

AN ANALYSIS OF SYNERGY EFFECT FROM ACQUISITION IN PT HAKAASTON AND ITS SUBSIDIARIES

Ayu Hutami Hariyanti^{1*}

Student of Magister Management, Faculty of Economic and Business, Universitas Indonesia,
Depok, Indonesia, ayuhutami@gmail.com

**Corresponding author*

Nur Dhani Hendranastiti²

Department of Management, Faculty of Economic and Business, Universitas Indonesia,
Depok, Indonesia, nurdhani@ui.ac.id

Abstract

Background – PT. Hakaaston has acquired three subsidiaries, namely PT. Bhirawa Steel, PT. Semen Indogreen Sentosa and PT. Catur Armindo Putra, which began in 2019. The acquisitions are generally expected to bring benefits to the acquiring company. However, after three years of implementing the acquisition, there has been no significant change, raising the question of whether the conducted acquisition that had been carried out was based on the right strategy and careful considerations.

Aim – This study aims to obtain the evidence regarding the effects of the acquisition conducted by PT. Hakaaston.

Design / Methodology / Approach – Researchers conducted an in-depth analysis of the condition using a mixed method approach to determine whether the acquisition that has been carried out could lead to financial synergies or operational synergies. The research process divided into several steps, the first step involved quantitative research, where the researcher conducted the statistical tests on the ratio of the company's financial reports of 2019-2022 which continued into the next step which involved qualitative in the form of in-depth analysis through interviews with informants. The results of statistical tests and interviews are integrated to allow the researcher to conclude whether synergy has been achieved from the acquisition.

Findings – The empirical findings based on post-acquisition financial statement report found that 2 out of 3 subsidiary companies experienced financial improvements while the holding company, as the acquirer, experienced a decline subsequent to the company's acquisition. The result of the analysis interview with the informants explained that the conducted acquisition focus is not only on financial synergies but also on operational synergies in which the company played a role in supporting the construction of the Trans Sumatra Toll Road.

Conclusion - The initial quantitative analysis found that there is no significant financial or operational synergy among the subsidiary companies of PT. Hakaaston, meanwhile the qualitative analysis found that in terms of operational synergy, according to the informants from both the subsidiary companies and the holding company, operational synergy has been achieved.

Research implication – The findings of this study can serve as the basis for further research on Mergers & Acquisitions (M&A) policies which are not only beneficial for one party but more towards economic benefits. In addition, the research results can be used as a consideration in making decisions regarding future Mergers & Acquisitions (M&A) plans for companies to make them more effective.

Research Limitations – The limitation of this study is the relatively small-time frame of the research process, as the acquisition only took place in 2019. Therefore, future research can consider using a longer time frame to examine the post-acquisition period.

Keyword : Mergers, Acquisitions, Synergies.

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Abstrak

Latar Belakang - PT. Hakaaston telah melakukan akuisisi terhadap 3 anak perusahaan yaitu terhadap PT. Bhirawa Steel, PT. Semen Indogreen Sentosa dan PT. Catur Armindo Putra yang dimulai pada tahun 2019. Akuisisi yang dijalankan umumnya memberikan ekspektasi keuntungan bagi perusahaan pengakuisisi, namun pasca 3 tahun dijalankannya akuisisi belum terjadi perubahan yang signifikan sehingga memunculkan pertanyaan apakah akuisisi yang dijalankan telah disusun berdasarkan strategi yang tepat serta pertimbangan yang matang.

Tujuan - Penelitian ini bertujuan untuk mendapatkan bukti mengenai efek dari dilakukannya akuisisi yang dijalankan PT. Hakaaston.

Desain / Metodologi / Pendekatan - Peneliti melakukan analisis mendalam mengenai kondisi ini menggunakan metode campuran (mix method) untuk mengetahui akuisisi yang dijalankan apakah dapat menimbulkan Financial Synergies atau Operational Synergies. Proses penelitian dibagi menjadi beberapa tahapan, yang pertama adalah penelitian kuantitatif dimana peneliti melakukan uji statistik terhadap rasio-rasio laporan keuangan perusahaan tahun 2019-2022 yang dilanjutkan ke tahap kualitatif berupa analisis mendalam melalui wawancara dengan informan. Hasil uji statistik dan wawancara diintegrasikan sehingga peneliti dapat menyimpulkan apakah telah terjadi sinergi dari akuisisi tersebut.

Hasil dan Pembahasan - Temuan empiris berdasarkan data laporan keuangan perusahaan pasca akuisisi menemukan bahwa 2 dari 3 anak perusahaan mengalami peningkatan dari segi keuangan perusahaan namun perusahaan induk selaku pengakuisisi mengalami penurunan pasca akuisisi perusahaan. Analisis atas hasil wawancara dari narasumber menjelaskan bahwa akuisisi yang dijalankan tidak hanya mengacu kepada Financial Synergies, namun juga terhadap Operational Synergies dimana perusahaan memiliki peranan untuk membantu pembangunan Jalan Tol Trans Sumatra.

Kesimpulan - Analisis kuantitatif awal menemukan bahwa tidak ada sinergi keuangan atau operasional yang signifikan antara anak perusahaan PT. Hakaaston, sedangkan analisis kualitatif menemukan bahwa dari segi sinergi operasional, menurut narasumber baik dari anak perusahaan maupun induk perusahaan, sinergi operasional telah tercapai.

Implikasi penelitian - Hasil temuan penelitian ini dapat menjadi dasar untuk penelitian-penelitian selanjutnya mengenai kebijakan dalam Merger & Akuisisi (M&A) yang tidak hanya bersifat menguntungkan bagi satu pihak namun lebih kepada manfaat ekonomi. Selain itu hasil penelitian dapat menjadi pertimbangan dalam pengambilan keputusan atas rencana M&A perusahaan kedepannya agar lebih efektif.

Batasan penelitian - Batasan dalam penelitian ini adalah rentang waktu penelitian yang cukup kecil dikarenakan akuisisi baru berjalan pada tahun 2019, sehingga dalam penelitian kedepannya dapat menggunakan rentang waktu yang lebih panjang untuk pasca dilakukannya akuisisi.

Kata Kunci : Merger, Akuisisi, Sinergi.

INTRODUCTION

Synergy is a form of performance improvement for a company that arises from the implementation of a Merger & Acquisition (M&A). Hossain (2021), in his research on M&A literature, found that the performance improvement of a company comes from the synergy obtained, market strength, company profitability, risk diversification, and integrated management strategy between

subsidiaries and holding company. Other studies (Andriuskevicius, 2015; Lee et al., 2019) have found that synergy from innovation, operations, marketing, and organization can enhance a company's innovation level and industry category. Additionally, synergy from M&A can represent a successful strategic growth mode and create value during periods of economic uncertainty. Synergy can be achieved when M&A is carried out with the right strategy,



thus creating value (Gupta et al., 2021). However, there are also M&A transactions that fail to create value and synergy, making them considered as failures. M&A can be metaphorically likened to a double-edged sword, where one side can bring benefits to the company in the form of synergy, but on the other side, it can lead to losses if the M&A process does not go well. Previous studies (Bratianu & Anagnoste, 2011; Tang et al., 2021; Vu & Moisescu, 2013) explain that such failures are caused by the uncertainty and significant risks associated with M&A implementation. This leads investors, as shareholders, to demand high return as a sense of security against the high risks of M&A (Sheikh et al., 2015). In addition to the high risks, the cultural and regional differences between the acquiring company and the target company can pose challenges in M&A when the differences are substantial. Wang et al. (2020) explain that regional cultural differences have a stronger negative effect on synergy realization compared to organizational cultural differences. M&A can proceed smoothly if the acquiring company has a good understanding of the target company's conditions. The condition of the target acquisition company can be assessed through financial report analysis. Additionally, the previous collaboration experience between the acquiring company and the target company can be a consideration in making M&A decisions. Porrini (2004), in their research, found that

previous alliances or collaborations between the acquirer and the target are positively correlated with acquisition performance. The transition from inter-firm collaboration to acquisition often occurs. McCarthy and Aalbers (2022) explain that this condition arises because the experience from previous collaborations enables the acquirer to more easily identify and absorb the knowledge of the target company. The experience possessed by the acquirer can help the company position itself and effectively manage the target acquisition to create synergy between the subsidiary and the holding company.

PT. Hakaaston is a subsidiary of PT. Hutama Karya (Persero), a state-owned enterprise (BUMN) in Indonesia, which has been assigned by the Government of the Republic of Indonesia to undertake the construction of the Trans Sumatra Toll Road spanning 2,704 km. This construction assignment is stipulated in Government Regulation (Perpres) No. 100 of 2014, updated by Perpres No. 117 of 2015, which designates PT. Hutama Karya (Persero) as the toll road developer. PT. Hakaaston's business orientation in asphalt concrete, ready-mix concrete, and construction services places the company in an important role in assisting PT. Hutama Karya (Persero) in completing the construction of the Trans Sumatra Toll Road. Apart from its role in toll road development, infrastructure development throughout Indonesia is currently experiencing high



intensity, presenting an opportunity for PT. Hakaaston to increase its sales. Therefore, the company made the decision to acquire three subsidiary companies, namely PT. Bhirawa Steel, PT. Semen Indogreen Sentosa, and PT. Armindo Catur Pratama, from 2019 to 2020 to enhance production and expand its business.

M&A can be successful when both large and small companies can identify suitable partners or counterparts, ensuring that all parties benefit from the M&A process. However, if this does not happen, the M&A strategy may not be executed effectively (Hossain, 2021). The selection of the right partner or target will lead to a productive M&A, benefiting not only the company but also the management and shareholders. Productive M&A leads to increased shareholder wealth compared to operating separately (Natocheeva et al., 2017, Smeulders et al., 2019). Referring to previous research, the acquisition targets for PT. Hakaaston should ideally be companies with good productivity and financial performance. However, in the acquisitions of PT. Bhirawa

Steel, PT. Semen Indogreen Sentosa, and PT. Armindo Catur Pratama, these companies had high debt values prior to 2019, as shown in table 1. Each subsidiary company has a high level of debt. PT. Bhirawa Steel, with the code BS, experienced a decrease in debt level in 2018, but this decrease was due to debt restructuring and company stock sales. Meanwhile, the current ratio of the company, that indicates the financial condition of the company in relation to current assets and current liabilities, is also in a less favorable condition. This is presented in the table 2. The current asset condition of the company can also be considered inadequate as it tends to be smaller compared to the company's liabilities. Although PT. Armindo Catur Pratama (ACP) has a ratio value above 800%, this is due to the restructuring of short-term debt into long-term debt with banks.

This raises the question for researchers whether the acquisition conducted by PT. Hakaaston is the right decision and can generate synergy beyond the individual conditions of each subsidiary company.

Table 1
Debt to Equity Ratio of Subsidiary Companies

Company	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BS	963%	350%	603%	480%	271%	99%	71%	55%	64%	48%
SIS	5768%	895%	1968%	979%	1156%	693%	260%	280%	195%	142%
ACP	198%	190%	137%	126%	114%	116%	412%	359%	306%	361%

Source: Financial statements of PT. Bhirawa Steel, PT. Semen Indogreen Sentosa, and PT. Armindo Catur Pratama Year 2013 to 2022

Table 2
 Current Ratio of Subsidiary Companies

Company	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BS	82%	79%	74%	77%	13%	50%	83%	70%	132%	137%
SIS	33%	48%	53%	71%	78%	75%	75%	84%	101%	113%
ACP	116%	138%	146%	152%	867%	676%	82%	98%	103%	84%

Source: Financial statements of PT. Bhirawa Steel, PT. Semen Indogreen Sentosa, and PT. Armindo Catur Pratama Year 2013 to 2022

This research contributes to the literature in the following ways. Firstly, it is inspired by the research recommendation (Hossain, 2021) that companies should exert effort towards productive M&A, even though there are cases of less productive M&A with specific objectives. Secondly, according to the research (McCarthy & Aalbers, 2022), acquisitions based on prior cooperation experience with the target company are highly effective because the acquiring company has experience in working together. In the context of this case study, the researcher aims to determine whether the acquisition of partners with prior cooperation experience, despite their current unfavorable conditions, can have a positive impact on both the acquiring company and the target company. The final contribution of this research is based on (Lee et al., 2019), which found that synergies from operations, marketing, and innovation can enhance innovation levels and industry categories of a company. Therefore, the research seeks to investigate whether the acquisition of PT. Bhirawa Steel, PT. Semen Indogreen, and PT. Armindo Catur Pratama

can create both financial and operational synergies for PT. Hakaaston.

LITERATURE REVIEW

Synergy from Merger & Acquisition

The growth of a business or company can be seen through its asset value and financial performance. Das & Kapil (2012) stated that M&A is a favored strategy in the business world as a means for companies to grow. However, from an academic perspective, there are differing viewpoints on whether M&A truly provides tangible benefits in the form of synergy. Synergy can be considered as an investment made through M&A transactions. Lin et al. (2021) explain that a company's investment efficiency affects its financial performance, decision-making, long-term plans, and vision. Furthermore, M&A, as a form of investment, has an impact on the company's value and ownership structure (Cho, 1998). Synergy is the manifestation of a successful M&A, which can be achieved through the integration of market strengths between the subsidiary and holding company, risk diversification, and proper strategic management between the subsidiary and holding company in



executing business operations, as mentioned by Gupta et al. (2021) and Hossain (2021).

Synergy can occur when two or more parties collaborate in business to create new value, allowing companies to optimize management and operations for greater effectiveness and efficiency, thereby increasing corporate profits and preventing value destruction (Bradt & Pritchett, 2022; Brahma et al., 2018). The effectiveness resulting from the synergy of M&A can manifest in securing the source of production raw materials for the company, and it can also lead to a decrease in variable costs for the company as a result of synergy with subsidiary companies (Gudmundsson et al., 2020; Kwilinski, 2020). Additionally, Coccorese & Ferri (2020) explain that M&A among banks can enhance cost efficiency for the combined bank.

However, M&A is not always successful. Sataphy & Mishra (2020) in their study in India found that the performance of Indian acquirers deteriorated after the merge compared to the pre-merger period. This decline occurred in both profitability and cash flow measures, with sales size and growth appearing to be factors too significant to explain the acquirer's influence. Liu et al. (2021) in their research on China cross-border M&A revealed that, in general, cross-border M&A does not enhance financial performance. The appreciation of the CNY exchange rate,

infrastructure, labor costs, institutional distance, and technological level in the host country are significantly related to long-term post-merger performance, particularly for state-owned enterprises which tend to have poorer profitability compared to private firms.

M&A does not always proceed smoothly, and there are also several conditions that can cause M&A to fail in creating value for the company. M&A brings about uncertainty and significant risks in its implementation, which leads investors, as shareholders, to seek high returns as a sense of security for the high risks associated with M&A (Sheikh et al., 2015). In addition to the high level of uncertainty, the literature (Harison et al., 2016) identifies the term "angel investor," where investors expect adjusted returns above market risk for their investments in the form of capital gains in the medium to long term. In other words, they are willing to endure short-term losses and exercise patience as they wait for the businesses they invest in to thrive over an extended period of time. The government plays a role as an Angel Investor, as explained in a study by Li et al. (2016) in China, which describes how the government issues specific regulations to support the role of Angel Investors and improve the economy. Efficiency Theory Synergy is a form of efficiency that a company achieves in its business operations with the support of its subsidiary companies after the M&A by the holding company.

Risberg (2013:9) states that the efficiency theory views mergers as planned actions aimed at creating synergy. The synergies resulting from M&A can be categorized into three types:

1. **Financial Synergies** This involves achieving lower capital costs by increasing the size of the company, which provides access to lower-cost capital.
2. **Operational Synergies** This involves the integration of separate operational units or the transfer of knowledge, resulting in reduced business unit costs and enabling the company to offer unique products as a result of knowledge transfer.
3. **Managerial Synergies** This refers to effective company management when the acquiring company's managers possess superior planning and monitoring capabilities, which can improve the performance of the acquired company.

Rabier (2017), in his study, found that companies that engage in acquisitions with the goal of operational synergy tend to have a positive experience with the acquisition and achieve long-term returns that are less common in acquisitions aimed at financial synergy. This is consistent with the initial basis for PT. Hakaaston's acquisition, which was to support the development of the Trans-Sumatra Toll Road. Li et al. (2020)

also state that there is a relationship between operational decisions and financial leverage, where operational decisions that can generate operational synergy can increase a company's borrowing capacity to finance business activities and reduce agency conflicts.

Based on previous research on M&A synergy and efficiency theory, the hypothesis for the quantitative phase of the study is whether there is financial synergy and operational synergy in the acquisitions conducted by PT. Hakaaston. These hypotheses will be further analyzed in-depth using qualitative methods.

Financial Performance

Jumingan (2006) explains that financial performance is a reflection of the financial condition of a company during a specific period. This includes aspects such as revenue and expenses. According to Munawir (2012), financial performance aims to assess a company's level of liquidity, solvency, profitability, and activity, allowing for accurate measurement of the company's financial condition over time. Barnes (1987) states that financial ratios can be used for various purposes, including assessing a company's ability to pay its debts, evaluating business and managerial success, and even compliance with regulations regarding company performance. Pratiwi et al. (2020) in their research on financial performance and stock prices found that there is no

significant influence of financial ratios on the company, but they do have a positive impact on stock prices. In addition to stock prices, an increase in a company's leverage, as reflected in the financial performance ratios of the acquiring company post-acquisition, according to Agliardi et al. (2016) in their study, creates significant growth options for the company and lower bankruptcy costs and lower volatility. This research uses five types of financial ratios to measure the performance of both the holding company and the subsidiary, namely:

1. Return on Investment (ROI) is the ability of a company to generate profit in relation to its total assets. The ROI of a company can be calculated by dividing the after-tax profit of the company by its total assets. Return on Investment (ROI) measures how much net profit can be obtained from the total wealth owned by the company. ROI can be calculated using formula 1.
2. The Debt to Equity Ratio is the ratio of funds owned by shareholders to those provided by creditors. The higher the ratio, the less the company relies on shareholder funding. For a company's solvency, the lower the ratio, the higher the company's ability to repay its long-term debt. The Debt to Equity Ratio is a measure of the obligations related to the total equity held by shareholders in a company. The Debt to Equity Ratio can be calculated using formula 2.
3. Total Asset Turnover Ratio is an activity (efficiency) ratio that indicates how effectively a company competes in its industry by maximizing the use of its assets. Companies need to maximize the utilization of their assets by measuring how effectively they use their resources. Total Asset Turnover Ratio is a metric used to measure a company's effectiveness in utilizing its assets. The more efficiently a company uses its assets, the faster those funds will be returned in the form of company revenue. The formula 3 is for calculating the Total Asset Turnover Ratio.
4. The Current Ratio is the ability to meet debt obligations when they become due. The higher the current ratio, the faster a company can meet its short-term debts. If the current ratio is too high, it indicates that excess working capital is being wasted. The Current Ratio is a measure for a company to account for its short-term liabilities. The formula 4 is for calculating the Current Ratio.
5. Earnings per Share (EPS) is a ratio that is highly regarded by investors, as it reflects the prospects of future profits that a company is expected to generate. EPS provides information to shareholders about the company's profitability, as it represents the earnings attributable to each share

owned by investors. Earnings per Share is calculated by dividing the net income of the company, after taxes, by the total

number of shares outstanding. The formula 5 is for calculating the EPS.

$$\text{ROI} = \frac{\text{Earning After Tax}}{\text{Total Assets}} \quad \dots\dots\dots \text{formula 1}$$

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debts}}{\text{Total Shareholder's Equity}} \quad \dots\dots\dots \text{formula 2}$$

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{Total Aktiva}} \quad \dots\dots\dots \text{formula 3}$$

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}} \quad \dots\dots\dots \text{formula 4}$$

$$\text{EPS} = \frac{\text{Earning After Tax}}{\text{Number of Shares}} \quad \dots\dots\dots \text{formula 5}$$

RESEARCH METHODOLOGY

Methodology

The research method used in this study is a mixed methods approach. Creswell et al. (2005) define mixed methods as a procedure for collecting, analyzing, and "mixing" or integrating quantitative and qualitative data at various stages of the research process within a single study to gain a better understanding of the research problem. The sequential mixed methods research design is employed in this study. It begins with the quantitative method to examine how statistical tests explain the initial research hypotheses. This is followed by the qualitative method, which involves analyzing interview data as primary data to complement the findings from the quantitative method. By using this approach, the researcher can draw conclusions regarding the acquisition

policies implemented by the company. Creswell (2017) explains that the explanatory sequential mixed methods approach involves initially conducting quantitative research followed by qualitative research. This study aims to understand the relationship between the financial performance of the company and the investment or subsidiary companies' contribution to the return on investment of PT. Hakaaston as an investor in PT. Bhirawa Steel, PT. Semen Indogreen Sentosa, and PT. Armindo Catur Pratama.

The types and sources of data used in this study are primary and secondary data. Primary data in this research are obtained through direct interviews conducted by the researcher with the informants, which are recorded and transcribed into written form. Meanwhile, the secondary data used in this report consist of the company's financial



statements, Company Profile, and other relevant documents. The financial statements used in the research cover the period from 2013 to 2022. Considering that the acquisition took place in 2019, the researcher extends the analysis to include the company's performance in the five years preceding the acquisition.

The research process includes several stages: Collecting Data, Data Analysis and Integration, and Interpretation. The analysis of financial ratios is conducted manually using Microsoft Excel, and the results of the ratios will be subjected to t-tests using the SPSS software to determine whether there is a significant relationship between the financial ratios. The research will then proceed with a qualitative method, namely in-depth interviews, where the interview results will be transcribed into written narratives.

Data

The data in this study is divided into two types: primary data and secondary data. Primary data in this study is obtained through interviews conducted directly by the researcher with the respondents. The interviews were recorded and then transcribed into written form. The interviewees in this study are spread across different levels of the company's organizational structure, including low management, middle management, and top management. The list of interviewees is

included in the appendix on the last page of this research.

Secondary data in this study is derived from the company's financial reports, company profiles, and other company documentation. The time frame for this study is from 2013 to 2022, with the consideration that the acquisition took place in 2019. This time frame was chosen to examine the company's conditions before and after the acquisition. There is no sample or population in this study as it is a case study of one company with three subsidiary companies. The purpose is to determine whether there has been synergy among the subsidiary companies and how they contribute to supporting the holding company, PT. Hakaaston, in fulfilling the government's assignment to develop the Trans Sumatra Toll Road.

RESULT AND DISCUSSION

Quantitative Analysis

Based in table 3, the t-test indicate that there is no significant influence of the ROI of PT. Bhirawa Steel, PT. Semen Indogreen Sentosa, and PT. Armindo Catur Pratama on the ROI of PT. Hakaaston. This finding is consistent with the financial performance results regarding the ROI of the subsidiary companies compared to the holding company.

The results of the financial performance analysis on ROI (table 4) indicate that the subsidiaries PT. Bhirawa Steel and PT.

Semen Indogreen Sentosa experienced improved financial performance after the acquisition. In contrast, PT. Armindo Catur Pratama's financial performance declined, although it still remained in a positive condition. The worst condition was experienced by PT. Hakaaston, where the company experienced a significant decline to a negative value, indicating that the company incurred losses after the acquisition. Quantitative analysis was conducted again on all financial ratios both before and after the acquisition of the subsidiaries (table 5, table 6, table 7, and table 8).

The results of the quantitative analysis indicate that there is no significant difference after the acquisition by PT. Hakaaston. This suggests that there is currently no statistical evidence of financial or operational synergy between the subsidiary companies and PT. Hakaaston. However, it should be noted that the research period focused on the relatively short timeframe of the acquisition. The financial performance of the subsidiary companies, particularly PT. Bhirawa Steel and PT. Semen Indogreen Sentosa, has shown improvement. On the other hand, PT. Armindo Catur Pratama experienced a decline after the acquisition. The most adverse impact was observed in PT. Hakaaston, where the company incurred significant losses due to the interest burden from the loan taken for the acquisition. This

declining condition raises a new perspective for researchers to explore whether the acquisition conducted by PT. Hakaaston can be considered as a form of angel investor. Further investigation will be conducted in the qualitative analysis section to determine the motives behind the acquisition and whether synergy has been achieved.

Qualitative Analysis

The added value for the company is the objective of M&A, which is achieved through market integration, risk diversification, and strategic management between subsidiary and holding companies through appropriate strategies (Gupta et al., 2021; Hossain, 2021). The same opinion is supported by previous researchers and is in line with the views of the research informants regarding the initial objectives of M&A.

"In consolidation, the acquisition strategy carried out by PT Hakaaston has been able to provide added value and strengthen PT Hakaaston's vision of becoming a leading construction manufacturing company in Indonesia. Through the acquisition, the company has achieved product diversification and increased sales in the supporting construction manufacturing sector." (Dewantoro, 2023)

"In consolidation, the acquisition strategy carried out by PT Hakaaston has been able to provide added value and strengthen PT Hakaaston's vision of becoming a leading construction manufacturing company in Indonesia. Through the acquisition, the company has achieved product diversification and increased sales in the supporting construction manufacturing sector." (Zubair, 2023).

M&A should provide added value for the acquiring company, but the opposite occurred in this study. PT. Hakaaston experienced a decline in financial performance as a result of high interest burden.

"The impact that occurred, for example, in Hakaaston is the use of MTN credit (Bank credit) for the acquisition, which resulted in an increase in interest expenses, eroding EAT (Earnings After Taxes) and Current Ratio < 1M, as well as mismatch liability asset." (Purnomo, 2023).

"During the acquisition process, the calculation of cash returns was not taken into account, so for corporate actions funded by interest-bearing debt, it will result in a mismatch. The impact of COVID-19 is compounded by the loss in exchange rates on imported materials required by subsidiary companies in conducting their business, which can affect both standalone and consolidated performance." (Ninang, 2023)

Despite the financial performance decline of PT. Hakaaston, the company has gained positive impacts from the acquisition through its production operations.

"After the acquisition, there was a decrease in cost of goods sold, particularly in the readymix portfolio. Prior to the acquisition, the large demand for readymix was fulfilled through multiple vendors at varying prices. However, after the acquisition, the readymix demand is supplied by the subsidiary with guaranteed pricing and quality." (Dewantoro, 2023)

"The production costs decreased as the production volume increased." (Yesaya, 2023)

"After the acquisition, there was cost reduction due to the high demand for concrete production volume to supply both internal and external projects." (Aziz, 2023)

The decline in financial performance experienced by PT. Hakaaston does not necessarily indicate the absence of financial synergy. The improved financial performance of PT. Bhirawa Steel and PT. Semen Indogreen Sentosa following the acquisition, according to the sources, has contributed to the profit of PT. Hakaaston, demonstrating financial synergy. The continued underperformance of PT. Armino Catur Pratama aligns with the information provided by the sources, suggesting a lack of financial synergy.

"Financial synergy is reflected in the balance sheet of the holding company through the growth of assets and equity, while for the subsidiary companies, their performance is manifested through increased revenue that contributes to net profit." (Dewantoro, 2023)

"It has been achieved by improving the ability to negotiate interest rates with banks. The company's profit contribution to the holding company." (Parjanto, 2023)

"Financial synergy has been adequately achieved, as the acquisition has led to the application of interest rates by bank creditors that align with those imposed on the holding company, compared to before the acquisition. Additionally, with the support of accelerated billing from the holding company, it has reduced interest expenses on bank loans." (Aziz, 2023)

"Financial synergy is reflected in the balance sheet of the holding company through the growth of assets and equity, while for the subsidiary companies, their performance is manifested through increased revenue that contributes to net profit." (Zubair, 2023)

"Not yet achieved." (Suandi, 2023)

"Not yet achieved." (Wahdi, 2023)

The positive outcome achieved through M&A and acknowledged by all subsidiary companies, according to the informants, is operational synergy. This is manifested in the form of reduced production costs and ensured availability of steel, ready mix, and other materials. The support provided by these subsidiary companies contributes to the completion of the Trans-Sumatra Toll Road construction, which is a primary task of PT. Hutama Karya as the holding company of PT. Hakaaston.

"In terms of operating synergy resulting from the merger and acquisition, there has been a cost reduction in the acquisition of infrastructure projects. This is due to the direct allocation of infrastructure projects acquired by the holding company to its subsidiary companies." (Suandi, 2023)

"The implementation of operating synergy has begun, leading to cost reduction, such as cost optimization in the acquisition of Hutama Karya Group projects." (Handayani, 2023)

"After the acquisition, there has been a decrease in the cost of goods sold, particularly in the ready mix portfolio. Prior to the acquisition, the procurement of ready mix, which had high demand, was done through multiple vendors at varying prices. However, after the acquisition, the ready mix needs are supplied by the subsidiary company, ensuring price and quality." (Dewantoro, 2023)

"As Bhirawa Steel maintains its quality, with the market for Reinforcement Bars being mixed between Induction and Blast Furnace, Bhirawa Steel's Reinforcement Bars have a competitive position compared to other industrial products. Bhirawa Steel provides quality assurance and contributes to the

year-end profits, increasing the company's value." (Susianto, 2023)

"After the acquisition, there is a cost reduction due to high production demand for concrete volume, supplying both internal and external project markets." (Aziz, 2023)

"Internal financial synergy within the HK Group has been implemented, although it needs continuous improvement. One financial synergy is evident in PT. Hutama Karya as a state-owned enterprise, which enters into construction contracts with other state-owned construction companies for toll road projects. In this case, PT. Bhirawa Steel supplies reinforcement bars with payment guarantees from the progress billing of these contractors. Additionally, being a member of Hutama Karya Group allows for cash payment, resulting in a decrease in selling prices due to the elimination of discount interest." (Aryadi, 2023)

"Before the acquisition, the procurement of ready mix and iron, which had high demand, was done through multiple vendors at varying prices. However, after the acquisition, the ready mix and iron needs are supplied by the subsidiary company, ensuring price and quality." (Rintoro, 2023)

The theory of efficiency, particularly in terms of operational synergy, is supported in this study and manifests in cost reduction. The decrease in production costs, as a form of operational synergy, is a result of the high demand for concrete production volume to supply both internal and external market projects. The findings of this study align with previous research (Coccores & Ferri, 2020), which demonstrates that cooperative bank mergers can improve cost efficiency, albeit only by 5% of the total merger.

Table 3
 ROI *t*-test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Model					
(Constant)	1,916	1,564		1,226	0,436
ROI SIS, BHP, ACP (X)	-0,509	0,214	-0,922	-2,385	0,235

Source: Research data, 2023

Table 4
 Return On Investment Company

Company	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
HKA	6%	10%	6%	7%	5%	6%	7%	-2%	-1%	7%
BS	-5%	17%	-10%	3%	-3%	26%	3%	2%	4%	2%
SIS	-6%	8%	0%	0%	1%	2%	-9%	3%	9%	7%
ACP	5%	2%	2%	2%	3%	0%	4%	2%	0%	-8%

Source: Financial statements of PT. Bhirawa Steel, PT. Semen Indogreen Sentosa, PT. Hakasaston, and PT. Armindo Catur Pratama for the period from 2013 to 2022.

Table 5
 Paired T-Test for Financial Statements of PT. Hakaaston Before and After Acquisition.

Model	Mean	Std. Deviation	Std Error Mean	Interval of the		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Before - After	-443,680	1677,768	433,198	-1372,797	485,436	-1,024	14	0,323

Source: Research data, 2023

Table 6
 Paired T-Test for Financial Statements of PT. Bhirawa Steel Before and After Acquisition

Model	Mean	Std. Deviation	Std Error Mean	Interval of the		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Before - After	167,849	264,218	68,221	21,530	314,168	2,460	14	0,027

Source: Research data, 2023

Table 7
 Paired T-Test for Financial Statements of PT. Semen Indogreen Sentosa Before and After Acquisition

Model	Mean	Std. Deviation	Std Error Mean	Interval of the		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Before - After	-1530,867	22501,27	5809,802	-13991,65	10929,9	-0,263	14	0,796

Source: Research data, 2023

Table 8

Paired T-Test for Financial Statements of PT. Armindo Catur Pratama Before and After Acquisition

Model	Mean	Std. Deviation	Std Error Mean	Interval of the		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1 Before - After	-5704,043	16138,88	4167,041	-14641,46	3233,37	-1,369	14	0,193

Source: Research data, 2023

Table 9

Financial Performance of PT. Hakaaston from 2013-2022

Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ROI	6%	10%	6%	7%	5%	6%	7%	-2%	-1%	7%
DER	66%	71%	63%	68%	76%	86%	451%	440%	386%	369%
TATR	211%	149%	73%	78%	69%	75%	73%	72%	82%	113%
CR	139%	129%	97%	144%	107%	109%	104%	81%	82%	97%
EPS	67	180	32	60	71	234	6.546	-138	-79	318

Source: Financial statements of PT. Hakaaston year 2013 to 2022.

Table 10

Financial Performance PT. Bhirawa Steel from 2013-2022

Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ROI	-5%	17%	-10%	3%	-3%	26%	3%	2%	4%	2%
DER	963%	350%	603%	480%	271%	99%	71%	55%	64%	48%
TATR	78%	51%	44%	38%	38%	4%	75%	86%	66%	96%
CR	82%	79%	74%	77%	13%	50%	83%	70%	132%	137%
EPS	-59	336	-179	49	-16	151	10	5	11	6

Source: Financial statements of PT. Bhirawa Steel year 2013 to 2022

Table 11

Financial Performance PT. Semen Indogreen Sentosa from 2013-2022

Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ROI	-6%	8%	0%	0%	1%	2%	-9%	3%	9%	7%
DER	5768%	895%	1968%	979%	1156%	693%	260%	280%	195%	142%
TATR	136%	121%	114%	90%	134%	93%	76%	86%	152%	155%
CR	33%	48%	53%	71%	78%	75%	75%	84%	101%	113%
EPS	-94.358	416.115	4.208	3.369	12.255	17.937	-50.383	19.769	64.546	48.408

Source: Financial statements of PT. Semen Indogreen Sentosa year 2013 to 2022

Table 12

Financial Performance PT. Armindo Catur Pratama from 2013-2022

Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ROI	5%	2%	2%	2%	3%	0%	4%	2%	0%	-8%
DER	198%	190%	137%	126%	114%	116%	412%	359%	306%	361%
TATR	68%	67%	39%	46%	55%	39%	40%	54%	15%	19%
CR	116%	138%	146%	152%	867%	676%	82%	98%	103%	84%
EPS	168.972	63.659	33.847	29.154	41.671	5.274	59.232	25.150	1.296	-71.713

Source: Financial statements of PT. Semen Indogreen Sentosa year 2013 to 2022

CONCLUSION

Based on the results and discussions in this study, through the initial quantitative analysis using the mixed method approach, it is found that there is no significant financial or operational synergy among the subsidiary companies of PT. Hakaaston. Although the significance values indicate that the data is normally distributed, the t-test results show that there is no significant influence between the subsidiary companies and the holding company. The absence of influence or synergy may also be attributed to the relatively short duration of the study period, which covers only 3 years after the acquisition, considering that the acquisition took place in 2019.

The qualitative analysis was conducted as part of the mixed methods research. The researcher analysed the interview findings presented in the interview transcripts. Based on the interview results, it was found that in terms of operational synergy, according to the informants from both the subsidiary companies and the holding company, operational synergy has been achieved. This is reflected in the availability of raw materials, cost reduction, and improvement in the quality of the company's outputs. However, in terms of financial synergy, based on the interview results, it was only observed in PT. Bhirawa Steel and PT. Semen Indogreen Sentosa, although it is not yet

optimal. A different situation was observed in the subsidiary company PT. Armindo Catur Pratama, where the company still has a high level of obligations in terms of debt and deferred tax liabilities, which prevents the company from providing financial feedback to PT. Hakaaston, resulting in a lack of financial synergy from PT. Armindo Catur Pratama.

RESEARCH IMPLICATIONS

There are several practical implications that can be drawn from this research. First, the objectives of M&A should consider the financial condition and productivity of the target company. Operational considerations alone, without accompanying financial stability, can have detrimental effects on the acquiring company, particularly when the target company has a high debt burden. Second, the previous collaboration background should be taken into account as a consideration, as post-acquisition integration between the holding company and subsidiary companies is necessary. The track record or experience of previous collaborations can aid in the integration process and optimize synergy.

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