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The Impact of M&A on Stock Markets and Financial Performance: Abnormal Returns and the Long-Term Profitability of Mergers and Acquisitions

School of Accounting and Finance
Bachelor's Thesis
Finance

Vaasa 2025

VAASAN YLIOPISTO
Laskentatoimen ja rahoituksen akateeminen yksikkö
Tekijä: Dan Kotiranta
Tutkielman nimi: The Impact of M&A on Stock Markets and Financial Performance: Abnormal Returns and the Long-Term Profitability of Mergers and Acquisitions
Tutkinto: Kauppatieteiden kandidaatti
Oppiaine: Rahoitus
Työnohjaaja: Nebojsa Dimic
Valmistumisvuosi: 2025 **Sivumäärä:** 45

TIIVISTELMÄ:
Tutkielman tarkoituksena on tarkastella yrityskauppojen lyhyen ja pitkän aikavälin taloudellisia vaikutuksia ja tuottoja. Erityisesti lyhyen aikavälin osakekurssireaktion analyysi keskittyy yrityskauppailmoituksen yhteydessä ilmeneviin epänormaaleihin tuottoihin sekä ostaja- että kohdeyrityksen osalta. Tutkimus tarkastelee myös kaupankäyntiä yrityskauppailmoituksen ympärillä, mikä voi antaa evidenssinä lyhyen aikavälin epänormaalien tuottojen ilmenemisestä ja tehokkaiden markkinoiden olettamusten rikkoutumisesta. Yrityskauppojen pitkän aikavälin taloudellista suorituskykyä arvioidaan kirjanpitoon perustuvien mittareiden avulla, huomioiden muun muassa synergiaetujen realisoituminen sekä muut tutkimuksessa tarkasteltavat keskeiset muuttujat.

Yrityskaupat sekä niiden kannattavuus ovat rahoituksessa laajasti tutkittu alue. Aiemmat tutkimukset ovat päätyneet varsin yhdenmukaisiin tuloksiin yrityskauppailmoituksen yhteydessä havaittavista lyhyen aikavälin epänormaaleista tuotoista, mutta eri muuttujien vaikutus pitkän aikavälin taloudelliseen suorituskykyyn on ollut vähemmän yksiselitteinen. Aiemman kirjallisuuden mukaan kohdeyrityksen osakekurssi kokee keskimäärin positiivisia epänormaaleja tuottoja ilmoituksen yhteydessä. Kuitenkin yrityskauppojen pitkän aikavälin taloudellisesta suorituskyvystä, esimerkiksi koskien synergiaetujen realisoitumista ja maksutavan merkitystä, tutkimustulokset ovat olleet hajanaisia.

Avainsanat: Mergers & acquisitions, Efficient market theory, Stock prices, Leveraged buyouts, Financial performance, Insider trading in securities

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1 Introduction

Mergers and acquisitions are a widely studied field in finance, capturing the interest of both institutional and individual investors, as well as companies, whose objective is to maximize shareholder wealth. Mergers and acquisitions are a fundamental component of the economy, with their impact extending beyond individual firms to broader markets and the overall economic landscape, as they serve as a means for companies to grow, expand into new markets, or acquire strategic resources. As Renneboog and Vansteenkiste (2019) highlight, mergers and acquisitions enable firms to expand their operations by acquiring complementary products, patents, or trade secrets, avoid market foreclosure caused by suppliers, reduce tax burdens through subsidiaries located in tax-friendly jurisdictions, and achieve cost synergies by enhancing operational efficiency. The importance of mergers and acquisitions has increased even more in increasingly competitive and global markets, where the primary goal of firms and management remains the same – to maximize shareholder wealth by making the best possible decision under uncertainty. Mergers and acquisitions can help a company maintain its position in the market as competition and costs tighten or be pivotal, either by turning the company into a market leader through successful long-term acquisition strategy or completely destroying shareholder value.

It is essential to examine the short- and long-term returns and performance of mergers and acquisitions, as these may diverge over time. Analyzing stock market reactions to M&A announcements provide insights into investor behavior, market efficiency, and immediate market sentiment. Studying the short-term abnormal returns generated by M&A announcements is important, as these returns reflect the market's initial assessment of the strategic and financial justification of the deal. Furthermore, research on investors' ability to exploit abnormal returns around the announcement can reveal the strength of market efficiency, particularly in relation to over- or underreaction and information symmetry among market participants, which plays a crucial role in the functioning of financial markets.

In contrast, studying long-term financial performance helps identify the characteristics of successful deals and key factors that contribute to positive returns. Mergers and acquisitions also have broad economic and societal implications, as they can affect both job creation and job losses, shape market competition by, for example, increasing market concentration and thus weakening consumer welfare, and foster innovation through the combination of firms' expertise and resources, making the examination of M&As important. M&As themselves also employ various professionals, including auditors, lawyers, and advisors.

Short-term returns of mergers and acquisitions, referring to the period around the announcement of the deal, have been relatively consistent in financial research, whereas the results regrading long-term profitability, considering different underlying factors, vary significantly. For example, Kellner (2024) finds in his study that the cumulative average abnormal returns of target firms are positive and statistically significant around the announcement of the deal. Similarly, Georgen & Renneboog (2004) obtain corresponding results for the target firm's abnormal returns over a two-month period around the announcement. When examining the long-term financial performance of mergers and acquisitions, the results are not as straightforward. For instance, Li (2013) finds that after mergers, target companies experience a decrease in capital investments and labor costs while output levels remain stable, indicating synergy gains and improved financial performance from the merger. On the other hand, the findings of Akbulut (2013) and Heron & Lie (2002) suggest that overvaluation-driven, stock-financed acquisitions fail to create long-term value for shareholders. Due to the differing outcomes of these long-term returns and the various underlying factors, it is valuable to investigate which factors in mergers and acquisitions contribute to better financial performance and which do not.

1.1 Purpose of the study

The purpose of the thesis is to examine the short-term and long-term financial impacts and returns of mergers and acquisitions. Specifically, the analysis of short-term stock

price reaction surrounding the M&A announcement focuses on abnormal returns for the acquiring and target firm. The stock prices of companies involved in M&A transactions generate abnormal returns around the announcement, driven by new profit opportunities and the likelihood of emerging risks (Kellner, 2024). The paper also examines trading around M&A announcements, which could potentially serve as evidence of the emergence of short-term abnormal returns and violations of market efficiency assumptions. Thus, the first hypothesis is formulated as follows:

H_1: M&A announcements generate abnormal returns, which investors seek to exploit, potentially indicating deviations from market efficiency assumptions.

The long-term financial performance of mergers and acquisitions is primarily analyzed through accounting-based metrics, considering factors such as the realization of synergy gains and the influence of other key variables examined in the study. The study uses accounting-based metrics rather than stock price development, as stock prices may contain a wide range of additional information beyond the financial performance of mergers and acquisitions, such as the market's perception of a new CEO appointment or the reduction of emissions in production. According to synergy theory, the value of a new entity formed through a merger or acquisition is greater together than the sum of the individual firms. Synergy gains can include financial and operational synergies, which are realized, for example, by diversifying systematic risk through investments in uncorrelated businesses and by merging previously separate units, thus reducing costs and improving efficiency (Trautwein, 1990). Additionally, according to Renneboog & Vansteenkiste (2019), transaction-related factors such as payment method, deal structure, ownership structure and control concentration, as well as management experience and characteristics, have explanatory power in determining the long-term financial performance. According to them, for example stock-financed transactions driven by overvaluation are a poor way of creating value, in addition to deals executed by overly confident managers. Thus, the second hypothesis is formulated as follows:

H_2: M&As achieve synergy gains, with factors such as payment method, acquisition form, ownership structure, and management characteristics influencing financial performance.

The hypotheses of the study are based on the previously mentioned distinction between short-term and long-term returns and financial performance, as well as existing literature. The motivation is to examine the impact of M&A announcements on stock price reactions, related market efficiency, and the factors influencing long-term financial performance.

1.2 Structure of the study

The first chapter introduces the topic, purpose of the study, and hypotheses. The second chapter delves into the theoretical background of mergers and acquisitions, focusing on different forms of transactions with real-world examples of deals, and theories related to their occurrence and profitability. Following this, chapters three and four present a literature review, examining short-term returns of mergers and acquisitions from the perspective of stock price reactions and investors' attempts to capitalize on potential abnormal returns, as well as factors that may influence the long-term performance of M&As. The final, fifth chapter provides conclusions and synthesizes the findings.

2 Theoretical background

2.1 Forms of mergers and acquisitions

Mergers and acquisitions are a well-researched field in finance and a common topic in financial news. In practice, mergers and acquisitions take various forms depending on factors such as the objectives of the deal, acquiring firm's industry, constraints and ownership structure, the desired synergy gains, and market conditions. In a broad sense, mergers and acquisitions refer to transactions in which organizations, companies, or business units are transferred to the ownership of another company or consolidated.

2.1.1 Horizontal mergers

A horizontal merger is a merger between similar companies that compete in the same industry and produce similar products or services. When companies merge through a horizontal merger, the goal is to create an entity whose overall value is greater than the combined value of the individual companies operating independently. The anticipated advantages of a horizontal merger include a reduction in competition, an increase in market share, and the integration of expertise from two firms within the same industry. A horizontal merger thus reduces the number of competing companies and increases market concentration, which is why competition authorities must monitor the resulting market power and market dynamics to prevent the emergence of a monopolistic competitive position (Levin, 1990). A notable example of a horizontal merger is the 2016 merger between Marriott and Starwood Hotels, which resulted in the largest hotel chain of its time, comprising both luxury and more affordable options from both companies (Karmin & Hoffman, 2015).

2.1.2 Vertical mergers

A vertical merger is a merger between companies at different levels of the supply chain for a particular product or a service, exemplified by a merger between a precious metal

refinery and a mining company. Vertical mergers aim to achieve cost reduction, profitability enhancement, market expansion, and supply chain optimization, typically through the acquisition of a company's distributor. Kedia et al. (2011) state that vertical mergers can lead to cost savings and improved profit margins by reducing reliance on suppliers and eliminating additional price markups, allowing the firm to lower the final product price and strengthen its competitive position. A vertical merger benefits the merged entity but can have divergent effects on downstream competitors, as the firm may raise the price of the intermediate good it sells after strengthening its competitive position, which can potentially drive companies out of the market, a phenomenon known as market foreclosure (Kadner, 2024). The research also suggests that the merged entity may compete less aggressively than before due to the elimination of double marginalization, as the company also profits from the sales of its downstream competitor. A vertical merger from the 2000s that has gained prominence over time is eBay's acquisition of PayPal through a stock transaction, in which the online auction company acquired a firm facilitating electronic payments between individuals and businesses, with approximately 60% of its revenue at the time coming from processing payments on eBay's platform.

2.1.3 Conglomerate mergers

A conglomerate merger is a merger between entirely different companies, that do not compete in the same market or produce similar products or services, and often operate in separate geographical locations. Thus, it can be stated that conglomerate mergers are neither horizontal nor vertical. The purpose of a conglomerate merger is to diversify the company portfolio and mitigate risks by reducing dependence on a single industry. Gribbin (1976) writes that conglomerate mergers became more common in the United Kingdom in the post-war period as companies began reallocating their assets after the nationalization of their core industries. As a result, capital directed toward different sectors than those in which the firms had previously concentrated their core business activities. According to Gribbin (1976), conglomerate mergers are driven by the need to utilize excess capacity and eliminate organizational inefficiency through growth, which is most effectively achieved by continuously reallocating resources when a company encounters

growth constraints in its existing market, thereby further incentivizing diversification. An example of a conglomerate merger can be seen in the privatization of the food company Heinz in 2013 when Berkshire Hathaway, a firm operating in the insurance and financial services industry, acquired the firm (Calandro Jr, 2013).

2.1.4 Reverse mergers

In a reverse merger, a public company acquires a private company, thereby transforming the private company into a publicly traded entity. The public company issues a significant number of new shares to acquire the private company, which causes its ownership to dilute to below fifty percent in the newly formed entity, transferring control to the owners of the previously privately held company (Sinha et al., 2005). According to Sinha et al. (2005), the advantages of going public via a reverse merger for the private equity firm and the target company include increased liquidity, the ability to use publicly traded shares for future acquisitions, going public without underwriting fees, and the opportunity to achieve a successful listing even with a weaker operational performance, without the high requirements imposed by underwriters and institutional investors. From the perspective of private equity investors, a key reason for pursuing a reverse merger can be the achievement of liquidity. For example, in the case of biotechnology portfolio companies, a private equity investor may seek an early exit if the company's product or technology no longer appears promising, potentially recovering at least a portion of their investment (Sinha et al., 2005). According to the study, the primary reason for pursuing a reverse merger from the target company's perspective is the opportunity to raise capital at a more favorable pre-money valuation than what is available in the venture capital markets.

2.1.5 Tender Offers

A tender offer differs from a merger in that, in a tender offer, an investor or a company makes a public offer to the shareholders of a publicly traded company to purchase their shares at a specified price within a defined time frame. In contrast, a merger involves

negotiations between the acquirer and the target company's board of directors to agree on a price, followed by a shareholder vote to approve the proposed transaction. According to Offenberg & Pirinsky (2015), tender offers serve as an effective corporate governance mechanism in hostile takeovers, allowing the acquirer to bypass an uncooperative target board. A tender offer is a significantly faster method of executing an acquisition, making it particularly attractive to the acquirer when the transaction is strategically important, and the likelihood of a competing bid is high (Offenberg & Pirinsky, 2015). On the other hand, according to Offenberg & Pirinsky (2015), the acquirer's decision to pursue an acquisition through a tender offer creates a sense of urgency and sends a positive signal to the target company regarding its value. As a result, the target is likely to raise the transaction price, thereby increasing the acquisition premium. Thus, the faster process comes at the cost of higher expenses. A recent well-known example of a tender offer is the $97.4 billion bid by an investor group led by Elon Musk for the shares of the nonprofit organization that controls OpenAI (Toonkel & Berber, 2025).

2.1.6 Leveraged buyouts

Leveraged buyouts represent a widely studied and highly debated form of acquisition in finance theory, in which investors partially or entirely finance the purchase of the shares of the target company through borrowed funds secured against its assets and cash flows (Smith, 1990). Especially private equity firms and funds utilize leveraged buyouts to achieve higher returns on equity. Guo et al. (2011) state that leveraged buyouts are intended to increase the value of the target company through firm-specific improvements driven by private equity investors via active ownership, including increasement in profitability, divestment of unproductive assets, and optimization of working capital efficiency. Other factors explicitly mentioned as mechanisms through which leveraged buyouts seek to generate value include tax shield benefits resulting from increased leverage, which can increase cash flows available to the providers of capital, as well as gains from industry-specific valuation multiples.

The leveraged buyout market experienced significant growth from the 1980s until the financial crisis and even at that time, transactions financed with high leverage were considered highly risky. Concerns regarding the nature of highly leveraged transactions were raised by the simultaneous increase in transaction prices and debt levels, the characteristics of bank loans after being sold in the syndicated market, and the minimal covenant requirements associated with the loans (Acharya et al., 2007). The largest leveraged buyout prior to the financial crisis, the 2007 acquisition of Energy Future Holdings by Goldman Sachs, KKR, and TPG, came to an infamous end when the company filed for bankruptcy protection due the unfavorable development of natural gas prices, resulting in the three firms losing the $8 billion in equity they had invested (Sender & Crooks, 2014).

2.2 Efficient Market Hypothesis

To study the short-term stock price reactions triggered by mergers and acquisitions, it is essential to examine the formation and behavior of securities' prices. To investigate the stock price reactions utilized by investors, it is also necessary to assess the efficiency of securities pricing and what information the price reflects, ensuring that different parties do not have varying access to information, thereby preventing any informational advantage in the securities market.

According to Fama (1970), in efficient markets, stock prices fully reflect all available information, resulting in stock prices adjusting immediately to new information. In such an efficient market, there are no transaction costs, all information is immediately available free of charge to market participants, and investors agree on the effect of current information on the price of the security and the distribution of future prices (Fama, 1970). Fama (1970) classifies market efficiency into three forms based on the availability of information reflected in security prices. In the weak form, market prices reflect all past information, in the semi-strong form, they reflect all publicly available information, and in the strong form, they reflect not only both but also include insider information.

In efficient markets, exemplified by large securities exchanges, competition among rational profit-maximizing investors leads to a situation where a security's actual price is a good estimate of its intrinsic value, which may change over time as a result of new information, such as success of a research project or a change in the management (Fama, 1995). According to Fama (1995), new information, which the market was previously unaware of, is immediately reflected in the prices of securities. Due to the uncertainty surrounding the new information, successive price changes for a given security follow a random walk, meaning the changes are independent of one another (Fama, 1995). Thus, according to the random walk hypothesis, technical analysis is completely useless in attempting to predict the future price of a security.

At least the strong form of market efficiency is a highly hypothetical scenario, as, for example, purchasing securities often involves transaction costs. Fama and French (1996) write that stocks do not perfectly follow the random walk hypothesis. Specifically, stocks that have had high recent returns tend to have higher future returns, and a company's stock returns are related to its size, book-to-market equity, and price-to-earnings ratio, indicating that patterns can be identified in the average returns of stocks. According to the study, insiders can predict abnormal stock price changes, and they are able to assess the value of their information and increase their trading volume, which suggests that stock prices do not reflect insider information (Seyhun, 1986). On the other hand, with advancements in modern technology, security prices can be expected to incorporate newly available information with increasing efficiency and with minimal delay.

2.3 Merger Waves

When studying mergers and acquisitions, it is essential to examine how they occur with varying frequency at different times and the factors that influence this. The theory helps identify the impact of economic conditions, market forces, and management psychology on the activity of M&As.

Merger waves refer to periods during which mergers and acquisitions occur at a significantly higher-than-usual rate. The finance literature generally identifies six merger waves in history, starting from the late 19th century. The temporal and industry-specific clustering of mergers is one of the most consistent empirical regularities in merger literature, with waves often explained by industry-specific shocks and stock market valuations levels (Duchin & Schmidt, 2013). According to Harford (2005), two explanations are offered for the cause of merger waves: the neoclassical hypothesis and the behavioral hypothesis. According to the neoclassical hypothesis, technological, regulatory, or economic changes in an industry's operating environment trigger a collective response from both industry insiders and external firms, leading to the reallocation of industry assets through mergers, with executives competing for the best asset combinations and causing the activity concentrate in time (Harford, 2005). However, Harford (2005) argues that merger waves only emerge when capital market liquidity is sufficient to facilitate such reallocation, further intensifying the temporal clustering of mergers. Harford (2005) states that the behavioral hypothesis, in contrast, supports the view that the concentration of merger activity is driven by stock market valuations, meaning that during market booms, overvalued acquiring firms use their stock to finance the purchase of undervalued target firms' shares in order to acquire real assets.

According to Rhodes-Kropf & Viswanathan (2004), potential deviations of market value from firms' fundamental values on both sides of the transaction can explain the correlation between stock-based acquisitions and market valuation. Rhodes-Kropf & Viswanathan (2004) argue that industry-specific shocks alone do not fully explain the phenomenon of merger waves, as market misvaluations can also trigger waves even in the absence of any fundamental economic justification for mergers. According to the authors, when the market is overvalued, the target firm rationally adjusts downward the expected value of a stock-based offer. However, the greater the market overvaluation, the more likely the target firm is to overestimate the offer's value, thereby increasing the probability of a merger occurring.

2.4 Synergy Theory

Synergy theory is one of the most relevant theories when examining the long-term financial performance of mergers and acquisitions, as it provides insights into the motivations and expectations of firms in pursuing such deals. Presenting the synergy theory is essential, as it explains the background behind value creation in mergers.

According to synergy theory, the value of the new entity formed through a merger or acquisition of two or more companies is greater than the sum of their individual values before the transaction, as synergy potentials are realized. In general, mergers and acquisitions can generate three distinct types of synergies: financial, operational, and managerial synergies. Financial synergies result in lower cost of capital, which can be achieved by reducing the systematic risk of a company's investment portfolio through diversification into uncorrelated businesses, increasing the firm's size to gain access to cheaper capital, and establishing internal capital markets that operate with superior information, thereby enabling more efficient capital allocation (Trautwein, 1990). According to Trautwein (1990), operational synergies are achieved by integrating the functions of previously separate units and facilitating knowledge transfer between them, while managerial synergies arise when the target company benefits from the acquiring firm's superior planning and monitoring capabilities. However, Trautwein (1990) states that financial synergies have been subject to strong theoretical criticism from the perspective of efficient markets due to a lack of evidence, particularly concerning their potential to reduce systematic risk and the concept of a superior internal capital market. Leland (2007) examines the existence and extent of purely financial synergies, assuming if operational synergies exist, their effect is incremental to the financial synergies under consideration. According to Leland (2007), financial synergies can be either positive, favoring mergers, or negative, favoring separation. When the cash flows of the firms involved in a transaction are not perfectly correlated, risk can be reduced through a merger, leading to lower expected bankruptcy costs and enabling an increase in leverage, which enhances tax benefits (Leland, 2007).

According to Liu et al. (2022), when few firms share the bidder-target relatedness, their tendency to overinvest in overlapping projects, such as marketing expenses for acquiring the same customer base, leads to synergies in a merger by reducing inefficient competitive investments. Similarly, in a market with only a few firms, where high fixed costs or other significant barriers to entry exist, a merger can generate synergies by reducing per-unit costs through economies of scale (Liu et al., 2002). Cornaggia & Li (2019) write that mergers can also serve as a mechanism for reallocating liquidity to firms, allowing acquirers to generate synergies by alleviating the financial constraints of target firms. In other words, synergies arise when acquirers possess valuable financial characteristics that target firms lack. However, financial synergies can also arise due to the financial characteristics of the target firm, as exemplified by reverse mergers, where the target firm is headquartered in the United States and the acquirer is located in another country, enabling access to the world's biggest equity capital markets (Cornaggia & Li, 2019).

On the other hand, financial researchers have debated whether mergers between similar companies really generate abnormal returns for the acquiring firm's shareholders. If the target firm holds greater value for a specific bidder than for any other, yet this information remains unknown to other market participants, the target's price will align with public expectations, allowing the unique bidder to outperform expectations upon acquisition and thereby generate abnormal returns for its shareholders (Barney, 1988). Barney (1988) states that a situation in which only one bidder possesses information of uniquely valuable synergistic cash flows with a target firm is not the only circumstance under which imperfect competition arises in the market for corporate control. According to him, even if these valuable combined cash flows are publicly known, the acquiring firm's shareholders can still achieve abnormal returns if other bidders are unable to replicate them. Barney (1988) further argues that such difficult-to-imitate, uniquely valuable combined cash flows arise when the bidder possesses resources such as corporate culture, a unique history, or product reputation. Thus, Barney (1988) suggests that a bidding firm must develop an additional capability beyond merely assessing strategic relatedness, as

firms cannot expect to achieve abnormal returns from acquiring target companies if multiple other bidders value the same targets in the same way.

2.5 Hubris hypothesis

The hubris hypothesis is also highly relevant when examining the factors behind the long-term financial performance of M&As, as it provides one perspective for the occurrence of value-destroying acquisitions. Presenting this theory is essential as it helps to understand the significance of managerial psychological traits in determining the outcome of a merger or acquisition.

Roll (1986) examines the hubris hypothesis in his article, which is regarded as an explanation for corporate takeovers, suggesting that decision-makers' overconfidence can lead to valuations and bids exceeding the current market value. According to Roll (1986), the management of the bidding firm should recognize that valuations exceeding the market price constitute an error, as market prices reflect rational behavior, in an efficient market. Overconfident executives signal through their actions a belief that corporate acquisitions generate profits, that their valuations are accurate, and that they perceive synergies that other market participants fail to price correctly, but research has not provided evidence that such beliefs are justified (Roll, 1986). Roll (1986) also argues that if takeovers were driven purely by synergies, there would be a consistent increase in value for both the target and acquiring firm. However, in most cases, the acquiring firm's stock price declines or remains largely unaffected. This suggest that the synergy gains of mergers and acquisitions are, at the best, merely a redistribution of wealth between the shareholders of the acquiring and the target firms rather than creation of new value (Roll, 1986).

According to Hayward & Hambrick (1997), the role of excessive CEO overconfidence in acquisitions explains the excessively large size of premiums paid, as the CEO's positive media coverage, the acquiring company's recent financial performance, and a measure

of the CEO's self-importance are strongly associated with the size of the premiums paid. Acquiring firms pay substantial premiums, which essentially reflect management's statement of their belief in the additional value the target firm can generate, even though excessive premiums often harm the acquiring firm's shareholders' wealth in both the short and long term, a consequence of management's tendency to overestimate their ability to create value through acquisitions (Hayward & Hambrick, 1997). According to Hayward & Hambrick (1997), the consolidation of the CEO and board chair roles, a significant proportion of insiders on the board, and the limited stock ownership of outside board members in the acquiring company amplify the impact of hubris on the payment of acquisition premiums. It is also observed that overconfident CEOs engage in mergers and acquisitions more frequently on average and are particularly prone to making lower-quality acquisitions, especially when their companies have abundant internal resources and do not require external financing (Malmendier & Tate, 2008). according to Malmendier & Tate (2008), overconfident CEOs genuinely believe they are maximizing shareholder wealth, which is why traditional incentive contracts alone are unlikely to correct their value-destroying decision-making.

3 Short-term returns and stock price reactions in mergers and acquisitions

This section examines the short-term stock price reactions and returns of mergers and acquisitions based on previous literature, focusing on both the target and acquiring firms. Section also investigates the trading of investors, such as hedge funds and mutual funds, around M&A announcements, exploring if the previous literature suggests realized returns from M&A announcements and potential patterns indicating market inefficiencies, where investors may exploit information that has not yet been reflected in the stock price.

3.1 Stock price reactions to M&A announcements

3.1.1 Target Company

Kellner's (2024) study provides strong evidence in support of the first hypothesis regarding the target company's price reaction and violations of market efficiency assumptions. The study examines the European M&A market in the post-financial crisis period from 2010 to 2021, focusing on the abnormal returns of target and acquiring companies before, during, and after the announcement. The criteria for the data utilized by Kellner (2024) include the target company being in a European Union member state, its shares being publicly listed on a European stock exchange, and the transaction value exceeding 10 million USD. If the target company has been subject to multiple M&A announcements within a six-month period, only the first one is considered. According to Kellner (2024), small but statistically significant price changes are observed for target companies across all types of M&A transactions before the announcement, with the largest price change occurring on the announcement day. The cumulative average abnormal returns (CAAR) remain highly significant on the following day and over the subsequent ten-day period. Kellner (2024) also finds that CAAR values are highest in the case of mergers and that acquisitions of majority interest trigger a significantly stronger price reaction compared

to partial acquisitions. Thus, Kellner's (2024) findings indicate a strong positive development in target firms' stock prices, particularly on the announcement day but also in the days preceding it, which may be attributed to illegal insider training and information leaks. The abnormal returns observed after the announcement may result from inefficient information processing by market participants (Kellner, 2024).

The study of Goergen & Renneboog (2004) also supports the first hypothesis. The study examines the short-term wealth effects of intra-European takeover bids, considering the nature of the acquisition, the location of the acquirer, the method of payment, and the target firm's market-to-book ratio. The dataset of the study consists of transactions in which both firms are European, and one of the parties must be publicly traded, with a deal value that must exceed 100 million USD. Goergen & Renneboog (2004) find that the abnormal return for the target firm on the actual announcement day of the bid is 9%, while the cumulative abnormal returns over the two-month period preceding the event day amount to 23%, suggesting that the bid was anticipated, likely due to rumors or insider information. The findings indicate that hostile takeover bids generate the highest abnormal returns for the target company compared to mergers or friendly acquisitions, which is assumed to be driven by market expectations that resistance to the bid will lead to an upward revision of the offer price. Goergen & Renneboog (2004) also find that the announcement effect on stock prices is significantly larger in the United Kingdom than in Continental Europe, which can be attributed to the higher premiums offered for British firms and the greater prevalence of hostile takeovers. Additionally, across all regions, cash offers elicit a stronger market reaction than equity-financed acquisitions.

3.1.2 Acquiring Company

Kellner's (2024) study does not support the first hypothesis for acquiring firms. The study finds that the stock price performance of acquiring firms, as measured by CAAR values, is significantly lower than target firms. No significant abnormal returns are observed before the announcement, with the only notable reaction occurring in the day following the announcement and the subsequent ten days, during which the CAAR value is -1 %.

Kellner (2024) also finds that no statistically significant abnormal returns can be detected based on location or industry. However, in terms of transaction types, mergers exhibit a slightly negative stock price performance. According to Kellner (2024) a potential explanation for this lies in the historically low interest rates in Europe during the period under study, which reduces the costs of M&A transactions, but also incentivize riskier deals that market may perceive negatively. Kellner (2024) also states that a pre-existing ownership stake in the target firm reduces the premium paid, likely due to increased information symmetry, which benefits the acquirer and leads to more favorable stock price performance.

Moeller et al. (2005) also find results contradicting the first hypothesis in their study on acquiring firm's stock price reactions. The study examines the great losses experienced by acquiring companies during the period 1998-2001, measured as the three-day cumulative abnormal return surrounding acquisition announcements, as the study focuses on identifying the factors that contributed to the $240 billion in shareholder losses. According to Moeller et al. (2005), while the mean abnormal return for acquisitions in the late 1990s remained positive, the overall losses were driven by the increasing size of losses from acquisitions with the worst dollar returns, which resulted in a skewed distribution of returns. The findings suggest that common characteristics of large loss deals include the use of a stock as a means of payment, hostile and competitive bidding process, transactions occurring within the acquirer's own industry, a significantly high Tobin's q for the acquiring firm, and a positive correlation between the size of the losses and the target's valuation. Moeller et al. (2005) also propose that negative abnormal returns may have resulted from the acquisition signaling to the market that the firm has run out of internal growth opportunities.

However, Alexandridis et al. (2017) find evidence supporting the first hypothesis for bidding firms. The study examines the abnormal returns of public acquirers in U.S. transactions, as well as deals exceeding $500 million, during the post-financial crisis period from

2010 to 2015, a time in which U.S. publicly listed companies announced M&A transactions with a total combined value of $3.07 trillion, comparing these to corresponding data from 1990-2009. Alexandridis et al. (2017) find that the publicly listed acquirer's cumulative abnormal return on the day before, the announcement day, and the following day is statistically significant at 1.05% during the study period, representing a 2.13 percentage point increase compared to the 1990-2009 period. The findings also indicate that acquiring firms experience a $30.2 million increase in market value on average within the three-day event window. According to Alexandridis et al. (2017), the differences between the examined large transactions across the two periods are even more pronounced, with the average cumulative abnormal return reaching 2.54% in 2010-2015, representing an increase of 2.9 percentage points compared to the reference period. Publicly listed companies' acquisitions, which have historically been more susceptible to value destruction, have experienced a quality improvement following the financial crisis, potentially driven by more effective incentive structures, increased executive specialization, and a greater emphasis on risk management (Alexandridis et al., 2017).

3.2 Trading around M&A announcements

Different investors may have varying access to private information or differing abilities to process public information due to distinct regulations, compensation structures, and trading strategies, as exemplified by the differences between mutual funds and hedge funds (Fich et al., 2024). In general, hedge funds are less regulated, their trading is less transparent, fund managers' compensation is more performance-driven, and they employ more complex strategies, such as derivatives and short selling. Fich et al. (2024) investigate the differences in portfolio adjustments between mutual funds and hedge funds both before the announcement of takeover and during the announcement quarter, utilizing data from 7184 M&A announcements between 1990 and 2015 along with the corresponding holdings of funds. The research findings indicate that mutual fund ownership in target firms decrease by 36 basis points one quarter before the announcement

quarter, whereas hedge fund ownership increases by 63 basis points over the three quarters preceding the announcement. However, the results show that the most significant ownership changes occur during the announcement quarter, with mutual funds reducing their holdings in the target firms from 11.46% to 8.39%, while hedge funds increase their holdings from 4.02% to 6.13%. According to Fich et al. (2024), hedge funds may possess superior information compared to mutual funds, and hedge funds manager may potentially influence the decisions of management of the acquiring firm or merely exploit public information more efficiently. The research results regarding hedge funds are therefore consistent with the first hypothesis concerning trading around the announcement and market efficiency. The study's findings suggest that the increase in hedge funds' positions may also result from merger arbitrage strategies, in which investors not only purchase the target firm's shares but also engage in short selling of the acquiring firm's shares immediately following the announcement.

Dai et al. (2017) also find evidence supporting the first hypothesis. The study examines trading patterns in target and acquiring firms prior to the public disclosure of M&A information, investigating whether hedge funds illicitly exploit insider information. The authors express concerns about the potential negative consequences of such activities, including higher target premiums and a lower likelihood of deal completion. Dai et al. (2017) also assume that the greater the number of external parties involved in an M&A transaction, such as investment bankers and lawyers, the higher the probability of insider information leakage. The findings of the study indicate that hedge funds take larger positions in target firms compared to their matched control firms across all quarters prior to the announcement and engage in short selling of the acquirer's stock, particularly in stock-based transactions. According to Dai et al. (2017), the test results do not support the notion that short-term hedge funds are more skilled at identifying profitable deals; instead, they exploit material insider information regarding to M&A transactions. Thus, the findings of the study strongly challenge the assumptions of efficient markets

regarding the immediate reflection of all information in prices and the symmetry of information among market participants, as otherwise, hedge funds would not have an informational advantage over others.

4 Long-term financial performance in mergers and acquisitions

Previous literature on mergers and acquisitions, such as Moeller et al. (2005), has often found that M&A transactions result in losses for acquiring firm's shareholders around the announcement period. According to Renneboog & Vansteenkiste (2019), even the modest positive returns observed within this time window may be driven by misestimated synergy gains, which stem from behavioral biases and selective disclosure by the acquirer. As a result, short-term gains often fail to persist in the long run. Therefore, it is crucial to identify the factors that influence on the long-term financial performance of mergers and acquisitions. However, assessing the long-term performance of mergers and acquisitions using for example stock price data or financial statements is inherently challenging, as isolating the impact of individual factors on these metrics proves difficult. Therefore, this section examines various relevant factors primarily underlying accounting-based financial performance.

4.1 Synergies

Li (2013) finds strong evidence in support of the second hypothesis in the study on synergy gains in M&As. The study examines the sources of gains from mergers and the mechanism that drive productivity growth in target firms, defined as the relative increase in output compared to inputs. The study compares target firms to similar production plants and utilizes a sample of 1430 mergers completed between 1981 and 2002. According to Li (2013), following a merger, capital investments, employee wages, and overall employment in the target firm tend to decline significantly, while the level of output remains unchanged, with the reductions primarily concentrated among administrative and non-production employees. The findings also indicate that the target firm's production plants produce slightly less than comparable plants, although the difference is not statistically significant, but the targets utilize fewer material and capital investments for production. Thus, the increase in productivity is driven by the acquiring firm's ability to make better use of the target company's capital and labor, which is why mergers serve

as an efficient mechanism for reallocating productive resources to management that can leverage them more effectively (Li, 2013). The findings of the study are also strongly aligned with synergy theory, as the value of the merged entity is greater than the sum of their individual values when examining financial performance.

Healy et al. (1992) also find strong evidence in support of the second hypothesis regarding the achievement of synergy gains in mergers and acquisitions. The study examines the post-acquisition operating performance of merged firms using a sample of the 50 largest mergers of U.S. public industrial companies between 1979 and 1983. They analyze post-merger accounting data to identify the sources of changes in pre-tax operating cash flows between the first and fifth year after the merger and use industry performance as a benchmark for their evaluation. Healy et al. (1992) find that merged firms achieve pre-tax operating cash flows that exceed their industry benchmarks by 15% in the post-acquisition period, driven by improved asset productivity resulting from the elimination of prior inefficiencies and the creation of new opportunities to leverage the merged firms' resources.

Bradley et al. (1988) also examine the magnitude of synergy gains using the revaluation of the combined wealth of target and acquiring firm shareholders as a measure, as well as the factors that influence the distribution of the gains among the shareholders of the merged firms. Bradley et al. (1998) define synergies as the benefits arising from more efficient management, economies of scale, improved production techniques, the combination of complementary resources, and the reallocation of assets to more productive uses. According to Bradley et al. (1988), successful tender offers create synergy benefits and promote a more efficient allocation of corporate resources. However, target company shareholders gain the most from these offers, and targets involved in multi-bidder contests benefit from the greater synergistic gains generated by such transactions. Despite the distribution of synergy gains between the buyer and the target company, the results of the study are in line with the second hypothesis.

In financial research on mergers and acquisitions, there has been extensive and diverse discussion regarding the synergy benefits arising from the similarity or divergence of company resources. Harrison et al. (1991) study the impact of different and similar resource allocation patterns between the acquiring and target firms on the performance of mergers and acquisitions. The authors believe that greater value in mergers and acquisitions can arise from differences in resources when unique and valuable synergistic resources are involved. In such cases, the target company holds greater value for one bidder than for others, suggesting that the potential for valuable synergy is higher based on differing resource allocation patterns. The results of the multiple regression analysis indicate that differences in capital intensity, administrative intensity, interest intensity, and R&D intensity between the acquiring and target firm are positively related to firm performance following the acquisition. In other words, the performance of the merged firm was better when the differences in resource allocation between the companies were greater (Harrison et al., 1991). The study, however, finds that synergy gains can be achieved through mergers and acquisitions, and the results are consistent with the second hypothesis.

4.2 Method of payment and stock-financed acquisitions

In examining the impact of the method of payment on financial performance, the study primarily focuses on stock-financed acquisitions, as the literature has specifically discussed the negative effects of these on company value. Stock-financed payments are also interesting, as they involve significant uncertainty regarding the monetary value of the transaction price, as well as several psychological factors.

According to Boone et al. (2014), adverse selection, taxes, and costly contracting influence the choice of payment method in mergers and acquisitions. They write that adverse selection predicts an increase in the proportion of stock payments as the uncertainty regarding the value of the acquirer and the target increases, whereas the taxation of the target firm’s shareholders predicts that the likelihood of stock payments rises when the

capital gains tax rate of the target firm is high. Additionally, costly contracting predicts that the proportion of stock payments increases as the correlation between the stock returns of the acquirer and target firm rises. The costly contracting hypothesis is based on the idea that the values of the acquiring and target firms fluctuate before the deal is completed, which may lead to costly renegotiations if the deal terms are no longer satisfactory to the parties involved (Boone et al., 2014).

In finance research on mergers and acquisitions, there has been extensive discussion on managers' ability to benefit shareholders by converting overvalued equity into real assets through stock-based acquisitions. Akbulut (2013) finds strong evidence in support of the second hypothesis regarding the payment method in mergers and acquisitions. The study examines the long-term benefits of overvaluation-driven stock-based acquisitions for shareholders. The study uses managerial insider trades as a measure of overvaluation, based on the argument that if managers seek to exchange their firm's overvalued stock for real assets through acquisitions, they would similarly trade their own shares accordingly. If the management sells shares they perceive as overvalued, one could assume that they would not bother engaging in acquisitions that benefits shareholders in the long run. According to Akbulut (2013), however, firms may require managers to maintain a minimum level of stock ownership, and managers may resist selling significant portions of their holdings due to reputation-related reasons. As a result, their incentives are more aligned with those of long-term shareholders rather than short-term investors. The study compares the abnormal returns of overvalued acquirers to those of similarly overvalued firms that do not engage in acquisitions, and the findings indicate that, for overvalued firms, stock-based acquisitions do not appear to be a value-creating strategy, as these firms significantly underperform relative to their counterparts. The results suggest that the underperformance of acquirers stems not only from the correction of overvaluation but also from the acquisitions' impact on value creation, indicating that stock acquisitions driven by overvaluation ultimately destroy shareholder value in the long run (Akbulut, 2013).

However, Heron & Lie (2002) do not find evidence supporting the second hypothesis; on the contrary, their findings suggest the opposite. The study also examines the relationship between a company's performance, earnings management, and the method of payment in acquisitions. According to Heron & Lie (2002), if management attempts to artificially inflate earnings in a single reporting period by using aggressive discretionary accruals, it would have an offsetting effect in the future, as accounting standards require accruals to reverse over time. Therefore, the study assumes that if earnings management before stock-financed acquisition occurs, the company's performance should decline after the acquisition. In the study, operating performance is measured as the ratio of operating income to sales, and the performance of the sample firms is compared to that of industry peers with similar performance before the acquisition. The results indicate that the trend in operating performance levels is consistent across different payment methods, and acquiring firms significantly exceed their industry medians in all payment categories. Heron & Lie (2002) state that the method of payment does not appear to convey information about firms' future operating performance and suggest that the weaker long-term stock returns in stock-financed acquisitions result from investors' overly optimistic expectations regarding growth prospects prior to the announcement.

4.3 Buyouts

Among the various forms of mergers and acquisitions, the study focuses on buyouts in relation to the impact of different transaction types on long-term financial performance. This particular transaction type was chosen because of the strategic and operational changes made by private equity firms in target companies, the specific risks and opportunities involved, and the extensive research that covers interesting prior literature.

Guo et al. (2011) find evidence supporting the second hypothesis regarding the strong financial performance of buyouts. The study investigates the value creation of leveraged buyouts in public-to-private transactions by analyzing 192 deals completed between 1990 and 2006, focusing on the period between the buyout and the subsequent exit

from a private equity firm's portfolio. According to the research findings, the average nominal return on capital, defined as the buyout price, for the entire sample is 90.7%, while the market- and risk-adjusted return on capital averages 63.3%, despite 12% of the sampled firms having undergone bankruptcy proceedings. The results show that the highest returns for the ample companies were achieved through initial public offerings, with an average nominal return to capital of 152% and a market- and risk-adjusted return of 127.3%. According to Guo et al. (2011), the primary determinant of returns is the improvement in a company's operational performance after it has gone private. The study identifies the sources of these improvements as the increased alignment of management and shareholder interests when management contributes a portion of the equity financing for the buyout, as well as the benefits of higher debt, which manifest in the reduction of agency problems and an increase in the tax shield. Guo et al. (2011) also state that capital can generate positive returns even if operational performance does not improve, as long as industry or overall market valuation multiples increase while the firm is private. Their results indicate that the growth in valuation multiples is a key factor in explaining the returns of the sample firms. For instance, among firms that exited through an IPO, the median capital/EBITDA multiple increased from 7.96 to 10.61 over the period used to calculate the previously presented returns.

Ayash & Schütt (2016) also examine the performance of leveraged buyouts using a sample of 183 U.S. public-to-private transactions. The study utilizes EBITDA adjusted for restructuring costs and scaled by tangible assets, which serves as an unbiased measure of operating performance in the LBO context, as Ayash & Schütt (2016) highlight LBO accounting inherently distorts performance measures by introducing an upward bias. The sample includes only transactions with a deal size of at least $50 million, as Ayash & Schütt (2016) state that smaller transactions tend to involve lower levels of leverage. Consequently, the factors influencing performance in smaller transactions may differ from those assumed in previous literature, such as Guo et al. (2011), which emphasizes mechanisms like more effective monitoring and better alignment of interests. The anal-

ysis results indicate that the sample's post-LBO performance relative to the industry declines from 21% to 8% over the period spanning one year before the transaction to three years after. Additionally, when restructuring costs are accounted for, no statistically significant industry-adjusted performance improvements are observed, with the median standing at -5%. According to Ayash & Schütt (2016), the weak evidence of performance improvement may be explained by goodwill impairments, which initially appear as an increase in the firm's assets at the time of the deal but later result in higher depreciation and amortization expenses. As a result, leveraged buyout accounting practices generally introduce an upward bias in performance metrics. Thus, the research findings are contrary to the second hypothesis regarding the superior financial performance of buyouts.

Boucly et al. (2011) also find evidence in support of the second hypothesis. The paper examines changes in a company's performance following a leveraged buyout relative to a control group, using a dataset of 839 French transactions. They state that leveraged buyouts can help alleviate credit constraints faced by target firms and unlock growth opportunities, as private equity investors are perceived as transparent and proactive owners who monitor the company more effectively than previous owners, thereby creating value for creditors. Furthermore, according to Boucly et al. (2011), private equity funds can provide financial expertise and introduce highly qualified executives into the management team, which may enhance banks' confidence in the firm. The results indicate a 4.4% increase in operating performance within the dataset, and following the transaction, the target firms' EBITDA grows by 18% compared to the control group. According to the research findings, following a leveraged buyout, the number of employees in a company increases on average by 18% within four years of the deal, and during the same period, capital expenditures grow by 40%. The results also show that the target company's leverage, which is not related to the leveraged buyout, increases by 2.6%, meaning the target finances part of its asset growth with debt. According to Boucly et al. (2011), post-leveraged buyout growth strongly depends on the target's pre-acquisition ownership structure, as growth tends to concentrate in private-to-private transactions, which may be influenced by the fact that, due to lock-up periods, private equity investors

can be more patient than family owners who rely on dividends for consumption, making the funds more willing to reinvest free cash flows back into the business.

4.4 Ownership structure

This section examines the findings of previous literature on the relationship between a firm's ownership structure and the financial performance of mergers and acquisitions, comparing family-owned firms with those where management is separated from the largest shareholders. According to Caprio et al. (2011), ownership structure is negatively correlated with the likelihood of making a takeover bid, and family firms are less likely to act as acquirers, influenced by the need to ensure the continuity of family control.

Shim & Okamuro (2011) examine the differences in merger performance between family-owned and non-family-owned firms. They conduct a difference-in-differences analysis to evaluate the merger performance of firms with different ownership structures, using three-year averages for the pre- and post-merger period. As performance measures, they employ industry-adjusted variables, including returns on assets, Tobin's Q, and revenue growth. The DD analysis results obtained by Shim & Okamuro (2011) indicate significant differences in industry-adjusted ROA and Tobin's Q between family and non-family firms. While non-family firms experience a significant improvement in ROA, family-owned firms exhibit a substantial decline in both ROA and Tobin's Q. These results are surprising given the financial literature, which recognizes family-owned firms as passive acquirers due to their fear of losing control rights, suggesting that their mergers should be sufficiently profitable to compensate for this loss (Shim & Okamuro, 2011). Thus, ownership structure is important for the financial performance of mergers and acquisitions, and the results support the second hypothesis.

Hubbard & Palia (1995) examine the relationship between managerial ownership and the stock returns of acquiring firms. A low level of managerial ownership intensifies the

agency conflict between shareholders and management, which can be mitigated by increasing managerial ownership, thereby exposing managers' wealth to the firm's stock price performance. However, according to Hubbard & Palia (1995), at high levels of managerial ownership, firm value may suffer as managers become entrenched and less subject to shareholder oversight. Therefore, it is crucial to identify the optimal level of managerial ownership at which managers undertake value-maximizing acquisitions. Their results show that the abnormal returns of mergers initially increase as managerial ownership rises to 5% but begin to decline thereafter. When ownership exceeds 25%, firms experience slightly negative abnormal returns from acquisitions. The findings also indicate that acquirers with low managerial ownership levels are more likely to use cash rather than stock as the method of payment, which may be because managers seek to avoid ownership dilution and loss of control (Hubbard & Palia, 1995). Although the results are not entirely conclusive, they support the hypothesis regarding the significance of ownership structure in the financial performance of mergers and acquisitions.

Stulz et al. (1990) also find evidence of the significance of ownership structure in the financial performance of mergers and acquisitions. The study examines the impact of the target firm's ownership structure on the distribution of total gains in successful takeover bids. According to them, large shareholders can use their voting rights to advance their own interests by influencing both the likelihood and outcome of a takeover, while management, which values the preservation of its position, may leverage its voting rights to reduce the probability of the transaction and increase the costs for the acquiring firm. The study's findings indicate that, in successful tender offers, the target's share of the total takeover gain depends on the target's ownership structure, as the target's gain increases with managerial ownership and decreases with institutional ownership. According to Stulz et al. (1990), the impact of managerial ownership is more significant when management has strong incentives to leverage its ownership to increase the bidder's acquisition price, which is particularly evident in multiple-bidder contests. The results also suggest that target management with a large ownership stake is better able to transform a single-bidder offer into a multiple-bidder contest.

4.5 Management and advisors

Huang et al. (2014) examine the impact of board members, who are free from conflicts of interest, with work experience as an investment banking director on a firm's financial performance in mergers and acquisitions, as the board plays a crucial advisory role in corporate transactions and other significant decisions. According to the authors, investment banking directors on the boars can improve the screening of acquisition targets, identify suitable target companies, help the firm avoid value-destroying acquisitions, assist in negotiating better acquisition terms, and reduce advisory fees. These factors can be expected to have a clear impact on the long-term profitability of mergers and acquisitions. The research findings show that acquirers with investment banking directors on their boards perform significantly better than other acquirers, surpassing them by 3% in the first year, with the difference growing to 7.1% over a three-year period. Huang et al. (2014) find that, in the context of large acquisitions, the presence of investment banking directors on the board is negatively associated with the acquisition premium. Specifically, in large deals, a one-standard-deviation increase in the "investment banking director (%)" variable is linked to a 6.3% reduction in the acquisition premium. The results also show that acquirers with investment banking directors on their boards outperform other acquirers, as five years after the acquisitions, these acquirers exceed other buyers by 1.86 percentage points based on the industry-adjusted performance measure. Thus, the results indicate that the experience and characteristics of executives and board members are important for the financial performance of mergers and acquisitions, and the results support the second hypothesis.

Doukas & Petmezas (2007) also find evidence of the significance of management characteristics in the financial performance of M&As. The study examines the long-term performance of acquisitions made by overconfident managers and investigate whether self-attribution plays a role in this context. According to Doukas & Petmezas (2007), self-attribution tends reinforce an individual's overconfidence, leading them to believe their

abilities are above average. As a result, managers affected by this bias tend to overestimate the potential positive outcomes of an acquisition, which may ultimately lead to value-destroying deals. In the study, managerial overconfidence is measured by high acquisition intensity over a short period, defined as manager completing at least five acquisitions within a three-year timeframe. The study assesses the long-term impact of managerial overconfidence on the performance of acquisitions by examining acquirers' stock returns and comparing long-term return differences between initial acquisitions and high-order acquisitions. According to Doukas & Petmezas (2007), if overconfident managers generate superior returns by engaging in multiple acquisitions compared to managers with lower acquisition intensity, their time-series portfolios should yield higher returns relative to an explicit asset pricing model. The regression results indicate that the intercepts for multiple acquirers are negative and statistically significant, with the magnitude of the negative intercepts systematically increasing from the first to the third year after the acquisition. This suggests that stock performance deteriorates over time across all financing methods. The findings also show that firms engaging in multiple acquisitions consistently experience weaker stock performance compared to firms making only single acquisitions. According to Doukas & Petmezas (2007), the results support the view that highly acquisitive managers tend to overestimate synergies and improvements in operational efficiency. Thus, it can be concluded that management characteristics are important for the financial performance of mergers and acquisitions. Additionally, the results of the study are consistent with the hubris hypothesis, where overly confident executives destroy shareholder wealth by engaging in multiple acquisitions and overestimating the premium they pay.

5 Conclusions

This thesis examines the short-term abnormal stock returns of mergers and acquisitions and investors' attempts to capitalize on both private and public information related to these transactions, considering assumptions of market efficiency. Additionally, it examines several key factors underlying the long-term financial performance of mergers and acquisitions. They key factors underlying financial performance were selected as synergy gains, method of payment, buyouts as a deal type, ownership structure, and management and advisors, as these encompass a diverse range of perspectives on mergers and acquisitions. The study also covers the theoretical background of mergers and acquisitions and includes six common forms of M&A, along with four well-known theories relevant to short- and long-term returns. The first theory focuses on market efficiency and securities pricing, while the latter ones more directly address the objectives, prevalence, and outcomes of mergers and acquisitions. The hypotheses have been formulated based on the study's two different timeframes and existing literature. To address the hypotheses, relevant prior research on the topic has been utilized.

When examining the short-term stock returns of mergers and acquisitions, previous research indicates that target firms generate cumulative abnormal returns, particularly before the announcement and on the announcement day. In contrast, for acquiring firms, prior research suggests that returns are significantly weaker than those of target firms. However, more recent studies suggest that these returns have slightly improved in the post-financial crisis period. According to previous research, investors, particularly hedge funds, tend to capitalize on the short-term stock returns of mergers and acquisitions by increasing their stakes in target firms even before the announcement. This suggests violations of market efficiency assumptions and aligns with the general expectation of a positive stock price reaction for target firms following an acquisition announcement. Thus, the study supports the first hypothesis regarding abnormal returns around the M&A announcement for target companies, as well as investors, particularly hedge funds,

exploiting these returns, which contradicts the assumptions of efficient markets. However, the study does not provide enough strong evidence for abnormal returns around the announcement for the acquiring firm.

When examining the long-term performance of mergers and acquisitions, it is observed that synergies are achieved through these transactions. However, some studies emphasize that these synergies primarily materialize within the target companies and are dependent on the previously distinct resources of the firms involved. Although the findings in the literature on the outcomes of stock-financed acquisitions are relatively consistent, there are differing views regarding the reasons for poor performance. The literature suggest that the underlying causes of underperformance include both the impact of overvaluation-driven stock acquisitions on the destruction of shareholder value and the simple correction of investor expectations from pre-announcement levels concerning growth prospects. However, previous literature does not observe differences in performance metrics derived from accounting for mergers and acquisitions between different payment methods.

In the selected forms of acquisitions discussed in this paper, the perspective from the previous literature, particularly regarding buyouts by private equity firms, is relatively clear-cut, emphasizing the ability of private equity funds to create value and achieve success in financial performance through buyouts. Explanations provided by the earlier literature for this include, among other factors, the more efficient organization of operations by private equity investors, their financial expertise, and the alignment of interests between management and owners by reducing agency problems. On the other hand, the literature addressing ownership structure in relation to M&A financial performance is highly contradictory, as studies present results for family-owned companies, where owners are often in leadership positions, showing both good and poor financial performance. Some of the previous literature also suggests that as management ownership increases beyond certain point, financial performance declines. When evaluating the characteristics and abilities of management in relation to M&A financial performance,

the literature based on this aspect presents findings regarding the benefits of investment banking experience, as well as the value-destroying effect of excessive overconfidence. Thus, it can be stated that the study strongly supports the second hypothesis regarding the achievement of synergy gains, as well as the significance of the form of acquisition and management characteristics for long-term financial performance in mergers and acquisitions. However, in the case of the method of payment and ownership structure, the study does not find sufficient evidence to support the significance of their impact on financial performance.

The practical implications of this study are particularly important from the perspective of financial markets and corporate finance. From the financial market's viewpoint, studying the subnormal returns around M&A announcements allows investors to assess the impact of such announcements on stock prices and potentially develop trading strategies or ways to hedge their portfolios based on these reactions. Additionally, results of market inefficiencies caused by potential illegal insider trading can help regulators assess potential ways to improve regulatory compliance. From the corporate finance perspective, studying the factors influencing long-term financial performance can support management's decision-making by evaluating the impact of the factors presented in this study when planning transactions. Advisors in M&As can also leverage the paper to benefit their clients, for example, by assessing the impact of the payment method on financial performance to help them make better decisions.

For further research regarding short-term stock returns, this thesis suggests empirical research on the violations of market efficiency assumptions and how, for example, hedge funds increase their positions in target firms whose acquisitions are announced during the same period. Regarding long-term financial performance, this paper suggests research on the relationship between the examined variables, such as ownership structure and payment method, and the achievement of synergies and financial performance, as opposed to studying their individual effects.

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