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National Tributes On The Liquidity And Value Creation Of Construction Companies In A Colombian City

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Abstract

The profitability obtained in an investment, as well as the legal stability in relation to taxes is important for the organizations, for this reason, the relationship between national taxes and liquidity and economic value inductors of the construction companies in the city of Cúcuta, Colombia was determined. Methodologically, this was a quantitative, descriptive-correlational study, the population consisted of 24 companies of the construction sector, with a non-probabilistic-intentional sample of 6 companies. In order to collect the data, accounting and financial information of the economic entities was requested. The results show how tax laws and decrees during the period of validity affect liquidity, free cash flow, profitability, working capital productivity and value drivers. Therefore, it was concluded that taxes were increasing in the first three years, when relating taxes with PKT, the coefficient of determination is only 22%, and if the PDC is observed, it is found that its values in all years are very low, even in the year 2019 which is almost null, also the return on net assets (RAN) shows values that for the Colombian reality are low, in the financial field shows that the tax aspects generated a destruction of economic value of the construction companies.

Keywords: first keywords; Value creation, Profitability, Tax, Liquidity, Construction companies.

1. Introduction

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For a long time, the construction sector has increased progress and the way wealth is distributed in countries, for Homaid & Tijani, (2015) these activities allow increasing the Gross Domestic Product (GDP) since it needs more raw material and also establishes new jobs in a direct and indirect way, forming capitals and participating in taxes, q in turn the quality of life of the population tends to be better by providing housing, road infrastructure, aqueducts and sewage, parks and spaces for recreation.

According to Cornelio, B. and Reátegui, T. (2014), states that a number of construction companies observed, do not plan to control the execution, ignoring the importance of financial planning policies, likewise, Cancelado and Sánchez (2018) mentions that tax planning is a scenario to counteract the problems derived from the different change in the rules that apply to the sector and thus avoid sanctions by the tax authority and especially the negative impacts on finances. On the other hand, Arango and Rivera (2018), raises the calculation of the fair value estimate applying the discounted cash flows method, where it is then compared with the estimate made using the multiples methodology: Market Value to Earnings and Market Value to EBITDA, to finally obtain a single fair value.

With the aim of encouraging construction activity in the country, Hernandez (2018) states that the Colombian Ministry of Finance proposes a decree to refund VAT on VIS and VIP construction materials; likewise, builders who are part of the urban renewal program may request VAT refund, in contrast, the tax aspects project problems of liquidity and profitability of the sector due to the elimination of the benefit of income tax exemption for VIS builders.

According to what is established by the DIAN (2017) allows construction companies that meet the conditions, to keep the tax exemption; and exposes the procedure of the income tax exemptions of the goods that as a whole its value does not exceed the ceilings framed by the norm, but that the complementary or related services exceed the maximum ceilings will not obtain the income exemption. Likewise, Caycedo, C. (2018) clarifies that in the Tax Statute the exempt income for the construction of VIS and/or VIP housing is associated with the profit originated by the negotiations of land necessary for the development of such projects, sale of housing, urban renewal, titling of mortgage portfolio and credits for the acquisition of VIS and/or VIP housing.

It is possible to perceive the real situation of the different changes to which the housing construction companies in Colombia are subjected in relation to the opportunities to generate economic value and liquidity, in such sense, the companies of the housing construction sector in the city of Cúcuta, faced with the possibilities of VAT refund and tax exemption or not, must have sufficient liquidity and at the same time find the value inducers that allow them to grow and consolidate this market segment so important for national development. Therefore, it is necessary to characterize the national tax obligations for this sector, appreciate the development of liquidity and economic value drivers, and from there, determine the relationship between the taxes to which they are obliged and their impact on liquidity and economic value drivers during the years 2015 - 2019.

1. COMPANY VALUATION AND VALUE DRIVERS

1.1 Economic Value Added in Companies

For different organizations, economic growth is paramount; therefore, Rueda et al. (2013) state that knowledge of value becomes an important variable in the financial stability of the company to make it sustainable and competitive over time within a specific sector, Téllez (2015) states that the increase in

economic value added (EVA) is a financial measure of market value added, and is monitored through the so-called value drivers, in order to know which are the variables related to the operation of the organization that most influence or affect its value and have a cause-effect relationship with the decisions made by management.

The Economic Value Added (EVA), has a diversity of variables and methods that can be used, Valls (2001) states that it is evident that it is not possible to use them all, for operational reasons it is better to select some of them, therefore, a good choice is to calculate the value of profitability, seen from the cash flows and confronting the net assets, in addition the information obtained should be crossed with a comparative method; Garcia (2003), states that EVA is the difference between the operating profit after tax and the expected return on investment, this benefit depends on the financial cost, or cost of capital (Kc) that is implicit with the use of assets by the company multiplied by the amount of net operating assets, expressed as follows: EVA= UODI - (Net Operating Assets * CK)

1.2 Strategic and Operational Value Drivers

The working capital (KT) is an indicator to which great attention should be given due to the importance it has in relation to the liquidity of the institutions; in this regard, Peñaloza (2008) stated that it is necessary to focus on the permanence of the company, profitability, working capital, and liquidity, generating the productivity of working capital (PKT) where the accounts of current assets and liabilities intervene; In addition, Albornoz (2006) states that these items are those that become effective in less than a year; for these considerations, companies must effectively manage cash, banks, debtors, inventory, as well as the good management of current liabilities.

For Gitman and Zutter (2012), working capital is the mass of money or resources that the company needs to carry out its activities, associated with the different liquidity problems of the companies, and that as elements for the generation of value is defined as those current items, both assets and liabilities that are directly related to the operation of the company. In addition to the above, Rivera (2004) states that it is advisable to keep this indicator as low as possible, which implies that the company, as it expands, demands less money for working capital, freeing it up and allowing investments or profit sharing, thus giving much more value to the company. According to the statement of Van Horne and Wachowicz (2010) the EBITDA indicator refers to gross cash, after covering taxes, debt service, profit sharing, investment in working capital and investments in fixed assets. The related value driver called EBITDA Margin **(**MEBITDA) according to Garcia (2009) is obtained by dividing profit by revenue and is expressed by the following formula: EBITDA Margin = EBITDA/ Revenues. Another value inducer is the Growth Leverage (PDC) which arises from the relationship between MEBITDA and PKT, which allows determining how much the company can grow and if it is adding value to the profitability of the equity, its calculation is expressed as: PDC = MEBITDA / PKT, where the ideal is that this relationship is greater than 1.

1.3 Financial Value Drivers

As regards the profitability of net assets (RAN), according to Guardiola, et al. (2020), the rate of production is related to the added value of the company, therefore to generate profitability it is necessary to invest in assets, that is, the amount of its assets at commercial value as a variable for calculating the operating profitability must be calculated considering this condition, but at the moment of knowing the profitability of net assets (RAN) the profit after taxes must be crossed with the value of net assets. For

organizations it is necessary to know the return on investment after taxes Garcia (2003) emphasizes that the operating profit generates economic value and is used for the calculation of the RAN, in addition to this, Rueda (2010) states that if the income presents a decrease this can be observed in the profit, being less profitable the investment, therefore the operating profit after taxes is the retribution of those who finance the assets necessary for the production.

A value inducer to take into account is the free cash flow, being a technique of utmost importance for the development of any economic model, which defines the surpluses or available resources that the company has with which it can cover its commitments with beneficiaries, owners and financial creditors, being decisive to calculate the organization's debt capacity (Block, S. 2005) (Delgado, L. 2014). The way in which the cash flow of a company is prepared for the different users of the information helps to determine its attractiveness together with its possibilities of growth and value generation. Thus, it should be taken into account that there are companies that demand more resources for the normal development of their operations in order to achieve a significant cash flow statement, where it is explained which variables generate changes in this item. (Martin and Petty 2001)

2. Method

2.1. Research approach or paradigm.

According to Bonilla and Rodriguez (2005) the research was developed under the quantitative approach, characterized by being objective, supported by statistics, being numerical and quantifiable.

2.2. Type of research.

According to Hernández, Fernández and Baptista (2014) the type of research used was descriptive - correlational, because it analyzed the reality and understood the context in its most relevant phenomena, in addition the crossing of variables was generated to know the degree of correlation that exists between them. To establish the population (Arias, F. 2012) establishes that it should be a group that have characteristics in common and form the universe, represented in 24 companies of the construction sector registered in the Chamber of Commerce, registered in CAMACOL and domiciled in the city of Cucuta, Colombia. The sample used is non-probabilistic, according to Otzen & Manterola. (2017) sampling in quantitative research can be intentional, because it allows the researcher to determine the size, for the research it consisted of six (6) construction companies in San José de Cúcuta, Colombia. It is important to collect the information, Méndez (2020) highlights that the questionnaire is a useful tool to complement the data obtained; according to the above, a questionnaire was applied to managers to expand the financial information submitted to the auditing entities of the selected companies and confronted with the national tax laws for the period 2015 - 2019.

3. Results

3. 1 Description of the national tax laws that govern construction companies in the city of Cúcuta

During the research period, the national tax obligations of construction companies in the city of Cúcuta and their relationship with income tax have been governed by the following regulations:

Table 1. National Taxes and Fees

Standard	Years	CREE Tax	Wealth tax
Law 1739 of 2014	201g5	The Income Tax for Equity (CREE) for the years 2015 has a rate of 9%.	The wealth tax is established according to the taxable base: Range >= 2,000 million and < 3,000 million has a marginal rate of **0.35%.** Range >= 3,000 million and < 5,000 million the marginal rate is **0.75%.** 5,000 million and upwards the marginal rate of **1.15% applies.**
	2016	The Income Tax for Equity (CREE) for the years 2016 has a rate of 9%.	Range >= 2 billion and < 3 billion has a marginal rate of **0.15%.** Range >= 3,000 million and < 5,000 million the marginal rate is **0.25%.** 5,000 million and upwards the marginal rate of **0.5% applies.**
Law 1819 of 2016	2017	As of 2017, the (CREE) is eliminated and the special self-withholding on income is born, in the specific case of the construction sector the rate of 0.8% applied to the total income.	Range >= 2 billion and < 3 billion has a marginal rate of **0.10%.** Range >= 3,000 million and < 5,000 million the marginal rate is **0.20%.** 5,000 million and upwards the marginal rate of **0.4% applies.**
	2018 2019	Special self-withholding on income, in the specific case of the construction sector, at a rate of 0.8% applied to the total income.	For 2018, a special tax is applied for legal entities as follows: Range >= 2,000 million and < 3,000 million has a marginal rate of **0.35%.** Range >= 3,000 million and < 5,000 million the marginal rate is **0.75%.** 5,000 million and upwards the marginal rate of 1.**5% applies.**

As from January 2015, the facts stipulated as generating wealth tax are established by the possession of this, for the purposes of the tax, the concept of wealth is equivalent to the total gross equity owned by the declarant, minus the debts payable by the taxpayer that are in force in the period to be declared. According to the above, the value of the gross equity of legal entities must be taken as the taxable base to calculate the wealth tax corresponding to the years 2015, 2016 and 2017, subtracting the commitments that are due at the date.

In relation to the surtax on equity income tax (CREE), the taxable base of such tax is established as the difference between the gross income susceptible of increasing the net worth of the taxable year and the returns, rebates and discounts, and from what is thus obtained, those corresponding to income not constituting income will be subtracted, from which exempt income will be allowed to be subtracted. However, for all purposes, the taxable base of the CREE may not be less than 3% of the net worth of

the taxpayer on the last day of the immediately preceding taxable year in accordance with the provisions of Articles 189 and 193 of the Tax Statute.

All these taxes and their respective rates have caused construction companies in the city of Cúcuta to pay a total of the following national taxes for the years under study:

Table 2. Taxes paid and their proportion to net income (**UN**) of construction companies in Cúcuta

	2015	**2016**	**2017**	**2018**	**2019**
Tax Paid	256,284.00	354,808.00	837,366.00	271,944.00	106,950.00
A	640,710.00	887,020.00	2,109,965.51	2,212,008.00	727,617.78
Proportion	**0.400**	**0.400**	**0.397**	**0.224**	**0.147**

In thousands of pesos

As can be seen in Table 2, there is a variable behavior of the payments made for national taxes by the companies of the construction sector in Cúcuta, since the proportion of taxes in relation to the net profit obtained can be perceived to have a stability in the first three accounting periods and then decrease in a sustained manner in the last years of the research study.

3.2 Analysis of liquidity indicators MEBITDA, PKT, and PDC for construction companies in the municipality of San José de Cúcuta in the period 2015-2019.

To analyze the liquidity of construction companies in the city of Cúcuta in the period 2015-2019, the behavior of construction revenues, EBITDA Margin (MEBITDA) and Working Capital Productivity (PKT) was observed.

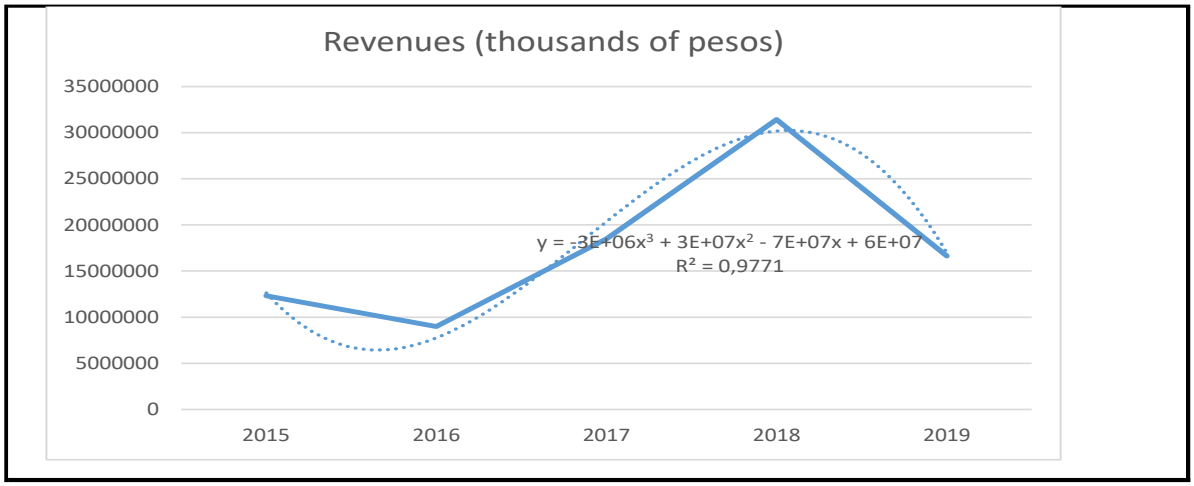

Figure 1: Revenue behavior of construction companies in Cúcuta

The income from construction of works of the construction companies had a varied behavior, since it starts the year 2015 with a value of 12,326,789,000, then in 2016 it decreased to 8,999,892,000, which is equivalent to a drop of 27%, but in the years 2017 and 2018, it rebounded up to 31,429,692,000, equivalent to a growth of 249%, to decrease in the year 2019 to a value of 16,642,005,400 which represents a drop of 47%. A general analysis shows that revenues have an average value of 17,578,454,000, with a variability coefficient of 49%.

EBITDA margin as a liquidity indicator has the sense of showing the amount of cents contributed by each peso of income and is calculated through the following formula:

$$MEBITDA = \frac{EBITDA}{Ingresos}$$

Table 3. EBITDA margin (**MEBITDA**) of construction companies in Cúcuta

	2015	**2016**	**2017**	**2018**	**2019**
EBITDA	1.652.040	1.990.150	1.990.150	3.925.254	488.610
Revenues	12.326.789	8.996.892	18.496.892	31.429.692	16.642.006
MEBITDA	**0,13**	**0,22**	**0,11**	**0,12**	**0,03**

In thousands of pesos

In accordance with the information obtained, it should be clear that liquidity is the operational source of the different funds and is calculated based on the net income of the entity to which depreciation and amortization expenses are added, which are estimated for accounting purposes but are not a cash outflow, Once this value is obtained, the relationship that it has proportionally with the company's income is analyzed, observing the results of each of the years of the study, for each peso of income there are 22 cents, in the best of the results and only three (3) cents in the worst result of liquidity, in general these results indicate that there are liquidity problems for the construction companies.

Another liquidity indicator is the productivity of working capital (**PKT**), which is determined by the ratio of net operating working capital to revenues.

$$PKT = \frac{KTNO}{Ingreso}$$

Table 4. Productivity of Working Capital (**PKT**)

	2015	**2016**	**2017**	**2018**	**2019**
KTNO	7.413.360	31.829.050	24.417.791	35.406.613	25.249.216
Revenues	12.326.789	8.996.892	18.496.892	31.429.692	16.642.006
PKT	**2,22**	**3,54**	**1,32**	**1,13**	**1,52**

In thousands of pesos

The results mean the amount of cents that the company must leave illiquid to be able to earn one peso; so its value should be as low as possible to indicate the administrative efficiency in terms of accounts receivable, inventories and accounts payable to suppliers, but also to relate it to a greater or lesser business liquidity. For each of the years of the study, the PKT of the construction companies in Cúcuta show very high values, greater than unity, which indicates the existence of major liquidity problems.

The financial growth lever (**PDC)** is a liquidity indicator, this number relates the EBITDA margin to the PKT but by its quotient, and it is calculated through the following formula

$$PDC = \frac{MEBITDA}{PKT}$$

Table 5. Liquidity surpluses (+) or shortages (-) from operations and (**PDC)**

	2015	**2016**	**2017**	**2018**	**2019**
MEBITDA	0,13	0,22	0,11	0,12	0,03
PKT	2,22	3,54	1,32	1,13	1,52
Surplus (+) shortage (-)	-2,09	-3,32	-1,21	-1,00	-1,49
PDC	0,06	0,06	0,08	0,11	0,02

The value must be greater than one (1) to guarantee that the growth in sales can be financed operationally without resorting to external financing, and if it is less than one, it is evidence of the possibility of liquidity problems when revenues grow if indebtedness is not resorted to. As can be seen, construction companies in Cúcuta have had major liquidity problems during the period under study, since every year they have a shortage of operating funds to be able to bring in money, and if the PDC is observed, it is found that its values in all years are very low, even in 2019, when it is almost nil.

3.3 Analysis of the RAN, Kc, FCL and EVA value drivers for construction companies in the municipality of San José de Cúcuta for the period 2015-2019.

Return on Net Assets (**RAN**) as a macro value driver is a measure of after-tax operating profitability, which if higher than the cost of capital enables the creation of economic value of the company; where: After Tax Operating Income (UODI) is divided into Net Operating Assets (ANDEO).

$$RAN = \frac{UODI}{ANDEO}$$

Table 6. Return on Net Assets (**RAN**)

	2015	2016	2017	2018	2019
UAI	989.675	1.327.785	1.327.785	1.212.008	937.403
UODI	593.805	796.671	800.837	940.064	799.617
ANDEO	24320786	26512889	24997437	35406613	30149413
RAN	0,02	0,03	0,03	0,03	0,03

In thousands of pesos

It is observed that the return on net assets (RAN) shows values between minus 3% and up to +3% being clear that as the percentage of profitability increases in a margin of financial protection, and the results obtained for the Colombian reality seem to be low; however, the comparison has to be made against the calculation of the cost of capital of the same companies.

The financial indicator called cost of capital (**Kc**) is the average value of the resources obtained from the different sources of financing; however, since most companies do not have a financing structure of half debt and half equity, the average must be calculated by weighting each cost by the ratio of the source to the structure (Wd and We).

$$Kc = Wd * Kd + We * Ke$$

Table 7. Cost of capital (**Kc**)

	2015	2016	2017	2018	2019
i	0,05	0,02	0,02	0,07	0,09
Kd	0,03	0,01	0,01	0,05	0,08
Wd	0,68	0,85	0,85	0,94	0,82
Ke	0,25	0,25	0,25	0,25	0,25
We	0,32	0,15	0,15	0,06	0,18
Kc	0,10	0,05	0,05	0,06	0,11

According to the financial information the average cost of capital is 25% for all years, while the other values were obtained from the financial statements of the construction companies in the sample, as can be seen the cost of capital is lower than the cost of equity of 25%, since the organizations in the construction sector in Cúcuta have obtained cheaper indebtedness and obligations have been taken up

to 95% in 2018, which means financial risk but manages to lower the cost of capital. However, this indicator needs to be compared with the RAN.

Table 8. Comparison between Return on Net Assets (**RAN**) and the cost of capital (**Kc**)

	2015	**2016**	**2017**	**2018**	**2019**
RAN	0,02	0,03	0,03	0,03	0,03
Kc	0,10	0,05	0,05	0,06	0,11
Situation	**Unfavorable**	**Unfavorable**	**Unfavorable**	**Unfavorable**	**Unfavorable**

When reviewing the comparative results of the two indicators for the years of the research period, it is found that the return on investment by the owners represented in the net assets is not generating value for the company because the cost of capital comparative situation shows unfavorable results in relation to the creation of value of the construction companies in Cúcuta.

The economic value added (**EVA**) indicator is obtained from the difference between the operating profit after tax and the expected return on investment, but this profit depends on the financial cost of acquiring the resource.

Table 9. Indicator to calculate the Economic Value Added (**EVA**)

	2015	**2016**	**2017**	**2018**	**2019**
EVA	- 1.867.710	- 502.255	- 453.189	- 1.351.124	- 2.046.104

The partial results about the creation of economic value of the construction companies of Cúcuta in the period 2015-2019 show results of destruction of economic value in all years; indeed period after period, the financial information of the companies on average shows that they have not produced the operating profit after taxes required by their risk immersed in the investment for the realization of the operations, being a situation that has led to a negative EVA in all years.

The free cash flow (**FCL**) indicator, which is a macro-driver of business value, is presented below:

Table 10. Indicator for calculating Free Cash Flow (**FCL**)

	2015	**2016**	**2017**	**2018**	**2019**
FCL (thousands of pesos)	- 1.865.631	9.929.442	- 8.935.797	16.475.151	- 31.783.231

In the day-to-day business processes, the free cash flow obtained should cover the internal rate of return for its beneficiaries, i.e. the partners and financial creditors, with the results showing negative results of the FCL amounts in almost all the periods under study, only for the year 2018 the results are favorable and helping to improve the value corresponding to the construction companies of the city of Cúcuta during the period 2015 - 2019.

3.4 Correlational Analysis

In order to apply the correlation of national taxes paid by the companies versus liquidity and value creation of the construction companies in Cúcuta in the study period, formulas from the Excel spreadsheet of Pearson correlation coefficient and R^2 correlation coefficient have been applied; such calculations show the following results:

Correlation indicators between national taxes and indicators of liquidity and value creation of construction companies in Cúcuta in the period 2015-2019.

	Pearson	**R^2**
A	0,92	0,85
PKT	0,47	0,22
MEBITDA	0,77	0,59
RAN	0,60	0,36
EVA	0,78	0,61
FCL	0,12	0,01

If we statistically relate the taxes paid on behalf of the construction companies of Cúcuta with their respective net profits, we find that the correlation has a Pearson coefficient of 92%, which is high and shows that the taxes paid by such companies are certainly determined by their own profits. When tax payments are considered as a dependent variable of net income, a determination coefficient of 0.85 is found, which indicates that taxes are 85% determined by net income.

When relating taxes with the Productivity of the Net Operating Working Capital (**PKT**) we find a Pearson coefficient of 0.47, which shows an average correlation between these variables, that is, when tax payments vary, the PKT varies to the same degree. However, when considering PKT as a dependent variable of tax payments, the coefficient of determination is only 22%, which shows that 78% of other factors determine the behavior of PKT.

If we now consider the relationship of another liquidity indicator, such as the EBITDA Margin (**MEBITDA**), we find a Pearson coefficient value of 0.77 showing a high average correlation, since when the tax payment varies, the MEBITDA varies in the same direction by 77%; likewise, the correlation coefficient between the MEBITDA as dependent on the tax payment raises the determination coefficient to 0.59, which means that there is a 41% determination of this liquidity indicator.

The correlation coefficient between tax payments and the RAN value inducer of the Pearson coefficient is 0.78, which indicates a high positive correlation between the variables, i.e., as RAN varies, so do tax payments in the same direction by 78%; but, if RAN is considered as dependent on tax payments the coefficient R^2 is 36%, which shows that other factors determine the remaining 64% of RAN behavior.

With respect to the relationship between tax payment and EVA, a high positive correlation coefficient of 0.78 is obtained and when considering EVA as dependent on tax payment, an R^2 value of 61% is obtained, which shows a medium determination and that other factors act in 39% to determine such measure of value addition.

When relating tax payments to the FCL in the years of the research, a low Pearson coefficient of 0.12 is perceived, which shows that, as taxes paid vary, the FCL varies in the same direction, but only by 12%; likewise, the coefficient of determination of 0.01 indicates almost total independence between the variables.

Conclusions

The amounts cancelled that correspond to taxes of the national order that are applied for the construction companies of Cúcuta have a variation of constant growth in the first periods of the study, however, the proportion of taxes to the net profit is maintained the first three years, the income from construction of works of the construction companies of Cúcuta in the period 2015-2019, had a non-uniform behavior

with an average value of seventeen thousand five hundred seventy-eight million four hundred fifty-four thousand pesos and a variability coefficient of 49%, which evidences the dispersion expressed above.

Low MEBITDA results were obtained, on the contrary, in relation to the PKT of the construction companies of Cúcuta show very high values, greater than unity, but the result of both indicators evidences the existence of liquidity problems. The construction companies of Cúcuta have had great liquidity problems during the study period, since every year they present operating fund shortages in order to be able to receive cash, and if we observe the PDC we find that its values in all the years are very low, even in 2019 when it is almost null.

It is observed that the return on net assets (RAN) shows values between minus 3% and up to +3% which for the Colombian reality are low, but it is when comparing the results of the RAN and KC unfavorable results are seen in relation to the creation of value of the companies under study, on the other hand, the partial results about the creation of economic value of companies during the period 2015-2019 from the EVA indicator, where results of destruction of economic value are shown in all years, on the other hand, the results found from the FCL highlight the accounting period 2018 where the results are increasing and contribute for the company to generate value, the other years analyzed have bad results that imply a destruction of the economic stability of the organizations.

The Pearson coefficient of 0.77 shows a high average correlation between tax payments and MEBITDA, and the correlation coefficient between tax payments and MEBITDA as a dependent of tax payments is 0.59, and the correlation coefficient between tax payments and the RAN value driver is 0.59; Likewise, the correlation coefficient between MEBITDA as a dependent of tax payments is 0.59, and the correlation coefficient between tax payments and the value driver RAN is 0.78 which indicates a high positive correlation between the variables; but, if RAN is considered as a dependent of tax payments the coefficient R^2 is 36%,

With respect to the relationship between tax payments and EVA, a high positive correlation coefficient of 0.78 is obtained, and when considering EVA as dependent on tax payments, an R^2 value of 61% is obtained. When relating tax payments to the FCL in the years of the research, a low Pearson coefficient of 0.12 is perceived, which shows that, as taxes paid vary, the FCL varies in the same direction, but only by 12%; likewise, the determination coefficient of 0.01 indicates almost total independence between the variables.

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