolescence reserve over the past year. However, based on our metrics and comments made by management, CTLT is definitely not "out of the woods" yet, not even close.

Inventory Outpaces Revenue Growth in Nine Consecutive Periods

In the most recent period, inventories increased 17.7% YOY to $732.0 million, the highest reported balance by Catalent in company history. In contrast, 3M sales fell by 0.3% YOY to $1.02 billion. As a result, inventory diagnostics for the company continued to deteriorate into Q1 FY2023. The skyrocketing inventory appeared to catch management off guard over the last fiscal year. Going back to the Q4 FY2022 earnings call, CEO Maselli stated the following pertaining to inventory levels:

> Note that our free cash flow has been negatively impacted the last two years by our strategic decision at the onset of the pandemic to increase inventory levels, which continue to allow us to have the inputs we need to meet our supply obligations to our customers and their patients in a timely manner.
>
> When we feel the time is appropriate, and are more comfortable with the stabilization of our supply chain, we will begin to reverse course, which will have a future positive effect on free cash flow.

In layman's terms, the company overpurchased at the onset of the pandemic and now they are stuck with a glut of inventory they cannot get rid of. This "bullwhip effect" has been wreaking havoc companies over the past year and Catalent is in one of the worst situations out there.

We detail these inauspicious inventory trends below:

- Catalent inventories outpaced sales over the past three fiscal years causing inventory turnover to deteriorate. For example, 3M days sales in inventory[10] (DSI) increased from only 48 days in Q1 FY2020 to 86 days currently. This value represented a new five-year high at Catalent (see Chart 4, Page 20).

- Recently, CTLT's inventory-to-3M sales spiked 1,094 bps YOY to 71.6%, representing the highest seasonal value in the last five years by far.

- Management appears to somewhat understand the gravity of the situation by increasing its inventory obsolescence reserve by 46.0% YOY to $92.0 million. However, based on the current level of DSIs and management comments, we believe that this allowance is significantly under-reserved.

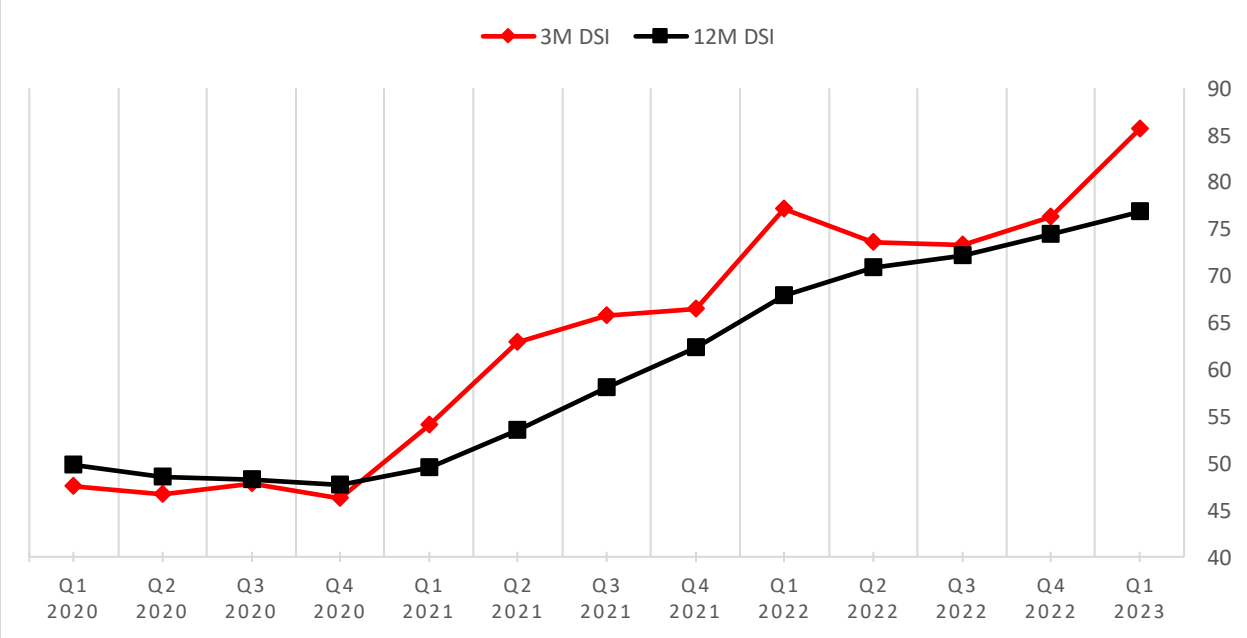
[10] Three-month days sales of inventory (3M DSI) = Average inventory QOQ / 3M COGS * 91.25.

- Using last year's 12M DSI figure of 68 days, we reverse engineer an expected inventory balance of $604.9 million. Therefore, over the last year, we can estimate that earnings were boosted by an after-tax $107.3 million over the TTM (or $0.59 in EPS, 25.4% of TTM EPS).

Table 4: Inventory Metrics
($ in millions)

Period Ended:	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022
Inventory	$732.0	$702.0	$676.0	$688.0	$622.0
Inventory-to-3M sales	71.6%	53.5%	53.1%	56.5%	60.7%
Inventory-to-12M sales	15.2%	14.5%	14.4%	15.3%	14.9%
3M DSI	86	76	73	74	77
12M DSI	77	74	72	71	68
YOY					
Inventory	17.7%	24.7%	28.1%	49.1%	61.9%
Inventory-to-3M sales	1094	607	297	590	1526
Inventory-to-12M sales	28	46	32	203	316
3M DSI	11.0%	14.7%	11.4%	17.0%	42.5%
12M DSI	13.1%	19.4%	24.4%	32.6%	37.2%

Chart 4: Three-Month and Twelve-Month DSI Trends



While management touts the free-cash-flow improvements from the reduced inventories in future periods, this will have the inverse effect on earnings as margin compression and inventory write-downs will plague the company over the next few years. CFO Castellano also took a more pessimistic tone at the 11/16/22 Conference discussing customers' sudden conservation of cash in the latest periods:

> It's a little bit of an inventory impact here on us as well. We can't control how our customers manage their supply chain and what we've learned through this October update here is some of our customers are because products aren't moving off shelves are willing to take a more -- take a different approach to how they manage their supply chain and run on lower levels of safety stock inventory than where they were. So, someone like Catalent as a producer, really feels that on both ends, not only our products moving slowly off of store shelves, but you have customers with excess levels of inventory that are going to let some of that bleed in before needing to pick up demand with us. [underline added]

Unfortunately for CEO Maselli, a company cannot simply just "reverse course" when its channel is stuffed with inventory. Finally, at the latest conference CFO Castellano is detailing the magnitude of CTLT's inventory woes. And to return to normalized DSI balances near 50 days, we estimate that the excess inventory will take years to unwind causing increased headaches for CTLT going forward.

Research and Development Expenses Nosedive

As a contract development and manufacturing organization (CDMO), we would expect Catalent to sustain a level of research and development (R&D) expenses. However, as Catalent continues to acquire more and more companies throughout the years, it appears that they have skimped on R&D expenditures. While many companies choose to acquire their R&D versus building it in house, as accountants, we need to remain cognizant of the firm's amortization costs as they represent real cash expenses spent on acquisitions.

We remain skeptical of any company that chooses to circumvent R&D expenses on the income statement through acquisitions for long periods of time. For instance, the poster child for this was Valeant Pharmaceuticals in 2015. Rockstar CEO Michael Pearson was R&D expense averse and rather relied on a roll up acquisition model.[11]

> Valeant used to be a small drugmaker, struggling to stay afloat by doing what pharmaceutical companies typically do: invest heavily in R&D in order to discover new drugs. But Pearson, who took over in 2008, scrapped that approach. He argued that returns on R&D were too low and too uncertain; it made more sense to buy companies that already had products on the market, then slash costs and raise prices. So, Valeant became a serial acquirer, doing more than a hundred transactions between 2008 and 2015. It invested almost nothing in its core business; R&D spending fell to just three percent of sales.

While this may seem innocuous at first with the company trading out R&D expenses for amortization expenses, we notice that most companies that use this model also like to exclude amortization expenses from non-GAAP earnings. Therefore, this model that Valeant employed, provides a feedback loop where R&D expenses are greatly reduced and then heightened amortization expenses get ignored as non-GAAP exclusions.

Illustrating this trend at Catalent, R&D expenses averaged about $55.7 million a year from FY2016 through FY2020. And while R&D margin was still low relative to peers, they stood at a respectable average of 2.4% relative to sales. However, after FY2020, R&D expenses dropped precipitously to an average of only $22.0 million over the next two fiscal years. This resulted in R&D margins of only 0.5%

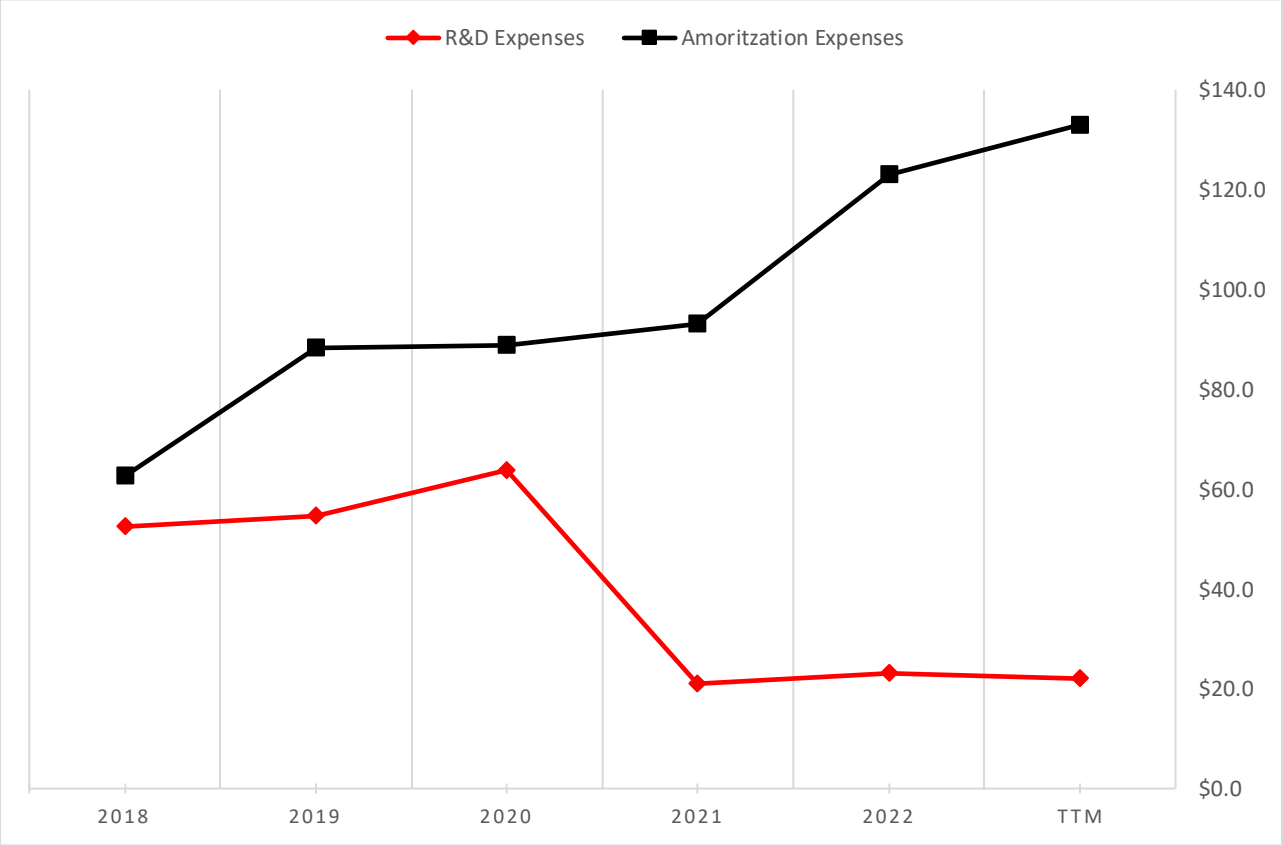
[11] https://fortune.com/2016/03/20/valeant-timeline-scandal/ and https://www.newyorker.com/magazine/2016/04/04/inside-the-valeant-scandal

in both FY2022 and FY2021. Catalent did not discuss the reason for the drop in R&D spending.

Throughout a timeframe of heightened acquisitions, amortization expenses have increased to $133 million over the TTM. Management removes all these expenses as non-GAAP exclusions due to being “non-cash”. Although it is interesting CTLT chooses not to reduce non-GAAP earnings by cash spent on acquisitions… the best of both worlds. As detailed in the Chart 5 below, the reader can view the bifurcation between amortization and R&D expenses.

Due to the sustained cash spent on acquisitions over the last five years, we believe amortization costs should not be excluded from sustainable earnings in order to get a true view of economic reality at Catalent.

Chart 5: Catalent R&D versus Amortization Expenses



Catalent's Free-Cash-Flow Metrics Worst in Company History

Catalent's free-cash-flow (FCF) numbers reveal that the company is in turmoil, falling into negative territory over the last three fiscal years. Focusing on the twelve-trailing-months, CTLT has consumed a reported total of $471.0 million in free-cash-flow. We have already detailed how CTLT's unbilled receivables and inventories have driven free-cash-flow to historic lows. To combat the decline, management plans to reduce projected capital expenditures in future periods.

Our free-cash-flow chart on Page 25, reveals the total cash degradation at Catalent in recent years. Here is management discussing free-cash-flow in the Q4 FY2022 earnings call:

> Note that our free cash flow has been negatively impacted the last two years by our strategic decision at the onset of the pandemic to increase inventory levels, which continue to allow us to have the inputs we need to meet our supply obligations to our customers and their patients in a timely manner.
>
> When we feel the time is appropriate, and are more comfortable with the stabilization of our supply chain, we will begin to reverse course, which will have a future positive effect on free cash flow. Similarly, the realization of contract assets will also drive a favorable impact on future free cash flow after negatively impacting our fiscal 2022 results.

We are not so optimistic that management can just "reverse course" and open up the free-cash-flow floodgates. In fact, we believe it will be a painful endeavor for the company as they work through delayed milestones and an overabundance of inventory. Our detailed analysis of CTLT's free-cash-flow is as follows:

- Over the past three fiscal years, net income and free-cash-flow have bifurcated to new heights as the firm dealt with contract asset and inventory issues. Illustrating this, net income reported new highs of $221.0 million, $585.0 million and $519.0 million in FY2020, FY2021, and FY2022, respectively.

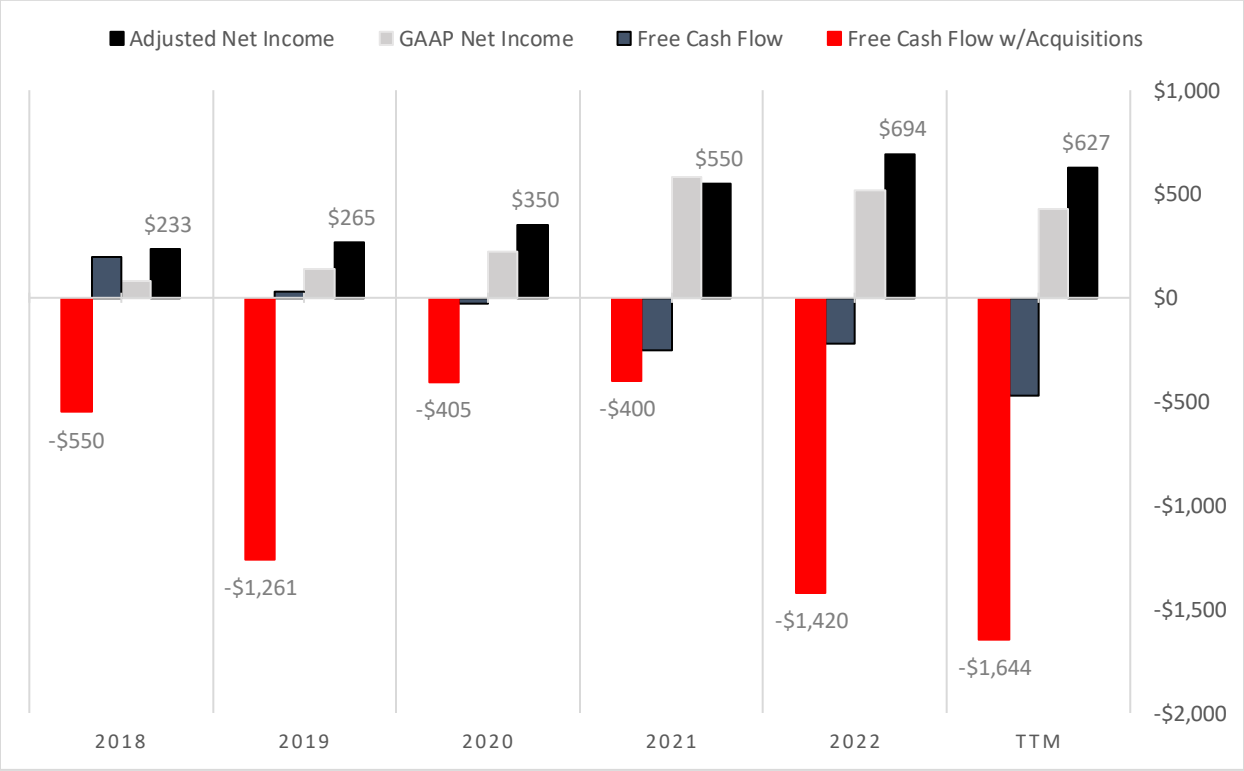
- In contrast, free-cash-flow deteriorated to recent lows of –$26.0 million, –$253.0 million and, –$221.0 million during the same timeframe (see Chart 6, Page 25).

- Things have not gotten better over the TTM with net income decreasing to $426.0 million in the Q1 FY2023 period. Reporting further deterioration, TTM free-cash-flow decreased to –$471.0 million, the lowest value reported in over 10 years.

- To make matters worse, when we aggregate FCF over the last five years, we find that overall CTLT *consumed* a reported $272.0 million in cash. When we include cash acquisitions, the firm consumed an astonishing $4.04 billion in FCF. While analysts can make the case not to include acquisitions into free-cash-flow, we believe it is necessary in serial acquirer companies.

- While management may address the situation by saying the company is spending for future growth, we believe that it has run out of options to organically grow the company. Instead, anemic acquisitions and prematurely recognized revenue have led to stagnated growth.

Chart 6: TTM Net Income and Free-Cash-Flow Five-Year Trends
($ in millions)



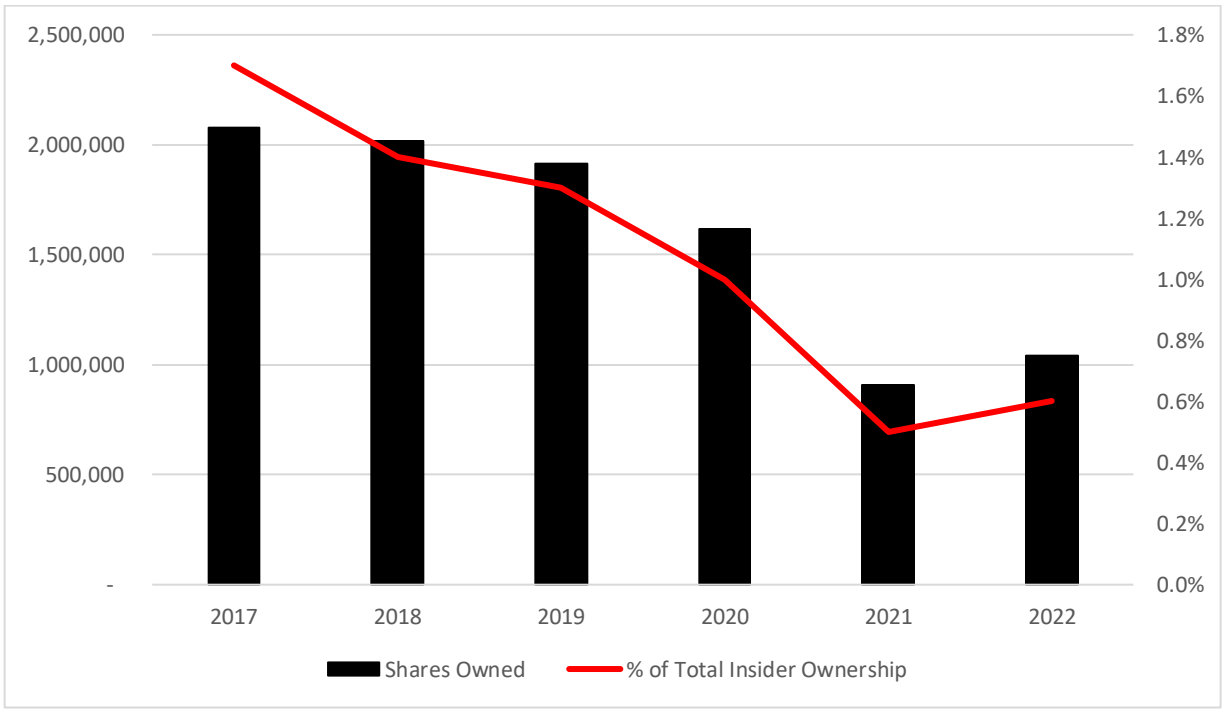
Insiders Hold Near Lowest Amount of Ownership Since IPO

Affirming our short thesis, insiders at Catalent hold near record low levels of the company's stock, as detailed in the latest Proxy Report from September 2022. As of FY2022, insiders (listed as 30 directors and executives) held a total of 1,044,228 shares of CTLT's stock. This number been on the decline with a slight increase in the last year (see Chart 7, below). Insiders held approximately 0.6% of stock in the company, approximately half of the trailing five-year average of 1.2%.

Pertaining to the prior CEO and now Executive Chair John Chiminski, he currently holds 332,217 shares of CTLT stock. This represents the second-lowest number of shares owned since the company's IPO in 2014. This amount is about half is trailing five-year average holdings of 772,304 shares.[12]

The recent drawdown of insider stock coupled with the recent high-level executive turnover only corroborates our short thesis at Catalent.

Chart 7: Insider Ownership at CTLT



[12] FY2022 Proxy (09/16/22).

Management Has Incentive to Manipulate Revenue and EBITDA Based on its Performance Goals

Digging into CTLT's recent proxy statement, we find that a very small percentage of compensation is based on salary and primarily based on incentive awards. Specifically, we detail the main NEOs below and their respective compensation:

- Executive Chair John Chiminski earned $1,0750,000 in salary which only represented 8.7% of his total compensation of $12,407,517 for FY2022.

- Newly appointed CEO Alessandro Maselli earned $654,183 in salary, which represented 20.2% of his total compensation of $3,234,030 for FY2022.

- CFO Thomas Castellano earned $500,000 in base salary, which represented approximately 30% of overall compensation for the fiscal year.

The point we would like to make is that a large percentage of compensation comes in the form of both "Management Incentive Plans (MIP)" and "Long-Term Incentive Plans (LTIP)". These plans carry both cash and equity-based payments and represent a much larger portion of total compensation than their base salary.

The board decided to base these incentive plans on what they call "budget-based revenue" and "budget-based EBITDA". These metrics somewhat mimic reported revenue and Adjusted EBITDA given by management for the year. In detail for FY2022, budget-based revenue and EBITDA were disclosed as $4,912 million and $1,315 million, respectively. These metrics apparently exceeded their target goals by 7.5% and 10.3%, respectively, earnings management a heightened payout based on their MIP and LTIP goals.[13]

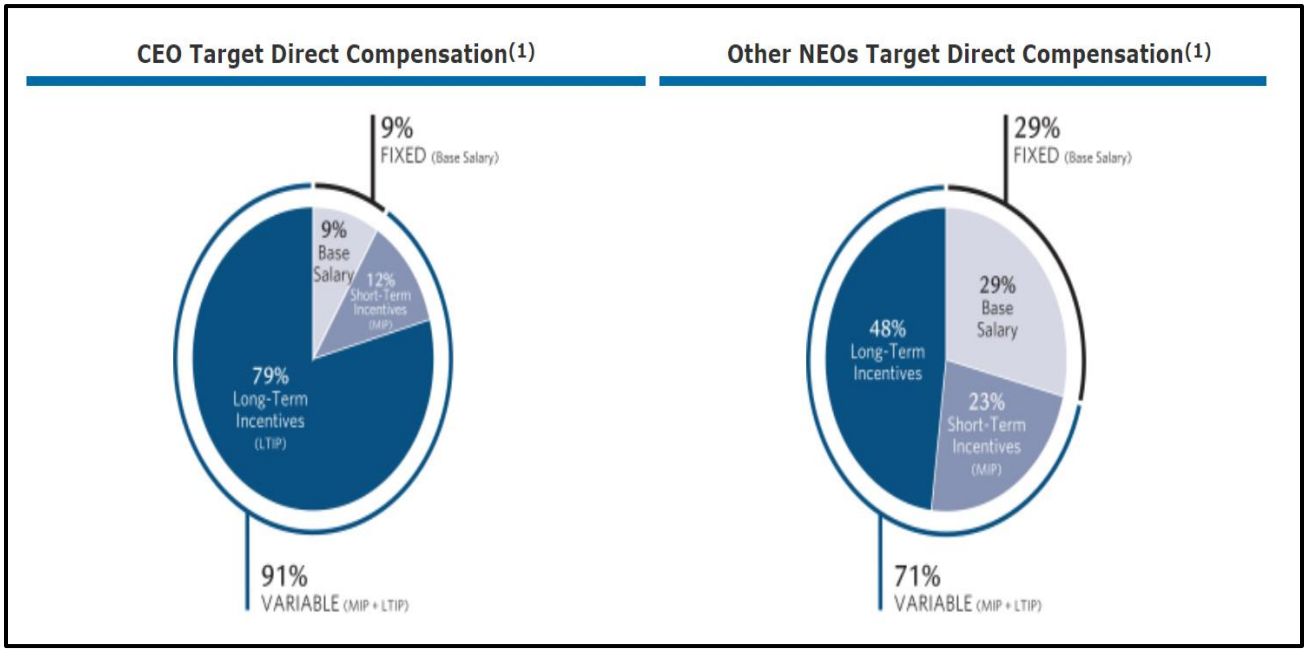
Based on the amount of earnings management disclosed herein, we believe that management had increased motivation and opportunity to manipulate both revenue and EBITDA in order to hit performance targets. Regarding the revenue target, we discussed earlier how we believe management used contract assets to prematurely recognize over $550 million in suspect revenue. If we adjust "budget-based revenue" of $4,912 million downwards by this amount, we see a value of only $4,343.8 million. This would have caused management to miss their target by 4.9%.

[13] FY2022 CTLT Proxy Statement

Additionally, CFO Castellano recently admitted to over $400 million on excess inventory on the balance sheet. Even if management wrote off half the inventory of $200 million, this would have caused management to miss their EBITDA goal by 6.5%. Again, this is just focusing on the inventory and ignores other earnings quality concerns.

The company already attributes a higher percentage of variable pay to its prior CEO than its peer group (91% versus 71% for the industry). Thus, allowing management to base their bonus and equity awards on manipulated metrics such as revenue and adjusted EBITDA.

Exhibit 1: CEO Compensation Versus Industry[14]



[14] FY2022 CTLT Proxy Statement

Recent Executive Turnover Only Adds Fuel to the Fire

The recent amount of high-level executive departures gives our analysts cause for concern at a time of poor earnings quality. Making matters worse, we see how insiders now hold a near 10-year low percentage of CTLT stock. Here is the recent executive turnover in the last two years:

- On 01/05/22, long-standing CEO (13 years) John Chiminski agreed to step down from his position on 07/01/22, leaving his role to the then COO Alessandro Maselli. We note that since FY2017, Mr. Chiminski owned a total of 1,034,336 shares in the company. Since that time, this amount has dwindled down to only 332,217 shares.

- On 05/11/21, Catalent's previous CFO Wetteny Joesph left her position to work at Zoetis. The firm then promoted its Chief Accounting Officer (CAO) Thomas Castellano to fill the position on that date.

- Since then, there has been musical chairs going on with the CAO position. This is at a time when red flags galore have appeared at CTLT. On 06/01/21, the firm elected Ricky Hopson to fill Mr. Castellano's previous role as CAO. However, just one year later, he stepped down from this role on 07/05/22 in what appears to be a demotion to the Division Head of Clinical Development and Supply. Finally, on 09/09/22, this vital role was filled by Karen Santiago.

Post COVID Boost, Accounting Red Flags Could Lead to Substantial Downside in FY2023

The bull case regarding Catalent's stock price revolves around the following tenets that we believe the sell-side community has misunderstood:

- Analysts believe that CTLT recent sales decline is transitory and will turn around to grow near mid-single-digits in the near term.
- Analysts believe that CTLT will reach a long-term target growth rate near 10%.
- Recently the market reacted positively to Barclays reporting that the FDA cleared form 483 violations, although this has not been confirmed by the company at this time.[15]

Overall, we believe that Catalent will face both fundamental and earnings quality headwinds moving into a post-COVID environment. We believe that management may have turned to accounting gimmicks in order to unsustainably boost earnings in the near term. We believe the sell-side community is not accurately pricing in the magnitude of our earnings quality concerns.

We have gone step-by-step to debunk many of these flawed reasonings for investors and analysts. Based on our analysis, we believe that much of the recent sales growth was attributable to prematurely recognizing revenue. With respect to the company's already diminished cash flow figures, we believe a reversal to generate meaningful amounts of free-cash-flow will be a painful one for Catalent.

We believe the spike in contract assets suggest that management is behind on major long-term contracts and has not reached milestones as determined by their own project managers. Furthermore, the stagnation in customer advances suggest a low quality of revenues that will be a material topline headwind going into FY2023.

Accordingly, we are initiating coverage on Catalent, Inc. (CTLT) with a Strong Sell Opinion.

[15] With regards to the firm's clearing of its 483 violations that have not been confirmed, CFO Castellano downplayed the significance of the Brussels plant in at the KeyBanc Conference stating, "Our fiscal 2022 guidance, which we did raise after the second quarter results, takes into consideration any financial impact associated with this [the Brussels plant closing], which our quote was this was not material."

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