AN OVERVIEW ON THE DETERMINANTS OF MERGERS AND ACQUISITIONS WAVES

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This paper concentrates on the presentation of the economic dimension of the mergers and acquisitions from a macroeconomic perspective. Thus, the objective of this paper is to reveal the main drivers of merger and acquisition activity. These operations take place in waves, which enters the context of changing the competition game marked by economic changes, technological evolutions, changes generated by the phenomenon of globalization, and by regulating changes. On the other side, a series of studies in the literature argue the existence of a connection between evaluating the securities and the merger and acquisition activity. This research is based on a systematic, logical and comparative analysis of scientific literature regarding the macroeconomic determinants of mergers and acquisitions.

Key words: external growth, merger and acquisition waves, macroeconomic determinants, neoclassical hypothesis, behavioural hypothesis

JEL Codes: M10, M20

1. Introduction
Merger and acquisition activities regard both quoted companies which direct themselves and target the consolidation of the activities at the world level and unquoted companies which have to cope with the growth problems and even survival problems. In the literature there are numerous theories trying to explain why firms adopt the growth strategy through mergers and acquisitions or analyse the consequences of this strategy. Our objective is to present the economic dimension of mergers and acquisitions, from the macroeconomic perspective, in order to understand the determinants of these operations. The merger and acquisition activity takes place in waves which belong to a context of changing the completion game, marked by economic changes, technological evolutions, changes generated by the phenomenon of globalization, and also by changes in what the regulation process is concerned.

2. Research methodology
This theoretical paper is based on a systematic, logical, and comparative analysis of scientific literature regarding the determinants of the merger and acquisition activity. Therefore, we have used as a research method the qualitative approach, in order to identify the macroeconomic determinants of the external growth operations through mergers and acquisitions. The usefulness of the paper is reflected in its contribution to this research, ensuring the premises for future studies related to this topic.

3. The macroeconomic determinants of the merger and acquisition activity
The observation of the annual evolution of the number of merger and acquisition operations emphasizes the phenomenon of evolution in waves, which consists in a sudden and important growth of the number of operations, concentrated in a short period of time. Golbe and White (1993) were the first to notice the cyclic character of the merger and acquisition activity. So far, six waves of mergers and acquisitions have been analysed in the literature: those from the 1890s, '20s, '60s, '80s, '90s, and the last started in 2003 and concluded in 2007, when the economic-financial crisis started. Each of these waves was based on motivations and characteristic specific
to the period of development. Ceddaha (2007:16) considers that, except for the factors specific to each enterprise, the main common points of each wave are those referring to political and regulating factors, macroeconomic factors (the concentrations intensify during the economic growth periods) or to industrial and sector factors.

Gregoriou and Renneboog (2007:1) consider that the economic recovery (after a period of recession) seems to generate takeover waves and these often coincide with periods of credit rapid expansion. The changes regarding regulation are, also, important determinants of the merger and acquisition waves. It is considered (Martynova and Renneboog, 2005 quoted by Gregoriou and Renneboog 2007:1) that the first waves, those of the 1890s and ’20s, were generated by the antitrust laws while those of the ’80s seems to have been generated by the markets’ large scale deregulation. In the last years, the merger and acquisition activity concentrated on sectors making the object of deregulations, for example financial services, health, utilities, media, telecommunications or defence. There are in the literature significant proofs regarding the fact that the merger and acquisition activity is intensified in the deregulated sectors as compared to the regulated sectors (Jensen, 1988; Mitchell and Mulherin, 1996; Mulherin and Boone, 2000). The deregulation has eliminated the artificial barriers within these sectors and stimulated competition (yet, it had other effects, negative).

The evolution of these operations is characterized by recurrence, in other words, the succession of intense activity periods followed by periods when only few transactions are recorded. These belong to a context of changing the competition game marked by technological, economic, regulation policies changes etc. Thus, innovations, technological, organizational or financial, imply re-engineering simultaneously reaching several sectors (Coutinet and Sagot-Duvaurox, 2003:31-32). Current operations are different from those of few years ago, both in what the size is concerned and their internationalization, a consequence of an economy subscribing to the tendency of globalization.

When technological innovations are transversal, they will determine large organizational re-engineering. In the same time, they will be at the origin of new activities subscribing to the dynamics of a product’ lifecycle and which, when they reach maturity, will generate concentration movements. Practically, these technological innovations participate to the “creative destruction” phenomenon described by Schumpeter (2011:40) and within which mergers and acquisitions play a central role. Also, organizational innovations play an important role regarding the waves of mergers and acquisitions. Thus, we can mention the organizational innovation of the ’20s, that is the passing from a one-divisional structure (the U firm), to a multidivisional structure (the M firm), illustrated by firms like General Motors or Dupont. Another organizational innovation is the occurrence of the holding firm in the ’60s, whose organizational structure corresponds to the conglomerated operations of that period. In the category of financial innovations, we have the appearance of Leverage Buy-Out operations or the appearance of junk bonds), which stimulated the merger and acquisition operations (Coutinet and Sagot-Duvaurox, 2003:32, 34).

Ceddaha (2007:16) and Depamphilis (2010:16) state that all the waves of mergers and acquisitions have certain common aspects. Thus, the operations tend to get intense in periods of sustained economic growth, of low interest rates and increase of the capital market. The relation between a sustained economic growth and the merger and acquisition operations is quite complex and can be regarded from two points of view. On one side, a high rate of economic growth reflects the dynamism of economy, which can determine intensification of the merger and acquisition activity and, on the other side, the recession periods are favourable to re-engineering which can take the form of mergers and acquisitions. The mergers and acquisitions take place, also, in the context of stock exchange growth. Nelson (1959) or Andrade, Mitchell and Stafford (2001) showed that mergers and acquisitions are concentrated in time, that they tend to group themselves during periods of stock exchange growth and the payment manner is represented,
generally, by certificates. Practically, the anticipation of a future growth in the price of shares can
determine enterprise make mergers or acquisitions, hoping to obtain large revenues. The cost of
capital can, also, influence the activity of mergers and acquisitions, the low interest rates
stimulating the operation through indebting.
In the literature there are two hypotheses meant to answer the question “Why do merger and acquisitions waves appear?” For a wave of mergers and acquisitions to appear, obviously, the
frequency of making certain types of mergers and acquisitions must increase in certain periods of
time. We will further approach models susceptible to forecast such variations in time of mergers
and acquisitions.

3.1. Neoclassical hypothesis
The neoclassical explanation (considered as such because it is based on suppositions such as: the
managers maximize the profit; the mergers and acquisitions create wealth; the capital markets are
efficient) of the merger and acquisition activity, supported by many studies (starting with Gort’s
study, 1969, quoted by Harford, 2005; Mitchell and Mulherin, 1996; Mulherin and Boone, 2000;
Andrade, Mitchell and Stafford, 2001 or Harford, 2005) is that these operations represent an
efficient answer to the reorganization opportunities occurring as a result of certain economic
events, the merger and acquisition waves being caused by a combination of economic,
technological, and regulating games. Mitchell and Mulherin (1996) clearly emphasize the
existence of the waves of mergers and acquisitions in the sectors and associate this phenomenon
to different economic, technological or regulating shocks, reaching these sectors. These
researchers suggest the fact that a systematic analysis of the shocks and of the merger and acquisitions activity can help a better understanding of the waves of mergers and acquisitions.
During the conglomerated wave of the ‘60s, the well managed companies built diversified groups
by competing the capital and the know-how of the target companies (Gaughan, 2011: 44). During
the wave of the ‘80s, the raiders financed through bank loans and junk bonds acquired and
separated the conglomerated formed in the ‘60s because the conglomerated organization was not
efficient anymore (Jensen, 1986).
Holmstrom and Kaplan (2001) consider that the corporate governance problems represented a
determinant factor of the waves of mergers and acquisitions in the ‘80s and ‘90s. Andrade,
Mitchell and Stafford (2001) and Mulherin and Boone (2000) consider that the wave of mergers
and acquisitions in the ‘90s corresponded to a consolidation within the large sectors, yet it also
represented an answer to deregulation. Practically, deregulation, another factor considered
determinant for the appearance of waves of mergers and acquisitions, functions in the same way
as the appearance of new technologies, because it allows the expansion of the set of input-output
combinations. By removing certain constraints, firms are encouraged to penetrate the market. In
order to adapt to changes generated by deregulation, a re-engineering of sectors may be necessary
and the mergers and acquisitions can facilitate this process. On certain markets, such as that of
utilities or flights, the shares of the firms were constrained by deregulation. After the start of the
deregulation wave at the end of the ‘70s, many firms took advantage of this freedom, which has
led to the intensification of the merger and acquisition activity.
A wave of mergers and acquisitions may occur as a result of the flexibility of the antitrust policy.
Therefore, a more permissive antitrust policy may determine the intensification of the merger and
acquisition activity. The antitrust activity of growth of power occurred as a result of innovations
in the communication and transport technology and the formation of larger organizations, in
many geographical areas.
The neoclassical hypothesis explains the waves of mergers and acquisitions by the fact that
numerous sectors have different shocks which make these operations become profitable and,
moreover, the favourable macroeconomic conditions reduce the cost of acquisition financing.
The economic shock has as potential sources factors such as: industrial over-capacity, the
appearance of new technologies, changes in terms of regulation or changes regarding the access to capital markets which modify the optimal operational scale of firms. The economic shock takes the form of an economic expansion motivating enterprises to expand in order to cope with the increasing aggregated demand in economy and the mergers and acquisitions represent a much faster form of expansion than internal growth, through own forces. The shocks in terms of regulation may occur by eliminating the barriers which might hinder such operations. Technological shocks may have multiple forms because technological changes can generate important changes within the existing sectors or might create new ones. Coase (1937) was one of the first researchers supporting the fact that technological changes lead to firm mergers. Later, Gort (1969, quoted by Gregoriou and Renneboog, 2007: 6), through a model, argue that economic perturbations like market imbalances, can determine re-engineering within sectors. Jovanovic and Rousseau (2001, 2002b) concluded that technological changes were a determinant of the waves of operations in the 1900s, ’20s, ’80s and’90s, less of the wave of the ‘60s and that the waves are shorter when technological changes are bigger. They also consider that the waves of mergers and acquisitions tend to appear in the periods of boom of the capital market. The eaves of mergers and acquisitions coincide with the periods in which price earning ratio (PER - the report between the share price and the revenue per share) rates on the capital market are high.

Manne (1965) considers that mergers are a means to transfer resources (asset relocation) in the hands of those who can manage them better. He stated that a badly-managed company’s share price would be lower and, thus, it would be an attractive target for those capable of managing it better. Moreover, the author states that mergers play the same economic role that the entry on a market plays – that of asset relocation – and that, often, these operations represent an even cheaper means and yet more efficient. Therefore, Jovanovic and Rousseau (2001) underline the idea that mergers and acquisitions, on one side, and the market entry and exit, on the other side, represent substitutable means to relocate assets. The idea that mergers represent asset relocations suggest the fact that this type of waves of operations should occur when there are important technological changes and should disappear when asset relocation is complete.

Yet, Harford (2005) states that these types of shocks cannot, in them, generate a wave of mergers and acquisitions, but there are other generating factors, too. Thus, analyzing the waves of operations on sectors (35 sectors were taken into consideration), in 1981-2000, Harford shows that a necessary condition for these shocks to produce a wave of operations is represented by the existence of enough liquidity capital to permit the asset relocation (transactions). Moreover, easy access to capital may cause the intensification of the activity of mergers and acquisitions even though sector shocks are absent. DePamphilis (2010:13) states that easy and cheap access to financing has been an extremely important impelling factor for the sixth wave of mergers and acquisitions. Also, he considers that the market’s differences of evaluation do not represent a cause generating waves of mergers and acquisitions, yet they can represent a determinant for certain transactions.

Another neoclassical theory invoked to explain the waves of mergers and acquisitions is the Q theory of investments, whose promoters were especially Jovanovic and Rousseau (2002a). They say that economic and technological changes increase enterprises’ growth opportunities. Such changes can determine the relocation of capital by the more lucrative and more efficient firms. Thus, the high dispersion of Tobin’s Q rate records low values (sub-unitary) and in this view we can mention two favouring situations: an inflationist context (a situation in which the acquisition of assets by taking over the control of enterprise on the financial market becomes less expensive than purchasing new assets) and/or strong decreases recorded on stock exchange markets (as the stock exchange crack in 1987 and 1989, which have led the development of the mergers and acquisition activity at the end of the ’80s, both in the United States and in Europe). In another paper, Jovanovic and Rousseau (2002b) stated that the booms of the capital markets at the end of
the ‘90s were caused by important technological changes. The boom of the capital market at the end of the ‘90s was a result of the innovations in the IT field which has led to the increase of the opportunities for profitable mergers and acquisitions.

Neoclassical methods explain the concentration of takeovers at the sector or country level. Yet, the waves can also result from the firms’ answers to the competition’s actions. Therefore, if a firm makes more merger and acquisition operations, it can determine other firms to adopt this strategy (Persons and Warther, 1997 quoted by Gregoriou and Renneboog, 2007:6).

The neoclassical theory referring to mergers and acquisitions obviously has a considerable explainable power, yet it is incomplete. For it concentrates on the specific shocks at the sector level, it does not explain the aggregated waves of operations only in the situation in which several sectors experiment the same period of time, money or certificates, thus there are distinct patterns in choosing one or another. Regarding the central idea of neoclassical explanations, that of increasing profitability as a result of mergers and acquisitions, the result is inconclusive. If Ravenscraft and Scherer (1987), concentrating on the period of conglomerated operations, do not succeed in demonstrating profitability increases, Healy, Palepu and Ruback (1992), taking into consideration the period of hostile takeovers, managed to find evidence of profitability increase.

In the end, the neoclassical theory does not manage to explain certain obvious aspects of the capital market and the reaction to different announcements. Loughran and Vihj (1997) state that the market does not react fairly to the announcement of a merger or acquisition, the acquirers making the payment bid in money recording long term positive abnormal returns, while the acquirers offering certificates record long term negative abnormal returns.

3.2. Behavioural hypothesis

A series of papers support the connection existing between bond evaluation and the activity of mergers and acquisitions (Shleifer and Vishny, 2003; Rhodes-Kropf and Viswanathan, 2004 or Gugler, Mueller and Yurtoglu, 2005). The behavioural model requires the elimination of the hypothesis of efficient capital markets and or the hypothesis according to which the managers maximize the shareholders’ wealth. This model takes into consideration the psychology of the players on the capital markets and, thus, explains why the waves of mergers and acquisitions appear and why they tend to coincide with the boom periods of the capital markets (Gugler, Mueller and Yurtoglu, 2005; Gugler Mueller and Weichselbaumer 2008). Therefore, as Shleifer and Vishny (2003) observed, when the managers of the acquiring company are aware of the fact the company’s shares are over-evaluated, they decide to change them for tangible assets, through a merger or an acquisition, which has as effect the protection of the company’s shareholders from a loss of value when the market is making a correction of the shares rate. During periods of stock exchange euphoria, the firms with over-evaluated shares use these shares to buy real assets of some under-evaluated or less evaluated companies, the interest of the target companies’ managers having an important role in making the transaction regarding the maximization of the shareholders’ long term profit. Thus, the merger or acquisition operation is a win-win operation, even though there are no value creating synergies (for both parties benefit from the merger or acquisition). Using some over-evaluated shares means that the acquirer can issue less shares, which will be reflected in a lower decrease of returns, in other words of the return per share. Therefore, over-evaluations lead to an intensification of the merger and acquisition activity and, therefore, to the appearance of waves of such operations, the managers taking advantage from the inefficiencies of the markets during periods of stock exchange euphoria. Consequently, the payment manner in the concentration operations should be represented by shares.

Rhodes-Kropf and Viswanathan (2004) suggest a rational managerial behaviour model in conditions of uncertainty regarding the evaluation. They foresee that the waves of mergers and acquisitions in periods of boom in the capital market, yet they provide another explanation referring to the fact that the mangers of the target company accept over-evaluated shares. The
researchers consider that the optimism of the market during periods of *boom* makes that the understanding by the managers of target companies of the motivation of over-evaluation be difficult. If they are not certain regarding the fact that the acquirer’s actions are over-evaluated due to the market’s optimism or to the fact that the synergies expected to take place as result of the merger or the acquisition, can make the mistake to engage in operations that will not generate synergies. In the model built by them, the target companies which do not have perfect information will accept takeover offers from companies over-evaluated in peak times of market evaluation, because in these periods the target companies overestimate the synergies. Therefore, the high flow of transactions produces the wave of mergers and acquisitions. Yet, their model is different from that of Shleifer and Vishny’s (2003), meaning that the managers of the target companies rationally accept over-evaluated shares due to the information regarding the synergies and not due to rationales related to short term returns.

Holmstrom and Kaplan (2001), Verter (2002, quoted by Gugler Mueller and Yurtoglu, 2005), Dong et. al. (2003) or Ang and Cheng (2006) are other researchers whose studies mention the hypothesis of share overvaluation, in explaining the waves of mergers and acquisitions. These studies confirm that the long term market fluctuations regarding the evaluation and the number of takeovers are positively correlated. To test the validity of this argument, the researchers used certain methods to track the over-evaluation. These instruments are especially represented by the *book to market* rate value, or its inversion, *market to book*.

Another hypothesis enunciated in the same context explaining the mergers and the acquisitions refers to the managerial freedom and influence. The first researcher to talk about growth as being a manger’s objective was Marris (1964, 1998, quoted by Gugler, Mueller and Yurtoglu, 2005). Then, Mueller (1969, quoted by Gugler, Mueller and Yurtoglu, 2005) applied the same theory to explain the wave of mergers and acquisitions at the end of the ‘60s. He states that the managers take advantage from the firm’s growth, either because the returns grow as the organization becomes bigger, either because they obtain a certain “psychological comfort” by managing a bigger organization.

Also, these operations represent a defensive mechanism of managers as Gorton, Kahl and Rosen (2005) consider. Also, they show that the structure of the sector is very important for the dynamics of mergers and acquisitions. Therefore, the sectors in which several firms have relatively similar dimensions with that of the large firm, with opportunities of profitable acquisitions, are open to making defensive operations (generating a wave of operations), if the managers are busy with the private benefits related to control. Inversely, the sectors in which the firms are different from the point of view of dimension or less open to acquisitions (often the operations that are based on such motivations prove unprofitable). The authors maintain that the managers will always prefer to keep the independence of the firm they run and can get to other firm takeovers, as a defensive measure to the danger to become, in their turn, targets for other companies. If the managers consider that the firm is in danger to be taken over, this topic can generate a wave of inefficient activity of takeovers.

Yet, no version of the over-evaluation hypothesis cannot explain the activity of mergers and acquisitions at the level of the firms which are not quoted. The shares of these firms cannot be over-evaluated, or at least not by the capital market which means that these firms cannot change over-evaluated shares with other less evaluated shares. This aspect targets especially continental Europe because a larger part of its economic activity is made by unquoted firms.

**4. Conclusions**

Over the last decades, the boom that the strategy of growth and development through mergers and acquisitions has experienced, adopted by enterprises, is remarkable. These transactions have become unavoidable in the process to conquest the markets, especially internationally. Without using a merger or acquisition operation, it often becomes impossible for an enterprise to develop
in short time, to reach a right size and to show the financial community that a strategic project can be finalized. The merger and acquisition operations, more and more, the value of the firms and managerial teams represent central elements of their strategic movements. The mergers and the acquisitions do not represent a strategy in itself, as it might seem when initially approaching this subject, yet they are instruments used to make a strategy.

At the macroeconomic level, the operations result from economic, technological or regulations shocks and contribute to the intensification of the activity of mergers and acquisitions. Also, empirical studies in the literature have shown that there is a strong correlation between the evolution of stock exchange markets and the merger and acquisition activity, many operations taking place in periods of stock exchange euphoria.

We can state that this modality of growth and development is used by the majority of firms in order to restructure their strategic position, according to the objectives set and the evolution of the business environment. Practically, through merger and acquisition operations, the firms can adapt to the changes occurred in their competition environment. In a competition environment, the enterprise must be proactive and try to create growth and development opportunities.

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