1. Introduction

It is widely accepted that leading business organizations are the key driving force behind development of the world economy and society, and that businesses that successfully integrate other business, that integrate financial, social, and environmental management objectives to determine their future and the future of society are the engines for growth and sustainable economic development in the global marketplace, at the same time creating added shareholder value.

According to Damodaran[1] "any asset can be evaluated", in other words, anything that may create some sort of benefit, such as money or something with sentimental value can be evaluated in terms of monetary or exchanging value.

The process of valuing a company may have different purposes such as M&A, IPOs, pricing shares, settlement and may use different types of valuation methods. These methods should be consistent with the purpose of the valuation so that it may reach the real value of the company being analyzed. The use of inappropriate valuation method may result in opposite reality that will lead to enormous losses due to the fact these methods are based in different principles. The understanding of principles is crucial so that the analyst in charge of a valuation can choose the right approach. This project will focus on assets valuation, more specifically valuation methods of companies for M&A purposes.

Even thought, the subject "Valuation of companies" counts with a huge bibliography, according to Martelanc at al. (2005)[2] still there are lots of blanks on theories that are subjected to analyst's false assumption. This study seeks to explore factors that influence international financial institutions and their professional valuators' choice of valuation methods when valuing companies in joint ventures or mergers & acquisition decision making processes. It also

[1] Damodaran, Aswath – Damodaran on Valuation Security analysis for investment and Corporate Finance (1994)
[2] Avaliação de Empresas –Um guia para Fusões e Aquisições – Martelanc, Pasin & Cavalcante (2005) page 2

examines the manner in which these decisions are made by professionals working in the subsidiaries of major international financial institutions located in Brazil.

2. The problem in more concrete terms

Based on the above-mentioned observations, it was decided to raise some thoughts and came up with the following problem:.

1. What factors tend to influence valuation methods adopted by international financial institutions when assessing the values of companies?
2. Which methods are most used by professionals in financial institutions located in Brazil and what are the main reasons for their choices?
3. What are the implications of the valuation methods for the Merger & Acquisition and Post-merger integration process?

2.2 Scope and Limitations

The aim of this project is to analyze the various valuation methods available and the reasons professionals opt to use them depending on the motives.

The theoretical discussions in the project focus attention mainly on the various approaches to valuation in Merger and Acquisition decision within an international context. But in order to provide a stronger base for an understanding of the valuation methods, I have provided a broader discussion of the motives for mergers and acquisitions in international contexts as well as some of the post-acquisition integration challenges that managers face.

The empirical part of the project is limited to information from only 9 professionals involved in valuations in some major international financial institutions, having branches in Brazil. The limited number of respondents in the empirical part has been dictated by my resource limitations and the sensitive nature of the type of information I seek to obtain. This poses serious limitations on the extent to which my study provides a comprehensive insight into the subject of investigation.

2.3 Project's Design

Introduction: An overview on Merger and Acquisition world and the most used methods to come up with a price of a company, leads the project to the problem formulation.

Methodology approach: Discussion and definition of an applied methodological approach: which one has been chosen and the reasons. This choice has a big influence on the way the project is designed.

Theoretical Part: Using the concepts, theories and models learned at the university that draws the theoretical framework, will also guide the project. An in-depth analysis of an M&A deal, including the motives for a Cross-Border M&A, the post-merger phase and the various valuation methods used by the market, are the core issue of this chapter.

Analysis (Empirical Part): By applying a survey with 09 Investment Banking professionals, an analysis of the answers will support the conclusion and an answer to the problem formulation. Due to the current global crisis that affected the market in all continents, I have decided to interview a specialist in M&A from PriceWaterhouseCoopers (São Paulo office) to evaluate the impact of the crisis on M&A deals.

Conclusion: At last some recommendations regarding the results of the survey will support the conclusions.

3. Methodology

The choice of an appropriate methodology is crucial for conducting a good and trustworthy analysis in business. It helps to create high quality in knowledge, make our research reach deeper, clear to the methodological root of knowledge. The research design can reflect our assessment of the nature of knowledge we are planning to generate using this specific approach. Using this approach in connection with the applied theories attempt to answer and solve the problems cleared out in the problem formulation. The discussion in this part will be mainly based on the book "Methodology for Creating Business Knowledge" written by Arbnor and Bjerke, 1997.

3.1 Methodological Approaches

A methodological approach impacts the results of every study. It can be defined as "an approach for creating knowledge; based on a set of ultimate presumptions, using methods within a field of activity or a subject area"[3]. Three main methodological approaches have been developed and used in business studies as well as in the other social sciences:

3.1.1 Analytical Approach

The Analytical approach is the oldest way of doing the study. It is based on the assumption that the world is objective and independent of its observers. It also has a summative character saying that the whole is a sum of all parts. To be more precise, if it is possible to measure all parts of the phenomenon, then the sum is the total value of the whole phenomenon. As a result, the maximized value of the whole may be achieved when each of the part has the biggest value. The other assumption of the analytical approach is the cause → effect relation. It means that the relationships between parts are examined to explain the phenomenon. The more causes are found, the better and more complete view is constrained. It is important to include both types of causal relations - deterministic and stochastic -

[3] Arbnor, I. & Bjerke, B, *Methodology for Creating Business Knowledge*, 2nd. edition SAGE Publications,USA, 1997, p. 454

to create a stronger and fuller explanation. As a result a better knowledge is generated about causal laws, mechanism and logical structures. Moreover, knowledge about the whole is created through the explanation of its parts and it is universal and quantitative. Therefore, the scientific ideal of analytical approach is to explain objective reality as full as possible in form of causal relations.

3.1.2 Systems Approach

The systems approach was developed based on the analytical approach as a reaction to presumptions of the latter. According to the systems approach the world is objective or objectively accessible. It is assumed that reality is a system, constituted by components and relationships among them. That means that all components are "often mutually dependent on each other"[4]. It is important to mention, that in this approach the whole is not the sum of its parts as internal relations exist in the system. The way the parts are put together also provides important information as the interaction between the individual components may cause synergy effect. It means that the parts can create more or less than the sum of the individual parts depending on if the synergy is positive or negative. Differently from the analytical approach, the environment of the system should be discussed[5]. As far as the knowledge in the systems approach is concerned, it is unique and qualitative as it is generated about the unique system model and its type of cohesion. According to this approach, there is a need to look for forces that influence the particular system as a whole. Such connections are called finality relations between purposeful forces and their results. The better explanation of finality relations is, the better understanding of the particular whole is created. What is more, the parts are explained through the characteristic of the whole of which they are parts. As a consequence, the created knowledge does not result in an absolute theory, but it can be adapted to the other specific case to give "a rather unique picture of the new system"[6]. Therefore, the scientific ideal of the systems

[4] Arbnor, I. & Bjerke, B, *Methodology for Creating Business Knowledge*, 2nd. edition SAGE Publications,USA, 1997, p. 65
[5] Arbnor, I. & Bjerke, B, *Methodology for Creating Business Knowledge,* 2nd. edition SAGE Publications,USA, 1997, p. 51
[6] Arbnor, I. & Bjerke, B, *Methodology for Creating Business Knowledge*, 2nd. edition SAGE Publications,USA, 1997, p. 70

approach is to describe and explain a certain system, especially its finality relations (positive/negative synergy) in the particular environment.

3.1.3 Actors Approach

According to the actors approach the world is subjective. To be more precise, there are many worlds - every individual has its own different world as it was generated from his own experience and interpretations of reality. The reality exists only as a social construction and is nondependent of its observers - the social world is made by the actors in interaction. Such presumption stresses the importance of understanding and explaining relations between parts, and between parts and the whole. According to the actors approach this kind of relationships are called the dialectical relations that are defined as "the relations between that which people create and how these creations in turn influence the creators"[7]. In order to describe dialectical relations there is a need to understand the relations among interpretations made by various actors in relation to different levels of meaning structure. Because of constant transformation in individual understanding due to mutual communication, continues development process of the reality is created. The knowledge according to the actors approach is unique and qualitative and it is generated about social constructions, subjective meaning structures and dialectical relations. What is more, knowledge about the whole is created through the understanding of the actors and their finite provinces of meanings. Through results depend on the actors, but they also may include certain general contribution that may be useful in future studies. Therefore, the scientific ideal of the actors approach is dialectical explanation and understanding of the social construction.

3.1.4 Choice of Methodological Approach

In the previous paragraphs, it was settled up a general framework of the methodology approach normally used in the Business research. By doing this, it was intended to make an understanding of each approach as well as find the linkage of these three approaches with this project so that proper choice of the

[7] Arbnor, I. & Bjerke, B., *Methodology for Creating Business Knowledge*, 2nd. edition SAGE Publications,USA, 1997, p. 71

approach can be attained. Following on this intention, I will try to analyze the possibility of using each approach under the situation of this project so that final conclusion can be made on the choice of the methodology approaches.

The Actors Approach is to some aspect useful for social research because society itself is composed of human activities, but it also has incompatibility in applying itself to the project. If perception is taken of reality in the actor's approaches and apply that in this project, we will easily find the outcome of the project is useless for my purpose since the one's perception of reality is depended on other subjective idea which can be various from mine. The actors approach assumes that the reality is a social construction made by the actors in interaction in their environment, creating reality (ontology → social world). The knowledge in the actors approach (hermeneutic approach) is generated under social constructions and logical argumentation relations (epistemology → dialogue). If it is wished to create the perception of reality, it requires permanent communication with not only the companies which have involved in an M&A transaction but also other actors involved such as dealers, customers, stakeholders etc, which is impossible not only due to limited resources but its essential ridicule (otherwise the project will become a permanent project). However, some part of the elements within the conception of science, scientific ideas in the actor's approach can be reasonable, for example the reality creation process itself can be an impulse of the knowledge promotion which to some extent can remedy the weakness in adopting other approaches, say system approach. In addition actor's approach is not completely incompatible to the system approach since the system approach acknowledges the reality can be objective accessible which to some extent accept the subjective element within the system.

The System approach is not either, compared with other approaches, the most appropriate to solve the problem stated in the problem formulation regarding the capabilities and time schedule as believed. The system approach takes a holistic, rather than a reductive perspective on the problem, the system is more than its parts, better, creates a synergy between parts (ontology → synergy). Knowledge is created about the whole, which explains the parts through the characteristics of which they are parts (epistemology → cohesion). The social world can be seen as systems which is objective or at least objective accessible and include different components, the system exists in an environment, it is unique and the knowledge it creates does not fit into the purpose of this project, since the intention is to analyze the various valuation methods and not recreate them.

The Analytical Approach is frequently used in the natural science research but has certain limitations in being used in the social science research, especially business research. The analytical approach represents clearly explanatory knowledge (Positivistic/Explanaticist approach), that assumes the reality is objective, the world is constituted by independent parts, the whole is a sum of parts (ontology → cause and effect - an induced act cause an expected reaction). The knowledge on analytical approach is universal and quantitative and it is generated through explanations (epistemology → only one true). Firstly, having in mind that the purpose is to analyze the existing valuation methods and fully understand them, analytical approach has elements of human beings in a completely objective way and therefore be defined by mathematic models and anticipated by mathematic deduction and calculation. As mentioned before, this project aims in solving isolated problem since analyzing only the components. Based on the arguments, analytical approach would be suitable to be used in this project.

3.1.5 Methodology Objectives

This project aims in coming up with the most used valuation methods by Financial Institution and its professionals, let alone the appropriate use of them by taking into consideration the characteristics of the company being valuated.

The empirical evidence for the study derives from information from 9 professional valuators who work in some of the major financial institutions with branches in Brazil. These professionals work directly in Merger and Acquisitions deals and

IPO's (Initial Public Offering) that kindly participated in responding the survey (name of respondents is listed on appendix 1).

The data were collected in two stages. In the first stage I sent questionnaires to 9 people (questions of the survey are enclosed on appendix 2). After collecting information, the survey was organized in a way to identify incomplete and not consistent responses. Second, I interviewed 04 of the respondents in order to gain a deeper insight into some of their answers and to understand some of the motives underlying their choices of valuation methods and what they consider to be the consequences of their choices for management decisions.

Following the theoretical part, the methodology of the survey will be presented. Due to the peculiarity of the issue, a combination of the result of the survey and its analysis were made without breaking into questions one by one.

4. Theoretical frame

4.1 Introduction to M&A

4.1.1 A general overview on M&A Transactions in the world

M&A and corporate restructuring are a big part of the corporate finance world. Every day, Wall Street investment bankers arrange M&A transactions, which bring separate companies together to form larger ones. When they're not creating big companies from smaller ones, corporate finance deals do the reverse and break up companies through spin-offs.

Not surprisingly, these actions often make the news. Deals can be worth hundreds of millions, or even billions, of dollars. They can dictate the fortunes of the companies involved for years to come. For a CEO, leading an M&A can represent the highlight of a whole career. And it is no wonder we hear about so many of these transactions; they happen all the time. Next time you flip open the newspaper's business section, odds are good that at least one headline will announce some kind of M&A transaction.

The total value of mergers and acquisitions (M&A) around the world reached almost $4 trillion, beating the previous record, set in 2000, by $500 billion. The total for 2006 was four times the nominal figure for 1996, and eight times the figure for 1986. Even after taking inflation into account, that leaves a remarkable growth rate.

The 2000 record owed much to the "new economy" stock market bubble. Lots of the deals done then soon proved horribly misguided — including the biggest and most disastrous marriage of the year, between AOL and Time Warner. When the bubble burst, M&A activity went into a deep slump, from which its current strength marks a striking recovery.

That precedent prompts a crucial question: will the M&A binge of 2006 have a similar aftermath? Martin Lipton, of the law firm Wachtell, Lipton, Rosen & Katz, one of the shrewdest observers of the M&A scene, thinks not. Each year-end he sets down his expectations for the year to come, and this time round he is optimistic. "Absent a political or military catastrophe", he says, "2007 will be another record year."

Should we share his confidence? Well, maybe. His bullishness is based on a belief that the year ahead will bring more of the same. The long list of forces stimulating M&A in 2006 will be even stronger in 2007. And, certainly, it is hard to imagine — absent catastrophe — a loss of momentum in several of the areas identified by Mr. Lipton.

Privatization of infrastructure seems likely to expand further, allowing more integration, especially across borders. Firms are likely to continue offloading non-core businesses as they become ever more focused on the few activities they do best. Corporate governance pressures on them to do so will surely intensify, the more so as new American rules for disclosure of executive pay put bosses under greater scrutiny.

Nor is there obvious reason to question Mr. Lipton's confidence that mergers and leveraged buyouts will continue to take root in countries where, until recently, there was very little such activity.

Likewise, Mr. Lipton is surely right to expect that poison-pill defenses against hostile bids will continue to be dismantled in response to shareholder pressure; and that boards of directors will be reluctant to "just say no" to unwanted takeover bids, in the way that they once did with Mr. Lipton's encouragement.

But much of the history of M&A makes depressing reading. It is full of deals done for bad reasons, often to satisfy a boss's imperial ambitions. Even when a deal is justified by a plausible-sounding business strategy, the strategy can quickly prove misguided (take a bow, AOL-Time Warner).

Many of mergers in 2006 took place within relatively disaggregated industries — energy, financial services, mining and metals, health care and media — where it was widely believed that consolidation would produce big cost savings and higher profits. Similar beliefs are likely to drive further M&A in all those industries in 2007. Little, if any, of this consolidation seems in danger yet of being blocked on antitrust grounds, though Mr. Lipton may be over-optimistic when he predicts a continuation of “enlightened” policies. The European Commission, for one, seems to be limbering up for a bout of “unenlightened” intervention, judging from its recent review of the Sony-Bertelsmann Music merger.

As for America's antitrust authorities, they are said to be sniffing around the consortiums that private-equity firms form to do deals too big for any one of them alone. A serious crackdown in this area seems unlikely. But if one it did occur, M&A activity might also be dampened by political and regulatory moves against the hedge-fund industry, that despised cousin of private equity.

But Mr. Lipton gives much his personal impression when he says that 2007 will see the continuation of “tremendous global liquidity, with readily available debt financing at attractive rates”.

True, the global financial system looks as healthy today as it has ever done. Bank profits and balance sheets are especially strong. But beneath the surface there may be hidden weaknesses — perhaps in banks' exposure to hedge funds or to credit derivatives.

A hiccup or two here could have serious consequences for the capital markets, all the more so if accompanied by an unexpected weakening of the economy. The amount of liquidity available last in 2006 to finance M&A activity arguably owed something to irrational exuberance — and experience suggests that animal spirits can vanish from the markets as inexplicably and rapidly as they appear, although M&A activity famously comes in waves.

Sure, M&A deals grab headlines, but what does this all mean to investors? To answer this question, this project discusses the forces that drive companies to buy or merge with others, or to split-off or sell parts of their own businesses.

One plus one makes three: this equation is the special alchemy of a merger or an acquisition. The key principle behind buying a company is to create shareholder value over and above that of the sum of the two companies. Two companies together are more valuable than two separate companies - at least, that's the reasoning behind M&A.

This rationale is particularly alluring to companies when times are tough. Strong companies will act to buy other companies to create a more competitive, cost-efficient company. The companies will come together hoping to gain a greater market share or to achieve greater efficiency. Because of these potential benefits, target companies will often agree to be purchased when they know they cannot survive alone.

4.1.2 Distinction between Mergers and Acquisitions

Although they are often uttered in the same breath and used as though they were synonymous, the terms merger and acquisition mean slightly different things.

What is the difference between merger and acquisition? The merger occurs when two or more companies join forces to become a more powerful one while the latter happens when one company acquires the majority and controls another one.

When one company takes over another and clearly established itself as the new owner, the purchase is called an acquisition. From a legal point of view, the target company ceases to exist, the buyer "swallows" the business and the buyer's stock continues to be traded.

In the pure sense of the term, a merger happens when two firms, often of about the same size, agree to go forward as a single new company rather than remain separately owned and operated. This kind of action is more precisely referred to as a "merger of equals." Both companies' stocks are surrendered and new company stock is issued in its place. For example, both Daimler-Benz and Chrysler ceased to exist when the two firms merged, and a new company, DaimlerChrysler, was created.

In practice, however, actual mergers of equals don't happen very often. Usually, one company will buy another and, as part of the deal's terms, simply allow the acquired firm to proclaim that the action is a merger of equals, even if it's technically an acquisition. Being bought out often carries negative connotations, therefore, by describing the deal as a merger, deal makers and top managers try to make the takeover more palatable.

A purchase deal will also be called a merger when both CEOs agree that joining together is in the best interest of both of their companies. But when the deal is unfriendly - that is, when the target company does not want to be purchased - it is always regarded as an acquisition (hostile takeover).

Whether a purchase is considered a merger or an acquisition really depends on whether the purchase is friendly or hostile and how it is announced. In other words, the real difference lies in how the purchase is communicated to and received by the target company's board of directors, employees and shareholders.

4.1.3 Synergy

Synergy is the magic force that allows for enhanced cost efficiencies of the new business. Synergy takes the form of revenue enhancement and cost savings. By merging, the companies hope to benefit from the following:

- Staff reductions - As every employee knows, mergers tend to mean job losses. Consider all the money saved from reducing the number of staff members from accounting, marketing and other departments. Job cuts will also include the former CEO, who typically leaves with a compensation package.
- Economies of Scale - Yes, size matters. Whether it's purchasing stationery or a new corporate IT system, a bigger company placing the orders can

save more on costs. Mergers also translate into improved purchasing power to buy equipment or office supplies - when placing larger orders, companies have a greater ability to negotiate prices with their suppliers.

- Acquiring new technology - To stay competitive, companies need to stay on top of technological developments and their business applications. By buying a smaller company with unique technologies, a large company can maintain or develop a competitive edge.
- Improved market reach and industry visibility - Companies buy companies to reach new markets and grow revenues and earnings. A merge may expand two companies' marketing and distribution, giving them new sales opportunities. A merger can also improve a company's standing in the investment community: bigger firms often have an easier time raising capital than smaller ones.

That said, achieving synergy is easier said than done - it is not automatically realized once two companies merge. Sure, there ought to be economies of scale when two businesses are combined, but sometimes a merger does just the opposite. In many cases, one and one add up to less than two.

Sadly, synergy opportunities may exist only in the minds of the corporate leaders and the dealmakers. Where there is no value to be created, the CEO and investment bankers - who have much to gain from a successful M&A deal - will try to create an image of enhanced value. The market, however, eventually sees through this and penalizes the company by assigning it a discounted share price.

4.1.4 Varieties of Mergers

From the perspective of business structures, there is a whole host of different mergers. Here are a few types, distinguished by the relationship between the two companies that are merging:

- Horizontal merger - Two companies that are in direct competition and share the same product lines and markets.
- Vertical merger - A customer and company or a supplier and company.
- Market-extension merger **-** Two companies that sell the same products in different markets.
- Product-extension merger **-** Two companies selling different but related products in the same market.
- Conglomeration - Two companies that have no common business areas.

There are two types of mergers that are distinguished by how the merger is financed. Each has certain implications for the companies involved and for investors (such as withholding tax):

- Purchase Mergers - As the name suggests, this kind of merger occurs when one company purchases another. The purchase is made with cash or through the issue of some kind of debt instrument; the sale is taxable. Acquiring companies often prefer this type of merger because it can provide them with a tax benefit. Acquired assets can be written-up to the actual purchase price, and the difference between the book value and the purchase price of the assets can depreciate annually, reducing taxes payable by the acquiring company.
- Consolidation Mergers - With this merger, a brand new company is formed and both companies are bought and combined under the new entity. The tax terms are the same as those of a purchase merger.

4.1.5 Acquisitions

An acquisition may be only slightly different from a merger. In fact, it may be different in name only. Like mergers, acquisitions are actions through which companies seek economies of scale, efficiencies and enhanced market visibility. Unlike all mergers, all acquisitions involve one firm purchasing another - there is no exchange of stock or consolidation as a new company. Acquisitions are often congenial, and all parties feel satisfied with the deal. Other times, acquisitions are more hostile.

In an acquisition, a company can buy another company with cash, stock or a combination of the two. Another possibility, which is common in smaller deals, is for one company to acquire all the assets of another company. Company X buys all of Company Y's assets for cash, which means that Company Y will have only cash (and debt, if they had debt before). Of course, Company Y becomes merely a shell and will eventually liquidate or enter another area of business.

Another type of acquisition is a reverse merger, a deal that enables a private company to get publicly listed in a relatively short time period. A reverse merger occurs when a private company that has strong prospects and is eager to raise financing buys a publicly-listed shell company, usually one with no business and limited assets. The private company reverse merges into the public company, and together they become an entirely new public corporation with tradable shares.

Regardless of their category or structure, all mergers and acquisitions have one common goal: they are all meant to create synergy that makes the value of the combined companies greater than the sum of the two parts. The success of a merger or acquisition depends on whether this synergy is achieved.

Summing up, the strategic intend behind M&A may lay in the CEO's vision and leadership, their perception of good possibilities of growth by selling more products, reaching new markets, gaining more competences. Furthermore, there are the Synergies. A successful M&A transaction has to consider the benefits of acquiring or merging another company. Production, sourcing, logistics, sales, marketing, distribution channels, after sales support, new products development, administration and financing are the main points that should be evaluated in order to reach synergies and reap good results.

4.1.6 Understanding the motives for M&A

The main reasons for M&A can be characterized by companies seeking for an industrial restructuring, consolidation of their acquisitions, improvement on their operations, expansion on market (growth opportunity), divesture of non-core assets/businesses and so on. Therefore, the main reason is to create shareholder value (building value to grow the firm to grow the earnings).

The driving forces for M&A may relay on rapid growth in size or getting bigger market share, diversification of range of products from the acquiring company, gaining market power and dominance, not to mention the access to strategic proprietary assets. We also have to mention the gains of global competitive environment, achieving synergies in local and global operations. By becoming larger, the company also gets benefits from size in negotiation, labor costs, access to raw materials, etc.

Synergy is the word in M&A. There is some factors such as shared activities, knowledge, skills, image, values that may result in larger the economy of scale that will also result in reducing costs and increasing gains.

Companies are often driven by the wrong motives for growth. When organic growth is considered not to satisfy the ambitious goals set by top management for rapid growth in size or market share, it can be observed that companies plunge into a range of unrelated acquisitions and diversify their business in such a way that negative synergy or antagonism occurs.

The integration process often fails and substantial resistance from employees and other stakeholders generates a tremendous negative impact on the business. This is specifically true in cross-border M&A whereby cultural differences hinder successful cooperation and integration. Corporate cultures, corporate climates, values and beliefs vary to a large extent in the global market place, making it extremely difficult to work together to achieve common goals.

In their pursuit for achieving economies of scale, cost savings, and making redundant functions and employees of the firms concerned, management often does not fully understand how to address the factors that are critical for success.

Business integration, be it vertical or horizontal, should be based on achieving synergies related to adequate value chain management. Interdependency between value chains provides a sound basis for synergies and value creation. Congeneric and conglomerate mergers have an even greater chance to fail because common goals, shared activities, and shared knowledge and skills are less likely to occur in unrelated businesses.

4.1.7 Understanding the M&A Process

In order to start up a M&A deal, some steps must be taken carefully, and a final agreement is the instrument to guarantee a good result for both parties.

4.1.7.1 An overview

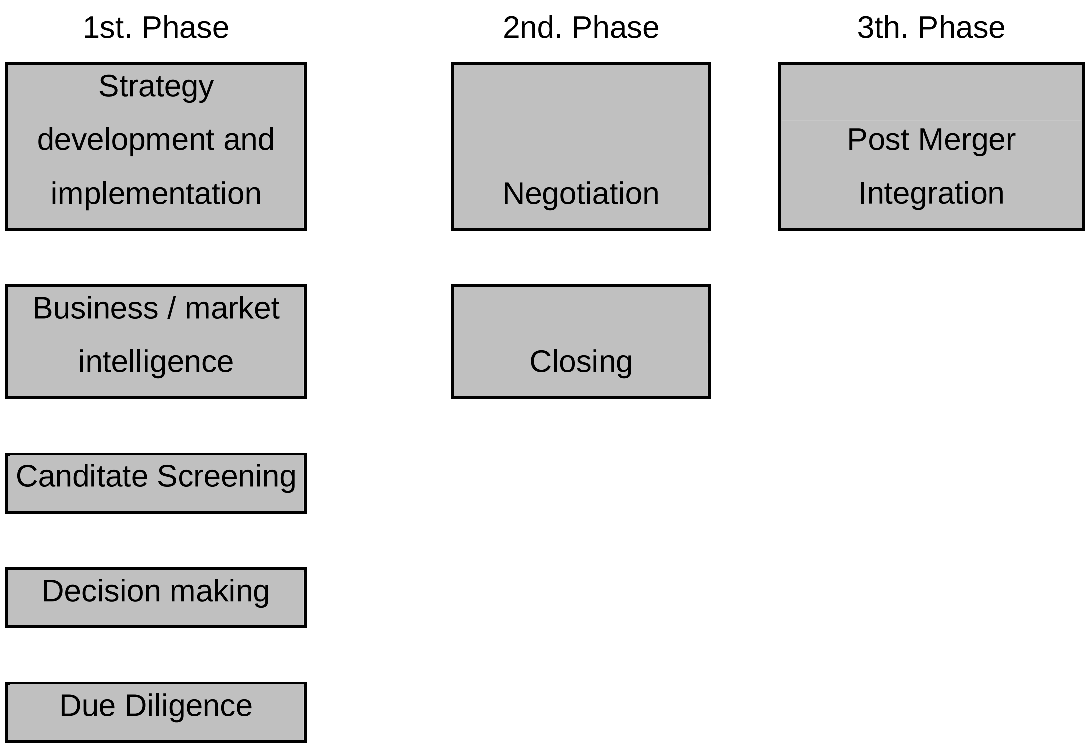
From the beginning, a development and implementation of a strategy is a crucial phase, otherwise the acquired company will not add value to the acquiring one. Then, a business plan and a screened analysis of the market should be made, considering the business the acquired company develops.

Right after the second phase a question will rise – should we acquire a company? If so, a detailed analysis of the candidate company should be fully accomplished followed by a due diligence.

Next step, the negotiation. In this moment, all attention must be spent up to the closing of the deal. A detail deserves an attention; the importance of an agreement should meet a solid and strong set of terms that establish the needs of both parties since it is a bilateral document that express the details of the business and guide the rights and obligations that must be accomplished. Summing up, the agreement is an instrument that can be used to transmit protection to any entrepreneur.

Last but not least, the post merger phase. If the acquiring company is not capable in handling the integration process, the changes of integration will not be put in place and implemented are big, then the M&A deal will be doomed to fail.

Phases of M&A (figure 1)



4.1.7.2 The Analysis Phase

When the CEO and top managers of a company decide that they want to do a merger or acquisition, they start with a tender offer. The process typically begins with the acquiring company carefully and discreetly buying up shares in the target company, or building a position. Once the acquiring company starts to purchase shares in the open market, it is restricted to buying 5% of the total outstanding shares before it must file with the SEC. In the filing, the company must formally declare how many shares it owns and whether it intends to buy the company or keep the shares purely as an investment.

Working with financial advisors and investment bankers, the acquiring company will arrive at an overall price that it's willing to pay for its target in cash, shares or both. The tender offer is then frequently advertised in the business press, stating the offer price and the deadline by which the shareholders in the target company must accept or reject it.

4.1.7.3 Negotiation – an important phase

It is widely known that in an M&A deal the parties before going into a final agreement, spend long period in negotiation, that can be short or long term, some of which discuss the details and clauses that covers the business in question. We may say it is a period of thoughts, which is necessary to close the deal in a basis to reach both needs.

In short, negotiation is the action of discussing common issues with a goal of reaching a common agreement. Then, the first step is put the parties together in order to generate the arrangement of an agreement.

By establishing the reciprocal interest in doing the transaction, the negotiation starts up. Commonly, technical issues comes the first and then the definition of the product/service and its legal aspects come right after to assure that the rights and obligations are clearly set.

Furthermore, only after the technical aspects are being dully discussed, the legal nuances will be determined on the agreement[8] (e.g. date of delivery, payment conditions, eventual consequences, responsibilities, applicable law, arbitrage, and so on).

In order to reach an agreement, the parties should act in good faith by endeavoring efforts to build up a balanced document.

The parties should admit franc conversation and avoid any sort of domination thought. According to Irineu Strenger[9], agreement that aggregate more rights to one party to another, does not sign a future happy life.

On the other hand, we have to consider the fact that many M&A deals are hostile, and both companies may not discuss the terms of the agreement peacefully, then the target company can do one of several things:

- Accept the Terms of the Offer - If the target firm's top managers and shareholders are happy with the terms of the transaction, they will go ahead with the deal.
- Attempt to Negotiate - The offer price may not be high enough for the target company's shareholders to accept, or the specific terms of the deal may not be attractive. In a merger, there may be much at stake for the management of the target - their jobs, in particular. If they're not satisfied with the terms laid out in the tender offer, the target's management may try to work out more agreeable terms. Not surprisingly, highly sought-after target companies that are the object of several bidders will have greater attitude

[8] Basso, Maristela, Contratos Internacionais do Comércio – livraria do Advogado (1994)
[9] Irineu Strenger, Contratos Internacionais do Comércio – 3rd edition (1998)

for negotiation. Furthermore, managers have more negotiating power if they can show that they are crucial to the merger's future success.

- Execute a Poison Pill or Some Other Hostile Takeover Defense – a target company can trigger a poison pill scheme when a hostile suitor acquires a predetermined percentage of company stock. To execute its defense, the target company grants all shareholders - except the acquiring company - options to buy additional stock at a dramatic discount. This dilutes the acquiring company's share and intercepts its control of the company.
- Find a White Knight - As an alternative, the target company's management may seek out a friendlier potential acquiring company, or white knight. If a white knight is found, it will offer an equal or higher price for the shares than the hostile bidder.

4.1.7.4 Closing the Deal

Finally, once the target company agrees to the tender offer and regulatory requirements are met, the merger deal will be executed by means of some transaction. In a merger in which one company buys another, the acquiring company will pay for the target company's shares with cash, stock or both.

A cash-for-stock transaction is fairly straightforward: target company shareholders receive a cash payment for each share purchased. This transaction is treated as a taxable sale of the shares of the target company.

If the transaction is made with stock instead of cash, then it's not taxable. There is simply an exchange of share certificates. The desire to steer clear of the tax explains why so many M&A deals are carried out as stock-for-stock transactions.

When a company is purchased with stock, new shares from the acquiring company's stock are issued directly to the target company's shareholders, or the new shares are sent to a broker who manages them for target company shareholders. The shareholders of the target company are only taxed when they sell their new shares.

When the deal is closed, investors usually receive a new stock in their portfolios - the acquiring company's expanded stock. Sometimes investors will get new stock identifying a new corporate entity that is created by the M&A deal.

4.1.7.5 Post Merger Integration - Understanding the importance of "doing the homework" in the post-merger

It's no secret that plenty of mergers don't work. Those who advocate mergers will argue that the merger will cut costs or boost revenues by more than enough to justify the price premium. It can sound so simple: just combine computer systems, merge a few departments, use sheer size to force down the price of supplies and the merged giant should be more profitable than its parts. In theory, 1+1 = 3 sounds great, but in practice, things can go awry.

Historical trends show that roughly two thirds of big mergers will disappoint on their own terms, which means they will lose value on the stock market. The motivations that drive mergers can be flawed and efficiencies from economies of scale may prove elusive. In many cases, the problems associated with trying to make merged companies work are all too concrete.

Flawed Intentions - For starters, a booming stock market encourages mergers, which can spell trouble. Deals done with highly rated stock as currency are easy and cheap, but the strategic thinking behind them may be easy and cheap too. Also, mergers are often attempt to imitate: somebody else has done a big merger, which prompts other top executives to follow suit.

A merger may often have more to do with glory seeking than business strategy. The executive ego, which is boosted by buying the competition, is a major force in

M&A, especially when combined with the influences from the bankers, lawyers and other assorted advisers who can earn big fees from clients engaged in mergers. Most CEOs get to where they are because they want to be the biggest and the best, and many top executives get a big bonus for merger deals, no matter what happens to the share price later.

On the other side of the coin, mergers can be driven by generalized fear. Globalization, the arrival of new technological developments or a fast-changing economic landscape that makes the outlook uncertain are all factors that can create a strong incentive for defensive mergers. Sometimes the management team feels they have no choice and must acquire a rival before being acquired. The idea is that only big players will survive a more competitive world.

The Obstacles to Making it Work - Coping with a merger can make top managers spread their time too thinly and neglect their core business, spelling doom. Too often, potential difficulties seem trivial to managers caught up in the thrill of the big deal.

The chances for success are further hampered if the corporate cultures of the companies are very different. When a company is acquired, the decision is typically based on product or market synergies, but cultural differences are often ignored. It's a mistake to assume that personnel issues are easily overcome. For example, employees at a target company might be accustomed to easy access to top management, flexible work schedules or even a relaxed dress code. These aspects of a working environment may not seem significant, but if new management removes them, the result can be resentment and shrinking productivity.

More insight into the failure of mergers is found in the highly acclaimed study from McKinsey, a global consultancy. The study concludes that companies often focus too intently on cutting costs following mergers, while revenues, and ultimately, profits, suffer. Merging companies can focus on integration and cost-cutting so much that they neglect day-to-day business, thereby prompting nervous customers to flee. This loss of revenue momentum is one reason so many mergers fail to create value for shareholders.

But remember, not all mergers fail. Size and global reach can be advantageous, and strong managers can often squeeze greater efficiency out of badly run rivals. Nevertheless, the promises made by dealmakers demand the careful scrutiny of investors. The success of mergers depends on how realistic the dealmakers are and how well they can integrate two companies while maintaining day-to-day operations.

The most important thing for management to keep in mind is that the merger or acquisition part of a well defined strategy that should lead to synergies and value creation. The risk of strategic drift is a real danger and could lead to value destruction. In this respect, a clear definition and understanding of the desired future state of the combined business is essential.

To be able to successfully handle the post merger integration process, the phases of business transformation and the drivers for change need to be identified and clearly described. Envisioning and establishing the business case are essential to be able to depart for the desired future state.

Selecting an integration strategy that is in line and complies with the goals set by top management is equally important to assure strategic fit. As no merger or acquisition is the same and conditions for success vary to a large extent, selecting the right integration strategy will avoid the combined business to fail in their pursuit for achieving synergy and value creation.

Firms have three basic integration strategies:

1. Stand alone or preservation (no interdependency);

2. Symbiotic of partial integration;
3. Complete integration of absorbing approach;

Making the right choice depends on the desired future state of the business, the resources and capabilities of the two firms, marketing and branding strategies, and many others factors inherent to the business involved. It may be decided that a stand-alone strategy is a wise choice for the time being, and later on the process evolves through various stages to end the process.

Summing up, one of the main reasons why business integration fails is due to the fact that management wants to completely integrate the acquired firm or merger firms too quickly, which may generate major resistance to change, considerable resistance, uncertainty among stakeholders, and turbulence, that my affect and result in slowing down or blocking the integration process. By establishing a proper action plan and a transition management methodology is of major importance to manage and guide the whole process through the various stages toward the desired future state.

4.1.8 Cross-Border M&A

Differences between an in-country deal and a cross-border one: Brian J. Miller et al. (2004)[10] state that the critical aspect to differentiate a foreign and a domestic deal are the key areas which must be considered when dealing a Cross-border merger - corporate structure, regulations, taxation, and culture-based issues.

More and more companies, large and small, are entering into combinations that span international borders. Some are instituting joint ventures, others are forming partnerships, and still others merging or making outright acquisitions.

[1010] M&A Back-to-Basics Techniques for the '90s Ernst & Young (2nd edition – 1994)

Cross-border M&A is a large and growing part of all FDI (foreign direct investment). In an age of globalization, cross-border M&A represents one of the most important means of integrating the world's economies.

The Motives: One important aspect of understanding cross-border mergers and acquisitions is to examine the motives driving the deals. Cross-border M&As have long been an important strategy to expand abroad. The rise of globalization has exponentially increased the market for cross border M&A.

The government environment is of a particular interest for cross-border M&As since they are affected by various regulations at the country level (or regional level) such as competition policy, corporate and capital taxes, various restrictions to capital movements across borders, protection of certain industries.

According to Donald Hopkins (1999)[11] there are four motives to a Cross-border deal:

- Strategic Motives: involve deals that improve the strength the firm's strategy through increasing firm's core competence, market power, creating synergies, providing complimentary resources/products.
- Market Motives: the most important market motive of a cross-border acquisition is to use it as a method to enter new markets in new countries. Firms are acquiring already established firms as the fastest way to enter a new country without adding additional capacity to a market that already may have excess capacity, specially to a mature market with established brands names to acquire a brand name and the company instead of trying to grow name in a market where customer loyalty is hard to change (starting from ground zero).
- Economic Motives: economies of scale, being able to reduce costs due to redundant resources of two firms in the same or closely related industry, macroeconomic differences between countries, for example one country

[11] Cross-border mergers and acquisition: Global and Regional Perspectives – Donald Hopkins (1999) Journal of International Management (pg. 207-239)

might have a higher growth rate and more opportunity than some other country, are some economic motives to cross-border M&A.

- Personal Motives: Hopkins says that managers of companies are the agents of the stakeholders, and the two parties might have conflicting interests; managers may seek for power and security such as growth, size, and so on. On the other hand, the stakeholder wants a bigger return on their investments and increase on the price of their stocks. The key issue is to find out a balanced point, not acquire any company for the pure management ego and in consequence avoid destroying value to the stakeholder.

Most of the motives mentioned above do not specifically take into account cross-border mergers and acquisitions. But what would be the advantages? A Cross-border M&A deal would give the company greater ability to move operations to the lowest cost country, improve firms ability to cope with the risks from market changes or change in government policy, and improve the ability to learn and adapt because of the different strengths associated with the culture of different countries.

Scale economies created by the increase in market volume due to across border acquisitions would result in greater efficiency in each activity of the value chain, the need to balance scale and flexibility, and benefits from the experience.

Scope Economies created by the addition of new products, businesses, and markets due to across border acquisition would result in sharing investments and costs, lower risk due to geographic, product, market, and business diversification, and the ability to share learning across units.

Summing up, scale economies would require a merger between firms in the same industry. Likewise, scope economies are most likely where there is relatedness between products, markets, or business.

5. Valuation Methods - how much the company being acquired is really worth

5.1 Introduction

Investors in a company that are aiming to take over another one must determine whether the purchase will be beneficial to them. In order to do so, they must ask themselves how much the company being acquired really worth.

Naturally, both sides of an M&A deal will have different ideas about the value of a target company. Its seller will tend to value the company at as high of a price as possible, while the buyer will try to get the lowest price that is possible. That said, what purpose does a valuation serve?

Generally speaking, a company's value is different for different buyers and it may also be different for the buyer and the seller. Value should not be confused with price, which is the quantity agreed between the seller and the buyer in the sale of a company. This difference in a specific company's value may be due to a multitude of reasons. For example, a large and technologically highly advanced foreign company wishes to buy a well-known national company in order to gain entry into the local market, using the reputation of the local brand. In this case, the foreign buyer will only value the brand but not the plant, machinery, etc. as it has more advanced assets of its own. However, the seller will give a very high value to its material resources, as they are able to continue producing. From the buyer's viewpoint, the basic aim is to determine the maximum value it should be prepared to pay for what the company it wishes to buy is able to contribute. From the seller's viewpoint, the aim is to ascertain what should be the minimum value at which it should accept the operation.

These are the two figures that face each other across the table in a negotiation until a price is finally agreed on, which is usually somewhere between the two extremes.

A company may also have different values for different buyers due to economies of scale, economies of scope, or different perceptions about the industry and the company.

Valuation may be used for a wide range of purposes:

1. Company buying and selling operations:
    - For the buyer, the valuation will tell him the highest price he should pay.
    - For the seller, the valuation will tell him the lowest price at which he should be prepared to sell.

2. Valuations of listed companies:
    - Valuation is used to compare the value obtained with the share's price on the stock market and to decide whether to sell, buy or hold the shares.
    - Valuation of several companies is used to decide the securities that the portfolio should concentrate on those that seem to it to be undervalued by the market.
    - Valuation of several companies is also used to make comparisons between companies. For example, if an investor thinks that the future course of GE's share price will be better than that of Amazon, he may buy GE shares and short-sell Amazon shares. With this position, he will gain if the GE's share price does better (rises more or falls less) than that of Amazon.

3. Public offerings:
    - Valuation is used to justify the price at which the shares are offered to the public.

4. Inheritances and wills:

- Valuation is used to compare the shares' value with that of the other assets.

5. Compensation schemes based on value creation:

- Valuation of a company or business unit is fundamental for quantifying the value creation attributable to the executives being assessed.

6. Identification of value drivers:

- Valuation of a company or business unit is fundamental for identifying and stratifying the main value drivers.

7. Strategic decisions on the company have continued existence:

- Valuation of a company or business unit is a prior step in the decision to continue in the business, sell, merge, milk, grow or buy other companies.

8. Strategic planning:

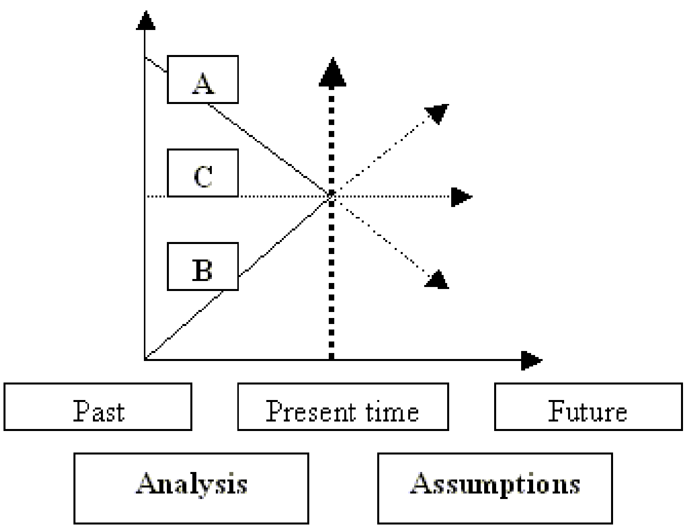
- Valuation of the company and the different business units is fundamental for deciding what products/business lines/countries/customers … to maintain grow or abandon.
- Valuation provides a means for measuring the impact of the company's possible policies and strategies on value creation and destruction.

According to Janette Jensen[12] there are myths and truths about valuation. Valuation is not an objective search for true value of companies; in fact all valuations methods are biased. Likewise, a good valuation does not provide a precise estimation of value, due to the fact there are no precise valuations. Last but not least, there is no connection between quantitative/sophisticated models to be the best valuation. Many believe that simpler valuation models do better than more complex ones.

[12]Jensen, Janette, slide nr. 1 dated as of March 06,2006

For better clarity, I came up with the figure 2 below in order to visualize the previous paragraph. In fact, you may know the price of the company considering its past performance, but is it a good strategy to buy a company without analyzing what the future might bring? In doing so, it is important to understand the company activity, its inter-company relations, its products and services, market position (market-share), trends, future prospects (growth potential), its value drivers and so on.

Figure 2



5.2 Valuation Methods – an overview

In short, the main valuation methods can be classified in five categories:

1. Balance Sheet (Book Value/ Adjusted Book Value/ Liquidation Value) ;
2. Multiples;
3. Discounted Cash Flow;
4. EVA (Economic Value Added);
5. Options;

In this chapter, I will describe the five groups comprising the most widely used company valuation methods.

5.2.1 Valuation Methods – Balance Sheet (Accounting Based)

The balance sheet methods are used for specific purpose and mainly when they are interested on company's assets not for its future cash flow. It is the easiest way in valuing a company, not to mention it is inadequate due to the fact the acquirer is concerned in the future outcome and not only on the actual equity of the company.

In addition, balance sheet methods ignore valuable intangible assets such as trademark, networks, clients, among others are not reflected on the balance sheet, but on the other hand, they represent an additional value, that's the goodwill. Goodwill is the difference between the amount paid in a deal (traded value) and value stated on the balance sheet of the acquiring company.

Some of these methods are the following: book value, adjusted book value and liquidation value.

- **Book Value**

A company's book value is the value of the shareholders' equity stated in the balance sheet, which is the difference between total assets and liabilities.

- **Adjusted Book Value**

This type of method is quite similar to the previous one (book value). The only difference is that all values of assets and liabilities must match their current market value, including all liabilities that might not be stated on the balance sheet.

- **Liquidation Value**

This is the company's value in case it is liquidated, its assets are sold and its debts are paid off. The intangible value, like brand, trademark, and son on usually is not taken into account.

Furthermore, liquidation value does not represent the potential of future value creation, due to this the buyer is only seeking for company's premises, machineries, capacity of production, and not in its capacity of future cash flow.

5.2.2 Valuation Methods – Multiples

Multiples assume the value of a company as a comparison of other similar companies, comparable companies so to speak. Hence, the value of company A divided by a indicator (could be the profits of the company) will generate a multiple that can be used to obtain the value of company B.

Summing up, multiples valuation method is based on the assumption that similar assets should have similar value. The value of an asset is compared to the values assessed by the market for similar or comparable assets.

To do relative valuation it is necessary to identify comparables assets to obtain market values for these assets, convert market values into standardized values what will create multiple prices. Then, it is needed to compare the multiple for the asset being analyzed to the standardized values for the comparable asset.

In order to standardize value, prices should use common variable such as earnings, cash flows, book values, or revenues.

Furthermore, Multiples is easy to apply, however can be applied by having comparable listed companies. On the other hand, you may take the risk of underestimating growth of companies or over-estimating their non-growth. Due to this, a market value can be identified by the following equation:

$$\textbf{Market Value (MV)} = \begin{array}{c}\text{(price of common stock X number of common stocks)} \\ + \\ \text{(price of preferred stock X number of preferred stock)}\end{array}$$

In an efficient market, the price of shares reflects the potential earnings and dividends, risks of the business, intangible factors and so on.

To come up with the **Enterprise Value (EV)** we must add to the equation above debts minus the available value. Including the net debts is important due to the possibility of measuring the value of companies with different level of liabilities.

$$\textbf{Enterprise Value (EV)} = \begin{array}{c}\text{Market value} \\ \mathbf{+} \\ \text{Debts} \\ - \\ \text{Available value}\end{array}$$

The most widely multiples methods used and acknowledged are:

Market Value (after debt):

1. P/E Ratio (price-earnings ratio);
2. P/book value (price-book value ratio);
3. P/Sales (price-sales ratio);

Enterprise Value (before debt):

1. EV/total assets
2. EV/EBITDA (enterprise value to earnings before interest, taxes, depreciation and amortization);

3. EV/EBIT (enterprise value to earnings before interest and taxes);
4. EV/NOPAT (enterprise value to net operational profit after taxes);

The advantages in using multiples: simplicity, fast way in gathering information, there is no need of huge amount of information. On the other hand, the disadvantages are differences on the comparable fundamentals of companies, the quality of information, uniqueness.

Some examples to better understand the use of the multiples:

- **Market Value - P/E Ratio (price-earnings ratio):**

This multiple is the most used by investment banks to analyze share's performance.

With the use of this ratio, an acquiring company makes an offer that is a multiple of the earnings of the target company. Looking at the P/E for all the stocks within the same industry group will give the acquiring company good guidance for what the target's P/E multiple should be.

Example:

- Industry average price-to-earnings ratio= $12,2
- Company's earnings 2005 = ("market value" $1200 /"net earnings" $100) = $ 12
- Valuation= 12,2 x 12 ($146,4)

- **Enterprise Value - EV/EBIDTA (enterprise value to earnings before interest, depreciation, taxes, and amortization);**

This multiple is the most used to determine the value of a company for an M&A deal. EBITDA is highly related to the cash flow but with an advantage, the data is easily obtained on the balance sheet and there is no need to estimate or come up with the assumptions.

To apply the EV/EBITDA multiple, we have to look for a set of comparable companies, and multiply a representative EV/EBITDA multiple by the company's EBITDA.

Example:

- Company's EBITDA = $ 100 million
- Typical EV/EBITDA multiple in the industry= 15x
- Estimated valued= $1.5 billion (100 x 15)

5.2.3 Valuation Methods – Discounted Cash Flow

We have to bear in mind that the potential of creating future result in terms of cash flow is the main goal for those who seek a merger and acquisition deal. A key valuation tool in M&A, discounted cash flow determines a company's current value according to its estimated future cash flows. Forecasted free cash flows (net income + depreciation/amortization - capital expenditures - change in working capital) are discounted to a present value using the company's weighted average costs of capital (WACC). Admittedly, DCF is tricky to get right, but few tools can rival this valuation method.

Likewise, the DCF also relates the value of an asset to the present value of the expected future cash flows on that asset. The DCF analysis uses future free cash flow projections and discounts them by using the WACC (weighted average cost of capital) to arrive at a present value, which is used to evaluate the potential investment.

Every asset has an intrinsic value that can be estimated based upon its characteristics in terms of cash flows, growth and risk. Due to this, it is needed to estimate the life of the asset, the cash flows during the life of the asset, not to mention the discount rate (WACC) to apply to these cash flows to get the present value.

In addition, DCF requires us to think through the factors that affect a company, such as future sales growth, margins. Makes us to consider the discount rate, which depends on a risk-free interest rate, the company's costs of capital and the risk its stocks faces.

In short, if the value arrived at through DCF analysis is higher than the current cost of the investment, the opportunity of acquiring the target company may be a good one.

An example to better understand the use of the DCF (with a focus on FCF approach "free cash flow") which are commonly used by analysts and valuation experts to determine the "fair value" of companies:

1. Determining assumptions: is the company growing faster or not evolving? Will the company be able to earn returns on its asset great than its cost of capital? In answering these questions they will help us on indicating how far into the future we should forecast cash flows (e.g. 1 year, 5, 10 year).
2. Forecasting revenue growth (assumptions): we have to consider whether the company's market is expanding or contracting, how is its market share, whether there are new products driving sales or whether pricing changes are imminent.
3. Forecasting Free Cash Flow (assumptions): FCF is the cash that flows through a company that represents the actual amount that can be left to pursue opportunities that can be used to enhance the company's power (such as developing new products, increasing premises, and so on). FCF is equal to revenues minus operating costs, minus taxes, minus investment, minus change in working capital.

4. Calculating the Discount Rate (=WACC): After projecting the FCF, a discount rate must be determined in order to calculate the Net Present Value (NPV) and figure out what these cash flows are worth today. In order to reach the Enterprise Value (EV) some calculations must be done such as:
    a. Cost of Equity (what costs the company to maintain a share price that is satisfactory to investors):
        - Cost of Equity (RE) = Risk free rate (Rf)[13] + Beta (β)[14] x Equity Market Risk Premium (Rp)[15]
    b. Cost of Debt (is the rate that the company is paying on its debt):
        - Cost of Debt (RD) = Rf x (1 – corporate tax rate)[16]
    c. Weighted Average Cost of Capital is based on the proportion of debt and equity in the company's capital structure. The lower the WACC the higher the value of company.
        - WACC = (% Equity x RE) + RD (% debt x RD)
5. Calculating Terminal Value: means a reasonable idea of the value of the company's cash flows after the forecast period.
    - Terminal Value = final projected year cash flow / (WACC – long term cash flow growth rate)
6. Calculating Enterprise Value (EV): to arrive at a total enterprise value we take the present value of the free cash flows, divide them by the company's % WACC and add up the results.
7. Calculating Fair Value of Equity: to come up with a fair value of the company's equity, we must deduct its net debt from the value.
    - Fair Value of Equity = EV – Debt

    If we divide the fair value by the number of shares outstanding, we get a fair value for the company's share. If the shares are trading at a lower value than this, they could represent a buying opportunity for investors. On the

[13] Rf (Risk free Rate): amount invested in securities considered free from credit risk (e.g. American Treasury Bonds)
[14] Beta measures how much a company's share price moves aginst the market as a whole. A Beta of **one** indicates that the company moves in the line with the market. If the Beta is above one, the share is very volatile, and below one means the share is stable.
[15] Rp = Rm – Rf . Represents the returns investors expect over and above the risk-free to compensate for taking the extra risk.
[16] Due to benefits of tax deductions available on interest paid, the net cost of debt is the interest paid less the tax savings.

other hand, it they are trading higher than the per share fair value, it could be a signal that the deal may not be a good idea.

5.2.4 Valuation Methods – EVA (Economic Value Added)

Economic Value Added (EVA) is a financial performance method to calculate the true economic profit of a corporation. The EVA presents the analysis of the Economic Value Added, an advanced evaluation method that measures the performance and the profitability of the business, taking in account the cost of capital the business employs. This method, created by Stern Stewart & Co. is used today by more and more companies as a framework for their financial management and their incentive compensation system for the managers and the employees.

EVA can be calculated as Net Operating Profit after Tax (NOPAT) minus a charge of opportunity cost of capital invested. The basic formula for calculating EVA is:

EVA = Net Sales Operating Expenses (-) EBIT (-) Taxes (-) NOPAT (-) Capital Charges (which means Invested Capital x Cost of Capital)

Furthermore, the EVA is also calculated by the following formula:

EVA =NP-TC *WACC Where: NP = Net Operating Profit after Tax TC = Total Capital Employed = Total Equity and Liabilities of the Company WACC = Weighted Average Cost of Capital

The Weighted Average Cost of Capital (WACC) is calculated as follows:

$$WACC=(E*CE+SL*CS+LL*CL)/TC$$

Where:

E = Owners Equity

CE = Average cost of Owners Equity

SL = Short Term Liabilities

CS = Average cost of Short Term Liabilities

LL = Long Term Liabilities

CL = Average cost of Long Term Liabilities

The net present value of EVA is calculated according to the Discount Rate as follows:

$$NPVEVA=\Sigma(EVAi/(1+ r)^{i})+EVAn/r$$

Where:

EVAi = EVA calculated for year i

r = Discount Rate

n = the last year of the plan period

Operating Steps: Enter the average cost of capital for the equity, the long term liabilities and the short term liabilities, then enter the discount rate. The values of the EVA will be calculated and presented. Please note that when you enter data into the average cost cells, the values are copied to the following years IF the cells for these years are empty.

By taking all costs into account, including the cost of equity, EVA shows the financial amount of wealth a business has created or destroyed in a reporting period. In other words, EVA is profit in the way that shareholders define it. If the shareholders expect, say, a 10% return on their investment, they earn money only to the extent that their share of the NOPAT exceeds 10% of equity capital.

Everything before that just builds up to the minimum acceptable compensation for investing a risky enterprise.

5.2.5 Valuation Methods – Real Options

Overview of Real Options Theory

The term "real options" was first used by Myers (1984) in the context of strategic corporate planning. More recently, this notion has been broadened to capture various types of decision making under uncertainty. The basic concept of this notion is that wherever there is an option, there is a chance to benefit from the upside, while avoiding downside risk at the same time.

As opposed to traditional financial options, real options basically refer to the options whose underlying assets are real assets. Especially in the case of real estate, a typical application of real options theory is the land development option, which can be seen as a call option. Following the definition by Geltner et al. (2007), the land development option can give the land owner "the right without obligation to develop (or redevelop) the property upon payment of construction cost." This thesis is focused on this call option model of the land value.

Types of real options

As many studies have shown (Dixit and Pindyck, 1994; Trigeorgis, 1996; Amram and Kulatilaka, 1999), many types of decisions could be made by using real options theory. The main examples of real options are as follows:

Waiting options - When any key factor in the business is uncertain (e.g., rent may be increasing or decreasing in the case of real estate), we may be able to acquire higher returns by waiting for a certain period of time than we could acquire by acting immediately.

Growth options (Phasing options) - When the project is phased into more than two steps, the initial investment provides the firm with growth options to be acquired by the second or later investment, given that the first investment turns out to be successful. In other words, by considering the value of growth options, the firm may be able to go ahead with the first project even if that project itself is expected to have a negative return.

Flexibility options (Switching options) - This option refers to the flexibility built into the initial project design. By incorporating flexibility to react to the uncertainty in the future, the project can have higher value than the value based on the traditional DCF analysis. In the case of real estate, what is called "conversion" is an example of switching options (e.g., the option to switch the use from hotels to condominiums).

Exit options (Abandonment options) - Even when there is a certain amount of risk to continue the project in the future, it could be possible to initiate the project, taking into consideration the value of the option to exit from the project when the risk becomes obvious (in the case of real estate, there is an abandonment option for the land owner of vacant land, which is selling the land without a building on it).

Learning options - When the project can be developed in a phased manner, the firm can test the suitability of the projects by developing the initial phase with low costs. Then, based on the result, the firm can modify (or abandon) the following phase of development in order to maximize the total project value.

Option contracts are opportunities, not obligations, to purchase shares of the underlying stock, and the valuation methods depend on a number of factors. The first factor in option valuation is the price movement of the underlying stock. Next is the strike price, or how much you have to pay for the options contract. Then there is the time to expiration. Each option contract has an expiration date and the closer to expiration the lower the strike price. The final factors in option valuation methods are the volatility and dividends of the underlying stock and the tax-free interest rate that an investor could earn with safer investments.

When applying option value assessments to the purchase of an options contract, you should consider personal and individual business investment preferences such as risk aversion, required rate of return and other microeconomics factors. Options valuation method determines if the risk is bearable and the potential rate of return helps improve the risk factors.

5.3 Summary and Discussions

In this chapter, the five main groups comprising the most widely used company valuation methods were described: balance sheet, multiples, discounted cash flow, EVA and real options. For anyone involved in the field of corporate finance, understanding the mechanisms of company valuation is an indispensable requisite. This is not only because of the importance of valuation in mergers and acquisitions but also because the process of valuing the company and its business units helps to identify sources of economic value creation and destruction within a company. Likewise, there are a wide range of purposes that valuation may be used: company buying or selling operations, to evaluate listed companies, for IPO (Initial Public Offerings), inheritances and wills, for executives compensation schemes based on value creation, strategic decisions on the company's continued existence, among others.

To come up with an answer to the first part of the problem formulation, what would be the factors that influence the choice of a valuation method by professionals? According to Damodaran[17], the method that is becoming increasingly popular is that based on cash flow discounting, due to the reason this method view the company as a cash flow generator and, therefore, assessable as a financial asset,

[17] Damodaran, A avaliação de investimentos (1997)

not to mention takes the assumption that the company will continue to grow and it will keep adding value to the shareholders.

This method seek to determine the company's value by estimating the cash flows it will generate in the future and then discounting them at a discount rate matched to the flows' risk. The DCF is based on a detailed, careful forecast, for each period of the financial items related with the generation of the cash flows corresponding to the company's operations, such as, collection of sales, personnel raw materials, expenses, and so on.

The literature criticizes the usage of others methods because the fundamental problem with them is that some are based solely on the balance sheet, others on the income statement, but none of them consider anything but historic data. We could imagine two companies with identical balance sheet and income statements but different prospects: one with high sales, earnings and margin potential, and the other in a stabilized situation with fierce competition. We would all concur in giving a higher value to the former company than to the latter, in spite of their historic balance sheet and income statements being equal.

6. Results of the Survey

This section contains the outcome of the survey that was opted to combine the analysis and the results of the questionnaire without breaking into questions.

The objective of this survey was to identify the choices that financial institutions and their analysts make regarding the valuation methods, not to mention the conditions these analysts choose the right approach to value a company.

To elaborate the survey, a questionnaire was submitted to 9 professionals who act in the area of Mergers and Acquisition, Private Equity and Venture Capital in the major Investment Banks with presence in Brazil.

The results demonstrated a tendency in behavior, due to this does not represent a statistic analysis but it is helpful to prospect detailed answers that might help to figure out motivation behind the answers.

The data was collected through a questionnaire. Right after the questionnaires were organized in order to identify incomplete and inconsistent answers. Consolidating and interpreting the answers helped me to not only identify the most used valuation method but also understanding the rationale among different respondents (the content of the questionnaire is enclosed on appendix A).

6.1 Main Purpose for Valuing a Company

Table 1 shows that 51,9% of the interviewees stated they use valuation for mergers and acquisition, buying and selling participation in a company and initial public offering purposes.

Table 1

Purpose		Answers
Mergers and Acquisitions	4	22,1%
Participation in companies	3	19,2%
IPO	1	10,6%
Liquidation	0	0%
Company Restructuring		**51,9%**
Joint Venture	3	18,3%
Investment Projects	2	13,5%
Financing, Debt Service	0	0%
Investment and Financing		**31,8%**
Equity pricing	2	16,3%
Secondary Market		**16,3%**
Total	**15**	**100%**

There was more than one answer for respondents

6.2 Most Used Valuation Method

Valuation method must be consistent with the purpose of the valuation, not to mention the singularity of the companies being evaluated so that the conclusion can end up with a real value of the company. The usage of non appropriate methodology in a process of valuation can generate wrong results and might also result in huge losses. According to chapter 4.3 the most used valuation methods are:

- Balance Sheet
- Multiples
- Discounted Cash Flow
- EVA
- Real Options

As expected, Discounted Cash Flow (DCF) is by far the most used by the interviewees, followed by Multiples. That is interesting to notice that respondents use DCF and multiples to form a comparative analysis of the price or even project a cash flow.

The choice of DCF and multiples as the most used method can be directly explained to a matter of information available or time. The respondents say to prefer the multiples when there are many comparable companies in the same industry and the data are reliable not to mention, when there is no much time available to a more deepen analysis. On the other hand, DCF is more indicated when a profound analysis is required and a huge number of detailed information is available.

According to Damodaran, the value of a company is related to many factors that can be controlled or even influenced (who is valuing? Buyer, seller a third party?, what are their preferences, values, interest, personal goals, in which context the valuation is made economical, political, social moment). Due to this, although happens the usage of quantitative valuation method, the choice of information will rely on the judgment of the professional responsible for the model chosen.

The weakest point of estimating the value a company: the future is difficult to predict. That is needed to really understand the business of a company, its strategy to assign realistic and coherent assumptions based on its history and its future possibilities. However, assumptions may imply fact not realistic, because unexpected factors may modify the scenario. This problem is faced mainly when

DCF is chosen, this risk might be reduced by combining 2 or more valuation methods. In fact, many of the respondents use 2 or up to 3 valuation method, as described on table 2.

Table 2 - Number of Valuation Methods Used by interviewees

Number of methods	Answer	%
1 method only	1	13,8
2 methods	5	58,6
3 methods	2	27,6
Total	**8**	**100**

Furthermore, the respondents indicated the quality of the valuation is directly proportional to the quality of data and information obtained and also the time you have to understand and analyze the company being evaluated. Then, the concern in valuing a company must concentrate not only in the final value but in all phases during the valuation process. If the homework is well done, the possibility in creating erroneous result will lessen.

6.3 Length of the Project

Taken into consideration that companies have an indefinite life, there is a need to define the horizon of projecting future cash flows of the company. To define future cash flows there is no correct rule but it will depend basically in 02 factors:

- Projects with defined lifetime: according to the respondents the horizon of projecting future cash flows must be in accordance with the entire project.
- Uncertainty: bring some difficulty to estimate the cash and consequently, demand higher discount rates. Both of the factors make the usage of future cash flows difficult.

Most of the respondents indicated the time frame of 5 up to 10 years to plan a future cash flow.

6.4 The coherence between Cash Flow and Discount Rate

There are 02 points to forecast a free cash flow: one is the company itself and the other is on the stakeholder perspective.

Tabel 3 – Cash Flow Used

Type of Cash Flow	Answers	
Company	5	65,5%
Stakesholder	3	34,5%
Total	**8**	**100%**

The arguments to choose one or other type of cash flow are related to stability and level of company's liability. Therefore, the respondents were not coherent in their answers. The instability level of liability was justified to choose company's cash flow and stakeholder's cash flow, what demonstrate that respondents do not feel comfortable to the concept of structure of capital.

Whatever the choice, the WACC must be coherent with the type of cash flow. In case it is used the company's cash flow it must be discounted the WACC. On the other hand, in case it is used the stakeholders' cash flow it must be discounted the cost of capital.

6.5 Discount Rate

According to Damodaran, estimating a discount rate is one of the most delicate phases on the valuation that reflects variables such as cost of opportunity and the perception of the risk of the investment. Notwithstanding, the final discussion of the fair value of a company always end up in a discussion of the discount rate that reflects the need of negotiating the final price of the deal.

However, there is another issue to be discussed, the calculation of the Cost of Capital. The target company's country must be taken into consideration.

Many scholars such as Damodaran, Copeland and Ross recommend the use of CAPM (Capital Asset Pricing Model) to measure the cost of capital due to the fact the inflation and risk expected are included on the calculation.

Furthermore, all respondents consider the country risk when estimating the cost of capital not the cash flow. The divergence comes out when the respondents estimate the premium risk (table 4).

Tabel 4 – Estimating Country Risk Premium

Estimating Country Risk Premium	Answers	
Average of past premium	4	48,3%
Current Premium	3	31,0%
Estimating future premium	2	20,7%
Total	**9**	**100%**

48,3% of the respondents consider the average of past country premium as the best way to use for current calculation. One of the motives cited for using past data was due to high volatility on Brazil country risk that many analysts use in order to reduce their fluctuation. The major critic I would have by using this data is that we are estimating future cash flow and considering past data.

I have also identified that 20,7% of the respondents use the country premium risk estimated by economists and banks. They argue that economists and banks come up with a premium taking into consideration the current economic situation of the country for future years.

Only 31% use the current country risk premium although I believe the current premium reflects the perception of the country risk at the day of the valuation.

On the other hand, the free cash flow is estimated on the company's point of view, it means the cost of capital is the weighted average of own capital and the third part capital is the WACC (Weighted Average Cost of Capital). According to Copeland (2001) the WACC must be coherent with the premises and the definition of the estimated cash flow, then it is very important to consider the market price debts and not the book value.

According to table 5, 21,4% of the respondents prefer to use total debt based on the book value. By doing this, they overvalue the total debt of the company even if its performance goes well, subsequently they reduce the cost of capital and overvalue the price of the company.

Tabel 5 – Estimating Total Debt

Estimating total debt based on	Answers	
Book Value	2	21,4%
Market Value	7	78,6%
Total	**9**	**100%**

6.6 Multiples

Multiples aim to find the value of an asset by comparing them to similar assets/companies with a same market value (Stock Exchange). According to Damodaran (1997), a comparable company can be defined as a company that generates cash flow, shows potential growth not to mention similar risk to the company being valued.

Despite the simplicity and quickness to use, multiples are more likely to mistakes due to the quality of information, differences between company's fundamentals and uniqueness of each company.

Right after the DCF, multiples are mostly used by investment banks and consultants, and most of the times they use it to tackle and verify the results they got from the DCF. Many of the respondents stated they rely on DCF, but on the other hand, they use at least 02 different valuation methods to put a price in a company. Many of them mentioned the multiples as a second choice.

As expected, the survey pointed out that almost 100% of respondents use at the same time multiples and DCF (market value and value of similar deals) with different purposes. Market value is used to calculate the price before the deal closes (pre-phase), however comparables deals help the professionals to estimate how much the market is paying for similar companies.

According to the survey, the respondents tend to prefer Price/EBITDA (60%), followed by Price/Earnings (40%).

The information available influences the decision of criteria to be used, especially to select comparable companies. The most preferred criteria are companies in the same industry, followed by similar companies overseas in the case there are no companies in the same industry in Brazil. Still, in case there are no similar international companies, the respondents tend to select companies with similar fundamentals or even companies with same magnitude.

Talking about the size of comparables companies, the survey indicated that, due to the fact there are small number of listed companies in Brazil, most of times the respondents select international comparable companies and use a discount (70% of the respondents stated they use a discount that vary from 15% to 50%, with a average of 27,75%).

After selecting comparable companies there is a decision to make, which data to use – past or estimated ones? According to table 6, 43% tend to use estimated information, but due to the difficulty to come up with estimated data, 47% prefer to use publicly data (openly information that are available on the companies' annual report).

Tabel 6 – Usage of Past or Estimated Multiples

Usage of Past or Estimated Multiples	Answers	
Publicly Data	5	47%
Estimated Data	4	43%
Total	**9**	**100%**

6.7 Effects of the current global recession on an In-country and Cross-border M&A deals

During the interview held with 05 of the initial respondents, the impact on the current global crisis on an in-country and cross-border M&A deals were the main subject. All of them without exception stated the global economic decline is intensifying. The developed world is in recession. Dysfunctional credit market and widespread de-leveraging are deepening the stress in the global financial sector. Commodity markets are in consolidation mode after an acute price deflation phase. Inflation remains well-contained, leading to a synchronized and aggressive easing of monetary conditions. Disorderly currency adjustments and global risk re-pricing triggered a flight to liquidity in favor of the US dollar and Japanese yen.

Government intervention in financial markets and direct official support to key industries are on the rise in both the developed and developing world. Massive fiscal stimulus is in place in both US and China as well as in many other countries. The fiscal and debt-servicing outlook is deteriorating, forcing governments to undertake massive debt issuance.

North America, Europe and Japan are all experience economic contractions in 2009. This synchronized decline will be partially offset by growth in developing country as in Brazil. Without an orderly functioning of global and interdependent credit markets, the resumption of a sustainable global growth path will be postponed. The abrupt end of an extended credit boom and the ensuing distress in housing and financial sectors caused a substantial deterioration in production, consumption, investment and employment conditions in the US. Despite the increasing contribution of emerging-market economies to global growth in recent years, they are not immune to the ongoing erosion of economic conditions in the most advanced countries.

Massive debt issuance by the US is negatively affecting highly leveraged developing countries by crowding out access to international finance, mostly for emerging market countries. Foreign capital flows to emerging-markets economies is declining in 2009 not to mention, the scenario for sovereign has weakened.

As a result of the crisis, in 2008, according to the inteviewees there was a reduction of 11% in M&A transactions in Brazil, when comparing the year of 2007 totaling 639 deals in 2008. The decrease in number of M&A deals is concentrated on the 4th quarter, when Brazil, in fact, was impacted by the international crisis. Still, it is noticed the impact in Brazil was smaller than the rest of the world. There were a big number of Cross-border M&A made by Brazilian companies, mostly in the North and South America, Africa and Spain. Mining and food industry were the most aggressive in Cross-border deals. On the other hand, foreign companies have reduced their investments in Brazil, only 27% (146 M&A transactions) were lead by international enterprises (in 2007 this percentage was 42%).

With a credit reduction, equity market weakened, Private Equity funds have played a lot as an alternative to capitalize companies. In 2008, Private Equities funds increased in 5% their participation in M&A deals, totaling 20% of transactions in almost all sectors of the economy.

6.8 Discussions and Implications

I would like to answer the second part of the problem formulation here. That is what factors determine the choice of methods of professionals in the present study and how do they differ from the general discussions in chapter 5?

The survey clearly demonstrates there is not a standard usage of models for valuing companies by these professionals.

It was also possible to realize that professionals hold different attitudes when talking about valuation. Part of them believes that the value of a company is not relevant as long as there is someone with an intention to buys it. This sort of valuator uses methodologies with no criteria, manipulating them in order to please the side they are assisting, does not matter if it is the acquiring or acquired party. Besides, many use some techniques that last for years without questioning whether they are coherent or not.

Another finding lays on the fact that valuation is always related to commercial transactions, such as selling/buying companies, opening or closing capital, selling and buying shares, and so on. Then, a direct contact with clients in this transactions lead the valuators to be pressured to develop a valuation model that result in a final price of the company aligned with their client's expectations.

Furthermore, without exemption, all respondents definitely agree that Discount Cash Flow method is the most used and more reliable since it seeks to determine the company' value by estimating the cash flows it will generate in the future and then discounting at a discount rate matched with to the flows' risk.

Others valuation methods such as book value, multiples were used extensively in the past. However, they are currently used increasingly less and it can be said that, nowadays, the discounted cash flow method is generally used because it is the only conceptually correct valuation method because it is viewed as a cash flow generator that is able to add value to the shareholders. DCF is based on a detailed, careful forecast for each period of the cash flows corresponding to the company's operations and its industry.

We might conclude that despite high importance that valuation pursue on an M&A transaction, equivocate usage of many techniques still happens. There are doubts and low precaution on using imported methods without concerning to adapt them into a reality in Brazil. Time and lack of information also contribute to incentive these professionals to use methods for years without questioning its validity to a current economic reality and its consequences to the result of the professionals' work.

After this discussion I decided to raise some implications of my findings as follows:

6.8.1. Implications for Management Decisions - To what extent will these choices help managers make good acquisition decisions?

Stevens D. Oesterle[18] states that evaluating a potential acquisition, which includes determining a fair price for it, is an integral part of a well-run corporate development. Managers who are facing a potential integration must not be in a compulsion to buy or to sell and in both cases must have the reasonable knowledge of the relevant facts about the company being acquired because this imply that what a purchaser will pay is often determined by who he is, what information he possesses, and the process by which value is determined.

[18] Mergers & Acquisitions – Ernest & Young – 2nd Edition – Chapter 3

As seen on chapter 5, value can change dramatically depending on the assumptions made by a potential purchaser about the expected future earnings performance and cash flow from an acquisition. Different potential purchases may have very different ideas about appropriate value. For example, a management group whose projections and calculations support one price for a business may find themselves outbid by a corporate buyer that relies on comparable projections, but that is already in the acquisition target's industry. Because of its ability to eliminate overhead or to benefit in some other way from combining similar businesses, the latter firm will be able to pay higher price.

The valuation process is a critical component of both the target valuation and due diligence processes, because during the due diligence more detailed information is gathered to confirm the assumptions used in the preliminary assessment of value. As the financial information and assumptions are refined in the due diligence process, the range of values for the acquisition candidate are also refined to reflect the updated assumptions and other new information.

The company's senior management must feel comfortable about the results of the valuation and due diligence processes not only to achieve a win-win deal, but during a time of intense company growth/decrease and industry change have the ability to learn and guide to the right direction, is truly critical to the success.

6.8.2. What are the implications of the valuation methods for the Merger & Acquisition and Post-Merger integration process?

Tim Koller et al.[19] say on their book that companies thrive when they create real economic value for their shareholders by investing capital at rates of return that exceed their cost of capital. Although these principles apply across time and geography, many managers and investors might face situations where the expected return is unsuccessful and value creation will not be accomplished.

[19] Valuation – Measuring and Managing th Value of Companies – Mckinsey & Company (fourth edition)

Value is driven by expected cash flows. Cash flow, in turn, is driven by expected returns on capital and growths. These are the principal lessons of valuation and corporate finance. But if the assumptions and expectations do not succeed, and the price paid on the company does not justify the investment made, what is going to happen?

In my findings show that most professionals use assumptions, methods and forecasting to please or suit their clients' expectations. To give the deal a better chance to success than average, two important rules should be taken into consideration: i. never uses the M&A advisor for due diligence when they are on a 'success' fee for the deal. There is a clear conflict of interest that 'Chinese walls' can never overcome and ii. always engage an independent and commercially astute advisor with industry experience to review the deal as proposed. This is a major way of combating 'deal fever' and sometimes doubtful decision-making.

Due diligence is not simply a checking process. Nor is it there just to provide ammunition for negotiations. Whilst it does both of these it should also be used to plan the longer-term, including post-completion activities. Pre-deal due diligence is the ideal platform on which to build a successful post-completion plan, not to mention it could be the base to put up accurate assumptions for the real capacity of a company to generate future cash flows. It would help a lot to not overestimate the value creation of a target company, let alone to not pay a price that a return would be doubtful.

As seen on chapter 4, more than half of all mergers and acquisitions fail to deliver on expectations. Other research shows that in the majority of cases this is because the acquisition is not properly integrated. However good the strategy, the choice of target and the negotiations of the sale and purchase agreement, poor post-deal integration will seriously increase the probability of a poor deal or even failure.

Does valuation may influence post-merger integration process? According to Ravi Chanmugam et al.[20] there is a risk by overestimating synergies, the value of a target company through a valuation method and underestimating the complications of the post merger process, because in case there is no concern about the entire M&A process, value creation will not happen. For example, if teams working on the synergy capture in the post-merger integration process have no idea what level of synergies are needed to recover the premium price that was paid for the acquisition, it will make the chance of a successful deal far remote. To avoid this unpleased scenario, M&A transaction must be treated as a single, connected and integrated process that begins with pre-deal strategy, progresses through deal execution, and continues with post-merger integration.

The key and goal of post-merger integration should be value creation, not just integration, which in most of the cases, is done as quickly as possible, without any advanced planning. Opportunities brought through an acquisition must be put in place rapidly. On the other hand, lower value-activities can be postponed. Blindly and aggressively integration plan without regard to a value-creation focus can actually destroy value.

Summing up, post-merger integration process must be construed and based on value creation. When the valuation is used and the final price of the company is reached, we have to bear in mind that post-merger phase is crucial for the success of the deal, because if a meticulous plan and synergies estimations do not make part of post-merger phase, the recovery of the premium price paid for the acquisition will be uncertain.

[20] The Intelligent clean room: ensuring value capture in Merger & Acquisitions – Ravi Chanmugam, Walt Shill, David Mann, Kristen Ficery and Bill Pursche – The Journal of Business Strategy (2005)

6.8.3. Implications for Further Research - What do I consider to be the major limitations of the present study and avenues for future research?

It is important to critically evaluate the results and the whole study. The present study has certain limitations that need to be taken into account when considering the study and its contributions. The quality of the research has been discussed in the Chapter 2.2. However, some of these limitations can be seen as fruitful avenues for future research under the same theme.

This study has focused on a subject that is a very extensive, the valuation methods for M&A transactions. Clearly, this represents a challenging task for research regardless of the more specific interests that the study may have. In this study, this extensive and complex subject has been studied from a rather narrow empirical perspective. The selection of 09 professionals, despite they are outstanding in the Brazilian market, naturally brings forth many limitations as far as the generalization of the results of the study is concerned. Thus, the empirical part can only be seen as a kind of pilot context of the valuation process. On the other hand, the empirical analysis of this study represents therefore only a small sample of point of views and experience.

To study the valuation methods for M&A purposes with an exclusive focus on Discounted Cash Flow, due to the fact it is clearly the most used method, is one of the future research challenges in this topic. Likewise, a broader source of respondents would enable us to test the conceptual framework of the study further, not to mention, if it is possible, include respondents from different countries and markets.

Another limitation of this study is the perspective adopted. Instead of trying to understand the valuation for both sides (buyer and seller) in general, this study has been first and foremost limited to the simply valuation perspective. Although the study has also taken into account other views along different types of valuation methods, the main perspective from which conclusions are drawn is that of the DCF. This can thus also be seen as a limiting factor in this study.

Criticism can also be presented concerning the way the theories are applied in this study. I have argued that this research contributes to understand the importance of valuation for M&A deals. The theoretical base of this study can be described as being fragmented as it includes such a wide variety of different perspectives. However, the purpose of adopting this kind of strategy in the present study has been to use the broad selection of different perspectives as a strength to the project.

The conclusions as well as the limitations of this study also bring forth some fruitful and interesting possible avenues for future research that might be needed in relation to the theme of the study.

7. Conclusions and Considerations

One size doesn't fit all. Many companies find that the best way to get ahead is to expand ownership boundaries through mergers and acquisitions. For others, separating the public ownership of a subsidiary or business segment offers more advantages. At least in theory, mergers create synergies and economies of scale, expanding operations and cutting costs. Investors can take comfort in the idea that a merger will deliver enhanced market power.

By contrast, de-merged companies often enjoy improved operating performance thanks to redesigned management incentives. Additional capital can fund growth organically or through acquisition. Meanwhile, investors benefit from the improved information flow from de-merged companies.

M&A comes in all shapes and sizes, and investors need to consider the complex issues involved in M&A. The most beneficial form of equity structure involves a complete analysis of the costs and benefits associated with the deals.

In order to avoid problems and mistakes that may lead M&A to fail, it is essential that management carefully plan and formulate strategies that clearly provide a rationale for their choices, conducting the firms to grow and create value to its stakeholders. These strategies should be based on clear vision, be in line with the company's mission, its goal and objectives, resources and capabilities. Companies should plan well ahead on how to organize the integration process and have an action plan in place before the deal is done.

Selecting the right integration strategy and deciding on the level of autonomy of each of the merged and acquired firms, are critical in the process.

The right approaches to realize synergies should be taken before embarking. Financial, value chain, competence synergies are most important that should be analyzed on firms concerns. A solid action plan should be developed and put in place in consonance with the strategies defined considering the synergies identified for the value creation.

According to a local Brazilian's newspaper, Valor Econômico (dated as of march 14,2007), the M&A deals in Brazil has growth greatly and the volume of business reached USD 70 billions, an increase of 237% comparing the same period in 2005. The leading banks on this segment were Credit Suisse with a participation in almost USD 30 billions followed by Goldman Sachs and UBS. In number of transactions, Itau BBA Bank and Citibank were the leaders, each had 11 deals.

In connection with that, the survey comes up with a lack of common usage of valuation method which is a reality among Investment Banks (all those mentioned in the previous paragraph).

It was also possible to realize professionals' attitude in their work with valuation. Many of them stated they might manipulate the method in order to reach the party's expectation they are providing advisory, it does not matter if it is the buyer or the seller.

Furthermore, many banks define certain valuation techniques that last for years, nobody argues whether the method needs some changes or improvement, they just simply use them without questioning.

On the other hand, there is a positive point regarding the survey, the professionals usually value a company with the purpose of assisting clients that intent to merger, acquire a company, buy or sell stocks, offer stocks to investors and so on. In this case, the contact with clients put some pressure on the professional in order to develop a valuation that results in a price that meets their expectations.

A matter of time and information were also mentioned by professionals in a way to decide for the right valuation method. Additionally, clients normally want to take advantage of some market condition due to this, they request the valuation as a shorter period of time as possible.

All said, the conclusion is, despite the high importance of a valuation in a Merger and Acquisition deal, unsuitable method is used. There are also doubts and questions and no precaution in using long-established valuation methods. The lack of time and information worsen the situation since professionals use old valuation method for many years without questioning whether they apply or not to the economic reality and the outcome work.

8. References and Bibliography

1. Basso, Maristela (1994) Contratos Internacionais do Comércio: negociação, conclusão, prática – Livraria do Advogado;

2. Strenger, Irineu (1998) Contrato Internacionais do Comércio – LTr Editora Ltda. 3ª. edição;

3. Arbnor, I. & Bjerke, B (1997) Methodology for Creating Business Knowledge, 2nd edition SAGE Publicacations

4. Roos, J.F. (2003) Increasing shareholder value through successful business integration and effective post merger management;

5. Hopkins, Donald (1999) Cross-Border mergers and acquisitions: Global regional perspectives;

6. Kay, Ira & Shelton, Mike (2000) The people problem in mergers;

7. Marks, Mitchell & Mirvis, Philip (2001) Making mergers and acquisitions work: Strategic and psychological preparation;

8. Torre-Enciso, Isabel & Garcia, Javier Bilbao (2001) Mergers and Acquisitions trends in Europe;

9. Searby, Frederick Wright (2000) Control post merger change;

10. Ernst & Young (1994) Mergers and Acquisitions – Back to basics techniques for the 90's – 2nd edition;

11. Mckinsey & Company (2004) Valuation: Measuring and Managing the value of Companies – 4th edition;

12. Damodaran, A. Avaliação de Investimentos: ferramentas e técnicas para a determinação do valor de qualquer ativo – Qualitymark (1997);

13. Martelanc, R.; Pasin, R.; Cavalcante, F. Avaliação de Empresas: Um guia para fusões e aquisições e gestão de valor. Pearson/Financial Times (2004);

14. Ravi Chanmugam, Walt Shill, David Mann, Kristen Ficery and Bill Pursche: The Intelligent clean room: ensuring value capture in Merger & Acquisitions. The Journal of Business Strategy (2005)

15. Handouts – Mergers & Acquistions – Jens Lübeck Johansen (2005);

16. Handouts – Valuation – Janette Jensen (2006);

17. Handouts – M&A a strategic approach – Henrik Harbo (2006);

18. www.investopedia.com

19. www.economist.com

20. www.valoronline.com.br

Appendix 1

1. JP Morgan Chase: Juliana Baiardi (VP – Banker)

   Email: Juliana.s.baiardi@jpmorgan.com - phone: +55 11 3048-3435

2. Credit Suisse: José Olympio Pereira (Head of Corporate Finance)

   Email: jpereira@credit-suisse.com - phone: +55 11 3841-6205

3. UBS Pactual: Rodolfo Riechert (Head Corporate Finance)

   Email: riechert@pactual.com.br - phone: +55 11 3383-2631

4. Merrill Lynch: Alexandre Bettamio (Head Investment Bank)

   Email: bettamio@ml.com - phone: + 55 11 2188-4241

5. Goldman Sachs: Cassio Gouveia

   Email: Gouveia@gs.com - phone: +55 11 3371-0844

6. Morgan Stanley: Gustavo Santos

   Email: Gustavo.santos@morganstanley.com - phone: +55 11 3048-6038

7. Citibank: Ricardo Lacerda

   Email: Lacerda@citi.com - phone: +55 11 4009-3738

8. ABN AMRO: Flávio Valadão

   Email: fvaladao@br.abnamro.com - phone: +55 11 3174-7015

9. PriceWaterHouse&Coppers: Alexandre Pierantoni

   Email: alexandre.pierantoni@br.pwc.com phone: +55 11 3674-3666

Appendix 2

1. What is the main purpose you usually evaluate companies? 1 for the most important and 9 for the less importante
( ) to analyze partnership and *joint ventures*
( ) Merger and acquisitions
( ) to buy and sell participations
( ) to determine a fair value of a stock in order to decide for a better option
( ) to analyze opportunities in investments, projects and new companies
( ) to analyze value management
( ) Receivership
( ) to an IPO (Initial Public Offering)
( ) Others:____

2. What is the valuation method you use the most? 1 for the most used, 7 for the least used.
( ) Balance Sheet (Book Value)
( ) Multiples
( ) Goodwill
( ) Discounted Cash Flow
( ) Options
( ) Value Creation (EVA/MVA)
( ) Others:____

3. How many different valuation methods you normally use to evaluate a single company?

( ) 1
( ) 2
( ) 3
( ) 4
( ) 5

4. In case you use more than one valuation method and you reach different results, in each one you trust the most?

( ) Balance Sheet (Book Value)
( ) Multiples
( ) Goodwill
( ) Discounted Cash Flow
( ) Options
( ) Value Creation (EVA/MVA)
( )
Others:____

5. Do you believe there are certain methods that are not indicated to evaluate companies in a specific situation?

( ) Balance Sheet (Book Value) – situation:
( ) Multiples – situation:
( ) Goodwill – situation:
( ) Discounted Cash Flow – situation:
( ) Options – situation:
( ) Value Creation (EVA/MVA) - situation:
( )
Others:____

6. By valuing a company through DCF method, you normally do your forecast using:
( ) Free cash flow
( ) Equity Cash flow
( ) It does not matter

7. When you use DCF for your valuations you think it is better:
( ) forecast from 3 to 5 years a cash flow
( ) forecast from 5 to 7 years a cash flow
( ) forecast from 7 to 10 years a cash flow
( ) forecast from 10 to 15 years a cash flow
( ) forecast according to the project, which may vary case by case.

8. By using DCF, how many scenarios you normally create and what are the main variables?
( ) 1
( ) 2
( ) 3
( ) 4
( ) 5
Which are the main variables used?

9. Which are the Multiples methods you use the most e which you do not use? 1 for most used and 7 to less
( ) PER (Price Earnings Ratio)
( ) Price/EBIT
( ) Price/EBITDA
( ) Price/Sales
( ) Price/Book Value
( ) Others? Which one?.

10. Do you prefer using multiples from past or future data?

11. How do you use comparable companies? What are the criteria?

12. Will your choice for the most appropriate Multiple depend on the sector? Explain.

13. In which circumstance do you opt for Multiples or DCF or vice-versa?

14. How do you come up with the intangible value of a company?

15. How do you include intangible value of a company when using DCF?

16. How the current global crisis has affected M&A deals both in-country and Cross-border?