Associativity in Companies in the City of Ibagué as a Strategy for Organizational Growth

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Abstract
Business associativity is consolidated as a decisive strategy to enhance competitiveness, sustainability, and organizational growth in regional contexts. This study analyzed the dynamics of associativity in companies in the city of Ibagué (Colombia), with the purpose of identifying the determining factors that condition its adoption from the perspective of strategic management. A mixed-method methodology was employed, combining qualitative and quantitative techniques supported by descriptive statistics, cross-tabulation, and correlation analysis. The results show that activities related to agricultural production and input marketing exhibit the highest levels of associativity and inter-company cooperation. In contrast, a significant lag was identified in the incorporation of digital technologies, especially in rural areas, where connectivity limitations represent a structural barrier to associative integration. Likewise, it was observed that most respondents (n = 134) do not participate in formal association schemes, although they show a high willingness to join collaborative processes. The findings suggest that associativity in Ibagué faces challenges related to technological gaps and connectivity barriers but offers significant potential to boost regional competitiveness through the strengthening of business networks and the generation of productive synergies. This study provides empirical evidence that contributes to the design of public policies and management strategies aimed at consolidating resilient and innovative business ecosystems.
Keywords: associativity, development, growth, cooperation, Ibagué, entrepreneurship

INTRODUCTION

Associativity constitutes a strategic axis within contemporary theories of management and competitiveness, as it enables the creation of collaborative networks capable of generating economies of scale, productive synergies, and shared innovation. In scenarios characterized by high economic volatility and accelerated technological transformations, as is the case in Latin America, associativity emerges as a mechanism that goes beyond tactical cooperation to become a structural strategy for organizational sustainability and development. From this perspective, analyzing the factors that condition associative practices and dispositions in regional contexts makes it possible to understand how inter-company linkages influence productivity, territorial resilience, and long-term competitive capacity.
Given these conditions, business associativity has become a key strategy for the development and strengthening of companies today. In the department of Tolima, Colombia, this trend is

no exception, as more and more organizations recognize the benefits of joining forces and working together to achieve common goals. Tolima, located in the center of the country, presents economic diversity that spans sectors such as agriculture, industry, commerce, and services. However, many of its companies face common challenges, such as limited access to broader markets, scarcity of financial resources, and restricted innovation capacity.

In this scenario, associativity has become an effective solution to overcome these obstacles and promote sustainable growth. This concept implies the union of two or more companies with the purpose of sharing resources, knowledge, and experiences, aiming to improve competitiveness and achieve greater efficiency in the value chain. In this context, it is necessary to determine the main factors that influence business associativity from the strategic paradigm, which requires characterizing organizations from a sociodemographic perspective, identifying the willingness to associate, analyzing internal aspects that influence cooperation, recognizing external environmental elements that facilitate or limit alliances, and establishing the benefits derived from associative processes.

The findings of this study provide a critical understanding of associative dynamics in the Colombian context, revealing both structural obstacles related to technological and connectivity gaps and opportunities derived from the business willingness to cooperate. The relevance of this work lies in the fact that it provides empirical and conceptual inputs for the design of public policies, development programs, and managerial strategies aimed at strengthening more integrated, resilient, and innovative business ecosystems. Consequently, this analysis represents a significant contribution to the academic and practical debate on associativity, as it highlights its potential to catalyze processes of organizational development and sustainable regional growth.

THEORETICAL BACKGROUND

Business associativity is a widely studied phenomenon and is considered a key strategy to improve the competitiveness of small and medium-sized enterprises (SMEs) through cooperation among organizations. Hernández and Rodríguez (2022) define it as a strategic alliance between independent companies that collaborate to achieve common objectives, adopting various forms such as consortia, business networks, clusters, and cooperatives, among others.

The analysis of different modes of association has led to the construction of various theoretical approaches. One of these is the Network Theory proposed by Granovetter (2021), which examines how inter-company connections generate social capital and facilitate access to strategic resources. Complementarily, from the perspective of Transaction Cost Theory, developed by Williamson (2020), the effects of associativity on reducing operating costs and improving organizational efficiency are analyzed. Finally, Moore's Business Ecosystem Approach (2019) highlights the interdependence among companies in collaborative environments and their ability to drive innovation processes.

Other theoretical approaches also enrich the understanding of associativity. The Resource-Based View (RBV) argues that companies, when collaborating, gain access to complementary resources and capabilities that could not be obtained individually. This strengthens their competitive position, since what provides sustainable advantage is not the isolated possession of resources but rather their unique combination (Barney, 1991). Likewise, Resource Dependence Theory suggests that business associativity arises as a response to mutual dependence among organizations and environmental uncertainty. In this way, companies

associate to reduce vulnerability and ensure access to critical resources, thus improving their competitiveness (Pfeffer & Salancik, 1978).

Meanwhile, Porter's Diamond Model, developed by Michael Porter (1990), focuses on the competitive advantage of nations and identifies the presence of industrial clusters as a key factor. The author argues that local competition, combined with business associativity, stimulates innovation, capability development, and specialization, thereby granting competitive advantages in international contexts.

Consequently, associativity and competitiveness are closely linked concepts in the business field. Associativity refers to the ability of companies to establish strategic alliances, collaborations, joint work networks, subcontracting, or other forms of cooperation. Parrales et al. (2021) define it as a voluntary union of companies that coordinate to carry out joint actions with the aim of achieving objectives that could not be accomplished individually, thereby ensuring long-term sustainability.

Gómez (2019) argues that adopting associativity requires willingness and effort from participants, who must establish the scope of the strategy, maintain managerial autonomy, and define coordination mechanisms. He also emphasizes that associativity may adopt different legal and organizational forms, depending on the characteristics and needs of the companies involved. Similarly, Fernández and Narváez (2011) highlight that, for associativity to be effective, it is essential to formalize clear agreements that guarantee the commitment of all actors.

On the other hand, competitiveness has been defined from multiple perspectives. The U.S. Government (1985) describes it as the ability of a country to produce goods and services in a free-market context, meeting local, national, and international demand while increasing the population's economic income. Porter (2015) defines it as a company's ability to outperform competitors and maintain a strong market position. From classical theories, Smith (1988) introduces the concept of absolute advantage, understood as the ability of an organization to produce more efficiently than another. Similarly, Smith (1988) and Krugman (2001) explain the comparative advantage, which refers to the ability to produce a good at a lower cost than competitors. Finally, Porter (1993) develops the concept of competitive advantage, which consists of identifying and sustaining a favorable market position through factors such as business strategy, productive structure, demand conditions, integration with related companies, environmental opportunities, and government policies.

Thus, business associativity not only becomes a mechanism for cooperation but also a strategy that directly impacts competitiveness. The literature suggests that, by working together, companies can improve operational efficiency, access new markets, strengthen capabilities, and, consequently, consolidate sustainable competitive positions in local, national, and international contexts.

Similarly, successful models of associativity have been identified that serve as references to understand its impact on competitiveness. Among them, industrial clusters stand out, which according to Porter and Ketels (2023), contribute to improving innovation processes and the productivity of participating companies. Another relevant form is cooperation networks, which, according to García et al. (2021), may be horizontal, formed among companies with similar characteristics, or vertical, articulated along value chains. These networks become a key factor in achieving sustainability and generating shared competitive advantages.

However, the literature also reveals obstacles faced by associativity processes. Gómez and Vargas (2022) and Rojas (2023) point out that the main challenges include lack of trust among

partners and difficulties in collaborative management. Nevertheless, in recent years, positive trends have emerged driven by the use of information and communication technologies, such as digital associativity and the use of blockchain tools, which allow greater transparency and traceability in transactions (Torres et al., 2024).

Additionally, the sustainability approach has gained relevance in the promotion of business alliances. Díaz and Pérez (2023) emphasize that circular economy models strengthen associativity by integrating environmental management practices and efficient use of resources. In this way, associations not only pursue economic goals but also align with principles of social responsibility and sustainability, in line with current market and societal demands.

Consequently, business associativity has been consolidated as an increasingly relevant strategy in organizational management, as it enables the creation of value and the improvement of competitiveness. Doria and López (2023) point out that, in the last decade, associativity has been a central axis in the design of business strategies in Colombia. Similarly, Espinosa and Ramírez (2015) argue that associativity is a fundamental tool for companies to strengthen their competitive capacities and achieve higher levels of sustainability.

In this same line, Bernal et al. (2019) state that business associativity becomes the axis of multiple strategies, such as strategic alliances, the alignment of productive chains, mini-chains, industrial districts, business nuclei, and service networks. Fernández and Narváez (2011) add that this type of cooperation enables companies to compete more efficiently and reduce costs, ensuring their permanence in the market.

Business competitiveness, for its part, constitutes an essential issue in modern management. Sisa (2020) defines it as the ability of an organization to compete in the market and maintain or improve its position in terms of sales, profitability, and participation. Similarly, Vargas and Del Castillo (2008) emphasize the importance of promoting endogenous capacities that ensure sustainable competitive advantages and high levels of productivity in small enterprises.

Finally, the literature warns that associativity and competitiveness must be synchronized to respond to the challenges of an increasingly globalized environment. Alencastro (2023) argues that inter-business cooperation not only drives innovation and access to new markets but also improves operational efficiency. However, in order to achieve the expected benefits, it is necessary to overcome barriers associated with trust, collaborative management, and technological incorporation. In this sense, García et al. (2019) stress that building trust and effective collaboration among participants is the determining factor for the success of associative processes.

METHODOLOGY

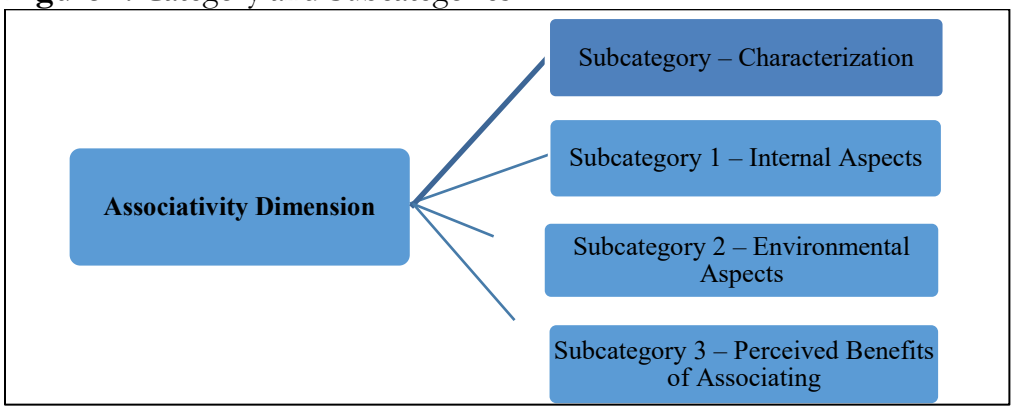
The study has a descriptive scope, cross-sectional design, and a quantitative approach. This type of design allows for understanding and measuring the behavior of the variables under analysis, which in this case correspond to internal aspects, the environment, and the benefits of associating. The quantitative analysis was supported by descriptive statistics, cross-tabulation, variable correlation, and other procedures that facilitated data processing. The methodological procedure was structured as follows:

- Instrument: A structured questionnaire was designed as the main means of collecting information.
- Index and normality tests: Applied to determine the validity and reliability of the data.
- Probit regression: Used to identify the relationship between a qualitative dichotomous

dependent variable (with only two possible results) and various independent variables. In cases where two or more categories were handled, binary or multinomial logistic regression was applied, following the recommendations of González-Revaldería et al., (2007) and Field et al., (2012).

It is important to note that the study is based on the strategic business paradigm, which seeks to align the internal resources of the company with environmental factors to achieve long-term objectives through appropriate strategies. In this context, associativity is configured as part of the organizational growth strategy, since the current economy demands quick responses to environmental requirements and collaborative work in networks. However, associativity is either stimulated or limited by certain key variables, such as the internal characteristics of organizations, elements of the external environment, and the perceived benefits of associating or networking with other actors. In this sense, associativity was segmented into three main dimensions: internal aspects, environment, and perceived benefits. The implementation of the inductive method was also necessary, as the study started from particular aspects to generate general conclusions. In this regard, the topic of interest is associativity, which is studied to understand its current state and how certain categories may affect its behavior in an explanatory way. From there, general conclusions about the phenomenon under study are drawn. In addition, the research is also of an exploratory nature, as it seeks to generate theoretical knowledge from the analysis of the phenomenon through the study of categories defined either prior to or during the research process. Figure 3 illustrates the main category of study (associativity) along with the subcategories analyzed, providing a didactic structure for the research.

Figure 1. Category and Subcategories



Source: Own elaboration.

In this sense, the Associativity Willingness dimension seeks to categorically determine whether individuals would be willing to associate, focusing on the reasons for doing so or not. To this end, it is necessary to characterize the associative environment of the region in order to define its current or future situation. Likewise, in order to understand the reasons why companies have associated or not, it is necessary to analyze their internal characteristics, such as their functional areas and elements of their growth strategies. From this perspective, the willingness to associate is evidenced from an internal environment. At the same time, it is essential to identify the elements of the external environment that have influenced or are currently influencing the level of associativity of the companies analyzed. In this way, it will be possible to determine whether, when these elements change, associativity will also change or not.

Finally, the directional element must incorporate within its corporate strategies a positive conception of associativity. The perceived benefits of associating may also explain the level of associativity in a region.

Sources of Information

For data collection, both primary information (surveys to gather qualitative and quantitative variables) and secondary information (institutional databases) were used. The population is represented by 262 companies from the agricultural, food, and related sectors (Confecámaras, 2022). The sample consisted of 156 companies, selected through non-probabilistic sampling for finite populations (Hernández et al., 2014), using the convenience sampling technique. Regarding techniques and instruments, structured questionnaire surveys and unstructured interviews were applied (Soriano, 2013; Hurtado, 2009). The questionnaire was organized into five dimensions:

- Sociodemographic: economic activity, geographic area, etc.
- Willingness to associate: possibilities and risks.
- Internal aspects: organizational conditions.
- Environmental aspects: institutional trust.
- Perceived benefits: impact on competitiveness.

It is important to note that each dimension has a different purpose. Subsequently, a dictionary of variables (Table 1) was prepared, which provided an organized framework for the design of the related tables and graphs for the respective analysis and model.

Table 1. Dictionary of Variables

Dimension	Variable	Concept
Sociodemographic	C1	Economic activity
	C2	Rural or urban area
	C3	Use of digital media
	C4	Currently associated
Willingness to Associate	P1	Would you like to know the scope, benefits, and risks of associating in a business group?
	P14	If you were provided with a joint business management model, indicate your willingness to associate
Internal Aspects	D1	Considers it important to establish internal conditions beforehand to associate with other entrepreneurs
	P3	As a group member, considers that there must be a process containing procedures
	P4	Willing to participate jointly with other entrepreneurs
	P6	As a member of the business group, what importance do you assign to legal independence, managerial autonomy, time availability of each company's manager, and managerial leadership?
	P7	Preference regarding the number of members in the business group
Environmental Aspects	D2	How important do you consider external conditions for associating with other entrepreneurs?

	P2	What is the degree of trust you have in the institutions and leaders who guide the associativity process in the region?
	P8	What importance do you assign to institutional support provided to the group?
	P9	What is your preference regarding associative forms?
Perceived Benefits	D3	Considers that associativity has a significant impact on the competitiveness of companies
	P10	By being part of a business group, in which aspects would your company improve?
	P11	By being part of a business group, what opportunities would this create for your company?
	P12	By being part of a business group, does it enable the long-term projection of each participating company?
	P13	As a member of a business group, do you consider that your company's level of competitiveness would improve?

Source: Own elaboration.

Once the survey database was tabulated, a quantitative analysis was carried out to determine the reliability of the questionnaires. For this purpose, Cronbach's Alpha was calculated using SPSS software version 26. Tables 2 and 3 show the number of processed data and Cronbach's Alpha, where it was verified that all data were valid and the Alpha coefficient was 0.88, which is considered a high reliability value for the questionnaire (Bolívar, 2002). Therefore, it is concluded that the information collected through the survey applied to the 156 companies is reliable, and the results obtained will remain consistent for different applications.

Table 2. Number of Processed Data

Cases	**N**	**%**
Valid	156	100.0
Excluded	0	0.0
Total	156	100.0

Note: Listwise deletion is based on all variables in the procedure.
Source: Own elaboration

Table 3. Cronbach's Alpha

Cronbach's Alpha	**Number of items**
0.88	156

Source: Own elaboration

Table 4. Normality Test

Item	**Statistic**	**df**	**Sig.**
P1. Would you like to know the scope	.537	156	.000
P2. What is the degree of trust	.310	156	.000

Source: Own elaboration

In Table 4 it is identified that eliminating at least one of the items does not guarantee an improvement in the instrument's reliability. Therefore, retaining the original variables directly contributes to addressing the objectives established for the research.

Table 5. Overall Reliability Statistics by Item Deletion

Item	**Cronbach's Alpha if item deleted**
C1. Economic activity	.706
C2. Rural or urban area	.791
C3. Use of digital media	.687
C4. Currently associated	.704
P1. Would you like to know the scope, benefits, and risks of associating in a business group?	.871
P2. Degree of trust in institutions and leaders who guide associativity in the region	.808
P3. Considers there must be procedures for:	.607
P4. Willing to participate jointly with other entrepreneurs for:	.831
P6. Legal independence, managerial autonomy, time availability of the manager, and managerial leadership are:	.702
P7. Preference for the number of members in the business group	.604
P8. Importance assigned to institutional support provided to the group	.700
P9. Preference regarding the following associative forms	.609
P10. By being part of a business group, your company would improve in:	.817
P11. By being part of a business group, it enables:	.750
P12. Being part of a business group allows long-term projection of participating companies	.604
P13. Considers that the competitiveness level of their company will improve	.722
P14. If provided with a business management model, indicate your willingness to associate	.805

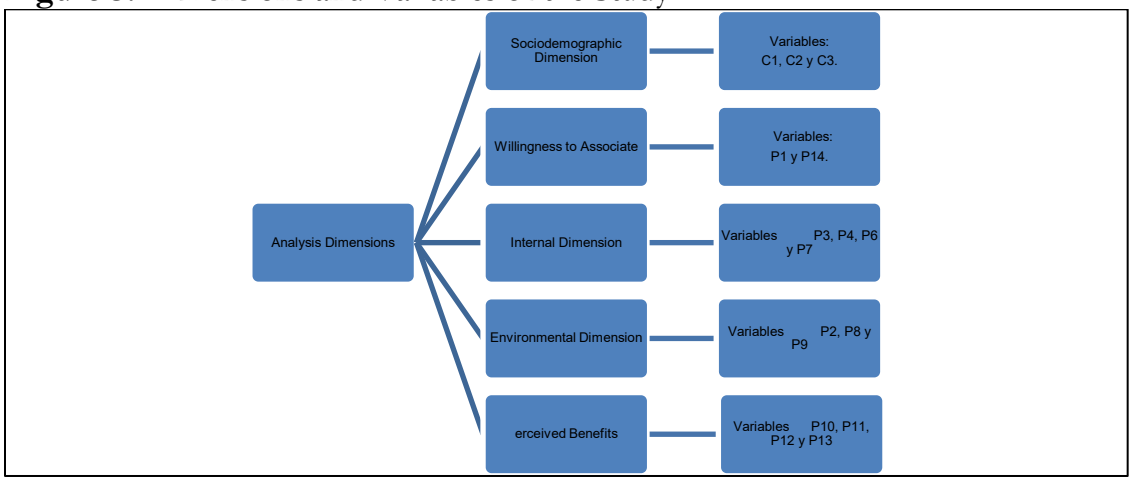
Source: Own elaboration

Procesamiento de la información

The development of this research employed Exploratory Data Analysis (EDA), which, according to Batanero, Estepa & Godino (1991), has the following purposes: first, it reduces the visual importance of data representation, assigning priority exclusively to calculations; and second, it equates the analysis with the confirmatory model. In this type of analysis, the set of observed variable values is assumed to fit a pre-established model, calculating statistics to either accept or reject a hypothesis (p.1). In the case of probabilistic regression models, specifically the Probit model, the aim is to determine the relationship that may exist between each covariate and the dependent variable, as well as to present the interaction between the covariates with respect to the dependent variable. This relationship is measured through odds ratios and marginal effects. Subsequently, Figure 3 presents the dimensions and variables of

analysis associated with each dimension. This graphical scheme serves as the statistical methodology framework to address the research objectives and provide answers to the study's purpose.

Figure 3. Dimensions and Variables of the Study



Source: Own elaboration

RESULTS AND DISCUSSION

First, a general characterization of the object of study is presented, referred to as the sociodemographic dimension, as a starting point. Second, the most relevant variables and the behavior of those with the greatest impact on the study are analyzed, following the order of importance of the dimensions and variables under analysis (sociodemographic, willingness to associate, internal factors, external factors, and perceived benefits). Third, the statistical models applied (factor reduction, structural equations, and logistic regression) are explained, highlighting their differences, similarities, and contributions to the research.

Characterization of Respondents

In the sociodemographic dimension, a summary of the four (4) variables with their respective descriptive statistics for the study subjects of this research is presented, as shown in Table 6.

Table 6. General Statistics

	C1. Economic activity	**C2. Rural or urban area**	**C3. Use of digital media**	**C4. Currently associated**
N	Valid 156	156	156	156
	Missing 0	0	0	0
Mean	4.71	1.50	1.15	1.86
Median	4.00	1.50	1.00	2.00
Mode	4	1	1	2
Std. Deviation	2.095	0.502	0.362	0.349

a. Multiple modes exist. The smallest value is shown.

Source: Own elaboration

From Table 6, all data are valid (156) and each question yielded results that will be analyzed individually to facilitate readers' understanding.

The analysis follows the order presented in Table 6, as follows:

In Table 7, regarding Economic Activity, it is shown that agricultural production is the most prevalent business activity, with 36.5%, equivalent to 57 companies; followed by agricultural input sales with 23.7% (37 companies). On the other hand, food sales represent only 3.2% (5 companies), while the transformation of agricultural products accounts for 4.5% (7 companies).

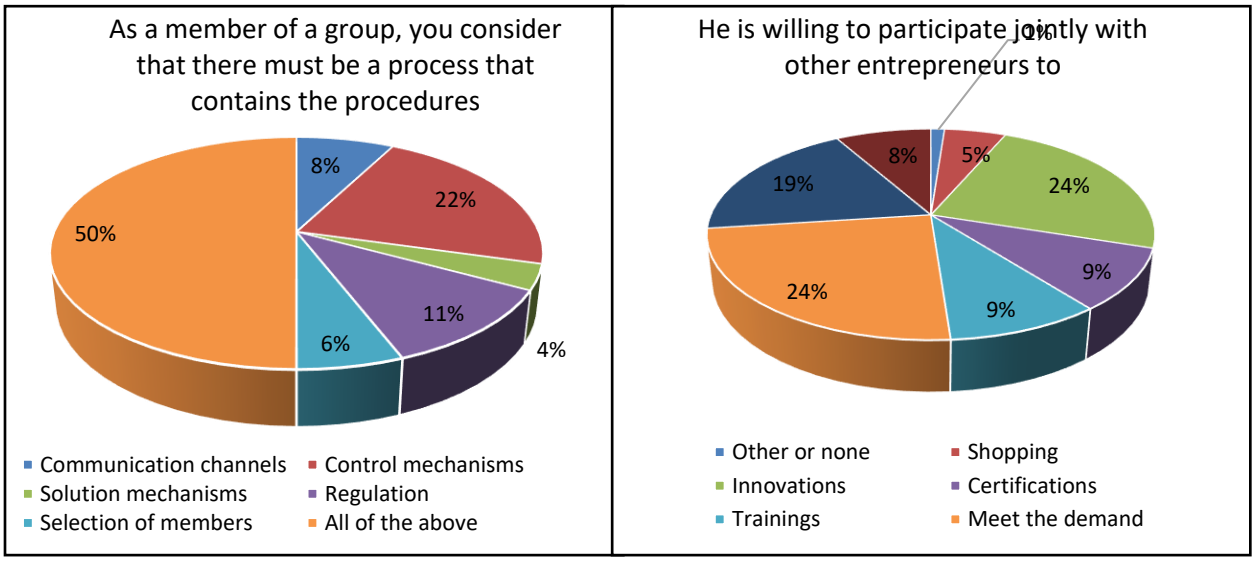
Table 7. Economic Activity

	Frequency	**Percentage**	**Valid Percentage**	**Cumulative Percentage**
Valid	Livestock Activities	12	7.7	7.7
	Support Organizations	14	9.0	9.0
	Other Activities	10	6.4	6.4
	Agricultural Production	57	36.5	36.5
	Agricultural Product Processing	7	4.5	4.5
	Food Sales	5	3.2	3.2
	Agroindustrial Input Sales	37	23.7	23.7
	Agricultural Input Sales	14	9.0	9.0
Total	156	100.0	100.0	

Source: Own elaboration

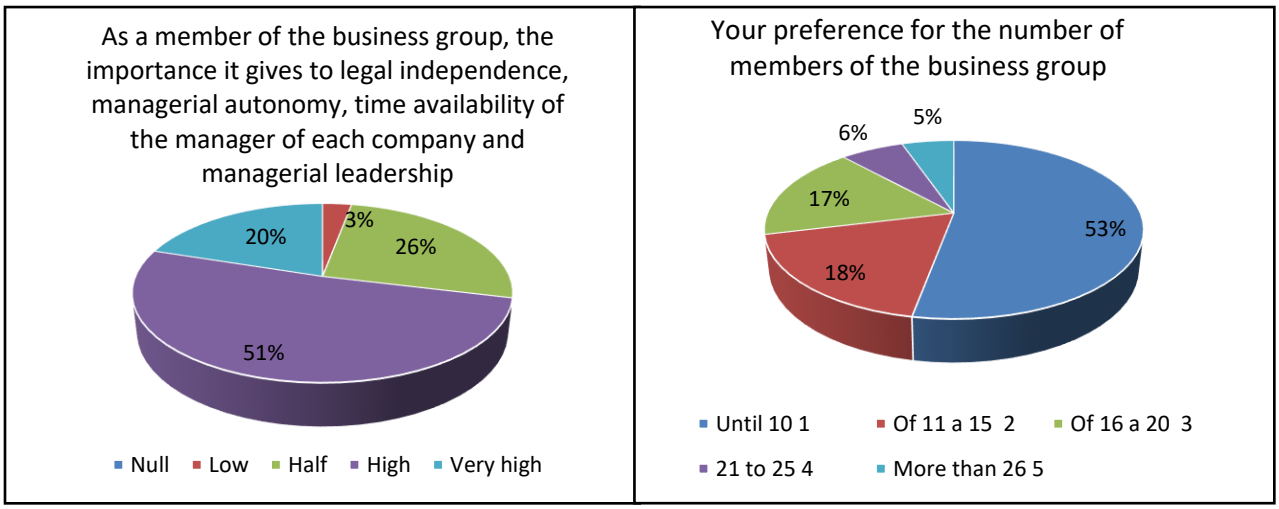
From the previous table and graph, it can be concluded that there is a strong relationship between agricultural production and the sale of agroindustrial products, which is vital for the design of associative strategies in the sector.

Figura 2 As a group member, consideration of procedures and participation with other entrepreneurs.



Source: Own elaboration

Figure 4. Importance assigned to legal independence, managerial autonomy, time availability of each company's manager, and managerial leadership, as well as preference for the size of the group to be formed.



Source: Own elaboration

The majority of entrepreneurs consider it essential to have a process that includes aspects such as communication, regulations, control mechanisms, member selection, and conflict resolution. This shows a clear demand for well-defined organizational structures within business groups, suggesting that entrepreneurs value formalization and clarity in group dynamics. For entrepreneurs, training programs and trade missions are the most relevant options, followed by innovation and responsiveness to the demand of each market segment. In contrast, associations or joint work among entrepreneurs for certifications and trade fairs are of lower priority. Entrepreneurs seek practical growth, such as training activities and market expansion, rather than formal or promotional activities.

Figure 3 Degree of trust in institutions and their importance to the group.

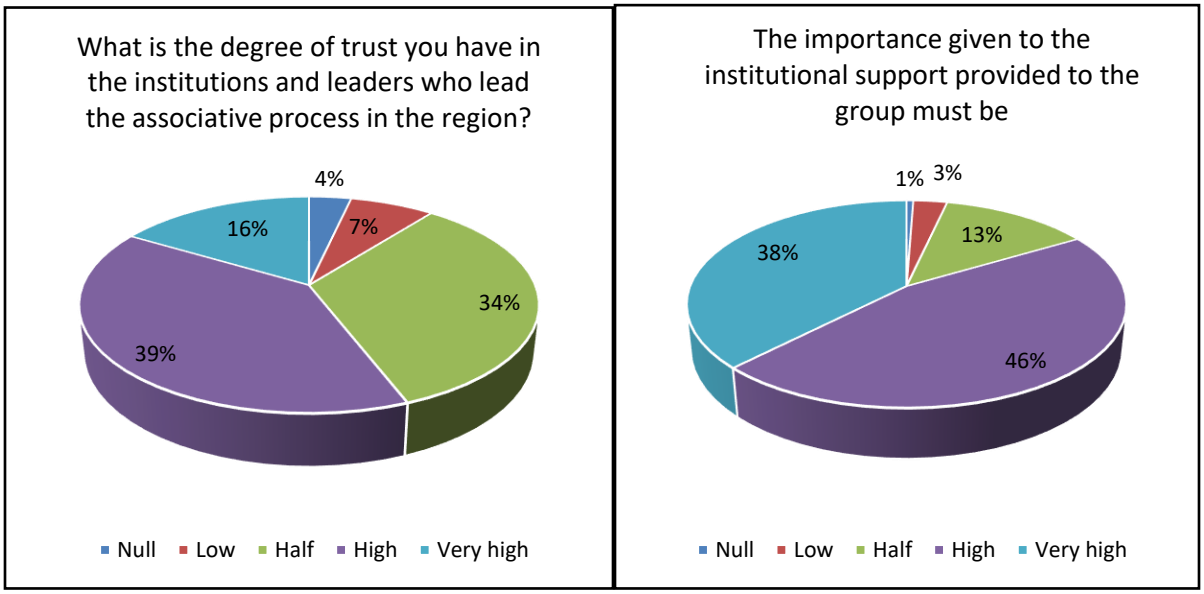
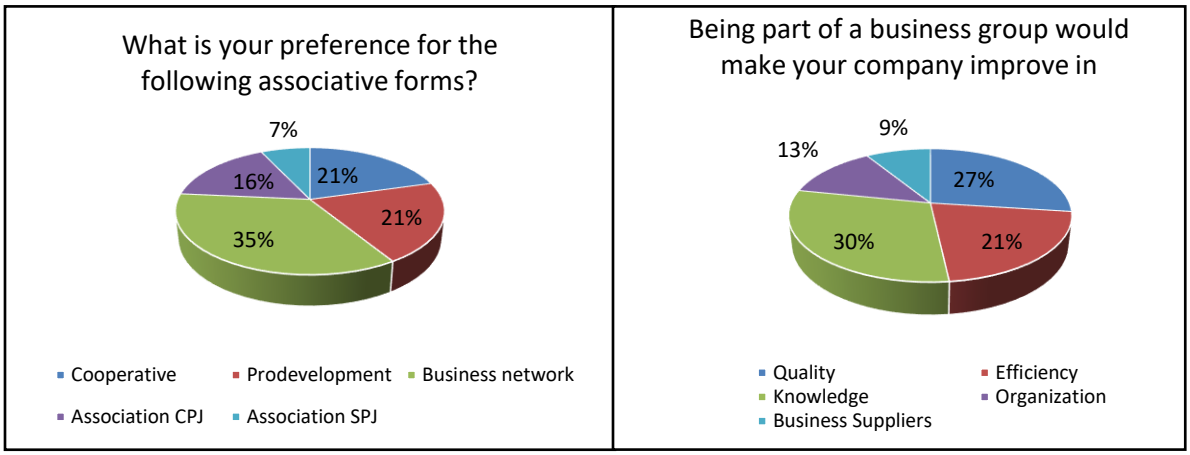


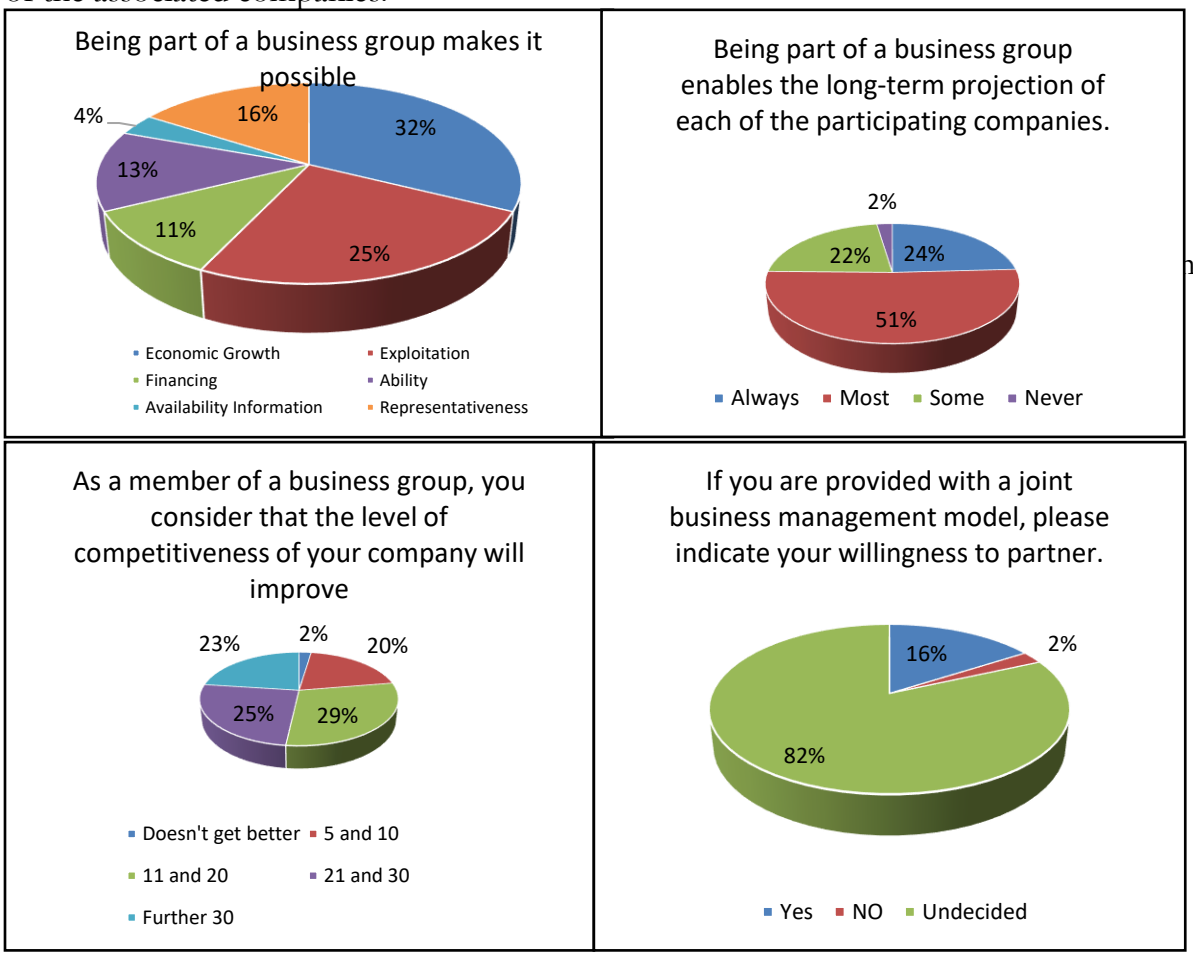
Figure 4 Preference for forms of association and consideration of how being part of a group contributes to business improvement.



Source: Own elaboration

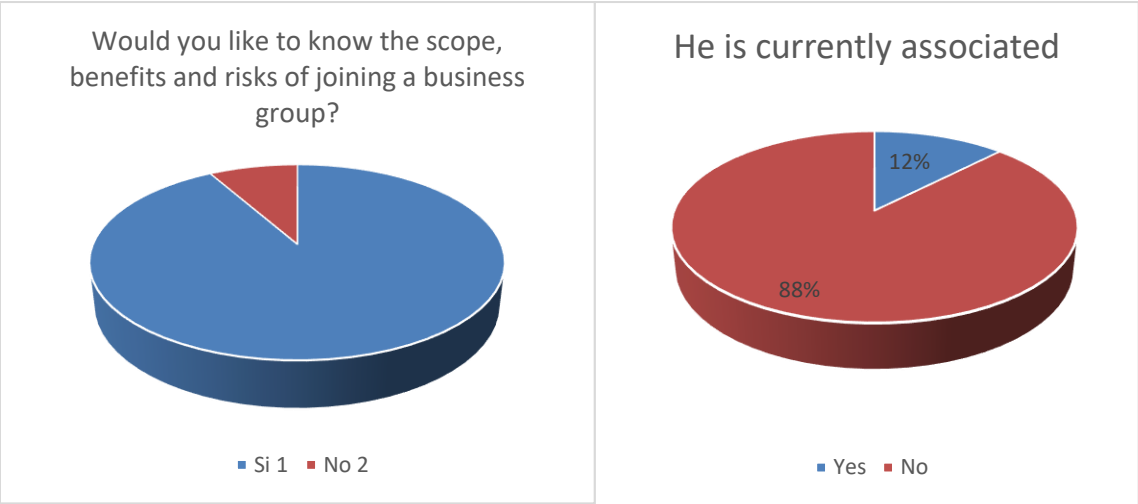
Executives place greater value on the importance of legal independence, managerial autonomy, and leadership. Regarding the formation of working groups or associations among entrepreneurs, they prefer small groups of up to ten members, which reflects a pursuit of agility and cohesion.

Figure 5 Being part of a group enables certain aspects and facilitates the long-term projections of the associated companies.



Regarding trust in institutions, it was found that the responses are divided: while some expressed high or very high levels of trust, others rated it as low or nonexistent. The majority value institutional support as high or very high, which indicates that they see it as a key facilitator for associativity.

Figure 7 Would you like to know the scope, benefits, and risks of joining a business group, and are you currently associated.



Source: Own elaboration

Among the expected benefits of associativity, economic growth is identified as the greatest benefit. Entrepreneurs believe that associativity enables economic growth (25%), followed by resource utilization (16%). Regarding long-term projection within the group, they consider that most companies obtain benefits from associativity.

With respect to the impact on competitiveness, expectations are moderate, as many anticipate improvements ranging from 5% to 20%. Concerning willingness to associate, 82% responded positively, provided that a joint management model is offered, while 2% remain undecided. Currently, 88% of the surveyed entrepreneurs are associated, and only 12% are not. Entrepreneurs prefer groups with clear rules, autonomy, and manageable size.

Likewise, it is observed that entrepreneurs highly value training, market access, and efficiency as priorities. A certain degree of distrust is perceived among entrepreneurs, which suggests that business associations must work on transparency to gain credibility. Similarly, it is recommended that business associations design programs that emphasize tangible benefits with managerial flexibility. There is a clear opportunity for growth, as the low current percentage of association contrasts with the high willingness to join if a viable model is offered.

Analysis of Probabilistic Regression Models – Probit Models

he results of the probabilistic regression analyses conducted on the dependent variables are presented below, starting with variable P15: Currently associated, followed by the estimation of marginal effects. The explanatory variables are as follows:

P2: The degree of trust placed in institutions and in the leaders who guide the associativity process in the region.

P8: The importance assigned to institutional support provided to the group (None, Low, Medium, High, Very High).

P9: Preference for the following associative forms (Cooperative, Business Network, CPJ Association, and SPJ Association).
P10: By being part of a business group, your company would improve in (Quality, Efficiency, Knowledge, Organization, and Supplier Negotiation).
P11: By being part of a business group, it enables (Economic growth, Resource utilization, Financing, Capacity, Availability of information, and Representativeness).
P12: By being part of a business group, it enables long-term projection of each participating company (Always, Most of the time, Sometimes, Never).
P13: As a member of a business group, do you consider that your company's level of competitiveness will improve? (No improvement, 5–10, 11–20, 21–30, More than 30).

Table 8. Probit Model, Dependent Variable P15

Probit regression — Number of obs = 170; Wald chi2(7) = 26.17; Prob > chi2 = 0.0005; Log pseudolikelihood = -48.900757; Pseudo R2 = 0.2307

P15	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
P2	.4715389	.190024	2.48	0.013	.0990987	.8439791
P8	.687815	.1990665	3.46	0.001	.2976519	1.077978
P9	.1205157	.135677	0.89	0.374	-.1454063	.3864376
P10	-.0621414	.1036003	-0.60	0.549	-.2651943	.1409116
P11	-.1727113	.0772256	-2.24	0.025	-.3240708	-.0213518
P12	-.2231492	.213813	-1.04	0.297	-.6422149	.1959166
P13	.0323931	.1476204	0.22	0.826	-.2569375	.3217238
_cons	-4.293962	1.57505	-2.73	0.006	-7.381003	-1.206921

Source: Own elaboration with calculations using Stata software

Table 9. Probit Model, Marginal Effects – Dependent Variable P15

Marginal effects after probit
y = Pr(P1) (predict)
= .93752944

variable	dy/dx	Std. Err.	z	P>|z|	[	95% C.I.	]	X
P2	.0189759	.0179	1.06	0.289	-.016112	.054064		2.58235
P8	.0281653	.02115	1.33	0.183	-.013293	.069624		3.17059
P9	.0317978	.01464	2.17	0.030	.003102	.060494		2.68824
P10	-.0272055	.01342	-2.03	0.043	-.053514	-.000897		2.55294
P11	.0042459	.011	0.39	0.699	-.017313	.025805		2.78235
P12	-.0322091	.02555	-1.26	0.208	-.082293	.017875		2.02941
P13	.0082534	.01739	0.47	0.635	-.025837	.042343		3.46471

Source: Own elaboration with calculations using Stata software

The results of the binomial probability regression show that the probability of a company being associated is positively determined by the degree of trust placed in institutions and in the leaders who guide the associativity process in the region; secondly, by the preference for forms of associativity; and by the belief that being part of a business group enables economic

growth, resource utilization, financing, capacity, information availability, and representativeness. However, the model does not provide statistical evidence that being part of a business group directly favors business growth or improves competitiveness levels.

Subsequently, another regression was conducted with the dependent variable P1 (Would you like to know the scope, benefits, and risks of joining a business group?), against the same explanatory variables of the first model. The results are as follows:

Table 10. Probit Model, Dependent Variable P1

Probit regression — Number of obs = 170; Wald chi2(7) = 11.08; Prob > chi2 = 0.1353; Log pseudolikelihood = -43.58277; Pseudo R2 = 0.0988

P1	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
P2	.1543528	.1406152	1.10	0.272	-.121248	.4299536
P8	.2290999	.1729092	1.32	0.185	-.1097959	.5679957
P9	.2586477	.1224225	2.11	0.035	.018704	.4985914
P10	-.2212929	.1138802	-1.94	0.052	-.4444939	.0019081
P11	.0345367	.0894681	0.39	0.699	-.1408175	.2098909
P12	-.2619927	.2100633	-1.25	0.212	-.6737092	.1497238
P13	.0671344	.1431386	0.47	0.639	-.2134121	.347681
_cons	.4820235	.880429	0.55	0.584	-1.243586	2.207633

Source: Own elaboration with calculations using Stata software

Table 11. Probit Model, Marginal Effects – Dependent Variable P1

Marginal effects after probit
y = Pr(P1) (predict)
= .93752944

variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
P2	.0189759	.0179	1.06	0.289	-.016112	.054064	2.58235
P8	.0281653	.02115	1.33	0.183	-.013293	.069624	3.17059
P9	.0317978	.01464	2.17	0.030	.003102	.060494	2.68824
P10	-.0272055	.01342	-2.03	0.043	-.053514	-.000897	2.55294
P11	.0042459	.011	0.39	0.699	-.017313	.025805	2.78235
P12	-.0322091	.02555	-1.26	0.208	-.082293	.017875	2.02941
P13	.0082534	.01739	0.47	0.635	-.025837	.042343	3.46471

Source: Own elaboration with calculations using Stata software

The model shows that whether or not entrepreneurs in the city of Ibagué are associated is positively determined by variable P2 (the degree of trust placed in institutions and in the leaders who guide the associativity process in the region) and P9 (Cooperatives, associations, and business networks), with the latter being the preferred form among entrepreneurs in the city of Ibagué. The other independent variables do not influence the decision or probability of being associated.

CONCLUSIONS

From the theoretical review, business associativity is consolidated as a fundamental strategy for the development, strengthening, and improvement of business competitiveness, especially for small and medium-sized enterprises (SMEs). This strategic cooperation allows organizations to achieve common goals, share resources, knowledge, and experiences, and overcome obstacles such as lack of access to markets or financial resources. Its relevance is supported by various theories, including Network Theory, Transaction Cost Theory, the Business Ecosystem Approach, the Resource-Based View, Resource Dependence Theory, and Porter's Diamond Model.

The statistical analysis reveals that entrepreneurs in the city of Ibagué value structure and clarity in associative dynamics, considering it essential for a business group to have well-defined processes that include communication channels, regulations, control mechanisms, member selection, and conflict resolution. Moreover, their participation preferences are oriented toward activities that promote practical growth, such as training and trade missions, followed by innovation and responsiveness to market demand, which reflects an interest in capacity development and business expansion.

Likewise, the survey analysis establishes that entrepreneurs have divided perceptions regarding trust in institutions and in the leaders of the regional associativity process, although most consider institutional support a key facilitator of great importance for business groups. Furthermore, when analyzing the configuration of associations, companies show a clear preference for small groups of up to ten members, which reflects the pursuit of agility and internal cohesion.

The results of the binomial probability regression show that the likelihood of a company being associated depends positively on the degree of trust in institutions and the leaders guiding the process, the preference for associative forms, and the belief that belonging to a business group enables economic growth, resource utilization, financing, information availability, and representativeness. Despite the high willingness to associate—expressed by 82% of respondents if offered a joint business management model—the Probit model did not find statistical evidence that belonging to a business group directly favors growth or significantly improves competitiveness levels.

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