Department of Business and Management

Double Degree in International Management and Corporate Finance (DDIM)

Chair of Corporate Governance

Buyers' attitude towards Family and non-Family CEOs: who will be kept and who will be replaced?

Supervisor

Prof. Giovanni Fiori

Candidate

Anna Chiara Afeltra

Matr. 695801

Co-Supervisor

Prof. Karynne Turner

Academic Year 2018/2019

Agli occhi che non hanno mai perso i miei.
Alle mani che non hanno mai lasciato le mie.
Alle orecchie che non hanno mai smesso di ascoltare pazientemente le mie parole.
In qualunque parte del mondo fossi.

Ma soprattutto,
a chi mi ha insegnato a leggere Turgenev,
a chi mi ha insegnato a leggere Austen,
e a chi, invece, mi ha chiuso i libri e mi ha insegnato a ridere delle mie stesse paure.

"Volli, sempre volli, fortissimamente volli"

TABLE OF CONTENTS

ABSTRACT

This thesis study is focused on the understanding of the event of replacement of chief executive officer after an acquisition. In particular it is aimed at finding the association between the event of replacement and the characteristic of the chief executive officer, by distinguishing between a *family chief executive officer* and a *non-family* one. Furthermore, also the implications deriving from the introduction in the analysis of different types of bidders are considered. In order to do so, two different classes of deals are created: a class considering *institutional buy-outs* and a residual one. Results have demonstrated a highly negative significant relation between *family CEO* and the event of replacement and, again, a highly negative significant relation between *institutional buy-outs* and CEO replacement. Furthermore, despite evidences in the sample considered, the interaction between chief executive officers familiarly linked to the company and deals structured as institutional buyouts, has not showed significant results. The analysis is constructed on a sample of 941 deals taking place in the US between 2006 and 2016. No financial, insurance or real estate industries are included in the sample.

摘要

本文的研究重点是对并购后首席执行官更换事件的理解。特别的是，它的目的是通过区分家族式首席执行官和非家族式，找出更替事件与首席执行官的特点之间的联系。此外，还考虑了在分析不同类型的投标人时引入的含义。为此，两类不同的交易类型由此产生：一类考虑机构收购，另一类考虑剩余收购。研究结果显示，家族CEO与更换事件之间存在高度负向显著关系，机构收购与CEO更换之间也存在高度负向显著关系。此外，尽管考虑了样本中的证据，但与公司关系密切的首席执行官与机构收购交易之间的互动，并没有显示出显著的结果。该分析基于2006年至2016年美国发生的941宗交易的样本。该样本不包括金融、保险或房地产行业。

INTRODUCTION

According to Lord Justice Lindley[1], a company is "*an association of many persons who contribute money or money's worth to a common stock and employ it in some trade or business and who share the profit and loss (as the case may be) arising there from. The common stock contributed is denoted in money and is the capital of the company. The persons who contribute it, or to whom it belongs, are members. The proportion of capital to which each member is entitled is his share. Shares are always transferable although the right to transfer them is often more or less restricted*".

From this definition, not considering for a moment the concept of money, stock, earnings and losses, what emerges is the "association of many person" who altogether contribute to enlarge the value of a company. Still, "value" can be associated to economic value, market value or socioemotional wealth (later on, also SEW), as in the case of some special type of firm.

The totality of people running a company defines what is technically named as "*Corporate Governance"*, which consist of "*a system of structuring, operating and controlling a company such as to achieve the following: (i) fulfil the long-term strategic goal of the owners, [...] (ii) consider and care for the interests of employees, past, present and future, [...] (iii) take account of the needs of the environment and the local community, [...] (iv) work to maintain excellent relations with both customers and suppliers, [...] (v) maintain proper compliance with all the applicable legal and regulatory requirements under which the company is carrying out its activities*[2]". Thus, in other words, corporate governance is in charge of monitoring, disciplining and guiding the whole group of people who administrate a company. As a matter of fact, the totality of duties related to the governance has implication generally in the daily life of business, but intervenes also in case of extraordinary event such as the acquisition of the company itself by another company, an institution, a group of people, or a mix of the previous ones.

During the past years, increasingly attention has been given to mergers and acquisitions (M&A), very often accused to have progressively changed so much the processes behind the acquisition itself that the overall structure, hierarchy and configuration of the market has also been modified. The twenty years before the starting of the XXI Century were characterized by tremendous adaptations: while in the 1980s there were a predominance of hostile takeovers, in the 1990s the market started to be characterized by friendly mergers thus referring to a situation in which the two

---

[1] Nathaniel Lindley, Baron Lindley, (29 November 1828 – 9 December 1921) was an English judge. He was raised to be a Lord Justice of the Court of Appeal in 1881.

[2] Sheridan, T., Kendall, N., 1992. Corporate Governance. *London: Pitman Publishers*;

parts of the transactions were favourable to ensure the completeness of the deal[3]. If on one hand that period was characterized by a prosperous M&A activity fuelled by general sense of mutual agreements, on the other hand it was also witnessed an increasing flow of transformations in the corporate governance subject. Most of them included: (i) higher shareholder activism leading to a stricter monitor and influence over firm decisions by institutional investors[4]; (ii) a growing number of outside directors in the boards; (iii) an increase in the consciousness that CEOs were highly capable of generating value and positive cash flows for their company thanks to their resources[5].

Moreover, during last decades, the whole American market – and consequently the global one - was devastated by a series of financial scandals such as Enron Corporation, Tyco International plc, WorldCom. The Sarbanes-Oxley Act of 2002 came in response to those high-profile frauds attacking the overall corporate governance market of the US.

Among all the direct consequences of those events and related adjustments in the market for corporate control and M&As, there is a more active labour market for chief executive officers (later on, also "CEO") whom were increasingly experiencing higher turnover and replacement rates[6], lower tenure and an increasing number of external hires who always more frequent were replacing existing CEOs. Those years represented an "*interesting decade in which to explore the role of target CEOs in the governance of the merged entity*[7]".

Recent empirical studies have demonstrated that the CEO's role has got riskier and harder: in 2002 Rakesh Khurana reported that CEO turnover recorded an increase in 1990s relative to the previous years; later on, in 2008 Murphy and Zabojnik confirmed the evidences of previous results, even though the scale of the report was small (from 10 per cent to 11 per cent over the considered period). Lastly, some interesting data emerged from an empirical study[8] conducted by Kaplan and

---

[3] Andrade, G., Mitchell, M., Stafford., E., 2001. New evidence and perspectives on mergers. *Journal of Economic Perspectives*. 15(2) 103–120;

[4] Daily, C. M., D. R. Dalton, N. Rajagopalan., 2003. Governance through ownership: Centuries of practice, decades of research. *The Academy of Management Journal*. 46(2) 151–158;

[5] Bertrand, M., Schoar, A., 2003. Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*. 118(4) 1169–1208;

Wang, H.C., Barney J.C., 2006. Employee incentives to make firm-specific investments: Implications for resource-based theories of corporate diversification. *Academy of Management Review*. 31(2) 466–476;

[6] Lucier, C., Kocourek, P., Habbell, R., 2006. CEO succession 2005: The crest of the wave. *Booz & Company's Strategy + Bus. Magazine*, (May 30), http://www.strategy-business.com/article/ 06210?gko=6e014;

[7] Wulf J., Singh H., 2011. How Do Acquirers Retain Successful Target CEOs? The Role of Governance. *Management Science* 57(12):2101-2114. https://doi.org/10.1287/mnsc.1110.1414;

[8] Kaplan S.N., Minton B.A., 2012. How has CEO turnover changed? *International Review of Finance*, pp. 57-87. DOI: 10.1111/j.1468-2443.2011.01135.x;

Minton in 2012: annual CEO turnover was recorded at a level of 15.8 per cent, from 1992 to 2007, with an average tenure of less than 7 years. A table follows:

Table 1 - Data about Total CEO turnover from 1992 to 2000[9]

Time (years)	Turnover rate (%)	Tenure (years)
1992 - 1999	12.6	< 8
2000	16.8	≈ 6

The other important data emerging from the above-mentioned paper also proved an increase of the internal (or *board-driven*) turnover which rose from 10.9 per cent to 12.4 per cent from the starting date of the sample until last years. Additionally, among the total of the CEOs hired in 1992, only the 21.30 per cent kept their position whereas only the 16.35 per cent were still CEOs in 2007.

Furthermore, the relation between family firms and institutional investors has received always more attention and the interaction of those topics with the one of "acquisitions" is experiencing great development. The peculiarity of family firms is not only the heterogeneity of the group, where at each component is addressed a different level of family involvement, different size, industry and culture[10], but the fact that "succession" could prove to be a problem for the survival of the entity as family-owned and family-controlled[11]. Not always founding families are able to keep the control within the hands of the family and sometimes it could happen that an "external", thus a non-family member takes over the business. In order to maintain ownership IPO, trade sale and buy-outs are seen as options[12]. Buyouts usually involve private equity (PE) firms: in that situation PE and the incumbent or an external management take over the company[13]. Anyway, the risen of these options can be also forced by the different kind of situations.

Important studies have already investigated the probability for family firms to be acquired by a strategic or a financial investor, giving as a result that a higher degree of family ownership makes family firms more inclined to choose a strategic buyer and that the result can be extended also to the

[9] Data have been taken from Kaplan S.N., Minton B.A., 2012. Op. cit. – Anyway, the table is a reorganization of the data of the paper made by the author of this thesis.

[10] Chua, J. H., Chrisman, J. J., Steier, L. P., Rau, S. B., 2012. Sources of Heterogeneity in Family Firms: An Introduction. *Entrepreneurship: Theory and Practice*, 36(6), 1103–1113;

[11] Cabrera-Suárez, K., Saá-Pérez, P. de, García-Almeida, D., 2001. The Succession Process from a Resource- and Knowledge-Based View of the Family Firm. *Family Business Review*, 14(1), 37–46;

[12] Scholes, L., Westhead, P., Burrows, A., 2008. Family firm succession: The management buy-out and buy-in routes. *Journal of Small Business and Enterprise Development*, 15(1), 8–30;

[13] Meuleman, M., Amess, K., Wright, M., Scholes, L., 2009. Agency, Strategic Entrepreneurship, and the Performance of Private Equity-Backed Buyouts. *Entrepreneurship Theory and Practice*, 33(1), 213–239;

presence of a family member in the role of CEO and/or Chairman[14]. Later on, it will be clarified the great heterogeneity characterizing this type of firms[15] and how modifying the border in which family firms are defined, can generate a totally different output in terms of performance[16].

Lastly, an interesting point of reflection for the purpose of this work is the relationship between deals involving institutional investors and family firms, even though there seems not to be already considerable results. This is likely due to the difficulty to get access to data, given the high level of confidentiality surrounding buyout deals.

Although eminent studies have assessed the way private equities conduct deals and the perceptions arising from the decision-making process before it, those "perceptions and decision-making" about family firms can generate misrepresentation of the reality in investment decision-making of PEs[17]. A very good example of that could be the fact that usually private equities do not identify the potentiality hidden in family firms because they associate "*family*" to a weakness and they do not want be entrenched in the risks deriving from the family involvement and in the related strategies undertaken to mitigate those risks (such as earn outs, management changes, etc.).

Hence, the aim of this work is to study the likelihood of replacement of a chief executive officer when the company he or she is running, become the target of an acquisition. In particular, it will be studied if the probability is higher for a family member in the role of CEO, thus *family CEO*, or a CEO who is not associated to the founding family, thus *non-family CEO*. In addition, also the interaction with institutional buy-outs will be examined, in order to understand if this type of deal can have a different impact on the replacement of the chief executive officer.

To achieve the results expected from this analysis, the work will be organized as follow.

The *first chapter* describes the overall macro-economic and social environment in which the work is set. The sample that will be analysed with a statistical model contains deals that have taken

---

[14] Pierini L, Bozzolan S, Villalonga B., 2019. To whom does the family sell the firm? The determinants of the choice of buyer in acquisitions. *Working paper*;

[15] Tsang, E. W. K., 2002. Learning from overseas venturing experience: The case of Chinese family businesses. *Journal of Business Venturing*, 17(1), 21–40;

Chrisman, J.J., Chua, J.H., Pearson, A.W., Barnett, T., 2012. Family Involvement, Family Influence, and Family-Centered Non-Economic Goals in Small Firms. *Entrepreneurship: Theory and Practice,* 36(2), pp.267– 293;

[16] Villalonga, B., & Amit, R., 2006. How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2), 385–417;

[17] Thaler, R. H., 1993. Advances in behavioral finance. *New York: Russell Sage Foundation*;

Ackert, L. F., Deaves, R., 2010. Behavioral finance: Psychology, decision-making, and markets. *Mason, OH: South-Western Cengage Learning;*

place between 2006 and 2016, thus the ten-year-period including both financial crisis and recovery periods. Then, enough space is given to theoretical concept and framework in order to clear understand the different element of the literature that will be indagated and studied later on.

The *second chapter* deeply examines and investigate previous thesis, papers and academical researches to understand which the starting point for this work is. The approach used in this chapter is merely deductive: the first part focuses on the literature involving *turnover* and *replacement* related to chief executive officers both internal and external; the second part is dedicated to the relation and the space that this topic occupies when associated with the whole sphere of acquisition and deals in general; the third part, instead, is focused on the involvement of family and what happens to the chief executive officers of family firms when they become the target of an acquisition.

The *third chapter* defines the hypothesis that have arisen from the previous chapter and a logit regression model to validate them is presented. In particular, this work will investigate the probability of replacement for *family* and *non-family CEOs* and, successively, the impact that institutional investors have on the replacing decision. Thus, a first general model will be presented, containing all the set of variables considered fundamental for the understanding of the issue; then, a reduced model containing a new interaction terms will be introduced. Finally, main evidences and results are described right after the analytical section of this chapter.

Lastly, *Discussion and Conclusion* tries to give an understanding of the results of the model as well as to highlight the limitations of the analysis. This last section is also aimed, as far as possible, at underlining some consideration for futures investigations.

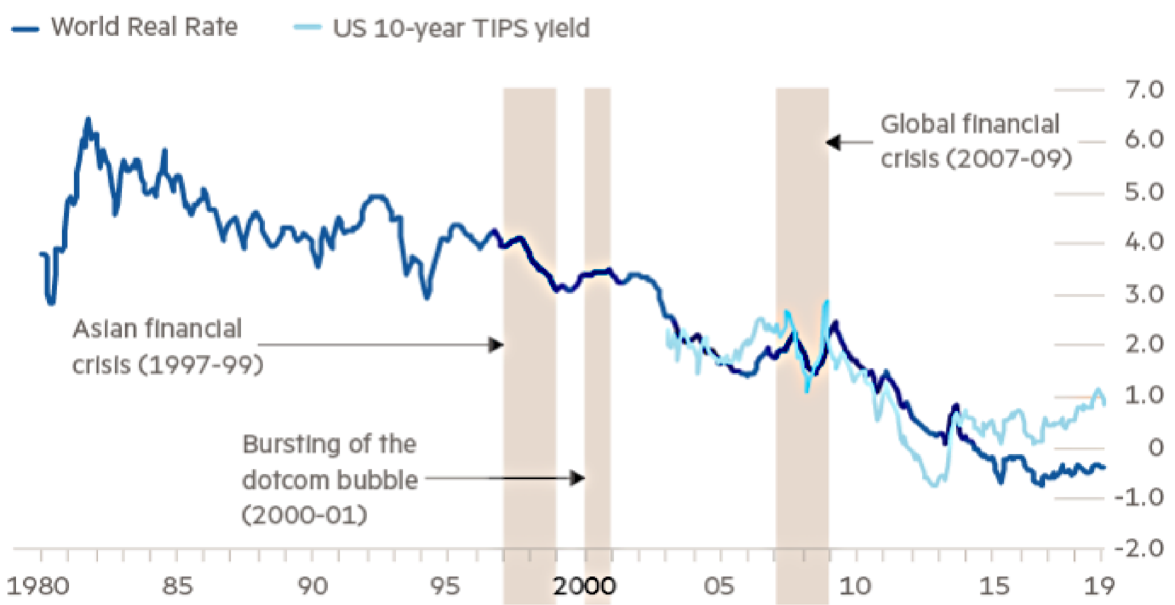
CHAPTER ONE: THEORY AND IMPLICATIONS

1. MACRO-ECONOMIC ENVIRONMENT

The following study will be focused on the period ranging from the beginning of 2006 and the end of 2016, even though, in order to have the biggest understanding possible of the topic, this timeline limitation is only applied to the regression analysis presented further on. No time limits are applied for references and literature review. However, before going ahead with the dissertation, it is deemed important to provide a general overview of the macro-economic situation shaping those years in order also to understand M&A activity of those years.

The 10-years-period considered for the analysis turns its back to a series of dramatic events that eroded markets and investors. The beginning of the 21st Century was characterized by the explosion of Internet: investors saw potential growth in this new business, and they started talking about a "new economy", which was going to come into the world. However, in April 2000 an inflation report introduced the speculative bubble which would have later caused huge losses[18]. Anyway, the most terrifying and dramatic event of that period was the 9/11 terrorist attacks, which shaped the future of the global economic climate forever. New York stock exchange closed for several days and losses for $60 billion were estimated[19].

Figure 1 - Real interest rates collapse

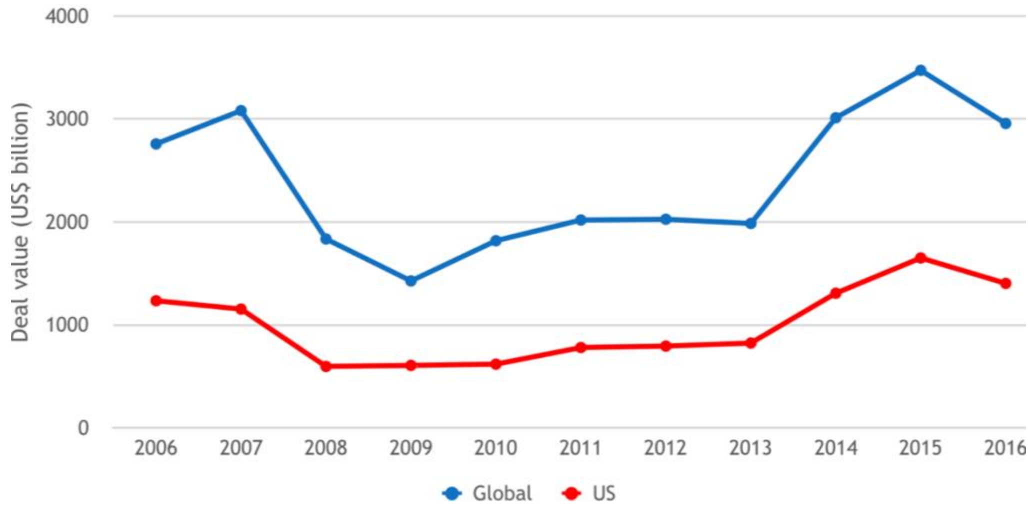


[18] Wollscheid, C., 2012. Rise and Burst of the Dotcom Bubble: Causes, Characteristics, Examples. *GRIN Verlag*. p. 1;

[19] Financial Times. School economics: https://www.ft.com/content/4ea12204-2714-11e9-a5ab-ff8ef2b976c7 (Monetary policy has run its course. Monetary policy);

Year 2001 was the year of the corporate scandals: names as Enron, Arthur Andersen, Tyco, WorldCom, acquired a global resonance because of corporate fraud scandals that led to bankrupt those companies. The consequences of such dishonest behaviours led to the enactment of the Sarbanes-Oxley Act in 2002: from that moment, economic punishments started to be issued and principles of independence from their clients were established for accounting firms. Investors were experiencing a period of high scepticism toward the overall global market. In 2002 the market reached declines never seen since 1998 while investors were discouraged and were profressively losing any sort of confidence in the stock market. However, countries such as China and India seemed not to be touched by those negative events and continued growing exponentially. At the beginning, US started to outsource from the Asian countries because of the law costs of the labour market. Hence, when the "rising giants" realized the important of their own talents, they started to keep their human capitals inside the national borders.

Figure 2 - M&A activity from 2006 to 2016[20]



Another catastrophic series of events for the global economy happened between 2007 and 2008: the sub-prime housing crisis and the housing bubble. The problem of any bubbles in general is that, sooner or later, they will burst and that happened also at the time. During the first year of that century, motivated by a booming American housing market and the related very favourable prices, just about anyone wanted to buy a house. And just about anyone managed to get the house thanks to the loan issued from the banks. All those people who were rated as bad creditors or not qualified for a mortgage in the past, were now allowed to get money from banks at very low interest rates and with inflated values.

[20] White and Cases, Mergers: https://mergers.whitecase.com/ (M&A activity by value 2006 – 2016);

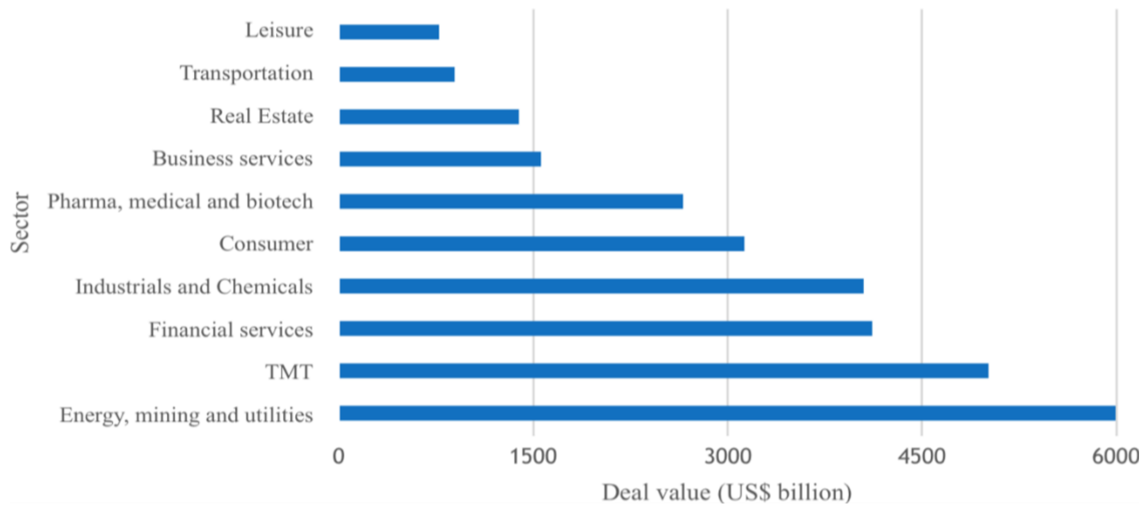
Furthermore, the mechanisms of some of those loans were such that the mortgage payment increased as times went by. When the interest rates started to increase and loans were getting always more and more expensive, people started not to repay their mortgages and financial institutions were reporting in their balances credits that would have never been repaid. Thus, the credit crunch exploded.

The following were years of profound economic downturn across the whole world because of the sub-prime mortgage crisis, scandal and consequent failure of financial institutions. Anyway, little signs of recovery started to be recorded between the end of 2009 and the beginning of 2010, even though they did not represent stable growth at all.

Obviously, the declines of the global economy had negative impact on the overall financial market. Hence, according to Michael Carr[21]: "*In the aftermath of 2008 it took a good five years for people to start thinking about M&A again. It was 2013 when we entered a new era that started the current environment. Five years later, we are now in a place where shareholders are demanding growth and we're seeing both horizontal and vertical transactions. All of which are signs of a strong market.*"

Nevertheless, American market continued to be the oasis for such activities. Deals with American target companies accounted for very incredible dollar values, while the European recovery was still slow and heavy. Anyway, while U.S. and European companies were struggling against the consequences of the global crisis, the situation in the Asian continent was better. Acquisitions with Asian targets boomed, and data reported by Bloomberg showed a percentage of 19 per cent of total world transaction (compared to 12.6 per cent level pre-crisis).

Figure 3 - M&A activity: Top sectors by value 2006 - 2016



[21] Michael Carr, global co-head of Mergers and Acquisitions at Goldman Sachs Group Inc.

In addition, the sectors where mergers and acquisitions gained the first place in terms of deal value was "Energy, mining and utilities", followed right after by "TMT" (Technology, Media and Telecom) and, later on, by "Financial Services". The worst places in the top 10th sectors classification are occupied instead by "Leisure, transportation and real estate industries".

2. DEFINITIONS

For the purpose of this work, it is considered appropriate to give some definitions and explanations about the main concepts which will be discussed further. The issues which will be dealt with in the dissertation include the following theoretical concepts:

(i) Deal methods;
(ii) Target firm and acquirer firm;
(iii) Family firms;
(iv) Board of directors and Chief Executive Officers (CEOs).

The list above-mentioned will be now discussed in detail using a deductive approach.

2.1 DEAL METHODS

Mergers and Acquisitions – the terminology just proposed is evidently composed of two words, thus two different notions. To fully understand its meaning, it is deemed necessary to separate the two definitions. A *merger* is the combination of two companies after which only the bidding company survives, whereas the other simply disappears[22]. An acquisition, instead, defines the situation in which one company gains a controlling stake in another company[23] or a selection of asset of it. Thus, this latter process can be defined as the purchase of an asset, a division, or an entire company[24]. However, the distinction among the two words is merely theoretical since the final operation leads to the same result: two entities once in different businesses, with different products categories and separate ownership are now operating together to accomplish strategic or financial objectives[25]. The questioned objectives are: (a) growth: M&As are good means for firms to enlarge

[22] Gaughan, P.A., 2007. Mergers, Acquisitions, and Corporate Restructurings. *John Wiley & Sons*;
DePamphilis, D., 2003. Acquisitions and Other Restructuring Activities: An Integrated Approach to Process, Tools, Cases, and Solutions. *Butterworth-Heinemann*;
[23] This company can be a subsidiary, or a totally new company not included in the ownership structure of the bidder;
[24] Scott, D.L., 2003. Wall Street Words: An A to Z Guide to Investment Terms for Today's Investor. *Houghton Mifflin Harcourt (first published January 28th 1988)*;
DePamphilis, D., 2003. Op.cit.
[25] Sherman, A.J., Hart, M.A., 2006. Mergers and Acquisitions from A-Z. *Amacom*;

their capital base[26]; (b) access to intangible assets: human capital, structural capital and customer capital are good examples[27]; (c) financial synergies: tax benefits, changes in the market regulation, changes in technology and industry, cost reduction and so on[28]. Everything set up until now was to contextualize mergers and acquisitions as a global trend lining up with corporate restructuring strategies, thus being part of the set of actions put in place during the maturity process of a powerfully built economy which is able to generate strong returns to investors[29].

Historically, M&As have received great attention thanks to the high impact this phenomenon has produced on the overall global economy. From the last years of 19th Century until 2000, five waves of mergers and acquisitions have spanned over those decades carrying with them different backgrounds, different reasons and having different results in terms of changes on the market. Each of these waves has in common both the starting period, and the final situation: they started in period of flourishment or recovery, in which economy was fuelled by a positive spirit and they all came to an end because of a world war, or global crisis, or market depression.

The first wave was recorded between 1893 and 1904: it followed a period of great expansion and established the fundamentals for the horizontal consolidation of manufacturers within one industry. The immediate consequence of this first wave was the creation of the first 'giants' of the oil industry and the rise of monopolies[30]. In addition, the improvement of the US market with the reformation of the New York Stock Exchange made M&A more accessible and easier to take in place. The beginning of the First World War and the exacerbation of the antitrust legislation marked the end of the wave.

The second wave started in 1910s and it took all the possible advantages from the end of the First World War exploiting the potentialities deriving from the recovery period. This wave was the first characterized by friendly acquisitions, which in most of the cases were paid more frequently with equity. The main players of this period were the small companies survived to the previous wave which wanted to gain economies of scale and acquire fresh knowledges and resources to oppose

[26] Andrade, G., Stafford, E., 2004. Investing the economic role of mergers, *Journal of Corporate Finance*, 10: 1-36;

[27] Saint-Onge, H., Chatzkel, J., 2009. Beyond the Deal: Mergers & Acquisitions that Achieve Breakthrough Performance Gains. *McGraw-Hill;*

[28] Cassiman, B., Colombo M.G., 2006. Mergers and Acquisitions: The Innovation Impact. *Edward Elgar Publishing*;

[29] Tamosiuniene, R., Duksaite E. The Importance of Mergers and Acquisitions in Today's Economy. *Vilnius Gediminas technical university, Sauletekio ave. 11, Vilnius, Lithuania*;

[30] The first evidences of the horizontal mergers were: the "Standard Oil Company of New Jersey", (1899); the "United States Steel Corporation" (1901); the "International Harvester Corporation" (1902). Cleverism: https://www.cleverism.com/historical-analysis-ma-waves-mergers-acquisition/ (A Historical Analysis of M&A Waves);

themselves to the power monopolists. Anyway, the urge and the psychological violence of the Great Depression became a setback for further development of the second wave.

The third wave turned upside down the concept of M&As which until that moment was the responsible of the horizontal consolidation of the market. From 1955 to 1980, the consolidation started to be vertical, giving birth to the concept of diversification and, subsequently, to conglomerates. At the end of 1970s, the third merger wave started to collapse, and it definitively ended in 1981 with the oil crisis. Peculiarities of this wave were both the divestiture, following most of the bust-up[31] takeovers and the leverage buy-out.

The fourth wave has taken place in the period comprises between 1984 and 1989 and was aimed at eliminating conglomerates and their relative inefficiencies[32]. It has been demonstrated that in the 1980s there was a positive relationship between a bid with a related target (operating in the same business) and the stock market return for shareholders of the latter. The relationship was negative when the target firm was unrelated, (thus not operating in the same industry) indicating that the market generally reacts in a negative way when stressed with unrelated diversification strategies[33].

Finally, the fifth wave is attributable at the period starting from 1993 until 2000: the financial markets were riding the surge of globalization experiencing a very booming period. The fuel of the high number of cross-border acquisitions was without any doubts the technological innovation with a more intense focus on the search for sustainable advantages for the companies. The acquisitions were in most of the cases friendly, and mostly paid with equity. The end was determined by the economic recession that caused global stock market crash[34]. According to the IMAA Institute, the XXI Century is now being characterized by other two M&A waves: the sixth went from 2003 and 2009, whereas the seventh is the one we are experiencing nowadays which started in 2012[35].

Institutional buy-out (IBO), Management buy-in (MBI) and *Management buy-out (MBO)* – In the US literature, IBOs and MBIs are both included into the macro-category of Leveraged Buyouts

[31] The term was identified by Morck, R., Shleifer, A., Vishny, R.W., 1991. Do Managerial Objectives Drive Bad Acquisitions? *The Journal of Finance*, Vol. 45, No. 1 (Mar., 1990), pp. 31-48;

[32] Lyandres E., 2007. Strategic Cost of Diversification. *The Review of Financial Studies*. Vol. 20, No. 6 (Nov., 2007), Oxford University Press. Sponsor: *The Society for Financial Studies*, pp. 1901-1940;

[33] Morck, R., Shleifer, A., Vishny, R.W., 1991. Op. cit., p. 33- 34;

[34] Sudarsanam, S., 2010. Creating value from mergers and acquisitions: the challenges. *London: Prentice Hall international.* 2nd ed. xxvi, p. 786;

[35] Institute for Mergers, Acquisitions and Alliances (IMAA): https://imaa-institute.org/m-and-a-us-united-states/;

(LBOs)[36]. A leveraged buyout is defined as "the acquisition of a company, division, business, or collection of assets ("*target*") using debt to finance a large portion of the purchase price. The remaining portion of the purchase price is funded with an equity contribution by a financial sponsor ("*sponsor*"). LBOs are used by sponsors to acquire a broad range of businesses, including both public and private companies, as well as their divisions and subsidiaries. The sponsor's ultimate goal is to realize an acceptable return on its equity investment upon exit, typically through a sale or IPO of the target". Traditionally, debt represents 60 per cent or 70 per cent of the financing structure, while equity represents the remaining 30 per cent or 40 per cent[37].

However, when the current management wants to purchase a controlling percentage of ownership in the firm and it is looking for institutional support from private equities to fund the transaction, the operation is called "Management Buy-Out" (MBO). The final aim is to take the company private[38]. IBOs, instead, (also named Bought Deals or Finance Purchases) consists of bidding groups of institutional investors and private equities. The main difference between MBOs and IBOs, is whether the management team gained its equity stakes by being part of the bidding group (MBO), or by being part of the remuneration package (IBO). In an MBI, outside managers purchase the overwhelming majority of the equity[39].

Expressing the concept in other words, if the management takes over the company, the LBO is named management buy-out; if an outside management team purchases the company, and it subsequently goes private, the LBO is named management buy-in.

2.2 Target company and Acquirer company

During and M&A process two different spheres of interest will arise: the sell-side and the buy-side, thus two different names will be used to indicate the two entities involved in the whole process. The *target company* will be the one who will sell, or that will be acquired, whereas the *acquirer company* will be the bidder, or the one that with an offering will acquire the target. Generally speaking, any types of company can be both buyer and acquirer. For the purpose of this work, it is

[36] Renneboog L., Simons T., Wright M., 2007. Why do public firms go private in the UK? The impact of private equity investors, incentive realignment and undervaluation. *Journal of Corporate Finance* 13 (2007) 591–628;

[37] Rosenbaum J., Pearl J., 2009. Valuation, Leveraged Buyouts, and Mergers & Acquisitions. *Published by John Wiley & Sons, Inc., Hoboken, New Jersey. Published simultaneously in Canada*, p. 161;

[38] Wright, M., Thompson, S., Chiplin, B., Robbie, K., 1991. Buy-Ins and Buy-Outs: New Strategies in Corporate Management. *Graham & Trotman Ltd., London;*

[39] Renneboog L., Simons T., Wright M., 2007. Op. cit.;

useful to make a distinction between *strategic* and *financial* buyers, because of their impact on the M&A process and the future direction the company will take.

A *strategic buyer* is commonly a firm that operates in the same industry of the target, notwithstanding they can also work in different industry and they are willing to diversify their business with the acquisition. The term *financial buyers*, instead, refers to a group including private equity firms, financial conglomerates and similar[40]. Financial and strategic buyers generally differentiate for the selection of the targets during M&A activities, thus different are the results and the impact of their choices on the overall structure and strategy of the target companies as well as of their entire portfolio[41]. To give some examples about how the two different type of buyers operate in the market: a financial buyer usually hold the target company in its portfolio for an average of 3.9 years[42], while strategic buyers' investment are characterized by an indefinite holding period, even if not profitable divisions are generally divested later on[43]. Furthermore, financial buyers can provide skills related to corporate governance thanks to active participation in the target's board[44] as well as knowledges linked to the capability to expand the target's set of financial resources, even if they do not contribute to the daily business or management of the company[45]. Strategic buyers, on the other side, add value to the acquired business thanks to operational resources, relations with internal and external stakeholders (customers, employees, suppliers, etc.) and, most of all, they are able to enhance or enlarge the reputation of the company in the industry[46].

2.3 Family Firms

Generally speaking, scholars often identify as family firms: (i) firms where members of a family own more than 50 per cent of the total shares[47]; (ii) firms where members of the family dominate both board and top management team; (iii) firms that think to be a family firm behaving

---

[40] Pierini L, Bozzolan S, Villalonga B., 2019. Op. cit.;

[41] Campbell A., Goold M., Alexander M., Whitehead J., 2014. Strategy for corporate level, 2nd edition, New York: *Wiley*;

Puranam P., Vanneste B., 2016. Corporate Strategy: Tools for Analysis and Decision-Making. *Cambridge: Cambridge University Press;*

[42] Acharya VV, Gottschalg OF, Hahn M, Kehoe C., 2013. Corporate governance and value creation: Evidence from private equity. *The Review of Financial Studies*, 26(2): 368– 402;

[43] Porter M., 1987. From competitive advantage to corporate strategy. *Harvard Business Review* 65(3): 43–59;

[44] Acharya VV, Gottschalg OF, Hahn M, Kehoe C., 2013. Op. cit.;

[45] Anders, G., 1992. The barbarians in the boardroom. *Harvard Business Review*, 70(4): 79–87;

[46] Porter M., 1987. Op. cit.;

[47] Westhead, P., Cowling, M., 1998. Family Business Research: The Need for a Methodological Rethink. *Entrepreneurship Theory and Practice*, 23, 31-57;

like that. Being private seems not to be a prerequisite since also listed companies can be family firms: in this case a minor percentage of shares (e.g. 30 per cent) is enough to allow the control of the firm.

In recent years, researchers are struggling to find a complete and clear definition of family firms, by investigated every single aspect of this particular type of firm. The very first attributable definition is a residual one: it is the result of a dichotomous discrimination between family and non-family firms[48], even though previous studies have totally ruled out the possibility to include all the peculiarities of family firms in a single residual definition[49]. Later on, starting from the name itself of the category, it has been investigated the concept of "family" as the major "component-of-involvement"[50]. The involvement of the family was identified to regards ownership, management as well as governance. Anyway, although the above-mentioned involvement is measurable, it does not explain the totality of the concept underlying the term "family" since it is not able to capture all the elements behind firm performance. Finally, family ownership can be undoubtedly used to justify some strategic decisions put in place by family boards or family management, but it is not able to give justifications or evidences for financial figures[51]. Thus, the component that really matter is "behaviour". According to Pearson et al. and Zellweger et al., behaviour can represent the power and the influence of the family on the firm strategy, thus explaining the distinctiveness of family firms (as previously argued by Chua et al. 1999).

Interestingly, in 2002, Astrachan et al. developed a scale measuring the degree of family involvement in the business[52]. The F-PEC scale (this is the name) is a continuous scale including the entire sphere of family influence: power (P), experience (E) and culture (C). The "power" is aimed at defining influence in relation to ownership, governance and management. The word "experience" wants to sum up and measure goals achieved over the dynasties and how the transition from a generation to another has been overtaken. Culture, instead, analyses the mutual impact of family over

[48] Beck, S., Kenning, P., 2015. The Influence of Retailers' Family Firm Image on New Product Acceptance: An Empirical Investigation in the German FMCG Market. *International Journal of Retail & Distribution Management*, 43(12), 1126-1143. DOI: 10.1108/IJRDM-06-2014-0079;

[49] Klein, S.B., Astrachan, J.H., Smyrnios, K.X., 2005. The F-PEC Scale of Family Influence: Construction, Validation, and Further Implication for Theory. *Entrepreneurship Theory and Practice*, 29(3), pp.321–339.

[50] Chrisman, J.J., Chua, J.H., Sharma, P., 2005. Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship: Theory and Practice*, 29(5), pp.555–575;

Chua, J.H., Chrisman, J.J., Sharma, P., 1999. Defining the Family Business by Behavior. *Entrepreneurship: Theory & Practice*, 23, pp.19–39;

[51] Zellweger, T.M., Eddleston, K., Kellermanns, F.W., 2010. Exploring the concept of familiness: Introducing family firm identity. *Journal of Family Business Strategy*, 1(1), pp.54–63;

[52] Astrachan, J.H., Klein, S.B., Smyrnios, K.X., 2002. The F-PEC Scale of Family Influence: A Proposal for Solving the Family Business Definition Problem. *Family Business Review*, 15(1), pp.45–58;

business decision and vice-versa. Anyway, the F-PEC scale carries with it some weaknesses, especially for the fact that not all the dimensions are easily and fully quantifiable.

All the different definitions given until now, are totally in line with the fact that family firms in general are not homogeneous. They, instead, benefit of great heterogeneity involving capabilities, resources, involvement and so on[53]. Therefore, having determined that so far it is not possible at all to give a unique definition for family firms, we will refer in this work to them with a definition as limitless as possible: those in which "*multiple members of the same family are involved as major owners or managers, either contemporaneously or over time*"[54].

Statistically, family firms are nowadays spread all over the world and they are presents in almost all the biggest global economies. Considering the first top 20 family businesses, ranked by revenues, the podium is detained by an American company (1st and 3rd places) and a German one (2nd place).

Table 2 - Top 20 Family Business[55]

Rank	Company name	Family owner(s)	Founded	Listing status	Country	Family shareholding	Sector
1	Walmart Inc.	Walton	1945	Public	USA	50.70	Retail and Consumer Products
2	Volkswagen AG	Porsche and Piech	1937	Public	Germany	52.20	Automotive & Assembly
3	Berkshire Hathaway Inc.	Buffett	1955	Public	USA	37.60	Wealth & Asset Management
4	Exor NV	Agnelli	1899	Public	Netherlands	53.00	Wealth & Asset Management
5	Ford Motor Company	Ford	1903	Public	USA	40.00	Automotive & Assembly
6	Schwarz Gruppe	Schwarz	1930	Private	Germany	100.00	Retail and Consumer Products

[53] Chrisman, J.J., Chua, J.H., Pearson, A.W., Barnett, T., 2012. Op. cit.;

[54] Miller, D., Le-Breton Miller, I., Lester, R., Canella, A., 2007. Are Family Firms Really Superior Performers. *Journal of Corporate Finance*, Vol. 13, Issue 5;

[55] Family Capital: https://www.famcap.com/the-worlds-750-biggest-family-businesses/ (The World's Top 750 Family Businesses Ranking. "To be considered a family business, Family Capital has selected only companies that are 20 years (from June 2018) and older. This 20-year time frame corresponds on average with a level of transition from first generation control to at least some participation of the next generation of the family owners);

7	BMW AG	Quandt and Klatten	1916	Public	Germany	72.70	Automotive & Assembly
8	Cargill, Incorporated	Cargill and MacMillan	1865	Private	USA	88.00	Diversified industries
9	Tata Sons Ltd	Tata	1868	Private	India	73.40	Manufacturing & Industrial Products
10	Koch Industries, Inc.	Koch	1940	Private	USA	84.00	Manufacturing & Industrial Products
11	Comcast Corporation	Roberts	1963	Public	USA	33.60	Technology, Media and Entertainment
12	Pacific Construction Group Company Ltd	Yan	1995	Private	China	90.00	Real Estate, Hospitality & Construction
13	Dell Technologies Inc.	Dell	1984	Public	USA	75.00	Technology, Media and Entertainment
14	Aldi Group	Albrecht	1913	Private	Germany	100.00	Retail and Consumer Products
15	Amer International Group Company Ltd	Wang Wenyin	1994	Private	China	100.00	Manufacturing & Industrial Products
16	ArcelorMittal	Mittal	1976	Public	Luxembourg	37.40	Mining & Metals
17	Auchan Holding SA	Mulliez	1961	Private	France	87.80	Retail and Consumer Products
18	Gunvor Group Ltd	Törnqvist	1997	Private	Switzerland	60.00	Power & Utilities
19	Reliance Industries Ltd	Ambani	1966	Public	India	45.20	Oil & Gas
20	LG Electronics Inc.	Koo	1947	Public	South Korea	37.50	Retail and Consumer Products

The most recent highlights coming from different areas of the world have shown the huge impact family firms have had on the country in which they have operated. In China, 85.4 per cent of Chinese private enterprises are family owned[56] with a promise of continuation over the years since next generations have demonstrated their interest in keeping succession line within the families.

[56] Sun Yat-sen University, Zhejiang University and Hong Kong-based family firm Lee Kum Kee, 2010.

In Europe, family firms represent 1 trillion Euro in turnover (60 per cent of all European enterprises)[57], accounting for 9 per cent of the European Union's GDP. Moreover, they have created more than 5 million jobs in the old continent in total.

As UK is concerned, English family firms generates the 25 per cent of the total national GDP even if the intergenerational situation of the United Kingdom is not so transparent because of issues concerning conflicts between generations.

Additionally, from the data reported it seems that Indian family firms account for two-thirds of India's GDP representing 90 per cent of gross industry output, the highest percentage globally stated. Furthermore, Indian family business are able to generate 79 per cent of private sector employment but only 13 per cent of family businesses survive to the third generation; a figure that declines to 4 per cent when the forecasting is extended to the fourth. In the entire Middle East, family firms are involved in more than 80 per cent of the totality of its businesses. For this reason, family businesses are able to influence the culture, the political environment and the economy of the whole area. Finally, according to the Harvard Business School, at least half of all-American companies are family firms and just over half of all listed companies in US are family owned and controlled[58].

2.4 Board of directors and the role of CEOs

When companies compete each other, human resources are the truly determinants of the success since they are able to affect and modify the point of view of the entire organization. Following Barney's framework[59], human resources have these features: they are valuable, rare and non-substitutable. Having those attributes in the pocket of the company, we can identify them as driver of superior performance for the firm as to enable the latter to get sustainable competitive advantages. Anyway, although also in this case, they can evolve as a form of competitive advantage for the firm, their contribution has to be sustainable since they are clearly "imitable". Considering that the most important and valuable asset for a corporation is its staff, thus more formally, its employees, because of their high-skilled knowledges and competences, managers can shape future developments and progresses of the firm. Thus, it could be argued that the future steps a firm will take are strictly related to the capabilities of the personnel, and – going more in detail – of the senior executive contribution[60].

[57] KPMG: https://assets.kpmg/content/dam/kpmg/pdf/2013/11/kpmg-family-business-insights.pdf (Family Business, 2013. KPMG International);

[58] PWC: https://www.pwc.com/m1/en/publications/documents/family-firm-english.pdf (The Family Firm: Central to the success of the Middle East. PwC Family Business Survey 2012. Jan 2013);

[59] Barney J., 1991. Firm resources and source of competitive advantage. *Journal of Management*, 1991, vol. 17, No. 1, 99-120;

[60] Nayyar, P.R., 1993. Performance effects of information asymmetry and economies of scope in diversified service firms. *Academy of Management Journal*, 36(1), 28–57;

However, although a CEO is able to formulate complex and precise strategies for the entire firm, his or her decisions are subject to limits such as personal preferences and attitudes as well as other any kind of potential bias[61]. This situation generates a cognitive structure to capture information and rationalize them in the most efficient way. For Hambrick and Fukutomi, 1991, this is a sort of "paradigm" starting from the very first moment the CEO enter that position. As soon as the paradigm is formed, the more the CEO spend time in that role, thus increasing his or her tenure within that specific duty in the company, the more is likely to augment the above-mentioned paradigm. According to the theorists, one of the factor responsible for that issue is the scope of information search, since at the beginning of his or her office, a chief executive officer is more likely to be informed, to be up to date with the market, and look up for information coming from the external environment. As time goes by, tenure erodes a little by little the scope of information of the chief executive officer[62]. A relevant study has been conducted on this issue by Gabarro, in 1987, highlighting that the vast majority of innovating changes are made within the first two years of a CEO enrolment in the company, but those changes are likely to decrease further on[63].

Anyway, boards of directors are the most important players within the organization, and they have the responsibility to take the most important decisions for the firm. Their major tasks consist of acting as an advisor to CEOs, monitoring as well as disciplining them (of course, when it is required). In order to ensure the effectiveness of the board itself, the board has also to show a high degree of independence. About this topic, according to the CFA Institute "*To be effective, boards must take steps, both in their structures and in their nominating procedures, to ensure that insiders and executive owners are unable to exercise undue control over the board's activities and decisions. Company boards should have an independent majority* (…) that *is more likely to consider the best interests of shareowners first. It also is likely to foster independent decision-making and to mitigate conflicts of interest that may arise"*[64]. Thus, the idea coming from the above definition could be that directors should not have personal, financial, or business connections to the chief executive officer or other members of the top management team. The final goal of the concept of "independence" is

---

[61] Cyert, R.M., March, J.G., 1963. A Behavioral Theory of The Firm. *Carnegie Institute of Technology Citations*, 14,451;

March, J.G., Simon, H., A., 1958. Organizations. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*, available at SSRN: https://ssrn.com/abstract=1496194;

[62] Hambrick, D. C., Fukutomi, G.S.,1991. The seasons of a CEO's tenure. *Academy of Management Review*, 16: 718-742;

[63] Gabarro, J. J., 1987. The dynamics of taking charge. *Boston: Harvard Business School*;

[64] CFA Institute: https://www.cfainstitute.org/en/advocacy/issues/board-independence. CFA Institute, a global, not-for-profit organization, is the world's largest association of investment professionals.

needed not to influence the attitude of the directors towards management and prevent them from disciplining top executives when it is revealed to be necessary[65].

From the literature emerges that boards typically have to accomplish three main tasks: strategic, control and network. First, they have to clearly highlight the mission and the vision of the company as well as create and approve the strategic plan (strategic). Secondly, board must monitor firm performance, operations and management to ensure the reachability of strategic goals (control). Finally, they help in the process of enhancement of corporate reputation and prestige by managing the connections and relations with stakeholders and other investors. Effective boards are composed of a mix of competences and knowledge held by individuals with different ages, coming from different countries and, most of the all, with different backgrounds. In particular, there are different types of directors: chief executive officer, inside or executive directors, outside or non-executive directors (independent)[66]. Big relevance for the purpose of this work is assumed by CEO.

The chief executive officer (CEO) performs one of the most important roles within the organization and it is one of the "seat" to which has always been given careful thought. The major researches and focus of the last fifteen years derived from the failures of big names such as WorldCom, Enron and Arthur Andersen[67] and later on, the bailout of banking and automotive industries during 2009 and 2010. Because of these scandals, markets started to frown on CEO compensation accused to be too high and, above all, it was considered immoral and unethical to link it to the performance of the company[68]. For what said until now, it seems of great importance to delineate the role of the chief executive officer.

As the world is getting more and more connected with the globalization and offshore strategies are gaining tremendous ground, CEOs are fully-fledged global leaders. As a consequence of that, CEOs are not anymore only responsible for the influence and the impact on the overall firm environment, but in some cases, they can also determine the course of countries or big areas of the

---

[65] Blair M., 2003. Shareholder Value, Corporate Governance, and Corporate Performance - A Post-Enron Reassessment of the Conventional Wisdom. In: Cornelius P.K., Kogut B., 2003. Corporate Governance and Capital Flows in a Global Economy, *Oxford University Press*, 2003;

[66] Klaus J. H., Patrick C. L., 2004. Board Models in Europe. Recent Developments of Internal Corporate Governance Structures in Germany, the United Kingdom, France, and Italy. *Law Working Paper N°. 18/2004*. January 2004;

[67] Matsumura, E. M., Shin, J. Y., 2005. Corporate governance and CEO compensation: Intended and unintended consequences. *Journal of Business Ethics*, 62(2), 101-113. doi:10.1007/ ss10551-005-0175-7;

Zhang, Y., Wiersema, M. F., 2009. Stock market reaction to CEO certification: The signaling role of CEO background. *Strategic Management Jour*nal, 30, 693-710. doi:10.1002/smj.772;

[68] Matsumura, E. M., Shin, J. Y., 2005.Op. cit.;

world[69]. In 2006, it was reported that "*of the hundred largest economic entities in the world, 46 were countries, and 54 were companies*"[70].

In 1973, after long researches, Henry Mintzberg published one of his masterpieces: "*Nature of Managerial Work*". This academic work is considered a milestone in the literature about the role of CEOs: the paper underlines six features characterizing the entire daily work conducted by CEOs. The six role categories are: (i) informational, (ii) interpersonal, (iii) decisional, (iv) operational, (v) strategic, and (vi) diplomacy.

The *Information* role represents communication duties proper of the chief executive officers: they have to receive and transmit information from the inside to the outside of the organization to create of culture of knowledge sharing[71]. This role is subdivided in:

a. Monitor: collection and reception information to understand organization culture;
b. Disseminator: transmission of special information within the organization;
c. Spokesperson: spreading of information into the organization;
d. Commander: giving orders to employees.

The *Interpersonal* role is very close to the information one, since the moment in which establishing interpersonal relationship is more feasible is during the process of receiving and sending information. It is based on:

a. Leader: motivation function for subordinates;
b. Motivator: establishment of excitement and curiosity in the firm, thus people are always stimulated in achieving knowledges and higher level of performance;
c. Director: CEOs are in charge of putting the right person in the right place.

The *Decisional* role consists in showing the ability to take decisions up to date and which are capable of being challenging, stimulating, entrepreneurial and innovative. It contains eight sub roles for CEOs:

---

[69] Boatright, J. R., 2009. From hired hands to co-owners: Compensation, team production, and the role of the CEO. *Business Ethics Quarterly*, 19, 471-496;

Edersheim, E. H., 2007. Peter Drucker's "unfinished chapter": The role of the CEO. Leader to Leader. *Ethics Resource Center*. 45, 40-46. doi:10.1002/ltl.242;

[70] Edersheim, E. H., 2007. Op. cit.;

[71] Carlson, S., 1951. Executive behavior. Stockholm, *SE: Stromberg's*;

Mintzberg, H. (1973). The nature of managerial work. *New York, NY: Harper & Row;*

a. Entrepreneur: introduction of new idea and changes in the organizations;
b. Disturbance handler: CEO as the keeper of the organization when it is vulnerable;
c. Conflict handler: he or she is charge of solving eventual conflicts within the organization;
d. Resource allocator: best opportunities fit of the resource and of the efforts of the firm;
e. Taskmaster: CEO as the driving force to get the work done in the company;
f. Staffer: make sure that the right person is paid for doing the right job in accordance with his or her capabilities;
g. Negotiator: CEO as mediator and negotiator for the organization;
h. Problem solver: CEO should have all the capabilities to solve every kind of problem within the organization.

The *Operational* role hold all the different duties and tasks a CEO has to deal with during his or her daily life at the organization:

a. Analyzer: protection of existing products and markets and high focus on efficient management process;
b. Controller: delivery of every single project on time;
c. Operator: delivery of every single project in the most accomplishing way as possible;
d. Technical expert: CEO as holder of all the knowledges and competences needed to perform in the market;
e. Consultant: provider of advices and recommendations on issues related to the organization.

The *Strategic* role: researches conducted by Mintzberg testified that CEOs are always so busy that they do not have time for long-term strategic planning. In summary, roles category related to strategic task are:

a. Coordinator: CEOs has to be sure that the efforts and the resources of the operational process are efficiently addressed to the final goals;
b. Innovator: chief executive officers have to foster innovation in every single moment;
c. Planner: planning skills for both short and long term must be enough;
d. Vision setter: CEOs has to create firm identity for the overall organization;
e. Strategist: he or she has to delineate company’s strategy;
f. Transformer: CEOs have to guide the organization along the transformation of the market;
g. Creator and maintainer of culture: CEOs have to be sure that the culture of the organization is suitable for the strategic plan.

The *Diplomacy* role regards the impact and the force exerted by the external environment on CEOs, making them global citizenships since globalization and the way in which companies operate have changed the interaction between directors and the world itself. The diplomacy role is articulated in three sub-roles, even though only two were depicted by Mintzberg:

a. Link/Statesperson: chief executive officers create a connection to the external world for the organization[72];
b. Figurehead: representation of the organization in all formal situation;
c. Liaison: the interaction between CEOs and peers is finalized to the establishment of a "market" for sharing favours and information.

Anyway, considered the great power and the huge importance a CEO has within the organization, it is reasonable to understand why the turnover of a such strategic resource is the first to be questioned in case of mergers, acquisitions or others.

[72] This sub-role was identified by Lafley, in 2009. Lafley, A. G., 2009. What only the CEO can do. *Harvard Business Review*, 87(5), 54-62;

CHAPTER TWO: LITERATURE REVIEW

1. PREVIOUS LITERATURE ABOUT CEO TURNOVER

One of the most revolutionary events in the long-term strategy of a corporation is absolutely the replacement of the *chief executive officer*. This interchanging operation, implemented at the very top level of the company's management, represents also a change of direction for the *style of leadership* that had governed the company until then. As previously authoritatively argued, the substitution of the main actor of the top management could also give the signal that something in the future of the whole organization is going to be altered and, subsequently its strategy (such as new investment or divestment) is at a turning point. Furthermore, even if those changes are often publicly released not only via financial or accounting report but also via newspapers and websites, their importance depends on how much they are able to convey real changes in the corporation in exam as well as on the structure of the business involved[73].

Former literature has focused the attention also on what happens to top managers after the completion of the transaction suggesting that better results are obtained once the deal is put in place and the retained CEO is able to provide a high level of coordination capacity for the buy-side. The reason is that he or she will be capable of transferring previous knowledge and understanding of the business from the target firm to the combined one, thus attenuating the revolutionary effect of a merger on both companies[74-75]. This tend to be a particularly valuable issue in case of family firms'

[73] Weisbach M., 1995. CEO turnover and the firm's investment decisions. *Journal of Financial Economics* 37, 159-188;

[74] In addition, buy-side could also take advantages from the human capital the CEO and the entire top management will provide. This is true in particular in high-tech firms, where top management may hold patent or knowledge. The same line of reasoning can be applied to law firm, for example, where the CEO could also be a lawyer. Buccholtz, A. & Ribbens, B., 1994. Roles of chief executive officers in takeover resistance: Effects of CEO incentives and individual characteristics. *Academy of Management Journal*, 37(3), pp. 554-579;

Coff, R., 2002. Human capital, shared expertise, and the likelihood of impasse in corporate acquisitions. *Journal of Management*, 28(1), pp. 107-128;

Wulf J., Singh H., 2011. Op. cit.;

[75] Cloodt, M., Hagedoorn, J., Van Kranenburg, H., 2006. Mergers and acquisitions: their effect on the innovative performance of companies in high-tech industries. *Research Policy*, 35(5), p. 642–654;

Colombo, M., Rabbiosi, L., 2014. Technological similarity, post- acquisition R&D reorganization, and innovation performance in horizontal acquisitions. *Research Policy*, 43(6), p. 1039–1054;

Graebner, M., 2004. Momentum and serendipity: How acquired leaders create value in the integration of technology firms. *Journal of Strategic Management*, 25(9), pp. 751-777;

Graebner, M., Eisenhardt, K., Roundy, P., 2010. Success and failure in technology acquisitions lessons for buyers and sellers. *Academy of Management Perspectives*, August. pp. 73-92;

Ranft, A., Lord, M., 2002. Acquiring new technologies and capabilities: A grounded model of acquisition implementation. *Organization Science*, 13(4), pp. 420-442;

acquisition, where the founder is not only a family member but he or she is also employed as chief executive officer. In this situation CEOs and top management are bearer of key knowledges, management capabilities and, most of all, leadership capability (in other words, VRIN[76] resources). Thus, they are always more often required to keep on with their employment and engagement within the firm since they are the only ones whom can ensure the completion of the acquisition in the proper time and realize the extremely coveted “acquisition value”[77].

However, a big portion of the studies have empirically showed high level of turnover in the period right after the closing of the transaction[78] highlighting good returns thanks to targets’ CEO retention even though there is trend on the acquiring side to replace them during or right after the deal. The misalignment between what has been proven and what generally happens has been observed and scholars are trying to fulfil this gap through agency theory and the idea of the existence of a market for corporate control.

So far, there are several reasons and determinants for target’s top manager during – or right after – an acquisition. They will be listed below, even if they will be better explained later one:

(i) Market for corporate control[79];
(ii) Agency theory[80];
(iii) Integration process and related problems[81];
(iv) Fear of losing autonomy and increase of ambiguity in future career[82];
(v) Cultural differences which could intensify in international acquisition[83];

---

[76] Barney J., 1991. Op. cit.

[77] Mickelson R.E., Worley C., 2003. Acquiring a Family Firm: A Case Study. *Family Business Review*, vol. XVI, no. 4, December 2003, *Family Firm Institute, Inc*;

[78] Cannella, A., Hambrick, D., 1993. Effects of executive departures on the performance of acquired firms. *Strategic Management Journal*, Volume 14, pp. 137-152;

Zollo, M., Singh, H., 2004. Deliberate learning in corporate acquisitions: Post-acquisition strategies and integration capability in US bank mergers. *Strategic Management Journal*, 25(13), pp. 1233-1256;

[79] Manne, H.G., 1965. Mergers and the Market for Corporate Control. *The Journal of Political Economy*, Vol. 73, No. 2. (April 1965), pp. 110-120;

[80] Jensen, M.C., 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, Vol. 76, No. 2, pp. 323-329;

[81] Cannella, A., Hambrick, D., 1993. Op. cit.;

Walsh, J. P., 1989. Doing a deal: Merger and acquisition negotiations and their impact upon target company top management turnover. *Strategic Management Journal*, 10, 307–322;

[82] Hambrick, D., Cannella, A., 1993. Relative standing: A framework for understanding departures of acquired executives. *Academy of Management Journal*, 36(4), pp. 733-762;

Lubatkin, M., Schweiger, D., Weber, Y., 1999. Top management turnover in related M&As: An additional test of the theory of relative standing. *Journal of Management*, 25(1), pp. 55-73;

[83] Krug, J., Hegarty, W., 2001. Predicting who stays and leaves after an acquisition: A study of top managers in multinational firms. *Strategic Management Journal*, 22(2), pp. 185-196;

(vi) CEO is considered as a source of human capital[84].

In order to delimit the area of application of the phenomenon, it is also useful to give a definition of CEO turnover, classified as *forced* and *voluntary* turnover[85] or again as *internal* and *external* versus *routine change*[86], depending on the context of application.

For each of the classification above-mentioned, *turnover* is obviously associated to different causes. When the turnover is *forced* or *internal*, it could be associated to disciplinary actions taken by the board of directors of a company to protect the interests of investors and ensuring the continuity of the business. The doctrine has demonstrated how a CEO can be quickly removed and substituted when his or her performance has been not satisfying, disappointing or in disagreement with the board on issues concerning the strategy, management and investors themselves. If this situation happens, the management can promptly dismiss, remove, or make CEOs leave the office.

A disciplinary action coming from the outside (incorporated in the definition of *external*) will have as a result the shift of the decision power from the hands of the chief executive officers to someone else and it could find its roots when (i) the company is part of a mergers and acquisition process and the acquiring company's CEO will become the CEO of the new combined entity; (ii) the company has become the target in a takeover process; (iii) shareholders push for changing the directory through a bankruptcy procedure[87].

Recall, external turnover refers to the situation of replacement[88] coming from an event of mergers and acquisitions, bankruptcy or delisting. Previous studies have demonstrated that rate of external turnover from 1992 to 2007 was 4.7 per cent per year.

---

[84] Barney J., 1991. Op. cit.;

Wulf J., Singh H., 2011. Op. cit.;

[85] According to the paper, this is the distinction for which more cases have been reported. Parrino, R., 1997. CEO turnover and outside succession: A cross-sectional analysis. *Journal of Financial Economics* 46, 165-197;

[86] Kaplan S.N., Minton B.A., 2012. Op. cit.;

[87] Carapeto M., Moeller S., Faelten A., 2010. What should I do next? CEO succession and subsequent M&A strategy. *Mergers and Acquisitions Research Centre Cass Business School, City University of London*. 1-36;

[88] For the purpose of this work, replacement – thus, turnover - is considered when a person was the CEO of the company at the announcement date of the transaction, but he or she does not appear anymore in that position by the completion of the deal. Previous studies have demonstrated that rate of external turnover from 1992 to 2007 was 4.7 per cent per year. Kaplan, S.N., Minton, B.A., 2006. How has CEO Turnover Changed? Increasingly Performance sensitive Boards and Increasingly Uneasy CEOs. *NBER Working Paper Series, Working Paper # 12465, National Bureau of Economic Research*;

When nothing of the aforementioned happens, the turnover is defined as "*routine succession*" – and it could be caused for example because of (i) retirement[89]; (ii) physiological need to look for a different experience along the career path of an individual; (iii) illness or death; and (iv) stealing the CEO from another a company, even a competitor[90]. Of course, in these cases, no signal of pressure or stress from the inside of the board arrive to shareholders and stakeholders[91]. Experiencing a routine succession will result in considering the outgoing CEO as part of the selection process of the replacement ensuring that the future chief will follow the strategy already undertaken by the previous one[92].

Anyway, as a matter of fact, the overwhelming majority of studies focusing on CEO succession have involved *non-routine* replacements linked to the connection with the board of directors, to corporate control, and its subsequently monitoring and correcting action. At this point, it is also important to underline that the market could react in different ways to the event of replacement: the reaction could be positive if the forced change make investors believe that the decision will benefit both the governance and cash flows. On the contrary, shareholders – thus, the market – can react negatively if the forced change in management has been not announced to them or the reasons behind have been not fully explained[93].

For the purpose of this work, it is important to remind the eminent studies about non-routine CEO turnover caused by poor results in terms of performance or because specific financial goals have

---

[89] It has been demonstrated that the incidence of turnover for retirement at or around age 65 is dramatically higher than at other ages and that for companies governed by such aged CEOs, premium paid will be higher. Moreover, firms with bad governance and 65-years-old-CEOs are overrepresented and they might benefit the most if they are acquired. Jenter D., Lewellen K., 2015. CEO preferences and acquisition. *Journal of finance*. May 1, 2015.

[90] According to the previous studies conducted by Dedman in 2000, these classifications of CEO succession cannot be included in the list of disciplinary turnovers.

[91] Huson M. R., Malatesta P., Parrino R., 2004. Managerial succession and firm performance. *Journal of Financial Economics* 74, 237-275;

[92] Vancil R.F., 1987. A look at CEO succession. *Harvard Business* Review 65 Issue 2, 107- 117;

[93] Warner, J.B., Watts, R.L., Wruck, K.H., 1988. Stock prices and top management changes, *Journal of Financial Economics* 20, 461-492;

been not met[94], and poor acquisitions[95] - defined as the failure to meet reasonable and achievable target performance for reasons that do not result from incapacity or mental illness, and bankruptcy[96].

In their study, directed in 2006, Lehn and Zhao have shown that following an acquisition, 57 per cent of CEOs were replaced, and, of this percentage, 83 per cent were replaced within five years from the completion of the transaction. They also found that returns after the announcement of an acquisition for firms that are replacing their chief executive officer were highly negative and lower than the returns for firms that did not experienced a CEO turnover. In addition, those results were also mathematically confirmed thanks first to a logit estimation and then by a hazard model analysis: the analysis showed that CEOs opposing to value-reducing acquisitions were significantly less likely to be replaced than CEOs who proceeded with a value-reducing one.

Industry and market performance also have a huge impact on CEOs turnovers and replacement. Actually, poor performance of the industry and market as a whole increase the level of CEO turnover[97]. In addition, the likelihood of forced CEO turnover increases with industry homogeneity.

Furthermore, managerial entrenchment is likely to decline as the institutional ownership level increases and when the role of CEO and chairman of the board is clearly divides. Those findings have been underlying by Dedman, in 2000 who reflected in her work two perceived best practices such as the separation above-mentioned, and the inclusion of a minimum of three non-executive directors on

---

[94] Warner, J.B., Watts, R.L., Wruck, K.H., 1988. Op. cit.;
Weisbach, M. S., 1988. Outside directors and CEO turnover. *Journal of Financial Economics.* 20(1–2) 431–460;
Gibbons, R.S., Murphy, K.J., 1990. Relative performance evaluation for chief executive officers, *Industrial and Labor Relations Review*, 43, 30S-51S;
Murphy, KJ and JL Zimmerman, 1993. Financial performance surrounding CEO turnover. *Journal of Accounting and Economics* 16, 273-315;
Blackwell, D.W., Brickley, J.A., Weisbach, M.S., 1994, Accounting information and internal evaluation: Evidence from Texan banks, *Journal of Accounting and Economics*, 17, 331-359;
Boot, A, 1992, Why hang on to losers? Divestitures and takeovers, *Journal of Finance,* 47, 1401-1423;
Kang, J. K., Shivdasani, A., 1995. Firm performance, corporate governance, and top executive turnover in Japan, *Journal of Financial Economics*, 38, 29-58;
Dedman, E., 2000. Executive Turnover in UK Firms: the impact of Cadbury. *Accounting and Business Research*, Vol. 33 Issue 1, p. 33-50.
Coughlan, A.T., Schmidt, R.M., 1985, Executive compensation, management turnover, and firm performance: An empirical investigation, *Journal of Accounting and Economics*, 7, 43- 66;
[95] Lehn, K.M., Zhao, M., 2006.CEO turnover after acquisitions: Are bad bidders fired? *Journal of Finance,* 61, 1759-1811;
[96] Hotchkiss, E.S., 1995, Post-bankruptcy performance and management turnover, *Journal of Finance*, 50, 3-21;
Gilson, S., 1990. Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default, *Journal of Financial Economics*, 27, 355- 389;
[97] Kaplan, S.N., Minton, B.A., 2006. Op. cit.;

the board. Even though her studies provided important clues for the topic, she was not able to prove that board independence – thus, the number of non-executive board members – was strictly linked to CEO turnover, meaning that board control does not automatically imply a higher probability of forced replacement.

For what has been said until now, it is evident that great attention has been given to the topic of CEO replacement and turnover in the governance literature until now. Historically speaking[98] the very first author to empirically test the relation among chief executive turnover and acquisition was Walsh, in 1988. Thanks to his studies, in the succeeding ten years, the literature was able to focus on question such as (i) "*Do target company executives depart at higher rates than normal following an acquisition?*" (ii) "*If so, what are the determinants of this higher than normal executive turnover?*" (iii) "*What are the performance effects of high executive turnover after an acquisition?*"

It is argued in the literature if the effects of acquisition usually dissolve three or four years after the acquisition, in the sense that after a certain time threshold, an executive is not likely anymore to depart from the company; or if the effects can drag on even after several years. Recent researches have demonstrated that especially in cases of mergers and acquisitions, effects extend far beyond the top management team is put in place.

Several factors have been examined to better recognize the causes of turnover right after the acquisition. To list some of them we could find: (i) different types of mergers and its relating negotiation process as a whole; (ii) industry classification; (iii) firm; (iv) individual characteristics.

To give some evidences, Walsh in 1989, for example, highlighted peculiarities of the *negotiation process* including the amount of time required to organize and negotiate the deal; buyer's public certainty that they would retain target company management; hostile vs friendly negotiations; type of payment (i.e. cash or stock); and the premium paid for the target company[99]. Although the great attention and the minutia of the study, the only variable of his model explaining high turnover after the acquisition was the "hostility of the merger". As a matter of fact, when target board of directors are not willing to become the target of an acquisition and the buy-side overstep the top management putting in place a tender offer, it is not unreasonable that the chief executive officer will leave his or her seat once the acquisition will start. Surprisingly, even if hostile acquisition were the most significant variable in Walsh's study, (and later on in Krug and Nigh, 1998), the overall set of

---

[98] Walsh, J., 1988. Top management turnover following mergers and acquisitions. *Strategic Management Journal*. Vol. 9, 173-183. https://doi.org/10.1002/smj.4250090207;

[99] Walsh, J. P., 1989. Op. cit.;

variables representing merger characteristics, seemed to be a poor indicator of future target company turnover[100].

A bigger picture is provided if also other executives, together with CEOs, are included in the analysis. Among the executives who departed right after the acquisition, a big amount left involuntarily[101]. Krug & Hegarty, 2001 and Krug and Nigh, 2001 interviewed a group of target executives to understand the reasons behind their decision[102]: the results showed that one third of the respondents left for other career opportunities, for retirement or personal reasons, thus nothing related to the acquisition; one-third was involuntarily terminated; the last portion did not feel comfortable with the new top management or they feel themselves to be a victim of obstructionism made by the acquiring team. On the contrary, the answers of the acquiring companies were univocal: they all considered the departure of targets' executives as voluntary.
What is evident is that all those departures will have not existed if the acquisition would have never put in place.

From the mentioned papers three conclusions can be objectively reached: (i) the highest rate of turnover is registered during the first year after the acquisition; (ii) the rate tends to get back to normality within three years after the acquisition; (iii) high executive turnovers are generally associated with low target company financial performance.

Another specification often subject of study is industry characteristics. The main issue that has been analysed is *relatedness*, arguing that acquiring firms were more inclined to substitute target CEOs if the buy-side and the sell-side operates in the same business industry or, in other cases, they share some core product categories[103]. When the acquiring firm operates, instead, in a completely different industry, the probability of CEO's retention seemed to be higher since the acquirer can count on fewer knowledges. Later on, in 1991, Kobrin founded that turnover in U.S. target companies was significantly higher when the two parts of the acquisition process were both player of a global

---

[100] Krug, J.A., Nigh, D., 1998. Top management departures in cross-border acquisitions: Governance issues in an international context. Journal of International Management, 4, 267–287;

[101] Krug J.A., Aguilera R.V., 2004. Top management team turnover in Mergers & Acquisitions. In: Finkelstein S., Cooper C.L., 2005. *Advances in Merger and Acquisition*, Vo. 4, p. 124;

[102] Krug, J., Hegarty, W., 2001. Op. cit.;

Krug, J.A., Nigh D., 2001. Executive perceptions in foreign and domestic acquisitions: an analysis of foreign ownership and its effect on executive fate. *Journal of World Business*, 2001, vol. 36, issue 1, 85-105;

[103] Manne, H.G., 1965. Op. cit.;

Pitts, R. A., 1976. Diversification strategies and organizational policies of large diversified firms. *Journal of Economics and Business*, 28, 181–188;

industry, even higher if the industry was the same[104]. Turnovers started straight after the acquisition and strengthened their effects through the sixth year following the acquisition, suggesting that global industry effects can be acknowledged both immediately and in the long-term.

Firm characteristics have also been largely subject to studies. In particular what has been considered in many cases is the financial performance of the firm prior to the acquisition. Major results evidence that poorly performing target companies will see their top management removed and replaced during the first two years after the M&A[105].

Higher turnover can be also be the consequence of poor performance when the target is acquired by a corporate raider[106-107]. The results of this kind of operations is the faster replacement and departure of target's management due to a perception of inferiority on their side since the acquiring is showing off its supremacy. Moreover, this general feeling, together with the awareness of the previous management's limits, led the acquiring company to replace target executives with their own human resources.

Analysis on the market for corporate control have discovered that only few mergers and acquisitions are driven by the desire of improving target financial performance and by the hubris of competent managers[108]. Anyway, what can be said without any doubts is that firms who have lower returns than the average of their industry, are more likely to be acquired and experiencing a management turnover rate higher than the analogous company with the same M&A history.

Another important food of though refers to the impact that Sarbanes-Oxely act of 2002[109] (later on, SOX) has generated on the whole market for corporate control. The most evident result is an intensification on CEOs turnover after the approval of the act, thus meaning that the overall

---

[104] Kobrin, S. J., 1991. An empirical analysis of the determinants of global integration. *Strategic Management Journal*, 12, 17–31;

[105] Hambrick, D., Cannella, A., 1993. Op. cit.;

[106] According to investopedia.com, 'a corporate raider is an investor who buys a large number of shares in a corporation whose assets appear to be undervalued. The large share purchase would give the corporate raider significant voting rights, which could then be used to push changes in the company's leadership and management. This would increase share value and thus generate a massive return for the raider'. https://www.investopedia.com/terms/c/corporate-raider.asp

[107] Walsh, J. P., Kosnik, R. D., 1993. Corporate raiders and their disciplinary role in the market of corporate control. *Academy of Management Journal,* 36, 671–700.

[108] Walsh, J. P., Kosnik, R. D., 1993. Op. cit.;

[109] 'The Sarbanes-Oxley (SOX) Act of 2002 was the response to corporate financial scandals earlier that decade. The act created new rules for accountants, auditors, and corporate officers and imposed more stringent recordkeeping requirements'. https://www.investopedia.com/terms/s/sarbanesoxleyact.asp
The act also added new criminal penalties for violating securities laws.

monitoring of corporate governance has increased[110]. There are also evidences that stock market's new legislation with Sarbanes Oxley Act has enhanced a higher sensitivity of CEO turnover to financial figures and it has made the job of a CEO has become increasingly hazardous so much that the main objectives that SOX wanted to address, are already results.

In order to empirically demonstrate what has been above-said, HamRoy has tested the effect of SOX on corporate governance considering the reform as an exogenous shock that has led to an increase in strength of market for corporate control. His studies showed that after the approval of SOX, CEOs faced a higher threat of exit leading to a high number of policy implications that were in line with the previous research already published.

In accordance with what was previously affirmed by Murphy and Zabonjik in 2004 and by Kaplan in 2006[111], HamRoy demonstrated that CEOs' tenure after the SOX, was characterized by a median of 4.8 years, whereas in the overall sample (thus also before the SOX) the median was 7.83. Thus, the stock market reforms and adoption of Sarbanes Oxley Act has led to a higher sensitivity of CEO turnover to firm performance and that in the post-SOX period, the job of a CEO has become increasingly hazardous and the objectives of SOX in imposing corporate discipline seems to have yielded some results.

An additional explanatory element of the increase of CEOs turnover is the representation of the managerial human capital resource as a major cause of retention of executives in M&A transaction. As discussed by Wulf and Singh, target CEOs are considered to be a valuable asset that acquiring firm will utilize in order to improve firm performance. The problem is that to ensure the retention of successful target CEOs, the acquiring side usually makes promises about managerial discretion, job security, perfect integration between the previous management and the combined firm. To be more precise, the replacement of top managers and CEO is one of the actions put in place by acquirers to evade eventual problems (such as integration and resistance against the changes) during post-acquisition period[112].

---

[110] HamRoy S., Effect of Mergers and Acquisitions on CEO Turnover in Large Firms and SMES: A Hazard Analysis. *Department of Economics, Lancaster University Management School, Lancaster, LA1 4YW*;

[111] Murphy, K.J. and Zabonjik, J., 2004. CEO Pay and Appointments: A Market-Based Explanations for the Recent Trends. *The American Economic Review*, 94(2), 192-196;
Kaplan, S.N., Minton, B.A., 2006. Op. cit.;

[112] Rajan R. G., Zingales L., 1998. Power in a theory of the firm. *The Quarterly Journal of Economics*. 113(2) 387–432;

Bailey, E., Helfat, C., 2003. Management succession, human capital, and firm performance: An integrative analysis. *Managerial and Decision Economics*, 24(4) 347–369;

However, it is very difficult if not impossible to credibly commit to promises made to target CEOs. The margin between promises kept and unfulfilled promises enhance the likelihood of chief executive officer retention.

Interestingly, Walsh and Ellwood stated in 1991 that target executives should be considered as valuable assets rather than liabilities, consistent with the idea that firms are composed of both physical and human capital[113]. Based on the previous assumption, it is possible to sustain that the resource-based view considers mergers and acquisitions as a mean to enhance competitive advantages and exploit all the capabilities and the resources of the target company, above all executives. The reason behind is linked to the facts that they are able to generate long-term sustainability together with a favorable position in the market[114]. Castanias and Helfat in 1991, developed of "managerial or earned rents" in favor of this argument the notion as "those portions of the firm's rents that management creates from its superior management skills" giving evidence of all the previous deductions.

Several working and empirical papers studying M&A transactions conducted during the 1980s, found results related to the managerial human capital view and the post-performance of the combined firm. First Cannella, Hambrick and Matsusaka in 1993 high-lightening positive returns when acquirers retain top management of the target firm and negative ones when they replace the same team. Later studies focused, thought, on CEOs' factor of success since the managerial human capital view recognizes that acquiring company should retain only CEOs who are successful[115] (e.g. Weisbach 1998).

Additionally, target's CEO decide to go away, thus creating a situation of replacement because of their psychological perception against the acquisition. In details, the reasons behind his or her departure are loss of sovereignty, subordination and uncertainty in the path of their future career. Moreover, as already mentioned, cultural differences can also influence CEO's departure especially in international context, where those kinds of differences could really matter [116].

Finally, the literature has founded relations between CEO tenure and turnover. Tenure is usually considered as the extent to which they matured their skills and experience, generally

[113] Rajan R. G., Zingales L., 1998. Op. cit.;
[114] Barney, J. B. 1991. Op. cit.;
Castanias, R. P., Helfat C. E., 1991. Managerial resources and rents. *Journal of Management*, 17(1) 155–171;
[115] Weisbach, M. S., 1988. Op. cit.;
[116] Krug, J., Hegarty, W., 2001. Op. cit.;

expressed as the number of years. In accordance with Kor and Mahoney[117] (2005), some argued that a longer tenure is generally associable with fewer probability of turnover, thus they are more likely to resist changes in the management due to external forces.

In 2003, Buchholtz et al. argued that the decision of CEO retention and turnover is a decision taken jointly between target CEOs themselves and acquiring firm. On the CEO side, he or she is willing to find a grateful employer in the acquirer that will grant him or her opportunities for new promotions[118]. About the topic is relevant what Booz and Company published article has unfolded: "*Why do so many former chiefs stay on? There are three reasons. First, being acquired by a larger company may be a passport to greater opportunity, even for executives who are losing their CEO title. Second, CEOs may stay with the acquiring company because there is a reasonable chance that they could move on to the chief executive role of the larger company in the future. Third, when a deal takes an acquirer into a new business, that company will often insist that much-needed senior talent remain with the new entity. In this case, the CEO may agree, as part of the deal to remain with the new company, particularly if his or her skill set, and leadership are viewed as critical for success*".

Furthermore, in some cases (especially in family firm) CEOs commonly hold large investment strictly related to the company business thus producing as a result a great willingness to protect the money invested[119]. As can be imagined, the fact that the acquirer will promise not to violate those investments could be an important factor in the CEO's decision to continue to be part of the company, even if he or she will be part of the combined entity in different roles.

Discretion is another issue CEO will value in order to formalize the decision of leaving or staying in the new combined entity. CEOs will be more favourable toward working environment that preserve managerial discretion – even if this is a feature hard to be found and to be ensured by a contract among the parties[120]. In addition, the cost of replacement of some managers are really high: they include severance agreement, provision and clause upon termination or resignation, golden parachutes etc. Thus, it is very difficult for shareholders deciding to fire a manager with all those

[117] Kor, Y. Y., Mahoney, J. T., 2005. How dynamics, management, and governance of resource deployments influence firm-level performance. *Journal of Strategic Management*, 26(5) 489–496;

[118] Lucier, C., Kocourek, P., Habbell, R., 2006. Op. cit.;

[119] Hart, O., J. Moore., 1990. Property rights and the nature of the firm. *Journal of Political Economics*. 98(6) 1119–1158;

[120] Williamson, O. E., 1973. Markets and hierarchies: Some elementary considerations. *American Economic Review*, 63(2) 316–325;

hypothetical costs[121]. As previously authoritatively stated, "acquiring company with governance provisions that protect management will be more able to commit managerial discretion".

Moreover, if CEOs hold equity stakes it is easier to believe they will be truly engaged and commit to the overall business, and without any doubts, this owning could represent another quibble for the decision concerning staying or leaving the company. The strength and the impetus shown by the acquirer side to convince the incumbent management to stay in the combined firm or to leave it is commonly communicated by the acquiring CEO whom for a matter of credibility will never renege on his own promises. In addition, since the acquiring and the target CEO will relay their job on the same preferences and the same willingness, it will be easier to the target one to believe in the words of the acquirer side.

Those arguments are totally in line with what has been demonstrated by Aghion and Tirole in 1997, affirming that "any commitment to delegate decision-making authority to the target CEO will be more credible when the holders of "formal" authority have similar preferences to the target CEO. This is more likely when one of the major shareholders is the acquirer CEO[122].

Thus, for what has been said in the very last paragraphs, the literature has confirmed a lower probability of turnover for successful CEO when the governance of the acquirer firm is characterized by both governance provisions and a higher percentage of stakes hold by CEO.

2. CEO TURNOVER IN THE DEAL CONTEXT

When working with the overall process involving a deal, little attention has been given to the main governance body, specifically to the board of directors. Studies involving this topic generally focus on CEO turnover or Chairman replacement using agency theory as arguments, of which many have been already previously reported in the previous pages. Once took into account both sides of the transaction, stating clearly which are the causes behind CEO turnover and replacement, could help in identifying the factors that impact and alter the probability of retaining for the target company's executives since in most cases, acquiring company does not want to retain the entire directory of the target[123].

---

[121] Gompers, P. A., Ishii, J. L., Metrick, A., 2003. Corporate governance and equity prices. *The Quarterly Journal of Economics*, 108(1) 107–155;

[122] Aghion, P., J. Tirole, 1997. Formal and real authority in organizations. *Journal of Political Economics*, 105(1) 1–29;

[123] Finkelstein S., Cooper C.L., 2005. Advances in Merger and Acquisition, Vo. 4; p. 124;

Different theories during the years have tried to provide explanations about the important role played by individual directors in the board of directors: starting from 1984, Useem has disclosed the "*managerial hegemony theory"* recognizing the role of directors are something belonging to a perpetuating class power and to a ruling elite[124]; in 1986 Mace, continuing on the same line, identified them as passive actors with very limited powers[125].

Only after some years, the importance of the strategic relevance of the directors as starting point for value creation began to emerge[126]. Subsequently, Ruigrok, Peck & Keller in 2006 depicted how strategic goals are strictly dependent on the capabilities of the board of directors' decisions[127]. The same is for IPO, CEO successions and M&A strategies[128].

As could be inferred by the M&A context and the overall set of processes related to acquisitions, target firm's board of directors have a key primary role since they will be in the front line in any cases: if the acquisition turns out to be friendly, it means they have been the signers of the merger agreement; if not, it means the board has not exercised their power and no signatures have been released. Furthermore, ensuring business continuity and the possibility to reach long-term goals is strictly determined by the cohesiveness of the target board. Only when the company is really small, this argument seems not to hold[129]. On the contrary, this is the followed rule when the target is a subsidiary of the acquiring company. The underlying reason is again the consideration of the CEO, executives and directors as bearer of human capital, a leading factor for the execution of the acquisition strategy[130].

---

[124] Useem M., 1984. Large Corporations and the Rise of Business Political Activity in the U.S. and *U.K. Oxford University Press*, Mar 13, 1986 - *Business & Economics* - 246 pp;

[125] Mace, M., 1986. Directors: Myth and Reality. *Boston: Harvard Business School Press;*

[126] Golden, B. R., Zajac, E. J., 2001. When will boards influence strategy? Inclination x power = strategic change. *Journal of Strategic Management*, 22: 1087-1111;

[127] Ruigrok W., Peck S. I., Keller H., 2006. Board Characteristics and Involvement in Strategic Decision Making: Evidence from Swiss Companies. *Journal of Management Studies*, 2006, vol. 43, issue 5, 1201-1226;

[128] Filatotvhev I., Bishop K., 2002. Board composition, share ownership, and 'underpricing' of UK. IPO firms. *Journal of Strategic Management*, 23: 941 – 955 (2002) Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/smj.269;

Ocasio. W., 1994. Political Dynamics and the Circulation of Power: CEO Succession in U.S. Industrial Corporations, 1960-1990, *Administrative Science Quarte rly* 39(2):285, June 1994; Published by: *Sage Publications*, Inc. on behalf of the Johnson Graduate School of Management, *Cornell University;*

Davis, G., Diekmann. K., & Tinsley, C., 1994. The Decline and Fall of the Conglomerate Firm in the 1980s: The Deinstitutionalization of an Organizational Form. *American Sociological Review*, 59(4), 547–570;

[129] DePamphilis, D., 2001. Case Study: Managing growth through acquisition: time-tested techniques for the entrepreneur. *College of Business Administration, Loyola Marymount University, Los Angeles*, CA, USA;

[130] Jemison D., Haspeslagh P., 1991. Making acquisition work. INSEAD, Fontainebleau, France;

Together with the agency theory and the idea of CEOs as source of competitive advantage, based on the resource-based views, the "Social Capital perspective" represents an interesting alternative in order to stress the importance of a chief executive officer within the organization[131]. The great added value provided by this new theory aim at looking the overall social context in which the company operates thanks to a mediation put in place by its directors. Thus, the social capital perspective goes beyond the alignment of interests between management and shareholders of the agency perspective and the inclusion in the model of the capabilities hold by directors to transfer knowledge from an entity to another or from one generation to another, as the resource-based view model.

To give a definition, we could define social capital as "*the sum of the resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition*"[132]. Of course, this is not the only definition of social capital existing but the other see social capital as something essential for the longevity of the company: Bourdieu for example wants to express it as "It's not what you know, it's who you know". So far, CEOs, directors and executives bring social capital to the whole company thanks to their personal and interorganizational relations, or, in other words, their network.

According to the definition given above, the social capital perspective considers the group of directors as something embodied not only in the firm, but as people totally entrenched in a broader social context that goes beyond the firm. Their role is to enlarge always more frequently the social borders of the company maximizing the process of value creation for the company itself[133]. In particular, their role is to tie together the firm and the overall surrounding environment by linking their internal net of managers and employees and other stakeholders such as suppliers, customers, and government. All those relations are particular important, if not vital, for the value creation process of the business.

The most crucial connection, however, is the one between directors and all their external relations[134]. The sense of the importance of the connection, relies behind the enormous valuable contribution a director and a chief executive officer may bring in case of acquisitions: social capital

[131] Finkelstein S., Cooper C.L., 2005. Advances in Merger and Acquisition, Vo. 4; p. 124;

[132] Bourdieu P., Wacquant L.J.D., 1992. An Invitation to Reflexive Sociology. *The University Chicago Press*, p. 119;

[133] Granovetter, M., 1985. "Economic Action and Social Structure: The Problem of Embeddedness". *American Journal of Sociology*, 91 (November): 481-510;

[134] Adler, P. S., Kwon, Seok-Woo, 2002. Social Capital: Prospects for a New Concept. *The Academy of Management Review*, Vol. 27, No. 1, p. 17;

studies have showed how "closed social relations" can be an effective tool for communications since acquired directors can provide a priceless network that proves to be really helpful for the integration process following the completion of the transaction.

Social capital researches also showed how directors in "closed inter-organizational networks" can provide more social capital to the new organization than directors in "open social networks". Thus, directors with "closed networks" will be better in securing social capital because they were part of it and will ensure little probability of replacement than directors with open networks[135]. For the sake of clearness, according to Manning (2008), inter-organizational relationships are developed among actors in the network[136], which are independent and whose interactions are different from hierarchies and markets[137].

As Lin in 2001 argued, directors are able to develop portion of social capital when they create interpersonal connections with parts of the markets and organizations, where it worth it. In this situation, directors are intermediaries among the organization and the controlling resources truly participating in the value creation process of the business[138].

3. CEO TURNOVER AND FAMILY FIRM INVOLVEMENT

One of the most important categories of company in the market is *family firms*[139]. In a sample of S&P 1500 firms, it has been demonstrated that 44 per cent of the sample is composed by family firms with founding families holding 16 per cent of the equity and 60 per cent of the CEO positions in family firms. Obviously, these evidences may arise the possibility of noteworthy implications for performance and operations[140].

Nowadays, according to the Family Firm Institute, family-owned companies account for two-thirds of all businesses worldwide, generating more than 70 per cent of the annual global GDP[141] and

---

[135] Finkelstein S., Cooper C.L., 2005. Op. cit.;

[136] Manning, P., 2008. Social Capital: Origins, Meanings and Economic Significance. *University of Chester*;

[137] Uzzi, B., 1996. The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect. *American Sociological Review*, Vol. 61, No. 4, pp. 674-698;

[138] Lin, N., 2001. Social capital. A theory of social structure and action. *Cambridge: Cambridge University Press*;

[139] Anderson, R., Duru A., Reeb. D., 2008. Family preferences and investment policy: Evidence from R&D spending and capital expenditures. Working paper, *American University*;

Chen, S., Chen, X., Cheng, Q., 2008. Do family firms provide more or less voluntary disclosure? *Journal of Accounting Research*, 46 (3): 499–536;

[140] Chen, S., Chen, X., Cheng Q., Shevlin, T., 2010. Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics* 95 (1): 41–61;

[141] Family Firm Institute: https://my.ffi.org/page/globaldatapoints. Family firms account for 2/3 (two thirds) of all businesses around the world (Interview with John Davis, Harvard Business School)

they create on average 50 – 80 per cent of jobs in the overwhelming majority of countries of the world. Moreover, in 85 per cent of new company establishment, family firms are used.

Even though the belief that companies are run by professional manager, many of the biggest corporations of the world are still run and controlled by families, which poses their authority and are able to efficiently keep the business in their hands[142].

Table 3 – Percentage of family business contribution to national GDP

Country	% of GDP
Italy	94%
Ecuador	93%
Lebanon	85%
Pakistan	80%
Mexico/India	79%
Peru	74.70%
Venezuola/Bahrain	73%
Argentina	68-70%
Costa Rica/Uruguay/Singapore	70%
El Salvador/Colombia/Malaysia	65%
US	63%
Chile	60%
Germany	57%
Finland/Brazil/Portugal	50%
Netherland	49%
Belgium	45%
Iraq	35%

There are some special characteristics which are family-firm-tailored; those unique features can be addressed in (i) ownership; (ii) governance and structure of the board; (iii) culture; (iv) intergenerational relationship and related succession issues; (v) influence of the family power over the strategic investment of the firms[143].

[142] La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 1999. Corporate ownership around the world. *Journal of Finance*, 54(2), 471–517;

[143] Anderson, R., Duru A., Reeb. D., 2003. Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance*, 58 (3): 1301–1328;

Carney, M., 2005. Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice*, 29, 249-265;

Short, J. C., Payne, G. T., Brigham, K. H., Lumpkin, G. T., & Broberg, J. C., 2009. Family firms and entrepreneurial orientation in publicly traded firms. *Family Business Review*, 22, 9-24;

The attitude towards intergenerational relationship is the key driver to purse the business plan of the firm when family CEOs are concerned ensuring not only business continuity, but also representing the fuel for the maximization of the organization's source of wealth. Likewise, the authority and the involvement of founder generations as family CEOs, allows the preservation of the business to be in the hands of the family longer than if the CEOs were non-family[144]. Extending the argument also to agency cost of debt, Lagaras and Tsoutsoura in 2015[145] have proven that firms governed by a family CEO are characterized by a lower level of those costs.

Finally, since very often CEOs is the founder of the firm or one of the descendants in the family firm, the resulting situation is that large shareholders are the main player in the company management[146]. Family managers also have the peculiarity of transferring assets in several ways, thus making the transfer of wealth a very easy matter[147].

For the purpose of this work it is important to make a broadly categorization of the concept of "family firm". Those firms are generally split up in four categories: (i) family firms governed by the founder himself (or herself); (ii) firms governed by a CEO with some special family relation with the founding family; (iii) firms governed by a CEO without any relation with the founding family; (iv) firms governed by a CEO without the existence of any founding family[148]. This dissertation will later on consider a sample in which the only differentiation will be made between *family* and *non-family CEO*. Anyway, for the sake of completeness, none of the previous categories will be excluded by the literature review process.

Before going ahead, it seems to be also important to understand why a company should change from a family CEO to a non-family CEO. As a matter of fact, a family firm start organizing its board with a family member as CEO. Over the years, people inside the firm - top management makes no exception – are subject to several changes and as the corporate aged, control passes through generations. It may happen that going through several generations, family firms can undertake the decision to hire an outsider, namely a non-family CEO.

---

[144] Kang D, Sorensen A., 1999. Ownership organization and firm performance. *Annual Review of Sociolog*, 25: 121 – 144;

[145] Lagaras, S., Tsoutsoura, M., 2015. Family control and the cost of debt: Evidence from the Great Recession. *Fama-Miller Working Paper; Chicago Booth Research Paper* No. 15- 14;

[146] La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 1999. Op. cit.;

[147] Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P., 2002. Disentangling the incentive and entrenchment effects of large shareholdings. *Journal of Finance*, 57, 2741–2771;

[148] Mullins W., Schoar A., 2013. How do CEOs see their Role? Management Philosophy and Styles in Family and non-family firms, *NBER Working Papers 19395, National Bureau of Economic Research, Inc*;

As it could be imagined, that means a great change in the style of leadership of the board made easily only when, and if, the owners themselves recognizes the consequences of having a non-family CEO in the family organization itself.

Most of the times, founding families fails to properly prepare the organization for the transition phase and they do not learn from mistakes made by other family firms before them. New-hired non-family CEO should be more tolerable towards the top management, since it will be hard for previous owner to provide the same level of trust and respect of the previous family-CEO during the first moments of the transaction[149].

Nowadays, family firms represent one third of S&P 500 firm[150] carrying with this number a series of implications. Among them, the presence of the family who founded the business appear to be the major symptom of a problem of agency cost within the firm. If the reasoning remains isolated only to family shareholders, the result will be a better monitoring of the chief executive officers since family's, managers' and shareholders' interests are aligned. When considering, instead, both family and non-family shareholders, the result could be entrenchment and conflicts of interest between the two categories above-indicated. Nevertheless, family ownership on environmental performance perseveres independently of whether the CEO is a family member or CEO duality is present[151].

As already previously underlined, CEO turnover and replacement represent one of the major issues for the destiny of the firm for the long-term implications deriving from the operation since it could provoke the costliest manifestation of conflicts in the management[152]. Higher is the hugeness of agency conflicts, the more difficult it is to replace CEOs performing below the expectation. For the sake of consistency, avoiding dismissing CEOs will lead to a higher probability of bankruptcy and delisting[153].

The influence of family control can influence agency conflicts in two ways: on one side it is clear how the relatedness to the firm for a CEO can enhance his or her willingness to improve long term investments horizon with good impact on the value generation process – and, subsequently,

[149] Baskin O., Eckrich C. Preparing Owners for a Non-Family CEO. *Family Business Consulting Group Publications*;

[150] Anderson, R., Duru A., Reeb. D., 2003. Op. cit.;

[151] Berrone P., Cruz C., Gomez-Mejia L.R., 2010. Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family-Controlled Firms Pollute Less? *Administrative Science Quarterly*, 55 (2010): 82–113;

[152] Huson, M., R. Parrino, and L. Starks. 2001. Internal monitoring mechanisms and CEO turnover: A long-term perspective. The Journal of Finance, 56 (6): 2265–97;

Shleifer, A., R. Vishny. 1997. A survey of corporate governance. *The Journal of Finance*, 52 (2): 737–83;

[153] Ertugrul, M., and K. Krishnan. 2011. Can CEO dismissals be proactive? *Journal of Corporate Finance*, 17 (1): 134–51;

remove the non-performing ones. On the other side, because of the great power deriving from the ownership concentration of the founding family, family members can potentially pursue their own interests at the expense of the value generation process for the whole firm and for other shareholders and stakeholders. In this case, it could be very hard persuading non-performing chief executive officer to leave the seat of power.

These implications have already been tested[154] by separating family firms run by a family CEO from those governed by an external CEO. When founding families are involved, there are private benefits enjoyed only by family members serving as CEO. The outcome of the study highlights two qualities in family firms: "monitoring of CEOs" and "potential family entrenchment", both significantly affecting the efficacy of replacing poorly performing CEOs, even though with different implications depending on who governs the firm. The first one aims to alleviate agency conflicts; the latter leads to family entrenchment.

Furthermore, including family firms in the overview of CEO turnover represents a unique opportunity to explain how on one hand the presence of the founding family leads to the perfect monitoring of non-family CEO firm, strengths CEO power and influences as well as control on family CEO firm. The straightforward implications emerging from the literature is an increase of the impact of family involvement on valuation, thus ultimately performance[155]. Anderson and Reeb (2003) elaborated on the higher accounting performance and higher Tobin's Q figures for family firms than non-family firms to provide evidences that the weight of the excellent alignment between managers and investors is so heavy to outweigh the negative impact of family entrenchment[156].

It has also been founded that it does not matter if the CEO is a family member and he or she occupies both the CEO position and the board chairman: there will always be a positive relation among family involvement and performance at every level of the overall working environment. This result has emerged from a study about performance of American family and non-family between 1998 and 2002 on a sample of 194 firms which were obliged to account for their emissions. Intuitively, family firms aim at protecting socioemotional wealth and, in order to reach this goal, they

[154] Chen, X., Cheng, Q., Dai, Z., 2013. Family Ownership and CEO Turnovers. *Contemporary Accounting Research*, Vol. 30 No. 3 (Fall 2013), pp. 1166–1190;

[155] The examined literature refers to a sample of American company, chosen for the sake of consistency with our model. Studies of family firms in other countries led to the same results (Claessens, Djankov, Fan, and Lang 2002 whom selected a sample of companies located in Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand; Faccio, Lang, and Young 2001 whom selected a sample of companies located in France, Germany, Hong Kong, Indonesia, Italy, Japan, Malaysia, Philippines, Singapore, South Korea, Spain, Taiwan, Thailand, and the U.K; Cheung, Rau, and Stouraitis 2006 whom selected a sample of companies located in Hong Kong).

[156] Anderson, R., Duru A., Reeb. D., 2003 Op. cit.;

must keep under control the performance of the overall firm. The effort in this case is much higher than their non-family counterparts, especially at the "local level"[157].

Anyway, this is something that should be taken with a grain of salt since in more recent studies, Anderson, Duru and Reeb (2009)[158] have demonstrated that the counterbalance of the entrenchment and the better alignment of interests fails when there is no transparency in the family organization. According to Anderson et al., monitoring and entrenchment provide positive relation between company organization and corporate opacity even though when entrenchment is considered, less transparency grant controlling shareholders the possibility to take advantage of their control for private benefits.

Other studies investigate the relation among family ownership, control and corporate decisions. In detail: (i) family firms on average performs better in terms of earnings than non-family firms[159] (Ali et al. 2007); (ii) family firms are generally less tax aggressive than non-family ones; (iii) expenses on R&D are higher in non-family firms than in family firms; (iv) agency problems are less evident in family firms than in non-family firms[160].

However, when the CEO is family, thus the interests are aligned, family members can take advantages of the situation for private benefits. Those benefits are generally categorized in three macro classes: (i) monetary incentives and non-monetary ones, such as social status; (ii) increase of family reputation; (iii) possibility for the family firms to better expropriate other investors if a family member act as a CEO on behalf of the company. On the other side, retaining a non-performing CEO is too costly to the family at the expense of family value in the ownership structure.

Nevertheless, when dealing with founding families there is always a comparison between the private benefits and the potential cost of replacement: the founding family could retain a poor performing *family CEO* when the private benefits are higher than the cost of replacement, *"although doing so may hurt the firm value and is suboptimal for minority shareholders"*. A clear example is the Ford case: as commented by the *Business Week* in August 2006[161] *"[given his poor performance,]*

[157] Gomez-Mejia L.R., Larraza- Kintana M., 2010. Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family-Controlled Firms Pollute Less? *Administrative Science Quarterly*, 55 (2010): 82–113;

[158] Anderson A., Duru A., Reeb D. M., 2009. Founders, heirs, and corporate opacity in the United States. *Journal of Financial Economics*, 92, 2009, 205–222;

[159] Ali, A., T. Y. Chen, and S. Radhakrishnan, 2007. Corporate disclosures by family firms. *Journal of Accounting and Economics*, 44 (1–2): 238–86;

[160] Wang, D., 2006. Founding family ownership and earnings quality. *Journal of Accounting Research* 44 (3): 619–56;

[161] Business week, 21-28. August 2006.

CEO Bill Ford would have been fired by now by most boards if his name were Smith". Bill Ford finally left the CEO position in September 2006 (after a tenure of 5 years) but continued serving the company as Chairman.

Hence, families behave as a screening machine for acquisitions: no exceptions are made when and if a family member is a top level of the company. Anyway, as a matter of fact it has not been demonstrated that family CEOs can take advantages from their position by being involved in acquisitions or takeovers from which they could gain private benefits[162].

So far, taken into account the important weight gave by previous studies to the topic, it is undeniable that family and founder managers and CEOs are a motivating and attention-grabbing types of employees to indagate for their turnover as the role of administrator and socioemotional involvement create a profound gap between CEO and professional CEOs[163].

Previously CEO has been defined as a source of competitive advantage in order to provide evidences about lower turnover for founder and family-CEOs compared to non-family CEOs. Anyway, the value ascribable to the CEO's human capital is circumscribed to the situation in which the acquirer will retain top management after the acquisition in light of his or her knowledge and to the relatedness of the two sides of the transaction. Those are the only quantifiers for the real human capital value estimation bared by the executives. In addition, family CEOs' human capital also depends on the age of the firm, thus its maturity. Maturity, in fact, decreases the power of firm specific human capital[164].

Anyway, as previously said, when it comes to acquisition, it should be considered that on the other side of the deal there is a company, a found, or a group of manager that could not understand all the advantages deriving from a member of the family within the board, or even better as chief executive officer. To be more precise, they do not want to face any risk related to the management of a company in which the socio-emotional wealth is so high to even compromise the daily business of the post-acquisition entity. This is the case of institutional investors in the form of private equities, group of incumbent management or external management whom prefers or not to enter some

[162] Caprio L, Croci E., Del Giudice A., 2011. Ownership structure, family control, and acquisition decisions. *Journal of Corporate Finance* 17 (2011) 1636–1657;

[163] Gao, N., & Jain, B., 2012. Founder management and the market for corporate control for IPO firms: The moderating effect of the power structure of the firm. *Journal of Business Venturing*, 27(1), 112-126;

Wasserman, N., 2003. Founder-CEO succession and the paradox of entrepreneurial success. *Organization Science*, 14(2), 149-172;

[164] Gao, N., & Jain, B., 2012. Op. cit.;
Wasserman, N., 2003. Op,. cit.

investments, or in most cases, to put in place radical changes (such as earn outs, management changes, etc.)[165].

Lastly, an issue of extremely high importance is related to the composition of the labour market. It has been demonstrated that dynastically-promoted CEOs, incorporated in our definition of family CEOs, are associated to lower level of turnover than their external equivalents when the labour market is more frictional[166]. The starting point is associated with the assumptions that CEOs generally play a key role in the delineation and construction of employment agreements within a firm. In addition to the previous statement, it is noticeable that employment contract renegotiations became an issue when a new management team enters the firm also because of the time spent in dealing with the construction of the contract itself[167].

The core topic of contract renegotiation due to the establishment of a new management is that there are some contractual clauses as well as some sections of the agreement that were once implicitly agreed with the previous CEO and the action of replacement of the latter could breach those covenants. On the other side it is not always possible to renegotiate new employment agreement terms right after and acquisition with a new labour force because of time and money constraints associated to the negotiation. It is also generally accepted that family CEOs carrying with them a higher number of those implicit terms thus leading to the results that family CEOs are associated with a lower level of replacement than external (non-family)[168].

As previously argued, also *industry* is a key determinant for differences between the two categories of chief executive officers analysed. Long-term contracts with family management are essential when the external labour markets are more frictional and there is a higher probability of conflictual connections among the subjects of the market[169]. Again, chief executive officers are considered as human resources and bearer of connections and relations with external and internal stakeholders.

---

[165] Thaler, R. H., 1993. Op. cit.;

Ackert, L. F., Deaves, R., 2010. Op. cit.;

[166] Bach, L., Serrano-Velarde, N., 2015. CEO Identity and Labor Contracts: Theory and Evidence from CEO Transitions. *Journal of Corporate Finance*, 2015, vol. 33, issue C, 227-242;

[167] Shleifer, A. and L. H. Summers, 1987. Breach of Trust in Hostile Takeovers. *NBER Working Paper 2342;*

[168] Bach, L., Serrano-Velarde, N., 2015. Op. cit.;

[169] Bach, L., Serrano-Velarde, N., 2015. Op. cit.;

Furthermore, previously studies have indagated the relation among large block holders and management turnover (for example Mueller and Philippon in 2011 and Bassanini et al. in 2010[170]). They considered block holders as a sort of securities for employment agreements especially in industry where the level of unemployment is more pronounced. Following the trail of this study, Bach and Serrano-Velarde in 2015 have included the family variable in the equation demonstrating that the significant variable was not "large individual block holder" but, again, "family". The high level of trust, credibility and commitment together with the network proper of family (or dynastically) CEOs become the key explanation for this employment securements.

[170] Mueller, M., T. Philippon, 2011. Family Firms, Paternalism, and Labor Relations. *American Economic Journal: Macro, forthcoming;*

Bassanini, A., Breda, T., Caroli, E. and A. Reberioux O., 2010. Working in Family Firms: Less Paid but More Secure? Evidence from French Matched Employer-Employee Data. *PSE Working Paper* 2010-40;

CHAPTER THREE: EMPIRICAL ANALYSIS

1. RESEARCH QUESTIONS

So far, a deep analysis has been conducted in order to lay down solid literary basis to assess the characteristic, reasons and the implication behind CEO replacement (or, turnover) of a target company. From the literary references, previous studies, as well as logical-deductive considerations, the following hypotheses have been formulated:

hypothesis 1: if the CEO is a family-CEO the probability of replacement is lower than in the case of non-family CEO;

hypothesis 2: if the company is involved in an institutional buy-out, there is lower probability of replacement for CEOs than in other type of deals;

hypothesis 3: if the company is involved in an institutional buy-out, the probability of replacement for a family-CEO is lower than in case of a non-family CEO.

2. DEFINITION OF THE SAMPLE

The initial sample has been extracted from Bureau van Dijk (BvD)'s Zephyr database[171]. It consists of 1,022 deals completed in the United States between 2006 and 2016[172]. The choice of this geographic area has been driven by the fact that US remain the country where the highest number of acquisitions of publicly traded companies by institutional investors has been experienced[173], and because, according to the U.S. Bureau of the Census, 90 per cent of American businesses are family-owned or controlled.

The deals included in the sample have been chosen upon certain physiognomies. Those follow:

(i) the target is a non-financial firm. For this reason, all the financial firms characterized

[171] The initial sample has been kindly granted by the authors of the paper "Pierini L, Bozzolan S, Villalonga B., 2019. To whom does the family sell the firm? The determinants of the choice of buyer in acquisitions. *Working paper*";

[172] When dealing with the years in which the deals have been announced, also 2005 can be figured out in the list. The reason is that it is assumed that a deal completed during 2006 should be addressed at least to the year before considering the rumor period, the announcing period, then the completion date. Thus, also 2005 must be considered.

[173] Wright M, Amess K, Weir C, Girma S., 2009. Private equity and corporate governance: Retrospect and prospect. Corporate Governance: An International Review, 17(3): 353–375;

by a two-digit SIC codes from 60 to 67 are excluded[174];

(ii) the acquirer can be either a company or a fund;

(iii) the target firm is publicly listed in the US and the headquarter is located within the American borders;

(iv) Zephyr classifies the deal as a merger, acquisition, institutional buy-out (IBO), management buy-out (MBO), management buy-in (MBI), or management buy-in/buy-out (BIMBO);

(v) the acquirer's stake in the target company after the deal is a majority stake – thus, higher than 50%.

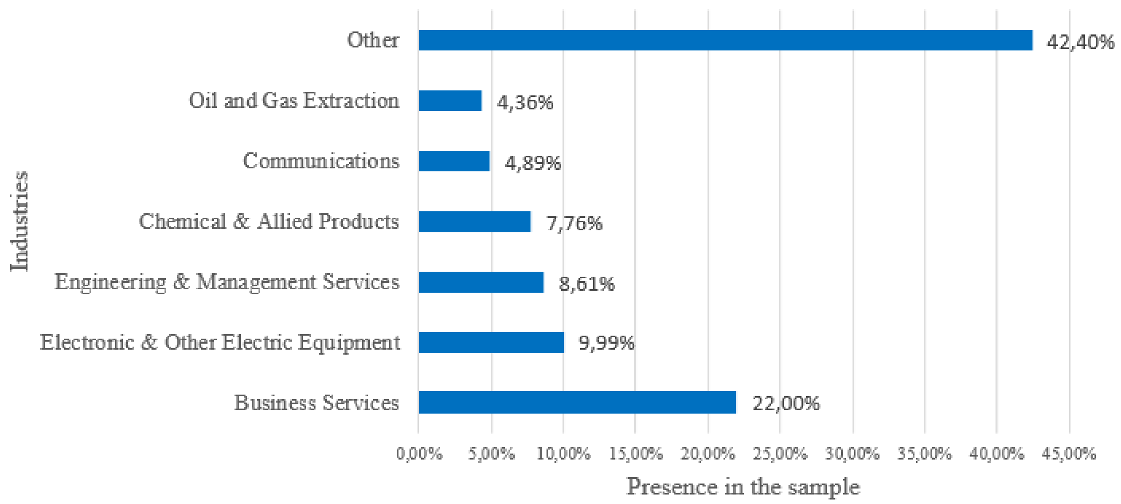
(vi) no restrictions were imposed on the geographical location of the acquirer's headquarter (even if 84% of the deals have a U.S. acquirer as well);

(vii) there must not be missing values for financial figures or other variables in the time period considered.

After the application of these selection criteria, the number of deals left in the sample turns to be equal to 941. Because of the structure of the sample, the related econometric interpretation reveals a panel-data models in which industry and year fixed effects are considered. Obviously, as a matter of consistency, also the whole set of descriptive statistics and all the graphs provided later on will be based on the final sample obtained and they will be afterward analysed in detail.

An exhaustive table with the whole set of deals organized by industry is included in the appendix (see Table 4). Anyway, the following graph (Figure 4) provides a snapshot of key data deriving from an arrangement of the sample according to 2-digit US primary SIC Code.

Figure 4 - Deals organized by Industry (2-digit SIC Code)



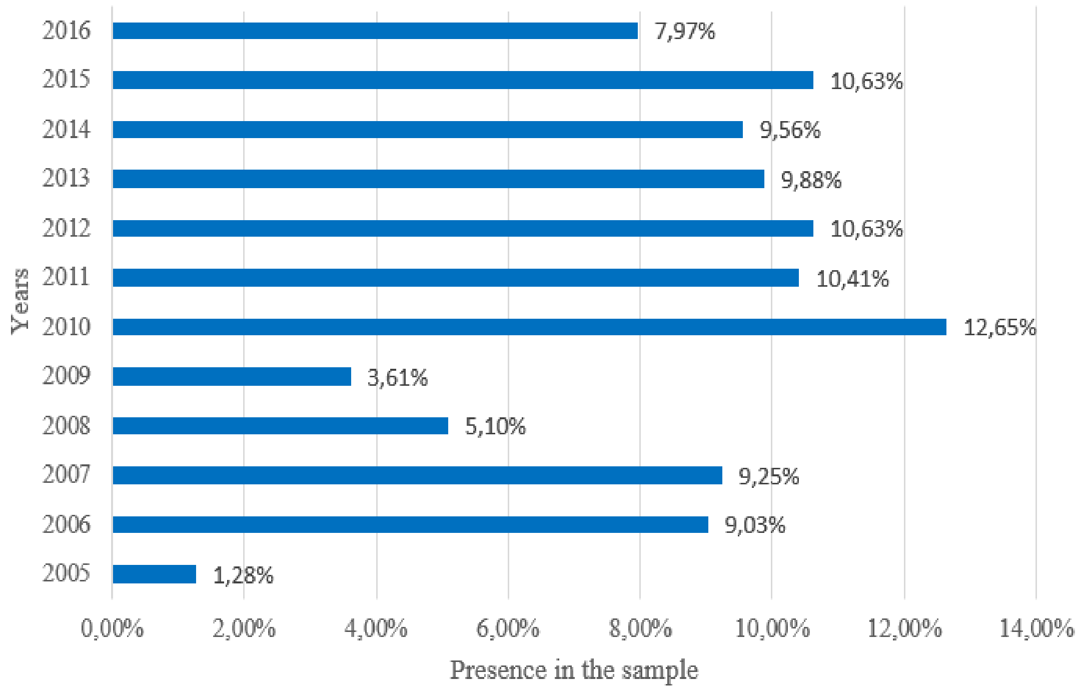
[174] US Primary Sic Code from 60 to 67 include Financial, Insurance and Real Estate Industry.

It is interesting to notice that the overwhelming of the deals has interested the "Business Services industry", representing 22 per cent of the total. This data is followed soon after by "Electronic & Other Electric Equipment" with 9.99 per cent and "Engineering & Management Services" industry, that represents instead the 8,61 per cent of the total. Those data are totally in line with the general expectations since the vast majority of M&As since 1985 mostly happened in the Industrial and in the Services sectors, with numbers of transaction equal respectively to 48,963 and 46,900[175]. Of course, "Other" accounts for 42 per cent of the sample, but it takes into consideration a big number of industries not namely mentioned so far.

Apart from that, other relevant industries are "Chemical and Allied Products" representing 7.76 per cent of the total, "Communications" with the 4.89 per cent and "Oil and gas extraction" with the 4.36 per cent. On the other side, the smallest percentage of deals has been recorded in industry such as "Non-metallic Minerals, Except Fuels", "Rubber & Miscellaneous", "General Merchandise Stores", "Furniture & Home-furnishings Stores", "Justice, Public Order, & Safety", "Environmental Quality & Housing" and "National Security & International Affairs". Related to that, only 11% of the deals were represented by each of the above-mentioned industry categories.

The following figure (Figure 5) represents, instead, the distribution of the sample over the period considered. Even in this case, a more explicative table with the whole set of deals in absolute numbers and organized by year of announcement is included in the appendix (see Table 5).

Figure 5 - Deals organized by year of announcement



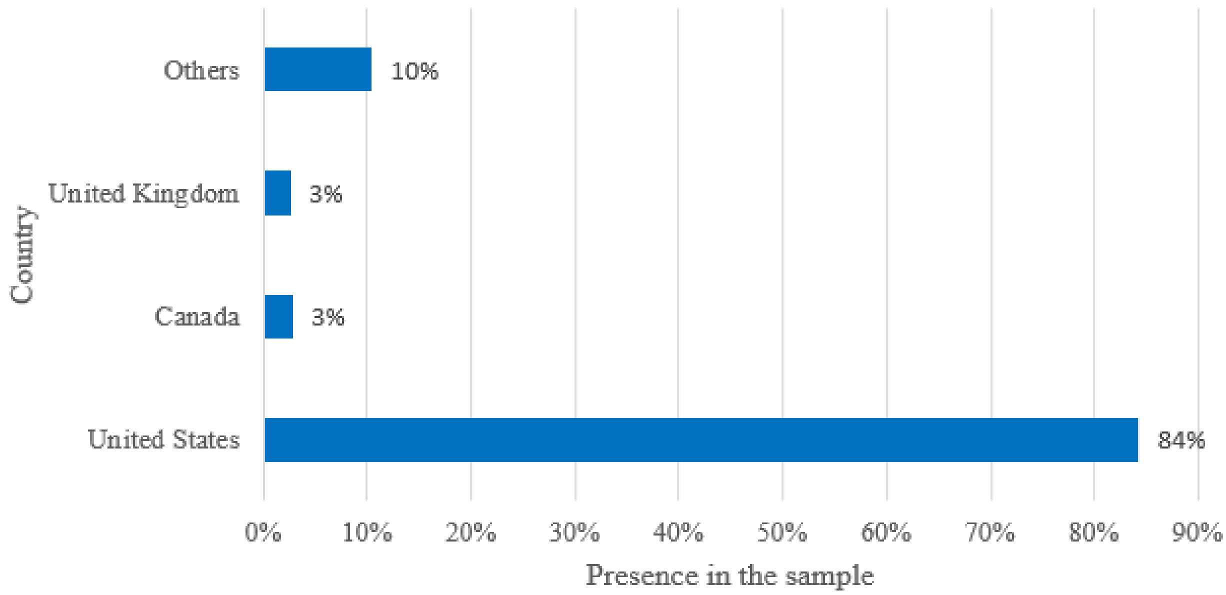
[175] Data acquired from the Institute for Mergers, Acquisitions and Alliances (IMAA), 2004-2019. "Number and value of M&A by Target Industry (1985-2016)";

As shown by the previous representation, the years in which the vast majority of deals have been completed are 2010, 2012 and 2015: in particular, the highest percentage has been recorded in 2010 (12.65% of the total). Those results were easily predictable if it is considered that the highest number of deals have been historically associated to years following a crisis or a financial scandal, hence deals which interested a recovery period or years of stable growth.

Furthermore, this time distribution is also conformed to the macro economic environment previously analysed in which the overall study is obviously set and, most of all, to the thought of Mr. Carr[176], arguing that "little signs of recovery in financial markets started to be recorded between the end of 2009 and the beginning of 2010, even though they did not mean stable growth at all".

As it has already been pointed out at the beginning of this chapter, the sample has been built up without imposing any restrictions on the geographical location of the acquirer's HQ (restrictions were only imposed on target companies). Anyway, it is interesting to have an overview of the composition of the sample also by the acquirer's location side, in accordance to the organizational perspective and the national perspective that is enclosed within a company[177]. Figure 6 shows a representation of deals organized by the country where the acquiring company are headquartered[178]. For a table with the complete list of countries involved, please see Appendix (Table 6).

Figure 6 - Deals organized by Acquiror Country Code



Coming back to the two perspectives above-listed, the first one focuses on features such as

[176] Micheal Carr, global co-head of Mergers and Acquisitions at Goldman Sachs Group Inc.;
[177] Hofstede, G., 1980. Culture's consequences: International differences in work-related values. *Sage, vol. 5*; Shrivastava, P. (1986). Post-Merger integration. *Journal of business strategy*, 7(1), 65-76;
[178] Data have been downloaded from Zephyr (BvD);

organizational culture and structure of a company, both considered as "macro factors". The latter focuses instead on "micro factors", which are considered to be - for example - individual believes or values, or any other personal and social behaviours that could differ from a country to another. Obviously, both perspectives reciprocally influence each other since, for example, the national culture can modify and shape the whole organizational structure. For this reason, when dealing with domestic acquisition, more relevance should be giving to the organizational culture and, at the same time, the national perspective should be considered when the acquisition is cross-border. Following this line of thought, it has already been demonstrated that culture distance positively influences target firm's top management turnover following and M&A: the result of previous studies is that the higher the cultural distances, the higher the turnover. No significant results are instead been achieved as financial performance is concerned. The explanation for that is the fact that cultural difference can erode communication at top management level, where the cooperation between acquiring and target top management is fundamental[179].

Turning to some figures, as previously mentioned, almost the totality of the sample is composed by acquirer company that are headquartered in the United States (84%). The second most popular countries are Canada and the UK, represented by 3% of the total, followed right after by Japan and Netherlands (1%). The others do not overcome the threshold of 1%. For this reason, for the purpose of this work, it is not appropriate to consider the geographical location of the acquirer as a key determinants of CEO replacement, even if with a dummy effect, since, because of the characteristics of the sample in analysis, the countries where only one company has been involved in an acquisition process, could provide distorted or falsified results and, in other cases, they will be automatically excluded from a statistical model.

3. DATA AND VARIABLES

To help the understanding of the variables is important to underline that all deal-level variables are measured at the deal announcement date whereas all firm-level variables are measured at the end of the last fiscal year prior to the deal's announcement[180]. Exceptions are made sometimes for the dependent variable, but the issue will be better clarified later on.

[179] Krug, J.A., Nigh D., 2001. Op. cit.;
[180] For example, if the deal Z has been completed in March 2002, the ROA is the one calculated at 31/12/2001;

3.1 DEPENDENT VARIABLE

CEO REPLACEMENT

In this model, the choice of replacing the chief executive officer of the target company is captured by a dummy discrete variable corresponding to 1 when the CEO has been replaced, 0 otherwise. Namely, *CEO Replacement* is the questioned variable.

The methodology behind the allocation of the values consists in considering replaced a chief executive officer who has been removed, replaced or substitute by the end of the transaction period, thus at the completion date. In some special situations, it could happen that the CEO has been kept inside the board for some more months after the end of the deal. The approach used in these situations consists in considering the CEO replaced even if she or he remains in office for the four months following the completion of the deals. It may also frequently happen that the ex-chief executive officer remains in the post-deal company as a consultant, director, president or any other role: also, in that case, for the purpose of this analysis, the CEO has been considered replaced.

The underlying assumption is that sometimes the after-deal integration process is so hard and difficult that it could start before the completion of the deal, and, in other cases, it could last for several months after the closing date. Even though companies struggle for speeding up the closing of the deal and the integration process in order to achieve the strategic purposes for which a deal has been firstly put in place, it has been investigated that – for example - on a sample 200 companies, 80% of the companies have experienced a longer process than expected[181]. Anyway, the results of the study were not analysed under a statistic perspective thus no words about the significance of the phenomenon can be said. However, it is a very common matter of fact.

In order to assess the variable examined in the model, information have been generally collected from different sources: at first place annual reports of the target companies have been examined, then Bloomberg Executive Profile & Biography, proxy statements published on the SEC's database, known as EDGAR, have been considered (mostly for bigger companies). In some other situation, the personal LinkedIn account of the CEO himself or herself, has been fundamental in order to figure out the result. Sometimes, none of these sources contained the information needed, thus Bloomberg terminal and Thomson Reuters databases have been consulted.

[181] EY: The right combination. Managing integration for deal success. https://www.ey.com/Publication/vwLUAssets/EY_Merger_Integration_Survey_the_right_combination/$FILE/EY-Merger-Integration-Survey-the-right-combination.pdf;

Generally speaking, the event of replacement for a chief executive officer has been reported in 605 deals out of 941, representing the 64% of the total. This percentage, of course, does not contain any information about other independent variables that will be presented in the next pages. Obviously, in the remaining percentage of the sample, the CEO has kept his or her position.

3.2 INDEPENDENT AND CONTROL VARIABLES

The model contains different independent variables that are aimed at capturing the relation between the event of replacement and the characteristics of the CEOs, deals and financial structure of the target.

FAMILY CEO

It is a dummy variable equals to 1 if when the chief executive officer is a family member or she/he has any kind of familiar and close relationship with the founders of the firms, 0 when no relationship has been identified. Not surprisingly, it could happen that the Chief Executive Officer and the Chairman's seats were occupied by the same person since this is a very common situation that is frequently replicated in most publicly listed U.S. firms[182]. As other important academic papers have argued before this study, having different variables for *Family CEO* and *Family Chairman* could have manipulated the model since a problem of multicollinearity would have risen. In addition, in family firms in which the Chairman and CEO are not the same persons, the Chairman has some kind of relations with the founding family and, as a matter of fact, he or she is likely to be the father/mother of the CEO. As could be imagined, this type of situation can make the differentiation quite arguable. Thus, for the purpose of this work, the issue has not been considered.

For the identification of family CEOs (i) firm annual reports from the last fiscal year ending before the announcement date of the deal; (ii) firm websites – when existing - and other web pages; (iii) Bloomberg Executive Profile & Biography; and (iv) LinkedIn have been fundamental[183].

For what has been said in the previous chapters, a chief executive officer can be considered as the means of transportation of knowledges and capabilities from a firm to another in case of acquisition as well as the keeper of the intergenerational socioemotional wealth of the family firm[184]. *Family CEO* are more frequently engaged in firms operating in "Industrial Machinery and

[182] Pierini et al. 2019. Op. cit.;

[183] The classification of CEO as family or non-family has been kindly provided by Pierini et al., 2019. Op. cit.;

[184] Strike, V. M., Sapp, S., Congiu, L., 2013. Leaving a legacy of transgenerational success: the effect of socioemotional wealth on CEO career horizons in family firms. *Academy of Management Annual Meeting Proceedings*, Vol. 2013 Issue 1, p508-513;

Equipment" (17%), "Chemical and Allied Products" (11%) and, finally, "Health Services" (10%). In those case, not only capabilities and knowledges, but also a great amount of network and personal connections are fundamental for the continuity of the business. On the other side, *Non-family CEOs* represent a higher percentage in industries such as "Business Service" (26.27%); "Electronic & Other Electric Equipment" (10.87%), "Engineering & Management Services" (10.32%) and "Communications" (5.64%). A more detailed table describing the composition of the sample with these filters can be consulted in Appendix (Table 7).

CEO AGE

It is a numerical variable representing the exact age a chief executive officer was at the time of the completion of the deal. This kind of variable has been included in order to represent the natural biological differences and analogies among different age groups of chief executive officers. Previous studies have already investigated the connection between turnover and age of the chief executive officer[185] achieving a significant positive relation in the statistical analysis. In addition, the hazard of post-acquisition CEO turnover as a function of CEO age have already showed in the past that there could be a problem of collinearity. Anyway, little evidences have risen with the model analysed that will be presented later on. "Age" has also a huge impact on the control exercised by CEO: it is often associated with longer tenure since older chief executive officers may have more power to influence the board thus reducing without any doubt the probability of turnover after an acquisition process[186]. Thus, in accordance to Lehn and Zhao, the variable has been included[187].

Considering again CEO as a source of human capital[188] it has been confirmed that the probability that a CEO will be retained then replaced is much higher for younger CEOs than senior individuals[189].

Before going ahead, it is important to underline that when comparing two groups of CEOs, younger CEOs vs older or senior CEOs, the two age groups include on one side people who are much less than 65 years old, whereas on the other side, we are referring to people who are 65 or more. As a matter of fact, a big increase in M&A activity has been recorded when CEOs turn to be 65, making this number a sort of threshold. Also, strong evidences have been found regarding the fact that

[185] Weisbach, M. S., 1988. Op. cit.;
Murphy, KJ and JL Zimmerman, 1993. Op. cit.;
[186] Lehn, K.M., Zhao, M., 2006. Op. cit.;
[187] Lehn, K.M., Zhao, M., 2006. Op. cit.;
[188] Rosen, S., 1987. Transactions Costs and Internal Labour Market. *NBER Working Paper No. 2407;*
[189] Buccholtz, A.K., Ribbens, B.A., Houle, I.T., 2003. The Role of Human Capital in Post-acquisition CEO Departure, *Academy of Management Journal*, 46(4), 506-514;

retirement preferences of chief executive officer deeply affect merger activity[190]. The reason why replacement is linked to the age is the personal and professional growth of the chief executive officer, that is expected to be lower when he or she is young. For this reason, since the low firm-specific skills are low, lower is the opportunity cost of losing the job. The same results in terms of replacement even if with different motivation behind, is true for CEOs close to retirement: in this case there is less motivation to continuously invest in firm-specific skills because of the diminishment of the productive years remaining to the person itself[191].

For the construction of the sample, data about CEOs age have been extrapolated by LinkedIn, Bloomberg Executive and Profile, as well as Bloomberg Platform and Thomson Reuters. In some special cases, it has been necessary to conduct some researches on the internet in order to get the information from press reviews released right after the acquisition.

CEO TENURE

It is a numerical variable indicating the years of service provided to the company at the completion date of the deal. There are some empirical evidences that *family CEOs* have longer tenures than *non-family CEOs*, most of the cases owning more professional skills[192]. It has been also demonstrated that CEOs supposing to have strict relations with the founder family are positively correlated with tenure[193]. Taking again as a reference the resource-based view of a firm, tenure implications within an organization provide that greater firm-specific knowledges are associated to a more efficient integration process, thus lower probability of turnover since those kinds of competences are difficult to be replicated[194]. Thus, following Kaplan and Minton[195], as well as other authors, "tenure" has been included as a numerical variable in the model. Anyway, some correlation may arise from the coexistence in the same model of a variable such as "*family CEO"* and a variable such as "*CEO Tenure"*. The reason could be found in the fact that founding families and founding CEOs, usually grow with their companies and they leave them only when forced or for extraordinary event. Hence, in the estimation of the model, this point will be taken into consideration even if it could be possible that it turns to be not significant.

---

[190] Jenter D., Lewellen K., 2015. Op. cit.;

[191] HamRoy S., Op. cit.;

[192] Sraer D., Thesmar D., 2007. Performance and behavior of family firms: evidence from the French stock market. *Journal of the European Economic Association;*

[193] Mullins W., Schoar A., 2013. How does CEOs see their role? Management philosophy and styles in family and non-family firms. *Working paper 19395;*

[194] Krug J.A., Aguilera R.V., 2004. Op. cit.;

[195] Kaplan, S., Minton, B., 2012. Op. cit.;

DEAL TYPE

This classification has been considered fundamental to the model in order to capture the different impact of having an acquisition put in place by different kind of investors, whom expect different proceeds from the transaction. According to the methodology undertaken by previous studies[196] the different type of deals has been defined following the articulation BVD's Zephyr database. Hence, the final sample results to be composed by: (i) Institutional Buy-Out; (ii) Acquisition <100%; (iii) Acquisition 100%; (iv) Capital Increase; (v) Management Buy-Out. A theoretical explanation has already been previously provided. However, since there is high interest on the interaction between Institutional Buy-Out and CEO replacement, the variable is inserted in the sample as a dummy one: the variable will be equal to 1 when the deal is a IBO, 0 otherwise.

CONTROL VARIABLES

The model also contains a set of control variables aimed at providing robustness to the model. Many studies have already recognized the market for corporate control as an important disciplinary mechanism since managerial replacement seems to be higher in firms that are targets of acquisition. Those data are particularly valuable when the performance of the firm before the acquisition is poor[197]. Results from the literature suggest that not satisfyingly performing managers are disciplined by both internal and external controls, indicating a negative relation between the likelihood of non-routine CEO turnover and firm performance. At the same time, also for turnover deriving from M&A and any other kind of deals, because of the fact that buyers and targets are hopefully to reach some synergies, it is important to consider key financial figures also to understand the economic situation in which the target company is at the time of announcement of the deal. For the sake of completeness, the whole set of control variables is explained below.

FIRM SIZE

Firm size has been included as variable in order to capture the need of the target firm for physical resources[198] – a need that could be hidden behind the acquisition in order to achieve further growth as well as assets considered to be productive or exploitable in the future. The size of the firm

[196] Pierini et al., 2019. Op. cit.;

[197] Martin K.J., McConnell J.J., 1991. Corporate Performance, Corporate Takeovers, and Management Turnover. *The Journal of Finance*, Vol. XLVI, no. 2, 671-687;

[198] Villalonga B., 2004. Intangible resources, Tobin's q, and sustainability of performance differences. *Journal of Economic Behavior and Organization*, Vol. 54, n. 2;

is measured with the natural logarithm of total asset, according to previous study[199]. Statistically speaking, the transformation of a dependent variable is necessary when the linear relationship between the dependent variable and the independent one must be improved. The normalization and the stabilization of the variance is possible considering the logarithm of the variable.

FINANCIAL STATEMENT RATIOS

The supply for financial resources is instead captured by firm profitability, measured as net income over total assets (*ROA)* whereas the need for financial resources and organizational resources are respectively captured by *Leverage* (ratio of debt over equity) and *Growth* (percentage change in revenues over the past year). Furthermore, *Debt/EBITDA* (ratio of debt over EBITDA) as well as pre deal *Market Cap* have been considered in order to capture financial metrics associated to the pre-deal phase. The choice of those variables is conformed to previous studies which considered firm profitability and growth as key elements considered by private equities or other types of acquirer before undertaking investment decisions[200]. Additionally, growth is a good indicator of revenue potential[201] and having an attractive profit level is consequently associated to a good ability to achieve predictable profits in the future[202]. Thus, the variables are included in the model.

Anyway, all financial values used to construct the variables, thus, to build up the model, refers to the last annual report publicly available before the deal announcement date. The information has been downloaded from Orbis, DataStream as well as Zephyr. The choice behind the separation of the resources required by the firm, thus the choice of including different kind of variables in the model relies in the academical classification made by Barney in 1991, who divided the valuable resources into four main categories: (i) physical, (ii) financial, (iii) organizational, and (iv) human, which, until now, have been all considered to be extremely important for the initiation and management of the

[199] Brauer M. 2006. What have we acquired and what should we acquire in divestiture research? A review and research agenda. *Journal of Management,* 32(6): 751–785;

Very, P., Lubatkin, M., & Calori, R., 1996. A cross-national assessment of acculturative stress in recent European mergers. *International Studies of Management & Organization*, 59-86;

[200] Dawson A. 2011. Private equity investment decisions in family firms: The role of human resources and agency costs. Journal of Business Venturing, 26(2): 189–199;

Elango, B., Fried, V.H., Hisrich, R.D., Polonchek, A., 1995. How venture capital firms differ. *Journal of Business Venturing* 10 (2), 157–179;

Sandberg, W.R., Schweiger, D.M., Hofer, C.W., 1988. The use of verbal protocols in determining venture capitalists' decision process. *Entrepreneurship Theory and Practice* 13 (2), 8–20;

[201] Wright, M., Hoskisson, R., Busenitz, L., Dial, J., 2001. Finance and management buy-outs: agency versus entrepreneurship perspectives. *Venture Capital* 3 (3), 239–262;

[202] Dreux, D.R., 1992. Financing family businesses: alternatives to selling out or going public. *Family Business Review* 5 (2), 233–237;

acquisition process and for the next future of the firm or the combined entity.

Other variables refer, instead, to the characteristics of the deal and the existing relation between the two sides of the acquisition process. Literature related to the topic suggests the importance of having such variable in the regression model because they are revealed to be fundamental to capture the dynamic behind the relation among target and acquirer[203].

DEAL VALUE

Deal Value is a numerical variable representing the dollar value paid for the transaction. It has been included in order to capture the differences between strategic buyers and financial buyers in the choice of the target since it has been already demonstrated that strategic buyers are able to pay much more for the control premium of a company than financial one thanks to the higher ability they have to generate synergies after the completion of the deal[204]. Thus, the different approach used by buyers could also impact the choice of replacement or not of the chief executive officer.

DEAL METHOD OF PAYMENT

Deal method of payment is a variable describing if the deal has been paid with cash, stock, shares or other[205]. The variable is inserted in the sample as a dummy: it takes values equal to 1 when the deal has been paid with stocks or stock equivalents, 0 otherwise. This kind of variable is considered because family involvement highly impacts the choice of payment, assumed that since strategic and financial buyers usually pay in different ways, the choice of the acquirer could derive from the method of payment that will be received. In particular, considering a situation in which a company is highly focused on firm performance and financial ratios, by being paid in cash, target company will protect short-term financial position of the entity as well as personal motivation of the employees. On the other side, assuming that a target will be paid with stock, or at least with a large amount of that, it is highly likely that a *family CEO*, as well as other directors, will remain involved in the future of the company business and the perception of shareholders of losing the family network after the M&A could be reduced[206].

---

[203] Villalonga B, McGahan AM., 2005. The choice among acquisitions, alliances, and divestitures. *Strategic Management Journal* 26(13): 1183–1208;

[204] Villalonga B, Amit R., 2010. Family control of firms and industries. *Financial Management* 39(3): 863–904;

[205] In the definition or cash also cash equivalent and cash assumed are included. In the definition of debt also debt equivalent or debt assumed are included. In the definition of shares, also shares equivalent have been considered. Other includes a mix of the previous mentioned method of payment.

[206] Pierini et al., 2019. Op. cit.;

LENGTH OF THE TRANSACTION

The variable represents the number of days from the announcement of the deal and the completion of the deal itself. Other studies have dealt with similar type of variable, in other to capture the pressure, the desire or the need to close the negotiation process as soon as possible[207]. Both side of the transaction, in fact., suffer from time pressure since it is associated with weaker bargaining power and it does not allow buyers to think about some important decisions[208], as the replacement of a chief executive officer could be.

This type of information has been included in order to consider the costs of replacement the firm could incur in when a chief executive officer has to be removed and replaced. The costs of replacement can be related not only to the severance package the company will have to pay to the removed executive - equal to approximately three years' total compensation[209], but also to the cost of finding another appropriate personal to guarantee the effectiveness of the replacement. It could be possible that in a very fast transaction, the buyer could avoid the possibility of make these costs real. Thus, it is expected that as the length of the transaction increases, the likelihood of replacement increases as well.

Finally, Industry and year effects have been included in the model.

The summary of the whole set of variables considered in the model, the source used to construct each of them, as well as their explanation is summarized in Table 8 (see appendix).

3. METHODOLOGY

The hypothesis previously presented will be tested by conducting a binary logistic regression model, in which the dependent variable can assume only the values 1 or 0, thus it is limited in the interval [0,1]. The model will test the relation between the replacement of the chief executive officer and the involvement of the founding family on the CEO role, thus if the CEO is *family* or *non-family*.

---

[207] Smith, D. L., Pruitt, D. G., Carnevale, P. J., 1982. Matching and mismatching: The effect of own limit, other's toughness, and time pressure on concession rate in negotiation. *Journal of Personality and Social Psychology*, 42(5), 876–883;

Druckman, D., 1994. Determinants of Compromising Behavior in Negotiation: A Meta-Analysis. *The Journal of Conflict Resolution*, 38(3), 507–556;

[208] Pruitt, D., Drews, J., 1969. The effect of time pressure, time elapsed, and the opponent's concession rate on behavior in negotiation. *Journal of Experimental Social Psychology*, 5, 43–60;

Stuhlmacher, A. F., Gillespie, T. L., Champagne, M. V., 1998. The impact of time pressure in negotiation: a meta-analysis. *International Journal of Conflict Management*, 9(2), 97–116;

[209] Stoddard N., Wyckoff C., 2008. The cost of CEO failure. *Chief Executive Group, LLC* (Online Newspaper);

In the model, year (represented by the year of announcement) and industry (represented by the two-digit SIC code) fixed effect have been considered, respectively γ and μ.

The equation related to the model follows:

$$P[CEORep] = \beta + \beta_1 Family\ CEO + \beta_2 CEO\ Tenure + \beta_3 CEO\ Age + \beta_4 Deal\ Type + \sum \beta_5 Controls + \gamma_i + \mu_x + \varepsilon$$

where all the variables have been already explained.

As a robustness check, it has also been initially tested the impact of having a *family CEO* on the likelihood of replacement without considering any other implication and variable. The result has been a similar smaller model, containing fewer variables, highly significant and robust.

Later on, considering the collinearity of some variables such as CEO tenure, a reduced model has been considered as the base line model for this analysis.

From previous investigation and according to the hypothesis formulated, three results are expected: (i) a negative coefficient for the variable *family CEO*, (ii) a negative coefficient for the variable *IBO*, and (iii) a significant coefficient for the interaction term.

4. RESULTS

4.1 DESCRIPTIVE STATISTICS AND FIRST EVIDENCES

The base line model deriving from the considerations previously exposed has produced the following evidences. Table 9 (see appendix) shows the descriptive statics related to the variables of the model, whereas Table 12 (see appendix) provides a representation of the correlation between variables.

The mean of *CEO Replacement* equals 0.6429, thus indicating that a replacement of the chief executive officer has taken place around 64% of the total number of deals: in absolute numbers, when the CEO has been replaced in the sample, 94 times the CEO was *family,* whereas, when the CEO has not been replaced, the CEO was *family* in 75 cases. *Family CEO* is characterized by a mean of 0.1796, hence representing that 18% of the chief executive officer of the sample were closely linked to the founding families and they are identified as *family CEO*. As *CEO Age* and *Tenure* are concerned, their mean is respectively 6.88 and 52.73: this is a very interesting results since it has already been previously discussed that during the first decade of the twenty-first century the average tenure was decreasing stabilizing around a number of 6 (years).

The average *Deal Value* for a deal in the sample is 2,596,523,119 USD, whit the lowest value equals to 983,000 USD and the highest value equals to 70,500,000,000 USD – those data clearly state that the overall sample was composed by deals with a relative low value. *Deal Type* mean corresponds, instead, to 0.1722 by indicating that 17,22% of the deals has been organized as an institutional buy-out (IBO), that – as defined before in this work – is the takeover of a target company put in place by a financial institution, commanded by a group of management who will run the company. Among the companies that have been involved in an institutional buy-outs, 32 were run a *family-CEO*, whereas 130 where run by a *non-family CEO*.

Furthermore, the average length of a transaction in the sample has been 0.285432: since this number is expressed in years, it means that on average, a deal in the sample has been involved in a transaction lasting for 104 days. Moreover, the 10,94% of the deals in the sample have been paid in stock or stock equivalent, by indicating that the remaining 89% has been paid in cash, debt or a mix of all the previous options.

Finally, financial metrics have presented a situation as follows: the average ROA of the sample is -3.89, indicating that on average, the companies of the sample have been not so productive since if net income is negative, ROA is negative, too. Giving some more details about the topic, the lowest ROA in the sample corresponds to -686.78, whereas the highest ROA value is 301.87, but since the median is around 3.33, it is expected that the most frequent for ROA in the sample is still low, but above the median. Anyway, target companies in the sample on average seems to be not so profitable at the announcement date. Then, *Target Growth*: the 941 target companies of the sample have grown by the 16% with an average *Leverage* of 79.44, by indicating an important usage of the financial leverage. Lastly, the average target company in the sample was characterized by a *Pre-Deal Market Cap* of 1,899,191 USD (this value should be taken into account considering that the company with the highest market cap in the sample was characterized by 73,893,080.06 USD.

Critical correlation has emerged between the two variables *Family CEO* and *CEO Tenure*: this result confirmed the previous suspect about a strong correlation among them. Numerically speaking the coefficient of correlation was not really high (around 0.2785); anyway, the p-value for this evidence was really low by making them highly significant (under the null hypothesis of no correlation, p value equals to 0.0000). For this reason, the variable has not been considered in the final model.

4.2 INTERPRETATION OF THE MODEL AND VALIDATION OF THE HYPOTHESIS

Generally speaking, p-value for the model is low (0.0000). The one analysed is a logit binary model with a limited dependent ordinal variable, that have taken only the value 1 or 0. The number of observations has been 941 and the final model presents a McFadden Pseudo R^2 equals to 0.11; furthermore, industry and year effects considering 2-digit SIC Code have been applied to the model. Table 10 summarized the most significant results from the estimation of the logit models with years and industry effects.

As a premise, in this logistic regression, coefficients represent the change in the logit for each unit change in the predictor whereas, the slope is the rate at which the predicted log odds increases (or, in some cases, decreases) with each successive unit of X. The f (beta) of the model is equal to 0.223 by meaning that the probability of replacement of the chief executive officer associated to the base line model is approximately 22%.

From the output of the logit binary regression model, it is evident that *family-CEO* shows a negative and highly significant association with the dependent variable (coeff = -0.484095 p-value = 0.0117) by confirmed what was announced with the hypothesis 1. Recalling the hypothesis: "*if the CEO is a family-CEO the probability of replacement is lower than in the case of non-family CEO*", it could be confirmed according to the data that there is a significant negative relation between *family-CEO* and CEO replacement.

The same negative relation has been found also between the variable indicating CEO Age (coeff = -0.014 p-value = 0.1327) and the dependent one, but those results is only limited to the data of the sample since it is not statistically significant. Those considerations are in line with the literature, that in many occasions underlined the strong entrenchment of chief executive officers linked to the founding families or being the founder himself or herself.

Furthermore, according to the model the variable *Deal Type* is highly significant and since it has a negative coefficient it is possible to acknowledged that on average an institutional buy-out is associated with a lower probability of replacement for CEOs, regardless of family involvement in the chief executive officer's position (coeff = -1.10002 p-value = 0.000) if compared with the base-line level of the variable, which is representative of other type of deal such as acquisitions, capital increases and management buyouts.

Deal Method of payments is, instead, characterized by a positive coefficient, thus a positive relation with the probability of *CEO Replacement.* Anyway, p-value is not enough low to make the variable significant, thus the higher probability of replacement when the deal is paid with stocks rather than with other method of payments is only circumscribable to the model analysed.

As financial variables are concerned, strong level of significance have been recorded for the *Pre-deal target Market Cap* and *Firm Size*. The former (coeff = 7.41440e-0.8 p-value = 0.0231) is positively associated to the probability of replacement of the chief executive officer and the same is for the latter, (coeff = 0.1076 p-value = 0.0487) implying that by taking a Δ Firm Size equals to 1, it is expected to have a Δ log odds equals to 2.41. This with no doubts indicate that larger firms are generally more willing to experience turnover at top management level for CEO than smaller companies.

Anyway, only two of the set of control variables are statistically significant. Even if there is large space in the literature for the resource-based view theory, it seems that there is no evidence that on average an acquirer would consider the chief executive officers as the embracement of the financial results of the company.

Lastly, also *Length of the transaction* does not provide any statically significant results, although in the sample there is a positive linear association with the dependent variable. Thus, evidences from the model show that even if the composition of the labour market is really important and there are several costs associated to the hiring of a new CEO[210], this extra expense does not play a very crucial role in the decision taken by the acquiring company to replace the CEO or taken by the CEO himself or herself to leave the organization, even if the time constraint deriving from the transaction period is considered.

To provide a better interpretation of the previous data, the following summary table (Table 10.1) reports the whole set of variables, with the coefficient and the odds ratio (OR). OR is a static that helps in understanding and quantifying the level of association between two events. Applied to the specific situation of this study, the odds ratio is defined as the ratio of the odds of an event of replacement in the presence of the other variables, thus, for example, *family CEO*. Numerically speaking, the odds ratio for *family CEO* is 0.6163 by indicating a measure of the variation of the likelihood linked to this specific variable.

[210] Shleifer, A. and L. H. Summers, 1987. Op. cit.;
Bach, L., Serrano-Velarde, N., 2015. Op. cit.;

Table 10.1 - Coefficients and odd ratios from the regression model

Variable	Coefficient	Odds Ratio
const	2.35435	
Family CEO	-0.484095	0.616254655
CEO Age	-0.0143074	0.985794464
Deal Type	-1.10002	0.332864426
Deal Method of payment	0.184859	1.203048798
Deal Value ($)	-2.66E-11	1
Length of the transaction	0.0271973	1.027570522
D/EBITDA	-0.00265809	0.99734544
Firm size	0.10762	1.113624488
ROA	-0.00202133	0.997980712
Growth	0.00122353	1.001224279
Leverage	-0.000111	0.999889006
Pre deal Market Cap	7.41E-08	1.000000074

4.3 FURTHER EVIDENCES

To validate the hypothesis predicted before according to which there could be a significant interaction between *institutional buy-out* and *family CEO*, a second regression model has been considered. The variables have been kept as the same for the previous experiment but it has been added an interaction term between the variable *family CEO* and *Deal Type* to understand if there could be a significant impact on the probability of replacement when the CEO is familiar to the company and the deal is an institutional buyout. Statistically speaking, when a model has interaction term(s), it means that it tries to describe how the effect of a predictor variable depends on the level and value of another predictor variable. Since there is a high collinearity among *Age* and *Tenure* of chief executive officers with the interaction factor, this latter variable has been again excluded from the model.

The equation related to this second model follows:

$$P[CEORep] = \beta + \beta_1 Family\ CEO + \beta_2\ Deal\ Type + \beta_3(Family\ CEO * Deal\ Type) + \sum\beta_5 Controls + \gamma_i + \mu_x + \varepsilon$$

where all the variables have been already explained and $\beta_3(Family\ CEO * Deal\ Type)$ represents the interaction that is wanted to be studied, with the related coefficient. Of course, in this case four equations have been generated since the variable *family CEO* can take value 0 and 1 and the same is true for the variable *Deal Type*. Table 11 summarized the most significant results from the estimation of the logit models with years and industry effects.

Evidences arising from this model show that since the interaction term has been included, keeping all the other factor constant, the probability of replacement for a *family CEO* is lower than for a *non-family CEO*, even if this difference is not numerically high. The equation below provides a numerical picture of the model:

$$P[CEORep] = 2{,}39 - 0{,}52\, Family\ CEO - 1{,}14\, Deal\ Type + 0{,}1878\, (Family\ CEO * Deal\ Type) + (\dots) + \gamma_i + \mu_x + \varepsilon$$

Thus, we can say that we could also analyse the effect over *non-family CEO* when the level of *family CEO* equals 0 and the level of any other type of deals when *Deal Type* equals 0.

Anyway, since the interaction between the two terms is not significant, it is not possible to validate the third hypothesis predicted at the beginning even though are significant both the variable indicating the type of deal that the ones indicating the characteristic of the chief executive officer.

There are of course evidences in the sample considered, but those evidences cannot be extended on an average basis since p-value is high (coeff = 0.1878 p-value = 0.6960). As a final consideration, it is not possible to validate the third hypothesis.

DISCUSSION AND CONCLUSION

Looking at the overall content, this work is aimed at understanding the event of replacement of a chief executive officer and at analysing the phenomenon in different situations: when the CEO is a *family CEO*; when the type of deal in an *Institutional Buy-Out* and when those two last hypothesis interact among them, by generating a third hypothesis, in which the likelihood of replacement is read when referred to the interacted case.

As predicted by one of the hypothesis presented, by considering the overall model in both cases, family involvement has demonstrated to have a considerable impact on the probability of replacement of a chief executive officer in case of acquisition, strengthening consideration related to the power that closeness relation with the family has even when dealing with an external counterpart. In fact, it has been demonstrated, both literarily and analytically, that being a *family CEO* is associated to a lower likelihood of replacement than being a *non-family CEO*. All that is contextualized in a situation in which the company is involved in a deal, thus the event of replacement is forced and not physiological.

The reason behind these findings could be traced back to the identification of a *family Chief Executive Officer*, as the keeper of socioemotional wealth: following previous definition, SEW is that complex system embracing the whole sphere of the organization in terms of ownership, entrepreneurial tradition and culture, which is ultimately responsible of generating family image, identity and reputation[211]. Thus, CEOs could be the right intermediaries for the spread of this recognition in the social community as well as for ensuring the survival of the culture and the ideology associated to the company.

This consideration is, also, perfectly in line with the role that a chief executive officer should accomplish to, in accordance to the theory of Mintzberg (1973). Paraphrasing the "*Nature of Managerial work*", when dealing with the internal and the external work environment, establishing interpersonal relation and by acting as consultant and strategist for the company, a *family CEO* become the good mediator and negotiator as well as the curator of the company, most of all, when vulnerable. This could be, again, a good element taken into account by an acquiring company in the

[211] Zellweger, T. M., Kellermanns, F. W., Chrisman, J. J., & Chua, J. H. 2012. Family Control and Family Firm Valuations by Family Ceos: The Importance of Intentions for Transgenerational Control. *Organization Science*, 23(3): 851-868;

Berrone P., Cruz C., Gomez-Mejia L.R., 2010. Op. cit.;

Lin, N., 2001. Op. cit.;

decision of replacing a CEO whom has familiar connection with the target. Additionally, it should be underlined that the precious added-value of having a chief closely-linked to the founding family is so important that, sometimes, it could happen that he or he remains in the post-deal entity as a consultant, or in other prestigious functions. Anyway, this is not the only justification, since keeping the ex-chief executive officer within the management of the company, even if in a different role, could be the only compromise to let the acquisition goes on. In some other cases, instead, the choice of keeping the ex-chief in the post-deal turns to be strategic since acquirers recognize that most CEOs whom stay two to three years after the completion date as 50%-time consultants and non-executive directors, can still do something "*amazing (and lucrative) things*"[212].

Moreover, the significance of being a *family CEOs* is also supported by literature regarding block-holders and management turnover. The enormous credibility and high-quality level of the network proper of a chief executive officer who is *family* or, even more, is the founder of the company itself, become a perfect justification for the securements linked to employment. In addition, a *family CEO* bears the expertise, the knowledge and the human capital proper of his or her role and, last but not the least, even when the labour market is more frictional, they are safeguarded by long-term contracts[213].

However, by evidencing the peculiarities of a *family chief executive officer*, there is no intention to discredit *non-family* ones. The final aim is to underline the high connection, at 360 degrees between the CEO and the internal and the external work environment of the company they are running (and, sometimes, have also founded).

The results arising from the logit regression model have also given proof not only to the relation between firm size and the likelihood of replacement by making possible the assumption that for bigger companies, the probability of replacement tends to increase, but also it has highlighting the great significance that the type of deal has on the replacement decision. Without any doubts, behind the typology of deal a target company faces at the moment of acquisition, there are different group of buyers whom are interested in different form of "revenues" generated by the acquisition. As a matter of fact, the second hypothesis presented, has been validated, by showing that a deal with the characteristics of an IBO, is associated to a lower probability of replacement for chief executive

[212] Forbes: Why So Many CEOs Call It Quits After Their Companies Get Acquired. https://www.forbes.com/sites/quora/2016/08/09/why-so-many-ceos-call-it-quits-after-their-companies-get-acquired/#49585b8e3238;

[213] Bassanini, A., Breda, T., Caroli, E. and A. Reberioux O., 2010. Op. cit.;
Bach, L., Serrano-Velarde, N., 2015. Op. cit.;

officers. Previous studies have already confirmed that financial buyers are more likely to ensure firm's independence[214] and to avoid interferences in the daily management of the company[215]. Hence, no conflicts with literature come at this point.

However, it has been not possible to infer that the interaction between being a *family CEO* and being acquired by an *Institutional Buy-Outs*, is associated, on average, with a lower likelihood of replacement for the executive.

It is certain that in the sample there are many cases of *family CEO* who has been replaced after have being acquired with an IBO. By the way, since the interaction term is not significant, it is not possible to extend the result at the population level by inferring that, on average, family-linked executives are more entrenched and benefit from a lower likelihood of being replaced. A reason for that could be find in the composition of the sample, which provides not so many cases in which in the sell side is involved a *family CEO* and the buy-side is characterized by investors who want to pursue an IBO. What has been just argued could be seen as consistent with the skepticism that family firms have toward financial buyers, held responsible of taking advantages from the business instead of taking care of it[216], thus they do not engage in so many deals with this type of buyers – or, at least, they try not to do so.

Nevertheless, the relation between *family CEO* and IBO that the model has highlighted is neither wrong or surprisingly since it is commonly accepted that the involvement of family and the structure of some family firms moderate the bargaining power that institutional investors can exercise during a deal[217].

Furthermore, interesting results come from the analysis of some financial data presented in the model. As the size of the firm increases, both in terms of assets and in terms of shares, the likelihood of replacement seems to increase. It could be argued that at very high level of firm size, there are very few relations to secure with the chief executive officer, thus the decision of replacement merely depends on a cost opportunity trade-off of the acquiring company.

[214] Meuleman, M., Amess, K., Wright, M., Scholes, L., 2009. Op. cit.;

[215] Anders, G., 1992. Op. cit.;

[216] Achleitner AK, Herman K, Lerner J, Lutz E., 2010. Family business and private equity: conflict or collaboration? The case of Messer Griesheim. *The Journal of Private Equity*, 13(3): 7–20;

[217] Ahlers, O., 2013. Family Firms and Private Equity: a collection of essays on value creation, negotiation, and soft factors. *Springer Gabler*, p. VI;

As the non-significant variables are considered, it should be underlined that they in any cases contributed to the validity of the model, and, even if they do not present statistical significance in this model, it is not said that in other context, they could be of highly impact on the same phenomenon, as the one discussed.

To conclude, with the increase of the understanding of the peculiarities of the topic of this work, the feeling that was being elaborated is that there is still a high gap between some types of deals and the implication that they could have on the governance of a family firms, as well as, on the single individuals that compose it. Of course, this gap is made even more pronounced because of the preferences exhibit by family firms to sell their business to strategic buyers, but, on the other side, there is the evidence that directors are more inclined to prefer financial buyers since personal goals tends to outweigh the preservation of SEW. Consequently, a trade-off between choices of firms and directors, and difficulties related to the search of information about some specific financial investors should be considered when dealing with this analysis.

Finally, the entire work has been opened with the premise that companies are composed of people, as well as corporate governance is aimed at controlling the actions of different people who interact with the internal environment of the company itself and with the market. And, when family firms are involved, human component is stronger and heartfelt, even when on the other side of the transactions there are funds, PE, or other types of financial investors. Furthermore, in a world in continuous evolution, where the labour market is not, anymore, the one of the past, it is impossible that all the rules are set only by the market. Thus, for future researches and analysis, human component should be carefully taken into consideration.

ACKNOWLEDGEMENTS

I would like to show my gratefulness to Prof. Giovanni Fiori with whom I have started my bachelor career and I have concluded my whole academic path so far. Thank You for your advice, support and guidance over these years.

SUMMARY

INTRODUCTION

This thesis study wants to explore the event of replacement of chief executive officer after an acquisition. The final aim is to prove the existence of an association between the event of replacement and some characteristics of the chief executive officer, by distinguishing between a *family CEO* and a *non-family* one after an acquisition. Hence, also the implications deriving from the introduction in the analysis of different types of bidders are considered. To validate the hypothesis deriving from this issue, a regression analysis has been conducted. The model has demonstrated a highly negative significant relation between *family CEO* and the event of replacement and, again, a highly negative significant relation between *institutional buy-outs* and CEO replacement. Furthermore, despite evidences in the sample considered, the interaction between chief executive officers familiarly linked to the company and institutional buyouts, has not showed significant results. The analysis is based on a sample of 941 deals that have taken place in the United States between 2006 and 2016.

The whole work starts from the definition of a company as "*an association of many persons who contribute money or money's worth to a common stock and employ it in some trade or business and who share the profit and loss (as the case may be) arising there from (...)*"[218]. Without considering monetary implications, what remains is the "association of many person" who contribute to provide value for the company. Still, "value" can be associated to economic or market value, or socioemotional wealth, as in the case of some special type of firm. Undoubtedly, the totality of duties accomplished by corporate governance has implication in the daily life of business as well as in case of extraordinary event, such as the acquisition of the company itself by different investors. About acquisition, the subject involving Mergers and Acquisitions has received great attention and it has been accused to have progressively changed the overall structure and configuration of the market because of the implication of its procedures. Taking as an example what happened during the past years, the beginning of the XXI Century was characterized by tremendous adaptations: while the 1980s was the period of hostile takeovers, in the 1990s the market started to be characterized by friendly mergers[219]. If on one hand that period was characterized by a prosperous M&A activity thanks to a common mutual agreement, on the other hand they were years of big changes. Among them: (i) higher shareholder activism leading to a stricter monitor and influence over firm decisions by institutional investors[220]; (ii) a growing number of outside directors in the boards; (iii) an increase

[218] Nathaniel Lindley, Baron Lindley, (29 November 1828 – 9 December 1921) was an English judge. He was raised to be a Lord Justice of the Court of Appeal in 1881.

[219] Andrade, G., Mitchell, M., Stafford., E., 2001. Op. cit.;

[220] Daily, C. M., D. R. Dalton, N. Rajagopalan., 2003. Op. cit.;

in the consciousness that CEOs were highly capable of generating value and positive cash flows for their company thanks to their resources[221].

Recent studies have analysed those changes, proving that CEO's role has got riskier and harder: in 2002 R. Khurana reported that CEO turnover recorded an increase in 1990s; later on, in 2008 Murphy and Zabojnik confirmed the evidences of previous results. Lastly, Kaplan and Minton in 2012[222] showed that annual CEO turnover was recorded at 15.8 per cent, from 1992 to 2007, with an average tenure of less than 7 years.

In addition, always more space in the literature has been given to the relation between family firms and institutional investors. The peculiarity of family firms is represented not only by the heterogeneity of the category, because of different level of family involvement, size, industry and culture[223], but by "succession", which could be a problem for the survival of the entity as family-owned and controlled[224]. Lastly, it is also interesting the relationship between institutional investors and family firms, even though there are little references about the matter. This is likely due to the difficulty to get access to data, given the high confidentiality surrounding buyout deals. Even if action plans put in place by PE when instructing a deal are clearly stated, when family firms enter the equation, they can manipulate decision-making of PEs[225] since they associate "family" to a weakness. The reason is linked to risks deriving from the family involvement and subsequent related strategies undertaken to mitigate those risks (such as earn outs, management changes, etc.).

The time period considered for the study ranged from the beginning of 2006 and the end of 2016. This 10-years-period is of extremely importance in order to understand financial implications and changes of the market because of the series of dramatic events that eroded markets and investors. First, the explosion of Internet at the beginning of the 21st Century and the consequent speculative bubble that invested the market causing huge losses. Then, the catastrophic event of 9/11 which shaped the future of the global economic climate forever. In that occasion, NYSE shut down for days with $60 billions of losses. Moreover, 2001 was the year of the corporate scandals: names as Enron, Arthur Andersen, Tyco, WorldCom acquired a global resonance because of corporate fraud scandals that led to bankrupt those companies. To help the market for corporate control, the Sarbanes-Oxley

---

[221] Bertrand, M., Schoar, A., 2003. Op. cit.;
Wang, H.C., Barney J.C., 2006. Op. cit.;
[222] Kaplan S.N., Minton B.A., 2012. Op. cit.;
[223] Chua, J. H., Chrisman, J. J., Steier, L. P., Rau, S. B., 2012. Op. cit.;
[224] Cabrera-Suárez, K., Saá-Pérez, P. de, García-Almeida, D., 2001. Op. cit.;
[225] Thaler, R. H., 1993. Op. cit.;
Ackert, L. F., Deaves, R., 2010. Op. cit.;

Act was released in 2002: from that moment, economic punishments started to be issued and principles of independence from their clients were established for accounting firms. When little signs of recovery were visible in the distance, the sub-prime housing crisis in 2008 and the housing bubble hit the market.

Anyway, according to Michael Carr[226]: "*In the aftermath of 2008 it took a good five years for people to start thinking about M&A again. It was 2013 when we entered a new era that started the current environment. Five years later, we are now in a place where shareholders are demanding growth and we're seeing both horizontal and vertical transactions. All of which are signs of a strong market"*. Nevertheless, even if most of the crisis started within the US borders, American target companies accounted for high dollar values, while the European recovery was still slow and heavy. Anyway, the situation in the Asian continent was better. Acquisitions with Asian targets boomed representing the 19% of the total world transactions (compared to 12.6 per cent level pre-crisis)[227]. "Energy, mining and utilities" was the sectors with the highest deal value was, followed right after by TMT (Technology, Media and Telecom) and, later on, by financial services. The worst places in the top 10th sectors classification are occupied instead by leisure, transportation and RE industries.

DEFINITIONS

For the purpose of this work, it has also been considered appropriate to give some definitions about the main concepts discussed. The main concepts regard; (i) Deal methods (M&A, IBO; MBI, MBO, LBO); (ii) Target and acquirer firm; (iii) Family firms; (iv) Board of directors and CEOs.

The terminology *Mergers and Acquisitions* is evidently composed of two different notions. A *merger* is the combination of two companies after which only the bidding one survives, whereas the other disappears[228]. An acquisition, instead, defines the situation in which one company gains a controlling stake in another company[229] or a selection of asset of it[230]. However, the distinction is merely theoretical since the final operation leads to the same result: two entities once in different businesses, now operating together to accomplish strategic or financial objectives[231].

[226] Michael Carr, global co-head of Mergers and Acquisitions at Goldman Sachs Group Inc.
[227] Bloomberg data
[228] Gaughan, P.A., 2007. Op. cit.;
DePamphilis, D., 2003. Op. cit.;
[229] This company can be a subsidiary, or a totally new company not included in the ownership structure of the bidder;
[230] Scott, D.L., 2003. Op. cit.;
DePamphilis, D., 2003. Op.cit.;
[231] Sherman, A.J., Hart, M.A., 2006. Op. cit.;

Institutional buy-out (IBO), Management buy-in (MBI) and *Management buy-out (MBO)* - IBOs and MBIs are both included into the macro-category of Leveraged Buyouts (LBOs)[232]. An LBO is defined as "the acquisition of a company, division, business, or collection of assets ("*target*") using debt to finance a large portion of the price. The remaining portion is funded with an equity contribution by a financial sponsor (…)". Traditionally, debt represents 60 or 70 per cent of the financing structure, while equity represents the remaining 30 or 40 per cent[233]. However, when the current management wants to purchase a controlling stake and it is looking for institutional support from PE to fund the transaction, the operation is called "Management Buy-Out". The final aim is to take the company private[234]. IBOs, instead, consists of bidding groups of institutional investors and PE. The main difference between MBOs and IBOs, is whether the management team gained its equity stakes by being part of the bidding group (MBO), or by being part of the remuneration package (IBO)[235]. Expressing the concept in other words, if the management takes over the company, the LBO is named management buy-out; if an outside management team purchases the company, and it subsequently goes private, the LBO is named management buy-in.

During a deal process two spheres of interest will arise: the sell-side and the buy-side. The *target company* will be the one who will sell, or that will be acquired, whereas the *acquirer company* will be the bidder, or the one that with an offering will acquire the target.

Turning instead to another topic, scholars often identify as *family firms*: (i) firms where members of a family own more than 50 per cent of the total shares[236]; (ii) firms where members of the family dominate both board and top management team; (iii) firms that think to be a family firm behaving like that. Being private is not a prerequisite since also listed companies can be family firms: in this case a minor per centage of shares (e.g. 30 per cent) is enough to allow the control of the family. Anyway, researchers are trying to provide a complete and clear definition of family firms, by investigated every single aspect of this particular type of firm.

Finally, *boards of directors*. They are the important players for the company, and they have the responsibility to take the most crucial decisions for the firm. Their major tasks consist of acting as an advisor to CEOs, monitoring as well as disciplining them (of course, when it is required). In order to ensure the effectiveness of the board itself, the board has also to show a high degree of

[232] Renneboog L., Simons T., Wright M., 2007. Op. cit.;
[233] Rosenbaum J., Pearl J., 2009. Op. cit.;
[234] Wright, M., Thompson, S., Chiplin, B., Robbie, K., 1991. Op. cit.;
[235] Renneboog L., Simons T., Wright M., 2007. Op. cit.;
[236] Westhead, P., Cowling, M., 1998. Op. cit.;

independence. Furthermore, effective boards typically have to accomplish three main tasks: strategic, control and network. Anyway, the chief executive officer performs the key role within the organization, and, as the world is getting more and more connected with the globalization and offshore strategies are gaining tremendous ground, CEOs are fully-fledged as global leaders. As a consequence of that, they are not anymore only responsible for the influence and the impact on the overall firm environment, but in some cases, they can also determine the course of countries or, at least, big areas of the world[237]. In 2006, it was reported that "*of the hundred largest economic entities in the world, 46 were countries, and 54 were companies*"[238].

LITERATURE REVIEW

One of the most revolutionary events in the long-term strategy of a corporation is undoubtedly the replacement of the *chief executive officer*. This modification implemented at the very top level of the company's management, represents also a change of direction for the *style of leadership* that had governed the company until then. Previous literature has given high attention also to what happens to top managers after the completion of the transaction suggesting that better results are obtained when the deal is put in place and the retained CEO is able to provide high level of coordination capacity for the buy-side. The added value provided by the CEO is represented by the transfer of previous knowledge and understanding of the business from the target firm to the combined one, thus attenuating the revolutionary effect of a merger on both companies[239]. This transfer of knowledges is particularly valuable in case of family firms' acquisition, where the founder is not only a family member but he or she is also the one running the company. In this situation, CEOs and top management are bearer of management and, most of all, leadership capabilities (in other words, VRIN[240] resources). Thus, by keeping them within the combined entity, it will be ensured the completion of the acquisition on time and the realization of the "acquisition value"[241].

T*urnover,* anyway, is obviously related to different causes. If *forced* or *internal,* it is generally associated to disciplinary actions taken by the board of directors to protect the interests of investors and ensuring the continuity of the business. Previous studies have demonstrated how a CEO can be quickly removed and substituted when his or her performance has been not satisfying: if this situation

[237] Boatright, J. R., 2009. Op. cit.;
Edersheim, E. H., 2007. Op. cit.;
[238] Edersheim, E. H., 2007. Op. cit.;
[239] Buccholtz, A. & Ribbens, B., 1994. Op. cit.;
Coff, R., 2002. Op. cit.;
Wulf J., Singh H., 2011. Op. cit.;
[240] Barney J., 1991. Op. cit.
[241] Mickelson R.E., Worley C., 2003. Op. cit;

happens, the management can promptly dismiss, remove, or make CEO leave the office. A disciplinary action coming from the outside, thus *external turnover*, will have instead as a result the shift of the decision power from the hands of the chief executive officers to someone else and it could find its roots when (i) the company is part of an M&A and the acquiring company's CEO will become the CEO of the new combined entity; (ii) the company has become the target of a takeover; (iii) shareholders push for changing the directory through a bankruptcy procedure[242]. To give evidence, it has been showed that rate of external turnover from 1992 to 2007 was 4.7 per cent per year.

However, the overwhelming majority of studies focusing on CEO succession have involved *non-routine* replacements powered by the board of directors and corporate control as monitoring and correcting action. Following literature related to acquisitions, some conclusions can be objectively defined: (i) the highest rate of turnover is registered during the first year after the acquisition; (ii) the rate tends to get back to normality within three years after the acquisition; (iii) high executive turnovers are generally associated to low target company financial performance. Another important consideration is linked to the high impact on CEOs turnover and replacement of industry and market performance. Actually, poor performance of the industry and of the market as a whole, increase the level of CEO turnover[243]. In addition, industry homogeneity and firm and individual characteristics deeply affect the likelihoods of forced CEO turnover. The main issue related to industry as a cause of turnover has been found in *relatedness*, arguing that acquiring firms were more inclined to substitute target CEOs if the buy-side and the sell-side operates in the same business industry or, in other cases, they share some core product categories[244]. If the two sides of the transaction operate in totally different industries, the probability of CEO's retention seemed to be higher since the acquirer can count on fewer knowledges. The same effect on turnover is also produced by poorly performing target companies, which will see their top management removed and replaced during the first two years after the M&A[245]. Only few mergers and acquisitions are driven, in fact, by the desire of improving financial performance and by the hubris of competent managers[246]. Anyway, for firms performing below the average of the industry, management turnover is more likely to take place.

---

[242] Carapeto M., Moeller S., Faelten A., 2010. Op. cit.;
[243] Kaplan, S.N., Minton, B.A., 2006. Op. cit.;
[244] Manne, H.G., 1965. Op. cit.;
Pitts, R. A., 1976. Op. cit.;
[245] Hambrick, D., Cannella, A., 1993. Op. cit.;
[246] Walsh, J. P., Kosnik, R. D., 1993. Op. cit.;

Considering, now, the historical evolution, another important milestone is represented by the Sarbanes-Oxely act of 2002[247], the responsible of the creation of a robust market for corporate control. The most evident result after its approval was an intensification on CEOs turnover, meaning that the overall monitoring of corporate governance has increased[248]. With the higher monitoring of governance bodies, also higher control on the board of directors has been put in place. As could be inferred by the M&A context and the overall set of processes related to the subject, target firm's board of directors have will be in the front line in any cases: if the acquisition turns out to be friendly, it means they have been the signers of the merger agreement; if not, it means the board has not exercised their power and no signatures have been released. Furthermore, ensuring business continuity and the possibility to reach long-term goals is strictly determined by the cohesiveness of the target board, that only if the company is big enough[249]. The underlying reason is again the consideration of directors as bearer of human capital, a leading factor for the execution of the acquisition strategy[250]. Together with the agency theory and the idea of CEOs as source of competitive advantage, based on the resource-based views, the "Social Capital perspective" represents an interesting alternative in order to stress the importance of a chief executive officer within the organization[251]. This perspective goes beyond the alignment of interests between management and shareholders of the agency perspective and the inclusion in the model of the capabilities hold by directors to transfer knowledge from an entity to another or from one generation to another, as the resource-based view model since it added the capabilities of the CEO to act as mediator in the society.

Finally, nowadays, according to the Family Firm Institute, family-owned companies account for two-thirds of all businesses worldwide, generating more than 70 per cent of annual global GDP[252] and they create on average 50 – 80 per cent of jobs in the overwhelming majority of countries of the world. Moreover, in 85 per cent of new company establishment, family firms are used. As already previously underlined, CEO replacement represent one of the major issues for the destiny of the firm since in the long-term it could provoke the costliest manifestation of conflicts in the management[253].

---

[247] 'The Sarbanes-Oxley (SOX) Act of 2002 was the response to corporate financial scandals earlier that decade. The act created new rules for accountants, auditors, and corporate officers and imposed more stringent recordkeeping requirements'. https://www.investopedia.com/terms/s/sarbanesoxleyact.asp
The act also added new criminal penalties for violating securities laws.

[248] HamRoy S., Op. cit.;

[249] DePamphilis, D., 2001. Op. cit.;

[250] Jemison D., Haspeslagh P., 1991. Op. cit.;

[251] Finkelstein S., Cooper C.L., 2005. Op. cit.;

[252] Family Firm Institute: https://my.ffi.org/page/globaldatapoints;

[253] Huson, M., R. Parrino, and L. Starks. 2001. Op. cit.;
Shleifer, A., R. Vishny. 1997. Op. cit.;

Higher is the hugeness of agency conflicts, the more difficult it is to replace CEOs performing below the expectation.

The influence of family control can influence agency conflicts in two ways: on one side it is evidence how the relatedness to the firm for a CEO can enhance his or her willingness to improve long term investments. On the other side, family members can potentially pursue their own interests at the expense of the value generation process for the whole firm and for other stakeholders. In this case, it could be very hard persuading non-performing chief executive officer to leave the seat of power. Nevertheless, the founding family has always the power to retain a poor performing CEO family when the private benefits are higher than the cost of replacement.

Lastly, extremely important is the composition of the labour market. It has been demonstrated that *family CEOs* are associated to lower level of turnover than their external equivalents when the labour market is more frictional. The starting point is that CEOs generally play a key role in the construction of employment agreements within a firm. In addition, employment contract renegotiations became an issue when a new management enters the firm because of the time needed to formalize the contract itself. It is known that family CEOs carrying with them a higher number of implicit terms and that leads to the results that family CEOs are associated with a lower level of replacement than external ones (non-family).

HYPOTHESIS AND REGRESSION ANALYSIS

So far, a deeply analysis has been conducted to lay down literary basis to assess the characteristic, reasons and the implication behind CEO replacement of a target company. Thus, the following hypotheses have been formulated:

hypothesis 1 - if the CEO is a *family-CEO* the probability of replacement is lower than in the case of *non-family CEO*;

hypothesis 2 - if the company is involved in an *institutional buy-out*, there is lower probability of replacement for CEOs than in other type of deals;

hypothesis 3 - if the company is involved in an *institutional buy-out*, the probability of replacement for a *family-CEO* is lower than in case of a *non-family CEO*.

The initial sample has been extracted from Bureau van Dijk (BvD)'s Zephyr database[254]. It consists of 1,022 deals completed in the United States between 2006 and 2016 since it is the country

[254] The initial sample has been kindly granted by the authors of the paper "Pierini L, Bozzolan S, Villalonga B., 2019. To whom does the family sell the firm? The determinants of the choice of buyer in acquisitions. *Working paper*";

with the highest number of acquisitions of publicly traded companies by institutional investors has been experienced[255], and because, according to the U.S. Bureau of the Census, 90 per cent of American businesses are family-owned or controlled.

Deals included in the sample have been chosen upon certain physiognomies: (i) the target is a non-financial firm (firms with two-digit SIC codes from 60 to 67 are excluded[256]); (ii) the acquirer can be either a company or a fund; (iii) the target firm is publicly listed and headquartered in the US; (iv) Zephyr classifies the deal as a merger, acquisition, institutional buy-out (IBO), management buy-out (MBO), management buy-in (MBI), or management buy-in/buy-out (BIMBO); (v) the acquirer's stake in the target company after the deal is a majority stake – thus, higher than 50%; (vi) no restrictions were imposed on the geographical location of the acquirer's headquarter; (vii) there must not be missing values for financial figures or other variables in the time period considered.

After the application of these selection criteria, the number of deals left in the sample turns to be equal to 941. Because of the structure of the sample, the related econometric interpretation reveals a panel-data models in which industry and year fixed effects are considered. It is interesting to notice that the overwhelming of the deals has interested the "Business Services industry", representing 22 per cent of the total. This information is in line with the general expectations since the most of the M&As since 1985 mostly happened in the Industrial and Services sectors, with numbers of transaction equal respectively to 48,963 and 46,900[257].

The years, instead, in which the vast majority of deals have been completed are 2010, 2012 and 2015. Those results were easily predictable if it is considered that the highest number of deals have been historically associated to years following a crisis or a financial scandal, hence deals which interested a recovery period or years of stable growth.

In addition, even if no restrictions has been posed on the geographical location of the acquirer's HQ country of the acquirer, it is interesting to have an overview of the composition of the sample also by the acquirer's location side, in accordance to the organizational perspective and the national perspective that is enclosed within a company[258]. Since they reciprocally influence each other since, with domestic acquisition, more relevance should be giving to the organizational culture and,

[255] Wright M, Amess K, Weir C, Girma S., 2009. Op. cit.;
[256] US Primary Sic Code from 60 to 67 include Financial, Insurance and Real Estate Industry.
[257] Data acquired from (IMAA), 2004-2019. "Number and value of M&A by Target Industry (1985-2016)";
[258] Hofstede, G., 1980. Op. cit.;
Shrivastava, P. (1986). Op. cit.;

at the same time, the national perspective should be considered when the acquisition is cross-border. The result of previous studies is that the higher the cultural distances, the higher the turnover. Turning to some figures, the 84% of the acquirers are headquartered in the United States; the second most popular countries are Canada and the UK, represented by 3% of the total, followed right after by Japan and Netherlands (1%). The others do not overcome the threshold of 1%. For this reason, it is not appropriate to consider it as a key determinants of CEO replacement.

In this model, the choice of replacing the chief executive officer of the target company is captured by a dummy discrete variable corresponding to 1 when the CEO has been replaced, 0 otherwise. Namely, *CEO Replacement* is the questioned variable. Generally speaking, the event of replacement for a CEO has been reported in 605 deals out of 941, representing the 64% of the total. The model also contains different independent variables aimed at capturing the relation between the event of replacement and the characteristics of CEOs, deals and financial structure of the target.

Family CEO: it is a dummy variable equals to 1 if when the chief executive officer is a family member or she/he has any kind of familiar and close relationship with the founders of the firms, 0 when no relationship has been identified. Not surprisingly, it could happen that the Chief Executive Officer and the Chairman's seats were occupied by the same person since this is a very common situation that is frequently replicated in most publicly listed U.S. firms[259].

CEO Age: it is a numerical variable representing the age a chief executive officer was at the completion of the deal. Previous studies have already investigated the connection between turnover and age of the chief executive officer[260] achieving a significant positive relation in the statistical analysis. Considering again CEO as a source of human capital[261] it has been proved that the probability that a CEO will be retained then replaced is higher for younger CEOs than senior individuals[262].

CEO Tenure. It is a numerical variable indicating the years of service provided to the company at the completion date of the deal. There are empirical evidences that *family CEOs* have longer tenures than *non-family CEOs*, most of the cases owning more professional skills[263]. It has been also demonstrated that CEOs supposing to have strict relations with the founder family are positively

[259] Pierini et al. 2019. Op. cit.;
[260] Weisbach, M. S., 1988. Op. cit.;
Murphy, KJ and JL Zimmerman, 1993. Op. cit.;
[261] Rosen, S., 1987. Op. cit.;
[262] Buccholtz, A.K., Ribbens, B.A., Houle, I.T., 2003. Op. cit.;
[263] Sraer D., Thesmar D., 2007. Op. cit.;

correlated with tenure[264]. Anyway, correlation may arise*:* the reason could be that founding families and founding CEOs, grow with their companies and they leave them only when are forced to do so.

Deal Type. It has been included to capture the different impact of having an acquisition put in place by different investors, whom expect different proceeds from the transaction. Since there is high interest on the interaction between Institutional Buy-Out and CEO replacement, the variable is inserted in the sample as a dummy: the variable equals 1 when the deal is an IBO, 0 otherwise.

Finally, the model contains a set of control variables aimed at providing robustness to the model. *Firm size* has been included as variable in order to capture the need of the target firm for physical resources[265]. The size of the firm is measured with the natural logarithm of total asset. The supply for financial resources is instead captured by firm profitability (*ROA)* whereas the need for financial and organizational resources are respectively captured by *Leverage* and *Growth*. Furthermore, *Debt/EBITDA* as well as pre deal *Market Cap* have been considered in order to capture financial metrics associated to the pre-deal phase. *Deal Value* is a numerical variable representing the dollar value paid for the transaction: it has been included in order to capture the differences between strategic buyers and financial buyers in the choice of the target since strategic buyers are able to pay much more for the control premium of a company thanks to the higher ability they have to generate synergies[266]. *Deal method of payment* is a variable describing if the deal has been paid with cash, stock, shares or other. The variable is inserted in the sample as a dummy: it takes values equal to 1 when the deal has been paid with stocks or stock equivalents, 0 otherwise. This kind of variable is considered because family involvement highly impacts the choice of payment, assumed that since strategic and financial buyers usually pay in different ways, the choice of the acquirer could derive from the method of payment that will be received. *Length of the transaction* represents, instead, the number of days from the announcement of the deal and the completion of the deal itself. It has been included in order to consider the costs of replacement the firm could incur in when a chief executive officer has to be removed and replaced. Finally, Industry and year effects have been included in the model.

The hypothesis previously presented will be tested by conducting a binary logistic regression model, in which the dependent variable is limited in the interval [0,1]. The model will test the relation between the replacement of the chief executive officer and the involvement of the founding family,

---

[264] Mullins W., Schoar A., 2013. Op. cit.;
[265] Villalonga B., 2004. Op. cit.;
[266] Villalonga B, Amit R., 2010. Op. cit.;

thus if the CEO is *family* or *non-family*. In the model, year (represented by the year of announcement) and industry (represented by the two-digit SIC code) fixed effect have been considered, respectively γ and μ. The equation related to the model follows:

$$P[CEORep] = \beta + \beta_1 Family\ CEO + \beta_2 CEO\ Tenure + \beta_3 CEO\ Age + \beta_4 Deal\ Type + \sum \beta_5 Controls + \gamma_i + \mu_x + \varepsilon$$

where all the variables have been already explained.

As a robustness check, it has also been initially tested the impact of having a *family CEO* on the likelihood of replacement without considering any other implication and variable. The result has been a similar smaller model, containing fewer variables, highly significant and robust. Later on, considering the collinearity of some variables such as CEO tenure, a reduced model has been considered as the base line model for this analysis.

From previous investigation and according to the hypothesis formulated, three results are expected: (i) a negative coefficient for the variable *family CEO,* (ii) a negative coefficient for the variable *IBO,* and (iii) a significant interaction terms for the two variables considered.

Generally speaking, p-value for the model is low (0.0000). The number of observations has been 941 and the final model presents a McFadden Pseudo R^2 equals to 0.11. As a premise, in this logistic regression, coefficients represent the change in the logit for each unit change in the predictor whereas, the slope is the rate at which the predicted log odds increases (or, decreases) with each successive unit of X. The f (beta) of the model is equal to 0.223 by meaning that the probability of replacement of the chief executive officer associated to the base line model is approximately 22%.

From the output of the logit binary regression model, it is evident that *family-CEO* shows a negative and highly significant association with the dependent variable (coeff = -0.484095 p-value = 0.0117) by confirmed what was announced with the hypothesis 1. Thus, it could be confirmed that there is a significant negative relation between *family-CEO* and the event of CEO replacement. The same negative relation has been found also between the variable indicating CEO Age (coeff = -0.014 p-value = 0.1327) and the dependent one, but those results is only limited to the data of the sample since it is not statistically significant. Those considerations are in accordance with the literature, that in many occasions underlined the strong entrenchment of chief executive officers linked to the founding families or being the founder himself or herself. Furthermore, according to the model the variable *Deal Type* is highly significant and since it has a negative coefficient it is possible to acknowledged that on average an institutional buy-out is associated with a lower probability of replacement for CEOs, regardless of family involvement in the chief executive officer's position (coeff = -1.10002 p-value = 0.000) if compared with the base-line level of the variable, which is representative of other type of deal such as acquisitions, capital increases and management buyouts.

Deal Method of payments is, instead, characterized by a positive coefficient, thus a positive relation with the probability of *CEO Replacement.* Anyway, p-value is not low enough to make the variable significant. As financial variables are concerned, strong level of significance have been recorded for the *Pre-deal target Market Cap* and *Firm Size*. The former (coeff = 7.41440e-0.8 p-value = 0.0231) is positively associated to the probability of replacement of the chief executive officer and the same is for the latter, (coeff = 0.1076 p-value = 0.0487) implying that by taking a Δ Firm Size equals to 1, it is expected to have a Δ log odds equals to 2.41. This with no doubts indicates that larger firms are generally more willing to experience turnover at top management level for CEO than smaller companies. Lastly, also *Length of the transaction* does not provide any statically significant results, although in the sample there is a positive linear association with the dependent variable.

To validate the hypothesis predicted according to which there could be a significant interaction between IBOs and *family CEO*, a second regression model has been considered. The equation related to this second model follows:

$$P[CEORep] = \beta + \beta_1 Family\ CEO + \beta_2\ Deal\,Type + \beta_3(Family\ CEO * Deal\,Type) + \sum\beta_5 Controls + \gamma_i + \mu_x + \varepsilon$$

where all the variables have been already explained and $\beta_3(Family\ CEO * Deal\ Type)$ represents the interaction, with the related coefficient. Of course, in this case four equations have been generated since the variable *family CEO* can take value 0 and 1 and the same is true for the variable *Deal Type*. Evidences from model show that since the interaction term has been included, keeping all the other factor constant, the probability of replacement for a *family CEO* is lower than for a *non-family CEO*, even if this difference is not numerically high. Thus, we can say that we will also analyse the effect over *non-family CEO* when the level of *family CEO* equals 0 and the level of any other type of deals when *Deal Type* equals 0.

Anyway, since the interaction between the two terms is not significant, it is not possible to validate the third hypothesis predicted at the beginning even though are significant both the variable indicating the type of deal that the ones indicating the characteristic of the chief executive officer. There are of course evidences in the sample considered, but those evidences cannot be extended on an average basis since p-value is high (coeff = 0.1878 p-value = 0.6960). As a final consideration, it is not possible to validate the third hypothesis.

CONCLUSIONS

As predicted by one of the hypothesis presented, by considering the overall model in both cases, family involvement has demonstrated to have a considerable impact on the probability of replacement of a chief executive officer in case of acquisition, sharpening the power that closeness relation with the family has even when dealing with an external counterpart. Hence, it has been demonstrated, both literarily and analytically, that being a *family CEO* is associated to a lower likelihood of replacement than being a *non-family CEO*. All that is contextualized in a situation in which the event of replacement is forced and not physiological. The reason behind these findings could be the identification of a *family Chief Executive Officer*, as the keeper of socioemotional wealth and the responsible for the generation of family image, identity and reputation[267]. Thus, CEOs could be the right intermediaries for the spread of this recognition in the social community as well as for ensuring the survival of the culture and the ideology associated to the company.

Moreover, the significance of being a *family CEOs* is also supported by literature regarding block-holders and management turnover. The enormous credibility and high-quality level of the network constructed by a chief executive officer who is *family* or, even more, is the founder of the company itself, become a perfect reason behind the securements linked to employment. In addition, a *family CEO* bears the expertise, knowledge and human capital proper of his or her role and, last but not the least, even when the labour market is more frictional, they are safeguarded by long-term contracts[268].

The results arising from the logit regression model have also highlighted the great significance that the type of deal has on the replacement decision. Without any doubts, behind the typology of deal a target company faces at the moment of acquisition, there are different group of buyers whom are interested in different form of "revenues". As a matter of fact, the second hypothesis presented, has been validated, by showing that a deal with the characteristics of an IBO, is associated to a lower probability of replacement for chief executive officers. Previous studies have already confirmed that financial buyers are more likely to ensure firm's independence[269] and to avoid interferences in the daily management of the company[270].

[267] Zellweger, T. M., Kellermanns, F. W., Chrisman, J. J., & Chua, J. H. 2012. Op. cit.
Berrone P., Cruz C., Gomez-Mejia L.R., 2010. Op. cit.;
Lin, N., 2001. Op. cit.;
[268] Bassanini, A., Breda, T., Caroli, E. and A. Reberioux O., 2010. Op. cit.;
Bach, L., Serrano-Velarde, N., 2015. Op. cit.;
[269] Meuleman, M., Amess, K., Wright, M., Scholes, L., 2009. Op. cit.;
[270] Anders, G., 1992. Op. cit.;

However, it has been not possible to infer that the interaction between being a *family CEO* and being acquired by an *Institutional Buy-Outs*, is associated, on average, with a lower likelihood of replacement for the executive. It is evident that in the sample there are cases of *family CEO* who has been replaced after have being acquired with an IBO, but results are not extendible at the population level. A reason for that could be the composition of the sample, which provides not so many cases in which in the sell side is involved a *family CEO* and the buy-side is characterized by investors who want to pursue an IBO. What has been just argued could be seen as consistent with the skepticism that family firms have toward financial buyers, held responsible of taking advantages from the business instead of taking care of it[271], thus they do not engage in so many deals with this type of buyers – or, at least, they try not to do so.

To conclude, with the increase of the understanding of the peculiarities of the topic of this work, the feeling that was being elaborated is that there is still a high gap between some types of deals and the implication that they could have on the governance of a family firms, as well as, on the single individuals that compose it. Of course, this gap is made even more marked because of the preferences of family firms to sell their business to strategic buyers, but, on the other side, there are evidences that directors are more inclined to prefer financial buyers since personal goals tends to outweigh the preservation of SEW. Consequently, a trade-off between choices of firms and directors, and difficulties related to the search of information about some specific financial investors should be considered when dealing with this analysis.

Finally, the entire work has been opened with the premise that companies are composed of people, as well as corporate governance act as a controlling entity on those people acting on behalf of the company itself and with the market. And, when family firms are involved, human component is stronger and more heartfelt, even when on the other side of the transactions there are funds, PE, or other types of financial investors. Thus, for future researches and analysis, human component should be carefully taken into consideration.

[271] Achleitner AK, Herman K, Lerner J, Lutz E., 2010. Op. cit.;

REFERENCES

Acharya VV, Gottschalg OF, Hahn M, Kehoe C., 2013. Corporate governance and value creation: Evidence from private equity. *The Review of Financial Studies*, 26(2): 368– 402;

Achleitner AK, Herman K, Lerner J, Lutz E., 2010. Family business and private equity: conflict or collaboration? The case of Messer Griesheim. *The Journal of Private Equity*, 13(3): 7–20;

Ackert, L. F., Deaves, R., 2010. Behavioral finance: Psychology, decision-making, and markets. *Mason, OH: South-Western Cengage Learning;*

Adler, P. S., Kwon, Seok-Woo, 2002. Social Capital: Prospects for a New Concept. *The Academy of Management Review*, Vol. 27, No. 1, p. 17;

Aghion, P., J. Tirole, 1997. Formal and real authority in organizations. *Journal of Political Economics*, 105(1) 1–29;

Ahlers, O., 2013. Family Firms and Private Equity: a collection of essays on value creation, negotiation, and soft factors. *Springer Gabler*, p. VI;

Ali, A., T. Y. Chen, and S. Radhakrishnan, 2007. Corporate disclosures by family firms. *Journal of Accounting and Economics*, 44 (1–2): 238–86;

Anders, G., 1992. The barbarians in the boardroom. *Harvard Business Review*, 70(4): 79–87;

Anderson A., Duru A., Reeb D. M., 2009. Founders, heirs, and corporate opacity in the United States. *Journal of Financial Economics*, 92, 2009, 205–222;

Anderson, R., Duru A., Reeb. D., 2003. Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance,* 58 (3): 1301–1328;

Anderson, R., Duru A., Reeb. D., 2008. Family preferences and investment policy: Evidence from R&D spending and capital expenditures. Working paper, *American University*;

Andrade, G., Mitchell, M., Stafford., E., 2001. New evidence and perspectives on mergers. *Journal of Economic Perspectives*. 15(2) 103–120;

Andrade, G., Stafford, E., 2004. Investing the economic role of mergers, *Journal of Corporate Finance*, 10: 1-36;

Astrachan, J.H., Klein, S.B., Smyrnios, K.X., 2002. The F-PEC Scale of Family Influence: A Proposal for Solving the Family Business Definition Problem. *Family Business Review*, 15(1), pp.45–58;

Bach, L., Serrano-Velarde, N., 2015. CEO Identity and Labor Contracts: Theory and Evidence from CEO Transitions. *Journal of Corporate Finance*, 2015, vol. 33, issue C, 227-242;

Bailey, E., Helfat, C., 2003. Management succession, human capital, and firm performance: An integrative analysis. *Managerial and Decision Economics*, 24(4) 347–369;

Barney J., 1991. Firm resources and source of competitive advantage. *Journal of Management*, 1991, vol. 17, No. 1, 99-120;

Baskin O., Eckrich C. Preparing Owners for a Non-Family CEO. *Family Business Consulting Group Publications*;

Bassanini, A., Breda, T., Caroli, E. and A. Reberioux O., 2010. Working in Family Firms: Less Paid but More Secure? Evidence from French Matched Employer-Employee Data. *PSE Working Paper* 2010-40;

Beck, S., Kenning, P., 2015. The Influence of Retailers' Family Firm Image on New Product Acceptance: An Empirical Investigation in the German FMCG Market. *International Journal of Retail & Distribution Management*, 43(12), 1126-1143. DOI: 10.1108/IJRDM-06-2014-0079;

Berrone P., Cruz C., Gomez-Mejia L.R., 2010. Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family-Controlled Firms Pollute Less? *Administrative Science Quarterly,* 55 (2010): 82–113;

Bertrand, M., Schoar, A., 2003. Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*. 118(4) 1169–1208;

Blackwell, D.W., Brickley, J.A., Weisbach, M.S., 1994, Accounting information and internal evaluation: Evidence from Texan banks, *Journal of Accounting and Economics*, 17, 331-359;

Blair M., 2003. Shareholder Value, Corporate Governance, and Corporate Performance - A Post-Enron Reassessment of the Conventional Wisdom. In: Cornelius P.K., Kogut B., 2003. Corporate Governance and Capital Flows in a Global Economy, *Oxford University Press*, 2003;

Boatright, J. R., 2009. From hired hands to co-owners: Compensation, team production, and the role of the CEO. *Business Ethics Quarterly*, 19, 471-496;

Boot, A, 1992, Why hang on to losers? Divestitures and takeovers, *Journal of Finance*, 47, 1401-1423;

Bourdieu P., Wacquant L.J.D., 1992. An Invitation to Reflexive Sociology. *The University Chicago Press*, p. 119;

Brauer M. 2006. What have we acquired and what should we acquire in divestiture research? A review and research agenda. *Journal of Management,* 32(6): 751–785;

Buccholtz, A. & Ribbens, B., 1994. Roles of chief executive officers in takeover resistance: Effects of CEO incentives and individual characteristics. *Academy of Management Journal*, 37(3), pp. 554-579;

Buccholtz, A.K., Ribbens, B.A., Houle, I.T., 2003. The Role of Human Capital in Post-acquisition CEO Departure, *Academy of Management Journal*, 46(4), 506-514;

Cabrera-Suárez, K., Saá-Pérez, P. de, García-Almeida, D., 2001. The Succession Process from a Resource- and Knowledge-Based View of the Family Firm. Family Business Review, 14(1), 37–46;

Campbell A., Goold M., Alexander M., Whitehead J., 2014. Strategy for corporate level, 2nd edition, New York: *Wiley*;

Cannella, A., Hambrick, D., 1993. Effects of executive departures on the performance of acquired firms. *Strategic Management Journal*, Volume 14, pp. 137-152;

Caprio L, Croci E., Del Giudice A., 2011. Ownership structure, family control, and acquisition decisions. *Journal of Corporate Finance* 17 (2011) 1636–1657;

Carapeto M., Moeller S., Faelten A., 2010. What should I do next? CEO succession and subsequent M&A strategy. *Mergers and Acquisitions Research Centre Cass Business School, City University of London*. 1-36;

Carlson, S., 1951. Executive behavior. Stockholm, *SE: Stromberg's*;

Carney, M., 2005. Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice*, 29, 249-265;

Cassiman, B., Colombo M.G., 2006. Mergers and Acquisitions: The Innovation Impact. *Edward Elgar Publishing*;

Castanias, R. P., Helfat C. E., 1991. Managerial resources and rents. *Journal of Management*, 17(1) 155–171;

Chen, S., Chen, X., Cheng Q., Shevlin, T., 2010. Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics* 95 (1): 41–61;

Chen, S., Chen, X., Cheng, Q., 2008. Do family firms provide more or less voluntary disclosure? *Journal of Accounting Research*, 46 (3): 499–536;

Chen, X., Cheng, Q., Dai, Z., 2013. Family Ownership and CEO Turnovers. *Contemporary Accounting Research*, Vol. 30 No. 3 (Fall 2013), pp. 1166–1190;

Chrisman, J.J., Chua, J.H., Pearson, A.W., Barnett, T., 2012. Family Involvement, Family Influence, and Family-Centered Non-Economic Goals in Small Firms. *Entrepreneurship: Theory and Practice*, 36(2), pp.267– 293;

Chrisman, J.J., Chua, J.H., Sharma, P., 2005. Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship: Theory and Practice*, 29(5), pp.555–575;

Chua, J. H., Chrisman, J. J., Steier, L. P., Rau, S. B., 2012. Sources of Heterogeneity in Family Firms: An Introduction. *Entrepreneurship: Theory and Practice*, 36(6), 1103–1113;

Chua, J.H., Chrisman, J.J., Sharma, P., 1999. Defining the Family Business by Behavior. *Entrepreneurship: Theory & Practice*, 23, pp.19–39;

Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P., 2002. Disentangling the incentive and entrenchment effects of large shareholdings. *Journal of Finance*, 57, 2741–2771;

Cloodt, M., Hagedoorn, J., Van Kranenburg, H., 2006. Mergers and acquisitions: their effect on the innovative performance of companies in high-tech industries. *Research Policy*, 35(5), p. 642–654;

Coff, R., 2002. Human capital, shared expertise, and the likelihood of impasse in corporate acquisitions. *Journal of Management*, 28(1), pp. 107-128;

Colombo, M., Rabbiosi, L., 2014. Technological similarity, post- acquisition R&D reorganization, and innovation performance in horizontal acquisitions. *Research Policy*, 43(6), p. 1039–1054;

Coughlan, A.T., Schmidt, R.M., 1985, Executive compensation, management turnover, and firm performance: An empirical investigation, *Journal of Accounting and Economics*, 7, 43- 66;

Cyert, R.M., March, J.G., 1963. A Behavioral Theory of The Firm. *Carnegie Institute of Technology Citations*, 14,451;

Daily, C. M., D. R. Dalton, N. Rajagopalan., 2003. Governance through ownership: Centuries of practice, decades of research. *The Academy of Management Journal*. 46(2) 151–158;

Davis, G., Diekmann. K., & Tinsley, C., 1994. The Decline and Fall of the Conglomerate Firm in the 1980s: The Deinstitutionalization of an Organizational Form. *American Sociological Review*, 59(4), 547–570;

Dawson A. 2011. Private equity investment decisions in family firms: The role of human resources and agency costs. Journal of Business Venturing, 26(2): 189–199;

Dedman, E., 2000. Executive Turnover in UK Firms: the impact of Cadbury. *Accounting and Business Research*, Vol. 33 Issue 1, p. 33-50.

DePamphilis, D., 2001. Case Study: Managing growth through acquisition: time-tested techniques for the entrepreneur. *College of Business Administration, Loyola Marymount University, Los Angeles*, CA, USA;

DePamphilis, D., 2003. Acquisitions and Other Restructuring Activities: An Integrated Approach to Process, Tools, Cases, and Solutions. *Butterworth-Heinemann*;

Dreux, D.R., 1992. Financing family businesses: alternatives to selling out or going public. *Family Business Review* 5 (2), 233–237;

Druckman, D., 1994. Determinants of Compromising Behavior in Negotiation: A Meta-Analysis. *The Journal of Conflict Resolution*, 38(3), 507–556;

Edersheim, E. H., 2007. Peter Drucker's "unfinished chapter": The role of the CEO. Leader to Leader. *Ethics Resource Center*. 45, 40-46. doi:10.1002/ltl.242;

Elango, B., Fried, V.H., Hisrich, R.D., Polonchek, A., 1995. How venture capital firms differ. *Journal of Business Venturing* 10 (2), 157–179;

Ertugrul, M., and K. Krishnan. 2011. Can CEO dismissals be proactive? *Journal of Corporate Finance*, 17 (1): 134–51;

Filatotvhev I., Bishop K., 2002. Board composition, share ownership, and 'underpricing' of UK. IPO firms. *Journal of Strategic Management*, 23: 941 – 955 (2002) Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/smj.269;

Finkelstein S., Cooper C.L., 2005. Advances in Merger and Acquisition, Vo. 4; p. 124;

Gabarro, J. J., 1987. The dynamics of taking charge. *Boston: Harvard Business School*;

Gao, N., & Jain, B., 2012. Founder management and the market for corporate control for IPO firms: The moderating effect of the power structure of the firm. *Journal of Business Venturing*, 27(1), 112-126;

Gaughan, P.A., 2007. Mergers, Acquisitions, and Corporate Restructurings. *John Wiley & Sons*;

Gibbons, R.S., Murphy, K.J., 1990. Relative performance evaluation for chief executive officers, *Industrial and Labor Relations Review*, 43, 30S-51S;

Gilson, S., 1990. Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default, *Journal of Financial Economics*, 27, 355- 389;

Golden, B. R., Zajac, E. J., 2001. When will boards influence strategy? Inclination x power = strategic change. *Journal of Strategic Management*, 22: 1087-1111;

Gomez-Mejia L.R., Larraza- Kintana M., 2010. Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family-Controlled Firms Pollute Less? *Administrative Science Quarterly*, 55 (2010): 82–113;

Gompers, P. A., Ishii, J. L., Metrick, A., 2003. Corporate governance and equity prices. *The Quarterly Journal of Economics*, 108(1) 107–155;

Graebner, M., 2004. Momentum and serendipity: How acquired leaders create value in the integration of technology firms. *Journal of Strategic Management*, 25(9), pp. 751-777;

Graebner, M., Eisenhardt, K., Roundy, P., 2010. Success and failure in technology acquisitions lessons for buyers and sellers. *Academy of Management Perspectives*, August. pp. 73-92;

Granovetter, M., 1985. "Economic Action and Social Structure: The Problem of Embeddedness". *American Journal of Sociology*, 91 (November): 481-510;

Hambrick, D. C., Fukutomi, G.S.,1991. The seasons of a CEO’s tenure. *Academy of Management Review*, 16: 718-742;

Hambrick, D., Cannella, A., 1993. Relative standing: A framework for understanding departures of acquired executives. *Academy of Management Journal*, 36(4), pp. 733-762;

HamRoy S., Effect of Mergers and Acquisitions on CEO Turnover in Large Firms and SMES: A Hazard Analysis. *Department of Economics, Lancaster University Management School, Lancaster, LA1 4YW*;

Hart, O., J. Moore., 1990. Property rights and the nature of the firm. *Journal of Political Economics*. 98(6) 1119–1158;

Hofstede, G., 1980. Culture's consequences: International differences in work-related values. *Sage, vol. 5*;

Hotchkiss, E.S., 1995, Post-bankruptcy performance and management turnover, *Journal of Finance*, 50, 3-21;

Huson M. R., Malatesta P., Parrino R., 2004. Managerial succession and firm performance. *Journal of Financial Economics* 74, 237-275;

Huson, M., R. Parrino, and L. Starks. 2001. Internal monitoring mechanisms and CEO turnover: A long-term perspective. The Journal of Finance, 56 (6): 2265–97;

Jemison D., Haspeslagh P., 1991. Making acquisition work. INSEAD, Fontainebleau, France;

Jensen, M.C., 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, Vol. 76, No. 2, pp. 323-329;

Jenter D., Lewellen K., 2015. CEO preferences and acquisition. *Journal of finance*. May 1, 2015.

Kang D, Sorensen A., 1999. Ownership organization and firm performance. *Annual Review of Sociolog*, 25: 121 – 144;

Kang, J. K., Shivdasani, A., 1995. Firm performance, corporate governance, and top executive turnover in Japan, *Journal of Financial Economics*, 38, 29-58;

Kaplan S.N., Minton B.A., 2012. How has CEO turnover changed? *International Review of Finance*, pp. 57-87. DOI: 10.1111/j.1468-2443.2011.01135.x;

Kaplan, S.N., Minton, B.A., 2006. How has CEO Turnover Changed? Increasingly Performance sensitive Boards and Increasingly Uneasy CEOs. *NBER Working Paper Series, Working Paper # 12465, National Bureau of Economic Research*;

Klaus J. H., Patrick C. L., 2004. Board Models in Europe. Recent Developments of Internal Corporate Governance Structures in Germany, the United Kingdom, France, and Italy. *Law Working Paper N°. 18/2004*. January 2004;

Klein, S.B., Astrachan, J.H., Smyrnios, K.X., 2005. The F-PEC Scale of Family Influence: Construction, Validation, and Further Implication for Theory. *Entrepreneurship Theory and Practice*, 29(3), pp.321–339.

Kobrin, S. J., 1991. An empirical analysis of the determinants of global integration. *Strategic Management Journal*, 12, 17–31;

Kor, Y. Y., Mahoney, J. T., 2005. How dynamics, management, and governance of resource deployments influence firm-level performance. *Journal of Strategic Management*, 26(5) 489–496;

Krug J.A., Aguilera R.V., 2004. Top management team turnover in Mergers & Acquisitions. In: Finkelstein S., Cooper C.L., 2005. *Advances in Merger and Acquisition*, Vo. 4, p. 124;

Krug, J., Hegarty, W., 2001. Predicting who stays and leaves after an acquisition: A study of top managers in multinational firms. *Strategic Management Journal*, 22(2), pp. 185-196;

Krug, J.A., Nigh D., 2001. Executive perceptions in foreign and domestic acquisitions: an analysis of foreign ownership and its effect on executive fate. *Journal of World Business*, 2001, vol. 36, issue 1, 85-105;

Krug, J.A., Nigh, D., 1998. Top management departures in cross-border acquisitions: Governance issues in an international context. Journal of International Management, 4, 267–287;

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 1999. Corporate ownership around the world. *Journal of Finance*, 54(2), 471–517;

Lafley, A. G., 2009. What only the CEO can do. *Harvard Business Review*, 87(5), 54-62;

Lagaras, S., Tsoutsoura, M., 2015. Family control and the cost of debt: Evidence from the Great Recession. *Fama-Miller Working Paper; Chicago Booth Research Paper* No. 15- 14;

Lehn, K.M., Zhao, M., 2006. CEO turnover after acquisitions: Are bad bidders fired? *Journal of Finance*, 61, 1759-1811;

Lin, N., 2001. Social capital. A theory of social structure and action. *Cambridge: Cambridge University Press*;

Lubatkin, M., Schweiger, D., Weber, Y., 1999. Top management turnover in related M&As: An additional test of the theory of relative standing. *Journal of Management*, 25(1), pp. 55-73;

Lucier, C., Kocourek, P., Habbell, R., 2006. CEO succession 2005: The crest of the wave. *Booz & Company's Strategy + Bus. Magazine*, (May 30), http://www.strategy-business.com/article/06210?gko=6e014;

Lyandres E., 2007. Strategic Cost of Diversification. *The Review of Financial Studies*. Vol. 20, No. 6 (Nov., 2007), Oxford University Press. Sponsor: *The Society for Financial Studies*, pp. 1901-1940;

Mace, M., 1986. Directors: Myth and Reality. *Boston: Harvard Business School Press;*

Manne, H.G., 1965. Mergers and the Market for Corporate Control. *The Journal of Political Economy*, Vol. 73, No. 2. (April 1965), pp. 110-120;

Manning, P., 2008. Social Capital: Origins, Meanings and Economic Significance. *University of Chester*;

March, J.G., Simon, H., A., 1958. Organizations. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*, available at SSRN: https://ssrn.com/abstract=1496194;

Martin K.J., McConnell J.J., 1991. Corporate Performance, Corporate Takeovers, and Management Turnover. *The Journal of Finance*, Vol. XLVI, no. 2, 671-687;

Matsumura, E. M., Shin, J. Y., 2005. Corporate governance and CEO compensation: Intended and unintended consequences. *Journal of Business Ethics*, 62(2), 101-113. doi:10.1007/ ss10551-005-0175-7;

Meuleman, M., Amess, K., Wright, M., Scholes, L., 2009. Agency, Strategic Entrepreneurship, and the Performance of Private Equity-Backed Buyouts. Entrepreneurship Theory and Practice, 33(1), 213–239;

Mickelson R.E., Worley C., 2003. Acquiring a Family Firm: A Case Study. *Family Business Review*, vol. XVI, no. 4, December 2003, *Family Firm Institute, Inc*;

Miller, D., Le-Breton Miller, I., Lester, R., Canella, A., 2007. Are Family Firms Really Superior Performers. *Journal of Corporate Finance*, Vol. 13, Issue 5;

Mintzberg, H. (1973). The nature of managerial work. *New York, NY: Harper & Row;*

Morck, R., Shleifer, A., Vishny, R.W., 1991. Do Managerial Objectives Drive Bad Acquisitions? *The Journal of Finance*, Vol. 45, No. 1 (Mar., 1990), pp. 31-48;

Mueller, M., T. Philippon, 2011. Family Firms, Paternalism, and Labor Relations. *American Economic Journal: Macro, forthcoming;*

Mullins W., Schoar A., 2013. How do CEOs see their Role? Management Philosophy and Styles in Family and non-family firms, *NBER Working Papers 19395, National Bureau of Economic Research, Inc*;

Murphy, K.J. and Zabonjik, J., 2004. CEO Pay and Appointments: A Market-Based Explanations for the Recent Trends. *The American Economic Review*, 94(2), 192-196;

Murphy, KJ and JL Zimmerman, 1993. Financial performance surrounding CEO turnover. *Journal of Accounting and Economics* 16, 273-315;

Nayyar, P.R., 1993. Performance effects of information asymmetry and economies of scope in diversified service firms. *Academy of Management Journal*, 36(1), 28–57;

Ocasio. W., 1994. Political Dynamics and the Circulation of Power: CEO Succession in U.S. Industrial Corporations, 1960-1990, *Administrative Science Quarte rly* 39(2):285, June 1994. Published by: *Sage Publications*, Inc. on behalf of the Johnson Graduate School of Management, *Cornell University*;

Parrino, R., 1997. CEO turnover and outside succession: A cross-sectional analysis. *Journal of Financial Economics* 46, 165-197;

Pierini L, Bozzolan S, Villalonga B., 2019. To whom does the family sell the firm? The determinants of the choice of buyer in acquisitions. *Working paper;*

Pitts, R. A., 1976. Diversification strategies and organizational policies of large diversified firms. *Journal of Economics and Business*, 28, 181–188;

Porter M., 1987. From competitive advantage to corporate strategy. *Harvard Business Review* 65(3): 43–59;

Pruitt, D., Drews, J., 1969. The effect of time pressure, time elapsed, and the opponent's concession rate on behavior in negotiation. *Journal of Experimental Social Psychology*, 5, 43–60;

Puranam P., Vanneste B., 2016. Corporate Strategy: Tools for Analysis and Decision-Making. *Cambridge: Cambridge University Press;*

Rajan R. G., Zingales L., 1998. Power in a theory of the firm. *The Quarterly Journal of Economics*. 113(2) 387–432;

Ranft, A., Lord, M., 2002. Acquiring new technologies and capabilities: A grounded model of acquisition implementation. *Organization Science*, 13(4), pp. 420-442;

Renneboog L., Simons T., Wright M., 2007. Why do public firms go private in the UK? The impact of private equity investors, incentive realignment and undervaluation. *Journal of Corporate Finance* 13 (2007) 591–628;

Rosen, S., 1987. Transactions Costs and Internal Labour Market. *NBER Working Paper No. 2407;*

Rosenbaum J., Pearl J., 2009. Valuation, Leveraged Buyouts, and Mergers & Acquisitions. *Published by John Wiley & Sons, Inc., Hoboken, New Jersey. Published simultaneously in Canada*, p. 161;

Ruigrok W., Peck S. I., Keller H., 2006. Board Characteristics and Involvement in Strategic Decision Making: Evidence from Swiss Companies. *Journal of Management Studies*, 2006, vol. 43, issue 5, 1201-1226;

Saint-Onge, H., Chatzkel, J., 2009. Beyond the Deal: Mergers & Acquisitions that Achieve Breakthrough Performance Gains. *McGraw-Hill;*

Sandberg, W.R., Schweiger, D.M., Hofer, C.W., 1988. The use of verbal protocols in determining venture capitalists' decision process. *Entrepreneurship Theory and Practice* 13 (2), 8–20;

Scholes, L., Westhead, P., Burrows, A., 2008. Family firm succession: The management buy-out and buy-in routes. *Journal of Small Business and Enterprise Development*, 15(1), 8–30;

Scott, D.L., 2003. Wall Street Words: An A to Z Guide to Investment Terms for Today's Investor. *Houghton Mifflin Harcourt (first published January 28th 1988*;

Sheridan, T., Kendall, N., 1992. Corporate Governance. *London: Pitman Publishers*;

Sherman, A.J., Hart, M.A., 2006. Mergers and Acquisitions from A-Z. *Amacom*;

Shleifer, A. and L. H. Summers, 1987. Breach of Trust in Hostile Takeovers. *NBER Working Paper 2342;*

Shleifer, A., R. Vishny. 1997. A survey of corporate governance. *The Journal of Finance*, 52 (2): 737–83;

Short, J. C., Payne, G. T., Brigham, K. H., Lumpkin, G. T., & Broberg, J. C., 2009. Family firms and entrepreneurial orientation in publicly traded firms. *Family Business Review*, 22, 9-24;

Shrivastava, P. (1986). Post-Merger integration. *Journal of business strategy*, 7(1), 65-76;

Smith, D. L., Pruitt, D. G., Carnevale, P. J., 1982. Matching and mismatching: The effect of own limit, other's toughness, and time pressure on concession rate in negotiation. *Journal of Personality and Social Psychology*, 42(5), 876–883;

Sraer D., Thesmar D., 2007. Performance and behavior of family firms: evidence from the French stock market. *Journal of the European Economic Association;*

Stoddard N., Wyckoff C., 2008. The cost of CEO failure. *Chief Executive Group, LLC* (Online Newspaper);

Strike, V. M., Sapp, S., Congiu, L., 2013. Leaving a legacy of transgenerational success: the effect of socioemotional wealth on CEO career horizons in family firms. *Academy of Management Annual Meeting Proceedings*, Vol. 2013 Issue 1, p. 508-513;

Stuhlmacher, A. F., Gillespie, T. L., Champagne, M. V., 1998. The impact of time pressure in negotiation: a meta-analysis. *International Journal of Conflict Management*, 9(2), 97–116;

Sudarsanam, S., 2010. Creating value from mergers and acquisitions: the challenges. *London: Prentice Hall international.* 2nd ed. xxvi, p. 786;

Tamosiuniene, R., Duksaite E. The Importance of Mergers and Acquisitions in Today's Economy. *Vilnius Gediminas technical university, Sauletekio ave. 11, Vilnius, Lithuania*;

Thaler, R. H., 1993. Advances in behavioral finance. *New York: Russell Sage Foundation*;

Tsang, E. W. K., 2002. Learning from overseas venturing experience: The case of Chinese family businesses. *Journal of Business Venturing*, 17(1), 21–40;

Useem M., 1984. Large Corporations and the Rise of Business Political Activity in the U.S. and *U.K. Oxford University Press*, Mar 13, 1986 - *Business & Economics* - 246 pp;

Uzzi, B., 1996. The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect. *American Sociological Review*, Vol. 61, No. 4, pp. 674-698;

Vancil R.F., 1987. A look at CEO succession. *Harvard Business* Review 65 Issue 2, 107- 117;

Very, P., Lubatkin, M., & Calori, R., 1996. A cross-national assessment of acculturative stress in recent European mergers. *International Studies of Management & Organization*, 59-86;

Villalonga B, Amit R., 2010. Family control of firms and industries. *Financial Management* 39(3): 863–904;

Villalonga B, McGahan AM., 2005. The choice among acquisitions, alliances, and divestitures. *Strategic Management Journal* 26(13): 1183–1208;

Villalonga B., 2004. Intangible resources, Tobin’s q, and sustainability of performance differences. *Journal of Economic Behavior and Organization*, Vol. 54, n. 2;

Villalonga, B., & Amit, R., 2006. How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2), 385–417;

Walsh, J. P., 1989. Doing a deal: Merger and acquisition negotiations and their impact upon target company top management turnover. *Strategic Management Journal*, 10, 307–322;

Walsh, J. P., Kosnik, R. D., 1993. Corporate raiders and their disciplinary role in the market of corporate control. *Academy of Management Journal*, 36, 671–700.

Walsh, J., 1988. Top management turnover following mergers and acquisitions. *Strategic Management Journal*. Vol. 9, 173-183. https://doi.org/10.1002/smj.4250090207;

Wang, D., 2006. Founding family ownership and earnings quality. *Journal of Accounting Research* 44 (3): 619–56;

Wang, H.C., Barney J.C., 2006. Employee incentives to make firm-specific investments: Implications for resource-based theories of corporate diversification. *Academy of Management Review*. 31(2) 466–476;

Warner, J.B., Watts, R.L., Wruck, K.H., 1988. Stock prices and top management changes, *Journal of Financial Economics* 20, 461-492;

Wasserman, N., 2003. Founder-CEO succession and the paradox of entrepreneurial success. *Organization Science*, 14(2), 149-172;

Weisbach M., 1995. CEO turnover and the firm’s investment decisions. *Journal of Financial Economics* 37, 159-188;

Weisbach, M. S., 1988. Outside directors and CEO turnover. *Journal of Financial Economics*. 20(1–2) 431–460;

Westhead, P., Cowling, M., 1998. Family Business Research: The Need for a Methodological Rethink. *Entrepreneurship Theory and Practice*, 23, 31-57;

Williamson, O. E., 1973. Markets and hierarchies: Some elementary considerations. *American Economic Review*, 63(2) 316–325;

Wollscheid, C., 2012. Rise and Burst of the Dotcom Bubble: Causes, Characteristics, Examples. *GRIN Verlag*. p. 1;

Wright M, Amess K, Weir C, Girma S., 2009. Private equity and corporate governance: Retrospect and prospect. Corporate Governance: An International Review, 17(3): 353–375;

Wright, M., Hoskisson, R., Busenitz, L., Dial, J., 2001. Finance and management buy-outs: agency versus entrepreneurship perspectives. *Venture Capital* 3 (3), 239–262;

Wright, M., Thompson, S., Chiplin, B., Robbie, K., 1991. Buy-Ins and Buy-Outs: New Strategies in Corporate Management. *Graham & Trotman Ltd., London;*

Wulf J., Singh H., 2011. How Do Acquirers Retain Successful Target CEOs? The Role of Governance. *Management Science* 57(12):2101-2114. https://doi.org/10.1287/mnsc.1110.1414;

Zellweger, T.M., Eddleston, K., Kellermanns, F.W., 2010. Exploring the concept of familiness: Introducing family firm identity. *Journal of Family Business Strategy*, 1(1), pp.54–63;

Zellweger, T. M., Kellermanns, F. W., Chrisman, J. J., & Chua, J. H. 2012. Family Control and Family Firm Valuations by Family Ceos: The Importance of Intentions for Transgenerational Control. *Organization Science*, 23(3): 851-868;

Zhang, Y., Wiersema, M. F., 2009. Stock market reaction to CEO certification: The signaling role of CEO background. *Strategic Management Jour*nal, 30, 693-710. doi:10.1002/smj.772;

Zollo, M., Singh, H., 2004. Deliberate learning in corporate acquisitions: Post-acquisition strategies and integration capability in US bank mergers. *Strategic Management Journal*, 25(13), pp. 1233-1256;

SITOGRAPHY

CFA Institute: https://www.cfainstitute.org/en/advocacy/issues/board-independence.

Cleverism: https://www.cleverism.com/historical-analysis-ma-waves-mergers-acquisition/ (A Historical Analysis of M&A Waves);

EY: The right combination. Managing integration for deal success. https://www.ey.com/Publication/vwLUAssets/EY_Merger_Integration_Survey_the_right_combination/$FILE/EY-Merger-Integration-Survey-the-right-combination.pdf;

Family Capital: https://www.famcap.com/the-worlds-750-biggest-family-businesses/ (The World's Top 750 Family Businesses Ranking. "To be considered a family business, Family Capital has selected only companies that are 20 years (from June 2018) and older. This 20-year time frame corresponds on average with a level of transition from first generation control to at least some participation of the next generation of the family owners);

Family Firm Institute: https://my.ffi.org/page/globaldatapoints;

Financial Times. School economics: https://www.ft.com/content/4ea12204-2714-11e9-a5ab-ff8ef2b976c7 (Monetary policy has run its course. Monetary policy);

Forbes: Why So Many CEOs Call It Quits After Their Companies Get Acquired. https://www.forbes.com/sites/quora/2016/08/09/why-so-many-ceos-call-it-quits-after-their-companies-get-acquired/#49585b8e3238;

Institute for Mergers, Acquisitions and Alliances (IMAA), 2004-2019. "Number and value of M&A by Target Industry (1985-2016)": https://imaa-institute.org/m-and-a-by-industries/;

Institute for Mergers, Acquisitions and Alliances (IMAA): https://imaa-institute.org/m-and-a-us-united-states/;

Investopedia: https://www.investopedia.com/terms/s/sarbanesoxleyact.asp; https://www.investopedia.com/terms/c/corporate-raider.asp;

KPMG: https://assets.kpmg/content/dam/kpmg/pdf/2013/11/kpmg-family-business-insights.pdf (Family Business, 2013. KPMG International);

PWC: https://www.pwc.com/m1/en/publications/documents/family-firm-english.pdf (The Family Firm: Central to the success of the Middle East. PwC Family Business Survey 2012. Jan 2013);

White and Cases, Mergers: https://mergers.whitecase.com/ (M&A activity by value 2006 – 2016);

APPENDIX

TABLE 4 - DEALS ORGANIZED BY SIC CODE

SIC	Industry	Number of deals	% of the total
10	Metal, Mining	4	0.43%
12	Coal Mining	4	0.43%
13	Oil and Gas Extraction	41	4.36%
14	Non-metallic Minerals, Except Fuels	1	0.11%
15	General building contractors	3	0.32%
16	Heavy Construction, Except Building	2	0.21%
17	Special Trade Contractors	4	0.43%
20	Food & Kindred Products	16	1.70%
21	Tobacco products	2	0.21%
23	Apparel & Other Textile Products	9	0.96%
24	Lumber & Wood Products	2	0.21%
25	Furniture & Fixtures	2	0.21%
26	Paper & Allied Products	8	0.85%
27	Printing & Publishing	12	1.28%
28	Chemical & Allied Products	73	7.76%
29	Petroleum & Coal Products	4	0.43%
30	Rubber & Miscellaneous	1	0.11%
31	Leather & Leather Products	4	0.43%
32	Stone, Clay, & Glass Product	2	0.21%
33	Primary Metal Industries	9	0.96%
34	Fabricated Metal Products	6	0.64%
35	Industrial Machinery & Equipment	36	3.83%
36	Electronic & Other Electric Equipment	94	9.99%
37	Transportation Equipment	11	1.17%
38	Instruments & Related Products	68	7.23%
39	Miscellaneous Manufacturing Industries	8	0.85%
40	Railroad Transportation	3	0.32%
42	Trucking & Warehousing	5	0.53%
44	Water Transportation	2	0.21%
45	Transportation by Air	6	0.64%
46	Pipelines, Except Natural Gas	2	0.21%
47	Transportation Services	8	0.85%
48	Communications	46	4.89%
49	Electric, Gas, & Sanitary Services	31	3.29%
50	Wholesale Trade – Durable Goods	11	1.17%

51	Wholesale Trade – Nondurable Goods	7	0.74%
53	General Merchandise Stores	1	0.11%
54	Food Stores	5	0.53%
55	Automotive Dealers & Service Stations	2	0.21%
56	Apparel & Accessory Stores	7	0.74%
57	Furniture & Home-furnishings Stores	1	0.11%
58	Eating & Drinking Places	13	1.38%
59	Miscellaneous Retail	12	1.28%
70	Hotels & Other Lodging Places	5	0.53%
72	Personal Services	3	0.32%
73	Business Services	207	22.00%
75	Auto Repair, Services, & Parking	3	0.32%
78	Motion Pictures	4	0.43%
79	Amusement & Recreation Services	6	0.64%
80	Health Services	28	2.98%
82	Educational Services	2	0.21%
83	Social Services	3	0.32%
87	Engineering & Management Services	81	8.61%
89	Services, Not Elsewhere Classified	8	0.85%
92	Justice, Public Order, & Safety	1	0.11%
95	Environmental Quality & Housing	1	0.11%
97	National Security & International Affairs	1	0.11%
	Total	**941**	**1**

Representation of the sample organized in accordance to 2-digt US primary SIC code, with the related percentage.

TABLE 5 - DEALS ORGANIZED BY YEAR OF ANNOUNCEMENT

Years	Number of deals	% of the total
2005	12	1.28%
2006	85	9.03%
2007	87	9.25%
2008	48	5.10%
2009	34	3.61%
2010	119	12.65%
2011	98	10.41%
2012	100	10.63%
2013	93	9.88%
2014	90	9.56%
2015	100	10.63%
2016	75	7.97%
Total	**941**	**1**

Representation of the sample organized in accordance to the announcement date (expressed in years), with the related percentage.

TABLE 6 - DEALS ORGANIZED BY ACQUIRER'S HQ

Country	Number of deals
United States	793
Canada	26
United Kingdom	24
Netherlands	10
Japan	10
Cayman	9
Ireland	9
France	8
Switzerland	5
Deutsche	5
Bermude	5
Luxembourg	4
Sweden	3
Israel	3
New Zealand	2
Singapore	2
Virgin Island	2
Belgium	2

Curacao	2
Finland	2
China	2
India	2
West Samoa	1
Denmark	1
Brazil	1
Bahamas	1
Spain	1
Austria	1
Italy	1
Australia	1
Kroatia	1
Norwey	1
Hong Kong	1
Total	**941**

Representation of the sample organized in accordance to the country code of the acquirer company, thus in. which country the acquirer is headquartered.

TABLE 7 - DEALS ORGANIZED BY SIC CODE RELATED TO THE FAMILY AND NON-FAMILY CEO

SIC	Industry	Family CEO	% of the tot	Non-Family CEO	% of the tot
10	Metal, Mining	3	1.40%	1	0.14%
12	Coal Mining	2	0.93%	2	0.28%
13	Oil and Gas Extraction	3	1.40%	38	5.23%
14	Nonmetallic Minerals, Except Fuels	0	0.00%	1	0.14%
15	General bulding contractors	1	0.47%	2	0.28%
16	Heavy Construction, Except Building	2	0.93%	0	0.00%
17	Special Trade Contractors	2	0.93%	2	0.28%
20	Food & Kindred Products	9	4.21%	7	0.96%
21	Tobacco products	1	0.47%	1	0.14%
23	Apparel & Other Textile Products	4	1.87%	5	0.69%
24	Lumber & Wood Products	2	0.93%	0	0.00%
25	Furniture & Fixtures	2	0.93%	0	0.00%
26	Paper & Allied Products	6	2.80%	2	0.28%
27	Printing & Publishing	5	2.34%	7	0.96%
28	Chemical & Allied Products	11	5.14%	62	8.53%
29	Petroleum & Coal Products	1	0.47%	3	0.41%
30	Rubber & Miscellaneous	1	0.47%	0	0.00%
31	Leather & Leather Products	2	0.93%	2	0.28%
32	Stone, Clay, & Glass Product	0	0.00%	2	0.28%
33	Primary Metal Industries	6	2.80%	3	0.41%
34	Fabricated Metal Products	5	2.34%	1	0.14%
35	Industrial Machinery & Equipment	17	7.94%	19	2.61%
36	Electronic & Other Electric Equipment	15	7.01%	79	10.87%
37	Transportation Equipment	7	3.27%	4	0.55%
38	Instruments & Related Products	10	4.67%	58	7.98%
39	Miscellaneous Manufacturing Industries	4	1.87%	4	0.55%
40	Railroad Transportation	1	0.47%	2	0.28%
42	Trucking & Warehousing	1	0.47%	4	0.55%
44	Water Transportation	1	0.47%	1	0.14%
45	Transportation by Air	1	0.47%	5	0.69%
46	Pipelines, Except Natural Gas	1	0.47%	1	0.14%
47	Transportation Services	2	0.93%	6	0.83%
48	Communications	5	2.34%	41	5.64%
49	Electric, Gas, & Sanitary Services	6	2.80%	25	3.44%
50	Wholesale Trade – Durable Goods	8	3.74%	3	0.41%
51	Wholesale Trade – Nondurable Goods	5	2.34%	2	0.28%
53	General Merchandise Stores	1	0.47%	0	0.00%

54	Food Stores	2	0.93%	3	0.41%
55	Automative Dealers & Service Stations	1	0.47%	1	0.14%
56	Apparel & Accessory Stores	3	1.40%	4	0.55%
57	Furniture & Homefurnishings Stores	0	0.00%	1	0.14%
58	Eating & Drinking Places	1	0.47%	12	1.65%
59	Miscellaneous Retail	5	2.34%	7	0.96%
70	Hotels & Other Lodging Places	1	0.47%	4	0.55%
72	Personal Services	2	0.93%	1	0.14%
73	Business Services	16	7.48%	191	26.27%
75	Auto Repair, Services, & Parking	2	0.93%	1	0.14%
78	Motion Pictures	2	0.93%	2	0.28%
79	Amusement & Recreation Services	4	1.87%	2	0.28%
80	Health Services	10	4.67%	18	2.48%
82	Educational Services	2	0.93%	0	0.00%
83	Social Services	1	0.47%	2	0.28%
87	Engineering & Management Services	6	2.80%	75	10.32%
89	Services, Not Elsewhere Classified	1	0.47%	7	0.96%
92	Justice, Public Order, & Safety	1	0.47%	0	0.00%
95	Environmental Quality & Housing	0	0.00%	1	0.14%
97	National Security & International Affairs	1	0.47%	0	0.00%
	Total	**214**	**1**	**727**	**1**
	Grand Total			**941**	

Representation of the sample organized in accordance to the number of deals in which the chief executive officer was *family* or *non-family*, with the related percentage.

TABLE 8 - DESCRIPTION OF VARIABLES

Variable	Description	Source
Dependent variable:		
CEO Replacement	Dummy variable that equals 1 if the CEO has been replaced within the completed date, and 0 the CEO has not been replaced	Hand-collected from annual report, EDGAR proxy statement, Bloomberg Executive Profile & Biography, Bloomberg Platform and LinkedIn
Independent Variables:		
Family CEO	Dummy variable that equals 1 if the CEO and/or Chairman of the target firm is a member of the founding family, and 0 otherwise	Hand-collected from annual report, Bloomberg Executive Profile & Biography, and LinkedIn
CEO Age	Age of the CEO at the deal announcement date	Hand-collected from annual report, Bloomberg Executive Profile & Biography, and LinkedIn
CEO Tenure	Number of years of employment as CEO until the deal announcement date	Hand-collected from annual report, Bloomberg Executive Profile & Biography, Bloomberg Platform and LinkedIn
Deal type	Dummy equal to 1 if the deal is an Institutional Buy-Out, 0 otherwise	Zephyr
Control variables:		
Firm Size	Natural logarithm of firm total assets	DataStream
ROA	Ratio of net income to total assets	DataStream
Growth	Percentage change in sales relative to the prior year.	DataStream
Leverage	Debt equity ratio of the target company	DataStream
Length of the transaction	Number of years of transaction duration	DataStream
Debt/EBITDA ratio	Ratio measures a company's ability to pay off its incurred debt	Orbis
Pre deal Market Cap	Market Capitalization of the target	Zephyr
Deal Value	Deal value in U.S. dollars	DataStream

Description of the variables analyzed in the logit regression model. For each of the variable follows the full explanation and the source.

TABLE 9 - DESCRIPTIVE STATISTICS OF THE MODEL

	Mean	Median	Standard Deviation
CEO Replacement (dummy)	0.64293305	1	0.479389577
Family CEO (dummy)	0.179596174	0	0.384054859
CEO Tenure	6.889479277	5	6.699833742
CEO Age	52.73538789	52	8.257112446
Deal type (dummy)	0.172157279	0	0.37771784
Deal value	2596523119.46	519228000.00	6958241418.21
Deal Type (dummy)	0.109458023	0	0.312379038
Length of the transaction	0.285432286	0.232876712	0.210640491
Target ROA	-3.888490967	3.33	36.57510068
Target Growth	16.14060574	5.92	83.12154803
Leverage	79.4354729	21.92	626.9886668
Pre-deal target MC	1899191.334	349013.2887	5673186.945

Mean, median, and standard deviation of the whole set of variables used in the analyses, estimated on the same sample as the regressions (941 completed acquisitions involving US publicly listed firms as targets over the period between January 1, 2006 and December 31, 2016.

TABLE 10 – RESULTS FROM THE REGRESSION (FIRST MODEL)

Variable	Coefficient	Slope at mean	Significance
const	2.35435		**
Family CEO	-0.484095	-0.112144	**
CEO Age	-0.0143074	-0.003176	
Deal Type	-1.10002	-0.261377	***
Deal Method of payment	0.184859	0.0399933	
Deal Value ($)	-2.66E-11	-5.90577e-12	
Length of the transaction	0.0271973	0.00603741	
D/EBITDA	-0.00265809	-0.00059005	
Firm size	0.10762	0.02389	**
ROA	-0.00202133	-0.0004487	
Growth	0.00122353	0.000271607	
Leverage	-0.000111	-2.46824e-05	
Pre deal Market Cap	7.41E-08	1.65E-08	**
Number of observations	941		
Industry Fixed Effect	yes		
Year Fixed Effect	yes		
Mc Fadden R2	0.11		

TABLE 11 – RESULTS FROM THE REGRESSION (INTERACTION TERMS)

Variable	Coefficient	Slope at mean	Significance
const	2.39192		**
Family CEO	-0.517559	-0.12011	**
CEO Age	-0.0144565	-0.00320	
Deal Type	-1.13691	-0.270158	***
Interaction term	0.187809	0.0403775	
Deal Method of payment	0.187409	0.040505	
Deal Value ($)	-2.64E-11	-5.86670e-12	
Length of the transaction	0.0183143	0.00406331	
D/EBITDA	-0.002663	-0.00059005	
Firm size	0.106794	0.0236939	*
ROA	-0.00207691	-0.0004607	
Growth	0.00121672	0.0002699	
Leverage	-0.00011	-2.45989e-05	
Pre deal Market Cap	7.4218E-08	1.65E-08	**
Number of observations	941		
Industry Fixed Effect	yes		
Year Fixed Effect	yes		
Mc Fadden R2	0.1104		

The symbols ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

TABLE 12 – CORRELATION MATRIX OF THE BASE LINE MODEL

CEO Repl	Family CEO	CEO Age	Deal Type	Deal Meth of Pay	Deal Value ($)	Lght of the trans	Debt/EBITDA	Firm size	ROA	Growth	Leverage	Predeal MC	
1	-0.0847	-0.0355	-00.1889	0.0482	0.0643	0.0116	-0.0307	0.0625	-0.0274	0.0439	-0.0390	0.0903	CEO Replacement
	1	-0.0046	0.0213	-0.0044	-0.0398	-0.0652	-0.0185	0.0091	0.0267	0.0454	-0.0015	-0.0309	Family CEO
		1	-0.0135	-0.0136	0.0958	0.0939	0.0059	0.0969	0.0464	-0.0621	0.0420	0.0817	CEO Age
			1	-0.1418	-0.0588	-0.0345	0.0116	0.0572	0-0819	-0.0547	0.0791	-0.0569	Deal Type
				1	0.1029	0.2023	-0.0098	0.0395	-0.1184	0.0310	-0.0056	0.0815	Deal Meth of Pay
					1	0.3431	0.0003	0.4946	0.0863	-0.0115	0.0094	0.8197	Deal Value ($)
						1	-0.0223	0.3533	0.0464	-0.0105	0.0351	0.2787	Length of the trans
							1	0.0293	0.0039	0.0001	-0.0226	-0.0005	Debt/EBITDA
								1	0.3166	-0.0398	0.0763	0.4572	Firm size
									1	-0.0884	0.0175	0.0868	ROA
										1	-0.0012	-0.0155	Growth
											1	0.0038	Leverage
												1	Predeal MC

Correlation matrix for the whole set of variables presented in the model.