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# Socioeconomic development in the municipalities of Santa Catarina: what do the indicators show?

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#### **Abstract**

This paper analyzes the evolution of socioeconomic development in the municipalities of the state of Santa Catarina between 2005 and 2016. For the study of 295 municipalities, the Firjan Municipal Development Index (IFDM, acronym in Portuguese) was adopted, as well as the methodological parameter "Report on Human Development", published in Mexico in 2002, which classifies municipalities as, namely: i) tending to growth; ii) tending to development; iii) vicious circle; and iv) virtuous circle. For this, the following two approaches were used: i) intrastate approach: IFDM of the municipalities of Santa Catarina in relation to the state average; and ii) interstate approach: IFDM of the municipalities of Santa Catarina in relation to the Brazilian average. The results show a better condition for the development of the municipalities of Santa Catarina when analyzed from the perspective of the national average, as opposed to when compared to the state average, where inequalities are more evident, with a larger contingent of municipalities in the condition of underdevelopment.

Keywords: Regional Development. Mesoregions. Counties. Santa Catarina.

# Desenvolvimento socioeconômico nos municípios catarinenses: o que mostram os indicadores?

#### Resumo

Este artigo analisa a evolução do desenvolvimento socioeconômico dos municípios do estado de Santa Catarina entre os anos de 2005 e 2016. Para o estudo dos 295 municípios, adotou-se o Índice Firjan de Desenvolvimento Municipal (IFDM) e como parâmetro metodológico o "Informe sobre Desarrollo Humano", publicado no México em 2002 que classifica os municípios em: i) tendendo ao crescimento; ii) tendendo ao desenvolvimento; iii) círculo vicioso; e iv) círculo virtuoso. Para tanto, foram utilizadas duas abordagens: i) Intraestadual: IFDM dos municípios de Santa Catarina em relação à média do estado; e ii) Interestadual: IFDM dos municípios catarinenses em relação à média brasileira. Os resultados mostram uma condição melhor de desenvolvimento dos municípios catarinenses quando analisados pela ótica da média nacional, ao contrário de quando comparados com a média estadual, em que



as desigualdades são mais evidentes, com um contingente maior de municípios na condição de subdesenvolvimento.

Palavras-chave: Desenvolvimento Regional. Mesorregiões. Municípios. Santa Catarina.

# Desarrollo socioeconómico en los municipios de Santa Catarina: ¿qué muestran los indicadores?

#### Resumen

Este artículo analiza la evolución del desarrollo socioeconómico de los municipios del estado de Santa Catarina entre 2005 y 2016. Para el estudio de los 295 municipios, se adoptó el Índice de Desarrollo Municipal de Firjan (IFDM) y como parámetro metodológico el "Informe de Desarrollo Humano", publicado en México en 2002, que clasifica a los municipios en: i) tendencia al crecimiento; ii) tender al desarrollo; iii) círculo vicioso; y iv) círculo virtuoso. Para ello, se utilizaron dos enfoques: i) Intraestatal: IFDM de los municipios de Santa Catarina en relación a la media estadual; y ii) Interestatal: IFDM de los municipios de Santa Catarina en relación al promedio brasileño. Los resultados muestran una mejor condición de desarrollo de los municipios de Santa Catarina cuando se analizan desde la perspectiva de la media nacional, a diferencia de la comparación con la media estatal, en la que las desigualdades son más evidentes, con un mayor contingente de municipios en condición de subdesarrollo.

Palabras clave: Desarrollo Regional. Mesorregiones. condados Santa Catarina.

#### 1 Introduction

Approaches to the topic of economic growth and development has shown that some regions prosper and become privileged centers of productive concentration and economic growth, paving the way for a virtuous process of economic development. On the other hand, other regions remain stagnant or even decline as a result of the expansion of the former (RODOLFO, 2016).

The way to reduce these disparities has been the subject of intense debate both in the academic environment and in political instances, being one of the great challenges to be faced to improve the development level of the nation-state. The identification of these aspects has become an indispensable condition for the adoption of effective public policies for regional development. However, regarding its internal dynamics, it is still necessary to understand the peculiarities inherent to each geographic space (BEGNINI; ALMEIDA, 2016; FERRERA DE LIMA, 2019).

Thus, in order to understand the socioeconomic realities of the regions, measuring the level of development through a set of indicators that characterize the population such as health, income, education, among others, has become inherent to the very process of a nation's development. However, such measurement contrasts with the difficult task of understanding the socioeconomic realities that the different regions present and that are difficult to capture, increasingly requiring the improvement of homogeneous and effective measurement techniques.

In the case of Santa Catarina, Raiher (2013) and Rodolfo (2016) used socioeconomic indicators to measure the state's level of development and found that some regions showed high levels of development, while others remained stagnant. The West of Santa Catarina and the coastal region, including the Itajaí Valley; the eastern part of the North region; the Northern part of the South region, and the East of Greater Florianópolis appeared with the largest number of developed municipalities. Municipalities in the condition of underdevelopment were



concentrated in the central part of the state, in the Serrana region, and in the western part of the North region.

Given this context, the problem of this study arises from the following question: did the socioeconomic development of the municipalities of Santa Catarina and their respective regions improved in the period from 2005 to 2016? The identification of these aspects is important for providing more realistic diagnoses of the socioeconomic situation of these spaces, allowing the adoption of public policies that are consistent with the municipal and regional needs of that state.

To answer this question, this study analyzes the evolution of the socioeconomic development of the municipalities of Santa Catarina between 2005 and 2016, which was measured by the Firjan Municipal Development Index (IFDM). The estimation was carried out in the following two moments: first, the behavior of the IFDM of the municipalities of Santa Catarina was measured in relation to the state average IFDM (intrastate approach). Second, the municipalities were compared with the Brazilian average IFDM (interstate approach).

The article is structured in five sections. In addition to this introductory section, the following topic discusses the references that support the work, highlighting the most relevant aspects of the development. The third section describes the methodological procedures used to measure and identify the development conditions of Santa Catarina's municipalities. The fourth section presents the results of the study, showing the profile of the municipalities in comparison with the state and national average; while the last section presents the final considerations.

#### 2 Theoretical Aspects of Development

There is a consensus in the literature that economic growth tends to promote severe economic inequalities in a country, causing some regions to grow and develop faster than others, which intensifies regional imbalances. The growth and development process creates externalities that favor the continuity of inequalities, as the expansion of some regions produces regressive effects in others. Myrdal (1957) used the term circular and cumulative causation to explain how this process becomes circular and cumulative, in which a negative factor can be both the cause and effect of other negative factors.

In this context, circular and cumulative causation can further reinforce a situation of poverty or wealth in a region. Souza (2009) clarified this logic as follows: when the circle is ascending (prosperous growth situation), people tend to leave poverty, as they have more food, health, and work capacity; when the circle is descending (poverty situation), people tend to get poorer and sicker. When applying this idea to the region, the poorer it is, the lower the income, savings, and regional investment, which explains the low productivity of the factors and its underdevelopment.

Nurkse (1957), in the work entitled 'the vicious circle of underdevelopment', highlighted that the major obstacle to the development of an underdeveloped country or region is the insufficiency of internal demand, which results from the low purchasing power of its population. The low level of consumption in these economies



means that the propensity to invest in these regions is also low. As a result, the production of goods and services is restricted to the size of this market.

Souza (2009) clarified that the small size of a nation's domestic market holds back investments due to high average costs, making the production of certain types of goods unfeasible, which limits growth and economic development. This situation characterizes the problem of underdevelopment of countries or regions that are unable to expand their productive structures and, consequently, their domestic market, thus persisting in a vicious circle of underdevelopment.

For Hirschman (1958), the mechanisms capable of inducing the economic expansion of a nation can be found in specific investments, which tend to propagate the creation of new productive investments through complementary effects (chain effects that oscillate back and forth), thus breaking with the economic backwardness of underdeveloped countries and/or regions. The advantage of Hirschman's approach is that it makes room for induced investment, facilitating the management of scarce resources (DUARTE, 2015), as well as maximizing the state's ability to intervene in the economy (CORRÊA, 2019).

Douglas North in 1955, in his theory called "export base", shows that a country or region can increase its production and develop by expanding its basic export activities. According to the author, the income generated by the external demand for goods and services are also important elements to boost local activities. Thus, the success of the export base plays a vital role in determining the absolute and per capita income level of a region, promoting the expansion of employment and regional wealth (PIFFER, 2009; RODRIGUES, 2019).

According to this theory, activities can be classified as basic, which are those geared to the demand of other regions, and non-basic activities, which are those driven by basic activities, that is, those driven by the demand of the region itself. North also highlighted the importance of institutions, including the State, as being fundamental for promoting improvements in the production and/or marketing of products that make up the export agenda (PIFFER, 2009; RODRIGUES, 2019; SILVA, 2020).

However, for this economic base to be dynamized, there must be a mobilization of the local business community, in order to create the necessary conditions to increase production through the expansion of basic and non-basic activities. Such mobilization must make the region, in addition to being a stage where economic activities are developed, also become a place where regional development policies are planned, which must necessarily take into account the specific characteristics and peculiarities of each region (BELLINGIERI, 2017; SILVA 2020).

In that regard, is important to emphasize that socioeconomic development includes elements that go further increased production and improved income distribution. It is also necessary to ensure that people have access to quality public services, which would allow continuous improvement in social well-being. For this to happen, state intervention through public policies aimed at this end is essential, since the market does not play the role of offering these services (RAIHER; FERRERA DE LIMA, 2014; FERRERA DE LIMA, 2019).

Boisier (1999) and Dallabrida (2017) argue that the improvement of social well-being is linked to the need for a permanent process of progress of the region itself or the local community and each person. Which means that regional and/or local



development goes through structural changes that take place at the base, by the leadership of the regional and/or local community, which is in charge of enabling and leveraging its resources to improve economic and social well-being. population. In this case, the synergy of the community for interaction and territorial cooperation, in the sense of increasing trust among its members, is presented as a fundamental element for carrying out actions in favor of social well-being.

Based on Sen and Williams (1982), Fukuda-Parr (2003) cites two main approaches to the study of development throughout history that emphasize basic needs and, although they have different meanings, the purpose is human well-being. The first is the neoliberalism approach, where well-being is defined by the utilitarian doctrine of utility maximization, however, the neglect of rights, freedoms and human organization are critical that limit this approach. The second approach is that of basic needs, which considers the provision of goods and services as the main "need" of people, not analyzing, therefore, a resource base to define human well-being, being the satisfaction of people's material needs. as the main use of public policies, without paying attention to human rights and individual freedoms.

Over the years, other studies of human capabilities have received greater attention regarding freedom from social and political oppression, with emphasis on gender issues¹. Thus, the transition from an era of development planning to an era of globalization changed the development agenda, in which the issue of social inequalities is presented as one of the main promoters of this transition. Consequently, the people's level of ability came to be understood through human development, in which economic growth is only a means and not an end in itself (FUKUDA-PARR, 2003).

Thus, the construction of the Human Development Index (HDI), presented in the 1990s by the United Nations Program (UNDP) and authored by Armatya Sen and Mahbub ul Haq, refers to aspects of monitoring social well-being and equity for development. Thus, as it is an indicator that places the individual at the center of well-being analysis, the HDI has since become a landmark in terms of how to understand the social well-being of the people of a nation, taking into consideration health, income, and education as pillars for human development.

Even though it is not possible to capture all the complexities that involve human beings and their sense of well-being, the HDI serves as a guide for the implementation of public policies, as well as for the construction of other indices, such as the Firjan Municipal Development Index. (IFDM), which adopts a methodology that is similar to the one used by the HDI. Thus, the role played by the state in the progress and strengthening of underdeveloped regions needs to meet the interests of society and, despite the HDI being a static representation, it contributes to state decisions and actions for this purpose.

<sup>&</sup>lt;sup>1</sup> For Fukuda-Parr (2003), the evolution of the study of human development can be evidenced in the topics studied in the following UNDP reports: sustainable development in 1994; gender equality in 1995; poverty in 1997; consumption and sustainable development in 1998; human rights in 2000; and democracy in 2002.



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## 3 Methodological procedures

For the analysis of the socioeconomic development of the 295 municipalities of the state of Santa Catarina between 2005 and 2016, the 'Report on Human Development', published in Mexico in 2002 (UNDP, 2002) was adopted as a parameter, which classified the Mexican states according to their development profiles, being found by the average value of each dimension of the Human Development Index (IDH)<sup>2</sup>.

For this study, the Firjan Municipal Development Index (IFDM) was used, which uses data made available annually from official sources covering the variables health, education, and employment and Income, unlike the HDI, which is based on the demographic census carried out every ten years<sup>3</sup>. The IFDM classifies the development status of municipalities as follows: high development (0.800-1.000); moderate development (0.600-0.799); regular development (0.400-0.599); and low development (less than 0.400).

The UNDP methodology (2002) takes into consideration four classifications of development, namely: a) tending to growth, when the income dimension of the HDI of a region is greater than the average of the reference region; b) tending to development, when only the longevity and/or education/knowledge dimensions of the HDI are above the average of the reference region; c) vicious circle, when the three dimensions of the HDI (income, longevity, and education/knowledge) present values below the average of the reference region; and d) virtuous circle; when all dimensions of the HDI must present values above the overall average.

In Table 1, this information is systematized and adapted to the Firjan Municipal Development Index (IFDM), which was used as a basis for analyzing the municipalities in Santa Catarina.

Table 1 - Classification of municipalities according to their socioeconomic development profiles

Classification	Municipality situation						
tending to growth	IFDM-Income > than the average						
tending to development	IFDM-Health and/or IFDM-Education > than the average						
Vicious circle (Underdeveloped)	IFDM-Income, IFDM-Health, and IFDM-Education < the						
	average						
Virtuous circle (Developed)	IFDM-Income, IFDM-Health, and IFDM-Education > than						
	the average						

Source: Raiher and Ferrera de Lima (2014); Corrêa, Bidarra and Piffer (2019) adapted from the Report on Human Development (2002); and IFDM - Firjan (2016).

<sup>&</sup>lt;sup>3</sup> The HDI is more complete, as the demographic census provides a database with reference to the knowledge of the living conditions of the population for each Brazilian household. The IFDM was chosen for providing annual data, in this case from 2005 and 2016.



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<sup>&</sup>lt;sup>2</sup> According to the report of the United Nations Development Program (UNDP, 2019), the dimensions and respective values of development are, namely: Very High (0.800-1.000); High (0.700-0.799); Medium (0.555-0.699); and Low (0.350-0554).

The study includes the following two types of comparisons: intrastate comparison, in which the IFDM of the municipalities is compared with the weighted average (WA) of the population of the municipalities in the state of Santa Catarina; and interstate comparison, in which the IFDM of the municipalities is compared with the weighted average (WA) of the population of all Brazilian municipalities. The following equation was used to calculate the weighted average (WA):

$$WA = \frac{\sum IFDM_j \times POP_j}{POP_i} \tag{01}$$

Where:  $\Sigma IFDM_j$  = value of the Firjan Index of the municipality j;  $POP_j$  = population of municipality j; and  $POP_i$ = total population of the reference unit i. The IFDM data of the municipalities come from the Firjan system database, referring to 2005 and 2016.

# 4 Results and discussion

According to IBGE (2020), the state of Santa Catarina had 7,164,788 inhabitants in 2019, with a population density of 65.27 people per km2, distributed among its 295 municipalities. The 2010 Demographic Census showed that about 84.00% of the population was urban, which showed a growth of 5.28% in relation to the 2000 Census<sup>4</sup>. The state had a Human Development Index (HDI) of 0.774, classified as a high standard of development, surpassed only by the Federal District (0.824) and the state of São Paulo (0.783).

In 2017, the Gross Domestic Product (GDP) of Santa Catarina was R\$277.19 billion, being the 6th largest GDP in the country, with a 4.21% share of the national GDP. In terms of average household income, in 2018 the value found was R\$1,660.00 and the unemployment rate was approximately 6.30%, which is lower than the national average (11.80%). On the other hand, in 2018 the Gini Index<sup>5</sup> was 0.76, being the 12th state with the highest concentration of income in Brazil and the first in its region, as the states of Rio Grande do Sul and Paraná presented indices of 0. 78 and 0.77, respectively (IBGE, 2020).

Development Index (IFDM) showed similar results to those found by the HDI in 2016. Most municipalities (83.50%) presented moderate development and 15.50% of municipalities presented high development, that is, approximately 99.00% of the municipalities in the state presented an IFDM above 0.600, being surpassed only by São Paulo, where the percentage of municipalities with this profile was 99.40%.

Such aspects indicate that Santa Catarina's municipalities presented higher socioeconomic development than the other states (with the exception of São Paulo), since in this comparison only three municipalities were classified as Regular Development and none with Low Development. However, as discussed by Rodolfo

<sup>&</sup>lt;sup>5</sup> The value of the Gini Index ranges between 0 and 1, where the closer to 1, the greater the income equality of a state.



<sup>&</sup>lt;sup>4</sup> Population data for 2018 estimated by the Brazilian Institute of Geography and Statistics (IBGE). For urban population, the data refer to the 2000 and 2010 Demographic Censuses (IBGE, 2020).

(2016), regional inequalities during the 2000s and early 2010s increased in the state, which is also confirmed by this study<sup>6</sup>, because when comparing the municipalities with each other, it is noticed that some presented little evolution in the socioeconomic aspect between 2005 and 2016.

To geographically locate the municipalities in the condition of 'tending to growth', 'tending to development', with 'virtuous development', or in the 'vicious circle of underdevelopment', it is important to highlight the geographic division of the state of Santa Catarina by mesoregions, as illustrated in Figure 01.

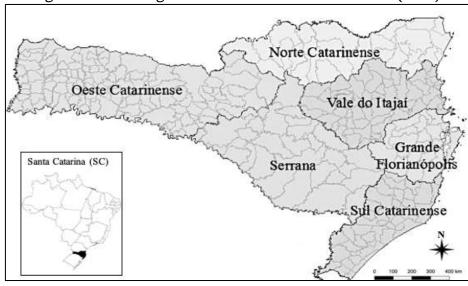


Figure 01 - Mesoregions of the state of Santa Catarina (2020)

Source: Elaborated by the authors from Craice and Pezzo (2015).

By intrastate analysis, which compares the IFDM of each municipality with the average of all municipalities in the state, the mesoregion of Itajaí Valley was the one that presented the highest percentage of municipalities in the condition of 'virtuous circle' and 'tending to development' in 2005 and 2016, representing 75.92% and 79.63% of the municipalities in the mesoregion, respectively. In the condition of underdevelopment (vicious circle), the Serrana mesoregion presented the highest percentage of municipalities (in relation to the total of the mesoregion) with this profile, 76.67% in 2005 and 63.33% in 2016. The South mesoregion of Santa Catarina was the one that held the largest number of municipalities in the condition of 'tending to growth' in the two reference years.

Such aspects can be observed in Table 01, where the number of municipalities per mesoregion is presented according to their development conditions.

<sup>&</sup>lt;sup>6</sup> Based on the Informe sobre Desarrollo Humano published in Mexico in 2002; Raiher and Ferrera de Lima (2014) and Corrêa, Bidarra and Piffer (2019).



Table 01 - Number of municipalities in Santa Catarina by mesoregion and socioeconomic development condition - intrastate approach - 2005 and 2016

Status/Mesoregion	West of Santa Catarina		North of Santa Catarina		Serrana		Itajaí Valley		Greater Florianópolis		South of Santa Catarina	
	2005	2016	2005	2016	2005	2016	2005	2016	2005	2016	2005	2016
Virtuous circle	08	08	04	02	00	00	13	8	01	01	02	02
Tending to development	71	76	08	14	04	07	28	35	15	10	25	21
Tending to growth	02	04	01	01	03	04	01	00	00	01	04	04
Vicious circle	37	30	13	09	23	19	12	11	5	9	13	17

In terms of better socioeconomic development conditions, in addition to the Itajaí Valley mesoregion, the West of Santa Catarina mesoregion also presented a significant number of municipalities in the condition of 'virtuous development' and 'tending to development'. According to the Table, the mesoregions of Greater Florianópolis and South of Santa Catarina, whose municipalities were mostly in the 'tending to development' condition in 2005, presented reduction in the number of municipalities with this profile in 2016, losing together nine municipalities to the lower categories of development.

Figure 02 shows the spatial distribution of the municipalities of Santa Catarina according to their socioeconomic development profiles from the perspective of the state average - intrastate approach. From the Figure, it is observed that the municipalities included in the 'virtuous circle' and 'tending to development' are concentrated in the West of Santa Catarina (west side), Itajaí Valley (central and eastern part), Greater Florianópolis (east side), and South of Santa Catarina (central part) mesoregions<sup>7</sup>, where municipalities located in the central region of the state remained with the greatest traces of underdevelopment.

<sup>&</sup>lt;sup>7</sup> Indicates the location of municipalities within the mesoregion.



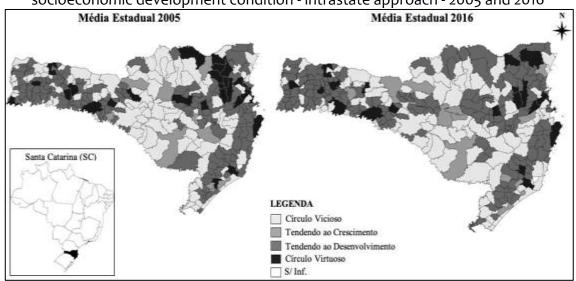


Figure 02 - Spatial distribution of the municipalities of Santa Catarina by socioeconomic development condition - intrastate approach - 2005 and 2016

In terms of the worst development conditions, the North and Serrana mesoregions presented the highest percentages of municipalities in a vicious circle of underdevelopment in relation to their total number of municipalities. However, it is important to emphasize that these mesoregions showed a reduction in the number of municipalities with this profile from 2005 to 2016, indicating that there was a significant improvement in their socioeconomic conditions in the period.

Figure 03 shows the percentages of municipalities in the condition of Tending to Development and in a Vicious Circle of underdevelopment by mesoregion. The percentage of municipalities with this profile was 86.7% of the number of municipalities in the state in 2005, and 88% in 2016. From the Figure, it is observed that there was a significant increase in the proportion of underdeveloped municipalities in the period (included in the Vicious Circle) in the mesoregions of Greater Florianópolis and Sul Catarinense, as well as a drop in the proportion of municipalities in the Tendendo ao Desenvolvimento condition. On the other hand, the other mesoregions showed an increase in the proportion of municipalities in the condition of Tending to Development, with a decrease in the percentage of municipalities in the condition of Vicious Circle.



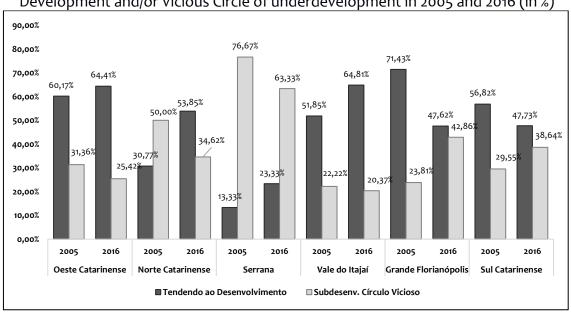


Figure 03 - Municipalities in Santa Catarina in the condition of Tendling to Development and/or Vicious Circle of underdevelopment in 2005 and 2016 (in %)

Such inequalities in terms of development between municipalities and between regions are a reflection of the income inequalities existing in the state, because although Santa Catarina enjoys a better condition than the other units of the federation with regard to income distribution, they remain in their territory municipalities and regions with high inequalities, with the municipalities located in the western region of Santa Catarina and in the Planalto Serrano presenting the highest levels of concentration (NEVES et al., 2015).

Figure 04 shows the spatial distribution of municipalities in Santa Catarina in the condition of a vicious circle of underdevelopment in 2005 and 2016. From the figure, it is possible to observe a predominance of these municipalities in the central region of the state. However, it is important to note that there was a reduction from 28 to 21 municipalities in the condition of 'virtuous circle' in the period, while the number of municipalities in the condition of 'vicious circle' went from 103 to 95.

It is also verified that many of the municipalities that remained in the condition of underdevelopment are located in the Serrana and Norte mesoregions. There was an increase in municipalities with this characterization in the period in the mesoregions of Greater Florianópolis and South of Santa Catarina. In total, 55 municipalities in the state were unable to get out of the underdevelopment condition observed in 2005, while 37 more municipalities joined this condition in 2016.

On the other hand, the municipalities that managed to leave the condition of underdevelopment (vicious circle) for the condition of 'tending to growth', Tending to development' or 'virtuous circle' were 44. Out of these, only the municipality of Vargeão, located in the West mesoregion, managed to migrate from the 'vicious circle' to the 'virtuous circle' of development.



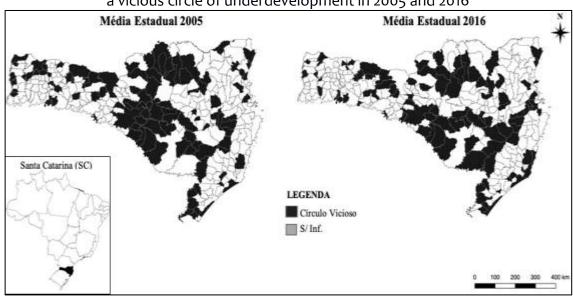


Figure 04 - Spatial distribution of municipalities in Santa Catarina in the condition of a vicious circle of underdevelopment in 2005 and 2016

Regarding municipalities that were found in the condition of 'virtuous circle', 13 remained in this condition from 2005 to 2016, with emphasis on the mesoregion of Itajaí Valley, which concentrated seven municipalities. Eight municipalities entered this category in the period, while 13 left. In the Greater Florianópolis mesoregion, only Florianópolis (capital of the state) was in the condition of 'virtuous circle' in the two years analyzed, while only the municipality of Tubarão remained in this category in the South mesoregion of Santa Catarina.

Figure 05 illustrates the spatial distribution of municipalities in the condition of 'virtuous circle' in 2005 and 2016. From the figure, it is observed that there was a reduction in the number of municipalities with this characterization, since the mesoregions of Itajaí Valley and North of Santa Catarina showed a reduction in the number of members in this condition in the period from 13 to 8 and from 4 to 2, respectively. The Serrana mesoregion did not have any municipality in this condition in the two reference years. The low development, especially in this last mesoregion, has been fundamental for the deepening of regional inequalities in the state when the analysis is made from the perspective of the state average - intrastate approach.

For Trovão (2019), these inequalities may be associated with the loss of the proper functioning of the labor market during the 2000s, the inability to absorb population growth by national economies, and the lack of public policies in the state. This deterioration of the national state culminated, during the 2010s, in obstacles to the implementation of public policies to improve income distribution and reduce regional inequalities in Brazil.

As an example of these obstacles, the conduction of the National Policy for Regional Development (PNDR)<sup>8</sup> can be mentioned, which was instituted in 2007 with the objective of combating regional inequalities, focusing on municipalities with low socioeconomic indicators, and whose advances were little significant until 2016.

<sup>&</sup>lt;sup>8</sup> For more details, see the study by Magalhães, Monteiro Neto, Costa, Resende and Sousa (2017), who carried out an evaluative approach to PNDR actions in several Brazilian municipalities.



Therefore, the economic and social vulnerabilities that demand public policies to fight them became more evident from 2010 onwards.

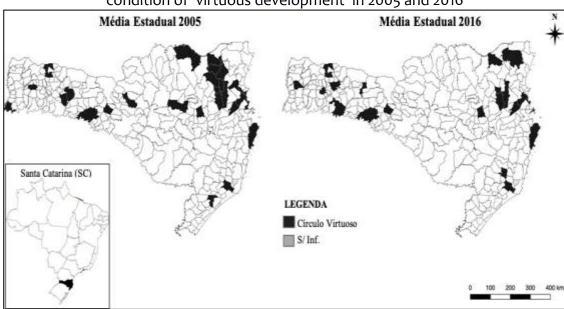


Figure 05 - Spatial distribution of the municipalities of Santa Catarina in the condition of 'virtuous development' in 2005 and 2016

Source: Prepared by the authors from data from the IFDM/FIRJAN (2020).

The conditions of inequality in Santa Catarina were also noted by the Santa Catarina Development Plan 2030 (PDSC-2030). In order to build strategic scenarios for the development of the state for the period 2018-2030, the PDCS-2030 was based on the following three demographic phenomena that help to understand inequalities: i) movements towards coastal regions, which is a phenomenon known as 'coastalization'; ii) accelerated growth of the largest cities and urban agglomerations; and iii) the end of the so-called "demographic bonus", with prevailing trends of falling fertility rate and proportional increase in the elderly population (SANTA CATARINA, 2018).

The phenomenon of 'coastalization' was based on the strong population growth of coastal regions between the 1990s and 2010s. Larger cities, especially those located in municipalities with more than 50,000 inhabitants, absorbed most of the population, while smaller municipalities (with less than 20,000 inhabitants) had their population reduced. Finally, the end of the 'demographic bonus' is explained by the increase in the proportion of elderly people in relation to the economically active population (SANTA CATARINA, 2018).

Such demographic movements highlighted in the study of the PDSC-2030 (2018) contribute to the understanding of uneven growth between municipalities and regions, confirming the need for planning a municipality more in the sense of defining a complex distribution of public services between the largest and smallest of the population. state, such as public education, public health growth, in addition to urban growth, with a view to security, control of social well-being.

However, when an analysis made from the perspective of the national average (interstate approach), that is, the one that compares the IFDM of Santa Catarina municipalities with the average of the IFDM of municipalities throughout the country,



a greater number of municipalities in the condition of Circle is observed. Virtuoso both in 2005 and 2016, which confirms a better development condition of the state's municipalities, compared to the national scenario, as shown in Figure 06.

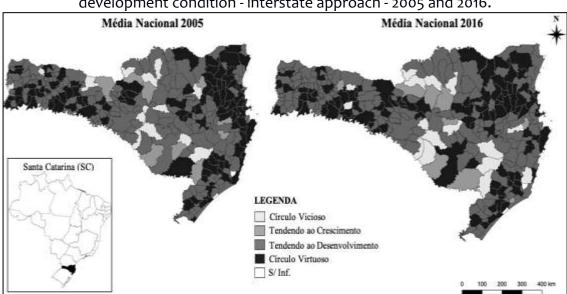


Figure o6 - Spatial distribution of Santa Catarina municipalities by socioeconomic development condition - interstate approach - 2005 and 2016.

Source: Prepared by the authors from data from the IFDM/FIRJAN (2020).

These aspects show that the municipalities in the state had an IFDM above the average of Brazilian municipalities, that is, that there is a lower socioeconomic inequality in Santa Catarina municipalities when compared to the national average of the IFDM. In the Virtuoso Development Circle, it was found that in 2005 there were 106 municipalities, increasing to 99 in 2016. The number of municipalities Tendant to Growth remained constant, in a total of 9, and the municipalities Tendant to Development showed a moderate increase from 163 to 168. As for those included in the Vicious Circle of underdevelopment, there was a slight increase from 14 to 16 municipalities.

In any case, it is important to emphasize that when the municipalities are analyzed from the perspective of the state average (intrastate approach), inequalities between regions and between municipalities are more evident. On the other hand, when the analysis is carried out from the perspective of the national average (interstate approach), the good classification of the HDI and IFDM reflects the better development conditions of the municipalities in the state, even if the improvement for the Virtuoso Development Circle or the reduction in the number of included in the Vicious Circle has not been recorded in the period.

Given the above, whether within the scope of intrastate and/or interstate analysis, it is important to highlight the need for instruments that stimulate the economy of municipalities in vulnerable economic and social conditions. Such instruments ratify the importance of the role played by the state in promoting egalitarian economic development, which makes it possible to create conditions for municipalities with worse socioeconomic indicators to be able to break the underdevelopment (vicious circle) and plan development under new perspectives, new actions, and new practices.



## **5 Final considerations**

This paper analyzed the evolution of the socioeconomic development of the municipalities of Santa Catarina from 2005 to 2016, which was measured by the Firjan Municipal Development Index (IFDM). The analysis was performed by comparing the IFDM of municipalities in Santa Catarina in relation to the average of municipalities in the state (intrastate approach) and in relation to the average of Brazilian municipalities (interstate approach). For this, the municipalities were categorized as, namely: a) tending to growth; b) tending to development; c) vicious circle - or underdeveloped; and d) virtuous circle - or developed.

In general, the results show that the development condition of the municipalities of Santa Catarina is more noticeable when they are analyzed from the perspective of the national average of the IFDM, since approximately a third of them were included in the virtuous circle of development. Th mesoregions with the largest number of municipalities classified as developed from this perspective are, namely: the West, South, and Itajaí Valley, which totaled 86 municipalities in this condition in 2016.

On the other hand, when the analysis is carried out from the perspective of the state average, regional and municipal inequalities are more evident, with the most developed municipalities being concentrated in the West and Itajaí Valley mesoregions, with Greater Florianópolis, South, North, and Serrana mesoregions presenting the highest percentages of municipalities in the condition of underdevelopment, which denotes the presence of intense regional inequalities in the State.

Such evidence shows that both developed and underdeveloped municipalities are geographically heavily concentrated in Santa Catarina, regardless of the approach used for analysis (intrastate and/or interstate). The fact that the most developed municipalities are concentrated in only two mesoregions, with the central part of the state bringing together the largest contingent of municipalities in the condition of low development is worrying and deserves the full attention of those responsible for planning regional development policies.

Therefore, in view of the intense regional inequalities observed in Santa Catarina in terms of development, it is suggested that new studies be carried out to identify other possible factors, which in addition to those pointed out in this study, such as: income concentration, coastalization, growth of urban agglomerations and the end of the "demographic bonus", may also be contributing to the deepening of regional inequalities in the state. Such diagnoses are fundamental for the promotion of public policies capable of breaking the vicious circle of underdevelopment of municipalities and/or regions that are in this condition, improving their socioeconomic profiles.

In this sense, studies on regional or local development that seek to understand the role of individuals to improve the socioeconomic well-being of the places where they live are also essential to alleviate the underdevelopment of regions with poor socioeconomic indicators. To this end, the State, as an agent for formulating public policies, has the role of promoting, instrumentalizing and guiding such communities, providing conditions that lead to multiple dimensions (economic, social, environmental, etc.) for development.



However, it is important to emphasize that an analysis such as the one carried out in this study requires some care, as interstate and/or interregional comparisons can present misleading results for not capturing the dimension of internal inequalities existing in the regions. This was the case of Santa Catarina, whose municipalities presented good results when compared to the national average of the IFDM, but presented much lower results when compared to the state average.

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