

Analysis of business classification by size of member or associate countries of the Andean Community (CAN)



Análisis de clasificación empresarial por tamaño de países miembros o asociados de la Comunidad Andina – CAN

Barrera Liévano, Jhony Alexander
Parra Ramírez, Sandra Miyey
Parada Fonseca, Sandra Patricia

Received: November 16, 2020
Approved: December 12, 2021

ABSTRACT

The present research is developed having as its target population the countries that are members or associates of the Andean Community - CAN as of December 31, 2019. The main objective is to describe the classifications by company size given by the related countries. The research is developed under a methodology with a mixed approach, descriptive and documentary type. The following research questions are posed: What are the variables used by the CAN countries for the classification of companies according to size? Is there a high dispersion among the quantitative variables used by the CAN countries for the classification of companies according to size? The research hypothesis is that "the CAN member or associate countries present a high dispersion in terms of their quantitative variables for business classification by size based on the simple average and standard deviation". As results, it is identified that all of them include the variable of annual net sales revenue and 89%

.....
D. student in projects at the American University of Europe.
Corporación Unificada Nacional de Educación Superior – CUN
<https://orcid.org/0000-0002-2274-2297>
jhony.barrera.lievano@gmail.com

Master in International Economic Relations
Corporación Universitaria Minuto de Dios - UNIMINUTO (Bogotá - Colombia)
<https://orcid.org/0000-0002-7273-9870>
sandra.parra@uniminuto.edu

Master in Business Administration
Corporación Universitaria Minuto de Dios (Bogotá - Colombia)
<https://orcid.org/0000-0001-9080-8238>
Sandrappf2009@gmail.com

the variable of number of workers, and that the quantification of these variables does not present high dispersion. Finally, new research topics are proposed.

Keywords: Business classification; Andean Community; Regional organization; Enterprise size

RESUMEN

La presente investigación se desarrolla teniendo como población objeto de estudio los países que son miembros o asociados a la Comunidad Andina – CAN a 31 de diciembre de 2019. Como objetivo principal se propone describir las clasificaciones por tamaño de empresas dadas por los países relacionados. Se desarrolla la investigación bajo una metodología con enfoque mixto, de tipo descriptivo y documental. Se plantean las siguientes preguntas de investigación: ¿Cuáles son las variables que utilizan los países de la CAN para la clasificación de las empresas según tamaño? ¿existe una alta dispersión entre las variables cuantitativas planteadas por los países de la CAN para la clasificación de las empresas según tamaño? Se plantea como hipótesis de investigación que “los países miembros o asociados de la CAN presentan una alta dispersión en cuanto a sus variables cuantitativas de clasificación empresarial por tamaño tomando como base el promedio simple y la desviación estándar”. Como resultados se identifica que todos acogen la variable de ingresos por ventas netas anuales y que el 89% la variable de número de trabajadores, y que la cuantificación de estas

variables no presenta alta dispersión. Finalmente se proponen nuevos temas de investigación.

Palabras clave: Clasificación empresarial; Comunidad Andina; Organismo regional; Tamaño de empresa

Introduction

Companies are characterized by being the engine of the economy and generators of value for society. In fact, from an economic perspective, the company is considered as one of the three actors in the economic circuit, which is also composed of the State and the family (Massad, 2007), and which, in a symbiotic way, generates mutually beneficial relationships.

The classification of companies, not by economic activity, but by size, has been considered as a study and control variable in research on phenomena related to the same concept (Huerta, et. al., 2010). However, the classification per se of the size of the economic unit involves various difficulties (Santiago, 2003), which means that it varies depending on the country or region, given the existence of international treaties on the subject.

Although there may be several questions regarding the classification by size of companies, it is one question that becomes the main focus, as illustrated by Nieto and Sanchez (2015) when they ask what are the factors that determine the optimal size of a company? As mentioned by González-Alvarado (2005) and Barrera (2019), there are several quantitative variables that have been taken into account for this classification, among which are the number of employees, volume of income, volume of sales, volume of assets, economic sector, among others.

The importance of classifying companies according to their size lies in the creation of incentives by the different governments for the promotion, development, growth and sustainability of business units (Held, 1995) (Tapia, 1997) (Silva, 2005), since this results in the strengthening of domestic economies through the generation of

employment (Melgarejo, et al, 2013; Barrera and Parra, 2020; Barrera, Parada and Serrano, 2020).

Although the countries internally develop their own legislation to determine the size of companies, this classification does not obey standardized parameters at a global level, which makes it almost impossible to compare existing statistics directly. Due to the above, the objective of this research is to describe the classifications by company size given by the member or associated countries of the Andean Community - CAN. The following questions are posed: What are the variables used by the CAN countries to classify companies according to size? With regard to the quantitative variables presented by the countries, is there a high level of dispersion? The research hypothesis is that "the CAN member or associate countries show a high dispersion in terms of their quantitative variables based on the simple average and standard deviation". The research is developed under a mixed approach methodology, documentary type.

The Andean Community - CAN

The ideal of having a united America proclaimed by Simón Bolívar and described in the Letter of Jamaica of September 6, 1815 (Artieda, 2019), is the symbol of the beginning of a large number of regional processes that were developed a century and a half later in Latin America, including the Andean Community - CAN, Southern Common Market - MERCOSUR, Latin American Integration Association - ALADI, Caribbean Community - CARICOM, Latin American Free Trade Association - ALALC, among other supranational organizations. As a result of the change in regional scenarios coming from Europe (Tremolada 2006), these alliances have had the purpose of strengthening trade ties between member countries through mechanisms such as the reduction of tariff barriers and the elimination of legal obstacles (Romero et al, 2019) in addition, political and legal aspects from a multifunctional facet. According to Malamud (2013), regionalism processes in South America have their own argumentation, aim at ambitious results and generate economic interests.

However, the economic crises that occurred in the period from 1950 to 1980 (Chiriboga, 2009) and with the implementation of the Latin American economic model called "import substitution industrialization" proposed by the Economic Commission for Latin America and the Caribbean - ECLAC, caused the failure of unifications such as LAFTA and a slow process in the implementation of integration

agreements such as the Andean Community - CAN, Southern Common Market - MERCOSUR, ALADI, CARICOM, among other supranational organizations (Malamud, 2011).

According to Liévano, J. A. B. (2021), it is crucial to develop specific correlations in the indicators of the financial axes, as this underlies the administrative model that allows consolidating a net profit margin from the business application. In this context, the Andean Community, created on May 25, 1969 through the Cartagena Agreement (Correa and Casas, 2007), although preceded by the Declaration of Bogota in 1963 resulting in the Andean Pact, is one of the oldest integration processes in South America and still remains in force in the international scenario, despite the fact that some founding countries (Chile and Venezuela) withdrew in recent decades in the midst of its crisis (Blanco, 2014; Godoy and Gonzalez, 2010).

As mentioned on its official website, this organization has 4 member countries (Bolivia, Colombia, Ecuador and Peru), 5 associate countries (Argentina, Brazil, Chile, Paraguay, Uruguay), and one observer country (Spain). At present, the CAN enacts as its objectives (Andean Community, 2020a):

TO PROMOTE the balanced and harmonious development of the Member Countries under conditions of equity, through integration and economic and social cooperation.

ACCELERATE growth and the generation of productive employment for the inhabitants of the Member Countries.

FACILITATE the participation of Member Countries in the regional integration process, with a view to the gradual formation of a Latin American common market.

DECREASE external vulnerability and improve the position of Member Countries in the international economic context.

STRENGTHENING subregional solidarity and reducing development gaps among Member Countries.

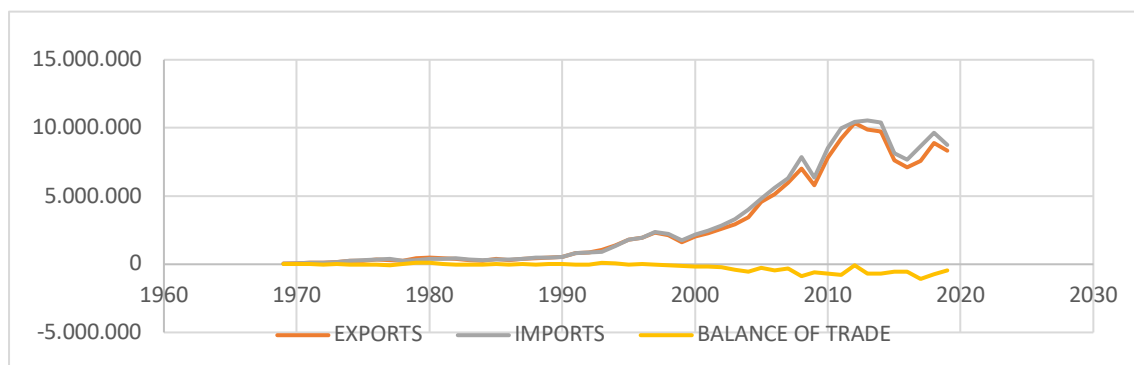
To bring about a persistent improvement in the standard of living of the sub-region's inhabitants.

Pursuant to Article 5 of the Cartagena Agreement, the Andean Community is comprised of the Member States and the bodies of the Andean Integration System, the latter being composed of the Andean Presidential Council; the Andean Council of Foreign Ministers; the Andean Community Commission; the General Secretariat of the Andean Community; the Court of Justice of the Andean Community; the Andean Parliament; the Business Advisory Council; the Labor Advisory Council; the Andean Development Corporation; the Latin American Reserve Fund; the Simón Rodríguez Agreement, the social agreements that are attached to the Andean Integration System, the Simón Bolívar Andean University, the Advisory Councils established by the Commission and the other bodies and institutions that may be created within the framework of Andean sub-regional integration.

In this sense, the CAN has created a supranational institutional regulatory framework through the establishment of legal norms that can be complied with by the States and other member countries (Gallardo et al, 2019), i.e., there are not strictly speaking common policies, but community and implementation rules (Carrasquilla and Rivero, 2015); Among these regulations, the establishment of an Andean jurisdiction is noteworthy, which allows citizens to go taking into account the free movement in the territory that makes up the integration without a visa or passport; the popular election of parliamentarians to the bloc and a Dispute Settlement System.

In trade matters, the CAN established a free trade zone, a regional customs tariff with exemption from paying tariffs for members of the community; approximately 80% of the products traded are produced by micro, small and medium-sized enterprises in the region that generate between 71.8% and 89.6% of employment (Heredia and Sanchez, 2016), although the trade balance is in deficit, the volume of imports and exports among themselves have increased by more than 200% as evidenced in Figure 1 (Andean Community, 2020b), additional the regional agreement has rules that tend to avoid double taxation and tax evasion.

Figure 1. CAN trade balance 1969-2019 (figures in US dollars)

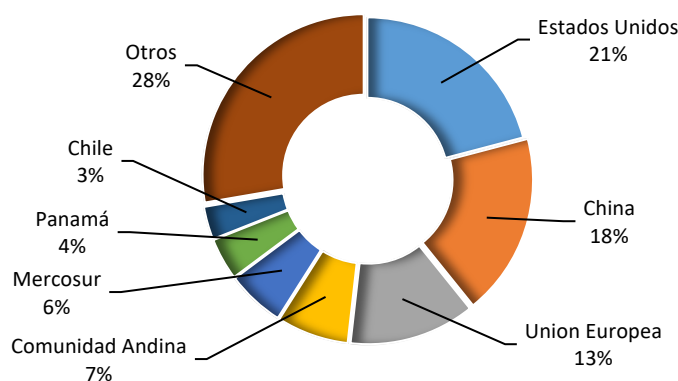


Source: Prepared by the authors with data from the annual report 50 years of the Andean Community of Nations 2020.

Among other regulations are air and land transportation, migration, tourism, labor and business policies; it has guidelines that orient its Common Foreign Policy (CFP), investment promotion, search for trade opportunities, joint action in multilateral negotiation forums and trade approaches with other regional integrations, food security measures, energy integration, rules on industrial property, environment, border development (Ochoa et al 2014).

The main export destinations of the member countries, according to the 2019 annual report, have been the United States, China, the European Union and domestic trade among the member countries of the integration, as shown in Figure 2.

Figure 2. CAN destination markets in 2019



Source: Andean Community of Nations (2020c)

Despite the change, in institutional order since its creation, going through several economic, political and social crises within each member state and the lack of a single

perception among the rulers (Contipelli, 2016), the Andean Community of Nations has been able to face the challenges present in the new era of globalization and that goes beyond being an interregional trade zone (Moncayo, 2017).

Materials and methods

In order to achieve the research objective and to be able to answer the questions posed, a mixed approach study of documentary type is developed. The laws, decrees, and regulations issued by the governments of the countries that are members or associates of the Andean Community - CAN as of December 31, 2019 will be used.

We proceed to identify the parameters of business classification according to size, under the denominations of small and medium enterprise, understanding that, according to the quantitative variables determined by each government, if a local enterprise presents lower values than the minimum values to be a small enterprise, it will be understood as a micro enterprise, and if a local enterprise exceeds the maximum values to be a medium enterprise, it will be understood as an enterprise or large enterprise, based on the reality that all the nations of the CAN present the classifications of micro, small, medium and enterprise or large enterprise.

In order to be able to compare the quantitative information regarding variables that are represented in monetary units, their value will be calculated in U.S. dollars, according to the exchange rates in effect as of December 31, 2019, reported by the official entities of each country, among which are in the first instance the central banks, or the local entity in charge of determining the exchange rate.

After determining the variables established by each nation subject to this study, the information is presented in a comparative manner. As for the data relating monetary magnitudes and the number of employees, the arithmetic mean and the standard deviation presented in a general manner are determined through the application of descriptive statistics, so that they can be compared independently for each nation, based on the total information of the Community. For this study, high dispersion is understood as that which, when measuring the relationship between the standard deviation and the arithmetic mean, results in a value equal to or greater than one (1).

Results

The classification according to company size is not standardized worldwide, neither in terms of the variables to be taken into account (although sales, income, assets, and number of workers are generally estimated), nor in terms of their quantification, a phenomenon that also occurs among the CAN member and associate countries. Each country has created its own legislation, which will surely respond to the characteristics of its own economies and local needs and particularities. The following are the classifications for the nine countries that belong to the Andean Community, with respect to the parameters they have determined for small and medium-sized enterprises.

Argentina

- Legislation: Resolution 220/2019, Annex IV of the Secretariat of Entrepreneurs and SMEs of the Ministry of Production.
- Classification variables and magnitudes: Sector, number of workers, annual sales. Table 1 illustrates what has been established for the country.

Table 1. *Business classification by size - Argentina*

Sector and classification variables		Small	Median Tranche I	Median Tranche II
Construction	No. of employees	Between 13 and 45	Between 46 and 200	Between 201 and 590
	Annual sales ARS ¹	Between 12,710,001 and 75,380,000	Between 75,380,001 and 420,570,000	Between 420,570,001 and 630,790,000
	Conversion to USD ²	Between 212,223 and 1,258,640	Between 1,258,641 and 7,022,374	Between 7,022,375 and 10,532,476
Services	No. of employees	Between 8 and 30	Between 31 and 165	Between 166 and 535
	Annual sales ARS	Between 6,700,000 and 40,410,000	Between \$40,410,001 and \$337,200,000	Between 337,200,001 and 481,570,000

¹ Argentine peso.

² The exchange rate as of December 31, 2019 according to the Central Bank of Argentina is taken. USD/ARS = 59.89 ARS.

	Conversion to USD	Between 111,872 and 674,737	Between 674,738 and 5,630,322	Between 5,630,323 and 8,040,908
Trade	No. of employees	Between 8 and 35	Between 36 and 125	Between 126 and 345
	Annual sales ARS	Between \$23,560,001 and 141,680,000	Between 141,680,001 and 1.190.400.000	Between 1,190,400,001 and 1.700.590.000
	Conversion to USD	Between 393,388 and 2,365,670	Between 2,365,671 and 19,476,440	Between 19,476,441 and 28,395,224
Industry and mining	No. of employees	Between 16 and 60	Between 61 and 235	Between 236 and 655
	Annual sales ARS	Between 21,990,001 and 157.740.000	Between 157,740,001 and 986.080.000	Between 986,080,001 and 1.441.090.000
	Conversion to USD	Between 367,173 and 2,633,828	Between 2,633,829 and 16,464,852	Between 16,464,853 and 24,062,280
Agropecuario	No. of employees	Between 6 and 10	Between 11 and 50	Between 51 and 215
	Annual sales ARS	Between 10,150,000 and 38.180.000	Between 38,180,001 y 272.020.000	Between 272,020,001 and 432.450.000
	Conversion to USD	Between 169,477 and 637,502	Between 637,503 and 4,541,993	Between 4,541,994 and 7,220,738

Bolivia

- Legislation: Ministerial Resolution MDPyEP/200/2009, regulation for the registration and accreditation of productive units of the Ministry of Productive Development and Plural Economy in Bolivia. However, this was modified by Ministerial Resolution 064 of April 01, 2015.
- Classification variables and magnitudes: number of workers, productive assets, annual exports, annual sales. Table 2 illustrates what has been established for the country.

Table 2. *Business classification by size - Bolivia*

Classification variable	Small	Medium Company
No. of employees	Between 10 and 19	Between 20 and 49
Productive assets in UFV³	Between \$150,001 and 1,500,000	Between 1,500,001 and 2,039,536
Conversion to USD⁴	Between 50988 and 509.884	Between 509,885 and 1,928,397
Annual exports in UFV	Between 75,001 and 750,000	Between 750,001 and 7,500,000
Conversion to USD	Between 25,494 and 254,942	Between 254,942 and 2,549,420
Annual sales in UFV	Between 600,001 and 3,000,000	Between 3,000,001 and 12,000,000
Conversion to USD	Between 203,953 and 1,019,768	Between 1,019,769 and 4,079,072

Source: Adapted from Ministerial Resolution MDPyEP/200/2009 of the Ministry of Productive Development and Plural Economy. Plurinational State of Bolivia.

Brazil

- Legislation: Supplementary Law number 123 of December 14, 2006.
- Classification variables and magnitudes: number of workers, annual sales. Table 3 illustrates what has been established for the country.

Table 3. *Business classification by size - Brazil*

Classification variable	Small	Median
No. of employees	Industry and Civil Construction: between 20 and 99	Industry and Civil Construction: between 100 and 499
	Trade and services: between 10 and 49	Trade and services: between 50 and 99
Annual Sales in BRL⁵	240,000 and less than 2,400,000	N. A
Conversion to USD⁶	Between 59,551 and 595,518	

Source: Adapted from Complementary Law 123 of 2006, Presidency of Brazil.

Chile

- Legislation: Law No. 20416 of the Ministry of Economy, Development and Reconstruction of Chile.
- Classification variables and magnitudes: number of workers, annual sales. Table 4 illustrates what has been established for the country.

Table 4. *Business classification by size - Chile*

Classification variable	Small	Median
No. of employees	Between 10 and 49	Between 50 and 200
Annual sales UF⁷	Between 2,401 and 25,000	Between 25,001 and 100,000
USD Conversion⁸	Between 85,267 and 887,834	Between 887,834 and 3,551,337

Colombia

- Legislation: Decree No. 957 of June 5, 2019 of the Ministry of Commerce, Industry and Tourism, which regulates Article 2 of Law 590 of 2000, as amended by Article 43 of Law 1450 of 2011.
- Classification variables and magnitudes: sector, number of workers, income from ordinary activities. Table 5 illustrates what has been established for the country.

Table 5. *Business classification by size - Colombia*

Sector	Classification variable	Small	Median
Manufacturer	No. of workers (for all)	Between 11 and 50	Between 51 and 200
	Annual revenues from ordinary activities measured in UVT ⁹	Between 23,563 and less than or equal to 204,995.	Greater than 204,995 and less than or equal to 1,736,565.
	USD Conversion ¹⁰	Between 246,405 and less than or	Greater than 2,143,619 and less

Services		equal to 2,143,619.	than or equal to 18,159,762
	Annual revenues from ordinary activities measured in UVT	Between 32,988 and less than or equal to 131,951.	Greater than 131,951 and less than or equal to 483,034.
Trade	USD Conversion	Between 344,965 and less than or equal to 1,379,849.	Greater than 1,379,849 and less than or equal to 5,051,226
	Annual revenues from ordinary activities measured in UVT	Between 44,769 and less than or equal to 431,196.	Greater than 431,196 and less than or equal to 2,160,692.
	USD Conversion	Between 468,162 and less than or equal to 4,509,141.	More than 4,509,141 and less than or equal to 22,594,980

Ecuador

- Legislation: Organic Code of Production, Commerce and Investments.
- Classification variables and magnitudes: number of workers, annual sales, amount of assets. Table 6 illustrates what has been established for the country.

Table 6. *Business classification by size - Ecuador*

Criteria	Small	Medium Company
No. of employees	Between 10 and 49	Between 50 and 199
Annual sales USD¹¹	Between 100,001 and 1'000,000	Between 1'000.001 and 5'000.000
Amount of assets USD	100,001 to 750,000	750,001 up to 3,999,999

Paraguay

- Legislation: Law No. 4457 / 12 for micro, small and medium-sized enterprises (MSMEs).
- Classification variables and magnitudes: number of workers, annual sales. Table 7 illustrates what has been established for the country.

Table 7. Business classification by size - Paraguay

Classification variable	Small	Median
No. of employees	Between 16 and 30	Between 31 and 50
Annual sales PYG ¹²	More than 500,000,000,000 and up to 2,500,000,000,000	Over 2,500,000,000,000 and up to 6,000,000,000,000
Conversion to USD ¹³	More than 77,481 and up to 387,408	More than 387,408 and up to 929,780

Peru

- Legislation: Law to Promote Productive Development and Business Growth Supreme Decree No. 013-2013-PRODUCE
- Classification variables and magnitudes: annual sales. Table 8 illustrates what has been established for the country.

Table 8. Business classification by size - Peru

Classification variable	Small	Median
Annual sales in ITU ¹⁴	Over 150 and up to 1,700	Over 1700 and up to 2300
Conversion to USD ¹⁵	More than 190,217 and up to 2,155,797	More than 2,155,797 up to 2,916,667

Uruguay

- Legislation: Law 201 of August 13, 1991, which is determined in Decree No. 54/992 as subsequently amended by Decree No. 504/2007.
- Classification variables and magnitudes: number of workers, annual sales. Table 9 illustrates what has been established for the country.

Table 9. Business classification by size - Uruguay

Classification variable	Small	Median

No. of employees	Between 5 and 19	Between 20 and 99
Annual sales in UI ¹⁶	Annual sales excluding VAT between 2,000,000 and 10,000,000	Annual sales excluding VAT, greater than 10,000,000 and 75,000,000
Conversion to USD ¹⁷	Between 243,014 and 1,170,070	Greater than 1,170,070 and greater than 8,775,530

Source: Adapted from Law 16.201, Decree 54/992 and 266/995. Ministry of Industry, Energy and Mining

Comparison between classifications

Each country that is part of the Andean Community, either as a member or associate member, has stipulated quantitative variables for business classification according to the size of the productive unit. Overall, the variables applied do not coincide in all cases, which reflects the difference in the understanding of the size of the company, not to mention the asymmetry in the quantification measures applied.

The following is a summary of three comparative tables, which illustrate from different angles the dynamics of the Community to classify companies according to their size, according to the legislation or regulations in force as of December 31, 2019.

Table 10. Variables used by the CAN countries to classify companies according to size

Country	Variables				
	Assets	Annual exports	Annual sales revenue	No. of employees	Economic sector
Argentina			X	X	x
Bolivia	x	X	X	X	
Brazil			X	X	x
Chile			X	X	
Colombia			X	X	x
Ecuador			X	X	
Paraguay			X	X	
Peru			X		
Uruguay			X	X	

Table 10 presents the variables taken into account by the countries. It shows that all of them include annual sales revenue in their particular business size classification systems. It also shows that 89% of these countries include the variable of number of workers. Differentially, only three countries (Argentina, Brazil and Colombia)

differentiate between economic sectors and only Bolivia considers variables such as assets and annual exports in addition to annual sales revenue and number of workers. Finally, the only country that only considers one variable is Peru.

Regarding annual revenues received from sales, the CAN countries set minimum and maximum amounts for company size classifications. In a standardized manner, Table 11 presents the values specified by each nation, presented in U.S. dollars (USD) as of December 31, 2019.

Table 11. Annual sales revenue CAN countries to classify companies by size
Country Annual sales revenue - Figures in USD

	Small business		Medium-sized company	
	Minimum amount	Maximum amount	Minimum amount	Maximum amount
Argentina	250.827	1.514.075	1.514.076	15.650.325
Bolivia	203.953	1.019.768	1.019.769	4.079.072
Brazil	59.551	595.518		
Chile	85.267	887.834	887.834	3.551.337
Colombia	353.177	2.677.536	2.677.536	15.268.656
Ecuador	100.001	750.000	750.001	3.999.999
Paraguay	77.481	387.408	387.408	929.780
Peru	190.217	2.155.797	2.155.797	2.916.667
Uruguay	243.014	1.170.070	1.170.070	8.775.530
Average	173.721	1.239.779	1.320.311	6.896.421
Standard deviation	99.808	753.334	762.809	5.722.284

As can be seen, the average minimum and maximum amounts for the classification of companies range on average between USD 173,721 and USD 1,239,779 for small companies, between USD 1,320,311 and USD 6,896,421 for medium-sized companies, less than USD 173,721 for micro-enterprises and more than USD 6,896,421 for large companies. In all cases, the standard deviation of the average does not exceed the absolute value of the minimum and maximum averages of the CAN countries; however, in all cases this deviation exceeds 50% of the average.

In general terms, Colombia has the highest values or ceilings for the classifications, both in minimum and maximum amounts, exceeding the mean in all cases, although in the maximum value for classifying the median, Colombia has the highest value for classifying the median. This phenomenon is explained by the fact that Argentina has two levels of classification within the medium-sized enterprise category. The lowest values or ceilings are found in Brazil, with values below the average (in terms of the small enterprise classification), and Paraguay.

Finally, with respect to the number of workers variable, which is applied by eight of the nine CAN member and associate countries, there is diversity in its quantification, as shown in Table 12.

Table 12. *Number of workers CAN countries to classify companies according to size*

Country	Number of employees			
	Small business		Medium-sized company	
	Minimum	Maximum	Minimum	Maximum
Argentina				468
Bolivia				
Brazil				299
Chile				
Colombia				
Ecuador				
Paraguay				
Uruguay	5			99
Average			42	

Standard deviation

It can be seen that for the CAN countries that consider the variable of number of workers to classify companies according to their size, that, on average, micro companies are those with fewer than 11 workers, small companies have an average of between 11 and 41 workers, medium companies have an average of between 42 and 196 workers, and large companies have more than 196 workers. With respect to standard deviations, there is no evidence that the average exceeds the absolute value of the minimum and maximum averages of the Community countries for the number of workers variable; however, in all cases this deviation exceeds 50% of the average.

Regarding the dynamics of minimum and maximum values for the business classification by size, for the variable of number of workers, Uruguay is the country with the lowest values, followed by Paraguay. On the other hand, Brazil has the highest values, being surpassed only by Argentina in the ratio of maximum ceiling for the classification of medium-sized enterprises, a phenomenon that is explained by the fact that this country has two levels of classification within the denomination of medium-sized enterprise.

Conclusions

In 2020, it is evident that the Andean Community has been in operation for more than 50 years, and that in the midst of the various difficulties faced by the hemisphere, it has endured over time. This organization has generated an institutional regulatory

framework in the form of community norms and not common policies, which can be complied with by its member states.

Within this framework, the citizens of the member and associate countries enjoy free movement within their territories and, at the business level, the advantage of lower tariffs thanks to the establishment of a free trade zone with benefits for its members.

With regard to the research objective and the questions posed, it was found that the internal legislation or regulations of the CAN countries unanimously include the variable of annual sales revenue, and that, of the nine members or associates, eight of them (89%) include the variable of number of workers. In addition, the countries of Argentina, Brazil and Colombia differentiate by economic sector. As an exceptional case, Bolivia includes other variables, which are amount of assets and annual exports.

On the other hand, regarding the asymmetry presented by the CAN countries in terms of the quantification of the variables applied for the business classification, it was identified that the dispersion measured through the standard deviation of the means of each variable analyzed did not exceed 100% of the value of the mean in any case, which leads to the conclusion that the dispersion, given the conditions of the differences between nations, is not high, considering that the relationship between the standard deviation and the arithmetic mean is less than 1.

Finally, we propose as new research topics the characterization of the business fabric of each country belonging to the CAN, where points such as the component of the business park in terms of size, employment generation, economic sector, and contribution to the GDP of each country and the Community are addressed, as well as the evaluation of the effectiveness of internal policies for the promotion and strengthening of micro, small and medium-sized enterprises.

References

- Artieda López, A. M. (2019). Parliaments and regionalism: reviewing the participation of parliaments in regionalism processes in South America. *Estado & Comunes, Revista De políticas Y Problemas Públicos*, 1(4).
- Barrera Liévano, J. A. (2019). COMMUNITY ACTION BOARDS AND SMALL AND MEDIUM ENTERPRISES-ARTICULATION FOR THE DEVELOPMENT OF CORPORATE SOCIAL RESPONSIBILITY ACTIVITIES. *Tendencias*, 20(1), 53-76.
- Barrera Liévano, J. A., Parada Fonseca, S. P., & Serrano Serrato, L. V. (2020). Empirical analysis of correlation between the capital structure indicator and the net profit margin indicator in small and medium enterprises. *Journal of Quantitative Methods for Economics and Business*, 29, 99-115.
- Barrera Liévano, J. A., & Parra Ramírez, S. M. (2020). DETERMINING FACTORS FOR MSMES' ACCESS TO GOTA A GOTA CREDIT. *Revista republicana*, (28), 217-236.
- Blanco Alvarado, C. (2014). The crisis of the Andean Community. *Revista de Derecho*, (42), 1-32.
- Carrasquilla, R. S., and Rivero, C. N. (2015). LA COMUNIDAD ANDINA DE NACIONES (CAN)/THE ANDEAN COMMUNITY OF NATIONS. *Revista De Derecho UNED*, (16), 663-683.
- Chiriboga Vega, M. (2009). Is the CAN a valid integration scheme? Retrieved from <http://library.fes.de/pdf-files/bueros/quito/06812.pdf>

Andean Community (2020a). Who we are. Retrieved August 8, 2020 from: <http://www.comunidadandina.org/Seccion.aspx?id=189&tipo=QU&title=somos-comunidad-andina>

Andean Community of Nations (2020b). Annual report "50 years of trade integration of goods in the Andean Community 1969-2019". General Secretariat. Retrieved <http://www.comunidadandina.org/DocOficialesFiles/DEstadisticos/SGDE903.pdf>

Andean Community of Nations (2020c). Annual Report: Intra and Extra-Community Trade in Goods, 2010 - 2019. General Secretariat. Retrieved <http://www.comunidadandina.org/DocOficialesFiles/DEstadisticos/SGDE904.pdf>

Contipelli, E. (2016). The Andean community of nations and the evolution of the socioeconomic integration process in Latin America. *Estudios De Deusto*, 64(1), 261. doi:10.18543/ed-64(1)-2016pp261-280.

Correa, M. E., and Casas Casas, A. (2007). What is happening with the Andean Community of Nations - CAN-? *Political Paper*, 12(2), 591-632.

Gallardo Falconi, D. R., Robles Zambrano, G. K., & Moreno Arvelo, P. M. (2019). The Andean Community of Nations (CAN) and its Impact on the Economic Development of Ecuador. (Spanish). *Contemporary Dilemmas: Education, Politics and Values*, 6(1).

Godoy, H., & González Arana, R. (2010). The CAN crisis: The case of internal actors. *Investigación & Desarrollo*, 17(2), 350-367.

- González-Alvarado, T. E. (2005). Problems in the definition of microenterprise. *Revista Venezolana de Gerencia*, 10(31), 408-423.
- Held, G. (1995). Financing policies for small firms: recent experiences in Latin America. ECLAC
- Heredia Rodríguez, L., and Sánchez Macías, J. I. (2016). Evolution of public policies to promote SMEs in the andean community of nations and the european union: A comparative analysis. *Revista Finanzas y Política Económica*, 8(2), 221-249.
- Huerta, P., Contreras, S., Almodóvar, P., & Navas, J. (2010). Influence of firm size on performance: a comparative study between Chilean and Spanish firms. *Revista Venezolana de Gerencia*, 15(50), 207-230.
- Malamud, Andrés (2013). "Overlapping Regionalism, No Integration: Conceptual Issues and the Latin American Experiences." *EUI: Working Papers, Global Governance Programme* 42. 1-20.
- Malamud, Andrés. (2011). Concepts, theories and debates on regional integration. *North America*, 6(2), 219-249.
- Massad, C. (2007). *Economía para todos*. Santiago de Chile: Editorial e Imprenta Maval LTDA.
- Melgarejo, Z., Vera Colina, M., & Mora Riapira, E. (2013). "MSME competitiveness and regional development: a Colombian case study." *Tendencias*, 14(2), 184-215.
- Moncayo Jiménez, E. (2017). The Andean Community facing globalization: Elements for a concerted response. *Desafíos Journal*, 3, 6-32.

- Nieto, V., Timoté, J. A., Sánchez, A., & Villarreal, S. (2015). Business size classification in Colombia: History and limitations for a proposal. *Archives of economics*, 434, 1-48.
- Lievano, J. A. B. (2021). Correlation analysis between financial indicators of administrative efficiency and net profit margin in Colombian companies. *Quantica scientific journal*, 2(2).
- Ochoa, J. A., Peña Morales, M. A., & Duarte Payán, S. M. (2014). The Andean community: A paradigm of economic integration in Latin America. *REICE: Revista Electrónica De Investigación En Ciencias Económicas*, 2(3), 1-27.
- Romero Hidalgo, O. M., Martínez Puré, R. D., Fernández Álvarez, S., & Castaño Gómez, L. (2019). Crisis of economic integration systems in Latin America: case MERCOSUR and Andean Community of Nations. *Cuestiones Políticas*, 35(62), 14-29.
- Santiago, G. T. (2003). The problem of classification of microenterprises. *Actualidad contable FACES*, 6(7), 78-91.
- Silva Lira, I., & Sandoval, C. (2005). Local-regional economic development and productive development: the Chilean experience. CEPAL.
- Tapia, L. (1997). Políticas de fomento a la microempresa en los noventa. ECLAC
- Tremolada Álvarez, E. (2006). Andean Law: a legal systematization for the survival of the Andean Community of Nations. *Cuadernos constitucionales de la Cátedra Fadrique Furió Ceriol*, (57), 35-75.

