

**ANALYSIS THE EFFECT OF MERGER AND ACQUISITION ON
SHAREHOLDER WEALTH OF ACQUIRING COMPANY**

A THESIS

**Presented as Partial Fulfillment of Requirements
to Obtain the Bachelor Degree in Accounting Department**



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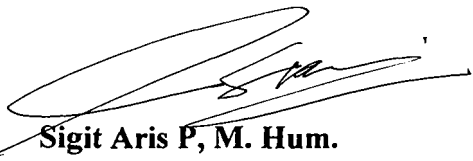
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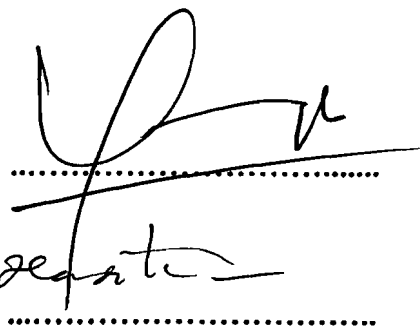
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ABSTRACT

Yuwati (2004): **Analysis The Effect of Merger and Acquisition on Shareholder Wealth of Acquiring Company:** Jogjakarta, Accounting Department, Faculty of Economics, Universitas Islam Indonesia.

Merger and acquisition are business strategies to expand and allocate resources of company. The most dominant reason to do a merger is to achieve synergy or create firm value that mainly enhances shareholder wealth. In short term, synergy can be measured by using event study method, by observing stock price to find abnormal return around announcement day.

A controversy whether merger and acquisition create synergy becomes interesting subject discussion. Some researchers stated that shareholder of acquiring company often suffer negative return.

This research will analyze the effect of merger and acquisition on shareholder wealth of acquiring company. The result of hypothesis 1 shows that merger and acquisition positively effect shareholder wealth of acquiring company. However, the result of hypothesis 2 indicates that there is no significant different of average abnormal return (AAR) before or after merger and acquisition. This indicates that shareholder wealth of acquiring company increases from merger and acquisition activity, but statistically it is not different before and after M&A announcement.

ABSTRAK

Yuwati (2004): **Analisis Efek Merger dan Akuisisi Terhadap Kekayaan Pemegang Saham Perusahaan Pengakuisisi** : Jogjakarta, Jurusan Akuntansi, Fakultas Ekonomi, Universitas Islam Indonesia.

Merger dan akuisisi merupakan strategi bisnis untuk mengembangkan dan mengalokasikan sumber-sumber aset perusahaan. Salah satu alasan paling dominan dilakukannya merger yaitu synergy atau untuk menciptakan nilai tambah yang pada intinya meningkatkan kekayaan pemegang saham. Dalam jangka pendek synergy dapat diukur menggunakan metode event study, dengan meneliti pergerakan harga saham untuk menemukan abnormal return seputar tanggal pengumuman.

Kontroversi apakah merger dan akuisisi menciptakan synergy masih menjadi bahan diskusi yang menarik. Beberapa penelitian menyatakan bahwa pemegang saham perusahaan pengakuisisi sering menderita return negative.

Penelitian ini menganalisa efek merger dan akuisisi terhadap kekayaan pemegang saham perusahaan pengakuisisi. Hasil penelitian terhadap hipotesis 1 menunjukkan bahwa merger dan akuisisi memberikan efek positive terhadap pemegang saham perusahaan pengakuisisi, namun demikian hasil uji statistic terhadap hipotesis ke 2 membuktikan bahwa tidak terdapat perbedaan rata-rata abnormal return (AAR) yang signifikan sebelum dan sesudah pengumuman merger dan akuisisi. Hal ini mengindikasikan bahwa terdapat kenaikan kekayaan pemegang saham perusahaan pengakuisisi dari aktifitas merger dan akuisisi tetapi secara statistic tidak berbeda antara sebelum dan sesudah pengumuman.

CHAPTER I

INTRODUCTION

1.1 Background

In modern era, business develops rapidly and it is full of competition in which companies have to take appropriate action in order to compete others so that they can survive. Merger and acquisition are business strategies to expand and allocate companies resources. This strategy is very popular in which its number has increased from year to year and it involves huge number of dollars. Moreover, there are some companies that apply merger and acquisition quite often. For example, in 2000 there were 9,472 merger and acquisition transaction in US. Based on worldwide survey, merger and acquisition through July 20, 2000 were valued at \$1.7 trillion, it was 18% year-over-year increase (Adolph et al, <<http://www.fleetcapital.com/resources/other/homerg.pdf>>).

In general, merger and acquisition are combination of two or more firms into one combined firm. There are many reasons why companies decide to do merger and acquisition. Brigham and Houston (1998) mentioned some motives behind corporate merger and acquisition are such as synergy, tax consideration, purchase of assets below their replacement cost, diversification, manager's personal incentive, and break-up value. But a dominant motive of conducting merger and acquisition is directed to achieve synergy. There was a merger of AOL and Time Warner, in which synergy is expected by uniting Time Warners' contents and cable distribution with AOLs' internet subscriber base, one

analyst estimated the synergy perceived was \$ 1 billion (Melicher, <[http://www, isb.unizh/studium/courses02/pdf/ 279_vortrag_melicher.pdf](http://www.isb.unizh/studium/courses02/pdf/279_vortrag_melicher.pdf)>).

Synergy occurs when total valuation from the combination is greater than the sum of the values of the component firm operating independently (Weston and Weaver, 2001). Sirower (1998) defined synergy as the increase of competitive and cashflows resulted from merging companies in which they can not achieve without conducting merger. In a simple equation, people commonly defined synergy as $2 + 2 = 5$ effect (Hudayati, 1997). The value can be source from revenue enhancement, cost reduction, lower taxes, and lower cost of capital after merger and acquisition (Ross, Westerfield, and Jaffe, 2001).

In short term period, synergy can be measured by observing stock market reaction to merger and acquisition announcement. Many researchers in this area have been using abnormal returns in both the bidder and target firm as a way to measure the value created in merger and acquisition deals. Merger, called synergy, is referring to the presence of positive abnormal stock return resulting from increasing company's stock price relative to the stock market (Davidson, Cheng, and Chhachhi, 1993). This method is called event study that is used to examine whether certain event or announcement effects the stock price movement in specific window. In a capital market that is efficient in responding to public information, stock price quickly adjusts following a merger announcement. This movement reflects any expected value changes (Andrade, Mitchell, and Stafford, 2001). Hapeslagh and Jemison (1991), Rappaport (1998) also suggested that the

immediate price reaction is the best guess about the long-term implication of the transaction.

Controversies related to the synergy effect of merger and acquisition still become subject of discussion. Eccless, Lanes, and Wilson (2001) argued that many acquisitions have not created value for the acquiring company because they pay more than the acquisition worth to them. A research conducted by Rahmawati and Tandelilin (2001) highlighted that significantly target shareholder gets positive abnormal return from merger and acquisition. Moin (2002) also concluded the fact of merger and acquisition as high risk business “not promising land”, over payment, over estimate of synergy value. Its diversification often fails to create return to shareholder, and shareholder of acquiring company often suffers from dilution.

Loughand and Vjih (1997) concluded that target shareholder always earns significant positive abnormal return from merger and acquisition, while acquiring shareholder earns little, or no abnormal return, or even negative abnormal return. A research by Sudarsanam, Holl, and Salami (1996) confirmed that there are synergies from operational, financial, and managerial that rise from combination of complementary resources and growth opportunities. However, this research also finds that target gets significant positive abnormal return while bidder gets negative cumulative abnormal return.

Another research done by Davidson, Cheng and Chhachhi showed average merger creates value, but a large percentage of the sample does not gain it. Sirower (1998) found that average companies' acquisition strategy destroys value

of acquiring company. A research by Eccles, Lanes & Wilson (2001) studied about 131 deals each valued at \$500 billion or more occurred between 1994 and 1997 in the US, Europe, and Asia. Their analyses are consistent with Sirower's earlier study of US company, showing 59% of the deals, the total market adjustment of the acquiring company goes down on announcement.

Based on the explanation above, this research will examine shareholder wealth of acquiring firm on merger and acquisition. The samples of this study are all companies listed at Jakarta Stock Exchange that announced merger and acquisition during period 1996 until 2000. This research will focus on the stock market response around the announcement merger and acquisition, with assumption that the market value of a firm's stock price reflects unbiased estimation of the firm future performance.

1.2 Problem Identification

Merger and acquisition are firm decision to drive combined firm to be better than before. A combined firm will be more efficient, more competitive, and stronger than before. Briefly, the main objective is to enhance shareholder wealth through firm value creation.

The most statistically reliable evidence on whether merger and acquisition create value for shareholders comes from short window event studies, where stock market reaction at merger and acquisition announcement are used as a gauge of value creation or destruction (Andrade, Mitchell, and Stafford, 2001). If merger and acquisition reflect to increase the firm value, the stock return to shareholder

will react positively. On the other hand, if it tends to destruct the firm value, the stock return will be negative. Since the acquiring company becomes survived company and handle for next operation, it is sensible that shareholder wealth of acquiring company should obtain a serious attention.

1.3 Problem Formulation

This study tries to evaluate the effect of merger and acquisition on shareholder of acquiring company. The research problems in this study are formulated as follows:

1. Do merger and acquisition positively effect the shareholder wealth of acquiring company?
2. Does shareholder wealth of acquiring company increase after the merger and acquisition?

1.4 Problem Limitation

To make this research more focus, this study sets problem limitation which is stated below:

1. This research only examines the merger and acquisition in Indonesia in period of 1999-2003.
2. This research only focuses on acquiring company.
3. This study ignores subjective variable like politic condition, national stability, and other macroeconomics influence.

4. Although merger and acquisition have different definition, but this study assumes that both of them are the same activities, so that they are interchangeable.

1.5 Research Objective

This research is conducted to achieve these following objectives:

1. To analyze whether merger and acquisition positively influence shareholder wealth of acquiring company.
2. To identify whether shareholder wealth of acquiring company is increasing after merging.

1.6 Research Benefit

The writer expects that this research will give several contribution to these following parties:

1. It gives empirical evidence about merger and acquisition in Indonesia so that it can be used as consideration to determine strategy to expand business for manager or decision maker.
2. It gives information as a consideration in making investment decision for shareholder and investor.
3. It gives additional reference to the next research for the researcher.

1.7 Definition of Terms

Definition of term is needed to make readers understand about what they are going to read from this thesis.

1. Merger

A merger occurs when one corporation takes over all the operations of another business entity and that entity is dissolved (Beams, 1996).

2. Acquisition

An acquisition occurs when one corporation acquires the productive assets of another business entity and integrates those assets into its own operation. It also refers to acquisitions when one corporation obtains operating control over the productive facilities of another entity by acquiring a majority of its outstanding voting stock. The acquired company doesn't need to be dissolved, or go out of its existence (Beams, 1996).

3. Acquiring company

It refers to a company that acquires other companies or surviving company.

4. Shareholder wealth

Shareholder wealth is wealth belongs to shareholder represents return of future cashflows which will be received by themselves. Future cashflows performance will influence return for shareholder from changing stock prices. The return for shareholder is measured based on abnormal return received. Meanwhile, abnormal return is different between expected return and actual return (Weston and Weaver, 2001). Actual return is a return that really happens on stock and

certain date, while expected return represents the return that would be expected if no event takes place (Weston and Weaver, 2001)

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Definition and Type of Merger and Acquisition

Merger is business combination in which one corporation takes over all the operations of another business entity and that entity is dissolved (Beams, 1996). Acquisition occurs when one corporation acquires the productive assets of another business entity, and integrates those assets into its own operation. It also refers to an acquisition when one corporation obtains operating control over the productive facilities of another entity by acquiring a majority of its outstanding voting stock, the acquired company doesn't need to be dissolved, or go out of its existence (Beams, 1996)

There are several types of merger based on the business relation between acquirer and acquiring company. Brigham and Houston (1998) explained these types of merger as follows:

I. Horizontal Merger

It is a combination of two firms that produce the same type of good or service. A good example of horizontal merger is merger of banks in Indonesia in the monetary crisis era.

2. Vertical Merger

It is a merger between a firm and one of its suppliers or customers. An example of vertical merger is a steel producer's acquisition of one of its own supplier such as an iron or coal mining firm, or an oil producer's acquisition

of petrochemical firm which uses oil as a raw material. It is also said to be vertical merger when noodles producer acquires flourmill company.

3. Conglomerate Merger

It is a merger of companies in totally different field industries. Acquisition of food company by real estate company is one example of conglomerate merger in which these companies have different business.

4. Congeneric Merger

It is a merger of firms which is in the same general industry, where there are no customer or supplier relationship exists. An example of this kind of merger is acquisition that is conducted by IBM to Lotus Development Corporation .

2.2 Reasons for Merger

There are several reasons why companies decide to do a merger that are explained as follows :

1. Synergy

Synergy is the most dominant reason that justifies firms to execute merger. Synergy is defined as total valuation from the combination which is greater than the sum of the values of the component firm operating independently (Weston and Weaver, 2000)

According to Ross, Westerfield, and Jaffe (2002), synergy can rise from several sources as described as follows:

a. Revenue enhancement

One important reason for acquisition is that a combined firm may generate greater revenues than two separate firms. The increased revenues may come from marketing gains, strategic benefit, and market power.

1. Marketing Gains

It is frequently claimed that mergers and acquisitions can produce greater operating revenues from improved marketing. Improvements can be made in the following:

- Previously ineffective media programming and advertising efforts.
- A weak existing distribution network.
- An unbalance product mix.

2. Strategic Benefit

Some acquisitions promise a strategic advantage. This is an opportunity to take advantage of the competitive environment if certain situation occurs. In this regard, a strategic benefit is more like an option than a standard investment opportunity. For example, if a sewing machine company acquires a computer company. The firm will be well positioned if technological advances allow computer-driven sewing machines in the future.

3. Market or Monopoly Power

One firm may acquire another to reduce competition, so that prices can be increased and monopoly profit is obtained.

b. Cost Reduction

One of the most basic reasons to do merger is that combined firm may operate more efficiently than two separate firms. A firm can obtain greater

operating efficiency in several different ways through a merger or an acquisition

1. Economies of scale

Economies of scale is achieved if the average cost of production falls while the level of production increases. Although the precise nature of economy of scale is not identified, it is one obvious benefit of horizontal mergers. The phrase *spreading overhead* is frequently used in connection with economic scale. This refers to the sharing of central facilities such as corporate headquarters, top management, and large mainframe computer.

2. Economies of vertical integration

Operating economies can be gained from vertical combination as well as from horizontal combinations. The main purpose of vertical acquisition is to make coordination of closely related operating activities easier. This is probably the reason why most forest product firms that cut timber also own sawmills and hauling equipment.

3. Complementary resources

Some companies acquire others to make better use of existing resources or to provide the missing ingredient for success.

4. Elimination of inefficient management

There are firms whose value which could be increased with a change in management. For example, Jensen and Ruback as cited by Ross, Westerfield, and Jaffe (2002) argued that acquisition can occur because of changing technology or market conditions that require a restructuring of the corporation.

Incumbent managers in some cases do not understand changing conditions. They have trouble abandoning strategies and styles they have spent years in formulating.

c. Tax Gains

Tax gains may be a powerful incentive for some acquisition. The possible tax gains that can come from an acquisition are explained as follows:

1. The use of tax losses from net operating losses

A combined firm will pay lower taxes than separate firm and can take advantage from potential losses of acquired company.

2. The use of unused debt capacity

The cost of financial distress is likely to be less for the combined firm than separate firm. Thus the combined firm may have higher its debt equity ratio, creating additional tax benefit, and additional value.

3. The use of surplus fund

When company has surplus funds, they can reallocate it through several ways like paying dividend, repurchasing its share, or acquiring share of another firm. Paying dividend result in increasing tax that is usually avoided by shareholder, while repurchasing its own share solely to avoid tax reason is not legal option. Acquired share of another firm can avoid these problems because there is no tax at all paid on the dividend.

d. The cost of capital

The cost of capital can often be reduced when two firms have a merge because the cost of issuing securities are subject to economies of scale. The

cost of issuing both debt and equity is much lower in larger issues than in smaller issues.

2. Purchase of Assets Below Their Replacement Cost

In some cases, sometimes a firm becomes an acquisition candidate because the cost of replacing its assets is considerably higher than its market value. For example, in the early 1980s oil companies could acquire reserves cheaper by buying other oil companies than by doing exploratory drilling (Brigham and Houston, 1998).

3. Diversification

Several managers often state that diversification becomes a reason to do merger because they argue that diversification helps having stabilization of earnings, so it is benefit for the owners. Stabilization of earning is certainly beneficial to employees, supplier, and customers, but its value is less certain from the standpoint of stockholders (Brigham and Houston, 1998).

4. Break up Value

Firms can be valued based on book value, economic value, or replacement value. Break up value is a firm's value if its assets are sold off in pieces. Nowadays, takeover specialist has begun to recognize break up value as another basis for valuation . If this value is bigger than the firm current market value, then a take over specialist could acquire the firm at its current market value or above its current market value. Then they sell it off in pieces, so that they can earn a substantial profit (Brigham and Houston, 1998).

5. Managers' personal incentives

Generally, financial economist prefer to think that business decision is made based on only economic consideration especially maximization of firms' values. But reality, some business decision are based on more managers' personal motivations. For example there are some merger and acquisition are driven by manager's personal incentive rather than to maximize firm value. However, it is sensible that many people, including business leader, expect to run a larger corporation than a smaller one. It has been also observed that executive salaries are highly correlated with the company size, the bigger company is the bigger salary the manager will have (Brigham and Houston, 1998). According to Sudarsanam (1995), manager may undertake acquisition for several reasons as explained as follows:

1. to increase company size, because their income, bonus, status, and their authority increase as the increase of company size (syndrome empire building).
2. to arrange managerial ability which is not yet maximally used (self fulfillment motive).
3. to reduce risk and minimize financial cost distress and bankruptcy (job secure motive).
4. to avoid takeover.

2.3 Payment Method in Merger and Acquisition

Payment method is payment of merger and acquisition transaction between acquiring company and target. Acquirer can use various method of

payment to takeover business and select the method which gives the most advantages from cost and time perspectives. Moin (2002) mentioned that there are 4 kinds of payment method in merger and acquisition transaction

1. Cash

Using cash as a payment is often used, and it is the most preferable method for both acquirer and target. Acquirer transfers amount of cash to target shareholder as a substitute of stock or asset transfer. This method is used when a company has a lot of money which has been planned to fund the transaction. One of cash fund is reserve fund, it is a fund from accumulated retained earning

2. Liability

It is called leverage buyouts when acquirer uses cash as a payment method in the transaction, but the majority of cash comes from third parties (liability). In other words, acquisition payment uses liability and only small number is paid with cash from acquirer. In leverage buyouts acquirers can issue common or conversion obligation and they can borrow from other parties like bank or investment banker. Because the credit rate of acquisition transaction is very high, acquirer often sells part of target company asset to pay the liabilities. If acquirer issues conversion obligation, the holder has right to exchange with share in certain period or get back obligation principle in certain due date.

3. Stock

If acquirers do not have enough cash or the target shareholders want to keep their authorities in company, acquirers can use stock as payment of transaction. This method happens when target company stock swaps with stock of company after merging. The ratio of exchange is decided based on the stock price both bidder and target on agreement. This payment method can use common, preferred, or other kind of stocks. The advantage of this method is acquirer does not have to issue amount of cash, which would not affect acquirer cash.

4. Combination of cash, liabilities, and stock

This combination method can be used when acquirers do not have enough cash, or do not want to use stock entirely. It can also be used when acquirers do not want to use liability entirely to pay the transaction, in this case they can combine two or three payment methods. Acquirers can use cash and liability, cash and stock, liability and stock, or cash liability and stock as payment method. By using this method, acquirers do not have to use cash to pay all transaction.

2.4 Hostile versus Friendly Merger and Acquisition

Based on its process, merger can be differentiated into friendly or hostile. Friendly merger is a merger whose terms are approved by the managements of both companies, while hostile merger is a merger in which the target firm's management resists acquisition (Brigham and Houston, 1998). Melicher (http://www.isb.unizh/stadium/courses02/pdf/279_vortrag_melicher.pdf) described their features as follows:

1. Friendly Merger and Acquisition

1. One firm (usually the larger) decides to buy a firm, negotiates a price with the target firm's management, and then acquires the target firm.
2. Price is agreed upon and the terms of payment (cash, stock, bonds, or combination) is finalized.
3. Both management announce their agreement and the target firm's shareholder, then they are asked to "tender" (or send in) their shares to financial institution in exchange for the specified payment.

2. Hostile Merger and Acquisition

1. It Occurs when the target firm's management resists the takeover.
2. The acquiring firm still makes tender offer asking the target firm's shareholders to tender their shares for the specified payment.
3. However, the target firm's management will urge their shareholders not to tender their shares because the offering package is too low.
4. The target firm's management often initiates various defenses (e.g., share repurchase or selling a block of stock to a friendly investor).
5. The acquiring firm often responds with a proxy fight to elect a new slate of officers.

2.5 Pattern of Gains Related to Merger Theories

Merger is corporate strategy to enhance its value. According to Weston and Weaver (2001), the theories of merger can be summarized into 3 major explanations.

1. Synergy or efficiency, in which total value from the combination is greater than the sum of the values of the component firm operating independently.
2. Hubris is the result of the Winner's curse, which causes the bidder to overpay. It postulates that value is unchanged, of course in synergistic merger, it would be possible for the bidder to overpay as well.
3. The agency problem in which total value is decreasing as a result of mistakes or managers who put their own preferences above the firm necessity.

Table 2.1 performs a summary from the previous discussion.

Table 2.1 : Pattern of Gains Related to Merger Theories

Type	Total Value	Gains to Target	Gains to Acquirer
1. Efficiency or Synergy	+	+	+
2. Hubris (winner's curse over pay)	0	+	-
3. Agency Problem or Mistakes	-	+	-

Sources: Berkovitch and Narayan, 1993 as cited by weston and weaver, 2001.

It is clear that synergy only occurs when total value is increasing as the increasing value both bidder and target. It just likes win-win solution, in which no party will lose while other gain.

The success of merger and acquisition depend on how well the process is executed. Rappaport (1998) stated that there are 5 essential stages of merger and acquisition process as explained as follows:

1. Competitive analysis

The basic purpose of this stage is to identify synergetic interrelationships between the company's businesses and other businesses. This relationship represents opportunities to create a competitive advantage by reducing cost or enhance differences. If the synergy is truly distinctive, the acquisition candidate will be worth more to buy company than to either the selling shareholders or to other competing bidders who cannot exploit such synergies.

2. Search and screen

The main idea of this stage is to develop a list of good acquisition candidates. The search process focuses on how and where candidate may be found, while the screening process in values identifies a few of the best candidates that meet the established criteria such as company size, culture fit, current share of market and quality of management. Once the best apparent candidates have been identified, more detail analysis for each will be initiated.

3. Strategy development

This stage involves taking the synergistic interrelationship which develops in generic fashion in the competitive analysis stage. Then this stage also examining their implementation potential for each of the identified candidates.

4. Financial evaluation

This stage focuses on the following issues:

- What is the maximum price that should be paid for the target company?
- What are the principal areas of risk?
- What are the cash flow and balance sheet implications of the acquisition?

- What is the best way of structuring the acquisition?

5. Negotiation

Besides of the four steps explained above, according to Roger Fisher and William Ury as cited by Rappaport (1998), there are 4 basic rules to be obeyed to achieve success in negotiation.

- Separate the people from the problem

The “people problem” should be dealt separately, Because ego and emotion often get entangled with the substantive economic and organizational issues. The buying and selling company negotiators should be positioned to work together, attacking the problem, not attacking each other.

- Focus on interest, not positions

The object of the negotiations is to satisfy each party’s interests and but it doesn’t satisfy its negotiation position, which often obscures underlying interests.

- Invent option for mutual gain

To search a unique solution is dysfunctional. It develops a range of potential solutions that advance shared interests and serve as catalysts for creatively reconciling conflicting interests. For example, if there are irreconcilable differences concerning acquisition prices, an earn-out arrangement may well serve both the buyer’s and seller interest.

- Insist on using objective criteria

Rather than reaching an impasse or rewarding intransigence, it is better to discuss objective criteria (e.g., relative market value, expert opinions) by which an equitable agreement can be reached.

2.6 Event Study

The event study is designed to examine the effect of some event or set of events on the value of assets, the most common is using firm's stock prices (Dwyer, 2001 <<http://www.dwerecon.com/pdf/lecteven.pdf>). Tandelilin, (2001) performed methodology standards which are usually used in event study as explained as follows:

1. Collecting sample of companies that have announcement or some event in market. Price can be changed because of an event in market such as merger, stock spit, or earning announcement.
2. Deciding event date, usually announcement date used as event date.
3. Determining the event window. Observation period usually uses day as the event window. If the research uses 30 days around announcement day as the event window, so 15 days before announcement are sign with -15,-14,-13,...,-1 event date signed with 0, and 15 days after signed with +1, +2, +3,...,+15.
4. Calculating return of each sample everyday along observation period.
5. Calculating abnormal return. Abnormal return comes from actual return subtracted by expected return. Some researchers use equilibrium market model to calculate expected return, and some others use market index:

$$AR_{it} = R_{it} - E(R_{it})$$

where;

AR_{it} = abnormal return of stock I on day t

R_{it} = return of stock I on day t

$E(R_{it})$ = expected return of security I on period t using equilibrium model

6. Calculating average abnormal return all sample everyday. From the resulting data can be described the existing effect of event to changes' price along certain observation period.
7. Calculating cumulative abnormal return along certain period. one example is calculation of cumulative abnormal return for 15 days before and 15 days after event date, and then comparing the result of calculation between before and after event date.
8. Analyzing and discussing the result. The resulting data can be described and then concluded effect of announcement on changing price.

2.7 The Capital Market Efficiency

In observing synergy effects from merger and acquisition, most researchers refer to market reaction of merger and acquisition announcement, with assumption capital market is efficient. Efficient capital market means that security prices reflect all relevant information (Husnan, 2001). Fama (1970) as cited by Husnan (2001) classified the information into past price changes, public information, and public and private information. The way of the market reflects those information can be seen in the levels of capital market efficiency below.

1. Weak form efficiency, in which prices fully reflect all information contained in past prices. In this condition, an investor can not get excess return by using trading rules based on the past price information.
2. Semi strong efficiency, in which prices fully reflect the past prices and also all available public information. It means that the investor can not earn excess return by using available public information.
3. Strong form efficiency, in which security prices fully reflect all information both public information and information which come from fundamental analysis about firm and economics. Thus, there will be no investor who gets a better security price estimation, because the price is always real.

2.8 Previous study

There are some previous researches which are related to merger and acquisition and its impact to shareholder wealth.

1. Davidson III, Cheng and Chhachhi (1993)

They conducted a research on merger synergy and relative size of bidder and target. They researched 167 pairs of bidders and targets in 1983-1987. They observed 200 days from day -290 to day -90. Day 0 was defined as the date of merger which was firstly announced. They classified bidder that represented 60% or more of the portfolio's total value as large bidder sample. Those less than 40% were categorized as small bidder.

Based on their results, there are several conclusion as explained as follows:

1. 57.5% of the portfolios gain in value, while 42.5% of the portfolios do not gain. Half of the portfolios that gain in value (28.7% of the total sample) really create synergy in which both bidders and targets obtain positive returns.
2. 10.2% of the total sample, both bidders and targets suffer loss.
3. There is 61.1% of transfer of wealth that generally goes from bidder to target.
4. The size difference between bidders and targets affects overall portfolio results and the synergy of the merger.

2. Sirower (1998)

Sirower examined 168 acquisitions during 1979 to 1996, in which the acquired firm was at least 10% of the size of the bidder. Based on his research, there were some findings which can be explained as follows:

1. On average acquisitions destroyed the shareholder value of acquiring firm, in which there were about 2/3 of the companies suffering significant value destruction firm whereas about 1/3 of the acquisition actually created value.

3. Sudarsanam, Holl, and Salami (1996)

They investigated the impact of synergy between bidders and targets, and their ownership structure on the returns to shareholders of 429 completed UK acquisitions during 1980-1990. They focused \pm 40 days around the announcement date.

Their research confirmed these following results:

1. The CAR pattern of their research suggested that period day -20 to day + 40 captured all of the value changes relating to the sample bids. Therefore, they used the CARs over that period as a measurement the wealth gained to shareholders. Over this period, bidder shareholders earned -4.04 %, whereas Target shareholder experienced a CAR of 29.18%, both significantly at 1%.
2. There was a wealth transfer from bidder to target shareholder since targets gain and bidder got lose. It has been demonstrating that bidders have overpaid their acquisition.
3. There were synergy from operational, financial, and managerial that create value for shareholders either bidder or target, or even both. A combination of complementary resources and growth opportunities increased shareholder wealth for bidder and target

2.9 Hypothesis Formulation

Hypotheses of this research are designed as follows:

H₁ : Merger and acquisition positively effect shareholder wealth of acquiring company

H₂ : Shareholder wealth of acquiring company is increasing after merger and acquisition

CHAPTER III

RESEARCH METHOD

3.1 Research Method

This research applies the event study methodology. The event study is designed to examine the effect of some events or set of events on the value of assets, the most common are using firm's stock prices (Dwyer, 2001). This research observes stock price to find abnormal return as a measurement of wealth creation from merger and acquisition.

3.2 Research Subject

The subject of this research is several companies listed on The Jakarta Stock Exchange that announced merger and acquisition during 1999 to May 2003.

3.3 Research Setting

This research uses the Jakarta stock exchange corner at Universitas Islam Indonesia as the representative of the Jakarta stock exchange in Jakarta as the setting of this research. The activity of the JSX corner provides all information during research time.

3.4 Research instrument

3.4.1 Data Collection

Data collection is executed by seeking the secondary data that is available from data sources in the faculty of economics library of UII Jogjakarta, JSX corner at Economic Faculty of UII.

Data collection and its source taken in this study are described as follows:

1. Several companies that conducted merger and acquisition are gathered from www.jsx.co.id, Bisnis Indonesia daily newspaper.
2. Announcement date which is collected from Bisnis Indonesia daily newspaper.
3. Daily stock price which is collected from JSX corner at UII Jogjakarta .
4. CSPI is gathered from JSX corner at UII Jogjakarta.

3.4.2 Population and Sample

The population in this study is several companies that conducted merger and acquisition during 1999- May 2003. The samples of this study are those companies which fulfilled several criteria applied in this study as explained as follows:

1. The acquiring companies are listed in JSX before January 1999 until May 31, 2003.
2. The announcement data is publicly available.

After the selection process, there are only 21 companies that pass the criteria made by researcher.

3.4.3 Period of Observation

The period observation of this research is 20 days before and 20 days after the merger and acquisition announcement. This period of observation is relevant enough to capture all effects on stock price of the event.

3.5 Research variables

Variables used in this research are return, abnormal return, average abnormal return, and cumulative average abnormal return. The definition of those variables are explained as follows:

1. Return

Return is a gain from investment. It can be classified into actual return or expected return. Actual return is return that really happens on stock I at day t . Expected return represents the return that would be expected if no event took place (Weston and weaver, 2001).

2. Abnormal return

Abnormal return is different between expected return and actual return (Weston and weaver, 2001).

3. Average abnormal return

Average abnormal return represents sum of abnormal return of stock I on day t divided by total sample. It represents the average of abnormal return of all stock in certain time (Weston and weaver, 2001).

4. Cumulative average abnormal return .

Cumulative average abnormal return is total average abnormal return for certain period observation. It represents the average total effect of the event across all firms over a specified time interval (Weston and Weaver, 2001).

3.6 Analysis Steps

The analysis steps to organize this research are described as follows:

1. Identification of event date. The event date is defined as the intention date of the merger and acquisition which are first announced publicly.
2. Determining the event window. The event window is 20 days before and 20 days after the event date.
3. Obtaining data of the daily stock price and CSPI.
4. Doing hypotheses testing.
5. Analyzing and interpreting the data found from statistical test.
6. Making conclusions and stating any other findings.

3.7 Hypotheses Testing

Hypotheses testing is done by using Excel program for windows.

3.7.1 Examining Hypothesis 1

There are several steps in examining hypothesis 1 which are described as follows:

1. Calculating stock actual return :

$$R_{it} = \frac{(P_{it} - P_{it-1})}{P_{it-1}}$$

R_{it} = return of stock I on day t

P_{it} = price of stock I on day t

P_{it-1} = price of stock I on day t-1

2. Calculating daily market return :

$$R_{mt} = \frac{(CSPI_t - CSPI_{t-1})}{CSPI_{t-1}}$$

R_{mt} = market return

CSPI = Composite Stock Price Index on day t

$CSPI_{t-1}$ = Composite Stock Price Index on day t-1

3. Calculating Abnormal Return :

$$AR = R_{it} - R_{mt}$$

AR = Abnormal Return

R_{it} = return of stock I on day t

R_{mt} = market return

- 4 Calculating mean abnormal return stock I on day t :

$$AAR_{nt} = \frac{\sum^n AR_{it}}{n}$$

AAR_{nt} = mean abnormal return of stock I on day t

AR_{it} = abnormal return of stock I on day t

n = number stock being observed

5. Calculating cumulative average abnormal return :

$$CAAR_m = \sum_{t=-20}^{t=+20} AR_{mt}$$

$CAAR_m$ = cumulative average abnormal return

AR_{mt} = abnormal return of stock on t period

6. Calculating the significant of abnormal return :

$$t = \frac{AAR_t}{SPE_t}$$

t = t- statistic

SPE_t = standard prediction error on day t

7. Calculating standard Prediction Error of stock I on day t :

$$SPE = \sqrt{\sum_{i=1}^k \frac{(AR_{it} - AAR)^2}{k-1}} \times \frac{1}{\sqrt{k}}$$

SPE = standard prediction error stock I on day t

AR_{it} = abnormal return of stock I on day t

k - number of companies

8. Stating the null and alternative hypothesis :

H_0 : $AR \leq 0$, Merger and acquisition do not effect shareholder wealth of acquiring company

H_a : $AR > 0$, Merger and acquisition positively effect shareholder wealth of acquiring company

9. Selecting the significant level at 0.05 :

10. Stating the decision rule :

Ho will be accepted if t statistic < t table or Ho will be rejected if t statistic > t table

Ho will be accepted if P > 0.05 or Ho will be rejected if P < 0.05

3.7.2 Examining Hypothesis 2

Several steps are conducted to examine hypothesis 2 as described as follows:

1. Calculating mean abnormal returns all stock of sample. Then categorizing mean abnormal return into 2 groups, mean abnormal return before and after announcement day, and omitting day 0 (event date).

$$AAR_{before} = \frac{\sum_{i=-20}^{i=-1} AR_{before}}{n}$$

$$AAR_{after} = \frac{\sum_{i=+1}^{i=+20} AR_{after}}{n}$$

2. Calculating standard prediction error of abnormal return before and after announcement day.

$$\sigma_{before} = \sqrt{\frac{\sum_{i=-20}^{i=-1} AR_{before} - AAR_{before}}{(n-1)}}$$

$$\sigma_{after} = \sqrt{\frac{\sum_{i=+20}^{i=+1} AR_{after} - AAR_{after}}{(n-1)}}$$

3. Calculating t statistic at 0.05 level of significant.
4. Stating the null and alternative hypothesis.

Ho: $AAR_{after} \leq AAR_{before}$, shareholder wealth of acquiring company does not increase after merger and acquisition

Ha: $AAR_{after} > AAR_{before}$, shareholder wealth of acquiring company increases after merger and acquisition

5. Stating the decision rule.

Ho will be rejected if t statistic > t table or contrary

Ho will be accepted if $P > 0.05$ or Ho will be rejected if $P < 0.05$

Chapter IV

Research Findings and Discussion

4.1 Research Description

In general, merger and Acquisition are the combination of two or more companies into one larger company. Many firms set mergers as their main strategic tool for grow, succeed, and achieve better efficiency in managing assets. Briefly, the essence objective of merger and acquisition are to enhance shareholder wealth through firm value creation. This research is conducted to examine the effect of merger and acquisition on shareholder wealth of acquiring company.

The population of this research is several companies that conducted merger and acquisition during 1999 – May 2003. After the selection process, there are only 21 companies that passed criteria made by researcher. This research uses event study by observing stock price around the announcement day to find abnormal return as a measurement of wealth creation from merger and acquisition. The market reaction to merger and acquisition announcement is a good predictor of subsequent performance. The period observation is 20 days before and 20 days after the announcement day.

4.2 Research Findings and Discussion

This research examines the effect of merger and acquisition on shareholder wealth of acquiring company by observing behavior of abnormal return around

announcement day. Merger and acquisition announcement may have positive or negative effect, they depends on how market responds them. There are two hypotheses that will be examined in this research. Excel for window is used in this statistic testing.

4.2.1 Examining Hypothesis 1

Hypothesis 1 on this research is to examine whether merger and acquisition positively effect shareholder wealth of acquiring company. Sample used to test hypothesis 1 is 21 stocks passed criteria. Output of abnormal return calculation is presented on appendix 2. Then, the following steps are calculation of average abnormal return and cumulative average abnormal return, in which output is presented on table 4.1.

Table 4.1: The Result of Calculation AAR and CAAR

DAY	AAR	CAAR
-20	0,00719	0,00719
-19	-0,00793	-0,00074
-18	0,00606	0,00532
-17	-0,02788	-0,02256
-16	-0,00579	-0,02835
-15	0,01449	-0,01386
-14	-0,00703	-0,02088
-13	-0,00865	-0,02953
-12	0,00100	-0,02853
-11	-0,02202	-0,05054
-10	0,02273	-0,02781
-9	0,01737	-0,01045
-8	0,00452	-0,00593
-7	0,00443	-0,00151
-6	-0,00661	-0,00812
-5	0,00747	-0,00065
-4	0,00471	0,00406
-3	0,00914	0,01320

-2	-0,01104	0,00216
-1	0,02639	0,02855
0	0,00637	0,03492
1	0,01290	0,04782
2	0,01916	0,06698
3	0,01652	0,08350
4	0,01274	0,09624
5	0,03674	0,13298
6	0,02043	0,15341
7	0,02876	0,18217
8	0,00129	0,18346
9	0,00078	0,18424
10	-0,00722	0,17702
11	-0,01164	0,16538
12	0,00757	0,17294
13	0,00198	0,17492
14	0,00239	0,17731
15	-0,00681	0,17050
16	-0,01271	0,15779
17	0,01112	0,16891
18	0,02952	0,19842
19	0,00592	0,20434
20	-0,02363	0,18071

To get obvious illustration the movement of AAR and CAAR, following figures are presented:

Figure 4.1 : Average Abnormal Return of Acquiring Company Around Announcement Day

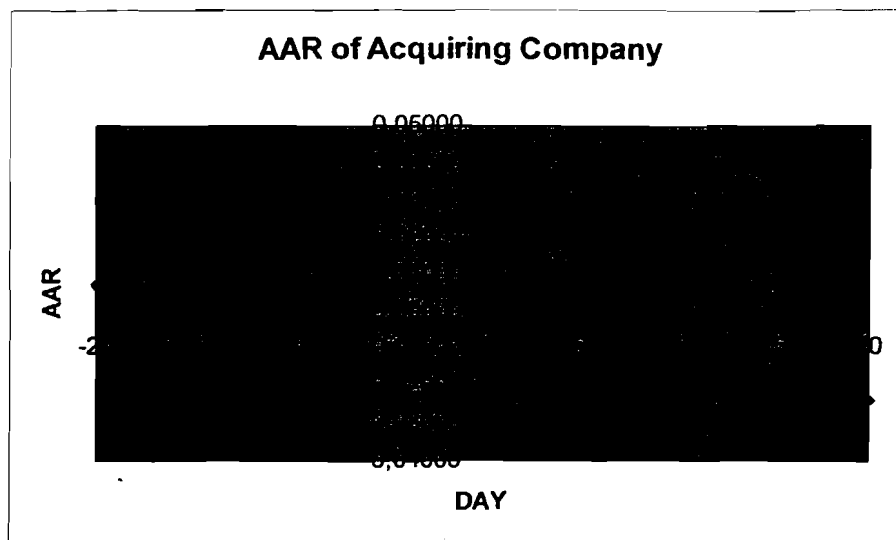


Figure 4.2 : Cumulative Average Abnormal Return of Acquiring Company Around Announcement Day

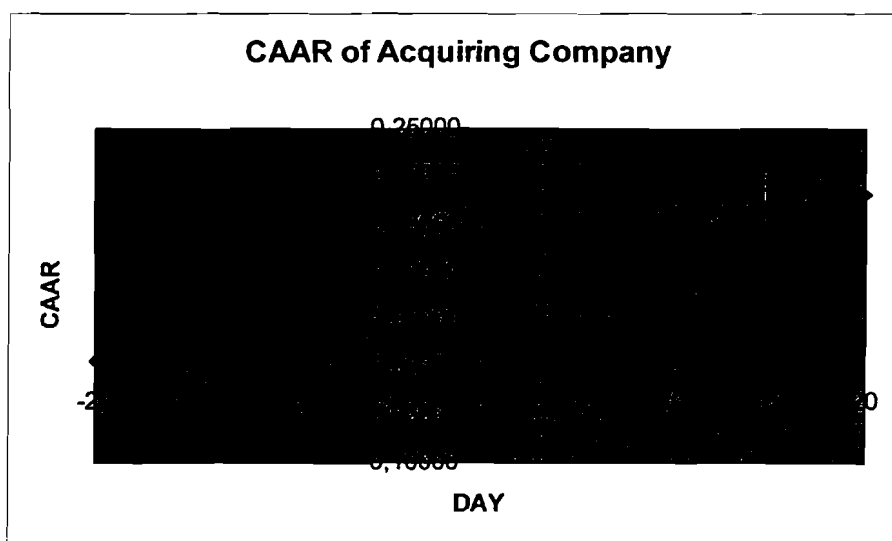


Table 4.1 shows that there are more AAR with positive value than AAR with negative value. In 41 days observation, there are 28 days which indicate a

positive value of 68,293%, and the rest 13 days have negative value of 31,708%, and no 0 (zero) value comes up. AAR positive and AAR negative are spread over observation days either before or after announcement day. Before announcement day, there are 8 days in which value is negative. Meanwhile, after the announcement, there are 5 days which value is negative. In a glance, they indicate that strategy merger and acquisition bring good news more than negative news for shareholder.

As it is shown on figure 4.2, AAR around announcement day is very fluctuating drawn by arbitrary pattern. AAR with highest value achieved on day +5 i.e 0,03674, whereas the lowest one happens on day -17 i.e -0,02788. The increasing of AAR significantly happens on day -10 i.e 0,04475 and day -1 i.e 0,03743.

AAR cumulatively keeps rising, CAAR continuously shows positive value starts on day -4 and after that there is no negative value. Figure 4.3 points out that CAAR draws the increasing line regularly.

In general, shareholder gains increasing wealth, since there are many AAR with positive value around announcement day and CAAR value that continuously have positive value. However, statistic testing is needed to examine the level of its accuracy, whether AR outcome around announcement of merger and acquisition are significant or not.

Hypothesis testing uses abnormal return all stock for 41 days observation, i.e 20 days before, day 0 and 20 days after the announcement day. The result of statistic testing is presented on table 4.2.

Table 4.2: Result of Statistic Testing of Hypothesis 1

Test of $\mu = 0$ vs $\mu > 0$

Day	N	Mean	Std. Deviation	Std. Error Mean	95%Lower Bound	T	P
t-20	21	0,00719	0,03807	0,00831	-0.00714	0.87	0.198
t-19	21	-0,00793	0,03348	0,00731	-0.02053	-1.09	0.855
t-18	21	0,0061	0,0470	0,0103	-0.0116	0.59	0.281
t-17	21	-0,02788	0,04074	0,00889	-0.04321	-3.14	0.997
t-16	21	-0,00579	0,02805	0,00612	-0.01634	-0.95	0.822
t-15	21	0,0145	0,0544	0,0119	-0.0060	1.22	0.118
t-14	21	-0,00703	0,04273	0,00933	-0.02311	-0.75	0.770
t-13	21	-0,00865	0,03816	0,00833	-0.02301	-1.04	0.844
t-12	21	0,00100	0,03977	0,00868	-0.01397	0.12	0.455
t-11	21	-0,0220	0,0524	0,0114	-0.0417	-1.93	0.966
t-10	21	0,0227	0,0998	0,0218	-0.0148	1.04	0.155
t-9	21	0,0174	0,0607	0,0132	-0.0055	1.31	0.102
t-8	21	0,00452	0,01996	0,00435	-0.00299	1.04	0.156
t-7	21	0,00443	0,02246	0,00490	-0.00403	0.90	0.189
t-6	21	-0,00661	0,02504	0,00546	-0.01604	-1.21	0.880
t-5	21	0,00747	0,03881	0,00847	-0.00713	0.88	0.194
t-4	21	0,00471	0,03310	0,00722	-0.00775	0.65	0.261
t-3	21	0,00914	0,03559	0,00777	-0.00426	1.18	0.127
t-2	21	-0,01104	0,02585	0,00564	-0.02077	-1.96	0.968
t-1	21	0,0264	0,0470	0,0103	0.0087	2.57	*0.009
t=0	21	0,0064	0,0828	0,0181	-0.0248	0.35	0.364
t+1	21	0,0129	0,08889	0,0194	-0.0206	0.67	0.257
t+2	21	0,0192	0,0621	0,0135	-0.0042	1.41	**0.086
t+3	21	0,0165	0,1017	0,0222	-0.0217	0.74	0.233
t+4	21	0,0127	0,1325	0,0289	-0.0371	0.44	0.332
t+5	21	0,0367	0,1124	0,0245	-0.0056	1.50	**0.075
t+6	21	0,0204	0,1204	0,0263	-0.0249	0.78	0.223
t+7	21	0,0288	0,1103	0,0241	-0.0128	1.19	0.123
t+8	21	0,00129	0,02410	0,00526	-0.00778	0.25	0.404
t+9	21	0,00078	0,04192	0,00915	-0.01499	0.09	0.466
t+10	21	-0,00722	0,02803	0,00612	-0.01777	-1.18	0.874
t+11	21	-0,0116	0,0507	0,0111	-0.0307	-1.05	0.848
t+12	21	0,0076	0,0619	0,0135	-0.0157	0.56	0.291
t+13	21	0,0020	0,0506	0,0110	-0.0170	0.18	0.430
t+14	21	0,00239	0,02407	0,00525	-0.00667	0.45	0.327
t+15	21	-0,00681	0,02687	0,00586	-0.01693	-1.16	0.871
t+16	21	-0,01271	0,03858	0,00842	-0.02723	-1.51	0.927
t+17	21	0,0111	0,0461	0,0101	-0.0062	1.11	0.141
t+18	21	0,0295	0,1110	0,0242	-0.0123	1.22	0.119

t+19	21	0,0059	0,0756	0,0165	-0.0225	0.36	0.362
t+20	21	-0,0236	0,0547	0,0119	-0.0442	-1.98	0.969

* Significant level at 5% t-Table = 1.725

** Significant level at 10% t-Table = 1.325

Based on statistic test output on table 4.2, this indicates that positive abnormal return with significant level at 5% only appears on day -1 ($P = 0.009$, $T = 2.57$). It can be an indication that shareholder of acquiring company may get transfer assurance information of merger and acquisition announcement 1 day before event date. While positive abnormal return with significant level at 10% can be found on day +2 ($P = 0.086$, $T = 1.41$) and day +5 ($P = 0.075$, $T = 1.50$). This result shows that announcement of merger and acquisition bring good news. It indicates that market players predict that there will be synergy from merger and acquisition activity. Hopefully, performance of acquiring company will be better in the next session. So that, H_a which states that announcement of merger and acquisition significantly give positive effect to shareholder wealth of acquiring company is accepted and H_o fails to reject H_a .

4.2.2 Examining Hypothesis 2

Hypothesis 2 of this research is to examine whether shareholder wealth of acquiring company increases after merger and acquisition. Hypothesis testing begins with calculate average abnormal return all stock of sample. Then, it categorizes them into 2 groups, average abnormal return 20 days before and average abnormal return 20 days after merger and acquisition , and omit day 0 (event date). The result of statistic testing of hypothesis is showed on table 4.3 which uses Excel for Windows.

Table 4.3: Result of Statistic Testing of Hypothesis 2

Two sample T for after Vs before

	Mean	N	Std. Deviation	Std. Error Mean
After	0,0073	20	0,0155	0,0035
Before	0,0014	20	0,0138	0,0031
Difference = mu after – mu before				
Estimate for difference: 0.00586				
95% lower bound for difference : -0.00196				
T-test of difference = 0 (vs >): T-value = 1.26 P-value = 0.107 DF = 38				
Both use pooled StDev = 0.0147				

Statistic test result on table 4.3 shows T-value = 1.26 and P-value = 0.107, it indicates that there is no significant different of AAR before and after announcement day. Thus, it can be concluded that H_a states that shareholder wealth of acquiring company increases after merger and acquisition is rejected. Since there is no significant different AAR before and after announcement of merger and acquisition, it indicates that the stock exchange players give same reaction according to announcement of merger and acquisition. This condition is presented on figure 4.3 in which increasing and decreasing of AAR are very fluctuating. It may also become an indication that information about merger and acquisition have been known publicly before announcement day, since CAAR has increased starts on day -10 as it is shown on figure 4.3. If the result of hypothesis 2 is connected with result of hypothesis 1, so it makes sense that shareholder wealth of acquiring company increases, but statistically not different between before and after merger and acquisition announcement.

4.2.3 Research Discussion

Statistic test output shows that market react positively around merger and acquisition announcement. This is a positive prediction that merger and acquisition will create synergy, in which company's performance will be better after merger.

Expectation of synergy to be materialized depends on many circumstances behind merger and acquisition decision, like reasons and objectives of merger and acquisition. Efficiency is the most dominant reason they reveal. Maximizing product capacity and joint facilities utilization will minimize cost, so it can produce cheaper product. It can increase competitiveness, market share, and strengthen market position. The increasing of production capacity will increase customer and supplier faith. Merger and acquisition can eliminate certain taxes because transaction of companies before merger, so the utilization of financial more efficient, in which this can increase cash flows performance of combine company. In some cases, they conduct merger to decrease dependence of material from third parties, to get trained and expert employees, or to acquire product facilities and access to market quickly because it needs long time to built from beginning.

Culture also has important influence in synergy achievement. Cultural fit leads into easier integration, while great culture differences or the opposite culture will hamper integration. Location of both bidder and target in Indonesia at least give influence same cultures, norms, and laws that support integration. The other way, the differences of system, procedures, and policy of each company need cost

and enough time to be adapted. Of course, there is no company that has same characteristic, so ego and personal interest must be eliminated. They should more focus on company's goal.

Other inherent risks which can hamper synergy are high cost in short term after merging, several problems that may rise because of uncertainty of economic and politic condition, and employee status solution. Employee status is crucial problem that needs to be solved prudently. Most of companies set target employee as employee of merging company and their right will be fulfilled. However, there are some companies that select their employees by using an objective valuation, so there will be dismissal of employee with compensation in conformity with law.

Chapter V

Conclusions, Implications, Weaknesses, and Recommendation

5.1 Research Conclusions

Based on the statistical test and analysis described in the earlier chapter, several conclusion are drawn as follows:

1. AAR value very is fluctuating before and after announcement day, and there is no AAR with 0 (zero) value appears. Number of AAR with positive values are excessive than ARR with negative value, for 41 days observation period 68,293% has positive value and the rest are negative. They indicate that merger and acquisition announcement tend to bring good news for shareholder of acquiring company.
2. CAAR value experience keeps increasing from day -10. Moreover, it is always positive from day -4 until the end of observation period. This is an indication that shareholder of acquiring company obtains addition wealth cumulatively around announcement day.
3. The result of hypothesis 1 shows that positive AR with significant level at 5% presents on day -1 and AR with significant level 10% presents on day +2 and day +5. This shows that market catches good news, in which market predicts that there will be synergy from merger and acquisition activity, and hopefully company's performance will be better after merger and acquisition. So, it can be concluded that merger and acquisition positively affect the shareholder wealth of acquiring company.

4. Statistic test for hypothesis 2 has proven that there is no significant difference of AAR before and after merger and acquisition, so alternative hypothesis that states shareholder wealth of acquiring company increases after merger and acquisition is rejected. This points out that market gives same reaction before and after announcement day.
5. Based on the result of hypothesis testing 1 and hypothesis 2, they indicate that shareholder wealth of acquiring company increases, but it is not statistically different between before and after announcement day. This condition may rise because the information of merger and acquisition have been known by public before the announcement day. This is indicated by value of AAR that is very fluctuating before and after event date, and also value CAAR that starts rising before announcement day. The positive AR with significant level at 5% can be an indication that public gets assurance information of merger and acquisition announcement 1 day before event date.
6. Expectation of synergy to be materialized effected by reasons and objectives of merger and acquisition. Efficiency of both operational and financial is the most dominant reason. Beside that, culture has important role in integration process. Culture fit will smooth integration, but different and opposite culture will hamper integration. There are always inherent risks that can hamper synergy like emerging cost because of merger, uncertainty of future condition, and employee status solution.

5.2 Research Implications

There are several results of this research which give implementation as explained as follows:

1. This research shows that announcement of merger and acquisition bring good news, in which market predicts that there will be synergy from merger and acquisition activity and hopefully company's performance will be better after Merger. It can be an input for manager, CEO or decision maker to make merger and acquisition as one alternative to expand their business to be more efficient and competitive.
2. For investor and shareholder, this can be a consideration as an opportunity to invest by seeing that announcement merger and acquisition positively effect shareholder wealth.
3. For market players, they have to be more careful to hold transaction around announcement day because stock price is very fluctuating on that period. If they are not smart to predict situation, they can suffer lose.

5.3 Research weaknesses

However, this research still contains many weaknesses that are described as follows:

1. This research only analyzes the effect of merger and acquisition on sort term. A question whether merger and acquisition give positive or negative effect, in long term, still cannot be proved yet.
2. This research only focuses on shareholder of acquiring company.

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APPENDICES

Appendix 1

**List of companies that have conducted merger and acquisition for
period 1999 until may 2003**

No	Date	Code	Acquiring	Target
01	15 Nov 1999	BATI	PT BAT Indonesia Tbk	PT Rothmans of Pall Mall Indonesia
02	20 Nov 1999	DYNA	PT Dynaplast Tbk	PT Sanpak Unggul
03	24 Dec 1999	BDMN	PT Bank Danamom Indonesia Tbk	PT Bank PDFCI Tbk
04	13 Jan 2000	RMBA	PT Trasindo Multi Prima Tbk	PT Bentoel Prima PT Lestari Putra Wirasejati
05	17 Apr 2000	BDMN	PT Bank Danamon Indonesia Tbk	PT Bank Duta Tbk PT Bank Rama Tbk PT Bank Tamara Tbk PT Bank Tiara Asia Tbk PT Bank Nusa Nasional Tbk PT Bank Pos Nusantara PT Jaya Bank International PT Bank Risdjad Salim International
06	4 July 2000	INTP	PT Indocement Tunggal Prakarsa Tbk	PT Indo Kodeco Cement PT Indocement Investama
07	10 Oct 2000	SULI	PT Sumalindo Lestari Jaya Tbk	PT Nityasa Mandiri
08	27 Oct 2000	SIPD	PT Sierad Produce Tbk	PT Anwar Sierad Tbk PT Sierad Feedmill PT Sierad Grains
09	8 Nov 2000	STTP	PT Siantar Top Tbk	PT Saritama Tunggal
10	10 Nov 2000	DSFI	PT Dharma Samudra Fishing Industries Tbk	PT Tirta Artamina
11	29 Nov 2000	SMAR	PT Smart Tbk	PT Inti Gerak Maju
12	16 Jan 2001	TINS	PT Timah Tbk	PT Indotambang Raya Megah PT Ganda Upayatama
13	6 Feb 2001	INTP	PT Indocement Tunggal Prakarsa	PT Dian Abadi Santosa
14	02 Apr 2001	BASS	PT Bahtera Adimina Samudra Tbk	PT Intergalaxy Deltafies Sheries PT Megah Galaxy

15	06 Feb 2002	GGRM	PT Gudang Garam Tbk	PT Karyadibya Mahardhika
16	22 Apr 2002	BLTA	PT Berlian Laju Tanker Tbk	PT Banyu Laju Shipping
17	01 May 2002	SRSN	PT Sarasa Nugraha Tbk	PT Sarasa Mitratama
18	13 May 2002	IMAS	PT Indomobil Sukses Makmur International Tbk	PT Indosentral Binatrada PT Sumber Artha Perdana
19	27 May 2002	BDPC	PT Bank Danpac Tbk	PT Bank Pikko Tbk
20	28 Aug 2002	BNLI	PT Bank Bali Tbk rename to Bank Permata	PT Bank Universal Tbk PT Bank Prima Express PT Bank Arthamedia PT Bank Patriot
21	14 Mar 2003	BYSB	PT Bayer Indonesia Tbk	PT Aventis Cropscience Indonesia

Appendix 2

List of abnormal return

DAY	BATI	DYNA	BDMN	RMBA	BDMN	INTP
-20	0,02589	0,01178	-0,01307	-0,01703	0,00282	-0,02137
-19	-0,05501	0,00471	0,0227	-0,00362	-0,00162	-0,0052
-18	-0,00133	0,00352	-0,00168	0,00518	-0,00679	0,02457
-17	-0,05487	-0,00245	-0,02354	-0,02829	-0,15656	-0,0408
-16	0,01996	-0,02758	-0,00145	-0,00615	0,01011	-0,02214
-15	0,01178	-0,00205	-0,02519	0,00901	0,18635	0,00397
-14	0,00471	0,00114	-0,14277	0,01189	0,00146	0,01611
-13	0,02984	-0,01545	0,00438	-0,01133	-0,15893	-0,02391
-12	-0,00245	-0,05175	0,14394	-0,01676	-0,00647	-0,0248
-11	-0,02758	0,04338	-0,14203	-0,00634	-0,00597	0,0256
-10	-0,00205	0,04902	-0,00362	-0,00768	-0,00501	-0,01399
-9	0,00114	0,03327	0,14804	-0,02289	0,2142	-0,00892
-8	-0,01545	-0,00014	-0,02829	0,00611	0,02121	0,00828
-7	-0,02472	0,00066	-0,00615	0,00345	0,01177	-0,01018
-6	-0,01218	-0,0187	0,00901	-0,00302	-0,01176	-0,00867
-5	-0,00361	0,0235	0,01189	-0,03442	0,0021	0,00317
-4	-0,01673	0,10972	-0,01133	0,03161	-0,00022	-0,01607
-3	-0,00014	0,08551	-0,01676	-0,01539	0,00878	0,00277
-2	0,00066	-0,01204	-0,00634	-0,01087	-0,00066	-0,02763
-1	0,00511	0,00519	0,11732	0,00839	0,01472	0,13813
0	0,27184	0,00496	-0,134	-0,0021	-0,11723	-0,06351
1	0,38353	-0,0414	0,00611	0,00104	0,0019	0,0201
2	-0,01242	-0,01227	0,12845	0,23178	0,00371	-0,00188
3	-0,10931	-0,00377	-0,00302	0,42526	-0,00018	0,01037
4	0,13754	0,00966	-0,25664	0,50763	-0,00846	-0,00642
5	0,04392	-0,02174	0,03161	0,44183	0,22224	-0,00816
6	0,0186	-0,00168	-0,01539	0,49565	-0,17637	-0,00831
7	0,13028	-0,02354	0,13199	0,46857	0,00469	0,00846
8	0,01845	0,06832	0,00839	0,01045	-0,00981	-0,01972
9	-0,01307	0,01829	-0,0021	0,00996	0,00404	-0,00682
10	0,0227	0,00306	0,00104	-0,00197	-0,01267	-0,01541
11	-0,00168	-0,01603	-0,14322	0,01548	-0,00764	-0,02843
12	-0,02354	0,02191	0,02526	-0,00268	-0,00683	-0,01771
13	0,02128	-0,01703	0,1862	0,03067	-0,01233	-0,05687
14	0,03037	-0,00362	-0,02158	0,02153	-0,00865	-0,02321
15	-0,01777	-0,01523	0,00815	-0,01778	0,00483	0,03157
16	-0,04825	-0,02829	-0,11301	-0,03368	-0,00104	-0,01097
17	0,0233	0,01468	0,01045	-0,00225	0,03473	-0,00501
18	0,17862	-0,0114	0,00996	0,4718	0,00439	0,00075
19	0,1782	0,03272	-0,00197	-0,09879	-0,18017	0,03049
20	0,00518	-0,03174	-0,12738	-0,19098	0,03604	-0,02879

SULI	SIPD	STTP	DSFI	SMAR	TINS
-0,00795	0,07776	-0,07102	0,00757	-0,00991	0,00698
0,01781	-0,05566	0,00142	-0,00708	0,00342	0,01494
0,02485	0,06108	-0,01831	-0,00101	-0,0739	-0,02991
-0,07317	-0,02952	0,00055	-0,02909	-0,01326	0,00295
-0,05796	-0,02091	-0,0087	-0,0027	-0,01389	-0,02825
0,09806	0,07486	-0,01382	-0,00998	-0,01198	-0,00575
-0,10329	0,00448	0,00118	0,01343	0,01081	0,03581
0,00399	-0,02428	-0,01387	0,00685	-0,01304	-0,0082
-0,00364	0,04757	0,00568	0	0,00774	-0,00056
-0,17646	-0,03858	0,00685	0,0107	-0,00485	-0,02079
0,45222	0,00947	0	0,00559	-0,00484	-0,02167
0,00418	0,00055	0,0107	0,02838	0,00415	-0,02707
-0,01315	-0,0087	0,00559	-0,00305	-0,00998	0,06858
-0,01399	0,02785	-0,0241	0,01866	-0,00136	0,03636
-0,02588	-0,03882	-0,00305	0,01268	0,00182	0,05569
-0,01452	0,0278	-0,00991	-0,01376	0,09299	-0,04799
0,02076	-0,03432	0,00342	0,00526	0,02485	-0,00541
-0,02492	0,00685	-0,00459	-0,02298	-0,05813	0,05158
-0,08643	0	-0,01326	-0,00281	0,00684	-0,00932
0,01572	0,05237	-0,00643	0,02899	0,08996	0,00563
0,0059	0,00559	0,02506	0,00482	0,00384	0,00911
0,00142	0,01876	0,05367	-0,05366	-0,0092	-0,01537
0,00947	-0,00305	-0,02674	0,0045	0,03165	-0,00405
0,08626	-0,00991	0,00774	0,01644	-0,0055	0,0115
-0,06133	0,00342	-0,00485	0,00415	-0,03059	-0,01543
0,01396	0,03541	-0,01134	-0,00998	-0,01456	-0,01149
-0,02585	-0,05172	0,00415	-0,00297	-0,02312	0,03096
-0,02776	-0,01389	-0,00998	-0,00735	-0,01977	-0,00039
-0,03657	-0,01198	-0,01223	0,00398	0,04354	0,00082
-0,03727	0,01081	0,00368	-0,01337	0,01494	-0,00743
-0,01824	-0,01304	0,00398	-0,00153	-0,11844	0,00875
-0,12993	0,00774	0,08663	0,01601	0,00295	0,02687
0,24195	-0,00485	0,0318	0,00087	-0,01071	0,03521
-0,05477	-0,02356	-0,00929	0,00384	0,01211	0,05478
0,0287	-0,03752	-0,00643	0,03667	-0,00055	-0,02894
0,02086	-0,00998	0,00384	0,04773	0,00934	-0,03552
0,00342	-0,01223	-0,0092	0,0029	-0,00056	0,05631
-0,01952	0,00182	0,00387	0,02977	0,20137	-0,00588
-0,02841	-0,01454	0,02783	-0,02143	-0,02354	0,00101
-0,01389	-0,04776	0,0287	-0,02902	-0,00145	-0,00643
0,03417	-0,04698	0,01033	-0,01641	-0,02519	0,0401

INTP	BASS	GGRM	BLTA	SRSN	IMAS
0,00119	0,00998	0,0367	-0,0085	0,00191	-0,01459
-0,02104	-0,00495	0,05078	0,01094	-0,02938	-0,0196
-0,01465	-0,01265	0,09442	-0,00508	-0,06292	0,03382
-0,00904	0,00224	-0,04212	0,0012	-0,01196	0,01692
0,00535	-0,04178	-0,01303	-0,00102	-0,00955	0,08514
-0,00756	0,03254	-0,02458	-0,01016	0,07871	-0,06282
-0,01537	0,04225	0,02083	-0,00497	-0,04332	-0,00545
-0,00405	0,02699	0,02996	0,00191	-0,01459	0,02194
0,0115	-0,05852	-0,02752	0,01062	-0,0196	-0,00221
-0,01543	-0,06769	0,01813	-0,01292	-0,05322	-0,0006
0,00518	0,02777	-0,00823	-0,01196	0,01692	-0,02599
-0,00294	-0,05475	0,0506	-0,04801	0,01371	0,02612
0,01628	0,01823	0,02349	0,01345	0,00385	-0,0156
-0,01557	0,07484	-0,00872	0,0043	-0,00545	-0,00123
-0,02437	0,02721	-0,02465	0,02387	-0,0664	-0,00931
0,00932	0,02161	-0,02463	-0,0196	-0,00221	-0,00812
-0,00536	-0,06863	-0,00738	0,03382	-0,0006	0,00786
-0,01167	0,03007	0,01168	0,01692	0,00849	0,09773
-0,01637	-0,06153	0,00685	0,01371	0,02612	-0,0375
-0,06382	0,03637	0,00582	0,07528	0,03996	-0,02633
-0,08242	0,1269	-0,00767	0,06122	-0,00123	0,01243
-0,04377	-0,04366	-0,03628	0,01748	-0,00931	-0,00276
0,00801	0,0246	-0,01815	-0,03251	-0,00812	-0,00048
0,00918	0,01345	0,00045	-0,0006	-0,04477	0,01696
0,00806	-0,00517	0,01408	-0,05401	0,04615	-0,00346
-0,00402	-0,05683	-0,00133	-0,00721	0,15265	-0,06023
0,02735	0,06979	0,00507	0,05337	-0,03845	0,0771
-0,06019	0,02594	-0,00183	-0,00123	0,01243	-0,00839
-0,00191	0,00319	-0,00081	-0,04157	-0,00276	0,01556
0,01375	0,00757	-0,00395	-0,00812	0,14238	-0,00652
0,00335	0,00874	0,00241	-0,02547	0,01696	-0,01152
-0,03476	0,01057	-0,00396	-0,04389	-0,04513	0,03417
0,00653	0,01943	-0,01747	0,03047	-0,03474	-0,01384
-0,0037	0,01847	0,00093	0,007	-0,04242	-0,03805
0,01481	-0,01035	0,00276	0,01243	0,02609	0,05566
-0,00268	-0,05488	-0,00218	-0,00276	-0,03206	-0,05363
-0,00928	-0,0146	0,01166	-0,00048	-0,10652	0,00942
-0,0113	-0,00531	0,00454	-0,01752	-0,01152	-0,00295
0,01679	0,04191	-0,02519	0,03225	-0,0571	0,01295
0,17884	-0,01897	0,01397	0,00874	0,04498	-0,00059
-0,06919	-0,03156	-0,0145	0,00303	-0,05913	0,00518

BDPC	BNLI	BYSB
0,00849	0,12316	0,00022
0,02612	-0,10596	-0,01023
-0,0156	0,13577	-0,01222
-0,00123	-0,09699	0,00359
-0,00931	0,01987	0,00247
-0,00812	-0,0139	0,00495
0,00786	0,00133	-0,00570
-0,00941	-0,00845	-0,00196
-0,00524	0,00382	0,00974
0,007	-0,00547	0,00394
0,01243	0,0073	-0,00355
-0,00276	-0,00235	-0,00068
-0,00048	-0,00502	0,00965
0,01696	-0,00103	0,01059
-0,00346	-0,01174	-0,00717
0,00874	0,12396	0,01064
0,00303	0,0063	0,01829
0,02609	-0,00864	0,00866
0,01556	0,00406	-0,02081
-0,00652	0,00952	0,00876
-0,01152	0,02012	0,00157
-0,00154	0,00913	0,01478
-0,01384	0,10029	-0,00651
-0,00357	-0,09169	0,02161
-0,01577	0,02273	-0,02375
0,01304	0,0222	0,00152
0,00942	-0,01588	-0,00266
-0,00295	-0,00159	0,00038
0,01295	-0,00578	-0,01545
-0,00059	-0,10894	-0,00076
0,00518	-0,00183	-0,00770
-0,01067	0,00451	0,01589
-0,01382	-0,10823	-0,00013
-0,03076	0,00187	-0,00679
-0,00912	-0,01658	-0,01228
0,0009	0,01887	-0,04471
0,00863	0,02487	0,00402
0,00981	-0,00025	-0,01934
0,00845	-0,00483	-0,00040
0,00781	0,00601	-0,00719
0,01341	-0,00084	-0,00100