



Department of: *Impresa & Management*

Chair of: *Performance Measurement and Financial Reporting*

Accomplishment or missed finalisation of a M&A: an empirical research assessing the impact of board independence within family firms.

SUPERVISOR

Prof.ssa Barbara Sveva Magnanelli

CANDIDATE

Giuseppe Punzi

Student Nr. 683321

ASSISTENT SUPERVISOR

Prof. Saverio Bozzolan

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Introduction

M&As became diffused from the second half of the 19th century gaining a crucial role in the range of the possible strategies adopted by companies to grow and to expand their businesses.

These transactions are always being a very treated topic due to the high relevance which this phenomenon has assumed in the worldwide financial landscape.

The main goal of this thesis is to give a provision enhancing the analysis of the distinctive feature of merger and acquisition processes. Specifically, it contributes to fill the lack of clarity upon the effects of several variables on the completion of M&A deals through an empirical test.

Such research variables concern corporate governance features as the presence of independent directors within the board of directors, and the type of ownership of firms as the familiar conduction of the business, and the combination of the previous as the presence of independent directors within family firms' corporate boards.

The details of the variables were collected from a cautious analysis of the balance sheets published by 165 Italian listed companies throughout the years 2011 and 2016.

The experiment conducted through the usage of STATA® consists in the computation of the probability of the occurrence of an event therefore the statistical method suitable is the logistic regression.

Furthermore, the data of the experiment concern M&A deals of the aforementioned listed companies negotiated over the time span envisaged hence, they constitute a panel data which is the sample of the experiment. These data have been collected through the use of a software, namely Zephyr, and have been gathered into a database specifically created.

In order to study the panel data and monitor the possible bias triggered by the presence of some exogenous entities as cultural or macro-economic factors it has been made a choice between Random Effects and Fixed Effects running the Hausmann test and it has been decided to adopt the Random Effects technique.

Against this background, the model used in the analysis is the Random Effects logistic regression.

The analysis is divided in three chapters and is conducted very schematically giving details and findings of the issues examined.

The first section is a theoretical part. First of all, it focuses the attention on the feature under discussion providing a definition of the mergers' and acquisitions' dealings and of the process of value creation triggered by them. Then, the analysis proceeds taking into consideration the historical evolution of the phenomenon, i.e. the merger waves, considering the context of U.S., Europe, and Italy, the different types of M&As analyzing their respective pros and cons.

Subsequently, the focus is moved to the methods of payments through which these transactions are undertaken, to the beneficiaries of the deals and to the rationales behind the adoption of such business strategies.

The second section deepens the variable under examination hence, within this chapter are dealt issues of corporate governance and of family ownership also displaying the literature contribution on these themes.

More specifically, in the first part of the chapter is examined the board of directors and the crucial role played by it in the conduction of the business' operations and in particular in M&A's dealings. Moreover, is given an overview of the board independence examining the regulations concerning the feature in the aforementioned countries, U.S, Europe and Italy, and the most accredited corporate governance theories on the impact of independent directors on the financial outcomes of a company.

The second part of the chapter instead regards family firms also treating the corporate governance dynamics connected to this kind of entities and the board of directors within such companies.

Then are examined the attitude of these companies to undertake merger and acquisitions and the factors which affect the decisions to undertake such processes also giving insights about the particular factors which benefit or jeopardize the performance of family firms. Finally, the third and last chapter of this thesis displays the empirical research conducted explaining every step of the experiment.

The beginning of the analysis is the construction of the hypotheses tested, then are described the method of collection of data through Zephyr and the consequent creation of the database.

Successively the third section specifies the methodology used in order to prepare the test, so it involves the description of the logit model, the use of STATA® to complete the Hausmann test and the panel data analysis.

Lastly the results of the experiment are provided specifying the findings which provide support or refuse the hypothesis and they are commented with a further analysis of other empirical researches.

Mergers and Acquisitions Overview

1.1 § - Merger and Acquisition definition and value creation

One of the central argument of the following study is constituted by the fascinating topic regarding merger and acquisition transactions. In order to thoroughly comprehend the matters this analysis is going to deepen, first of all, it is essential to focus on the clarification of certain fundamentals of the aforesaid transactions, namely M&As.

The expression merger refers to the combination of two existing companies in which the *acquiring* company assumes the assets and liabilities of the merged or *acquired* one.

In the merger the two standing business entities melt in a unique company and only one of the two corporation, the acquirer, survives as remarked by Patrick A. Gaughan (2010)¹.

Instead, in the acquisition the *acquiring* company bargains at least more than 50% of the *target* firm's ownership with a view to achieve the effective control over it.

Generally, M&As refer to large strategic dealings undertaken by the majority of nowadays businesses which deeply alter the nature, the course, the control and the strategic direction of the firm as stated by Michael E. S. Frankel, Larry H. Forman (2017)². M&As constitute the principal transactions in the contemporary financial market which involve multiple financial intermediaries, private or public companies and a wide range of market regulators.

The increasing attention on M&As is justified by the companies' trend to undertake these operations for achieving influence, development and success. In 2017, the global market of mergers and acquisitions recorded \$3.7 trillion in terms of transaction volumes, as it's possible to see from figure 1, meaning that an important portion of companies decided to seek for M&A's strategies in order to expand in new marketplaces, in new businesses or to achieve profitability through synergies.

¹ Cfr. P. A. Gaughan in "*Mergers, Acquisitions, and Corporate Restructurings*", John Wiley & Sons, Inc, Copyright © 2010.

² Cfr. M. E. S. Frankel, L. H. Forman, in "*Mergers and Acquisitions Basics: The Key Steps of Acquisitions, Divestitures, and Investments*", 10 April 2017.

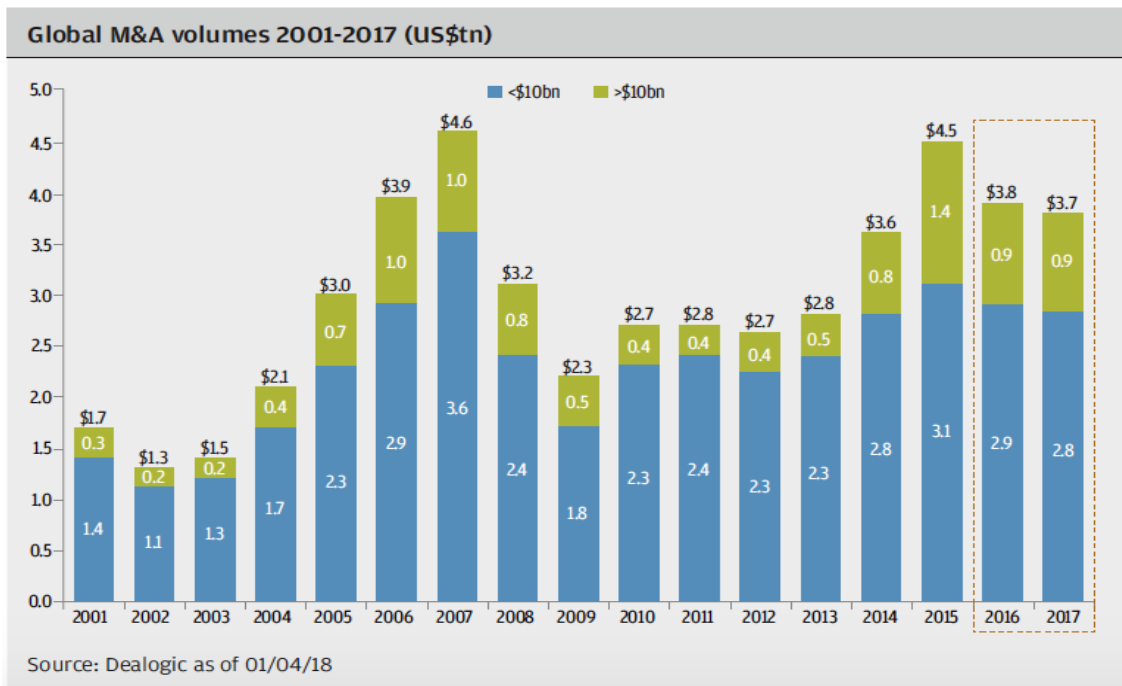


Figure 1: Global M&A volumes.

M&As has become attention-grabbing and interesting due to the disclosures they provide “about the firms ‘resources, skills, strategic intentions and development patterns”³.

They constitute a specifically important area of organizational change which encompass both the internal company’s environment and the external background embodied by the stakeholders.

It is fundamental to scrutinize M&As since these transactions represent the prevalent system through which companies generate value.

The concept of value cannot be expressed in limited definition due to its broadness and variety of connotations. It is associated to disparate characterizations which comprise both specific performance indicators known as Shareholder value, Book Value, Net Asset Value, Market Value but has even a wider sense differently interpreted depending on the type of business, scenario or stakeholder involved.

³ Cfr. L. Chalçon, A. Colovic, O. Lamotte & U. Mayrhofer in “Reputation, E-reputation, and Value-Creation of Mergers and Acquisitions”, Internal studies of Management & Organization, 18 Nov. 2016, Vol. 47, p. 4-22.

Besides the specific definitions of the notion value, it is central to appreciate that value is the core element which establishes the strategic choices, the development patterns and the managing of each corporate business.

Increasing value is the dominant long run purpose who guides each company's component, the reason why businesses continue to exist and to improve themselves.

To measure the value M&A would create, different performance and financial indicators could be used and interpreted. "*M&A value creation is often measured by the reaction of financial markets to the announcement of an operation*"⁴ which reflects the financial analysts' perception related to the performance and the value produced, for the acquiring company's shareholders, after the M&A's completion.

Moreover, to evaluate the reaction of financial markets, it is widely spread the proxy called Cumulated Abnormal Return (CAR) which measures the difference between the company's expected and actual returns over a determined period.

Indeed, the creation of value may diverge according to the characteristic of the companies involved in a merger or an acquisition. For instance, concerning the acquiring companies, it was showed that the size, measured through firm's market capitalization, is negatively correlated with the M&A value creation, as emerges from the researches of Ludivine Chalençon, Ana Colovic, Olivier Lamotte & Ulrike Mayrhofer (2016)⁵.

Instead with regards to the target company, it was observed that the value created by M&A is greater when the firm legal status is private other than listed.

Once provided the basic definition of M&A and before to deepen the categorization and the specific feature on which the attention will be focus, it is essential to afford and comprehend the evolution of this phenomena over time.

⁴ Cfr. L. Chalençon, A. Colovic, O. Lamotte & U. Mayrhofer in "*Reputation, E-reputation, and Value-Creation of Mergers and Acquisitions*", Internal studies of Management & Organization, 18 Nov. 2016, Vol. 47, p. 4-22.

⁵ *Ibid.*

1.2 § - History of Mergers and Acquisitions

The first step to make in order to give an historical overview of the merger and acquisitions operations is to highlight that, as a glaring trend, “*they occur in bursts interspersed*”⁶. As a matter of fact, M&A present a wave pattern so, there were some periods with peaks of these activities followed by others in which they plummeted. Taking into account the period from 1890s until now, the M&A specialists identified five different waves, each with different triggers of regulatory or economic nature, which took place in several countries.

Inter alia, the first and the second waves concerned only the U.S. and then this phenomenon spread and involved Europe.

1.2.1 § - U.S. M&As' Background

Here below is reported the chart⁷ about the volume of M&A which occurred in the U.S. from the 1880s up to 2015 which created the 5 waves. Furthermore, in this chart is represented the occurrence of antitrust cases filed recorded during the same period.

⁶ Cfr. S. Sudarsaman in “*Creating value for Mergers and Acquisitions*”, Financial Times Prentice Hall, 2010, p. 13.

⁷ <https://www.mauldineconomics.com/outsidethebox/why-american-workers-arent-getting-a-raise-an-economic-detective-story#>.

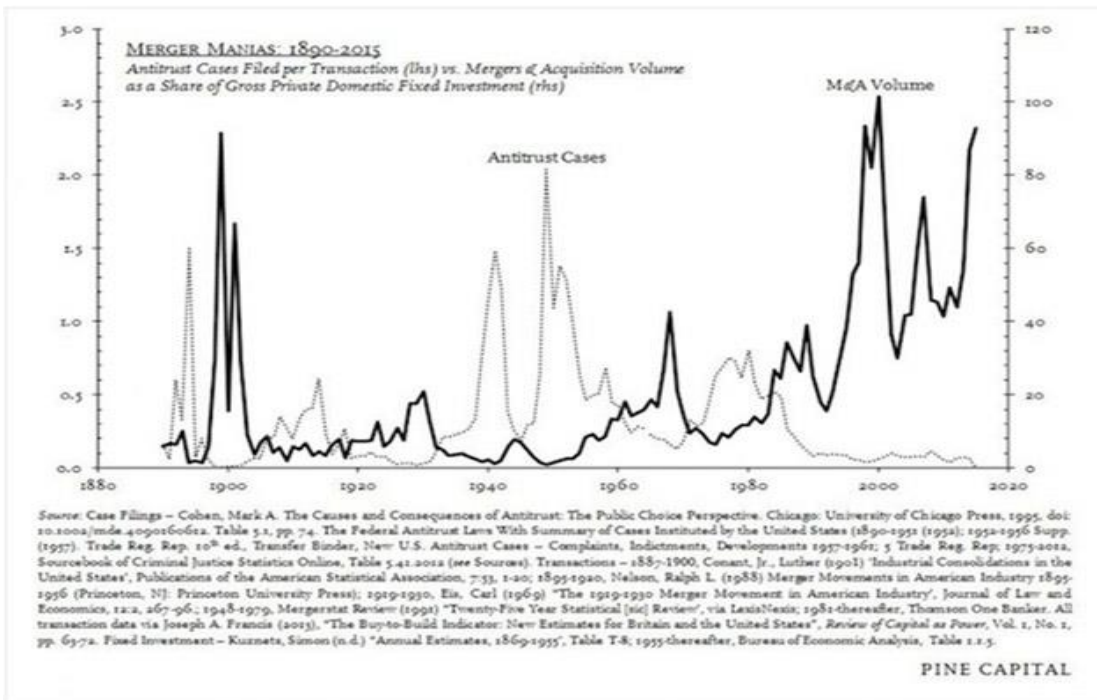


Figure 2: the 5 Merger's waves and Antitrust Cases.

The first spike of takeover activities took place in the 1880s, it was due to the firms' desire to increase their size and their market power achieving the monopoly as described by George Stigler⁸.

The wave starts from 1885, reaching the summit in 1900. This was a period of economic growth as demonstrated by the noteworthy development of the New York Stock Exchange. But, the real boost of merger and acquisitions of this span was the development of facilities like railways which gave to the firms the chance to expand their local or regional businesses.

The breakup of the market constraints led to a more tightened competition because companies had to face the threats of other market actors previously not considered as competitors. In fact, the main relevant feature of the first M&A wave was precisely the fact that in order to avoid the increased rivalry and to achieve a monopolistic position many firms contract alliances with their competitors in the form of horizontal mergers

⁸ G. J. Stigler, "Monopoly and oligopoly by merger", *American Economic Review*, May 1950, Vol. 40, p. 23-34.

like stated by Sudi Sudarsanam: “*An important characteristic of this merger wave was the simultaneous consolidation of producers within industries, thus qualifying for the description «horizontal consolidation»*”⁹.

So, although in 1890 the Sherman Antitrust Act was enacted to curb and to prevent concentrations and monopolies, it had not an effective impact on the M&A transactions because of its uncomfortable vagueness.

Then, in 1904, only once the Sherman Act was enforced more rigidly and a financial crisis affected the market capital, this first M&A wave ended.

The second flood of M&A occurred after the First World War, in 1920s, in a period of economic recovery with a growth of the stock market and stopped with a market crash, that of 1929, as well as the first wave.

This time the market structure was less affected by the takeover activities in fact, “*in total it involved less than 10% of the economy’ assets rather than the first wave’s over 15%*”¹⁰.

Unlike the first wave dominated by actors of great importance as General Electric and American Tobacco, the market was not the scene of singular giant firms but, indeed the subject of this wave was the emergence of oligopolies.

The previous trend of firms trying to achieve monopolistic position was replaced by the shift towards mergers whose objective was the vertical integration.

Actually, the reason of turnaround was the enhancement of the Antitrust legislation due to the issue of the Clayton Act, in 1914, to broaden the provisions of the Sherman Act. In particular, whereas the aim of both Sections 1 and 2 of the Sherman Act was forbidding mergers, to be considered as contracts having as their purpose a restraint of trade, or as acts for attempting to monopolize the market, the new discipline was better tailored to operations based on share purchases.

The Section 7 of this Act established the first merger legislation worldwide deepening the notion of merger control which characterizes the holding company i.e. a firm whose primary aim is to hold stocks of other companies, regarded as a mere corporate form of

⁹ Cfr. S. Sudarsaman in “*Creating value for Mergers and Acquisitions*”, Financial Times Prentice Hall, 2010, p. 14.

¹⁰ R. J. Gilson and B.S. Black, “*The Law and Finance of Corporate Acquisitions*”, New York Foundation Press, 1995, p. 15.

the old-fashioned trust. In dollar terms the third wave arose in 1960s, it was sharply bigger than the former ones reaching approximately a value of \$70bn and continued until the economic slowdown of 1970s and the oil crisis triggered by the embargo of the Organization of Petroleum Exporting Countries (OPEC) in 1973.

Primarily the focal point of the third wave was diversification. Again, the shift was caused by further antitrust provisions enacted in 1950 through the Celler-Kefauver Amendments to the Clayton Act. In fact, this new Act attempted to hinder vertical mergers which resulted in restrained competition.

Moreover, another relevant argument for this bias was lowering the financial risk, “*Weston & Mansinghka (1971) illustrated, from case studies, that firms diversified their activities into unrelated businesses in order to face the instability of demand and profits, the uncertain development of operations, the associated risks to technological obsolescence, and the uncertain evolution of the competitive environment*”¹¹.

Hence, as underlined by Sudi Sudarsanam, “*the percentage of firms in the unrelated business category increase from about 4% in 1949 to about 9% in 1964 before reaching over 21% in 1974*”¹².

The next step in the history of M&A occurred in the 1980s. The failure of mergers of the third wave in achieving the advantages of diversification led to a dramatic change of the takeover activities. It was described by Schleifer and Vishny as a “*round trip*”¹³.

As a matter of fact, firms were reversing the trend of conglomerate acquisitions of the previous wave extending their size and subsequently downsizing their activities to eliminate the inefficiencies and to exploit only their core businesses to gain a competitive advantage over the competitors.

¹¹ <https://faculty.insead.edu/laurence-capron/documents/historical-analysis-of-three-waves-of-mergers.pdf>.

¹² Cfr. S. Sudarsaman in “*Creating value for Mergers and Acquisitions*”, Financial Times Prentice Hall, 2010, p. 15.

¹³ A. Schleifer and R. W. Vishny, “*Takeovers in the ‘60s and the ‘80s: Evidence and Implications*”, Strategic Management Journal, 1982, Vol. 3, p. 359-70.

So, this wave consisted in acquisitions followed by divestitures, considering the U.S. they “*consisted about 20-40% of the M&A activity during this period*”¹⁴. Furthermore, due to a less rigid antitrust regime compared to that of 60s and 70s, the U.S scene during this decade was marked by the first hostile acquisitions, private equity funds, Leveraged Buyouts (LBOs), by the emergence of bust-up takeovers with the leading role of raiders and by the first private equity firms which made easier to complete Management Buyouts (MBO) and privatizations of public entities.

Lastly during the years of the technological revolution, 1990s, following the previous trend, the M&A transactions which shaped the fifth wave were geared to the acquisition of a competitive advantage deploying the core resources and capabilities of the company. This was “the mother of all the waves so far, assuming truly gigantic proportions. At its height in 2000, the value of M&A reached a value of “*\$1.8 trillion compared to the previous peak of \$324bn in 1989. The value of divestitures of the same year was \$368 compared to the previous peak of \$108bn in 1988*”¹⁵.

1.2.2 § - European M&As

As aforementioned, from the 1960s onwards takeover activities spread in the Europe. Specifically, this phenomenon started in the U.K with the third wave and then from the fourth one it regarded also the other European Countries.

Because of to the nonintervention attitude to takeover activities and the relevance of the stock market, U.K. took a prominent place in the Continent. Hence, it is surely the European country with the longest history of mergers, as in the recorded M&A operations represented in the following graph¹⁶.

¹⁴ Cfr. S. Sudarsaman in “*Creating value for Mergers and Acquisitions*”, Financial Times Prentice Hall, 2010, p. 16.

¹⁵ *Ibid.*

¹⁶ <https://imaa-institute.org/m-and-a-uk-united-kingdom/>.

Historical M&A in the UK since 1880

Number of M&A in the UK (since 1880)

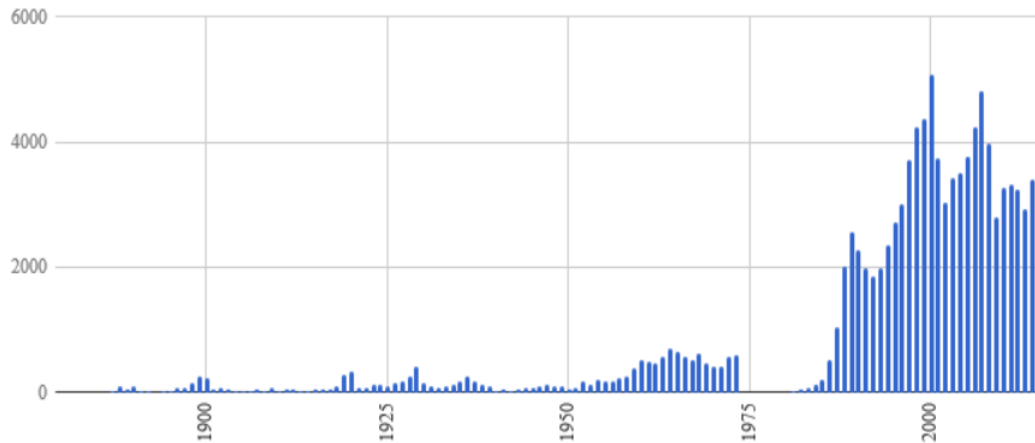


Figure 3 UK M&A's waves.

As opposed to the M&A occurred in U.S., during the 1960s mergers in UK were predominantly horizontal. The driving factors behind these were the incipient nature of the antitrust regime and the decision of the British government to create firms of considerable size able to withstand the international competition.

To promote the development of such companies was established the Industrial Reorganization Corporation (IRC) whose sponsored mergers were not subject of examination by the Mergers and Monopolies Commission (MMC), an institutional body created in 1965 and committed to settle claims on takeover activities.

The M&A wave of UK experienced a decline after the 1968 but then it grew back with a soar in 1972. Also, these M&A were predominantly horizontal nevertheless, as in U.S., and the percentage of conglomerate mergers increased.

Unlike the discrepancies showed during the third wave, the mergers and acquisitions of the fourth surge had the same pattern in United Kingdom and in the United State. Indeed, as their U.S. counterparts, diversified companies were divesting in pursuit of the competitive advantage operating on a narrower business portfolio and, in addition to this, the deregulation of the securities market in London, in 1986, brought to the

investments made by the U.S. investment banks and to the import and the succeeding deployment of the emerging techniques of U.S. (hostile and raiders and LBOs).

The Continental Europe was concerned for the first time by takeover activities since 1984 and they sharply increase, indeed they passed from value of “\$40bn in 1986 to \$175bn in 1990”¹⁷. In particular, the countries mainly engaged in M&A operations were Germany, France and Netherlands even if in a smaller size rather than their potential while, Italy, whose analysis will be discussed in the next paragraph accounted for only the 6% of the M&A activity in the EU.

Later, on the threshold of the new millennium the global economic environment changed drastically. The globalization had a substantial impact on the products and services and on the capital markets, governments started deregulation and privatization processes in order to make the economies more competitive moreover, in these years were established supranational bodies like the World Trade Organization (WTO), the North Atlantic Free Trade Association (NAFTA) and the Single Market of the European Union which contributed to decrease the barriers to trade and the limitations to the capital mobility. All these features had a significant positive impact on takeover activities which sharply increased and near 2000 rocketed. As a matter of fact, “*international acquisitions including EU firms as either targets or bidders grew from 21% in 1991 to nearly 29% in the years 1996-99*”¹⁸.

Whilst the trend of focusing on the core competencies to achieve a competitive advantage over the rival and then undertaking divestitures was still the same for the fifth wave in fact, the value of divestitures registered in the EU had a steady increase from “\$2bn in 1985 to \$313bn in 2000”¹⁹.

1.2.3 § - Italian's M&A History

Taking into account Italian experience, M&As lagged behind the other countries

¹⁷ Cfr. S. Sudarsaman in “*Creating value for Mergers and Acquisitions*”, Financial Times Prentice Hall, 2010, p. 19.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

analyzed. In Italy there were two different macro-trend which occurred respectively between the 1988 and the 1998, and between 1999 and 2010.

The first time lag was characterized by the growing phenomenon of privatizations and by the rise of the so called “middle market” while, in the latter the internationalization process represented the main incentive of firms to M&A deals. In this period in fact, as aforementioned, some drivers had a remarkable impact like the first implications of the globalization process and of the gradual elimination of constraints, as the barriers to trade, of the national markets which later brought to the Single Market of the EU.

The Italian scenario, considering the years between 1988 and 1991, was dominated by holding companies like Agnelli or Pirelli whose transactions were tended to diversify their portfolio and to the reinforcement of their position pursuing the goal of establish barriers to the entry of foreign competitors. Instances of M&A activities of the years were the acquisitions of the U.S. company Armstrong Tire completed by the Pirelli Group (1988), of Leeco Diagnostics undertaken by Recordati Industria Chimica e Farmaceutica (1988), and the joint venture NH Geotech created by Ford Motor and Fiat (1991).

On the other hand, also transnational M&A activities made by foreign companies were characterized by a general increase, as witnessed by the transactions of Nestlè acquiring Buitoni and Perugia (1988) and of Kraft General Foods which purchased Pietro Negroni and Simmethal (1990).

Later, until the 1994, occurred a smooth decrease of the M&A processes because of the lack of economic and political stability. M&As completed accounted for “385, -29% compared to the 1992”²⁰.

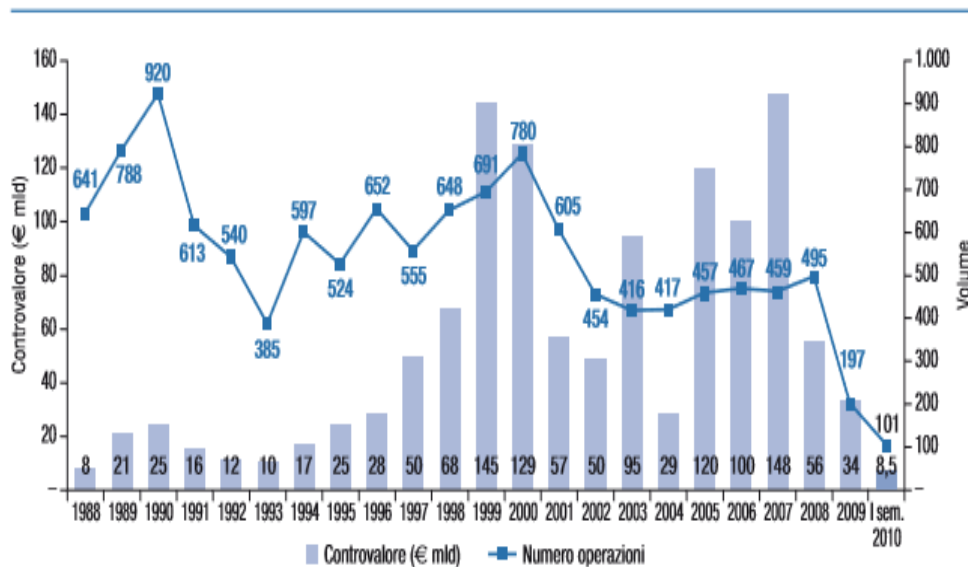
On the other hand, the latter half of this decade was marked by recovery of the economic stability and an increased financial market integration which resulted in a boost of M&As. As a matter of fact, “in 1998 the value of the M&A operations stood at 65 billion, a result achieved thanks to the presence of banking institutions like Banca Intesa and Unicredito Italiano”²¹. Furthermore, is essential to underline the increase of transactions made by foreign firms towards Italian ones thanks to the appearance and the diffusion of the U.S.

²⁰ KMPG, “20 Anni di M&A, Fusioni e acquisizioni in Italia dal 1988 al 2010”, Egea, 2003, p. 234.

²¹ Cfr. R. Caiazza in “Cross border M&A Determinanti e fattori critici di successo”, Geppichelli Editore – Torino, p.13.

and U.K private equity funds in the European scene.

Taking into account the period starting from the 2001 and ending in the 2008, the worldwide economic scenario suffered due to the international financial markets' collapse and the consequent economic stagnation. So, as a result of the market uncertainty, the investors 'confidence and the risk appetite plummeted and brought to a dramatic decrease of the number of M&A operations which reached the minimum level in the 2004 as provided below by the graph representing M&As' market in Italy from 1988 in terms of value and number of transactions.



Fonte: KPMG Corporate Finance

Figure 4: Italy's M&A.

The dramatic effects of the crisis persisted until 2012, but then, were seen the first signal of a recovery. In fact, although the difficulties faced by the global economies, the uncertainty and the mistrust in the market gradually decreased as shown by the increase in the number of M&A transactions undertaken.

Approximately the "80% of the M&A transactions is represented by cross border

operations”²² as it’s possible to see in the next chart which regards cross-borders M&A targeting Italian companies. Moreover, they accounted for 39,7 billion with 290 completed deals in 2014 and reaching a new high in 2015 peaking with a value of “50 billion”²³.



Figure 5: Cross- Borders Italy's M&A.

1.3 § - Types of Mergers and Acquisition

The determinants beyond the firm’s choice to undertake an M&A are made up around the aim to create value, as aforementioned before. They may differ for several features or conditions: the type of M&A undertaken (vertical, horizontal or conglomerate); the role of the firm, the acquirer or the acquired; the geographical positioning of the firms involved or the M&A’s form which may involve either the purchase of the target’s company stocks or asset.

²² https://assets.kpmg.com/content/dam/kpmg/pdf/2015/04/KPMGMA2014_web.pdf

²³ <https://www.ft.com/content/df73311e-0b35-3d5c-aaf9-e12e49f6eee3>

To better understand the rationale which leads firms to engage in M&As, the analysis will move towards the examination of the different scenarios these transactions might present. First of all, M&As are categorized in three different types: horizontal, vertical and conglomerate or diversified. In a horizontal M&A, the transaction occurs between firms which compete in the same industry whose aim is to reach a better competitive position than the standalone companies. In horizontal M&As, also called related M&A, the basic business operations remain the same but the acquirer's capacity and the market power increase, and so the profit.

The advantages originated by horizontal M&A are copious: first, the number of potential competitors in the industry is reduced as confirmed by the market power increase; second, horizontal mergers or acquisition lead to the reduction of operating costs due to the increase in sharing resources as assets, employees and physical assets; third, the management, who have a better understanding of the playing field due to the similarities in the two firms, may be able to deeply comprehend the acquired company, reducing significantly the risk of M&A failure as we can see from Rozen-Bakher (2018)²⁴.

In 2017, one of the most significant horizontal M&A involved the pharmaceutical biotechnological industry between Gilead, Science Inc. and Kite Pharma. Gilead, a research-based biopharmaceutical company acquired Kite Pharma, a clinical stage biopharmaceutical corporation for the consideration of \$ 12 billion in order to exploit the new discoveries regarding new method of treating the cancer as emerges from Ryan McQueeney (2017)²⁵.

Vertical mergers and acquisitions are operation which take place between firms operating in the same production path but at different phases. The companies involved in this M&A type often have a buyer-seller relationship, for example it occurs when a manufacturer in a specific industry wants to own its supplier (upstream) or its distributor (downstream). These transactions might improve the companies' efficiency and reduce their costs producing either economies of scale or scope.

²⁴ Cfr. Z. Rozen-Bakher in "*Comparison of merger and acquisition (M&A) success in horizontal, vertical and conglomerate M&As: industry sector vs. services sector*", The Service Industries Journal, 2018 Vol. 38 p.7-8, 492-518.

²⁵Cfr. Ryan McQueeney in "*The 5 Best M&A Deals of 2017 (So Far)*", Nasdaq, 3 October 2017.

Although vertical M&As are considered more complicated to achieve due to the complex negotiations and synchronization of companies, they might improve the company's market access in particular, when they are undertaken between companies which operate in imperfectly competitive markets.

Moreover, vertical mergers or acquisitions usually improve the coordination between different stages of the company value chain obtaining several important results as the reduction of inventory cost and the increase of capacity utilization which translate in more efficiency and profitability as reported in Rozen-Bakher (2018)²⁶.

To provide an instance of vertical M&A, over the past year, there was the merger announcement between AT&T, the world's largest telecommunications firm and provider of mobile and fixed telephone services, and Time Warner, a mass media and entertainment company which would have led to great synergies in terms of efficiency and market access, as according to Benjamin Gomes – Casseres (2018)²⁷.

A conglomerate or diversified merger or acquisition happens when a corporation purchases a controlling interest in another firm which conduct an unrelated business activity. The firms involved in this type of M&A are companies which produce unrelated product, neither complements or substitutes.

The reason for diversified merger is the willingness of the company to expand its products or services 'portfolio. This M&A category implicates more risks and efforts compared to the other examined before due to the several disparities regarding the markets, products, geographical locations, operations, human resources and physical assets.

The aforementioned dissimilarities may result in a lower profitability and in a lack of reduction of operating costs. Nevertheless, conglomerate M&As are advantageous because they have the highest synergy potential and they lead to simpler, more convenient

²⁶ Cfr. Z. Rozen-Bakher in “*Comparison of merger and acquisition (M&A) success in horizontal, vertical and conglomerate M&As: industry sector vs. services sector*”, The Service Industries Journal, 2018, Vol. 38 p.7-8, 492-518.

²⁷ Cfr. B. Gomes – Casseres, in “*What the Big Mergers of 2017 Tell Us About 2018*”, 2018.

and profitable access to capital and income stability, as stated by Rozen-Bakher (2018)²⁸.

The diversified M&A is a *real challenge* faces by ambitious entrepreneurships which includes countless risks but, at the same time, could lead to great results.

The clearest example of conglomerate M&A is one coming from the past, exactly in the 1970, when Phillip Morris, the major tobacco company, merged with Miller Brewing Co, a major company in the beer industry to diversify its business through unrelated product, Vicky A. Bengé (2017)²⁹.

In several cases, mergers and acquisition are accomplished by the acquirer company through incorrect behaviors such as the fighting for replacement of the management of the target firm or the direct appealing to the target's shareholders (tender offer). Moreover, in this so called, hostile takeovers, the acquirer challenges to convince the target board members to unseat their position by using their proxy votes to support the acquirers' candidate for the election to the target board. In contrast, target firm can follow different available strategies in order to defense from these aggressive acquisitions.

A further categorization regarding M&A's features is the one concerning the method by which the merger or acquisition is concluded: the purchasing of stock or the assumption of the acquired company's assets. Usually, the purchase of the assets is advantageous for the acquiring company when it desires to delimit its acquisition to the parts of the acquired company that coincide with the acquirer needs. Instead, if the acquirer decides to buy the target's stock it is as the former assumes the latter's liabilities.

Each category M&A may occur between domestic firms or companies located in different geographical settings.

Cross-borders M&As are certainly valuable when the objective of the company is to seek growth opportunities in new markets exploiting the know-how and all the capabilities already solid in the domestic market. On the other hand, when dealing with foreign countries, the risks are higher than in the domestic one due to the fact that there may be

²⁸ Cfr. Z. Rozen-Bakher in "*Comparison of merger and acquisition (M&A) success in horizontal, vertical and conglomerate M&As: industry sector vs. services sector*", The Service Industries Journal, 2018, Vol. 38 p.7-8, 492-518.

²⁹ Cfr. V. A. Bengé in "*Companies that did a Conglomerate Merger*", 26 September 2017.

situations in which the company will not have the complete understanding of the culture and the extraterritorial playing field, increasing considerably the information asymmetry and the agency costs.

In fact, firms dealing with cross border M&A have to consider some additional variables as the country-industry and firm – level conditions related to both the acquiring and to the target firm. It is fundamental to analyze labor, capital, natural resources, and legal, political and cultural surroundings.

Nowadays, it is observed the reversal tendency for companies to narrow the geographical area of interests, reducing for example, the desire to make deals in the Eastern part of the world represented by China and Japan.

1.4 § - Methods of payment for acquisitions

Usually, the decision about the payment method of takeover activities is agreed between the parties involved through a negotiation process which determines also who will be the controller of the majority of interests when the deal will be closed.

The degree of importance given to the payment methodology is very high because the choice of a particular technique affects the liquidity of a firms, its financial leverage, the accounting policy which will be used to report the costs of the merger operation and the tax benefits related to the completion of the process.

Actually, firms can finance M&A transactions maximizing tax benefits, exploiting the different burden of a favorable fiscal regime of another country, and increasing also the bid premium which has a strong impact on the bid success and simultaneously on the gains of the shareholders of the target firm.

In addition to these features, a bidder has to evaluate also the currency of payment due to the exchange rate risk to which it is exposed.

The different methods of payment used in a M&A transaction are determined both from the number of shares purchased by the bidder prior to the initial offer and both from the nature of the bid made by the acquiror company.

One of main methods to regulate an acquisition and a merger process is cash in exchange for shares of the target company. In this case the shareholders of the target company are no more concerned about the amount paid by their dividends which is related to the

performance of the firm. In addition, they prefer this kind of way of financing the operation because it release them from the potential inability to sell their stake of the equity capital. As a consequence of the high level of preference, is not unusual that a target firm accept a lower offer compared to the value of the company instead of other payments like share exchange payment i.e. a number of the acquirors' shares used as a currency to pay the shares of the target ones.

From the perspective of the shareholders of the acquiror company, cash payments might affect in a positively way the outcome of the negotiation process resulting in an aforementioned lower offer or even in a deferred payment nevertheless, it could also led to a disadvantage in case of future bad performance of the company because the only shareholders who will suffer in this case will be that of the bidder while in case of a stock exchange payment the shareholders of both the firms are tied to each other hedging themselves against the performance risk.

Furthermore, payment in cash could mean that the shareholders of the bidder have to pay immediately the income taxes on gains achieved from the transaction this expense is avoided through the shares swapping.

Besides, the payment of shares against shares could also be related to the financial leverage of a firm, indeed a bidder entity with high gearing obviously prefer this method of payment in order to decrease that ratio instead of the payment through debt which increases it.

Taking into account debt payment, from the seller point of view, the entity should be very confident about the financial conditions of the bidder company because if the acquiror goes to bankruptcy the remuneration of its shareholders will be paid as junior debtholders unless the acquiror would provide, and so hedge investors of the target, a guarantee for the repayment as secured creditors. From the acquiror standpoint instead debt constitutes a tax deductibility which results in an increase of the value of the company through an increase of the Earnings Per Share ratio (EPS).

Moreover, shareholders of the bidder could exploit the advantage arising from paying of shares of the target company providing to the target shareholders convertible loan or preferred shares i.e. loan stock or preferred shares considered to be convertible into ordinary shares of the acquiror entity at a rate predetermined by the parties over a certain

time lag.

1.5 § – M&A's Value-Added Beneficiaries

When an M&A is announced to the market audience, it is observed that the price of the acquiring company basically remains the same but the company who wants to acquire or incorporates the target firm, is forced to pay premium for the latter.

The price exceeding the value of the target would have been absorbed by the acquiring company because the extra – price paid would have been equal to the value the target firm will add to the acquiring one. The premium price, instead, is captured by the target shareholders because of a series of phenomena related to the market's reaction to M&A announcement.

In the reality it happens that the firm which will be acquired, have not yet exploited its real value. In most of the cases, the target companies' shares are underpriced on the market due to their inefficient management. In this context, another firm might decide to catch up the challenge to fix the situation and to make a profit at the same time by making a tender offer for a price, higher than the market value, but lower than the potential value of the target firm.

However, the practice shows that acquirer firm, in order to convince the shareholders to tender their shares, have to offer a price that have to be, at least, equal to the price the company would have if well managed reducing to none the profit the acquirer would have make.

In this way, even if the market value of the company is very low, the acquirer has to pay for the premium price. Additionally, the shareholders which have not spent their effort and time in the administration of the firm, continue to participate to company profitability and gain from the positive effects and benefits arising from the takeover announcement and settlement.

The target company shareholders "free rider problem" is a challenge which affects the whole sector of mergers and acquisitions and its consequences range from the reduction of the acquiring corporate's profit to the abandonment of the proposal and the loss of interests from the acquiring company to continue with the operation.

In order to overcome the problem of free riding, the bidder can engage three different

common mechanisms.

One of the methods which may allow the acquirer to avoid the problem of the shareholders' reluctance to tender their shares, is called *toehold* and consists in the anonymously acquisition of the shares of the target company in the market.

This mechanism, however, is heavy regulated by the market authorities such as SEC and is not allowed to a company to acquire more than the 10% of the other company's shares without making a public announcement on its future intention on the acquisition.

Beside the *toeholds*, regulated by market institutions and whose utilization is limited to a certain threshold, there exists other two methods which seek to help the acquirer to capture more of the profits from the acquisition: the leveraged buyout and the freeze out merger.

The leveraged buyout is a lower – cost mechanism which allows acquirer to take over companies and replace the underperforming management.

It happens, for example, when the acquirer company decides to announce its intention to buy the shares of the target company, at a certain price, by using the money it borrows from a shell corporation by pledging the shares themselves as collateral on the loan.

In this approach, the money lend by the bank will be needed only if the bid succeeds and, this situation, the acquirer company could merge the target company with the shell corporation by attaching the loans directly to the target, exerting the control it obtains after the acceptance of the tender.

It is the target corporation has borrowed the money and not the acquiring company which ends with the obtaining of half of the shares without paying them.

In these surroundings, the shareholders have an interest in the acceptance of the shares because they are in a position of indifference to the tender offer, whether they keep or tender the shares the price at which the shares are bought remain the same due to the debt attached to the target company.

If they tender their shares they receive the price for them, if they do not but the enough other shareholder do it, the acquiring company will take the control over the company and replace the management reaching the same company value.

Thanks to the usage of effective tool for purchasing a company, the acquirer is allowed to hold a major portion of the profits and gains arising from the transaction and the

problem of free riding is slightly reduced but not completely deleted.

In the practice, is not that simple to pursue a leveraged buyout because of the issues related to the minimum equity stakes required to the acquirers and the complicated transactions needed in order to obtain its approval and its effective realization.

The alternative mechanism utilized to acquire a company is the freeze out merger. By dint of the use of this instrument the acquiring company is allowed to *freeze* existing shareholders out of the gains from merging by forcing the non – tendering shareholders to sell their shares for the tender bidder price.

The accomplishment of the freeze out merger is implemented throughout a series of phases which begin with the acquirer firm’s tender offer at a price marginally higher than the current target stock price. If the target bid succeeds the merges can occur and the non-tendering shareholders lose effectively their shares because the acquired company does not exist anymore but, they have the right to receive the compensation corresponding to the tender offer price for their shares.

The offer, in this way can achieve the complete ownership of the target company for the price equal to the tender offer price. The freeze out method is advantageous because it is not necessary for the acquiring company to make all cash offer.

The analyzed tools can significantly distribute the value created by the announcement and the accomplishment of a merger or acquisition, eluding the concentration of the gains in the only hands of target corporate’s shareholders as it’s possible to read in Jonathan Berk’s and Peter De Marzo’s book³⁰.

1.6 § - Rationales: Growth, Synergies and Diversification

In general, the reasons which push a business to take up a M&A transaction can be found in the willingness to grow faster, to obtain synergies or to diversify the business depending on the type of M&A it desires to pursue.

When companies decide to pursue a strategy, whose aim is the future expansion, both within their own industry and outside their business sector, have to decide to prosecute their strategy throughout either internal growth or external growth. Internal growth

³⁰ Cfr. J. Berk and P. De Marzo in “*Corporate Finance*”, Standford University, PEARSON, 3th. Edition.

implicates the company's commitment to internally develop new valuable resources suitable with its strategic intentions.

The internal growth process including the engineering, the setting up and the implementation of new resources may be slow and uncertain limiting the expansion possibilities of the company and removing the growth opportunities which might remain open for only a limited period of time.

With the purpose to catch up new opportunities faster and to gain time advantage over competitors several engage in external growth through M&As. Takeover activities allow corporations to exploit new opportunities or new geographical expansion faster and with lesser threats. *“Managers often look to M&A as a way to jump –start growth. It often is hoped that acquisitions will lead not only to revenue growth but also to improved profitability through synergistic gains”*³¹.

However, the flip side of M&A is the increased demands on management which faces with a larger enterprise, conjugating the greater size of revenues with commiserate returns for the company's shareholders.

The concept of growth shall encompass the enterprises' geographical expansion which occurs when rather than concentrate in domestic market companies may seek cross-border expansion to capture revenue and profits from a new appealing foreign market. Through cross-borders M&A the firm acquires the possibility *“to utilize the country-specific know-how of the target, including its indigenous staff and distribution network”*³².

The theme of international M&A has become crucial in the currently economic framework in which cross – country barriers are changing and starting to dissolve leaving to commercial freedom and globalization through international trade agreements as World Trade Agreements.

Moving forward with the rationale for which enterprises merge with each other or acquire other companies, huge significance has to be given to synergies.

³¹ Cfr. P. A. Gaughan in *“Mergers, Acquisitions, and Corporate Restructurings”*, John Wiley & Sons, Inc, Copyright © 2010.

³² *Ibid.*

Synergies, from a corporate interpretation refers to the ability of a corporate combination to be more profitable than the individual parts of the firms that were merged, explaining why even if firms incur in acquisition process expenses, they are still able to give target shareholders a premium for the obtaining of their shares.

The effect of synergies may be explained by a simplified mathematical formula which highlights the synergistic benefits which allows the combined firm to appear to have a positive Net Acquisition Value (NAV) as emerged from Patrick A. Gaughan (2010)³³.

$$NAV = [V_{AB} - (V_A + V_B)] - (P + E)$$

where:

- V_{AB} is the combined value of the two combined firm A and B;
- V_A is the value of the firm A;
- V_B is the value of the firm B;
- P is the premium paid for the acquisition of the firm B;
- E is the expenses of the acquisition process.

The term in the squared brackets represent the so-called synergy effect that has to be greater than the sum of the premium paid for the acquisition of the target firm and the expenses related to the whole acquisition process in order to explain the affordability of the M&A.

In practice, it is very difficult to determine the accurate value of synergy effect, and when dealing with M&A decisions, managers should be able to evaluate the potential proxies of the “*synergistic benefits from joining previously separate organizations, create value, transfer capabilities from one organization to another or enhance learning*”³⁴.

According to Eero Vaara³⁵ the synergy effects are really challenging to imitate by

³³ Cfr. P. A. Gaughan in “*Mergers, Acquisitions, and Corporate Restructurings*”, John Wiley & Sons, Inc, Copyright © 2010.

³⁴ Cfr. Eero Vaara, in “*On the Discursive Construction of Success/Failure in Narratives Post-merger Integration*”.

³⁵ Cfr. S. Laura-Melinda in “*The Necessity to Exploit the Economic Network's Synergistic Potential*”, LAP LAMBERT Academic Publishing, 2011.

competitors because are unique combinations of factors with time – varying characteristics.

The shared classification of synergies view two main types of synergies: operating, achieved through revenue enhancements or cost reductions, and financial, referred to the decrease in the cost of capital resulting after the M&A.

The financial synergies indicate the impact of the combination of two firms through M&A on the cost of capital of the merging partner or the acquiring firm which lowers the risk of capital. The literature diverges on the value created by the financial synergies and the debate is still unconcluded.

The Cost – Reducing Operating Synergies are the most common type of synergies that management attempt to achieve through economies of scale, reducing the unitary production cost as the firm size increases, or economies of scope, utilizing one set of input to provide a wider range of products.

The banking sector provide a striking evidence of the aforementioned concepts in fact, when financial institutions merge, they can share inputs to offer more sets of services which smaller banks may not be able to afford such as trust department, economic analysis group, as in Patrick A. Gaughan (2010)³⁶.

On the other hand, the operating synergies might be pursued through revenue enhancement that may arise from the different potential sources of revenue improvements resulting from the M&A.

The new opportunities vary depending on the specific M&A and might be the ones coming from the sharing of markets opportunities, the broadness of the product line, the exploiting of the one company brand name. Despite the unlimited potential of revenue enhancement synergies, they are very difficult to succeed and impossible to precisely forecast as underlined by Patrick A. Gaughan (2010)³⁷.

Another rationale which prompts companies to undertake M&As is the intention for enterprises to grow outside the current business boundaries.

³⁶ Cfr. P. A. Gaughan in “*Mergers, Acquisitions, and Corporate Restructurings*”, John Wiley & Sons, Inc, Copyright © 2010.

³⁷ *Ibid.*

Companies might choose to diversify in order to attempt the acquisition of the leading industry position and the related potential benefits as the broader consumer awareness or the prominent position in distribution. When a company initiates to acquire a consistent number of firms it may gain benefits related to the diversification of the investors' portfolio of assets, so reducing the risk and stabilizing the volatility level of earnings which makes problematic to pay dividends to shareholders and plan with a long-term vision as pointed out again by Patrick A. Gaughan (2010)³⁸.

Companies may decide to diversify their business in order to enter in more profitable industries than the current playing field because maybe the company's industry has reached the mature stage of its production life cycle or because the competition is pressing and does not allow the firm to raise the prices at a profitable level.

Furthermore, in some particular industries there might be the presence of entry barriers which limit the entrance of companies in the sector due to the specific experience required to operate in the marketplace or the national institution protection against some special industries with particular characteristics as natural monopolies or sensitive areas.

In addition to the above-mentioned three main rationales for company to engage in a M&A, there are other reasons which have an influence on the choice to merge or acquire: improved management, improved research and development, improved distribution, tax motives.

After a merger or an acquisition, the larger company could require better managerial skills because it may face the challenge to oversee a wider distribution network and has to revolutionize the organizational strategy in order to avoid the growth trap.

M&As have an impact on the company management, in fact, the overall performance of the managers might improve by gathering knowledge and productivity from the better management of one of the two merging companies.

Taking into account the Resources and Development department, it may happen that one company has massively invested on innovation rather than the other enterprise: by

³⁸ Cfr. P. A. Gaughan in "*Mergers, Acquisitions, and Corporate Restructurings*", John Wiley & Sons, Inc, Copyright © 2010.

undertaking an M&A transaction the “less pioneering” firm leverages on the advanced R&D function, filling the development gap as it would have invested in the past years in innovation and new technologies.

Furthermore, companies are constantly up to date on the tax benefits and fiscal advantages arising from new regulation waves and are always seeking for the best way to avoid heavy taxation, considerable labor cost and legal restrictions. M&A the most of time is the achievable solution to capture new tax cost saving opportunities.

Shifting the focus of the discussion on cross border M&A, the specific type of mergers and acquisitions transaction aforementioned before, the analysis proceed investigating the specific advantages arisen after a foreign operation.

The benefits earned from the companies who decide to go through with a cross border M&A are related to the entrance and the exploiting of the new environment.

Advantages are related to the diversification or entrance in a foreign impervious market, companies are enabled to absorb important foreign business resources as innovative and valuable technologies, to gain from the knowledge of skilled human resources, to have access to strategic local markets, as it’s possible to see from Katsuhiko Shimizu, Michael A. Hitt, Deepa Vaidyanath, Vincenzo Pisano (2004)³⁹.

Mergers and acquisitions undertaken by enterprises transform the company environment due to the deep changes involving the internal environment. Once a company establish to pursue an M&A strategy, has to consider both positive and negative implications that may arise after its choice.

The literature related to the effect of mergers and acquisitions is broad and discordant. On the one hand, numerous authors confirm the expectation related to the positive effects of M&A, which treat these transactions as well – considered decision undertaken by firms in order to achieve positive effects on the profitability of the merged companies. On the other hand, as many different authors have studied and confirmed the negative implications after an M&A which implicates the decline of profitability.

³⁹ Cfr. K. Shimizu, M. A. Hitt, D. Vaidyanath, V. Pisano, in “*Theoretical foundations of cross-border mergers and acquisitions: A review of current research and recommendations for the future*”, Journal of international Management, 2004.

For what concerns the positive effects on companies' financial performance, it is important to mention financial efficiency and asset stripping or unbundling.

First of all, financial advantages arise from the ability of the company with the weakest balance sheet "to save on" interest payments by using the stronger company's assets to pay off its debt. Moreover, some companies tend to gain from the acquiring of other companies whose underlying assets are underpriced and the rapidly sell off the different business units at a higher price, on the point Duncan Angwin⁴⁰.

Another crucial advantages for which firms pursue M&A as a leading strategy in their corporate environment is the speed through which the acquirer "acts fast", meaning that has a remarkable benefit in changing the industry landscape faster than competitors gaining from the first mover advantage.

The rationale of decline in profitability and financial performance may be justified by the tendency to lose the control on the company due to the increased complexity of the organizational structure. Moreover, it was observed that the effect of mergers and acquisition tend to have a negative influence on the firm's industry which results in the contraction of the sector.

In many instances, it has been observed the failure of the most of M&A operation, even if the expectation on future positive effects on firm performance, at the time of the announcement of the operation, was high.

The causes which may lead to a merger and acquisition fails, may be listed as follow:

- The existence of the integration risk, consisting in the difficulties arising in the implementation of the integration of the two merging companies; the companies are unable to reach the desired objectives in term of synergies and economies of scale or scope;
- The possible overpayment of the target company, for more than it is worth and have negative consequences on overall future financial performance;
- The lack of corporate cultures integration, namely culture clash which result in a lock in of the companies due to their deep discrepancies and dissimilarities.

⁴⁰ Cfr. D. Angwin, in *"In Search of Growth: Choosing between Organic, M&A and Strategic Alliance Strategies"*, QFINANCE.

M&A strategies have consequences also on the people belonging to a company. It was examined that firm engaged in mergers and acquisitions have noticed enhancements in plant productivity and in the sorting and matching of plants and workers to more efficient uses, as stated in Donald S. Siegel and Kenneth L. Simon (2010)⁴¹.

M&A constitutes a phenomenon which stimulate organizational change, sometimes interpreted as a technological change because it encompasses the application of new production methods by dint of the transfer of renovate knowledge from one firm to the other.

Although the potential benefits of an M&A, some studies show that it might result a negative effect related to the technological innovation.

The coveted economies of scale and scope may become diseconomies due to an increase in organizational requirements.

Mergers and acquisition require for major efforts of the management which do not concentrate appropriately on R&D new projects. Moreover, the financial expenses following an M&A reduce the capital available for new projects and ideas and managers tend to become more risk averse due to the increase in the company's debt as emerges again from Donald S. Siegel and Kenneth L. Simon (2010)⁴².

⁴¹ Cfr. D. S. Siegel and K. L. Simon in “*Assessing The Effect Of Mergers And Acquisition On Firm Performance, Plant Productivity, And Workers: New Evidence From Matched Employer-Employee Data*”, Strategic Management Journal, 2010.

⁴² *Ibid.*

Board independence and family firms

2.1 § - Board of directors

The corporate scandals which occurred from the first years of 21th century as the fraudulent manipulation of financial reporting of Enron and WorldCom increased the debates regarding the ways in which firms conducted operations and, on the control actually enforced on them, as underlined by Cheung and Chan “*interest in corporate governance by policy makers in developed countries has grown significantly by the early 1990s*”⁴³.

According to the Organization for Economic Co-operation and Development Corporate (OECD) corporate governance “*involves a set of relationships between a company’s management, its board, its shareholders and other stakeholders*”⁴⁴.

The governance of a company regards the whole set of rules and activities by which a firm is managed, and its processes are monitored. More specifically, it concerns the balance of the different interests belonging to any stakeholder.

Hence, every feature concerning corporate governance of an enterprise is born with the attempt to mitigate the conflict of interest in particular that existing between managers and shareholders which arises from the separation between ownership and control. As a matter of fact, these conflicts of interest are likely to occur whenever managers do not take into account the impact of their work on the firm performance. For managers, indeed, is not compulsory to own shares so, compared to the owners, their exposure to risk is pretty lower in case of bad performance.

Furthermore, the degree of these conflicts of interests, also known as agency conflicts, depend on how much the interests of the related parties aforementioned are interrelated. Some possible techniques in order to counterbalance the agency conflicts is to give to managers some incentives related to the firm performance as tying their remuneration to that or as giving them some stocks but, these procedures imply the managements’ exposure to the firms’ risk. Otherwise, to align the interests of investors with management

⁴³ Cfr. S. Y.L. Cheung and Bob Y. Chan in “*Asia-Pacific Development Journal, Economic and Social Commission for Asia and The Pacific*”, 2004, vol.11, No.2, p.1.

⁴⁴ <http://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf>

actions, it's possible to put under strict control the decisions and the actions of managers but the degree of the control and the related monitoring cost depend on the degree of fragmentation of the shareholders' structure.

As a matter of fact, in widely held companies the protection of investors' requests a high degree of surveillance and a huge expense and, because none of the shareholders wants to bear the monitoring cost, the result is that managers are able to control the firms and to lay down the achievement of investors' goals, as the increase of profit, giving more importance to their personal objectives.

Hence, the shareholders as a group establish a collective body, namely the board of directors, to represent their interests in the company and to monitor the management avoiding, inter alia, the exposure of the latter to the firm's risk.

According to OECD Principles of Corporate Governance, "*the corporate governance framework should ensure the strategic guidance of the company, the effective monitoring of management by the board, and the board's accountability to the company and the shareholders*"⁴⁵.

The decisions of the board concern the execution of three different functions, the first, the function of watchdog for the interests of shareholders, involves features like either oversee the performance of the company or choices regarding dividends policies or the issue of additional shares or the audit and the approval of decisions undertaken by the executive managers as investments or acquisitions. In fact, primarily, "*the board members should act on a fully informed basis, in good faith, with due diligence and care, and in the best interest of the company and the shareholders*"⁴⁶.

Then the strategic function which entails setting out the strategic and directive guidelines for the business operations of the company, the "*strategic function in providing the vision, mission and goals of the organization*"⁴⁷, "*the fiduciary duty to protect the organization's assets and member's investment*"⁴⁸.

⁴⁵ <http://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf>

⁴⁶ Ibid.

⁴⁷ <https://www.extension.iastate.edu/agdm/wholefarm/pdf/c5-71.pdf>

⁴⁸ ibid

Lastly, the supervisory function consisting in managing the process to recruit, to hire, to handle the relationships and eventually to fire the general manager namely, the Chief Executive Office or CEO.

The structure and the mandates of the directors are provided bylaws. This latter provides also guiding principles regarding processes of appointment, election and dismissing of members and officers, namely the president and the vice-president knowns also respectively as chair or vice-chair of the board, the frequency of meetings and the number of directors.

Traditionally, it's possible to distinguish between three different type of directors according to the different ties and their closeness to the firm.

Generally, insider directors are in charge of executive duties and provide their expertise and know-how to develop the firm strategy for its businesses thanks to their closeness to the firm. Indeed, *“an inside director is a member, who has the interest of major shareholders, officers, and employees in mind, and whose experience within the company adds value. An insider director is not typically compensated for board activity as they are often already a C-level executive”*⁴⁹ as the Chief Operating Officer (COO) or the Chief Financial Officer (CFO) but it can be also a major shareholder, a lender or another stakeholder, such as a labor union representative.

Gray directors instead, are represented by *“people who are not as directly connected to the firm as insiders are, but who have existing or potential business relationships with the firm”*⁵⁰ e.g. lawyers or consultants who are already retained by the firm or could be interested in having ties with the company.

Lastly, the outside directors defined as *“a member of a company's board of directors who is not an employee or stakeholder in the company”*⁵¹ are people who are not related and have not business ties with the firm. They are non-executive directors and their tasks regard the assessment of managers' performance. As compared to insider directors they may be less informed because of their arm's length distance from the firm nevertheless, they contribute to enhance performance outcomes balancing the interests represented and

⁴⁹ <https://www.investopedia.com/terms/b/boardofdirectors.asp>

⁵⁰ Cfr. J. Berk and P. De Marzo in *“Corporate Finance”*, Stanford University, PEARSON, 3th. Edition p. 963.

⁵¹ <https://www.investopedia.com/terms/o/outsidirector.asp>

giving new insights making their voice heard. To give an instance of such contribution we report the words of John W. Byrd and Kent A. Hickman: “*The independent outside directors represent the monitoring component of the board. Boards in which independent outside directors hold at least half the seats can block a proposed acquisition, and such boards will approve fewer unprofitable acquisitions than other boards. Moreover, independent directors may influence the acquisition process even when they lack veto power over board decisions; as more directors voice their concerns over a proposed acquisition, the likelihood of swaying the decision increases*”⁵².

According to the various directors’ type there are different incentives to accomplish to the duties of the charged position. For instance, “*dependent directors may lose reputation by monitoring (control) and build reputation by advising (support), so they have lower incentives to monitor and stronger incentives to advise than independent directors do*”⁵³. Hence, one would expect that managers which act in such structured setting prefer to not be intensively monitored, due the consequent lack of discretion over the firms ‘resources and consequently on the Free Cash Flow (FCF), and that their reaction to this consist in provide a fewer information flow. However, the advice responsibilities of managers contribute to improve the value of the FCF offsetting the effect of the little discretion aforementioned.

2.2 § - Board of directors in M&A transactions

Many directors have experience either as officers of their own companies, or directors of other companies which were engaged as bidder or as target in merger and acquisition’s transactions, or as professional advisors for instance as accountants or consultants with expertise in the M&A subject.

Considering takeover activities, directors play the same role played in all other aspects of the company’s business as monitoring and governance but in addition to the aforementioned duties and responsibilities there are some more specific tasks.

⁵² Cfr. J. W. Byrd and K. A. Hickman in “*Do outside directors monitor managers?*”, Journal of Financial Economics, 1992, Vol. 32, p. 197.

⁵³ Cfr. Ø. and S. Staubo in “*Mandatory Gender Balance and Board Independence*”, European Financial Management, 2016, Vol. 22, Nr. 1, p. 3–30.

Actually, on the buy side the board is responsible for evaluating proposed acquisitions in the context of the strategic business plan to which they contribute and which they finally approve. Furthermore, it should evaluate the proposed mergers or acquisitions taking care about the best and most efficient usage of the resources available to the company including that financial and operational.

The board does the recruitment and hires the CEO. So, if the board wants the company to grow through acquisitions strategies, the board should ensure that it and managers own the necessary skills to complete transactions and successively to integrate businesses incorporated.

Directors must know all the features relevant to an M&A process, being conscious of what led to not achieving the target goals of the transaction. Hence, it is their responsibility to challenge in advance the overoptimistic assumptions made by the managers thanks to their critical observation.

The situation is a bit different when the M&A transaction implies the sale of the company, specifically the sale of the company as a whole, could be a key opportunity for the stockholders involved to achieve capital gains, a premium for their stock investment.

Therefore, directors have to assess, before the start of the process, if it occurs in the proper time to sell. As a matter of fact, even if the company receives a bid premium compared the current market value, the duty of the directors is to estimate if the value of the divestment would be maximized by selling at that time or if it would be more profitable selling at a different point in the business cycle or at a different point in the company's development. Indeed, apart from the boards' valuation is also recommended that firms require a fairness opinion to a financial advisor always with the target of gaining the best possible outcome.

Once the process is concluded, the board will consider an agreement establishing the terms of the sale and the board of the bidder company must adopt a resolution approving a merger agreement which also declares its advisability to stockholders.

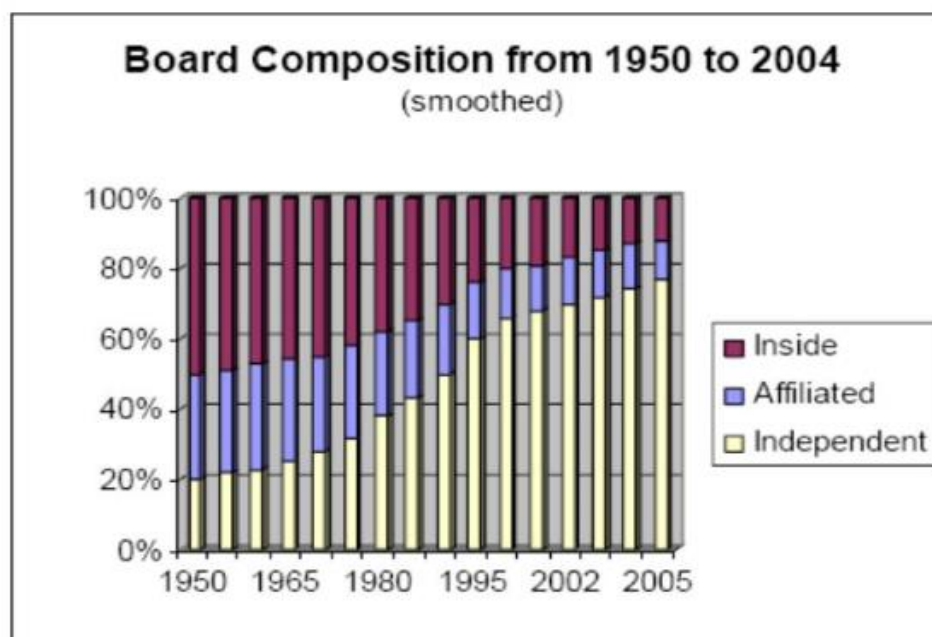
Besides, in this process the directors must act in good faith and on an informed basis. So, in this setting takes place the "*business judgement rule*"⁵⁴ which presumes these ways of

⁵⁴ <https://www.stoutadvisory.com/it-it/insights/article/role-board-mergers-acquisitions>

proceeding “*until proof of violation of a duty of care*”⁵⁵ while, if the sale of the company is triggered by personal reasons which creates a conflict of interests this rule is not applicable and there is no such presumption, while it is not enforceable in the event of gross misconduct.

2.3 § - Board independence

The board composition was quite different throughout the history. As displayed by the image below the percentage of independent members of the board gradually increase from the 1950s to 2005 achieving what now is known as an independent board: “*An independent board is a corporate board that has a majority of outside directors who are not affiliated with the top executives of the firm and have minimal or no business dealings with the company to avoid potential conflicts of interests*”⁵⁶.



Source: Gordon (2006), all publicly-traded US companies

Figure 6: Board composition from 1950 to 2004.

⁵⁵ https://www.altenburger.ch/uploads/tx_altenburgerteam/mc_2009_Business_judgment_rule.pdf

⁵⁶ <http://lexicon.ft.com/Term?term=independent-board>

The institution of an independent board derives its origins from the U.S due to the desire to strengthen the activities performed by the directors because of some financial scandals which took place during 1970s.

Traditionally the board of directors' function was that of an advisory board while the managerial power was under CEO responsibilities but, phenomena like the Penn Central's bankruptcy brought to a progressive and considerable change of the role of this body. Hence, the board of directors was charged to oversee the actions of managers passing from being an advisory board to a monitoring one.

The main initiatives to complete this transformation were the "development of intra-board structures, such as task-specific committees and designation of a *“lead director”*⁵⁷, hence, three specific bodies were established: the compensation committee, the nomination committee and the audit committee. In particular this latter was a mechanism of remarkable importance to improve the control function of the board to the extent that *“in 1974, the SEC began requiring disclosure of the existence of an audit committee (or lack thereof), [...] the NYSE began requiring audit committees in 1977”*⁵⁸.

Furthermore, some regulatory issues as the Securities Exchange Acts of 1933 and 1934, which inter alia introduced the aforementioned Securities Exchange Commission (SEC) and represented a way to react against the Great Depression following the market crisis of 1929, and the Sarbanes-Oxley Act (SOX) of 2002 were enacted in order to enhance the control on large public companies and to protect investors increasing the financial transparency of firms.

Commonly to the only former rules provided under the chairmanship of Franklin Delano Roosevelt by the Congress the SOX was passed to safeguard shareholders' interests lowering the likelihood of fraudulent practices occurred in 2000s.

Specifically, Section 302 and 404 outlined two key requirements because of the lack of confidence of investors in financial statements. The former required *“senior management to certify the accuracy of the reported financial statement”*⁵⁹. Section 404 instead provided that *“management and auditors establish internal controls and reporting*

⁵⁷ Cfr. J. N. Gordon in *“The rise of independent directors in the United States, 1905-2005: of shareholder value and stock market prices”*, Columbia Law and Economics WP, No.323, p.1477.

⁵⁸ Ibid.

⁵⁹ <https://www.investopedia.com/terms/s/sarbanesoxleyact.asp>

*methods on the adequacy of those controls”*⁶⁰.

Besides, to achieve these goals SOX issued heavy penalties for the provision of false information, revised the incentives connected with the audit processes and its independence. As a matter of fact, this Act issued that audit partners of companies have to rotate every five years limiting the risks connected with long term relationships between the auditor and the auditee, as the concerns about the higher proclivity to satisfy the clients’ requests to gain future contracts and made compulsory for firms to have a dominant percentage of outside independent directors in the board of directors.

Shifting our focus to Europe, the evolution of the figure of independent directors started in UK. due to the similarities of the legislations of common law and of the financial systems. UK Government Commission indeed in 1992 introduced the Cadbury Commission to overhaul the financial features of corporate governance.

The sponsors of the Committee were concerned about the very little trust of investors in the financial reporting and in the very low level of representation of shareholder’s interests by the auditors in the implementation of controls. Likewise, the concerns of U.S of 2002 the problems which triggered public concerns and requested the governments’ intervention were some unexpected collapses of firms. *“These concerns about the working of the corporate system were heightened by some unexpected failures of major companies’ and by criticisms of the lack of effective board accountability for such matters”*⁶¹.

The same Sir Cadbury stated: *“The fundamental issue is one of pressure. There is pressure on the company to show the results that the market expects. There is pressure on the auditors who don’t want to lose their jobs. The question is whether a structure can emerge out of the dialogue which is robust enough to give the shareholders what they ought to get and what they can rely upon. Internal controls are a part of the legitimate expectations of those who receive accounts”*⁶².

The solutions adopted attempting to avoid such financial failures were similar to that provided later by the Sarbanes-Oxley Act: the composition of the audit and compensation

⁶⁰ Ibid.

⁶¹ <http://www.ecgi.org/codes/documents/cadbury.pdf>

⁶² Cfr. S. Pincombe in *“Accountancy and Management: Auditors Look to Pass the Buck as Pressure for Reform Increases”*, The Independent, London, 12 November 1991, p. 21.

committees have to be constituted for the major part by independent directors and the auditors should rotate. Nevertheless, compared to the mandatory acceptance of provisions enacted by the SOX, in UK the recommendations of the Cadbury Commission had not force of law, hence they could be adopted or not at the discretion of companies and, that firms who didn't accepted them had to explain the reasons for it in their annual reports. Taking into account Italy instead, the first appearance of independent outside directors in the country took place only in 1999 in the Code of Self-Regulation of listed companies. *"The T.U.F indeed, although vigilant on the issue of monitors, reforming the regulations of listed companies had placed the attention on the Supervisory Board and on audit companies. The code of Self-Discipline, reversing the trend with respect to the legislator of 1998, attempted instead to revitalize the board of directors: the secondary legislation has focused on the figure of outside directors"*⁶³ as stated by Roberto Drisaldi, indeed the Code of Self-Discipline introduced in Italy the framework for intra-board structures and the figure of the independent directors.

Moreover, compared to that of the Anglo-Saxon countries, the role of outside directors in Italy is quite different because of the differences of the ownership structure and of the presence of the additional body of the supervisory board whose activities create overlapping with that performed by the independent directors.

In Italy the role of independent directors is to counterbalance the interests of the controlling shareholders in order to avoid the exploitation of their position to gain private benefits to the detriment of the minority shareholders. Indeed, the majority of biggest Italian companies are controlled by one or a group of controlling shareholders hence, the governmental regulation has to safeguard the interests of the minority shareholders against the actions of other ones and not against that of management.

2.4 § - Effect and theories of independent directors on firm performance:

The main theories concerning the effect of board independence on the performance outcomes of companies are the agency theory and the stewardship theory as summarized

⁶³ Cfr. R. Drisaldi in *"Gli amministratori indipendenti nella disciplina e nella prassi: Comparazioni e Riflessioni"*, Società, 2014, Vol.7, p. 790.

in the following table reported in the research of G. Samara and J. Berbegal-Mirabent.⁶⁴

	Agency Theory	Stewardship theory
Foundational Work	Jensen and Meckling (1976)	Davis et al. (1997)
Relationship	Based on the principal-manager relationship: describes the individual-level agent behaviors and the firm-level agency governance mechanisms that are implemented in response	Based on the principal-manager relationship: Describes the individual-level steward behaviors and the firm-level stewardship governance mechanisms that are implemented in response
Assumption	Economic model of man	Humanistic model of man
Behavior	Opportunistic: Individual/self-serving	Pro-organizational: Collective/other-serving
Governance	Monitoring and incentive systems: mechanisms to curb opportunistic behavior by aligning the interests of the manager with those of the principal	Trust systems: Mechanisms to encourage cooperation and involvement to facilitate the natural alignment of interests between the manager and principal
Outcome	Pro-organizational outcomes; Firm performance by way of cost minimization	Pro-organizational outcomes; Firm performance by way of wealth maximization

Table 1: Summary of Corporate Governance Theories.

The former arises from the aforementioned separation between ownership and control of a firm in which the owners, the shareholders, are identified as principals and the executives, represented by managers, are named agents.

Specifically, this theory establishes the misalignment of interests between the parties involved which triggers an agency loss suffered from the principals which don't handle their businesses directly.

In this setting, some incentives can be given to the agents in order to motivate managers pursuing the purpose of maximization of profit of the firm. Moreover, the board of

⁶⁴ Cfr. G. Samara and J. Berbegal-Mirabent, in "Independent directors and family firm performance: does one size fit all?", International Entrepreneurship and Management Journal, 2018, Vol. 14, p. 154.

directors following this theory is entitled to act representing the shareholders.

Different studies like that of Weisbach 1988, Zhara and Pearce 1989, and of Finkelstein and Hambrick 1995 sustain the agency theory and demonstrate both the tendency of outside directors to show to investors their proficiency and their competence, and the high degree of protection of shareholders' interests given by the presence of independent directors in the board.

Especially the contribution of Weisbach proves taking into account a sample of 495 companies listed on New York Stock Exchange (NYSE) between 1977 and 1980, on the different behavior of inside and outside directors in the decision of dismiss the top management. This research shows evidence that boards composed for the major part by independent directors have a greater chance to fire the CEO when the firm is underperforming.

But, it's also relevant to underline that other studies like Kesner e al. (1986), Wade e al. (1990), Boeker e Goodstein (1993) demonstrate how the long permanence of an independent director within a board affects their proclivity to approve the management's decisions which jeopardize the interests of shareholders.

The latter theory instead considers managers as stewards of owners which share the same interests and want to achieve the same goals. Hence, the board of directors should not be responsible of a strict control over the activities performed but the executive management but has to provide support training and mentoring managers with the ultimate objective of increase the performance of the company.

The risk of moral hazard is not considered as relevant because stewards are trustworthy and are pushed by the desire and the satisfaction of achieve successful outcomes so, they do not cooperate with the board of directors because it is compulsory but because it is the method to enhance the performance of the company.

The studies of Donaldson 1990 and David et al. 1997 follow these theories and argue that actions that benefit the firms and their owners are taken even if these decisions are not pursuing their primary self-interest. Indeed, there are some psychological factors which affects the behavior of stewards making it less egoistic and individualistic and more oriented to the wealth of the company.

Moreover, in a trustworthy setting a firm can exploit its human capital and has more

potential to improve its performance developing its core business and gaining a competitive advantage. The typical instance of these kind of firms are family business firms in which the performance of the company and its relating increase are family's success.

2.5 § - Controlling owners and Family firms businesses

Much of the focus in the United States is on the agency theory and on the conflict of interests of investors who are represented by widely dispersed stockholders detaining lower percentages of the equity capital stocks.

In many other countries instead, the scene is not dominated by the conflict between investors and management, respectively principals and agents, but by that inside the different shareholders, minority ones and that who represents the controlling part. A particular sample of this other conflict is clearly visible in family firms.

Considering other countries as those in Europe, families run the major part of businesses and because the management is made up of family components there are no agency conflicts.

The literature has given different definitions of family firms either as “*family firms are those in which multiple members of the same family are involved as major owners or managers, either contemporaneously or over time*”⁶⁵ or “*family firms are those in which the family controls the business through involvement in ownership and management positions*”⁶⁶, or even “*any business in which two or more family members are involved and the majority of ownership or control lies within a family*”⁶⁷ so, the common characteristic of these definitions is the controlling role assumed by families.

One of the possible strategies set up by families to achieve the control on company's business, in case family members do not own shares for a percentage equal to more than 50%, is to issue dual class shares so that the class of shares held by the family have a larger burden compared to the other cause of their senior voting rights.

⁶⁵ Cfr. Miller, Le-Breton Miller, Lester, Cannella in “*Are Family Firms Really Superior Performers*” *Journal of Corporate Finance*, 2007, Vol. 13, Issue 5, available at <https://www.ffi.org/page/definitions?>

⁶⁶ Sciascia and Mazzola, *Family Business Review*, 2008, Vol. 21, Issue 4, available at <https://www.ffi.org/page/definitions?>

⁶⁷ <https://www.inc.com/encyclopedia/family-owned-businesses.html>

Besides, families can represent the controlling part of an entity if they establish a pyramidal structure namely they can own more than 50% of shares of a company which in turn controls another entity so, actually family members control two firms owning only a quarter of shares of the second company. This process can be still committed if the second firm controlled represents the major investor of another third company etc. so, further down along the pyramid, lesser shares are needed to control firms.

Nevertheless, the problem connected with this process is the inverse relationship between percentage of shares required to control and profits achieved, indeed the lesser percentage of ownership is required the lower are the rights on profits of the ultimate controlled firm. Hence, for practical purposes every set of shares higher than 20% of the equity are regarded as controlling if no other investor owns a bigger block because of the very wide dispersion of the other shares among several shareholders.

2.6 § - Family Governance

When the management of a company is composed by family members like a descendent which assumes the role of CEO, the agency costs can be largely reduced or even avoided because of the incentives of executives to behave as stewards in favor of the going concern and benefiting investors increasing the performance outcomes of the entity which are reflected in a major value of the investment made by the shareholders.

In this scenario, shareholders gains are due to the fact that the performance of the company will constitute the track record of the family member in charge of the CEO position and because speaking about the performance of a family firm equals to discuss about the reputation and the name of the owner family.

Moreover, usually the job tenure of a CEO or of management composed by family members is longer than in other companies so the management and the CEO are not interested by short-term goals if they jeopardize the achievement of long-run goals as the development of particular skill which will create a sustainable competitive advantage.

In addition to these benefits, there is the issue of passing on the next generation the businesses carried out by the current members, the know-how of processes and the expertise.

Generational change contributes to improve stewardship 's behaviors and to develop

relationships with suppliers and customers even if it leads to problems connected to the transition as the waste of resources, nay, just these problems and the concerns about the future generation increase even more the stewards' attitude.

Unfortunately, exists also the case in which the family components of the shareholders, representing the major investors, act only pursuing their interests. Indeed, in family firms, the main disputes regard actions made by the controlling part which can be triggered by the benefits which they bring to family members to the detriment of other shareholders. Hence, a very relevant topic about family firms is related to control which the minority part of shareholders, the nonfamily members, must exercise on management decisions. Indeed, once a family coalition has a number of shares which gives unchallenged control, can abuse of its power increasing, as already mentioned, the dividends paid or making decisions not pursuing the long-term growth of a firm like little investments in research and development.

The effects of this relationship can be laid down through the presence of an influent investor or thanks to the presence of outside independent directors, which can see and assess objectively the pros and cons connected to a proposition or a decision of management.

A particular instance threatening the interests of minority shareholders occurs in case of pyramidal control and is known as tunneling. It is an illegal practice by which, due to the lower profits achieved by the major shareholder, in case of family companies represented by the family, the management, which in entities run by families is composed by family members, is encouraged to relocate the profits gained by the firms on the lowest level of the pyramid towards firms on upper levels in order increase cash flows of the latter, so effectively increasing family's rights on them, or enhancing the dividends paid, which include that for which family is entitled.

Actually, once a certain level is overcome, manifested itself an inverse relationship between financial returns of nonfamily shareholders and family control on the business. As said before about pyramidal structures, *“the lower the ratio of family ownership to family control, the greater the incentive to exploit nonfamily shareholders and the weaker the attitude of stewardship, and thus the lower the financial returns to the lower-tier*

firm”⁶⁸.

2.7 § - Family firms' board of directors

The decisions regarding the board of directors in family companies is strictly dependent on the phase of the life cycle of the company.

Usually, at the birth of the company maintain effective control on the business undertaken so the role of the board of directors is narrowed to the implementation of the advisory function. Indeed, the founders wants to control and handle directly the entity without being strictly controlled by directors which can interfere with the achievement of their targets.

Successively, when the founder ages transferring the skills required to conduct the company is the main concern and the most important strategic issue of the firm.

When successor generations of leaders become involved in the firm the entrepreneurs begin to consider the possibility of having a board which is charged also of supporting responsibilities with regard of the strategic and future decisions and plans.

An effective advisory board at this stage can facilitate this transfer of control. As stated by John L Ward: *“The board can help the owner-manager identify and articulate key components of their business knowledge. It can help design appropriate management structures for succession and assure business continuity during the transfer of important leadership functions. Independent directors, in particular, can play a special role in these processes, as objective, experienced advisors to both the founder and their successors in ownership and management. An advisory board at this stage can help foster levels of planning that many families reflexively avoid”*⁶⁹.

Successively, when the family business matures, the role played by the directors takes more and more the meaning of strategic and surveillance function of the board. Indeed, in this stage directors assess the managerial plans, providing protection to the financial interests of the other shareholders ensuring objectivity and professionalism in the performing of their duties. So, in this context independent directors are essential to the

⁶⁸ Cfr. D. Miller, I. Le Breton-Miller, *“Family Governance and Firm Performance: Agency, Stewardship, and Capabilities”*, Family Business Review, March 2006, Vol. 19, No. 1, p. 73-87.

⁶⁹ Cfr. J. L. Ward in *“The role of the board in family business strategy”*, available at <http://www.campdenfb.com/article/role-board-family-business-strategy>.

activities performed by the board.

Furthermore, a peculiarity of family business is the institution of two other structures of governance of the firm, namely the family council and the business council, in order to improve the communication with family owners on relevant business features.

Generally, both of them resolve disputes about the involvement of family components to the company and discussing about the proposals for the future direction of the firms and its operations but there also some differences regarding their tasks and compositions: *“The family council consists of current and potential stockholders belonging to the family. The family council meets at least once per year to share ideas and proposals and to analyze problems in relation to family commitments towards the company.*

The business council, on the other hand, includes only family members active in the family business. The business council reports to the family council on the development of the family business and analyzes family expectations for the business (e.g., new business ideas, new projects, and new investments) and brings them to the board of directors and to the CEO”⁷⁰.

Furthermore, as the family firm continue to increase its size and the interests involved are very heterogeneous, a board can also provide support to collect the long-term interests of the family and pursuing strategies aimed to a valuable and sustainable growth of the company which also benefits the minority shareholders.

However, taking into account the board of directors of a holding company, its role is to guide the strategic issues related to every business under the holding considering the growth possibilities and stage of the lifecycle in which the entities are. Besides, due to the natural evolution of the markets sometimes the board and the management have to assess the decision of divesting.

This latter in fact is not easily undertaken by managers especially that of family companies in which there’s a loyalty relationship to stakeholders as customers or suppliers.

Boards of directors also have the responsibility to assess processes of growth of companies through practices of acquisitions. Usually managers are very eager to

⁷⁰ Cfr. E. R. Brenes, K. Madrigal, B. Requena in *“Corporate governance and family business performance”*, Journal of Business Research 2011, Vol 64, p. 280–285.

complete an M&A transaction so their assessment of it is not so objective hence, in this context, the role of the board is to ensure the most rigorous assessment of market potential and evaluation, in financial terms, of all the transactions costs associated with the M&A, and to set in advance parameters of financial and strategic nature including goals and targets of the transaction.

This duty is even more prominent in a family company context because it also involves the assessment of the merger and acquisition taking into account the impact of the transaction on the continuity and stability of the business conducted by family components. As a matter of fact, some M&A practices can create conflicts within the owner family so, the board and in particular the independent directors have also the responsibility to mitigate these conflicts providing explanations of the mergers and acquisitions clarifying impartially the benefits of the operations undertaken. Sometimes instead, due to resilience of some family members included in the management, firms do not take a decision regarding M&As so the board oversees the role of final arbiter so, once weighted pros and cons of the takeover activity, it makes the difficult choice.

2.8 § - M&As in Family firms

Mergers and acquisitions are one of the most effective way to pursue a growth strategy and they represent the main challenge for firms in which families are the majority shareholders. Nevertheless, this feature is very understudied by the current literature.

Taking into account the unique and distinctive characteristics of family entities as the aforementioned particular governance, corporate culture and the implementation of human capital, the issues about the family reputation connected to the family name in stake but also the concerns about the succession of the future generations, it's easy to realize that family firms have different objectives compared to that of other companies including non-financial aims.

This difference is crucial when family companies take strategic decisions, especially those of starting a merger or an acquisition. Indeed, typically, the shareholders evaluation of a M&A is basically a financial assessment of the operation measured through the Cumulative Abnormal Return (CAR) but, in the considerations of family businesses other dynamics get involved.

An instance of them are the non-financial tensions between collaboration and control, the conflict which occurs in family firms because family components have the willingness to maintain the control over the business, but they also are encouraged to cooperate with other entities to grow and achieve the benefits of synergies.

However, although, this tension is common to every company controlled by families, the degree of this conflict cannot be the same due to the importance given to the different financial and non-financial aims, *“Because the family needs to maintain control over the firm to pursue its non-financial interests, family firms that are more oriented towards non-financial goals are more likely to have higher collaboration-control tension than family firms for which non-financial interest is less important”*⁷¹.

Hence, on one hand, the M&A assessment of shareholders can be negatively biased to the interests of the family owners and can led to not consider adequately takeover activities and to suboptimal values of investments made by the company, *“human and financial resources may also be suboptimal in family businesses because of their interest in maintaining family control and avoiding external monitoring”*⁷².

On the other hand, the increased steward’s attitude and high level of commitment to the firm can affect positively the evaluation of strategic growth activities involving takeover activities.

Furthermore, the impact of family ownership influence on shareholder M&A valuation could be also observed in relation to the different the legal and institutional environment. Typically, the protection of shareholders is more intense in common-law countries which are also characterized by very disperse ownership structures. An essential aspect, this latter, which triggers conflicts of interests between management and shareholders.

Instead, considering civil-law countries, as that of Continental Europe, the predominant model is the concentration of ownership hence, the relevance of the agency problems relates owners and minority shareholders.

“Thus, family ownership may have a negative influence on shareholder valuation if the acquirer firm belongs to a country with weak minority shareholder protection. And family

⁷¹ Cfr. M. Nordqvist, L. Melin, M. Waldkirch, G. Kumeto, in *“Theoretical Perspectives on Family Businesses”*, Edward Elgar publishing, p 94-95.

⁷² Cfr. Schulze et al., 2001, as reported by I. Feito-Ruiz and S. Menéndez-Requejo in *“Family Firm Mergers and Acquisitions in Different Legal Environments”*, Family Business Review, 2010, Vol. 23, p. 61.

ownership will be more beneficial in legal environments where minority shareholders' protection against family owners opportunism is higher"⁷³.

2.9 § - Family firms' performance

After decades of being regarded as an obsolete ownership structure, recent research has focused its attention to the performance achieved by publicly traded family-controlled businesses and on the major drivers which affects their performance.

According to agency theory and resource-based view of the firm indeed, there are some essential factors affecting the performance of family entities either in a positive or in a negative way.

One of the leading features related to this topic are, on one side, lower agency costs bore by family companies due to the increased stewards' attitudes,

Moreover, the fewer agency costs are related to the corporate cultures and values belonging to family organizations as the shared opinion and mutual trust.

On the other side, instead, the agency theory suggests that in some family firms it's possible to register more agency costs precisely because the firms' businesses are run out by families. Indeed, families can be easily subject to conflicts which led to misalignment and competing goals and values which in turn reduce the results of the firm.

It's possible also that the familiar ties hamper an efficient governance and control on the decisions undertaken. Family relationships make the resolution of agency problems more difficult as a result of altruism or self-control. Indeed, as reported in an article of the Family Business Review: *"If my sons or my wife make mistakes, I let it go, because it's not worth fighting over. You have to live with your family. A nonfamily member, you can fire him"*.⁷⁴

Moreover, other resources which significantly affect the performance of a family firm are the capitals employed: the human, the social capital and the financial capitals.

Specifically, for family companies the first of them constitutes a unique asset which

⁷³ Cfr. Maury 2006, as reported by I. Feito-Ruiz and S. Menéndez-Requejo in *"Family Firm Mergers and Acquisitions in Different Legal Environments"*, Family Business Review, 2010, Vol. 23, p. 63.

⁷⁴ Cfr. W. Gibb Dyer, Jr. in *"Examining the "Family Effect" on Firm Performance"*, Family Business Review, 2006, p. 261.

brings a noteworthy competitive advantage. The relationships established within a family firm are very rare but above all, because they are based on loyalty of family members and commitment to the business, they are very difficult to replicate by competitors so, the advantage is sustainable other than valuable.

However, this kind of resource exploited has a collateral effect: the limited set, in numerical terms, of potential family members which can be employed by an entity.

Indeed, there are some businesses which has different technical requirements which cannot be accomplished by family members. Hence, in these contingencies families have to recruit non-family members as executives who could have difficulties about the integration in such family firms and who, inevitably, has a different degree of commitment to the firm.

The aforementioned social capital is composed by the relationships established by the family firm with stakeholders and in general all the social relationships created are a high value asset which enhance the goodwill and the reputation of the company.

Otherwise, social relationships can turn into a liability if the entity is not able to exploit them, or if there are internal family conflicts or personal abuses of these resources.

Lastly, families have the chance to exploit the availability of the family capital for the purposes of the company giving a competitive advantage over competitors who lacks these additional resources. Indeed, this safety capital is less likely to be provided and used by companies except family's ones because of mistrust and a weaker commitment to the firm.

Some instances of how families can use these financial resources are to survive in periods of difficulties or to invest in new projects without give up resources needed by other departments. *“Family members can use their personal assets to strengthen the firm; however, families are also known for taking assets out of the businesses they own, thereby undermining the firm’s stability”*⁷⁵.

Unhappily, the drawbacks connected to the availability of additional assets are the resulting difficulties in preparing the accounting reports and a more likely occurrence of opportunistic practices to meet family needs to the detriment of the minority shareholders.

⁷⁵ Cfr. W. Gibb Dyer, Jr. in *“Examining the “Family Effect” on Firm Performance”*, Family Business Review, 2006, p. 264.

Empirical Research

3.1 § - Introduction

In light of the increasing relevance accorded to merger and acquisitions which nowadays are even greater considered as a fundamental, or even a compulsory, process to implement a growth strategy, in the final chapter of this thesis we will deepen the features so far examined specifying the particular impact of the variables explained on the completion of M&A's transactions giving also an overview of the performance of the companies after the deal completion.

Moreover, conscious about the great emphasis of corporate governance elements, especially after the already discussed accounting and harmful scandals, and about the role played by family firms in our country, the purpose of this study is to provide reliable perspective on such features. Indeed, analyzing the past and the current literature it's possible to point out that there is not an evident cause-effect relationship between independent directors and firm performance and the same taking into account family firms and their outcomes.

Hence, first of all, we provide statistical evidences, in order to fill the existing literature gap of a definition of a clear relationship of how the independent directors affect the implementation of takeover activities and then we examine, again with statistical results, the family firms' effects on M&As. Furthermore, the analysis will concern the performance results of the entities involved in the transactions.

Subsequently the analysis will treat a matter not so much examined by literature, the study will be focused on the incidence of the combined effect of these variables on mergers and acquisitions namely how the independent directors present in a family firms bias the success of an M&A's operation.

In order to develop this analysis, we used two regression models through which we tested different hypotheses. The first model was useful to test the first and the second assumptions while the second model was of essential importance because it allowed us to gather the two variables on which the first two hypotheses are based in order to create and to test third hypothesis.

Prior studies on the relationship between independent directors and firm performance showed very mixed results establishing both a positive and a negative relationship, whereas some other studies, instead, stated even that there is not a direct relationship. Hence, with the purpose of clarify if independent directors actually affect the completion of a deal our first hypothesis concerns their presence into corporate boards of the firms under analysis involved in mergers and acquisitions:

- ***Hypothesis 1: The presence of independent directors in corporate board of a firm bias in a positive way the company's decision to implement and complete mergers and acquisition operations.***

The second hypothesis regard the second variable under examination namely, the familiar ownership of an entity. From what emerged from the prior literature the attitude to adopt a merger and acquisition strategy to grow is not so well accepted in family firms because of their peculiarities and the dynamics belonging to families. Hence, more specifically, the hypothesis is about the impact of such companies, characterized by different values and purposes, on the possibility of undertaking an M&A:

- ***Hypothesis 2: The ownership of controlling interests of acquirer firms in the hands of families, defined as the relative majority of shares percentage, affects positively the accomplishment of M&A.***

Finally, the third assumption as aforementioned, relates to the variables of the first two statements which we test and studies their combined effect.

Due to the presence of these directors and the consequent greater protection to minority interests of the other shareholders which are not so prone to M&A deals, one would expect a negative evaluation of M&A deals and so a negative influence on the completion of such business practices:

- **Hypothesis 3:** *The presence of independent directors within the corporate board of directors of a family firm indicated as the owner of a relative majority of shares, is determinant for the missed finalisation of M&A transactions.*

3.2 § - Creation of database

The experiment starts with the creation of a database including all the data of mergers and acquisitions completed by 165 listed Italian firms during the time period going from 2011 to 2016. Specifically, we took into considerations only the mergers and acquisition which were completed excluding from the sample examined transactions which were only rumored and transactions which were announced but for which the completion of the deal failed.

First of all, these data were collected through the usage of a particular software, namely Zephyr, and we have to highlight that it defined as “acquisition” any deal where the acquirer firm ends up with 50% or more of the equity capital of the company acquired. So even if the acquired stake was a small portion of the capital of the company acquired, because the final percentage was equal or above the aforementioned level, 50%, the transaction was coded as acquisition and was included in the collection.

Inter alia, the acquisitions included in the software are reported by it as “acquisition X%” or “acquisition majority stake”, respectively in the cases in which the percentage in the entity acquired was disclosed or not, nevertheless the resulting portion of capital was a controlling stake, “acquisitions of remaining X%” if the bidder company acquired the remaining portion of capital not already owned to get the 100% of target’s capital, “acquisition stake increased from X% to Y%” or only “acquisition stake to X%” when the acquirer increased its portion in the target company from a pre-defined level or from an unknown percentage, again the results were equal or above the 50%. However, in the database, for the subsequent analysis and statistical regression we reported only the final percentages acquired.

Considering Zephyr’s classification of merger instead, a “true merger”, occurred when there was a one-for-one share swap for shares in the new firm and the deal involves a “merging of equals”, if it is not on equal terms the deal was defined as an acquisition. The companies involved in the merger are recorded as Acquirer or Target without a

particular order and also in case of more than two companies involved multiple firms can be entered in such way.

Zephyr enabled us to group the transactions for each acquirer and merger entity identifying the target company of the deals, in case there were more than one target the deals recorded on the database were divided and reported with their characteristics more times accordingly to the number of target, and verifying the announced and the completed dates of the deals.

This software provided us the financial data about the target and the acquirer societies such as revenues, deal value, deal equity value, total target value and deal size of the M&A, namely the aforesaid percentage of the equity capital involved in the transaction. Specifically, the deal equity value was equal to the deal value if this latter is stated as equity value. If it wasn't the case it represented the value for a given and known number of shares for which is known also their price per share. The total target value instead was equal to the total value of the target entity if the 100% of its shares were acquired, so in 100% transactions it was equal to the deal value.

Furthermore, we categorized the information obtained from the software highlighting the country of the target societies, the method of payment used for the mergers and acquisitions, already discussed in the first chapter, namely cash, deferred payment and shares, the offer price and the bid premium announced.

Notwithstanding Zephyr permitted us to get details on the stock Price per target, acquirer and vendor enterprises both three months prior to announcement, prior to the announcement, after completion date and one month after completion date. These details were essential to monitor the performance of the companies and the particular impact which the transaction resulted.

Subsequently, we identified the rationale behind the transactions, stating if the acquisition was part of a horizontal or vertical integration process or if the transaction was a diversified acquisition.

Therefore, considering horizontal mergers or acquisitions, concerning two companies belonging to the same industry for which the operations after the completion of the deal remained almost the same, and vertical ones, involving the acquisition of control on more stage of the same supply chain, we assigned them respectively number 1 and 2.

Conversely, if the operation consisted in a purchase of shares in order to gain the controlling interests of another company and the resulting operations changed due to the different business' activities, we identified these transactions with the number 3.

Finally, in the last field of our database we pointed out if the M&A transaction involved the purchase of assets or stocks, again assigning values for each one, 1 in case of an asset purchase and 2 for the latter event.

3.3 § - Variables' Description

3.3.1 § - Dependent Variable

Once the Zephyr database was completed, we studied the data about the different independent and control variables of the sample of firms under analysis during the time lag envisaged in order to assess the resulting value of the dependent variable namely the chance of completion of a M&A. Due to the fact that the dependent variables assess the accomplishment of an event, it has a qualitative nature. Hence, it can assume only 0 or 1 values.

3.3.2 § - Independent Variables

These variables were gained from the financial reports of the companies published from 2011 to 2016 and regard both the board of directors, like the "Number of Independents" directors within the board and the ownership structure of the firm as the "Family Firm" which indicates if the businesses of the entities are conducted by families or not.

Deepening the "Number of Independents" variable, the observations gathered are 966. In addition on one hand the maximum value is 17 and the minimum level is 0 corresponding to the total absence of independent directors,

Regarding the values corresponding to Mean and Standard Deviation are respectively for the first variable 4,3768 and 2,4437.

Taking into account the variable "Family Firm", it is a dummy variable i.e. it has a dichotomous nature and assumes only 0 or 1 values, the latter in case of family conduction of the business. Due to the nature of this variable the values assumed, 0 and 1, stand also for the minimum and maximum values accounted.

More precisely, we defined, upon 984 observations registered, as "Family Firm",

assigning a value of 1, only companies in which a family owned the controlling interests i.e. the 51% of the equity capital or even a relative majority of the shares percentage as 30%, 20-25% in case of very wide dispersed shareholders.

The values gained from the collection of data are 0,6341 for the Mean, 0,4819 for the Standard Deviation.

<i>Independent Variables</i>	<i>Obs</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
<i>Number of Independents</i>	966	4,376812	2,443738	0	17
<i>Family Firm</i>	984	0,634146	0,4819137	0	1

Table 2: Independent Variables

3.3.3 § - Control Variables

Subsequently, we assessed different control variables, whose data were gathered as the previous independent variables, from the financial statements of the companies under examination, as the “Board Size” whose observations concerning the 165 listed firms are 966. In these set of representations, the highest value registered is 24 and the lowest 3, the Mean and the Standard deviation instead account for 9,5838 and 3,3625.

The control variables under analysis regarded also the financial outcomes of the companies namely their performance ratios namely, the Return on Asset, “ROA”, and the “Financial Leverage”.

The first is determined as the ratio between the Net Income plus the Interest Expenses, which takes into account returns on operations and the return from investments, and the value of the Total Assets comprehensive of operating and financial assets.

$$ROA = \frac{Net\ Income + Interest\ Expenses}{Total\ Asset\ Value}$$

It is a measure of the profitability of the assets of an entity which specifies how efficiently a company handle its assets and how the company is able to create value through its resources.

Analyzing our findings made up by 947 observations, the values registered vary in a range

which goes from a minimum of -79,49 to a maximum of 227,56 and have a Mean value equal to 1,5444 and a Standard Deviation of 14,8041.

The Financial leverage instead, consists in the Long-Term Debt of a company, usually in the form of debt or preferred equity, and the equity capital on hand of a company.

$$\text{Financial Leverage} = \frac{\text{Long Term Debt}}{\text{Equity}}$$

It states show a company relies on debt endowment in order to finance its business operations and is also a key indicator of the solvency of an entity.

Moreover, in our data collection, in total number of 963 findings, it varies from -7767,84 and 7014,9 accounting a value of 154,9757 for the Mean and of 589,5252 for the Standard Deviation.

Then we took into consideration another performance measure, namely the “Tobin’s Q” ratio calculated as: “the market value of a firm divided by the replacement value of the firm’s assets. [...] Since the total assets values is difficult to estimate, another version of the formula often used is the ratio between equity market value of a firm and its equity book value”.

$$Q \text{ Ratio} = \frac{\text{Total Market Value}}{\text{Total Asset Value}} = \frac{\text{Equity Market Value}}{\text{Equity Book Value}}$$

We used the Tobin’s Q ratio rather than the Return On Equity because it is calculated on financial measures regarding the operating performance of a firm rather than measures about the past performance as the ROE. Moreover, due to the computation of the market value of the assets of a company, it better reflects the real value of the assets.

Specifically, the Tobin’s Q measure which in our model represents a control variable, is an indicator of the undervaluation represented by a low value of the ratio or otherwise an overvaluation of entity’s shares in case of a high value of the ratio.

Looking at the values registered on 966 observations, on average the result was positive indeed the Mean value is equal to 1,2913. The Standard Deviation estimated is 0,8031

while -1,0998 and 7,1754 are the values associated to companies' Tobin's Q minimum and maximum.

Lastly, the final control variable considered is the size of the firm, i.e. "Firm Size". It is a standard measure in literature and it's calculated as the logarithm of the total assets of a company.

Specifically, we had a sample of 966 observations and the minimum value corresponds to 8,2882 while the maximum one is equal to 18,9235. The Mean value amounts to 13,1441 and the Standard Deviation at 1,9069.

<i>Control Variables</i>	<i>Observations</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>Min</i>	<i>Max</i>
<i>Board Size</i>	966	9,5838	3,3625	3	24
<i>ROA</i>	947	1,5444	14,8041	-79,49	227,56
<i>Financial Leverage</i>	963	154,9757	589,5252	-7767,84	7014,9
<i>Tobin's Q</i>	966	1,2913	0,8031	-1,0998	7,1754
<i>Firm Size</i>	966	13,1441	1,9069	8,2882	18,9235

Table 3: Control Variables

3.4 § - Methodology

In order to complete tests of our hypotheses and to get a quantitative result of how much the variables enhance or undermine the probability of our dependent variable namely the completion of M&A deals, we used a logit function whose equation is:

$$\text{logit}(p(x)) = \ln(p(x)) - \ln(1 - p(x)) = \ln\left(\frac{1}{p(x)} - 1\right)$$

Moreover, we used the statistical software STATA® which actually allowed the data analysis and the gaining of relevant numerical evidences about the data contained in the databases created.

First of all, we declared dataset to be panel data setting the command "*xtset panelvar*

*timevar*⁷⁶ which stand respectively for the companies' identification and the reference years. Hence, "the data are to be a panel and the order of the observations within panel are considered ordered by "*timevar*"⁷⁷.

Specifically, the observations gathered for the same groups of companies examined constituted our panel data i.e. multidimensional phenomena involving measurements over a pre-established period. Moreover, considering our experiment, the time span defined goes from 2011 to 2016 and the groups of data are composed by 165 entities, as the number of companies studied.

As a matter of fact, the most appropriate way in order to study the panel data of the independent variables within the time span is the panel analysis which allowed us to monitor the presence of individual heterogeneity i.e. the bias on the variables triggered by the presence of some exogenous entities as consolidated practices in the businesses and cultural factors, or macroeconomic elements, like countries' regulations or agreements.

Hence, we have to choose between the major techniques used to study the panel data namely the Fixed effects and the Random effects.

The rationale of the first one is that there are correlated variations within entities between predictor and outcome variables. Hence, the Fixed effect removes the characteristics which cause the bias allowing to evaluate the net effect of predictors on variables. Moreover, we have to underline that the characteristics which affect the predictor are unique and so also the error terms because otherwise the inferences make the model not fit for the purpose.

$$Y_{it} = \beta X_{it} + \alpha_{it} + u_{it}$$

Where:

- Y_{it} is the dependent variable;
- X_{it} represents the independent variables;

⁷⁶ <https://www.stata.com/manuals13/xtxtset.pdf>

⁷⁷ <https://www.stata.com/manuals13/xtxtset.pdf>

- β is the coefficient for that IV;
- α_{it} ($i = 1 \dots n$) is the unknown intercept for each entity;
- u_{it} is the error term;
- i = entity;
- t = time.

Conversely, the Random effects technique assumes that the variations within entities between predictor and outcome variables are uncorrelated and random. With Random effects the inferences out with the model are generalized.

$$Y_{it} = \beta X_{it} + \alpha + u_{it} + \varepsilon_{it}$$

Where:

- u_{it} is the Between-entity error;
- ε_{it} is the Within-entity error.

The next step was the running of the Hausmann test with the coefficients obtained from the commands "xtlogit fe" and "xtlogit re".

In particular, the process in order to complete this test is made up different phases. The first of them, considering the set panel data, is to run the logit regression of the dependent variables, and of other control variables, on the independent ones assuming Fixed Effects. Then we stored the regression in order to create a record of the resulting data. Successively, we repeated the same regression analysis and created another record evaluating the same panel data, but this time assuming the presence of Random Effects. When the records about these different assumptions are stored, we actually implemented the test which enabled us to decide which techniques is the more suitable for the case studied.

The null hypothesis of the test was that the difference in coefficients is not systematic therefore, the most suitable model is Random effects, on the contrary the alternative hypothesis stated the opposite so that the preferred model was the Fixed effects.

Whether the $Prob\ chi2 > 0,05$ the null Hypothesis must be accepted.

In our study, the coefficients of the Random Effects obtained from xtlogit are consistent under the null hypothesis and the alternative one rather than the coefficients of the Fixed effects are efficient under the null hypothesis but inconsistent under the alternative hypothesis. In addition, the resulting Chi-squared probability was equal to 0,9692. Consequently, we assumed the presence of Random Effects.

<i>Variables</i>	<i>Fixed Effects Coefficients</i>	<i>Random Effects Coefficients</i>	<i>Difference</i>	<i>SQRT</i>
<i>Number of Independents</i>	0,0059	- 0,0057	0,0116	0,0530
<i>Board Size</i>	0,0820	0,0940	-0,0119	0,0395
<i>Family Firm</i>	0,0411	0,0493	-0,0082	0,5589
<i>ROA</i>	0,0229	0,0163	0,0066	0,0158
<i>Financial Leverage</i>	-0,0007	-0,0002	-0,0005	0,0004
<i>Tobin's Q</i>	-0,2080	-0,0831	-0,1249	0,2943
<i>Firm Size</i>	0,3170	0,2123	0,1046	0,3919

Table 4: Fixed and Random Effects.

Hence, the final step of the process was run a statistical analysis useful to contemporaneously determine the probability of an event and analyze a panel data thanks to the results of the Hausmann test. Hence, we used the Random effects logistic regression.

3.5 § - Regression

As already pre-empted, the experiment has been conducted endeavoring a model which combines the logit function with the assumption of Random effects namely the random effects logistic regression.

This model enables us to assess the effect of the dependent variables on the categorical outcome indeed, its result is “*the conditional probability that an outcome variable equals one at a particular value of a predictor variable*”⁷⁸.

⁷⁸ <https://www.rips-irsp.com/articles/10.5334/irsp.90/>

Moreover, as opposed to the OLS regression which estimation concerns the minimization of the sum of squared errors, the logistic regression models' estimates the parameters with the aim of maximize the probability of the occurrence of an event, namely the odds of an event $P(Y = 1)$.

The general equation which describes the Logit model is:

$$\text{logit}(p(x)) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_m X_m = \beta_0 + \sum_{i=1}^m \beta_i X_i = X\beta$$

The analysis starts using the logistic function corresponding to the inverse of the logit equation:

$$p(x) = \frac{e^{(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_m X_m)}}{1 + e^{(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_m X_m)}} = \frac{1}{1 + e^{-(\beta_0 + \beta_1 X)}}$$

Inverse Logit

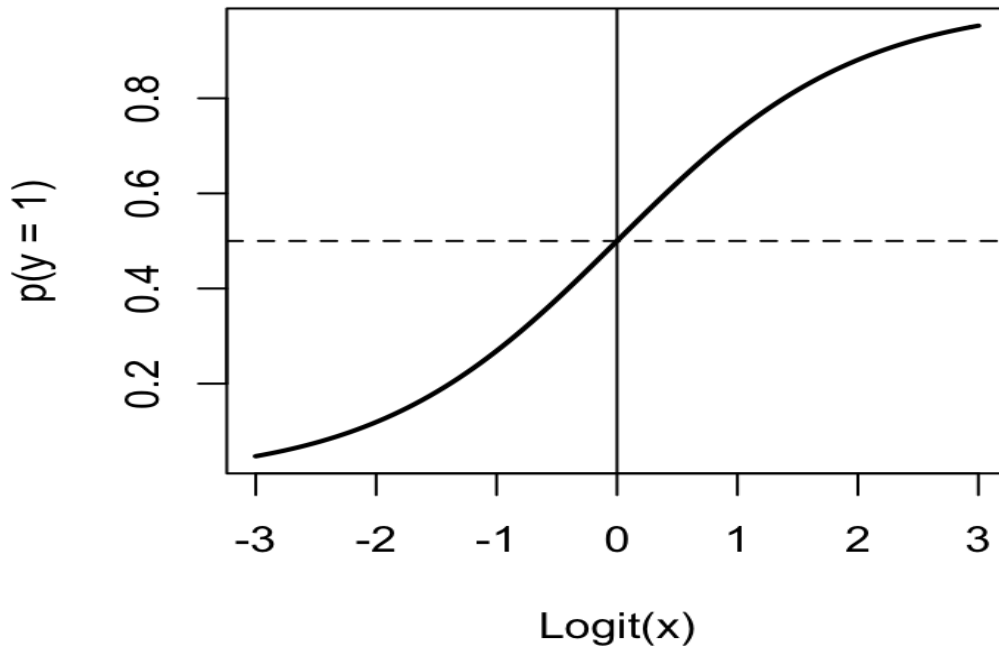


Figure 7: Inverse Logit function.

The logit function of the odds is the inverse function of the logistic one:

$$\text{logit}(p(x)) = \ln(p(x)) - \ln(1 - p(x)) = \ln\left(\frac{1}{p(x)} - 1\right) = \beta_0 + \beta_1 X$$

Taking into account the odds of an event, they are equal to:

$$P(Y = 1) = \frac{p(x)}{1 - p(x)}$$

Therefore, the likelihood of the event $Y = 1$ corresponds to:

$$P(Y = 1) = e^{\beta_0 + \beta_1 x}$$

Where:

- $P(Y = 1)$ represents the likelihood of undertaking an M&A;
- $1 - P(Y = 1)$ is the probability that $Y = 0$ i.e. the probability for which the company does not complete a merger and acquisition transaction;
- β_0 is the constant;
- β_i is the coefficient of the explanatory variables to be estimated;
- X_i is the independent variable, it includes the different variables under study, i.e. the number of independent directors and the family or non-family type of ownership;
- e is the base of the natural logarithm;
- $\ln\left(\frac{1}{p(x)} - 1\right) = \beta_0 + \beta_1 X$ is the logit, namely the \ln odds of a company undertaking an M&A.

Furthermore, the relevance of the variables is measured through the Chi-squared probability, the lower the Chi-squared probability value, the higher will be the degree of significance of the parameter under study. Hence, a small Chi-squared value, and a corresponding large P-value near to 1, is a synonym of a greater effect of the variable on the probability of the M&A.

3.6 § - Test results

In our experiment we made two different regressions, the first has as principal aim the to assess the inferences of the independent variables, “Number of Independents” and “Family firm” belonging to the first and the second hypotheses on the dependent variable, “M&A completed deals”, testing respectively the impact of the number of independent directors within the board of a company and the effect of family conduction of operations on the occurrence of mergers’ and acquisitions’ transactions. Moreover, in the model are also used different control variables which are not under examination but present different effects.

Hence, in the first regression i.e. Estimation 1:

- $Y = M\&A\ completion \rightarrow Y = \begin{cases} 0, & \text{Merger or Acquisition does not occur} \\ 1, & \text{Merger or Acquisitions occurs} \end{cases};$
- $x_1 = \text{Number of independent directors};$
- $x_2 = \text{Family firms' ownership} \rightarrow x_2 = \begin{cases} 0, & \text{Non - Family firm} \\ 1, & \text{Family firm} \end{cases}.$

In particular from the calculations made emerges that in the 926 observations gathered in this regression both the independent variables “Number of Independents” and “Family firm” are not significant and their reference values are -0,0057 and 0,0493. Hence, the first has a negative impact on the dummy dependent variable while the second have a positive one but the values registered are not robust i.e. they have a p-value $> 0,1$.

The same negative inference is given by the control variables “Financial Leverage” and “Tobin’s Q”, -0,0002 and -0,0831 but again these are not robust results.

Taking into account the control variables instead, the “Board Size”, the “ROA” and the “Firm Size” are significant and have a positive impact, in fact their coefficients’ value are 0,0940, 0,0163 and 0,2123 besides, both present a p-value $< 0,05$.

Estimation 1

<i>Variables</i>	<i>Coefficient</i>	<i>Standar Error</i>
<i>M&A</i>		
<i>Number of Independents</i>	-0,0057	0,0606
<i>Board Size</i>	0,0940*	0,0444
<i>Family Firm</i>	0,0493	0,2808
<i>ROA</i>	0,0163*	0,0073
<i>Financial Leverage</i>	-0,0002	0,0002
<i>Tobin's Q</i>	-0,0831	0,1708
<i>Firm Size</i>	0,2123*	0,0842

+ $p < 0,10$; * $p < 0,05$; ** $p < 0,01$; *** $p < 0,001$;

Table 5: Regression 1

The second regression instead, examines both the impact of the independent variables examined in the first one but we add also another variable in the study of the impacts on M&A transactions, namely the “Number of Independent Directors within Family Firms”, which is the result of the combination of the multiplication of the two precedent independent variables.

Therefore, we have:

- $Y = M\&A \text{ completion} \rightarrow Y = \begin{cases} 0, & \text{Merger or Acquisition does not occur;} \\ 1, & \text{Merger or Acquisitions occurs} \end{cases}$;
- $x_1 = \text{Number of independent directors}$;
- $x_2 = \text{Family firms' ownership} \rightarrow x_2 = \begin{cases} 0, & \text{Non - Family firm;} \\ 1, & \text{Family firm} \end{cases}$;
- $x_3 = \text{Number of independent Directors on Family Firms}$.

Hence, four different scenarios can occur: the first regards the absence of independent directors within corporate boards of non-family firms, the second involves the absence of independent in family firm’s board of directors, the third and the fourth instead take into

account the presence of independent directors respectively in non-family and in family firm's corporate boards.

The purpose of our second regression, namely Estimation 2, regards the latter scenario displayed and considers again 926 observations.

Our findings show that the "Number of Independents" is again not significant, the value of coefficient registered is 0,1140, therefore we have a positive but not robust relationship on M&A.

Conversely, "Family firm" affects positively the outcome M&A deals and we can provide statistical evidences for it with a coefficient of 1,0597+ implying p-value < 0,1. The "Number of Independent within Family Firms", differently from the previous variable, has a significative, p-vale < 0,05, and negative inference on the possibility of occurrence of a M&A, indeed, the corresponding coefficients' value is equal to -0,2086.

The findings regarding "Family Firm" and the "Independent Directors within Family Firms" can appear discordant but actually, it's possible to have such divergent effects because the dependent dummy variable "Family Firm" assess only the effects of the family ownership structure while the latter combined variable is an evaluation of the mixed effects of the two variables under examination.

Regarding the control variables, also in the second estimation the "Board Size", "ROA" and "Firm Size", are significant with a p-value < 0,05. Their coefficients display a positive effect on M&A transactions and are equal to 0,0972, 0,0156 and 0,2051.

For the two outstanding control variables, their respective impacts on M&A are negative, coefficient of -0,0002 for the "Financial Leverage" and of -0,0721 for the "Tobin's Q" but we have no proofs to support their effects on M&A because they are not robust outcomes.

Estimation 2

<i>Variables</i>	<i>Coefficient</i>	<i>Standard Error</i>
<i>M&A</i>		
<i>Number of Independents</i>	0,1140	0,0832
<i>Board Size</i>	0,0972*	0,0441
<i>Family Firm</i>	1.0597+	0,5576
<i>ROA</i>	0,0156*	0,0073
<i>Financial Leverage</i>	-0,0002	0,0002
<i>Tobin's Q</i>	-0,0721	0,1692
<i>Firm Size</i>	0,2051*	0,0830
<i>Number of Independent in Family Firms</i>	-0,2086*	0,0985

+ $p < 0,10$; * $p < 0,05$; ** $p < 0,01$; *** $p < 0,001$;

Table 6: Regression 2

3.7 § - Findings' Discussion

The statistical evidences presented in the previous paragraph display important results which can be interesting and useful for a comparison with the literature on the argument of our experiment and for sustaining or rejecting our hypotheses.

The first of them relates to the “Number of Independents” variable namely, the “*negative effect of independent directors within boards in M&A deals*”.

The recent financial crisis has opened again the debate on the role of these figures and the literature has focused its attention on the connection between it and the firm performance analyzing this relationship from different perspectives.

As a matter of fact, on one hand the studies of Baysinger & Butler (1985), Pearce & Zahra (1992), Daily & Dalton 1993, Masulis R.W. Mobbs S. (2011) and of Sharma V. (2011), highlighted a positive relationship between the performance outcomes and the independence of the directors of the corporate board. The first authors gave insights of the effects of changing board composition, the second analyzed the inference of board composition from a strategic contingency viewpoint while Sharma V. took into consideration the impact on performance and financial ratios deepening the attitude of paying dividends.

Moreover, we have to highlight the findings of Yu Liu, Mihail K. Miletkov, Zuobao Wei and Tina Yang which provide “*robust evidences on the relationship between board independence and firm performance in China*”⁷⁹.

On the other hand, the analysis of Muth & Donaldson (1998), Klein, Shapiro, & Young (2005), Bhagat & Bolton (2008), showed the opposite implications of corporate governance features.

As reported in the research about Canadian companies of Klein, Shapiro, & Young: “*We analyze the relationship between firm value, as measured by Tobin’s q, and newly released indices of effective corporate governance for a sample of 263 Canadian firms. The results indicate that corporate governance does matter in Canada. However, not all elements of measured governance are important, and the effects of governance do differ by ownership category. For the entire sample of firms we find no evidence that a total governance index affects firm performance. This is mainly because we find no evidence that board independence, the most heavily-weighted sub-index, has any positive effect on firm performance*”⁸⁰.

Furthermore, Afzalur Rashid in his examination regarding Bangladesh firms founded that board independence affects negatively the economic performance of firms. Indeed, “*By using data from 135 listed firms on Dhaka Stock Exchange and by using accounting and market performance measures [...], board independence and firm economic performance does not positively influence each other*”⁸¹.

Besides, from the researches of Hermalin & Weisbach (1991) and Villalonga & Amit (2006) emerges that the board composition, more specifically the presence or alternatively the absence of independent directors within corporate boards, do not have a significative impact on the financial outcomes of a company.

The findings of our study, as these latter studies, show that the impact of this variable do not presence any level of significance in both the regressions run, the coefficients of this

⁷⁹ Cfr. Y. Liu, M. K. Miletkov, Z. Wei, T. Yang in “*Board independence and firm performance in China*”, *Journal of Corporate Finance*, 2015, Vol. 30, p. 224.

⁸⁰ Cfr. P. Klein, D. Shapiro, J. Young, in “*Corporate Governance, Family Ownership and Firm Value: the Canadian evidence*”, *Corporate Governance. An International Review*, Blackwell Publishing Ltd, 2005, p. 769.

⁸¹ Cfr. Afzalur Rashid, in “*Board independence and firm performance: Evidence from Bangladesh*”, *Future Business Journal*, 2018, Vol. 4, p. 34.

variable presents a negative value in the first estimation and a positive one in the second, but we have not enough proofs in order to find support of our first assumption. The coefficients of -0,0057 and of 0,1140 do not give us levels of confidence needed to accept the hypothesis, namely $p\text{-value} < 0,1$, hence it has to be rejected.

Taking into account the second variable, namely “Family Firm”, many recent studies of U.S. public family firms as that of McConaughy, Walker, Henderson, & Mishra (1998) show, as stated in their examination, about founding family-controlled firms (FFCFs), that “*FFCFs are more efficient and valuable than non-FFCFs that are similar with respect to industry, size, and managerial ownership*”⁸².

Also Anderson & Reeb (2003, 2004), examining if the engagement of family members in the conduction of business operations jeopardize or benefits the firm performance and considering the different corporate governance of this kind of companies, the stewardship theory and the high commitment to the firm founded astonishing results which confirm the positive relationship.

Indeed, mentioning the study of Anderson & Reeb: “*We investigate the relation between founding-family ownership and firm performance. We find that family ownership is both prevalent and substantial; families are present in one-third of the S&P 500 and account for 18 percent of outstanding equity. Contrary to our conjecture, we find family firms perform better than nonfamily firms*”⁸³.

The research of Lee (2006) instead is a focus “*to empirically investigate the competitiveness of family versus nonfamily firms*”⁸⁴. In fact, the author states that “*Conventional economic theory does not differentiate management decisions between family firms and other firms that are owned by diverse shareholders. In this study, we specifically test the hypothesis that family ownership or control leads to better performance and thus profitability. Moreover, if family business owners also participate*

⁸² Cfr. D. L. McConaughy, M. C. Walker, G. V. Henderson, Jr, C. S. Mishra in “*Founding Family Controlled Firms: Efficiency and Value*”, JAI Press Inc, Review of Financial Economics, 1998, Vol. 7, p.1.

⁸³ Cfr. R. C. Anderson and D. M. Reeb in “*Founding-Family Ownership and Firm Performance: Evidence from the S&P 500*”, The Journal of Finance, Vol. 58, p.1301.

⁸⁴ Cfr. J. Lee, in “*Family Firm Performance: Further Evidence*”, Family Business Review, 2006, Vol. 19, p. 103.

*in management, they might command greater loyalty within the firm, thereby enhancing employee productivity and overall firm performance*⁸⁵.

The second hypothesis of our experiment, i.e. the “*family firms’ positive effect on mergers and acquisitions*” has to be accepted, indeed, both from the results of these studies and from our experiment the theory by which family firms outperform other entities in terms of performance is supported. Our results show that “Family Firms” variable is not significant in the first regression while in the second statistical analysis’ results it has a positive impact on the companies’ accomplishments presenting a p-value < 0,1. The coefficients are respectively equal to 0,0493 and 1.0597+.

Finally, we regard the third variable, examined only in the second regression, resulting from the mix of the previous two, the “*Number of Independent Directors within Family Firms*”, on which is based the third assumption.

The literature contribution on this particular topic is currently under debate but it is yet so far from being conclusive.

As we can read from Georges Samara’s and Jasmina Berbegal-Miralbent’s analysis, “*in the distinctive context of family businesses, the relationship between the presence of independent directors on the board and firm performance is theoretically debated and empirically inconclusive. [...] Empirically, positive, negative and no effect of independent directors’ presence is associated to family business performance*”⁸⁶.

Indeed, from the studies of Anderson and Reeb (2004), Arosa et al. (2010), and Kuo and Hung (2012) is bore a positive relation of the presence of independent directors on the performance of such companies.

Conversely, in the exams conducted by Agrawal and Knoeber (1996) and of García-Ramos and García-Olalla (2011) is registered a negative effect of the variable studied. As a matter of fact, in the investigation on a sample of European, publicly traded, family entities run by the latter authors it’s highlighted that “*Our findings contradict the widespread belief that smaller and more independent boards as well as nondual leadership structures always lead to better firm performance, suggesting that agency*

⁸⁵ Ibid.

⁸⁶Cfr. G. Samara and J. Berbegal-Miralbent, in “*Independent directors and family firm performance: does one size fit all?*”, International Entrepreneurship and Management Journal, 2018, Vol. 14, p. 150.

theory is limited in its explanation of the relationship between board characteristics and firm performance”⁸⁷.

Finally, several findings like that emerged from Cuadrado-Ballesteros et al. (2015), Dalton et al. (1998) and Gnan et al. (2015) demonstrate how a family firm’s corporate board composed by independent directors does not have inferences on the performance outcomes.

Therefore, the real aim of this experiment was to fill this lack of clarity testing if actually this statistic independent variable has negative inferences on the accomplishment of a M&A transaction. As we can see from the findings of the run regression, namely the computations of our second estimation, the coefficient value is -0,2086*, demonstrate that the presence of independent directors within boards of family firms has a significative negative effect on the dependent variable. Hence, with a p-value < 0,05 the third assumption has the needed statistical support to be accepted.

⁸⁷ Cfr. R. García-Ramos, M. García-Olalla in “*Board characteristics and firm performance in public founder- and nonfounder- led family businesses*”, Journal of Family Business Strategy, 2011, Vol. 2, p. 220.

Conclusions

The matter treated in this thesis has been highly discussed and debated over the time by several authors.

Indeed, in the literature are many the references concerning corporate themes focusing their attention on issues about the role of the independent boards and the corporate governance of family firms.

More deeply, such features has been studied giving crucial importance to the results on the firm's performance triggered by them.

Consequently, the aim of this empirical research is to provide further evidences of the inferences about the role played by independent directors within family firms in a context of M&A transaction.

The empirical analysis conducted contributes to enhance the not so conclusive studies on the issues through the provision of current and updated statistical evidences based on a sample of the already mentioned 165 Italian listed firms.

This empirical test examines, through two different regressions on a sample of 926 observations, the impact of already mentioned parameters, the independent variables examined, on the success of a M&A, the dependent variable of the experiment.

The board independence is described by the variable "Number of independents", the family ownership by the "Family Firm" variable and the board independence in a family firm context by the "Number of Independent within Family Firms" proxy.

The purpose of the experiment is to evaluate whether, and in positive cases also how, the independent variables affect the completion of an M&A dealing.

Therefore, to verify what has been said, three different hypotheses are constructed on the parameters at stake.

Hypothesis 1 states that, once a company decide to engage in an M&A transaction, the presence of independent directors within board of directors impacts positively the accomplishment of the deals.

As a matter of fact, one could expect that due to the characteristics and the strict requirements needed to held the essential position of independent director within a

corporate board, it would affect in a positive way M&A processes providing its experience and the necessary control on all the steps of the transaction involved.

Unfortunately, this empirical test refutes this common belief demonstrating that the presence or otherwise the absence of independent directors shall apply without prejudice to the accomplishment of mergers and acquisitions.

Indeed, since our findings show different values but they do not have a proper degree of significance, we have to refuse this assumption.

Hypothesis 2 is about the inference of family's property on the results of dealings of merger and acquisitions. The assumption at stake suggests the existence of a positive correlation between the variable and the completion of such transactions.

Different elements represent the unique and identifiable values typical of firms conducted by families. These elements prompted several discussions, resulting in the more disparate evidences, upon the ways of handling of businesses in such firms and about the implications on the performance.

Taking into account the empirical evidences from our computations display that actually the variable "Family Firm" has a positive effect and above all a level of materiality sufficient to prove the truthfulness of this hypothesis. Hence, this assumption has to be accepted.

Furthermore, many researches have been conducted on the essential importance of family firms focusing their attention to the dynamics occurring in such businesses and evaluating the impact of them on the results of a company. Nevertheless, the majority of the literature's dissertations analyze the effect of family firms on performance undervaluing the position of the minority shareholders in family entities and consequently not examining the roles established, as the independent directors, in order to protect their interests.

In addition, the literature contribution which attributes the adequate significance to the minority shareholders unfortunately does not present the proper clearness in order to state an unambiguous intercurrent relationship between prominent board independence in family firms' boards of directors and the performance of companies.

The aim of third assumption, representing a combination of the previous two, consists in testing if factually the presence of independent directors in a family firm context influences in a critical and negative way the finalisation of a M&A.

From the calculated results emerges a negative and enough relevant relationship between this independent variable and the final outcome, hence it's possible to confirm this negative assumption.

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Summary

M&As' overview

1.1 § - Introduction:

M&As became diffused from the second half of the 19th century gaining a crucial role in the range of the possible strategies adopted by companies to grow and to expand their businesses. These transactions are always being a very treated topic due to the high relevance which this phenomenon has assumed in the worldwide financial landscape. The main goal of this thesis is to give a provision enhancing the analysis of the distinctive feature of merger and acquisition processes. Specifically, it contributes to fill the lack of clarity upon the effects of several variables on the completion of M&A deals through an empirical test. Such research variables concern corporate governance features as the presence of independent directors within the board of directors, and the type of ownership of firms as the familiar conduction of the business, and the combination of the previous as the presence of independent directors within family firms' corporate boards.

The details of the variables were collected from a cautious analysis of the balance sheets published by 165 Italian listed companies throughout the years 2011 and 2016. The experiment conducted through the usage of STATA® consists in the computation of the probability of the occurrence of an event therefore the statistical method suitable is the logistic regression.

1.2 - § Merger and Acquisition definition and value creation:

In order to thoroughly comprehend the matters this analysis is going to deepen, first of all, it is essential to focus on the clarification of certain fundamentals of the aforesaid transactions, namely M&As. The expression merger refers to the combination of two existing companies in which the *acquiring* company assumes the assets and liabilities of the merged or *acquired* one. In the merger the two standing business entities melt in a unique company and only one of the two corporation, the acquirer, survives as remarked by Patrick A. Gaughan (2011). Instead, in the acquisition the *acquiring* company bargains at least more than 50% of the *target* firm's ownership with a view to achieve the effective control over it. Generally, M&As refer to large strategic dealings undertaken by the majority of nowadays businesses which deeply alter the nature, the course, the control

and the strategic direction of the firm as stated by Michael E. S. Frankel, Larry H. Forman (2017). M&As constitute the principal transactions in the contemporary financial market which involve multiple financial intermediaries, private or public companies and a wide range of market regulators. It is fundamental to scrutinize M&As since these transactions represent the prevalent system through which companies generate value.

The concept of value cannot be expressed in limited definition due to its broadness and variety of connotations. It is associated to disparate characterizations which comprise both specific performance indicators known as Shareholder value, Book Value, Net Asset Value, Market Value but has even a wider sense differently interpreted depending on the type of business, scenario or stakeholder involved. Besides the specific definitions of the notion value, it is central to appreciate that value is the core element which establishes the strategic choices, the development patterns and the managing of each corporate business. Increasing value is the dominant long run purpose who guides each company's component, the reason why businesses continue to exist and to improve themselves.

1.3 § - History of Mergers and Acquisitions:

The first step to make in order to give an historical overview of the merger and acquisitions operations is to highlight that, as a glaring trend, *“they occur in bursts interspersed”* as underlined by Sudi Sudarsaman. As a matter of fact, M&A present a wave pattern so, there were some periods with peaks of these activities followed by others in which they plummeted. Taking into account the period from 1890s until now, the M&A specialists identified five different waves, each with different triggers of regulatory or economic nature, which took place in several countries. Inter alia, the first and the second waves concerned only the U.S. and then this phenomenon spread and involved Europe. Taking into account Italian experience, M&As lagged behind the other countries analyzed. In Italy there were two different macro-trend which occurred respectively between the 1988 and the 1998, and between 1999 and 2010. The first time lag was characterized by the growing phenomenon of privatizations and by the rise of the so called “middle market” while, in the latter the internationalization process represented the main incentive of firms to M&A deals. In this period in fact, as aforementioned, some drivers had a remarkable impact like the first implications of the globalization process and of the

gradual elimination of constraints, as the barriers to trade, of the national markets which later brought to the Single Market of the EU.

1.4 § - M&As classifications:

First of all, M&As are categorized in three different types: horizontal, vertical and conglomerate or diversified. In a horizontal M&A, the transaction occurs between firms which compete in the same industry whose aim is to reach a better competitive position than the standalone companies. In horizontal M&As, also called related M&A, the basic business operations remain the same but the acquirer's capacity and the market power increase, and so the profit. The advantages originated by horizontal M&A are copious: first, the number of potential competitors in the industry is reduced as confirmed by the market power increase; second, horizontal mergers or acquisition lead to the reduction of operating costs due to the increase in sharing resources as assets, employees and physical assets; third, the management, who have a better understanding of the playing field due to the similarities in the two firms, may be able to deeply comprehend the acquired company, reducing significantly the risk of M&A failure as we can see from Ziva Rozen-Bakher (2018).

Vertical mergers and acquisitions are operation which take place between firms operating in the same production path but at different phases. The companies involved in this M&A type often have a buyer-seller relationship, for example it occurs when a manufacturer in a specific industry wants to own its supplier (upstream) or its distributor (downstream). These transactions might improve the companies' efficiency and reduce their costs producing either economies of scale or scope. Moreover, vertical mergers or acquisitions usually improve the coordination between different stages of the company value chain obtaining several important results as the reduction of inventory cost and the increase of capacity utilization which translate in more efficiency and profitability.

A conglomerate or diversified merger or acquisition happens when a corporation purchases a controlling interest in another firm which conduct an unrelated business activity. The firms involved in this type of M&A are companies which produce unrelated product, neither complements or substitutes.

The reason for diversified merger is the willingness of the company to expand its products or services 'portfolio. This M&A category implicates more risks and efforts compared to the other examined before due to the several disparities regarding the markets, products, geographical locations, operations, human resources and physical assets.

Nevertheless, conglomerate M&As are advantageous because they have the highest synergy potential and they lead to simpler, more convenient and profitable access to capital and income stability.

A further categorization regarding M&A's features is the one concerning the method by which the merger or acquisition is concluded: the purchasing of stock or the assumption of the acquired company's assets. Usually, the purchase of the assets is advantageous for the acquiring company when it desires to delimit its acquisition to the parts of the acquired company that coincide with the acquirer needs. Instead, if the acquirer decides to buy the target's stock it is as the former assumes the latter's liabilities.

1.5 § - Methods of payment for acquisitions:

Usually, the decision about the payment method of takeover activities is agreed between the parties involved through a negotiation process which determines also who will be the controller of the majority of interests when the deal will be closed. The degree of importance given to the payment methodology is very high because the choice of a particular technique affects the liquidity of a firms, its financial leverage, the accounting policy which will be used to report the costs of the merger operation and the tax benefits related to the completion of the process.

1.6 § - Rationales: Growth, Synergies and Diversification:

In general, the reasons which push a business to take up a M&A transaction can be found in the willingness to grow faster, to obtain synergies or to diversify the business depending on the type of M&A it desires to pursue. The effect of synergies may be explained by a simplified mathematical formula which highlights the synergistic benefits which allows the combined firm to appear to have a positive Net Acquisition Value (NAV) as emerged from Patrick A. Gaughan (2011). $NAV = [V_{AB} - (V_A + V_B)] - (P + E)$ where: V_{AB} is the combined value of the two combined firm A and B; V_A is the

value of the firm A; V_B is the value of the firm B; P is the premium paid for the acquisition of the firm B; E is the expenses of the acquisition process.

Board Independence and Family firms

2.1 § - Board of directors:

According to the Organization for Economic Co-operation and Development Corporate (OECD) corporate governance “involves a set of relationships between a company’s management, its board, its shareholders and other stakeholders”.

The governance of a company regards the whole set of rules and activities by which a firm is managed, and its processes are monitored. More specifically, it concerns the balance of the different interests belonging to any stakeholder.

Hence, every feature concerning corporate governance of an enterprise is born with the attempt to mitigate the conflict of interest in particular that existing between managers and shareholders which arises from the separation between ownership and control.

As a matter of fact, in widely held companies the protection of investors’ requests a high degree of surveillance and a huge expense and, because none of the shareholders wants to bear the monitoring cost, the result is that managers are able to control the firms and to lay down the achievement of investors’ goals, as the increase of profit, giving more importance to their personal objectives.

Hence, the shareholders as a group establish a collective body, namely the board of directors, to represent their interests in the company and to monitor the management avoiding, inter alia, the exposure of the latter to the firm’s risk.

The decisions of the board concern the execution of three different functions, the first, the function of watchdog for the interests of shareholders, involves features like either oversee the performance of the company or choices regarding dividends policies or the issue of additional shares or the audit and the approval of decisions undertaken by the executive managers as investments or acquisitions. In fact, primarily, “the board members should act on a fully informed basis, in good faith, with due diligence and care, and in the best interest of the company and the shareholders”.

Then the strategic function which entails setting out the strategic and directive guidelines for the business operations of the company, the “strategic function in providing the vision,

mission and goals of the organization”, “the fiduciary duty to protect the organization’s assets and member’s investment”.

Lastly, the supervisory function consisting in managing the process to recruit, to hire, to handle the relationships and eventually to fire the general manager namely, the Chief Executive Office or CEO.

Traditionally, it’s possible to distinguish between three different type of directors according to the different ties and their closeness to the firm.

Generally, insider directors are in charge of executive duties and provide their expertise and know-how to develop the firm strategy for its businesses thanks to their closeness to the firm.

Gray directors instead, are represented by “people who are not as directly connected to the firm as insiders are, but who have existing or potential business relationships with the firm” e.g. lawyers or consultants who are already retained by the firm or could be interested in having ties with the company.

Lastly, the outside directors defined as “a member of a company's board of directors who is not an employee or stakeholder in the company” are people who are not related and have not business ties with the firm. They are non-executive directors and their tasks regard the assessment of managers’ performance.

2.2 § - Board of directors in M&A transactions:

Considering takeover activities, directors play the same role played in all other aspects of the company’s business as monitoring and governance but in addition to the aforementioned duties and responsibilities there are some more specific tasks.

Actually, on the buy side the board is responsible for evaluating proposed acquisitions in the context of the strategic business plan to which they contribute and which they finally approve. Furthermore, it should evaluate the proposed mergers or acquisitions taking care about the best and most efficient usage of the resources available to the company including that financial and operational.

The situation is a bit different when the M&A transaction implies the sale of the company, specifically the sale of the company as a whole, could be a key opportunity for the stockholders involved to achieve capital gains, a premium for their stock investment.

Therefore, directors have to assess, before the start of the process, if it occurs in the proper time to sell. As a matter of fact, even if the company receives a bid premium compared the current market value, the duty of the directors is to estimate if the value of the divestment would be maximized by selling at that time or if it would be more profitable selling at a different point in the business cycle or at a different point in the company's development.

2.3 § - Board Independence:

The board composition was quite different throughout the history. The percentage of independent members of the board gradually increase from the 1950s to 2005 achieving what now is known as an independent board: "An independent board is a corporate board that has a majority of outside directors who are not affiliated with the top executives of the firm and have minimal or no business dealings with the company to avoid potential conflicts of interests".

The institution of an independent board derives its origins from the U.S due to the desire to strengthen the activities performed by the directors because of some financial scandals which took place during 1970s.

Shifting our focus to Europe, the evolution of the figure of independent directors started in UK. due to the similarities of the legislations of common law and of the financial systems. UK Government Commission indeed in 1992 introduced the Cadbury Commission to overhaul the financial features of corporate governance. Taking into account Italy instead, the first appearance of independent outside directors in the country took place only in 1999 in the Code of Self-Regulation of listed companies.

Italy is quite different because of the differences of the ownership structure and of the presence of the additional body of the supervisory board whose activities create overlapping with that performed by the independent directors. In Italy the role of independent directors is to counterbalance the interests of the controlling shareholders in order to avoid the exploitation of their position to gain private benefits to the detriment of the minority shareholders.

2.4 § - Effect and theories of independent directors on firm performance:

The main theories concerning the effect of board independence on the performance outcomes of companies are the agency theory and the stewardship theory.

The former arises from the aforementioned separation between ownership and control of a firm in which the owners, the shareholders, are identified as principals and the executives, represented by managers, are named agents. The latter theory instead considers managers as stewards of owners which share the same interests and want to achieve the same goals. Hence, the board of directors should not be responsible of a strict control over the activities performed but the executive management but has to provide support training and mentoring managers with the ultimate objective of increase the performance of the company. The risk of moral hazard is not considered as relevant because stewards are trustworthy and are pushed by the desire and the satisfaction of achieve successful outcomes so, they do not cooperate with the board of directors because it is compulsory but because it is the method to enhance the performance of the company.

2.5 § - Controlling owners and Family firms businesses:

The literature has given different definitions of family firms either as “family firms are those in which multiple members of the same family are involved as major owners or managers, either contemporaneously or over time” or “family firms are those in which the family controls the business through involvement in ownership and management positions”, or even “any business in which two or more family members are involved and the majority of ownership or control lies within a family” so, the common characteristic of these definitions is the controlling role assumed by families. Hence, in these contexts the scene is not dominated by the conflict between investors and management, respectively principals and agents, but by that inside the different shareholders, minority ones and that who represents the controlling part.

2.6 § - Family Governance:

When the management of a company is composed by family members like a descendent which assumes the role of CEO, the agency costs can be largely reduced or even avoided because of the incentives of executives to behave as stewards in favor of the going concern and benefiting investors increasing the performance outcomes of the entity which

are reflected in a major value of the investment made by the shareholders.

Unfortunately, exists also the case in which the family components of the shareholders, representing the major investors, act only pursuing their interests. Indeed, in family firms, the main disputes regard actions made by the controlling part which can be triggered by the benefits which they bring to family members to the detriment of other shareholders. Hence, a very relevant topic about family firms is related to control which the minority part of shareholders, the nonfamily members, must exercise on management decisions.

2.7 § - Family firms' board of directors:

The decisions regarding the board of directors in family companies is strictly dependent on the phase of the life cycle of the company. Usually, at the birth of the company maintain effective control on the business undertaken so the role of the board of directors is narrowed to the implementation of the advisory function. Indeed, the founders wants to control and handle directly the entity without being strictly controlled by directors which can interfere with the achievement of their targets.

Successively, when the founder ages transferring the skills required to conduct the company is the main concern and the most important strategic issue of the firm.

When successor generations of leaders become involved in the firm the entrepreneurs begin to consider the possibility of having a board which is charged also of supporting responsibilities with regard of the strategic and future decisions and plans. An effective advisory board at this stage can facilitate this transfer of control. Successively, when the family business matures, the role played by the directors takes more and more the meaning of strategic and surveillance function of the board.

2.8 § - M&As in Family firms:

Taking into account the unique and distinctive characteristics of family entities as the aforementioned particular governance, corporate culture and the implementation of human capital, the issues about the family reputation connected to the family name in stake but also the concerns about the succession of the future generations, it's easy to realize that family firms have different objectives compared to that of other companies including non-financial aims. This difference is crucial when family companies take

strategic decisions, especially those of starting a merger or an acquisition. An instance of them are the non-financial tensions between collaboration and control, the conflict which occurs in family firms because family components have the willingness to maintain the control over the business, but they also are encouraged to cooperate with other entities to grow and achieve the benefits of synergies.

2.9 § - Family firms' performance:

After decades of being regarded as an obsolete ownership structure, recent research has focused its attention to the performance achieved by publicly traded family-controlled businesses and on the major drivers which affects their performance.

According to agency theory and resource-based view of the firm indeed, there are some essential factors affecting the performance of family entities either in a positive or in a negative way. One of the leading features related to this topic are, on one side, lower agency costs bore by family companies due to the increased stewards' attitudes.

Moreover, the fewer agency costs are related to the corporate cultures and values belonging to family organizations as the shared opinion and mutual trust. On the other side, instead, the agency theory suggests that in some family firms it's possible to register more agency costs precisely because the firms' businesses are run out by families. Indeed, families can be easily subject to conflicts which led to misalignment and competing goals and values which in turn reduce the results of the firm.

Experiment

3.1 § - Experiment Introduction:

Conscious about the great emphasis of corporate governance elements, especially after the already discussed accounting and harmful scandals, and about the role played by family firms in our country, the purpose of this study is to provide reliable perspective on such features. Indeed, analyzing the past and the current literature it's possible to point out that there is not an evident cause-effect relationship between independent directors and firm performance and the same taking into account family firms and their outcomes. Hence, first of all, we provide statistical evidences, in order to fill the existing literature gap of a definition of a clear relationship of how the independent directors affect the

implementation of takeover activities and then we examine, again with statistical results, the family firms' effects on M&As. Furthermore, the analysis will concern the performance results of the entities involved in the transactions. Subsequently the analysis will treat a matter not so much examined by literature, the study will be focused on the incidence of the combined effect of these variables on mergers and acquisitions namely how the independent directors present in a family firms bias the success of an M&A's operation.

In order to develop this analysis, we used two regression models through which we tested different hypotheses. Prior studies on the relationship between independent directors and firm performance showed very mixed results establishing both a positive and a negative relationship, whereas some other studies, instead, stated even that there is not a direct relationship.

Hence, with the purpose of clarify if independent directors actually affect the completion of a deal our first hypothesis concerns their presence into corporate boards of the firms under analysis involved in mergers and acquisitions:

Hypothesis 1: *The presence of independent directors in corporate board of a firm bias in a positive way the company's decision to implement and complete mergers and acquisition operations.*

The second hypothesis regard the second variable under examination namely, the familiar ownership of an entity. From what emerged from the prior literature the attitude to adopt a merger and acquisition strategy to grow is not so well accepted in family firms because of their peculiarities and the dynamics belonging to families. Hence, more specifically, the hypothesis is about the impact of such companies, characterized by different values and purposes, on the possibility of undertaking an M&A.

Hypothesis 2: *The ownership of controlling interests of acquirer firms in the hands of families, defined as the relative majority of shares percentage, affects positively the accomplishment of M&A.*

Finally, the third assumption as aforementioned, relates to the variables of the first two statements which we test and studies their combined effect.

Due to the presence of these directors and the consequent greater protection to minority interests of the other shareholders which are not so prone to M&A deals, one would

expect a negative evaluation of M&A deals and so a negative influence on the completion of such business practices.

Hypothesis 3: *The presence of independent directors within the corporate board of directors of a family firm indicated as the owner of a relative majority of shares, is determinant for the missed finalisation of M&A transactions.*

3.2 § - Creation of database:

The experiment starts with the creation of a database including all the data, collected through a particular software, namely zephyr, of mergers and acquisitions, by 165 listed Italian firms during the time period going from 2011 to 2016. Specifically, we took into considerations only the mergers and acquisition which were completed excluding from the sample examined transactions which were only rumored and transactions which were announced but for which the completion of the deal failed.

3.3 § - Variables' Description:

3.3.1 § - Dependent Variable:

Once the Zephyr database was completed, we studied the data about the different independent and control variables of the sample of firms under analysis during the time lag envisaged in order to assess the resulting value of the dependent variable namely the chance of completion of a M&A. Due to the fact that the dependent variables assess the accomplishment of an event, it has a qualitative nature. Hence, it can assume only 0 or 1 values.

3.3.2 § - Independent Variables:

These variables were gained from the financial reports of the companies published from 2011 to 2016 and regard both the board of directors, like the “Number of Independents” directors within the board and the ownership structure of the firm as the “Family Firm” which indicates if the businesses of the entities are conducted by families or not. Therefore, also this latter independent variable is a dummy.

3.3.3 § - Control Variables:

Subsequently, we assessed different control variables, whose data were gathered as the previous independent variables, from the financial statements of the companies under

examination, as the “Board Size”, the Return on Asset, “ROA”, and the “Financial Leverage”, the “Tobin’s Q” and the “Firm Size”.

3.4 § - Methodology:

In order to complete tests of our hypotheses and to get a quantitative result of how much the variables enhance or undermine the probability of our dependent variable namely the completion of M&A deals, we used a logit function whose equation is:

$$\text{logit}(p(x)) = \ln(p(x)) - \ln(1 - p(x)) = \ln\left(\frac{1}{p(x)} - 1\right)$$

Moreover, we used the statistical software STATA® which actually allowed the data analysis and the gaining of relevant numerical evidences about the data contained in the databases created.

First of all, we declared dataset to be panel data setting the command “xtset panelvar timevar” which stand respectively for the companies’ identification and the reference years. As a matter of fact, the most appropriate way in order to study the panel data of the independent variables within the time span is the panel analysis which allowed us to monitor the presence of individual heterogeneity i.e. the bias on the variables triggered by the presence of some exogenous entities as consolidated practices in the businesses and cultural factors, or macroeconomic elements, like countries’ regulations or agreements. Hence, we have to choose between the major techniques used to study the panel data namely the Fixed effects and the Random effects through the running of a particular test, namely the Hausmann test with the coefficients obtained from the commands “xtlogit fe” and “xtlogit re”. The null hypothesis of the test was that the difference in coefficients is not systematic therefore, the most suitable model is Random effects, on the contrary the alternative hypothesis stated the opposite so that the preferred model was the Fixed effects.

Whether the $Prob\ chi2 > 0,05$ the null Hypothesis must be accepted.

In our study, the coefficients of the Random Effects obtained from xtlogit are consistent under the null hypothesis and the alternative one rather than the coefficients of the Fixed effects are efficient under the null hypothesis but inconsistent under the alternative hypothesis. In addition, the resulting Chi-squared probability was equal to 0,9692.

Consequently, we assumed the presence of Random Effects and we used the Random effects logistic regression.

3.5 § - Regressions:

In our experiment we made two different regressions, the first has as principal aim the to assess the inferences of the independent variables, “Number of Independents” and “Family firm” belonging to the first and the second hypotheses on the dependent variable, “M&A completed deals”, testing respectively the impact of the number of independent directors within the board of a company and the effect of family conduction of operations on the occurrence of mergers’ and acquisitions’ transactions. Moreover, in the model are also used different control variables which are not under examination but present different effects. Hence, in the first regression i.e. Estimation 1:

- $Y = M\&A \text{ completion} \rightarrow Y = \begin{cases} 0, & \text{Merger or Acquisition does not occur} \\ 1, & \text{Merger or Acquisitions occurs} \end{cases} ;$
- $x_1 = \text{Number of independent directors};$
- $x_2 = \text{Family firms' ownership} \rightarrow x_2 = \begin{cases} 0, & \text{Non - Family firm} \\ 1, & \text{Family firm} \end{cases}$

The second regression instead, examines both the impact of the independent variables examined in the first one but we add also another variable in the study of the impacts on M&A transactions, namely the “Number of Independent Directors within Family Firms”, which is the result of the combination of the multiplication of the two precedent independent variables. Therefore, we have:

- $Y = M\&A \text{ completion} \rightarrow Y = \begin{cases} 0, & \text{Merger or Acquisition does not occur} \\ 1, & \text{Merger or Acquisitions occurs} \end{cases} ;$
- $x_1 = \text{Number of independent directors};$
- $x_2 = \text{Family firms' ownership} \rightarrow x_2 = \begin{cases} 0, & \text{Non - Family firm} \\ 1, & \text{Family firm} \end{cases} ;$
- $x_3 = \text{Number of independent Directors on Family Firms}.$

3.6 § -Test results and Conclusions:

This empirical research analyses, through two different regressions on a sample of 926 observations, different parameters effects, the independent variables examined, on M&A, the dependent variable of the experiment.

The board independence is described by the variable “Number of independents”, the family ownership by the “Family Firm” variable and the board independence in family firms by the “Number of Independent within Family Firms” proxy. The purpose of the experiment is to evaluate whether, and in positive cases also how, the independent variables affect the completion of an M&A dealing. Therefore, to verify what has been said, three different hypotheses are constructed on the parameters at stake.

<i>M&A</i>	<i>Estimation 1</i>		<i>Estimation 2</i>	
	<i>Coefficients</i>	<i>Standard Error</i>	<i>Coefficients</i>	<i>Standard Error</i>
<i>Independent Directors</i>	-0,0057	0,0606	0,1140	0,0832
<i>Board Size</i>	0,0940*	0,0444	0,0972*	0,0441
<i>Family Firm</i>	0,0493	0,2808	1.0597+	0,5576
<i>ROA</i>	0,0163*	0,0073	0,0156*	0,0073
<i>Financial Leverage</i>	-0,0002	0,0002	-0,0002	0,0002
<i>Tobins'Q</i>	-0,0831	0,1708	-0,0721	0,1692
<i>Firm Size</i>	0,2123*	0,0842	0,2051*	0,0830
<i>Number of Independent within Family Firms</i>			-0,2086*	0,0985

+ $p < 0,10$; * $p < 0,05$; ** $p < 0,01$; *** $p < 0,001$;

Hypothesis 1 states that, once a company decide to engage in an M&A transaction, the presence of independent directors within board of directors impacts positively the accomplishment of the deals. Since our findings shows different values but they not have a proper degree of significance we have to refuse this assumption.

Hypothesis 2 is about the inference of family’s property on the results of dealings of merger and acquisitions. The assumption at stake suggests the existence of a positive correlation between the variable and the completion of such transactions. The empirical evidences from our computations display that actually the variable “Family Firm” has a positive effect and above all a level of materiality sufficient to prove the truthfulness of this hypothesis. Hence, this assumption has to be accepted.

The aim of Hypothesis 3, representing a combination of the previous two, consists in testing if factually the presence of independent directors in a family firm context influences in a critical and negative way the finalisation of a M&A. From the calculated results emerges a negative and enough relevant relationship between this independent variable and the final outcome, hence it’s possible to confirm this negative assumption.