



## Mergers and Acquisitions: The Performance of the Acquiring Firm-Empirical Study of Cheverontexaco

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### Abstract

This paper analyzes a merger in the oil industry; in the case of Chevron and Texaco. Oil is assumed to be a homogeneous good which is produced by a small number of firms with different unit costs. Merger formation is endogenously explained as a result of cooperative decisions. It is shown that merger participants are very asymmetric if prior costs of production differences are moderate. If cost differences are large, however, the more efficient firms participate in the mergers to enjoy production efficiency, while the least efficient firms are not attractive partners and, therefore, remain independent in the post-merger market. Moreover, the research tries to investigate Chevron share returns if the merger has achieved its goal of maximizing shareholders wealth.

**Key words:** ChevronTexaco; Merger formation; Oil industry

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### INTRODUCTION

On October 16, 2000, Chevron announced plans to acquire Texaco. The merger was subsequently approved by the Chevron shareholders. This is somewhat unsettling why would the shareholders of Chevron agree to lose almost 10% on their holdings, especially given that the largest shareholders control almost a quarter of the

company voting stock? This example, while striking, is by no means an exception many studies show that average returns to acquiring-firm shareholders are negative, or at best slightly positive, while average returns to target-firm shareholders are positive and high, when both companies are publicly traded. Moeller, Schlingemann, and Stulz, (2005).

The general consensus among those in the field of finance is that the principal goal of a firm should be the maximisation of stockholder's wealth. Management of firms therefore strives to ensure that all major decisions taken are geared towards achieving this all-important goal. This goal is achieved by ensuring that the resources of the firm are efficiently employed. Few companies enjoy the luxury of having no serious competitors or little likelihood of any need to change their competitive strategy. It is therefore essential for companies to look for opportunities to create – and sustain – a competitive edge over their rivals and build customer loyalty that provides something of a comfort zone. Thus, businesses operating in today's highly competitive, uncertain and rapidly changing world continue to change in reaction to events such as moves by the competition, shifts in technology or new customer demands. Nothing appears so compelling as the need to survive. However, there is little doubt as to how, overwhelmingly, this choice is exercised: it is to achieve the greatest possible rate of corporate growth as measured in sales.

Few business people today need to be persuaded that firms should be growth-oriented. The firm that does not attempt to grow, it is argued, is likely not merely to stand still but to stagnate and die. The firm's current ownership and management should not be taken for granted. If it is possible for the value of the firm to be enhanced by changing management or by reorganizing under new owners, there will be incentives for someone to make a change. One of the ways through which the value of the firm could be enhanced through change of management is

by the purchase of another firm in a merger or acquisition. Mergers and acquisitions have become indispensable tools in building a new generation of companies with the power and resources to compete on a global basis. While mergers have actually been around since the 1980s, they have in recent years dramatically transformed and redefined the business landscape. The business world is in the midst of a "merger wave." When done for the right reasons and in the right way, mergers and acquisitions can indeed be beneficial. They can increase overall efficiency and profitability in the economy by creating new value in the combined companies. The merged entities themselves stand to reap significant rewards in terms of more efficient production, enhanced market coverage, technological advances, and better use of physical resources. Most mergers actually benefit competition and consumers by allowing firms to operate more efficiently.

Mergers and takeovers have attracted a great deal of attention from the financial press and other media in recent times. The terms merger and acquisition are used interchangeably to mean any transition that forms one economic unit from two or more previous ones. Gowrisankaran et al (2004).

Their characteristics and resulting values pre and post formation have been studied thoroughly in the financial literature. Theoretically, a company will enter into an acquisition or merger agreement if they believe that the economic value of these firms combined is greater than the economic value of these two firms as separate entities. Thus, an acquisition, merger or joint venture is likely to take place when an organization lacks a key success factor for a particular market. It should be pointed out that it is not a company that decides to merge with another or to attempt to take over another.

Company Profile: Chevron

Chevron Incorporated was founded in 1879 and was headquartered in San Francisco. In 2002 a year after its merger with Texaco relocated its corporate headquarters to San Ramon in California. [Annual Report 2006- The History of Chevron]

Chevron and Texaco merged in October 9th 2001, after series of talks, to form ChevronTexaco Corporation which later on renamed itself Chevron Corporation on May 9<sup>th</sup> 2005 and the merged business ranks among the world's largest and most competitive global energy companies.

[<http://www.eia.doe.gov/emeu/finance/mergers/dwnstream.pdf>]

It is engaged in every aspect of the oil and gas industry, including exploration and production; refining, marketing and transportation; chemicals manufacturing and sales; and power generation. "Chevron is one of the world's leading companies in developing heavy oil, and this opportunity expands our efforts to develop high-quality, large-scale resources to enhance our production growth profile," said George Kirkland, Chevron

Corporation's executive vice president, Upstream and Gas. ChevronTexaco is expected to create greater value for stockholders. According to Chairman David J. O'Reilly, the company "is positioned for stronger financial returns than could be achieved by either company separately, partly through significant cost reductions, but mainly because we will have a much broader mix of quality assets, skills and technology. We are committed to being first in our industry in total stockholder return."

[<http://www.chevron.com/news/speeches>]

## 1. REVIEW LITERATURE

A concise review of the diverse academic writings of research in the field is spelled out as indicated in the following paragraphs.

**1.1** Mitchell, Pulvino, and Stafford (2004) *Journal of Finance*, asserted that, from a short-run perspective, the most commonly studied event study encompasses the three or five days surrounding a merger announcement, but for the sake of this report the researcher would like to study ten days surrounding the merger announcement day. From a theoretical standpoint, and in the context of an efficient market, changes in stock market value around merger announcements date should fully capture the economic gains from merging.

**1.2** Most financial research in mergers and acquisitions use event study method to examine the impact of merger announcements on stock prices as a result of the merger, the returns go to target firms. On the other hand, the impact of merger on returns for the acquiring firms has largely been either significant negative abnormal return. Over time, short-term event studies do consistently find that the nature of the merger deal create gains and losses for acquirers. How the deal is made as a friendly merger or hostile takeover, or how it is paid for through stock or cash does matter. Indeed, managers pursuing mergers can make decisions on how the merger deal is executed to materially influence the profitability of the merger to maximize shareholders wealth. Yusce Ayse (2003).

### 1.3 The Impact of the Mergers Announcement on Share Price

Major merger/acquisition is preceded by announcement of the event on the stock market. Mergers and acquisition deals on an average have the potential to enhance shareholder value. While there are many popular ways to measure the value created by mergers, the short-run stock performance of the bidder, the target and the combined entity is the most widely used method. The short-run stock performance is widely viewed as the most reliable evidence of value creation because in an efficient capital market, stock prices quickly adjust to new information and incorporate any changes in value that the mergers are expected to bring. Rather than considering actual stock returns occurring. Asim.M et al (2006).

On hearing information of this decision or declaration, investors would normally study the information (surprise) of the merger to see whether it has a potential feasibility. If the merger is potentially viable, investors would be motivated to buy more shares from the proposed merged company. When it is feasible the demand for the shares would be higher than the supply and hence price goes up. However if the merger is considered to be a loss or not feasible investors would rather prefer to sell their existing share holdings from the companies involved in the merger and hence the supply would exceed the demand which would in turn cause the price to fall. It can be deduced from the above observation that the announcement of a merger can have either positive or an adverse result. Hence an effective event study after an announcement is vital to the performance of a merged or proposed company. This study seeks to investigate the ChevronTexaco situation using event study and financial analysis made to know whether it actually helped it or not. A closer study of the daily stock price performance of acquiring firms would be considered. As is normally the case, the announcement results affect both the asymmetric information hypothesis (i.e. acquiring-firm shareholders earn higher returns following cash offers), Panayides, Ph. Et al (2002), but in the case of Chevron, shares were issued to paid for Texaco and hence had a lower return as earnings were spread among larger quantities of investors. Moreover, acquiring-firm shareholders earn higher returns following takeovers that expand the firm's operations geographically or increase its market share.

The importance of mergers and acquisitions on firms' growth led many researchers to study this issue on various sectors during the last twenty years. Their objective was to measure the effects of M&As on stock returns. M&As 'push' firms' growth, increase their market share, creditability and stock returns.

**1.3.1** Kiymaz and Mukherjee (2001) noticed that pre-announcement and post-announcement parameters lead at times to different conclusions regarding wealth effects. On the other hand, Cybo-Ottone and Murgia (2000) studied M&As and concluded that M&As are mainly driven by significant positive abnormal returns. Same were the conclusions by Havrylchuk (2004), who examined Polish banking sector: Results indicate that Polish merged banks experienced positive abnormal returns (ARs) and shareholders increased their profit. Moreover, Otchere and Ip (2006) investigated the intra-industry effects as in the case of Chevron and Texaco (oil industry) firms and found, among others, that the target firms' rival realized significantly positive ARs following both the acquisition proposal and termination announcements. Scholtens and De Wit (2004) studied mergers announcement effects and concluded that mergers result in small positive AR and target firms realize significantly higher returns than acquirers. Panayides

and Gong (2002) studied the stock reaction to M&A announcements and their event study analysis led to the conclusion that all merger firms see their stock prices increase rapidly on the announcement of the proposed events, which is long anticipated by the industry.

**1.3.2** Despite the alleged benefits of corporate takeovers, empirical studies indicate that takeover announcements generally have little impact on acquiring-firm stock prices (Jensen and Ruback, 2004; and Rosen, Richard J., 2004). Some researchers also observe average performance following acquisitions. Rhodes. Et al (2005), report that acquiring-firm shareholders earn normal returns over the five-year period following takeovers, but Moeller, et al 2005, and Agrawal, Jaffe, and Mandelker (2003) find that, on average, shareholders lose. Based on these results, many observers conclude that managers seek to maximize firm size (the size-maximizing hypothesis) rather than shareholder wealth (the value-maximizing hypothesis). Moeller, et al (2005) ask "Why do [acquiring-firm managers] enter so readily into the market for corporate control, given its well-known large risks and apparently modest returns?"

The study will investigate the role that event study plays in explaining changes in acquiring-firm shareholder wealth around the takeover announcement date. The announcement has impact on the price of the shares due to the demand and supply forces that come into play at the stock market. The studies of these processes are known as the "event study." Thus according to Elton and Gruber (1995; 427), it is how fast the information was incorporated in the share price. They further agreed that dozens of studies confirmed that share prices reacted rapidly to announcements, and in expected ways where the direction of the price change and the likely impact were clear. Many authors use the event studies to determine what information is reflected in the share price, and to determine whether the announcement is good or bad news.

#### **1.4 Acquisition, Mergers or Takeovers?**

Most financial commentators use the three terms merger, acquisition and takeover interchangeably, and with good reason. Arnold, G. (2005), claims it is sometimes very difficult to decide if a particular unification or amalgamation of two companies is more like a merger, in the sense of being the coming together of roughly equal-sized firms on roughly equal terms and in which the shareholders remain as joint owners, or whether the act of union is closer to what some people would say is an acquisition or takeover – a purchase of one firm by another with the associated implication of financial and managerial domination. In reality it is often impossible to classify the relationships within the combined entity as a merger or a takeover. The literature is full of cases of so-called mergers of equals, which turn out to be a takeover of managerial control by one set of managers at the

expense of the other. The financial implications through the mergers and acquisitions as depicted by Daimler's Chief, Juergen Hubbert in this saying "We have a clear understanding: one company, one vision, one chairman, two cultures" [The Economist, 2000]

**1.4.1** Louis, Henock, (2004) asserted that, "if the management of one firm observes another firm underperforming, it can try to acquire the business and replace the poor managers with its own team." They observed that there are three ways for one firm to acquire another. These are:

The merger of the two companies into one entity, in which case the acquiring company assumes all the assets and all the liabilities of the other, and the acquired firm ceases to exist. This arrangement requires the approval of at least 50% of the stockholders of each firm subject to corporate charters and state laws.

The acquiring firm purchases the target firm's stock in exchange for cash, shares or other securities. In this practice; the acquired firm may continue to exist as a separate legal entity, but is now owned by the acquirer. The approval and co-operation of the target firm's managers are generally sought, but even if they resist, the acquirer can attempt to purchase a majority of the outstanding shares from shareholders. This provides the acquirer with an option to bypass the target firm's management altogether.

The approach is to the target firm's assets, in which case the ownership of the assets needs to be transferred to the acquiring firm and payment is made to the acquired firm rather than directly to its stockholders.

**1.4.2** Rosen, Richard J., (2004), affirm that, there is the need to carefully consider the various factors involved in choosing between an acquisition and a merger. These factors are:

In acquisition of stock, no shareholder meetings must be held and no vote is required. If shareholders of the target firm do not like the offer, they are not required to accept it and they will not tender their shares.

In an acquisition of stock, the bidding firm can deal directly with the shareholders of a target firm by using a tender offer. The target firm's management and board of directors can be bypassed.

Acquisition of stock is often unfriendly. It is used in an effort to circumvent the target firm's management, which is usually actively resisting acquisition. Resistance by the target firm's management often makes the cost of acquisition by stock higher than the cost by merger.

Frequently a minority of shareholders will hold out in a tender offer, and thus the target firm cannot be completely absorbed.

Complete absorption of one firm by another requires a merger. Many acquisitions of stock end with a formal merger later.

A lot of mergers are in actual fact acquisitions. What happens is one business actually buys another and incorporates it into its own business model. As a result of this misuse of the term merger, many statistics on mergers are presented for the combined mergers and acquisitions (M&A) that are occurring. This really gives a broader and more accurate view of the merger market.

**1.5** From the view point of Moeller et al (2004) many mergers and acquisitions are motivated by possible gains in efficiency from combining operations. Mergers create synergies, meaning the two firms are worth more together than when they are apart. They further gave their contributions to the debate on the reasons why companies merge.

**1.5.1** According to Luo, Yuanzhi, (2005), a company may wish to undertake a merger in order to prevent this from being done by a rival. Regardless of any other benefits which the merger might present, it may be justifiable if it prevents a competitor from gaining a particularly dominant position. Many companies would like to continue to acquire or merge with other companies in order to remain competitive in the marketplace. Globalisation, deregulation, the need to achieve economies of scale, and the pressure to make substantial investments in science, technology and business are the driving forces which drive firms into mergers and acquisitions for higher competitive gain. For a predator company, a merger would enable it gain a larger market share over its competitor with whom it competes for a marketplace for its output (products). The gain of a larger market share by the predator company through merger would result in an increase in cash flow without any possible loss of turnover.

**1.5.2** Kaen (1995:864) argues that taxes are often used as a reason for mergers and a source of merger gains. Usually, firms are permitted to revalue the target company's assets on the post-merger books. This asset value write-up creates tax shields which would otherwise be unavailable; the only way to get them would be to merge. The ability of corporation to carry tax losses forward to reduce future taxes provides the chances of other tax-related gains. Such tax shields are valuable to profitable companies, but the only way they can obtain them is to buy the corporation which has them. Hence, companies with unused tax shield s become acquisition candidates.

### **1.5.3 Utilisation of Surplus Funds**

From the perspective of Brealey et al (2003), mergers could be employed as a strategy for the proper utilisation of surplus funds. This happens when a firm is generating a substantial amount of cash, but has fewer investment opportunities for its utilisation. Though the firm could opt to distribute the excess cash to shareholders in the form of increased dividends or even by repurchasing its shares, most managers are reluctant to shrink their firm this way. Instead firms prefer to deploy the excess capital by purchase the shares of another firm through the use of mergers financed by cash.

## 1.6 Synergy

The idea underlying this is that the combined entity will have a value greater than the sum of its parts. J.F Weston et al (2002) state that “*synergy represents the two plus two equals five effect.*” The increased value comes about because of boosts to revenue and/or the cost base. Arnold continues that, if two firms, A and B, are to be combined a gain may result from synergistic benefits to provide a value above that of the present value of the two independent cash flows:

$$PV_{ab} = PV_a + PV_b + X$$

Where:

$PV_a$  = discounted cash flows of company A;

$PV_b$  = discounted cash flows of company B;

$PV_{ab}$  = discounted cash flows of the merged firms, and

$X$  = gains.

Value is created from the merger when the gain is greater than the transaction costs which usually comprise adviser’s fees, underwriters’ fees, legal and accounting costs, stock exchange fees, public relations bills, etc. Some companies begin their merger analyses with a forecast of the target firm’s future cash flows. Any revenue increases or cost reductions attributable to the merger are included in the forecasts, which are then discounted back to the present and compared with the purchase price: Estimated net gain = DCF valuation of target including merger benefits - cash required for the acquisition. Reasons for these synergistic effects have been offered, such as gaining fast access to new technologies or new markets, risk diversification, tax advantages, benefiting from economies of scale in research and/or production, tapping into sources of know how located outside the boundaries of the firm and finally monopoly type advantages.

Frederik. Et al (2004), remarks “a merger adds value only if synergies, better management, or other changes make the two firms worth more together than apart.”

**1.6.1** A range of literature also exists to explain the motives for the buyers of divested assets. In certain cases, the theories are the mirror images of those applying to sellers. The asset ‘fit’ theory implies that buyers will experience additional value, created by more efficient utilization of acquired assets, because the acquired asset ‘fits’ with (or is related to) its existing core operations. Failure to disclose the transaction price of the sell-off and the source of acquisition funds also impacts the perceptions of the buyer’s shareholders. Non-disclosures which contributes to asymmetric information, will generally lead to less favorable reactions from shareholders because the market perceives management to be hiding unfavorable information, perhaps overpayment resulting from a loss incurred on acquisition. Consequently, the “distressed firms are forced to sell to well-financed industry outsiders who are unwilling to pay the full best use value of the assets” (Kruse, 2002, p. 108).

In this situation, the outsider is acquiring the asset at a discount which should be reflected in its share price. Asset liquidity is subsequently demonstrated when a buyer receives a discount on the purchase price of the asset because a diversified seller might accept a lower price for an asset sale as opposed to when a non-diversified firm is selling (Fuller, Netter and Stegemoller, 2002). A discount on the acquisition price is also capture by the buyer when a better price is negotiated for a non-listed target which cannot be bought and sold as easily as publicly listed targets (Fuller, Netter and Stegemoller, 2002).

The managerial performance theory proposes that there is a strong association between managerial performance of the buyer and abnormal returns from the announcement of voluntary sell-offs. Datta, Iskandar-Datta and Raman (2003) found that the maximum value is created for the buyer and the transaction as a whole when well-managed buyers acquire from poorly managed sellers. Datta, Iskandar-Datta and Raman again demonstrated that effective monitoring is important because it significantly benefits the shareholders of the buying firm as the agency problems associated with sub-optimal investments and free cash flow are likely to be reduced.

## 1.7 Some Common Assumptions Made on Mergers

It is believed that, regardless of the reasons companies have for merging or acquiring, there are several basic assumptions being made, either explicitly or implicitly to address the study. These include:

- ✚ Mergers and Acquisitions are the fastest and easiest ways to grow;
- ✚ Mergers and Acquisitions are likely to fall short of their initial goals;
- ✚ Mergers and Acquisitions are difficult to do;
- ✚ Creating synergies is a major challenge;
- ✚ Moulding cultures is a major challenge;
- ✚ Soft and hard due diligence are necessary but not sufficient conditions and finally;
- ✚ Pre-planning can help increase chances for success.

It appears that companies that have gained from the experience of previous combinations or mergers and acquisitions efforts recognize and address these assumptions more effectively than those that have not gain experience in merger deals. The more firms have experiences, the more they appear to learn from each additional merger or acquisition, thus solidifying their core competency and competitive advantage. [Ashkenas et al., 2000].

With the importance of the need for mergers and acquisitions growing, and the base of experience expanding, it may seem reasonable also to assume that success is more likely to occur than failure in these types of combinations. In fact, worse than this, mergers and acquisitions are more likely to fail than succeed.

## 1.8 Areas of research investigations

In a theoretical sense, when considering mergers and acquisitions finance theory suggests employment of a capital budgeting model. Correspondingly, the drivers of the merger and acquisition that the researcher seeks to investigate are:

The increase of shareholders value (thus the announcement effect on the share price and dividend growth -The Event Study), as the general consensus among those in the field of finance, is that the principal goal of a firm should be the maximization of stockholder's wealth. Gaspar et al, (2005). This part of the research according to Elton and Gruber; depend on the impact of the announcement and the price return on shares known as “**event study**.” Thus how fast the information was incorporated in the share price of the acquiring firm and the dividend growth as a result of the merger.

Using financial indicators to analyse the performance pattern, Ball and Kthari (1994; 663) opine that, there are a number of empirical studies that have attempted to construct statistical models using publicly available financial information to predict acquisition targets. These include Rhodes-Kropf et al (2005) Stevens and Louis, Henock, 2004; the results reported by these studies indicate that such models have impressive ability to predict acquisition targets six to twelve months before the announcement of the mergers.

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## 2. MATERIALS AND METHOD

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### 2.1 Research Questions

The main research questions that this study will attempt to address are:

- Are mergers a viable alternative for firms seeking to continue their revenue growth and increase shareholder value?
- Is ChevronTexaco on course to achieve the twin merger objectives of having a much broader mix of quality assets, skills and technology to allow for significant cost reductions, and secondly, to be more competitive in the industry by being bigger?
- Are the shareholders of the acquiring firm maximized?

### 2.2 Scope of the Study:

This report will focus on the collection and analysis of information necessary to gain an informative insight into the operations, market and financial performance of ChevronTexaco after the merger which saw it becoming the second largest integrated Energy Company in the United States and the fifth largest globally. The analysis would therefore focus on the following:

- The creation of a company with significant financial strength.

- The enhancement of the ChevronTexaco's marketing power and improvement in Research and Development to increase oil discovery that exploit breakthroughs in explorations.

- The achievement of Synergies and cost savings.

### 2.3 Significance of the Study :

It is believed that the following observation can be made from this study: Add to our understanding of various messages contained in the academic literature on mergers and acquisition; Help investors within and without to evaluate the outcome of the merger to see if the motives for coming together is realized; Assist policy formulators in determining the best strategy to become big to win a bigger share of the target market; prejudice the research to the relevant practical measures to grow bigger to compete in the market.

### 2.4 Objective of the Study

The objective of this research is to find out the growth, success and the creation of stakeholders wealth maximization in the combined company.

The purpose (and for that matter the objectives) of this study is to examine and explore the growth of shareholders wealth maximization, taking the mergers and acquisition of ChevronTexaco as case study. In this research, consideration would be given to the operations of the aforementioned company after the merger and to find out the trend and the extent to which mergers and acquisitions could be used to influence the wealth maximization goal of the two companies. In an attempt to address this issue, the study would investigate the identification and analysis of the corporate and financial performance of ChevronTexaco after what was seen as one of the mega-mergers in the oil industry. The objective of this research would be investigated using the following two approaches:

**Event study** is one term that is common to a merger activity. To hammer down or to draw convincing conclusion to the relevance and the benefits of mergers in creating shareholders wealth maximization, this research would also consider the impact of the announcement of the merger (also known as the event study) to investigate the Chevron shares to see if in reality the merger would fulfilled it propositions before taking such financial decision.

**Financial ratios** will be used to determine whether after the years of the merger, the two of the major players in the oil industry, the indicators point to a combined firm pulling out billions of dollars of combined cost structures, and being more competitive together than apart.

### 2.5 Hypothesis of the Study:

Asim.M and Goel.R (2006) suggest that, In order to test the hypotheses the study required: announcement date, excess shareholder returns and cumulative excess returns. Announcement date ( $t = 0$ ) is the date on which

the information about a merger bid first appeared in the financial dailies.

H0: The events tested the shareholders wealth creation in the ChevronTexaco merger.

H1: The event's failure to create wealth for post merger acquiring firm shareholders

### 3. METHODOLOGY OF THE STUDY

#### 3.1 Event Study

Event study analysis has been widely accepted as a research tool in finance, business and economics. Changes in market value can be analyzed using the event study analysis, which examines the impact of a single event (or series of events) on firm's value. Average abnormal returns across stocks that are exposed to the same event of interest are calculated to identify if the event has caused the stocks to deviate significantly from a relationship suggested by a benchmark model. Event study methodology may be interpreted as analyzing the market's reaction to 'events' or as an empirical investigating of the relationship between stock returns and economic informational events such as the announcements of M&As' in oil industries. The events tested for possible abnormal returns are announcements based on mergers and acquisitions. An event study will be the methodological framework applied to examine the impact of voluntary sell-off announcements on shareholder wealth.

Excess shareholder return measures the stock market's initial reaction to a merger bid and division of any gains from any new information which becomes available to the market. Daily share price changes were tracked to compute daily excess returns ( $XRit$ ) for the security  $i$  as on a particular day ( $t$ ) by employing market model.

$$XRit = Rit - E(Rit) \quad (1)$$

where,  $t$  = day measured relative to an event,  $XRit$  = excess return on security  $i$  for day  $t$ ,  $Rit$  = return on security  $i$  during  $t$ ,  $E(Rit)$  = expected rate of return on security  $i$  that it would ordinarily earn for a given level of market performance for day  $t$ . Before making this calculation, the risk free rate ( $rf$ ) and the beta ( $\beta$ ) coefficients for individual stocks based on the market model would be estimated. Based on the ( $rf$ ) and ( $\beta$ ) estimates obtained from the market, the expected returns during the event window period of the acquiring firms are calculated based on the following model.

$$E(Rit) = rfi + \beta i (Rmt - rfi) \quad (2)$$

Where the estimation period is event days - 10 to +10

Abnormal returns are generated by the market model. Parameters of the model are estimated using logarithmic returns for 10 trading days preceding the announcement date. Price reaction for sellers is reported for the day before to the day after the announcement date (day -1

to day 1). Price reaction for buyers is reported for the announcement date to the first day after the announcement date (day 0 to day 1). Pre- announcement period abnormal returns for sellers and buyers are reported for 10 days before the announcement date. Datta, S. et al, (2003) they concluded that buyers who disclosed the source of acquisition funds experienced greater positive announcement returns compared to those buyers that did not disclose the source of acquisition funds.

#### 3.2 Sources of Data

The data used refer to M&As in ChevronTexaco and the stock value around the event. Data were selected from NASDAQ and NYSE Stock Exchanges. The companies selected are oil producing firms with different capitalization so that they constitute, as long as this is possible, a representative sample. The study investigates the period ten days period before and after the merger announcement. The sample includes 21 days observations in closing prices.

#### 3.3 Financial Indicators Using Annual and Quarterly Accounts of ChevronTexaco

According to Arnold (2005), Financial performance is measured through the following seven ratios; Total Assets, Return on Assets, Return on Equity, Earnings Per Share, Efficiency Ratio, Price to Book ratio, Price to Earnings ratio, and Net Profit Margin.

#### 3.4 Articles

Relevant articles from newspapers and magazines will also provide an invaluable source of data for the project. These will include analysts' opinions on the merger and its effects on the operations and financial performance of ChevronTexaco.

### 4. RESULT AND DISCUSSION

On 15 October 2000, California-based Chevron Corporation agreed to acquire New York-based Texaco Inc. for about \$36 billion in stock, creating the world's fifth-largest oil company. (2<sup>nd</sup> largest in the United State of America) Through an agreement and merger plan Chevron agreed to acquire all of the outstanding common stock of Texaco in exchange for stock in Chevron. As a result of the merger, Chevron's shareholders hold approximately 61 percent, and Texaco's shareholders hold approximately 39 percent, of the new combined company. In fiscal year 1999, a year before the merger announcement took place; Chevron had worldwide revenues of \$36.6 billion and net income of \$2.1 billion, while Texaco realized worldwide revenues of \$35.7 billion and net income of \$1.2 billion. [Courtesy by: FAME; 1999 Annual report]

#### 4.1 The Analysis of Event Study to the Merger

The researcher would like to use twenty one days event period ( $t = -10$  to  $t = +10$  months) to evaluate the impact

of corporate takeover announcements. Day zero ( $t = 0$ ) is the date the takeover is announced on the 16th October, 2000 in the Wall Street Journal. Taking the announcement day as time = '0' meant that -1 to -10 represents 13<sup>th</sup> to 2<sup>nd</sup> October 2000, respectively thus 10 days before the announcement day. The other side is the +1 and +10 represents the 10 days after the announcement day thus 17<sup>th</sup> to 30<sup>th</sup> October 2000.

#### 4.1.1 Findings and Conclusion

##### Findings

##### The event Study and its interpretations

In search for the Event study, the researcher will adopt capital asset pricing model (CAPM) to calculate the **expected returns** on the shares.

The beta ( $\beta$ ) for the company as per courtesy of: [investor.chevron.com] is 0.7.

Risk free Rate ( $r_f$ ) is 6% per: [Ft.com/Bond\_Accounts]

Risk of the Market ( $r_m$ ) is also 15% [Citibank.co.uk]  
Therefore using the formula;

$$\begin{aligned}
 R_s &= r_f + \beta(r_m - r_f) \\
 R_s &= 6\% + .7(15\% - 6\%) \\
 &= 6\% + .7(9\%) \\
 &= 6\% + 6.3\% \\
 &= \underline{12.3\% \text{ p.a}}
 \end{aligned}$$

Therefore since the event study carried out by daily, the annual expected return will be apportioned into days hence  $12.3\%/365 = 0.03\%$ .

The **actual returns** will be computed using the formula below;

$$\frac{P1 - P0}{P0}$$

The **abnormal returns** are the Actual returns less Expected returns.

**Table.1**  
**Below Showing the Abnormal Returns of Chevrontexaco**

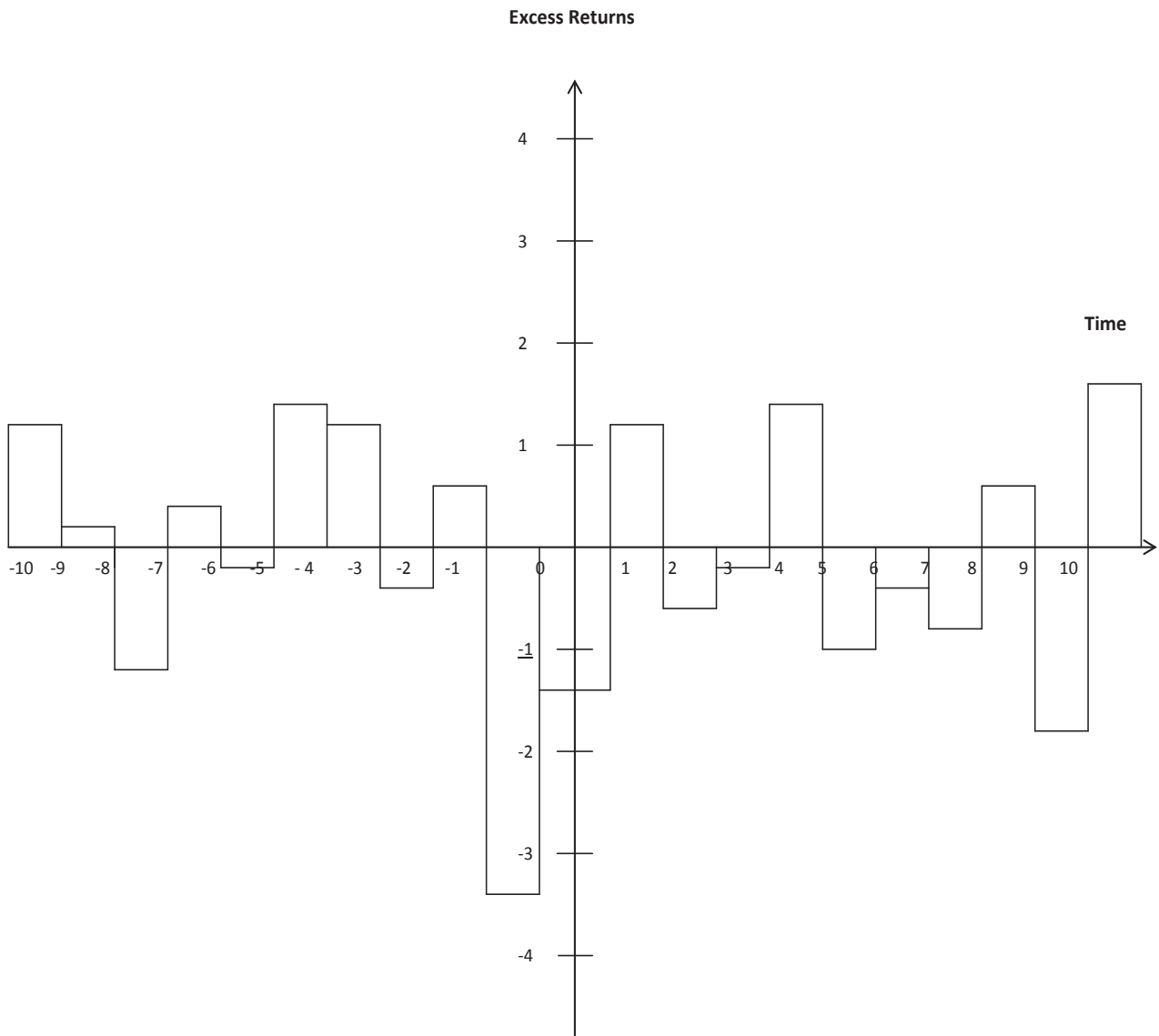
Days	Price (US\$)	Actual returns (%)	Expected returns (%)	Abnormal returns.(%)	Cum.abnormal. returns.(CAAR)
29-Sep-00	85.25	0	0	0	
02-Oct-00	86.69	1.7	0.03	1.67	1.67
03-Oct-00	86.87	0.2	0.03	0.17	1.84
04-Oct-00	84.81	-2.4	0.03	-2.43	-59
05-Oct-00	85.5	0.8	0.03	0.77	0.18
06-Oct-00	84.37	-0.01	0.03	-0.04	0.14
09-Oct-00	86	1.9	0.03	1.87	2.01
10-Oct-00	87.19	1.4	0.03	1.37	3.38
11-Oct-00	86.62	-0.7	0.03	-0.73	2.7
12-Oct-00	87.31	0.8	0.03	0.77	3.4
13-Oct-00	84.25	-3.5	0.03	-3.53	-0.11
16-Oct-00	82	-1.6	0.03	-1.63	-1.74
17-Oct-00	82.87	1.1	0.03	1.07	-0.67
18-Oct-00	82.5	-0.5	0.03	-0.53	-1.2
19-Oct-00	82.31	-0.2	0.03	-0.23	-1.43
20-Oct-00	83.44	1.4	0.03	1.37	-0.06
23-Oct-00	82.56	-1.1	0.03	-1.13	-1.19
24-Oct-00	82.25	-0.4	0.03	-0.43	-1.62
25-Oct-00	81.5	-0.9	0.03	-0.93	-2.55
26-Oct-00	82	0.6	0.03	0.57	-1.98
27-Oct-00	80.31	-2.1	0.03	-2.13	-4.11
30-Oct-00	81.62	1.6	0.03	1.57	-2.54

Table1, showing the results of share performance indicate that Chevron expanding geographically and increasing market share are the two most profitable takeover strategies for its long term operations. In

contrast, diversifying the firm's operations with overlap reduces acquiring-firm shareholder wealth by 2.5% within a period of 21 days surrounding the merger announcement date. Jorion et al (2005).



Excess Return around Announcement Day



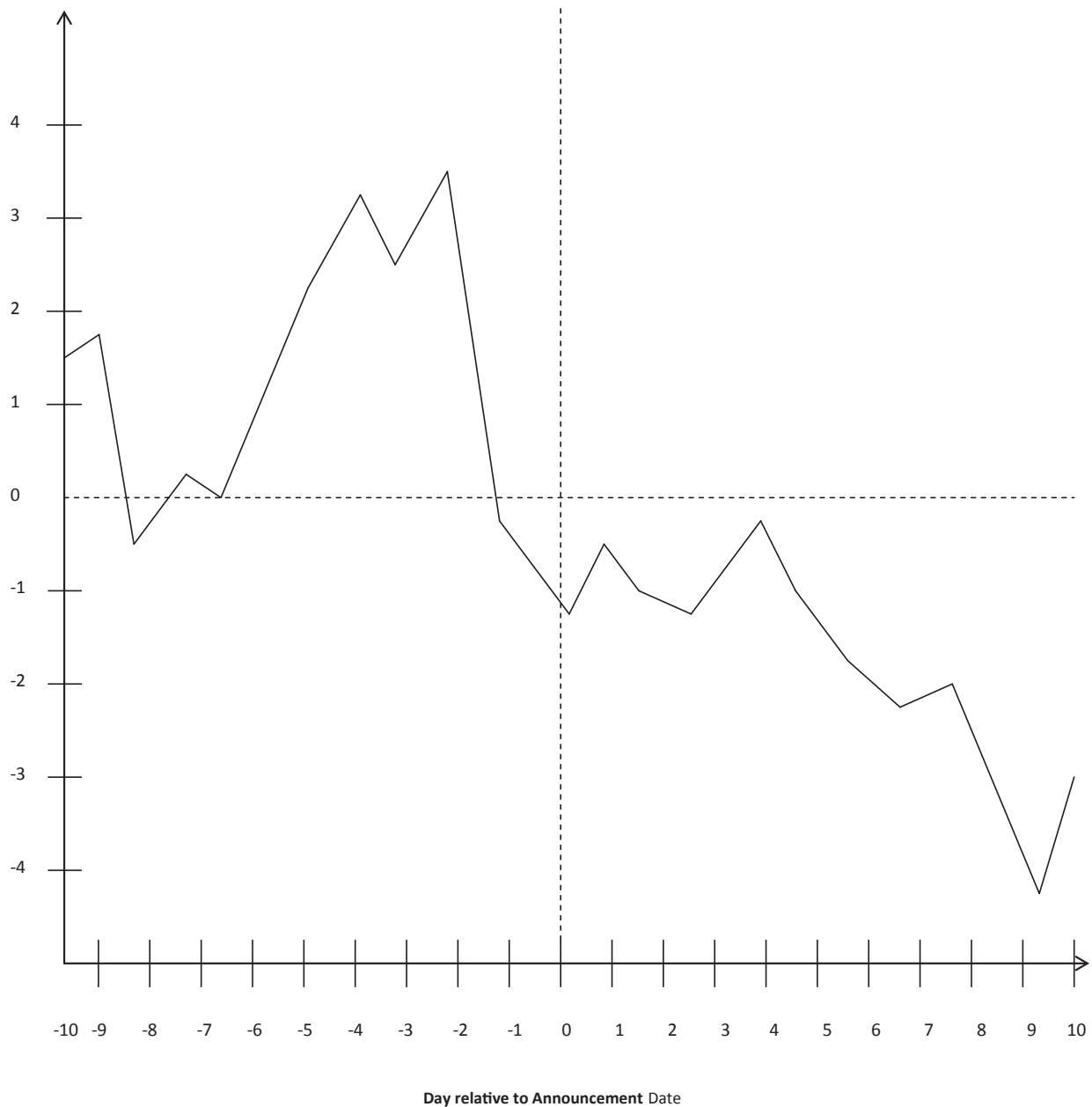
**Figure 1**  
**Announcement Day**

One of the most important stylized facts about mergers is that, the acquirer returns are on average, negative, Andrade and Stafford (2004). The abnormal returns for Chevrans' shareholders as shown in the table above are evidence to support negative and positive abnormal returns. A merger may create or destroy shareholder value. It will create value when a merger leads to better positive outcomes than a shareholder can achieve by altering his investment portfolio. However, a merger may destroy shareholder value if the merger outcomes are deficit of what a shareholder could have achieved by altering his investment portfolio. This study tries to evaluate the

financial implications of the Chevron merger deal on shareholder's wealth. It was found that in this process of merger; despite the deal appeared to be favorable to the shareholders of Chevron, they lost and the management created 'empire building' for themselves at the expense of the owners. At the time of the announcement, the news of the merger had already been discounted by the market, as shareholders had a forewarning from reports in the media and their experience with the company's previous mergers. The firm stock lost almost every day with the worst time in the day preceding the merger announcement for about 3.5%.

### 4.1.2 Cumulative Abnormal Returns (Cer)

Cumulative  
 Residual  
 from day-10



**Figure 2**  
**Cumulative Excess Return Around Announcement Date**

Exhibit 2 presents the CER (cumulative excess returns) of Chevron accumulated according to the event study for the period (-10 to +10), thus, from 10 days before the merger to 10 days after the merger. From the table it is clear that the entire time window is displaying negative CERs for Chevron with the mean of approximately 0.9%. In relative terms, the CER declined during the 10 days prior to the merger by 0.11% and fell again by 2.54% (t=+10) from the date of merger through the next 10 days.

On the date of announcement of merger (t=0), Chevron had experienced a total of 1.74% negative returns reflecting that the shareholders expected benefits from the merger is turned the other way round. This high negative return supports the fact that the shareholders were not satisfied by the swap ratio declared by their management. Further, there was uncertainty about the rights of Texaco shareholders in the merged entity. If CER is considered after excluding the day before and announcement days

return, it is found that CER for the period (-20 to -1) rises by 3.4% and then there is additional increase by 1.07% during the +1 days after the merger. Thus, on ignoring 0 day and -1 Day, CER, it is found that CER stays at positive for chevron shareholders during 10 days prior to and the following day after the announcement of merger deal. It can be argued that there is less information available on the target company and hence the market reaction to the announcement will be slower. However, in an efficient market the expectation formed at the time of the announcement should still be unbiased. Overall, it can be concluded that the period under review supports the theories that postulate negative returns to the Chevron shareholders. Asim.M and Goel. R (2006).

#### 4.2 Analysis of Financial Indicators

Shares in ChevronTexaco also slipped \$2.04 (2.7%) lower to \$72.34. Despite these ChevronTexaco claims that the merger synergies are on track toward savings target of \$2.2 billion annually before-tax. Having got the indicators for the ratios in the methodology, the calculations are summarised in the table below:

**Table 2**  
**Pre and Post Merger Performance Ratios of Chevrontexaco**

Financial ratio	Pre-merger As at June 30, 2001	Post-merger As at June 30, 2002
Return on Assets	6.06%	1.46%
Return of Equity	12.99%	3.22%
Earnings Per Share	2.350	0.390
Efficiency Ratio	71.71%	74.51%
Price to Book Ratio	2.9	2.44
Price Earning Ratio	181.11	156.39
Net Profit Margin	28.69%	23.54%

The ratios calculated and shown in the table above for the year 2002, a year after the merger show ChevronTexaco's performance being nowhere near the performances of the two firms combined before the merger. However, this should not be the yardstick to rule out any better results in the future as the merger was still in its embryonic stage and such investments take some considerable amount of time to bear fruits. The claim by ChevronTexaco that the merger synergies are on track toward savings target of \$2.2 billion annually before-tax by early 2003 gives considerable hope for the future. If not for the Dynegy losses and other charges, ChevronTexaco would have made \$US1.23 billion, or \$US1.16 per share and though that figure still falls well below the consensus earnings estimate of \$US1.37 among analysts polled by Thomson First Call, a better assessment of the performance of the merger could be

made in about three years after the merger when the synergies begin to yield significant cost-savings and other effects such as fast access to new technologies or new markets, risk diversification, tax advantages, benefiting from economies of scale in research and/or production, etc.

One major reason for the first year gloomy picture of the merger results of ChevronTexaco depicted by the calculated ratios is the use of net income in the calculation of most of the ratios. The fall in net income by 81 per cent in the second quarter as a result of investment losses in troubled energy trader Dynegy Inc. (\$631 million losses) and lower petrol prices had a negative effect on inputs into the calculation of the ratios and as such the results.

Lower prices of energy hurt most of the oil industry in the second quarter of 2002. Unocal, Phillips Petroleum and Conoco all showed sharply weaker profits. ExxonMobil, the world's largest publicly traded oil company also saw a significant drop in its second quarter results.

## CONCLUSION

One of the most often asked questions in the mergers and acquisition literature is why? Why do companies merge with and acquire other companies? From a strictly financial perspective, managers who make these investment decisions are meant to be undertaking wealth maximizing activity. However, the finance literature is replete with evidence that this activity only increases the wealth of the target shareholders. So what is in it for the acquiring firm? Why do the managers of these firms persist in this activity when it is not profitable?

Thus, critics again are challenging the sensibility of mergers and acquisitions: "Is bigger better?" they ask. They claim that mergers often have not provided the competitive edge that acquirers seek, and as such many of them have not been good for the shareholders of acquiring firms either. While stocks have certainly gone up in general, shareholders of many acquiring companies have been disappointed relative to the shareholders of peer institutions. Most of these deals have had the potential to perform well for shareholders, as well as for customers, but have failed in the implementation. Thus, with the right management and policies in place ChevronTexaco could be on course to achieve the twin merger objectives of having a much broader mix of quality assets, skills and technology to allow for significant cost reductions, and secondly, to be more competitive in the industry by being bigger. The stock, yielding 3.1%, provides an excellent growth-and-income play on a sector poised to benefit from an uptick in economic activity.

## REFERENCES

- Asim, M., & Goel, R. (2006). Return to shareholders from mergers. *IIBM Management Review*, 17(3).
- Anderson, W., & McLaughlin, S. (2012). *Buybacks versus ordinary dividends: Marginal investor reactions to cash-return announcements*. Albany, New Zealand: 16th New Zealand Finance Colloquium, 9-10 Feb 2012. <http://www.nzfc.ac.nz/archives/2012/papers/updated/26.pdf>. (Conference Contribution - Paper in published proceedings)
- Anderson, W., & Chang, A. (2011). Are profit warnings and suspension notices adequate distress disclosures on the New Zealand stock exchange? *International Research Journal of Finance and Economics*, (73), 27-45. [http://www.eurojournals.com/IRJFE\\_73\\_03.pdf](http://www.eurojournals.com/IRJFE_73_03.pdf). (Journal Article)
- Anderson, W. W. (2011). *Dealing With Trading Thinness in Event Studies: An Improved Trade-To-Trade Model*. Christchurch: 15th New Zealand Finance Colloquium, 10-11 February 2011. (Conference Contribution - Full conference paper)
- Anderson, W. W., & Chang, A. (2011). *The impact of disclosures of financial distress on the market value of shares of publicly-listed New Zealand firms*. Darwin, Australia: 2011 Accounting and Finance Association of Australia and New Zealand (AFAANZ), 3-5 July 2011. (Conference Contribution - Paper in published proceedings)
- Andrade, Gregor, & Erik Stafford (2004). Investigating the economic role of mergers. *Journal of Corporate Finance*, 10(1), 1-36.
- Arnold, G. (2005). *Corporate financial management*. Pitman Publishing.
- Agrawal, Anup, & Jeffrey F. Jaffe, (2003). Do takeover targets underperform? Evidence from operating and stock returns. *Journal of Financial and Quantitative Analysis*, 38, 721-746.
- Ashkenas, R. N., & Francis, S. C. (2000) Integration managers: Special leaders for special times. *Harvard Business Review*, Nov.-Dec., 108-114.
- Brealey, R., & Myers, S. (2003). *Principles of corporate finance* (7th ed.). McGraw-Hill.
- Cybo-Ottone, A., & Murgia, M. (2000). Mergers and shareholder wealth in European Banking. *Journal of Banking & Finance*, 24, 831-859.
- Datta, S., Iskandar-Datta, M., & Raman, K. (2003, Feb.). Value creation in corporate asset sales: The role of managerial performance and lender monitoring. *Journal of Banking and Finance*, 27(2), 351-375.
- Elton, D. J., & Gruber, M. J. (1995). *Modern portfolio theory and investment analysis* (5<sup>th</sup> ed.). John Wiley & Sons, Inc.
- Fuller, K. Netter, J., & Stegemoller, M. (2002, Aug.). What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions. *Journal of Finance*, 57(4), 1763-1793.
- Gaspar, José-Miguel, Massimo Massa, & Pedro Matos, (2005). Shareholder investment horizons and the market for corporate control. *Journal of Financial Economics*, 76, 135-165.
- Gowrisankaran, Gautam, & Thomas J. Holmes (2004). Mergers and the Evolution of Industry Concentration: Results from the Dominant-Firm Model. *RAND Journal of Economics*, 35(3), 561-582.
- Havrylychuk, O. (2004). Consolidation of the Polish banking sector: Consequences for the banking institutions and the public. *Economic Systems*, 28, 125-140.
- Jensen, Michael C., (2004). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76, 323-329.
- Jorion, P., Liu, Z., & Shi, C. (2005). *Stanford Law School, 2005. Securities Class Action Clearinghouse*.
- Kaen, F. R. (1995). *Corporate finance*. Blackwell Business, UK.
- Kiyamaz, H., & Mukherjee, T. K. (2001). Parameter shifts when measuring wealth effects in cross border mergers. *Global Finance Journal*, 12, 249-266.
- Kruse, T. A. (2002). Asset liquidity and the determinants of asset sales by poorly performing firms. *Financial Management*, 31(4), 107-129.
- Luo, Yuanzhi (2005). Do insiders learn from outsiders? Evidence from mergers and acquisitions. *Journal of Finance*, 60, 1951-1982.
- Louis, Henock (2004). Earnings management and the market performance of acquiring firms. *Journal of Financial Economics*, 74, 121-148.
- Mitchell, M., Pulvino, T. & Stafford, E. (2004). Price pressure around mergers. *Journal of Finance*, 58, 31-63.
- Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 73, 201-228.
- Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2005). Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *Journal of Finance*, 60, 757-782.
- Otchere, I., & Ip, E. (2006). Intra-industry effects of completed and cancelled cross border acquisitions in Australia: A test of the acquisition probability hypothesis. *Pacific-Basin Finance Journal*, 14, 209-230
- Panayides, Ph., & Gong, X. (2002). The stock market reaction to merger and acquisition announcements in liner shipping. *International Journal of Maritime Economics*, 4, 55-80.
- Rhodes-Kropf, Matthew, David T. Robinson, & Viswanathan, S. (2005). Valuation waves and merger activity: The empirical evidence. *Journal of Financial Economics* 77, 561-603.
- (2004). Market valuation and merger waves, *Journal of Finance*, 59, 2685-2718. 31
- Rosen, Richard J., (2004). Merger momentum and investor sentiment: The stock market reaction to merger announcements. *Journal of Business forthcoming*.
- Scholtens, B., & De Wit, R. (2004). Announcement effects of bank mergers in Europe and the US. *Research in International Business and Finance*, 18, 217-228.
- Weston, J. F. (2002). The ExxonMobil merger: An archetype. The Anderson school of UCLA.
- Yusce Ayse (2003). Creating wealth through mergers. *Journal of Academy of Business Economics*.