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## **CRITICAL AUDIT MATTERS IN ACCOUNTING: ANALYSIS AND STUDY OF THE TOP 100 COMPANIES FROM S&P 500 INDEX FOR FISCAL YEARS 2021 AND 2022**

Anamol Khadka

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CRITICAL AUDIT MATTERS IN ACCOUNTING:  
ANALYSIS AND STUDY OF THE TOP 100  
COMPANIES FROM S&P 500 INDEX  
FOR FISCAL YEARS 2021 AND 2022

by

ANAMOL KHADKA

Presented to the Faculty of the Honors College of  
The University of Texas at Arlington in Partial Fulfillment  
of the Requirements  
for the Degree of

HONORS BACHELOR OF SCIENCE IN ACCOUNTING

THE UNIVERSITY OF TEXAS AT ARLINGTON

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November 17, 2022

## ABSTRACT

CRITICAL AUDIT MATTERS IN ACCOUNTING:  
ANALYSIS AND STUDY OF THE TOP 100  
COMPANIES FROM S&P 500 INDEX  
FOR FISCAL YEARS 2021 AND 2022

Anamol Khadka, B.S. Accounting

The University of Texas at Arlington, 2023

Faculty Mentor: Ramgopal Venkataraman

Critical Audit Matters includes any matter arising from the audit of the financial statements that involves especially challenging, subjective, or complex auditor judgments. These matters are material and need to be communicated to the audit committee by the auditor. The problem with Critical Audit Matters (CAMs) is that it differs for each company, even within the same industry. This can alter from the changing risk environments, new accounting standards and policies, and also from the nature of complexity of each individual audit.

The research involved identifying industries whose firms reported the largest numbers of CAMs as well as identifying the significant accounting areas to which those

CAMS are related. The top 100 companies by market capitalization from S&P 500 index for the fiscal years 2021 and 2022 were studied and analyzed by the accounts, industries, and audit opinions from the audit reports. It was discovered that the accounting areas which reported more CAMS are revenue recognition, other contingent liabilities, and tax liabilities. Revenue recognition is a relatively new standard that requires substantial judgements and is the most significant account in the income statement. It was also observed that the technology, financial services and pharmaceutical industries reported 180% more CAMS than other industries due to the substantial assumptions and estimates required. For instance, the technology industry has very innovative revenue models which leads to more judgements and issues being reported.

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## CHAPTER 1

### INTRODUCTION

#### 1.1 Understanding of Critical Audit Matter

According to the Public Company Accounting Oversight Board (PCAOB), “a critical audit matter is any matter arising from the audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved especially challenging, subjective, or complex auditor judgment” (PCAOB). The PCAOB qualifies any audit matters as critical matters, whenever the matter is subject to materiality and requires complex auditing procedures and judgements.

##### *1.1.1 Regulations Regarding the Critical Audit Matter*

The PCAOB and the Securities and Exchange Commission (SEC) proposed and approved significant changes to the audit reporting model that would require auditors to disclose Critical Audit Matters (CAMs) in the audit report in 2017. The requirement to communicate the critical audit matters in the financial statements was effective for audits of large, accelerated filers for year ending June 30, 2019, and December 15, 2020, for all the other filers.

##### *1.1.2 Problem with the Critical Audit Matter*

The problem with Critical Audit matters is that CAMs will be different for each Company, even within the same industry. And this variation can alter from the changing risk environments, new accounting standards and policies, and also from the nature of

complexity of each individual audit. CAMs may be required for a variety of reasons such as the complexity of the revenue model, the nature and types of contracts or other arrangements entered into by the entity, the diversity in judgments of the auditor about what is critical or how much judgment necessitates reporting, and so on. Therefore, results are in considerable variation in the frequency of CAMs, as well as the areas in which CAMs are reported. This paper is a first step in examining and documenting the prevalence of CAMs and the reasons for those CAMs across a variety of industries in the United States.

### 1.2 Significance of the Research

The Critical Audit Matter is a crucial topic, not just for people in public accounting, but also for any reasonable user of financial statements. The auditors are in a position to express their opinion in the financial reports of public and private companies that impacts, not only the company's financial position, but also any external stakeholders like investors, banks, government, and others. Before the implementation of the CAMs in 2017, auditors were only required to express unqualified opinions on the financial statements report when they conducted an audit for complex and subjective matters given that statements are not materially misstated. However, with the CAMs, the auditors must include and specify the CAMs section within the unqualified report when there is a significant accounting area that is difficult to provide a qualified opinion and is subject to materiality. The research for analyzing the determining factors of the industries and businesses with more CAMs is necessary to understand the complexity of an audit in certain industries, as well as to disclose the more insightful information about different significant estimated numbers reported in the financial statement that impacts the financial decisions for the investors and other stakeholders.

### 1.3 The Objective of the Research

The purpose of this research was to identify the accounting areas and the industries that are getting more CAMs reported than the industry average. Additionally, the research also aimed to analyze the primary factors or the common reasons why the auditors are reporting more CAMs in these areas, which can potentially open doors for further research and development of the auditing procedures and methods. This can help to reduce the significant judgements and assumptions of the auditor in the audit process and assist them to provide more reasonable assurance on those topical areas.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Summary of Peer Review

According to *Critical audit matters: What firms are reporting*, the common areas that most often identified the Critical Audit Matters (CAMs) were goodwill and intangible assets, revenue, and income taxes. Some other common topical areas were in the acquisitions, inventory, contingencies, and other liabilities (Murphy 2019). Deloitte, a Big 4 accounting firm, disclosed one of the first CAMs in Microsoft's annual audited report. It included revenue recognition and accounting for income taxes as Critical Audit Matters for the company. Cree, a semiconductor, and LED manufacturing company was audited by the PwC, and they reported CAMs related to reserves for programs that gives the right to return inventory for the distributors. Similarly, News Corp, which was audited by the EY, also reported three Critical Audit Matters in their audit report. The auditor reported that the valuation and impairment testing of both goodwill and other intangible assets were complex and judgmental because of the many assumptions and estimates required (Murphy 2019).

In *Early Evidence on the Effects of Critical Audit Matters on Auditor Liability*, practitioners raised concerns about the potential risk for the auditors by increasing their liability (Gimbar et al. 2015). "The risk of increased liability that accompanies the form of

report contemplated by the proposal is real and substantial...any expansion of the audit report is almost certain to lead to additional liability exposure for the independent auditor” (Gimbar et al. A24-A33) in response to the PCAOB concept release about the CAMs. The article states that auditors already have significant liabilities on the audited reports for their opinions. Any additional requirement that the auditor needs to provide assurance for is going to increase the burden of liabilities to the auditors (Gimbar et al. 2015).

## CHAPTER 3

### METHODOLOGY

#### 3.1 Secondary Data Analysis

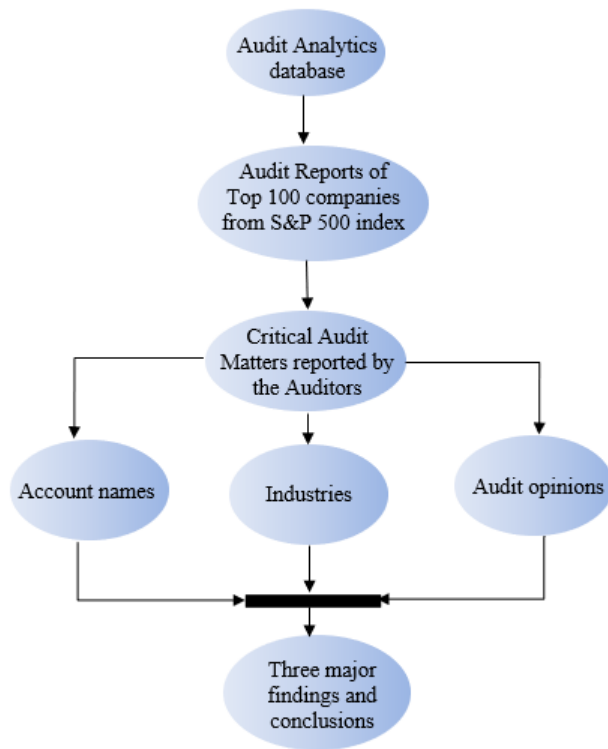
The methodology that was used for the Capstone project is secondary data analysis. A query was run, from the Wharton Research Data Services of the University of Pennsylvania Audit Analytics database, that collected the CAMs data of the Top 100 companies by market capitalization from the S&P 500 index for the fiscal years 2021 and 2022. The collected data was classified by the account names, industries, and the audit opinions from the audit reports. After mining the data and using some data analytics, some plausible relationships were discovered for the CAMS reported by the auditors in the audit reports.

#### 3.2 Graphical Demonstration of the Method

The following diagram shows the extraction and manipulation of the data which resulted in the findings for the research.



Figure 3.1: The Graphical Demonstration of the Method



## CHAPTER 4

### DISCUSSION

#### 4.1 Findings

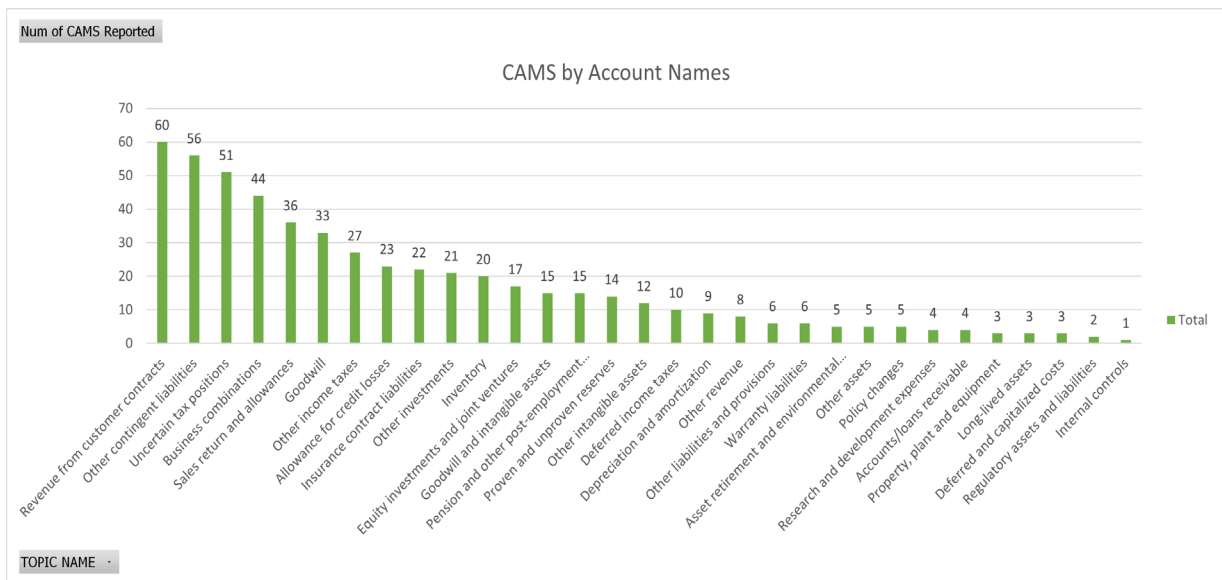
The Critical Audit Matters data collected from the Audit Analytics Database were mined and sorted. After sorting and implementing the data analytics and visualization using Excel, the most common accounting topical areas that were getting more CAMs were identified. After that, the data was further classified by industry for the given companies, and the significant industries that were reporting more CAMs on their audit reports were discovered. Lastly, it was also found, the most common reasons listed by the auditors in their audit opinions while explaining why they reported the CAMs in their audit reports.

##### *4.1.1 Critical Audit Matters by Accounting Areas*

Accounting areas that reported significantly more CAMs are revenue recognition, other contingent liabilities, uncertain tax positions, and sales returns & allowances. The total number of the CAMs recorded for the top 100 companies from the S&P 500 index is approximately 540 records. Out of the total number of records, revenue recognition, other contingent liabilities, uncertain tax positions, business combinations and sales returns and allowances reported 247 CAMs. It is inferred that these areas require assumptions and judgements about the future, probable events, and other economic factors. For instance,

revenue recognition standard is a new standard with effective date in periods beginning after December 15, 2017; thus, this is a relatively new standard that requires judgment in both determining the performance obligations under revenue contracts as well as allocating the purchase consideration across those performance obligations. So, it is not surprising that a number of auditors disclose this as a critical audit matter requiring judgment.

Figure 4.1: CAMS by Account Names



#### 4.1.2 Critical Audit Matters by Industry

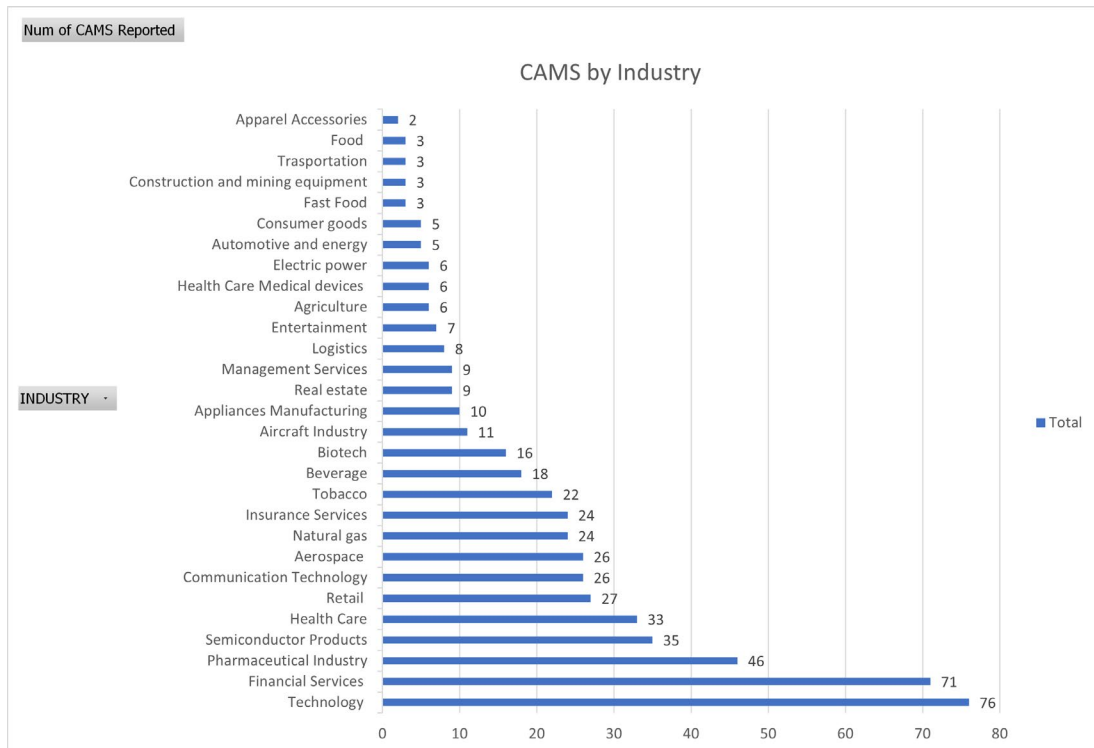
The classification and analysis of the CAMs data by industry resulted in significant findings. It was discovered that technology, financial services, and pharmaceutical industries reported 180% more CAMs than average CAMs reported by other industries. The primary reasons these industries are reporting more CAMs is because they are technically challenging and subjective. For instance, the technology industry has innovative revenue models which leads to more judgements and issues being reported

when auditing these revenue contracts. Also, most of the auditors are required to hire experts in those industries to help them understand the business and its internal controls as a part of the audit planning. As a result, these activities make auditing challenging and thus, more prone to report the CAMs in the audit reports.

Table 4.1: Comparison between the CAMs for the Significant Industries vs Industry Average

Average of Other Industries (Ignoring the small industries)	23
Average of the Significant Industries	64
Difference in %	181%

Figure 4.2: CAMs by Industry

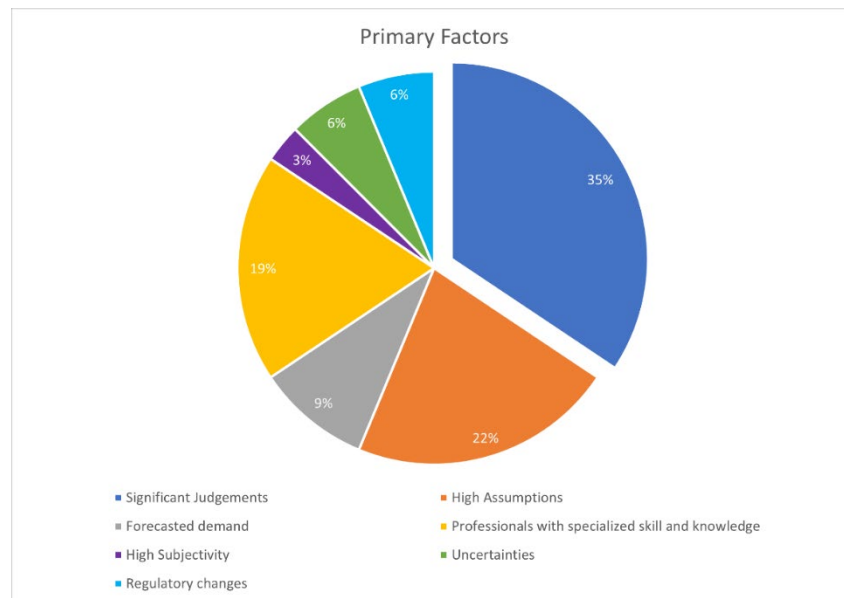


### 4.1.3 Primary Reasons Why Auditors Are Reporting CAMS

After reading the auditor’s descriptions and opinions on the Critical Audit Matters records for companies from the data collected, the most common reasons why the auditors were reporting CAMs in their audit reports were identified. The top three reasons or factors for the CAMs reported are:

- Significant auditor’s judgements
- High assumptions required
- Professionals with specialized skills and knowledge required during the audit process

Figure 4.3: Primary Factors for CAMs Being Reported



It was recognized that whenever the auditor was required to make significant judgements and high assumptions, the auditor reported CAMs. Similarly, whenever the outside professionals with specialized skills and knowledge were involved in helping the auditors,

the audit process becomes more challenging, and thus because of the complexity of the audit, the auditors reported more CAMs in their audit reports. This implies that when the auditors had to do extra work to provide assurance or exercise judgements on their part or rely on other professionals as a part of the audit process, they reported more CAMs in those areas.

## CHAPTER 5

### CONCLUSIONS

This research discovered that accounting areas like revenue recognition, contingent liabilities, and uncertain tax positions reported more CAMs due to the substantial assumptions and estimates required. Additionally, the technology, financial services, and pharmaceutical industries reported 180% more CAMs than other industries because of the significant auditor's judgements and professionals with specialized skills and knowledge required during the audit process. It was also found that the top three common reasons or factors why auditors reported more CAMs in their audit reports are significant auditor's judgements, high assumptions required, and professionals with specialized skills and knowledge required during the audit process.

APPENDIX A  
FUTURE RESEARCH OPPORTUNITIES



The next step is to examine how investors use the information in these CAMs and to study the impact of CAMs on investor behavior and whether it helps investors make better decisions or be more aware of risks. As auditors face more of these issues, it would also be interesting to observe whether audit standards evolve to accommodate greater reliance on experts in other domains. This could become even more important as Environmental Social Governance issues are reported, and assurance needs to be provided about these issues.

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## BIOGRAPHICAL INFORMATION

Anamol Khadka is a Senior at the University of Texas at Arlington. His intended graduation is Fall 2023 with Honors Bachelor of Science in Accounting and minor in Computer Science. He is interested in Accounting, Entrepreneurship and Technology. He joined UTA as a Freshmen back in August 2019. He has loved all the opportunities and resources that he has been utilizing to progress further in his professional career. He started his journey with the Accounting Society, a business leadership and networking organization within the College of Business. He worked there as a Vice President of Finance for about a year. He did his first internship with May Mobility, an autonomous vehicle ride sharing company in the role of 'Accountant' for almost a year. After that, he completed another internship during Spring 2022 with Clifton Larson Allen, as an 'Audit and Tax Intern'. He is looking forward for his third internship which is lined up for Spring 2023 as an 'Audit Intern' for Howard LLP, an accounting firm in Dallas.

After graduation, he is planning to complete a Master of Science in Computer Science. He has developed an immense interest and passion in Software Engineering, and after his graduation, he wants to work as a Software Engineer for few years to gain industry experience. After that, he wants to open his tech startup. His goal is to provide business solutions using technology to help increase the efficiency and the productivity of businesses and grow his company and expand its services globally.