RESEARCH ARTICLE

Evolution of the Ecuadorian Industrial Sector and its Reputation under the Merco Index

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Abstract:

Corporate reputation represents a company's performance, management, and behaviour to improve results and long-term soundness. This article analyzes the evolution of the financial performance of the Ecuadorian industrial sector through financial indicators and its corporate reputation and compares it with the ranking prepared by the Corporate Reputation Business Monitor (Merco). The methodology applied focuses on analysing Ecuadorian industrial companies rated as the most representative according to Merco, whose financial information is obtained from the financial statements provided by the Superintendence of Companies of Ecuador. The results show that the indicators with the highest correlation are those of liquidity, with the Acid Test ratio being the most directly related to Merco at 34%, followed by the Current Liquidity indicator at 24.82%. The indicators that show a less positive correlation with Merco are the Operating Return on Equity ratios of 3.56% and Financial Profitability of 2.26%. In conclusion, there is a direct positive relationship between the Merco index and the financial indicators of Ecuadorian industrial companies.

Keywords: Corporate reputation, Corporate reputation business monitor, Financial performance

Introduction

In the process of economic growth, according to Palomino (1), the industrial sector is a key pillar for the productive transformation of a country; it allows promoting forces for development to be unleashed, improves operational efficiency, the development of science, technology, and innovation, and in turn, it helps the evolution of the sectors that are chained to industry. Several dynamic branches, including producing goods such as petroleum, vehicles, construction, mining, food, textiles, etc., characterize the industrial sector's growth. However, this sector is

affected by major problems, such as the inability to employ the entire labour supply (2).

Ecuador is classified as a developing country, and one of the reasons for this is the lack of momentum in the industrial sector (3). For this reason, few industries show great progress and significant economic performance; most lack new processes and innovation (4). Although there has been little growth in the productive orientation, it continues to be centred on particular sectors such as food products, beverages, and tobacco (5).

A company's reputation results from a series of elements, such as the quality of its services or products, social responsibility, and its leadership in the market. It has taken on great importance, both in academia and the business world, being considered as the knowledge of the true characteristics of a company and the emotions that stakeholders or interested groups feel towards it (6). Corporate reputation can represent a company's past actions and future projects, generating a favorable image of its general attractiveness that will indirectly allow it to enjoy additional economic benefits (7).

Authors Orozco and Ferré (8) point to Merco as one of the most recognized models for evaluating corporate reputation. The Merco index was initiated in 2000 in Spain as the result of a university research project by the opinion of managers of large Spanish companies, financial analysts, associations, etc., which allows differentiation of the image and reputation of companies (9). The monitor prepares, for different Latin American countries, a ranking of the 100 companies with the highest reputation encompassing several areas of interest such as economic profitability, innovation, labour quality, etc. (10).

It is interesting to compare the Merco index with financial indicators because a financial indicator is considered a key tool that allows companies to determine their financial evolution through its calculation and interpretation (11). Among the most important indicators for analyzing the financial situation, profitability and liquidity indicators are mentioned. A profitability indicator serves to obtain the measurement of the administrative effectiveness that the company has for the control of its cost and expense levels (12). While a liquidity indicator refers to the solvency of a company's financial situation, it is necessary to evaluate the ability of a company to meet its short-term obligations (13).

This study analyzes the possible links between the financial indicators of liquidity and profitability concerning corporate reputation according to the Merco index so that academics and students can use this information for decision-making and promote the importance of corporate reputation in companies.

Methodology

The 8 best-rated Industrial Sector companies were taken from the Merco.info website. Information was extracted from the Superintendence of Companies of Ecuador's financial statements to analyse the liquidity and profitability indicators.
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Table 1. Companies in the industrial sector in Ecuador according to the Merco Index score.

Companies	National Sector Merco Index	International Merco Index	Company dedication
Continental Tire Andina	1	6128	Tire Production.
Procarsa	2	4852	Paper and cardboard manufacturing.
Owens Illinois	3	4509	Glass container production.
Intaco	4	4505	Commercialization of construction materials.
Dlip	5	4012	Preparation of processed food products.
Agripac	6	3233	Sale of agrochemical products.
Indurama	7	3044	Production of white goods and household appliances.
Fibroacero	8	3011	Manufacture and commercialization of white goods.

Source: Elaborated by the author based on information from the merco.info website

The financial indicators of liquidity and profitability were correlated with the ranking according to Merco by means of Pearson's coefficient, which allows measuring the degree of relationship between two quantitative variables. The correlation value will be positive if there is a direct relationship between both variables; otherwise, if the relationship is inverse, it will be negative (14).

Table 2. Table of financial indicators that were evaluated for correlation with the Merco index.

Factor	Index	Formula
Liquidity	Current Liquidity	$\dfrac{\text{Current Assets}}{\text{Current Liabilities}}$
	Acid Test	$\dfrac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$
Rentability	Net Return on Assets (Du Pont)	$\dfrac{\text{Net Incomen}}{\text{Sales}} \; X \; \dfrac{Sales}{Total\ Assets}$
	Gross Margin	$\dfrac{\text{Net Sales} - \text{Cost of Sales}}{Sales}$
	Operating Margin	$\dfrac{\text{Operating Income}}{\text{Sales}}$
	Net Sales Profitability (Net Margin)	$\dfrac{\text{Net Income}}{\text{Sales}}$
	Operating Return on Equity	$\dfrac{\text{Operating Income}}{Equity}$

	Financial Profitability	$\dfrac{\text{Sales}}{\text{Assets}} X \dfrac{IBTI}{Sales} X \dfrac{Assets}{Equity} X \dfrac{IBT}{IBTI} X \dfrac{NI}{IBT}$
IBT: Income before taxes IBTI: Income before taxes and interests NI: Net Income		

Results

The results are presented in 2 sections: the first refers to the analysis of the evolution of the Ecuadorian industrial sector, and the second measures the performance of the industrial sector through financial ratios and their relationship with the Merco index.

Evolution of the industrial sector in Ecuador

Based on the ranking of industrial companies according to the Merco indicator, sales, assets, liabilities, and equity are analyzed.
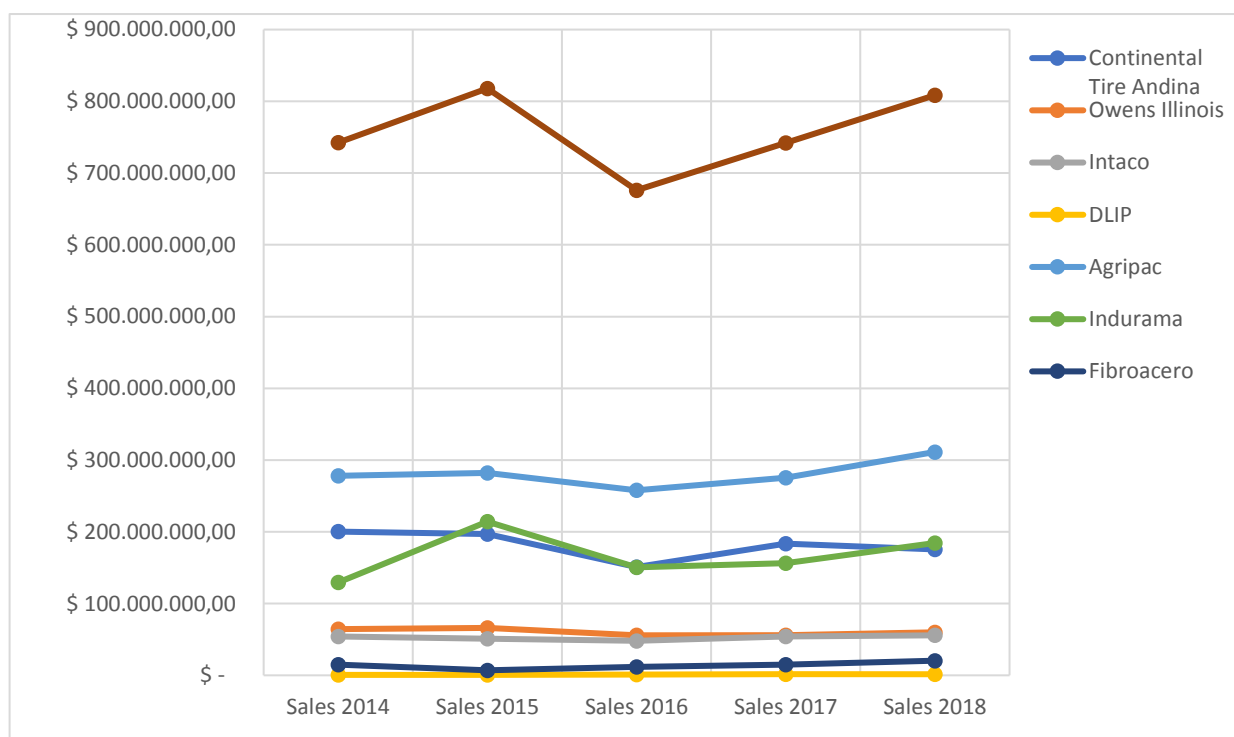

Figure 1. Sales in the industrial sector.
Source: Author's elaboration based on information from the Superintendence of Companies (2014-2018

When analyzing the evolution of the industrial sector from the companies rated with the Merco index, it is observed that the sales average has increased in 2015 and 2018, with a minimal difference between these years. The year 2015 leads the sales of the 5 years analyzed, with an average result of $ 116,850,274.80 for all the companies. At an individual level, Agripac stood out in 2015 with a value of $ 282,289,408.22; this company markets and distributes chemical products for agricultural use, representing 35% of total sales this year. Similarly, in 2015, the

company generating the lowest number of sales was DLIP with $104,383.00. It manufactures food products composed mainly of fruits, vegetables, and greens.

In 2016, the sales of the entire industrial sector decreased, having 4 companies that did not exceed $70,000,000 which are Owens Illinois, which manufactures glass containers; Intaco, which manufactures chemical products and compounds for construction; DLIP and Fibroacero, which manufactures and markets white goods.
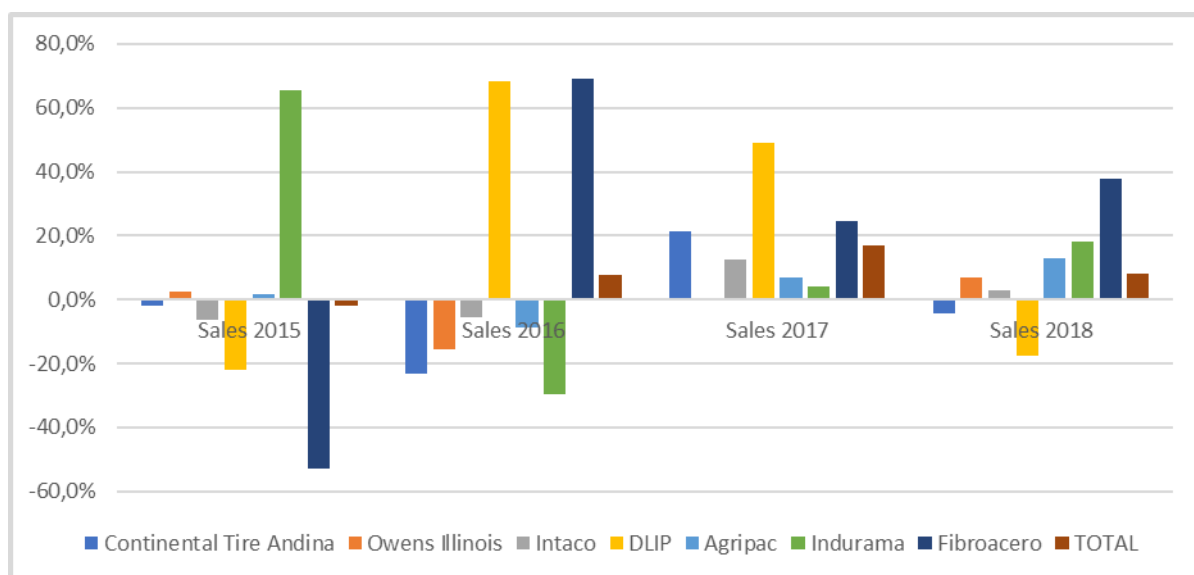

Figure 2. Variation in sales in the industrial sector.
Source: Author's elaboration based on information from the Superintendence of Companies (2015-2018)

Sales in 2017 show growth, thus giving the highest total average of 17% in the years analyzed. DLIP stood out in 2017 with a local sales growth of 49%. In 2016, two companies notably increased their sales: Fibroacero, which increased by 69%, and DLIP, which increased by 68%.

Sales in 2015 show the lowest percentage of all the years analyzed. They were probably affected by the economic situation in Ecuador, which for that year, according to the Central Bank, the GDP had a negative variation from the previous year of -3.7%. Fibroacero has the lowest sales value in 2015, with a variation of -53%.
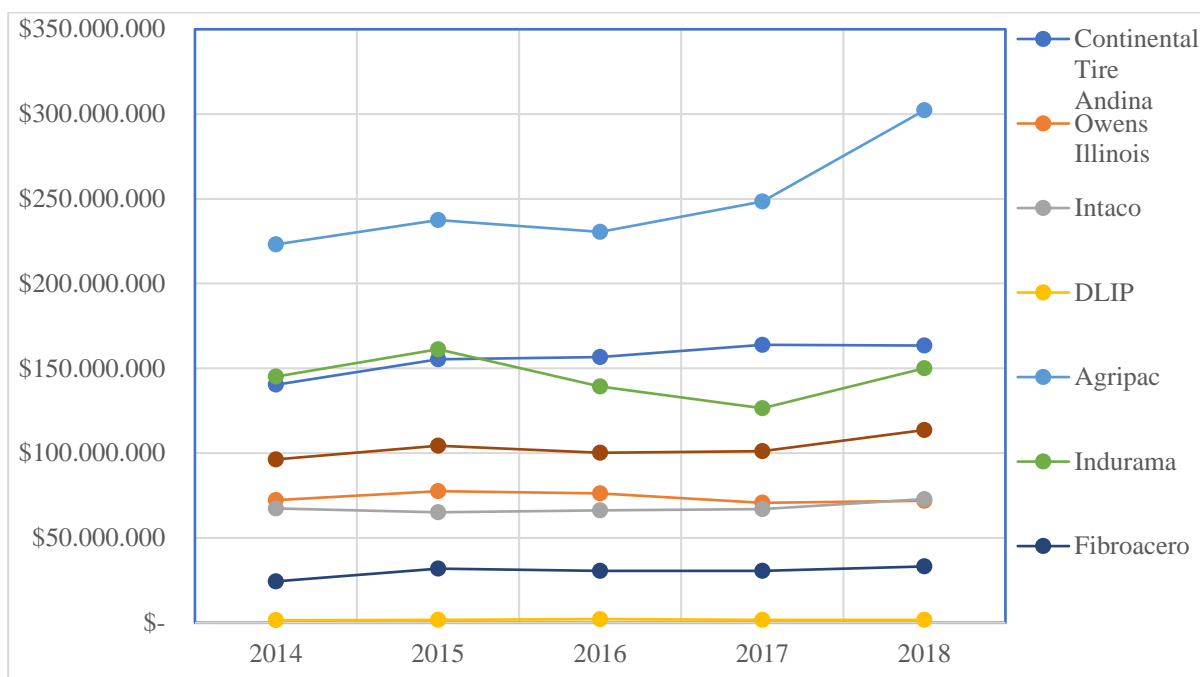
Figure 3. Industrial sector assets

Source: Author's elaboration based on information from the Superintendence of Companies (2014-2018

The assets of the industrial companies have been increasing upwards from 2014 to 2018, thus obtaining in 2018 the highest average assets with $113,653,354.85. In 2018, the companies with the highest assets were Agripac, with $ 302,195,450.88, and Continental Tire Andina, which manufactures tires, with $163,400,657.35.

2014 is the year with the lowest assets. DLIP is in the last position, whose assets value is less than $2,500,000 during the 5 years analyzed.
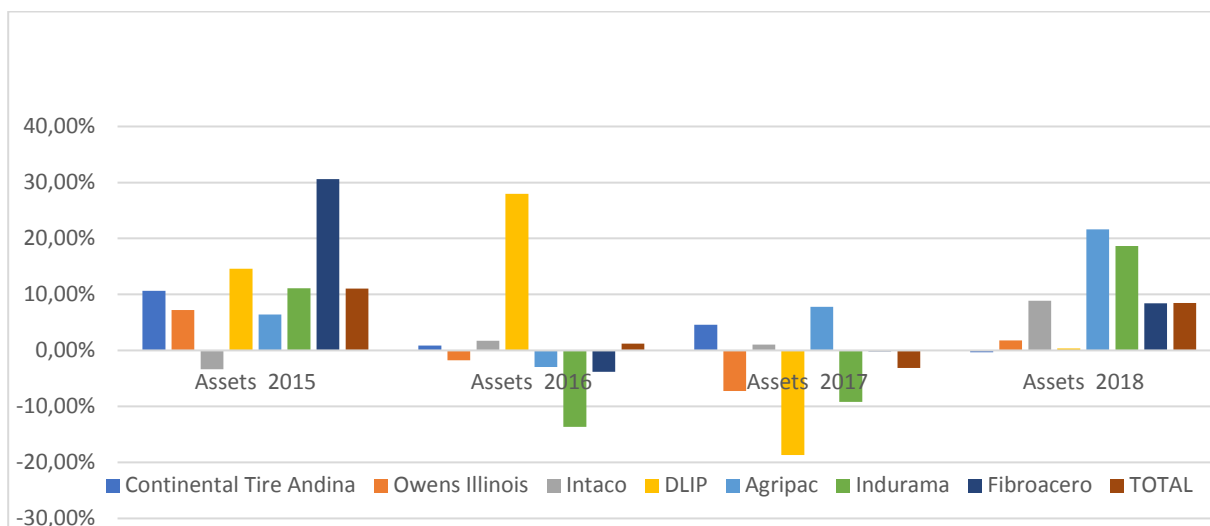

Figure 4. Variation in assets in the industrial sector

Source: Author's elaboration based on information from the Superintendence of Companies (2015-2018)

The highest percentage of growth in the assets of the companies analyzed is 11%, corresponding to 2015. This year, Fibroacero has the highest asset increase (30.61%); its financial statements show increased accounts relating to other properties, plants, and equipment.

In 2017, there was a decrease in assets of -3.11%. This shows that the company with the lowest percentage is DLIP, with a variation of -18.65%, which reflects a decrease in its current assets.
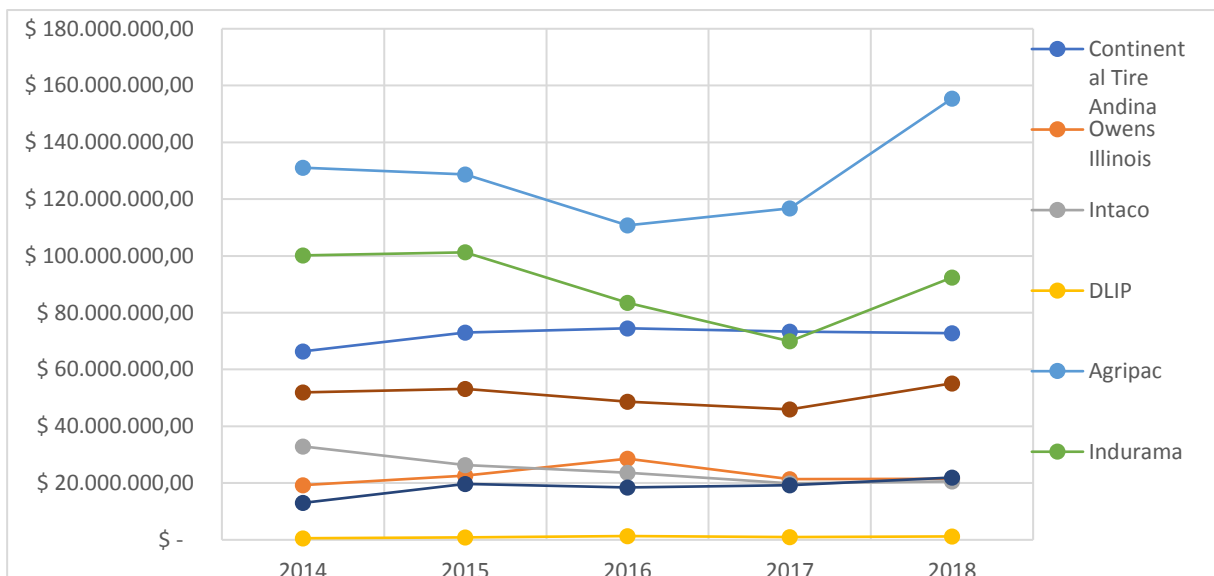

Figure 5. Industrial sector liabilities from 2014-2018

Source: Author's elaboration based on information from the Superintendence of Companies (2014-2018)

The average liabilities obtained in the 5 years analyzed are between $45,000,000 and $56,000,000. The liabilities declined in the third and fourth years, thus obtaining 2017 the lowest average value of the industrial sector of $ 45,944,697.39. Individually, the company DLIP had the lowest value in 2014, with $ 565,467.46, increasing by 54% in 2015.

In 2018, Agripac presented the highest value in liabilities, increasing from its previous year by 33%. According to its financial statements, the increase is reflected in the obligations with financial institutions.
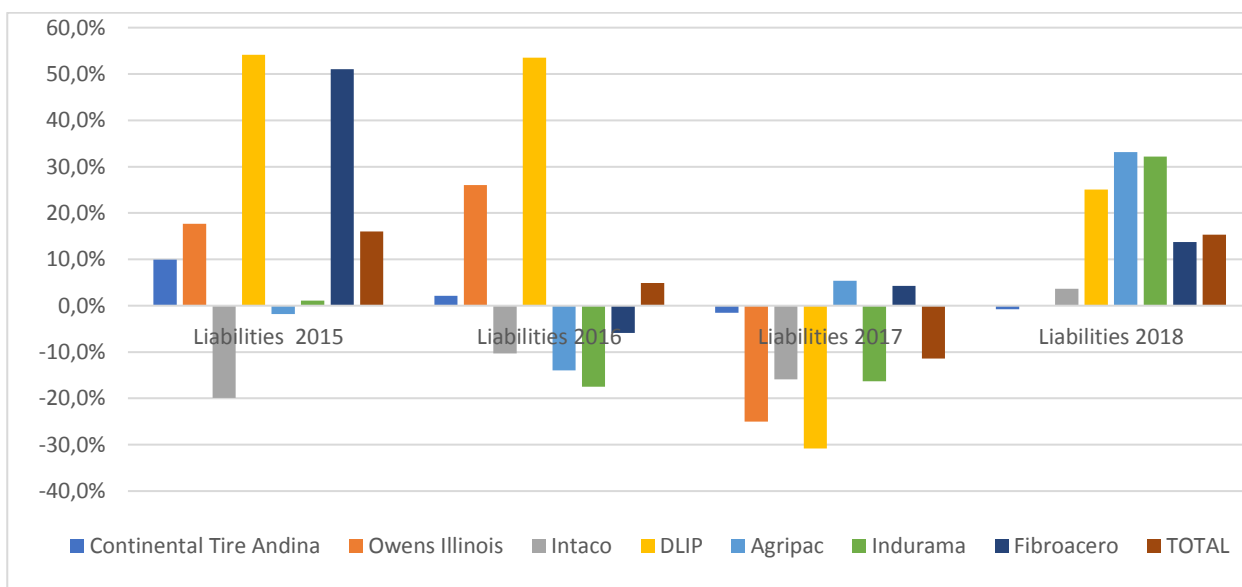

Figure 6. Variation in liabilities in the industrial sector from 2015-2018

Source: Author's own elaboration based on information from the Superintendence of Companies (2015-2018)

Variations in liabilities show a decrease in 2017 in almost all industrial companies. In 2017, the Central Bank recorded that the Ecuadorian economy (GDP) increased by 3%, mainly due to growth in household consumption, government spending and exports. This may be the main reason for companies to decrease their debts.

DLIP is the company that shows a notorious variation in all years, pointing out 2015 as its highest year, with an increase in its liabilities of 54.2%. One of the accounts in which the increase is reflected is in the current liabilities for employee benefits. For DLIP, the year with the lowest percentage is 2017, with a variation of -30.8% in its liabilities.

DLIP is the company showing a visible variation in all years, pointing out 2015 as its highest year, with an increase in its liabilities of 54.2%, one of the accounts showing the current liabilities for employee benefits. For Dlip the year with the lowest percentage is 2017, having a variation of -30.8% in its liabilities.

In 2018, the total liabilities of the industrial sector rose to $ 385,918,425.68, noticing that Agripac and Indurama companies increased their liabilities twice as much as their sales.
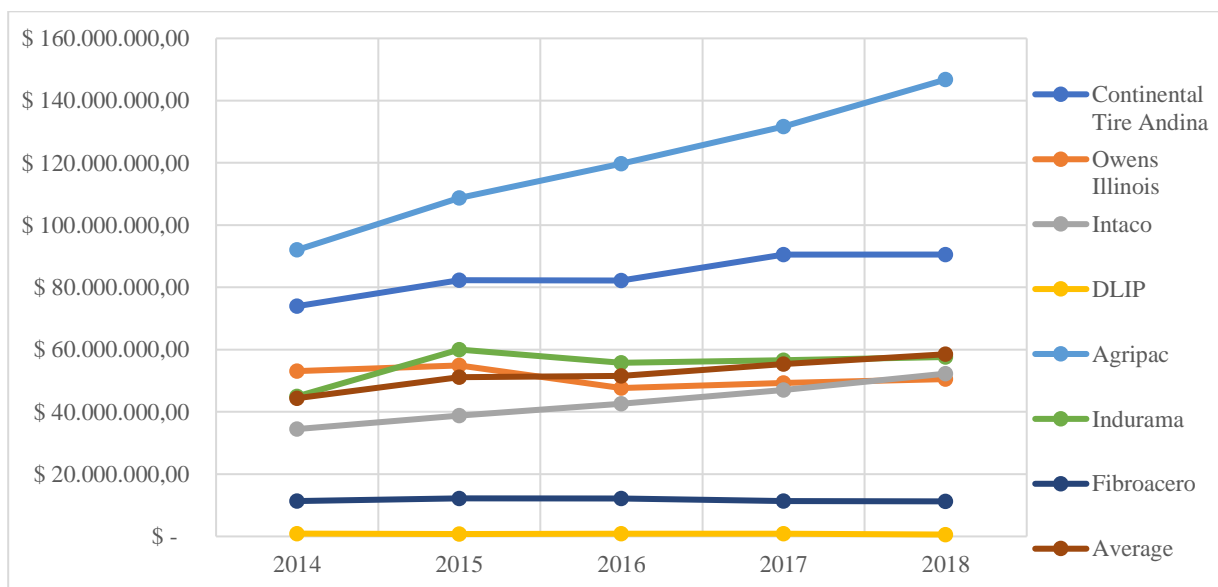

Figure 7. Equity of the industrial sector 2014-2018
Source: Authors' elaboration based on information from the Superintendence of Companies, 2014-2018.

The average equity of the industrial companies has been increasing year after year, having a value of $ 44,415,145.78 in the first year and obtaining a higher value of $58,522,151.19 in 2018. Agripac leads the industrial sector, obtaining 2018 the higher equity, increasing by 11.4% from its previous year; its rise is reflected in another surplus due to revaluation. On the contrary, the company with the lowest equity compared to the other companies is Dlip, maintaining 2018 its lowest equity, amounting to $605,535.28.
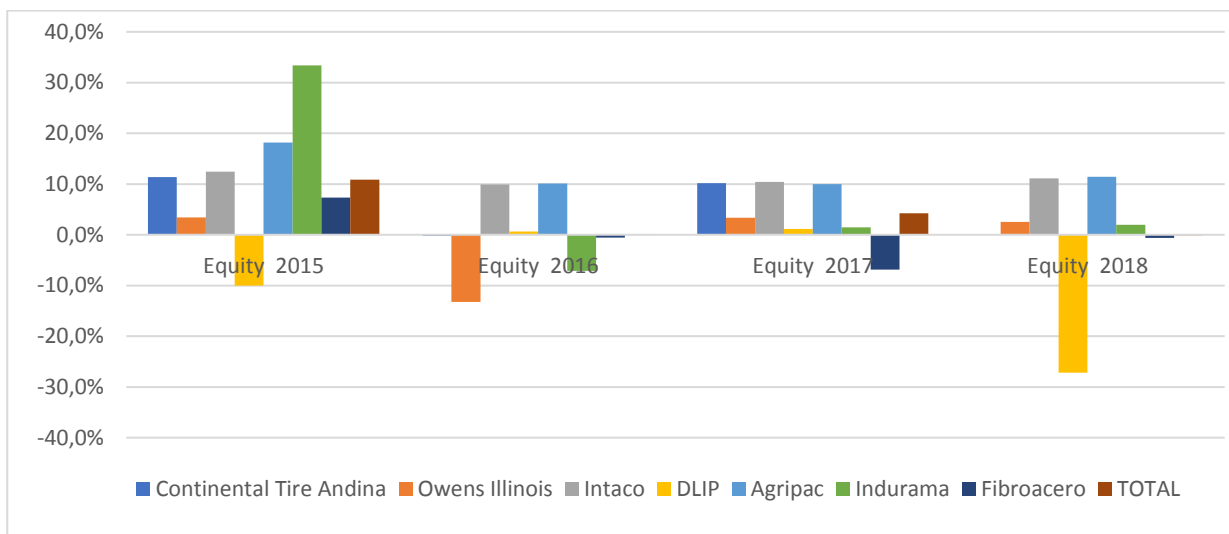
Figure 8. Variation in equity in the industrial sector from 2015-2018.
Source: Authors' elaboration based on information from the Superintendence of Companies.

In the equity Indurama, which is dedicated to manufacturing stoves and refrigerators, the greatest variation for 2015 is shown, increasing its value by 33%. Its financial statement shows an increase of 49.2% in the company's reserves. Dlip, on the contrary, maintains a total equity that does not exceed $1,000,000 in all the years analyzed. For 2018, Dlip presents the largest negative variation; its equity decreased by 27%, and there is a total decrease in the accumulated revaluation surplus account in property, plant and equipment.
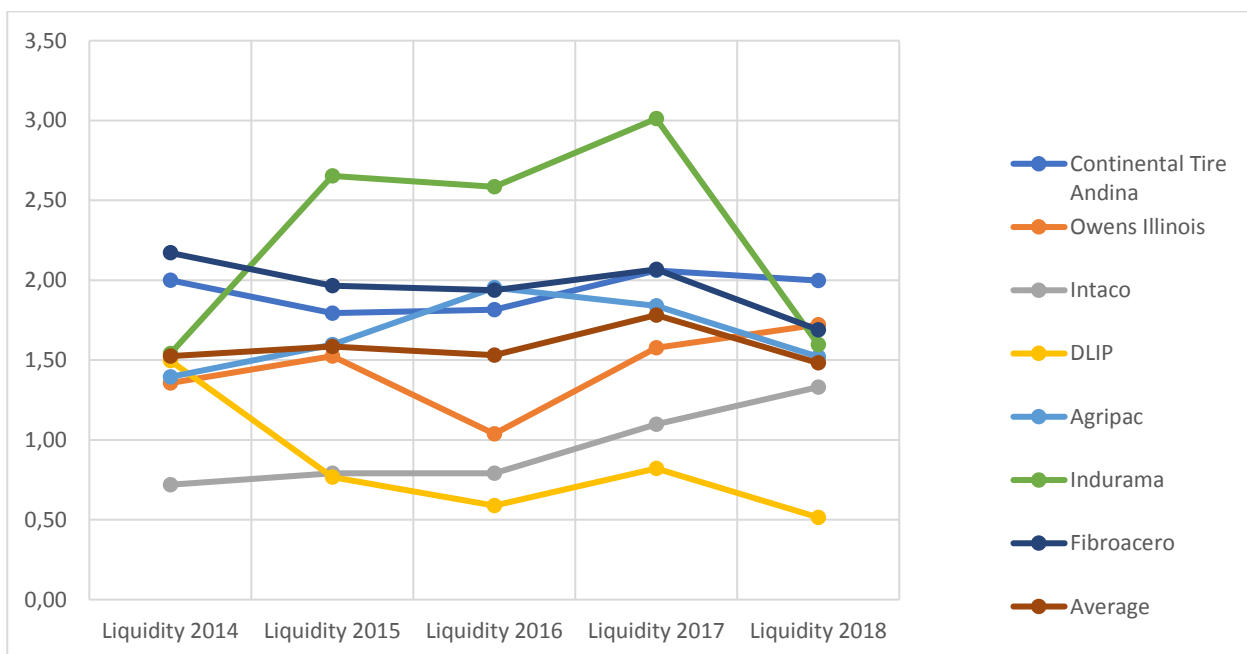

Figure 9. Liquidity indicator in the industrial sector
Source: Authors' elaboration based on information from the Superintendence of Companies, 2014-2018

The liquidity indicator assesses the capacity of the companies to settle short-term obligations. For the industrial sector, the year 2017 presents the highest acceptable liquidity value with 1.78 times. Regarding the other years, the average remains between 1.45 and 1.60 times.

Indurama is the company that has maintained its liquidity ratio higher than the others in almost all years, with its highest elevation in 2017 at 3.01 times. However, in 2018, its current liabilities increased in obligations with local financial institutions, causing its liquidity ratio to decrease to 1.60 times.

In 2018, 4 out of 7 companies decreased their liquidity compared to the previous year: Dlip reduced by -37.3 times, Agripac by -17.3 times, and Fibroacero by -18.3 times.
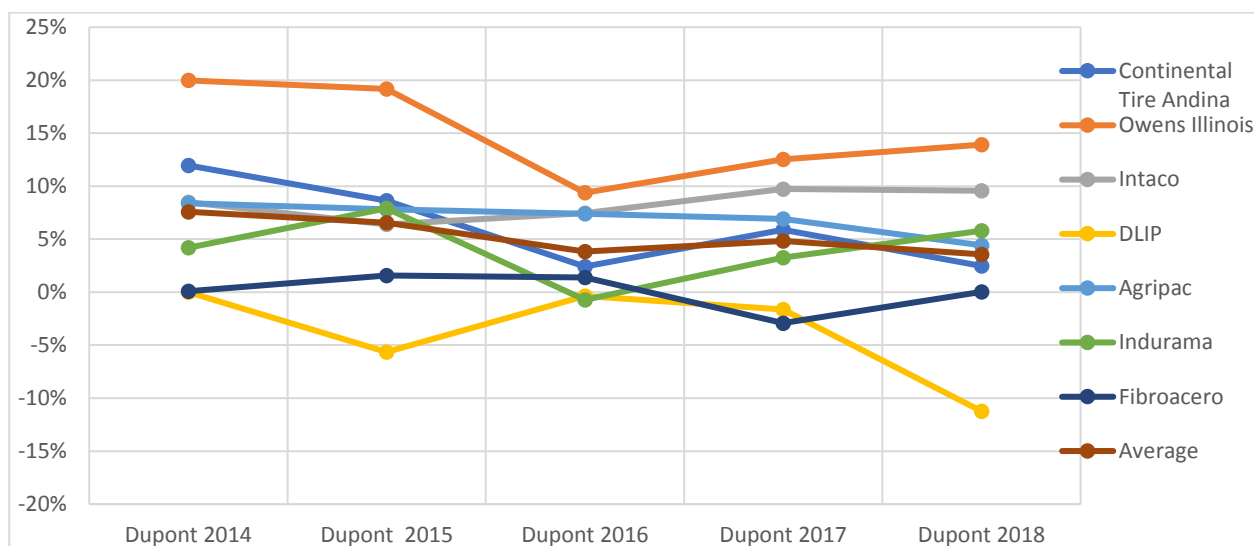

Figure 10. Du Pont indicator in the industrial sector
Source: Authors' elaboration based on information from the Superintendence of Companies, 2014-2018

Dupont analyzes the efficiency of companies in the use of their resources. Regarding the industrial sector, the indicator varies noticeably each year, with 2014 as the highest (8%) and 2018 as the lowest (4%). In 2014, the Owens Illinois company presented profitability of 20%, where it can be observed that its most significant performance component comes from the rotation of its assets.

The Dlip company presents, in the analyzed years, its Dupont index under 0. One of the reasons may be the negative net profits in 2018.
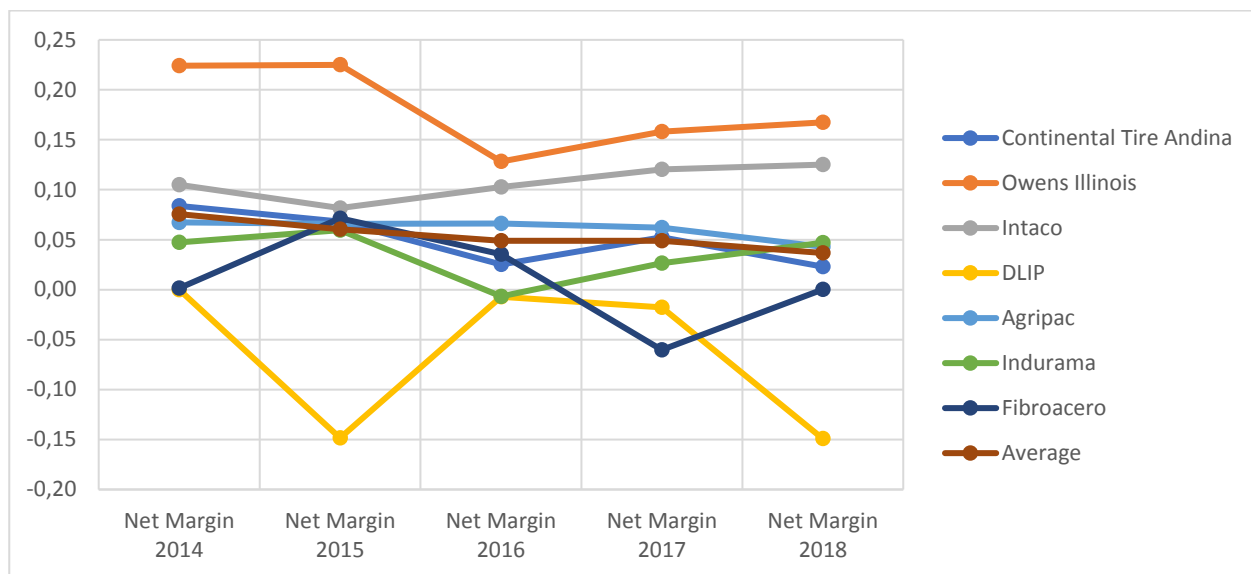
Figure 11. Net Margin Indicator in the industrial sector from 2014-2018.
Source: Authors' elaboration based on information from the Superintendence of Companies, 2014-2018.

The net margin reflects the profit obtained from the company's sales. In the 5 years analyzed, the industrial sector has decreased the profitability of its net sales, obtaining the lowest profitability in 2018 at 4%. Owens Illinois is the company that maintains the highest profitability in the years analyzed, representing a net profit higher than 12% of assets. The maximum value is in 2015, which indicates that the company can generate 0.22 cents in profit for every dollar invested in assets.

Dlip's net margins are below 0 since its profits are negative.

Performance vs. Merco index

The correlation coefficient shows the relationship between two variables. In this analysis, the first variable corresponds to the performance of the industrial companies reflected in financial ratios, and the second variable is the ranking established by the Merco index in 2018.

Table 3. Correlation Financial Indicators vs Merco Index

Acid Test	34,03%
Current Liquidity	24,82%
Operating Margin	18,20%
Net Margin	14,96%
Gross Margin	14,06%
Du Pont	12,21%
Equity Operating Income	3,56%
Financial Profitability	2,26%

Source: Authors' elaboration based on information from the Superintendence of Companies

The purpose of correlation is to examine the connection between two quantitative variables. Table 3 shows a positive correlation between the Merco index and profitability and liquidity indicators.

The correlation between the financial indicators vs Merco in 2018 maintains a positive correlation in all its indicators, led by the acid test and current liquidity indicators, demonstrating the company's current assets and liabilities. The indicator that reflects the lowest positive correlation with Merco is Financial Profitability, which measures the net profit produced by the investment of the company's owners, with a 2.26% ratio.

Discussion and Conclusions

Corporate reputation can be unpredictable when it comes to improving the economic results of any company, considering the Merco index is one of the most important evaluation monitors. Merco has a broad methodology for selecting companies in the ranking. It includes 6 important variables: economic-financial results, product/service quality, corporate culture and labour quality, ethics and corporate social responsibility, global dimension, and international presence.

The results obtained by correlating the performance of the financial indicators with the corporate reputation business monitor (Merco) show a direct relationship with the liquidity indicators. These are necessary to evaluate a company's ability to meet its short-term obligations, maintaining a higher percentage in the Acid Test indicator at 34.03%, followed by the Current Liquidity indicator at 24.82%. Indurama is the company that maintains the highest financial soundness to assume its short-term obligations in the 5 years analyzed.

In the periods analyzed, Agripac, a trader of chemical products for agricultural and livestock use, is the most representative company within the industry and excels with its accounting accounts, such as assets, liabilities, equity, and sales. However, Merco ranks it as the sixth company in the Industrial Sector Ranking.

On the contrary, Dlip, dedicated to the elaboration of food products, is the company at the bottom of the list of the industrial sector, keeping its accounts lower than the other analyzed companies; however, it is not the last in the Merco Ranking that positions it in the fifth place of the Industrial Sector.

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