

T. C.
İSTANBUL ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
İNGİLİZCE İKTİSAT ANABİLİM DALI

YÜKSEK LİSANS TEZİ

MERGERS AND ACQUISITIONS

SEHER ÜSTÜN
2504070007

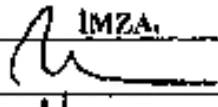
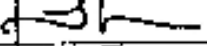
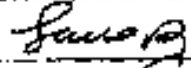


TEZ DANIŞMANI
YAR.DOÇ. DR. CENK GÖKÇE ADAŞ

İSTANBUL, 2010

T.C
İSTANBUL ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ

TEZ ONAYI

Enstitümüz İNGİLİZCE İKTİSAT Anabilim Dalında 2504070007 numaralı SEHER ÜSTÜN'ÜN hazırladığı "ŞİRKET BİRLEŞMELERİ VE SATIN ALMALARI (MERGERS AND ACQUISITIONS)" konulu YÜKSEK LİSANS/ DOKTORA-TEZİ ile ilgili TEZ SAVUNMA SINAVI, Lisansüstü Öğretim Yönetmeliği'nin 15.Maddesi uyarınca 25/11/2010 PERŞEMBE günü Saat:14:30 da yapılmış, sorulan sorulara alınan cevaplar sonunda adayın tezininKabul.....'ne* OYBİRLİĞİ /OYÇOKLUĞUYLA karar verilmiştir.

JÜRİ ÜYESİ	KANAATİ(*)	İMZA
PROF.DR.NİHAL TUNCER	Kabul	
YRD.DOÇ.DR.CENK GÖKCE ADAS	Kabul	
YRD.DOÇ.DR.M.KUTLUĞHAN SAVAŞ ÖKTE	Kabul	
YRD.DOÇ.DR.ZAHİDE AYYILDIZ ONARAN	Kabul	
YRD.DOÇ.DR.BARIŞ ALTAYLIĞIL	Kabul	

ÖZET

Şirket Birleşmeleri ve Satınalmaları

SEHER ÜSTÜN

Son yıllarda globalleşme ve iş dünyasındaki yoğun rekabet şirketlere birleşme ve satınalma faaliyetlerine girme konusunda önemli bir baskı yaratmaktadır. İş dünyası birleşme ve stratejik ortaklıklar gibi, yeni organizasyon modelleriyle, maliyetleri, sermayeyi, teknoloji ve iletişim gibi kaynakları paylaşmaya, daha global bir oluşum yaratmaya, belki de hepsinden öte riski paylaşmaya çalışmaktadır. Şirket birleşmeleri ve satınalmaları dünya çapında artan bir popülerlikle yayılmaktadır. Bir şirketle birleşmenin veya satınalma faaliyetinde bulunmanın temel amacı sinerji etkisi ile toplam performansı arttırmaktır.

Şirket birleşmelerinin ve satınalmalarının tarihçesi, temel kavramları, avantajları ve dezavantajları, şirket birleşme ve satınalmalarından sonraki problemler bu çalışmada detaylarıyla incelenmektedir. Ayrıca 2003-2007 yılları arasında birleşme ve satınalma faaliyetinde bulunmuş İstanbul Menkul Kıymetler Borsası'na bağlı belirli şirketlerin etkinliklerini kıyaslayan bir analiz yapılmıştır. Analizde bu şirketlerin birleşme öncesi birleşme süreci ve sonrasındaki etkinliklerini kıyaslayan Veri Zarflama Analiz yöntemi şirket birleşme ve satınalmalarının şirketlerin etkinliği üzerindeki etkilerini elde etmek için uygulanmıştır. VZA yönteminde EMS yazılım programı kullanılmıştır. Analizimizde 2003 ve 2007 yılları arasında gerçekleşen İMKB'deki 11 şirketin birleşme ve satınalma işlemleri değerlendirildiğinde, şirketlerin birleşme döneminde etkinlik değerlerinin birleşme öncesi döneme kıyasla genellikle daha yüksek olduğu gözlemlenmiştir. Daha önceki dönemde etkin olmayan şirketlerin çoğu birleşme ve satınalma sürecinde etkin olmuştur. Birleşme sürecinden sonra şirketlerin çoğunun etkinliklerini kayb ettikleri görülmüştür. EMS yazılım programı ile ölçülen etkinlik skorları her dönemde kıyaslandığında, en düşük etkinlik oranlarının birleşmeden sonraki dönemde görüldüğü gözlemlenmiştir. Bu sonuç, şirket birleşme ve satınalma işlemlerinin şirketlerin etkinliklerini arttırmada pozitif etkilerinin olduğunu gösterir, ancak şirketlerinin etkinliklerinin sonraki dönemlerde düştüğü gözlemlenmektedir.

ABSTRACT
Mergers and Acquisitions
SEHER ÜSTÜN

Globalization and severe competition in business puts major pressure on companies to enter into mergers and acquisitions in recent years. The business world is tending to new models of organization such as mergers and strategic alliances in order to share overhead costs, capital stock, technology, communication, change of achieve a global presence and may be above all to share venture risks. There has been an increasing trend of mergers and acquisitions all around the world. The primary purpose of merging and acquiring a company is usually to improve overall performance by achieving synergy.

The history, basic terms, their reasons, process, advantages and disadvantages, the problems after M&A are examined in detailed in this study. Besides, an exercise that contrasts the efficiencies of determined companies that are members of the Istanbul Stock Exchange which had these transactions between 2003 and 2007 is applied. Their efficiencies before, during and after the M&A transactions are contrasted by Data Envelopment Analysis in order to examine the affects of mergers and acquisitions transactions on the efficiencies of the companies. In the application of DEA the software packet of Efficiency Measurement System is used. In our analysis, considering the mergers and acquisitions transactions of the 11 companies in ISE between the years 2003 and 2007, it is observed that the efficiency values of the companies during the M&A transactions are generally higher in contrast to their efficiency values before the M&A transactions. Most of the companies which were inefficient in the past period became efficient during the M&A transactions. After the merger process, it is realized that most of the companies have lost their efficiencies. When the efficiency scores calculated by the software program EMS are contrasted at every stage, the lowest efficiency ratios are observed at the stage after the merger. This result shows us the M&A transactions in Turkey have positive effects for increasing the efficiencies of the companies, but it is observed that the efficiencies of the companies decline in the next periods.

ACKNOWLEDGMENT

This dissertation would have been possible with the support of many people. Firstly I would like to express my gratitude to my supervisor Ass. Prof. Dr. Cenk Gökçe ADAŞ who was always helpful and offered invaluable assistance, support and guidance during all the preparation period of my dissertation.

Also, I wish to present my special thanks to all of my teachers, the members and staff of English Economics Department for the support and guidance they have given during my education.

I also wish to express my love and gratitude to my family and my best friends who have always been there for their understanding, support and motivation during the preparation of this study.

PREFACE

The subject of this work is the analysis of mergers and acquisitions, their reasons, problems and conclusions. This work attempts to examine the mergers and acquisitions which have been very popular in recent years, by underlining their basic concepts, types, reasons, problems, advantages and disadvantages, the stages at their process and conclusions, finally implementing an examination that contrasts the efficiencies of determined companies which are quoted to Istanbul Stock Exchange and had M&A transactions between the years 2003-2007. In the examination, the efficiencies of these companies are contrasted which are obtained by using Data Envelopment Analysis, by measuring their levels before, during and after the mergers and acquisitions processes. All the data which are stated as inputs and outputs for Data Envelopment Analysis were taken from the Istanbul Stock Exchange. The software program, Efficiency Measurement System is used in order to generate the results. Comparison of the average efficiencies of the companies before, during and after the transactions showed the effects of merger and acquisitions on every stage.

Seher ÜSTÜN

İstanbul, 2010

TABLE OF CONTENTS

ÖZET.....	ii
ABSTRACT.....	iii
ACKNOWLEDGEMENT.....	iv
PREFACE.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	x
ABBREVIATIONS.....	xi
INTRODUCTION.....	1
1. THE HISTORY OF MERGERS AND ACQUISITIONS.....	3
1.1. First Wave (1897-1904)	4
1.2. Second Wave (1916-1929)	6
1.3. Third Wave (1965-1969).....	7
1.4. Fourth Wave (1984-1989).....	9
1.5. Fifth Wave (1992-2000).....	11
2. THE BASIC REASONS, TYPES AND CONCEPTS OF MERGERS AND ACQUISITIONS	14
2.1. The Basic Reasons of Mergers and Acquisitions.....	14
2.1.1. Growth	14
2.1.2. Synergy Effect	15

2.1.2.1. Revenue- Enhancing Operating Synergy Effect	16
2.1.2.2. Cost –Reducing Operating Synergies.....	18
2.1.3. Diversification	19
2.1.4. Tax Advantages	22
2.1.5. Other Motives.....	23
2.1.5.1. Horizontal Integration.....	23
2.1.5.2. Vertical Integration.....	25
2.1.6. Improved Management	26
2.1.7. Improved Research and Development	26
2.1.8. Improved Distribution	27
2.2. The Types of Mergers and Acquisitions.....	27
2.2.1. Horizontal Mergers	27
2.2.2. Vertical Mergers.....	28
2.2.3. Conglomerate Mergers.....	30
2.3. The Basic Concepts about Mergers and Acquisitions	31
2.3.1. Mergers and Acquisitions.....	31
2.3.2. Distinction between Mergers and Acquisitions.....	33
3. THE PROCESS OF MERGERS AND ACQUISITIONS	35
3.1. Decision for Mergers and Acquisitions.....	36
3.2. The Investigation and Determination of Candidates for Nomination ..	37
3.3. The Analysis and Contrast of the Candidates for Nomination	37
3.4. The Determination of Candidate Enterprises	38
3.5. The Analysis and Evaluation of the Selected Candidates... ..	38
3.6. The Selection of the Suitable Company among Candidates	39
3.7. The Presentation of the Intent Letter	40
3.8. The Arrangement of Confidentiality Agreement	40
3.9. The Beginning of the Negotiations between the Sides	41
3.10. The Sign of Letter of Intent	41
3.11. Due Diligence	42
3.12. Final Negotiations.....	48
3.13. Signature of Merger Agreement	49

3.14. Post Merger Integration	51
3.15. The Process of Acquisitions	54
4. THE PROBLEMS, ADVANTAGES AND DISADVANTAGES OF MERGERS AND ACQUISITIONS.....	57
4.1. The Problems of Mergers and Acquisitions.....	57
4.1.1. The Problems before Mergers	58
4.1.2. The Problems after Mergers.....	59
4.1.3. The Problems in Acquisitions.....	60
4.2. The Advantages of Mergers and Acquisitions.....	61
4.2.1. Value Creation.....	61
4.2.2. Synergy and Economics of Scale.....	62
4.2.3. Efficiency.....	62
4.2.4. Size and Growth.....	63
4.2.5. Reduction of Risk.....	63
4.2.6. Tax Advantages.....	63
4.2.7. Better Management and Institutionalization	64
4.2.8. The Increasing Power of Financial Structure.....	64
4.2.9. The Domination of the Market and Gaining Power	64
4.3. The Disadvantages of Mergers	64
4.3.1. Cultural Incongruities and Conflicts after Merger.....	64
4.3.2. The Case of Top Control-Restrictions in Decision Making	65
4.3.4. Losing the Key Personal	66
4.3.5. The Financial Disturbance after the Merger.....	66
4.3.6. Necessity of Additional Funds	67
4.3.7. Cost of Merging	67
4.3.8. Other Disadvantages	67
4.4. The Disadvantages of Acquisitions	68
4.4.1. Risk of Failure and Its Negative Results.....	68
4.4.2. Loss of Prestige and Public Opinion Reaction.....	68
4.4.3. The Disadvantages Arising out of Acquisitions.....	69
4.4.4. Foreign Ownership of National Companies.....	69
4.4.5. Dismissals and Its Negative Influences on Employment.....	69
4.4.6. Other Disadvantages	70

5. COMPARISON OF THE EFFICIENCIES OF THE COMPANIES BEFORE, DURING AND AFTER MERGERS AND ACQUISITIONS.....	71
5.1. The Data Envelopment Analysis	72
5.1.1. Data Envelopment Analysis and Decision Making	74
5.1.2. The Methods of Data Envelopment Analysis.....	75
5.1.3. The Advantages and Disadvantages of Data Envelopment Analysis	76
5.1.4. The Process of Data Envelopment Analysis.....	77
5.1.5. Selection of Decision Points	77
5.2. Methodology	77
5.3. Analysis and Results.....	79
6. CONCLUSION.....	89
REFERENCES	91
ONLINE RESOURCES	93

LIST OF TABLES

Table 1: Third Merger Wave, 1963-70.....	8
Table 2: Merger and Acquisition Transactions between 1970-1989 (\$ Millions).....	10
Table 3: Large Roll-Ups in the Fifth Merger Wave.....	12
Table 4: Due Diligence Checklist	44
Table 5: The Acquirer and Acquiree Companies.....	82
Table 6: The Inputs and Outputs of the Companies before the M&A Process.....	84
Table 7: The Efficiency Scores Before The M&A.....	85
Table 8: The Variables of Inputs and Outputs During the M&A.....	86
Table 9: The Efficiency Scores During The M&A Period	87
Table 10: The Variables of Inputs and Outputs After the M&A.....	88
Table 11: The Efficiency Scores After The M&A	89
Table 12: Efficiency Scores in Terms of Before, During and After Mergers.....	90

ABBREVIATIONS

DEA	: Data Envelopment Analysis
EMS	: Efficiency Measurement System
M&A	: Mergers and Acquisitions
ISE	: Istanbul Stock Exchange
İMKB	: İstanbul Menkul Kıymetler Borsası
VZA	: Veri Zarflama Analizi

INTRODUCTION

In today's business world which has been much more difficult from the aspects of profitability, growth and sustainability, the companies try several ways in order to survive and reach their targets. The companies face a much more intensive competition in contrast to the prior periods by the affect of globalization all around the world.

Because of this globalization and the effects of other factors, there occurred many enterprises in every sector which the customers can choose. At this point, the companies tried several ways in order to survive and increase their efficiencies. But these kinds of solutions have not been sufficient after a while. Because of the effects of competition, every company found similar solutions to each other, so they started to look for new solutions. For this reason, the companies started to merge with supplier companies, or customer companies or their competitors. In order to survive growth is not only enough, so many ways are tried by companies in order to be bigger.

In the world and in our country, the mergers and acquisitions have had much more strategic importance because of the economical crises in the end of the twentieth century. Because of this, the volume and values of the mergers and acquisitions increased. There are studies which show the increase of the efficiencies and performance of the companies after mergers and acquisition transactions, but several researches about them show that major of the companies face a decreasing trend in their profitability and efficiency in the following years after the transaction.

Throughout the history, there have been several obstacles by several arrangements for mergers and acquisitions, nowadays the mergers and acquisition transactions are tried to be implied in an efficient way. On the other hand, the decisions about mergers and acquisitions should be given carefully. The failure risk, the loss of time and money, and other disadvantages that can occur after the transaction should be considered well. Also the effects of mergers and acquisitions on human resources should be considered from the aspects of pressure and its

conclusions. At this point, the proper planning, organization, and realization of mergers and acquisitions is very important for the success of the mergers.

The subject of this study is to the mergers and acquisitions which have started to occur and widen around the world since the end of the nineteenth century. The aim of this study is the analysis of the basic concepts about the mergers and acquisition transactions, the determination of their reasons and the best factors for their realization, the determination of the stages during the merging period, the examination of the problems after the transaction, and the determination of their advantages and disadvantages, and their effects for the competition of today's business world. Besides, a study which contrasts the efficiencies of determined companies before, during and after the mergers and acquisition transactions between 2003-2007 years by Data Envelopment Analysis which is implied in order to examine the effects of mergers and acquisition transactions on the efficiencies of the companies by the software packet of Efficiency Measurement System.

In the first part of our study, the historical development of mergers and acquisitions, the basic reasons, and basic concepts about mergers and acquisitions are explained. Then the problems after the mergers and acquisitions, and their advantages and disadvantages are underlined. At the last part our study, an implication which makes an examination of contrast of the efficiencies of determined companies before, during and after the mergers and acquisition transactions between 2003-2007 years by Data Envelopment Analysis which is implied in order to examine the effects of mergers an acquisition transactions on the efficiencies of the companies by using the software packet of Efficiency Measurement System.

1. THE HISTORY OF MERGERS AND ACQUISITIONS

As seen from past experience mergers and acquisitions are triggered by economic factors. The macroeconomic environment, which includes the growth in GDP, interest rates and monetary policies play a key role in designing the process of mergers or acquisitions between companies or organizations. Most of the mergers and acquisitions are outcomes of the favorable economic factors like the macroeconomic setting, escalation in the GDP, higher interest rates and fiscal policies. These factors not only trigger the M&A process but also play an active role in laying the mergers and acquisition strategies between bidding and target firms.

We can evaluate the history of mergers by tracing back to the 19th century which has evolved in different phases mentioned as under. The history of mergers and acquisitions in the United States is comprised of a series of five distinct waves of activity. Each wave occurred at a different time, and each exhibited some unique characteristics related to the nature of the activity, the sources of funding for the activity, and to some extent, differing levels of success from wave to wave. When the volume, nature, mechanisms, and outcomes of these transactions are viewed in an objective historical context, important lessons emerge.

Five Periods of high merger activity, often called merger waves, have taken place in the history of the United States. These periods were characterized by cyclic activity, that is high levels of mergers followed by periods of relatively fewer deals. The first four waves occurred between 1897 and 1904, 1916 and 1929, 1965 and 1969, 1984 and 1989. Merger activity declined at the end of the 1980s, but resumed again in the early 1990s to begin the fifth merger wave. The various merger waves provoked major changes in the structure of American Business. They were instrumental in transforming American industry from a collection of small and medium sized businesses to the current form, which includes thousands of multinational corporations.

1.1. The First Wave (1897-1904)

The first substantial wave of merger and acquisition activity in the United States occurred between 1898 and 1904. The normal level of about 70 mergers per year leaped to 303 in 1898, and crested at 1,208 in 1899. It remained at more than 300 every year until 1903, when it dropped to 142, and dropped to 79 mergers, in 1904.¹ During this phase merger occurred between companies, which enjoyed monopoly over their lines of production like railroads, electricity etc. the first wave mergers that occurred during the aforesaid time period were mostly horizontal mergers that took place between heavy manufacturing industries. Industries comprising the bulk of activity during this first wave of acquisition and merger activity included primary metals, fabricated metal products, transportation equipment, machinery, petroleum products, bituminous coal, chemicals, and food products. It can be stated that 78% of the mergers and acquisitions occurring during this period resulted in horizontal expansion, and another 9, 7% involved both horizontal and vertical integration.

Some of today's great industrial giants were originated in the first merger wave. These include DuPont Inc., U.S Steel, Standard Oil, General Electric, Eastman Kodak, American Tobacco Inc., and Navistar International .While these companies are major corporations today with large market share some were truly dominant firms by the end of the first merger wave. In the first merger movement, there were 300 major combinations covering many industrial areas and controlling %40 of the nation's manufacturing capital.

By 1909, the 100 largest industrial corporations controlled nearly %18 of the assets of industrial corporations. During this era in American history, the business environment related to mergers and acquisitions was much less regulated and much more dynamic than it is today. There was very little by way of antitrust impediments, with few laws and even less enforcement. It is ironic that monopolistic industries formed in the light of the passage of the Sherman Act. However, in addition to the

¹ William Duncan, "Ten Important Lessons From the History of Mergers Acquisitions", *EzineArticles*, 11 Sep. 2008, p 2

Justice Department's lack of resources, the courts initially were unwilling to literally interpret the antimonopoly provisions of the Act. For example in 1895, the U.S. Supreme Court ruled that the American Sugar Refining Company was not a monopoly and did not restrain trade.²At this time, the Supreme Court was not concerned by the fact that the Sugar Trust controlled 98 % of the sugar refining capacity in the United States. This gave the green light to companies such as DuPont, Eastman Kodak, General Electric, International Harvester, Standard Oil, and U.S. Steel to engage in M&A without being concerned about legal interference.³

In addition to lax enforcement of federal antitrust laws, other legal reasons explain why the first merger wave thrived. Because corporations became better able to secure capital, hold stock in other corporations, and expand their lines of business operations, by this way creating a fertile environment for firms to contemplate mergers. But we should underline the fact that not all the states liberalized corporate laws. For example in the United States, New Jersey, in which the passage of the New Jersey Holding Company Act of 1988 helped liberalize state corporation laws, was the leading state in M&A, followed by New York and Delaware.

As another motivation in the first wave, was the development of the U.S. transportation system. The establishment of the major railway system helped create national rather than regional markets that firms potentially could serve. By taking the advantage of transcontinental railroads, such as the Union Pacific-Central Pacific, companies now facing competition from distant rivals chose to merge with local companies to maintain their market share.

Besides, the structural changes have made major effects at the M&A processes of the companies. When firms expanded, they exploited economies of scale in production and distribution. For example the Standard Oil Trust controlled 40% of the world's oil production by using only three refineries. It eliminated unnecessary plants and thereby achieved greater efficiency.⁴A similar process of

² Joseph R. Conlin, **The American Past**, Boston, USA, (Forth Worth, TX: Harcourt Press,1997),p.500.

³ George Stigler , “Monopoly and Oligopoly by Merger ”, **American Economic Review**, May 1950,p.23-34.

expansion in the pursuit of scale economics took place in many manufacturing industries in the U.S. economy during this time. Companies and their managers began to study the production process in an effort to enhance their ability to engage in ever expanding mass production.⁵

Finally financial factors, rather than restrictions forced the end of the first merger wave. The shipbuilding trust collapse in the early 1900 and the stock market crash of 1904, followed by the banking panic of 1907 had been the major reasons of this end. Because of the declining stock market and a weak banking system, the financial motivations for takeovers were absent and this brought the end of first great takeover period.

1.2. The Second Wave (1916-1929)

The second wave mergers that took place from 1916 to 1929 focused on the mergers between oligopolies, rather than monopolies as in the first wave. That means the first and second mergers were contrasted as 'merging for monopoly' versus 'merging for oligopoly'. Business monopolies resulting from the first wave produced some market abuses, and a set of business practices that were viewed as unfair by the American public. Even the Sherman Act proved to be relatively ineffective as a deterrent of monopolistic practices, and so Congress passed another piece of legislation entitled the Clayton Act to reinforce the Sherman Act in 1914. The Clayton Act was somewhat more effective, and proved to be particularly useful to the Federal Government in the late 1900s.⁶

We can state that companies used a significant amount of debt in their capital structure for having higher returns, but it had become more risky as the economy slowed. For example, the pyramid holding company, in which small group of investors could control big businesses with a relatively small amount of invested

⁴ Alfred D. Chandler, "The Coming of Oligopoly and Its Meaning for Antitrust' in National Competition Policy: Historian's Perspective on Antitrust and Government Business Relationships in the United States", **Federal Trade Commission Publication**, August 1981,p.72.

⁵ Robert C. Puth, **American Economic History**, (New York: Dryden Pres, 1982), p. 254.

⁶ William Duncan, p 2

capital. The industries that went for merger during this phase were producers of primary metals, food products, petroleum products, transportation equipments and chemicals.

There had been a total of 4600 mergers between the years 1926 to 1930. The type of the mergers in the second wave was generally vertical and a much higher percentage of the resulting businesses resulted in conglomerates that included previously unrelated businesses. When the great depression occurred, especially the stock market crash, the 'Black Thursday', ended the second wave of mergers and acquisitions. The investment banks played a pivotal role in facilitating the mergers and acquisitions. In the first two waves, the investment bankers played key roles. They often vetoed a merger when they thought the deal was against the investment banker's policies or ethical interests by holding funds from a firm seeking financing. The investment banks easily achieved controlling influence because a small number of them controlled the majority of the capital available for financing mergers and acquisitions.⁷

In the end, we can evaluate that the mergers and acquisitions in the first two waves were supported by investment banks. In contrast to this situation, the mergers and acquisitions in the third wave, in the conglomerate era, were generally supported by sources other than banks.

1.3. The Third Wave (1965-1969)

The mergers that took place during this period (1965-69) were mainly conglomerate mergers. This period is sometimes referred to as the conglomerate merger period because acquisitions of companies with over \$100 million in assets spiked so dramatically. Compared to the years preceding the third wave, mergers and acquisitions of companies this size occurred far less frequently. Between 1948 and 1960, for example, they averaged 1.3 per year. Between 1967 and 1969, however, there were 75 of them - averaging 25 per year. During the third wave, the FTC

⁷ Patrick A. Gaughan , **Mergers, Acquisitions and Corporate Structurings**, Fourth Edition,2007,p.34.

reports, 80% of the mergers that occurred were conglomerate transactions.⁸ If we make a contrast, during the two earlier waves, the majority of the target firms were significantly smaller than the acquiring firms. Peter Steiner reports that ‘the acquisition of companies with assets over 100 million USD, which averaged only 1,3 per year 1948 to 1960, and 5 per year from 1961 to 1966, rose to 24 in 1967, 31 in 1968, 20 in 1969, 12 in 1970 before falling to 5 each year in 1971 and 1972.

The number of mergers and acquisitions during the 1960s, is shown in Table 1.1. It was prepared by W.T.Grimm and Company (now provided by Houlihan Lokey Howard & Zukin) which began recording mergers and acquisition announcements on January 1, 1963. The FTC reported that 80% of the mergers that took place in the ten year period between 1965 and 1975 were conglomerate mergers.

Table 1. Third Merger Wave, 1963-70

Year	Mergers
1963	1,361
1964	1,950
1965	2,125
1966	2,377
1967	2,975
1968	4,462
1969	6,107
1970	5,152

Source: Mergerstat Review, 1998.

The third merger wave can be associated with well-known conglomerate firms such as ITT and LTV, many corporations of varying sizes engaged in a diversification strategy. This trend has been followed by many small and medium firms. However, the 3rd wave merger ended with the plan of the Attorney General to split conglomerates in 1968. One of the main reasons of this plan was the poor

⁸ William Duncan, p 2

performance of conglomerates. During the 1960s, Washington policymakers emphasizing the potential for abuses of monopoly power worked through the FTC and the Justice Department to curb corporate expansion which created the potential for monopolistic abuses. As we mentioned above, the prime advocates of this antitrust enforcement were Attorney General John Mitchell and Assistant Attorney General Richard McLaren, who is the main architect of the federal government's antitrust efforts during the 1960s. In his book *Managing*, Harold Geneen, then chief executive officer of ITT, has described the difficulty his company had in acquiring companies when McLaren was in office.

Besides in the end of the third wave, some mergers in the 1970s, have set precedence. The most prominent ones were the INCO-ESB merger; United Technologies and OTIS Elevator Merger are the merger between Colt Industries and Garlock Industries.

1.4. The Fourth Wave (1984-1989)

In spite of the declining trend of mergers and acquisition transactions in the 1970s through 1980s, a strong merger wave had started by 1984. Below, Table 1.2 shows the number of mergers and acquisition announcements for the period from 1970 to 1989. This period is different from the other previous waves, because the unique characteristic of this period is the significant role of hostile mergers. It is necessary to remind that if the acquisition is approved from the board of directors of the target company, it can be defined as a friendly merger. If the opposite situation occurs, it is defined as hostile. Another difference of this wave can be stated as the size and prominence of the M&A targets.

By the way, the fourth wave became the wave of the mega merger. Also, the costs of the mergers and acquisitions transactions increased sharply during this wave. This wave became the wave of mega merger. In addition to the rise in USD value of the mergers, the average size of the typical transaction increased significantly. The number of \$100 million transactions increased more than 23 times from 1974 to

1986. This was a major difference from the conglomerate era of the 1960s, in which the acquisition of small and medium sized businesses predominated.⁹

Table 2. Merger and Acquisition Transactions between 1970-1989 (\$ Millions)

Year	Total USD Value Paid	Number
1970	16.414,9	5,152
1971	12.619,3	4,608
1972	16.680,5	4,801
1973	16.664,5	4,040
1974	12.465,6	2,861
1975	11.796,4	2,297
1976	20.029,5	2,276
1977	21.937,1	2,224
1978	34.180,4	2,106
1979	43.535,1	2,128
1980	44.345,7	1,889
1981	82.617,6	2,395
1982	53.754,5	2,346
1983	73.080,5	2,533
1984	122.223,7	2,543
1985	179.767,5	3.001
1986	173.136,9	3.336
1987	173.136,9	2.032
1988	246.875,1	2.258
1989	221.085,1	2.366

Source: Mergerstat Review, 1998.

⁹ Gaughan, *Mergers, Acquisitions and Corporate Structurings*, p. 36.

In Europe in the latter half of the 1980s companies sought to prepare for the Common Market through cross-border horizontal mergers. In the U.S. this was the period that saw corporate raiders like Boone Pickens run rampant with two-tier, front-end-loaded, boot-strap, bust-up, junk-bond, hostile tender offers until the playing field was leveled by the poison pill in the mid-1980s.¹⁰ Although the poison pill, there had been an increasing trend in merger activity through the latter part of the 1980s. However this fourth wave merger trend ended in 1989-90 with the \$25 billion RJR Nabisco LBO and the collapse of the junk bond market, along with the collapse of the savings and loan banks and the serious loan portfolio and capital problems of the commercial bank. This economic slowdown led to the unrevealing of a number of the high profile leveraged deals of the fourth wave.

1.5. The Fifth Wave (1992-2000)

The 5th Wave Merger (1992-2000) was inspired by globalization, stock market boom and deregulation. High stock prices simultaneously emboldened companies and pressured them to do deals to maintain heady trading multiples. While the U.S. economy entered into its longest postwar expansion and companies reacted to the increased aggregate demand by pursuing mergers and acquisitions. In the fifth merger wave there had been fewer hostile deals and more strategic mergers occurred. The deals in this wave were more strategic than the previous ones. They were not based on debt-financed. Rather they were financed through the increased use of equity, which resulted in less heavily leveraged combinations.

The aim was to have a better economic expansion by strategic mergers and acquisitions rather than through internal expansion. A global view of competition, in which companies often find that they must be big to compete, and a relatively restrained antitrust environment led to once-unthinkable combinations, such as the mergers of Citibank and Travelers, Chrysler and Daimler Benz, Exxon and Mobil, Boeing and McDonnell Douglas, AOL and Time Warner, and Vodafone and Mannesmann. Especially the Time Warner and AOL merger recorded \$ 165 billion.

¹⁰ Martin Lipton, "Merger Waves in the 19th, 20th, 21th", **The Davies Lecture, Osgoode Hall Law School, York University**, September 14 2006 p.2.

From a modest \$342 billion of deals in 1992, the worldwide volume of mergers marched steadily upward to \$3.3 trillion worldwide in 2000. Nine of the ten largest deals in history all took place in the three-year period 1998-2000, with the tenth in 2006.

As every wave had included several uniquely different transactions, the fifth wave had so. In the mid 1990s, the market became enthralled with consolidating deals which are called roll-ups. Several fragmented industries were consolidated through larger-scale acquisitions of companies that were called consolidators. Certain investment banks specialized in roll-ups and were able to get financing and were issuing stock in these consolidated companies. The strategy behind was to combine smaller companies into a national business and enjoy economies of scale. Table 1.3 lists some of the major companies which were concentrated in particular businesses such as the funeral printing, office products and floral products businesses

Table 3. Large Roll-Ups in the Fifth Merger Wave

Company Name	Industry
Metal USA	Metal Service Centers
Office Products USA	Office Products
Floral USA	Florists
Fortress Group	Home Building
U.S. Delivery Systems	Delivery
Comfort Systems USA	Air Conditioning
Coach USA	Bus Company
Waste Management	Waste Removal
Republic Industries	Car Dealerships

Besides, not only in United States and Great Britain but also, in less developed countries like Asia, South and Central America, and Eastern Europe, there had been seen a movement towards stimulating their economies and raising capital

by selling off state-owned businesses. With this privatization process from the public, the number of M&A potential bidders and targets swelled.

2. THE BASIC REASONS, TYPES AND CONCEPTS OF MERGERS AND ACQUISITIONS

2.1. The Basic Reasons of Mergers and Acquisitions

2.1.1. Growth

Most studies of mergers and acquisitions measure the average returns to the acquired and acquiring companies' shareholders separately. The reason behind this is to determine whether the mergers increase wealth, or that they reduce it. For this reason a first hypothesis focuses on industry-level shocks to growth opportunities and profitability.

In his theory of managerial capitalism, Robin Marris (1963, 1964) claimed that managers sought to maximize the growth of their firm, but were constrained from ignoring shareholder interests entirely by the threat of takeover and subsequent discharge. Henry Manne (1965) invented the term "market for corporate control," and put forward the hypothesis that this market operated efficiently to eliminate managements that either pursued goals that conflicted with shareholder interests, or were simply incompetent. Under the MCCH any firm can capture the potential gain from a merger by reversing the policies of the target firm, which lower its share price, or by replacing its management with one of average competence, thereby raising its market value from its current level to its (higher) potential value.¹¹

According to MCCH, if one firm identifies a potential gain in one company and makes a bid for it, one might expect bidding for the target under the MCCH. This bidding, raises the target's share price to reflect the full gains from replacing its management. We can model this by following equations by meaning G as the gain to the acquiring firm's shareholders measured in dollars, V_t is the acquired firms' market value, and P is the premium paid to the acquired firm's shareholders.

$$G = aV_t + bP \quad (2. 1)$$

¹¹ Dennis C. Mueller, Mark L. Sirower , **The Causes of Mergers: Test Based on the Gains to Acquiring Firms' Shareholders and the Size of the Premia**, 2002,p.5.

The MCCH predicts $a = 0$, and $b = 0$.

This is a hypothesis described somewhat skeptically by Warren Buffet in the quotation at the opening of the article. The prediction that $b = 0$, abstracts from the problem of the winner's curse in a bidding process.¹²

2.1.2. Synergy Effect

The synergy effect is a one of the major reasons to underline why mergers and acquisitions occur. It is a better use of complementary resources. This refers to the fact that the combined company can often reduce its fixed costs by removing duplicate departments or operations, lowering the costs of the company relative to the same revenue stream, thus increasing profit margins.

The synergy effect is showed by the financial math that shows that $2+2=5$. This equation shows that the combination of two firms will yield a more valuable entity than the value of the sum of the two firms if they were to stay independent.

$$\text{Value (A+ B)} = \text{Value A} + \text{Value B}$$

Although many merger partners cite synergy as the motive for their transaction, synergistic gains are often hard to realize. There are two types of synergy: that which is derived from cost economies and that which comes from revenue enhancement. Cost economies are the easier of the two to achieve because they often involve eliminating duplicate cost factors such as redundant personnel and overhead. When such synergies are realized, the merged company generally has lower per-unit costs. Many of the consolidating mergers of the fifth merger wave are partially based upon the pursuit of such synergistic economies.

By the way, Revenue enhancing synergy is more difficult to predict and to achieve. An example would be where each firm believes that it can sell its products and services to the other firm's customer base. Also we can give another example as stating that where one company's capability, such as research prowess, is combined

¹² Patrick A. Gaughan , “ Mergers and Acquisitions ”, College of Business, Fairleigh Dickinson University Economatrix Research Associates, Inc.,p.3.

with another company's capability, such as marketing skills, to significantly increase the combined revenues.

The synergistic effect usually has a positive connotation, but one also occasionally hears of a negative synergistic effect, such as when the management teams of newly merged corporations do not work well with each other. Generally speaking, however, a synergistic effect makes the merged company worth more than its individual components were before the merger.

2.1.2.1. Revenue-Enhancing Operating Synergy Effect

Revenue enhancing synergy may be more difficult to achieve than cost reduction synergies. It may come from new opportunities that are presented as a result of the two combinations of the two merged companies.¹³ Revenue-enhancing synergy is the ability of a combined entity to realize more revenues than what the individual companies would have if they remained independent. Revenue-enhancing synergies work if when two companies merge, A's products can be sold to B and B's products to A. It occurs when company A merges with company B, which produces products that A's customers want but A does not produce.

There are many potential sources of revenue enhancements, and they may vary greatly from deal to deal. They may come from a sharing of marketing opportunities by cross-marketing each merger partner's products. If the same can be said in reverse, that B's customers want products that A makes but B does not currently provide, there may be a basis for each company being able to leverage its own customer base by doing such a deal. Revenue synergies can come from a variety of places, including leveraging one company's products through another's sales force, cross-selling one company's products, with another company's customer base, or selling products of one company into geographies of another company. Revenue synergies can also come from gaining pricing power in a given market.

¹³ Mark N. Clemente and David S. Greenspan, **Winning at Mergers and Acquisitions: The Guide to Market Focused Planning and Integration** (New York: John Wiley & Sons, 1998), p.46.

Revenue-enhancing synergies work if when two companies merge, A's products can be sold to B and B's products to A. Although the sources may be great, revenue-enhancing synergies are sometimes difficult to achieve. Such enhancements are more difficult to quantify and build into valuation models. This is why cost-related synergies are often highlighted in merger planning, whereas the potential revenue enhancements may be discussed but not clearly defined.¹⁴ The most dramatic example of generally poor merger planning is the largest deal of all time – the disastrous 2002 merger of AOL and Time Warner.

Cost cutting is easier than obtaining revenue-enhancing synergies. Sears' acquisition of real estate and brokerage businesses didn't work very well. Sears thought that its clientele was loyal and would be willing to buy other goods. The merger of Northrop Grumman and TRW worked. Together, they had the capabilities to bid for some jobs that they would not have been able to bid for separately. Diverse construction and design capabilities were required.

The ink was barely dry on Northrop Grumman Corp.'s (NOC) December, 2002, acquisition of TRW Inc. when the company began marshaling its newly acquired troops for their first big campaign. The target was an eight-year contract to build the Pentagon's new Kinetic Energy Interceptor, a Star Wars-like antimissile system that aims to destroy enemy rockets shortly after takeoff. Separately, Northrop and TRW had both passed on the project, thinking they couldn't compete head to head with missile-defense leaders Boeing Co. (BA) and Lockheed Martin Corp. (LMT). That changed with the merger. Northrop put together a team of people from six of its seven divisions, including specialists in defense electronics, information technology, satellites, and shipbuilding.

A later study by the same authors, using 184 mergers over the period 1985-1992, found -0, 24 % and 20,4 % for bidder and target returns respectively.¹⁵ A former TRW office in Virginia was put in command of the project, and reinforcements were sent from across the country. The effort paid off: Northrop

¹⁴ Gaughan, **Mergers, Acquisitions and Corporate Structurings**, p. 126.

¹⁵ J.F. Houston and M.D. Ryngaert, "Equity Issuance and Adverse Selection: A Direct Test Using Conditional Stock Offers", **Journal Of Finance**, pp.197-219.

scored a surprise victory, winning the \$4.5 billion contract last December and vaulting the company past its own sales targets.

2.1.2.2. Cost –Reducing Operating Synergies

Cost synergy is the financial benefit two companies may derive from a merger or acquisition. For example, two companies that merge may be able to produce more revenue than either one could independently by combining the most efficient processes each brings to the merger. Cost synergy may also refer to the cost reduction a merger brings about by eliminating or streamlining redundant processes. Cost synergy usually has a positive connotation; as a result, press releases and media reports often use the term to refer to layoffs following a merger that are intended to make the newly merged company more efficient. A cost synergy refers to the opportunity of a combined corporate entity to reduce or eliminate expenses associated with running a business. Cost synergies are generally accepted as the main source of operating synergies. They are the operating synergies that are easiest to model. One-time cost savings will increase the cash flow in the period of the savings, and thus increase the firm value by the present value of the savings. Continuing cost savings will have a much bigger impact on value by affecting operating margins (and income) over the long term. The value will increase by the present value of the resulting higher income (and cash flows) over time.¹⁶

Today's companies have the greatest opportunity in history to achieve cost-related synergies. The advents of computers, telecommunications, and the internet have made businesses incredibly transparent. Three of the most discretely quantifiable and controllable cost synergy elements in today's companies are; moving to a shared service model and reducing staffing redundancies which is especially true in areas such as human resources, finance, customer service, and information technology, achieving procurement leverage through greater volume in purchases and consolidation of suppliers to produce discounts, lowering material costs and, rationalization of facilities and capital equipment following the closing of the deal.

¹⁶ Aswath Damadoran, "The Values of Synergy", Stern School of Business, 2005, p.11.

This boosts the utilization of fewer resources, and eliminating those which are less capable and/or less well suited to the long term strategy of the company. An example of successful cost reductions was the 1991 acquisition of Manufacturers Hanover Trust by Chemical Bank in 1991. At the end of the deal, the companies had savings approximately 750 million USD. The success of this deal was one factor that led Chemical Bank to chase with Chase Manhattan in a 13 billion USD deal in 1995. This bank would continue to merge with other financial institutions to create one of the biggest banks in the world. In September 2000, J.P. Morgan and Chase Manhattan combined. Four years later, in 2004, J.P. Morgan merged with Bank One. The banking industry has consolidated significantly over the past 25 years since the industry was deregulated. Studies of fourth merger wave bank mergers do not show significant gains from combining banks.¹⁷

2.1.3. Diversification

In finance diversification means reducing risk by investing in a variety of assets. Because if the asset values do not move up and down in perfect synchrony, a diversified portfolio will have less risk than the weighted average risk of its constituent assets, often less risk than the least risky of its constituents. The rationale behind this technique contends that a portfolio of different kinds of investments will, on average, yield higher returns and pose a lower risk than any individual investment found within the portfolio. Diversification strives to smooth out unsystematic risk events in a portfolio so that the positive performance of some investments will neutralize the negative performance of others. Therefore, the benefits of diversification will hold only if the securities in the portfolio are not perfectly correlated. Studies and mathematical models have shown that maintaining a well-diversified portfolio of 25 to 30 stocks will yield the most cost-effective level of risk reduction.

Diversifying the investments is the opposite of concentrating them. Diversification is a method of reducing the overall risk or variance of investment

¹⁷J.F. Houston and M.D. Rynagaert, "The Overall Gains From Large Bank Mergers", **Journal of Banking**, 18, pp. 1155-1176.

returns by mixing multiple stocks, bonds, mutual funds, cash accounts and other types of investments into a portfolio. The benefits of diversification can only eliminate what is called unsystematic risk which is a risk that does not affect companies or securities. They are specific to the individual company. Diversification can not reduce or eliminate 'systematic risk'. Prices of securities do not always move in a correlated way. Because a price decrease in one security can be offset by a price increase in a different security, and the more securities you mix into a portfolio, the greater the probability of this offsetting price movement. So by mixing more securities via diversification, we can both reduce the risk factor and can increase the potential of gaining more profit.

Especially diversification benefits can be gained by investing in foreign securities which are less-correlated with the domestic investments. For example an economic downturn in the U.S. economy may not affect Japan's economy in the same way; therefore having Japanese investments would allow an investor to have a small cushion of protection against losses due to an American economic downturn. Most non-institutional investors have a limited investment budget, and may find it difficult to create an adequately diversified portfolio. This fact alone can explain why mutual funds have been increasing in popularity.

In general, diversification strategies are used to expand firms' operations by adding markets, products, services or stages of production to the existing business. The aim behind this strategy is to let the companies enter different business lines. When the new venture is strategically related to the existing lines of business, it is called concentric diversification. Conglomerate diversification occurs when there is no common thread of strategic fit or relationship between the new or old lines of business which is the new and old businesses are unrelated.

Diversification is a form of growth strategy. Because many entrepreneurs think bigger is better. Because of this reason, they follow one or more type of growth strategies. Growth in sales is often used as a measure of performance. Growth may also improve the effectiveness of the organization. We can state a lot of advantages over smaller firms operating in more limited markets. One of the main reasons is, large size or large market share can lead to economies of scale.

Marketing or production synergies may result from more efficient use of sales calls, reduced travel time and longer production runs. Learning and experience curve effects may produce lower costs as the firm gains experience in producing and distributing its product or service. Experience and large size may also lead to improved layout, gains in labor efficiency, redesign of products or production processes or larger or more qualified staff departments. Lower average unit costs may result from a firm's ability to spread administrative expenses and other overhead costs over a larger unit volume. Improved linkages with other stages of production can also result from large size.

Although diversification has benefits, it is an open question whether it can be accomplished more efficiently by investors diversifying across traded stocks, or by firms diversifying by acquiring other firms. If we compare the transactions costs associated with investor diversification with the costs and the premiums paid by firms doing the same, investors in most publicly traded firms can diversify far more cheaply than firms can. The track record of diversifying mergers is generally poor with a few notable exceptions. A few firms, such as General Electric, seem to be able to grow and enhance shareholder wealth while diversifying. However, this is the exception rather than the norm. Diversification may be successful, but it seems to need more skills and infrastructure than some firms have.

There are many reasons for pursuing a diversification strategy, but most pertain to management's desire for the organization to grow. Companies must decide whether they want to diversify by going into related or unrelated businesses. They must then decide whether they want to expand by developing the new business or by buying an ongoing business. Finally, management must decide at what stage in the production process they wish to diversify.¹⁸

¹⁸ <http://www.enotes.com/management-encyclopedia/diversification-strategy>

2.1.4. Tax Advantages

There are several different ways that companies may reduce taxes through a merger or acquisition and also tax benefits can accrue at both the shareholder and corporate level. Many mergers and acquisitions provide an opportunity for corporations and shareholders to receive tax benefits. In a small minority of cases, these benefits are large in comparison to the value of the acquired company. But it is not certainly accepted as tax advantages are one of the major motives behind merger and acquisition transactions. Because even in cases, where are significant tax advantages, there is no strong evidence that they were the driving factors in the takeovers.

However, in some cases the tax benefits a corporate combination are also available by other means, and such benefits should not be attributed to the merger process alone. Shareholders of an acquired combination can receive many forms of payment when they sell their shares as part of a merger or acquisition. Such receipts may be deemed taxable or nontaxable. If they are taxable, then the shareholders must pay capital gains taxes on their gain over basis. If they are not taxable, then shareholders need pay no taxes until they sell the shares in the acquiring company that they receive as payment. The latter treatment is clearly preferable to the former from the perspective of the acquired firm's shareholders. It may also represent a net gain to shareholders relative to the no-takeover situation; they may be less likely to sell their shares in the new company and incur capital gains taxes than they would have been had no acquisition occurred.¹⁹

Whether tax motives are important factors for M&A transactions, there has been much debate about this in finance. Certain studies have concluded that acquisitions may be an effective means to secure tax benefits. Gilson, Scholes, and Wolfson have set forth the framework demonstrating the relationship between such gains and M&A transactions. They assert that for a certain fraction of mergers, tax

¹⁹ Alan J. Auerbach and David Reishus, **The Impact of Taxation on Mergers and Acquisitions**, 1987, p.72.

motives could have played a significant role. Hayn, however, has empirically examined this relationship and has found that ‘potential tax benefits stemming from net operating loss carry forwards and unused tax credits positively affect announcement – period returns of firms involving tax-free acquisitions, and capital gains and the step-up in the acquired assets’ basis affect returns of firms involved in taxable acquisitions.²⁰

2.1.5. Other Motives

However in mergers and acquisitions there are also other economic motives behind. For further explaining we can divide them into two parts as horizontal integration and vertical integration. Horizontal integration explains the increase in market share and market power that results from acquisitions and mergers of rivals. On the other hand, vertical integration refers to the merger or acquisition of companies that have a buyer–seller relationship.

2.1.5.1. Horizontal Integration

In microeconomics and strategic management, the term horizontal integration describes a type of ownership and control. It is a strategy used by a business or corporation that seeks to sell a type of product in numerous markets. Horizontal integration in marketing is much more common than vertical integration is in production. Horizontal integration occurs when a firm is being taken over by, or merged with, another firm which is in the same industry and in the same stage of production as the merged firm, e.g. a car manufacturer merging with another car manufacturer. In this case both the companies are in the same stage of production and also in the same industry.²¹ Horizontal merger provides several advantages. For example, economies of scale principally denote effectiveness related to alterations in

²⁰ Carla Hayn, “Tax Attributes as Determinants of Shareholder Gains in Corporate Acquisitions”, **Journal of Financial Economics**, June 1989, pp. 121-153.

²¹ http://en.wikipedia.org/wiki/Horizontal_integration

the supply side, for example, growing or reducing production scale of an individual form of commodity. On the other hand, economies of scope denote effectiveness principally related to alterations in the demand side, for example growing or reducing the range of marketing and supply of various forms of products. Economies of scope are one of the principal causes for marketing plans like product lining, product bundling, as well as family branding. Also, economies of scale refer to the cost benefits received by a company as the result of a horizontal merger. The merged company is able to have bigger production volume in comparison to the companies operating separately.

Therefore, the merged company can derive the benefits of economies of scale. The maximum use of plant facilities can be done by the merged company, which will lead to a decrease in the average expenses of the production. More recent research implies that horizontal mergers increase buyer power of the merging firms in instances where the suppliers are concentrated. This was theoretically demonstrated by Snyder as well as by Stole and Zwiebel, who theorized that merged buyers could lower their costs of inputs that they purchase from concentrated supplier industries. This was supported by recent empirical work. Fee and Thomas examined a sample of 554 horizontal transactions over the period 1980-1997.²² However, they noticed negative stock market reactions by suppliers who imply that the merged companies gain some buying power relative to their suppliers. These results were also supported by Shahrur analysis sample of 463 horizontal mergers and tender offers over the period 1987-1999.²³ He found that efficiency considerations were the main factor driving the horizontal deals as opposed to the achievement of market power. His results lend support to the Eckbo findings some two decades earlier.

²² C.E. Fee and S. Thomas, "Sources of Gains in Horizontal Takeovers: Evidence from Customer, Supplier and Rival Firms", **Journal of Financial Economics**, 2004, pp. 423-460.

²³ Husayn Shahrur, "Industry Structure and Horizontal Takeovers: Analysis of Wealth Effects on Rivals, Suppliers and Corporate Customers", **Journal of Financial Economics**, 2005, pp.61-98.

2.1.5.2. Vertical Integration

In microeconomics and management, the term vertical integration describes a style of management control. Vertically integrated companies in a supply chain are united through a common owner. Usually each member of the supply chain produces a different product or (market-specific) service, and the products combine to satisfy a common need. It is contrasted with horizontal integration. Vertical integration is one method of avoiding the hold-up problem. A monopoly produced through vertical integration is called a *vertical monopoly*, although it might be more appropriate to speak of this as some form of cartel. Nineteenth century steel tycoon Andrew Carnegie introduced the idea of vertical integration. This led other business people to use the system to promote better financial growth and efficiency in their companies and businesses. The degree to which a firm owns its upstream suppliers and its downstream buyers is referred to as vertical integration. Because it can have a significant impact on a business unit's position in its industry with respect to cost, differentiation, and other strategic issues, the vertical scope of the firm is an important consideration in corporate strategy. A firm might consider vertically integrating for several reasons. It leads to reduction of transportation costs as the common ownership results in closer geographic proximity. The transaction costs can be controlled if a firm acquires the other firms in the vertical chain, then one division of the same company will transfer goods to other divisions. So, transaction costs in form of transport, cost of negotiation, cost of control etc. will be eliminated. The overall average cost of the firm will decrease because if the divisions are under same management control then there will be in house supply and departmental heads will determine the transfer price. There are a lot of examples in the automobile industry. As automobile manufacturers realized that they may need to provide potential buyers with financial assistance, in the form of less expensive and more readily available credit to sell more cars. For this reason, General Motors (GM) formed General Motors Acceptance Corporation. General Motors Acceptance Corporation provides low cost credit to many car buyers who might not be able to get financing necessary to buy a new car. Companies such as GMAC are able to sell commercial paper at money market rates and use the difference between these rates and the financing

rates it charges to car buyers to help sell cars while making profits on financing. However in 2000s, automakers needed to try to maintain market share to keep their costly plants and labor force generating revenues and were forced into costly financing programs that competitors, such as Toyota avoided.²⁴

2.1.6. Improved Management

Some takeovers are motivated by a belief that the acquiring firm's management can better manage the target's resources. For this reason, they aim to acquire the target company to provide better management opportunities. Little significant empirical research has been conducted on the importance of improved management motive. The important and difficult factor here is determining which takeovers are motivated solely by this factor because improved management usually is just one of the several factors in the acquirer's decision to make a bid. It is difficult to isolate improved management and to explain its role in the bidding process. The argument that takeover offers by large companies for smaller growing companies are motivated in part by managerial gains may be reasonable. For large public firms a takeover may be the most cost efficient way to bring out a management change.

2.1.7. Improved Research and Development

Research and Development process has always been important for countries especially nowadays. Because it is important for companies for their future growth, this is especially for pharmaceutical companies. This has been a reason for the consolidation for pharmaceutical companies in the fifth merger wave. As a good example for this approach, we can give the mega merger example Glaxo Wellcome and Smithkline Beecham in 1999. It was a merger cost approximately 73 million USD as being the largest company in the industry. By this merging process, the research and development departments of the two companies also merged which had nearly doubled the budgets of their larger rivals such as Pfizer and Merck. For this

²⁴ Gaughan, **Mergers, Acquisitions and Corporate Structuring**, p.156.

reason, these rivals also started to seek for right merger and acquisition processes. Following, the acquisition of Pfizer of Warner Lambert occurred in 2000.

2.1.8. Improved Distribution

One of the major the concerns of producers is the distribution of products to the ultimate consumers. Because, companies which a make a product but do not have direct access to consumers need to develop channels to ensure that their product reaches the ultimate customer in a profitable manner. Especially vertical mergers have advantages in this process. Vertical mergers between manufacturers and distributors generally give competitor manufacturers cause for concern in that they worry about being cut off from distribution channels. For the success of many companies locking in dependable distribution channels can be very important.

2.2. The Types of Mergers and Acquisitions

2.2.1. Horizontal Mergers

Horizontal mergers take place when the two merging companies produce similar product in the same industry. When the two companies competing in the same market merge or join together for example like Mac Donald and Burger King, it is a horizontal merger.

The main motivation behind the horizontal merger is forming a larger firm may have the benefit of economics of scale. This economics of scale provides arrying off duplication of installations, services and functions, widening the line of products, decrease in working capital and fixed assets investment, getting rid of competition, minimizing the advertising expenses, enhancing the market capability and to get more dominance on the market. Economies of scale refer to the cost benefits received by a company as the result of a horizontal merger. The merged company is able to have bigger production volume in comparison to the companies operating separately. Therefore, the merged company can derive the benefits of

economies of scale. The maximum use of plant facilities can be done by the merged company, which will lead to a decrease in the average expenses of the production.²⁵ They decrease the number of firms in an industry, possibly making it easier for the industry members to go into cartels for monopoly profits. Horizontal mergers can either have a very large effect or little to no effect on the market.

If the combining companies are at small scale, the results of the merger are less noticeable. These small scale mergers are very common. If a small local drug store were to horizontally merge with another local drugstore, the effect of this merger on the drugstore market would be minimal. In a large horizontal merger, however, the resulting ripple effects can be felt throughout the market sector and sometimes throughout the whole economy.

A general opinion about large horizontal mergers is they are perceived as anticompetitive. If one company holding twenty percent of the market share combines with another company also holding twenty percent of the market share, their combined share holding will then increase to forty percent. This large horizontal merger has now given the new company an unfair market advantage over its competitors. The amalgamation of Daimler-Benz and Chrysler is a popular example of a horizontal merger.

2.2.2. Vertical Mergers

These kinds of mergers occur when two firms, each working at different stages in the production of the same good combine. A vertical merger is one in which a firm of company combines with a supplier or distributor. By directly merging with suppliers, a company can decrease reliance and increase profitability. This type of merger can be viewed as anticompetitive because it can often rob supply business from its competition. If a contractor has been receiving a material from two separate firms, and then decides to acquire the two supplying firms, the vertical merger could cause the contractor's competitors to go out of business (say, if General Motors were

²⁵ <http://www.economywatch.com/mergers-acquisitions/type/horizontal.html>

to buy up Bridgestone Tyres and Michelin Tyres). In most cases, the vertical merger is a union that takes place voluntarily. Both parties determine that joining forces will strengthen the current position of the two businesses, and also lay the foundation for expanding into other areas as well. For example, a company that produces bearings for factory machinery may choose to merge with a company that manufactures gears for the same type of machinery. Together, they continue to provide products to their existing clientele. At the same time, the newly merged entity will create product offerings that will expand the usage of current clients and also allow the new company to capture additional customers.²⁶

Vertical mergers can best be understood from examining real world deals. One such merger occurred between Time Warner Incorporated, a major cable operation, and the Turner Corporation, which produces CNN, TBS, and other programming. In this merger, the Federal Trade Commission (FTC) was alarmed by the fact that such a merger would allow Time Warner to monopolize much of the programming on television. Ultimately, the FTC voted to allow the merger but stipulated that the merger could not act in the interests of anti-competitiveness to the point at which the public good was harmed.²⁷

Vertical mergers generate significantly positive wealth effects. The average combined wealth effect in vertical mergers is about 2.5% during a three-day event window surrounding the announcement of the merger transactions. The wealth effect is significantly larger when compared with that for diversifying mergers. Overall, the wealth effect in vertical mergers is comparable to that for horizontal mergers.²⁸ Also it is necessary to add that merger wealth effects are generally greater in the 1980s and 1990s relative to those at 1960s and 1970s. More importantly, we find that the increasing wealth effects of merger activity in the 1980s and 1990s are mainly

²⁶ <http://www.wisegeek.com/what-is-a-vertical-merger.htm>

²⁷ <http://www.learnmergers.com/mergers-vertical.shtml>

²⁸ Joseph P.H. Fan, Vidhan K. Goyal, "On the Patterns and Wealth Effects of Vertical Mergers", **Journal of Business**, June 2002, p. 4.

attributable to vertical mergers. There is no clear time-series pattern for wealth effects in horizontal or diversifying mergers.

2.2.3. Conglomerate Mergers

Conglomerate merger is a merger between firms that are involved in totally unrelated business activities. They generally involve the union of two companies that have no type of common interest, are not in competition with any of the same competitors, and do not make use of the same suppliers or vendors. The conglomerate merger usually brings together two companies with no connections whatsoever under a corporate umbrella.

There are a lot of reasons for conglomerate mergers to occur. Often, the merger is undertaken in order to allow two unrelated businesses to draw on the combined resources to strengthen the position of each company in their respective industries. Mergers of this type may come from a desire to protect both entities from economic downturns that could temporarily impact the bottom line of one of the entities. A conglomerate merger can create the opportunity for the merged firm to engage in conduct involving a variety of different kinds of contingent sales offers.

Two hypothesis are explored on how a conglomerate merger could enhance the effectiveness of coordination. The first is that an acquisition of complements can change bundling and tying opportunities, and by doing so, change the sustainability of coordination. The outcome from tying or bundling can have a negative impact on the profits. Of a rival, then regardless of whether it is profitable for the conglomerate, the use of bundling/tying makes credible punishment for deviation from a coordinated outcome more severe. The second hypothesis is that a conglomerate merger might give rise to multi market contact. Multi market contact arises when firms compete against each other in multiple markets. Multi market contact makes coordination easier by making reaching an agreement easier and/or making enforcement more effective. It makes coordination easier because it makes firm more symmetric and increases the extent of their interaction. It enhances the sustainability of coordination by either allowing for more severe punishments, since punishments

can be across more than one market, or by enhancing detection when prices or output are not public information.²⁹

There are two types of conglomerate mergers: pure and mixed. Pure conglomerate mergers involve firms with nothing in common, while mixed conglomerate mergers involve firms that are looking for product extensions or market extensions.³⁰ In the case of pure conglomerate mergers, two companies involved in the merger have no direct or indirect connection or interest. The pure conglomerate merger is one where the merging companies are doing businesses that are totally unrelated to each other. The other type of conglomerate merger which is less common is mixed conglomerate merger. The mixed conglomerate mergers are ones where the companies that are merging with each other are doing so with the main purpose of gaining access to a wider market and client base or for expanding the range of products and services that are being provided by them. The mixed conglomerate merger will still involve companies that are more or less not related in terms of competition, but may have some connection as far as vendors or possibly two aspects of a common industry. For example, if a company chose to merge with a supplier, this could be construed as a mixed conglomerate merger, owing to the former client-vendor connection.

2.3. The Basic Concepts about Mergers and Acquisitions

2.3.1. Mergers and Acquisitions

The main idea behind the mergers and acquisition transactions can be stated shortly with the equation which is one plus one makes three. The key principle behind buying a company is to create shareholder value over and above that of the sum of the two companies. Two companies together are more valuable than two separate companies - at least, that's the reasoning behind M&A.

²⁹ Jeffrey Church, **The Impact of Vertical and Conglomerate Mergers on Competition**, September 2004, p. 50.

³⁰ <http://www.investopedia.com/terms/c/conglomeratemerger.asp>

A merger is a combination of two or more companies in which the assets and the liabilities of the selling firm(s) are absorbed by the buying firm. Although the buying firm may be considerably different organization after the merger, it retains its original identity. The merger of equals between Sprint and Nextel is an example.

³¹ A merger refers to the situation when two companies are absorbed into a single entity. Stockholders are allowed to keep equal interest in the new company-unlike in acquisitions, where one of the companies buys into the second company's stock to have greater control. The merger process is often managed by investment bankers, who play the role of transferring ownership via stock sales. Merger is a financial tool that is used for enhancing long-term profitability by expanding their operations. Mergers occur when the merging companies have their mutual consent as different from acquisitions, which can take the form of a hostile takeover. Mergers may be horizontal, vertical, conglomerate or congeneric, depending on the nature of the merging companies.

An acquisition is the purchase of an asset such as plant, a division, or even an entire company. For example, Procter and Gamble made a major acquisition in 2005 when it purchased the Gillette Company, Inc., in order to extend its reach in the consumer products industry. An acquisition is a corporate action in which a company buys most, if not all, of the target company's ownership stakes in order to assume control of the target firm. Acquisitions are often made as part of a company's growth strategy whereby it is more beneficial to take over an existing firm's operations and niche compared to expanding on its own. Acquisitions are often paid in cash, the acquiring company's stock or a combination of both. Acquisitions can be either friendly or hostile. Friendly acquisitions occur when the target firm expresses its agreement to be acquired, whereas hostile acquisitions don't have the same agreement from the target firm and the acquiring firm needs to actively purchase large stakes of the target company in order to have a majority stake.³² Reverse takeover occurs when the target firm is larger than the bidding firm. In the course of acquisitions the bidder may purchase the share or the assets of the target company. In

³¹ Andrew J. Sherman and Milledge A. Hart, **Mergers and Acquisitions from A to Z**, 2006, p.10.

³² <http://www.investopedia.com/terms/a/acquisition.asp>

either case, the acquiring company often offers a premium on the market price of the target company's shares in order to entice shareholders to sell. For example, News Corp.'s bid to acquire Dow Jones was equal to a 65% premium over the stock's market price.

2.3.2. Distinction Between Mergers and Acquisitions

Although, in general these two terms are accepted as same, which are often uttered in the same breath and used as though they were synonymous, they mean slightly different things. The differences between a merger and acquisition are important to value, negotiate, and structure a client's transaction. Both mergers and acquisitions involve one or more multiple companies purchasing all part of another company.

As we stated earlier, a merger occurs when two firms, often of about the same size, agree to move forward and exist as a single new company rather than remain separately owned and operated. This kind of action is more specifically referred to as a "merger of equals." When companies are merging, it is financed by a stock of swap, in which the stock owners in both companies receive an equivalent quantity of stock in the new company. The stocks of both companies are surrendered and new company stock is issued in its place. A merger is said to be when two organizations agree on the decision of being one; it's the mutual decision. Because in a merger, organizations are aimed to be as one organization and continue as one rather than as two separate organizations. For this reason, the newly merged firm's stocks are issued and stocks of old companies (the stocks of two companies before merging) are surrendered. The merger can be horizontal merger, conglomerate (or congeneric) merger or vertical merger; it depends on the merging companies nature. If the two companies which have decided on merging compete in same product line it is said to be horizontal merging.

If two companies of different product line agreed on a merger such that there products together enhances the company's value is said to be vertical merger. At last,

the companies that do not have similar product lines at all decided to merge; this type of merger is called conglomeration merger. Depending on how merger has been financed it can be categorized as purchase mergers and consolidation mergers. The former is defined as a merger in which a company (target) is purchased by the bidder; the latter is defined as a merger in which a new firm is established by bringing together both the firms.³³

As an example to mergers, Glaxo Wellcome and SmithKline Beecham ceased to exist and merged to become a new company, known as GlaxoSmithKline in the case which two companies (often of same size) decide to move forward as a single new company instead of operating business separately. The stocks of both the companies are surrendered, while new stocks are issued afresh. As an example to an acquisition, Dr. Reddy's Labs acquired Betapharm through an agreement amounting \$597 million which is the case when one company takes over another and establishes itself as the new owner of the business. The buyer company “swallows” the business of the target company, which ceases to exist.³⁴

³³ <http://www.articledashboard.com/Article/Difference-between-Merger-and-Acquisition/1442624>

³⁴ <http://business.mapsofindia.com/finance/mergers-acquisitions/difference-between.html>

3. THE PROCESS OF MERGERS AND ACQUISITIONS

The most important part in M&A process is the merging process. In order to realize an efficient merging process, we should examine all the stages in detailed. The success of the M&A is proved when the companies integrate well. In the process of mergers and acquisitions, there are a lot of legal, financial and operational analyses. The problems about human resources are accepted as the main factors behind the failure of the mergers. According to this, the most important factors about integration in the mergers and acquisition process are not to lose the key talents and managers to provide efficient communication and integration of the corporate cultures.³⁵ Of course, there would be a pressure on employees during the M&A process because of the uncertainty. To avoid the problems that would occur, it is important to improve good relationships with the employees in every carrier path.³⁶ From another point, every stage of mergers and acquisition process can be stated as 'the most important stage'. The M&A process starts with the evaluation of the strong and weak parts of the enterprise.

When the basic operations are considered, mergers and acquisitions are examined at 3 steps. At the first stage, there is the improvement of the merging strategy, determining the criteria of mergers and acquisition, seeking for the target companies, their observation and evaluation from several stages. At the second stage, there occurs the improvement of the strategies, evaluation of the companies financially, valuation and start of the negotiations. At the last stage, there is the evaluation of the corporate culture, integration and the end of the operation.

Every mergers and acquisitions process has specific properties and the stages can differ according to case to case. By this way, these stages can differ according to the merger's direction, rivals, timing, reasons and aims, nationalities of the sides, corporate cultures and supervisors. According to the factors we have stated above, the M&A process can differ. Some stages are skipped or differentiated. Shortly, we

³⁵ Ira T.Kay, Mike Shalton ,'The People Problem in Mergers ',**The McKinsley Quarterly**, No.4, 2000,pp. 27-28.

³⁶ Philip H. Siegel, "Using Peer Mentors During Periods of Uncertainty", **Leadership &Organization Development Journal**, 2000, pp.243-244.

can state that there are similar approaches about mergers and acquisitions which we underlined generally in our work.

3.1. Decision for Mergers and Acquisitions

When the necessity for merging of the enterprise is determined, first it is important to decide whether the merger is right. The decision should be given when it is believed that the company will be successful by it. As usual, the decision for merging is given by top management. But in some cases the factors that affect this decision can be given because of the legal necessities. In the case of deciding for mergers, the conclusions should be considered in detailed. The groups that will be affected from mergers and acquisitions should be considered and their supports should be provided.

It is not easy for the top management to decide to merge. Because any decision without the approval of internal and external targets can cause bad conclusions. From this point of view, before the merger process, at the merger process and after the merger process, there will be a new corporate culture. At the first stage, it should be considered from the point of communication and public relations. A merger communication should be arranged, the internal and external groups about mergers should be informed by letters, corporate advertisement, e-mail and the potential reactions about mergers should be reduced and by this way mergers should be supported. These groups are the partners of the company, customers, suppliers, employees, investors, non-governmental organizations, law-makers and press especially.

3.2. The Investigation and Determination of the Candidates for Nomination

After the alternatives about the direction of the merger is decided and evaluated from the internal and external factors, it is time to state that the merger is suitable for the aims of the enterprise. At this point, for the success of mergers and acquisitions, starting from the merger planning, the evaluation of the target companies, integration after merger, at every stage, the human resources departments should be involved. Like in the marriages between people, in the mergers between companies, the discovering of the right candidate at the beginning will decrease the possibility of the problems.

At this stage, any mistake will be very critical. If the wrong one is chosen between the candidates for nomination, the risk of failure is high at the beginning anyway. On the other hand, the holders of the investigation are important. In this case we have two alternatives. These will be organized either by an internal team or supervisors. There are many advisory companies for mergers and acquisition transactions especially in the USA. The professional service from these institutions increases the possibility of success in the merger process.

3.3. The Analysis and Contrast of the Candidates for Nomination

This is the first stage where the investigation begins. At this stage, the determination of candidates among candidates for nomination is organized. In this determination process, there are several criteria which should be considered. These are the situation of the sector, the ratio of growth, the past of candidates in the market, location, market shares, finance, tend of merging, owners and management. It is necessary to remind that every merger has specific properties. For this reason, the criteria and their importance level can vary.

3.4. The Determination of Candidate Enterprises

In this stage, among many candidates for nomination or candidates, the most suitable ones are selected. This generally can be stated as the aim of this stage. At this stage, the negotiations with the candidate enterprises haven't started yet. The enterprises will determine the candidates according to the criteria which have been set up. So, much more detailed research is necessary here. Because, at the next stage, the research will be much more detailed and there will start negotiations and analysis with the selected candidate. As we have stated before, a consulting firm can make the merger process more efficient and prevent losing time. Also the number of the candidates is another point which is necessary to focus on. If the criteria are less, the selected candidates will increase, and this will cause losing time and will cost much more in the next future. On the other hand, if the criteria are diversified, the number of candidates will decrease but this will involve the risk of losing several suitable candidates. A specific number of candidates should be chosen among candidates for nomination. As such, it is not obligatory to determine only one candidate enterprise. A company planning to merge can consider more than one candidate enterprise. The criteria which is considered at this point, can be stated as, the yearly income and their Exchange (maximum and minimum), geographical location (country, city), time of activities, market shares, prestige, popularity, innovation, technology, corporate cultures, research and development, cost of production, sales and marketing facilities, sales prices, products and services, the situation of managers and owners, other factors. When evaluating candidate enterprises, there should be analysis, research and evaluation at the sector and corporate basis.

3.5. The Analysis and Evaluation of the Selected Candidates

It is a stage where a much more detailed analysis and evaluation of the candidate enterprise is organized. After this much more detailed research, one of them will be chosen, and negotiations will start. For this reason, the candidates should be analysed in detailed. A lack of data in the analysis, will take the process

back. After this the analysis and evaluation won't be one sided. The candidate enterprise will also start to analyse our enterprise. The criteria we have stated before should be cared while the candidate companies are analysed and evaluated. When the criteria increases, the time spent on this process increases and also, the cost will be higher. But if there is lack of criteria, the risk for making mistakes will increase. In this case, the consulting companies will be very helpful in order to get better solutions. The criteria which should be used in this process will be handled below.

In fact, the criteria of consistency should not only be quantitative, but also they should be qualitative. The merger of the parties which are not suitable to each other will increase the risk of failure. Especially, human resources departments are very responsible regarding these issues. The observation of candidates from several aspects such as human resources, corporate culture can prevent the problems that will include the risk for failure. To solve these problems will be much more difficult at further stages. Here, the internal and external factors play key role. The candidate can be suitable from internal factors but, external factors can't match well.

The consistency of the candidate in the interest of a mergers and acquisitions transaction is not only enough for the target company. The consistency of both sides is important here. A candidate company can be ideal alone, but in the case of merger, it is not guaranteed that they are suitable.

3.6. The Selection of the Suitable Company among Candidates

As we have stated before, after the necessity of merger is realized, the merger process starts and the decision after this stage is the most critical stage. After all these stages, the possible candidate will be chosen. First of all, the candidates for nomination must be chosen among many enterprises, after that there will be a selection and the candidates will be determined. After a more detailed analysis, and evaluation, the right candidate is selected. If the criteria necessary for the consistency is provided, the expected advantages will be realized. It is necessary to underline that every mistake at this stage will bring the necessity of the previous stage. This will

cause the enterprise losing time and money. Shortly, by the selection of the right candidate ,the merger will be realized, and also after that there will be a more successful integration .Here, the consistency criteria determined will play key role in obtaining the right decision.

3.7. The Presentation of the Intent Letter

At the previous stages, the selection of the candidates among the enterprises is done. From the point of merging process, the steps so far can be seen as one sided. The enterprises which decide to merge will present a letter of interest to the selected candidate enterprise as front offer. At this stage, the candidate will evaluate this offer and if it finds it suitable, the negotiations for merger will start. Here, the ideas and expectations of the candidate must not be ignored.

3.8. The Arrangement of Confidentially Agreement

The sides must sign a confidentially agreement. The aim of this agreement is to provide the privacy of the information the two sides had in the merger process whether the merger occurs or not. Although the negotiations are positive, next stages are very important. The companies' main concern here is to share their privacy with their rivals in the merger process. Because if the merger doesn't occur, the candidates will have the secrets of each other, this is a risk as we have stated earlier, and also both of the sides will lose time and there will occur external and internal problems. For this reason, both sides should sign an agreement to underline that they won't use the information for any reason except merging.

3.9. The Beginning of the Negotiations between the Sides

It is natural that there will be differences in the ideas of the parties in the merger, for this reason, the people who take role in the merger should be chosen well, and they should monitor the problems from the perspective of the other side. This will prevent losing time and bring positive conclusions. The problems which occur in the merger process are generally similar. So the consulting companies should be involved in the mergers. The basic issues which should be considered in the negotiations are price, the financial situation of the owners of the companies, legal problems and other basic operations. The acceptance of the merger means the candidate company has positive ideas about the merger. After, the negotiations will start about the merger. After the negotiations start, there will be communication between the sides about the merger and the basic issues of the merger will be considered. This can be stated as ‘the other critical stage’.

The negotiations will be affected from the expectations of the two parties, their requests personalities, profits and other external and internal factors will be important. For this reason, in order to pass this critical stage, the communication and marketing skills of the sides will take major role. As we have stated before, the participators of these negotiations should be selected well. Another point to focus here is, the parties can be in negotiations with more than one candidate at the same time. This situation will create alternatives for the parties. For this reason, the advantages of the other candidates should be considered well. On the conclusion, every stage has a specific importance. And at this stage, the sides must agree with the basic issues. After the negotiations are positively finished, and the agreement with the basic issues is signed, it is time to sign the letter of intent.

3.10. The Sign of Letter of Intent

After the consistency between the two sides, letter of intent is signed about the merger. By the letter of intent, the two parties should sign an agreement. The letter of intent shows that the sides are in the merger. For this reason, this stage is a

major step for realizing the merger. As we have stated before, every stage in the merger process is important and needs a decision process. After the letter of intent is signed, the merger process starts. Letter of intent shows that the two sides are positive about the merger. On the other hand, there will be concern in internal and external groups after it is announced. There will be pressure on suppliers, customers, human resources and other groups. For this reason, public and several groups should be informed clearly. After the letter of intent is signed, the sides will start to examine each other in much more detailed.

3.11. Due Diligence

‘Due Diligence’ which can be seen as the key of the success in the mergers, is a process of diligence including not only financial and legal but also management and culture; in other words it aims to reveal the enterprises’ previous and current states and future potentials. The parties should determine what kinds of information it should get about other parties. An information that is not very important for a party may be in the quality of a secret for another party and so it will have difficulty in giving this information. Because of completing the negotiations, signing the intention letter and then going through the phase of due diligence can not be seen as specific indicators of this merger. In other words, until the merger comes true, there won’t be any specific case in view.

Even if the parties say ‘yes’ to the merger, and they still get question marks in their minds, they will be unwilling to give some information to the other party. The interviews can be locked at a stage from time to time. In this respect, information managers are coming to prominence in the enterprises in recent times and the importance of these people is increasing in the stage of due diligence of mergers and acquisition.³⁷ If the stage of due diligence remains limited with the inspections of superficial and only physical factors which confront us under the names of detailed inspection, due diligence, comprehensive diligence, it is indispensable to have bad

³⁷ Tomasz Smaczny, “Is An Alignment Between Business and Information Technology the Appropriate Paradigm to Manage IT in Today’s Organizations”, **Management Decision**, 2001 pp. 800.

experiences for the parties. The studies of due diligence shouldn't be just seen as 'a procedure' for parties to get to know each other well.

As a result of this stage, it is going to be started to merger processes and if the expectations are met, the merger is going to be completed. Even maybe, the smallest unit that the parties have gone unnoticed will cause the parties to regret. In this respect, the parties shouldn't forget that they can suffer heavy losses and if possible, they should try to notice every unit by applying to experienced consulting companies that are specialist on the field.

This situation has caused to increase of many consulting and specialist companies related to mergers of company in recent years in the world and our country. Even if the previous stages have been got through with a set of teams that the parties have composed, the due diligence is such a strict subject that it can not be resigned to information, ability and experiences of party's teams. On the one hand, this stage aims to remove the privacy of parties, on the other hand it requires to use the communication skills.

It has been aimed to acquire more detailed information with the stage of due diligence relative to previous determining a candidate and investigating a candidate. While the general information about secondary data and mainly financial state and general information about the sector acquired from non-operating resources have enabled to proceed to another stage related to the merger, the due diligence requires close inspection of other parties or prospective partner candidates by the teams or consultants that the parties have brought together for the merger of the parties. In this respect, basing this due diligence on timesheet and setting forth with a list that has the required information to be acquired are going to increase the chance of success of the inspection. It is also necessary to completely reveal whether the situations acquired from or expressed in secondary resources reflect the truth or not.

Harmony from different points of view can be seen as the most basic subject about mergers of the company. At this point, physical and financial harmony of the parties will remain incapable of providing the factor of convenience in marriages. In this respect, only greatness and financial convenience aren't sufficient in the mergers of companies.

Because of the redistribution of the enterprise resources in the global economy, and quick transfer of the resources between the parties, mergers and acquisitions come into prominence. Especially intangible resources are among the factors that control the critical factors that motivate mergers and acquisitions. Information, strategic capabilities and technology transfer can provide unique opportunities in terms of synergy. Synergy in intellectual capital means to have more than the separate totals of intellectual capitals of the parties in terms of creating values and competence success and of two or more intellectual capital resources. Along with this, most of the perspectives of due diligence either ignore or overlook the intellectual capital because of the difficulties of determining and evaluating compared to the most of physical assets and this situation becomes influential on resulting in failure of the mergers.³⁸

The basic purposes of the due diligence stage are pointed out to reveal whether the assets that the parties told they exist, really exist or not, determine what kind of problems and benefits that the parties can create with a going-concern enterprise, introduce the parties' liabilities and responsibilities against third persons and specify whether the parties have obstacles against the mergers or not³⁹. It is required to start out with a checklist in order to find answers to these issues with the aim of a detailed inspection.

The parties shouldn't ignore the main observation after having determined its probable partner candidate by taking a set of data into account following various periods and after pre-agreements which have the characteristics of a booking note in the process of company combinations. It seems that if they keep on acting with missing information after combination period, it is indispensable to encounter with bad surprises in the combination way where they have gone with great expectations. That is why, the parties should observe each other from a to z in detail or the target management should be observed in this way. As aforementioned, precise due diligence conclusions may arise surprising results or the combination may collapse. If this step is avoided with a few superficial observations without making enough,

³⁸ Oliver Gupta, Göran Roos, "Mergers and Acquisitions Through an Intellectual Capital Perspective", **Journal of Intellectual Capital**, Vol.2, No.3, 2001, pp.297-298.

³⁹ Mergers & Acquisitions, (Online)http://www.law.urnich.edu/journalsandOrgs/rg/outlines/ma_prit.doc ., March 30, 2002

much worse situations shall come up after the combination process. In order to pass this step quickly, some points should be underlined superficially or to ignore some subjects will increase the problems encountered in the future. Due diligence changes A small management that produces only one type of products and acts in one region will not require⁴⁰ as much effort as a great management that acts globally and produces various goods in terms of due diligence activities.

Due diligence process is affected by such factors as combination desires of the parties and inter knowledge of the parties. Quick and effective observation may create advantages for both parties. So, the parties will not put each other into trouble and discomfort of various bodies will be able to be inhibited from long observations and the loss of cost and time will be prevented. Along with this, due diligence process may change according to the states of the parties from a week to a few years.⁴¹

Passing this process effectively can be connected with the subjects such as the parties' opening themselves to other parties, their demands for combination, and utilization from specialists. On the other hand, extension of the process can discourage the concerned parties, if the encountered problems have no solutions, combination can be cancelled or postponed at this stage and in the end combination may cause problems. For these reasons, the observation process of the combination shouldn't be too short to go unnoticed or avoid some subjects, and too long to obstruct the process of combination.

Finishing these observations in a short time is of course for the benefit of the parties. Due diligence is not only the candidate's assets and financial data, beyond these but also human resources of which importance has been understood especially in recent years and due diligence should be handled in terms of corporate culture and the decision should be taken after observations.

⁴⁰ Lajoux Elson, a.g.e, p.6.

⁴¹ 'Sample Software Company Acquisition Due Diligence List', (Online) www.charlesmillsconsulting.com , , March 5, 2003

There are many samples of checklists with regard to due diligence, various examples about these checklists have been given below with their main topics. The subjects such as financial and technological research and development, intellectual capital, agreements and contracts, assets and mortgages, subject concerning employment, shareholders, licences and liabilities should be discussed at due diligence checklists with main topics.

Due diligence checklists including tangible and intangible assets, customers, personnel contracts, environmental issues, foreign activities, legal problems, providers, problems of tax and employers can be drawn up⁴².

If it is a consulting company, it lays emphasis at the due diligence checklist with main topics on; Company, subsidiaries and information about joint partners, finance, taxes, contracts and agreements, regulations concerning government, cases, products, marketing, management and personnel, properties and instruments, equipment, research and development, and other information about the company.

⁴³A list has been drawn up below by blending various lists used for the step of due diligence which is one of the critical factors in the success of combination/purchase. The titles and sub-titles can be changed according to situations, time, conditions and other factors. In other words, it won't be meaningful to wait for the same list to be valid in every combination and purchase activity. The more detailed the due diligence checklist is the more reliable to decide with the acquired data.

However it is not expected for every enterprise to have this information or it is not easy for enterprises to give this information with specific drawbacks. In this respect, only the main topics and general subjects are emphasised and if the critical information of the parties can not be received, the acquired data may cause some important points to be overlooked. And so, by evaluating the information in such a way that the unsuitable candidates are taken as suitable, the suitable candidates are taken as unsuitable, a wrong decision will be taken and if the combination is done basing on acquired data, the possibility of failure will raise, and if the combination isn't done, a suitable candidate will be eliminated by bearing that all lose of time,

⁴² 'Sahakian's Due Diligence Checklist' (Online) www.corporate-partnering.com/dwcl-dd.htm.

⁴³ 'M&A Sample Due Diligence Checklist', (Online)www.wrhambrecht.com/comp/ma/process/diligence/index.html

effort and cost. As a conclusion, it shouldn't be forgotten that other points which are under mentioned and unnamed here of which careful evaluation in due diligence will affect the decision and the success of combination.

Table 4: Due Diligence Checklist

A. Financial Observation (Previous Financial Data)
1. Profit Tables
2. Cash Flows and Financing
3. Balance Sheets
4. Data about Segment of the Enterprises
5. Principal Contracts
6. Monthly Inspection Reports
7. Annual Reports of Board of Directors
8. Financial Forecast Data about the Future (income, cash flows, balance sheet)
B. Enterprise Inspections
1. Historical Background of Enterprise
2. Business Outlines (Historical)
3. Business Outlines (Future Forecast)
4. Competitors and Market Share
5. Income Resources and Quality
6. Quality of Products and Services
7. Sales and Marketing
C. Process of Production and Instruments
1. Means of Production
2. Analysis of Cost
D. Organization and Management
1. Organization
2. Management
3. Transactors

4. *Source: Mergerstat Review, 1998.*

It is possible to extend and give details on the above list. However it is clear that each factor on this list will not be suitable for every enterprise. Because, the data in hand may not be reliable as every enterprise doesn't have a written register. In this respect, it would be useful not to ignore the instructive qualities of above checklist and to make researches about the reliability of these data in case of need and include additional factors in the inspection.

However, on the other hand the checklist to be used for due diligence may change whether the parties knew about each other before or not. If the firms knew about the other party just like in marriages between people, their background, current state, personality, his family's moral, material state and other factors previously, the criterion that it is going to use for inspection will not be so many.

As mentioned before, due diligence checklists will be extended and shortened according to the situation. If they come to a positive conclusion as a result of the convenience of factors in the checklist, they will move to the following stage. Otherwise a new process will be initiated related to candidate or candidates that have been chosen among a few previously determined alternative candidates.

3.12. Final Negotiations

One last negotiation is held between the parties with the aim of turning the scales of the merger intention and resolving some specific conditions after getting information about each other with due diligence. If the results that the merger sided enterprises acquired through due diligence are in harmony with declared or hoped results, there won't be any obstacle against the merger. The final negotiation has a vital importance in terms of evaluating the due diligence results and after analyzing declaring the parties' latest decisions about the merger and has the aim of shaping the post merger structure by revising the conditions about merger.

It should not be forgotten that the enterprises that are on the way to merger with each other encounter this situation with adverse outcomes as a result of the parties' declarations and information that have been acquired from other resources and if this negative situation isn't solved, the merger won't come true, the parties

will give up their decisions, they are going to face with the problem of trouble that the merger may cause in various people. From this point, it is only possible to go through this stage in due diligence by giving true information and providing transparency. Otherwise, the negative information that doesn't suit with information storage or declaration may cause the parties' effort to go for nothing and to suffer in vain.

Actually, turning to final negotiations means that there isn't any obstacle for the merger to become true and the parties suit each other as a result of inspections that the parties made about each other. Final negotiation can be thought as revising the last state before marriage and talking about post marriage terms. In this respect, the communication skills of the negotiators come into prominence. Appearance of some problems is indispensable in the stage of due diligence, solution of these problems and evaluation of merger decision of both parties for the last time increase the importance of negotiators.

The last evaluation of the acquired after a long period in the stage of due diligence and getting closer to the merger are bound to final negotiations. In this stage, after coming to an agreement, to the stage of signing merger agreement will be preceded between the parties.

3.13. Signature of Merger Agreement

After a long period finishes, it is going to be moved to the signing and completing the merger stage between the parties. On the one hand, the parties will come to an agreement and form the frames on the subjects such as the organization structure to be made up and the new construction points of the enterprises, the post merger roles of the parties with the final negotiations. From this point of view, the challenging level of the merger stage is influenced by the success of final negotiations.

The agreement that is provided between the parties will help the stage of agreement be less challenging. Some challenges to come true in this stage should be taken quite naturally. As the share of rare resources is thought as a reason for a

conflict, the role that the parties will play after merger is a rare resource. The break of conflicts in this stage should be taken as naturally as it is in every stage and the management of this should be showed attention. It is necessary not to forget that moving to this process doesn't mean that this process has ended ever after. In other words, even if it causes some results such as postponement or the cancellation of marriage with the last minute disagreements between the parties on the days and even in the hours before the wedding, similar cases can be experienced in the merger of the companies. For this reason, it is the other critical stage that they have reached after the stage of signing the agreement and long and challenging processes. Failure can cause destructive results in the solution of problems that may arise. This situation requires the enterprises that side with the merger to use tolerant, reliable, capable, persuasive, dynamic, good communication and marketing skilled negotiators in every stage.

In the stage of signing the agreement, the parties will determine the details of previous formed frames and will take the decisions oriented to planning of post merger. The parties are considered to accept determined partner as partner candidate previously, before the agreement and merger that the parties will arrange between them. However, the roles after the merger aren't bound to decision and the concerned decisions aren't resolved and if the post merger decisions aren't resolved clearly, and this time after the merger process finishes, then the arising problems will be handled and it is of course going to be very difficult to solve these.

In this sense, for the success of the merger it is required to display their roles clearly for the parties after the merger. To decree after an agreement will significantly influence the post merger success on the subjects of management and organization of new structure after the merger, the number of human resources and situation in terms of the position, the shares of the parties, financial obligation and commitments, relations with post merger internal and external target group. The stage of signature the agreement is bound to juridical and legal processes related to merger. Because, it is required to pay attention to some points such as getting permission from some legal institutions and legal conformity before the merger agreement is signed. Therefore, it is necessary to deal with the legal conformity aspect and to get required permissions before the signature of the merger between the

parties. For this reason, the stage of signature looks like signature on the marriage books. It isn't enough to deal between each other for the parties; the documents related to merger are also required to be approved by legal authorities.

3.14. Post Merger Integration

As it happened in most of the stages of inter enterprise merger, the stage of post merger corresponds with marriage activity between people. To get some benefits of marriage which is gathering of two people and in other words to provide a synergy from a new merger depend on the common features and differences of the parties. The owners or top directors of the enterprises have a specific initiative, and the employees of married enterprises can not interfere in this situation and they just have to accept and get used to the new conditions that came along with marriages between the parties.⁴⁴

The merger is completed with the signature of merger agreement and carrying out merger legally after a challenging process and critical stages. However, this point is important for the merging parties. The enterprises on the way of merger with several purposes will make some changes and innovations in the structure of organizations after the legal completion of the merger. Hard times will start after this stage especially in terms of human resources. The employees will experience the effects of the merger at the very most. In this sense, they encounter with the some situations such as stress and emotional traumas because of change in human resources, uncertainty, the studies of restructuring, the beginning of the merging process and this increases the importance of formal and informal mentoring more. In such stages it is expressed that career advancement and psycho social informal mentoring play a critical role.

The value of invisible human resources on balance sheets or income tables and their reactions to this process display the enterprises that the element in the heart of merger is in fact human element⁴⁵. The enterprises, which are suitable for each

⁴⁴ Kevin J. Dooley, Brenda J. Zimmerman, "Merger as Marriage: Communication Issues in Post-Merger Integration", **Health Care Management Review**, 200 3, pp.58-59.

⁴⁵ Clemente, Greenspan, a. g. e, p.2.

other in terms of finance or greatness or sector, mostly ignore the conformity in terms of human resources or organization cultures. It can be said that one of the most specific reasons of resulting in disappointment and failure of merger and acquisition activities is the negligence of organization cultures integration, purpose, value, belief, thought, system, leadership styles, and integration of management applications and processes of the parties.

Top managers have important roles in creating an organization culture to support organizational strategies of the enterprise. Creating effectively blended culture in which protecting the parties' similar values and believes, is a decreasing element of resistance to change⁴⁶. All of the employees in new structure should work responsibly in order to keep up, maintain their lives and reach their aims along with the mergers and acquisitions that create a change. In method of change, success requires that the enterprises should be learning organizations in a sense. Authority, role, responsibility, policy, procedure and applications change in the new structure along with new management. In this respect, the enterprises of which employment styles, management styles, cultures are different from each other will have difficulty when gathered. Not only the marrying people, but also their families are important for harmony and happiness in marriages. In other words, the enterprises' various interior and exterior target groups will be very influential in the success of marriage⁴⁷. Even when the composing personnel surplus is taken into consideration, this situation will be more complicated. On the one hand merger bears meaning an organizational change and it becomes indispensable to resist to changes as in every organizational change effort. Some information missing and the worry about losing his job and career will create negativity on the motivation of the personnel. In this sense, the enterprises which side with merger and have different qualifications from each other will bring the difficulty in the harmony as well. Merger requires to make a choice among the personnel in the same fields of different enterprises and to place accordingly to the new structure. When one of the basic purposes of the merger is considered, discharging of some personnel should be taken naturally.

⁴⁶ Corrinne S. Shearer, David S. Hames, Janet B. Runge, "How CEOs- Influence Organizational Culture Following Acquisitions ", **Leadership & Organization Development Journal**, 2001, pp. 105-108.

⁴⁷ Dooley, Zimmerman, a. g. m., p.59.

Some of the employees in the same position will lose their jobs in the framework of post merger cost reduction studies. So, these are the all subjects to be emphasised studiously that how many employees will keep on post merger working from which enterprise, choosing these people one by one, determining new positions, adaptation to the new structure. The basic reasons of problems experienced on the subject of post merger integration can be ranked as disorientation of the personnel, nonconfidence in management and decrease of performance⁴⁸. With the beginning of merger news, the employees will try to find answers to the questions related to how merger can influence themselves and resist to this change, if the questions in their minds can't find answers on time and honestly, nonconfidence in management will begin, and so the employees won't focus on their jobs and decrease will appear in their performances. The employees that started to take place in the new structure and came from different enterprises will be able to be grouped between themselves as 'we' and 'they' and will cause hostility and conflict among employees, and this situation will lead to decrease the merger's chance of success⁴⁹.

In this point, the completion of the post merger integration can be seen as a critical condition for the success of the merger. So the leadership styles play a critical role. It has been revealed that the researches made on this issue, the power of awarding, legal power, specialization, taking into consideration and the application based on transformational leadership will have a more positive effect on the employees when compared to the applications based on compelling power⁵⁰. To sum up, the leadership styles has critical influences after merger on the employees in terms of motivation. Furthermore, with the aim of decreasing the stress that merger and acquisition caused on human resources, it has been told that the social support will be socially useful for the employees⁵¹.

⁴⁸ 'Merger and Acquisition Integration', (Online)
www.appliedlearninglabs.com/solutions/ma_int.html, 12 Mart 2003.

⁴⁹ Sheila Panchall, Susan Cartwright, "Group Differences in Post-Merger Stress", **Journal of Managerial Psychology**, Vol. 16, No.6, 2001, pp.424-425.

⁵⁰ Teresa Joyce Covin, Thomas A.Kolenko, Kevin W.Sightler, R.Keith Tudor, "Leadership Style and Post-Merger Satisfaction", **Journal of Management Development**, Vol:6, No:1, pp. 26-27

3.15. The Process of Acquisitions

The inter enterprises' merger and acquisition activities are generally held together. The liabilities related to subject and the subject in literature is especially discussed as Mergers and Acquisitions or M&A as abbreviated. The merger and the acquisition are actually applied with similar purposes but the activity of acquisition displays differences in terms of process in some stages. So the points to pay attention are that the acquisition doesn't bring very different results from the merger and it may be seen as the method of merger.

The process in acquisition period can be considered as buyer and sold in terms of enterprise. The post acquisition merger is in the structure of purchasing enterprise and as the management policies that the enterprise determined will be valid, it is meaningful for the subject to be mainly held in terms of enterprise. While the parties examine each other in the merger, in the acquisition period the target enterprise is examined unilaterally by the other enterprise which is buyer. If not all but a part of the target enterprise is purchased, the diligence will be mutual again.

The critical point is to focus on the demanded amount for the target enterprise, if the complete enterprise is to be purchased. In other words, what is important for target enterprise is the money that the enterprise owners will take, thus post acquisition human resources or the enterprise that sells in terms of management won't be worried so much. This situation will arise when complete enterprise is sold, if a specific part of the enterprise is sold, the subjects to be dwelled on will be varied. As both parties will have a proportion in the new structure, the diligence will be mutual again. When we take the subject into consideration in terms of buyer, the basic stages of acquisition processes are determining weak and strong aspects, evaluating the need of acquisition, determining a sector in the framework of this need, determining and evaluating the way of acquisition the candidate for nomination enterprises, the candidate enterprises, making election among the candidates, starting pre-interviews, negotiating, editing the intention letter and confidentiality agreement, having due diligence, price-fixing and taking the bid to enterprise, payment methods and resource evaluation, agreement and the process of acquisition and the completion

of process. As it is seen here, the subject of payment to a purchased enterprise draws attention differently than the mergers. The basic stages other than this situation generally correspond to merger.

On the other hand, a set of differences draw attention concerning the result. While in merger two enterprises combine their resources and keep on this way, in acquisition activity sometimes the purchased enterprise is being combined with the purchasing enterprise and the process of acquisition mainly changes the ownership of the enterprise but it doesn't reveal cases in merger as operation and organization. In the case of a merger which took place by melting of two enterprises is in each other, the human resources of party enterprises will be predominantly influenced with this and especially with the aim of cost reduction, it prefers to discharge mentioned personnel surplus. On the one hand, this case serves the purpose of downsizing. However, if the information transfer isn't made, the gossips that are a result of natural communication may worsen the case in this stage⁵². The acquisitions should be purchased with mergers and it should be taken naturally if it brings kind of differences. One of the important differences of the process of merger and acquisition is that payment is done for the purchased enterprise in the acquisition. The subjects of pricing after determining the value of the enterprise to be purchased, the negotiation of this with sold enterprise, doing marketing, the methods of payment are different cases compared to merger. One of the most critical features of the success of acquisitions should be the allowance made for acquisition⁵³

In the event that the critical importance of purchased enterprise for the purchasing enterprise, the price to be paid can increase according to the conditions, on the other hand, it applies to the same enterprise in order to purchase more than one enterprise in some cases and this causes a competence among the enterprises that want to purchase the same one, and significant rise in price. The enterprise which is purchased more costly than its value makes it hard to provide the expected income economically.

In conclusion, the process of acquisition has common points with the process of merger, but the specific difference in the process, making payment for the target

⁵² Astrachan, a .g .e. , p. 1.

⁵³ Byars, a. g .e. , p.84

enterprise and determining the value of this enterprise are being discussed. Besides this, as aforementioned some differences may exist because of purchasing all or only a part of target enterprise.

4. THE PROBLEMS, ADVANTAGES AND DISADVANTAGES OF MERGERS AND ACQUISITIONS

4.1. The Problems of Mergers and Acquisitions

The globalization and improvement of world economy makes the companies face serious competition factors. Besides, to provide the necessities of consumers, such as profitability, growth have been much more difficult compared to past. So, the companies start to choose the way of merging in order to survive grow and make profit. But the success of the mergers and acquisition transactions in the world is open to criticize. There are serious problems about the M&A transactions and their efficiency. The expected possibility of their failure risk is about 50%. Here, the human resource factor is seen as the factor missing factor but it is also the key factor in the adaptation of different cultures necessary for the success of M&A.

It is explained that the ideas of employees are about the other cultures passing through several processes such as denying, defending, minimizing, acceptance, adaptation and integration. Especially in the case of mergers, between different countries cultural education can be provided with education. For this reason it is necessary to provide communication by several methods based on human resources. Because of the uncertainty, the turnover of employees increase, satisfaction from the work and efficiency decreases. This shows us that, the employee's confidence on the company decreases. For this reason, in order to decrease this negative synergy of human resources, the communication with personal should be improved. The key personal shouldn't be ignored which have effect on the education and improvement of employees and they should be prepared to several changes.

So, it is important to underline that the merger can't provide the expected advantages in the case of mistakes before the merger, in the process of merger or after merger. More importance on human resources should be provided in order to prevent these possibilities. Before the merger, during the merger and after merger, stress because of the uncertainty creates problems. The reactions of the employees are grouped as denying, defending, negotiating and acceptance. If at this stage, the communication can't be sustained, the key personal can leave the jobs. As we have

stated before, every stage in the mergers and acquisitions is the most critical stage. After the mergers are included in the merger process, it is not certain that the merging will be concluded. The problems regarding mergers and acquisitions are explained below. At this stage, we can state that there can occur common problems in merger and acquisitions, but they can also have specific problems too. The problems can be classified as problems before mergers, problems in the merger, and problems after merger.

4.1.1. The Problems before Mergers

The reason of companies which don't achieve the expected success in the end of the mergers is generally an insufficient evaluation. The merger process is a difficult process so there can be several problems. For this reason, every stage will be the most critical stage. The necessary effort should be provided in order to handle with the problems. The problems which can occur before mergers and in the merger are stated below. Some of these criteria are related with internal conditions and some of them are related with external conditions.

- The uncertainty about the aim of the merger.
- The high expectations of the parties from the merger.
- The inconsistency of the general economic conditions.
- The lack of information about the merger
- The reactions of internal and external groups to the merger
- The lack of information of the employees about the merger.
- The lack of information and experience of the responsible personal about the merger.
- The lack of consulting support by not working with consulting companies.
- The mistakes in evaluating the type of merger.
- The mistakes in selection of candidate or candidates.
- The mistakes in determination and evaluation of consistency criteria.
- The problems that result from communication mistakes in the negotiations.

- The errors in the due diligence process.
- The ignorance of human resources and corporate cultures by due diligence.

4.1.2. The Problems after Mergers

The mergers of two or more companies by varying reasons do not guarantee that the expected advantages from the merger will occur. Especially, the first years don't satisfy the parties after the merger as we can evaluate from the current examples in the world economy. The mergers of companies don't mean that everything will be in order. It should be underlined that the merger process doesn't end after the merger legally realized. However, the real difficult process starts after this point. The failure of the merger and acquisitions depend on generally the problems in cultural adaptation and human resources. The mergers of the companies don't mean that everything will be in order. It should be underlined that the merger process doesn't end when the merger is legally realized. However the real difficult process starts after this point. The failure of the mergers and acquisitions depend on generally the problems in cultural adaptation and human resources. So the efficient management of human resources is very important for the success of the merger.⁵⁴

The consistencies of the companies from the aspects of growth, finance or technology don't guarantee the adaptation after merger. The integration of finance production, marketing isn't so difficult, but the integration of human resources and corporate culture is an important issue to underline. The change in the organization with the merger and complication occurs so there will occur problems in the integration to the new structure.⁵⁵

- The problems that occur because of the inconsistency of the two sides.
- The lack of information given to the several group in the merger process.
- The mistakes in due diligence.
- The lack of support from consultants in the merger process.

⁵⁴ Katinka Bijlsma Frankema, "On Managing Cultural Integration and Cultural Change Processes in Merger and Acquisitions", **Journal of European Industrial Training**, 2001, pp.192-194.

⁵⁵ Simon Atkinson, Anja Schaefer, Howartd Winey , "Organizational Structure and Effective Environmetal Management ", **Business Strategy and Environment**, Vol:9,2000,pp.117-118.

- The problems result from losing the key personal.
- The reactions of owners of the company to the merger process.
- The reactions of the external groups to the merger process.

As we have stated, there can occur problems after merger like before the merger process. These problems also result from internal and external factors like the problems before the merger process.

4.1.3. The Problems in Acquisitions

The problems that result from mergers and acquisitions have similarities from the factors of success and failure. Anyway, the purchased target company merges generally with the acquired company. In the acquisitions as we have stated before the cost paid in the acquisitions and other detail about this subject differs the acquisition from mergers. For this reason, the problems, the problems in acquisitions and the reasons of failure are very similar, so we will underline their major differences here. The cost paid for the purchased company, is a critical factor that affect the success of the acquisition. If the cost paid for acquisition is high, the time of acquisition is not right, the time of acquisition is not right and also mistakes in the integration after merger will affect the success of the enterprise in a negative way.⁵⁶

Although the mergers and acquisition transactions are popular nowadays, they don't provide the expected strategic and financial aims of the enterprises.⁵⁷ The cost paid for the acquisition, internal obligations, external pressure, and legal obstacles decrease the advantages from the merger. One of the major factors affect the success of the merger is the size of the target company. If the size is bigger than the acquirer of the target company, the acquisition's failure risk is higher. The cost paid and other adaptation problems cause the acquisition to have negative results.

Especially, in mergers and acquisitions, the cultural adaptation problem of the purchased company can cause culture problems and this case causes negative results for a lot of acquisitions. Besides, the lack of information and research about the

⁵⁶ Mitchell LeeMarks, "Consulting in Mergers and Acquisitions: Intervention Spawned by Recent Trends", *Journal of Organizational Change Management*, Vol:10, No.3, 1997, p.267.

purchase of the candidate, because of competition or other reasons, can affect the success of the acquisition in a negative way.

4.2. The Advantages of Mergers and Acquisitions

In the M&A transactions, there is the expectation of having several advantages. Most of the entrepreneurs expect, profit maximization, sustainability and growth for their companies. To reach these targets, is not easy in the competitive environment of nowadays. So a lot of enterprises choose the way of merging with other companies by a variety of types. Here, there is the concern of adaptation to changes quickly. But the competition in the market and increasing expectations of consumers creates problems for entering. The companies try several ways for presenting products and services at a less expensive price and more qualified. Below there are the advantages of mergers and acquisitions to the parties stated.

The reasons or motives behind M&A can also be stated as the advantages for mergers and acquisitions. If these targets at the beginning are realized, this transaction will have these advantages for us. The expected advantages are value creation, synergy, economics of scale, efficiency, cost cutting, growth and size, reducing risk, tax advantages, better management and financial situation, exploring new markets and enlarging market shares and other internal and external advantages. These issues are stated below under main titles.

4.2.1. Value Creation

One of the expectations from mergers of a lot of companies is to create value. Because the shareholders aim to maximize their profit, so it is very normal to state that the main advantage of merger is to create value with the effect of synergy. Synergy is created between the wealth of shareholders of the parties will increase. The rational reasons behind mergers and acquisitions are to maximize the value of

the company and wealth of the shareholders. But these advantages depend on the managerial implications of the target company also on corporate and personal implications.

4.2.2. Synergy and Economics of Scale

One of the advantages of merger is the synergy effect which will be created. The synergy effect is observed as sales synergy, investment and management and operation synergy. The advantages of synergy can be observed in a variety of area such as economics of scale innovation, technology, management and marketing. The new structure with by the merger of two or more companies provide important improvement from the point of several aspects such as marketing, management, innovation, technology, development and finance.

Especially with the positive effect in the end of merger, there can be cost reduction in production, marketing, finance and research and development. The mergers of the strong parts of the parties create a synergy effect. For example by the merger of a company which has a competitive advantage in research and development with a company which has competitive advantage at innovation creates a strong company from the production and innovation.

4.2.3. Efficiency

The key factor for providing low prices contrast to rivals is the efficiency in the competition environment. At this point efficiency is one of the most important advantages of mergers for companies. By M&A, the companies will have cost reductions by a variety of ways like production, finance, human resources, research and development, marketing. That means, from one side the sales will increase from other side costs will decrease.⁵⁸ For example when it is evaluated from human resources the firing off the unnecessary personal will provide cost reduction. This will prevent inefficiency.

⁵⁸ Mark Christopher Hackett, "Are There Alternatives to Merger" ,**Health Manpower Management**, Vol.22,1996,pp.6-7.

4.2.4. Size and Growth

The size is criteria for an enterprise for surviving in the long run.⁵⁹ From this point of view, M&A transactions are important for realizing these targets. The companies at a small scale have to work with profit mergers and so their growth possibilities are restricted by this way. Total scales, market share, production are affecting the market power of enterprises. The advantage of size will be efficient in a lot of issue. The main target in the business world is generally to be bigger. The idea which is the easiest way for being bigger is merging and motives many companies for M&A transactions. When growth is considered as an issue that obtains sustainability and power of enterprises, the merger can be accepted as a key factor even though it has several risks. The mergers and acquisitions generally require less time to be bigger in contrast to organic growth. Also the dynamism of merger affects this issue too positively.

4.2.5. Reduction of Risk

The enterprises will take all the risk alone when they try growing by internal ways. When mergers and acquisition transactions are preferred, the risk will be shared also. The type of the merger is also important here. An important advantage here is, by M&A transactions it is possible to monitor the spread of risk. Although, it is up to the type of the merger or other factor, mergers and acquisitions create.

4.2.6. Tax Advantages

The tax advantages are also among basic reasons for the trend of mergers and acquisition transactions between companies. Although there are several legal obstacles, actually the mergers and acquisitions are encouraged by government in our country like it is all around the world. Their tax advantages attract the companies. Shortly, M&A transactions have tax advantages for enterprises which play key role in their increasing popularity around the world.

⁵⁹ Ingrid Bonn, "Staying on Top: Characteristics of Long –Term Survival ", **Journal of Organizational Change Management**, Vol.13,No.1,2000,p.43.

4.2.7. Better Management and Institutionalization

By mergers and acquisition transactions, the strong ways of the management are combined and by this way a much better management can be realized. There will possibly be employees who are fired because of their lack of previous performance by the effect of the M&A transaction. On the other hand, the parties of the M&A transaction will have possibly a much more rational management. Besides, from the point of institutionalization, the merger will have several advantages. There will be an organizational change with the merger for this reason, the enterprises which are far away from institutionalization will have to institutionalize.

4.2.8. The Increasing Power of Financial Structure

The financial structure of the companies which merge will be stronger in contrast to past. So the increasing power of financial structure can be evaluated as one of the advantages of the merger. The important point here the enterprise which has a worse financial structure than the other party will affect the enterprise which is in a worse situation negatively.

4.2.9. The Domination of the Market and Gaining Power

By mergers and also by the effect of growth, there can be several advantages. At the end of growth, being a stronger enterprise in the market by the affect of synergy is possible. Of course, it depends on the type and scale of the merger. Merger will decrease competition and can have some determined advantages to the enterprise.

4.3. The Disadvantages of Mergers

The disadvantages result from the conclusions of mergers which can cause the positive expectations not to occur. The internal disadvantages can be stated as the restriction of decisions, cultural incongruities and conflicts, after merger, decreasing profit rates, the problems in human resources and losing the key personal.

4.3.1. Cultural Incongruities and Conflicts after Merger

Another critical factor which differ the enterprises from the others is corporate culture. Every company has specific values, beliefs, habits. In this case, because different companies will have different corporate cultures and this will cause several adaptation problems and for this reason there will be internal and external disadvantages. Besides, after mergers there can be several conflicts. There will be diminishing of personal, but the employees left in the company will face several conflicts as they are used to different kind of working style. This will cause important problems unless this adaptation problem is solved. At this point it is important to consider this issue from the point of due diligence. Especially, in a lot of merger facility, the consistency criteria is evaluated and due diligence is done. The issue is considered from several aspects such as the consistency of size, financial consistency and such as. But after merger, the cultural inconsistency about mergers will bring one of the main obstacles before the success of mergers and acquisitions and this is an important disadvantage.

4.3.2. The Case of Top Control-Restrictions in Decision Making

After the mergers, the managers of the enterprises won't be so free as they used to before the merger process in the case of decision making. Previously, the decision making was much free. But after merger, the other part will also have privileges in decision making. So the parties will think that top management will face

restriction in their decision making. But in some cases, after management a change in management will also be considered as advantage. This is a natural conclusion of the merger, also this case will also have advantages too. After merger, the decisions will be given in much more detailed way. So this will have positive affects for mergers. Although this, the top management of the company won't be so free by decision making and managing the company as they wish. After merger, the management will be restricted and giving decision won't be possible like previously.

4.3.3. Losing the Key Personal

It is very clear that the mergers and acquisitions create a major concern for human resources. So, the companies in the merger process apply downsizing and this increases the concerns of human resources. So, the companies in the merger process apply downsizing and this case increases the concerns of human resources. After the merging process starts, there has also started a successful period which causes to lose the key and qualified personal. It is stated that this situation can be removed by an efficient corporate change effort. It is clear that, the merger facilities serve for decreasing cost and this will affect human resources directly. When the concerns increase about the mergers, the employees will search for new jobs in the rivals. So there will be losing of key personal and this will create as sharing the privacy of the company with rivals. So the expectations from mergers will diminish by causing lose of cost and effort.

4.3.4. The Financial Disturbance after the Merger

If the merger is realized with a company which has a worse financial situation, the disturbance in the financial structure is inevitable such as in some cases, because of legal reasons, such as merging of a weak economy with a stronger one. This situation disturbs the financial structure. In these cases, the shareholders are against to merging.

4.3.5. Necessity of Additional Funds

According to the merger agreements and situations after merger, there will be a need of additional funds. When the necessity of fund is not provided, there will be financial problems after merger. Providing these funds from external resources will cost more and affect the profitability in a negative way.

4.3.6. Cost of Merging

By merging it is aimed to obtain cost reduction and increase the profitability of every stage in the merger process which makes cost and takes time. If the companies will realize the merger with the team they have set, this will make them lose time and can cost more than expected. Nowadays, a lot of companies have the support of advisory companies. This time it is to handle the advisory costs. The research through merger process, the compensation of the leaving employees, other legal costs several agreements and such as.

4.3.7. Other Disadvantages

The loss that results from the discouragement of the employees, and degeneration of the corporate culture, the costs of documents during and after the merger, the costs of combining the systems of the both parties, and other such related costs occur by the mergers and acquisitions transactions. Besides, the unsuccessful mergers cause decreasing stock prices of the companies which brings the opposite conclusion of the expected. Also, the problems with trade unions during the merger, and degeneration of the media relations can be stated from the other advantages of these transactions. On the other hand there are major doubts about the main aim of mergers and acquisitions which is maximization of the shareholders wealth. In the last ten years time, the mergers and acquisition transactions are unsuccessful from the point of value creation for shareholders.

4.4. The Disadvantages of the Acquisitions

Most of the above mentioned disadvantages, which emerge during or after the merger process, are of course valid for the acquisitions as well. It is indispensable to have more different disadvantages in addition to the disadvantages of the mergers for the acquisitions. Some situations may appear as a disadvantage because of acquisitions along with merger disadvantages.

4.4.1. Risk of Failure and Its Negative Results

It sometimes results in unsuccessful acquisition enterprises of this fund in a bad way with the acquisition transactions of some cash rich companies to put cash to good use. Acquisition of a company without making enough research and only because it has a charm price, causes the companies with opposite cases with their expectations. Because, as a result of the acquisition of an unfit company in an unfit sector decreases the chance of success and causes to lose the funds in hand. And this case can have a decreasing influence on the share values and accordingly on the shareholders value.

Moreover, while the costs during margin buying can increase and the profitability of the investment can decrease. Especially the acquisitions without enough research or with very high prices related to their competitors can cause the misuse of company resources. At this point, Hat ten's findings become remarkable. Because of the acquisition activities (merger mania) which were implemented without considering conformity factors and with the aim of company growth at the high cost of borrowing or the heavy interest load, it has been stated that crashes, dismissals and directions to downsizing started at the end of this period.

4.4.2. Loss of Prestige and Public Opinion Reaction

The loss of prestige is one of the disadvantages of acquisitions. As some acquisitions are operated with the hostile intentions, it can cause people's eyes raise. Besides this, as the acquisition process may create negative results to the detriment of

internal and external target groups, the unjust treatment of these groups can also be seen as a disadvantage. This situation can create negative influence on the company's prestige.

4.4.3. The Disadvantages Arising out of Acquisitions

While the disadvantages are being examined during acquisition, the disadvantages arising out of acquisition should not be ignored. Some acquisitions that the company implemented with various purposes, the company may encounter with bad surprises especially when implemented in unknown and uncertain sectors. In this respect, it will increase the probability of failure more to enterprise into acquisition transactions with high borrowing and without enough analysis and true evaluation of synergy argument, and so it requires being more cautious especially in an unknown sector ⁶⁰. Along with this, when the expected advantages with the mergers aren't provided in the same sector, it can create opposite results for the company.

4.4.4. Foreign Ownership of National Companies

The acquisitions, which are implemented in certain periods especially by foreign companies, cause the takeover of the control of companies in some sectors to foreign companies. This case can become more apparent with the acquisitions of many companies by foreign companies mostly in crisis period. Even if it may be desirable in terms of direct flow of foreign capital to the country, the criticisms related to takeover of national companies to foreign companies can turn into a current issue.

4.4.5. Dismissals and Its Negative Influences on Employment

It has been stated that some employees from human resources department have been dismissed as a result of reorganization of the companies with different studies in cases of merger and acquisition, adaptation of downsizing method. At this

point, it is required to take the discomfort, stress and similar emotions for granted as from the beginning of merger and acquisition process of human resources.

Besides, it is defended that the acquisitions may have negative influences in terms of employment and it will not contribute to employment⁶¹. When considered within the frame of basic purposes of acquisition activities, dismissal of some employees from human resources department with the aim of cost reduction draws attention as a frequent implementation. This must be considered as a factor that can adversely influence the employment process.

4.4.6. Other Disadvantages

It is possible to be adversely influenced by the results that the acquisitions have caused in terms of mentioned disadvantages, the magnitude of different groups, and the influenced sector-sectors, geographic and competitive influences and on several counts. Besides all these, in addition to abovementioned disadvantages, unexpected negative influences which can appear out of mergers and acquisitions in the long term can also create negative influence.

⁶¹ Ayşen Tokol, “Çokuluslu Şirketler ve Endüstri İlişkilerine Etkileri”, (Online) www.isguc.org./atokol2.htm , March 11, 2003.

5. COMPARISON OF THE EFFICIENCIES OF THE COMPANIES BEFORE, DURING AND AFTER MERGERS AND ACQUISITIONS

In recent years, by the globalization effect, the competition of the companies increase and it brings difficulties for them to survive. So they have to decide and imply their decisions on time. At this point, the art of strategic management is important. The firms need to make strategic combinations because of the effect of the competitive environment. At this point, companies choose the way of enlarging in order to survive, by sharing their costs, capital, technology, innovation and communication. Since the end of twenty century, the aim of the mergers and acquisitions can be explained as the equation of 1 plus 1 to3. The pressure for value creation of shareholders and investors on the managers of the companies is an important factor for this kind of transactions.

Besides, in order to increase the value of the companies, it is necessary to increase the efficiencies of the companies except mergers and acquisitions. In order to do this, the costs should be decreased, and new ways should be found out for increasing income. At this stage, firms chose the way of mergers and acquisitions for increasing the value of their companies. Since 1994, the trend of mergers and acquisitions has been much more popular especially in the sectors such as finance, retail, information, pharmacy. However, there are times that the cost and time sacrificed for mergers and acquisitions have been bigger than the value created by the transaction. In other words, the equation of 3 can't be obtained by the sum of 1 and 1. Even, usually, the sum is less than 1.

As it is considered above, one of the ways for companies increasing their efficiencies are mergers and acquisitions. But in application, practically, there have been suspects whether the efficiencies of the firms increase or decrease by the mergers. In today's world of economy with limited resources, the efficiencies of firms have been much more important, so every enterprise checks activities and develops strategies in order to be more efficient. In the case of analysis about the efficiency, there are several methods as ratio analysis, the methods with parameters

and without parameters. So we can divide them into 3 groups. In this study, the efficient measurement system is used among the methods for determination of efficiency stated above. By DEA, the efficiencies of 13 companies which are quoted to Istanbul Stock Exchange are measured. Firstly, several information about the efficiency measurement system will be given and then the method will be explained by several formula, after that, the analysis is applied and the results are explained. Lastly, these results are concluded and evaluated.

5.1. Data Envelopment Analysis

Data Envelopment Analysis is a method used usually in order to make the analysis of efficiencies of the companies. By the evaluation of efficiency, the firm can have opportunity of determining its place in this competitive environment and it shows how to get more output with the constant inputs.

The method is developed firstly by Chornes in 1978 in order to measure and contrast the technological efficiency of public institutions.⁶²In a lot of studies about efficiency measurement system, the inputs and outputs used for measuring efficiency are different. Some of them chose the observation of the operation as output. In all of the recent studies, the profitability is not accepted as a concept of efficiency, because the inputs and outputs have to reflect the sector they belong. However, as the profitability and dividends are the major parameters of the companies quoted to Istanbul Stock Exchange, many local and foreign studies undertake the profitability. Also, in efficiency analysis, which belongs to public institutions, profitability is one of the main outputs. DEA models the contrasting measurement of decision making units which have the same amount of inputs and outputs. For every decision making unit, a model is solved. In the end of linear programming, the decision making units which have a target function equal to 1 is tried to make similar with a suitable decision making unit. By this way, every unit which is not efficient is made efficient. Data Envelopment Analysis provides opportunity for contrasting efficiencies of units by focusing on inputs and outputs of a lot of similar service units. Besides, DEA provides opportunity for contrasting efficiencies of units by examining inputs and

⁶² A. Charnes, W.W.Cooper and E.Rhodes, "Measuring the Efficiency of Decision Making Units," **European Journal of Operational Research**, Volume 2,Issue 6,November 1978,pp.429-444.

outputs of a lot of similar service units. Besides DEA underlines the necessity of calculation of every service unit, because a lot of outputs and inputs are combined without considering their efficiency ratio.

Before evaluation of efficiency values found out by DEA, it is necessary to analyse the concepts of efficiency in detailed. If the organizations produce more input than necessary in production, it is obvious that the technological efficiency of production process is low. Technological efficiency is the success of the organization when using the inputs for producing the most outputs in a suitable way. Allocative efficiency is the success of choosing the most suitable input selection. Both of them determine the cost effectiveness by providing production with minimum cost of organization. The efficiency values that are provided by DEA show the variance of every decision unit from the border of efficiency.

The efficiency values related with inputs show how much it is necessary to decrease inputs in order to reach the border of efficiency. The efficiency values related with outputs show how much to increase outputs in order to be totally efficient. The DEA can be in 2 ways regarding inputs or outputs. The EMS models related with inputs show how much input should be involved in order to obtain a constant output. The other type, the DEA model related with outputs, show how much output can be obtained with a constant level of output.

It is possible to conclude the advantages of DEA as following. First of all, the method can conclude the performance of companies which have a variety of inputs and outputs as a single value. As DEA makes analysis of a lot of output and input, it doesn't need the determined averages and also it doesn't have a requirement of the relationships between inputs and outputs in a functional way. The properties of DEA have advantages for the evaluation of outputs of non-profit organizations.⁶³ The disadvantages of DEA can be stated as following. As we have underlined before, the decision making units should have similar structures of inputs and outputs. Also, the model should have to be set up carefully and the data should be saved without any error. The efficiency values which are calculated by DEA is very sensitive. Another

⁶³ Fatma TİRYAKİ, "The Use of Data Envelopment Analysis For Stocks Selection On Istanbul Stock Exchange", *İ.Ü. İşletme Fakülte Dergisi*, 2000, s.9.

disadvantage can be explained as by using DEA, the results of different studies can't be contrasted. DEA should be applied to decision units in a sufficient amount regarding the inputs and outputs. If this is not realized, the analysis should be applied by the inputs and outputs of the production process which doesn't have high correlations between each other.

5.1.1. Data Envelopment Analysis and Decision Making

If there are more than one decision points for a decision-maker, estimation of the efficiencies of these decision points and shape of this decision on efficiency measurements are important. sort of efficiency of these decision points is practically important for the decision-maker and the decision-maker wants to know how the scenarios change the efficiency of the full decision that will provide the increase of activity of less effective decision points.

At this point, Data Envelopment Analysis can be both defined as linear programming-based method and which is used to evaluate the relative efficiency of the decision points to put forward output or outputs by using similar inputs. The basic feature that holds Data Envelopment Analysis separate from other methods with similar purposes is it provides to evaluate on occasions where there are many inputs and outputs. Some information related to the decision points to be used as a reference and (scenarios) to increase the efficiencies of the decision points which are not effective at the rate of input/output As a result of the analysis, the efficiency value of each decision point. (Karakoç, 2003)

Data Envelopment Analysis was shaped with the Limited Production Function proposal made by Farrell against Average Performance Standard firstly in 1957, and it has come to the latest state with the studies of Charnes, Cooper, Banker and Rhodes. The basic efficiency standard of Data Envelopment Analysis is the division of weighted sum of outputs by weighted sum of inputs. In other words, the efficiency standard of any decision point can be defined as in the formula. (j. Decision Point), (5.1)

$$\frac{u_1 y_1 + u_2 y_2 + \dots + u_n y_n}{v_1 x_1 + v_2 x_2 + \dots + v_m x_m} \quad (5.1)$$

There are n pieces of output and m pieces of input for the j. decision point at the (5.1) formula. Here, it shows u_n n. output weight, y_n n. output amount, v_m m. input weight and x_m m. input amount.

The following methods used in DEA can be solved as input- or output-focused ways. The input- focus has been defined as the examination of the changes in the input amounts by maintaining the output amounts and the output-focus is defined as the examination of changes in the output amounts by maintaining the input amounts.

The DEA includes the fractional programming process as seen from (5.1) formula. However, solution of fractional programming is difficult. For this reason, fractional programming set can be turned into linear programming with the basic assumption that the denominator of (5.1) formula is equal to 1 and thus can be solved.

5.1.2. The Methods of Data Envelopment Analysis

Three methods are basically used with the Data Envelopment Analysis. These methods are:

- CCR (Charnes- Cooper-Rhodes) Method
- BBC (Banker-Charnes- Cooper) Method
- Social Method.

Fractional programming- linear programming transformation can be used considering the input efficiency of DEA or output efficiency of DEA with all of these methods.

5.1.3. The Advantages and Disadvantages of Data Envelopment Analysis

DEA is a very efficient tool when correctly used. The advantages of DEA can be sorted as follows:

- DEA is an ability to process many input and output together.
- DEA does not need any functional form associated with input and outputs other than linear form.
- DEA and decision units, of which activities are calculated, are relatively compared to the ones that have total activity.
- Inputs and outputs may have very different units. In this case, it is not necessary to use various assumptions and to make transformations in order to measure them in the same way.

The disadvantages of DEA can be sorted as follows:

- DEA is sensible to measuring error.
- DEA is enough to measure the performance of decision points, but it doesn't give any clue about the comment on the absolute activity basis.
- It is hard to apply statistical test of hypothesis as DEA is nonparametric technical.
- DEA is a static analysis; it makes a cross section analysis between the decision point data of only one period. As a result of analysis, just one activity estimator is acquired and it is very hard to get the statistical features of this estimator.
- As a solution of separate linear programming is required for each decision point, it can be time-consuming in terms of solution and calculation of large scale problems with DEA.

5.1.4. The Process of Data Envelopment Analysis

The necessary steps to apply DEA are as follows:

- The selection of decision points
- The selection of input and output factors
- The selection of the model
- The interpretation of the results

5.1.5. Selection of Decision Points

This stage is very important in terms of validity of DEA results. As DEA is a comparable analysis, all analysis results will be affected by this, in the event that wrong decision units are taken into analysis.

5.2. Methodology

The DEA models are divided into 2 groups such as “Input Efficiency of DEA” and “Output Efficiency of DEA”. These two models are very similar. The DEA model, Output Efficiency of DEA research how much input should be involved in order to have an efficient production of a constant output combination. The DEA Model,” Input Efficiency of DEA, research how much output combination can be obtained with a constant level of input combination. In this search, the Input Efficiency of DEA is used. The efficiency result for every decision unit in our analysis is calculated by the following equations.

$$Max\theta(U, V) = \frac{\sum_{r=1}^s U_r}{\sum_{i=1}^m V_i X_{ij}} \quad (5.2)$$

$$Max\theta(U,V) = \frac{\sum_{r=1}^s U_r Y_{rj}}{\sum_{i=1}^m V_i X_{ij}}, i, j = 1, 2, \dots, n \quad (5.3)$$

$$U_r \geq 0, r=1, 2, \dots, s$$

$$V_i \geq 0, i=1, 2, \dots, m$$

$$X_{ij} > 0, i=1, 2, \dots, m, j=1, 2, \dots, n$$

$$Y_{rj} > 0, r=1, 2, \dots, s, j=1, 2, \dots, n$$

θ = Efficiency Coefficient

If $\theta < 1$, the decision making unit is relatively not efficient and

If $\theta = 1$, the decision making unit is relatively efficient.

Efficiency Coefficient is always less than 1 or equal to 1. If it is less than 1, the decision making unit is not efficient relatively, if, explains that the decision making unit is efficient relatively.

The input and output variables in our analysis are stated below. The numbers of decision making units are calculated according to the rule that their number will be at least 1 unit more than 2 times of the sum of the inputs and outputs.

Inputs	Outputs
G1: Current Ratio	Ç1: Return on Equity
G2: Leverage Ratio	Ç2: Return on Assets
G3: Equity/Total Assets	

G1: Current Liabilities / Current Assets

Ç1: Net Profit / Equity

G2: Total Liabilities / Total Assets

Ç2: Net Profit / Total Assets

G3 : Equity / Total Assets

5.3. Analysis and Results

In our study, 11 different companies which are quoted on The Istanbul Stock Exchange and had M&A transactions as being acquirer between the years 2003-2007 are examined. Because the data involved in the analysis are limited, there is no limitation at the sector level. For this reason, the companies are examined all together without any differentiation. 3 of the determined companies belong to services sector, and the 8 of them have operations in production sector. The examination of the analysis is made by using the software packet, Efficiency Measurement System. The 11 acquirer companies in our analysis are listed in the Table 4 below by showing their acquire companies with the transaction years.

Table 4: The Acquirer and Acquiree Companies

No	Acquirer	Acquiree	Transaction Year
1	Borusan Birleşik Boru Fabrikaları A.Ş.	Mannesmann Boru Endüstrisi Türk A.Ş.	2004
2	Migros Türk A.Ş.	Tansaş Perakende Mağazacılık T. A.Ş.	2006
3	Acıbadem Sağlık Hizmetleri A.Ş.	Acıbadem Kanser Merkezi A.Ş. Acıbadem Bursa Hastanesi A.Ş.	2005
4	İzocam Ticaret ve Sanayi A.Ş.	Tek-İz İzolasyon ve Yapı Elemanları A.Ş.	2005
5	Pınar Su Sanayi ve Ticaret A.Ş.	Marmara Su ve Meşrubat Gıda Sanayi ve Ticaret A.Ş.	2005
6	Kent Gıda Maddeleri Sanayi ve Ticaret A.Ş.	Birlik Gıda Sanayi ve Ticaret A.Ş.	2003
7	Milliyet Gazetecilik A.Ş.	Simge Yayıncılık ve Dağıtım A.Ş.	2003
8	İş Girişim Sermayesi Yatırım Ortaklığı A.Ş.	Beyaz Filo Kiralama A.Ş.	2006
9	Duran Ofset Matbaacılık ve Ambalaj ve Sanayi A.Ş.	Doğan Matbaacılık Ambalaj Sanayi ve Ticaret A.Ş.	2005
10	Eczacıbaşı İlaç Sanayi ve Ticaret A.Ş.	Kanyon Ofis Merkezi	2007
11	Kordsa Sabancı Dupont Endüstriyel İplik ve Kord Bezi Sanayi ve Ticaret A.Ş.	Sakosa Sabancı Endüstriyel İplik ve Kord Bezi A.Ş.	2005

It is important to underline that in our study, minus values are increased by the greatest minus value in order to make all of the other values positive. This correction is made for every stage of our work which is before M&A during M&A and after M&A.

Before measuring the efficiency scores of the companies, the necessary data to calculate the inputs and outputs are obtained from the financial reports of the companies which are presented on the web site of the Istanbul Stock Exchange. In the analysis, the inputs are Current Ratio (G1), Leverage Ratio (G2), Equity/Total Assets (G3) and the outputs are Return on Equity (Ç1) and Return on Assets (Ç2). The variables to obtain these inputs and outputs are given in the following tables below. For the examination of the period before the M&A transaction, the financial values of the previous year which is 1 year before the transaction time is used for every acquirer company. For the examination of the period after the mergers and acquisition transactions, the financial values of the next year which is 1 year after the transaction time is used for every acquirer company.

The efficiency scores of the 11 acquirer companies before the M&A are showed in the Table 6 below. Before the M&A transactions, 3 of the acquirer companies (KENT, MİLLİYET, İŞ GİRİŞİM) are efficient by their ratios 100.00 %. There are two acquirer companies (ACIBADEM, İZOCAM) which have efficiency ratios near to the efficiency coefficient. The average efficiency score of the period before the M&A is 59.98%.

During the M&A period, 2 of the acquirer companies are measured as efficient. These companies are BORUSAN and İŞ GİRİŞİM. Their efficiency ratios are 100 %. There are three acquirer companies which have efficiency ratios near to the efficiency coefficient. They are ACIBADEM, İZOCAM and KENT. The average efficiency score of the period during the M&A transactions is 65.07 %. There has been a declining trend in the efficiency ratios of the companies İZOCAM, KENT GIDA, DOĞAN GAZETECİLİK A.Ş.

After the M&A transactions, there are 3 acquirer companies which are efficient. They are MİGROS, İZOCAM and İŞ GİRİŞİM. In this period, it is observed that most of the companies which were efficient in the prior periods have had a decline in their efficiency ratios. The average efficiency score of the period after the M&A transactions is 39.57 %.As it is contrasted with the prior periods, in this period, the average efficiency score is at the least level. The other companies, BORUSAN, ACIBADEM, PINAR SU, KENT GIDA, DOĞAN GAZETECİLİK, DURAN DOĞAN, EİS ECZACIBAŞI and KORDSA have lost their efficiencies after the M&A transactions. They had been more efficient before and during the M&A transactions.

The efficiency scores of the companies in the periods before, during and after the mergers and acquisition transactions are showed in the Table 11.In the table, it is obvious from the average ratios of the periods' that, the average efficiency ratio after the M&A period has been 39.57 % which is very low in contrast to the periods during and before the M&A transactions. This shows us the M&A transactions in Turkey have positive effects for increasing the inefficiencies of the companies, but it is obvious that these effects are short-termed because the average efficiencies decline in the next periods.

Table 5: The Variables of Inputs and Outputs Before the M&A

No	Companies	Current Liabilities (Million TL)	Current Assets (Million TL)	Equity (Million TL)	Net Profit	Total Assets (Million TL)	Total Liabilities	Year
1	Borusan Birleşik Boru Fabrikaları A.Ş.	87.172.214	105.498.035	154.112.121	13.322.498	263.707.691	109.468.842	2003
2	Migros Türk A.Ş.	888.665.000	740.283.000	706.930.000	73.705.000	2.360.878.000	1.568.718.000	2005
3	Acıbadem Sağlık Hizmetleri A.Ş.	32.736.324	44.721.826	99.817.532	13.388.841	164.216.000	62.800.000	2004
4	İzocam Ticaret ve Sanayi A.Ş.	15.397.335	53.137.125	86.773.398	12.166.371	118.786.863	52.013.465	2004
5	Pınar Su Sanayi ve Ticaret A.Ş.	11.210.449	5.799.286	31.231.699	715.698	56.868.661	32.013.467	2004
6	Kent Gıda Maddeleri Sanayi ve Ticaret A.Ş.	76.236.749	67.941.909	23.654.608	9.162.432	107.700.730	84.046.122	2002
7	Milliyet Gazetecilik A.Ş.	17.809.812	66.509.128	29.074.042	7.840.644	96.091.690	67.017.648	2002
8	İş Girişim Sermayesi Yatırım Ortaklığı A.Ş.	6.406.391	59.196.341	89.190.790	10.075.932	104.151.386	13.001.598	2005
9	Duran Ofset Matbaacılık ve Ambalaj ve Sanayi A.Ş.	10.024.622	9.566.949	2.290.302	0	15.271.195	12.678.597	2004
10	Eczacıbaşı İlaç Sanayi ve Ticaret A.Ş.	352.275.267	557.516.025	1.200.798.225	23.798.665	1.725.197.825	505.026.835	2006
11	Kordsa Sabancı Dupont Endüstriyel İplik ve Kord Bezi Sanayi ve Ticaret A.Ş.	64.464.089	146.857.586	399.986.646	29.019.177	469.793.210	120.485.841	2004

Table 6: The Efficiency Scores Before The M&A

No	COMPANIES	G1	G2	G3	Ç1	Ç2	EFFICIENCY
1	Borusan Birleşik Boru Fabrikaları A.Ş.	0.826	0.415	0.584	0.086	0.051	55.04%
2	Migros Türk A.Ş.	1.200	0.664	0.299	0.104	0.031	37.03%
3	Acıbadem Sağlık Hizmetleri A.Ş.	0.732	0.382	0.608	0.134	0.082	88.70%
4	İzocam Ticaret ve Sanayi A.Ş.	0.290	0.438	0.730	0.140	0.102	93.29%
5	Pınar Su Sanayi ve Ticaret A.Ş.	1.933	0.563	0.549	0.023	0.013	12.87%
6	Kent Gıda Maddeleri Sanayi ve Ticaret A.Ş.	1.122	0.780	0.220	0.387	0.085	100.00%
7	Milliyet Gazetecilik A.Ş.	0.268	0.697	0.303	0.270	0.082	100.00%
8	İş Girişim Sermayesi Yatırım Ortaklığı A.Ş.	0.108	0.125	0.856	0.113	0.097	100.00%
9	Duran Ofset Matbaacılık ve Ambalaj ve Sanayi A.Ş.	1.048	0.830	0.150	0.000	0.000	0.00%
10	Eczacıbaşı İlaç Sanayi ve Ticaret A.Ş.	0.632	0.293	0.696	0.020	0.014	14.86%
11	Kordsa Sabancı Dupont Endüstriyel İplik ve Kord Bezi Sanayi ve Ticaret A.Ş.	0.439	0.256	0.851	0.073	0.062	57.94%
					Average Efficiency= 59.98%		

Table 7: The Variables of Inputs and Outputs During the M&A

No	Companies	Current Liabilities (Million TL)	Current Assets (Million TL)	Equity (Million TL)	Net Profit	Total Assets (Million TL)	Total Liabilities	Transaction Year
1	Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş.	130.141.558	185.523.460	236.706.646	51.526.472	384.271.335	147.437.313	2004
2	Migros Türk T. A.Ş.	1.263.465.000	1.002.806.000	922.770.000	78.686.000	2.789.932.000	1.866.963.000	2006
3	Acıbadem Sağlık Hizmetleri A.Ş.	72.807.045	51.603.640	120.229.997	18.647.974	254.132.333	130.792.941	2005
4	İzocam Ticaret ve Sanayi A.Ş.	32.560.827	83.925.834	128.516.249	20.282.500	174.630.194	46.113.945	2005
5	Pınar Su Sanayi ve Ticaret A.Ş.	15.631.837	10.469.054	39.611.558	3.803.628	65.503.219	25.891.661	2005
6	Kent Gıda Maddeleri Sanayi ve Ticaret A.Ş.	55.335.998	77.334.428	146.508.669	25.334.454	212.697.998	56.421.329	2003
7	Doğan Gazetecilik A.Ş.	90.515.372	44.558.109	131.955.102	7.650.074	145.780.688	91.551.013	2003
8	İş Girişim Sermayesi Yatırım Ortaklığı A.Ş.	476.394	78.596.134	104.288.266	15.088.476	105.036.731	828.465	2006
9	Duran Doğan Basım ve Ambalaj Sanayi A.Ş.	34.551.714	15.671.012	8.884.326	(1.093.315)	50.243.291	41.358.960	2005
10	EİS Eczacıbaşı İlaç Sanayi ve Finansal Yatırımları Sanayi ve Ticaret A.Ş.	334.164.890	904.268.949	1.658.802.219	93.761.026	2.086.699.201	409.847.637	2007
11	Kordsa Global Endüstriyel İplik ve Kord Bezi Sanayi ve Ticaret A.Ş.	99.630.839	220.075.224	493.723.722	57.313.156	653.367.765	147.973.761	2005

Table 8: The Efficiency Scores During The M&A Period

No	COMPANIES	G1	G2	G3	Ç1	Ç2	EFFICIENCY
1	Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş.	0.701	0.384	0.616	0.218	0.134	100.00%
2	Migros Türk T. A.Ş.	1.260	0.669	0.331	0.085	0.028	72.96%
3	Acıbadem Sağlık Hizmetleri A.Ş.	1.411	0.515	0.473	0.155	0.073	92.77%
4	İzocam Ticaret ve Sanayi A.Ş.	0.388	0.264	0.736	0.158	0.116	88.89%
5	Pınar Su Sanayi ve Ticaret A.Ş.	1.493	0.395	0.605	0.096	0.058	44.93%
6	Kent Gıda Maddeleri Sanayi ve Ticaret A.Ş.	0.716	0.265	0.689	0.173	0.119	91.93%
7	Doğan Gazetecilik A.Ş.	2.031	0.628	0.905	0.058	0.052	26.63%
8	İş Girişim Sermayesi Yatırım Ortaklığı A.Ş.	0.006	0.008	0.993	0.145	0.144	100.00%
9	Duran Doğan Basım ve Ambalaj Sanayi A.Ş.	2.205	0.823	0.177	-0.123	-0.022	0.26%
10	EİS Eczacıbaşı İlaç Sanayi ve Finansal Yatırımları Sanayi ve Ticaret A.Ş.	0.370	0.196	0.795	0.057	0.045	32.66%
11	Kordsa Global Endüstriyel İplik ve Kord Bezi Sanayi ve Ticaret A.Ş.	0.453	0.226	0.756	0.116	0.088	64.74%
					Average Efficiency=	65.07%	

Table 9: The Variables of Inputs and Outputs After the M&A

No	Companies	Current	Current Assets	Equity	Net Profit (For the Period)	Total Assets (Million TL)	Total Liabilities	Year
1	Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş.	138.290.304	187.358.899	227.179.679	19.225.423	389.521.542	162.230.773	2005
2	Migros Türk T. A.Ş.	1.180.047.000	1.626.725.000	1.469.068.000	552.875.000	2.829.725.000	1.360.392	2007
3	Acıbadem Sağlık Hizmetleri A.Ş.	84.220.944	72.570.877	120.756.435	7.244.721	326.034.247	192.761.389	2006
4	İzocam Ticaret ve Sanayi A.Ş.	30.849.815	141.864.993	159.090.878	60.986.703	211.446.929	52.356.051	2006
5	Pınar Su Sanayi ve Ticaret A.Ş.	10.672.647	9.834.891	48.842.044	6.816.745	61.628.326	12.786.282	2006
6	Kent Gıda Maddeleri Sanayi ve Ticaret A.Ş.	67.023.256	107.272.337	172.481.207	5.695.395	257.044.416	84.563.209	2004
7	Doğan Gazetecilik A.Ş.	26.015.191	46.783.977	201.092.133	2.344.226	152.361.923	33.718.425	2004
8	İş Girişim Sermayesi Yatırım Ortaklığı A.Ş.	1.336.203	80.598.780	106.378.267	2.625.900	107.730.688	1.352.421	2007
9	Duran Doğan Basım ve Ambalaj Sanayi A.Ş.	29.283.241	23.406.355	10.201.718	(2.014.558)	45.369.593	35.167.875	2006
10	EİS Eczacıbaşı İlaç Sanayi ve Finansal Yatırımları Sanayi ve Ticaret A.Ş.	215.658.587	657.704.650	1.731.432.053	72.409.375	2.023.849.933	292.417.880	2008
11	Kordsa Global Endüstriyel İplik ve Kord Bezi Sanayi ve Ticaret A.Ş.	310.929.768	531.245.364	656.176.574	55.172.359	1.344.110.626	574.917.306	2006

Table 10: The Efficiency Scores After The M&A

No	COMPANIES	G1	G2	G3	Ç1	Ç2	EFFICIENCY
1	Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş.	0.738	0.416	0.583	0.085	0.049	22.34%
2	Migros Türk T. A.Ş.	0.725	0.000	0.519	0.376	0.195	100.00%
3	Acıbadem Sağlık Hizmetleri A.Ş.	1.161	0.591	0.370	0.060	0.022	22.34%
4	İzocam Ticaret ve Sanayi A.Ş.	0.217	0.248	0.752	0.383	0.288	100.00%
5	Pınar Su Sanayi ve Ticaret A.Ş.	1.085	0.207	0.793	0.140	0.111	36.54%
6	Kent Gıda Maddeleri Sanayi ve Ticaret A.Ş.	0.625	0.329	0.671	0.033	0.022	8.66%
7	Doğan Gazetecilik A.Ş.	0.556	0.221	1.320	0.012	0.015	4.29%
8	İş Girişim Sermayesi Yatırım Ortaklığı A.Ş.	0.017	0.013	0.987	0.025	0.024	100.00%
9	Duran Doğan Basım ve Ambalaj Sanayi A.Ş.	1.251	0.775	0.225	-0.197	-0.044	0.12%
10	EİS Eczacıbaşı İlaç Sanayi ve Finansal Yatırımları Sanayi ve Ticaret A.Ş.	0.328	0.144	0.856	0.042	0.036	15.92%
11	Kordsa Global Endüstriyel İplik ve Kord Bezi Sanayi ve Ticaret A.Ş.	0.585	0.428	0.488	0.084	0.041	25.09%
Average Efficiency=							39.57%

The efficiency scores of the companies in the periods before, during and after the mergers and acquisition transactions are showed in the Table 11.

Table 11: Efficiency Scores in Terms of Before, During and After M&A

No	COMPANIES	Before M&A	During M&A	After M&A
1	Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş.	55.04%	100.00%	22.34%
2	Migros Türk T. A.Ş.	37.03%	72.96%	100.00%
3	Acıbadem Sağlık Hizmetleri A.Ş.	88.70%	92.77%	22.34%
4	İzocam Ticaret ve Sanayi A.Ş.	93.29%	88.89%	100.00%
5	Pınar Su Sanayi ve Ticaret A.Ş.	12.87%	44.93%	36.54%
6	Kent Gıda Maddeleri Sanayi ve Ticaret A.Ş.	100.00%	91.93%	8.66%
7	Doğan Gazetecilik A.Ş.	100.00%	26.63%	4.29%
8	İş Girişim Sermayesi Yatırım Ortaklığı A.Ş.	100.00%	100.00%	100.00%
9	Duran Doğan Basım ve Ambalaj Sanayi A.Ş.	0.00%	0.26%	0.12%
10	EİS Eczacıbaşı İlaç Sanayi ve Finansal Yatırımları Sanayi ve Ticaret A.Ş.	14.86%	32.66%	15.92%
11	Kordsa Global Endüstriyel İplik ve Kord Bezi Sanayi ve Ticaret A.Ş.	57.94%	64.74%	25.09%
	Average Efficiency=	59.98%	65.07%	39.57%

6. CONCLUSION

The Data Envelopment Analysis is one of the most popular methods used in evaluation and comparison of efficiencies of firms in the recent years. Because the method doesn't have necessity of any other functional form for making correlations of inputs and outputs, it is generally preferred. The decision making units in prior period are contrasted relatively with the exactly efficient decision making units. The decision units which take role in efficient production at the analysis stage can be stated as potential contrasting issues for the unit that is efficiency is measured.

In our analysis, considering the mergers and acquisitions transactions between the years 2003 and 2007, the efficiency values of the companies during the M&A transactions are generally higher in contrast to their efficiency values before the M&A transactions. Most of the companies which were inefficient in prior period became efficient during the M&A transactions. Before the M&A transactions, 3 of the acquirer companies (KENT, MİLLİYET, İŞ GİRİŞİM) are efficient by their ratios 100.00 %. There are two acquirer companies (ACIBADEM, İZOCAM) which have efficiency ratios near to the efficiency coefficient. The average efficiency score of the period before the M&A is calculated as 59.98%. During the M&A period, 2 of the acquirer companies are measured as efficient which are BORUSAN and İŞ GİRİŞİM as having efficiency ratios 100 %. Three companies, ACIBADEM, İZOCAM and KENT have ratios near to the efficiency coefficient. The average efficiency score of the period during the M&A transactions is measured as 65.07 %. After the M&A, there are 3 acquirer companies which are efficient. They are MİGROS, İZOCAM and İŞ GİRİŞİM. The average efficiency score of the period after the M&A is 39.57 %. There has been a declining trend in the average ratios of the companies after the merger process. In the analysis, it is observed that only one of the companies (İŞ GİRİŞİM) had been efficient in before and during and after the M&A transactions. After the merger process, it is realized that most of the companies have lost their efficiencies. Because when the efficiency scores are contrasted at every stage, the lowest efficiency ratios are observed at the stage after the merger. We can generally state that the M&A transactions in Turkey have positive effects for increasing the

inefficiencies of the companies, but it is obvious from the results that this efficiency declines in the next periods.

At this point, the necessity of related corrections to make the efficiency stay at the highest level is realized. A systematic repository of data in which the statistical data about mergers and acquisitions exist, should be formed. This will be very necessary for providing necessary information about the M&A transaction which have very important effects not only in Turkey's economy but also in world economy.

Anyway, there is a lack of studies and articles about M&A transactions in literature of our country, in contrast to foreign literature. The increase of the academic studies about M&A will be helpful to strengthen the literature at this respect. It is also observed that there is a lack of data about M&A transactions. Also there should be academic studies and examinations which research about the several concepts about mergers and acquisition transactions such as the volume of M&A transactions, the nationality of the transactions at foreign or local basis, their direction, the scale of tax advantages, the obstacles they have. The examinations about these concepts will be helpful in the realization of mergers and acquisitions, and it will also give important assistance in academic basis. Also, the research on the internet shows that in foreign countries especially in USA, and Europe, there are a lot of advisory companies that specializes in transaction services and serves for the M&A before, during and after the process. However, it is observed that there is also a lack of advisory companies in our country.

On the conclusion, in literature of our country, the mergers and acquisitions transactions are very important issue which brings the necessity of much more detailed analysis. On the other hand, the companies that plan to make mergers and acquisition transactions should perform a very detailed examination which will diminish the risk of failure and by this way, the expected advantages from the M&A will realize. When the expected advantages from these transactions are realized, the profitability of the companies will increase directly, and the increasing profits will make a positive effect on the efficiencies of the companies. As we have examined in the example above, there is a directly relationship between the profitability of the companies and their efficiencies.

REFERENCES

Atkinson, Simon, Schaefer, Anja, Winey, Howard: "Organizational Structure and Effective Environmental Management", **Business Strategy and Environment**, Vol.9, 2000, pp.117-118.

Auerbach J., Alan, and Reishus, David: **The Impact of Taxation on Mergers and Acquisitions**, 1987

Bonn, Ingrid: "Staying on Top: Characteristics of Long -Term Survival", **Journal of Organizational Change Management**, Vol.13, No.1, 2000, p.43.

Chandler D., Alfred: "The Coming of Oligopoly and Its Meaning for Antitrust' in National Competition Policy: Historian's Perspective on Antitrust and Government Business Relationships in the United States", **Federal Trade Commission Publication**, 1981, p.72.

Charnes A., Cooper, W.W., and Rhodes, E.: "Measuring the Efficiency of Decision Making Units," **European Journal of Operational Research**, Volume 2, Issue 6, November 1978, pp.429-444.

Church, Jeffrey: **The Impact of Vertical and Conglomerate Mergers on Competition**, 2004

Clemente N., Mark, and Greenspan S., David: **Winning at Mergers and Acquisitions: The Guide to Market Focused Planning and Integration**, New York: John Wiley & Sons, 1998

Conlin R. , Joseph: **The American Past**, Boston, USA, 1997

Covin, Teresa Joyce, Kolenko, Thomas A., Sigtler Kevin W., Tudor R.Keith: "Leadership Style and Post-Merger Satisfaction", **Journal of Management Development**, Vol: 6, No:1 pp. 26-27

Dooley, Kevin J., Zimmerman, Brenda J.: 'Merger as Marriage: Communication Issues in Post-Merger Integration', **Health Care Management Review**, 2003, pp. 58-59.

Duncan, William : "Ten Important Lessons From the History of Mergers Acquisitions", **EzineArticles**, 11 Sep. 2008, p.2.

Fee, C. E., Thomas, S.: “Sources of Gains in Horizontal Takeovers: Evidence from Customer, Supplier and Rival Firms”, **Journal of Financial Economics**, 2004

Frankema, Bijlsma Katinka : “On Managing Cultural Integration and Cultural Change Processes in Merger and Acquisitions”, **Journal of European Industrial Training**, 25.2.3.4, 2001, pp.192-194.

Gaughan, A. Patrick: **Mergers, Acquisitions and Corporate Structurings**, Fourth Edition, 2007

Gaughan A., Patrick : “ Mergers and Acquisitions ”, **College of Business, Fairleigh Dickinson University Economatrix Research Associates**,2007, pp.297-298.

Gupta, Oliver, Roos, Göran: “Mergers and Acquisitions through an Intellectual Capital Perspective”, **Journal of Intellectual Capital**, Vol.2, No.3, 2001

Hackett, Mark Christopher :“ Are There Alternatives to Merger” ,**Health Manpower Management**, Vol.22,No:6,1996,pp.6-7.

Hayn, Carla : “Tax Attributes as Determinants of Shareholder Gains in Corporate Acquisitions”,**Journal of Financial Economics**, June 1989,pp.121-153

Houston, F. J., Rynagaert, D. M.: “The Overall Gains From Large Bank Mergers ”, **Journal of Finance** ,pp.197-219.

Kay, T. Ira, Shalton, Mike: “The People Problem in Mergers”, **The McKinsey Quarterly**, No.4, 2000,p 27-28

Lee Marks, Mitchell: “Consulting in Mergers and Acquisitions: Intervention Spawned by Recent Trends”, **Journal of Organizational Change Management**, Vol: 10, No.3, 1997, p.267.

Lipton, Martin: “Merger Waves in the 19th,20th,21th” ,**The Davies Lecture, Osgoode Hall Law School, York University**, 2006,p.2.

Mueller C., Dennis, Sirower L., Mark: **The Causes of Mergers: Test Based on the Gains to Acquiring Firms’s Shareholders and the Size of the Premia** , 2002

Panchall, Sheila, Cartwright, Susan : “Group Differences in Post-Merger Stress””, **Journal of Managerial Psychology**, Vol.16, No.6, 2001, pp.424-425.

Puth C., Robert: **American Economic History**, New York: Dryden Press, 1982

Siegel, H.Philip , :“Using Peer Mentors During Periods of Uncertainty ”,**Leadership & Organization Development Journal**, 2000,pp:243-244

Shahrur, Husayn : “Industry Structure and Horizontal Takeovers: Analysis of Wealth Effects on Rivals, Suppliers and Corporate Customers”, **Journal of Financial Economies**, 2005, p: 61-98

Shearer, S.Corrinne, Hames, S. David, Runge B. Janet: “How CEOs- Influence Organizational Culture Following Acquisitions”, **Leadership & Organization Development Journal**, 2001 pp. 105-108.

Sherman, Andrew J. and Milledge, A Hart: **Mergers and Acquisitions From A to Z**, 2006

Smaczny, Tomasz :“Is An Alignment Between Business and Information Technology the Appropriate Paradigm to Manage IT in Today’s Organizations ” **Management Decision**, 2001, p.800.

Stigler, George: “Monopoly and Oligopoly by Merger”, **American Economic Review**, May 1950,pp: 23-34

Tiryaki, Fatma : “The Use of Data Envelopment Analysis For Stocks Selection On Istanbul Stock Exchange”, **İ.Ü. İşletme Fakülte Dergisi**,2000,s.9.

ONLINE RESOURCES

www.investopedia.com/terms/a/acquisition.asp

www.articledashboard.com/Article/Difference-between-Merger-and-Acquisition/1442624

business.mapsofindia.com/finance/mergers-acquisitions/difference-between.html

www.wikipedia.org/wiki/Horizontal_integration

www.economywatch.com/mergers-acquisitions/type/horizontal.html
www.wisegeek.com/what-is-a-vertical-merger.htm

www.learnmergers.com/mergers-vertical.shtml

www.investopedia.com/terms/c/conlgomeratemerger.asp

www.charlesmillsconsulting.com

www.corporate-partnering.com/dwcl-dd.htm

www.wrhambrecht.com/comp/ma/process/diligence/index.html

www.appliedlearninglabs.com/solutions/ma_int.html

www.enotes.com/management-encyclopedia/diversification-strategy

www.isguc.org./atokol2.htm