



Identification and Regulation of Related Party Transaction Fraud under Performance Commitment Pressure: A Case Study of Aerospace Communications

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Abstract. With the implementation of the registration system, the activity in mergers, acquisitions, and reorganizations in the capital market has increased, and the “Performance Commitment” centered put-option agreements have become widespread. However, the fraudulent behavior of some companies using related-party transactions to embellish their financial statements has occurred frequently, seriously damaging the interests of investors. The article, therefore, examines the connected transactions of Hipad Intelligent Technology Co., Ltd., a subsidiary of Aerospace Communications, as the research object. Using GONE Theory, principal-agent theory, and case analysis method, a framework for “Fraud Identification - Motivation Analysis - Governance Plan” was constructed to explore the motives and countermeasures of fraud in connected transactions. Research findings indicate that Aerospace Communications’ fraud is attributable to multiple factors: performance commitment pressure serves as the original driving force, the interest impulses of controlling shareholders and management exacerbate greed motives, corporate governance deficiencies and information asymmetry provide operational opportunities, and low illegal costs reduce the risk of fraud exposure; Hipad Intelligent Technology Co., Ltd. inflated revenue and profits by fabricating four types of related party transactions, namely fictitious sales, fictitious procurement, fictitious R&D outsourcing, and fund borrowing and lending, ultimately leading to the company’s delisting; Such fraud leads to financial deterioration and credit bankruptcy of the company, while also damaging the interests of investors and undermining regulatory credibility.

Keywords: Fraud in Connected Transactions, Aerospace Communications, GONE Theory, Performance Commitment.

1 Introduction

1.1 Research Background

With the implementation of the registration system, the listing of the Science and Technology Innovation Board and the Beijing Stock Exchange, the activities of mer-

gers and acquisitions in the capital market have increased, and bet agreements centered on “Performance Commitments” have become popular in mergers and acquisitions of listed companies. However, some acquired subsidiaries, after being acquired at a high premium, use related party transactions to window-dress financial statements to avoid compensation obligations, thus harming investors’ interests. Aerospace Communications, a state-owned holding company, has a subsidiary—Hipad Intelligent Technology Co., Ltd. that inflated its revenue and profits through fictitious related party transactions, research and development business, etc., from 2016 to 2018. Eventually, it voluntarily delisted in March 2021, becoming one of the worst cases of fraud in the capital market in recent years [1].

Pressure from performance commitments directly triggered fraud at Aerospace Communications. The high-premium acquisition of Hipad Intelligent Technology Co., Ltd. imposed additional commitments. The threat of large compensation payments then induced management to engage in connected-transaction fraud. The core reason for the implementation of fraud in connected transactions lies in its concealment: Hipad Intelligent Technology Co., Ltd. and more than 40 suspected related parties fabricated supply chains, pricing deviated from fair value, and did not fully disclose substantive relationships, making identification difficult for traditional auditing procedures [2]. This case serves as a reference for curbing fraud in connected transactions and promoting the healthy development of the capital market.

1.2 Literature Review

In the research scope of unfair related party transactions and fraud in connected transactions, existing academic achievements have constructed multidimensional analysis models and achieved deep integration with relevant theories. From the underlying logic of information advantage parties using related party transactions to embezzle benefits, the main problems of unfair related party transactions are conflicts of interest, information asymmetry, and improper pricing. Asymmetric information is an important inducement for opportunistic behavior in transactions [3]. From the perspective of audit risk, the concealment of related parties and unfair pricing significantly increases the difficulty of auditing, and a framework for addressing this issue is proposed, which includes thorough auditing, data analysis, and strengthened fraud risk assessment and detailed testing [4]. From the perspective of the causes of related party transaction fraud, both GONE Theory and two-variable models support the conclusion that “performance commitment pressure induces profit manipulation through unfair related party transactions”, jointly building a multi-scenario explanatory system for the causes of fraud [5]. From the perspective of fraudulent methods and characteristics, related party transactions depict the actual scene of fraud in connected transactions through means such as inflating revenue, manipulating costs, unfair pricing, concealing related party relationships, and using complex related party transactions to fabricate business.

Overall, existing research has addressed the definition, motives, audit risks, and regulatory approaches of unfair related party transactions, and has been deeply integrated with theories such as information asymmetry and agency delegation.

Falsifying income, manipulating costs, and concealing related party relationships are the three major means of fraud in connected transactions, but there is still a gap in quantitative research on industry differences, and the intensity of mandatory disclosure is still a blank in current literature [6]. This article selects Aerospace Communications Holdings Group Co., Ltd. as the research sample, focusing on analyzing the entire process of fraud in connected transactions through its subsidiary Hipad Intelligent Technology Co., Ltd. A three-layer progressive research framework of “Fraud Identification - Motivation Analysis - Governance Plan” is established, and the conclusion of constructing a three-in-one mechanism of “Internal Governance - External Supervision - Market Constraints” is drawn [7].

1.3 Research Meaning

The practical significance of this paper lies in: embedding the GONE Theory into the special situation of “High Premium M&A + Performance Commitment”, verifying the interactive effect of need and opportunity, and enriching the explanation dimension of fraud motivation; The case integrates the income statement, balance sheet, cash flow statement and covert means into an operable identification framework, which makes up for the deficiency of focusing on statements and ignoring the identification of “Covert Channels”; Through the deconstruction of motivation to targeted governance in the same case, build a “Motivation Governance” closed loop, and provide a paradigm for subsequent research.

The theoretical significance of this paper lies in: proposing governance schemes such as “third-party custody of committed funds, advance accrual of compensation obligations, and real-time disclosure of large related party transactions” to provide revised rules and starting points for regulators; Refining the abnormal index library and embedding the penetrating audit list into the audit procedure to reduce the failure rate; Revealing the harm of ownership concentration, formalization of internal control and short-sightedness of management, and warn state-owned holding companies to repair governance as soon as possible; Summarizing the characteristics of fraud for investors’ early warning and foster sound capital-market development.

2 Case Introduction

2.1 Company Profile

The predecessor of Aerospace Communications can be traced back to the Zhejiang textile industry company established in 1980. In 1993, it completed the shareholding system reform and was listed on the Shanghai Stock Exchange. In 2000, China Aerospace Science and Industry Group became its controlling shareholder by acquiring a majority stake. The company shifted its positioning from the traditional textile industry toward a dual-track development model of “Military Products + Civil Products”.

In terms of business, it has formed four major sectors: information and communications, aerospace defense, special vehicles, and mobile terminals. In terms of financial performance, the operating income before the acquisition was stable, but

the profit was weak. After consolidation, both scale and profit soared temporarily. After the restatement, Hipad Intelligent Technology Co., Ltd. reported losses arising from the reversal of previously inflated revenue and profit. Losses continued from 2019; by the end of 2020, the company was insolvent, and voluntarily delisted in March 2021.

Founded in 2010, Hipad Intelligent Technology Co., Ltd. was originally a private high-tech enterprise. After being acquired by Aerospace Communications in 2015, it quickly became a core consolidated subsidiary of the group. Headquartered in Shenzhen Nanshan Science and Technology Park, it has four functional center platforms, including finance, supply chain, R&D, and marketing. In terms of organizational structure, the company adopts the three-level model of “headquarters - Business Division - sub-company”. Seven wholly-owned or holding subsidiaries are located in major first-tier cities, covering the whole machine assembly, communication equipment manufacturing, software integration, and other aspects. The equity was highly concentrated, leaving room for future related party transactions and fund scheduling.

2.2 Type and Scale of Affiliated Transactions of Subsidiaries

The transactions between Hipad Intelligent Technology Co., Ltd. and its subsidiaries and more than 40 suspected related parties can be classified into four categories, including fictitious sales-related transactions, fictitious procurement-related transactions, fictitious R&D outsourcing-related transactions, and capital lending and guarantee-related transactions. Based on the CSRC administrative penalty decision and the restated financial data issued by Aerospace Communications, the scale of these transactions appears in Table 1 between Hipad Intelligent Technology Co., Ltd. and the aforementioned related parties from 2016 to 2018.

Table 1. Scale of fraud in connected transactions (Unit: RMB 100 million).

| Year | Fictitious Sales Revenue | Fictitious Procurement Costs | Fictitious Research and Development Expenditure | Balance of Interbank Lending | Total |
|------|--------------------------|------------------------------|---|------------------------------|-------|
| 2016 | 21.38 | 9.67 | 3.47 | 4.12 | 38.64 |
| 2017 | 25.19 | 11.25 | 4.06 | 5.73 | 46.23 |
| 2018 | 22.45 | 10.82 | 3.91 | 6.18 | 43.36 |

First, fictitious sales-related party transactions. Hipad Intelligent Technology Co., Ltd. used subsidiary and shell companies in Hong Kong to sign false sales contracts to create a multi-layered cycle of “parent company subsidiary shell company”. Through circular transactions without actual logistics support, Hipad Intelligent Technology Co., Ltd. overstated its revenue. From 2016 to 2018, the fictitious revenue accounted for more than 60% of its disclosed revenue. Second, fictitious purchase-related party transactions. Hipad Intelligent Technology Co., Ltd., Nanchang Hipad Communication, and Chengdu Hipad Precision purchased goods at inflated prices from suppliers such as Shenzhen Yitong and Shanghai Chengrui, all controlled by the

same ultimate controller. After several transfers, the funds returned to form a closed loop. Third, fictitious R&D outsourcing-related party transactions. Beijing Hipad innovation technology paid large amounts of money to several suspected related parties in the name of “entrusted research and development”, but there was no acceptance data. The funds were ultimately employed to bridge the performance shortfall. Fourth, capital lending and guarantee-related transactions. Through Hangzhou Hipad Automotive Electronics Co., Ltd., it borrowed interest-free funds from related parties of the actual controller, with a year-end balance of 618 million yuan. Failure to accrue interest resulted in overstated profits. It also borrowed interest-free or low-interest funds from enterprises under the actual controller through subsidiaries such as Hangzhou Hipad automotive electronics and Shanghai Hipad information technology, and issued bank guarantees, resulting in the misappropriation of off-balance-sheet funds. It can be seen that Hipad Intelligent Technology Co., Ltd. has formed a complex internal transaction network with a number of subsidiaries, supplemented by the circular purchase and sale of overseas shell companies, resulting in large-scale and highly hidden related party transactions, which provide operation space for fraud in connected transactions.

3 The Causes of Fraud in Connected Transactions

3.1 Analysis Based on GONE Theory

This article will apply the GONE Theory to dissect the closed loop of fraud in connected transactions after Aerospace Communications acquired Hipad Intelligent Technology Co., Ltd., revealing how greed, opportunity, need, and exposure reinforce each other in the context of high-commitment mergers and acquisitions. According to GONE Theory, Aerospace Communications fraud primarily stems from high-performance commitments in the Need dimension. The performance commitment directly links the net profit of the subsidiary to huge compensation. To avoid triggering the compensation obligation, the management was compelled to inflate the performance through related-party transactions. Hipad Intelligent Technology Co., Ltd. is required to achieve a performance growth rate far exceeding the industry average for three consecutive years.

Greed shows the dual interest impulse of controlling shareholders and management. The high premium acquisition itself has pushed up the future valuation expectation. If the performance fails, it will trigger the risk of personal pledge liquidation. Therefore, the management and major shareholders tend to maintain the market value through earnings management. The market value of dividend and inflated profits enables major shareholders to pledge financing at a high level.

The opportunity lies in the structural defects of corporate governance and the information environment. The excessive concentration of equity leads to the approval of connected transactions degenerating into a mere formality. At the same time, the internal audit has been absent for a long time, and the external auditors lacked independence because of the fee dependence. With the help of more than 40 suspected related parties, Hipad Intelligent Technology Co., Ltd. has built a “parent

company subsidiary shell company” circular transaction. The highly hidden structure makes it difficult to penetrate the traditional procedures of letter confirmation and proof drawing, providing a technical space for fraud.

Exposure risk is significantly weakened due to low regulatory and legal costs. The current sanctions for fraud in connected transactions are far lower than the required performance-compensation amounts, and the management chooses to take desperate measures after weighing the costs of non-compliance. Before the Aerospace Communications case, the Shanghai Stock Exchange only handled the inquiry with information disclosure defects, and failed to launch timely in-depth investigations; In addition, the absence of class action and criminal liability further weakened the deterrent effect of fraud detection [4].

3.2 Motivation Analysis Based on Principal Agent Theory

The principal-agent theory points out that the separation of ownership and management rights causes the management to use the difference in information acquisition to infringe on the interests of shareholders. In the context of high premium M&A, performance commitment forcibly binds the net profit of subsidiaries with huge compensation, directly amplifying the “shareholder management” interest differences: when performance targets are missed, management faces not only bonus and reputational losses but also margin calls on pledged equity, which tends to avoid compensation liability through fraud in connected transactions, thus violating the long-term value pursuit of shareholders. At the same time, the “Absence of Owners” problem inherent in state-owned equity renders Aerospace Communications’ supervision of Hipad Intelligent Technology Co., Ltd. largely nominal. The SASAC has not established a dynamic performance verification mechanism. The board of directors and the audit committee are dominated by the controlling shareholders, and the approval has become a procedural formality. Day-by-day oversight by the parent group weakened markedly; the board of directors and the audit committee became nominal, and the internal audit turned into a mere formality, resulting in an almost complete vacuum of managerial constraints.

As a consolidated subsidiary of Aerospace Communications, the management of Hipad Intelligent Technology Co., Ltd. fully understands the real pricing, customer background and contract performance of related party transactions, while the controlling shareholders, minority shareholders and external auditors of listed companies are unable to obtain the list of related parties and transaction details in a timely and complete manner, resulting in obvious information asymmetry. The opacity of key information makes it difficult for traditional correspondence and sampling procedures to penetrate the multi-layer structure of “Parent Company - Subsidiary - Shell Company”, and the cost of external supervision is high, and the effect is limited, which ultimately provides a hidden and low-risk channel for the management to manipulate earnings.

4 Influence and Harm of Fraud

4.1 Impact on the Company Itself

The fraud in connected transactions of the Aerospace Communications subsidiary Smart Shanghai has caused a devastating impact on the company itself, resulting in the deterioration of financial performance, declining revenue, and sharp profit volatility, and ultimately the loss of the company's going-concern capacity, as shown in Table 2. From the perspective of financial performance, fraud caused a performance bubble through fictitious connected transactions, and the data underwent substantial downward revisions after exposure. As shown in Table 2, during 2016-2018, with the help of the multi-layer connected transaction network of "Parent Company - Subsidiary - Shell Company", Hipad Intelligent Technology Co., Ltd. has falsely increased its operating revenue by 6.902 billion yuan and profit by 2.574 billion yuan, accounting for more than 60% of the disclosed value in the same period, and its profit margin was artificially inflated to 18.2%. After the fraud was exposed in 2019, the reported net profit turned from a false profit to a substantial loss of 1.974 billion yuan; In 2020, the loss further expanded to 2.136 billion yuan, the profit margin plunged to -35.6%, and the financial fundamentals collapsed.

Table 2. Substantial impact of fraud on income and profit.

| Year | Disclosed Operating Income (100 million Yuan) | Adjusted Actual Operating Income (100 million Yuan) | Year-on-Year Change Rate of Operating Income | Disclosed Net Profit (100 million Yuan) | Adjusted Actual Net Profit (100 million Yuan) | Year-on-Year Change Rate of Net Profit |
|------|---|---|--|---|---|--|
| 2016 | 21.38 | 8.55 | - | 8.20 | -6.30 | - |
| 2017 | 25.19 | 9.07 | 17.8% | 9.50 | -7.80 | -195.1% |
| 2018 | 22.45 | 8.82 | -10.9% | 8.90 | -9.20 | -261.1% |
| 2019 | - | 9.43 | 6.9% | False Profit | -19.74 | - |
| 2020 | - | 6.06 | -35.9% | False Profit | -21.36 | 8.20% |

From the revenue perspective, the false growth lacked support from actual cash flow, and a large portion of the fictitious revenue was recorded as accounts receivable with no real collection prospects. Such transactions cover up the essence through "circular transactions". The actual revenue in 2019 amounted to only 23.7% of the originally reported figure for 2018, down 62.5% from the actual value of the previous year. In 2020, the revenue continued to decline by 35.9%, to only 14.7% of the 2018 figure. The core business contracted sharply after the capital chain ruptured, and the revenue scale shrank by nearly 80%. From the chain reaction caused by profit fluctuation, after the inflated profits were fully offset, the company needed to withdraw bad debt reserves of 1.23 billion yuan and litigation compensation exceeding 500 million yuan, resulting in the net assets from the false positive value at the end of 2018 to -1.46 billion yuan at the end of 2020, which was insolvent. Finally,

the company became insolvent and was subsequently delisted, which was highly consistent with the typical path of “false income - false profit - false performance”.

4.2 Impact on Market and Regulation

Fraud in connected transactions exerts significant market and regulatory impacts, first evident in investor losses. Fraud in connected transactions misleads investors by falsely increasing income and profits, leading investors to buy or hold securities on the basis of false information, and ultimately suffering losses due to a stock price crash and delisting. Therefore, when the controlling shareholder hollows out the company through connected transactions, the public shareholders often become the direct victims. The controlling shareholders hollowed out the company through covert trades, while minority investors bore the resulting losses, which seriously damaged the principle of market fairness.

The credibility of supervision was undermined. The concealment of connected transactions and audit risks, such as the difficulty in identifying complex relationships and verifying the fairness of pricing, increases the difficulty of supervision. If the supervision fails to identify and punish fraud in time, it will weaken the trust of the market in the supervision system [8]. The delayed and insufficient disclosure further revealed systemic regulatory shortcomings, undermined investors' perception of market fairness, and cast doubt on the effectiveness of disclosure regulation [9]. Finally, it has a negative demonstration effect [10]. In Aerospace Communications and other cases, fraudulent means may be imitated by other companies, forming a vicious circle of “Bad Money Expelling Good Money”. If the fraud under the pressure of performance commitment is not effectively curbed, it will induce more enterprises to manipulate profits through unfair transactions and destroy the market order and the integrity foundation.

5 Countermeasures and Suggestions

At the enterprise level, strengthen internal control and governance. First, optimize the ownership structure and solve the dilemma of “One Share Dominating the Market”. Through the introduction of investors, the implementation of an employee stock ownership plan, and other ways to disperse the equity, form a check and balance mechanism among shareholders, and reduce the space for controlling shareholders to manipulate related party transactions by using control rights. Second, improve the internal control mechanism of related party transactions and establish a whole process supervision system of related party transactions. Before a transaction, the audit committee under the board of directors, independent of the controlling shareholder, shall review the necessity of the transaction; The company must strictly implement fair pricing in the transaction; The board should review the substance and benefits of transactions regularly. Third, attach binding clauses to high-premium acquisitions. Specify performance commitments and compensation mechanisms in the M&A agreement. For example, if the underlying asset fails to reach the expected income

within a limited period of time, the transferor needs to repurchase equity or cash compensation. At the same time, the purchase premium is to be paid in installments, linked to the actual profits of the acquired assets, to prevent the transfer of interests under overvalued values.

At the regulatory level, improve rules and penalties. First, improve the rules and regulations on connected transactions, refine the criteria for identifying connected parties, the basis for judging the fairness of transaction pricing (such as the arm's-length transaction price comparison), and delineate the legal liabilities arising from unfair transactions, to avoid the behavior of "formal compliance and substantive injustice". Second, strengthen information disclosure requirements, requiring listed companies not only to disclose the amount and type of related party transactions, but also to specify the transaction background, pricing basis, capital flow and the substantive relationship of related parties (such as the hidden "Parent Company - Subsidiary - Shell Company" multi-layer structure), and mandatory disclosure of fairness opinions issued by independent financial advisers on material transactions [11]. The third is to increase the cost of fraud, increase the intensity of administrative fines (e.g., punishment by multiple of the amount of fraud), improve the civil compensation mechanism (e.g., supporting the class action of minority shareholders), and investigate criminal responsibility for malicious tunneling of listed companies, forming a "administrative+civil+criminal" triple punishment system.

At the audit level, optimize the verification procedures. First, the implementation of penetration audit, through the layer-by-layer tracing of connected transactions, not only to examine the face of each transaction, but also to penetrate to the actual controller and hidden connected parties, to avoid circumventing regulation by splitting transactions and concealing connected relationships [12]. The second is to optimize the verification procedures in high-risk areas. The details of frequent non-operating related party transactions and transactions whose pricing significantly deviates from the market are tested, such as confirming the authenticity of connected capital transactions and verifying the consistency between cash flows and the underlying business. Third, pay attention to high-risk signals and focus on abnormal signals such as a sudden increase in the frequency of connected transactions, the valuation premium rate of underlying assets far exceeding the industry average, and a marked mismatch between the growth rates of accounts receivable and revenue, to timely identify fraudulent acts of falsely increasing income and manipulating profits.

6 Conclusion

The study found that Hipad Intelligent Technology Co., Ltd., a subsidiary of Aerospace Communications, committed related-party transaction fraud through fictitious business activities, which eventually led to the delisting of the company. The motivation can be attributed to the pressure brought by performance commitment, the interest-driven drive of controlling shareholders and management, the operational space formed by corporate governance defects, and the low illegal cost, reducing the risk of fraud exposure. Based on this, it needs to work together from multiple dimensions,

such as optimizing corporate governance and internal control, improving regulatory rules and strengthening discipline, and implementing a penetrating audit.

The main contribution of this paper is to embed relevant theories into the special situation of “High Premium M&A + Performance Commitment”, build a framework integrating report analysis and covert transaction identification, and form a closed-loop framework linking “Motivation – Governance”, thereby addressing the deficiency of emphasizing report analysis and ignoring covert means identification in the existing research, and provides a reference for the optimization of enterprise internal control, the improvement of regulatory rules and the improvement of audit practice, as well as a case analysis paradigm for the subsequent fraud in connected transactions research. This study has limitations: first, it focuses on a single case, limiting the generalizability of conclusions; second, it relies primarily on qualitative analysis, lacking in-depth quantitative verification of fraud factors. Future research can introduce quantitative research methods to deepen the analysis of influencing factors and explore the application of digital technology in the identification of related party transactions to further enhance the practical value and governance efficiency of the research.

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