The Merging Process between Firms and its Influence in the Economic Value Added: A Comparative Descriptive Analysis

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Abstract

This study aims to identify whether the merger between companies increases its economic value added. This identification springs out from the theoretical assumption based on the questioning and analysis of the tendencies of achieving maximum growth through evaluation of product-market strategic coupling. The analytical methodology based on a comparative description used is supported by the Economic Value Added (EVA), addressing the spread method to analyze the data and calculate the results of three cases of mergers. This study confirms general research findings on the analysis of generating value through mergers for the six companies being merged and merging in three companies.

Keywords: Acquisitions, economic value added, mergers

1. Introduction

A business growth strategy is a relevant issue that has been treated abundantly in the academic literature. The problem referred to how companies make decisions about the different businesses in which they want to compete, it is a phenomenon of interest in the business world that has tried to be solved from the theoretical research. Mergers have become a growing trend for companies both large and small, domestic and foreign, to form strategic alliances within their industries. There are many objectives that companies seek to achieve by performing these processes, but the rationale is to ensure achieving sustained growth that is profitable in the long term for their businesses.

Currently, businesses must meet the challenges of a diverse global market and maintain a competitive advantage, so it is essential to form alliances to become stronger financial institutions, allowing companies to pool their resources; causing these strategies have a significant performance in the economic expansion of the countries that have implemented them. When a merger of two or more companies happens, each of which has been operating with few processes or frameworks of different work, conflicts arise. Surely, the difference in their levels of maturity, the imposition of processes by the members, or the difference in their ways of doing things, make it difficult to merge and create the resource waste and late identification of priorities, roles and responsibilities (Marley, 2009).

In a global context, acquisitions and mergers (A & M) have had varying degrees of success since the early 60s to the present. In the decades of the 60s and 70s, companies with profits above the average before the acquisition obtained falls in profits after the operation, due to the loss of management control (Ravenscraft, 1983 cited in Zozaya. At that time, the A & M represented high-risk strategies with low success rate. In order to improve this situation, most of the studies on A & M made in the decades of 80 and 90 have tried to explain from differ-
ent perspectives, the reasons for the results obtained by the firms after operations, focusing on finding key elements for success (Feito & Menéndez, 2011).

The strategic, organizational and cultural fit was the factors of study associated with improved results from acquisitions (Chatterjee, 1986; Jemison, & Sitkin, 1986; Paul, 1994). The success of the A & M, for Morck, Schleifer & Vishny (1990) was significantly associated with high levels of previous-merger performance of the acquiring companies. Other studies (Sherer & Ross, 1990; Morck et al, 1990), agree that A & M involving companies belonging to related industries tend to be more successful in comparison with the case of unrelated companies. Rovit & Lemire (2003) suggest that companies that accumulate experience in A & M become adept at managing these processes and achieve better results.

It should be noted, the distinction between acquisition and merger. Both are processes involving the search for a positive outcome for the company that proactively conducts these processes. The merger agreement refers to two or more companies of similar size to join either to expand its production capacity and its market share. Moreover, the acquisition refers to the union of two or more companies, where one of them is bigger than the other one and usually ends by imposing its procedures, policies, culture and business vision (Henningsson, 2008).

According to De los Rios (2007), in Mexico there is only marginal and secondary information on the subject. From a review of the literature, it was found that the research that addresses mergers and acquisitions, from a holistic point of view or from a quantitative perspective, are insufficient. In addition, several studies indicate that the failure rate of the A & M varies between 70% and 90% (Christensen, Alton, Rising, & Walswck, 2011). The background studies of Kitching (1967), Sang-Yong and Kim (2006), Campa and Hernando (2004), Mulherin and Bone (2000) and Martinez-Jerez (2002) have focused on analyzing the impact of mergers in the value of the company, using only measure market yields, i.e. focusing on the share price. However it is considered that it is not enough the realization of this simple comparison, but it must be used more elaborate models to determine value.

One way to measure the value generated by an organization is through the calculation of economic value added (EVA for its acronym in English). Amat (2001) defines EVA as the amount once it has been deducted from the total revenue expenditure, including the opportunity cost of capital and taxes. Cuevas (2001) states that EVA is a measure of utility produced on the cost of capital. Ramirez (2008) states that the economic value added is the remnant that a business operation generates after deducting operating income, taxes and bear the cost of the resources that are used in the operation. Tully (1993) states that it is an absolute measure of organizational performance that it can allow the creation of
value, which when implemented in an organization makes administrators to act as owners and also to measure the quality of management decisions.

The EVA is regarded as a measurement tool valuing the profit generated by the company, and how to assign the way to apply resources to the different business units directly related to the operation of the company (Stewart, 2009). In other words, EVA is what is left once all expenses have been served and satisfied the minimum return expected by shareholders.

Unlike other classic indicators of profitability, EVA meets the following objectives:

a) Can be applied to a business generally, responsibility centers or business units. It takes into account the cost of capital and the cost of debt. It considers the risk with which the company operates. It diminishes the impact of creative accounting and adjusts the information requirements for calculation.

b) It is reliable in comparing figures with other companies. It is not limited by the basic postulates.

c) It promotes reinvestment to improve or maintain the competitive position of the company.

d) It shows the actual creation of wealth.

e) It integrates profitability and growth to risk and performance, giving a favorable outcome.

f) It makes consistent decisions for adequate resources (Amat, 2001).

According to Martinez and Lopez (2003) investors are going after companies that generate competitive returns and not just profits, thus considering the situation of many companies that despite having earnings destroy value. According to the objective of the proposed research, it is to identify whether the merger between companies increases its economic value added.

2. **Framework of reference**

The study of the processes of M & A has been carried out under different theoretical perspectives, which include various elements of these processes, or refer to the end result that the company seeks to achieve. Thus, it is found on the one hand, on the life cycle theory (Mueller, 1972), that M & A is performed to modify, alter or enhance any stage of the life cycle of a company. In this perspective, it is stressed that the company executives are looking for their own benefit. Thus, the theoretical hypothesis it arises is to achieve maximum growth through evaluation of product-market strategic coupling.
Companies carrying out an M & A are taking a decision of an economic nature which is specifically to make an investment, where are allocated certain resources, in order to ensure in the future recovery of the funds invested, earning in turn a profit from them. The objective of M & A is the external growth to strengthen its presence in the markets, exploit synergies arising from any operation of this type, increase its competitive potential to undertake internationalization strategies and increase its market value, thus overcoming the performance of its main competitors. Kitching (1967) found in a sample of 22 companies that merged to a mismatch in size, where sales of the acquired company represented less than 2% of the turnover of the parent company before the merger, and occurs in 84% of purchases considered as failures.

Using a sample of 170 companies, Sang and Kim (2006) conducted a study which analyzed the value created by M & A and joint ventures in companies in the information technology (IT) sector and in companies that do not belong to this sector. In this study they found for companies in the IT sector, that their announcement of the operations of M & A in the stock exchange market, expectations rise to significant gains that increased the value of these companies. On the other hand, companies from different sectors to IT, obtained abnormal returns that also increased the value of the company.

Campa and Hernando (2004) analyzed a sample of 262 companies that announced M & A in Europe during the period 1998-2000, from various sectors. The results revealed that the announcement of the transaction on the market originated cumulative abnormal returns of 9%. On the other hand, companies that are highly regulated by the government generated lower returns than those that are not regulated. Even the returns of regulated firms become negative when it comes to two companies that are in different countries. This result is consistent with the obstacles faced by these enterprises (cultural, legal or barriers to transact) to conclude with success this type of transaction, which decreases the likelihood that the announced merger takes place and, therefore, reduces the expected value.

Thus, Corrales (2005) also mentioned that M & A have proven to be a mean popularly significant and growing to achieve diversity and corporate growth. However, the success of this strategy depends on extensive planning, rigorous analysis and careful implementation. However, Campa and Hernando (2007) mention that mergers create value for the shareholders of the company that sells the company, but the company that buys usually no generate value, as the trend of the actions of the latter tends to go downward after the announcement of a merger. Finally Werner and Carsten (2010) have mentioned that large companies may be able to create a much higher value buying small companies and optimizing their operations. This being coincident with the findings of Chein et al. (2008), who claim that are the larger companies who have the best results with mergers.
In another context, there have been few studies on the subject of human resources associated with mergers and acquisitions, including those conducted by Dolz & Ibarra (2005), Paul (1994), Siehl, Ledford & Siehl (1986). However, it should be highlighted those made especially in the late 90's and early new century. For some authors may define the type of integration by the level of integration (Pritchett, 1985; Paul, 1994). Thus, Paul (1994) argues that the level of integration measures the degree of post-acquisition change in the cultural, technical and administrative enterprise. It focuses on integration as a means to coordinate and control after the acquisition.

Furthermore, integration types proposed by Haspeslagh and Jemison (1991) or McCann and Gilkey (1990) can be defined as follows:

a) The coexistence or preservation: that would be defined by the possibility of keeping taker and taken companies substantially separated.

b) The symbiosis or processing: in this case it is produced a change in the two companies together through active collaboration. As Haspeslagh and Jemison (1991) point in the symbiotic acquisitions, companies remain independent first and then being gradually interdependent.

c) The absorption or assimilation: one company loses its independence being absorbed by the other. In the words of Haspeslagh and Jemison (1991) integration of absorption implies full consolidation, over time, operations, organization and culture of both companies.

Moreover, studies like the one conducted by Pritchett (1985) show the impact that mergers and acquisitions have on human resources. This type of operation involves major changes in organizations and thereby situations of uncertainty and ambiguity that cause employees are reluctant to change (Buono and Bowditch, 1989; Larsson and Finkelstein, 1999) are created.

Different studies have analyzed the implications of acquisitions on employment, both on the rotation policy (Walsh, 1988; Hambrick and Cannella, 1993; Kesner and Dalton, 1994; Iborra, 2000; Krug and Hegarty, 2001) and on employment in general (Kleinert and Klodt, 2002). Walsh's work (1988) was one of the pioneers in setting quantified in the top management of the acquired companies. It shows that the rotation policy is higher in the acquired companies in a control group during the five years following the acquisition. Hambrick and Cannella (1993), meanwhile, delve into some of the reasons that can explain the level of rotation and found that it related to issues concerning the status and position of both companies.

Furthermore, in connection with the adjustment of employment in general, acquisitions that create value through sharing resources not dependent OF indivi-
duals often seek to improve efficiency, among others, through the adjustment of human resources (Porter, 1987; Bower, 2001). In the symbiotic acquisitions, the creation of value requires the involvement of human resources of both companies for the transfer to take place, be expected to have a lower setting. However, in situations of preservation there are relatively few changes so that they affect mainly to higher management levels, but the overall adjustment in human resources is insignificant.

Previsions of human coupling, is another theoretical perspectives used in the study of the M & A. In this respect are considered the following aspects: the presence of a high level of anxiety in the process that leads to the search for a positive position of his own group presenting aspects of justice for the people involved something that is studied under the perspective of organizational justice (Seo & Hill, 2005).

Regarding the behavior of human capital, culture assimilated is another aspect that is considered in the analysis of the M & A. In this regard it stresses the importance of resolving the cultural conflicts of the human capital of both companies in a context of acculturation. Another aspect to consider is related to job characteristics and redesigning jobs to achieve greater integration of human capital (Seo & Hill, 2005).

Another theoretical perspective that has been used frequently in the study of M & A is financial. There have been studied the following issues also identified with the moment or momentum of decision making: a neoclassical approach, it is assumed that managers act based on the goal of increasing shareholder value due to increased synergies from process M&A; in relation to the financial link one of the points emphasized the optimistic beliefs, which are related to the market reaction to the ads of M & A, promoting optimism reflected in the share price in the short term, but would consider that, in the long run that price returns to normal (Rosen, 2006).

As financial synergies of the M & A theoretical position is one that considers the merger as a divestment (Fluck & Lynch, 1999). This financial perspective emphasizes the importance of assessing the ability of the project in connection with their survival. Other approaches emphasize the need to consider the efficiency of financial synergy (Trautwein, 1990).

An additional perspective on the process of the M & A is related to the legal and accounting assurance, as it is considered important to have accounting information that reflects the economic performance of the integration process (Giner & Pardo, 2004). Ugalde (2009) notes that there are three main reasons why companies merge and acquire other: to improve revenue, reduce costs and increase their levels of knowledge and innovation. Business combinations exploit synergies that improve corporate earnings to reinvest their resources (Capron, 1999).
Mergers and acquisitions have the great ability to make companies evolve, allow companies to become stronger. Also help organizations to have a better positioning in the market much faster than if trying to make the normal rate of development (Saavedra and Moon, 2012). Also provide the possibility of obtaining positive results in the combination of their assets and the union of various capacities, which are much easier if done together by joining forces with another corporation.

2.1 Methodology of Economic Value Added (EVA)

The Economic Value Added is defined as operating profit less the cost of capital employed to generate those profits (American Management Association, 2000). Gonzalez (2005) defines it as the difference between the adjusted net operating income after taxes of a company and its cost of equity traditionally measured through the weighted average cost of capital (WACC) or WACC for its acronym in English. The EVA will increase if operating profits increase, as long as they have not involved additional capital.

The EVA will increase when the new capital is invested in projects with higher profits to the total cost of capital or the capital can be reoriented or removed from areas of business that do not provide an acceptable return. On the contrary, it will decrease when the administration directs funds to finance projects with lower profits or capital cost that overlook the funding of projects with the same seemingly higher profits.

The basic components of EVA are operating income, capital invested and the average weighted cost of capital.

a) Operating income used for the calculation of EVA is operating profit after tax (UODI recommended by Stewart (2009)), which includes operating income, non-interest income, dividends and other extraordinary income; the expenses incurred in the operation of the company, including depreciation and taxes, regardless of interest charges or other extraordinary expenses. It is important to remove the depreciation of operating income.

b) Capital invested refers to fixed assets plus operating working capital and other assets; another way to reach the capital invested is through the debt of short-term and long-term costs plus stockholders' equity. The operating working capital disregard bearing liabilities and deferred tax liabilities in the short term.

c) The weighted average cost of capital can be obtained from two sources: debt with creditors, subject to interest and shareholders' equity. Both the weighted average cost of debt after taxes as the cost of equity makes up the weighted average cost of capital. That is, the EVA is the difference between the profit the company obtains with its operations and by capital from investors.
There have been defined two methods for the EVA for calculating it, the spread method and the residual method. To analyze the data in this study it will be addressed the spread method. This method has been defined as the difference between the rates of return on capital invested, less the weighted average cost of capital multiplied by invested capital (Saavedra 2002). If a positive value of EVA is obtained, it means that the profitability is sufficient to cover the cost of all sources of funding resources invested in the company to produce operational results, i.e., is generating value for shareholders, which should be reflected in the share price. However, if as a result it has a negative EVA means that the company is destroying value and resulting in a lower return for shareholders.

3. Case analysis

To better simplify the EVA methodology, the following information will make the analysis of three Mexican private sector companies located in the state of Veracruz. It is medium-sized enterprises of different businesses: car dealership (Gasme Automotriz, SA de CV), factory ampoules, vials and cartridges of glass (Schott of Mexico, SA de CV) and a factory of parts for the automotive industry and plastic jugs (Fischer, SA de CV), companies experienced a merger in the years 2010 to 2014, in order to consolidate assets, obtain an efficient corporate restructuring that would allow them financial and administrative benefits and become more competitive with the new challenges of the markets.

The analysis was performed by calculating the EVA according to the methods defined Saavedra (2002) with financial information that companies provide them the years 2010-2014, because the financial performance will be analyzed two years before and two years post-merger.

A. Gasme Automotive, S.A. de C.V.

In 1960 was founded the company under the name of Autos Económicos de Orizaba, S.A de C.V., (Economic Cars of Orizaba, SA de CV), three Mexican shareholders under the legal form of Limited Liability Company with business of sale of new and used cars, and parts under the brand Nissan and presentation of repair services residing in Orizaba, Veracruz. In 1978, the company was transformed to be a Variable Capital Company. Dated 22 October 2011, agreed to change the trade name to Automotriz Gasme, S.A de C.V (Gasme Automotive, SA de CV). On December 2, 2011 was approved absorb Automotive Gasme, SA de CV (subsidiary) by fusion, in order to economically strengthen the financial structure, provide greater competitiveness and more efficient administration, have effects before third parties from January 2, 2012.

Administration services, marketing, operational and workshop are provided by subsidiaries, therefore does not have a labor liabilities. Currently the company operates with 220 employees. The objectives of the merger consisted of
reducing the administrative cost at management level, strengthen social capital financings getting better, have a better organizational structure and get higher yields. To check the results the company achieved from the process of the merger and to check if was generating value in this process, it was proceeded to determine the value of the company two years before and two after the merger applying the model of economic value (EVA), same which was described in the first paragraph of this analysis and the result of this application is summarized below:

Table 1. Value of Gasme Automotriz, S.A de C.V. 2010 – 2014

(Thousands of pesos)

<table>
<thead>
<tr>
<th>Gasme Automotriz, S.A De C.V.</th>
<th>Years prior to the merger</th>
<th>Year of merger</th>
<th>Years after the merger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator/Year</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td>EVA</td>
<td>$(2,201)</td>
<td>$(3,553)</td>
<td>$(2,433)</td>
</tr>
<tr>
<td>Increasing of EVA</td>
<td>(61.40)%</td>
<td>31.53%</td>
<td>(101.90)%</td>
</tr>
</tbody>
</table>

Source: Prepared with data from Gasme Automotriz

As it can be seen, in 2010 and 2013 losses of value are presented and 2014, the second post-merger year, there is a recovery but are still lost value of -88.30%. This is because consolidation it failed to promptly. It had worked four years with the same staff and external services contracted to effect the unification of efficient processes and new management systems to control all information and as a single company, so will the benefit be acquired the long run.
B. Fischer S.A. de C.V.

The company was founded under the name of Fischer, SA de CV, a corporation on March 5, 1998 consists of two Mexican shareholders and a foreign society, in order to manufacture plastic jugs of various capacities for industrial use and various plastic parts for the automotive industry in the city of Cordoba, Veracruz. The October 31, 2013 was approved to absorb Operadora Fischer, S.A.de C.V (Operator Fischer, SA de CV) by merger; increasing its capital, obtaining the financial, administrative, economic empowerment and competition benefits to the new challenges of the market, having effects before third parties from 1 November 2013. The company has concluded a collective agreement with the industrial union of workers and employees of commercial houses of Cordoba, Ver. (CROM) and has 157 employees.

The results of the merged companies are presented in table 2 from the calculation of EVA:

Table 2. Value of Fischer, S.A de C.V. 2010 – 2014

<table>
<thead>
<tr>
<th>Indicator/Year</th>
<th>Years before merger</th>
<th>Year of merger</th>
<th>After a year</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVA</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td></td>
<td>$13,950</td>
<td>$5,645</td>
<td>$(360)</td>
</tr>
<tr>
<td>Increment of EVA</td>
<td>(60.83)%</td>
<td>(106.60)%</td>
<td>3,769%</td>
</tr>
</tbody>
</table>

Source: Own elaboration

Figure 2. EVA of Fischer, S.A de C.V. 2010 - 2014
As it can be seen in the results of the years 2010 and 2011 before the merger value had decreased in 2012 and had loss of value. The effect of fusion was positive in 2013 and 2014 obtained a recovery of important value of 3769.25% and 42.12%, respectively. This is because consolidation was achieved promptly and that the company that was adsorbed provided employees that were working already for the company and was only a fit to management level.

C. Schott Mexico, S.A. de C.V.

On July 12, 1989, it was created the company called Forma Vitrum de México, S.A. de C.V ("Vitrum Form Mexico, SA de CV") built and integrated by a foreign company and two foreign individuals in order to manufacture vials, glass vials and cartridges in the city Amatlán de los Reyes, Veracruz.. The company changed the corporate name to "Schott Forma Vitrum de Mexico, SA de CV" on May 1, 2010. The shareholders agreed to the sale of shares of individuals and acceptance of income as a partner to other foreign legal person, the June 12, 2012, and it was agreed the change of company name to Schott of Mexico, SA de CV.

On November 4, 2011, the absorption of Schott Mexicana, SA de CV by merging subsisting Schott de Mexico, SA de CV, as it was approved as the merging company to consolidate the assets of the business of both companies and achieve efficient restructuring within business group to which both belong (Schott Group). The merger became effective against third parties from January 1, 2012. The staff of employees of the company is 260 unionized in the production process (operators) and 42 of confidence.

The results of the merged companies are presented in the following table from the calculation of EVA:

Table 3. Schott value of Mexico, SA de CV 2010 – 2014

(Thousands of pesos)

<table>
<thead>
<tr>
<th>Indicator/Year</th>
<th>Years before the merger</th>
<th>Year of merger</th>
<th>Years after the merger</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVA</td>
<td>$54,072</td>
<td>$71,582</td>
<td>$43,558</td>
</tr>
<tr>
<td>Increasing of EVA</td>
<td>32.38%</td>
<td>(39.15)%</td>
<td>(15.61)%</td>
</tr>
</tbody>
</table>

Source: Own elaboration
Merging process between firms and its influence

As it can be seen in the results of the years 2010 and 2011 before the merger had a value increase. In 2012 and 2013 had decreased in value. The effect of fusion was positive in 2014 obtaining a recovery value of 48.79\% relative year of merger (2012), and was due to the company that absorbed, it was only dedicated to the marketing of pharmaceutical glass products and its profit margin was very low and had losses. Schott of Mexico, SA de CV to absorb its activity will decrease its profit margin, and the location of Schott Mexicana is in Mexico City, hampering the synergies between the companies by distance.

4. Conclusions

Mergers have the ability to make companies evolve, allow companies to become stronger, also help organizations to have a better positioning in the market more quickly than if they try to perform at a normal pace of development. Also mergers provide the possibility of obtaining positive results in the combination of their assets and the union of different capacities, which is easier to be done

In this work it was analyzed the generating value through mergers, taking the case of 6 companies being merged and merging in three companies: One from the commercial automotive sector and two in the industrial sector of plastic and glass processing, for a period of 4 years, including two years before and two after the merger.

The result allowed determining that the three cases are observed a recovery in value in the years after the merger, which would indicate that if value, however, it appears and looks that its involvement is long term and that everything depends on efficiency and effectiveness to be taken in the integration process. If not doing so incurs in extraordinary expenses for external achievement.
The limitations of this study are first that it is a multiple case study so it is not possible to generalize the results to all the merging companies. Other limitations are derived from the number of years analyzed, i.e. two years before and two post-merger, or whether they are listed or not in the Mexican Stock Exchange companies.

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