

AUDIT REPORTS AS A CRITERION FOR FOREIGN DIRECT INVESTMENT IN MANUFACTURING INDUSTRIES PERIOD 2013-2019

RELATÓRIOS DE AUDITORIA COMO CRITÉRIO PARA INVESTIMENTO ESTRANGEIRO DIRETO NAS INDÚSTRIAS MANUFACTUREIRAS NO PERÍODO 2013-2019

Recebido em 25.10.2023 Aprovado em 10.07.2024

Avaliado pelo sistema double blind review

DOI: <https://doi.org/10.12712/rpca.v18i2.63648>

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Abstract

The manufacturing sector is one of the main pillars of Ecuador's economy; it is important to consider that the amounts of foreign direct investment have shown increases and decreases in this sector. This investigation indicates this relationship in Ecuador. The results show a correlate, using Spearman's Rho, weakly and negatively, with a degree of association of -14.1%. In conclusion, the two variables are independent; thus, it is understood that the rating issued by the audit report does not play a determinant role in foreign direct investment in Ecuadorian manufacturing industries.

Keywords: Audit opinion; External audit; Foreign direct investment.

Resumo

O setor manufatureiro é um dos principais pilares da economia do Equador; é importante considerar que os montantes de investimento estrangeiro direto têm apresentado aumentos e diminuições neste setor. Esta investigação indica esta relação no Equador. Os resultados mostram um correlato, utilizando o Rho de Spearman, de forma fraca e negativa, com grau de associação de -14,1%. Concluindo, as duas variáveis são independentes; assim, entende-se que a classificação emitida pelo relatório de auditoria não desempenha um papel determinante no investimento estrangeiro direto nas indústrias manufatureiras equatorianas.

Palavras-chave: Parecer de auditoria; auditoria externa; investimento estrangeiro direto.

Introduction

How credible is the information that companies make available to the public in their financial statements? There are several stakeholders in society, such as investors, who depend on these reports to determine whether to increase, maintain or decrease the amount of investment in the entities. One of the auditors' jobs is to determine that the financial information issued by companies is fairly presented to provide credibility to what is being reported to target users (Bruns & Cott, 1998). The study carried out by González (1998), considers that an audit report can cause a reaction in different stakeholders due to its informative content.

In this context, the International Standards on Auditing (ISA) were born in the 1970s, as a system of high-quality international standards regarding auditing, quality control, and related services. This system was born because of the effort to unify and standardize auditing methodologies, then guided by the Generally Accepted Auditing Standards (GAAS). Therefore, over time, the ISAs have evolved from the concept of review, then attestation, and finally the current concept that has been adapted, assurance. The ISAs are issued by the International Auditing and Assurance Standards Board (IAASB), which is an independent board sponsored by the International Federation of Accountants (IFAC) (Deloitte Touche Tohmatsu Limited, 2014).

In this context, ISA 700 (2016), mentions that a clean or favorable opinion indicates that the quality of the financial statements is very good, given that they comply with Generally Accepted Accounting Principles (GAAP) and that they have been prepared in all material respects applying all international guidelines such as International Financial Reporting Standards (IFRS). ISA 705 (2016) mentions that a qualified opinion means that the financial statements contain some material deviation or limitation imposed on the scope of the auditors' work, but that this, does not affect the veracity of the financial information. An adverse or unfavorable opinion specifies that there is sufficient appropriate audit evidence that indicates that the misstatements in the financial statements are material because they contain deviations from Generally Accepted Accounting Principles. Finally, refusing an opinion indicates that the limitations imposed on the scope of the auditors' work have been so significant that the auditors do not have an adequate and reasonable basis for expressing an opinion (International Federation of Accountants, 2016). In addition, the study conducted by Bruns & Cott (1998), explains that the clean opinion is what a company requires, being the best opinion, whereas, the following opinions express different situations, with different degrees of importance.

Foreign direct investment in the manufacturing industry in Ecuador

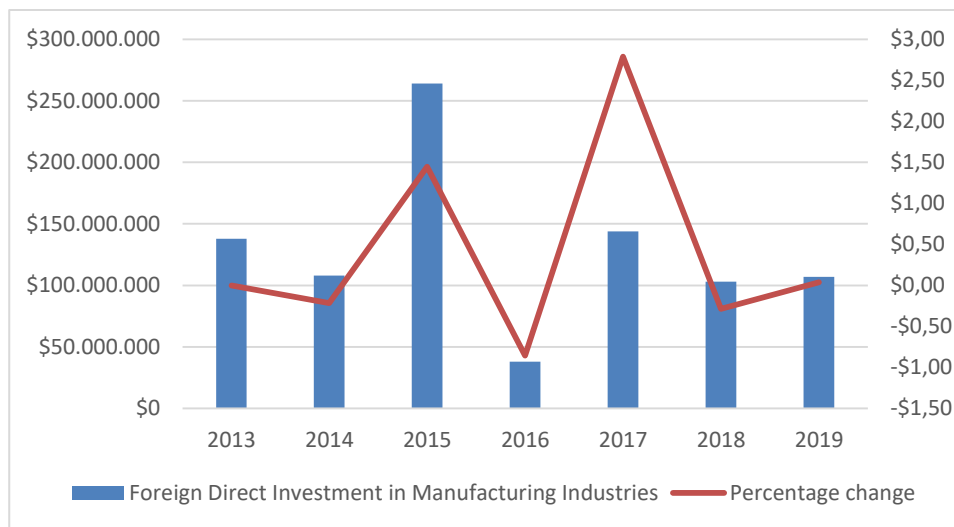
Foreign direct investment (FDI) can increase productivity in the host country's economy and can be considered a catalyst for domestic investment and technological progress (De Mello, 1999). It has become a significant source of financing for developing countries, as it not only increases available resources but also creates access to international trade networks (Gonzalez et al., 2019). How this type of investment can enter are through capital contributions, reinvestment of profits, and intercompany loans (Salgado, 2015). The main motivations of transnational capital flow target oil, mining, agricultural land, telecommunications, manufacturing, as well as information technologies (Roncal, 2018). The Latin American countries with the lowest FDI flows are Bolivia, Ecuador, El Salvador, Guatemala, Haiti, Nicaragua, and Paraguay (Castillo, et al., 2020).

In this context, foreign direct investment in Ecuador has maintained a non-uniform scenario during the last few years. In 2013, the country received USD 703 million, being this the highest FDI figure of the last decade in the country (Líderes Magazine, 2013). By 2014 it rises to 772 million, by 2015 it grows again to 1323 million, however, by 2016 it drops to 769 million, by 2017 it dropped to 619 million, by 2018 it recovered to a figure of 1,408 million and, by 2019 it dropped again to 937 million (ECLAC, Economic Commission for Latin America and the Caribbean, 2019).

The study maintains a focus on the manufacturing sector in Ecuador because it is an important pillar of the country's economic companies. This is because it represents a transcendental and vital component in the productive structure and at the same time is a fundamental element in the economic development of the country (UDLA, 2018). The manufacturing industry was the second sector that obtained the most income from FDI in the study period. This income is comprised of capital contributions, reinvested earnings, and intercompany loans. Among this period, 2015 and 2016 stand out as the years with the most influential variations. On the one hand, in 2015 the highest FDI income was obtained, with a variation of 144% concerning the previous year. On the other hand, in 2016 the income decreased by -86% concerning 2015, showing this year the lowest figure for FDI (ECLAC, Economic Commission for Latin America and the Caribbean, 2019). To better understand the information, Figure 1 is presented.

Figure 1.

Foreign Direct Investment in the Manufacturing Industry in Ecuador



Source: Authors' elaboration based on the ECLAC report on Foreign Direct Investment in the manufacturing industries

It is important to know the scenario of the manufacturing industries regarding the publication of their audit reports and foreign direct investment. This information allows the owners to know whether there are behaviors or a special impact, or otherwise, the existence of patterns between the two variables so that they can take this research as a reference for decision making for the benefit of corporate management of their entities. For this, studies referring to audit reports as a determining factor in the amount of foreign investment at the national level were not found. However, by analyzing the realities of other countries, several studies were found that take audit reports as a focus of analysis compared to other areas of interest, as is the case of González (1998) and Pucheta et al. (2007) who analyze audit reports concerning the price of shares in Spain. Similarly, the authors Gutiérrez et al. (2020) and Herbohn et al. Garsden (2007) develop their research by analyzing the audit report concerning the share price in the Latin American integrated market and Australia, respectively. Thus, substantiating the importance of the study of these reports.

From the information given, the foreign direct investment income in the manufacturing industries has shown varying figures in the years mentioned; therefore, the objective of this article is to determine the relationship between the audit reports and the amount of foreign direct investment in the manufacturing industries of Cuenca, during the period 2013-2019. It is taken into a consideration, to establish the relationship between the qualification of the audit reports and the amount of foreign direct investment.

Methodology

For the elaboration of this study, the manufacturing industries of Cuenca city were selected from the Official Registry of the Superintendence of Companies. From those entities, the ones that have the characteristic of foreign direct investment were chosen, which is reflected in the "Foreign Direct Investment" section of the registry, where it is specified whether the entity has that investment. In addition, only the companies that submit the audit report in all the years of the study period 2013-2019 were selected. Which, a total of thirty-four manufacturing industries in the city of Cuenca that maintain FDI were obtained during the study period. From this preliminary sample, industries that do not submit audit reports for the assigned years of study were discarded, so the final sample reflected a total of sixteen anonymous manufacturing companies in Cuenca. To provide better detail, the entities were classified according to their economic activities. The results of the study included twelve activities belonging to the manufacturing sector: tires, paper, ceramics, paints and varnishes, chemical products, metals, beverages, transportation equipment supplies, plastic products, metal products, food, and transportation equipment.

From the sixteen anonymous manufacturing companies that are taken as a sample, the qualification of the audit reports has been taken into consideration as the qualitative study variable; being this the independent variable, to relate it to the amount of direct foreign investment of the companies. manufacturing companies, being the same, the dependent variable. For the analysis of the information of the selected sample, it was important in the first place to parameterize the variable of audit reports.

For the parameterization of the qualitative variable, the International Standards on Auditing and a study carried out by Harvard University entitled Auditors and Their Opinions have been taken as a reference. Four different opinions that external auditor's issue is expressed there; they describe each one in order from the smallest to the largest significant material deviation. Therefore, the highest score has been assigned to the opinion that does not present significant material deviations, and the lowest score to the opinion with the greatest significant material deviation, as shown in Table 1.

Table 1

Auditing Reports Opinions

Reports	Qualification/Opinion	Score	Consideration
Report with a clean opinion	Clean audit: It does not present audit opinions	4	The rating mentions that the quality of the financial statements is particularly good and complies with GAAP and international IFRS guidelines.
Report with a qualified opinion	Qualified opinion: A limitation has existed and is known as an audit opinion	3	It means that there has been some limitation imposed on the scope of the auditors' work, but this does not overshadow the financial statement's veracity.
Report with disclaimer	Disclaimer: It exists meaningful uncertainty that affects financial statements	2	The rating means that the limitations in the auditors' work have been so significant that the auditors simply do not have an adequate basis for expressing an opinion.
Report with adverse opinion	Adverse opinion: Failure to comply with Generally Accepted Accounting Principles and Standards	1	This opinion means that the financial statements are materially misstated from GAAP and that the financial statements as a whole are misleading.

Source: Authors' elaboration based on International Standards on Auditing and Bruns & Cott (1998).

The amount of direct foreign investment was extracted from the Superintendence of Companies from the digital document called List of Partners/Shareholders, in which the accumulated investment of each company is displayed. This process was carried out for each of the 16 manufacturing entities of the selected sample. To maintain linearity on the amounts that reflect FDI, the natural logarithm is applied because this logarithmic transformation reduces heteroscedasticity and asymmetry in a database

(Damodar & Dawn, 2010). These quantitative data are analyzed against the rating of the audit report that is published each year by the manufacturing entities, thus the following hypothesis is generated:

Hypothesis 1a:

H₀ The amount of foreign direct investment in manufacturing industries in Cuenca is independent of the rating of the audit reports issued, during the period 2013-2019.

H₁ The amount of foreign direct investment in manufacturing industries in Cuenca depends on the qualification of the audit reports issued, during the period 2013-2019.

The proposed hypothesis was analyzed through Spearman's Rho statistical method. The study has taken a significance value of 5% as a reference for the rejection or acceptance of the variables, as suggested by (Lind et al., 2012).

This research is carried out through Spearman's RHO statistical method, a name used to refer to Spearman's correlation. Its author, a British statistician, introduced this measure to describe the degree of association between two variables, where their values are within a range from -1 to 1 (Martínez, 2009). The formula used to determine this coefficient is the following:

$$r_s = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$$

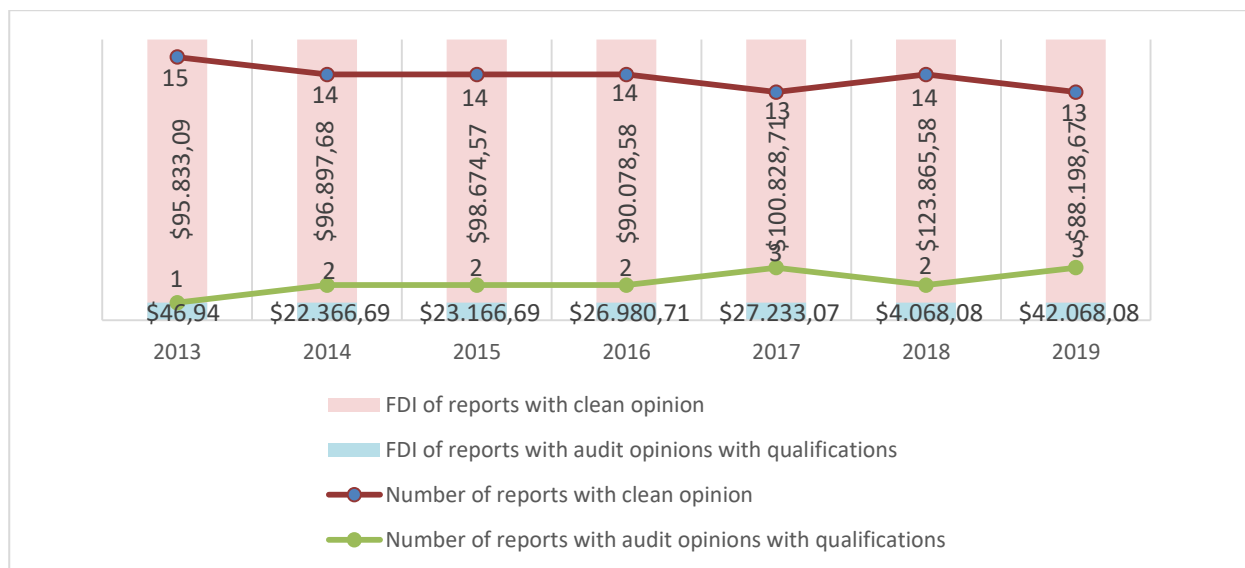
The result of the presented equation is interpreted in different scenarios, for which a value of -1 indicates a perfect negative correlation, and a value of 1, a perfect positive correlation. When the correlation coefficient is close to 1 or -1, it is considered a strong positive correlation or a strong negative correlation, respectively. On the other hand, when the correlation coefficient is close to 0.50 or -0.50, there is a moderate positive correlation or a moderate negative correlation, respectively. When this is close to zero, it is considered a weak positive correlation or a weak negative correlation, depending on the sign. Finally, a rank correlation of 0 indicates that there is no association (Lind, et al., 2012).

Results and Discussion

The results obtained from the analysis of the information showed that one-hundred twelve audit reports were obtained. This was a product of the sixteen manufacturing companies for the seven years of study. Of the one-hundred twelve reports, ninety-seven correspond to a clean report and fifteen correspond to a qualified opinion. It is important to mention that none of the companies that were the subject of the study obtained an audit report with an adverse opinion or a disclaimer. On the other hand, the amount of FDI from manufacturing entities during the 2013-2019 period was a total of \$840,307,119.63. In figure 2, the number of reports published for each year and the sum of the investments for each rating is detailed. It is necessary to emphasize that no correlation is being presented, but descriptive data, because the relationship between variables is presented afterward.

Figure 2.

FDI 2013-2019 and number of auditing reports published (in thousands)



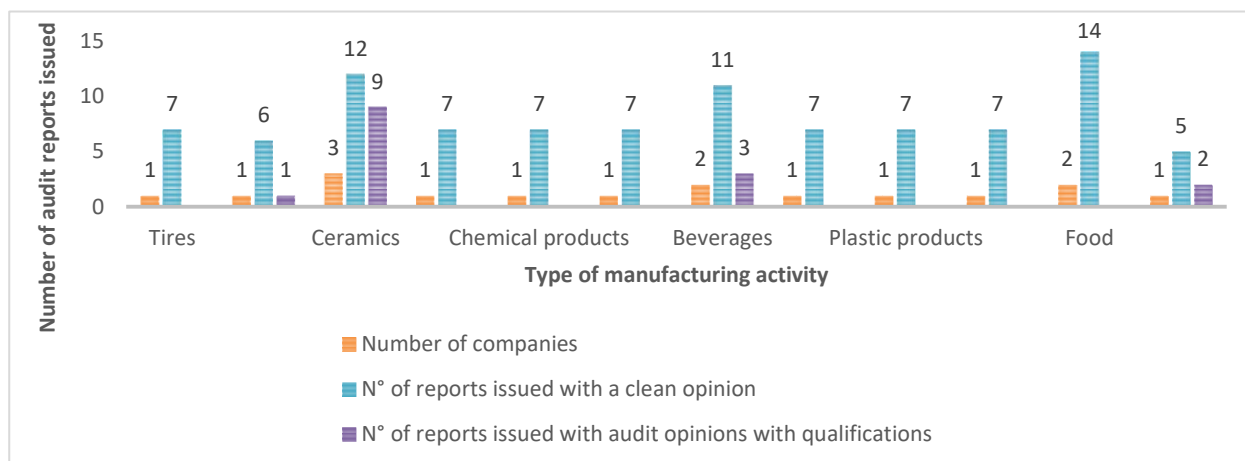
Sources: Authors' elaboration taken from a database.

Audit reports issued according to the type of manufacturing activity

From the sum of the ninety-seven audit reports with a clean opinion, it was obtained that the companies dedicated to the manufacture of tires, paints and varnishes, chemical products, metals, transportation equipment supplies, plastic products, metal products, and food, were those that published a clean opinion in each of the years. On the other hand, from the sum of the fifteen audit reports with a qualified opinion, it was obtained that only the entities that are dedicated to the manufacture of paper, ceramics, beverages, and transportation equipment have published a report with that opinion, being ceramics, the activity that has issued the highest number. Detailed information is presented in Figure 3.

Figure 3.

Number of audit reports issued by manufacturing activity.



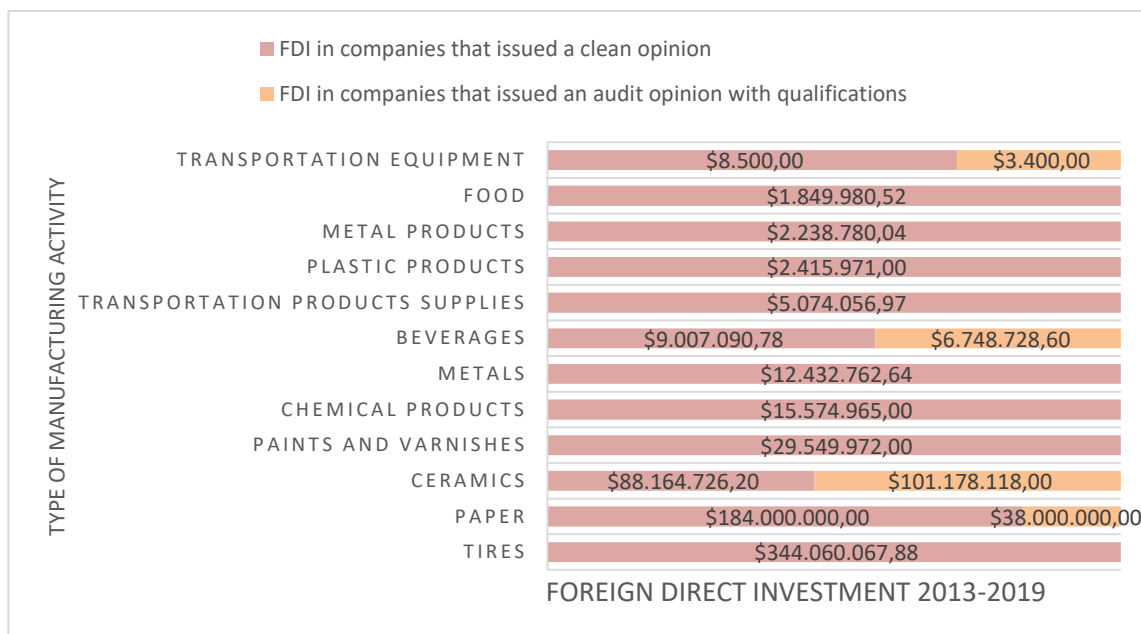
Sources: Authors' elaboration taken from a database.

Foreign Direct Investment according to the type of manufacturing activity and audit report

The companies that present the largest amount of foreign direct investment with the publication of a clean opinion were the entities dedicated to the manufacture of tires with \$344,060,060,067.88, paper with \$184,000,000, and ceramics with \$88,164,726.20. In this same context, the companies that present the largest amount of foreign direct investment with the publication of a qualified opinion were those activities of ceramics with \$101,178,118, paper with \$38,000,000, and beverages with \$6,748,728.60. The FDI breakdown for each activity is described in Figure 4.

Figure 4.

Foreign Direct investment by activity and audit report



Source: Authors' elaboration taken from a database.

Correlation between Audit Report Ratings and the Amount of Foreign Direct Investment in the Manufacturing Sector

Table 2 allows us to observe the result obtained from the correlation between the rating of the published audit reports and the amount of direct foreign investment in the manufacturing industries of Cuenca, during the period 2013-2019.

Table 2.

Correlation between Audit Report Ratings and the Amount of Foreign Direct Investment in the Manufacturing Sector, during the period 2013-2019

Research Variables	Statistical indicators	Foreign Direct Investment amount	Audit Report Rating
Foreign Direct Investment	Spearman's Rho correlation coefficient	1,000	-,141
	Sig. (bilateral)	.	,139
	N (Sample)	112	112
Audit Report Rating	Spearman's Rho correlation coefficient	-,141	1,000
	Sig. (bilateral)	,139	.
	N (Sample)	112	112

Sources: Authors' elaboration based on SPSS software.

Based on Table 2, the significance value or value (p) can be identified using Sig. (bilateral); and the degree of association of the variables using Spearman's Rho correlation coefficient. Next, we proceed to respond to the hypothesis raised in this study as follows:

Hypothesis 1a:

H_0 The amount of foreign direct investment in manufacturing industries in Cuenca is independent of the rating of the audit reports issued, during the period 2013-2019.

H_1 The amount of foreign direct investment in manufacturing industries in Cuenca depends on the qualification of the audit reports issued, during the period 2013-2019.

Table 2 shows a value (p) of 13.9%, which is higher than the significance level (5%) proposed for this research; therefore, the null hypothesis (H_0) is accepted. This shows that the amount of foreign direct investment in manufacturing industries in Cuenca is independent of the rating of the published audit reports, during the period 2013-2019.

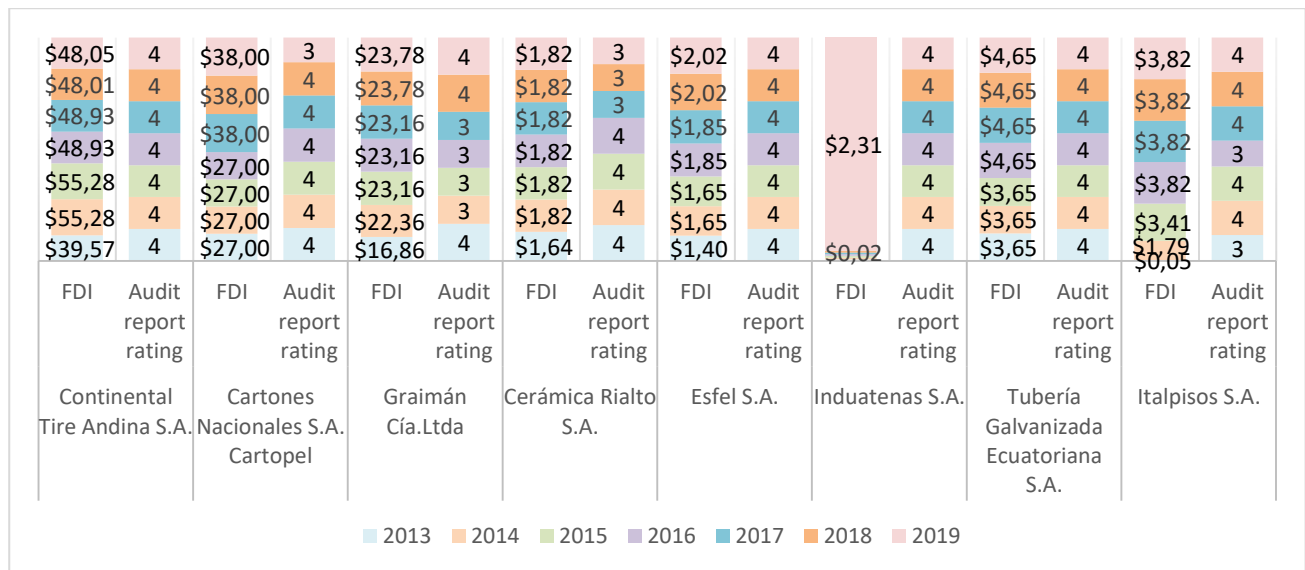
Spearman's Rho correlation coefficient expressed in Table 2 shows a degree of association of -14,1% between the study variables, which shows a weak negative correlation according to Lind et al. (2012).

To provide a better understanding of the independence of the two variables, figures 5 and 6 show the amounts of foreign direct investment accumulated per year for each of the manufacturing companies, together with the rating of the audit report published. For a better appreciation, the information has been divided into two parts, where figure 5 covers the top 8 manufacturing companies and figure 6 the remaining entities.

When analyzing the figures 5 and 6, when an entity publishes a report with a qualified rating, it does not result in a decrease in investment; likewise, when an entity publishes a report with a clean opinion, it does not mean that your investment is increasing. Such is the case that, even in the issuance of a clean or qualified opinion, the investment in certain entities remains at the same value throughout the period. An example that clarifies what is mentioned in the previous paragraph is the case of Continental Tire Andina S.A., which publishes an audit report with a clean opinion over 7 years; however, this has not influenced the investment to increase by the publication of that opinion. It is even observed that the amount has decreased in some periods.

Figure 5.

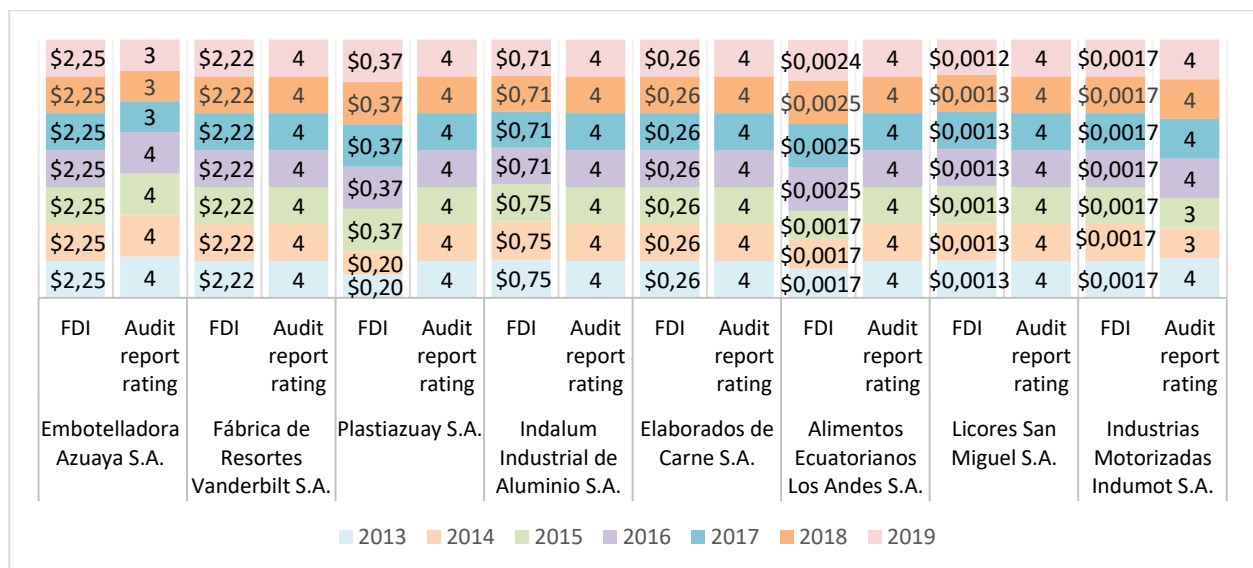
FDI of manufacturing companies 2013-2019 and audit report (in millions)



Sources: Authors' elaboration based on SPSS software.

Figure 6.

FDI of manufacturing companies 2013-2019 and audit report (in millions)



Sources: Authors' elaboration based on SPSS software.

Based on figures 5 and 6, the geometric mean was also analyzed to establish the variation rate of the investment amount of the sixteen manufacturing companies during the study period, resulting in a variable rate of 16%.

In the study results, there is no dependency between the rating of the audit report and the amount of direct foreign investment because statistical significance is not reflected. Although no research was found where the two variables of this article are correlated, documents are referring to audit reports as

a focus of analysis compared to other study areas. Such is the case of the study done by González (1998), where it is found out if the rating of an audit report is related to the price of the companies' shares listed on the stock exchange. It is concluded that there is no relationship between these two variables, this gives the interpretation that such a rating does not affect the dynamics of the rise or fall of those shares' prices. Another study that agrees with the previous one, corresponds to Gutierrez et al. (2020), where the authors analyze the relationship between the audit reports and the expected return of the shares price of the companies listed in the Latin American integrated market. The conclusion suggests that there is no correlation between the audit opinion and the behavior of the share prices. With a similar conclusion to the studies presented above, Pucheta et al. (2007) state that the opinion of the audit reports does not represent an informative value compared to the share price. Finally, a study conducted in Australia by Herbohn et al. (2007) mentions that no evidence was found of a reaction of the shares' price to the issuance of the audit report of the entities. Although foreign direct investment and the shares' price are indeed different variables, both are elements of the stock market, so it would be consistent to mention that the audit report is not a benchmark in decision-making in the stock market.

Final considerations

Once the information from the seven years of study has been analyzed, it is concluded that the opinion of the audit reports has a weak and negative correlation with the amount of foreign direct investment of the manufacturing companies studied. This is how a correlation percentage of -14.1% is observed, which means that the investors' investment decision is independent of the opinion published in the audit reports. Therefore, it can be concluded that said rating does not influence the variations in translational investment of manufacturing entities during the period 2013-2019, since, for investors, the opinion of the audit report does not represent significant informative data.

It is also important to highlight that the Ecuadorian companies studied did not correspond, the majority presented a clean opinion, implying that they manage strong internal control that allows them to obtain reasonable financial information. The type of companies that mostly obtained a qualified opinion were companies dedicated to the production of ceramics, which indicates that this sector has control deficiencies.

Finally, with the conclusions of this research, new studies are given in Ecuadorian companies, which contribute to knowing the direct influence of the results of audit reports. Just as studies were observed in other countries where, for example, its relationship with the price of shares was determined.

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