

## Analysis of the Economic Business Reality in Pasto amidst the COVID-19 Pandemic

### Análisis de la realidad económica empresarial en Pasto frente a la pandemia del COVID-19

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**Abstract:** The article aims to present and analyze some results obtained in the academic research "Business Economic Situation Due to the COVID-19 Pandemic," whose general objective was to analyze the economic situation of the business sector in Pasto in the face of the crisis triggered by the COVID-19 pandemic. Its primary focus was identifying business responses to this situation and proposing management strategies. The study began by creating a detailed profile of the companies, which addressed aspects such as their activities, funding sources, size, and legal structure. The methodology adopted was quantitative, descriptive, and cross-sectional, using the survey as the main data collection instrument. This survey was directed at company executives in Pasto, allowing an analysis of the general situation of small and medium-sized enterprises in the city. The outcomes obtained enabled an assessment of the business dynamics in the region, revealing the tactics employed by Pasto enterprises to mitigate the economic repercussions resulting from the pandemic. Based on these results, business management strategies were proposed to ensure the viability and adaptability of organizations in the current context. It is essential to highlight that the implementation of effective business management practices plays a fundamental role in the preservation and progress of companies in the face of challenges such as the COVID-19 pandemic. The study provides a detailed overview of the economic situation of companies in Pasto during the Pandemic, as well as the strategies they adopted to face it. This analysis provides business management recommendations that aim to enhance organizations' resilience and adaptability to both current and future economic challenges.

**Keywords:** administration; business economics; management; organization; crisis.

**Resumen:** El artículo tiene como propósito presentar y analizar algunos resultados obtenidos en la investigación profesoral «Situación económica empresarial por pandemia COVID-19», cuyo objetivo general fue analizar la coyuntura económica del sector empresarial de Pasto ante la crisis desencadenada por la pandemia COVID-19. Su enfoque primordial fue identificar las respuestas empresariales a esta situación y proponer estrategias de gestión. El estudio se inició con un perfil detallado de las empresas, abordando aspectos como su actividad, origen de financiamiento, tamaño y estructura jurídica. La metodología adoptada fue de carácter cuantitativo, descriptivo y transversal, empleando la encuesta como principal instrumento de recolección de datos. Esta encuesta se dirigió a directivos de empresas de Pasto, lo que permitió realizar un análisis de la situación general de las pequeñas y medianas empresas de la ciudad. Los resultados obtenidos permitieron una evaluación de la dinámica empresarial en la región, revelando las estrategias empleadas por las empresas pastusas para mitigar los impactos económicos derivados de la pandemia. Con base en estos resultados, se propusieron estrategias de gestión empresarial orientadas a asegurar la viabilidad y adaptabilidad de las organizaciones en el contexto actual. Es crucial resaltar que la implementación de prácticas efectivas de gestión empresarial desempeña un papel fundamental en la preservación y el progreso de las empresas frente a desafíos como la pandemia de COVID-19. El estudio proporciona una visión detallada de la situación económica de las empresas en Pasto durante la pandemia, así como de las estrategias adoptadas para enfrentarla. Las recomendaciones de gestión empresarial derivadas de este análisis están diseñadas para fortalecer la resiliencia y la capacidad de adaptación de las organizaciones ante los desafíos económicos presentes y futuros.

**Palabras clave:** administración; economía de la empresa; gestión; organización; crisis.

Research article/ Artículo de investigación

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## Introduction

Since November 2019, SARS-CoV-2 has reshaped global economic, political, social, and business dynamics. Organizations of all sizes face the "new normal," triggering significant changes in operations and protocols.

This study was created to examine the impacts of COVID-19 in the Pasto region to complement reports provided by DANE through a more comprehensive assessment of companies in the context of the pandemic. The aim was to understand how the crisis affected business characteristics, conditions, and processes and explore the alternatives implemented for maintaining economic activity. The central objective was to determine the economic situation of Pasto companies, focusing on analyzing the effects of the pandemic on areas such as human talent, business models, supply chains, liquidity, and taxation. In addition, the measures adopted by these companies to face the COVID-19 pandemic were identified, with the ultimate goal of proposing business management strategies that contribute to their long-term sustainability.

The methodology was quantitative and descriptive, which allowed us to detail the situation of Micro, Small, and Medium Enterprises (MSMEs) in the secondary sector of Pasto. Independent variables, such as source of capital, size, and legal form, were identified, as well as dependent variables related to the effects of the pandemic and the measures adopted. Data was collected through interviews and focus groups with managers assessing their situation during the pandemic. SPSS was used for data analysis.

The empirical-analytical approach was based on the experience of secondary sector entrepreneurs in Pasto during COVID-19. A sample of 311 companies was used. The analysis was based on studies on the global economic situation during the pandemic and its impact on companies' business cycles (Posada, 2020).

The WHO declared a pandemic in March 2020, representing one of the greatest economic, social, and health challenges. It affected global business dynamics and highlighted the vulnerability of economies and companies, especially MSMEs' weaknesses (Lozano et al., 2020).

Governments have issued insufficient measures to address the crisis, covering aspects such as liquidity, credit, direct aid, support for production, exports, and employment protection (ECLAC, 2020).

In times of crisis, organizations must be evaluated beyond financial results, considering their social responsibility and human resource management (Zanini and Marinelli, 2020). In short, this study provides a detailed view of Pasto's business reality during the pandemic and strategies to face present and future economic challenges.

## Materials and methods

The research design described companies' situations and the effects of the pandemic through data collection, analysis, and presentation (Ghauri et al., 2020).

For this purpose, a quantitative approach was used, which guides the research by collecting data that serve as inputs for the analysis of frequencies and statistical data; these allow for identifying trends and evaluating variables, which facilitates the understanding of various social and economic phenomena, such as the business economic reality in Pasto during the COVID-19 Pandemic. In addition, this approach highlights the analysis of entrepreneurs' opinions concerning organizational challenges, rapid adaptation, and response to changes (Hernández et al., 2014).

On the other hand, the analysis has been carried out following the principles of descriptive research, focusing on identifying trends and non-causal characteristics of interest. It examines how entrepreneurs of MSMEs in Pasto faced the COVID-19 Pandemic. It should be noted that the research adopted a cross-sectional section, which allowed for capturing a snapshot of the relevant characteristics and variables during confinement.

Following the approach and type of research, a population of 1,622 companies in the secondary sector registered with the Chamber of Commerce in 2021 was considered. The sample was obtained through simple random sampling, which consisted of selecting a representative subset of the population (Johnson & Christensen, 2016). This simple random sampling approach guarantees the sample's representativeness

and generalizing results onto the target population (Saunders et al., 2015).

This methodology allowed for obtaining an adequate sample for analyzing the economic and business situation in the context of the pandemic, thus providing an accurate and representative view of the secondary sector's reality in the study region (Bordens & Abbott, 2011). The data collection process was carried out systematically and rigorously, ensuring the reliability and validity of the information collected (Jones & Alderete, 2017), using the following statistical formula:

$$N = \frac{(1622) * (1.96)^2 * (0,5) * (0,5)}{(1622) * (0.05)^2 + (1.96)^2 * (0.5) * (0 * 5)} = 311$$

For sample selection, inclusion and exclusion criteria were established as follows:

- Inclusion criteria: Companies from the secondary sector registered with the Chamber of Commerce in 2021 were considered, which voluntarily agreed to participate in the research and signed the informed consent.
- Exclusion criteria: External companies of national or international origin located in Pasto's rural and urban areas were excluded.

As for the techniques and instruments for collecting information, a survey was used through a questionnaire containing closed and open questions aligned with the study variables, addressed to managers and employees of the participating companies. In addition, focus groups were used to delve deeper into certain relevant aspects.

Descriptive statistics were applied to process the information collected, using the SPSS application to

organize data and generate frequency tables, bar graphs, averages, and percentages. This tool allowed for a deep understanding of the information collected and a rigorous evaluation of the results.

## Declaration of ethical aspects

Informed consent was implemented as an ethical and legal procedure before the research instruments were applied to the population under study. Informed consent provided participants with detailed information about the purpose and procedures of the research, ensuring their complete understanding and voluntary consent (Polit & Beck, 2017). This instrument provides a solid basis for ensuring the rights and protection of participants and promoting integrity and transparency in scientific research.

## Results

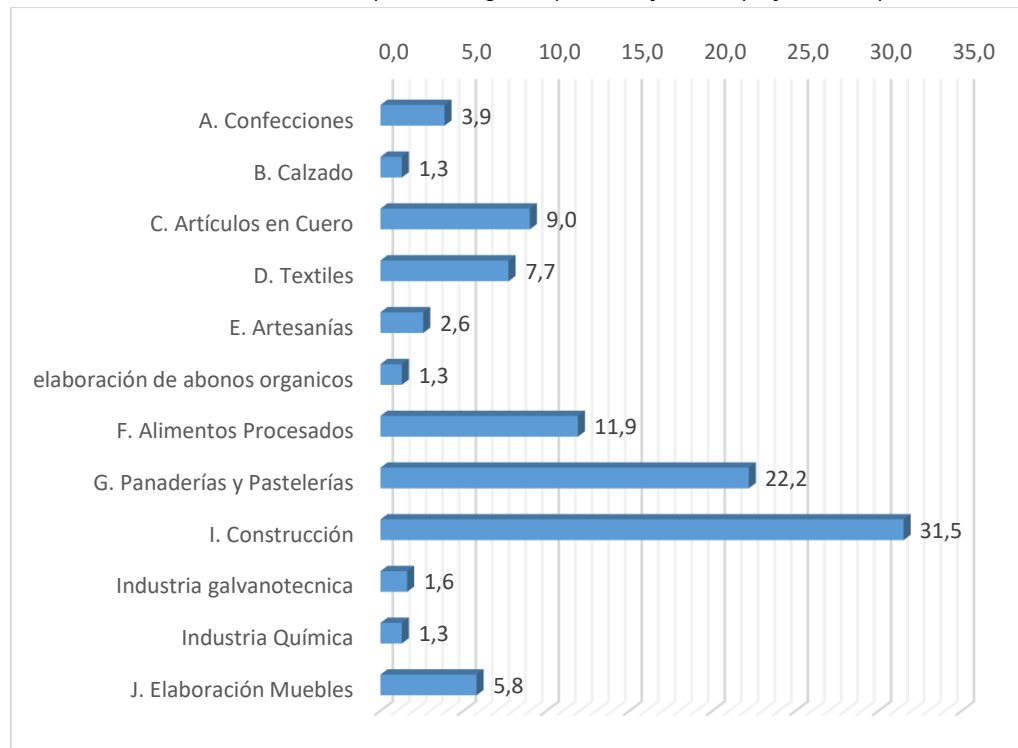
The COVID-19 pandemic has transformed global economic dynamics, forcing companies to adapt to the new normal quickly. All sectors, including the secondary sector, had to adjust to these new conditions, especially companies dedicated to transforming raw materials into finished products, essential for meeting market demands.

This research focused on processing companies in the city of Pasto; its fundamental purpose was to understand the unprecedented impact of the pandemic on this sector, which plays a crucial role in the local economy.

Following the established methodology, the study was oriented towards obtaining results, particularly in the economic area that addresses the development of processing companies in the city of Pasto, as illustrated in Figure 1:

**Figure 1.**

*The economic line in which the processing companies of the city of Pasto operate*



Source: own elaboration

Thus, the analysis shows that the most representative sector was construction, with a share of 31.5% of the total, followed by bakeries and pastry shops, which contributed 22.2% of the total, reflecting Pasto's characteristic economic structure. The relevance of these sectors for the research lies in their utility for revealing the evolution of productive dynamics during the pandemic and the adaptations employed. During this period, companies' primary needs were financial capital availability to make the necessary adjustments and keep production processes running.

The research was focused on 12 dimensions that allow identifying the scenarios companies faced as a basis for analyzing the economic reality of companies, resulting in the following percentages:

### Dimension 1. Companies' capital requirements

Data analysis reveals capital requirements for all companies, which is even more critical for MSMEs during crises such as the pandemic. 78.8% of these companies required financing to maintain their operations, with 70.4% obtaining private capital and only 2.6% accessing

public capital, highlighting the significant role of private banking in the economy.

Specifically, the sectors researched, such as construction and bakeries and pastry shops, depend on private capital by 82% and 43%, respectively, underlining these companies' need for external financial resources to adapt to market conditions during the pandemic. Since these companies' financing was mainly provided by the private sector, which tends to apply higher interest rates on loans due to its operating conditions, they faced liquidity challenges.

### Dimension 2. Classification of companies before and after confinement

Results indicate that companies mostly managed to maintain their classification. However, a slight tendency was observed for small and medium-sized enterprises towards the microenterprise class after the lockdown, resulting in a 2% increase in this segment's share. This data reflects the ability of these productive units to adapt to the new circumstances imposed by the pandemic, as detailed in the following table.

**Table 1.**

*Classification of companies before and after mandatory preventive confinement in the municipality of Pasto*

| Classification    | Before confinement | After confinement |
|-------------------|--------------------|-------------------|
| Microenterprise   | 48%                | 50%               |
| Small Business    | 33%                | 32%               |
| Medium Enterprise | 15%                | 14%               |
| Big Enterprise    | 4%                 | 4%                |
| Total             | 100%               | 100%              |

Source: own elaboration

### Dimension 3. Employment absorption by companies in the municipality of Pasto before and after mandatory preventive confinement

The data analysis reveals that, before the lockdown, 38% of companies in Pasto generated between 5 and 19 jobs, this being the most significant percentage, followed by 36% that absorbed between 1 and 4 jobs; however, this situation changed after the lockdown, where more than half of the organizations (53%) generate only between 1 and 4 direct jobs, suggesting that one of the strategies adopted by companies to survive during the situation was to reduce the number of workers, generating worrying economic and social effects for the region.

### Dimension 4. International trade relationships before and after mandatory preventive confinement

International trade plays a crucial role in regional economic growth, so it is essential to consider the projection of companies in Pasto towards international markets, especially after the temporary closure of borders due to the COVID-19 pandemic. Before lockdowns, these companies' participation in international trade was minimal, with 97% of surveyed entrepreneurs saying they did not participate in any activity related to international trade. Only 3% carried out import activities, mainly of raw materials from Ecuador.

After lockdowns, interaction with global markets remained limited, with 98% still uninvolved in import or export activities and only 1% importing raw materials from abroad. In addition, another 1% reported selling

products on the global market, profiting from their proximity to Ecuador.

### Dimension 5. Economic growth of companies in the municipality of Pasto after mandatory preventive confinement

Data tabulated on the economic growth of companies in Pasto after the lockdown reveals that 45.7% of surveyed companies experienced a significant impact, classified under the criteria of very high and high, from 2022 to 2024. The resulting paralysis seriously hampered medium- or long-term production processes, making it challenging to recover pre-pandemic dynamics.

Interestingly, 17.7% of the surveyed entrepreneurs foresee an economic impact within the low and very low criteria in the short term. This group is mainly made up of companies in the construction sector, which were the first to resume their productive activities after lockdowns. Bakeries, pastry shops, and processed food companies also stand out in this group. They reduced production during the pandemic and kept operating due to the constant demand for primary products.

### Dimension 6. Factors that affected companies in the municipality of Pasto during the COVID-19 pandemic

During the COVID-19 pandemic, several factors significantly impacted businesses in the municipality of Pasto. Temporary closures because of mandatory preventive confinement was the most notable factor, affecting 52.1% of businesses. This measure understandably halted production and generated high levels of unwanted inventories. In addition, reducing logistics services impacted 15.1% of businesses and contributed to unemployment and shortages.

Another factor was a decline in customers, which represented a significant challenge for 15.4% of entrepreneurs, as the population in confinement reduced their consumption capacity. Similarly, 8% of entrepreneurs mentioned the lack of input materials for productive activities, with an impact of 20%. In addition, increases in freight tariffs, raw material prices, shortages, and higher transportation costs affected 16% of companies. These limitations generated a complex situation for companies, exacerbating economic challenges during the pandemic.

**Dimension 7. Resistance of companies in the municipality of Pasto to new lockdowns**

The study reveals that 39.2% of entrepreneurs in the municipality of Pasto could not withstand another mandatory lockdown; for these companies, which have struggled through a difficult period, returning to normal conditions is crucial to keeping their operations, and a new lockdown is not a viable option. Conversely, 26.8% of entrepreneurs believe they could face another lockdown for a maximum of one month, highlighting these companies' limited resilience and vulnerability.

**Dimension 8. Companies' portfolios' behavior in the municipality of Pasto for the next year**

One of the most relevant results is the impact on companies' portfolios. 40.8% of entrepreneurs in Pasto report that their portfolios will be affected by up to 50 million pesos (approximately 13,000 US) in the coming years. This situation highlights the importance of companies having valuable tools to mitigate the negative impacts of this event, such as credit insurance, which provides confidence for continuing to make credit sales safely. It is notable that for 35.4% of entrepreneurs, the portfolio will not be affected, a positive aspect diminished by the fact that some of these entrepreneurs do not carry out credit transactions due to their sale numbers or lack of conditions for granting credit, which limits their commercial activities, as displayed in table 2.

**Table 2.**  
*Impact on companies' portfolios in the municipality of Pasto in the next year*

| Detail                                | Absolute frequency | Relative frequency | Cumulative percentage |
|---------------------------------------|--------------------|--------------------|-----------------------|
| A. Up to 50 million                   | 127                | 40,8               | 41,5                  |
| B. From 51 to 100 million             | 26                 | 8,4                | 50                    |
| C. From 101 to 150 million            | 13                 | 4,2                | 54,2                  |
| D. From 151 to 200 million            | 8                  | 2,6                | 56,9                  |
| E. More than 200 million              | 22                 | 7,1                | 64,1                  |
| F. The portfolio will not be affected | 110                | 35,4               | 100                   |
| Total                                 | 306                | 98,4               |                       |
| Lost                                  | 5                  | 1,6                |                       |
| Total                                 | 311                | 100                |                       |

Source: own elaboration

**Dimension 9. Companies' supply chains in the municipality of Pasto and their reactions to the COVID-19 pandemic**

Regarding the main factors affecting the supply chain of companies in Pasto during the COVID-19 pandemic, 28.9% of business owners identified shortages as the main impact due to mobility problems. In addition, 26% of business owners considered that all factors, including shortages, delays, high prices, logistics operation flexibility, and supplier closure or bankruptcy, negatively affected their organizations' activities, generating a rather complex performance outlook.

**Dimension 10. Companies' production volume in the municipality of Pasto and its reaction to the COVID-19 pandemic**

Data tabulation reveals that COVID-19's impact on the production volume of companies in Pasto varies considerably. For example, 28.6% of entrepreneurs had to reduce their production volumes by up to 25% during the pandemic. In contrast, 20.9% experienced a decrease of 76% to 100%, especially in sectors such as handcrafts, leather goods, construction, furniture, and the electroplating industry. These companies were affected by a lack of demand and the inability to adapt their processes to virtuality, encountering paralysis in their activities.

On the other hand, 15.4% of entrepreneurs reported no effects on their production volumes from the pandemic,



as is the case for processed foods, bakeries, pastry shops, the chemical industry, and organic fertilizer production. These companies produce basic goods for society, for which demand remained constant despite the pandemic.

In addition, 20.9% of companies experienced reduced production volumes between 26% and 50%; this group includes textile, clothing, and footwear companies, which chose to diversify their products to adapt to the pandemic's requirements, such as producing face masks and fluid-repellent clothing.

### **Dimension 11. Measures adopted by companies to address the COVID-19 pandemic**

In the analyses carried out in this dimension, 11 measures adopted by entrepreneurs to mitigate the effects of the pandemic and minimize losses were analyzed.

#### ***Raw material importation***

Importing raw materials before the pandemic was not a common strategy among the companies under investigation. Only 9% relied on importing raw materials before the start of the pandemic. Although this percentage may seem small, it represents a significant challenge for companies, as lack of access to the elements necessary for production can seriously hamper their operations and affect their ability to meet their commercial and social objectives.

#### ***Willingness to replace domestic raw materials with raw materials from abroad after the pandemic***

After the pandemic, only 22.5% of the surveyed population was willing to replace imported raw materials with domestic products. This behavior is partly due to the difficulties arising from the border closures implemented by several countries as a preventive measure against the spread of the virus. Contrarily, 33.8% of respondents are unwilling to make this substitution and are exploring other alternatives to overcome the current challenges.

#### **Measures taken for raw material acquisition**

Regarding measures related to raw material consumption, 36.7% of respondents opted to reduce production, a decision prompted by a decrease in demand caused by the lockdown. Another 24.8% sought lower-priced suppliers to compensate for reduced revenues caused by customer shortages. In addition, a

significant portion of companies (2.6%) explored the possibility of seeking domestic suppliers as an alternative to importing. These decisions are part of companies' efforts to remain competitive and ensure operational continuity in difficult times.

#### **Employee layoffs due to the COVID-19 pandemic.**

The study's results on employee layoffs due to the COVID-19 pandemic reveal that 38.9% of companies decided to fire up to 25% of their employees. Even more worrying is that 20.9% chose to fire between 75% and 100% of their workforce, which shows the situation's severe economic and social impact. Only 22.8% of employers managed to withstand the impact without resorting to layoffs, implementing various measures to keep their staff during the pandemic.

#### **Work strategies during the pandemic**

Among the labor-related strategies employers used to deal with the crisis, salary cuts were the most common at 22.2%, followed by reducing working hours at 21.9%. These measures had a significant impact, leaving many employees without sufficient financial support at home. It is also worth noting that 10.6% opted for teleworking and 13.8% for a change in the type of contract, which preserved jobs and business operations.

#### ***Concern within companies about the COVID-19 pandemic***

The effect of business decisions on employees was at the top of the list, as 39.5% of business managers expressed concern about meeting labor obligations towards their employees, followed by debts to suppliers at 26.4%, credit repayment also generated concern at 14.1%, as cash deficits caused by low incomes made meeting these obligations a challenge. These difficulties triggered severe economic events, such as increased unemployment and widespread bankruptcy due to activity suspensions or payment defaults.

#### ***Companies' reinvention in response to the COVID-19 pandemic***

Companies' adaptations to the COVID-19 pandemic involved adopting various strategies; no particular strategy predominates in the results since each company opted according to its considerations and profile. Among the most recurrent options are teleworking, face mask manufacture, home services provision, pastry product

diversification, and catalog expansion with related products, all with an average adoption rate of 4.1%. These activities allowed them to endure the severe impacts caused by the pandemic and the measures adopted to contain it.

***Insolvency law for companies***

The Colombian government enacted Law 1116 of 2006 on insolvency to support companies facing economic difficulties, including outstanding debts and default situations beyond their control. This law allows restructuring debt payments through agreements between debtors and creditors regarding amounts and terms, suspending legal proceedings, and safeguarding the money needed to sustain the debtor's family. However, according to the results of this study, most companies chose not to profit from this law; 91% did not use it, which implies that entrepreneurs had low adoption and knowledge gaps concerning these options.

***Measures offered by the Colombian government to the business sector during the pandemic***

A significant share of respondents, between 58.5% and 41.5%, said they were unaware of these measures, which

is regrettable since, by being uninformed, they could not take advantage of the benefits and were forced to face the crisis without support. Many entrepreneurs were forced to make difficult decisions, such as ceasing activities and firing employees.

***Businesses' access to government benefits during COVID-19 pandemic***

Most of the companies that attempted to access government benefits, 55.1%, reported difficulties in their application and could not access aid; 35% reported that their process was normal and encountered no significant obstacles. Although relief measures were presented, their conditions or requirements proved challenging. As the research reveals, most companies were unable to access these aids.

The Colombian government introduced several benefits for the business sector, but only a few organizations employed them. As detailed below, it is essential to understand which benefits were applied.

**Table 3.**  
*Government regulations available to companies during the pandemic*

| REGULATIONS                                                                                                           | ABSOLUTE<br>FREQUENCY | PERCENTAGE | RELATIVE<br>FREQUENCY | ACCUMULATED<br>RELATIVE<br>FREQUENCY |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------------------|--------------------------------------|
| Decree 417 of March 17, 2020: State of economic, social, and ecological emergency throughout the national territory   | 77                    | 24,8       | 27,1                  | 27,1                                 |
| Decree 435 of March 19, 2020, which extended the deadline for declaring income tax for the 2019 fiscal year           | 21                    | 6,8        | 7,4                   | 34,5                                 |
| Decree 520 of April 6, 2020, which extended the deadline for paying income tax installments for the 2019 taxable year | 8                     | 2,6        | 2,8                   | 37,3                                 |
| Decree 530 of April 8, 2020, on VAT payment exclusion for donations                                                   | 4                     | 1,3        | 1,4                   | 38,7                                 |
| Decree 568 April 15, 2020 Creation of the Solidarity Tax                                                              | 8                     | 2,6        | 2,8                   | 41,5                                 |
| Decree 655 of May 13, 2020, which allowed an extended deadline for income tax return presentation and payment for     | 9                     | 2,9        | 3,2                   | 44,7                                 |



## MSME's 2019 taxable year

|                                                                                   |     |      |      |      |
|-----------------------------------------------------------------------------------|-----|------|------|------|
| Decree 682 of May 21, 2020, on VAT Exemption                                      | 9   | 2,9  | 3,2  | 47,9 |
| Decree 688 of May 22, 2020, on Abbreviated Payments                               | 12  | 3,9  | 4,2  | 52,1 |
| National Consumption Tax (INC) Reduction to 0%                                    | 4   | 1,3  | 1,4  | 53,5 |
| The government's contribution to yearly salary bonuses corresponding to June 2020 | 17  | 5,5  | 6    | 59,5 |
| Law 2069 of December 31, 2020, which promotes entrepreneurship                    | 8   | 2,6  | 2,8  | 62,3 |
| Formal Employment Support Program (PAEF)                                          | 68  | 21,9 | 23,9 | 86,3 |
| Other                                                                             | 39  | 12,5 | 13,7 | 100  |
| Total                                                                             | 284 | 91,3 | 100  |      |
| <b>No response</b>                                                                | 27  | 8,7  |      |      |
| <b>Total</b>                                                                      | 311 | 100  |      |      |

Source: own elaboration

### ***Businesses' access to government regulations during the pandemic***

According to respondents, 27.1% recognize the provisions of Decree 417 of March 17, 2020, by which a State of Economic, Social, and Ecological Emergency was declared throughout the Colombian territory for an initial period of thirty (30) days. This decree identified the serious public calamity caused by the COVID-19 pandemic in the country. It is important to note that Decree 260 of 2020 extended the term of validity until December 31, 2022.

On the other hand, a significant percentage, 23.9%, admitted to having benefited from the Formal Employment Support Program (PAEF), which sought economic reactivation through financial support given to employers for covering the salaries of their active workers. According to a statement from the Colombian government, this program protected 4.1 million jobs

through 143,000 employers who received its support until March 2021.

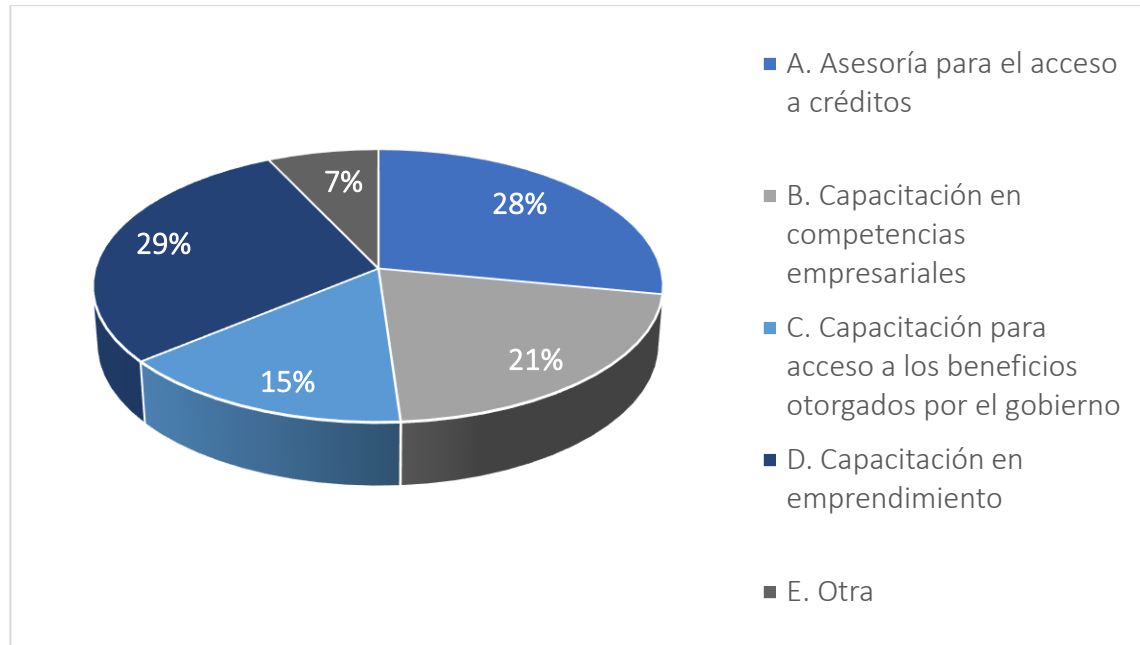
The highest application rates belong to government contributions to salary bonuses for June 2020. Other respondents reported having applied to other support programs in lower percentages, totaling 38.74%. Although the number of entrepreneurs employing them decreased, these measures offered necessary support to companies during the crisis.

### **Dimension 12. Businesses' needs due to the effects of COVID 19**

According to the results, the most urgent needs of companies caused by the impact of COVID-19 are focused on training, listed in the following order: entrepreneur training, bank loan access consultation, business skill training, and government benefits access training, as can be seen below:

**Figure 2.**

*The most significant needs of companies to mitigate the effects of the COVID-19 pandemic*



Source: own elaboration

The above graph identifies disregarded latent needs for addressing difficult and critical scenarios that became evident during the COVID-19 pandemic. The economic crises in these systems impact companies' typical performance, requiring management to formulate business strategies addressing stagnation and deterioration and promoting sustainability as product sources, employment, and income for the population.

## Business management strategies for the sustainability of companies in the city of Pasto

Business management strategies are activities designed to confront and overcome company difficulties, based on internal and external analysis, and aimed at meeting business objectives. These strategies involve management processes and decision-making that are fundamental to achieving business goals; the following strategies can be identified based on the results:

### Liquidity strategies for companies

The liquidity challenge was highlighted as one of the main problems faced by businesses in Pasto during the COVID-19 pandemic. Liquidity, referring to the availability of cash for fulfilling financial commitments, was compromised due to decreased demand and consequent

drops in sales and revenues. This situation led to payment defaults and significant difficulties in businesses that could not easily access formal credit from financial institutions.

Implementing short- and medium-term liquidity strategies is suggested to address urgent cash needs and overcome challenges caused by the pandemic.

Short-term strategies include resorting to financial leverage through soft credit lines and employing government access-to-finance policies. These measures can provide immediate relief and help stabilize companies' financial situations in the short term.

Medium-term strategies include searching new markets for products, diversifying production, establishing more effective credit and collection policies, and using financial leverage in entities that offer long-term credit and low interest rates. These strategies are designed to strengthen companies' financial positions in the medium term and establish solid foundations for future recovery and growth.

### Tax relief outreach strategies

The Colombian government enacted a series of tax provisions to alleviate the financial burden on companies

during the economic emergency; these measures include deadline extensions for submitting exogenous information and income tax declarations. In addition, VAT exemptions have been implemented on certain products, deadlines in administrative and jurisdictional procedures have been suspended, and refunds on income and sales tax balances were expedited. The default interest rate on owed taxes was also reduced, certain operations were excluded from the financial transactions tax (GMF), and the consumption tax was reduced to 0%. A solidarity tax was also created to increase tax revenues and compensate for decreased collections.

### Strategies for labor relief outreach

During the state of economic emergency, companies in Colombia benefited from labor measures to counteract the impacts of the COVID-19 pandemic. These measures, linked to the state of health, social, and ecological emergency, made labor regulations more flexible for adapting to the new economic reality, including the severance pay withdrawals in response to decreased workers' income, one-day advance notice of vacations, and successive work shift allowances of up to eight hours a day.

The strategies for disseminating these regulations were carried out through various media, such as radio, email, television, and training courses offered by the DIAN. However, doubts persist about the effectiveness and scope of these dissemination mechanisms.

## Discussion

The comparative analysis between the results obtained in this investigation and other studies reveals several convergence points. First, 78.8% of micro, small, and medium enterprise entrepreneurs in this study highlighted the urgency of capital for developing productive activities. This view reflects a common need observed in other Latin American countries, where financing measures were implemented in response to the COVID-19 emergency.

According to ECLAC, financing measures in countries such as Argentina, Brazil, Chile, and Colombia, among others, focused on making access requirements more flexible and formulating differentiated strategies to

expand beneficiary coverage. However, these measures were concentrated in regions with more significant economic growth, evidencing the need for more inclusive policies (ECLAC, 2021). Regarding financing, while in some countries such as Argentina, Chile, Ecuador, and Uruguay, capital offered by public institutions predominated, in Brazil, Costa Rica, Mexico, Panama, and Colombia, private entities were more relevant, as demonstrated in this study: 70.4% of entrepreneurs opted for private capital.

It can also be seen that 52% of entrepreneurs in Pasto faced the primary challenge of temporary closures, similar to the effect observed in Lima, where 75% of companies saw their operations affected (Ramos, 2021). Decreased sales were also a common problem, affecting 70% of companies in Lima and 15.4% in Pasto.

The pandemic generated significant consequences for employment, forcing mitigation strategies. Salary cuts (22.2%) and working hour reductions (21.9%) were employers' most commonly used measures in Pasto, mirroring the situation evidenced in other studies where the crisis impacted job stability and workers' emotional health. The results obtained in this study are similar to those obtained by Riascos (2021), which highlighted the overall negative perception of the impacts of the COVID-19 Pandemic. In this research, participants emphasize this situation's adverse implications for companies reorganizing their processes to remain operational and for workers' mental health and emotional stability. Workers were uncertain about the continuity of their jobs and salaries and feared the consequences on their families' health, which generated a general reluctance to go out to work.

Regarding business reinvestment, the strategies adopted by Pasto entrepreneurs were diversified according to their dynamics and profile, with measures such as teleworking, home services, diversifying production lines with related products, and home sales. These activities comprised approximately 67% of the strategies, allowing operations to remain operational during the health emergency.

These findings are linked to the results obtained by Rodriguez (2021), who observed that Colombian entrepreneurs resorted to adaptive business strategies based on their companies' internal resources and

capabilities addressing the health and economic crises derived from COVID-19. Their main objective was to preserve production continuity and survival during the crisis, prioritizing stability over productivity optimization or increasing competitiveness. However, it is relevant to note that certain transformation activities could not be carried out through teleworking, which limited the share of administrative staffers who opted for this modality to 44%.

Contrarily, the study by Cuéllar Estrada et al. (2023) indicates that Salvadoran companies adjusted their business strategies to mitigate the effects of the post-pandemic. The most common strategy among 142 companies was cost and price readjustments, with a share of 69.7%, followed by implementing and adapting new technologies to meet demand, standing out among the most representative with 47.2%. Although specific to each context, these trends highlight the importance of adaptability and agile decision-making in the current business environment. Adjusting and searching for internal solutions seems critical for survival and success in an uncertain economic landscape.

Colombia has established various fiscal measures to mitigate the pandemic's impacts. However, their effective implementation is difficult in some areas of the country. According to data provided by Pasto business people, most companies tried to access government benefits, but 55.1% reported difficulties in their application and could not receive aid. These difficulties are not exclusive to Colombia but were reported worldwide. In his study on fiscal measures as a tax instrument to revitalize the Spanish economy affected by COVID-19, Laorden (2021) concludes that fiscal policy was the most used and appropriate tool to support income and generate liquidity among the affected agents. However, the measures implemented were generally insufficient and useless to companies. In some cases, implementation delays further reduced their effectiveness.

It is important to note that, according to this study, VAT reduction represented a significant tax relief for Colombian entrepreneurs despite being limited to specific goods. This measure was particularly beneficial for companies able to employ it. In contrast, only 2.9% of entrepreneurs in Pasto benefited from this measure,

which underlines the lack of knowledge on regulatory applicability and the effectiveness of fiscal policies between different regions.

On the other hand, it was essential for companies in Pasto to strengthen their technological and logistical skills to overcome the challenges presented by lockdowns, which allowed them to establish strategies aligned with the value chain operation. These strategies included implementing teleworking and home services provision through digital platforms, which quickly played a crucial role in organizational leadership, as observed by Pacheco et al. (2017), citing Mintzberg, H. (2009) in their approach to entrepreneurial leadership. Companies in disruptive situations and disruptions of normality emphasize identifying opportunities in the environment that promote the initiative toward innovation and change.

It is important to highlight that this strategy was not only monitored in MSMEs inside Pasto, with a similarity of 4.1%, but it also became a vital measure for many other organizations. Business messaging and social media platforms broke down the barriers imposed by confinement, allowing digital marketing to be explored. According to a study by Huamán-Bazán et al. (2023), digital strategies through social media were fundamental during the pandemic in 88.9% of the 155 Peruvian MSMEs in the textile sector, and companies were able to maintain their economic activities thanks to these initiatives.

Finally, entrepreneurs highlight the importance of training, especially in critical areas such as bank loan access, business skills, and government benefits. These training courses highlight the need to acquire new business skills that allow more efficient decision-making and prepare managers to meet challenges and profit from environmental opportunities. One of the most significant aspects during the pandemic was the adoption of technological means, as demonstrated by the study by Guerrero Rojas et al. (2022), where Ecuadorian companies were reported to modernize their sales systems, optimizing digital channels such as WhatsApp, mobile applications, and web pages, which accounted for 29%, 26%, and 21% respectively, of the purchasing habits of the population.

## Conclusions

A significant portion of entrepreneurs in the secondary sector in the city of Pasto were unaware of the economic relief measures enacted by the government; therefore, it is imperative to implement effective outreach strategies to ensure that entrepreneurs are informed and able to employ the support measures provided by the government. A lack of knowledge about these measures can hamper businesses' ability to navigate a crisis and recover effectively.

It is important to analyze how these provisions have been disseminated and their impact on companies' ability to benefit from them. Regarding the dissemination of tax reliefs, it is necessary to assess whether the communication channels used have effectively reached all affected companies, and it is also essential to consider whether these measures are sufficient to address companies' financial needs.

Strengthening the media and the appropriate dissemination channels is crucial to meeting the economic crisis triggered by external agents such as the pandemic. In addition, training emerges as a priority need, highlighting the importance of designing training strategies that meet the demands of the business sector during crises.

Analyzing supply and demand in crises like the COVID-19 pandemic is essential. On the supply side, there has been a decline in production volumes, supply chain issues, reduced working hours, and remote work usage. On the other hand, there have been widespread job losses and working hour reductions, which have led to a decrease in income and consumption on the demand side.

Implementing immediate measures to overcome current difficulties and simultaneously develop medium- and long-term strategies that contemplate reinventing production processes and diversifying goods and services is essential. The adaptation of companies is a unique process for each organization that is intrinsically linked to its challenges, such as capital management, staff retention, inventory management, and logistics. Although the impacts of COVID-19 manifest themselves in many aspects, their impact varies according to the specific

circumstances of each company, which requires flexible and sustainable strategies to guarantee the continuity and development of production processes.

The pandemic positively impacted companies that knew how to adapt and has accelerated the adoption of technological and logistical strategies in producing and providing services. Implementing teleworking, home services, and digital platforms was vital and has become indispensable in maintaining operability and competitiveness with tools such as digital marketing or e-commerce. These strategies have not only benefited companies in Pasto but have also been crucial for other organizations at a national and international level for innovating and adapting to changes in the environment, as well as continuously investing in training to make the most of the available technological opportunities.

## Authors' contribution

The authors have established the structure of the professorial research project following the institutional guidelines and actively participated in the development of each of the research objectives. Mg. John Ernesto Bennett Muñoz leads this process to respond to the stated objectives. Below are the individual contributions of each author to the manuscript:

John Ernesto Bennett Muñoz: The author directed the development of data tabulation according to the proposed methodology and result analysis. He established argumentative syntheses and generated the structural basis of the article's discussion of similar research within the thematic scope.

Ana Cristina Argoti Chamorro: The author analyzed the database from various indexed sources to support the theoretical argument. She developed the discussion from a holistic and comprehensive perspective of the research results, comparing them with similar research related to the topic.

Luis Giovanni Revelo Ramírez: The author provided feedback regarding the central point of the research to develop its conclusions. In addition, he has reviewed the style and writing to generate friendly communication regarding the results and research topic.



## Declaration on conflicts of interest

The authors declare that they have no conflict of interest related to the preparation and presentation of this article, which arises from the joint efforts of the Faculty of Accounting, Economic, and Administrative Sciences teaching team. This article is part of the Universidad Mariana's Professorial research project, approved by the faculty council and the research committee through Agreement 259 of 2021 of the Universidad Mariana. It is part of the Accounting Identity Research Group, under the code COL0068987, and is developed within the research line "Business Development."

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