

Research on Audit Risks and Corresponding Mitigation Strategies in the Sales and Collection Cycle of Company Y

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Abstract. The pharmaceutical manufacturing industry has experienced rapid growth in output value over the past decade, becoming a significant component of the national economy. Despite numerous regulatory policies, many pharmaceutical companies have been penalized by regulatory bodies, with a substantial number of cases involving fraud or financial misstatement in the sales and collection cycle. This paper addresses this issue by examining the case of Company Y to investigate two key questions: the significant risk points in the sales and collection cycle of pharmaceutical manufacturers, and the corresponding audit risk response measures for this cycle within the industry. Current research focusing on the audit of pharmaceutical manufacturing, particularly at the level of the sales and collection cycle, is limited. Therefore, this paper centers on the sales and collection cycle, integrating theory with case study based on the audit risk model. By analyzing risk factors related to both the risk of material misstatement and detection risk in Company Y's sales and collection cycle, it summarizes response measures for audit risks in this business segment of the industry. Through statistical description of penalty cases in the pharmaceutical manufacturing industry and a specific analysis of the Company Y case, this paper aims to provide empirical data and guidance for auditors conducting audits in this area.

Keywords: Audit risk; Risk assessment.

1. Introduction

1.1. Research Background

The landscape of the domestic pharmaceutical manufacturing industry has been transformed over the last ten years, characterized by a substantial and consistent growth in total revenue. This period of economic prosperity has enabled Chinese pharmaceutical firms, despite a relatively later start compared to established international giants, to progressively narrow the technological and market gap. This catch-up has been facilitated by an accelerated pace of capitalization, strategic technology sharing, and a marked increase in internal research and development (R&D) expenditures. Consequently, the industry has evolved into a domain of intense competition for market share, defined by its high technology intensity and innovation-driven dynamics. In tandem with this growth, governmental and regulatory bodies have introduced a multitude of policies and guidelines aimed at standardizing developmental trajectories and ensuring equitable and healthy market competition. Despite these concerted regulatory efforts, the industry continues to be plagued by instances of financial fraud, with records indicating over 90 penalties issued by regulators against pharmaceutical manufacturers in the recent five-year period. The global COVID-19 pandemic further exacerbated existing challenges, introducing unprecedented volatility and uncertainty into the market environment, thereby necessitating even greater scrutiny and a heightened sense of professional skepticism from auditors. The sales and collection cycle, in particular, presents amplified vulnerabilities within this sector. The industry's operational model, which frequently relies on credit sales and grants companies' significant autonomy in product pricing, inherently elevates the risk of revenue inflation. Simultaneously, the accounting treatment of sales expenses and the valuation and impairment assessment of accounts receivable are areas notoriously susceptible to material misstatement. A review of recent penalty cases reveals a disturbing trend: over 20 of these instances were directly linked to the misstatement or fraudulent disclosure of revenue, sales expenses, and accounts

receivable. This statistic unequivocally underscores the sales and collection cycle as a critical focal point requiring exhaustive attention from audit firms during their engagements.

1.2. Research Significance

The significance of this research is anchored in both theoretical and practical realms. From a theoretical standpoint, there is a compelling need to construct a practical, robust, and nuanced framework for risk identification and response that is specifically tailored to the unique contours of the sales and collection cycle within the pharmaceutical manufacturing context. This paper seeks to contribute meaningfully to this objective by providing a systematic statistical review of industry-wide fraud and penalty cases, coupled with a detailed, forensic-level analysis of the Company Y case. The aim is to yield valuable empirical data and theoretical insights that can inform and enrich future academic research and refine audit methodologies in this specialized field. On a practical level, the study endeavors to synthesize and summarize a set of generalized audit risk response strategies that are directly applicable to the sales and collection cycle across the pharmaceutical industry. More importantly, it emphasizes the criticality of adapting and tailoring these strategies based on the specific circumstances, internal control environment, and risk profile of individual enterprises. Such a pragmatic and flexible approach is instrumental in empowering Certified Public Accountants to more effectively reduce detection risk, thereby significantly enhancing the probability of identifying material misstatements and uncovering sophisticated fraudulent activities, thus safeguarding the integrity of financial reporting and protecting the interests of stakeholders.

1.3. Literature Review

The sales and collection cycle is universally recognized as one of the four core business cycles in modern risk-oriented audit frameworks and is often regarded as the most critical due to its direct impact on key financial statement line items. A substantial body of scholarly work has been dedicated to investigating the common issues and vulnerabilities within this cycle. Seminal research by Xu Huizhen and Zhou Yaling (2017) pinpointed the accuracy of revenue recognition, concerning both its timing and monetary value, the confirmation of accounts receivable and their associated impairment, and the overall accuracy of sales expenses as the most crucial internal control nodes. These nodes, they argue, are also the most susceptible to manipulation in instances of financial fraud. This view is corroborated by Gao Lixia (2022), whose extensive study of revenue-related financial fraud cases penalized by the CSRC over two decades concluded that revenue recognition remains the epicenter of audit failures and financial misrepresentation. The methodologies of revenue fraud are varied and complex. Tang Yi (2016) systematically categorized common techniques, which include the deliberate shifting of revenue recognition between accounting periods to artificially smooth profits or meet targets, the outright fabrication of sales documents and corresponding goods flows to create illusory revenue, and the orchestration of transactions with related parties under the guise of arm's length dealings.

Beyond the direct manipulation of revenue, the management of collections and receivables constitutes another critical area of concern within the cycle. The work of Sun Fangcheng and Ding Rui (2020) provided empirical evidence, drawn from a study of A-share listed companies spanning 2007 to 2016, establishing a positive correlation between audit risk, audit fees, and both the magnitude and aging of a company's accounts receivable. Their findings indicate that as receivables grow larger and older, auditors perceive higher risk, charge higher fees to compensate for the increased scrutiny required, and are more likely to issue modified audit opinions. The concealment of fraud in the collection process often involves complex, obfuscated related-party transactions. Zhang Yongjiao's (2021) analysis of the Tianma Bearing case illustrated how the company used excessively complex and inadequately disclosed details of "other receivables" to effectively mask the true substance of related-party transactions, thereby creating a veil for its fraudulent activities.

In response to these risks, the audit literature prescribes a range of procedures. Wu Youqing (2013) emphasized the paramount importance of the confirmation process for accounts receivable,

particularly for major business partners with significant transaction volumes, to verify the authenticity and accuracy of recorded balances. Complementing this, Ni Yi and Liu Chun (2009) advocated for the robust application of analytical procedures, suggesting techniques like regression analysis to examine the logical relationship between sales expenses and revenue growth, thereby providing another lens through which to assess the reasonableness of reported figures.

When the focus narrows to the pharmaceutical manufacturing industry specifically, research identifies a distinct set of challenges within the sales and collection cycle. Huang Yanli (2018) documented issues such as monotonous sales models and distribution channels, high autonomous pricing power subject to volatile market influences, a high frequency of credit sales, aging receivables portfolios, and significant difficulties in collection. Zhu Jinhua (2019) expanded on this, highlighting internal deficiencies such as improper management of credit sales approvals, a lack of standardized customer credit management protocols, insufficient communication between commercial functions like sales and credit management, and a frequent failure of internal audit departments to provide effective oversight over credit management processes. Furthermore, the dimension of sales expenses has been identified as a particular management focus and risk area. Wang Ruiyun (2019), in a study of 26 listed Chinese pharmaceutical manufacturers, pointed out the prevailing phenomenon of unusually high sales expense ratios, with sales expenses constituting a substantial and often disproportionate component of total operating costs.

Proposed remedies and internal control enhancements for the industry are also discussed in the literature. Huang Yanli (2018) suggested that effectiveness could be significantly improved through measures such as establishing internal platforms for efficient information sharing and, built upon this foundation, constructing a rational and dynamic internal control risk assessment system to strengthen overall risk management. Zhu Jinhua (2019), focusing on the credit aspect, proposed that companies need to fundamentally improve their internal credit management mechanisms pertaining to credit sales strategies, while concurrently strengthening the processes and controls around the ongoing management of accounts receivable.

2. Case Overview of Company Y

2.1. Basic information of Company Y

Hunan Company Y Co., Ltd., hereafter referred to as "Company Y" for brevity, stands as a prominent example of a successful privately-owned pharmaceutical manufacturer in China. Established in 2003, the company achieved a significant milestone with its initial public offering (IPO) in 2011, becoming publicly traded on the Shenzhen Stock Exchange under the ticker symbol 300267.SZ. The company's strategic business operations are strategically diversified across three key pillars: pharmaceutical excipients, active pharmaceutical ingredients (APIs), and finished dosage forms. Its flagship product portfolios encompass the medicinal sucrose series, the starch and starch capsule series, and a range of antibiotic series products. Company Y's stature and success are underscored by its pioneering status as the first enterprise within China's specialized pharmaceutical excipients field to achieve a public listing. Adding to its prestige, the company's product technology center received formal recognition from the National Development and Reform Commission, being designated as a "National Certified Enterprise Technology Center." A crowning achievement is its stewardship of the National Engineering Research Center for Pharmaceutical Excipients, which holds the distinction of being the sole national-level scientific research platform dedicated exclusively to pharmaceutical excipients in the country. Through its consistent delivery of high-quality products and its sustained commitment to innovation, Company Y has cemented its leading position within the domestic pharmaceutical excipients market, demonstrating superiority not only in the breadth and variety of its product portfolio and its market scale but also in the advanced caliber of its research and development platforms. The company has also played an influential and active role in the national discourse, participating in the development and advocating for the implementation of industry standards for pharmaceutical excipients in China.

2.2. A Review of the Company Y Case Study

2.2.1. The course of the fraud incident.

The financial fraud perpetrated by Company Y was sophisticated and primarily executed through two distinct yet complementary schemes designed to artificially inflate reported profits. The first method involved a carefully orchestrated series of concealed overseas related-party transactions that spanned the years 2015 and 2016. During this period, Company Y manipulated transactions between its own wholly-owned subsidiaries to create a circular flow of goods and false revenue. The specific mechanism involved Company Y's wholly-owned subsidiary in Cambodia selling substantial quantities of modified starch products to its wholly-owned subsidiary in Hong Kong. The Hong Kong subsidiary, in turn, did not sell these products to independent third parties but instead channeled them indirectly back to the ultimate parent company, Company Y in China. This was achieved by routing the sales through intermediary food ingredient companies located in Guangzhou and Shanghai. This circular journey of goods, which never truly left the economic sphere of the consolidated entity, allowed Company Y to falsely recognize substantial revenue and profit. In the 2015 fiscal year, this maneuver led to the fraudulent inflation of operating revenue by approximately 18.06 million RMB and net profit by 15.86 million RMB. Emboldened by the initial success in evading detection, the company repeated this scheme on a much larger scale in 2016, thereby inflating revenue by a staggering 229 million RMB and net profit by 209 million RMB.

The second method involved a blatant failure to recognize sales returns in the 2016 financial year. Company Y had sold a significant volume of modified starch products to a Canadian distributor identified as SNY Company. Subsequently, a substantial portion of this shipment was found to have serious quality issues, rendering them unsaleable in the market. SNY Company formally requested a return of the defective products. After negotiations, a formal agreement was reached wherein Company Y would provide a full refund of the sales price, and the remaining, unsold modified starch inventory was to be disposed of by SNY Company as it saw fit. However, in a critical departure from both the contractual agreement and fundamental accounting principles, Company Y completely failed to record this sales return in its official financial records. The transaction remained on the books as a valid sale, and the corresponding accounts receivable remained outstanding. Meanwhile, the remaining inventory was reportedly sold off by SNY Company at significantly discounted prices. This accounting omission directly resulted in a material overstatement of revenue for 2016 by 25.76 million RMB and an equivalent overstatement of pre-tax profit by 23.27 million RMB.

2.2.2. Penalty result.

The eventual exposure of these fraudulent activities led to significant regulatory repercussions. In June 2018, the relevant regulatory authority imposed administrative penalties on Company Y and its responsible directors. The company itself was subjected to a mandatory order to make corrections to its financial statements, received a formal written warning, and was levied a financial fine of 600,000 RMB. The involved directors, including the chairman, were also individually sanctioned with warnings and personal fines totaling 300,000 RMB. The fallout extended to the audit profession as well. Subsequently, the signing Certified Public Accountants from Tianjian Accounting Firm, the audit firm that had issued clean audit opinions on the very financial statements containing the fraud, were also subjected to formal regulatory measures by the governing bodies. A particularly troubling aspect of this case is that Tianjian Accounting Firm, an entity with a solid reputation in the market, had issued unmodified (clean) audit opinions for Company Y's financial statements for both the 2016 and 2017 fiscal years, the precise periods during which the major fraudulent activities were occurring. The fraud was ultimately unmasked not by the external auditor, but through the diligence of external market participants. Serious doubts regarding the authenticity of Company Y's reported revenue were raised by external investors and independent financial analysis agencies. These concerns rapidly permeated the market, triggering a severe loss of investor confidence, a sharp and precipitous decline in the company's stock price, and ultimately leading to a compulsory trading suspension by the stock exchange. The situation attracted the immediate attention of the exchange, which issued a detailed

inquiry letter demanding explanations. This chain of events precipitated a formal investigation by the China Securities Regulatory Commission (CSRC). Under the immense pressure of the official investigation, Company Y was compelled to publicly admit to its fraudulent activities. In April of the following year, the local regulatory bureau formally confirmed the findings, issuing a detailed "Administrative Penalty Decision" which documented that Company Y had inflated its revenue by 18.06 million RMB in 2015 and by a much larger figure of 255 million RMB in 2016.

2.3. Case Characteristics

The Company Y case possesses several distinct characteristics that render it an exceptionally valuable subject for academic study and professional reflection. Firstly, its representative nature is undeniable. As an acknowledged leader within the domestic pharmaceutical excipients field, Company Y was not a small, marginal player but a substantial enterprise with considerable resources, advanced production technology, and a comprehensive organizational structure. Its prominent market position means that the lessons derived from its failure are not isolated but carry significant implications for the entire industry, providing a potent warning for the capital markets and yielding valuable, representative insights for audit practitioners. Secondly, the case is profoundly typical. The financial statement items manipulated, revenue, cost of sales, and accounts receivable, are central to the sales and collection cycle, and the methods employed, namely the fabrication of transactions and the deliberate concealment of related-party relationships, are commonplace tactics in the playbook of financial fraud among listed companies globally. The fraud impacted critical financial statement assertions such as the "occurrence" of revenue and the "accuracy, valuation, and allocation" of accounts receivable, thereby comprehensively covering the major risk points that auditors are trained to scrutinize within this cycle. This typicality makes the case an effective vehicle for distilling industry-wide audit response protocols. Finally, the case is marked by a perplexing low exposure risk. Despite being audited by Tianjian Accounting Firm, an audit firm with a strong national reputation and presumed professional expertise, the fraudulent activities were not detected during the routine audit processes for two consecutive years. This facet provides a crucial, albeit sobering, learning opportunity. Analyzing the root causes of this audit failure, the lapses in professional skepticism, the inadequacies in audit procedures, and the underestimation of risk, offers invaluable lessons for the profession regarding necessary focus areas, the limits of standard procedures, and the non-negotiable requirement for diligent execution of professional responsibilities, especially in high-risk environments.

3. Case Analysis

This analytical section is structured around the modern risk-oriented audit model, where Audit Risk is formally defined as the product of the Risk of Material Misstatement (RMM) and Detection Risk (DR). The subsequent analysis of Company Y's audit risks pertaining to the sales and collection cycle is therefore systematically divided into two primary components: a thorough examination of the Risk of Material Misstatement, which is further decomposed into risks at the overall financial statement level and those at the more specific assertion level, and a critical evaluation of the factors that contributed to an unacceptably high level of Detection Risk in this specific engagement.

3.1. Financial Statement Level Risk Factors in the Sales and Collection Cycle

3.1.1. Industry Risk Factors.

The operating environment for Company Y was shaped by several formidable industry-wide risk factors. The pharmaceutical excipients sector in China was, and to a large extent remains, characterized by a low industry concentration and severe product homogenization. This fragmented market structure, with hundreds of small competitors and only a handful achieving annual sales exceeding one billion RMB, fostered intense and often competition. This environment naturally led to price wars and squeezed profit margins, creating immense external pressure for companies to embellish their financial statements to attract vital investment, secure financing from cautious lenders,

and maintain a facade of competitiveness and growth for the capital markets. Despite its label as a "leader," Company Y's market share was not so dominant as to render it immune to these pressures; on the contrary, its position may have created additional pressure to consistently meet high growth expectations, thus providing a powerful motivation for financial fraud. Compounding this was the high financing pressure inherent to the industry. Pharmaceutical manufacturing is notoriously capital-intensive, with long and uncertain research and development (R&D) cycles and a protracted path to profitability for new products. Concurrently, the Chinese government's persistent policy direction towards "controlling costs and reducing drug prices" further constricted already tight profit margins. Company Y's own publicly stated ambitious expansion plans, such as a major "18,000-ton medicinal cassava starch" production project, coupled with continuous R&D expenditure needs, demanded significant and sustained capital infusion. This financial strain potentially served as a powerful incentive for management to engage in revenue and profit inflation to appease investors and creditors. Furthermore, the industry is highly susceptible to policy impact. The introduction of stringent policies, most notably the 2012 "Clinical Management of Antibacterial Drugs," directly suppressed market demand for antibiotics, which constituted a key product line for Company Y. This regulatory shift likely led to unforeseen inventory buildup for Company Y and increased the temptation to manipulate financial results to obscure the resulting operational difficulties and present a more favorable picture of business resilience and growth.

3.1.2. Operational Risk Factors.

Beyond industry-wide challenges, Company Y's own strategic decisions generated significant operational risks. During the critical period of 2016-2017, the company pursued an aggressive investment strategy that proved to be highly detrimental. Major investments, including the establishment of a healthcare industry investment fund (Kangxiang Health) in partnership with other firms and the acquisition of an internet company (Changsha Kaina), resulted in substantial and rapid losses, totaling over 128 million RMB within just two years. The investment in Kangxiang Health alone led to a confirmed investment loss of over 100 million RMB, while the acquisition of Changsha Kaina necessitated significant goodwill impairment losses. To conceal the severe negative impact of these poor strategic decisions and their associated losses on the company's overall financial performance, and to maintain market confidence and continued access to capital markets, Company Y had a compelling and immediate incentive to inflate revenue. This operational misadventure directly elevated the inherent audit risk associated with the sales and collection cycle, as it created a clear motive for management to commit fraud.

3.1.3. Enterprise Nature Factors.

The fundamental nature of Company Y's ownership and governance structure presented a profound risk factor. The company was a classic family-controlled enterprise. The actual controller, Shuai Fangwen, along with his concert parties (including the related investment vehicle, Hunan Shuaijia Investment Co., Ltd.), collectively held nearly 60% of the company's shares throughout the period in question. This dominance was further cemented in the boardroom, where the Shuai family held multiple seats, granting them decisive influence over major corporate decisions and strategic direction. This high concentration of ownership and control rights, with a separation degree of 1 indicating perfect alignment, is widely recognized in corporate governance literature as increasing the risk that controlling shareholders may act to seek private benefits at the expense of minority shareholders. This environment significantly heightened the inherent risk of fraudulent financial reporting, particularly in areas like revenue and profit that directly influence market valuation and the ability to raise capital.

3.1.4. Internal Control Risk Factors.

The risk emanating from the company's nature was exacerbated by critical deficiencies in its internal control environment. A particularly glaring weakness was the concentration of power. Shuai Fangwen, the controlling shareholder and chairman, also held positions on key board committees, including the audit committee. This merging of executive decision-making authority and independent oversight functions fundamentally undermined the principle of checks and balances. When the same individuals

who propose and execute transactions also control the mechanisms designed to monitor and validate them, the effectiveness of internal controls is severely compromised. This environment made it significantly easier for the controlling shareholders to orchestrate and conceal complex financial fraud, as there was no robust, independent internal challenge. This situation created a pervasive and significant audit risk regarding the accuracy and validity of reported profits and revenue.

3.2. Assertion Level Risk Factors in the Sales and Collection Cycle

3.2.1. Abnormal Sales Expenses Fluctuation.

A detailed analysis of the financial data reveals a glaring anomaly in the behavior of sales expenses, which should have raised immediate red flags. Company Y primarily operated under a direct sales model, a structure that typically entails a relatively stable and logical correlation between sales expenses (such as salaries for sales personnel, marketing, and advertising costs) and both sales volume and revenue. However, the empirical data told a contradictory story. While Company Y's reported sales volume experienced a meteoric rise, surging by over 736% from 2011 to 2016, its recorded sales expenses increased by a disproportionately modest 221% over the same period. Even more telling was the trend in the sales expense ratio, which demonstrated a clear and consistent declining trajectory. This was in direct opposition to the general rising trend observed across the broader pharmaceutical manufacturing industry during the same period. This discrepancy was particularly suspicious and difficult to reconcile with the company's own narrative. Company Y's annual reports and board announcements throughout this period were replete with statements about intensifying marketing efforts, promoting new product lines like starch capsules, and investing in an innovative "Internet+" trading platform. Such ambitious commercial activities would logically necessitate a substantial, not a shrinking, investment in the sales function. This irrational relationship strongly indicated a potential misstatement in the accounting of sales expenses and, by direct implication, raised serious questions about the accuracy of the associated revenue growth.

3.2.2. Revenue Growth Risk.

The reported revenue growth itself was underpinned by several indicators that deviated from reasonable expectations. Firstly, the company's net profit growth far exceeded that of its peers in a manner that defied industry logic. In the wake of the 2012 "toxic capsule" incident and the subsequent wave of stricter regulations that suppressed profitability for the vast majority of excipient manufacturers, Company Y's reported net profit growth not only remained resilient but accelerated sharply against the industry trend. The primary engine of this exceptional performance was identified as the starch and starch capsule series. However, these products, particularly the basic starch, are based on relatively standard and non-proprietary processing technology, making sustained, exceptionally high gross margins and profit contributions difficult to justify in a competitive market. The profitability of a key Cambodian project was reported at levels that were multiples of its original feasibility study projections, further straining credibility. Secondly, an analysis of production and sales dynamics revealed an illogical pattern. In 2016, the year of massive reported growth, the inventory of raw and auxiliary materials ballooned by an unprecedented 1,075% compared to the end of 2015. This inventory growth rate drastically outstripped the approximately 300% growth in both production and sales volume. Such a massive and unexplained accumulation of inventory is a classic red flag, strongly suggesting a failure to properly eliminate unrealized profits arising from inter-company transactions during the consolidation process. This failure would directly lead to inflated revenue and cost on the consolidated income statement and an inflated inventory asset on the balance sheet. Thirdly, the company engaged in frequent related-party transactions. Data shows that Company Y reported related-party transactions in 5 out of the 6 years from 2011 to 2016, placing it in the top half of family-owned pharmaceutical firms in terms of frequency. A high volume of such transactions inherently increases the risk that revenue may be manipulated through non-arm's length dealings designed to create artificial profit or shift it between periods.

3.2.3. Accounts Receivable Risk.

Several anomalies were present in Company Y's accounts receivable. While the accounts receivable turnover ratio showed a marked improvement in 2015 and 2016, the proportion of receivables aged within one year actually decreased during this same period. This inverse relationship between an improving turnover ratio and a worsening aging profile was unusual and suggested potential issues with the recoverability of receivables and the adequacy of bad debt provisions. More alarmingly, there was a complete lack of transparency regarding customer information. From its IPO in 2011 onward, Company Y consistently refused to disclose the identities of its top five customers and suppliers, citing commercial secrecy. This obstinate refusal, even in the face of a direct inquiry from the stock exchange, was a major red flag, strongly indicating an attempt to conceal the nature of its sales transactions and the authenticity of its reported revenue. The subsequent investigation confirmed that this secrecy was central to concealing the fraudulent sales and the unrecorded sales return with the Canadian SNY Company.

3.3. Cause Analysis (Detection Risk Perspective)

3.3.1. Lack of Industry Expertise.

The failure to detect these anomalies can be partly attributed to a potential lack of deep industry expertise within the audit team assigned to the engagement. Auditing a complex and highly specialized industry like pharmaceutical manufacturing requires more than just general accounting and auditing knowledge; it demands a thorough understanding of industry-specific dynamics, including the regulatory policy landscape, typical business models, cost structures, R&D accounting complexities, and standard performance benchmarks (e.g., typical gross margins for different product lines, normative sales expense ratios). An audit team lacking this contextual knowledge is poorly equipped to recognize anomalies that deviate from industry norms. For instance, they might fail to question why a company's net profit is soaring while its competitors are struggling, or why sales expenses are falling during a period of aggressive expansion. The Tianjian audit team may have been composed of competent generalists, but they potentially lacked the specific, nuanced understanding of the pharmaceutical excipients business necessary to perceive these discrepancies as the significant red flags they were, thereby failing to adjust the audit plan to a higher level of skepticism and more targeted testing.

3.3.2. Difficulties in Auditing Overseas Operations and Identifying Related Parties.

The very nature of Company Y's fraud was designed to exploit inherent practical difficulties in the audit process. The auditing of overseas operations presents significant logistical, cost, and time challenges. Company Y's key fraudulent transactions were executed through subsidiaries in Cambodia and Hong Kong and involved a customer in Canada. Geographical distance, language barriers, differing legal systems, and the high cost of travel often restrict the scope and depth of audit procedures that can be practically performed on foreign locations. It becomes more difficult to physically inspect assets, conduct face-to-face inquiries with local management, verify original supporting documentation, and directly trace cash flows through local banking systems. Relying on the work of other auditors or limited remote procedures increases detection risk. Furthermore, the identification of related parties was particularly challenging in this case. Company Y exploited opaque disclosure rules and corporate structures to sever the visible links between the parent company and the entities involved in the circular transactions. It conducted business with overseas entities that were effectively under common control, but this related-party nature was deliberately hidden behind layers of corporate veils and "arm's length" appearances. Without the ability to pierce these veils through intensive background checks and forensic-level investigation, which often goes beyond the scope of a typical financial statement audit, identifying these deliberately concealed relationships is extremely difficult. This is especially true when the transactions themselves are structured to appear legitimate, with market-based pricing and a complete, albeit fabricated, paper trail.

3.3.3. Inadequate Implementation of Analytical Procedures.

A critical failure appears to have been the inadequate implementation of analytical procedures. While heralded as a cornerstone of risk-based auditing, analytical procedures are only effective if they are applied thoroughly, skeptically, and with sufficient depth. Many of the warning signs in the Company Y case were not apparent from looking at any single account in isolation but emerged only when multiple data points were correlated and viewed in the context of the business environment. The inverse relationship between the sales expense ratio and sales volume, the dramatic deviation of profit growth from industry peers, the inexplicable disconnect between production, sales, and inventory growth, and the conflicting signals from accounts receivable turnover and aging, all of these required a holistic, multi-faceted analytical review that challenges management's explanations rather than accepting them at face value. The audit likely relied on more limited, year-on-year comparisons of the company's own data or focused on individual account balances without sufficiently exploring the logical relationships between them. This, coupled with a potential lapse in professional skepticism, the willingness to question and critically assess evidence rather than seeking to simply corroborate management's assertions, allowed these glaring inconsistencies to go uninvestigated. The auditors may have performed analytical procedures as a compliance exercise, but they failed to leverage them as a powerful tool for risk identification.

4. Risk Response Strategies for the Sales and Collection Cycle in Pharmaceutical Enterprises

4.1. Responses to the Risk of Material Misstatement

4.1.1. Master Industry Characteristics and Knowledge.

To effectively combat the high inherent risks, auditors must make a concerted and proactive effort to master the specific characteristics and knowledge of the pharmaceutical manufacturing industry. This goes beyond a superficial understanding; it requires a deep immersion into the sector's regulatory policies, competitive dynamics, supply chain complexities, typical sales and distribution models, and common R&D practices. Audit firms must prioritize this at an organizational level. This involves strategically assigning team members who possess relevant prior industry experience, whether in audit, advisory, or even industry roles, to pharmaceutical engagements. Crucially, the engagement partner responsible for the audit must demonstrably possess a proven track record and deep experience in auditing pharmaceutical companies. Furthermore, firms should invest in formal, pre-engagement industry-specific training programs for the entire team, covering topics such as product lifecycle management, the impact of government pricing policies, industry-standard performance benchmarks, and common fraud schemes specific to the sector. An auditor armed with this specialized knowledge is fundamentally better equipped to identify anomalies, ask the right, penetrating questions, and accurately assess risks throughout the audit process, thereby designing a more effective and targeted audit approach.

4.1.2. Enhance Risk Assessment of the Auditee.

A strengthened risk assessment process is essential. This involves a thorough evaluation of the entity's nature, governance structure, and internal control environment. Given the prevalence of family-controlled enterprises in the sector, auditors must pay particular attention to the ownership structure, assessing the potential for management override of controls and the related risk of fraudulent financial reporting. It is essential to evaluate whether the board of directors and its committees, especially the audit committee, are independent and effective in their oversight role. The audit should also involve a careful analysis of the complexity of the company's sales and collection transactions, considering the high degree of judgment involved in revenue recognition and the estimation of allowances for doubtful accounts. Furthermore, understanding the company's business strategy and assessing its associated risks can provide valuable insights into potential pressures or motivations for fraud.

Auditors should review strategic investment plans and their feasibility to gauge whether unrealistic performance expectations might incentivize manipulation of financial results.

4.1.3. Tailor the Audit Program.

The audit program itself must be specifically tailored to address the identified risks. Analytical procedures related to sales expenses should be optimized beyond simple year-on-year comparisons. Auditors should incorporate industry benchmark data and analyze the relationship between sales expenses, sales volume, and the company's stated sales model and promotional activities, diligently investigating any significant or inexplicable deviations. Given the high fraud risk, the audit must maintain a sharp focus on revenue and accounts receivable, performing extensive substantive procedures. This includes thorough testing of the validity and accuracy of revenue transactions against recognition criteria, rigorous confirmation procedures for account balances (especially for large balances), and a critical assessment of the reasonableness of management's estimates for sales returns and bad debt provisions. Auditors must also heighten their alertness to related-party transactions, moving beyond standard identification procedures. This involves conducting in-depth background checks on major customers and suppliers using commercial databases and other public information tools. They should maintain a skeptical stance towards transactions with parties that have recently changed their related status or have other subtle connections to the auditee, and carefully analyze the timing of significant transactions in relation to changes in relationships.

4.2. Control Measures for Detection Risk

4.2.1. Strengthen Quality Control and Review Procedures.

Audit firms must implement and enforce robust quality control systems throughout the entire audit process. This encompasses rigorous client acceptance and continuance procedures, where thorough background checks and annual risk assessments are vital before accepting or retaining an engagement. During the audit, appropriate personnel must be assigned, professional skepticism must be actively maintained, and audit strategies must be tailored to the assessed risks. Multi-layered review processes, performed within the engagement team and by an independent partner or the firm's quality control department, are essential to ensure that audit procedures are properly planned and executed, the evidence obtained is sufficient and appropriate, and conclusions are well-supported and objective. Finally, fostering a learning culture that encourages internal discussion of audit findings and enforces strict accountability for lapses in audit quality is fundamental to continuous improvement.

4.2.2. Leverage Experts and Media Effectively.

Auditors can significantly enhance their effectiveness by knowing when and how to leverage external resources. Given the highly technical nature of the pharmaceutical industry, the use of experts is often not a luxury but a necessity. Engaging valuation specialists to assess the fair value of complex inventory or intangible assets, industry consultants to opine on the reasonableness of product costing or pricing models, or IT auditors to evaluate the integrity and controls of specialized manufacturing or ERP systems can provide crucial evidence that auditors themselves are not qualified to generate. However, this reliance must be prudent; auditors are required to evaluate the competence, capabilities, and objectivity of the expert and cannot abdicate their ultimate responsibility by blindly relying on the expert's work. Similarly, a proactive and monitored review of media and research reports concerning the auditee can be a valuable source of audit evidence and risk indicators. Financial news, analyst reports, short-seller analyses, and even social media can provide early warnings of potential operational problems, internal control weaknesses, litigation, or public controversies that may not be evident from the financial statements or management representations. While information from these sources always requires corroboration, it can provide powerful leads, offer alternative perspectives, and help auditors maintain the necessary level of professional skepticism throughout the engagement by highlighting issues that management may have omitted or downplayed.

5. Summary

Through the comprehensive and in-depth case study of Company Y, this paper arrives at several critical conclusions with direct implications for audit practice. Firstly, it underscores that a perfunctory risk assessment is inadequate; the assessment and response to risks at the financial statement level, particularly those stemming from industry conditions, concentrated ownership structures, weak governance, and deficient internal control environments, are of paramount importance in auditing the sales and collection cycle of pharmaceutical manufacturers. These pervasive risks set the stage for potential fraud. Secondly, the case demonstrates that standard, one-size-fits-all audit procedures are easily defeated. The substantive procedures for revenue, accounts receivable, and sales expenses require significant tailoring, enhancement, and a much deeper level of execution. This includes the sophisticated use of multi-dimensional analytical procedures, rigorous and controlled confirmation processes, and a forensic-level scrutiny of transactions and estimates. Finally, and perhaps most importantly, auditors must consistently employ more robust, comprehensive, and persistently skeptical risk assessment techniques that are specifically targeted at the common fraud methods and misstatement risks prevalent in the pharmaceutical industry's sales and collection activities. A deep, acquired understanding of the business, a rigorously applied and quality-controlled audit process, and the strategic, skeptical use of all available tools and resources are the indispensable defenses against audit failure in this demanding and high-stakes area.

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