

Impact of the pandemic on the company Transpecarba S.A.: application of liquidity, indebtedness and profitability indicators.

Impacto de la pandemia en la empresa Transpecarba S.A.: aplicación de indicadores de liquidez, endeudamiento y rentabilidad

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ABSTRACT

The appearance of Covid-19 has sharply damaged the world economy. In Ecuador, the restrictive measures imposed by the pandemic had a great impact on the economy of the country's companies. Due to the changes present in the business environment with respect to the pandemic, most of the companies have incurred economic and financial problems, the worst case being the closure of their activities; it is then where the financial indicators intervene that would facilitate obtaining more accurate information regarding the business situation. The objective of the research is to analyze the economic and financial impact of Transpecarba S.A. through the financial indicators of liquidity, indebtedness and profitability, determining the situation of the entity in times of Covid-19. For this purpose, a descriptive methodology with a qualitative approach has been used, using the figures given by the financial statements to make the respective indicators, in addition to the interview that allowed us to have privileged information of the business situation. The results obtained according to each group of indicators allowed us to evidence the reality of each ratio, and by analyzing each one of them we were able to determine a favorable and unfavorable economic impact on the parameters studied.

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RESUMEN

La aparición del Covid-19 ha perjudicado bruscamente la economía mundial. En el Ecuador, las medidas de restricción dispuestas por la pandemia, afectaron en gran magnitud a la economía de las empresas del país. Debido a los cambios presentes en el medio empresarial respecto a la pandemia, la mayoría de las empresas, han incurrido en problemas económicos y financieros, siendo el peor de los casos el cierre de sus actividades; es entonces donde intervienen los indicadores financieros que facilitarían la obtención de información más acertada respecto a la situación del negocio. La investigación tiene como objetivo analizar el impacto económico y financiero de la empresa Transpecarba S.A. a través de los indicadores financieros de liquidez, endeudamiento y rentabilidad, determinando la situación de la entidad en tiempos de Covid-19. Para ello se ha empleado una metodología descriptiva con enfoque cualitativo, utilizando las cifras dadas por los estados financieros para realizar los respectivos indicadores, además de la entrevista que nos permitió tener información privilegiada de la situación del negocio. Los resultados obtenidos según cada grupo de indicadores permitió evidenciar la realidad de cada ratio, y analizando cada uno de ellos se consiguió determinar un impacto económico favorable y desfavorable en los parámetros estudiados.

Palabras clave: Pandemia, covid-19, ratios financieros, transporte de carga pesada

INTRODUCTION

In 2008 the world economy faced the well-known real estate bubble, which brought with it consequences that shook multiple sectors, as a result of the profitable succession of resources, services and provisions, in addition to the use of goods from the financial activity; some researchers on the subject have stated that this situation led to several factors in the financial and economic part of public and private companies, where responsibility is given in some way to excessive indebtedness of people, excessive liquidity and profitability of the financial system. (de los Santos & Reyes, 2016, p. 157)

Over-indebtedness, excessive liquidity and profitability directly affected European countries such as Spain, France, the United Kingdom and Italy, leading to a global economic crisis that was reflected in the performance of economic, productive and financial activities, negatively affecting the assets of countries such as Australia, the United States, Japan, South Africa and Ecuador.

Another event that marked the history and undoubtedly the economy of Ecuador, was the transition from sucres to dollars suffered in the years 1999 to 2000, which led to an economic crisis, affected by some factors such as the presence of deficient administrative and supervisory practices in the financial system, in addition to terrible economic and financial policies; as a result of this crisis, there were several consequences such as the dissolution of several banks, the presence of liquidity problems in local companies, lack of solvency in the financial sector and an excessive percentage of unemployment in the

country, thus discouraging the scope of business productivity in the national market. (Herrera & Macagnan, 2016, p.22)

For Espinoza et al., (2014) the world economy was sharply damaged by the emergence of covid-19, where it not only affected the financial system as in 2008, but also the productive economy, made up of production, small and medium-sized companies, including their workers; this economic crisis has no comparison, since not only underdeveloped countries were affected but also the powers that be; It brought with it repercussions on supply and demand, in addition to historically low interest rates, and above all it had a serious impact on the supply chains that make up the activities of transformation, production, transportation, storage and other actions for the distribution of a product.

Undoubtedly, in Ecuador, the government, with the restrictive measures imposed by the pandemic, has left aside the companies that essentially help to activate the economy, such as those activities of the service sector, mainly transportation, both of people and goods for sale, exports and imports, which has directly caused the closure of small businesses and even the reduction of tourism activities. Martínez-Campillo et al., (2013). Thus, according to the Gross Added Value (GVA) of the transportation sector, during the year 2020 it decreased by 13.8%, likewise a decrease of 19.4% in the consumption of diesel and extra gasoline, used in transportation by land and sea, was observed.

The current problem lies in the fact that, due to the changes present in the business environment with respect to the pandemic caused by the virus, most companies have incurred economic and financial problems, which in the worst cases have led to the closure of their activities; it is then where the indicators that would facilitate obtaining more accurate information regarding the levels of liquidity, indebtedness and business performance, thus helping to determine the current situation of the entity. In addition to this problem, there is the decrease of the GVA in the transportation sector, so it is necessary to apply these indicators in a company of the sector, which will help us to have a better picture of its business situation.

Therefore, the objective of this research is to analyze the economic and financial impact of Transpecarba S.A., through the application of liquidity, indebtedness and performance indicators, in order to determine the situation of the company in times of COVID-19.

For this purpose, a descriptive methodology has been used under a qualitative approach, where the information for the determination of the ratios will be collected from the statement of financial position and the statement of profit and loss of the company Transpecarba S.A. for the periods 2019 and 2020; it is emphasized that the interpretation of the results of the financial indicators will be executed through the literature review of scientific articles, academic texts and other bibliographic sources of true information, which will allow us to have more accurate bases for its analysis, in addition to the application of an interview to the manager of the company, with which we can obtain privileged information about the situation of the entity.

Covid-19 pandemic and emerging measures in Ecuador

In the case studied by Levy, (2013) the term pandemic is a unique, unpredictable phenomenon that does not occur commonly. The characterization of pandemic by the World Health Organization refers to the fact that the disease has spread to different countries, continents or globally, and that it has also harmed a number of people considerably.

Covid-19, also known as novel coronavirus, is an acute respiratory disease that started in December 2019 in Wuhan, China. Most cases of this virus have occurred in adults, and the lethality of this disease has occurred mostly in older adults. This virus is highly contagious, which has led to a pandemic officially declared on March 11, 2020. Its transmission occurs from person to person through droplets produced by an infected person when coughing, sneezing or talking, and it has also been proven that the contagion can also occur when having contact with areas that have been infected with droplets from people who have the virus. (Reyes et al., 2017, p.80)

This disease of great magnitude will leave as a consequence numerous economic as well as social havoc. This potent pandemic requires the attention and awareness not only of those who work in the health area but also of the community in general and its public leaders, in order to efficiently face the current reality and its great future repercussions (González García et al., 2017, p.82)

In Ecuador, a series of measures were decreed to face the crisis generated by the coronavirus, the most significant of which were as follows:

1. Closure of public services except for health, security, risk services.
2. Hospitals, neighborhood stores, markets and supermarkets will remain open.
3. Total suspension of the working day in the public and private sectors as of Tuesday, March 17.
4. Curfew (for vehicles and people) from Tuesday, March 17, 2020 from 9:00 p.m. to 5:00 a.m. the following day.
5. Suspension of domestic passenger flights.
6. Suspension of interprovincial transportation.

MATERIALS AND METHODS

The descriptive method was used in this research, where traits and characteristics about the object of study are identified, without having to provide explanations or reasons for the situations. In addition, it was carried out under a qualitative approach since this allows us to have descriptions about a situation, in addition to using the interview as a tool, which allows us to have information closer to the object of study.

The information to be collected will be through the figures given by the Financial Statements (Statement of Financial Position and Income Statement) of the company Transpecarba S.A. in the period 2019 and 2020, in order to calculate the liquidity, indebtedness and profitability indicators. The interpretation or analysis of each of the resulting ratios will be based on the literature review, whether scientific or academic

articles and other bibliographic sources related to the object of study, which will help to demonstrate the impact of Covid-19 in the heavy cargo transportation company "Transpecarba S.A.".

RESULTS

Tables were prepared with information relevant to each group of Financial Ratios or Indicators, in accordance with the values obtained from the Financial Statements of the company under study.

Table 1. *Liquidity Indicators*

Indicator	Formula	Result Period 2020	Result Period 2019
Net Working Capital	$KNT = \text{Activo Corriente} - \text{Pasivo Corriente}$	\$ 255.696,73	\$ 471.284,74
Current Ratio	$RC = \frac{\text{Activo Corriente}}{\text{Pasivo Corriente}}$	\$ 1,66 (166%)	\$ 1,73 (172,81%)
Quick Reason	$RR = \frac{\text{Activos Corrientes} - \text{Inventarios}}{\text{Pasivo Corriente}}$	\$ 1,64 (163,71%)	\$ 1,73 (172,81%)

Source: Adapted from Financial Statements of the company Transpecarba S.A.

Prepared by: Authors

- According to the results obtained, show that the company Transpecarba S.A. in the period 2020 has a net working capital of \$ 255,696.73 that in relation to the result of 2019 which was \$ 471,284.74; it is interpreted that, the business has decreased its capacity or availability of resources to be able to operate on a daily basis, which is unfavorable to the company, since from this point of view increases the liquidity risk.
- In the year 2020 the company covers with its current assets with \$1.66 to \$1.00 of short-term obligations, that is, the coverage of current controlled resources to obligations are 166%, which compared to the period 2019 which was \$1.73 (172.81%) it is interpreted that liquidity has decreased, which is unfavorable to the company in its payment capacity. It should be emphasized that the result of the ratio, despite having decreased, retains adequate liquidity because it is within the suggested ranges of 1.50 to 2.50 (\$).
- From the point of view of the rigorous liquidity level the company in the period 2020, has \$1.64 to cover with its current assets to short-term liabilities, which comparing with the year 2019 which was \$1.73. to cover \$1.00 of short-term obligations, reflects that the company has decreased its liquidity, however, in

both years an adequate liquidity is visualized, because the results of the ratio are within the suggested range which is from 1 to 2 (\$).

Table 2. *Indebtedness Indicators*

Indicator	Formula	Result Period 2020	Result Period 2019
Debt Ratio	$RD = \frac{Pasivo}{Activo}$	0.45 ctvs. (45,48 %)	0.58 ctvs. (58,40 %)
Debt - Equity Ratio	$RDP = \frac{Pasivo}{Patrimonio}$	\$ 0,83 (83,40 %)	\$ 1,40 (140,39 %)
Interest coverage ratio	$RCI = \frac{\text{Income before employee profit sharing} + \text{Interest paid} + \text{amortization} + \text{depreciation} + \text{financial expenses}}{\text{interest paid}}$	0 times	20.04 times

Source: Adapted from Transpecarba S.A. Financial Statements.

Prepared by: Authors

- The company in 2020 presents a debt of 0.45 ctvs. in relation to each \$1.00 of investment in assets, i.e. a debt level of 45.48% that comparing with the result of the 2019 period that was 0.58 ctvs. (58.40%) it is evident that the organization has decreased its financing with third parties, therefore it is favorable, because it reflects greater solvency and capacity to contract future obligations. It is also important to note that these values are within the maximum recommended limit, which is up to 70% for indebtedness with respect to investments in assets.
- In 2020, the organization shows indebtedness of \$ 0.83 in relation to each \$1.00 of equity contribution, i.e. a debt level of 83.40%, which compared to the result of the 2019 period which was \$ 1.40 (140.39%) shows that it has decreased its financing with third parties, this being favorable for the company, in addition to being within the recommended limit, which is up to 233%.
- The level of interest coverage for the period 2020 results in a value of 0 times, this is due to the non-existence of values in the interest paid account, while in the previous period it was 20.04 times, it is interpreted that the result has completely decreased, therefore, its payment capacity is unfavorable.

Table 3. Profitability Indicators

Indicator	Formula	Result Period 2020	Result Period 2019
Gross Profit Margin Ratio	$RMUB = \frac{Utilidad\ Bruta\ en\ Ventas}{Ventas}$	\$ 1,00 (100 %)	\$ 1,00 (100 %)
Operating Profit Margin Ratio	$RMUO = \frac{Utilidad\ Operacional}{Ventas}$	0.008 ctvs. (0,84 %)	0.020 ctvs. (2,02 %)
Net Income Margin Ratio	$RMUN = \frac{Utilidad\ del\ Ejercicio}{Ventas}$	0.011 ctvs. (1,09 %)	0.012 ctvs. (1,16 %)
Return on Investment in Assets	$ROA = \frac{Utilidad\ del\ Ejercicio}{Activo}$	0.06 ctvs. (5,67 %)	0.05 ctvs. (4,84 %)
Return on equity investment	$ROE = \frac{Utilidad\ del\ Ejercicio}{Patrimonio}$	0.10 ctvs. (10,39 %)	0.12 ctvs. (11,64 %)

Source: Adapted from Financial Statements of the company Transpecarba S.A.

Prepared by: Authors

- The company Transpecarba S.A. in the period 2020 and 2019 will obtain a gross profit of \$1.00 for every dollar of sales, i.e. a gross margin of 100%, therefore it can be seen that for every dollar of revenue the business earns \$1.00 in gross profit.
- In the 2020 period, the organization achieved an operating profit of 0.008 ctvs. for each dollar of sales, i.e. an operating margin of 0.84%, which compared to the previous period of 0.020 ctvs. (2.02%), which represents a decrease in operating profit.
- For the year 2020, 0.011 ctvs. of net profit is obtained for each dollar of sales, i.e. the net margin is 1.09% which in relation to the year 2019 of 0.012 ctvs. (1.16%), it is evident that there is a lower profit than in the previous year.
- According to the return on investment in assets, the company in the 2020 period obtains net profits of 0.06 ctvs. for each dollar of investment in assets; that is to say, it generates a profitability of 5.67% that in relation to the 2019 period of 0.05 ctvs. (4.84%) it is interpreted that the company's performance has improved the use of its assets maximizing the net profitability of the business.

On the other hand, the return on equity investment, exhibits in the period 2020 obtains a net gain of 0.10 ctvs. for each dollar of equity investment, i.e. generates a return of

10.39% that in relation to the period 2019 of 0.12 ctvs. (11.64%), it is evident that the net profitability of the period has decreased.

According to the results obtained in the research, with respect to liquidity it could be observed that the company has adequate levels, but from 2019 to 2020 these have decreased, which gives a minimum difficulty to the company of not being able to meet its short-term obligations; in this way like Montero & Sandoval (2018) it is stated that liquidity indicators help determine whether or not the entity has liquidity, also considering that the higher the result, the entity is more likely to cancel debts of less than one year.

In relation to the indebtedness ratios, according to Martínez & Guzmán, (2014) these provide information on the financing with third parties, which the entity has or its equity; from this in the research the results have shown that the company, from one period to another, has decreased both types of financing, so it presents greater solvency and willingness to contract obligations with third parties in the future.

Regarding the profitability indicators, the ratio of gross profit margin, operating profit margin, net profit margin and return on equity investment, showed a decrease in their results from the period 2019 to 2020, as a result of the decline in income from its economic activity; on the other hand, the result of return on investment in assets, has shown an increase that evidences the improvement in the use of assets; thus, with the use of these indicators, it is affirmed what they state León, (2015) "The profitability ratios are used to measure the company's capacity to generate profits based on the results invested". (p. 76)

The interview with the manager of the company showed that during the pandemic, the company did have changes in terms of the economic crisis that occurred, but nevertheless remained moderately stable economically and financially, also it was noted that they do not use financial ratios, and that to know the situation of the company, they rely on monthly balance sheets, monthly accounting report and bank reconciliations.

In general, in reference to the financial ratios, it is agreed with what they say Kato, (2013) that "Financial indicators allow us to evaluate how our company is doing, since they are considered as an x-ray where it can be determined whether at the end of each fiscal year it has been solvent, profitable or presented liquidity during its economic operations" (p. 22).

At the same time, (Díaz et al., 2017) states that companies mostly resort to the analysis of financial statements through ratios to determine their economic and financial situation, which do not provide concise information to evaluate the situation of the entity, so it expresses that other types of tools or methods should be used.

On the other hand, Espinosa et al., (2015) affirm that currently most of the entities have presented economic consequences, due to the Covid-19 sanitary crisis, with which the ratios or financial indicators help in the realization of a self-evaluation in addition to making the right decisions for the improvement of their economic situation.

CONCLUSIONS

The economic and financial situation of the company "TRANSPECARBA" S.A dedicated to heavy cargo transportation, according to the analysis made through the application of financial indicators in times of pandemic, expose in the case of liquidity, that the business in the year 2020 has decreased its capacity with respect to the values obtained in the period 2019, although the difference does not favor the company in its operations, it is concluded that it maintains adequate levels of liquidity, which allows the company to stay on its feet and continue working in search of better economic opportunities.

The debt area, unlike the liquidity area, is in better conditions, as it maintains low levels of debt in the 2020 period compared to the previous period, which means that the company maintains lower financing values with third parties, giving it a greater capacity to contract future obligations for the prosperity of the business. A fact to highlight in these indicators of indebtedness is that the capacity to cover with its interest in 2020 was null due to the non-existence of values in the interest paid account, which unlike 2019 maintained a level of 20.04 times.

The company's profitability indicators show favorable, unfavorable and constant variations. In the case of the Gross Profit Margin Ratio, the same profit level of \$1.00 is maintained in both periods; for the ratios of Operating Profit Margin, Net Profit Margin and Return on Equity Investment, an unfavorable variation is evidenced in the 2020 period in relation to the 2019 period of \$0.012, \$0.001, and \$0.02 for each dollar of sales and investment respectively, which is considered negative for the company since the profitability values in such areas have decreased; Finally, there is a favorable value in the ratio of Return on Investment in Assets, which compared to 2019 (\$0.05) in the 2020 period has increased to \$0.06, demonstrating that in this area the company has improved its profitability and its growth opportunities.

Although the company suffered an economic impact with favorable and unfavorable values in the parameters of liquidity, indebtedness and profitability in times of pandemic caused by Covid-19, it is concluded that the entity maintains acceptable levels to continue with its commercial activity in a normal way, however, a constant diagnosis of its items must be made to obtain greater opportunities for economic growth.

REFERENCES

- de los Santos, V. H., & Reyes, Y. D. (2016). Fiscal sustainability. Priority in the agenda of transformations of the Cuban economic model. *Investigacion Economica*, 75 (298), 155-184. <https://doi.org/10.1016/j.inveco.2016.11.005>
- Díaz, J. F., Coba, E., & Navarrete, P. (2017). Fuzzy logic and financial risk. A proposal for financial risk classification to the cooperative sector. *Contaduria y Administracion*, 62 (5), 1670-1686. <https://doi.org/10.1016/j.cya.2017.09.001>
- Espinosa, F. R., Molina, Z. A. M., & Vera-Colina, M. A. (2015). Entrepreneurial failure of small and medium-sized enterprises (SMEs) in Colombia. *Suma de Negocios*, 6 (13), 29-41. <https://doi.org/10.1016/j.sumneg.2015.08.003>
- Espinoza, R. A. C., de la Fuente, H. A., Palavecinos, B. S., & Rizzo, P. A. D. (2014). Information disclosure in quoted Chilean companies: The effect of institutional investors and leverage. *Estudios Gerenciales*, 30 (131), 190-199. <https://doi.org/10.1016/j.estger.2014.04.008>
- González, L. M., Viga Juárez, C. A., & Fierro, S. D. (2017). Prospecting the operational risk of MSMEs in Colombia. *Suma de Negocios*, 8 (18), 79-87. <https://doi.org/10.1016/j.sumneg.2017.11.004>
- Herrera, E. E., & Macagnan, C. B. (2016). Disclosure of information on organizational structural capital of banks in Brazil and Spain. *Contaduria y Administracion*, 61 (1), 4-25. <https://doi.org/10.1016/j.cya.2015.09.007>
- Kato, L. (2013). The problem of profit in economics and its relation to business accounting. *Economics Informa*, 383 , 23-63. [https://doi.org/10.1016/s0185-0849\(13\)71340-9](https://doi.org/10.1016/s0185-0849(13)71340-9)
- León, J., & Alvarado, C. (2015). Mexico: Price stability and the limitations of the bank credit channel. *Problemas Del Desarrollo*, 46 (181), 75-99. <https://doi.org/10.1016/j.rpd.2015.03.002>
- Levy, N. (2013). Financial reform and development banking: credits or illusions. *Economía Informa*, 382 , 3-17. [https://doi.org/10.1016/s0185-0849\(13\)71332-x](https://doi.org/10.1016/s0185-0849(13)71332-x)
- Martínez-Campillo, A., Cabeza-García, L., & Marbella-Sánchez, F. (2013). Corporate social responsibility and financial performance: Evidence on the dual direction of causality in the savings bank sector. *Cuadernos de Economía y Direccion de La Empresa*, 16 (1), 54-68. <https://doi.org/10.1016/j.cede.2012.04.005>
- Martínez, C. M., & Guzmán, I. (2014). Measuring efficiency in nonprofit organizations: An empirical study for care foundations. *Revista de Contabilidad-Spanish Accounting Review*, 17 (1), 47-57. <https://doi.org/10.1016/j.rcsar.2013.08.005>
- Reyes, P. M., Carreño, M. Á. D., & González, R. V. (2017). Recessions in Mexico At the Dawn of the Twenty-First Century. *Problemas Del Desarrollo*, 48 (189), 57-84. <https://doi.org/10.1016/j.rpd.2017.04.004>