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Reporting

Dealing with the Crowd: the Influence of Online
Platforms on the Process of M&A

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Academic Year: 2014/2015

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Introduction

The current work is prompted by the important role that the Internet ecosystem is nowadays increasingly gaining. From an innovative technology that was born with the principal purpose of transmitting information in a faster way, it has gradually turned into a dimension within which business opportunities flourish, both creating brand new sectors and enhancing the scope and efficiency of the existing ones. Industries that have been run for centuries under a brick and mortar approach have been hit by disruptive dynamics that offered the opportunity of a metamorphosis for some of the leading companies operating within them. As a result of this innovative push enabling an instant communication among each and every country around the world without, at least theoretically, any limitation but those imposed by the infrastructural boundaries, there has been an increasing “online shift” of the most traditional economic dynamics. An ancient practice like the commerce between firms and consumers, traditionally limited by geographical boundaries, has been revolutionized as a result of the benefits brought by the immediacy of communications and the increasingly effectiveness of transports, able to reach a widespread audience in a little time. We are talking about the e-commerce business, a sector constituting a gargantuan opportunity for those existing players able to adapt to environmental changes, but at the same time a sentence of death for those unable to timely invest in the right direction¹. Similar considerations can be done for the industry of audio-visual entertainment, where online platforms have substituted classic channels like TV and cinemas, forcing the existing players to re-invent their business models to capture consumers’ attention (someone named this new trend as a “war for the eyeballs”). The list of examples could go on for long, and the existing literature has indeed deeply analyzed this phenomenon, spanning from the telecommunications industry to services less focused on the final consumer, rather on b2b industries.

¹ Gaspari, R. 2015. New e-commerce frontiers: Rocket Internet, Carmudi Case Study. The digital marketing strategy behind an online car marketplace. LUISS Thesis.

Although the most evident impact of Internet and of its “platformization” can be observed on the consumer side, crucial changes are going on also within the relationship among companies, namely in the business-to-business sector. As a matter of fact the stagnation period that the US and Europe have been passing through, pushed companies to look for solutions that enable them to save the limited amount of resources coming from the market, looking for best-practices that would have let them enhance their efficiency avoiding lowering the quality of their output. Moreover, the consequences of the sub-prime crisis of 2008 dramatically shrank the opportunities of financing, pushing toward the direction of inventing new forms of capital funding, both equity and debt. The so-called innovative finance is a new branch of the financing industry that is emerging thanks to the development of new forms of funding prompted by the Internet but not limited to it. Examples of such innovations are the emergence of platforms for raising capital from audiences of not-qualified investors, in other words the crowdfunding, and for the invention of new financial instruments like mini bonds or particular types of derivatives. This orientation to the crowd, as we already said, is possible given the narrowing of barriers deriving from information asymmetries, and the possibility for everybody has a connection to the World Wide Web, to access online platforms. Innovative finance doesn’t however deal only with capital raising, but refers also to those platforms hitting sectors traditionally lead by few players, like the M&A industry. The flourishing of platforms through which streamline the complex process that must be performed within the context of mergers and acquisition, is creating opportunities for different type of actors; from one side, existing players involved in the advisory to sellers and buyers can use tools that let them reaching higher degrees of efficiency in several steps of the acquisition; on the other hand, advisors previously limited by the narrow scope of their business and by informative barriers, can now enhance their playing field fostering competition among incumbents who have so far perceived low degrees of competitive threats.

We have structured the work starting with a description in Chapter 1 of the contest within which the platforms we have briefly examined are emerging; in particular, we deem necessary to analyze the literature that sought to shed a

light on the relationship between characteristics of an advisor and the output of the merger performed, in terms of significant drivers like abnormal returns or takeover premiums paid. This approach is intended to highlight the interest of academics and companies on the optimization of the processes of merger and acquisitions; the chapter is completed with the explanation of the main reasons pushing companies to look for an advisor that takes care of the whole process, and in the end all these considerations are linked to the emergence of online M&A platforms.

Chapter 2 seeks to describe the contest within which M&A operations traditionally take place, shifting the focus from the advisor to the reasons driving two firms to merge; this analysis is performed through the description of merger waves, from which endogenous and exogenous factors are extracted. For a more exhaustive picture of the process, this chapter is completed with the analysis of the crucial steps that companies undertake when conducting an acquisition or merger; we chose to focus so far on the most common practices, that is to say the deal origination and the due diligence steps, in preparation for a broader description of the process conducted through the mechanism of auctions done in the next chapter.

Chapter 3 goes back investigating the role of the advisor, in particular starts from the analysis of the industry of investment banks, the typical actors performing M&A advisory. We describe in detail their business model and range of services offered, with a spotlight on their role in the coordination of auctions, one of the means through which mergers and acquisitions are performed; the complexity of such a mechanism often makes firms delegate to a third party, namely an advisor like an investment bank, the set up of the auction.

The last and more crucial chapter is entirely dedicated to read the context so far depicted under a digital-oriented light, shifting from a traditional brick and mortar approach to an online based one. In order to have a bird's eye of the state of the art of the innovative finance ecosystem, we report a brief description of the main activities included under this broad category. The focus is however on the solutions built for conducting mergers and acquisitions; in particular we compare the traditional way of carrying out certain crucial phases of the process to the one involving the use of online platforms. For each of the phases affected

by this “online shift”, we describe the structure of an existing platform and point out the main features and benefits brought to the process of M&A.

1. CHAPTER 1

M&A ADVISORY, A TREND TOWARD DIGITALIZATION

1.1. The Focus on the Role of the Advisor: a Literature Review

When it comes to deal with the topic of mergers and acquisitions, academics are pushed toward the aim of shedding light on the drivers responsible of the optimization of the process. Besides the classic managerial concerns, that we are though going to deeply analyze in the next chapters, it is interesting to follow the stream of researches that put the advisor on the first line, attributing to it a relevant power of influencing the output of an operation of M&A. Although the current work contains a detailed part that helps the reader to frame the environment and the peculiar business of a typical advisor of an M&A, it's important to clarify from the very beginning the nature of this actor and its principal tasks; the specification of which type of entity is used as an advisor during an acquisition is so far not essential, hence let's assume that this role is usually played by *financial intermediaries* in general². These figures are indeed specialists in the gathering of information, by producing them in an organized and easily usable form, and by processing the already existing one. Furthermore they use this ability to handle information to help both the target, the party selling-out some or all of its business, and the buyer, the acquiring party, to set up a valuation that is as closes as possible to reality. Such valuation, as we are going to see, is also dependent on the right assessment of *synergies* that could potentially come out from the merger or acquisition; as a matter of fact the advisor is also engaged in the identification and quantification of these synergies, together with the assessment of the risks connected to the operation.

² Allen, L., J. Jagtiani, S. Peristiani, and A. Saunders. 2004. The Role of Bank Advisors in Mergers and Acquisitions. *Journal of Money, Credit and Banking*, Vol. 36, No. 2, pp. 197-224

Digging into a literary review of researches conducted within the last thirty years, it is possible to notice the attention that academics reserved to recurrent variables concerning the service offered by the advisor to targets and buyers. In particular the dimensions we deem relevant to the current work, that have been investigated by several researches on M&A advisors, concern their *ranking and reputation*, their *nature*, the existence of a *prior relationship with their clients*, and *the contract fees charged*.

Ranking and reputation of the advisor is the first dimension we listed, because is one of the most used concerning the research of a correlation with the performance of the advisor when working for the two parties involved in an acquisition; in the most recent of the numerous studies conducted, the characteristics took as proxies for the effectiveness of the job performed by the advisor are the deal completion rate and the time taken to complete the deal.³ These two dimensions are investigated starting from the hypothesis that higher ranked advisors, hence with a supposed higher quality in terms of work done, are better in the effectiveness of their service in comparison with low quality professionals. Moreover, the reputation of the advisor is also put into relation with the output of the merger; is a high quality advisor able to enhance the probabilities of abnormal returns consequent to the merger? Concerning the first proxy of effectiveness, the authors found consistent results linking a top-tier advisor with the ability to complete a deal faster than other non top-tier financial intermediaries. Conversely the researchers weren't able to find a positive correlation between the high quality of the advisor and its deal completion rate. Lastly they find that in general high quality advisors don't deliver particular gains in abnormal stocks returns, for public companies, if compared to lower tier ones; at the same time they report that targets using high ranked advisors often receive lower gains on a post-merger basis. Moreover, transactions completed through considerations in stock are linked with higher gains for acquirers when a top-tier advisor is chosen. These results differ substantially in comparison with previous researches, and the reason must be attributed to a divergence in the structure of the researches conducted. As a matter of fact, Walter and Yawson

³ Walter, T. S., A. Yawson and C. P. W. Yeung. 2007. The Role of Investment Banks in M&A Transactions: Fees and Services. *Pacific-Basin Finance Journal*.

(2007) stated that a ranking based on a static representation of the current quality of advisors could be misleading; they argue the methodology chosen by academics like McLaughlin (1992) and Rau (2000), because firmly convinced that considering a static ranking over a window of decades would be wrong. Following the recommendations of Da Silva *et al* (2004), the new research tries to consider the dynamics of an M&A advisor market letting the ranking vary over a rolling period of three years. The authors critically point out that the existing literature has been using static league tables rankings to assess the quality of advisors; these tables are indeed based on the volumes of M&A deals completed over the previous twelve months, and are often deployed as marketing tools by the advisers themselves in order to communicate their power. Moreover they adjust the results for the complexity of the deal; this because even though high quality advisers are hired, a greater complexity could drive down abnormal returns for both targets and acquirers. Older studies⁴ that are part of the literature criticized by the aforementioned paper, actually found different results concerning the relationship between quality of the adviser and probability of completion of the deal; as a matter of fact the latter finds evidence that top-tier advisors are more likely to complete a deal than other lower-tier competitors. However the other two drivers, time to complete the deal and post-merger abnormal returns, are found to have the same results of the first research we described.

Finally, still dealing with the reputational dimension, we deem necessary to report a further research by which the just described ones were inspired; in particular Bowers and Miller (1990) first conducted a research that investigated the effects of the choice of high quality advisors on post-merger wealth gains for shareholders. The authors found that when first-tier investment banks are hired to conduct the operation, by either the sell or the buy-side, abnormal dollar returns are higher within a holding period compared to those acquisitions that used lower tier advisors; it's necessary to recall the divergence between this result and the one reported by Walter and Yawson (2007).

⁴ Hunter, W. C., J. Jagtiani. 2003. An Analysis of Advisor Choice, Fees, and Effort in Mergers and Acquisitions. *Review of Financial Economics*

A further variable that has been explored with the intention of identifying drivers for the effectiveness of an operation of merger or acquisition is the **nature of the advisor and prior relationship with clients**. As we are going to specify with higher detail in chapter 3, the type of financial intermediaries that are usually hired as advisors by targets and buyers involved in an acquisition process are investment banks. As a matter of fact some investment banks, despite the name, are allowed to act not only in the field of investment, but also to accept deposits like the more classic commercial banks do; this bank model sees as part of the business the emission of loans and financing, along with the investment leg from which they take the name (some definitions use the term *merchant bank* for the investment leg). As a consequence of these considerations the sell-side and the buy-side of an acquisition face the dilemma of choosing as advisor a pure investment bank or an institution active also in the commercial banking business. Is there a potential advantage for either a target or a buyer to hire an advisor belonging to one category instead of the other? The literature sought to answer this question starting from the consideration of a previous relationship between the client and the bank, namely a lending relationship.⁵ The assumption that the role of an advisor concerns the ability, as already said, of gathering information about both the acquiring and the target firm, brings to the importance of a familiarity between the advisor and the client. As a matter of fact banks that already had a prior working relationship, let's say lending money, with the client, may count on a competitive advantage over other banks deriving from a lower amount of resources to deploy in order to get the necessary information. This comes from the fact that pure investment banks can, in the lending field, just offer the so-called *bridge loans*, financing tools with a very specific purpose and limited to a single merger operation; it's clear that this form of financing produces very little information in comparison to a long-term financing relationship. If we investigate strict banking literature like Chan, Greenbaum and Thakor (1986) we find that the authors analyze the transferability of the information generated during the predisposition of a round of financing, and consider it reusable by the bank for other purposes; moreover

⁵ Allen, L., J. Jagtiani, S. Peristiani, and A. Saunders. 2004. The Role of Bank Advisors in Mergers and Acquisitions. *Journal of Money, Credit and Banking*, Vol. 36, No. 2, pp. 197-224

this behavior is perfectly in line with the regulation set by SEC, since no transfer among different subsidiaries has been done. Going back to the expected positive effect of using an advisor also involved in commercial banking activity, this is often referred to as the *certification effect*, a term adopted by researches dealing with the underwriting activity of investment banks (see chapter 3 for further details about investment banks businesses). This certification effect is hypothesized to be greater for those entities that already had the possibility to dig into their clients' balance sheets and cash flow statements, together with performing an analysis of the business in which they operates.

This competitive advantage might however be counterbalanced by a *conflict of interest* that potentially acts as a detriment to the expected excess return of the company after the acquisition. For example, the target could be affected by financial distress that is so far known exclusively by the corporate finance department of the commercial bank that once financed it through a loan; since the missed payment of interest and principal is only known by the institution in charge of managing the debt, the bank itself has all the interest to find a potential buyer with the financial soundness to help covering that debt. A further source of potential conflict of interest comes from the situation of *hostile takeovers*⁶, where commercial banks have fear to accept to becoming advisor of the bidder because they had previously relationships with the target; the fear comes in this case from the risk that the merger or acquisition doesn't end up well, with the result that the resistant target could not trust on the commercial bank anymore. A final potential source of conflict of interest can be the desire of a commercial bank to be an advisor only in those operations that require financing, and where it can be elected as the entity making available loans for both parties⁷. Besides these hypotheses, at the end of their empirical research, Allen and Jagtiani (2004) found a positive and significant relation between abnormal returns of the target consequent to an acquisition, and the use of their own commercial bank as advisor. Negative returns are instead found concerning the acquirer, but this is

⁶ With this term we refer to those operations that see an acquirer trying to get a control stake on a public company overcoming the management of the company, directly making an offer to the shareholders of the target.

⁷ Michaely and Woomak (1999) investigated conflicts of interests of different nature, specifically in the business of underwriting of shares during IPOs, seasoned emissions and other similar operations.

likely to be included in the negative post-acquisition results registered in the vast majority of operations⁸; at the same time acquirers seem to drive their choice of the advisor according to their past relationship with investment or commercial banks.

Notwithstanding the aforementioned variables are without any doubt important for the literature concerning operations of M&A, the largest effort has been put by researchers on the topic of **contract fees**. For example, within a research that tries to investigate the determinants of the market shares of investment banks involved as advisors in mergers and tender offers⁹, the author starts with considerations concerning the magnitude of contingent fees¹⁰ charged by advisors. After dividing advisors into three different groups depending on their market share¹¹, the author reports that on average, for tender offers, investment banks belonging to the first group charge 73% of total fees as contingent, while for second and third-tier banks the percentage goes down to 61% and 64%, respectively; concerning mergers, this percentage is lower, since the fixed part of fees charged is higher, with the result that first-tier banks charge on average 55% of contingent fees, while second and third-tier charge only 36% and 33% respectively. These results are commented by the author, who states that the difference in magnitude between tender offers and mergers fees is so high because mergers result from a negotiated deal, with lower probability of completion; for this reason investment banks want to charge a lower percentage of fees to completion, and ensure their incomes through fixed contract fees. A subsequent research performed by Chahine and Ismail (2006) tries to shed a light on the correlation between the level of the fees charged by advisors, distinguishing the sell-side from the buy-side ones, and the premium paid to target firms for the acquisition. The researchers affirm that targets pay higher fees to increase the premium received, while acquirers do the

⁸ See the *Managerial Risk Diversification Hypothesis* [in Amihud and Lev (1981); Amihud and Kamin (1979) exc.] and the *Winner's Course or Hubris Hypothesis* [in Roll (1986)]

⁹ Rau, R. P. 1999. Investment Bank Market Share, Contingent Fee Payments, and the Performance of Acquiring Firms. *Journal of Financial Economics*.

¹⁰ Contingent Fees are one of the types of fees charged by investment banks when acting as advisors; these fees are "contingent" to the achievement of a desired result, namely to the completion of the deal.

¹¹ Further considerations on this topic are contained in chapter 3.

opposite: they are willing to pay higher fees for paying a lower acquisition premium. Furthermore they find a positive and significant correlation between the level of fees charged and the investment bank reputation, both for targets and acquirers. Concerning the effectiveness of advisors' work in operations of M&A, the research evidences a positive relation between target's advisor fee and the premium received; at the same time, the research evidences a negative and significant correlation between the acquirer fee and the premium paid. In light of the last intersection among correlations, the author concludes that the hypothesis of a conflict of interest between acquirer and target firms is empirically demonstrated. A probably more interesting result is the fierce competition among advisors that comes out from the same paper; Chahine and Ismail find indeed that when acquirers pay a higher fee to the advisor in comparison to the fee paid by the target, the premium received by the latter is lower. The last evidence of this research concerns the lower fee paid on average by target firms in case of friendly operations. A later research¹² finds, following the intuition of Chahine and Ismail, strong evidence of the existence of a quality premium in advisory fees, in particular the first-tier advisors are found to ask for higher fees than other competitors of lower quality. However Hunter and Jagtiani (2002) don't find evidence of a correlation between fees charged and the ability to complete the deal; if we couple this result with the percentages reported at the beginning of the paragraph, we can affirm that there is no risk that an advisor strives to complete a deal at all costs, to earn the fee based on completion. Furthermore in a work conducted by Saunders and Sirinivasan (2001) the authors seek to shed a light on the potential correlation between magnitudes of fees paid to the advisor by both target and acquirers, and the previous relationship with the bank hired; the empirical results show a positive correlation between fees paid by the acquirer and the history between the advisor and the firm. This effect is explained by the authors as a consequence of the switching costs that tend to push against the switching to another investment bank; these costs get higher the longer the relationship between the advisor and the acquirer, because they basically consist in the surrender to those

¹² Walter, T. S., A. Yawson and C. P. W. Yeung. 2007. The Role of Investment Banks in M&A Transactions: Fees and Services. *Pacific-Basin Finance Journal*.

benefits, in terms of greater information, we already described at the beginning of the chapter. In other words acquirers are available to pay higher fees, whether fixed or linked to some contingencies, because they trust on the advisor and hence perceive these extra-fees as a price for a better service and a certification benefit. Finally the work of the two authors finds evidence that the high fees paid to the advisor for the service provided are not significantly linked to abnormal returns on a post merger basis; in light of this result the researchers don't find a difference in abnormal returns among firms switching to another investment bank and those that don't.

1.2. The M&A Dilemma: Using Advisors, or Going Alone?

After the review of the most relevant studies concerning the correlations emerging from an advisory relationship during an M&A, we want to dig into the theory behind the decision by firms to hire an investment bank as an advisor; this section reports the two opposite perspectives of a company that is starting to look for a potential buyer or a target: on the one hand, the literature supporting the decision to hire an intermediary able to conduct the operation through the help of the *three hypotheses* investigated by Servaes and Zenner (1996). On the other, the presentation of the point of view of those researches observing the effect of the choice of going alone, hence performing the M&A process using *in house* resources or others than investment banks.

1.2.1. The Three Hypotheses Approach

The reasons to choose an investment bank as an intermediary for the process of merger or acquisition have been object of research by several academics. The most useful for our purposes concerns the division of the possible drivers of the choice into three hypotheses¹³; the first is the *transaction cost hypothesis*, according to which firms choose investment banks because they are able to analyze the details and convenience of the acquisition at a lower cost than the firm itself, whether the latter is the target or the bidder. A further

¹³ Servaes, H., M. Zenner. 1996. The Role of Investment Banks in Acquisitions. *The Review of Financial Studies*, Vol. 9, No. 3, pp. 787-815

hypothesis is the *asymmetric information hypothesis* that posits the advisor as a figure able to destroy the asymmetric information between the potential buyer and the target. Finally the *contracting costs hypothesis* puts the investment bank in the position of being able to reduce agency costs of the acquirer since it certifies the value of the acquisition.

Concerning the hypothesis that deals with the reduction of transaction costs, the principal causes are considered by academics like Benston and Smith (1976) to be *economies of specialization*, *economies of scale in information acquisition* and *reduction in search costs*. Starting from these characteristics, we can infer that acquiring firms will prefer to rely on investment banks when a particular offer entails high transaction costs; therefore it would be better for the entity to hire a third party that could cut costs along the three dimensions just described. Servaes and Zenner (1996) built a model that enabled them to test the impact of complexity of the deal on transaction costs, using as variables the type of transaction that will likely be performed. They start from the assumption that transactions involving, for example, *hostile bids*, *bidding auctions*, *exchange of large amounts of securities* or *big volumes of cash* will add further degrees of complexity to the process. Another set of variables deals with the acquirer's prior experience in the field of merger and acquisitions; firms that are frequently involved in this kind of operations are in fact more likely to be more able to spread fixed costs throughout the multiple transactions that are going to perform.

The second hypothesis, that is to say the one concerning costs related to asymmetries of information between the target and the acquirer, is investigated through the use of another set of proxy variables. The researchers used four principal variables, starting with the degree of *industry relatedness* between the target and the acquirer; this approach is meant to capture the gap created by information asymmetry in the sense that an acquirer intentioned to buy a firm operating in an industry that is not related to its own one, will face more obstacles in finding the right information if compared to a target that uses to compete with it. This hypothesis goes on discriminating between *acquisitions of specific assets* and *acquisition of a firm as a whole*; it is easy to get that the specificity of certain assets is a characteristic that will push the acquiring firm to

look for the expertise of an external advisor, in order to refine the valuation of items hard to evaluate by just comparing it to the current market (*e.g.* a unique machine completely designed and commissioned *in-house*); moreover, another reason enforcing this approach is that financial insights on an aggregate level are usually available through public agencies, while the breakdown of specific items in balance sheets are more difficult to get. A *well-diversified* firm that holds in its portfolio a broad number of subsidiaries, and thus operates in many industries and strategic segments, has more difficulties in having an effective control in each and every aspect of them; this will increase the need for an external advisor able to reduce this source of information asymmetry. A last aspect, though crucial for further considerations about the acquisition process, regards the step in which the acquiring firm is at the moment of the eventual choice of the advisor; if the acquirer *has not yet identified a target*, indeed, the investment bank advice will be more necessary, since one of the principal tasks of an advisor is to provide help during the *searching process*.

The third hypothesis deals with the concept of *agency costs*, according to the famous agency theory, but specific for the contracting field¹⁴; that's why it takes the name of *contracting costs hypothesis*. In practice, according to this point of view, the investment bank hired as an advisor, whether for an acquisition or an underwriting of shares, acts as a monitoring entity; the benefit for the firm is the signaling effect produced by the investment bank, since the latter is considered responsible for misrepresentations in the prospectus of sale or underwriting. What does have the power of lowering the "certification need" by a third party that a company has when making an acquisition offer, trying to merge with another, or going public through underwriting of shares?

A possible answer is the positive influence that other actors can have over the company. In this sense the authors consider the presence inside the boards of directors of professional figures coming from outside the company, acting as intermediaries between shareholders and managers; this peculiarity is indeed considered source of monitoring of the quality of acquisitions, therefore

¹⁴ Hansen, R., S., P. Torregrosa. 1992. Underwriter Compensation and Corporate Monitoring. *Journal of Finance*

lowering the need for the service provided by an investment bank. As a consequence of this monitoring effect, the presence of outsiders inside the board of directors is seen as a proxy able to influence the choice of hiring an investment bank as advisor.

Table 1.1: summary of the hypotheses used to predict the relation between the choice of an investment bank as advisor, and different variables. *Source: Servaes, H. and M. Zanner. (1996)*

Hypotheses	Proxy Variable	Hypothesized Relation with Hiring an Investment Bank
Transaction Costs	<i>Complexity of Transaction</i>	
	Target firm resists the acquisition	+
	Payment in cash only	-
	Acquirer already found the target	-
	Size of the transaction	+
	<i>Acquisition Experience of the Acquirer</i>	
	Number of prior acquisitions	-
	Acquisition in a related industry	-
Information Asymmetry	Number of industries in which target is active	+
	Acquisition of assets	+
Contracting Costs	Outsiders on the board	-

The results of the model don't confirm completely the hypotheses that have been set by the researchers. A summary of the hypotheses introduced so far is useful to better understand the aim of the model just shaped, and are contained in Table 1.1. The conclusions of the authors are that the *transaction cost hypothesis* has good evidence and is supported by the empirical research performed; as a matter of fact, firms use investment banks in case of larger, non-cash and hostile takeover, when they have a little or no previous experience of M&As. This dimension is confirmed by a later research, in particular for how concerns the

deal size undertaken by private firms;¹⁵ the hypothesis indeed sought to shed light on a positive correlation between the opportunity cost of not hiring an M&A advisor and the size of the deal. In other words, larger deals are more likely to be conducted with the help of an adviser. Contracting hypothesis and asymmetric information are instead found to have weak evidence as responsible for the use of an investment bank. Concerning information asymmetries, it has been found that firms are more likely to use the advice of an investment bank when the target firm operates in several segments. The other way around, while the variable concerning acquisition of single assets was predicted to be positively related to the use of an investment bank, evidence is found that firms are more likely to use services of an advisor in complete takeovers.

1.2.2. *Why the Decision Not to Hire an Advisor?*

Specular to the considerations done so far, following the footprint of the work of Servaes and Zenner about the three hypotheses underpinning the decision to hire an advisor, we can shape the mindset that leads to the opposite conclusion. Notwithstanding the limited evidence found by the researchers concerning the effectiveness of information asymmetries in the decision whether or not to choose an advisor, the ability of the seller or buyer of independently reaching a sufficient amount of potential buyers to which address their deal is a deterrent to the use of an intermediary. For this reason, those organizations that are more expert and used to have to deal with mergers and acquisition events, will have a sound base of contacts to use for the next deal they are potentially going to perform. By definition a “next deal” can exist only for an acquirer in an acquisition process, or for both target and acquirer in a merger (even though technically a newCo has in this case been created). As a matter of fact, the actors who more likely have a long term experience in the acquisition process are those belonging to the broad category of *financial sponsor*, that is to say buyers who have the return on investment as the only acquisition driver, like equity funds do. The importance of building a network of companies through which potentially find an opportunity for merger or acquisition is underlined by

¹⁵ Agrawal, A., T. Cooper, Q. Lian, Q. Wang. 2011. Does M&A Advisers Matter for Private Sellers? *Culverhouse College of Business, University of Alabama*.

Roberts (2009); in his work he effectively depicts the process of networking typical of an investment bank, showing the numbers of what he calls “best practices in annual marketing and business development strategies” of an investment bank. Roughly speaking he divides the searching phase of a potential deal by an investment bank, also called deal-sourcing phase, into five discrete steps. Despite the form of a *vademecum* could embody a temptation for the “want-to-be an IB” reader to use it as a ready-to-use guide, we want instead to highlight the complexity of such a path. The author wants to stress this concept saying that “hiring an investment bank is not like weekly grocery shop, where the vendor just puts up a store and waits”, because he conducts his analysis into the fragmented and vastly populated world of middle market firms.¹⁶ What a better environment where to conduct researches about the dynamics of the networking between firms who seek to merge, than the middle market? Here companies are small and often at their first experience as active part of a merger or acquisition, as a result the networking process needs to be built from scratch. In practice the aim of the representation is to depict the work an investment bank must do in order to make the potential seller trust him. This process doesn’t concern the research of a buyer, the author says, since the latter will easily be identified once the sell-side will have decided to become a client of the investment bank. Besides this distinction, that for the purposes of this work is irrelevant, we are interested in the overall networking dynamics that the author has reported. In particular is interesting the structure he gave to the research, since he associated to each best practice step of the research of a client, the number of entities that should be approached, and the number of companies that finally turn into real clients. In particular he starts saying that an investment bank should at first *become an expert in a specific industry*, and this step includes the attendance to three trade shows and conventions per year, for a number of “discrete contacts” of 600 and 900 respectively. Going down through the funnel, the next step is the *coverage of a large number of business owners* by sending them emails and mails for first contact or follow up of previous meetings; if this practice is coupled with the organization of seminars and panels, the number of

¹⁶ Roberts, D. J. 2009. *Mergers & Acquisitions: an Insider's Guide to the Purchase and Sale of Middle Market Business Interests*. Wiley-Blackwell

companies reached arrives at 9,300 units. From this step on, the work on the client side decrease of intensity, and starts the process of *networking with professionals who provide services to high net worth clients* and *networking with other M&A support professionals*. Figures like accountants, attorney, commercial banks, business consultants and valuation professionals are considered a sound base for referrals to potential clients under two points of view: from the one hand, being figures that are in the first raw in the daily business activity of middle market companies, they are likely to be addressed with a question about the right investment bank to hire for a potential acquisition process by the firms they are working with; on the other hand figures like accountants and commercial banker are likely to know about a client's transaction before the client hire an investment bank, hence have the potential to push and to drive their choice. This activity is predicted to give roughly 5,900 contacts to companies, mainly reached through lunches and networking events. The funnel is completed adding two further features that are not identifiable as steps, rather as features that must be taken into consideration when networking, and they are *being in the industry for a long time* and *serving clients and executing engagements with excellence*. The incredible final number of referrals that this strategy is going to bring to the IB, amount to a bit more than 15,700 discrete contacts; but the even more astonishing figure is that the number of real clients among all these referrals turns out to be 10 per year, a massive work for a scarce result. We presented this model in order to give a pic of how crucial but massive the networking process can be, and to put some driver of analysis of the impact that social networks and specialized M&A platforms could give to the deal-sourcing step.

Even though it's said that the lawyer who represents himself has a fool as a client, a further reason for which companies decide to go alone in operations of M&A could be related to the previously presented transaction costs hypothesis. As a matter of fact, if a company deems that fees and all other costs related to the service offered by an investment bank will be higher than the gain benefited from the acquisition, then it will likely decide to go alone. This hypothesis has been heavily criticized by Roberts (2009), but supported by Warren Buffet, who, in his work addressed to the general audience of American companies, he is

skeptical on the value added by entities like investment banks to the acquisition process.

1.3.The Emergence of Online Platforms: Opportunity or Threat?

Although the limited frame we built so far about operations of merger and acquisition, the footprint that the role of the advisor has always had in this field it's evident. The effort that researchers and practitioners put in the analysis of each single possible correlation able to explain a success or a failure of a partnership in an M&A is a symptom of how crucial is the role of the advisor. This prosperity of literature highlights that companies strive to reach higher levels of efficiency in running acquisitions, being more and more demanding to the professionals they hire.

As we have seen, issues related to the informational dimension acquire a pivotal relevance when dealing with acquisitions or, more in general, with the raising of capitals by private companies. In recent years the dramatic growth of the audience connected with each other has created an environment, the World Wide Web, where the concept of platform has emerged as a tool able to carry out tasks more efficiently than in the traditional ways. Social relationships have basically no more barriers; commerce is enhanced by the ease of reaching every type of product from almost every part of the world; news and contents are addressed to everybody owns a device and an internet connection. In other words, every segment of our brick and mortar day life has been affected. Despite recent developments however, many consider the M&A and the private capital markets two of the marketplaces not yet affected by Internet. Despite this misconception, a recent declaration by one of the most important venture capitalists of the United States, Fred Wilson,¹⁷ is useful to give an idea of the growing phenomenon: "the capital markets have moved to the internet. We call it crowdfunding but what is really going on in raising money is a great application of online global platforms that connect billions of people in real time. I don't know the exact amount of capital that was raised on the Internet across all

¹⁷ Wilson, F. 2014. What Just Happened? *Fred Wilson AVC Blog*. <http://avc.com/2014/12/what-just-happened/>

sectors in 2014, but I am sure it is in the tens of billions.” Even though mixing the field of M&A with the environment of capital raising could appear misleading, the two fields have areas of coincidence. As a matter of fact, and as we already in part introduced, some actors of the buy-side are entities specialized in *serial acquisitions*, that is to say financial sponsors like private equity funds. In this particular case indeed, the acquisitions and mergers performed pass through stages of capital raising, an industry that is seeing the flourishing of online platforms, as we are going to see in the last chapter of the current work.

The M&A advisory is potentially affected by this digital trend through different points of view; an example is the issue on which we already focused in the last paragraph, when dealing with the network building. The deal-sourcing phase, despite according to Roberts (2009) accounts for only the 15% of the total effort of the investment bank as advisor, is extremely sensitive to an enhancement of the connectivity and ability to get in touch with a large audience of professionals and companies. Going on through the process of M&A, that we will frame in the prosecution of this work, further possibilities offered by online platforms come out, spanning from the production and distribution of marketing materials, to the building of tools useful for an effective application of the due diligence process. This brief introduction to the topic is meant to put the reader into the right mindset for the path of the following chapters, in order to critically acquire the information about the traditional features of an M&A, and then re-read it in the light of current platforms available on line.

2. CHAPTER 2

THE CONTEXT OF M&As

Although the width of operations gathered under the famous acronym M&A is incredibly vast, a wide literature has so far been able to index and describe them all. The common feature of all the definitions deals with the existence of, at least, two parties: the acquirer – also called the “Buyer” - and the entity object of the operation, called the “Target”. These are considered the two main characters triggering the complex mechanism of mergers and acquisitions.

This chapter starts listing the famous division in time periods of particular M&A activism within the 19th, 20th and 21st centuries mainly with a focus on the American market, given the availability of resources and data over which we can shape some consideration concerning the macro economic trends that drove this specific concentration of operations. This review, although of not particular innovation, is useful to draw the first lines of the convoluted net of factors composing the universe of merging and acquisition, going back to the discipline that has always helped mankind to locate and find the right direction: *history*.

With a *general* to *specific* approach, we are afterward going to identify the exogenous factors that characterized those waves, seeking to build a sound theoretical base, dividing it in three macro categories we deem useful to better understand the environment. The complement to this first batch of factors is identified with those that most intuitively come from the strategic considerations made by companies, and in this way we seek to present them with the help of the concept of *synergies*, considered by part of the literature as the higher possible level of categorization through which explain what pushes companies toward the desire of undertaking a traumatic marathon like M&A. We are going to avoid the part of researches that shed light on the only effect on performance indicators consequent to a merger, both because it is not the purpose of this work to focus on results that are influenced by thousands of variables, like in Caiazza, Volpe (2014) and in Hitt et al. (2012), and because our

aim concerns innovations of the tools used to perform due diligence and other steps crucial in a M&A.

The last part deals indeed with the deal structuring process, with a brief analysis of the best practices in the origination of a merger or acquisition, and the overview of the steps that every company shall follow to maximize the results it had as objectives.

2.1.Reasons for Undertaking an M&A Operation.

The first distinction when trying to enucleate the multiple reasons underpinning the decision to engage in a merger or an acquisition is between factors originating from the external environment, and those sourcing from the parties directly involved, namely the bidders and targets. The right approach to better identify these drivers is without any doubts to split the events in homogenous temporal tranches; this scheme has been adopted by the large majority of academics, in the attempt to introduce the topic of M&As starting from the analysis of the so called *merger waves*. This term refers to the segmentation of a time laps spanning over 150 years, specifically the period between 1893 and 2008. Although some sharp variation of the dates of end and begin of each span, the academic literature identifies *six* main periods of visible merger activity.

2.1.1. *Merger Waves*

The *first wave* is considered starting in the last part of the XIX century, when a high degree of industrialization was blossoming, although in 1893 the economy of not only the United States but of UK as well was going through a heavy depression. In this first agglomeration the direction of the operations of merger and acquisition undertaken is evident, the giants of the time, especially operating in manufacturing industries, harvested the benefits of important technological improvements. These benefits took the shape of availability of important overcapacities, leading firms to reach a certain degree of market power through horizontal mergers. An empiric study, conducted by Nelson (1959), tried to shed a light on the size of market share of a sample of companies resulting from a merger operation in the period 1895-1904. The results supported the theory that the largest part of the operations where oriented to strengthen a quasi

monopoly position, with 27,7% of all the mergers of that period resulting in an entity owning at least 42% of the market. Moreover, this one third of the mergers undertaken represented 70.4% of the total capitalization of the firms involved in this kind of operation in the same time lapse.

With a World War in the middle, where manufacturing firms focused on keeping an high pace of productivity, and after the US president enforcement of the Sherman Antitrust Act to smooth the concentration effect of the first one, the *second wave* appeared in 1925, and would last only five years later, in 1930. This time the direction of integration was diametrically the opposite, indeed firms sought to increase their penetration along their operative structure, that is to say vertically. As a matter of fact, firms tried to deepen their roots, integrating upward into phases close to supply, and to enhance their branches integrating backward into distribution. Like in the previous wave, a pivotal role was played by the technological improvement, however the influence of a stricter US antitrust legislation drove the need of growth toward a situation of *oligopoly*¹⁸. With the peak on 1929 of 1,250 mergers and a growth of stock market from 1921, economic conditions dramatically changed entering the great depression.

After another war the US economy saw the emergence of a *third wave* of mergers and acquisition, whose flag was, this time, *conglomeration*. The period 1963 – 1970 was marked by a strong economy and a bull stock market, reaching the highest peak of 2,500 mergers deals, and as already specified the vast majority of them were of a conglomerating nature. Indeed, 36% of all acquisitions undertaken were conglomerating, as documented by Ravenscraft and Scherer (1987). Moreover, diversification of previously focused businesses accounted for more than one third of all the deals announced, showing a high degree of managerial control, especially for large scale deals. Despite this trend however, there is no evidence of diversified companies valued at a premium if compared to single segment ones in the 60s¹⁹, leading to the conclusion of a lack of profitability of conglomerating mergers.

As a counterproof of the above mentioned underperformance of third waves' acquisitions, the next time span when deals blossomed again, between 1981 and

¹⁸ Stigler, G. 1950. Monopoly and Oligopoly Power by Mergers. *American Economic Review*.

¹⁹ Servaes, H. 1996. The Value Of Diversification During The Conglomerate Merger Wave. *The Journal Of Finance*. Vol. LI, N 4.

1989 saw conglomerates seeking to divest from unrelated businesses and re-focusing on their core. The *fourth wave* was in this way triggered by many factors including the necessity to go back to horizontal mergers, as the value of firms being part of a conglomerate sum up to a total value higher than the one of the entity owning them. This fostered the development of sophisticated financial product in the debt market like high-yield bonds and operations like LBOs, with a crucial role played by financial advisors like investment banks, whose structure and business will be described in the next chapters. A further reason enhancing the power of this trend was given by the Tax Reform Act of 1978, that let firms save a considerable amount of money from tax reduction and free resources for new acquisitions. As a consequence of that the market absorbed companies from abroad, attracted by a reduction in tax imposition of around the 21%. This could also explain the flourishing of hostile takeovers, fostered by the aforementioned investment banks, whose growing specialization in the advisory field helped firms undertake such complex operations.

The *fifth wave* is among the others the biggest one in terms of amount of stocks and cash moved. With an incredible amount of \$3,5 trillion spent on acquisitions in the period 1992 – 2000, of whom the 58% was paid for in stocks. The transaction value rose to the 15% of the Gross National Product of the US in 1999²⁰, the year before the beginning of the decline due to the bursting of the Internet bubble. This wave was composed by huge deals, in an environment marked by low interest rates and positive conditions of the stock market, confirming the high percentage of mergers through stocks consideration. Beside the size of the deal completed, the international dimension has to be considered a feature of this wave too: this was also the period of many cross-border M&A. As in the first two waves the technologic improvement played here a crucial part, and so did the deregulation of industries like the banking sector. The most involved markets were indeed telecom and banking, with insurances keeping a high pace too.

The last temporal interval, and the most recent one, is 2003-2008. This is called the *sixth wave* and is, in terms of absolute amounts, the largest capitalized wave ever, with \$2.5 trillion of M&A performed globally within 2006. The peak in

²⁰ Bruner, R. F. 2004. Applied Mergers and Acquisitions. New Jersey. John Wiley & Sons Inc.

the only US market was reached one year later, with a capitalization of almost \$1 trillion. The factors triggering this wave were different from the previous in that there is no evidence of a main influence of technologic upgrade. There was however a huge availability of capitals, liquidity in banks that has been used to undertake mergers and acquisitions. These sound bases of capitals fuelled private equity funds that saw a dramatic rise in size. Other factors could be looked for in the commitment of some governments in enhancing their relationship with other countries, creating some national or global champions²¹. Like in each of the aforementioned waves, the ending point coincided with the beginning of a crisis, in this case the recent subprime crisis that triggered the recession that we are still suffering today, despite the recent FED decision to rise interest rates after 6 years of zero or negative rates.

Beside the debate among academics concerning the exact beginning of each wave, this classification and division of the most crowded phases in terms of merger and acquisition frequency in the US is useful to extract some factors that contributed to the merger frenzy, notably exogenous factors. We went indeed through technological improvement, bullish market conditions, availability of capitals, deregulation of some industries and new and stricter regulation, all factors that can by themselves give an explanation to the push to merge. Numerous other drivers has been described, and likewise theories seeking to structure a consequential relationship among them. As an example Ravenscraft (1987) embraces the theory of the industry shocks as the frame that contains all the factors that we just mentioned. Moreover Nelson (1959) sees industry shocks as a trigger for firms to enhance their capacity in order to face the new and higher resulting demand, and the mean to reach this new size could be through an acquisition, considered a new branch of the “make or buy” dilemma. Although of undeniable interest, the theory of industry shocks goes beyond the topic of the present work, for that reason we go on listing and commenting the major factors leading to the decision of merging.

²¹ Lipton, M. 2006. Merger Waves in the 19th, 20th and 21st Centuries. Lecture at York University.

2.1.2. *Exogenous Factors*

Bruner (2004) gives an interesting review of the literature so far produced by academics about the factors affecting M&A. He starts from the point of view of Schumpeter, who argues that the entrepreneur is the leader in charge of “getting the things done”, and for this reason the one to focus on in order to understand origins of merger waves. In this way he asserts that it is not the economy as a whole, though the macroeconomic factors, to be taken into consideration when describing merger waves, on the contrary practitioners should narrow their efforts to industries and single firms. The entrepreneur indeed creates turbulences around opportunities of development and renewal of products, because he has the ability to highlight them and to create a cluster around these opportunities. If we keep this approach and go on analysing waves looking for the source of turbulences entrepreneurs exploited, we are able to list some factors considered exogenous:

Legislative context: this broad category includes changes to all those structures that give the industry a shape in terms of relationships with the countries firms are operating in, with other competing firms and with the consumers audience. *Deregulation* is one of the most common sources of turbulence leading to a merger, since it can create opportunities for firms seeking to grow in markets previously protected by specific requirements (i.e. for mineral materials the existence of areas protected by extraction rights), and that after regulation became a chance to enter a new geographical area or an unrelated business. Within the waves we just examined this factor was prominent in the telecommunications, banking sector, trucking and airlines, the first for technical reasons related to the existence of frequencies whose concession was regulated by the public administration. Another trigger that can open new growth opportunities is the *liberalization of trades* among countries. Through the removal of the restrictions of barriers to the free exchange of goods between countries, a firm can better establish his distribution channels in a new market, and eventually decide to vertically integrate with those firms that previously were just suppliers or partners. Examples are the North America Free Trade Agreement (NAFTA) and the Transatlantic Trade and Investment

Partnership. Particularly effective is the influence of such liberalization on industries considered trade-sensitive, such as textile and agribusiness.

As emerged from a quick look at the drivers of merger waves, the role of the regulator in *antitrust issues* is a spur for mergers and acquisitions, both in negative and positive terms. As a matter of fact, regulators have often used their available tools to prompt, retard or avoid mergers, being this kind of operations an indicator of the presence of a dominant position, that could eventually deemed to be abusively exploited in a next valuation step. The antitrust regulator is committed in the anti concentration issue both acting *ex post* or *ex ante*, through the so called premerger notification requirements of the Hart-Scott-Rodino Act, as witnessed by the already described enforcement of the Sherman Act, during the second wave, or by the action of the Federal Trade Commission created by the homonym Act. These are indeed, with the Clayton Act, the three documents enforcing antitrust law in the US.

Under a most technical point of view, and here the threshold between exogenous and endogenous factors gets sharper, firms are influenced in the choice whether to merge or not by the *accounting* model they are allowed to use when dealing with an acquisition. In particular, the valuation systems taken into consideration are the *pooling of interests method* and the *purchase method*. The first one prescribes the acquiring company to report in the balance sheet the acquisition of the other firm simply adding item by item each components of assets and liabilities, though keeping the book value of them and not leaving room for any goodwill. The second method instead, requires the acquirer to report every premium paid over the market value of the assets absorbed under the item *goodwill*, and to amortise it within a period of twenty years. Although at first sight, the pooling of interests method seems to be the favourite one by the acquirer, since earnings are not altered and no expenses are accounted against equity, the FASB decided on January 23, 2001 that all the business combinations should be accounted for using the purchase method²². The motivation here is not linked to the desire of the FASB not to advantage shareholders of an acquiring firm, rather to the aim of making the balance sheet of a combined firm a

²² Riker Danzig Scherer Hyland & Perretti LLP. 2001. FASB Ends Pooling of Interests in Accounting for Mergers and Acquisitions. <http://riker.com/publications/fasb-ends-pooling-of-interests-in-accounting-for-mergers-and-acquisitions>

document that reflects the underlying economics of business combinations by requiring that the current value of the assets and liabilities exchanged be reported to the investors. Moreover, although until the FASB requirement many practitioners saw the pooling of interests as a convenient accounting method, researches about the correlation between the use of it and abnormal stock prices of public companies gave a negative result (Hong, 1978).

Economic conditions: macroeconomic factors necessarily affect firms' decisions, especially since they influence management forecasts. The composition of *labour* force in a specific country could for example be a crucial factor for a company to be considered. This is true for many reasons, starting from the cost of specialized labour force in a country, to the availability of certain job profiles that can seamlessly integrate with the acquiring firm, through the legal requirements government states to be fulfilled by companies in terms of minimum wage, employee rights, days off. The mix of all this factors can influence a company in the decision whether to merge with another firm or not. There is although no evidence of impediments made by employees concerning the process of integration between two merging companies, thus this is not, despite all the troubles related to the integration phase, a deterrent to undertaking an operation of merger or acquisition.

Shifting to a more financial component of this already variegated mix, the strenght of *currencies* can potentially be a main factor when considering a possible merger. Companies that usually deal with exchange rates are those who have somehow relationship with a foreign-currency market. We are talking about firms that market their products in foreign markets, or those who have subsidiaries abroad. In this perspective, the so-called cross border mergers can be a chance to grasp huge financial advantages and exploit a particular leverage that can also act as an occasion to get financing at a dramatic lower interest rate. The possibility to take advantage of such a currency feature is the consequence of a phenomenon that basically links different markets with each other, giving the possibility to companies to remove barriers coming from geographical reasons. In other words we can list *globalization* as a driver to take into consideration when segmenting the countries that can be eligible candidates for potential merger scenario.

The conditions of both *debt* and *equity markets* are crucial factors for each company, despite the desire to merge or not. Bullish equity markets, for listed public companies, can mean positive premiums over the price of the stocks, and thus an enhanced ability to undertake convenient *stock-for-stock* acquisitions. This element is linked with the already mentioned topic of the choice of the accounting method when performing an acquisition. Under the perspective of the buyer, in fact, an higher stock price will be translated in a bigger goodwill, hence an higher amount of amortization per year to attribute to the pre-tax earnings, with all the linked tax adjustment requirements. Despite equity is considered less convenient for shareholders, it is a more flexible solution than the use of debt, as a result we can notice the positive correlation between stock market indexes and merger growth in the waves we described above. Finally, we would like to point out the role of the *consumer demand and supply* in product markets: there is no doubt that as long as economies grow, so does the wealth of each consumer taking part of it, the same for his inclination to spend and to be more demanding in terms of quality and diversification of products. In such evolving environment, especially in industries as varied as toys, automobile, media and entertainment, the need for a faster delivery of the product together with an higher quality and level of tailoring, push marginal firms to choose between merging or exiting the industry.

Industry features: in this last category we want to gather all the factors that are closer to the operating range of companies themselves, since the boundaries between exogenous and endogenous are here extremely narrow, and for that reason couldn't be listed under the previous labels.

The first factor in terms of power and degree of influence is *technological improvement*. There is a vast literature concerning this crucial part of the business of a company, that most of the times investigates the amount of resources to invest in R&D department, the degree of cooperation and proximity with universities or the most appropriate stage of the firm life cycle in which an effort toward a technological improvement is considered to be convenient. Although the desire to label this as a factor that is completely under control of organizations is high, the ways in which it takes shape can't be the effect of the only action of a single firm. In this case the concept of technological cluster helps

us to frame the context under the flourishing of an innovation; the definition provided by M. H. Fallah (2005) is useful to our objective, since it sees a technological cluster as a “geographical concentration of related technology firms including competitors, suppliers, distributors, and customers; usually around scientific research centres and universities”. It’s clear at this point that the contribution to an efficient environment in terms of ability to generate disruptive or incremental technological novelty is given by a wide range of actors. Besides the theoretical consideration done so far, the technological factor can be seen as a driver of the decision to merge mainly under the point of view of the need to obtain a particular technology developed and owned by another company. The acquirer seeks to merge in order to buy a portfolio of patents and technologies that would be otherwise too expensive to develop *in-house*. This is another example of the choice between a make or buy approach to growth: a firm can chose to buy the rights to use a certain technology, by paying to the owner of the patent, or to develop a proprietary technology itself. It is evident how much the two options differ in terms of resource expenses, although this is not the only difference, since sometimes the way of buying is unfeasible because the owner company doesn’t want to sell its technology to a specific competitor. As an example of how much technology can be a spur to M&A, Cisco Systems, in the time span 1994 – 2003, acquired 80 firms in the attempt to establish its technological leadership in the industry of network systems.

Going on talking about innovations, we must point out the importance of the development of *advanced financial tools* by financial engineers. As a consequence of the growth of complexity of financial products, firms that previously found more difficult to access the capital or debt market have been since 1970 helped in the issuing of their debt instruments. This is particularly true for undersized firms looking for capitals, too small and risky to satisfy the requirements of an investor with particular needs in terms of diversified portfolio. As an example, the creation of high-yield debt market is considered one of the most influencing factors that fostered the gargantuan growth of LBO funds since the seventies.

How the industry is composed in terms of *size* and *degree of competition* among the players is a variable not to underestimate. There are indeed industries whose texture, characterised for example by low competition and high

number of small firms, are more suitable for operations of consolidation, hence for mergers and acquisition. The other way round, industries composed by few players who probably already passed through a consolidation phase, have the interest to merge in order to build barriers to entry for potential new entrants.

Furthermore innovation in the field of *organization structure* played an important role too. In this case the causality link is not really clear, since the shape of the enterprise structure could be seen as either a consequence or a cause of the decision to merge. As an example of the consequence declination, each of the merger waves has been characterised by experimentation with heterogeneous form of organizational invention: starting from horizontal trust, through wholly integrated firms, to conglomeration.

The quantity of factors listed so far can give a clue on how many drivers a firm should take into consideration in order to manage the opportunities that turbulences in the economy offer. Although this can't be considered complete or absolute, an overview was necessary to describe the environment where mergers and acquisition take place, before going on with drivers coming from the inside of each organization. After all, the complexity of this topic is something academics use to deal with, like Brealy and Myers (1996) who consider the debate about the reasons prompting or discouraging to merge as one of the 10 most important unresolved questions in financial economics. As a matter of fact, while the two researchers were struggling trying to draw a model to explain merger waves, they wrote, "What we need is a *general* hypothesis to explain merger waves. For example, everybody seemed to be merging in 1995 and nobody 5 years earlier. Why? We need better theories to explain this 'bubbles' of financial activity."

2.1.3. *Endogenous Factors*

Besides the rationales that could narrowly be investigated in the macroeconomic environment, the most influencing variables forming a base for M&As must be sought inside the companies themselves. The most part of academic literature starts from the concept of *synergy* when drawing an exhaustive map of the different drivers fostering an operation of merger or acquisition. This approach is so widely accepted and embraced because it helps

to focus on the moon, rather than examine a little and short-seeing finger, and so forth build brick over brick toward a complete overview of the context.

The definition of synergies is effectively framed with the help of an apparently meaningless simple mathematic equation:

$$x + y = z$$
$$\text{with } \left\{ \begin{array}{ll} \mathbf{z} > \mathbf{x} + \mathbf{y} & \text{on the } \mathbf{revenue} \text{ side} \\ \mathbf{z} < \mathbf{x} + \mathbf{y} & \text{on the } \mathbf{cost} \text{ side} \end{array} \right.$$

Where x is the value of the acquiring firm, y is the value of the target firm and z is the value of the new entity resulting from the merger. The explanation of this formulation is provided by Fleuriet (2008), who states that two firms should seek to combine when, as a result of the M&A operation, the value of the merged entity (that we defined z) is higher than the value of the original firms taken by themselves (defined as y and x). This makes sense considering the revenues of the two combining firms, since in this case we are taking into account the benefits that a larger base of customers buying a wider range of product can produce. At the same time, the author expresses the concept under another point of view, that is to say the merger must be considered convenient when the resulting entity sees his operating costs and expenditures reduced, if compared to the algebraic sum of the single figures. What immediately comes to the attention of the reader is the difficulty in estimating a potential synergy *ex-ante* and the consequent risk of undertaking a value destroying operation. Since human being is not given the gift of predicting the future, the only way to reduce the aforementioned risk is to thoroughly analyse all the possible existing synergies so far theorized or encountered in real business life examples. Before going through all the typologies of synergies, it is appropriate to define the method by which they are evaluated. Let's start with the definition of the figures to take into account:

S : value of the synergies

V: value of the firm

CF : free cash flow available for distribution among shareholders at time t

Let's moreover define the acquirer (A) and the target firm (T), as the two components of the new entity resulting from the merger (AT). In this way it's easy to express the value of the acquiring firm V_A and of the target firm V_T , and the value of the new entity V_{AT} . Furthermore we need to define the equation that brings us to the value of synergies:

$$S = V_{AT} - (V_A + V_T) \quad (1)$$

That is nothing else than another form to express the same concept of the beginning of this paragraph. We notice how synergies are considered as the difference between the value of the new just formed merged entity and the sum of the value of the two combining firms on a stand-alone basis. According to the classic formulation of the enterprise value, we know that the latter is calculated from the free cash flows generated by the company, thus:

$$\Delta CF_t = CF_{AT} - (CF_A + CF_T) \quad (2)$$

So the (1), assuming a discount rate r whose determination goes beyond the purposes of this chapter, can now be formulated as follows:

$$S = \sum \frac{\Delta CF_t}{(1+r)^t} \quad (3)$$

To obtain the composition of the incremental free cash flow at time t , ΔCF_t we just need to remember the definition of a free cash flow, that is to say the cash derived from operations less the capital expenditures needed to maintain the firm's present productive capacity. The cash from operations could be a negative or a positive amount of money, depending on the amount of revenues, costs and taxes, then adjusted for the CAPEX and the changes in working capital expenditures; as a result:

$$\Delta CF_t = \Delta Rev_t - \Delta Costs_t - \Delta Taxes_t - (\Delta Capex_t + \Delta WCR_t) \quad (4)$$

As already said, these calculations are easily done on an ex-post basis, with available figures of the performance of the company resulting from the merger. Trying to foresee is a totally different job and effort.

The first distinction to make, following the first equation presented, is between synergies resulting in advantages on the cost side, and those that influence the revenue side. According to a distinction made by Rosenbaum (2013), synergies attributable to the *cost side* of advantages are for example headcount reduction, consolidation of overlapping facilities and the ability to buy at lower prices due to a greater purchasing power.

Headcount reduction deals with the process of shrinking the workforce of the resulting company, as a consequence of the merging of the two organizational structures. Although in recent times this process became easier to perform, due to the deeply differences in the skills of workers, nowadays more flexible and resilient, this is one of the most risky situations in terms of possible upcoming catastrophes. It is clear that there is no need for two CEOs, CFOs and other top management profiles, the same stands for two marketing departments, two financial or R&D division; nonetheless, as we go down to more basic job profiles, the process of rationalization of the workforce tends to overlap with the integration one, a phase that we are going to discuss thoroughly in the next chapters. Examples of important rationalisations under the workforce reduction point of view is the one of SBC, who merged with AT&T in 2005, with an expected reduction of 13,000 jobs within the integration process; also Verizon's acquisition of MCI, completed in 2006, planned a cut of 7,000 employees as a result of a cost reduction plan. Although these figures can be attractive for an immediate cost reduction and a consequent raise in operative margins, a high degree of caution is mandatory. When divesting in employees, a thorough analysis of the KPIs concerning the workforce employed in each department, compared to revenue figures, is necessary for each reduction scenario. For example to take into account the difference in customers assigned to each operational unit, along with the valuation of the new stream of revenues for each sales unit, from a pre-merger to a post-merger basis. If this figures are outlying too much the industry benchmark, management should revise the divestiture

plan. Generally speaking the right balance between immediate benefits and potential future troubles and understaffing is crucial.

The ***consolidation of overlapping facilities*** is a type of cost reduction synergy embracing a wide variety of potential outcomes, such as the closing of redundant facilities of certain departments. For example in sales there could be a reduction in terms of expenses linked to rents of physical shops or warehouses, since they have been merged after the acquisition. The same can stand for manufacturing, distribution and corporate facilities. Moreover, fixed costs coming from the aforementioned facilities can be spread to a wider number of products, in that way smoothing the payback period and potentially enhance margins.

Cost synergies can be reached also under the point of view of supply if, as a result of a merger, the new entity can achieve a relevant ***purchase power*** coming from the new size and width of products range. As a matter of fact, the acquisition of new products to be produced becomes competition leverage for the suppliers of the acquirer, who have the interest to obtain the new supply contract. In this perspective the acquirer can negotiate new and more convenient terms. Size is also important since it can help to reach the so called *economies of scale*, that is to say the ability of larger companies to produce and sell at a lower cost per unit if compared to smaller competitors. Specular to the aforementioned allocation of fixed costs to a higher number of products is the concept of *economies of scope*, allowing for the allocation of common raw materials across multiple markets and geographies. An example of a *cost synergy* obtained in the field of procurement can be found in the alliance between Nissan and Renault; since 2006 indeed the two companies have been having a common supplier base for 72% of the total purchase turnover, for a total of eight models.

Cost synergies are said to be easier to achieve if compared to the ones originating from revenues, as is reported in a research conducted by McKinsey in 2004: the methodology was to examine 160 merger deals in which McKinsey was the advisor, and compare the expected and effective cost synergies produced. As a result, they showed that 36% of the forecasts were underestimated, that is to say the effective cost synergies were higher than expected, and 25% of them achieved 90% of the expected benefits. To sum up

the forecasts made by the advisor were accurate and turned out in at least 90% of the real synergies 60% of the times.

The **revenue synergies** usually concern enhanced sales as a result of complementarities over crucial departments. A typical example is when the acquirer firm has a very strong and well-structured retail distribution, while the target has a portfolio of diversified products but a weak distribution channel. In this way the acquirer will leverage his existing retail presence, and be able to sell a wider range of products, being cautious with not cannibalizing the existing sales, overlapping products that could be in competition. The optimal solution under a demand-side point of view would be to merge with a company producing goods that could be used as perfect complements to the ones the acquirer already sells. This implies that the customer's ability to pay would be full captured by the same company, with the possibility to set up cross-selling strategies to further enhance profitability. An example of a well-managed and captured revenue synergy is the Cisco's acquisition of Linksys. Cisco was convinced of the potential growth of the retail market for wireless routers and similar products, however its business has always focused on the corporate segment, which nevertheless had a dramatic lower growth rate. The decision "to buy" instead of "to make", came from a double consideration: on one side Cisco was well known among companies, but almost unknown in the retail segment, and on the other it would have spent several months before being ready to offer a valid range of domestic devices. The synergy was in this case the one coming from the extra cash flow resulting from the decision to acquire rather than develop the new products from scratch.

A third type of synergy can be identified, and we are talking of **financial synergies**. These can be alternatively seen as another way of considering cost reduction, but given the financial nature of the savings we prefer to label them under a new category. As a matter of fact, the reduction of the cost of debt can be achieved thanks to the sharing of financial resources used to back potential future loans. The asynchronicities of cash flows from different strategic business units can be smoothed through financial synergies, depending on the nature of the business of each SBU. All the benefits listed so far can be reached through a reduction of the levels of risk, through a better knowledge of financial markets

and limiting the total amount of funding. Further benefits can be reached under a *tax* point of view, by reducing taxable income and tax band.

As already specified, revenue synergies have a controversial nature, because they are often hard to quantify and are also often overvalued. The temptation to avoid such a risk not including them in the calculus with the synergies related to cost reduction is high. That would be an even bigger mistake, because revenue synergies are real and valuable, and the secret to succeed is to not consider incremental revenues as synergies, but to look for them in the net cash flows coming from these increments.

The topic of synergies as a result of mergers and acquisitions has a remarkable theoretical background, especially in the evaluation of the difference between expected and realised synergies. A recent and broad research divided the reasons of the discrepancy between these two measures in the so called “synergy management pitfalls”, highlighting the crucial role of management in the success of this kind of operations. The authors identified the mirage, the gravity hill and the amnesia pitfall, each of them related to a poor synergy management performed during the pre-merger phase. By this work is evident how important is the management of the merger process, and as a consequence how crucial every step of the latter must be thoroughly set up and undertaken.

In the next paragraph we start shaping the phases composing a typical M&A process, in order to better understand how much new tools related to the use of Internet can hit these operations.

2.2. Steps to Follow

The process of M&A requires such a degree of expertise and dedication that it would be impossible to define a “perfect recipe” able to universally guarantee a decent outcome. Nevertheless the approaches of scholars, academics and practitioners don’t differentiate radically among each other, since a sound and valid literature about best practice has been so far produced. In order to introduce the phases concerning the undertaking of a merger or acquisition, it is necessary to start from the origination of the deal, in other words from the *searching step*.

2.2.1. *Information matters*

As every searching process, deal origination needs an environment where information is the main and most present element, along with the ability of the searcher to properly exploit this fundamental factor. Under which perspective can we affirm that information acts as a base for every deal origination? The incredible amount of information about potential deals in a globalized world is a feature that needs a certain degree of experience to be analysed and exploited in an effective way, for this reason a firm looking for a deal must focus on *intelligent-gathering operations*. As a consequence, deal origination can't be considered, so far, as a simple plug and play decision, where the buyer scrolls down a list of targets and picks one; on the contrary, its perspective should change toward the search of information, therefore considering these four branches of deal origination²³:

Economics of information: the theoretical background is wide, but the concept that we want to highlight is the one concerning the value that a certain kind of information can have. During the search process, not all the information has the same value in terms of quality; the so-called *private information* is characterised by being deal-rich and clear, and as a result of a customization also likely to be costly. Public information, that is not controllable and is available for everybody, is for its nature cheaper than private one; think about the example of television broadcasting: except for the payment of a governmental tax for the right to watch national TV, there are thousand of free broadcasts, that everybody can simply enjoy buying a really cheap device. In this case, beside the quality of the programs themselves, a figure to be considered as a proxy for determining quality can be the frequency of advertising. If we compare the just defined quality of the free television with the one of the, let's say, satellite or streaming Internet TV (*e.g.* Sky and Netflix), we will see that the latter has a percentage of advertising that is dramatically lower than the one broadcasted by the former. What is the counterbalance of this difference? Simply that both the higher quality solutions require a fee, with different business models, to give access to the content. The valuation of information is at the base of the *efficient markets*

²³ Bruner, R. F. 2004. Applied Mergers and Acquisitions. New Jersey. John Wiley & Sons Inc.

hypothesis first advanced by Fama in 1965, in this case concerning securities pricing: *public information* get automatically impounded very rapidly and without biases into the value of a related security. This is simply another way to say that the information available to everybody is priceless, therefore not creating a situation of *information asymmetry*, base for every profitable arbitrage. If we apply this concept to the deal origination process, we can frame a scheme where different degrees of publicity of the information over time lead to correspondent pricing levels. Starting from the birth of the deal, the initial situation sees a substantial privacy of the terms, and even of the existence of an interest. At this stage nobody knows about the potential deal, hence all information are intimately private. A second step deals with the announcement, for instance by the target firm, of its availability to sale; this is configured as a semi-public announcement, because not all the potential acquirer are reached and because of the slowness of the spread of the news. A third an extreme scenario starts with the public announcement followed by concrete actions toward the set up and realization of the deal, for example through active marketing and auctions. This three dimensions offer a framework over which it is possible to size crucial dimensions for the valuation of a potential deal, such as: *Degree of competition among potential buyers, likelihood that the opportunity is fully priced and likelihood that a buyer can intervene in ways to tailor the pricing and terms to greater advantage*. The following table summarises the correlations:

	Information about the Acquisition Opportunity is:		
	Private	Semi-Public	Fully Public
Degree of competition among potential buyers	Low	Medium	High
Likelihood that the opportunity is fully priced	Low	Medium	High
Likelihood that a buyer can intervene in ways to tailor the pricing and terms to greater advantage	High	Medium	Low

Table 2.2: Source, Bruner (2004)

It is clear that the availability of private information brings higher advantages in all the three figures analyzed; when information is private, competition is low among potential buyers, moreover there is a margin to leverage on an information asymmetry that gets potentially realized into an arbitrage opportunity and last there is more room for the buyer to negotiate better terms for the agreement.

Networks: the literature about the influence that social networks had on companies is extremely rich, in particular under the point of view of strategic marketing, these networks being nowadays a crucial tool to be used by every successful firm. But if we link what we just said about the power of the high quality of information gathered, together with its related price, we can see how this concept can be useful in the deal origination process too. Networks must be seen under the point of view of information gathering facilitators, created for the purpose of finding shortcuts to get an insight otherwise time-consuming and, therefore, expensive. Efforts should hence be spent on the direction of creating networks whose heterogeneity can help the firm not to be connected everywhere and at every time, rather to have a narrow range of hubs able to get everywhere and at every time. Many theories have been developed in the attempt to shed some lights on the effectiveness of a network in spreading news, and, more generally speaking, information. The concept of *weak ties* is an interesting theory, which we are going to discuss thoroughly in chapter 4, when presenting the role of online platforms in the deal preparation process.

Options: investing resources to build a network through which a flow of information can seamlessly pass is like investing in an option. The positive payoff is not guaranteed since, like often happens with options, there is no exact forecast neither in trying to bet on the trend of the price of a security, nor in the effectiveness of the network to provide viable deals.

Contagion: this term has been adopted from the negative medical meaning, especially when talking about the entrepreneurial world and the environment that could foster its development. Contagion of ideas, of visions, not only of diseases and virus, the former going even faster than the latter, with the help of new forms of communication. The diffusion of information, in our case about a

deal opportunity, is more effective depending on the setting, on the clarity of the message and on the help that certain specialized figures can give.

After this focus on the information side, it is evident the complexity of the investment necessary to conduct the search of the right deal. Likely the firm is not left alone in this effort, since it can ask help to entities whose work is to be warned of news about opportunities of deals, and we refer to experts and advisors like investment banks and advisory companies.

2.2.2. *Due Diligence and Next Steps*

The borders between the search of the right deal and the beginning of the *due diligence process* are so narrow that the two phases are not easy to distinguish. Due diligence is also defined as “Vigilant activity; attentiveness; or care, of which there are infinite shades, from the slightest momentary thought to the most vigilant anxiety. Attentive and persistent in doing a thing; steadily applied; active; sedulous; laborious; unremitting; untiring²⁴.” This definition underlines the nature of searching activity of due diligence. In the specific case of M&A this process involves the support to the valuation process, the check of the accuracy of the figures and representations contained in the merger agreement, the set up of the post-merger integration and the fulfillment of the disclosure requirements of investors. To be able to satisfy such an amount of requirements, the process should be based on pillars that must be considered universally accepted, valid in every peculiar M&A situation. First, the mind-set of those professionals performing due diligence must be the exact contrary of the one typical of compliance officers; for the due diligence to be useful *thinking like an investor* is pivotal, and it’s something to bear clearly in mind, because during the process the risk to approach the issue by simply checking things without thinking about the important big questions is high. Furthermore due diligence must be considered in a whole as *part of the risk assessment tools of the acquirer*, because it aims at reducing the risk of future surprises that could likely negatively affect returns. This comes from the nature of technique for good process of this tool, which could also be seen as an option: investing on it can mitigate the risk of the unknown. It goes without saying that not all the due

²⁴ *National Steel & Shipbuilding Co., v. U.S.* 190. Ct. Cl.247, 419 F.2nd 863, 875.

diligences are the same; the first choice to make in this sense is whether to perform a *broad-scope due diligence* or to prefer a *narrow-scope* one. This is a crucial node, that has as a consequence a more radical or smoother impact in terms of surprises; as already said the due diligence is a process whose objective is to avoid unpredicted circumstances, or more rationally, to gather the information necessary to be prepared to face them. Therefore, the choice of how much in depth is appropriate to go in the review of the target firm will influence the outcome in terms of premium paid and expected return of the acquisition. Although a broader review of the target gives more detailed insights and figures, this approach tends to be far more expensive, invasive and often disturbing the target's operating life or sometimes impossible to perform (let's think about M&A based on auctions). When the narrow-scope due diligence is the only viable option, tactics to mitigate risk should be set up, as an example the subscription of an insurance policy concerning the dark spots that were not under the lens of due diligence. Bing (1996) listed a butch of circumstances when he considered feasible using just a narrow scope due diligence, as an example he cited among the others, the presence of an experienced management and audited financial statements with simple notes. Dealing with the kind of output a due diligence process shall give, conceptually we are talking about *knowledge*; something that is deeply different from simple compliance, which is possible to obtain through a quick checking process. The approach starts from the gathering of data, along with verifying facts, goes through the analysis of patterns and trends and ends up with the production of actionable knowledge. This *bottom-up* approach is easy to explain, but extremely hard to apply, and intimately links to the considerations done about the scope of the due diligence process. Under a practical point of view, the apparent final outputs of the process are insights useful for integration managers and executives, nonetheless keeping a *paper trail* of the work done is a precaution that can help going backwards in its building process, enhancing the effectiveness of the results, under the integration stand point in particular.

Once the principles of due diligence are framed we deem necessary a more specific focus on pivotal features such as timing and outputs; as we already specified, the deal process starts, as obvious, with a search aimed at finding a

deal origination, that then gradually melts with due diligence even without an specific turning point; for this reason could look like a theoretical exercise the attempt to splitting it in discrete phases. Nevertheless, for the purpose of this work, it would be impossible to exclude such a categorization, given the intention to describe how certain innovative tools have an impact on the stages of the M&A development and can sometimes act as substitutes or complements to the work of advisors or improvements to a traditional operative practice.

Due diligence begins before the first contact between acquirer and target, because as we said the searching process produces information that constitutes a primary base for target evaluation. If we divide the due diligence process in the one performed by the *sell-side* and the one conducted by the *buy-side* we notice a mismatching of timing that is worth to spend some words about. Once the decision to be available for sale has been taken, the just defined target is required to prepare for the sale process. This, depending on the size of the firm, usually involves the work of an expert, in particular an advisor, so far regardless the distinction between investment bank, commercial bank, professional advisor and so forth. The sell-side advisor must have a comprehensive overview of the target's business, and a perfect fit with the vision of the management, because before the production of every possible document the advisor must have a framework able to properly position the target and articulate its investment merits. This will also produce a gross identification of suitable buyers, not directly and specifically, but under the point of view of figures like business growth rate, debt capacity level, contingent liabilities and labor relations. Given that this sell-side due diligence is done in relation to a further potential buyer's valuation, the advisor is required to work in the direction of creating a sound basis built taking in consideration a buyer perspective. A more precise analysis of the role of the advisor will be done in the next chapter. Here the timing of the due diligence process is anticipated in comparison to the one performed at the buy-side, simply because no buyer has yet been identified, hence the document that are up to be produced still don't have any recipient.

Looking for a buyer: the due diligence process of a buyer starts indeed after the identification of the target, and can be followed or not by the participation to an *auction* set up by the target firm. Auctions are part of the *selection of a buyer*,

since they are one of the methods that the target has to identify the best possible offer; a well-designed and run auction is determinant in terms of positive impact on the price and valuation of the target, and can basically be of two types. The target can decide to run a *broad auction*, where the number of bidders (proper name for the potential acquirers participating) is maximized because the aim is to enhance the competition. The category of bidders in a broad auction is wide, since there could be participants coming from the world of financial sponsor, and at the same time firms that use to compete in the same market of the target. The openness of such a call embodies great efforts in terms of resources to be spent for the upfront organization and marketing, both by the buy-side participants and the sell-side ones. That is because the number of offers to be examined is higher, the amount of intermediaries with whom to interact greater and the risk of leakages more threatening. On the other side, a *targeted auction* involves only selected bidders that are deemed to be financially and strategically suitable for taking part to the auction; this method takes shape on a later stage of the deal searching process, since it underpins a screening of the buyers made by the target. The consequence are a lower risk of leaks of critical information to competitors, and the participation of more conscious and interested bidders, given the pre-selection stage done; the negative side of the mechanism is the risk to leave the money on the table, as a consequence of a reduced level of competition among the bidders: they thoroughly analyzed the value of the target, more than would have been done in a broad auction, hence the range of bids narrows down. The management of auctions is an interesting topic, that we planned to analyze in the part of this work dedicated to the focus on how advisors perform their job during M&A, hence will follow the current chapter.

Letter of Intent: Besides the organization of an auction, and supposing the potential acquirer got privately in contact with the target, the first step is in this case the *proposal* made by the acquirer to the target. Sometimes there is an indication of the price and other terms even in this first approach, but in most of the cases this is a formal step that marks the willingness of both parties to engage negotiations. In most cases, the target will have to unveil some of the marketing documents prepared, in order to let the bidder get to the signing of the *Letter Of Intent (LOI)*. This is defined as one of the first round documents,

even if they don't refer only to negotiations performed through auctions, and we can call it an agreement to agree. It is useful to record the negotiation involvement up to the signing moment, but is a non-binding document, and for this reason gives a very weak degree of legal commitment. Nevertheless the letter of intent is a necessary document used to confirming the understanding and giving a shape to the commitment. The contents of the LOI are usually referred to the terms of the due diligence process, such as its deadline, eventual fees to be charged in case of break up and distribution of process expenses.

After this first document approval due diligence enters the phase of thorough analysis, when teams of both target and acquirer starts to interact more frequently to produce the material that is fundamental to the buyer in order to be able to evaluate and plan a proper post merger integration phase. The time span between signing of the letter of intent and of the deal contract is the most delicate, because the interaction between the two companies gets very frequent and goes very much in depth. The buyer's due diligence team undertakes activities such as interviews to the target's management which are often taped, and for that reason could be used in an eventual *post-merger litigation*. Moreover physical visits to the target's sites are likely to be done, during the presentation of the management, usually near key company facilities since visits to production plants are often part of the agenda²⁵. These meetings involves tours to manufacturing plants, distribution centers and sales offices, and are usually led by the general manager of the given facility. The sell-side management shall exploit this opportunity to gather first-hand information, but at the same time shall be careful since often the seller doesn't reveal to employees the true purpose of the visit. The latter because due diligence is potentially seen by the target as interfering with the daily business operations, together with the fear of rationalization of the organic, as already specified when listing potential cost synergies to achieve through a merger. The target's management has big responsibilities in the output of this phase, since the aim here is to try to satisfy the buyer's due diligence needs, hence winning the commitment of employees that are going to be involved in the integration

²⁵ Rosenbaum, J., J. Pearl, foreword by J. R. Perella, afterword by J. Harris. 2013. Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions. New Jersey. *John Wiley & Sons Inc.*

process, and of the managers leading departments that are crucial for the reach of positive cost and revenue synergies.

Data Room: a fundamental tool for the success of due diligence is the so-called *Data Room*. The name evokes a futuristic physical place where all information concerning the target is stored, where the acquirer can enter and just plug his USB key in, and get all the knowledge he wants. The reality is not far from this image, but there are several missing details that lead to the set up of such a fundamental piece of the merger process. This place can both be physical and virtual, in the latter case we will talk about *Virtual Data Room (VDR)*, whose features and peculiarities will be seen in chapter 4. The traditional data room is intended to be a place, possibly far from the target's facilities, where all the documents that the buyer requested are stored, and where the latter's diligence team can go and perform an inspection. In this way the data room acts as a gatekeeper, since information is put in a single place and all the new requests can be easily evaluated by the target's diligence team, especially in terms of impact on the normal operative activity of the seller. In terms of contents, data rooms are composed by detailed information about the whole target's organization, from business features, to environmental and legal issues, passing through tax and accounting, touching every single aspect of the seller. A serious buyer takes into big consideration this tool, and invests a consequent adequate amount of money for his maximum exploitation, hiring or dedicating to it attorneys, accountants and analysts, for the time deemed necessary. The data room usually contains information relevant to a buyer to make an informed investment offer to the target, and it is periodically refreshed with new data throughout the entire process of transaction. When the M&A is conducted through auction, access to data room is given only to those bidders accepted to the *second round*, this because the degree of details contained in data room is so high, that fake bidders could otherwise grasp free insights about one of their competitors. We will see in the next chapter how a typical auction process is conducted.

In order to access data room, the target firm should protect its own interests trying to limit eventual leaks of delicate information, for this reason *ex-post* encrypting and protecting certain files from sharing or printing (in the VDR

case), and signing legally binding documents before sharing. One of them is the Confidentiality Agreement (also called NDA), a legally binding contract that rules the exchange of information between target and the active potential buyers. This document varies among different companies, but usually contains provisions ruling the following topics: the boundaries of the *use of information* shared by the target, in order to limit the people who have access to it once the potential buyer is making his valuation; the *time period* of validity of the confidentiality agreement, that is to say how long its provisions have effect; a list of *permitted disclosures* that can be done by the buyer, and under which peculiar circumstances; schedule the *return of information* provided, in most of the cases this is required to be done after the exit from the negotiation process; the *non solicitation and no hire* provision, with which the target prevents prospective buyers to advance hiring offers to the target employees during the due diligence period; if we consider a situation involving a public target, a *standstill agreement* prevents the eventual hostile bidders to try to acquire the company without the board of directors' agreement and to influence it together with its management; some *restrictions on collaborating* among bidders, in order to prevent clustering dynamics that would reduce competition, and for this reason the premium paid.

This due diligence review has been made under the point of view of those deals that are performed, as already specified, without the use of auctions to determine the best offer; nevertheless auctions are very frequent and widely used, especially for complex transactions supported by the work of an advisor, hence their analysis is going to be performed in the next chapter, when dealing with investment banks.

Signing the Merger or Acquisition Agreement and Closing of the Deal: after the aforementioned documents have been produced, the due diligence process goes along with negotiations toward the shaping of the terms of the agreement with the buyer who has been considered the most suitable one by the target. The negotiation phase finishes with the beginning of the post merger integration, and with the exchange of the consideration. After closing the new owner performs an audit and makes adjustments according to eventual provisions linked to the completion of the deal, like escrows or claw-back accounts included in the deal.

3. CHAPTER 3

BETWEEN THE ACQUIRER AND THE TARGET: THE ROLE OF INVESTMENT BANKS

Roots of the banking activity date back of centuries, and in particular to the Italian Middle Ages, when rich families of the most powerful Italian cities like Venice, Florence and Genoa started lending money to the entrepreneurs who sought to enhance their businesses. We don't want to go through hundreds of years of loans and blossoming of new financial instruments, since this operation would be meaningless for the current work, but for the US market it is appropriate to fix the date that an educated investment banker would consider the rise of the investment banking sector: May 17, 1792; this date saw indeed the birth of the New York Stock Exchange outside of 68 Wall Street. Other less skilled investors, or if we ask the same question to a lawyer²⁶, would answer quoting the Banking Act of 1933 as the origin of investment banking. This ambiguity comes from a perspective that analyses, from one side, the activities performed by an investment banker, and from the other the distinction made under a legal point of view among other types of banks. Although a traditional connotative feature of investment banking is considered buying original issues of securities with the objective of reselling them to the public, a more precise analysis of all the activities performed by an investment banker is contained in next paragraphs. Dealing with the legislative leg, the aforementioned act was composed by the famous Glass-Steagall Act, responsible for the division between commercial banks and investment banks. As Rhaman (2012) stressed, this separation was seen as crucial to preventing abuse by financial firms in selling securities, but it was part of a broader reform of the banking sector aimed at fostering productivity in hard years for the American economy. As an example, the so-called "Glass Bill" expanded the permission for national banks to perform "bank branching" by opening new subsidiary branches, thing that was previously forbidden in order not to put too much competitive pressure on local banks.

²⁶ Fleuriot, M. 2008. Investment Banking Explained: an Insider's Guide to the Industry. *The McGraw-Hill Companies, Inc.*

Because of pressures received during the period that spanned from 1929 to 1933 by commercial banks, deemed too aggressive in conducting speculative operations, and the congress's need to give a quick signal to the nation after the stock market crash, the Glass-Steagall Act created barriers between banks whose core business was to take deposits and make loans, and those who were involved in the issuing and underwriting of securities and other financial instruments. One of the most evident results was the spin-off of the investment branch of JP Morgan, with the foundation on 1935 of Morgan Stanley.

Although there has been different opinions about the effectiveness of the just described act, this division lasted more than half century, until 1999, when the Gramm-Leach-Bliley Act was approved and actually repealed the provisions of differentiation between investment and commercial banks. This decision was the result of a perceived enhanced diversification level of these institutions, able indeed to lower the concentration risk that senator Glass intended to reduce in 1933. This feature, together with the higher transparency reached by big banks, were the conditions that turned the pre II World War act, from a tool able to stabilize critical actors of the economy, into a burden for the potential reach of economies of scope and scale²⁷.

This chapter focuses on the business of investment banks, starting with some figures about the current and recent past evolution of it, then specifying the business models and professional activity of major actors, and ending with the focus on the role that matters the most for the current work, that is to say the activity of advisor.

3.1. Overview of the Investment Banking Sector

In order to locate in the complex world of investment banking, to see which are the leaders and what is the magnitude of their business, we should first choose a dimension over which make the proper evaluation. Usually the metrics an analyst takes into consideration to describe growth trends are market shares, but for a widely diversified firm, this approach could lead to misleading

²⁷ Nanda, Delong and Roy. 2002. History of Investment Banking. *Harvard Business School*.

consideration about specific branches of it. If we think about the business of investment banks we see that, in general, its scope “includes all major capital market activities, such as underwriting, private placement, M&A, venture capital, market making, proprietary trading, financial engineering, clearing and settlement, financing and money management”.²⁸ It goes without saying that the more variegated the list of activities, the more multi-sourced is the revenue stream the investment bank will receive; although a thorough description of the different sources of revenues is going to be performed in the next paragraphs, here we want to depict the size of the business of investment banks under the point of view of the branch that matters the most for the purposes of this work, that is to say the advisory side, in particular for M&A operations. The source of revenues in this business comes from the different *contract fees* the advisor charges to his clients. In a research conducted on 2013 over the 10 *top-tier* investment banks, the part of the resources coming from fees charged for advisory in M&A accounted for 21.10% of the total fees on average. If we consider that this category of fee coexists with 3 others (Equity, Loans and Bonds), the result is consistent with an equally weighted portfolio of investment banking fees.

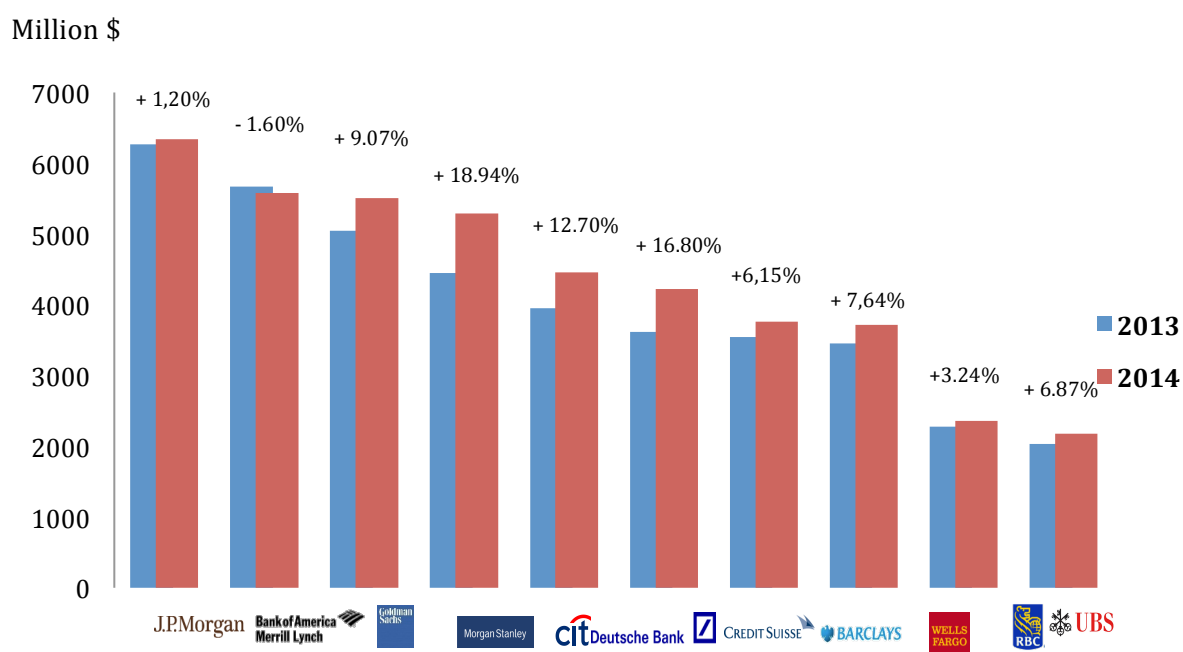


Chart 3.1: Total Fees for Top-Tier Investment Banks, 2013-2014. Source: Lecture 1, De Vecchi; Statista.com.

²⁸ Liaw, K. T. 2011. The Business of Investment Banking: a Comprehensive Overview. New Jersey. John Wiley & Sons Inc.

Chart 3.1 shows the levels of total fees of the 10 top-tier investment banks, showing a growth in every business from 2013 to 2014, with the only exception of Bank of America Merrill Lynch, which saw a slight reduction (-1.6%) on the fees received. The total amount of revenues coming from fees was around \$40.3 billion on 2013, and \$43.1 on 2014, therefore if we consider that the total world level of investment banking fees was \$94.38 billion, we see that 46% of these fees are concentrated in the top 10 investment banks, confirming the high market power of these actors. Latest data about 2015 are not far from the previous year; nevertheless a reduction of volumes brought the level of fees to \$39.7 billion just for the top investment banks, following the trend of the levels of the rest of this industry, that last year totalized \$83.5 billion. Therefore, from a year to another, there has been a shrink on volumes of the fees of more than 11%, although the actors leading the market remained the same²⁹. Charts 3.2 shows the breakdown of the figures concerning the volume of fees; as already said, investment banks charge fees in mainly four activities: Equity, Loans, Bonds and M&A.

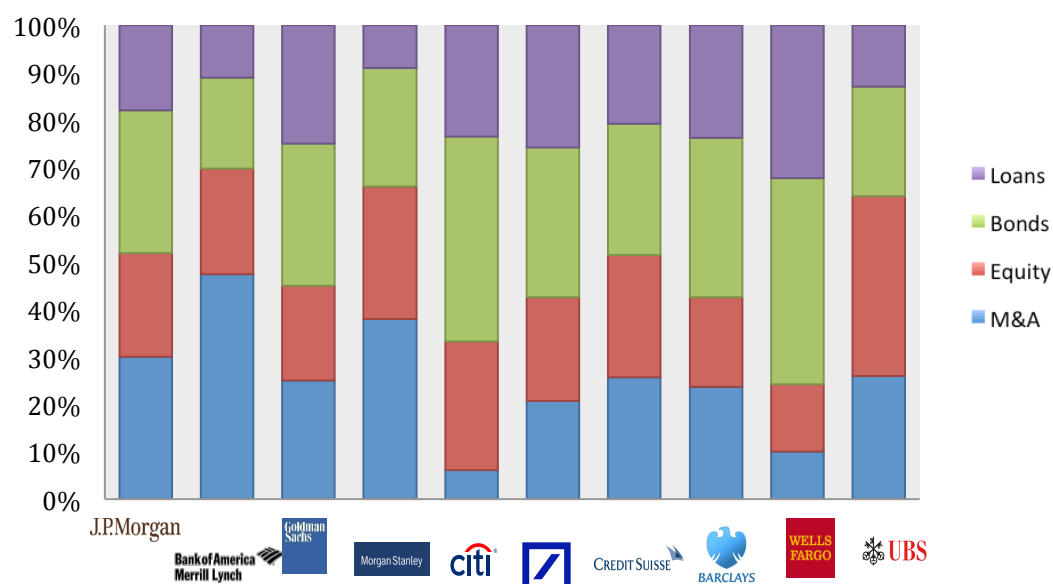


Chart 3.2: 2015 Fees Breakdown for Top-Tier Investment Banks. Source: *The Financial Times, League Tables 2015*.

A further breakdown can be done within each category, specifying the particular product concerned, and for the category of M&A the division is made upon the

²⁹ League Tables. 2016. *The Financial Times LTD 2016*.
<http://markets.ft.com/investmentBanking/tablesAndTrends.asp>

regions where the operation has been performed (Americas, Europe, Asia-Pacific, Japan, Africa and Middle East). Following this framework, *equity fees* can be divided into those charged for *follow-on offerings*, that is to say those operations concerning the issuing new shares after a company has already gone public through an IPO; further into fees concerning the emissions of *convertible equity*; lastly into those coming from underwriting and advisor in an *IPOs*. Concerning the category of *loans fees*, the breakdown can be done according to the different level of risk, going from the *highly leveraged* loans, to the *leveraged* ones, through the *undisclosed loans*, so forth until *near investment grade* and *investment grade* loans. The same framework is chosen for *bonds fees*, where the first level is *investment grade*, the second is *high yield*, going on with *asset backed* and *mortgage backed*, with a residual category collecting other types of bonds, with the related fees. If we examine chart one, we can notice a higher percentage of M&A fees for the first part of the ranking, that could let us think about an effect that see reputation of investment banks playing a role in the choice by firms of the advisor – the so-called *reputation effect*, that we are going to see in chapter 4. Globally, the average share of M&A fees among the top-tier investment banks is 25%, with an increase of 4% from 2013 and of 1,5% from statistics of 2014.

3.2. The Services Offered by Investment Banks

Despite the name suggests these entities to be involved in activities that concern investing capitals, this is not necessarily true, and most of the times, this part is not the core of the business. The reality is that investment banks act often as intermediaries, in particular linking entities that are issuing financial instrument for the sustainability of their business activities, to those institutions that desire to take advantage of these opportunities for investing reasons or to enhance their current businesses.

3.2.1. *The product-client matrix*

In order to avoid losses particulars on the activities performed by investment banks, it is appropriate to follow a simple but effective tool

describing the possible matches among services offered and actors involved in the business of investment banks: the *product-client matrix*³⁰.

Reporting the universe of existing clients of an investment bank on the first column vector of the matrix, while in the row one the macro-categories of services each and every investment bank is involved in, we can easily frame the map with which we can locate within the activity of the entity.

Table 3.1: Product- Client Matrix. Source: Fleuriet; Lecture 1, De Vecchi.

	Capital Raising	Capital Markets	Advisory
Corporations/ Financial Institutions/ Private Equity	Equity & Debt Underwriting	Risk Management	M&A
Financial Investors	Prime Brokerage	Sales and Trading	Research
Governments	Bond Underwriting	Debt Management	Privatization
Individuals	Financing	Private Banking	Private Banking
Proprietary	Principal Investor	Proprietary Trading	Investment Partnership

The most traditional service, also according to the origins of this type of bank, is *capital rising*; financing activity is performed, as already seen when talking about fees, both through the equity and the debt markets. Different products and activities are offered to the first category of clients, corporations and financial institutions together with private equity funds, such as preparation of *Initial Public Offers (IPO)* and *follow on offerings*, which we already briefly explained; it shall be specified that often initial public offers involves a wide group of banks, that is called an *underwriting syndicate*, created to have the

³⁰ Iannotta, G. 2010. Investment banking: a Guide to Underwriting and Advisory Services. Berlin. Springer-Verlag Berlin Heidelberg.

wider possible breadth for approaching potential investors; it goes without saying that among this pool of banks, a leader is always elected by the issuer, that is usually called the *book manager* (or *lead* underwriter). Furthermore *accelerated book buildings* are performed, forms of equity financing completed in few days with little to no marketing, usually completed in order to get the resources to acquire a target. Another service is the setting up of *block trades*, that is to say the exchange of a huge amount of securities traded at an arranged price between the parties. Moreover, transactions concerning the issuing of *convertible bonds*, another equity-related product, are done. Going on the debt side, investment banks underwrite all the existent debt securities, going from all the types of governmental bonds (Eurobonds, Yankee Bonds, U.S. public, exc.), to instruments such as *asset-backed securities (ABS)*, that are debt securities collateralized by a pool of assets, hence backed on loans or other forms of debt financing against assets; these differentiate from *mortgage-backed securities* in the collateral, that in this case are indeed mortgage or real estate loans. In the first cell, investment banks underwrites *bonds* for private corporations, while in the cell corresponding to governments as clients of investment banks, *bond underwriting* is the already specified activity of underwriting all kinds of public bonds.

Considering what investment banks offer to financial investors, the table suggests us that in the capital-raising field they act as *prime brokers*; prime brokerage is a special category of brokerage services that comprehend the lending of securities, leveraged trade executions and cash management; special clients are usually hedge funds, who need for example a figure that acts as an agent between the institution itself and all its brokers, in order for it to have a central source for closing and servicing assets. Moreover, a prime broker provides back-office accounting services, as an example Goldman Sachs became the first provider of low-touch trading, an electronic trade execution service for institutional brokerage.

For how concerns individual investors, investment banks are important as a source of *financing*; this is indeed a possibility that has been brought back after the Glass-Steagall repeal Act of 1999, which let again investment banks to play

the role of commercial bank too. This gave rise to new business models among main actors, which we will see in next paragraphs.

The last row of the matrix concerns the match between the figure of investment bank and of the client; in this case the investment banks become client of itself, because the capital used belongs to the bank. *Principal investing* consists of buying equity in privately held companies and then working closely with it in order to enhance the value. This activity can be done by investment banks also through the creation of investment partnerships, allowing external investor to be part of this branch. As an example, Goldman Sachs in 2005 engaged an operation with the municipality of Chicago for the set up of the concession for the Chicago Skyway Toll Road (CSTR)³¹. Besides the holistic role the giant had, since it acted as an advisor and provided the capital raising, it committed its own capital to facilitate the operation. In fact, the debt structure was such tailored that Goldman was counterparty to the interest-rate swaps it created, in order to seamless the debt payments to toll cash flows. Going on with the example of Goldman Sachs, it is worth to quote an article of the Economist: “Goldman applies capital not only to what traditionally has been perceived as proprietary trading – punts on the market – but to other businesses as well. Some of these, such as executing trading for clients in return for a commission, use to have no risk at all. With increased frequency, investors no longer want a straight broker, but someone to take on the risk of the transaction, and that someone must put up money and possibly suffer losses or make an outsized gain.”³².

Turning to the *capital markets* column, we see that investment banks take care of the *risk management* tactics of corporations and financial institutions; their experience in capital markets let them indeed manage securities with more consciousness in comparison with the financial departments of corporations. Concerning financial investors, investment banks are involved in *sale and trading* of securities, they advise them or act on behalf of these investors when involved with a higher interest in traded volumes. We go on with services offered by

³¹ Private-Public Partnership. 2005. The Skyway Sale and its Implications for Municipal Finance. *Presentation to the National Association of State Treasurers*.

³² 2006. Goldman Sachs: Behind the Brass Plate. *The Economist*.

investment banks in capital markets for government; we find *debt management*, concerning the set up and execution of strategies for managing sovereign debt, in order to achieve precise risk targets or developing and maintaining an efficient market for government securities. Another way of serving governments is through the *management of assets*, that means planning and executing a strategy to maximize the exploitation of available assets, of every nature. As an example of the magnitude of the business of asset management, BlackRock became in 2009 the first company in terms of volumes of assets managed, reaching the incredible level of \$4.3 trillion in 2013 of assets under management (AUM)³³.

The last category of operations in which an investment bank is involved within capital markets is when it trades its own capitals and assets, thus it engages *proprietary trading*. As was the case for raising capital, here the bank puts on the table proprietary resources, for speculative investment operations, further diversifying the portfolio of businesses.

The column labeled *advisory* brings us to the widest group of peculiar activities an investment bank can provide, since advisory exists to a certain extent in each and every of the just commented fields of capital raising and capital markets. As a matter of fact, private banking is a form of advisory activity, even if referring to capital markets for individuals. Investment banks use their competences to consult about governmental *privatizations*, a practice often performed for fiscal stabilization reasons, to improve the operating efficiency and, in the case of low developed capital markets, to enhance this dimension together with equity culture. Financial investors have all the interests to have the widest and most detailed picture of the investment possibilities, that's why they hire banks to advise them on the *research* of best opportunities. Moreover an investment bank taking part of a pool of an *investment partnership*, as already seen having a proprietary commitment, can advise other participants about the management of the investment done. Advisory about *M&A* is the topic we are going to go in depth with in the remaining of this chapter, when focusing on investment banks as advisors of corporations and financial institutions.

³³ Loomis, C. J. 2014. "BlackRock: The \$4.3 trillion Force". *Fortune*.

3.2.2. *Investment Banking Business Models*

A description of the products offered to clients by an investment bank couldn't have been followed by anything but the business models used by these entities. This approach is particularly interesting because through the business structure of a bank, it is possible to understand the influence that the legislative changes we introduced in the first paragraph had on this sector. As a matter of fact, the division into the five categories we are going to present is made starting from the original differentiation between commercial banks and investment banks; as a consequence of first the dispositions of the Glass-Steagall Act of 1933, and afterwards of the Gramm-Leach-Bliley Act in 1999, commercial banks, who took deposits and lend money, and investment banks, who acted as underwriters for investors, had to change their business models. It must be said that these dispositions were valid only for the American market, since in Europe the model of what we will later call a *universal bank* was well established and not restricted by any law. Therefore in the U.S. those entities that before 1933 used to have both deposits as liabilities and fees for advisory or underwritings as cash inflows, had to sell one of the two branches, in order to stick to the new law requirements. However changes in the field of legislation are usually prompted by economic interests; as a matter of fact, as huge amounts of capital were injected in the US market, commercial banks started pushing for becoming part of the explosion of the underwriting activity. As a result, after the repeal of the Glass-Steagall act, big entities started acquiring small investment banks and brokerages; doing so, the so-called *stand-alone entities*, only focused on underwriting and brokerage, dramatically shrank to five over the top 10 banks by 2005; these were Morgan Stanley, Goldman Sachs, Merrill Lynch, Lehman and Lazard³⁴. Academic literature added to these drivers two further dimensions upon which making out business models, that is to say the *geographic reach* and the *products offering* of the entities under analysis. As a result we identified 5 different types of bank active in the underwriting, advisory and more generally investment sectors;

³⁴ Chahine, S., A. Ismail. 2007. Premium, Merger Fees and the Choice of Investment Banks: A Simultaneous Analysis. *The Quarterly Review of Economics and Finance*

Global Universal Banks: this category is composed by those entities that perform both the typical services of commercial banks and those of a traditional investment bank, in relation to the division enforced and then removed by law. Moreover concerning the regional width they are called global because they are not limited to the market of origin, but instead they operate internationally; in this category we can find names as Citi, JP Morgan, Deutsche Bank and Bank Of America Merrill Lynch. As an example of the importance that these banks have on the market worldwide, JP Morgan totalized on 2015 revenues for \$102.10 billion, with a growth of just \$1 billion, from the previous year, shaping a flat trend of revenues; nonetheless the bank managed to grow net income of 12.32%, from \$21.76 billion to \$24.44 billion³⁵.

As already seen with the product-client matrix, these types of banks offer an extreme wide range of services, since they are the most diversified possible in the whole market. On the commercial banking side they provide lending and treasury services for corporations, financial institutions, government, and individuals; treasury services like forms of innovative payment, collection, liquidity management, commercial card.

On the investment banking side they help clients with strategic advisory, risk management, market making, security services, asset management and private banking. Private banking goes from investments to wealth structuring, and from trust and estate planning to credit and risk management. Asset management, as already seen, provides clients with high quality global investment management in equity, fixed income, real assets, hedge funds private equity and cash liquidity.³⁶

Global Investment Banks: is a tighter category that collects, as the previous one, entities that have a portfolio of activities spread all around the world, but just in the business of investment banking, without the branch of lending and taking deposits. Here the approach of the so-called *One Bank* is pivotal, since it includes in the same bank activities like Private Banking, Asset Management and Investment Banking providing clients with services concerning all asset classes

³⁵ League Tables. 2016. *The Financial Times LTD 2016*.

<http://markets.ft.com/research/Markets/Tearsheets/Financials?s=JPM:NYQ>

³⁶ De Vecchi. 2014. M&A and Investment Banking. *Class Lectures; Lecture 1 – Investment Banking*.

and global markets under just one point of contact, the relationship manager. Moreover it uses the experience of specialist in many areas in order to satisfy the full extent of clients' financial interests. Finally this approach is good for smaller corporations that generally don't have the same possibilities of bigger ones. The Investment Banking leg has more or less the same characteristics of the previous category, but with an extreme attention to businesses that are client-driven, flow based and capital efficient. Other two legs have the same features of the correspondent in global universal banks. Examples of banks belonging to this category are Credit Suisse, Morgan Stanley and Goldman Sachs.

Global Boutiques: the last group of investment banks having a global reach has though a smaller portfolio of available instruments and products. Boutiques are indeed those who tend to be small and focused on a class of service offerings; they are usually active in two main segments, Asset Management and Financial Advisory. As a consequence, they have far smaller financials if compared to the already introduced universal banks; concerning revenues, for example Lazard, active in financial advisory and asset management across 27 countries, totalized \$2,340 billion on 2014, with an annual growth rate of 17.88% from the previous year.³⁷

Domestic Universal Banks: we use this label when a universal bank, providing both commercial and investment banking services, is focused on a regional or national perspective. This is usually the case of banks in an early stage of growth, in potential to become international, through strategic acquisitions of entities that can enhance their power abroad; an example of a domestic universal bank slowly moving toward international perspective is Unicredit S.p.a., that in 2005 merged with the HVB Group, the fifth largest financial institution in Germany.³⁸ The domestic commercial banking activity follows a model that supports and enhances regional brands, helping improve the local commercial positioning of firms, especially concerning SMEs and non-profit entities. As for global correspondents, these banks provide advisory on M&A and offer services of structured finance and capital markets

³⁷ 2015. Lazard Fact Sheet. <https://www.lazard.com/media/2346/lazard-fact-sheet-august-10-2015-english.pdf>

³⁸ 2012. Unicredit History. <https://www.unicreditgroup.eu/en/banking-group/our-identity/history.html>

Local Boutiques: in this category we can find boutiques that are focused on specific industries, geographic markets or segments; all with the same feature of a small number of employee, they can be specialized on M&A, restructuring, fund raising and regulated capital markets, always offering an advisory service. Italian boutiques like Gruppo Banca Leonardo have the characteristic to be composed by professionals that had an important experience in global leading investment banks, like those we already presented beforehand in this chapter.

A different breakdown of existing investment banks is made upon other drivers such as the size of clients usually served or the industry served. In this sense we can find *Bulge Brackets* banks, those who serve the full spectrum of services to for large-cap firms (with more than \$10 billion of capitalization), even though the trend to serve also mid-cap firms is growing; immediately after and differentiated from the previous ones only by the status, are the so called *Major Bracket* banks, also called tier-one firms, the most famous of them being UBS and Lehman Brothers; *Regional Brokers* is the third category, characterised by the presence in certain regions of the country; finally, as for the first categorization, *Boutiques* are small entities who usually have focused and limited class service offerings.

3.3. Wearing the Clothes of an Advisor

Although the overall business of an investment bank, whichever the category of the business model, results in multiple activities that we saw in previous paragraphs, we can easily affirm that the advisory leg accounts for a relevant percentage of the total revenues. It is interesting to give a look to the composition of revenues of important investment banks, in order to have a instant pic of the impact of advisory on the total revenues stream; in Table 3.2 we reported the breakdown of revenues of Goldman Sachs, and regardless the obsolescence of the data, it is interesting to point out two main features.³⁹ First, the three years insights reported refer to a tough period for such a giant of the market of investment banking, thus analyzing revenues from proprietary

³⁹ Liaw, K. T. 2011. *The Business of Investment Banking: a Comprehensive Overview*. New Jersey. John Wiley & Sons Inc.

investment, trading and lending, gives the possibility to highlight the volatility of this leg; as a result we notice a dramatic increase in revenues from investment and lending within the two years 2008-2009, rising from a loss of almost \$11 billion, to a positive \$3 billion the year after. It goes without saying that such volatility must be counterbalanced by source of revenues able to smooth peaks and downs, and that is why in this case revenues from this source with high variance, together with the investment banking one, accounts for less than one-quarter of total net.

	2008	2009	2010
Investment Banking	5,453	4,984	4,810
Investing and Lending	-10,821	2,863	7,541
Institutional Client Service	22,345	32,719	21,769
Asset Management and Other Fees	5,245	4,607	5,014
Total Net Revenues	22,222	45,173	39,134

Table 3.2: Goldman Sachs Source of Revenues (\$ Million). *Source: Liaw, K. T. 2011*

Institutional Client Service and Asset Management and Other Fees, are the two most stable items and all concern the same macro category of service, that is to say the advisory. As we already seen in the breakdown of fees, the cash inflows coming from the four categories are equally distributed among themselves. However, for the purposes of this work we are interested in going more in depth into the activity an investment bank performs when a merger or an acquisition has been planned by the potential acquirer or the target firm. A further reason for this choice of investigating this source of revenues is the introduction, in the U.S. environment, of the possibility for firms to use the so-called *shelf registration*⁴⁰; this practice allows firms to register large amounts of securities at one time, with the possibility to issue them gradually over a certain number of years. This phenomenon allowed corporations to reduce their dependency from investment banks, because of the increased autonomy in the underwriting of their equity; as usual when demand decreases, investment banks saw a dramatic

⁴⁰ Bowers, H. M., Miller, R. 1990. Choice of Investment Banker and Shareholders Wealth of Firms Involved in Acquisitions. *Financial Management*, 19, pp 34-44

increase of competition in this field, hence pushing them to focus more in other business segments, in particular in the one concerning advisory in M&As.

In the second chapter we introduced the steps that usually precede the completion of a merger or an acquisition, under the hypothesis of a direct contact between the buyer and the target. As a matter of fact, the process of a M&A is completely different according to the type of transaction is going to be done; for example if a small firm is sold to a private equity fund the acquisition steps will be completely different from those underpinning an hostile takeover, or the merger of two publicly listed companies⁴¹. Although we already gave a brief description of how to move along the path of an acquisition or a merger process, we still miss an important brick we have just posed with the description of the business of investment banks; as a matter of fact, the step of hiring an investment bank as an advisor of the process is a crucial moment and decision.

3.3.1. *Choice of the Right Investment Bank*

We already introduced in chapter one the reasons why acquiring and target firms hire investment banks instead of performing an *in-house* valuation and due diligence. Looking for an investment bank that will take care of the whole process most of the times is a step performed through the so-called *beauty contest*; this process involves the meeting and interviewing of many investment banks, that usually prepare a pitch book through which they present themselves in terms of previous mandates and can offer a first price forecast and timetables according to the industry involved. If the transaction is very complex and with an important consideration, both the acquiring and target firms could consider appropriate to hire more than just one investment bank, creating a pool of banks coordinated by a leader. A central question that many researchers strived to ask in a consistent way deals with the criteria of choice of the advisor; under the point of view of the acquirer, the advisor's work will be as more effective as the price or premium paid for the acquisition will be lower. The other way around, the target has all the interest to increase the payment received to sell its shares, thus looking for an advisor able to maximize this value. It goes without saying

⁴¹ Iannotta, G. 2010. Investment banking: a Guide to Underwriting and Advisory Services. Berlin. Springer-Verlag Berlin Heidelberg

that these two interests are exactly one opposed to the other, and that for the two firms looking for the investment bank it is impossible to know *ex-ante* whether an advisor will perform better than another. Under an economic point of view, the service of an advisor can be seen as an *experience good*⁴² where the quality of this particular product can't be observed before the performance will be provided. Due to that peculiarity, those investment banks that consider themselves as high-quality advisers, has to find a way to be signaled as an entity that provides high quality products, and for that reason being justified to ask for higher prices, in this case under the form of higher fees. Reputation is though one of the dimensions along which firms should seek an investment bank, and this conclusion is supported by different empirical research on this topic; one of these uses an approach that starts reasoning from the *information asymmetry* generated during the evaluation an investment bank performs over the equity of the target firm.⁴³ Despite the *information asymmetry hypothesis* analyzed at the beginning of this chapter, the fact that the client of the advisor, let's say the target itself, is not able to know how much effort and details the investment bank put on the evaluation of its equity, creates a potential source of *moral hazard* by the advisor. For this reason is argued whether reputation can act as a tool to minimize this risk, since a scarce service provided today by the adviser, will have a negative impact on its reputation in the long term. As a result, Chemmanur (1994) found that a good reputation has a positive effect on four variables that we deem interesting to spend some words about. The model is built starting from the assumption that each and every investment bank bears a cost in evaluating a firm's equity; if the cost incurred is high, hence a big effort has been made in terms of resources spent, the probability of a bad evaluation will be low, and vice versa. Making the model simpler than reality, the research makes the interested firms consider the advisor having a good or bad reputation in relation to the behavior the investment bank had so far. The structure of the model was built in order to embody some implications that were supported by previous researches, whose results we are going to discuss.

⁴² Saunders, A., Srinivasan, A. 2001. Investment Banking Relationships and Merger Fees. *Working Paper, University of Georgia*

⁴³ Chemmanur, T.J., Fulghieri, P. 1994. Investment Bank Reputation, Information Production, and Financial Intermediation. *Journal Of Financial Economics*

Reputation was found for example to be effective on the degree of accuracy of the *equity value* estimated by the advisor, in fact the greater the reputation of an investment bank, the lower is the variance of the equity evaluations of the firm the advisor is going to market. Moreover, in the contest of IPOs but also of M&A, higher reputation is linked to the *possibility to charge higher fees*, and therefore have higher incomes if compared to their less prestigious rivals. We will already saw this relationship when dealing with the different types of fees charged in the first part of this work. Another effect of reputation capital is the *higher proceeds*, net of underwriting fees, received by the issuing firm. The last implication of the model is that firms *prefer to choose advisors with a higher reputation*, even though this translates into higher fees to be paid.

The variable of reputation has been so far explained through the use of the model just presented, as a function of the probability of misevaluating the target's equity in relation to the costs borne to perform such evaluation. Later researches have though better specified the proxy for reputation, using the market share of an advisor.⁴⁴ This market share was calculated as the ratio of the total value of transactions where the investment bank was hired as an advisor in a year, to the total value of M&As performed in that year; if in a transaction a pool of investment banks was used, the whole value of the transaction was computed to each of them. Following this scheme, it was possible to find three different categories of advisors, also called *reputational tiers*. The first of them gathered the so-called *Top-Tier investment banks*, followed by rankings from 6th to 20th called *Middle-Tier* ending with the rest, defined as *Bottom-Tier Investment Banks*. This categorization reminds us the one already seen in the first paragraph of this chapter, with the difference in that the latter took into consideration the market share based on the amount of fees charged.

A further dimension to consider when the target or the acquirer are up to choose the investment bank as an advisor to the M&A transaction, is the degree of previous relationship so far had with the entity. Saunders et al. (2001) made a model for the quantification of this relationship, and performed a research on the impact of the so-called *switching costs* over the choice of an advisor. The

⁴⁴ Saunders, A., Srinivasan, A. 2001. Investment Banking Relationships and Merger Fees. *Working Paper, University of Georgia*

researchers sought to see whether to a higher relationship strength were associated higher fees paid; the measure of the retaining to each investment bank is expressed by the ratio of the sum of the transactions where the latter acted as a lead manager (getting the 100% of the amount) and those where it was a simple manager of the pool (getting the 50% of the total), to the sum of the total value of transactions on equity, debt and mergers and acquisitions, performed in the last four years by the considered firm. The results saw a higher level of fees charged to acquiring firms when they choose an investment bank with whom they had a previous continuing relationship, identifying a sort of *loyalty extra fee* that firms are willing to pay to investment banks. The analysis goes on looking for a correlation between the post-announcement abnormal returns and the previous relationship with the bank, finding no evidence of a significant positive link between these two measures. The result suggests though that there must be extra reasons behind the decision to keep the same investment bank as advisor for operations such as equity underwritings or merger and acquisitions. These benefits cannot be easily identified, because of data limitations faced by many researchers, however they can be deducted by the considerations done so far; for example we can underline a better quality of the service during the long and often invasive process of due diligence and valuation, due to a better knowledge of the dynamics ruling the acquiring or target firm. As we already reported in the first chapter, the willingness of the firm to get other services from the investment bank could be another reason; during the presentation of the business models of existing investment banks, we reported in fact the double activity of financier and advisor of a modern *universal bank*. Under this perspective, a firm can accept to pay higher fees with the long-term objective of obtaining another service, let's say a loan, using as a mean to increase its bargaining power the loyalty demonstrated so far. This intuition was studied by Allen et al. (2004), who investigated the role of commercial banks as opposed to investment banks when hired as advisors for both targets and bidders. They argue that commercial banks have a higher ability to advice their client on M&A operations due to a prior lending relationship with them. This is again explained, as already pointed out, with the certification effect that a commercial or universal bank has thanks to a better knowledge of the client,

given the previous lending relationship that was presumably based on a sound analysis of the entity itself. Moreover, lending activity usually covers a long and continuous time period, compared to the discrete and shorter time referred to an operation of merger or acquisition; thus more information is deemed to be produced and of higher quality. However, as we already pointed out, a possible bias to this declination of the certification effect can be produced due to a conflict of interest in bank acting both as a financier and as a merger advisor.

Going back to the *switching costs*, their nature of extra economic variables is corroborated by the research we have just examined, since firms switching from an advisor to another lower fees paid by 13%. Combining to this result the ranking that differentiates among diverse quality bands of advisors, it is interesting to see whether the practice of switching is more frequent from one category to another (such as from top-tier to mid-tier advisors or vice versa), or into the same reputational rank. To this extent, a useful differentiation identifies:⁴⁵ *lateral switchers*, that is to say those that switch to another bank that belongs to the same tier of the current lead manager of the firm; *upward switchers*, are those instead that goes to a higher tiered bank if compared to the current one; finally *downward switchers* deals with the last category of firm switching to a lower ranked investment bank. The result of the research is that firms are more likely to switch if they start from a non-top tier investment bank as advisor; in other words the category of firm more likely to switch is the *upward switcher*.

3.4. Running an Auction

In previous paragraphs we introduced several researches that sought to shed a light on the determinant of the choice of an investment bank in the case of important operations like mergers or acquisitions. One of the drivers investigated was the complexity of the deal in terms of size of the transaction, a variable that was labeled under the category of *transaction costs*. As a matter of fact, costs related to the analysis and process development of larger and more complex deals will be greater in comparison to those borne for completing

45 Krigman, L., W. H. Shaw and K. L. Womack. 2000. Why do Firms Switch Underwriters. *Journal of Financial Economics*

smaller transactions. A further element adding complexity and thus creating the need for an external advice is the way the transaction is conducted. In the first chapter we spent some words about the steps a typical M&A process involves, using a simplification since we chose to focus on a negotiated sale rather than analyzing what the tool of *auctions* could mean. Since this mechanism is totally managed by investment banks, here we want to see the steps involved and how much the investment bank is able to influence them.

The term auction refers to a process that enables the target of a sale to be marketed by multiple perspective buyers. This procedure has many advantages intrinsic to its nature, especially in terms of evaluation of the target value; this is particularly true because auctions act as a mean to test the market, and for that reason are able to confirm or argue the valuation performed by the sell-side advisor as well as the inherent value of the target.⁴⁶ Although of great importance, the aforementioned advantages could be counterbalanced by drawbacks that may come from features typical of auctions; regardless the width reached by this mechanism, whether it will be performed over a *broader* or *narrower* base, as a matter of fact the risk of *information leakage* will be higher, at least concerning the material distributed to participants. The *impact on employee morale* is an issue that must be considered by every target going to be part to a M&A operation, but the model of auction puts much more pressure on the target employees, due to information leakage and higher number of potential buyers involved. Furthermore the presence of several buyers can lead to a situation of collusion among them, driving down the price received by the target.

3.4.1. *Narrow or Broad Based Auction?*

As we already introduced in the last paragraph of the first chapter, auctions can be *broad* or *narrow* in terms of entities contacted for advancing an offer and taking part to the bidding process. In a broad auction not only strategic buyers but also financial sponsors are usually considered, while in the narrow the target identifies specific companies deemed to have the right characteristics to advance

⁴⁶ Rosenbaum, J., J. Pearl, foreword by J. R. Perella, afterword by J. Harris. 2013. Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions. New Jersey. *John Wiley & Sons Inc*

a bid, both under strategic and financial capacity point of view. Can we identify some pros and cons of conducting one of these two different strategies?

Table 3.4: Advantages and Disadvantages Of Broad and Narrow Auctions. *Source: Rosenbaum, J., J.Pearl. Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions*

	<i>Broad</i>	<i>Narrow</i>
<i>Advantages</i>	<ul style="list-style-type: none"> · Intense competition · Maximization of the sale price · Maximum number of bidders reached · Limited negotiating leverage · Fiduciary duty achieved by BOD 	<ul style="list-style-type: none"> · Higher degree of confidentiality · Lower business disruption · Reduced probability of deal completion fail · Low risk of information leakages · “Market check” for BOD fiduciary duties
<i>Pitfalls</i>	<ul style="list-style-type: none"> · Confidentiality is compromised · Higher business disruption · Repelling effect for some targeted bidders · Outcome with no result can be perceived as an absolute fail · Competitors may take part with second purposes 	<ul style="list-style-type: none"> · Potentially excluding credible bidders · Risk to “leave money on the table” · Lower competition · More negotiation leverage · Less data over which BOD can affirm to achieve duties

Table 3.4 helps us recap some of these pitfalls and advantages under the sell-side point of view. We chose this approach since it is the target to decide, together with its advisor, which is the best available option between a narrow and a broad auction. There is no correct answer regarding which of the two is the best, since every single company in every single growth stage has different priorities and objectives; for that reason, for example, price maximization is not the only driver an advisor must take into consideration, since seller could have “softer” needs, such as the desire for a streamed closing of the transaction or for

a lower risk of business disruption. Once this first decision is made, the target set up the direction the auction is going to take, though is time for the investment bank and the deal team to draft a timeline of the process and a roadmap; elements like launch of the auction, receipt of initial and final bids, deal signing and closing, are specifically scheduled by the advisor.

The first step is though the *selection of a buyer universe*, and in this specific field the investment bank has a great influence, since its background and experience are determinant for the width and effectiveness of the research process. An investment bank with a deep knowledge of a certain industry has an important competitive advantage upon other competitors, in the ability to make out the best prospective buyer within the crowd of firms populating the market. As a matter of fact the advisor of the target scrutinizes all the dimensions we already discussed in the first chapter, hence will put particular attention to the potential *synergies*, together with strategic fit and financial robustness. The research is performed upon potential endogenous and exogenous factors, that the advisor evaluates through the use of innovative tools, like those platforms we are going to introduce in the next chapter.

3.4.2. Marketing Materials

Once prospective buyers have been identified, the advisor proceeds with the distribution of materials concerning the business of the target; these are indeed the first approach those selected firms have with the topic, since likely potential buyers already knew the target company, but didn't know whether it was on sale or not. As a consequence, the so-called *marketing materials* are meant to be drafted in a succinct way, to attract and give a good impression of the potentiality of the operation that is being built.⁴⁷ At this stage of the process, both target and prospective buyers are interested in not wasting time, studying unclear documents about unprofessional deals; for this reason the nature of marketing materials must be guided by clarity principles, as well as the aim of making the first approach the most seamless possible. More complete and efficient marketing documents are in a negative relation with the number of

⁴⁷ Lehrman, P. 2014. The Pitch Book: Materials You Need To Sell Your Company. Article in *The Axial Forum*. <http://www.axial.net/forum/sell-your-company-marketing-material/>

questions the advisor is going to be asked by potential buyers; since the role of the investment bank is here to provide all the information needed to make the buyer take an informed decision, more efficient documents correspond to a speed up of the process. Marketing materials are also a mean of “self-selection”, like an automatic filter built by the advisor; since the seller is not intended wasting time educating potential buyers only to hear they weren’t interested in the deal, the documents provided must be efficient and exhaustive. Doing that, there is no room for entities interested in grabbing information for free or competitors that want to slow down the sale process. So far is clear how much effort an advisor should put into the production of these documents; let’s now go on and see in particular which materials are usually drafted.

The two pivotal marketing documents presented to the potential buyers are the *Confidential Information Memorandum (CIM)* and the *Teaser*. The latter is in absolute the first approach of a seller to the potential bidder, and it is composed by a brief presentation, usually a one- or two-page abstract, containing the main insights of the target. Such a document contains for example an overview of the business of the seller firm, with principal governance information, such as equity distribution and main shareholders, and recent acquisitions or important investment rounds, if any. Moreover it must contain data about the investment bank in charge of conducting the deal from the sell-side. Although the main purpose of this document is to grab the attention of the receiver, it could contain an approximate range of possible evaluation, together with special requirements concerning future buyer’s conditions and advisory fees⁴⁸. In order to give an idea of the importance of this document, it is useful to report that on average, strategic buyers typically review more than 200 acquisition opportunities a year, and buy just 1-2% of the firms that introduced themselves. An even more astonishing number of potential deals is put to the attention of private equity funds and financial sponsors, that have a yearly turnover of 500 teasers⁴⁹. It is clear now how much important is for the teaser to catch the attention at first sight. Some guidelines about how to maximize the effectiveness of this first marketing material involve the recommendation to not leave aside the basics,

⁴⁸ M&A MarketPlace. 2008. Sample Teaser. *Concord Hill Capital*.

⁴⁹ *Ibid*.

such as business model, structure of management, key financial exc. Moreover, the advice of clarifying from the very beginning the goals of the seller is considered an essential feature to earn the trust of the counterpart. For example the teaser should contain information regarding the potential desire of the seller to recapitalize the company through a partial dismissing of shares, to give away the whole firm through ownership transition or to consolidate the shareholders base.⁵⁰ Potential buyers appreciate targets that are upfront on what they expect from a transaction. Furthermore, together with recommendations about professionalism in drafting the document and the requirement to be concise, a certain degree of anonymity is advised; this comes from the fact that when distributing a teaser, no confidentiality agreement has been signed yet, hence insights about financials and future outlooks could potentially be exploited by competitors without any legal protection.

After the receipt and the evaluation of the teaser, if interested in receiving further information and data, the potential bidder is required to sign a *Non Disclosure Agreement (NDA, also called Confidentiality Agreement)*. The objectives of this document are the clarification of the confidentiality at the base of the sharing of insights, the specification of which entities are authorized to have access to such information and the description of other binding terms to which the two parties have to agree. The NDA can be referred just to the protection of information provided to the potential buyer, in this case we talk about a *one-way NDA*; this document acts as a shield for the confidential data of the target, but the latter is not obliged to do the same with potential bidder's insights. To reach an equal level of protection, a *mutual NDA* is the perfect agreement to sign. Information to be included in this agreement concerns facts about products, marketing strategies, software, financial, design, and every item the party considers essential to maintain the competitive advantage; in every circumstance, a well designed non disclosure agreement must contain a list of all the items that constitute confidential information, together with terms of validity. Moreover, the returning or destroying of confidential information after the expiring of the terms is a provision that must also be included in the NDA.

⁵⁰ Axial For CEOs. 7 M&A Documents Demystified – A CEO's Guide to M&A Success. *Axial Forum*.

We are going to approach now the principal marketing document among the already listed, both in term of resources spent to produce it and relevance of the information contained in it. The *Confidential Information Agreement (CIM)* is a thorough description of the target, a sort of evolution in term of complexity of the already distributed teaser. As a matter of fact, beside the multiple shades in which it could be drafted, the purpose of the CIM is to present to the buyer the unique opportunity linked to the acquisition of the target company. Although each and every CIM has its own structure of content, depending on the industry, market, business model and effort put on its construction, we can identify some elements that are considered essential.⁵¹ Starting with an *executive summary*, then some *investment considerations* are recommended. Furthermore an overview of the industry, describing the market share and position, the competitive environment and the overview of the segment is the step that introduces the overview of the target company itself. Together with some historic references to support the strategic view, the CIM should contain a description of the internal organization, concerning management and employees, the relationships with suppliers and customers, and some details about products and services provided. A high level of specificity is required for the presentation of *operations overview* and *financial information*. Operations include manufacturing, distribution, sales and marketing, information system and legal and environmental concerns. The part including financial information is pivotal since it includes historical and projected financial information, with a narrative part explaining both past and future performance. It is clear how the CIM constitutes the first step for a preliminary valuation analysis for the advisor of the potential buyer; therefore the sell-side advisor spends a huge amount of time and resources with the target CFO, treasurer and financial team to draft this financial part. While normalizing historical financials, concerning past acquisitions and divestitures, the sell-side advisor also helps in producing future projections, typically five years length, supporting assumptions and narrative. Sometimes, and according to the potential buyer to whom the CIM is addressed,

⁵¹ Rosenbaum, J., J. Pearl, foreword by J. R. Perella, afterword by J. Harris. 2013. Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions. New Jersey. *John Wiley & Sons Inc*

the investment bank could analyze further potential acquisitions scenario deriving from the completion of the deal. As an example, the sell-side advisor can create a list of potential companies that could enhance the synergies coming from the current deal, whose acquisition would be supported by the expected increases in key financials like EBITDA or incremental sales.

In the second chapter we showed potential buyers warning the target of their interest, through the *Letter of intent (LOI)*; nevertheless, some M&A processes anticipate it with the submission of an *Indication of Interest (IOI)*. The latter is an even less binding document in comparison with the LOI, since the potential buyer just expresses a genuine interest in purchasing the target; it is moreover a document based on very limited information, since the potential bidder has probably never physically visited the target company, nor started any serious due diligence process. The indication of interest is often used as a filter by the target, since the quality and perceived effort represented by this document help identify potential tire-kickers and exclude them from the first bidding round⁵².

The Letter of intent that we briefly examined in the second chapter had a very weak level of confidentiality, and was indeed included in a process without any provision of auctions, though with a lower level of interest needed from the very beginning; as a matter of fact in order for the advisor to set up the auction in the best possible way, a well defined number of participants must be identified as soon as possible. When an auction is going to be performed, the letter of intent assumes a more binding role, as the seller before receiving the letter from a buyer, has already met him and tested his commitment to embark on the auction. The most common terms of letter of intent are: deal structure, type of consideration, closing date, closing conditions, exclusivity period, break up fees, management compensation, due diligence requirements, confidentiality, approvals, representation and warranties.

3.4.3. First Round

The situation so far described sees a narrowed number of potential bidders, who have embarked the opportunity of acquiring another company firstly

⁵² Axial For CEOs. 7 M&A Documents Demystified – A CEO's Guide to M&A Success. *Axial Forum*.

signing a confidential agreement (CA or NDA), then receiving and thoroughly analyzing a confidential information memorandum (CIM) for several weeks, and finally expressing their interest through a letter of intent, voluntarily preceded by a non-binding indication of interest (IOI). It is hence presumed that the list of participants to the first round has been completed; at this point participants, in a more or less numerous amount depending on the width of the auction, are addressed with the so-called *initial bid procedure letter*. This document specifies the terms until which the bidders must submit their first, non-binding, preliminary bids⁵³, for this reason called *first round bids*. The letter is also used to set which structure bidders must keep when they advance a bid; usually the letter states that these first offers must include: an indicative purchase price expressed within a range, and the type of consideration it will take the form of; assumptions that must hold in order to arrive at the stated purchase price; some information of the source of financing, if any; guidelines about what the future treatment of management and employees will be; indication of a time to complete the deal, and the degree of diligence to perform; key conditions essential to the signing and approval of the deal; buyer contact information.

It is a widely used practice for the advisor of the sell side to prepare the so-called *stapled financing package*, that is to say a pre-packed solution of financing usually directed toward financial sponsors. Despite all the considerations we introduced when talking about the possible conflicts of interest within a commercial bank acting as an investment bank as well, the stapled financing package is always offered by the sell-side advisor, that usually dedicates an entire and separate team of its structure to make sure it is performed seamlessly. This financing team is given the task of assessing a possible level of leverage that could be sustainable for the bidder, according to its current level of debt and equity. This possibility is communicated to buyers in advance of the submission of first bids, in order for them to tailor the offers taking in consideration also this possibility. Although the agreement by buyers over this solution is not mandatory, this tool provided by the investment bank on behalf of the target is an important signal of support from the sell-side, and could moreover help in

⁵³ Liaw, K. T. 2011. *The Business of Investment Banking: a Comprehensive Overview*. New Jersey. John Wiley & Sons Inc.

reducing the time of the whole M&A process due to the reduction of the need of a financial due diligence.

The first round is concluded with an opinion the advisor gives to the sell-side management concerning offers received; it will be the target itself, together with internal advisors, taking the decision about which bidders let pass to the second round.

3.4.4. *Second Round*

The second round of an auction coincide in its vast majority with the process of due diligence we introduced in the previous chapter; in fact sell-side advisor focuses on facilitating the gathering of information needed for the final submission of valid, and possibly binding final bids by potential buyers. Furthermore, the sell side investment bank is in charge of maintaining a competitive atmosphere among the bidders, and to take care that deadlines agreed in the already signed documents are respected. The official kick-off of the second round is though the *management presentation*.⁵⁴ Prepared by the sell-side advisor throughout the early stages of the auction, it is performed by the sell-side management at the very beginning of the second round of bids. The presentation basically follows the canvas contained in the CIM, in more concise manner, but with the objective to stimulate an interaction between the speaker presenting it, and the audience of bidders. This is indeed the occasion for sessions of Q&A, at which management prepared with the help of its advisor; this occasion is probably the first meeting between the two sides management, since also top management participates to this forum. Moreover, prospective buyers usually invite their investment bank in charge of advising during the process.

As we have seen, in this phase due diligence is performed, hence stages like *preparation of a data room* and organization of *site visits* are completed.

A pivotal moment is the distribution of the *final bid procedure letter*, a document that acts exactly like the one submitted at the beginning of the process, but at a later stage, and often along with the draft definitive agreement. The final bid procedure letter sets in a more stringent way, all the requirements

⁵⁴ Rosenbaum, J., J. Pearl, foreword by J. R. Perella, afterword by J. Harris. 2013. Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions. New Jersey. *John Wiley & Sons Inc*

that must be fulfilled before the expiration of the terms relative to the submission of the final bids. Differently from the first letter however, this sets far more stringent requirements because, on a temporal basis the moment of the closing of the deal is closer than the before. As a consequence the target asks the bidder definitive details about the price and form of exchange (mix of cash and stocks); the financing structure and information about financing sources; the approval of a draft definitive agreement, together with a markup the buyer feels comfortable with; the agreement upon the binding nature of the final bid, together with a recall of the related terms; overview of the regulatory approval and timeline for the completion; buyer's management approval; expected time of closing of the deal.

The *definitive agreement* is the most important document produced and signed during the second round, and is the revised and mutually approved version of the draft made when the final bid procedure letter is sent. It is a legally binding contract containing the details of the transaction, signed prior to the receipt of the final bid; if the seller accepts the final offer, the definitive agreement is automatically enforced and starts producing its effects. Sometimes the situation is more complicated, because legal advisors of the two parties meet in order to agree upon a definitive agreement that could be influenced by certain scenario following the final bid. In this sense, the potential buyer could want to specify some indemnifications and interim and post-closing covenants, not contained in the previous draft.⁵⁵ As a matter of fact, and as usual when dealing with documents built by different firms, the definitive agreement could take multiple shades, but generally speaking it should contain at least basic elements; an overview of the transaction and the relative mechanisms, warranties, closing conditions, termination provisions and indemnities.

3.4.5. *Final Bids Receipt and Deal Closing*

At this stage, the audience of potential buyers is extremely narrowed down and the remaining players submit to the target their final bids within the schedule set by the final bid procedure letter. The rigidity of the terms depends on the timetable of the seller, and is often derogated for additional due diligence

⁵⁵ Axial For CEOs. 7 M&A Documents Demystified – A CEO's Guide to M&A Success. *Axial Forum*.

requested by the bidder. Since the current is not a public phase anymore, the advisor of the target works tightly in contact with the buyer's one, in the attempt to stream the process of signing of the deal. The sell-side advisor is also extremely influent in the evaluation of the offers received by the target, since is the figure, together with the eventual other components of the advisory pool, that acted as an intermediary of the whole process, hence is already aware of the range of price within which all offers float. Although price is a key component of the final bid, target firm could be interested in other features of the submitted offer, like the impact of conditions stated by final bids. As a matter of fact, a firm could prefer a lower offer price that has few if any conditions attached, because of the necessity of a sure income from the transaction. Once final bids have been evaluated, the phase of *negotiation with selected bidders* can start. This is a recommended step, especially if the most attractive bids slightly differ among each other, and a further degree of specification of terms is required to determine which candidate will be the winner. During this phase a clarification of the remaining due diligence issues is performed, and this is the last chance to work on the provisions of the definitive agreement, after the first draft, its later narrowing and definitive handing. Once the choice is made, the proposal is sent to the board of directors for a final approval; as a consequence, the remaining of the bidders not selected during the auction phase is rejected. The target has the final word upon the choice, hence rejection of the bidders considered to be not suitable for the sale is totally in the rights of the seller.

After the approval of the board of directors, before getting to the deal closing, there is the need to obtaining regulatory and shareholders approval; this is however a topic that doesn't fit within the purposes of this work.

4. CHAPTER 4

THE USE OF COMPLEMENTARY ONLINE PLATFORMS FOR M&A OPERATIONS

This chapter has the objective of showing the state of the art of the emerging world of innovative finance, a term that is often referred to new ways of financing, like P2P lending and crowdfunding; however the term innovative finance gained enhanced width, embracing broader branches of the economic activity of a firm, beyond the previous limited field of financing. Entire classes of new assets are indeed currently labeled under this term, together with important functions of the investment banking that we already seen in previous chapters, but shifted from a pure off-line background, to a parallel operating field, this time on-line based. Although we used the adjective parallel, the picture we have in mind resulting from the considerations done in previous chapters describes the increasing complementarity of the on-line and off-line worlds. In the light of the complexity and peculiarity of all the possible M&A designs, it would be indeed utopian thinking about such an undertaking be conducted a hundred per cent through online processes. That's why the platforms we are going to present in this section have been created leveraging the technologic possibilities that Internet gave in terms of network externalities.

4.1.Main Features: an Overview

One of the most relevant innovations that the growing of the Internet has brought to our lives is the availability of on-line platforms. With the term *platform* we identify a tool characterized by network externalities, a term that economically speaking deals with the enhanced benefit that the user of a platform gets as the number of users active in the same platform increases⁵⁶. These benefits come from the intrinsic nature of platforms, specifically designed to be open to get support from several categories of participants. As a matter of fact, these platforms respond to the need that firms involved in M&A

⁵⁶ Renda, A. 2010. Neutrality and Diversity in the Digital Ecosystem. *Università LUISS Guido Carli, Reading Material*.

undertakings showed in recent years, to have a comprehensive view of the process they are going to go through, have clear the different possibilities of acquisition available in the market, a bird's eye view of the actors involved, and the ability to easily link to professionals working on the same acquisition project. As the initial part of the current work highlighted, one of the reasons for a more centralized approach to the management of the operation of M&A is the multiplicity of sources of information that must be taken into consideration, and this is the pivotal issue online platforms want to face. The complexity of the environment, together with the increasing pressure on firms for higher M&A productivity also in the light of past errors, the high pace of technologic improvement and the cross-boarder nature of operations, are all factors pushing toward the need of a more transparent and seamless approach to M&As⁵⁷. The actors who are active parts of these platforms and contribute to the maximum exploitation of their potential are private and public companies, namely those who seek an acquisition opportunity and those who want to sell their business; professionals like data analysts, accountants, consulting companies, lawyers; commercial banks and investment banks both in charge of the deal management process or whose objective is providing financing solutions for the operation. This is the audience that is more frequently found in platforms specialized in online M&A, those we are addressing the chapter to, but the current market is full of other types of platforms whose modularity let them interoperate and be complementary to others. Figure 4.1 is an effective representation of the multitude of platforms today existing and interrelating within each other, and in co-existing stages of the life cycle of the business of a company. At first sight the most concentrated segment is the one concerning capital raising; categories such as *small business lending and receivables* and *equity crowdfunding* include an enormous amount of platforms specialized in the aggregation of small investors who want to earn a return from the investment of small portion of their portfolios. The term *crowd* concerns the possibility for private investor of directly examining investment opportunities through those platforms and take part of the equity financing round. Depending on the stage at which companies

⁵⁷ Kilpi, K. Introduction To Digital M&A. Using Technology to Succeed in Acquisitions. *Midaxo* webpage: <http://blog.midaxo.com/digital-ma/using-technology-to-succeed-in-acquisitions>

seek investment rounds, we then distinguish between *angel syndicate models*, still part of the crowdfunding family, and *venture or co-investment models*. These kinds of platforms are acting as complements rather than disruptors to traditional institutions, once exclusive protagonists of the funding cycle (both debt and equity financing). It has been estimated that in the only 2014 the total market addressable opportunities by innovative finance amounted to \$3.3Tn, spread among 1,250 existing crowdfunding platforms worldwide. These gargantuan numbers reflect an average market growth of 410% within the period 2012-2014, with the total value of crowdfunding for 2015 reaching \$34.4bn

58

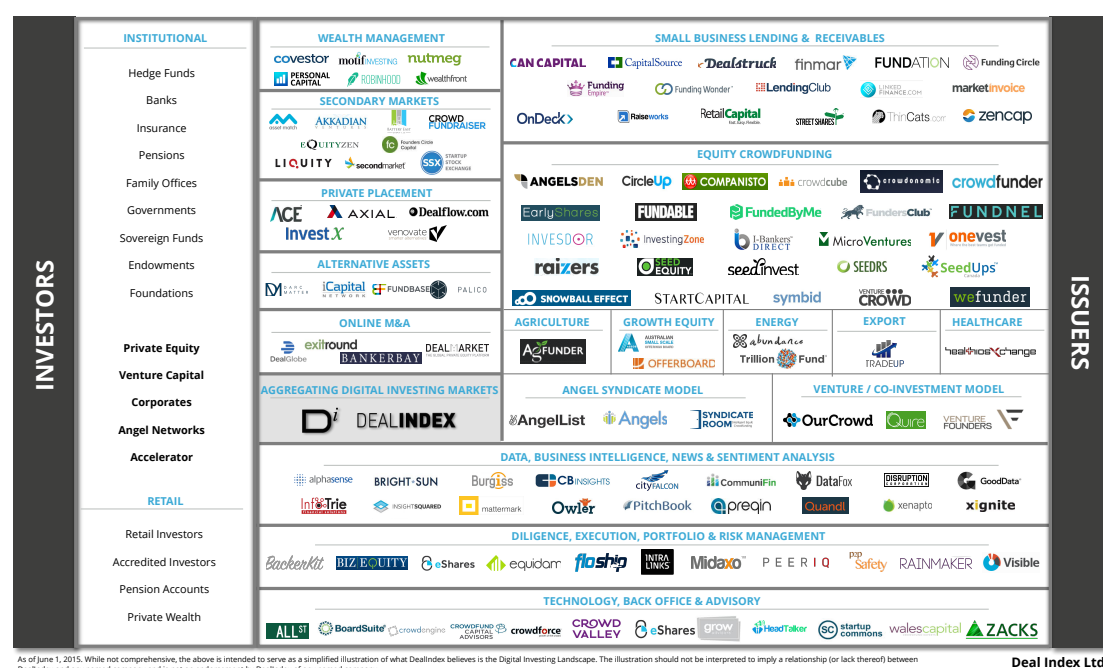


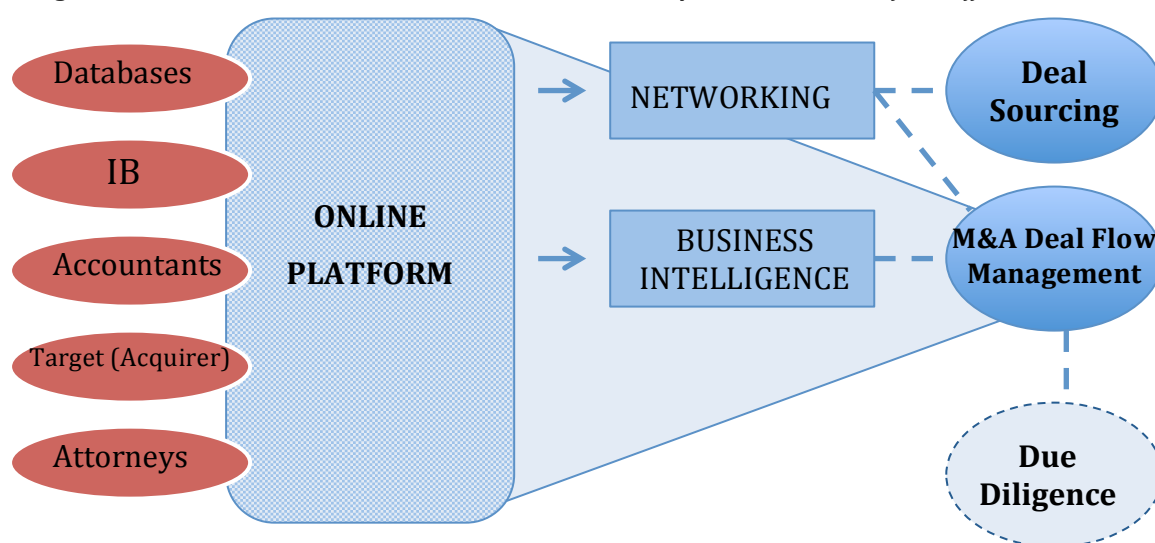
Figure 4.1: Innovative Finance Universe. Source: DealIndex Crowdfunding Report 2014.

Although the division contained in the figure above is useful to understand the segments influenced by innovative finance, boundaries can't be considered so strict and well defined, due to the intrinsic nature of open or semi-open systems typical of these kind of platforms; as a matter of fact we are going to present in this chapter the interrelations among them, and we will notice that as Shapiro (1985) said, a system entirely composed by open or semi-open architectures, becomes itself a single open architecture.

⁵⁸ 2015. Democratizing Finance, Alternative Finance Demystified. DealIndex Volume 1.

Despite the relevance in terms of size of the crowdfunding ecosystem, or more generally speaking of the innovative forms of financing, our work has been oriented from the very beginning on the influence that online digital platforms have on the M&A process; in previous chapters we in particular used a spotlight on the due diligence step and on the preparation of an auction finalized to the identification of the buyer through the sequential bidding rounds. These processes, as we are going to see more in detail in the next paragraph, are increasingly being hit by platforms belonging from the lower categories of Figure 4.1; in particular we are talking about categories labeled like *Online M&A; Data, Business Intelligence, News and Sentiment Analysis; Diligence Execution, Portfolio and Risk Management; Technology, Back Office and Advisory*. The first of these categories, online M&A, includes also the deal-sourcing step whose features we have already described when dealing with the complexity of networking for an investment bank. In many existing online platforms the four categories just reported can be found just in one single high versatile tool (e.g. Midaxo or DealMaker), or in different and interoperable platforms (e.g. Axial, RainMaker exc.). The scheme of a single integrated platform can be found in Figure 4.2. Whether reasoning under the point of view of a target or of the potential buyer, it makes no difference if the latter is a financial sponsor or a strategic acquirer, the left part of the flow chart shows actors providing inputs to the mechanism of the platform.

Figure 4.1: The Structure Of Online M&A Platforms. *Source: personal elaboration from different sources*



As already specified beforehand, the nature of multi-sided platform concerns indeed the collaboration of several entities, which according to their peculiarities will provide services that will enhance the value of the total output obtained by the client, regardless he is a target or a potential acquirer. As an example, one of the most useful resources of information constituting the “fuel” for the engine of the platform, is the work done by *external databases*; as a matter of fact, every M&A platform we examined (like DealMarket, DealGlobe, Midaxo exc.) has the possibility to import data directly from the most known databases providing industry market data, valuation models, news, and other essential materials necessary in the majority of the phases composing the process of M&A. Examples of these databases are, Bloomberg, PitchBook, S&P Capital IQ and many others. As we have seen before when dealing with the business of investment banks (IB), these actors are crucial, when hired by a target or an acquirer, for the undertaking of an M&A process; they have indeed the control of the whole process of merger or acquisition, and for this reason are one of the actors who the most can contribute to and gain from the platform. Although access to these online platforms is mostly purchased directly by targets and acquirers, (the proportion for Midaxo is 90% of companies looking for and running deals, and 10% of professionals and investment banks⁵⁹) investment banks can use this tool in mainly two ways: on the one hand, in order for the client to have a bird’s view of the progresses of the process, investment banks provide to this platform reports and updates about the task they are involved in, on the other these platforms can be used by the bank itself to structure the process from scratch; this second aspect is likely to be more relevant among small investment banks, who are not structured enough to afford a overhead investment in a proper IT infrastructure or in a built-in M&A deal flow management software. Furthermore professionals like attorneys and accountants use the platform to provide elaborated data if those directly got from databases need to be modified and made more ready to use; moreover, as already specified when dealing with the role of investment bank in the research of a deal, and the importance of building

⁵⁹ From an interview conducted directly to Soren Elbek, Midaxo Consumer Advocate Team Lead, on February the 2nd, 2016.

a network under the perspective of Roberts, these professionals can add to the platform contacts concerning potential new bidders or targets.

It goes without saying that the main input source of information for the platform is the owner itself, as we already said regardless of the status of target or acquirer. This is quite obvious since the client is the entity that is going to the market or looking for an acquisition, hence it embodies the first step from which every single valuation should start, and every hypothesis about synergies must refer to. The consequence of the previous consideration is that the information stream is not unidirectional, on the contrary the aforementioned actors will “upload” their contribute to the platform but at the same time “download” content made ready from other participants. This characteristic is mirrored and hence confirmed by the business model that the providers of these platforms use; as a matter of fact, the amount of money paid as subscription fee for the service is based not only on the time frame covered by the license, but mainly by the number of users that are allowed to access the platform.⁶⁰

The output of the platform, following the representation done in Figure 4.2, is basically embodied by the two elements of *Deal-Sourcing* and *Deal Flow Management* who are the results of a co-operation between the activity of *Networking* and *Business Intelligence*. The *Due Diligence* aspect has been thoroughly analyzed in the second chapter of the current work, and will be put in relation to platforms in the next paragraph, together with the other steps that are affected by the on-line shift.

4.2.Digitalization of Traditional M&A Steps

Throughout the work done so far, we have focused our attention not much on the valuation side of a merger or acquisition, rather on the features that the process leading to the closing of a deal usually hold. We have been able to identify crucial phases, sometimes deliberately split up on a pure theoretical attempt to better describe each of them, that have been undertaken since the first acquisition performed in the history of M&As. The description of modern platforms we have just introduced can't be considered complete unless an analysis of the consequences on the M&A steps is performed. In order to keep

⁶⁰ *Ibid.*

this rationale we deem proper to follow a chronological approach throughout the current work. In lights of this consideration, the first step can be considered, once a target or an acquirer decided to look for a merger opportunity, the *research of the deal*. As we already saw during the description of the influence of investment banks in the search of clients, the art of building the right network is not straightforward and it is subject to “soft skills” that goes beyond all the manuals ever written. However, despite the traditional view of networking as a practice involving face-to-face meetings, attendance to conferences and persuasive strategies of relationship buildings, an increasing interest is showed for platforms and social media. In a survey conducted on 2013, over a sample of 435 companies concerning the level of adoption of social media tools and analytics, a remarkable result of 40% of the surveyed entities declared to currently use analytic tools for their M&A process.⁶¹ At the same time, the sample gave another compelling result, concerning this time the use of social media among the surveyed firms; more than one third of them indeed make a large use of social media, and the breakdown into the different contexts in which it is deployed is as follows: 56% use them for the *target identification*, 30% for *due diligence*, and the leftover is divided between *valuation* and *negotiations*. Analytic tools are software able to process a huge and vast amount of data, often extracted from online websites, with the aim of turning spreadsheets with an infinite number of rows into easy-to-use dashboards. These are useful to analyze which among the numerous possibilities embodies a chance of investment. Social media are considered instead, by an interesting research, as “arrows in the entire quiver of deal origination, due diligence, negotiation and successful closing” of an M&A.⁶² Social media can perfectly fit in the requirements that we underlined when talking about networks built by investment banks; as a matter of fact, the indication to contact a vast amount of companies with the perspective of extracting from them just a few number of clients, can be deployed even better through social media platforms. LinkedIn for example lets the company connect to other firms met at conferences or other industry events, without the necessity

⁶¹ Dow Jones & Company Inc. 2014. How To Leverage Analytics and Social Media to Improve M&A. *Wall Street Journal*. <http://mobile.deloitte.wsj.com/cfo/2013/09/23/how-to-leverage-analytics-and-social-media-to-improve-ma/>

⁶² Fink, B. 2014. The Dealmaker’s Guide To Social Media. *The Axial Forum*.

of sending thousands of emails to reach the largest amount of possible clients or future targets/acquirers.⁶³ This tool lets the connected companies to be constantly updated about news feed of professionals and other firms operating in the industry. The depth of the contact that can be reached through such a mass platform is very low, but this is not always a bad thing; in a research conducted in 1967, Stanley Milgram sought to analyze the so-called *small world* phenomenon, that is to say the characteristic at the base of the famous *six-degrees of separation* way of saying. According to this theory of social networks, those who apparently have few connections with the target we want to reach, the so-called *weak ties*, will be those that more likely are going to connect to the desired target.⁶⁴ In this perspective social medias like LinkedIn will be likely means of effective links and could turn a simple “accept” into a future collaboration. Notwithstanding the power of this giant, other platforms tailored for M&A professionals are useful to build a network through which eventually find a convenient deal; Axial for example has a section of his platform dedicated to posting news and articles about the industries in which the professional or the company is active. The quality of the content posted is pivotal since it is one of the means through which communicate the effort and abilities of analysis to the audience addressed. A forum with a high turnover of quality articles about industries, economic trends and managerial best practices, will likely be used as a daily tool by many companies, hence become a place where a multitude of potential buyers and targets can meet.

Going back to the concept of platform we framed in the previous paragraph, concerning deal sourcing, tools like Axial or DealGlobe enable companies to search for potential deals among the audience of firms that subscribed to the platform itself. These platforms start from the same principle of those active in equity crowdfunding, that is to say putting in contact two entities with opposite objectives: on the one hand finding a source of capital, on the other investing in a firm deemed strategically or financially convenient, for all the reasons we discussed in the second chapter. We do this parallel since we are not interested

⁶³ *Supra*: Chapter 1 of the current work.

⁶⁴ Bruner, R. F. 2004. Applied Mergers and Acquisitions. New Jersey. *John Wiley & Sons Inc.*

in the nature of the users populating the platform, whether equity funds, private investors or companies that want to merge, rather in the mechanism that is being set up. Basically this kind of deal sourcing platforms allows companies looking for either a financial investor, a partner or directly an acquirer, to be noticed by the audience of institutions subscribed to the same platform. These two sides of a potential transaction can in practice create their own profile, selecting from an intuitive interface their specifics in terms of, for example, industry where to be active in, size of the deal sought, main financial insights, intentions of investment. The algorithm behind the platform will then, in a totally confidential way, generate a list of potential partners matching the requirements inserted. Depending on the type of subscription purchased the results will be more or less detailed, and the experience with already closed deals of the companies showed. This mechanism is particularly effective for the Middle Market segment, considered by many as the “sweet spot” for new entrants in the online space; as a matter of fact, a platform like DealIndex, powered by Intralinks, a name that will be recurrent throughout this chapter, features about 7,000 member companies with less than \$100 million in annual revenue, and more than 12,000 M&A professionals (Goldman is included, but the vast majority are local boutiques).⁶⁵

In the middle market indeed the deal flow, starting from deal sourcing, is spread over thousands of intermediaries; as a result the possibility to have an integrated platform able to match without waste of time and resources is a solution well accepted and used by firms, even under the correspondence of a fee. Platforms like this can be well accepted also by those companies that prefer not to advertise their projects online, for reasons related to strategy and confidentiality issues. The emergence of online platform is not threatening in any case the life of traditional off-line transactions; nonetheless, according to a survey conducted over a sample of 769 business owners, the first thing that 89% of CEOs starts relationships by going on line.⁶⁶ An interesting breakdown of this trend is contained in figure 4.3 that shows without room for discussion the

⁶⁵ Thomas, M. 2015. PE's New Virtual Reality: Online Deal Sourcing Platforms. *Middle Market Growth*, October 2015, pp 32-36. *Association of Corporate Growth*.

⁶⁶ Fink, B. 2014. What Do 89% of CEOs Do Before Talking to You? *Axial Forum*. <http://www.axial.net/forum/online-strategies-survey/>

prevalence of the Internet as the first approaching step, for all categories of institutions involved: buyers, sellers, intermediaries and lenders.

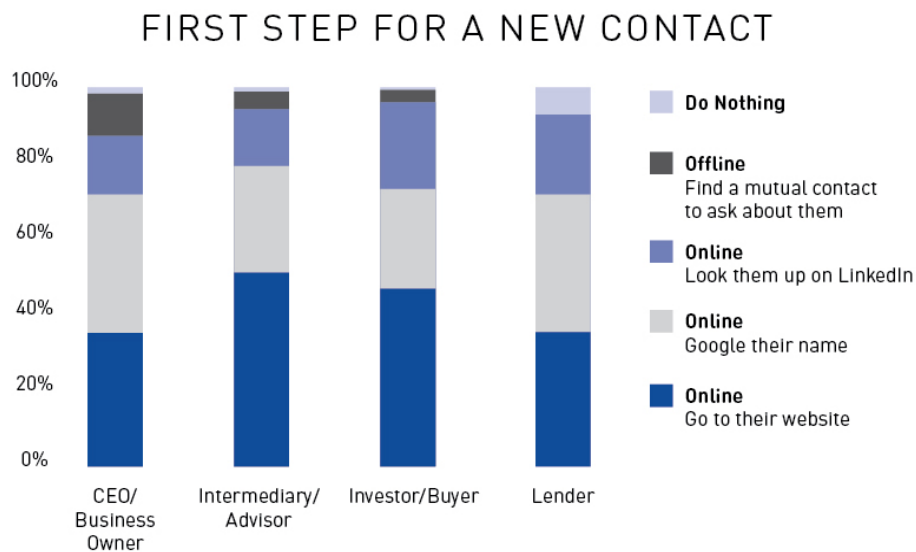


Figure 4.2 Breakdown of First Step for a New Contact. Source: Axial Forum, from "What Do 89% of CEOs Do Before Talking to You?"

To conclude the discussion about this first aspect of influence of online platform, we deem proper to present one of the many platforms available on the Internet, giving a look to the page dedicated to the research of the deal. We chose DealGlobe, an online platform that seeks to create "a truly end-to-end digital business model for M&A and capital raising, combining both online and offline capabilities."⁶⁷ The strengths of this platform born in 2013 are to be identified in the automation of the most standard part of the process through the proprietary algorithm for business match making, that together with analytic tools to assist individual and sector decision making, create a platform connected to the broadest audience ever. Moreover according to the model depicted in figure 4.2, this platform gives access to worldwide professionals that can support the buyer and the seller both in the online and offline deal process, through the section called Deal Partners, where all types of professionals (investment banks, consultancy companies, legal advisors exc.) can be easily reached. The layout of the platform section that is relevant so far, is characterized by a clear interface

⁶⁷ 2015. Democratizing Finance, Alternative Finance Demystified. *DealIndex Volume 1*.

through which the user can decide whether to be identified as a buyer, as a seller or as an intermediary.

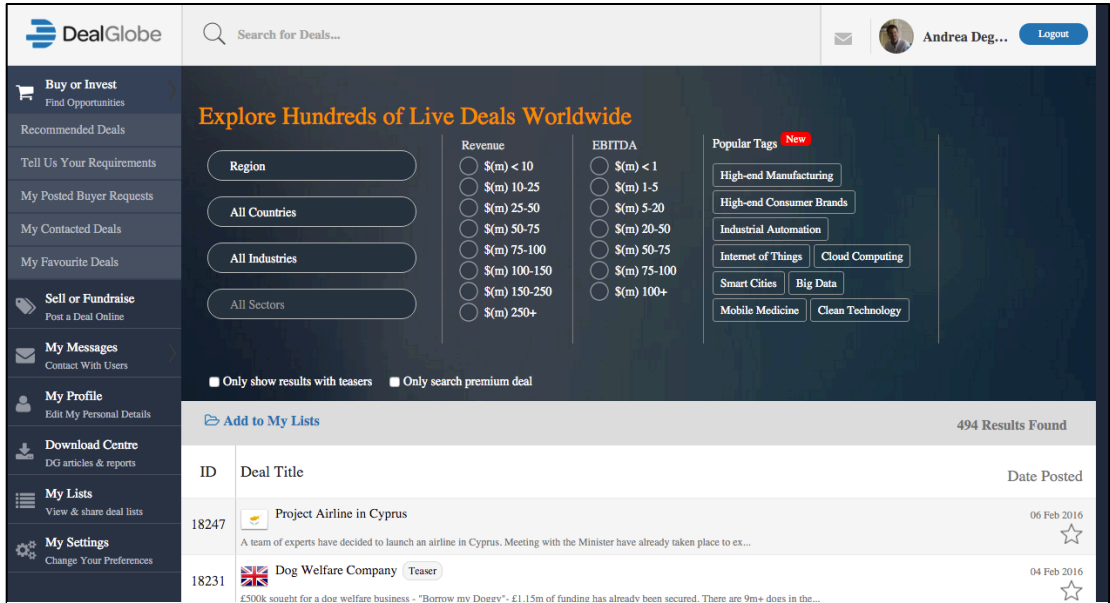


Figure 4.3: DealGlobe Deal Search Page. Source: dealglobe.com

Once the login is done, it is also possible to directly log in through the LinkedIn account, the user looking for a deal on the acquirer side can select the searching criteria as showed in figure 4.4. Starting from the choice of the country where to look for the deal, then the industry and sector, a further level of filter concerns the size of revenue desired (there are 8 bands starting from deals with revenue lower than \$5 million, then progressing with increased band width up to deals involving revenue of more than \$250 million). The amount of EBITDA is then used as a further mean of specification, matching 7 bands (from less than \$1 million up to more than \$100 million) to the previous range of revenue sought. Finally the search page is completed with the possibility to look for deal through straightforward tags, periodically refreshed according to the hottest sectors of the moment. Another search approach, different from the just described “pushing” one, concerns the buyer addressing to the audience a specific request in terms of the drivers described beforehand, (country, industry/sector, required financials), the description of an “Ideal Target”, type of transaction (Majority Acquisition, Minority Investment, Capital Increase). This research is completed with information concerning the buyer and the possibility to upload ad-hoc files for adding further detail to the company profile.

On the sell-side the process is similar, since the information required are specular to those used to filter the results by the buyer, however a further degree of detail is required for how it concerns the financials of the target company; the platform indeed asks for the last three years financials such as: Revenues, EBITDA, EBIT and Net Profit. This mask has a part reserved to the specification of the eventual mandate of the entity using the platform; as a matter of fact, in most of the cases, it is not directly the selling company to take care about the process, but rather is the intermediary that the seller hired to perform the searching process. If we take a look to the numbers of the platform, the total amount of deals we found were 495, and of these more than 90% were uploaded by intermediaries like investment banks, brokers and equity funds.⁶⁸

After the presentation of one of the platforms involved in the deal sourcing phase, the next step, and probably the one hit the most by this “online shift”, concerns the *M&A Deal Flow Management*. M&A deal flow management is a broad category that basically includes all the operations performed from the identification of a target until the closing of the deal. Entities active in the deal flow management are professional investors like venture capitalists, angel and seed investors, and other institutions who have many deals to manage in their portfolios, hence need a platform through which they can have a comprehensive view of their current investment situation. But what are the main issues related to the management of a portfolio of transactions? A survey performed by Intralinks in 2015 tried to shed a light on this topic. Linking to the previously described topic of deal sourcing, the research highlighted that 70% of the more than 100 corporations interested by the survey have analyzed more than 50 deals opportunities within the last 12 months.⁶⁹ Another relevant information is that more than two third of the interviewed professionals struggles to manage the information intensive deal process because of a lack of integrated data management tools. As a matter of fact, respondents declared to use Microsoft Excel spreadsheets (73%), Microsoft Word (28%) and Microsoft Outlook (32%) together with other document sharing solutions; however less than 18% of the professionals considered their data management process as *very effective*, while

⁶⁸ Sample of data downloaded form DealGlobe.com.

⁶⁹ 2015. The Art of Deal Management. *Intalinks*

60% of them deemed the latter *somehow effective*. These results are explained by the fact that professionals consider their data storage too much spread over different systems; furthermore they highlight a lack of integration with other productivity tools and the absence of best practices for tasking and process management. Considered that the process of M&A, as we have already seen, involves multiple actors who are often addressed with confidential documents (just 30% of respondents declares to never share confidential documents with any entity outside the organization), the possibility of jeopardizing confidential data is high. Although some actors who are experienced in M&As declared to have never shared confidential information to third parties, some materials must necessarily be made accessible to the counterparty; among the others we refer to those document we introduced in chapter three as marketing materials. These in fact are by definition documents born to be shared with other parties involved in the process. While teasers contain really little confidential information, and are indeed attached to the deal description contained in platforms like DealGlobe, the CIM (Confidential Agreement Memorandum) is a document that embodies a relevant degree of private information. In light of this consideration the latter is shared only after the signing of an NDA (Non Disclosure Agreement). These types of documents can be easily delivered to the parties involved giving them access to online platforms controlled by the administrator, who is able to give accessing rights and monitoring the log-ins.

Managing the M&A deal flow concerns also an appropriate approach to due diligence; we already described in detail what is usually meant with the term due diligence, and for this reason here we want to see how online platform can help conducting such pivotal step. Given the complexity of this phase, scheduling and building a conceptual map that for each task shows a breakdown of all the requirements that must be fulfilled is essential to effectively coordinate internal dynamics. If we take the example of the platform offered by Midaxo, we can have an idea of what this can in practice mean for a company. The Midaxo platform let the company using it to have a top-down visibility to the pipeline and individual

deals.⁷⁰ For each and every deal the company is active in, the platform creates a card that will be showed in the correspondent column of the step reached. Figure 4.5 comes from an interview had with Soren Elbek, Midaxo consumer advocate team lead who shared his desktop with us and let us take some screenshots for a better understanding of their product mechanisms. It's easy to notice the division in steps that matches with the frame we built in chapter three, spanning from the *initial study*, passing through negotiations and *due diligence*, ending with *transaction* and *signing and closing*.

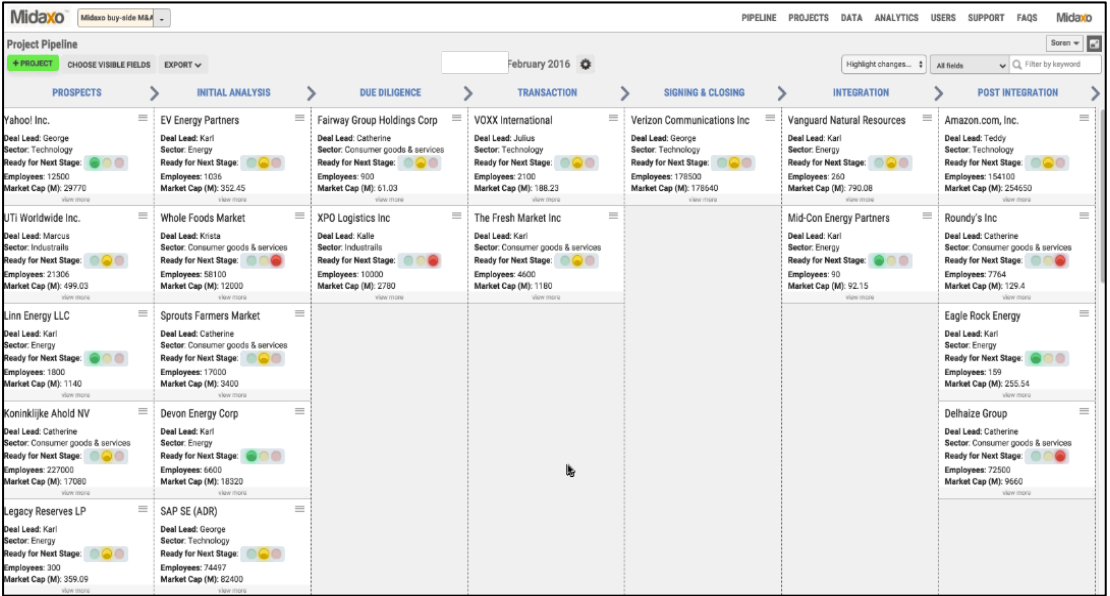


Figure 4.4: Midaxo Acquisition Pipeline. Source: Interview with Midaxo Consumer Advocate Lead

Clicking on each card lets the company further breakdown key deliverables and considerations regarding the deal at a particular stage. For example, due diligence for the Gamma project, will be composed by many other and more specific types of due diligence, such as legal, tax, business, financial due diligence and so forth. Each of the aforementioned steps will be then again broken down into subtasks that include objectives, best practice guidance, and templates. For each objective a series of best practices is attached, together with the link to document templates that the team in charge of designing the process wants the members of the company to use. According to data reported on Midaxo website, large clients of the platform can use checklist reaching the astonishing amount of

⁷⁰ Kilpi, K. 2015. Systematic Acquisition Process for Better M&A Governance and Reduced Deal Risk. *Introduction to Digital M&A*. <http://blog.midaxo.com/digital-ma/systematic-deal-evaluation-and-acquisition-process>

600 tasks for each deal; although of sure thoroughness this approach can't however be replicated among small companies approaching the M&A world for the first time. The issue highlighted by the interview we quoted beforehand, concerning the spread of documents across multiple systems and the difficulties of easily reaching them, is overcome by the practice of linking each task with the related necessary documents offered by the platform.

Another step that we recall from chapter two that can be subject to an innovation able of bringing higher efficiency and lower impact for the organization in terms of resources spent and lower interferences, is the set up of a *Data Room* by those platform providing a *VDR* service.

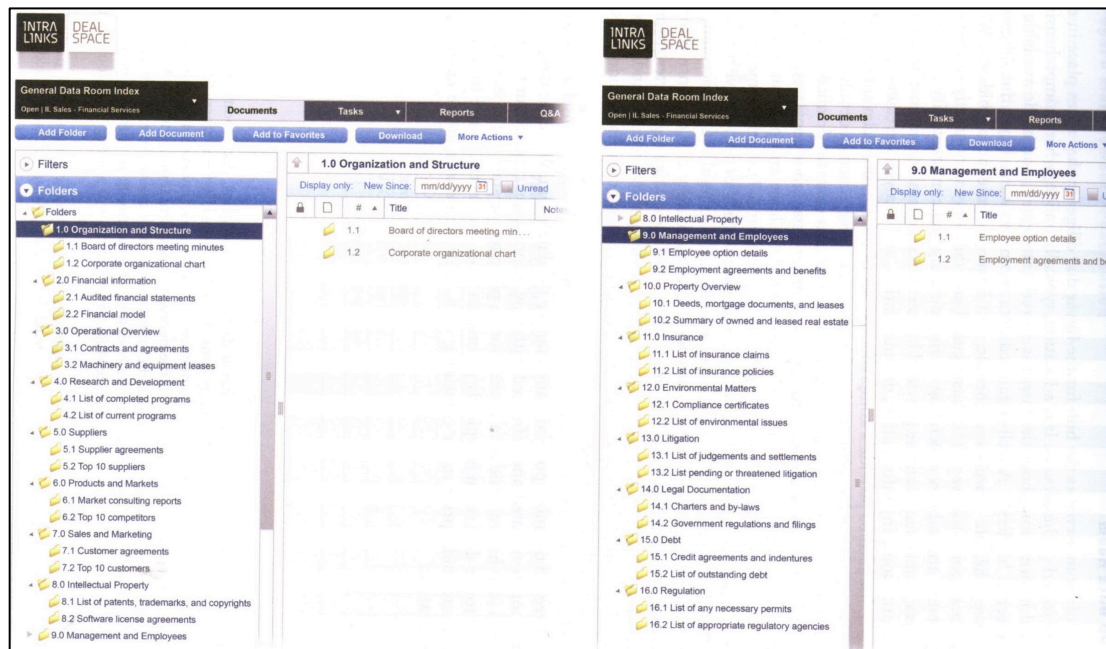


Figure 4.5: Dealspace Home Page. Source: Rosenbaum, J. 2013. *Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions*.

An example of a virtual data room widely used by companies is Dealspace, provided by Intralinks. On a recent interview Matthew Porzio, vice president of strategy and product marketing at Intralinks, stressed the fact that this platform can be used by multiple buyers at the same time, and the access of them regulated by the seller discriminating among which and for how long documents can be read by each buyer.⁷¹ A virtual data room, despite the powerful of the tool, is not something that can be built in a day, since the seller must set up months

⁷¹ Wallace, C. 2014. *Deal Sourcing: Due Diligence. Intralinks and The Deal*.

before giving access to the potential buyer, a deal team exchange in charge of preparing the documentation. A further tool for interoperability with this platform is the desktop application linking directly to the virtual data room: employee or advisors of the client will be able to upload files easily into Dealspace, simply dragging and dropping the folder. Ultimately, the wide amount of information contained in the virtual data room can be attached with a series of questions addressed by the participants to the platform using a further application of it; the latter lets the potential buyer and other participants to ask real time questions to the administrator concerning specific issues relating to the documents uploaded. Each question made is then recorded together with the answer, and tracked into the specific object it was addressed to, in order for the buyer not to answer again to the same question in the future, being sufficient to attach the link to the record of Q&As recorded in the platform.

Online platforms play an important role also in a last aspect of the M&A process, maybe the most crucial for the realization of the expected synergies we analyzed in chapter 2: *post merger integration*. After the deal is closed indeed, the clock starts ticking for the integration of the crucial aspects of the merger, starting from the integration of systems, of people and of processes. A technologic tool in this case is useful to ensure a centralization of all the multiple communications and documentation of the deal, through multiple spreadsheets and conference calls, following the trend that the use of virtual data room started.⁷² Such a tool is essential to streamline collaboration among the multiple actors involved, keeping them well informed of the progresses and the action required throughout the integration process. Moreover, since transferring data from the virtual data room to the integration team is not a process free of the risk of leaks, a platform that is able to integrate to the VDR will reduce the probability of jeopardizing the confidential information gathered there.

⁷² 2015. Intralinks. Dealmanager for Post-Merger Integration.

4.3. Benefits of the “Online Shift”

While last paragraph was meant to introduce technologic solutions in the field of the performance of M&A, here we want to underline how these technologies impacts this process, and what trends this novelty has triggered. In the first chapter we began our discussion focusing on the literature review that, apparently following a contingent wave, was committed in the research of some influence of the investment bank on the output of the merger or acquisition it was advising. In the attempt of theorizing the impact of what we call the *online shift* of the M&A process, we want to start from the hypothesis that Bowers and Millers (1990) investigated in the attempt of answering to some questions regarding, as already said, the relationship between features of the advisor and some measures of the effectiveness of the M&A process. The authors used the term *better merger hypothesis*⁷³ to describe one of the drivers leading a company to choose an investment bank instead of another. They point out that substantial searching costs are incurred in identifying a possible candidate to acquire or to whom sell the company. After our presentation it comes immediately to our mind that platforms active in the deal-sourcing step are extremely helpful for the aim of lowering those searching costs. We have seen that traditionally the entity addressed by companies seeking to merge in charge of lowering this barrier, is the investment bank. However platform such those we presented are tools that have the potential to streamline the searching process and therefore to reduce the related costs. Big investment banks like those presented as *top-tier* in chapter three are likely to have all the interests to invest in a proprietary technology providing a tailored platform able to store contacts and streamline the searching phase. This however is not necessarily true for smaller investment banks active, as we have seen, in the middle market, or more broadly in the market of non-public companies. As a consequence these small boutiques can take enormous advantage of these platforms, complementing their expertise in deal valuation, negotiation and due diligence, with a platform able to remove geographical, industry and sectorial natural limits intrinsic to their nature. Moreover is rational to advance the hypothesis that a higher number of

⁷³ Bowers, H. M., Miller, R. 1990. Choice of Investment Banker and Shareholders Wealth of Firms Involved in Acquisitions. *Financial Management*, 19, pp 34–44.

companies intentioned to undertake a merger or an acquisition will more likely opt for “going alone”. Evidences however tells us that the majority of companies using deal-sourcing platforms are advised by investment banks or other professionals, confirming the hypothesis advanced by some researchers (see chapter one of the current work), that investment banks often count on a reputational effect based on their previous experience. Interesting numbers are given by a research conducted in 2013 concerning online deal-sourcing platforms. Over 2,440 M&A professionals responded to the survey, and an interesting result is that 55% of these professionals declared to currently being using an online deal-sourcing platform to support their process; moreover, the 85% of these declared to have marketed at least one deal online in the last 12 months.⁷⁴ Among the questions asked to the sample, there was one concerning the forecast of the impact of these platforms on the phase of deal originating; the answer saw 69% of the respondents affirming that having an online platform populated by M&A professionals would make deal sourcing and marketing more efficient. Despite what it could be thought about these platforms, numbers says that using online networks don’t mean simply building up a community, on the contrary they effectively lead to closing deals: more than a half of respondents affirm to have concluded a negotiation that originated from online networks. Platforms like these, as we already introduced in their presentation, are not meant to substitute traditional best practices (like networking building through conferences attendance, frequent contacts with different types of M&A professionals, keeping in touch with past clients exc.) in deal-sourcing, rather can be seen as extremely effective ways to supplement them. Furthermore online platforms can be useful to level the playing field of M&A advisors, because of the already described lowering of searching costs, likely leading to a higher competition among professionals, with the overall result of pushing down the level of fees charged to either the sell-side and the buy-side. The dimension of time could also be affected, since a more effective and seamless process potentially could lead to a shrink in the timing of the whole process, being deal sourcing the incipit of every merger or acquisition. Time is furthermore analyzed

⁷⁴ 2013. How Deals Get Done: New research shows the growing influence of deal sourcing networks and social computing on the M&A industry. *Intralinks*.

under another field of mergers and acquisitions; a research conducted by CASS University in collaboration with Intralinks, who is as already seen a provider of online platform solutions, tries to shed a light on the relation between timing of the due diligence process and some drivers of the M&A performance. If the last consideration we did about the benefits brought by online networks concerned the lower time needed to complete a deal, the results of this study evidence how to a shorter time to completion of the deal corresponds a lower shareholders' post closing return.⁷⁵ This result can be the consequence of multiple reasons, like the fact that longer due diligence allows the acquirer to fully make a realistic evaluation, and also to more likely discover problems that the target could have deliberately kept hidden and may have gone unnoticed if the due diligence was conducted more quickly. These two apparently fighting results are though not to be considered part of two distinct phenomena, since the shorter time that the use of online deal-sourcing platforms embodies, is part of the searching of the deal step, while the longer time leading to higher shareholders' return refers to the due diligence process. There is no doubt that the use of virtual data room is a mean by which companies can track their performance resulting from previous M&A operations; this is true since the centralization of the VDR platform lets companies, for example, control how many times the bidder accessed the database, how many single user of each bidder or professional logged into the platform, how many pages have been uploaded. All these data can be an important source for companies to frame a best-practice strategy for future operations, and for researchers to have a sounder base to identify possible correlation among abnormal returns and specific behaviors of bidders. A direct benefit for a target using an integrated virtual data room is the increasing ease in the valuation on how a bid is legitimate: a higher bid done by a bidder who used for a few time the virtual data room, could be deemed less reliable than a lower bid resulting from a more detailed analysis.

⁷⁵ M&A Research Centre at CASS Business School and Intralinks. 2013. When No One Knows - Pre-announcement M&A activity and its effect on M&A outcomes. *Intralinks*.

Conclusions

The descriptive nature of the chapters we presented in the current work, let us have an overall idea of what are the pillars underpinning operations of merger and acquisition, specifically under the point of view of the process involved. We opened with a focus on the attention put by the academic literature on the analysis of the features of an investment bank; in particular we examined the attempt to find a correlation between these and optimal outputs resulting from an acquisition or a merger, like lower takeover premium for the acquirer or abnormal returns of the new resulting entity. Although as we have seen the overall results are ambiguous among the several researches performed within the last 30 years, what we were interested in was to underline the role of the advisor as the crucial actor able to lower information asymmetries and to be the cornerstone for the reduction of searching costs, according to the theories we examined in the first chapter. With the description of the main tasks that an advisor is supposed to perform within mergers and acquisitions, we further investigated in much detail what are the reasons making this figure so essential for the accomplishment of the operation. The question that we then asked concerned the potential influence that an ecosystem like the Internet could have on this aspect of the M&A processes. A brief analysis of the trend to a platformization of the Internet in many and diverse fields of the global economy let us notice that the principal contribution of new technologies dealt with the possibility to access information in an easier way.

In particular, we observed that existing online platforms for the undertaking of M&As had the common feature of making a large amount of reliable information available to a wide range of audience; an audience that is somehow involved in mergers or acquisitions, like potential buyers or targets, professionals like accountants or attorneys and advisors like investment banks. We identified the phases that we considered the most affected in the *deal-sourcing*, *deal flow management*, *due diligence* and *post-merger integration*.

As is evident, the description has been performed under a qualitative point of view, using past researches and interview to experts and managers of companies that have constituted once the buy- or the sell-side of a deal, and

through the analysis of the structure of existing platforms. A quantification of the benefits brought by these platforms in terms, among the others, of lower (higher) takeover premiums paid (received) by buyers (targets), reductions of fees charged by advisors or increases of the abnormal returns of the resulting merged entity, would be possible; however such an approach would require an availability of data on the performance of those companies that has used these platforms for, let's say, the origination of the deal or the management of the due diligence step. As a matter of fact the vast majority of firms using these tools belongs to the middle market, making hard finding data about them, also as a consequence of the confidentiality kept by firms when dealing with sharing of best practices.

The overall impression is though that these platforms can't be, so far, fully substitutes of traditional brick and mortars processes of M&A performed by advisors; hence the adage "the lawyer who defends himself has a fool as a client" is in part to be considered true, especially for those operations requiring a complex technical background also as a consequence of the size of the consideration or of the dynamics running among targets and bidders. Notwithstanding this non-disruptive nature, benefits for companies of the middle market is the reduced dependence on external professionals for the described steps of the merger or acquisition, as a consequence of the higher substitutability of their once unique tools (networks of experts, bargaining power with commercial banks, exc.). Further benefits are the result of the increased competition within the industry of M&A advisors, that is more and more oriented to give a value to the ability of the single advisor to have intuitions about a good deal (from here the belief that running an M&A is considered an art than a mere technique), rather than to the size of a network, to the availability of higher resources to market the deal or the degree of prior relationship with the client.

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Dealing with the Crowd: the Influence of Online
Platforms on the Process of M&A

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Introduction

The current work is prompted by the important role that the Internet ecosystem is nowadays increasingly gaining. From an innovative technology that was born with the principal purpose of transmitting information in a faster way, it has gradually turned into a dimension within which business opportunities flourish, both creating brand new sectors and enhancing the scope and efficiency of the existing ones. Industries that have been run for centuries under a brick and mortar approach have been hit by disruptive dynamics that offered the opportunity of a metamorphosis for some of the leading companies operating within them. As a result of this innovative push enabling an instant communication among each and every country around the world without, at least theoretically, any limitation but those imposed by the infrastructural boundaries, there has been an increasing “online shift” of the most traditional economic dynamics. An ancient practice like the commerce between firms and consumers, traditionally limited by geographical boundaries, has been revolutionized as a result of the benefits brought by the immediacy of communications and the increasingly effectiveness of transports, able to reach a widespread audience in a little time. We are talking about the e-commerce business, a sector constituting a gargantuan opportunity for those existing players able to adapt to environmental changes¹, but at the same time a sentence of death for those unable to timely invest in the right direction. Similar considerations can be done for the industry of audio-visual entertainment, where online platforms have substituted classic channels like TV and cinemas, forcing the existing players to re-invent their business models to capture consumers’ attention (someone named this new trend as a “war for the eyeballs”). The list of examples could go on for long, and the existing literature has indeed deeply analyzed this phenomenon, spanning from the

¹ Gaspari, R. 2015. New e-commerce frontiers: Rocket Internet, Carmudi Case Study. The digital strategy behind an online car marketplace. LUISS Thesis.

telecommunications industry to services less focused on the final consumer, rather on b2b industries.

Although the most evident impact of Internet and of its “platformization” can be observed on the consumer side, crucial changes are going on also within the relationship among companies, namely in the business-to-business sector. As a matter of fact the stagnation period that the US and Europe have been passing through, pushed companies to look for solutions that enable them to save the limited amount of resources coming from the market, looking for best-practices that would have let them enhance their efficiency avoiding lowering the quality of their output. Moreover, the consequences of the sub-prime crisis of 2008 dramatically shrank the opportunities of financing, pushing toward the direction of inventing new forms of capital funding, both equity and debt. The so-called innovative finance is a new branch of the financing industry that is emerging thanks to the development of new forms of funding prompted by the Internet but not limited to it. Examples of such innovations are the emergence of platforms for raising capital from audiences of not-qualified investors, in other words the crowdfunding, and for the invention of new financial instruments like mini bonds or particular types of derivatives. This orientation to the crowd, as we already said, is possible given the narrowing of barriers deriving from information asymmetries, and the possibility for everybody has a connection to the World Wide Web, to access online platforms. Innovative finance doesn’t however deal only with capital raising, but refers also to those platforms hitting sectors traditionally lead by few players, like the M&A industry. The flourishing of platforms through which streamline the complex process that must be performed within the context of mergers and acquisition, is creating opportunities for different type of actors; from one side, existing players involved in the advisory to sellers and buyers can use tools that let them reaching higher degrees of efficiency in several steps of the acquisition; on the other hand, advisors previously limited by the narrow scope of their business and by informative barriers, can now enhance their playing field fostering competition among incumbents who have so far perceived low degrees of competitive threats.

We have structured the work starting with a description in Chapter 1 of the contest within which the platforms we have briefly examined are emerging; in particular, we deem necessary to analyze the literature that sought to shed a light on the relationship between characteristics of an advisor and the output of the merger performed, in terms of significant drivers like abnormal returns or takeover premiums paid. The chapter is completed with the explanation of the main reasons pushing companies to look for an advisor that takes care of the whole process, and in the end all these considerations are linked to the emergence of online M&A platforms.

Chapter 2 seeks to describe the contest within which M&A operations traditionally take place through the description of endogenous and exogenous factors. Furthermore it's completed with the analysis of the deal origination and the due diligence steps, in preparation for a broader description of the process conducted through the mechanism of auctions done in the next chapter.

Chapter 3 goes back investigating the role of the advisor, in particular starts from the analysis of the industry of investment banks, the typical actors performing M&A advisory. We describe in detail their business model and range of services offered, with a spotlight on their role in the coordination of auctions, one of the means through which mergers and acquisitions are performed.

The last and more crucial chapter is entirely dedicated to read the context so far depicted under a digital-oriented light, shifting from a traditional brick and mortar approach to an online based one. In order to have a bird's eye of the state of the art of the innovative finance ecosystem, we report a brief description of the main activities included under this broad category. The focus is however on the solutions built for conducting mergers and acquisitions; in particular we compare the traditional way of carrying out certain crucial phases of the process to the one involving the use of online platforms.

CHAPTER 1: M&A ADVISORY, A TREND TOWARD DIGITALIZATION

When it comes to deal with the topic of mergers and acquisitions, academics are pushed toward the aim of shedding light on the drivers responsible of the optimization of the process. Besides the classic managerial concerns, that we are though going to deeply analyze in the next chapters, it is interesting to follow the

stream of researches that put the advisor on the first line, attributing to it a relevant power of influencing the output of an operation of M&A.

We do that digging into a literary review of researches conducted within the last thirty years, and it is possible to notice the attention that academics reserved to recurrent variables concerning the service offered by the advisor to targets and buyers. In particular the dimensions we deem relevant to the current work, that have been investigated by several researches on M&A advisors, concern their *ranking and reputation*, their *nature* and existence of a *prior relationship with their clients*, and *the contract fees charged*. **Ranking and reputation** of the advisor is one of the most used concerning the research of a correlation with the performance of the advisor when working for the two parties involved in an acquisition; in the most recent of the numerous studies conducted, the characteristics took as proxies for the effectiveness of the job performed by the advisor are the deal completion rate and the time taken to complete the deal. The **nature of the advisor and prior relationship with clients** concerns the type of financial intermediaries that are usually hired as advisors by targets and buyers involved in an acquisition process, often investment banks. As a matter of fact some investment banks, despite the name, are allowed to act not only in the field of investment, but also to accept deposits like the more classic commercial banks do; this bank model sees as part of the business the emission of loans and financing, along with the investment leg from which they take the name. As a consequence of these considerations the sell-side and the buy-side of an acquisition face the dilemma of choosing as advisor a pure investment bank or an institution active also in the commercial banking business. Is there a potential advantage for either a target or a buyer to hire an advisor belonging to one category instead of the other? The literature sought to answer this question starting from the consideration of a previous relationship between the client and the bank, namely a lending relationship. The largest effort has been however put by researchers on the topic of **contract fees**.

After the review of the most relevant studies concerning the correlations emerging from an advisory relationship during an M&A, we want to dig into the theory behind the decision by firms to hire an investment bank as an advisor; this section reports the two opposite perspectives of a company that is starting

to look for a potential buyer or a target: on the one hand, the literature supporting the decision to hire an intermediary able to conduct the operation through the help of the *three hypotheses* investigated by Servaes and Zenner (1996). On the other, the presentation of the point of view of those researches observing the effect of the choice of going alone, hence performing the M&A process using *in house* resources or others than investment banks. Regarding the first topic, the *transaction cost hypothesis*, states that firms choose investment banks because they are able to analyze the details and convenience of the acquisition at a lower cost than the firm itself, whether the latter is the target or the bidder. A further hypothesis is the *asymmetric information hypothesis* that posits the advisor as a figure able to destroy the asymmetric information between the potential buyer and the target. Finally the *contracting costs hypothesis* puts the investment bank in the position of being able to reduce agency costs of the acquirer since it certifies the value of the acquisition. The conclusions of the authors are that the *transaction cost hypothesis* has good evidence and is supported by the empirical research performed while contracting hypothesis and the asymmetric information one are instead found to have weak evidence as responsible for the use of an investment bank in an M&A. Specular to the considerations done so far we can shape the mindset that leads to the opposite conclusion of not hiring an advisor for coordinating the M&A process. Notwithstanding the limited evidence found by the researchers concerning the effectiveness of information asymmetries in the decision whether or not to choose an advisor, the ability of the seller or buyer of independently reaching a sufficient amount of potential buyers to which address their deal is a deterrent to the use of an intermediary. Furthermore, even though it's said that the lawyer who represents himself has a fool as a client, a further reason for which companies decide to go alone in operations of M&A could be related to the previously presented transaction costs hypothesis. As a matter of fact, if a company deems that fees and all other costs related to the service offered by an investment bank will be higher than the gain benefited from the acquisition, then it will likely decide to go alone.

Although the limited frame we have built so far about operations of merger and acquisition, the footprint that the role of the advisor has always had in this field

it's evident. As we have seen, issues related to the informational dimension acquire a pivotal relevance when dealing with acquisitions or, more in general, with the raising of capitals by private companies. In recent years the dramatic growth of the audience connected with each other has created an environment, the World Wide Web, where the concept of platform has emerged as a tool able to carry out tasks more efficiently than in the traditional ways. In other words, every segment of our brick and mortar day life has been affected. Despite recent developments however, many consider the M&A and the private capital markets two of the marketplaces not yet affected by Internet. We consider the M&A advisory segment to be potentially affected by this digital trend through different points of view; an example is the deal-sourcing phase, because extremely sensitive to an enhancement of the connectivity and ability to get in touch with a large audience of professionals and companies. Going on through the process of M&A, that we will frame in the prosecution of this work, further possibilities offered by online platforms come out, spanning from the production and distribution of marketing materials, to the building of tools useful for an effective application of the due diligence process.

CHAPTER 2: THE CONTEXT OF M&As

Although the width of operations gathered under the famous acronym M&A is incredibly vast, a wide literature has so far been able to index and describe them all. The common feature of all the definitions deals with the existence of, at least, two parties: the acquirer – also called the “Buyer” - and the entity object of the operation, called the “Target”. These are considered the two main characters triggering the complex mechanism of mergers and acquisitions. The reasons prompting firms to merge with or acquire another company can be found in **exogenous factors** that include: Legislative context (phenomena like *deregulation, liberalization of trades, antitrust issues, accounting models allowed*), economic conditions (the *composition of labor force, currency exchange rate, level of globalization, debt and equity markets conditions, consumer demand and supply*), industry features (like the level of *technological improvement of the company, the development of advanced financial tools, level of competition among market players, firm organizational structure*).

Besides the rationales that could narrowly be investigated in the macroeconomic environment, the most influencing variables forming a base for M&As must be sought inside the companies themselves, in the **endogenous factors**: costs synergies (*headcount reduction, consolidation of overlapping facilities, achievement of higher purchase power*) revenue synergies and financial synergies.

Together with the description of the factors leading firms to merge, it is interesting to go in depth with the process itself and the steps it involves. We start with the importance of information, because as every searching process, deal origination needs an environment where information is the main and most present element, along with the ability of the searcher to properly exploit this fundamental factor. Under which perspective can we affirm that information acts as a base for every deal origination? The incredible amount of information about potential deals in a globalized world is a feature that needs a certain degree of experience to be analysed and exploited in an effective way, for this reason a firm looking for a deal must focus on *intelligent-gathering operations*.

After deal research, we conceptually identify *due diligence* in the specific case of M&A as a support to the valuation process, the check of the accuracy of the figures and representations contained in the merger agreement, the set up of the post-merger integration and the fulfillment of the disclosure requirements of investors. To be able to satisfy such an amount of requirements, the process should be based on pillars that must be considered universally accepted: when conducting due diligence *thinking like an investor* is essential. Furthermore due diligence must be considered in a whole as *part of the risk assessment tools of the acquirer*. The target should decide hence whether to perform a *broad-scope due diligence* or to prefer a *narrow-scope* one.

During the due diligence process documents like Letter Of Intent (LOI) are produced, whose content usually refers to the terms of the due diligence process, such as its deadline, eventual fees to be charged in case of break up and distribution of process expenses. After this first document approval due diligence enters the phase of thorough analysis, when teams of both target and acquirer starts to interact more frequently to produce the material that is fundamental to the buyer in order to be able to evaluate and plan a proper post

merger integration phase. An essential tool for the success of due diligence is the so-called *Data Room*. A traditional data room is intended to be a place, possibly far from the target's facilities, where all the documents that the buyer requested are stored, and where the latter's diligence team can go and perform an inspection. It contains detailed information about the whole target's organization, from business features, to environmental and legal issues, passing through tax and accounting, touching every single aspect of the seller. The due diligence process goes along with negotiations toward the shaping of the terms of the agreement with the buyer who has been considered the most suitable one by the target. The negotiation phase finishes with the beginning of the post merger integration, and with the exchange of the consideration.

CHAPTER 3: BETWEEN THE ACQUIRER AND THE TARGET: THE ROLE OF INVESTMENT BANKS

Despite the name suggests investment banks to be involved in activities that concern investing capitals, this is not necessarily true, and most of the times, this part is not the core of the business. The reality is that investment banks act often as intermediaries, in particular linking entities that are issuing financial instrument for the sustainability of their business activities, to those institutions that desire to take advantage of these opportunities for investing reasons or to enhance their current businesses.

A useful tool to resume the different businesses, where investment banks are usually involved, is the *product-client matrix*. This table reports the universe of existing clients of an investment bank on the first column vector of the matrix, while in the row one the macro-categories of services each and every investment bank is involved in, we can easily frame the map with which we can locate within the activity of the entity. Investment banks differ among themselves also along two main dimensions: the width of the products offered to their clients (from strict investment banking to services typical of universal banking) and the geographical reach of their business. As a result, we identify 5 types of investment banks: *Global Universal Banks*, *Global Investment Banks*, *Global Boutiques*, *Domestic Universal Banks* and *Local Boutiques*.

When investment banks are hired by firms to act as advisors of a process of M&A, they could be in charge of the management of *auctions*. The term auction refers to a process that enables the target of a sale to be marketed by multiple perspective buyers. Auctions can be *narrow based* or *broad based*, depending on the number of potential buyers contacted; usually in a narrow-based auction are considered only strategic buyers, while in the broad-based one also financial sponsors are considered. Investment banks, or more generally speaking advisors, will be in charge of distributing the so-called *marketing material* to the audience of potential buyers. The two pivotal marketing documents presented to the potential buyer are the *Confidential Information Memorandum (CIM)* and the *Teaser*. After the receipt and the evaluation of the teaser, if interested in receiving further information and data, the potential bidder is required to sign a *Non Disclosure Agreement (NDA)*, also called *Confidentiality Agreement*). The objectives of this document are the clarification of the confidentiality at the base of the sharing of insights, the specification of which entities are authorized to have access to such information and the description of other binding terms to which the two parties have to agree. After these marketing materials have been sent, the *first round* of offers can start. Through the *initial bid procedure letter* the target specifies the terms until which the bidders must submit their first, non-binding, preliminary bids, for this reason called *first round bids*. The first round is concluded with an opinion the advisor gives to the sell-side management concerning offers received; it will be the target itself, together with internal advisors, taking the decision about which bidders let pass to the second round. The second round of an auction coincide in its vast majority with the process of due diligence we introduced in the previous chapter, and its official kick-off is constituted by a *management presentation*. Moreover in this phase due diligence is already being performed; hence stages like *preparation of a data room* and organization of *site visits* are completed. A pivotal moment is the distribution of the *final bid procedure letter*, a document that acts exactly like the one submitted at the beginning of the process, but at a later stage, and often along with the draft definitive agreement. In the end the *definitive agreement* is the most important document produced and signed and consists of a legally binding contract containing the details of the transaction, signed prior to the

receipt of the final bid; if the seller accepts the final offer, the definitive agreement is automatically enforced and starts producing its effects.

At this point, once final bids have been evaluated, the phase of *negotiation with selected bidders* can start and during this phase a clarification of the remaining due diligence issues is performed; this is the last chance to work on the provisions of the definitive agreement, after the first draft, its later narrowing and definitive handing.

CHAPTER 4: THE USE OF COMPLEMENTARY ONLINE PLATFORMS FOR M&A OPERATIONS

This chapter has the objective of showing the state of the art of the emerging world of innovative finance, a term that is often referred to new ways of financing, like P2P lending and crowdfunding; however the term innovative finance gained enhanced width, embracing broader branches of the economic activity of a firm, beyond the previous limited field of financing.

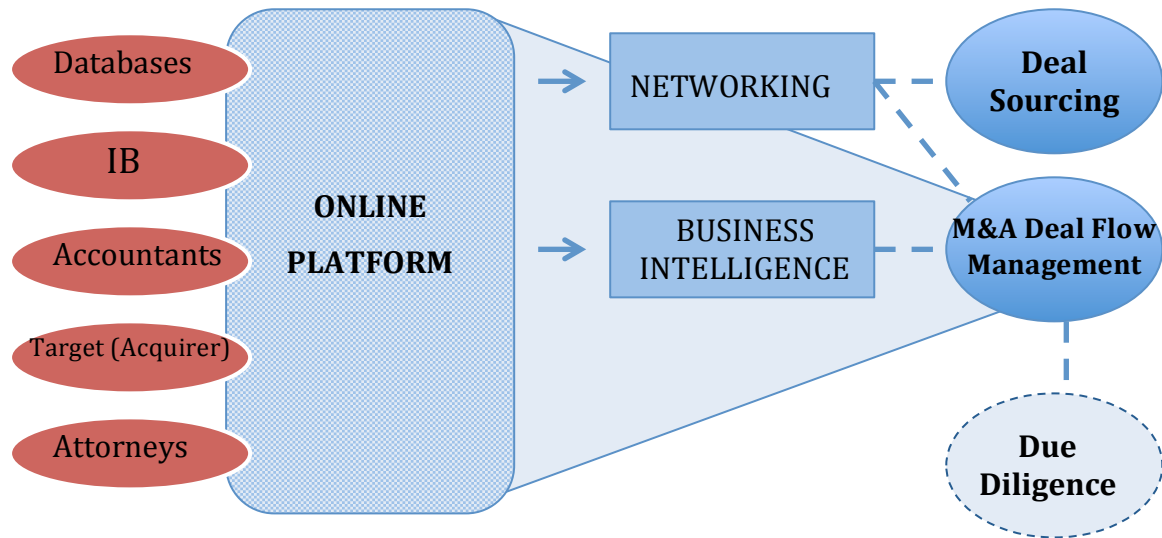
In the light of the complexity and peculiarity of all the possible M&A designs, it would be indeed utopian thinking about such an undertaking be conducted a hundred per cent through online processes. That's why the platforms we are going to present in this section have been created leveraging the technologic possibilities that Internet gave in terms of network externalities.

One of the most relevant innovations that the growing of the Internet has brought to our lives is the availability of on-line platforms. With the term *platform* we identify a tool characterized by network externalities, a term that economically speaking deals with the enhanced benefit that a user of a platform gets as the number of users active in the same platform increases. As a matter of fact, these platforms respond to the need that firms involved in M&A undertakings showed in recent years: to have a comprehensive view of the process they are going to go through, have clear the different possibilities of acquisition available in the market, a bird's eye view of the actors involved, and the ability to easily link to professionals working on the same acquisition project. The scheme of a single integrated platform can be found in Figure 4.2.

The left part of the flow chart shows actors providing inputs to the mechanism of the platform. The nature of multi-sided platform concerns indeed the collaboration of several entities, which according to their peculiarities will

provide services that will enhance the value of the total output obtained by the client. The output of the platform is basically embodied by the two elements of *Deal-Sourcing* and *Deal Flow Management* who are the results of a co-operation between the activity of *Networking* and *Business Intelligence*. Also the *Due Diligence* step is affected by these platforms, together with other steps that we are about to describe.

Figure 4.1: The Structure Of Online M&A Platforms. *Source: personal elaboration from different sources*



The description of modern platforms we have just introduced can't be considered complete unless an analysis of the consequences on the M&A steps is performed. In order to keep this rationale we deem proper to follow a chronological approach. In lights of this consideration, the first step can be considered, once a target or an acquirer decided to look for a merger opportunity, the *research of the deal*. Platform like social networks and analytic tools (e.g. Google Analytics) help companies create a network of professionals and companies that once would have been possible only through years and years of experience in the industry. Moreover tools like Axial or DealGlobe enable companies to search for potential deals among the audience of firms that subscribed to the platform itself. Basically this kind of deal sourcing platforms allows companies looking for either a financial investor, a partner or directly an acquirer, to be noticed by the audience of institutions subscribed to the same platform. These two sides of a potential transaction can in practice create their own profile, selecting from an intuitive interface their specifics in terms of, for example, industry where to be active in, size of the deal sought, main financial

insights, intentions of investment. The algorithm behind the platform will then, in a totally confidential way, generate a list of potential partners matching the requirements inserted.

After the presentation of one of the platforms involved in the deal sourcing phase, the next step, and probably the one hit the most by this “online shift”, concerns the *M&A Deal Flow Management*. M&A deal flow management is a broad category that basically includes all the operations performed from the identification of a target until the closing of the deal. Entities active in the deal flow management are professional investors like venture capitalists, angel and seed investors, and other institutions who have many deals to manage in their portfolios, hence need a platform through which they can have a comprehensive view of their current investment situation. Managing the M&A deal flow concerns also an appropriate approach to due diligence.

The set up of a *Data Room* is a practice streamlined by those platforms providing a *VDR* service. Multiple buyers can use this type of platform at the same time, and their access is regulated by the seller discriminating among which and for how long documents can be read by each buyer. A virtual data room, despite the power of the tool, is not something that can be built in a day, since the seller must set up months before giving access to the potential buyer, a deal team exchange in charge of preparing the documentation. Moreover a tool for interoperability with this platform is the desktop application linking directly to the virtual data room: employee or advisors of the client will be able to upload files easily into a platform like Dealspace, simply dragging and dropping the folder. Ultimately, the wide amount of information contained in the virtual data room can be attached with a series of questions addressed by the participants to the platform using a further application of it; the latter lets the potential buyer and other participants to ask real time questions to the administrator concerning specific issues relating to the documents uploaded.

Online platforms play an important role also in a last aspect of the M&A process, maybe the most crucial for the realization of the expected synergies we analyzed in chapter 2: the *post merger integration*. A technologic tool in this case is useful to ensure a centralization of all the multiple communications and documentation of the deal, through multiple spreadsheets and conference calls,

following the trend that the use of virtual data room started. Moreover, since transferring data from the virtual data room to the integration team is not a process free of the risk of leaks, a platform that is able to integrate to the VDR will reduce the probability of jeopardizing the confidential information gathered there. Such a tool is essential to streamline collaboration among the multiple actors involved, keeping them well informed of the progresses and the action required throughout the integration process.

After our presentation it comes immediately to our mind that platforms active in the deal-sourcing step are extremely helpful for the aim of lowering the searching costs that we presented in the homonym theory. We have seen that, traditionally the entity addressed by companies seeking to merge in charge of lowering this barrier is the investment bank. However platforms such as those we presented are tools that have the potential to streamline the searching process and therefore to reduce the related costs. Big investment banks like those presented as *top-tier* in chapter three are likely to have all the interests to invest in a proprietary technology providing a tailored platform able to store contacts and streamline the searching phase. This however is not necessarily true for smaller investment banks active, as we have seen, in the middle market, or more broadly in the market of non-public companies. As a consequence these small boutiques can take enormous advantage of these platforms, complementing their expertise in deal valuation, negotiation and due diligence, with a platform able to remove geographical, industry and sectorial natural limits intrinsic to their nature. Moreover is rational to advance the hypothesis that a higher number of companies intentioned to undertake a merger or an acquisition will more likely opt for “going alone”. Platforms like these, as we already introduced in their presentation, are not meant to substitute traditional best practices (like networking building through conferences attendance, frequent contacts with different types of M&A professionals, keeping in touch with past clients exc.) in deal-sourcing, rather can be seen as extremely effective ways to supplement them. Furthermore online platforms can be useful to level the playing field of M&A advisors, because of the already described lowering of searching costs, likely leading to a higher competition among professionals, with the overall result of pushing down the level of fees charged to either the sell-side

and the buy-side. There is no doubt that the use of virtual data room is a mean by which companies can track their performance resulting from previous M&A operations; this is true since the centralization of the VDR platform lets companies, for example, control how many times the bidder accessed the database, how many single user of each bidder or professional logged into the platform, how many pages have been uploaded. All these data can be an important source for companies to frame a best-practice strategy for future operations, and for researchers to have a sounder base to identify possible correlation among abnormal returns and specific behaviors of bidders. A direct benefit for a target using an integrated virtual data room is the increasing ease in the valuation on how a bid is legitimate: a higher bid done by a bidder who used for a few time the virtual data room, could be deemed less reliable than a lower bid resulting from a more detailed analysis.

Conclusions

The descriptive nature of the chapters we presented in the current work, let us have an overall idea of what are the pillars underpinning operations of merger and acquisition, specifically under the point of view of the process involved. We opened with a focus on the attention put by the academic literature on the analysis of the features of an investment bank; in particular we examined the attempt to find a correlation between these and optimal outputs resulting from an acquisition or a merger, like lower takeover premium for the acquirer or abnormal returns of the new resulting entity. Although as we have seen the overall results are ambiguous among the several researches performed within the last 30 years, what we were interested in was to underline the role of the advisor as the crucial actor able to lower information asymmetries and to be the cornerstone for the reduction of searching costs, according to the theories we examined in the first chapter. With the description of the main tasks that an advisor is supposed to perform within mergers and acquisitions, we further investigated in much detail what are the reasons making this figure so essential for the accomplishment of the operation. The question that we then asked concerned the potential influence that an ecosystem like the Internet could have on this aspect of the M&A processes. A brief analysis of the trend to a platformization of the Internet in many and diverse fields of the global economy

let us notice that the principal contribution of new technologies dealt with the possibility to access information in an easier way. In particular, we observed that existing online platforms for the undertaking of M&As had the common feature of making a large amount of reliable information available to a wide range of audience; an audience that is somehow involved in mergers or acquisitions, like potential buyers or targets, professionals like accountants or attorneys and advisors like investment banks. We identified the phases that we considered the most affected in the *deal-sourcing*, *deal flow management*, *due diligence* and *post-merger integration*.

As is evident, the description has been performed under a qualitative point of view, using past researches and interview to experts and managers of companies that have constituted once the buy- or the sell-side of a deal, and through the analysis of the structure of existing platforms. A quantification of the benefits brought by these platforms in terms, among the others, of lower (higher) takeover premiums paid (received) by buyers (targets), reductions of fees charged by advisors or increases of the abnormal returns of the resulting merged entity, would be possible; however such an approach would require an availability of data on the performance of those companies that has used these platforms for, let's say, the origination of the deal or the management of the due diligence step. As a matter of fact the vast majority of firms using these tools belongs to the middle market, making hard finding data about them, also as a consequence of the confidentiality kept by firms when dealing with sharing of best practices.

The overall impression is though that these platforms can't be, so far, fully substitutes of traditional brick and mortars processes of M&A performed by advisors; hence the adage "the lawyer who defends himself has a fool as a client" is in part to be considered true, especially for those operations requiring a complex technical background also as a consequence of the size of the consideration or of the dynamics running among targets and bidders. Notwithstanding this non-disruptive nature, benefits for companies of the middle market is the reduced dependence on external professionals for the described steps of the merger or acquisition, as a consequence of the higher substitutability of their once unique tools (networks of experts, bargaining

power with commercial banks, exc.). Further benefits are the result of the increased competition within the industry of M&A advisors, that is more and more oriented to give a value to the ability of the single advisor to have intuitions about a good deal (from here the belief that running an M&A is considered an art than a mere technique), rather than to the size of a network, to the availability of higher resources to market the deal or the degree of prior relationship with the client.