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Early Evidence on Critical Audit Matters in Expanded Audit Reports

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I. Introduction

In 2017, The PCAOB issued a new Audit Reporting Standard; AS 3101: "The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion". One of the required additions of this standard was auditors being required to report on Critical Audit Matters (CAMs hereafter) when writing audit reports. This requirement first took effect for large, accelerated filers in fiscal years ending on or after June 30, 2019 and then for all other companies with fiscal year ending on and after December 15, 2020. CAMs addressed "involve the most difficult, subjective, or complex auditor judgments, pose the most difficulty to the auditor in obtaining sufficient appropriate audit evidence, or pose the most difficulty to the auditor in forming an opinion on the financial statement" (Christensen, 2013). This created a whole new version of audit reports and footnote disclosure, a change that is bound to affect the auditors, the firms that are being audited, and users of those audit reports. I am specifically investigating the effects of this new auditing standard. First, I present early evidence on the nature of most frequent CAMs and industries with most CAMs reported. Further, I examine whether the frequency of disclosed CAMs and the nature of such CAMs affect the timeline of audit reports and audit fee. Lastly, I investigate how companies respond to the CAM disclosure through subsequent year audit reports.

First, I find that revenue recognition is one of the most frequent CAMs found in audit reports, lining up with recent changes in revenue recognition standards discussed in this paper. Second, the Business Services Industry and Chemical and Allied Products Industry present the most number of CAMs due to the nature of complexity involved in transactions in those industries. Third, audit fee seems to decrease more when there is a decrease in CAMs over years versus no change in CAMs for both EY and Deloitte Clients. Lastly, for EY, there is one more day reduction in audit delay for observations that have decrease in CAMs than those with no change. For Deloitte clients, there is no reduction in audit delay under any of the situations, but there is a half day more of audit delay for those observations with decrease in CAMs than those with no change in CAMs.

Because the new auditing standard is recent, there is very limited research examining the nature and the effects of this standard. My research contributes to the literature by providing early evidence on the nature and effects of this regulatory change.

II. Literature Review

Nature of Key Audit Matters

Although CAMs were most recently introduced to audit reports in the U.S., many European countries have been including Key Audit Matters (KAMs) in audit reports for years. The discussion about the similarities and differences between CAMs and KAMs is found in a later section.

In January 2015, the International Audit and Assurance Standards Board revised Auditor Reporting Standards. A significant change that was made during this revision was "ISA 701, Communicating Key Audit Matters (KAM) in the Independent Auditor's Report" (McGeachy, 2012). As a response to this, many European Countries adopted their version of KAMs. In France, expanded audit reports where auditors are required to disclose Justifications of Assessments (JOA) had existed since 2003 and put in place by audit standard "NEP 705: Justification of Assessments" (Bédard and Schatt, 2018). Bédard and Schatt (2018) examined the effect of these JOAs on investors and on the audit itself. It was expected that JOAs would result in an increase in audit report delay because they require additional time and effort, and that it could prompt investors to react if it decreased the information asymmetry between investors and auditors (Bédard and Schatt, 2018). However, they find that neither JOAs implemented for the first time or new ones in subsequent years showed an effect for investor reaction and that there is no increase in audit report delay. It was concluded that the "lack of effect on investors is consistent with the view that JOAs do not provide new information in addition to what is already expected by investors or what they may infer from financial statements" (Bédard and Schatt 2018). This is not to say that investors do not care about JOAs, but rather that the information being disclosed in them is information that they are mostly aware of already due to their knowledge about the financial performance of said company. The lack of audit delay that can be attributed to a few different reasons. The first one being that "JOAs do not require more time, including more discussions among management, the auditor, and the audit committee" (Bédard and Schatt, 2018). The other reason being that although they may require more time and effort put in by the auditor, these additional "costs" are absorbed by the auditors themselves, not the companies (Bédard and Schatt, 2018).

Pinto, Morais, and Quick (2020) examine whether or not these new KAM disclosures result from more precise accounting standards. In this setting, they define precision as more or less rules-based standards. They discuss how an article used in their research "argues that more rules-based accounting standards increase the precision level of the standards, which in turn may have implications for the behavior of participants in the financial reporting process" (Pinto et al., 2020) and use that to predict whether precision impacts the likelihood of a KAM being identified and reported. Pinto et al. (2020) makes an important point that KAMs are not standardized, but rather left up to the auditor's professional judgment, which means that there are differences between different KAMs that are identified. These differences can result in users making different decisions because of the different professional judgment of auditors, which is why analyzing and understanding factors that may increase the chance of a KAM being identified is important (Pinto et al., 2020).

Pinto et al. (2020) finds that “it is more likely to have a KAM in accounting standards with a higher level of precision” and that “the disclosure of KAMs based on more precise accounting standards decreases the readability of auditor’s reports”. This is a really important finding because it creates a new issue; when KAMs are issued, auditor reports are harder to read, which potentially reduces the usefulness of audit reports. It suggests that for users to understand the KAMs and understand why they are being identified and what that could mean for the company, requires a higher level of education than if you were to read an audit report that does not identify KAMs.

Genç and Erdem (2021) analyze the relationship between KAMs and firm characteristics in Turkey. In their research, they “determined the matters which should be included as KAMs and the factors affecting KAM disclosures” through an examination of 18 companies and how their audit reports relate to their characteristics. Genç and Erdem (2021) conclude that there is a negative relationship between KAM matters disclosed and company size, noting that “large firms have more power to negotiate with auditors in terms of audit fees and they can put more pressure on the auditors to disclose less KAM”. It was also found that inventory often requires specialized audit procedures, and those firms with large amount of inventory stock often have inventory-related KAMs identified. In addition, Plant, property, and equipment (PPE), because of its complicated nature, tends to cause an increased amount of KAM disclosures. Lastly, Genç and Erdem (2021) find that changing which Big Four firm performs the audit for these companies does not have a significant effect on the number of KAMs that are disclosed or their matters, which suggests “a unified audit judgment amount Big 4 audit firms” (Genç, 2021).

Institutional Background of Critical Audit Matters

In 2017, the Public Company Accounting Oversight Board (PCAOB) issued a new Audit Report Standard. AS 3101: “The Auditor’s Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion.” This new standard introduces three new parts to the Audit Report. The first one being communication of Critical Audit Matters (CAM), which makes up a part of the Extended Audit Report that is now required. CAMs are matters addressed during the audit report that “involve the most difficult, subjective, or complex auditor judgments, pose the most difficulty to the auditor in obtaining sufficient appropriate audit evidence, or pose the most difficulty to the auditor in forming an opinion on the financial statement” (Christensen, 2013). Another part is the disclosure of audit tenure – “the year in which the auditor began serving consecutively as the company’s auditor” (PCAOB, 2017). Lastly, it includes other improvements that clarifies the role and responsibilities of the auditor and makes the report easier to read.

This requirement to include CAMs in the audit reports first took effect for large, accelerated filers in fiscal years ending on or after June 30, 2019 and then for all other companies with fiscal year ending on and after December 15, 2020. The PCAOB made this change because they believed that adopting CAMs “responds to the strong interest of investors for enhanced communication about the audit and is consistent with the mandate to ‘protect the interests of investors and further the public interest in the preparation of informative, accurate, and independent audit reports” (PCAOB, 2017). The new CAM requirement goes into the Expanded

Audit Report and is preceded by the opinion on the financial statement by the auditor as well as the basis for opinion. The addition of this rule caused some controversy because it was thought that it would increase cost to companies that pay for audit reports, and it would increase the auditor's liability because they are now disclosing what they believe critical matters may be in the audit and the disclosure may increase the litigation risk for auditors. In addition, some of the research also raises concerns about the actual benefit to investors and an increase in time that it takes for audit reports to be completed. A CAM is a communication to the audit committee, disclosure on material financial statement accounts, and especially challenging, subjective, or complex auditor judgment (Zhang, 2021).

Communication to the Audit Committee focuses on the required communication between the audit committee and the auditor about any internal control deficiencies, and while this was already required by the PCAOB, it adds to the consideration of whether any CAMs should be disclosed to the public (Zhang, 2021).

The material financial statement accounts or disclosures aspect of the definition is a really important one. The CAM that is being communicated must relate to a financial statement account or a disclosure, but it also shines light on the fact that materiality required by the PCAOB does not only apply to quantitative, but also qualitative factors. This means that even the qualitative communications of CAMs must be tied to material accounts or disclosures in the financial statements (Zhang, 2021).

Lastly, a CAM involves "especially Challenging, Subjective, or Complex Auditor Judgment" (Zhang, 2021), as which accounting estimates are often qualified, but the PCAOB has also provided other items based on judgment that could potentially fall under CAMs. Some of these are “the nature of audit evidence obtained regarding the matter and the auditor’s assessment of the risks of material misstatement, including significant risks” (Zhang, 2021).

When communicating CAMs, the PCAOB has required a few different pieces of information for each CAM identified in the current year audit report. Information requires including a reasoning and description of the considerations that made the auditor decide that the matter qualified as a CAM, a relation and reference to the relevant financial statement accounts or disclosures, and an explanation of how the CAM was addressed in the audit.

Although Zhang (2021?) discusses studies and results from research in France, the idea behind it is the same, since both JOAs and CAMs are an additional part of the audit report that require time and effort to talk about matters that may be unclear or need more explanation. The biggest difference between CAMs and KAMs is that the PCAOB requires CAMs to be related to a material financial statement account or disclosure. This means that in some cases, what qualifies as a KAM may not qualify as a CAM because it doesn’t directly relate to an account, for example, “the implementation of a new information technology system during the period may be an area of significant auditor attention and may in some cases be identified and communicated as a KAM” (Fourie, 2019), but because it may not directly relate to a financial statement account or disclosure, it may not qualify as a CAM. In conclusion, the PCAOB has set more strict requirements for what qualifies as a CAM.

Nature of Critical Audit Matters

Because the requirement of CAMs in audit reports took effect recently, only a few studies have examined CAMs in the U.S. Christensen and Wolfe (2013) conducted an experiment where non-professional investors that are alumni of a businesss school were given a case study about ficticious companies. Christensen and Wolfe (2013) state the purpose of CAMs is to provide more insight and explanations to investors about difficult audit issues by responding “to investor requests for more decision-relevant information while keeping management as the originator of company-specific information”. In their research they found two different results. The first one being that nonprofessional investors that participated who received an audit report that contained a CAM paragraph “are more likely to stop considering the firm as an investment” than those nonprofessional investors that received the audit report without the CAM discussion (Christensen and Wolfe 2013). They noted this difference to an “information effect, because footnote disclosure combined with CAM paragraphs influences investment decisions more than footnote disclosure alone” (Christensen and Wolfe, 2013).

It was also found that participants who received a CAM paragraph in the audit report “are more likely to stop considering the firm as an investment than are those receiving the same information from the CAM paragraph in the footnotes” (Christensen and Wolfe, 2013). Christensen and Wolfe (2013) attributed this to a source credibility effect because “the source of the CAM paragraph information outweighs the paragraph’s information effect” In order words, investors who are receiving a CAM paragraph in the audit report think it is more credible than investors who receive the same CAM paragraph information in management’s footnotes. In addition, it was also found that those extended audit reports that possessed a resolution paragraph addressing the CAM discussed “decreases the desire to stop considering the firm as an investment, regardless of whether positive or negative assurance is offered” (Christensen and Wolfe, 2013). This demonstrates that as long as resolutions are being considered, nonprofessional investors feel more confident in the company and in investing, whether the implementation of those possible resolutions are likely or not.

Bentley and Wang (2020) discuss that managers have always had incentives to avoid discussions and disclosures that are costly to them and suggest how CAMs fall under that category, because “it requires the auditor to provide additional information about management’s estimates, judgments, and accounting policy choices”. At the same time, managers don’t have much control over whether a CAM disclosure is issued or what is disclosed and discussed in it other than try and avoid business transactions and activities that may prompt a CAM disclosure. (Bentley and Wang 2020). Bentley and Wang (2020) found that a CAM disclosure “reduces managers’ risk-decreasing activities in both a loan issuance context and a derivative context” (Bentley and Wang 2020). In addition, it was also found that “when we add a condition that includes disclaimer wording intended to reduce the implied auditor support offered by a CAM disclosure, this reduces managers’ risk-increasing (but not risk-decreasing) activities, in comparison to a CAM disclosure that does not include the disclaimer.” (Bentley and Wang 2020). In conclusion, Bentley and Wang (2020) touches upon the fact that managers operating decisions are influenced by potential CAMs and disclosures that may arise from the business activities they are deciding to pursue.

Throughout my literature review, I found a couple of articles such as Bentley and Wang (2020) and Christensen and Wolfe (2013) that focused their research on experiments rather than analyzing real company data. In contrast, my paper uses real company data from 2019-2021 year ends which makes a significant contribution to the literature.

III. Research Questions and Predictions

In this paper, given that the requirement to include CAMs in audit reports took effect in 2019 for large accelerated filers, I first present descriptive statistics on the nature of CAMs across different industries and over time. Such statistics help to understand which categories of CAMs are most frequent overall and in different industries. Second, I examine the effect of CAMs on audit fees and audit timeliness. I expect that the presence of CAM disclosures does not necessarily increase the time it takes to release audit reports. This is because if an auditor has audited a company for many years, they may understand the company well and may already be aware of certain aspects that are complicated. I however expect that audit lag would be longer if there were multiple CAMs being disclosed rather than just one. For audit fee, I would expect there to be an increase if there are a greater number of CAMs because it may increase the hours that auditors are spending on the entire audit.

IV. Methodology

I start with all EY and Deloitte Boston Office clients, identified by using Audit Analytics on the Wharton Research Data Service. Since the requirement to include CAMs in audit reports took effect first for large, accelerated filers fiscal years ending on or after June 30, 2019 and then for all other companies with fiscal year ending on and after December 15, 2020, to ensure I have the largest sample possible, I filter the data to only include fiscal year ending after June 1, 2019 of large accelerated filers. I then hand collect detailed information regarding each CAMs disclosed for EY and Deloitte Boston Office clients by reviewing footnote disclosures of each corresponding 10K. My final sample has 45 distinct clients from 2019-2021 including data with company name, year-end date, signature date, audit delay, filing date, filing delay, number of CAMs disclosed, nature of CAM and SIC industry code. Within the nature of CAM, I documented the description of the CAM as well as how the auditors addressed the CAM and proceeded to test and gather more information on it. After collecting the data, I grouped the

CAMs into bigger categories and started my analysis to gain an understanding on which CAMs are more frequent and which industries tend to have the most number of CAMs.

V. Results and Discussion

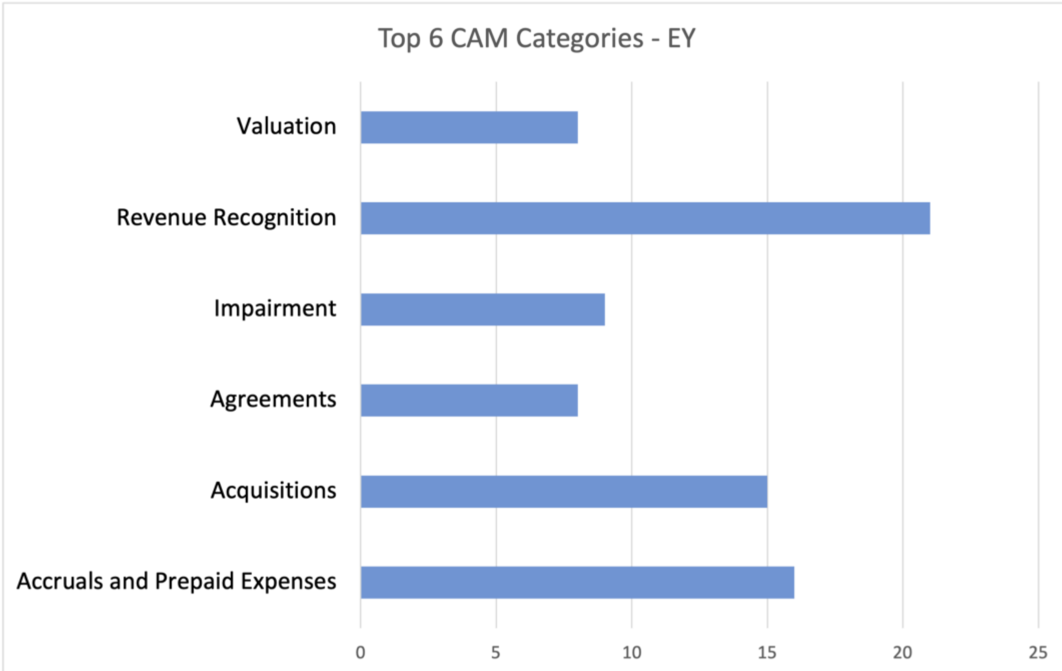
Part I – Descriptive Statistics of the Nature of Critical Audit Matters

When presenting my results, I chose to present EY and Deloitte separately. This is because although they do share some of the same results for the descriptive statistics and most frequent CAMs, they also present a few of different results. The deeper CAM frequency analysis in different industries yields different results that would be hard to present and analyze together.

EY Clients

First, I examine the frequency of CAM categories for EY clients. In Graph 1 below, revenue recognition is the most frequent CAM disclosed in audit reports for Boston EY Clients. It is then followed by accruals and prepaid expenses and then acquisitions.

Graph 1: Top 6 CAM Categories for EY Clients

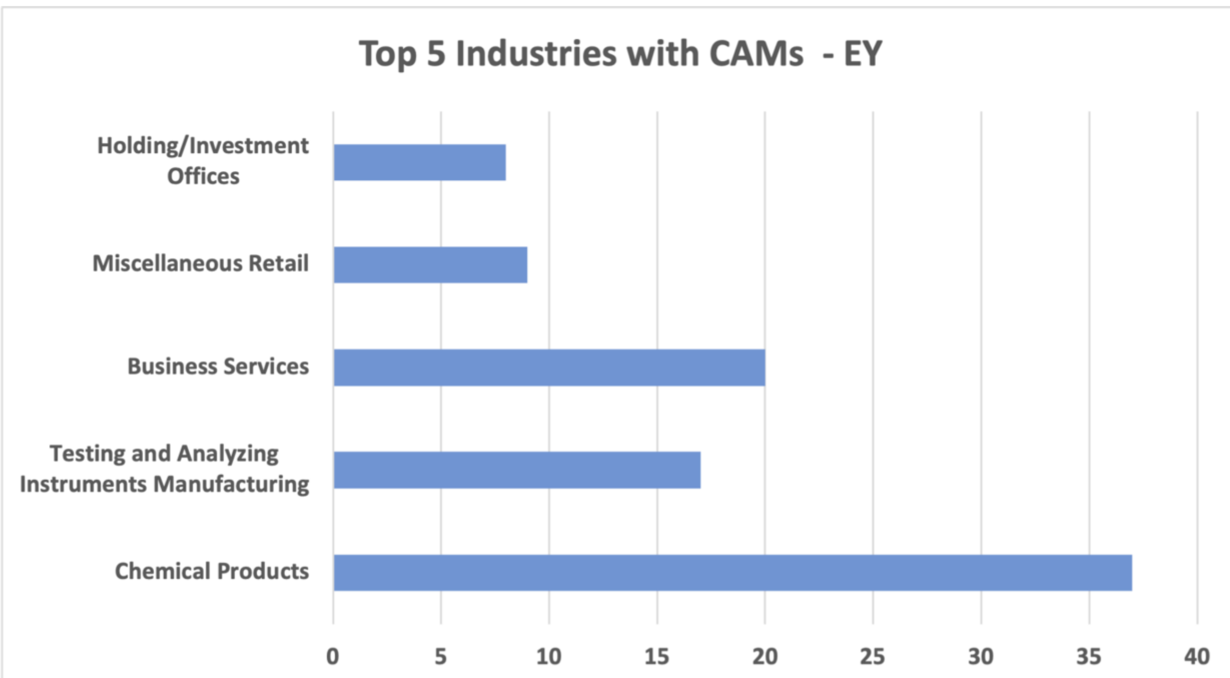


The complexity with the new revenue recognition standard taking effect for public entities for periods beginning after December 15, 2016 is the main reason for revenue recognition being the most frequent CAM disclosure The new standard calls for entities to "'recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration [that is, payment] to which the entity expects to be entitled in exchange for those goods or services.'" (FASB 2014**)**. This shifts the focus of revenue recognition from a heavy rules-based calculation to a heavy judgment-based calculation. If management and employees of the company are having to make assumptions and judgment based off their knowledge of the company, it will be hard for auditors to be able to audit those calculations and assumptions and vouch for the numbers.

In Moderna's 2020 10K, "Revenue Recognition from Collaboration Revenue" is identified as a CAM. The description states that the company recognizes revenue from contracts with customers through determining performance obligations that must be met. Then, as those obligations are met, they allocate a percentage of the overall contract revenue. The auditor states that this requires lots of management and employee assumptions, judgment, and knowledge about complex transactions and these obligations.

In addition, I analyzed the frequency of CAMs in different industries, using 2 digit SIC Industry Code. In Graph 2, for EY clients, I present the five industries with the most number of CAMs, and then analyze the most frequent CAMs in each industry.

Graph 2: Top 5 Industries with Most CAMs For EY Clients

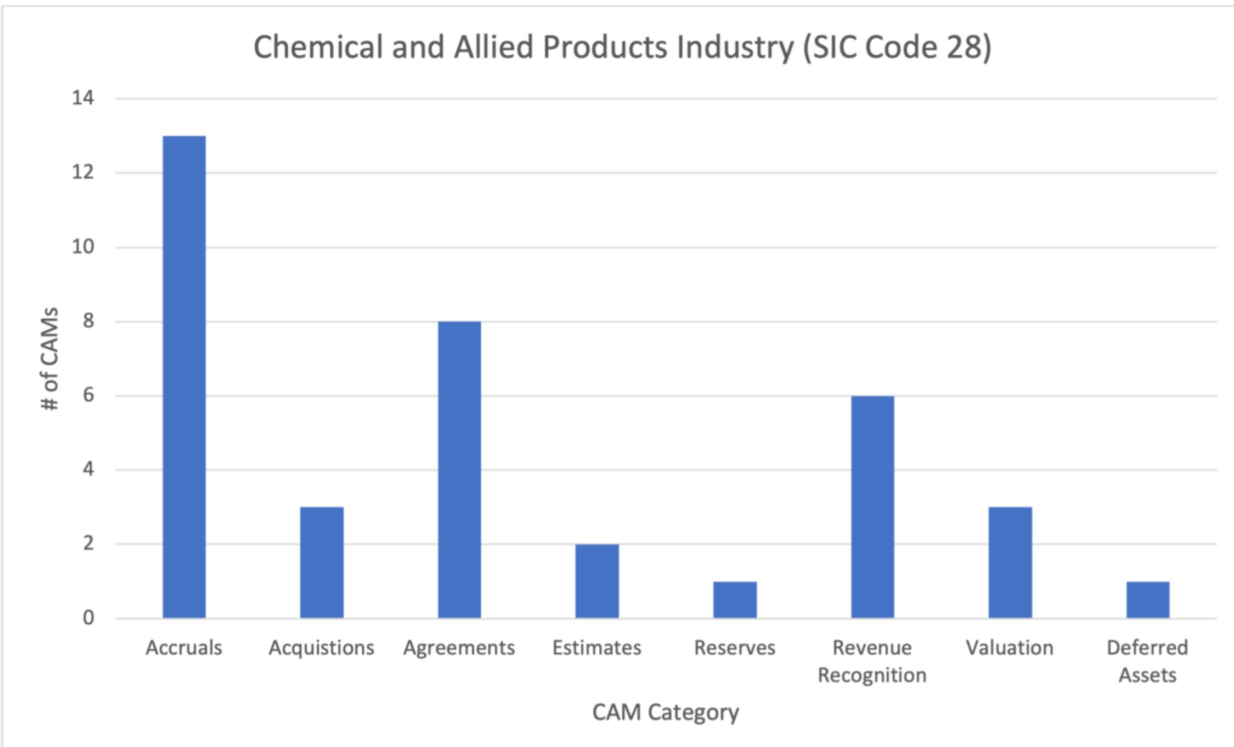


The chemical products industry is made up of a lot of pharmaceutical companies like Moderna, J&J, and AstraZeneca. In the holding and investment offices industries you can find investment banking and management firms like Goldman Sachs. Under miscellaneous retail, you can find retail companies such as TJX Companies, Staples, and Philips. The business services industry is comprised of companies such as Bottomline Technologies, Apple, Microsoft, and Oracle. The testing and analyzing instruments manufacturing industries like Boston Scientific

Corporation, and Therma Fischer Scientific. I present the analysis on the frequency of CAMs for the Chemical Products, Business Services below.

The Chemical Products industry has the greatest number of CAMs, at just over 35 occurrences. As seen below in Graph 3, accruals and prepaid expenses is the most frequent CAM. It is then followed by agreements and revenue recognition.

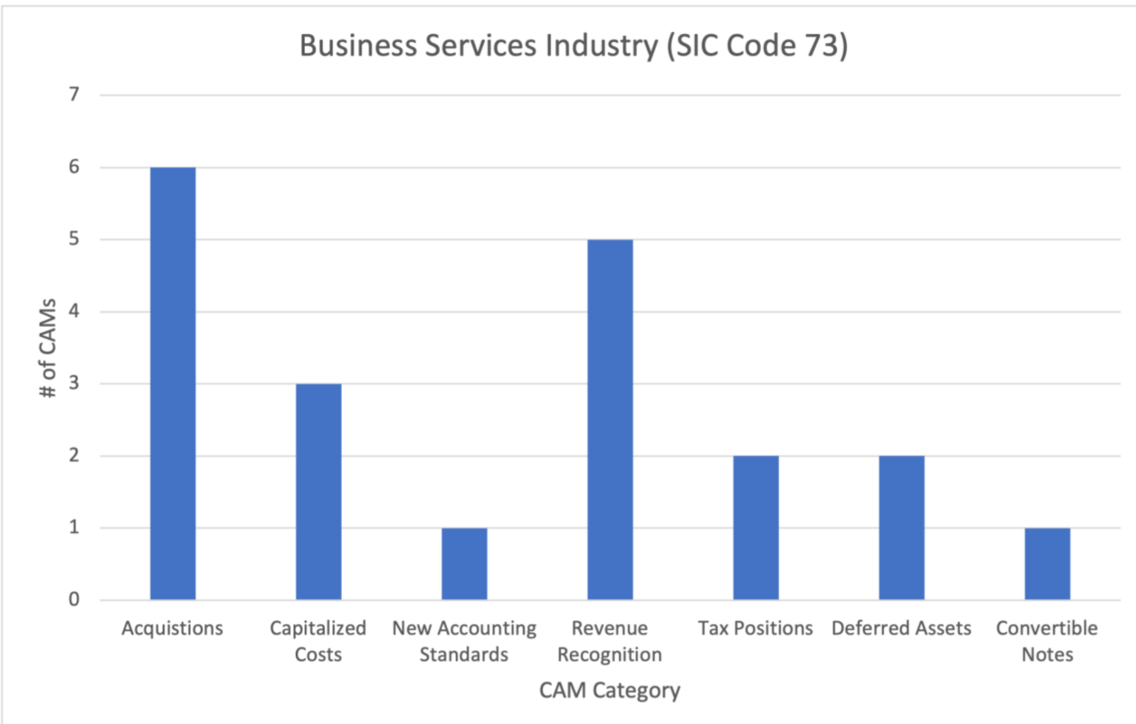
Graph 3: CAM Category Breakdown for Chemical and Allied Products Industry



To examine what CAM issues are related to Accrued and Prepaid Clinical Trial Expenses, I review Acceleron Pharma's 2020 10K. The auditor described that Acceleron includes estimated obligation for clinical trial expenses. These clinical trial expenses are based on estimates they receive for the services that they are looking for. Third party companies that conduct research for Acceleron are the ones responsible for the quotes and contracts. In this case, EY also identified that there is a significant application of management judgment because they are estimating services that have been provided but they have not been charged for, increasing audit complexity.

The business services industry is the next industry with the greatest number of CAMs with around 20. The category breakdown differs from the one for chemical products as seen below in Graph 4.

Graph 4: CAM Category Breakdown for Business Services Industry

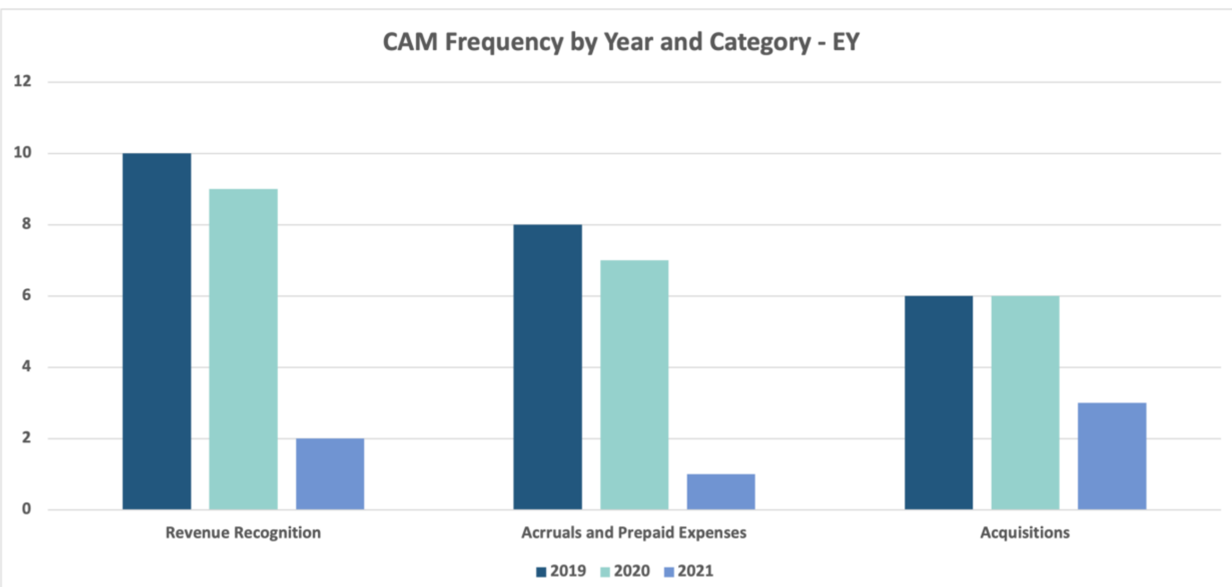


In this industry, acquisitions and revenue recognition are the most frequent CAMs. I examine Everbridge Inc's 2020 10K to better understand the acquisition CAM. Accounting for Acquisitions is identified by EY as a CAM. The auditor explains that Everbridge Inc acquired five companies in 2020. EY identifies that the recognition, disclosure, and measurement of the business combinations required determinations and assumptions by management that were hard for the auditor to go over.

Further, the new revenue recognition standards have differential impact on different industries (Richi 2018). Software industries are one of the highly affected industries because "often, software contracts include post-contract customer support such as technical support, maintenance, and software updates… under ASC 606, entities will need to evaluate whether these services are distinct performance obligations from the license itself" (Fisher 2019). Therefore, it is no surprise that revenue recognition is one of the CAMs that are most present.

Next, I analyze the frequency of each of the most frequent CAMs by year to gain an understanding of a time-series change. In Graph 5 below, it is evident that there is a very small decrease in CAM frequency from 2019 to 2020 for the two most frequent CAMS, revenue recognition and accruals and prepaid expenses. It is important to note that because the data for 2021 was not complete at the time of data collection, caution should be exercised to interpret the decline in number of CAMs in 2021.

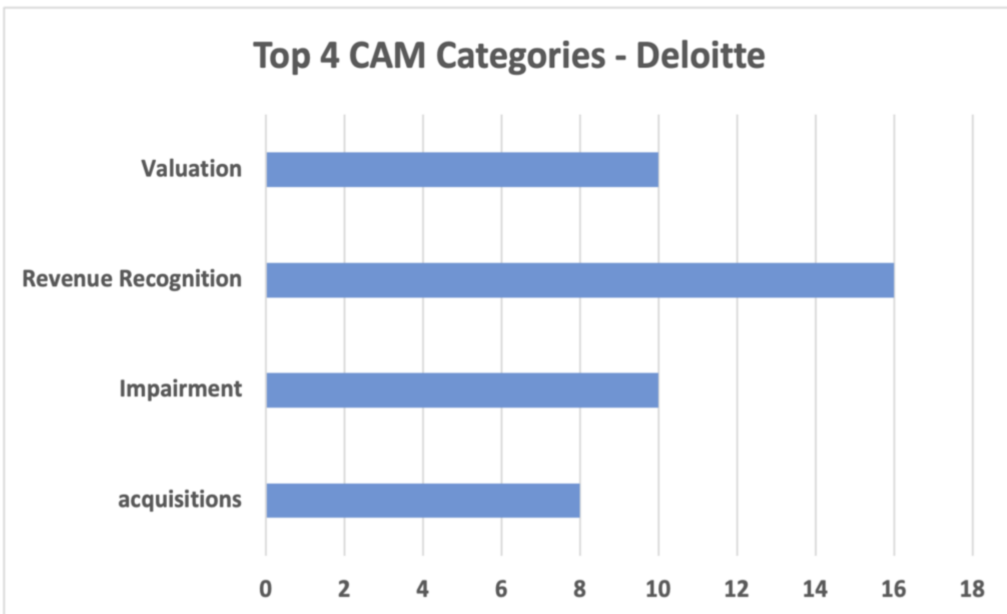
Graph 5: Time-Series – CAM Frequency Change by Year and Category for EY Clients



Deloitte Clients

When analyzing the data for Deloitte Clients, I found interesting how it differed from EY's analysis in certain ways. Based on Graph 6, although revenue recognition is still the most frequent CAM, it is followed by valuation and impairment. Both valuation and impairment were on the lower end of frequency for the EY clients.

Graph 6: Top 4 CAM Categories for Deloitte Clients

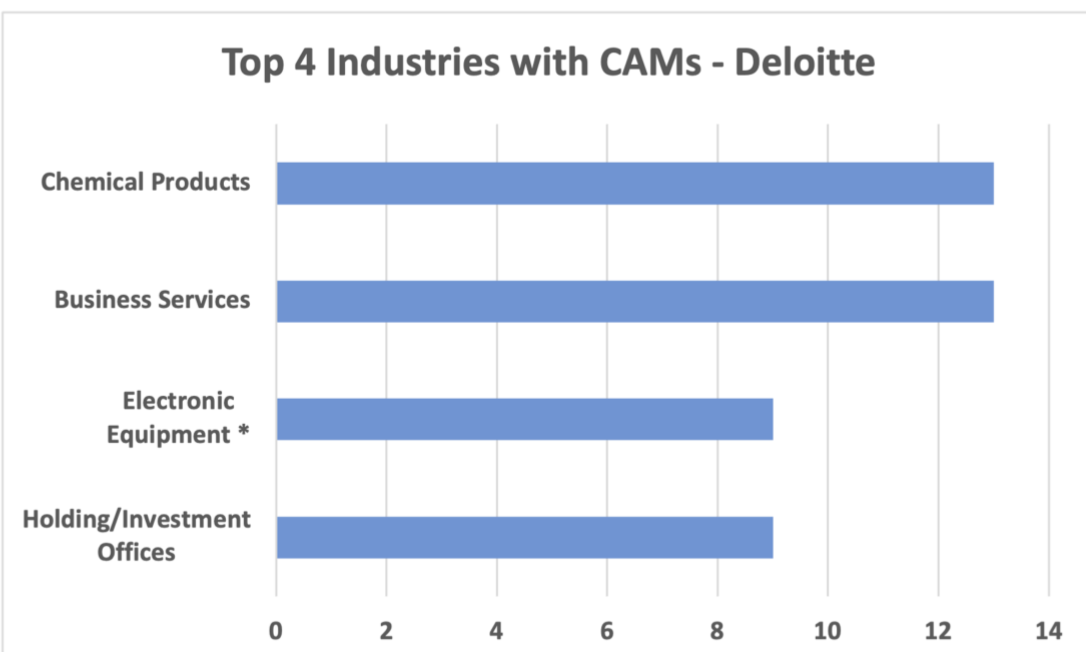


Reviewing Lantheus Holdings Inc's 2020 10K gains a better understanding of what a valuation CAM is. Deloitte identifies a CAM on the Valuation of Certain Intangible Assets in the Progenics Pharmaceuticals, Inc. Acquisition. Deloitte identifies that management estimated the fair value of different accounts of the company through significant estimates and knowledge about the two companies. Deloitte also specifies that the complexity required a valuation specialist.

For impairment, Deloitte identifies a CAM in MACOM Technology Solutions Holding Inc's 2019 10K. They identify that the impairment of long-lived assets is complex because the value of their PPE is reassessed for value when events happen or there are changes in circumstances that suggest a reassessment of value. The determination of their long-lived assets value includes significant estimates and assumptions related to different moving parts of the company, including forecasted revenue. As an auditor, Deloitte does not have the same knowledge and understanding of these aspects of the company as management does.

Further, I examine the frequency of CAMs for industries in which Deloitte's clients appear in Graph 7 below. Two industries had the same number of CAMs at 13 each, and two industries had the same amount at 9 CAMs each. Deloitte and EY have three CAM categories in common in Graph 2 and Graph 7: chemical products, business services, and holding and investment offices. However, the numbers of CAMs for each of these categories is much lower for Deloitte than they are for EY.

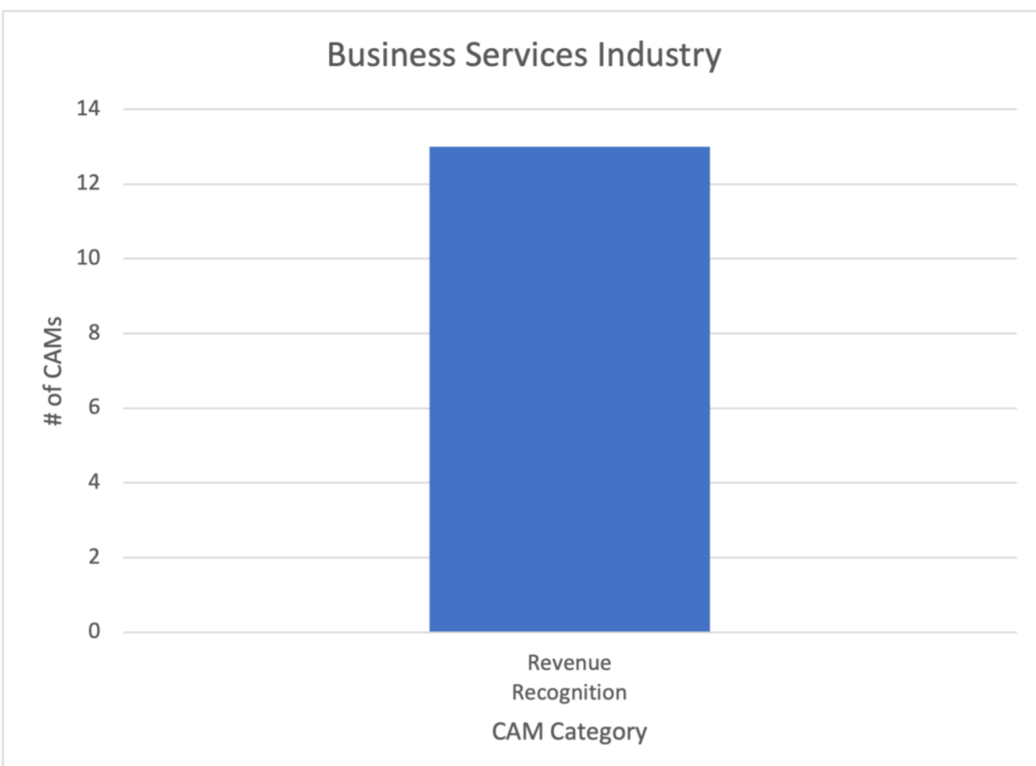
Graph 7: Top 4 Industries with Most CAMs for Deloitte Clients



The electronic equipment industry, which does not include computer equipment, is made up of companies like Intel Corp and Micron Technology Inc.

For Deloitte, the business services industry is one of the industries with the greatest number of CAMs. As seen in Graph 8 below, the only CAM category in this industry is revenue recognition. While it is hard to come up with a concrete answer to why this may be the case, what was discussed earlier still applies. In the business services industries, there are a lot of contracts that are present, and with the new revenue recognition standards, those may be impacted at a greater level and require more assumptions and complex judgment by management. As stated earlier in the EY analysis, these companies will need to start determining whether obligations that follow their contracts are different performance obligations and will need to calculate revenue accordingly.

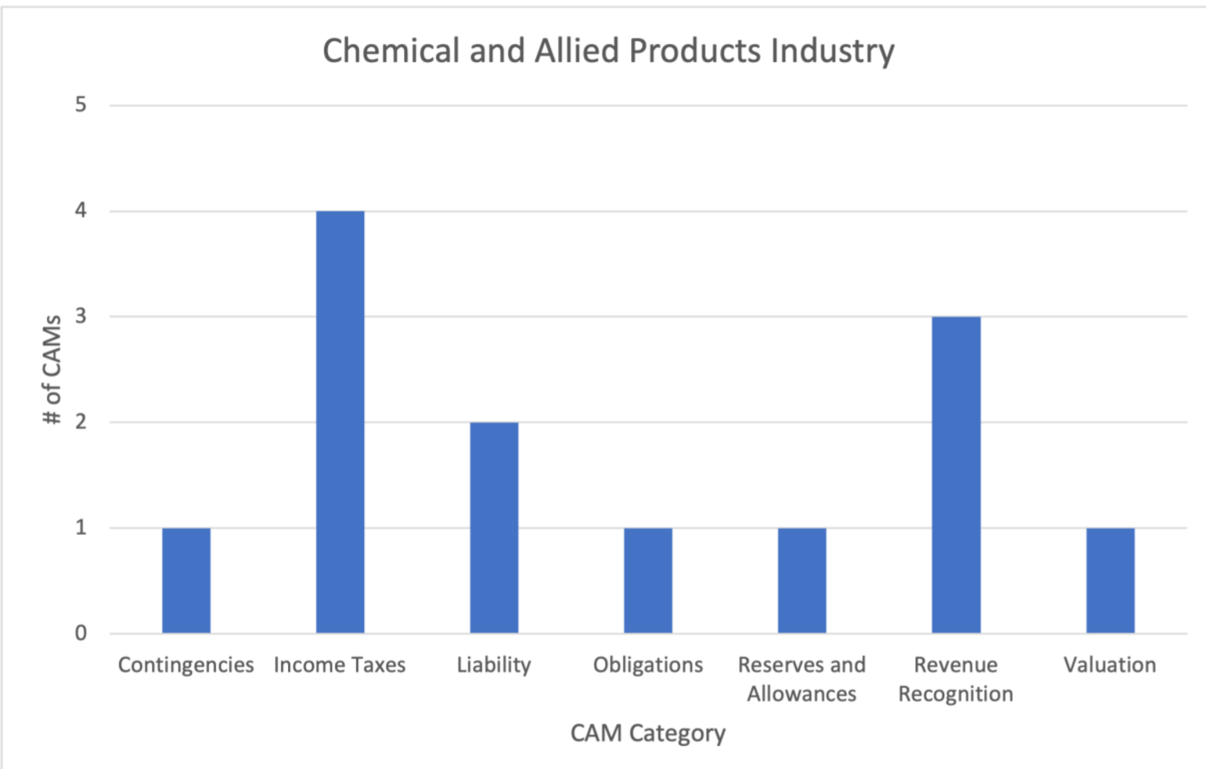
Graph 8: CAM Category Breakdown for Business Services Industry for Deloitte Clients



Deloitte identifies a CAM in Pegasystems's 2019 10K. Deloitte states that one of the ways the company generates revenue is software licensing agreements, which contain multiple performance obligations. Management is required to use complex calculations to determine percentage allocations of revenue to each performance obligation.

Like EY, the chemical products industry also poses significant CAMs. As see in the breakdown in Graph 9 below, income taxes is the most frequent CAM, followed by revenue recognition.

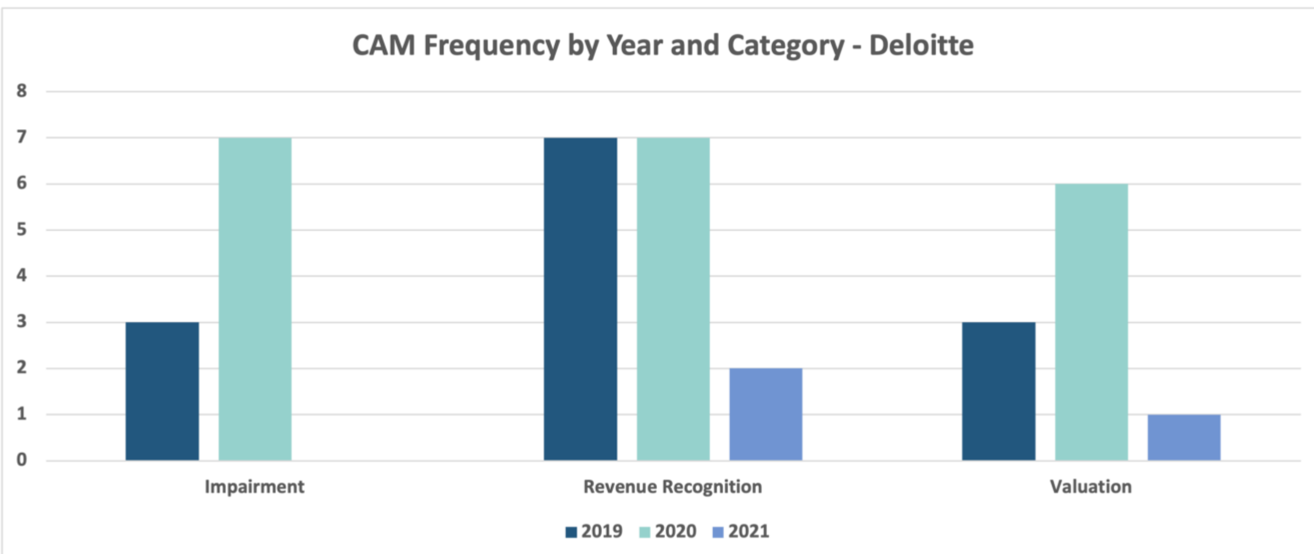
Graph 9: CAM Category Breakdown for Chemical and Allied Products Industry



An example of an income tax CAM in the chemical products industry can be found in Cabot Corp's 2019 YE 10K. Deloitte identifies *Income Taxes – Accounting for Global Intangible Low-Taxes Income (GILTI) and Base Erosion and Anti-Abuse Tax (BEAT)*, and explains that the company operates in over 20 different countries, and is subject to taxation in each country. Calculation of the GILTI requires management to make significant judgments.

For the analysis on CAM frequency by year and category for Deloitte as see in Graph 10, the data shows that there was a significant increase in impairment and valuation CAMs from 2019 to 2021. It is important to note that the 2021 data for Deloitte may also not be complete due to the date of data collection. While there are no known changes in regulations and standards that may provide an explanation for this increase, both impairment and valuation are estimates that are inherently complex and require a deep understanding of a company's assets.

Graph 10: Time-Series – CAM Frequency Change by Year and Category for Deloitte Clients



Part II – An Analysis of Audit Fee and Audit Lag Due to Critical Audit Matters

To analyze audit fee and audit lag for both EY and Deloitte clients, I separated their distinct clients into three different categories: those who had a decrease in CAMs in years 2019-2021, those with an increase in CAMs, and those with no change in CAMs. Audit lag is the amount of time between year end and the date that the auditor completes the report and signs the report. When taking the results and analysis into consideration, it is important to note that these are preliminary results from two of the Big Four accounting firms based on a small sample of their Boston office clients. In addition, this data does not control for the size of the clients.

EY Clients

Table 1: Audit Fee and Lag Analysis for EY Clients

Decrease in CAMs - EY		
n=9	**Δ Audit Fee**	**Δ Audit Lag**
median	($153,029)	(1.50)
Increase in CAMs		
n=2	**Δ Audit Fee**	**Δ Audit Lag**
median	($392,938)	0.00
No Change in CAMs		
n=12	**Δ Audit Fee**	**Δ Audit Lag**
median	($24,057)	(0.50)

Because the sample size for increase in CAMs is extremely small and therefore hard to make conclusions from, my analysis focuses on observations with only decrease and no change in CAMs. With a sample size of nine distinct clients that showed a decrease in CAMs over the years and twelve distinct clients that showed no change in the number of CAMs through the years, there are a few key take-aways to be made. First, audit fee decreases more when there is a decrease in CAMs than when there is no change in CAMs. In addition, there is one more day reduction in audit lag for observations with decrease in CAMs than those with no change in CAMs.

It does make sense that audit fee decreases more when a decrease in CAMs versus no change in CAMs is seen. If there are less CAMs that auditors need to analyze and write about, the amount of time that the auditors are spending to complete the audit should be less, resulting in a smaller fee. In contrast, if there are no change in CAMs from one year to another, the amount of time auditors are spending should not vary as much. This would result in a small decrease or no decrease at all in audit fee.

Deloitte Clients

Table II: Audit Fee and Lag Analysis for Deloitte Clients

Decrease in CAMs - Deloitte		
n=4	Δ Audit Fee	Δ Audit Lag
median	($165,003)	0.50
Increase in CAMs		
n=3	Δ Audit Fee	Δ Audit Lag
median	($16,942)	2.00
No Change in CAMs		
n=15	Δ Audit Fee	Δ Audit Lag
median	($66,843)	0.00

The Deloitte data had sample size of four distinct clients that showed a decrease in the number of CAMs over years, three distinct clients that showed an increase in CAMs over the years, and fifteen distinct clients that showed no change in the number of CAMs over years. In

Table II, there is a bigger decrease in audit fee when companies see a decrease in the number of CAMs over years. There is also a small decrease in audit fee when CAMs increase over the years. In addition, there is a greater audit lag seen when the number of CAMs is increasing over the years. It is important to note that the sample size is still very small and hard to make conclusions from. For audit delay, there is no reduction in audit delay under any of the situations, but there is a half day more of audit delay for those observations with decrease in CAMs than those with no change in CAMs.

These results, like EY's, make sense because a decrease in number of CAMs should signal a decrease in audit fee as it relates to less time being spent on the audit. It also makes sense that there is a greater audit lag when CAMs are increasing because auditors are spending more time working on the audit and feel like they need the extra days before being in a place where they are comfortable with signing off the report.

VI. Conclusion

The PCAOB's new Audit Reporting Standard AS 3101: "The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion" requires auditors to disclose and discuss parts of a company that are difficult, complex, and require significant management assumptions and auditor judgment. The purpose of this paper was to provide descriptive statistics about the nature of CAMs to help understand what categories of CAM are most frequent overall and in certain industries. In addition, an analysis of audit fee and audit lag with respect to changes in CAMs was also provided.

This paper provides contributions to the current literature in the sense that it takes real data from companies that have CAMs identified and presents results from that. It focuses on company statistics and auditor work instead of looking at it through an investor and client view like some of the other research. It would be important for future research to control for firm size (through total assets) and maybe conduct separate analysis on small, medium, and large firms. In addition, as this requirement takes place for more companies, it would be interesting to analyze a larger sample.

Works Cited

Bentley, J. W., Lambert, T. A., & Wang, E. (Y. (2020). The effect of increased audit disclosure on managers' real operating decisions: Evidence from disclosing critical audit matters. *The Accounting Review*, *96*(1), 23–40. https://doi.org/10.2308/tar-2017-0486

Bédard, J., Gonthier-Besacier, N., & Schatt, A. (2018). Consequences of expanded audit reports: Evidence from the justifications of assessments in France. *AUDITING: A Journal of Practice & Theory*, *38*(3), 23–45. https://doi.org/10.2308/ajpt-52339

Christensen, B. E., Glover, S. M., & Wolfe, C. J. (2013). Do critical audit matter paragraphs in the audit report change nonprofessional Investorss decision to invest? *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2318590

Fisher, K. (2019, November 19). *The impact of the New Revenue Standard on Your Software Startup*. Sciarabba Walker & Co., LLP | Certified Public Accountants. Retrieved May 12, 2022, from https://swcllp.com/the-impact-of-the-new-revenue-standard-on-your-software-startup/

Fourie, P. (2019, July 24). *Audit matters: Critical versus key*. KPMG. Retrieved December 1, 2021, from https://home.kpmg/ca/en/home/insights/2019/07/audit-matters-critical-versus-key.html.

Genç, E. G., & Erdem, B. (2021). The Analysis of the Relationship between Key Audit Matters (KAM) and Firm Characteristics: The Case of Turkey. *EMAJ: Emerging Markets Journal*, *11*(1), 60-66. https://doi-org.unh.idm.oclc.org/10.5195/emaj.2021.219

McGeachy, D., & Arnold, C. (2020, June 9). *Auditor reporting standards implementation: Key audit matters*. IFAC. Retrieved December 1, 2021, from https://www.ifac.org/knowledge-gateway/supporting-international-standards/discussion/auditor-reporting-standards-implementation-key-audit-matters.

Public Company Auditing Oversight Board. PCAOB. (2017, June 1). *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion and Related Amendments to PCAOB Standards*. Retrieved December 1, 2021, from https://pcaob-assets.azureedge.net/pcaob-dev/docs/default-source/rulemaking/docket034/2017-001-auditors-report-final-rule.pdf?sfvrsn=14ad22c9_0.

Pinto. (2020). The impact of the precision of accounting standards on the expanded auditor’s report in the European Union. Journal of International Accounting, Auditing & Taxation., 40.

Richi, E. (2018, September 1). *New Revenue Recognition standards impact multiple industries and departments*. Bizjournals.com. Retrieved May 12, 2022, from https://www.bizjournals.com/boston/news/2018/09/01/new-revenue-recognition-standards-impact-multiple.html

Financial Accounting Standards Board. FASB. (2014) Topic 606

Zhang, J., & Pany, K. (2021). A Summary of Early Critical Audit Matter Reporting. *The CPA Journal*.