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MASTER'S DISSERTATION (PROJECT)

“The Impact of Mergers and Acquisitions on Firm Performance”

Program 7M04124 - «Finance»

«__» _____ 20__

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May 2022

Abstract of The Impact of Merger and Acquisitions on Firm Performance(Project)

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HSE KAZGUU University, May 2022

This research examines the influence of corporate mergers and acquisitions on their market worth. M&A are a fast increasing group of organizations, and that employ specialized business methods. At the same time, financial researchers do not fully comprehend the implications of mergers. The study's major goal is to examine the quantitative influence of M&A transactions on firm performance while accounting for the dynamics of the buyer's share quotes. The first chapter presents an introduction of concepts and qualities, market behavioral methods, and market positioning elements for these organizations. The second chapter examines current literature and financial research on mergers and acquisitions, as well as potential approaches for determining the impact of takeovers on the company's performance. The third chapter examines cost estimation methods and analyzes the effectiveness of different approaches. The following illustrates how an event analysis is performed to discover signs of anomalous returns in the M&A announcement date frame. The first sample comprises of many Kazakhstani enterprises. Event windows are projected to reveal abnormal profits from chosen equities that are much greater in absolute size than the absolute magnitude of abnormal earnings for conventional corporations. Furthermore, due to market profile peculiarities, the Kazakhstan market is projected to see greater levels of abnormal returns from acquiring businesses following the announcement of M&A. Following that, conduct a regression analysis to see how much it affects the stock and come up with a hypothesis. In conclusion, the key findings of the analysis are presented.

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Introduction

Globalization, the economic slowdown, financial trends, and a variety of other variables, such as competitive enforcement, push organizations to be flexible in order to thrive in the market. As a result, internal company growth is frequently regarded as overly sluggish and inefficient. External expansion, particularly in the form of takeovers, has, on the other hand, been increasingly important in recent decades (Maja P. et al., 2015).

M&As are essential modes by which companies implement their domestic and foreign strategies (Santos, et al. 2012). It is a vital strategic move for businesses to achieve both tangible and intangible benefits (Chung, et al. 2020). Besides there are have several types of M&A which are according to Hadson (2016) generally, M&A can be divided into four categories:

- “1. Horizontal merger “
- “2. Vertical merger”
- “3. Concentric”
- “4. Conglomerate merger”

The kind of merger chosen by an organization basically relies upon the motivation reasons and destinations of the organizations taking part in an arrangement.

M&A research is important because mergers and acquisitions are crucial instruments for business restructuring. For instance, according to the website Statista.com global M&A activity surpassed \$4.7 trillion in 2017 (2018). According to the research by David R. King (2018) M&A is similar to the world's fourth-largest economy in terms of Gross Domestic Product (GDP). M&A spending also outnumbered research and development spending globally (R&D). In 2017, R&D expenditures were a little over \$2 trillion (Riemschneider, 2017). To put it another way, almost two times as much money is spent on acquiring existing assets as it is on generating anything new (David R. 2018).

The M&A study is of great importance because M&A is a fundamental means of transformation for companies. For example, in 2020, “...worldwide M&A in the US tripled to \$414 billion in the third quarter, up 67% in Asia-Pacific to \$274 thousand, and 21% in Europe to

\$231 thousand” (Oxford Business Group, 2020). This shows that while it is not known what the outcome of the companies will come, whether the merger or acquisition will be profitable, the data demonstrate the growth of acquisitions and mergers.

Without a question, mergers and acquisitions are happening at a breakneck speed, dating back to the second half of 2020. According to Anderson (2021) in a recent report, the United States has already registered \$2.14 trillion in M&A activity in 2021, putting the year on track to be the most active in history, during in Covid-19 pandemic. According to an S&P Worldwide Markets Intelligence study, the total global M&A value reached \$1 trillion for the third quarter in a row in Q2 2021, the first time this has ever happened in three consecutive quarters (Anderson., et al., 2021).

This emphasizes the value of M&A research in enhancing acquisition results. Existing academic research, on the other hand, is scarce, and company acquisition performance stays around zero (King et al., 2004).

My goal is why and how the company makes mergers and acquisitions and how it affects to performance of the firm. The study's major goal is to examine the quantitative impact of M&A transactions on a company's value while taking stock price dynamics into consideration, as well as to perform a comprehensive comparative analysis based on the transaction's size and the market.

The research part basis in is the works of secondary data which is used statistical data from domestic and foreign scientists' reviews. The first part will identify the characteristics of organizations' business models, including the effects that distinguish them from other conventional companies. Strategies will be considered in detail, according to which companies not only increase market power in one market but also conquer new niches in other sectors of the economy. The second chapter reviews the existing literature and financial studies of mergers and acquisitions and describes possible methods for assessing the impact of mergers and acquisitions on the company's value. The following describes the methodology, and background

of the study, and conducts an event analysis to identify indicators of abnormal returns in the M&A announcement date window. Moreover, the methodology for estimating the value of companies is considered and an assessment of their effectiveness is made. The first sample consists of several companies from Kazakhstan. Event windows are expected to show abnormal earnings from selected stocks that are significantly higher than the absolute magnitude of abnormal earnings for conventional companies. In addition, due to differences in market profile, the Kazakhstan market is expected to experience higher levels of anomalous returns from acquiring companies following the announcement of M&A. In conclusion, the main conclusions regarding the analysis carried out are made.

Literature Review

2.1 What is M&A

According to various sources, mergers and acquisitions are defined in a variety of ways. Look through some of the definitions that are thought to be the most applicable to the current situation. Mergers, which refer to circumstances in which one organization gets ownership control over another organization or business unit, and Acquisitions, which refer to situations in which one organization acquires ownership control over another organization or business unit (Öberg et al., 2007, Ferreira et al., 2014).

Snow (2011) offers a somewhat different definition, stating that a merger is a combination of two or more firms in which each company has the same number of shares as the others and plays a distinct function in the new entity. Meanwhile, an acquisition is a transaction in which one firm purchases the assets of another company, business division, or divisions of another organization (Candra., 2021).

According to Candra (2021) mergers and acquisitions (M&A) are one of the methods for firms to expand quicker than organically and may help them boost their worldwide market position and increase competitiveness (Sui et al, 2016). Several important commodities, such as coal, industrial metals, silver, lead, zinc, copper, steel, and aluminum, have a considerable volume and value of M&A activity throughout the world (Candra 2021). The overall value of M&A transactions in the coal and metal industry surpassed USD 60 billion in 2018 (January to December), with coal commodities accounting for the majority of the value and 320 transactions (Ernst and Young, 2019).

According to Downey (2008) initially, M&A efforts mostly concentrated on undervalued or troubled assets, so that when investors took ownership, there were potential to develop the assets further for profit. Later on, however, M&A became a must for corporate consolidation and even getting access to new markets and goods (Candra., 2021). M&A can alternatively be

separated into two categories depending on business management or shareholder type control (Snow, 2011), which is called controlled and non-controlled investment.

The first one is an investment that gives buyers control over the company's decisions. If the buyer acquires more than 50% or less than 50% of the shares, this decision can be controlled, but the voting threshold allows the buyer to make decisions on almost every aspect.

The second one is often known as a minority equity investment, is one that prevents purchasers from making choices on practically everything specified in the voting threshold. This is usually the situation when the buyer owns less than 50% of the stock (Candra., 2021).

However, there is substantial evidence that many M&A transactions fail (Weber et al., 2014), with failure rates estimated to be between 60 and 80 percent (Demetris V., 2017). Besides according to Demetris V(2017)., which claims Weber et al. (2011), a recent meta-analysis found that financial and strategic variables are insignificant in determining post-acquisition performance, and that researchers should focus on non-financial determinants (2017). Several researchers (Homburg, 2005) have emphasized the importance of marketing-related factors in successful M&As. For example, Demetris (2017) claims according to the research of Bekier and Shelton (2002) that the danger of losing clients in M&A is substantial because the management layer is generally focused on internal concerns during the integration period, leaving critical customer-related duties aside.

Moreover, numerous researchers emphasize the importance of a change that is essential to marketing and management literature: innovation (Demetris, 2017). Acquisitions are typically motivated by innovation, particularly in technological environments (Sorescu et al. 2007).

In order, to find out how the announcement of mergers and acquisitions impact the firm performance before or after disclosure information, I have used event study methodology which was detailed information will be given in the proposal below.

2.2 Types of merger and acquisition

This paper will allude to M&As as a phenomenon, in spite of the fact that takeover are entirely distinctive. The merger is the mix of two firms, wherein just one firm endures and the second firm stops existing legitimately (Santos et. al, 2012). In this manner, consolidations include a solidification cycle and the making of another firm with the disintegration of the first firms (Ross, Westerfield and Jaffe, 1998; Gaughan, 1999). Besides according to Tracy (2020) a merger, a combination of two companies of similar dimension combined to create a new entity, such as Exxon Mobil and BBVA Compass (2020).

However, acquisition happens when a business clearly purchases a new owner (Tracy, 2020). This is the case when Amazon purchased Whole Foods, Motorola purchased by Google, or Aetna purchased CVS. Interestingly, a securing identifies with the exchange of possession between two firms, where one firm (the acquirer) purchases a section or the entirety of another firm (the procured) setting up itself as the new proprietor (Ross et al., 1998).

It should also be made clear that various forms of M&As exist, including the extent to which the transaction is involved as mentioned in the introduction. Santos et. al. (2012) describes M&A as horizontal, vertical and conglomerate by reference to Gaughan's (1999) work. Corporations in the same market that conduct the same operation and produce the same goods, like M&A with direct competition, are responsible for horizontal M&As. Vertical M&As happen among organizations working at different stages in the worth chain (Santos et. al. 2012). Conglomerate M&As enter companies in companies and/or industries that operate unrelatedly (Santos et. al. 2012). Besides the 3 types of m&a, as mentioned above, there is also a concentric type of mergers and acquisitions. According to Hanson (2016) at times, two organizations will share clients yet offer various types of service. A model would be Sony, who fabricated DVD players yet also purchased the Columbia Pictures film studio in 1989 (Hanson 2016). Sony was presently ready to deliver movies to have the option to be played on their DVD players (Hanson 2016). Taking into account both the amount and the volume of transactions, horizontal M&As

are more often, adding up to 50% of total M&A business and representing almost 70% of the global value of M&A. (UNCTAD, 2008).

A great majority of the research focused on the output of the companies involved before and after the acquisition, often with somewhat confusing findings (Santos et al., 2012). Cong Cheng, Monica Yang, (2017) for example investigated that positively affected the liquidity, leverage and return ability, of purchaser firms.

Others think about have moreover appeared a positive effect on firms' execution (Yerim Chung, Alex Jiyoung Kim, 2020; Christian Tuch and Noel O'Sullivan 2007) yet a few different examinations have discovered that M&As either has no impact or are adverse to firms' post-securing execution (David R King, 2018, Santos et al. 2012).

But according to Hanson (2016), the profitability of a firm does not in any way depend on the type of mergers and acquisitions. However, the profitability of the firm depends on the chosen company, essentially relies upon the motivation and purpose of the organizations involved in an arrangement (David R King, 2018,).

2.3 Reasons for M&A

Operating in dynamic markets with a high rate of innovation, companies use mergers and acquisitions as a mechanism to gain a dominant position in the market or strengthen the old one. In addition, most companies seek to extend their period of high growth by conquering new markets, offering new products and services (Mchawrab, 2016). Besides, when developing by procuring an existing firm, the acquirer diminishes the number of competitors within the industry.

The foremost common think processes for mergers incorporate the following:

1. Value creation
2. Diversification
3. Acquisition of assets
4. Increase in financial capacity
5. Tax purposes

6. Incentives for managers

In the work of Santos et al. (2012) find that the other author such as Bradley, Desai and Kim (1988), Seth (1990a) and Seth, Song and Pettit (2000), obtaining and exploiting synergies between the value chains of the firms involved that would not be captured otherwise is a major driver of M&As. Synergies are created between companies that allow companies to gain a number of competitive advantages. First, market power is growing, along with the prospect of economies of scale, the ability to provide services at a higher cost, and rising revenue growth. For example, Ebay bought Skype in 2005 with the simple goal of maintaining double-digit revenue growth by bringing together two online communities - digital platforms (Damodaran, 2009). Secondly, other functional advantages are correlated with synergy, primarily related to the search for new talented employees. This is exactly what Facebook's deal to acquire FriendFeed in 2009 is associated with enabled the digital platform to acquire a number of key talent managers and engineers (Damodaran, 2009). Third, a lot of M&A transactions in the markets are associated with the search for companies with excess cash, which allows them to improve their debt burden or gain a tax advantage (Damodaran, 2009). Brouters (2000) pointed out that M&A provides a means to overcome financial sector weaknesses and reduce capital costs. Finally, mergers and acquisitions are also associated with future sources of income for companies, which increases its flexibility. The high margin of companies allows directing net profit to the purchase of target assets.

Cheng and Yang (2017) recommended that M&As are modes for getting to or controlling significant assets, not imitable and irreplaceable to accomplish an upper hand. The extra worth got from collaborations would, along these lines, be more prominent operational effectiveness and expanded market power (Santos 2012)

An imperative inspiration fundamental M&As is backed within the managerialism speculation, concurring to which managers select to embrace operations of M&As to maximize their claim utility at the cost of the shareholders (Tuch, O'Sullivan ,2007, Kim et. al, 2017).

However, this can often lead to under-considered and inefficient investment decisions, when firms are acquired at grossly inflated prices. For example, due to financial and management conflicts, Yahoo acquired Geocities and Broadcast.com in 1999 for \$3.6 billion and \$5.7 billion, respectively, which were closed a few years later (Saurel S. 2019).

In other cases, it appears that purchasing firm managers err in finding the cost of the acquiring firm, but prefer to proceed with the transaction, believing that the quality is right – a reason contained in the hubris theory (Santos, 2012).

According to Roberts et al. (2016), An enterprise may wish to diversify into new domains or sectors in order to balance its portfolio's risk profile. Diversification was an essential driver of numerous consolidations and acquisitions during the 1960s, 1970s and 1980s. More recently, a clear step from diversification was already made as a tactic for risk management (Roberts et al. 2016).

Whereas diversification does give preferences to the offering firm, such as the expansion of hazard and economies of scope, a few think about having found that it really crushes firm esteem (Lamonta & Polk, 2002; Dos Santos et al., 2008). These think about proposing that the misfortune of esteem after enhancement is due to wastefulness. In the study of Holt et al. (2017) that companies are ineffective in investing because they do not invest capital in specialist and well-established segments. Or maybe, they contribute in zones exterior their mastery and as a result, they may be less effective within the unused field of operation. This suggests that differing qualities in venture crush corporate esteem, as reserves are exchanged from portions of strength that give tall returns, to fragments (unused zones) that give lower returns (Holt et al 2017). The benefits of M&A transactions vary over time and depend on the characteristics of each transaction (Wang & Moini, 2012).

In addition, mostly the motive and goals of the companies depend on how this affects the profitability of the firm. Whether companies are doing it for the sake of risk diversification, or to increase revenues. In most cases it is up to the company to quickly integrate with each other.

2.4 Empirical evidence on performance of M&A

A closer look at prior research on the influence of higher yields on the outcomes of M&A announcements finds that the results vary greatly. According to the Lovisa H. (2019) prospects that can be studied include bidding firms, target businesses, and the combined outcome of bidding and target enterprises. An exact inquiry of incredible importance to takeover research is whether the consolidated returns of bidders and targets are positive or negative (Kiyamaz & Baker, 2008).

When determining whether or whether a certain transaction, such as a takeover, creates revenue, interest income reflects an anomalous revenue on equities. The gap between actual and predicted returns is referred to as abnormal returns (Lovisa H. 2019).

Such an assumption enables academic researchers to calculate the reaction of the buyer's or seller's share price to takeovers and mergers, and then apply the inference from the example of the reaction of the share price to determine the expected present value of the change in cash flows resulting from the takeover and acquisition, while accounting for other variables (Tuch C., O'Sullivan N. 2007). Despite the fact that there is no general correlation between the event windows picked in the current investigations, they can be comprehensively allocated as either long term or short term. According to the Tuch C., and O'Sullivan N. the short-term analysis relates to the days or months preceding the application's announcement, whereas the long-term analysis refers to time spans of many days or years (2007). The desired performance metric is also chosen differently in these investigations.

Short term

Nadisah and Kamilah (2018) M&A suggests that M&A generates value for destination companies, mixed and inconclusive results of acquiring firms are published after an M&A announcement. The evidence shows that after announcing M&A the acquisition firms may produce positive, negative or zero anomalous returns (Yaghoubi et al., 2016a, Nadisah and Kamilah 2018). Target companies are required to make positive returns because acquirers pay

discounts to lead target companies to sell their shares, thus increasing the market value of target companies (Yaghoubi et al., 2016a, Lebedev et al., 2015, Nadisah and Kamilah 2018).

However, in the research of Tuch and O'Sullivan (2007) the 'short-run' occasion period over which the execution of offering companies is measured changes significantly between considering with a few ponders joining execution comparisons as much as four months earlier to the offered declaration and up to three months a while later. But, not withstanding its selected event window, overall evidence indicates that the shareholders in m&a deals receive little or do not get any good returns (Tuch and O'Sullivan 2007).

Sudarsanam and Mahate's (2003) study gives a helpful understanding of the short-run execution of an example of 519 UK acquirers company somewhere in the range of 1983 and 1995. The creators report fundamentally negative unusual returns of 1.4% (over the -1 to multi-day time frame) with just 33% of acquirers encountering abundance gains.

Sudarsanam and Mahate (2003) additionally report commonly negative unusual returns yet don't discover the distinctions to be genuinely critical discoveries like on Limmack and Gregory. Notwithstanding, practically half of acquirers appear to wealth losses in short term.

Nevertheless, Nadisah and Kamilah (2018) with regards to the Chinese market, regardless of tracking down a positive normal unusual return in one month following the M&A movement, argues that organizations endure critical wealth loss in one to two years after acquisitions.

Long term

However, there are also several reports documenting negative irregular returns. The study of 434 M&A in the UK from 1969 to 1975 shows substantial abnormal negative returns of 6.30% according to Nadisah and Kamilah (2018). From the Franks et al. (1991) report, an irregular return of 1.02% for the US economy of 399 M&As between 1975 and 1984 was also negatively significant. From their example, 128 offer financed acquisitions have further negative unusual returns of 3.15% when contrasted with the money financed acquisitions that yield

positive strange returns of 0.83% (Nadisah and Kamilah 2018). From their example can show that 128 share-supported purchases have a further negative, abnormal return of 3.15%, compared to cash-supported purchases, which produce positive abnormal returns of 0.83%. The results of Franks et al. (1991) are consistent with the assertion that the payment system influences an irregular short-term return after the announcement duration.

There has also been a lot of research on long-term post-acquisition success by bidders. According to Tuch and O'Sullivan (2007) on the research most of this was driven by early studies that indicated that takeovers may have a negative effect on long-term shareholder capital. But, as pointed out by Agrawal and Jaffe (2000), numerous of the considers inspected the post-acquisition execution of bidders as a portion of a more comprehensive examination of takeovers, whereas the past decade has seen more considers centring only on bidder execution.

The research has analysed 352 fusions and acquisitions in the US during the period 1999–2008, according to Holt et al. (2017), and the findings show that in three years following M&A's announcement, bidding companies suffer significantly negative buy and hold abnormal returns. The findings also show that, in the course of time, aggressive tenders and cash-funded bidders respectively outperform friendly tenders and bidders (Holt et al. 2017). Holt et al. (2017) also found that in long-term bidder companies that concentrate on the specialization of the industry within M&A, companies that follow a more diversified approach substantially outperform those companies.

From all of the above literature review, it can be concluded that mergers and acquisitions have mainly negatively affected the profitability of companies. Only in a short-term mergers can positive trends emerge. But in the long term, mergers and acquisitions only lead to spending and negative income for the company.

According to Grigoriev and Troitsky (2012), research on the influence of mergers and acquisitions on a company's profitability took place mostly in established markets, whereas the repercussions of transactions in emerging markets of nations were researched considerably

less at the time (Grigoryeva S.A., Troitsky P.V. 2012). Furthermore, the author agrees with Khanna Palep (Khanna, Palepu, 1997, 2000) that due to the underdevelopment of the institutional framework, it is conceivable to integrate tactics successfully in these marketplaces (Grigoriev S.A., Troitsky P.V. 2012). To test this idea, Grigoriev, Troitsky (2012) used only a few scientific articles based on data from Slovenia, Poland, Romania, and India as examples (Grigoryeva S.A., Troitsky P.V. 2012).

Grigorieva, Troitsky, (2012) alludes to Trojanowski's (Trojanowski, 2002) work in his research, where he investigated market reaction data to information regarding firm mergers, using 53 transactions as data from 1996 to 2000 in Poland. Whereas, at the end of the investigation, Trojanowski (2002) achieved statistically significant (at the 5% significance level) values of accumulated excess returns. Moreover, according to Grigoriev, Troitsky, (2012), Gregoric, Vespro (Gregoric, Vespro, 2009), who researched the efficacy of doing in Slovenia, had a favourable reaction to merger agreement announcements. In addition, Pop discovered in his research that the average accumulation of excess returns for target firms in Romania is zero, as opposed to target companies in the developed world, where M&A transactions are the most profitable (Pop, 2006).

Furthermore, in order to comprehend the influence of M&A transactions on operational efficiency, Grigoryeva and Troitsky (Grigoriev S.A., Troitsky P.V. 2012) provided instances of Mantravadi and Reddy's work (Mantravadi, Reddy, 2008). Based on data from 118 transactions conducted by corporations in India between 1991 and 2003, Mantravadi and Reddy (2008) concluded that mergers, on average, result in a drop in profitability and return on capital employed (ROCE) after a couple of years. Furthermore, Grigoryeva and Troitsky (2012) concluded that the connection of diverse enterprises to the same industry has a favourable influence on changes in financial data (Grigoriev S.A., Troitsky P.V. 2012).

Grigorieva and Troitsky (2012) concluded in their works that despite a modest quantity of research and data from many developing nations, it is vital to discover characteristics that

properly indicate the efficiency of M&A transactions higher fluctuations. (Grigoriev S.A., Troitsky P.V. 2012).

Research methodology for M&A

3.1 Approaches to the evaluation of M&A transactions

There are several stated techniques to measuring the efficacy of mergers and acquisitions in global practice. However, since its theoretical components are more relevant to the unique scenario and dimension of the subject under investigation, each method has its own limits and benefits over the others (Wang & Moini, 2012). There are five basic strategies for analyzing the effectiveness of a merger and acquisition transaction and comparing their regions of application.

The accounting technique compares the company's performance before and after the purchase using financial statements (Wang & Moini, 2012). This strategy is justified by the fact that the purpose of business strategies is to maximise the return on invested capital (ROIC), and any advantage from a takeover will eventually be impacted the firm's financial statements. This method takes into account a wide range of efficiency indicators, including profitability (ROA), productivity (ROE), operational cash flows, innovation indicators, and sales or asset growth rates (Wang & Moini, 2012).

This accounting has undoubted advantages:

1. Using this kind of method, the outcomes of a previously established circumstance are reflected when a specific amount of time has passed after the transaction.

2. This method's relative simplicity of fulfilment. This strategy, however, has considerable downsides:

1. Exogenous influences are also incorporated in the model for researching long-term impacts using this strategy.

2. Financial statement data can be manipulated by firm management.

3. The disparity in accounting methods among countries, as well as their steady evolution throughout time.

4. Accounting data does not enable evaluating the efficacy of any specific merger or acquisition since it represents aggregated information over a very lengthy period of time, during which other transactions and simply the company's development in other directions might occur (Wang & Moini, 2012).

The way of assessing the efficacy of the company's senior management.

Executives are asked to judge how successfully they fulfilled their preliminary aims a few years after the takeovers were completed using this approach (Agnieszka, 2007). Moreover, several financial and non-financial metrics are used to characterize their primary objectives. Respondents are often the purchasing company's top executives.

The advantages of this method include:

1. Non-public, closed information can be utilized to assess the efficacy of takeovers.
2. Efficiency may be measured on several dimensions, including financial and non-financial data.
3. M&A can be motivated by a variety of factors.

The following are some of its drawbacks:

1. Because senior management is focused on their personal gain, the appraisal may be skewed.
2. Only a several managers' opinions are necessary when employing this strategy.
3. The efficiency metric is determined by the recall ability of senior management.

Expert assessment.

This way of assessment is comparable to top management's appraisal of efficiency, except in this case, the responders are independent specialists. Specialists examine information, and remarks on fiscal reports from experts or from rating organizations (Maja P., Josipa V., Kristina B., 2015).

To expand the unwavering quality of the outcomes, a few specialists are involved as sources of data. Notwithstanding comparable advantages to the past assessment technique,

this approach likewise gives an outer assessment that is more independent and can be utilized when performance indicators are unavailable. However, this strategy is unsuccessful when experts' information sources are biased, and they may have little information (Wang & Moini, 2012).

Alienation measure

This method assesses the result of a takeover by analyzing whether or not the acquired firm was later sold. The rationale of this approach is that on the off chance that the outcome doesn't live up to the assumptions of the acquirer, it will be sold (Maja P., Josipa V., Kristina B., 2015).. This is a reasonably basic method for evaluating the effectiveness of a takeover that does not require comprehensive financial or non-financial information. The selling of an asset, on the other hand, frequently signals a successful restructuring or a lucrative sale (Maja P., Josipa V., Kristina B., 2015).

As already mentioned, in recent times M&A transactions have become a very popular and effective tool for increasing the market power and value of companies due to economies of scale, lower cost of raising capital. Potential downsides include management problems arising from the situation of running a larger business, as well as an overestimation of the possible outcome of a merger, resulting in some companies literally overpaying. In this regard, it is important to have an idea of what the final result for the company from these transactions will be, and the assessment should be carried out not only qualitatively, but also quantitatively.

In world practice, there are many formulated approaches to assessing the effectiveness of mergers and acquisitions.

However, each approach has its own limitations and advantages over the others when its theoretical aspects are more related to the specific situation and dimension of the question under study (Wang & Moini, 2012). Let's consider an event analysis of assessing the success of an M&A transaction and compare their areas of application.

This approach has been widely used in M&A studies and has been predominant since the early 1970s (Agnieszka, 2007). It is designed to analyze and measure whether there is an excess return on a company's stock associated with an unforeseen event - a merger or acquisition. According to this approach, the return on shares reflects the rational expectations of shareholders and other market participants regarding the future value of the company in the coming period based on new information. The researcher determines the period - the window of events, during which the impact of the event will be measured.

This makes it possible to measure both short-term and long-term effects. The long-term analysis is designed to take into account that the price of a share does not always immediately reflect the effect of this event, since some uncertainties appear at the time of the announcement of the transaction, which can only be eliminated in the process of further discussion of the transaction (Tomaso et.al, 2010). Thus, this principle is used to quantify the success or failure of an acquiring firm in mergers or acquisitions.

The undoubted advantages of this approach include the following features:

- 1) In the process of event analysis, a relatively objective assessment is obtained from market participants.
- 2) A relatively simple process of obtaining data, which allows you to work with large samples.
- 3) Short-term study of objects largely eliminates the influence of external factors.
- 4) The calculation of abnormal returns does not depend on industry sensitivity, which allows you to study different groups of companies.

However, this approach also has a number of disadvantages, namely:

- 1) Event analysis allows you to evaluate only the expected results from synergy, and not directly implemented. The reliability of the results of the analysis of events essentially depends on the fulfillment of the hypothesis of an efficient stock market.
- 2) This approach cannot be used for closed, private firms, which leads to sampling bias.

3) The motives and incentives for conducting transactions on the part of top management are not taken into account, researchers evaluate the impact of mergers and acquisitions only at the level of the company, and not the industry or the market as a whole.

3.2 Hypotheses development

As already mentioned, companies use mergers or acquisitions as a tool to defend their market position or enter new markets. Due to the potential for economies of scale as well as network effects, I expect the company's financial and non-financial performance to improve in terms of instantaneous positive abnormal returns in the deal window. In addition, often M&A transactions are not carefully considered decisions, and are carried out in accordance with managerial motives, as well as due to the large amount of free cash and the desire to diversify their activities on the part of the largest digital platforms. Such unrelated transactions can lead to negative consequences and losses for the acquiring company.

However, it is important to understand what aspects of the proposals cause atypical returns in order to determine if the revenue from announcements is sensitive to different types of mergers and acquisitions. As a result, other academics attempted to correlate the acquirer's profitability with the potential supply. For example, researchers have focused on the examination of features such as payment method, the effect of mood on the merger, the relative size of the acquirer and the target, company market capitalization, and business's industry relationship is for continued action (Lovisa H. 2019, Tuch C. , O'Sullivan N. 2007).

Many mergers and acquisitions research focuses on whether a certain deal is more friendly or hostile. According to Tuch and O'Sullivan (2007) research, in an amicable (agreed) M&A, the company's board of directors is more optimistic about the deal. When a hostile offer is made, bidders seek shareholder approval in the face of management opposition.

Jensen (1993), Manne (1965), and Tuch and O'Sullivan (2007) argue that the opposition to the merger was driven by management self-interest. Since there is an idea that the managers were those who could not deal with the work and can be removed following the purchase of

enterprises. Friendly M&A, on the other hand, has been regarded as synergistic (Tuch, O'Sullivan 2007). Furthermore, Tuch and O'Sullivan (2007) reference Walker (2000)'s a study that shows negative anomalous returns in the short term with hostile offers, whereas positive offers show insignificant returns. However, in long term, the author of the study of Agrawal et al. (1992) and Logran and Vijh (1997) indicated that the anomalous statistic return is non-zero during a few years of research (Tuch, O'Sullivan 2007).

Payment methode for acquisitions and mergers can be employed in a variety of ways. According to Lovisa H.'s (2019) research, most organizations utilize cash, shares, or a combination of both. According to available data, different payment alternatives are very likely to impact the result of a particular transaction (Lovisa H. 2019). A number of academics, including Fuller and Glatzer (2003) in the study of Lovisa H. (2019), contend that cash transactions generate a much higher return than share payback. Cash transactions, they claim, create a lot of money, regardless of whether the firm is public or private.

Furthermore, Tuch C. and O'Sullivan N. (2007) found that large firms lose -2.45 per cent on average when paying with shares, but just -0.75 per cent when paying in cash. Smaller businesses earn 2.84 per cent on average when paid in cash and -0.42 per cent when paid in shares. Tuch C. and O'Sullivan N (2007) stated that the current study data supported the notion that cash purchases outperform stock trading.

According to Lovisa H. (2019), the market capitalization of size of an acquiring business may be assessed by its market capitalization, which is frequently used as a performance element determining announcement returns. Moeller et al. (2004) discovered evidence that smaller companies enjoy announcement returns that are two percentage points greater than higher-value companies, independent of how the purchase is financed (Lovisa H. 2019).

Moreover, data shows that the market capialization impact is consistent throughout time. The findings of Eckbo and Thornburn (2000) in the work of Lovisa H. (2019) support the notion that smaller enterprises outperform larger ones.

In studies in Lovisa H. (2019), Tuch, O'Sullivan (2007), the relative size of a deal also affects the income of bidders for several reasons. In the first scenario, the magnitude of the transaction, whether modest or huge, sends information about the objective and the company. Fuller et al. (2002) are cited by Lovisa H. (2019) as evidence that relative size effects mergers of both public and private enterprises, where they discovered evidence of a positive association between relative size and private ambitions. A positive link with public companies suggests that cash purchases are more positive than stock transactions, which have a negative value in the data.

In a research by Tuch, O'Sullivan (2007), Jarrell and Poulsen (1989) demonstrate the favorable influence of relative target size on bidders on the profitability of the acquiring business from a merger announcement within -10 to +20 after it is published. However, Tuch and O'Sullivan (2007), citing the work of Higson and Elliot (1998), found that when using multivariate models, the significance of the relative size of the transaction vanished, as the significance of the anomalous yield fell to approximately -1.7 percent after the transaction was announced.

However, most data conclusion comes from foreign the developed market, and how will impact for Kazakhstan firm do not have exact information. Because Kazakhstani market is only developing, with a relatively small number of announcements of transactions, as well as their total capitalization against the background of the largest foreign ones.

Thus, in accordance with the information before, I have formed the following hypotheses:

1. H1: Relative size of the firm positive affect for the performance in M&A
2. H2: Transactions related and related to the acquirer's core business result in positive and significant abnormal returns.
3. H3: Market capitalization of the firm positive affect for the performance in M&A
4. H4: In general, Kazakhstan companies are characterized by higher abnormal returns compared to foreign ones.

5. H5: The impact on the firm's profitability during mergers and acquisitions will positively affect with payment methods and mood of takeover.

Multivariate Regression: $CAR_{i36} = A_1 + \beta_1 Reality\ size_i + \beta_2 Market\ cap_i + \beta_3 Type_i + \beta_4 Payment_i + u_i$

3.3 Description of Event methodology study

In order to evaluate the effectiveness of mergers and acquisitions and acquisitions of companies, I will apply the method of event analysis. Firstly, this method will be convenient from the point of view of the selection procedure and obtaining information, since all the companies under consideration are public companies. Secondly, using this method it will be possible to estimate both long-term and short-term effects. Thirdly, it will allow clustering of the sample depending on whether the transaction is related, that is, related to the main activity of the acquiring company, or not. Finally, the use of this method will partially smooth out the presence of exogenous factors. With its clear baseline, event analysis has become one of the most widely used and trusted tools among financial researchers.

Thus, due to assumptions about the assumptions, in this study, I will explore both short-term and long-term effects of the announcement of transactions. Stock returns are potentially determined by five factors: how quickly new information is released to the market; how much information is revealed in the observation window and how convincing and clear it is; how long it will take investors to receive new information; how correctly investors will interpret this information; how to isolate investors' reactions to information about triggering consequences (Kummer, Agnieszka, 2007).

In the fields of industrial organization, corporate governance, and finance, empirical analysis of merger effects has a long history.

For decades, the most acceptable empirical approach to generating such an assessment has been a hotly disputed topic. If financial markets are efficient, stock market reactions to

merger announcements could assist predict merger profitability in the future (Tomaso et.al, 2010).

This approach, called an event study, devised and utilized for the first time in 1969 by Fama, is one of the most widely used methodologies in the methodology of financial consequences of mergers and acquisitions based on market data (Agnieszka, 2007)

The abnormal returns approach is widely used to quantify the change in stock prices of publicly traded firms in response to particular events or event notifications (Agnieszka, 2007).

At or around the days of a deal's announcement, stock price reactions of the acquiring firm, the target company, and/or the merging companies can serve as a proxy for predicted future profits from the merger - or at the very least, market mood (Kummer). If, on the one hand, a merger is expected to provide value, the stock prices of the merging companies should rise as a result. But on the other hand, Stock prices should decline if the market deems a transaction to be worthless (Kummer).

It can be demonstrated using market data that shareholders of merging businesses profit from the deal as the value of their shares grow and their return rises, both in relation to the growth in the market price of those shares (Agnieszka, 2007).

Most studies that look at the stock market reaction over a short period of time surrounding the announcement of an M&A deal (a 21-day window as usual, with 10 days before and 10 days after the news plus the day of the announcement) come to the same conclusion (Kummer).

- The returns from both the acquirer and the target are positive.
 - Shareholders in the target company achieve considerable positive excess returns,
- and
- Buying out a company's stockholders results in losses or, at best, nothing.

The key problem then becomes determining the appropriate counterfactual, or what would have happened if the event had not occurred (Tomaso et.al, 2010). The goal behind the

event research approach is to forecast this counterfactual using a model - most typically the market model.

In order to quantify the impact of an event, it is important to determine the number of abnormal stock returns in the event window. In this case, the abnormal return is defined as the difference between the realized return and the return expected by the market under normal circumstances:

$ARI_{i,t} = Ri,t - Ki,t$, where $ARI_{i,t}$ is the anomalous return on the company i stock on day t , Ri,t is the realized return, and Ki,t is the expected return by the market (Kummer).

Before abnormal returns can be identified, it is necessary to find a benchmark model that generates expected and market-predicted returns based on the stock's previous performance. Our study will use the market model approach first described by Brown & Warner (1980).

This is the most widely used approach to date. To isolate security-specific anomalous returns, the market model uses a statistical approach that relates the return of individual security to the return of the market. Using the least squares (OLS) time series and conventional regression, where realized returns are the dependent variable and market returns are the regressor, estimation of statistical parameters α and β :

$Ri,t = \alpha_i + \beta_i Rm,t + \epsilon_{i,t}$, where $\epsilon_{i,t}$ denote the predicted error for firm i on day t , with mean zero and time-constant variance (Kummer). These estimates of the regression coefficient, which are specific to firm i , are then used to determine the anomalous return for firm i on day t .

The abnormal return (AR) can then be defined as the difference between the realized return and the least-squares estimated return:

$$ARI_{i,t} = Ri,t - \hat{Ri,t} = Ri,t - (\hat{\alpha}_{i,t} + \hat{\beta}_{i,t} Rm,t)$$

Thus, the market approach to estimating abnormal returns has two advantages. First, it takes into account market dynamics. Second, by evaluating the β ratio in the period before the event, it also takes into account the different level of risk that characterizes each stock (Brown & Warner 1980).

Several methods are used to estimate abnormal returns during any interval after an event. We will use the approach according to which the total abnormal income, CAR, is calculated, that is, the sum of abnormal income in each event window.

$$CAR_{i,t1:t2} = \sum ARI_{i,t}$$

To investigate how stock prices react to merger announcements, we first calculate each firm's "normal return" over 240 trading days, beginning 10 days before the merger announcement date. We get estimated values for the model's parameters α and β which we use to produce the counterfactual, or what company i 's stock price would have been if the M&A hadn't been announced (R_{it}) (Tomaso et.al, 2010).

We define the total firm valuation effect of the merger as the sum of the daily abnormal returns within an event window spanning from m days before the event to n days after it, because there may have been information leakages that influenced firm i 's return before (or after) the merger announcement (Tomaso et.al, 2010). Sudarsanam developed seven models for calculating the expected returns model (2003), two of which were used in an excel file.

3.4 Interpretation of the results of event analysis of transactions mergers and acquisitions

One of the main objectives of this study is to use various methods to determine the abnormal returns in response to merger announcements during the event period and evaluate their differences. Assuming that the stock market is efficient, then the realized return cannot systematically differ from the expected return. However, higher (or lower) abnormal returns can sometimes occur due to unexpected events or market turmoil. In order to evaluate the effectiveness of mergers and acquisition for Kazakhstani companies, I will apply the method of event study analysis.

At the initial stage, research begins with the identification time series components. The firm's specific response to an event, the abnormal stock price, is measured for a predetermined

window of the event. In the literature, it is customary to include trading days [-1; +1] relative to the date of the event to formulate an event window if the exact date of the event cannot be determined with certainty (Werner, 2010). Extending to the previous day and even days can be useful to detect information leaks to the market or insider trading. Similarly, a next day extension may be appropriate if the announcement is released after the market closes, so that the market reaction will not be seen until the next trading day. Thus, I will identify and test for significance abnormal returns in two event windows: [-2; +2], [-10; +10].

The amount of abnormal profitability directly depends on the amount expected by the market, which is measured in the time interval before the announcement of the deal. The most common measurement window is a calendar year, or 240 trading days, where the target company's share prices are compared to market movements. It is important that the event window and the estimated return window do not overlap to avoid bias in the estimate.

Data collection

We utilized the KASE stock market database and Bloomberg resources to create a sample of transactions. M&A transactions from 2012 to 2022 were included in the study's sample. The chosen time span indicates the longest length of time during which most firms' financial information could be found. The following criteria were adopted to construct the study's final sample:

1. Status of the transaction. We have taken completed transactions into account.
2. Data from publicly traded corporations that have financial statements in the public domain as well as information on share price fluctuations.
3. The size of the purchased bundle and the transaction amount. The final sample contained transactions resulting in a block of shares greater than 25%, providing grounds for controlling the company's financial flows, as well as data indicating the overall value of the transaction.

In the given time period, 322 transactions were made in the country, but only 124 of them were completed. However, only 23 of these produced findings that met all of the criteria.

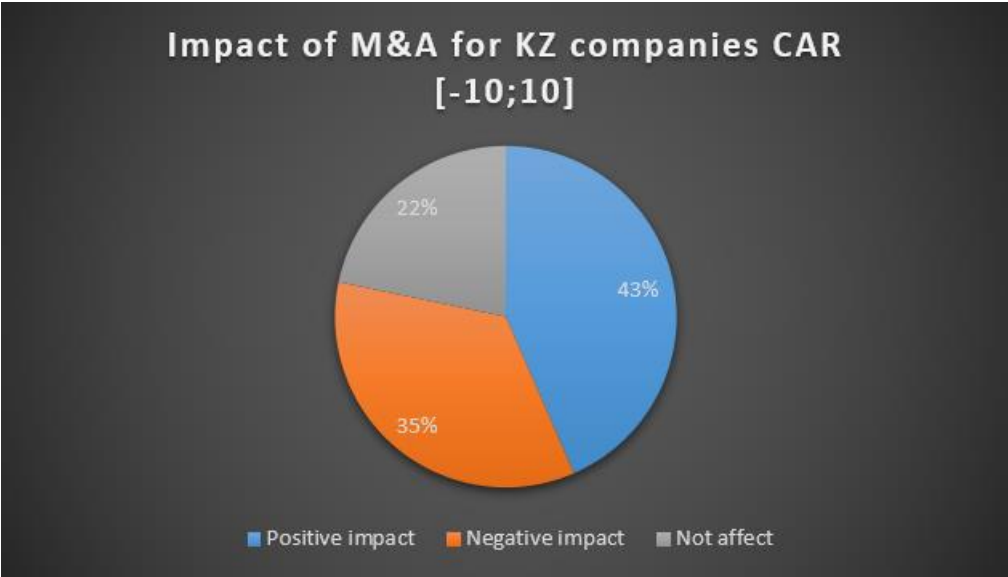
Table 1. Event study analysis

Firms name	CAR [-2;2]	CAR [-10;10]	Impact CAR [-2;2]	Impact CAR [-10;10]
BANK ASTANY	0.1%	-1.8%	Positive impact	Negative impact
KCELL	-0.16%	3.85%	Negative impact	Positive impact
KSZH FREEDOM FINANCE LIFE	0	0	No impact	No impact
GMK KAZAKHALTYN	0	0	No impact	No impact
SK LONDON-ALMATY	0	0	No impact	No impact
KTC	3.24%	0.33%	Positive impact	Positive impact
BTA BANK	-0.78%	7.83%	Negative impact	Positive impact
KAZKOMMERTS BANK	-18.11%	-83.84%	Negative impact	Negative impact
ATFBANK	-2.66%	-15.88%	Negative impact	Negative impact
EURASIAN NATRES CORP.	6.65%	5.03%	Positive impact	Positive impact

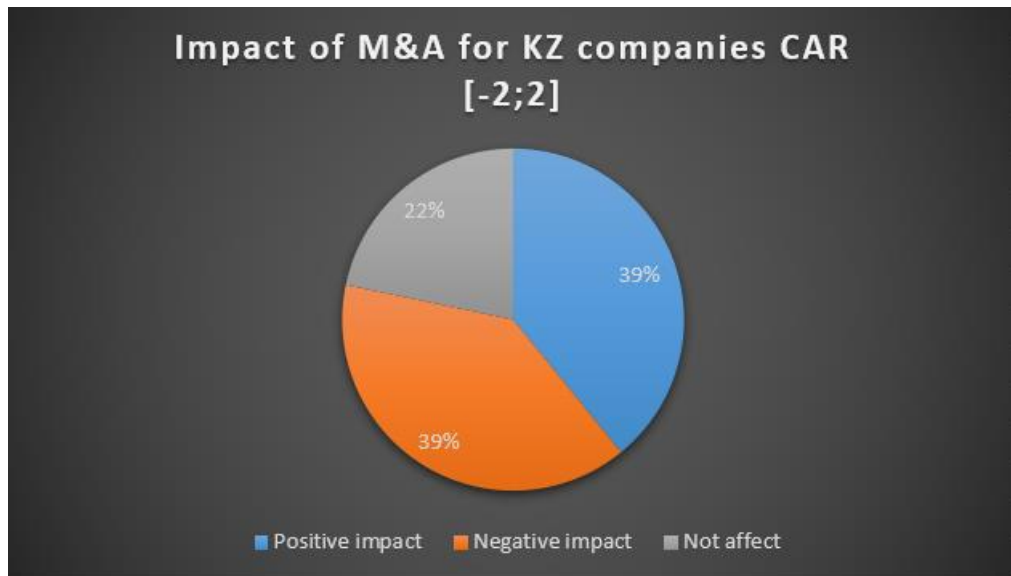
TEMIRBANK	0.25%	0.35%	Positive impact	Positive impact
FREEDOM FINANCE	0	0	No impact	No impact
FORTELEASING	-0.23%	-0.29%	Negative impact	Negative impact
SENIM BANK	-8.58%	-6.51%	Negative impact	Negative impact
TENGRI INV BANKING	0	0	No impact	No impact
KASPI	9.99%	15.18%	Positive impact	Positive impact
AK ALTYNALMAS	-3.75%	-14%	Negative impact	Negative impact
SAT & COMPANY	0.48%	-19.07%	Positive impact	Negative impact
TENGRI BANK	-0.16%	-0.96%	Negative impact	Negative impact
TSESNABANK	0.66%	11.7%	Positive impact	Positive impact
HALYK SAVINGS BANK	-3.35%	11.41%	Negative impact	Positive impact
ALLIANCE BANK	14.96%	22.54%	Positive impact	Positive impact
KAZAKHTELECOM	2.85%	2.44%	Positive impact	Positive impact

When conducting an event analysis for all transactions at once, only ALLIANCE BANK, KAZAKHTELECOM, TSESNABANK, HALYK SAVINGS BANK, KASPI, TEMIRBANK, EURASIAN NATRES CORP., et. demonstrate positively significant abnormal returns, and cumulative abnormal returns (CAR) in the event window [-10; +10] is significant between 0.35% and 22.54%. But the most remarkable thing is that some positive companies such as HALYK SAVINGS BANK, KCELL, on a smaller event window [-2; +2], negative significant abnormal profitability during the analysis for all transactions was revealed in companies as -3.35% and -0.16%. Just like in the negative significant profitability of companies, it was revealed on a small event window [-2; +2] found a positive trend, for such companies as BANK ASTANY, SAT & COMPANY 0.1% and 0.48%. But only in 5 different companies does the cumulative abnormal return show 0 percent, this is due to the fact that stocks fluctuate once a year or even less, because of this, 0 comes out in the calculations. It follows that the information about the merger or acquisition of companies has not yet been officially received have no effect on stock fluctuations.

Picture 1. Impact of M&A for KZ companies CAR [-10:+10]



Picture 2. Impact of M&A for KZ companies CAR [-2:+2]



On the study of data on 23 companies, you can make a diagram that clearly shows that out of 23 companies, 9 companies show positive and negative returns, while the rest of the companies show no effect in cumulative abnormal return in 2 days.

For the Kazakhstan stock market, paradoxical, statistically significant indicators of cumulative abnormal returns (CAR) in the event window [-2; +2] and [-10; +10] show a little bite different result out of 23 companies, 10 reacted positively, the remaining 8 reacted negatively, the remaining 5 companies showed results near zero in CAR [-10:+10].

Thus, our hypothesis H1 cannot be fully confirmed due to the lack of a sufficiently large number of significant results. Based on this, it can be concluded that the shareholders of companies in general are cautious about mergers and acquisitions as a strategy to maintain a dominant position in the market and ensure future growth. In addition, higher modulo indicators of abnormal returns for the Kazakhstani market partially confirm the H4 hypothesis regarding a greater reaction of shareholders to the announcement of M&A transactions from domestic companies.

Analysis of abnormal returns on company stocks in M&A announcement windows, which are related to the company's core business, has yielded conflicting results. Thus, the event analysis of the 13 largest related transactions, namely, related to the activities of the bank 7 out

of 13 horizontal mergers successful. Thus, the H2 hypothesis may be confirmed only for Kazakh companies of transactions. A potential explanation for the negative anomalous returns can be managerial motives, as well as the arrogance of top management, seeking to act in their own interests. Moreover, apply to telecommunications companies that show positive results in horizontal mergers. Which shows prove of H3 hypothesis increase in the value of the announced target company, the indicators of abnormal profitability for the acquirer also increase.

The results obtained by me in the process of empirical analysis of the effectiveness of mergers and acquisitions are largely consistent with studies already carried out by other authors. In Tuch and O'Sullivan (2007) and Sudarsanam and Mahate's (2003) study show that, after M&A announcements, obligating companies suffer from significant negative purchases long term and have abnormal returns in the short term. Also, the authors obtained positive significant abnormal returns in event windows for all companies in the panel. On the contrary, in contrast to my overall results, which showed no short-term prevalence of anomalous stock returns. Since in my calculations M&A shows 39% both positive and negative abnormal returns per share in CAR [-2:+2]. However, if we take CAR [-10:+10] it is showing that positive return after the announcement about 43%, which partly confirms the theory of Sudarshanam and Mahate (2003), then mergers and acquisitions have a negative impact in the long run, but in my case also have a more negative impact on the firm in the short run.

To understand how and what will most affect the change in CAR (10:10) and (2:2) in positive to negative, a regression analysis was carried out. The independent variables chosen were market capitalization, relative value, whether a given takeover transaction is friendly or hostile, and finally, whether the payment method was cash or stock. The last two data points had to be used as a dummy variable, with a value of 1 if the transaction is friendly and 0 if it is not. The same manner of payment was utilized, with numerical data 1 - if the transaction was in cash and 0 if it was in shares.

These values were not chosen for no reason, since Lovisa H. (2019), Tuch C. , O'Sullivan N. (2007) used the same variables in developed stock markets in their studies.

The suggested model was checked for multicollinearity in Excel before testing assumptions regarding the relevance of components.

Picture 3. Correlation of CAR [-10:+10]

	CAR [-10;10]	Market cap	Relative size	Types of M&A	Payment in cash or stocks
CAR [-10;10]	1				
Market cap	0,209245131	1			
Relative size	-0,095291431	-0,24197037	1		
Types of M&A friendly or hostile	0,217195937	0,198307159	-0,311945092	1	
Payment in cash or stocks	0,014170827	0,068797364	-0,31287608	-0,33508313	1

Picture 4. Correlation of CAR [-2:+2]

	CAR [-2;2]	Market cap	Relative size	Types of M&A	Payment in cash or stocks
CAR [-2;2]	1				
Market cap	0,320764047	1			
Relative size	-0,123123862	-0,24197037	1		
Types of M&A friendly or hostile	0,135723193	0,198307159	-0,311945092	1	
Payment in cash or stocks	-0,012598938	0,068797364	-0,31287608	-0,335083127	1

The independent and dummy variables do not have a substantial association. As a result, we may incorporate all components in the regression model.

The results of the regression analysis are presented in the table below.

Picture 5. Regression of CAR [-2:+2]

Регрессионная статистика								
Множественный R	0,495951533							
R-квадрат	0,245967923							
Нормированный R-квадрат	0,078405239							
Стандартная ошибка	0,058672007							
Наблюдения	23							
Дисперсионный анализ								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Значимость F</i>			
Регрессия	4	0,02021264	0,00505316	1,467915872	0,253230057			
Остаток	18	0,061963278	0,003442404					
Итого	22	0,082175918						
	<i>Коэффициенты</i>	<i>Стандартная ошибка</i>	<i>t-статистика</i>	<i>P-Значение</i>	<i>Нижние 95%</i>	<i>Верхние 95%</i>	<i>Нижние 95,0%</i>	<i>Верхние 95,0%</i>
Y-пересечение	-0,055701422	0,064402293	-0,864898122	0,398475172	-0,191005618	0,079602774	-0,191005618	0,079602774
Market cap	1,48103E-08	1,21915E-08	1,214798341	0,240139029	-1,08032E-08	4,04237E-08	-1,08032E-08	4,04237E-08
Relative size	-0,000785961	0,015084033	-0,052105506	0,959018532	-0,03247634	0,030904417	-0,03247634	0,030904417
Types of M&A friendly or hos	0,056777508	0,031257347	1,816453189	0,085992592	-0,008891742	0,122446758	-0,008891742	0,122446758
Payment in cash or stocks	0,009575922	0,035420616	0,270348812	0,789967325	-0,064840032	0,083991875	-0,064840032	0,083991875

Picture 6. Regression of CAR [-10:+10]

Регрессионная статистика									
Множественный R	0,449221								
R-квадрат	0,2018								
Нормированный R-кв	0,024422								
Стандартная ошибка	0,197939								
Наблюдения	23								
Дисперсионный анализ									
	df	SS	MS	F	Значимость F				
Регрессия	4	0,178296493	0,044574123	1,137681579	0,370399678				
Остаток	18	0,705236186	0,039179788						
Итого	22	0,883532679							
	Коэффициент	Стандартная ошибка	t-статистика	P-Значение	Нижние 95%	Верхние 95%	Нижние 95,0%	Верхние 95,0%	
Y-пересечение	-0,23976	0,217270832	-1,103497707	0,284345825	-0,696226946	0,216711215	-0,696226946	0,216711215	
Market cap	2,71E-08	4,113E-08	0,659472964	0,517941377	-5,92868E-08	1,13535E-07	-5,92868E-08	1,13535E-07	
Relative size	0,00103	0,050888258	0,020238164	0,984076039	-0,105882379	0,107942149	-0,105882379	0,107942149	
Types of M&A friendly c	0,197577	0,105451369	1,873634071	0,077310268	-0,023967827	0,419122381	-0,023967827	0,419122381	
Payment in cash or stoc	0,054939	0,119496783	0,459756091	0,651195865	-0,196114051	0,305992798	-0,196114051	0,305992798	

Picture 7. Overall Regression results for CAR [-10:10]

```
Call:
lm(formula = CAR10 ~ Marketcap + Size + TypeMA + Payments)

Residuals:
    Min       1Q   Median       3Q      Max
-0.66429 -0.02326 -0.00174  0.09576  0.20636

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) -2.398e-01  2.173e-01  -1.103  0.2843
Marketcap    2.712e-08  4.113e-08   0.659  0.5179
Size         1.030e-03  5.089e-02   0.020  0.9841
TypeMA       1.976e-01  1.055e-01   1.874  0.0773
Payments     5.494e-02  1.195e-01   0.460  0.6512
---
signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1979 on 18 degrees of freedom
Multiple R-squared:  0.2018,    Adjusted R-squared:  0.02442
F-statistic: 1.138 on 4 and 18 DF,  p-value: 0.3704
```

Picture 8. Overall Regression results for CAR [-2:2]

```
Call:
lm(formula = CAR2 ~ Marketcap + Size + TypeMA + Payments)

Residuals:
    Min       1Q   Median       3Q      Max
-0.136930 -0.016856 -0.009443  0.014392  0.138889

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) -5.570e-02  6.440e-02  -0.865  0.398
Marketcap    1.481e-08  1.219e-08   1.215  0.240
Size        -7.860e-04  1.508e-02  -0.052  0.959
TypeMA       5.678e-02  3.126e-02   1.816  0.086
Payments     9.576e-03  3.542e-02   0.270  0.790
---
signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.05867 on 18 degrees of freedom
Multiple R-squared:  0.246,    Adjusted R-squared:  0.07841
F-statistic: 1.468 on 4 and 18 DF,  p-value: 0.2532
```

This model was obtained after several variations were done. It is the most recent and stable model.

The adjusted R-squared value for CAR [-2:+2] is 7.8 percent, whereas the value for CAR [-10:+10] is 2.4 percent. Yes, it is a low figure, but many scientists say that in finance, and particularly in predicting stock returns using regression models, producing models with R-squared values in the range of 5% to 10% is standard practice. When we check, we can see that the majority of variables are not significant. Only the mood of takeover displays a p value that is significant at the 10% level. We cannot accept this model, because the average p-value indicates that this regression is not significant at the 5% level, and there are no significant variables.

Main results of hypothesis

Hypothesis 1: Relative size of the firm significant affect for the performance in CAR. The variable "Size" no significant at the 5% level. Hypothesis rejected.

Hypothesis 2: Transactions related and related to the acquirer's core business result in positive and significant abnormal returns. In CAR analysis for [-10:10] data shows more positive side than negative, but in [-2:2] data shows neutral positions. Hypothesis accepted.

Hypothesis 3: Market capitalization of the firm significant affect for the performance in CAR. The variable Market cap. is not significant at the 5% level. Hypothesis rejected.

Hypothesis 4: In general, Kazakhstan companies are characterized by higher abnormal returns compared to foreign ones. According to the calculation of CAR, data showing higher fluctuation. Hypothesis accepted.

Hypothesis 5: The impact on the firm's profitability during mergers and acquisitions will positively affect with payment methods and mood of takeover. The variable "Payments and mood of takeover" is not significant at the 5% level. Hypothesis rejected.

From the research Lovisa H. (2019), Tuch, O'Sullivan (2007), most of the hypothesis rejected, which means that data for developing country is not significant. But also work of

Nadisah and Kamilah (2018) proof partly, because more positive side have on long term CAR, than short term CAR. However, according to him related business shows more positive side in M&A which is proofed. Moreover research of Grigoriev S.A., Troitsky P.V. 2012, proofing that developing market have higher fluctuations on the announce of M&A.

Conclusion

The attention of the entire economic community is riveted to mergers and acquisitions due to the appearance of abnormally high stock returns even in cases where the total cost of the announced transaction is relatively insignificant. That is why the appetite of companies is growing every year for the election of both vertical and horizontal mergers and acquisitions.

The main goal of the empirical analysis was to identify patterns that affect the amount of abnormal profitability in M&A transactions. At the same time, the main assumed factors chosen as potentially influencing the final result were the cost of the announced transaction, the connection of the acquired company with the key business area, as well as the degree of development of the market where the securities of the analyzed objects are placed.

In accordance with the conducted event analysis for different event windows, some of the assumptions were confirmed, but most were subsequently refuted. Since it is not highly developed, and it is difficult to find accurate data related to Kazakhstani companies.

Using event analysis tools, calculate abnormal returns and accumulated abnormal returns of absorbing companies and identify the regression results data. As a result of the study, it was proved that the market immediately reacts to an information event, based on the deterioration of accumulated excess returns on wider windows. The additional value of the shares of the absorbing company is not created in all cases, which indicates the possibility of losses for investors. However, the uniqueness of each transaction, as well as takeover relates to the core business that market indicate a possible change in results in the long term. But in regression analysis is not proved what drives most to price change.

At this time, the theory cannot only explain the phenomenon of mergers and acquisitions in general in developing countries, which data are referred to both academically and commercially. Because in developed countries, not only event analysis is mainly used, but also accounting analysis, sometimes combining them, especially how they affect operating profit. Further future studies of how the impact of mergers and acquisitions in developing countries during covid-19 will be interesting.

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