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Children and adolescents: magnitude of poverty and extreme monetary poverty in Brazil

July 2021

Overview

- Data source: microdata from Continuous PNAD (2012-2019).

- Lines of monetary poverty and extreme poverty – single national lines -, proposed by the World Bank, and regionalized lines, proposed by Ipea, IGBE and CEPAL, were used.

Road map

Magnitude of poverty and extreme monetary poverty of children and adolescents

Why 0-to-17-year-olds?

Why look at monetary poverty?

Why single national lines and regionalized lines?

What is the magnitude of poverty and extreme monetary poverty of this group?

Age-group analysis block

Territorial Analysis

Average income gap and severity of poverty

Why look at poverty in the 0-to-17-year-old age group?

Magnitude of poverty and extreme monetary poverty of children and adolescents (0-to-17-year-olds)

- The proposed analysis of the situation of children and adolescents is aimed at providing a gama of information that will enable the identification of possible barriers to **social mobility**:
- This initial objective is aimed at articulating information to aid in the definition of interventions for the reduction of these barriers, thus fostering greater **equality of opportunities;**
- With this in mind, we start with an analysis of **0-to-17-year-old children and adolescentes**, covering youngsters up to the maximum age for basic compulsory education in Brazil.

Why look at monetary poverty?

Why monetary poverty?

- As a starting point in the analysis, we look at **per capita household income**[1] and at **monetary poverty**, for three main reasons:
  i. the identification of intergenerational poverty trap requires an analysis of the correlation between the father's income (the person responsible) and the income predictors of the offspring (inputs in the child's human capital production function and intermediate indicators of educational outcomes), *i.e.*, we should start with household income to be able to deal with intergenerational mobility of income;
  ii. monetary poverty metrics are less subjective and are based on better-founded parameters than other poverty dimensions;
  iii. in most cases, governments are guided by income criterion to define eligibility for social programs.

[1] Per capita household income is made up of the sum of habitual income from all work and effective income from other sources of members of the household (except for people whose condition in the household was that of pensionist, domestic worker or relative of the domestic worker), divided by the members of the household..

Why use single national lines and regionalized lines?

Why single national and regionalized lines?

- Two references were used to identify poverty and extreme monetary poverty in Brazil: **the World Bank**, which proposes single lines of poverty and extreme poverty, applied nationwide, and **Ipea, IBGE** and **CEPAL**, which propose regionalized lines, considering the structure of regional food baskets;
- Opting for an analysis based on World Bank lines makes it possible to compare the situation of poverty with that of other countries;
- On the other hand, an analysis based on regionalized lines allows one to see the differences between cost of living and consumer patterns that are regionally distinctive, enabling more accurate interventions;
- The lines proposed by the World Bank, for poverty in upper-middle income countries and for extreme global poverty, are equivalent to income up to $5.50/day (purchase power parity, PPP 2011) and US$ 1.90/ Day (PPP 2011), respectively. In 2019, they corresponded to approximately R$ 436.00/month per capita and R$ 151.00/month per capita;
- The poverty and extreme poverty lines proposed by IPEA, IBGE and Cepal, in 2019, were, on average, R$ 331.50/month per capita and R$165.75/month per capita, respectively.

*The extreme poverty line of the Bolsa Familia program is R$ 89.00/month per capita and the poverty line is R$ 178.00/month per capita.

Regionalized poverty lines – 2019

- The UFs that do not present a specific line, receive the regional value, according to the residential area;
- For example, São Paulo presents specific lines for each area: urban-metropolitan, urban-non-metropolitan and rural;
- On the other hand, the Northeast line is applied in Maranhão.
  - That is, for the rural area of Maranhão, the value for the Northeast rural area is applied; for the urban area of Maranhão, the value for the Northeast urban area is applied.
- Extreme regionalized poverty lines are calculated as being half the value of regionalized povery lines.

Regionalized lines (2019)	
Region	Value (month)
Rio de Janeiro – Metropolitan Area	R$ 388.95
Rio de Janeiro – Urban Area	R$ 329.91
Rio de Janeiro – Rural Area	R$ 298.66
São Paulo – Metropolitan Area	R$ 392.42
São Paulo – Urban Area	R$ 347.27
São Paulo – Rural Area	R$ 281.29
Porto Alegre – Metropolitan Area	R$ 434.09
Curitiba – Metropolitan Area	R$ 357.69
South – Urban Area	R$ 340.33
South – Rural Area	R$ 312.55
Fortaleza – Metropolitan Area	R$ 309.07
Recife – Metropolitan Area	R$ 406.31
Salvador – Metropolitan Area	R$ 382.00
Northeast – Urban Area	R$ 350.75
Northeast – Rural Area	R$ 312.55
Belo Horizonte – Metropolitan Area	R$ 305.60
Southeast – Urban Area	R$ 274.35
Southeast – Rural Area	R$ 232.67
Belém – Metropolitan Area	R$ 347.27
North – Urban Area	R$ 357.69
North – Rural Area	R$ 312.55
Federal District – Metropolitan Area	R$ 336.86
Midwest – Urban Area	R$ 291.71
Midwest – Rural Area	R$ 253.51

Regionalized poverty line

0-to-17-year-old children and adolescents under conditions of poverty or extreme poverty

Definition

- Children and adolescents are considered to be under conditions of poverty or extreme poverty when they comprise households* in which the per capita household income is under the analysed line.

*People residing in the household as pensionists, domestic workers or relatives of domestic workers are not considered to be components of the household.

Measures to analyse poverty

Measures presented for analysis

- The main measures presented for analysis can also be seen based on populational clippings by age group, sex, race or skin color, and residential area:
  - ➢ **number of poor people**;
  - ➢ **percentage of poor people**;
  - ➢ **total income gap**, known as the necessary volume of resources to promote eradication of poverty, were it to be perfectly allocated* and;
  - ➢ **average income gap**, represents the total income gap divided by the number of poor people, *i.e.*, the monetary distance between average income of poor people and the poverty line.

*The measures presented for analysis of poverty are based on income declared in Continuous PNAD and in the lines selected for analysis. Thus, the necessary volume of resources for the eradication of poverty represents the total needed to raise the per capita income of each person under conditions of poverty up to the poverty line. To exemplify, this would be the amount spent were there to be an income transference program that transferred the exact total so that each person would reach the poverty line, disregarding possible operational costs.

Optical analysis of poverty

Types of possible visions

- Two visions for looking at poverty will be presented: the incidence (or percentage) and the distribution of poverty or extreme poverty;
- The **incidence or percentage of poor people** represents the proportion of poor people within a certain group. For example, when we wish to know the percentage of poor children and adolescents, we look for those children and adolescents who are below the poverty line;
- On the other hand, we can also look at **poverty distribution**, which represents the distribution of poor people by groups. For example, when we wish to know in which age groups are poverty-stricken people. Poverty distribution by age group in Brazil* tells us that from a total of poor people, 13.3% are 0-to-5-year-olds, 9.2% are 6-to-9-year-olds, 11.9% are 10-to-14-year-olds, and 7.1% are 15-to-17-year-olds;
- These measurements are available for nationwide analysis based on clippings by age group, sex, race or skin color, and residential area. For other levels, by region or Unit of the Federation (UF), there is a variation on the type of filters, due to the reduction in sample size, as the panel does not permit crossing filters that present samples with less than 100 observations.

*Information based on the 2019 regionalized poverty line.

Executive Summary

- Approximately 40% of Brazil's poverty and extreme poverty was found to be among children and adolescents in 2019.
  - ➢The incidence of poverty and the number of poor among 0-to-5-year-old children is the largest among the groups studied;
  - ➢This age group also represents the largest total income gap;
  - ➢On the other hand, the average gap between children and adolescents is lower than that among people aged 18 or older.
- The trajectory of poverty indicators between children and adolescents, which had been improving between 2012 and 2014, began to get worse as of 2015, probably associated with the economic crisis.
- Despite the number of poor people begin to fall in 2018, both the percentage as well as the total and average gaps were at levels near to those at the beginning of the series.
- We observe, however, that poverty is not distributed equally throughout the country, neither in regional terms nor in the case of demographic groups - the Northeast, as well as urban areas, concentrates the largest proportion of poor people; and the majority of poor people are Black.

Executive Summary

- We can also note that even if poverty is not concentrated in a locality, it is possible that the incidence of poverty in that location is high - the North concentrates 16.7% of the poor people in the country, but the chances of a resident of the region being poor is 48.3%.
- The South and Midwest have the lowest incidence and distribution of poverty in the country
- Over time, both the poverty gap and the severity in the condition presented similar features
- Indicators are worrisome, especially when it comes to a population group that suffers the highest incidence of poverty and is in the phase of building its human capital, which will enable it to gain traction for social mobility
- It is necessary to shed a light on this reality and think of alternatives to guarantee more chances for those that will be the country's productive force over the coming decades

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Highlights

Children and adolescents: magnitude of poverty and extreme monetary poverty in Brazil

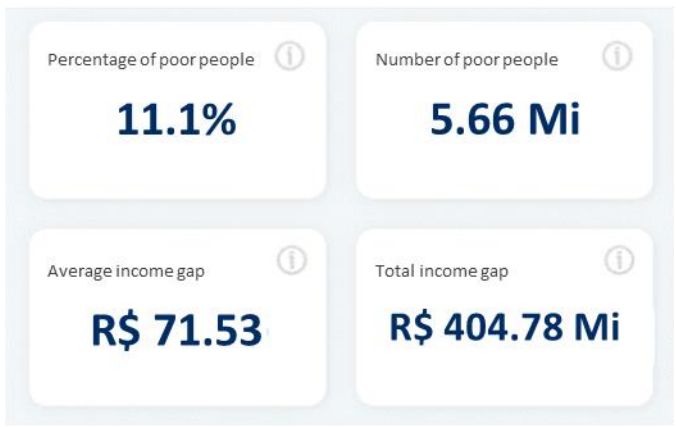
Synthesis of the magnitude of poverty and extreme poverty of children and adolescents in Brazil - 2012

- For the year 2012, the regionalized line of extreme poverty captures a greater percentage of extremely poor children and adolescents (11.3% as compared to 9.7% of the national line) and therefore expresses a greater need for resources for the eradication of extreme poverty (total income gap), if these were to be perfectly allocated;

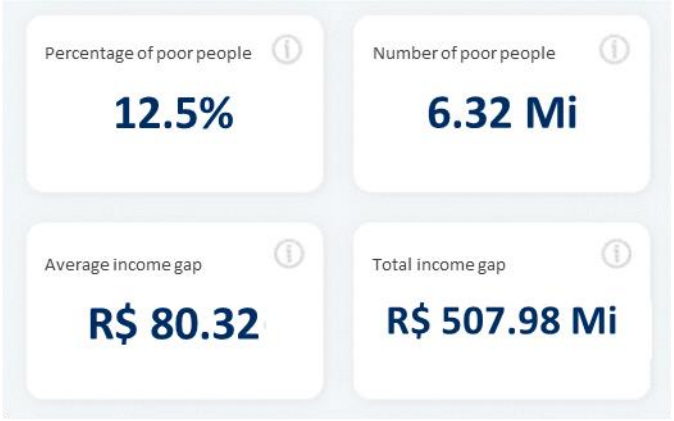
- In contrast, the regionalized line of poverty captures a lower percentage of poverty (31.8% as compared to 42.9% of the national line), demonstrating that the difference in cost of living can greatly influence the volume of resources necessary for the eradication of poverty. (R$ 2.43 billion/month, or R$ 29.2 billion/year, as compared to R$ 4.52 billion/month, or R$ 54.2 billion/year of the national line)

Synthesis of the magnitude of poverty and extreme poverty of children and adolescents in Brazil - 2019

- For 2019, the standard is analogous: the regionalized line of extreme poverty captures a higher percentage of extremely poor children and adolescents (12.5% as compared to 11.1% of the national line) and therefore expresses greater need for resources for eradication of extreme poverty (total income gap), were they to be perfectly allocated;
- In contrast, the regionalized line of poverty captures a lower percentage of poverty (31.2% compared to 41.0% of the national line), demonstrating that the difference in cost of living can greatly influence the volume of resources necessary for the eradication of poverty. (R$ 2.35 billion/month, or R$ 28.2 billion/year, compared to R$ 4.15 billion/month, or R$ 49.8 billion/year of the national line).

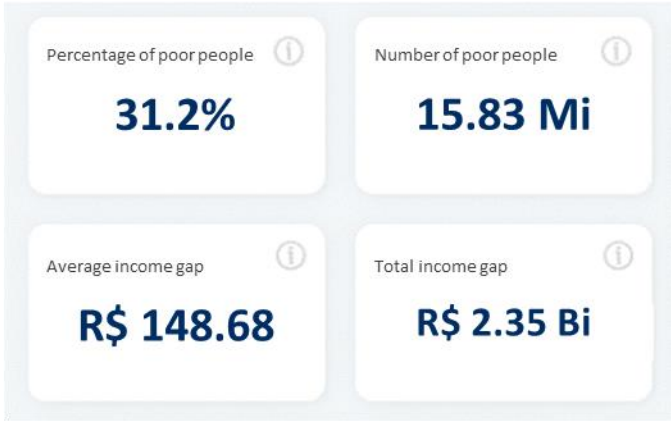


National extreme poverty line



Regionalized extreme poverty line

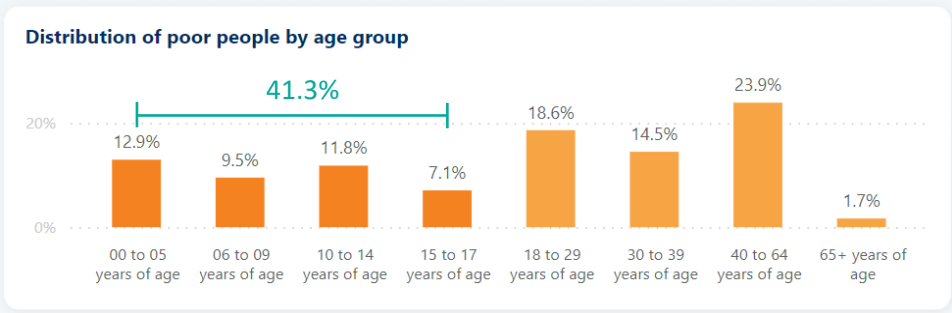
National poverty line



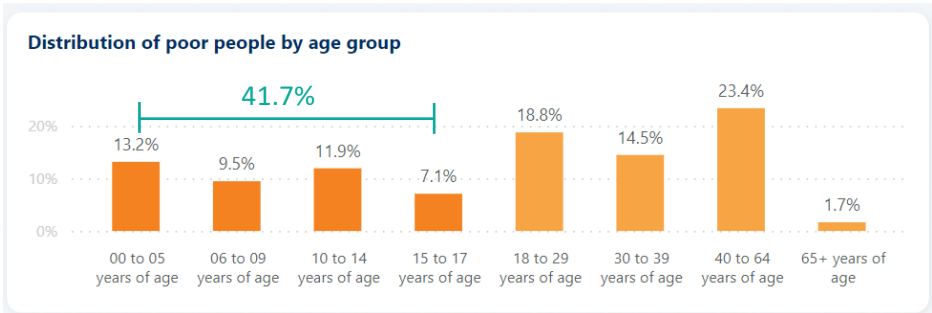
Regionalized poverty line

In Brazil, approximately 40% of poverty and extreme poverty were among children and adolescents in 2019

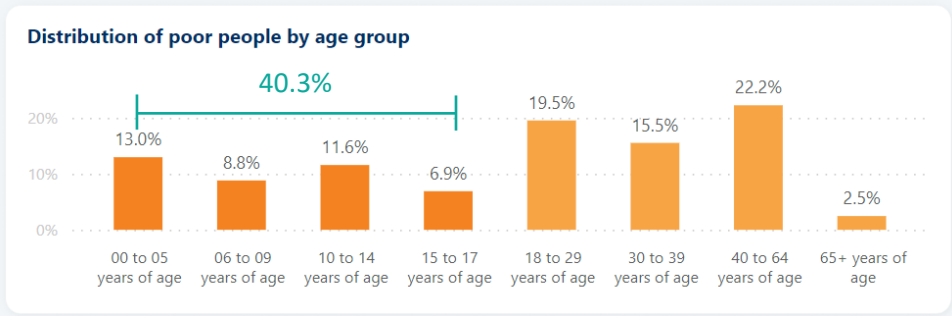
- Even using different poverty and extreme poverty lines, it is noted that they do not show significant variation in the distribution of poverty by age group in Brazil;
- Based on the lines proposed by the World Bank, in 2019, 41.3% of extreme monetary poverty was concentrated in the children and adolescent group and 40.3% of poverty was in this group as well;
- According to the regionalized lines, these concentrations were 41.7% and 41.5%, respectively.



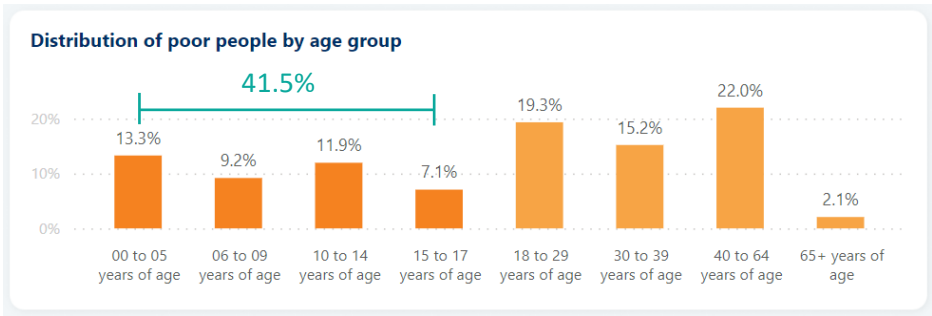
National extreme poverty line



Regionalized extreme poverty line



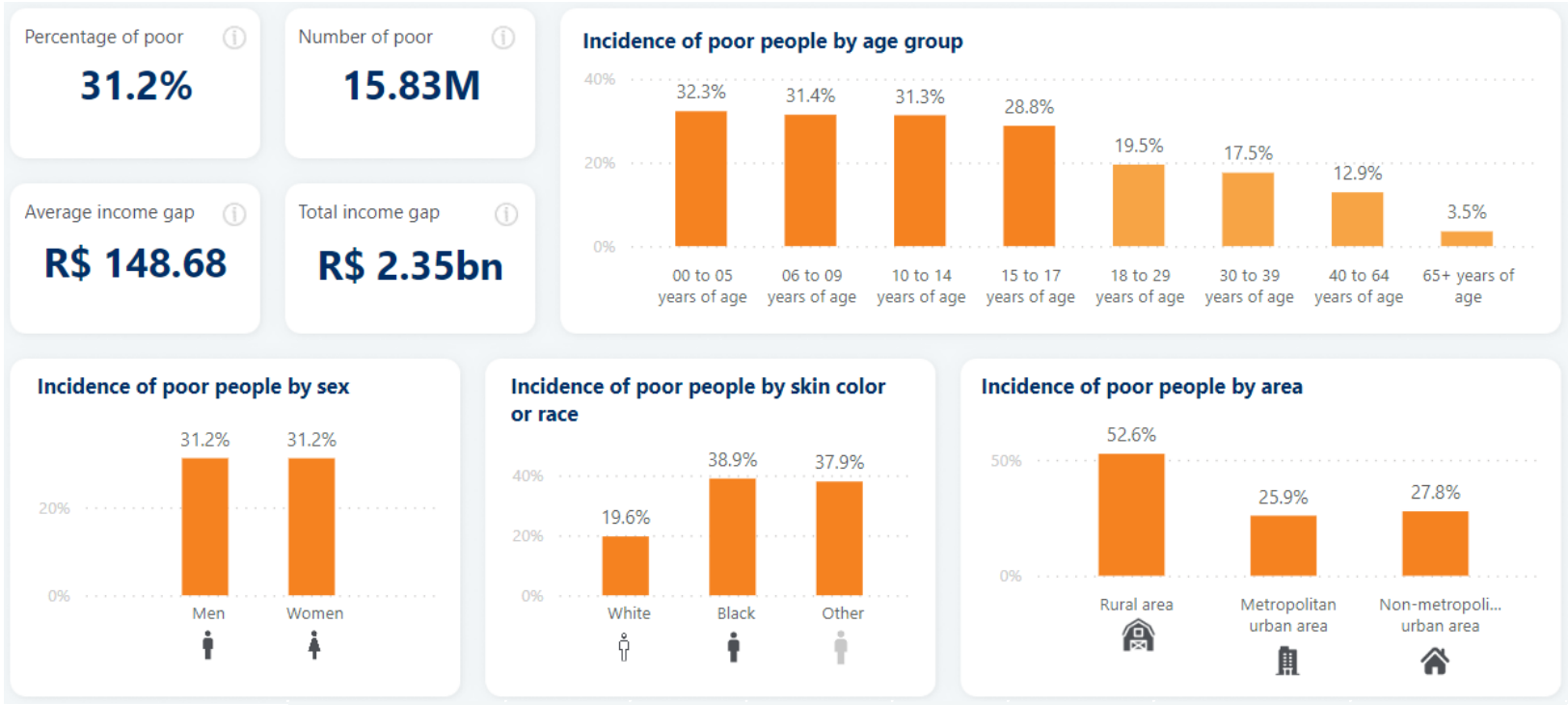
National poverty line



Regionalized poverty line

Poverty is most **prevalent** among children and adolescents

- While among people aged 18 and over the incidence of poverty is 14.1%, *i.e.*, for every 100 people aged 18 and over, 14 are poor, among people aged 0 to 17, this percentage is 31.2%;
  - ➢ In the population as a whole, in 2019, 18.2% were poor, equivalent to 38.19 million people
- In rural areas, the incidence of poverty is practically twice as high as in urban areas;
- The same occurs among Blacks (Blacks and Mixed race) and people of other skin colors or races (Yellow or Indigenous) in relation to Whites.

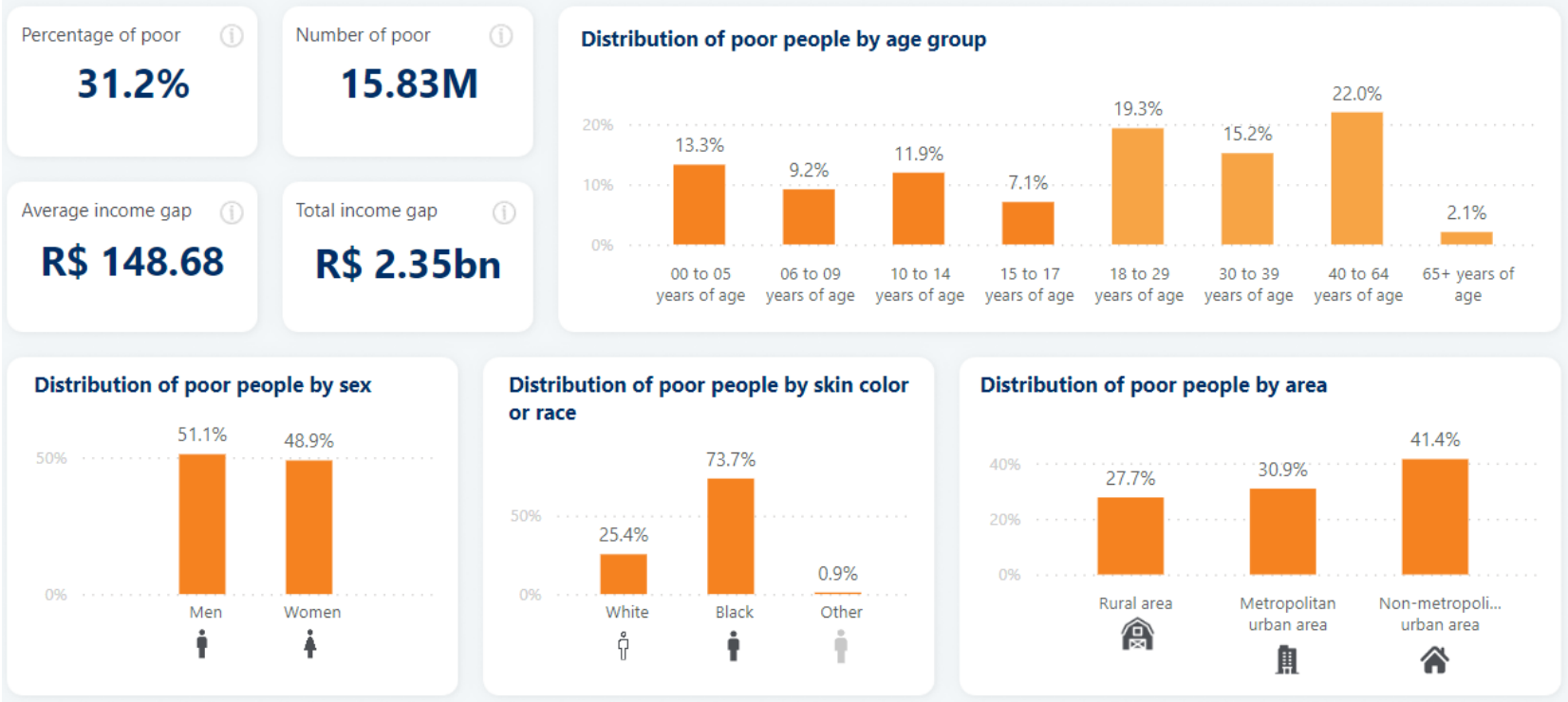


Regionalized poverty line

	Men	Women	Whites	Blacks	Rural	Urban metropolitan	Urban Non-metropolitan
# Poor people	8.09 Mi	7.73 Mi	4.01 Mi	11.66 Mi	4.38 Mi	4.89 Mi	6.56 Mi
Total gap	R$ 1.21 Bi	R$ 1.14 Bi	R$ 556.67 Mi	R$ 1.77 Bi	R$ 677.10 Mi	R$ 716.38 Mi	R$959.65 Mi
Average gap	R$ 149.66	R$ 147.65	R$ 138.66	R$ 152.04	R$ 154.50	R$ 146.62	R$ 146.33

The **distribution** of poverty among children and adolescents

- The distribution of poverty by skin color or race is quite concentrated among Blacks – for every 100 poor people aged 0 to 17, approximately 74 are Black;
- For every 100 poor children and/or adolescents, 41 live in non-metropolitan urban areas.



Regionalized poverty line

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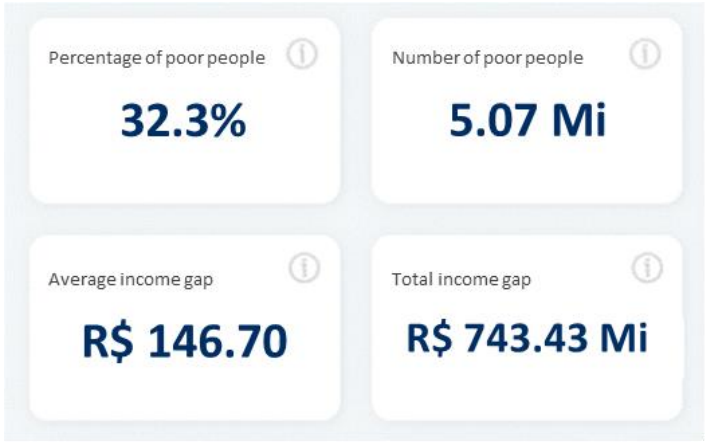
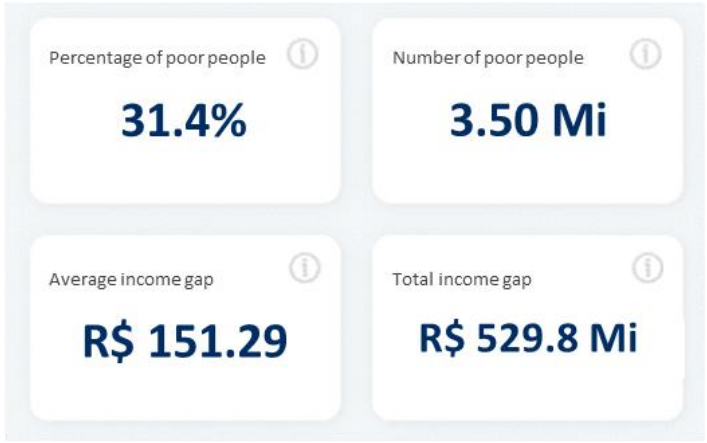
Analysis by age group

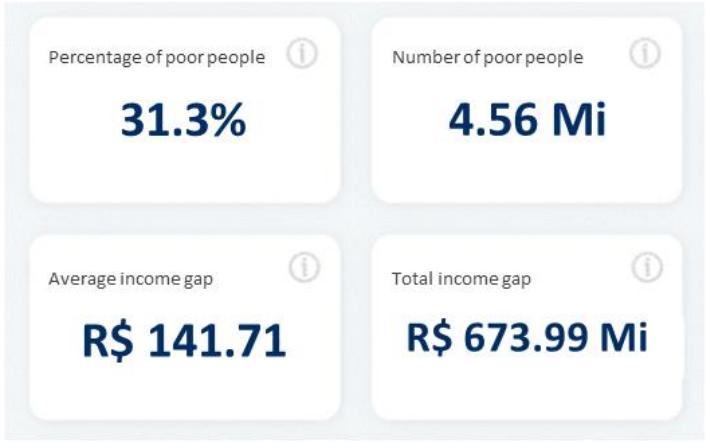
- The 0-5 age group concentrates the largest number of poor children, 5.07 million, and thus presents the largest total income gap: R$ 743.43 million/month, equivalent to R$ 8.92 billion/year – the largest volume of resources for eradicating poverty, were these to be perfectly allocated;
- The largest average gap, *i.e.*, the average distance between the income of people below the poverty line and the poverty line, is in the 6-to-9 age group, R$ 151.29;
- Among the groups, there are no marked differences in the incidence and distribution of poverty by sex, skin color or race, or area of residence.



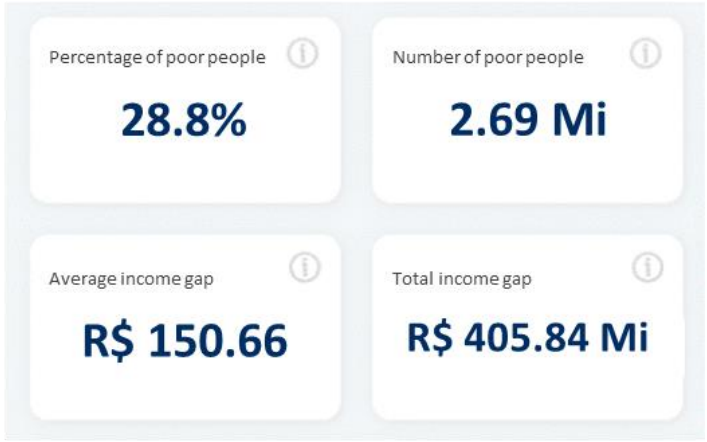
Regionalized poverty line – 0-to-5-year-olds



Regionalized poverty line – 6-to-9-year-olds



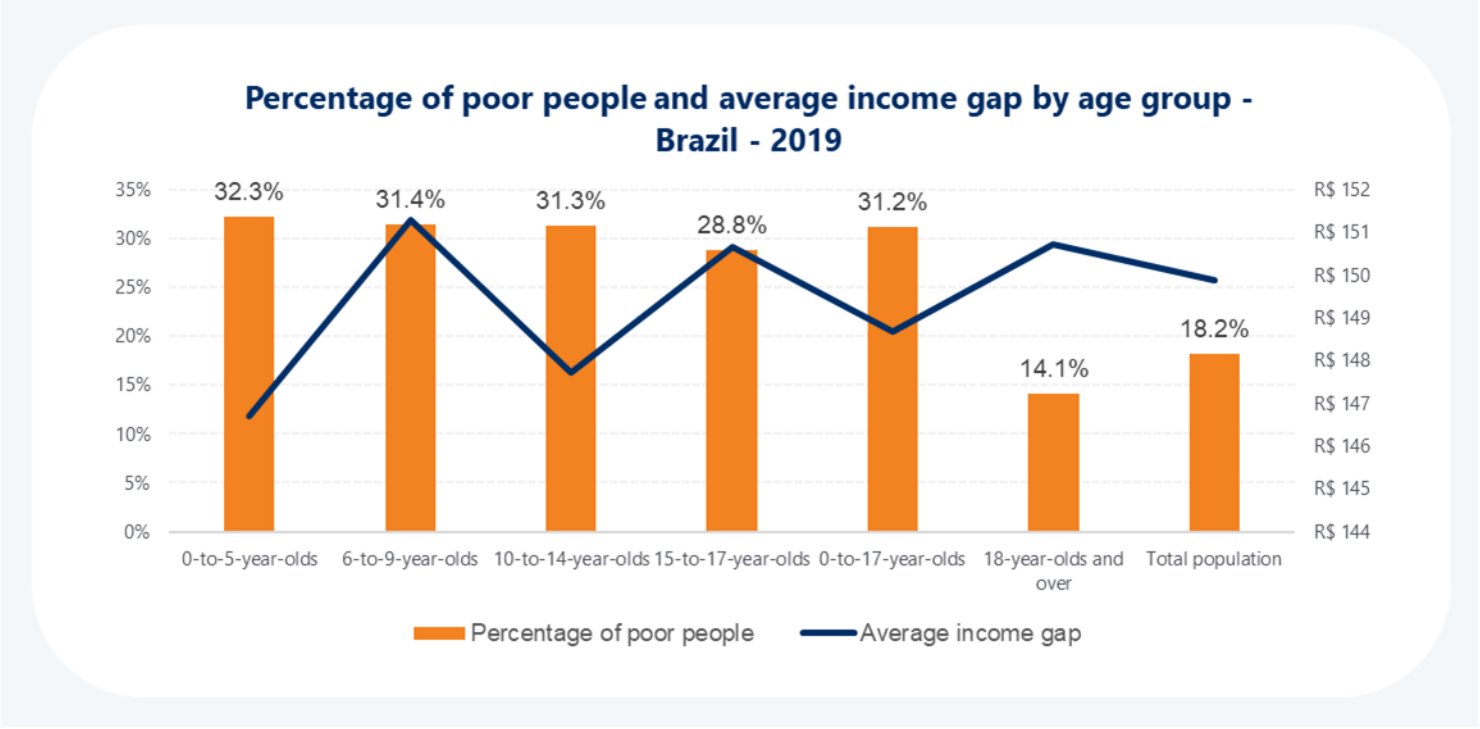
Regionalized poverty line – 10-to-14-year-olds



Regionalized poverty line – 15-to-17-year-olds

Average income gap by age group

- The smallest average income gap verified among the presented age groups is R$ 146.70, among 0-to-5-year-olds;
- On the other hand, the largest average gap is among children aged 6 to 9 (R$ 151.29);
- Among children and adolescents aged 0 to 17, the average gap is smaller than that among people aged 18 and over (R$148.68 versus R$150.73), aside from being below the average gap of the total population (R$ 149.88).



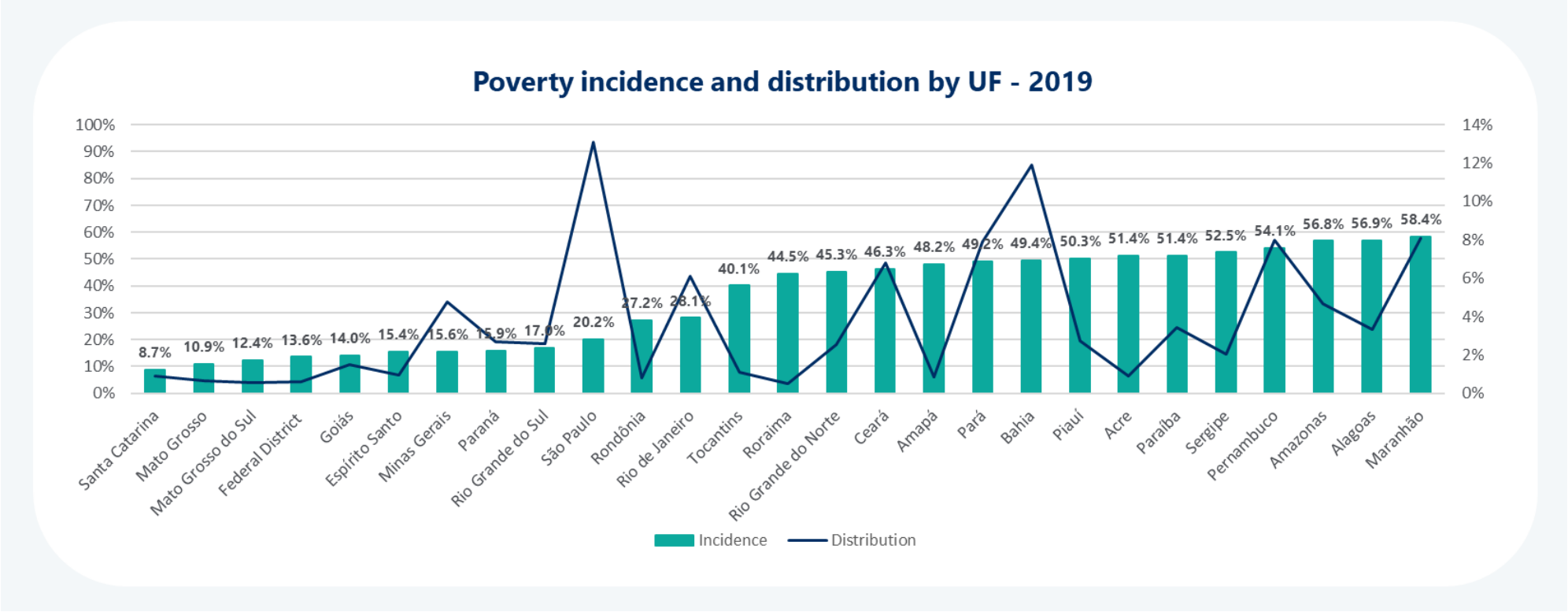
Regionalized poverty line

Poverty in 2019: Incidence and Distribution, by State and Region

Poor 0-to-17-year-old children and adolescents in Brazil

Poverty incidence and distribution among children and adolescents by UF

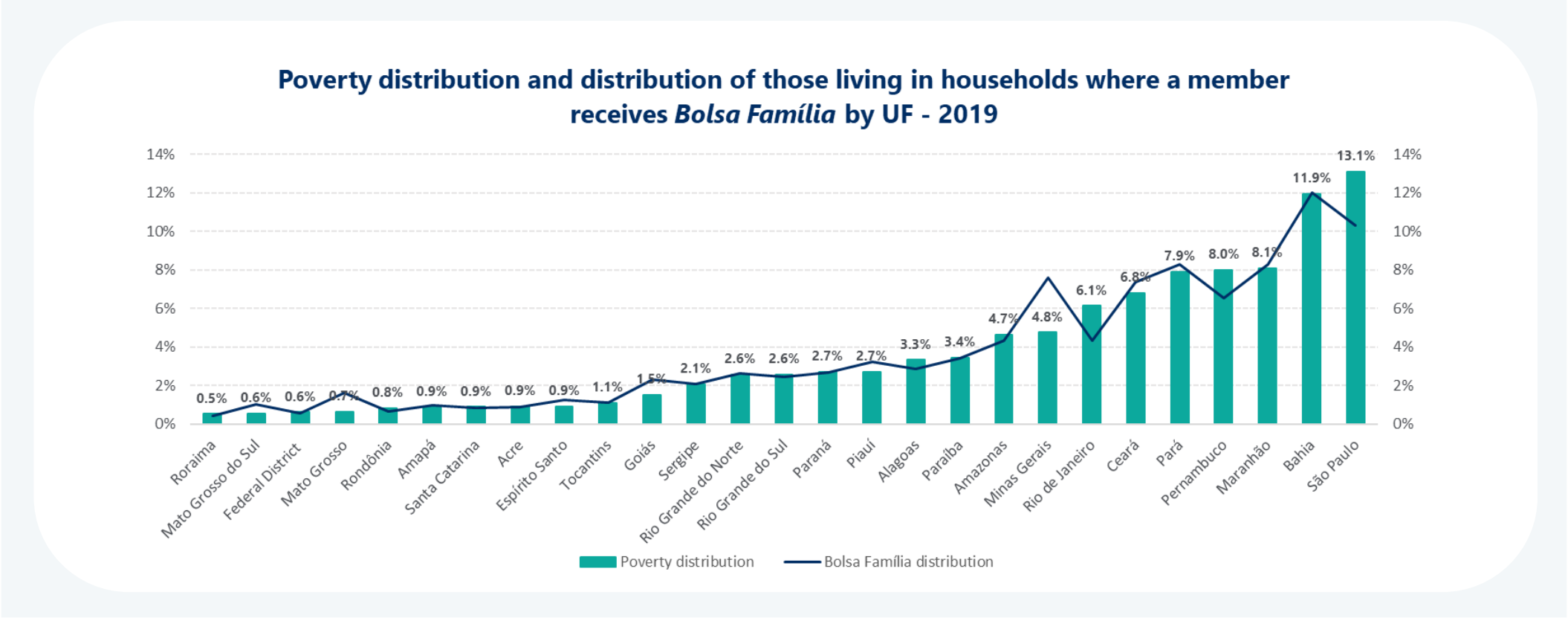
- It is important to look simultaneously at both the measures of distribution and incidence of poverty because if we look, for example, only at distribution, we can have the false impression that the situation of poverty in Acre is not as urgent as that of São Paulo, given that in the first UF the distribution of poor people is 0.9%, whereas in São Paulo it is 13.1%;
- However, despite concentrating only 0.9% of the poor children and adolescents in Brazil, Acre has one of the largest incidences of poverty - for every 10 children and adolescents, 5 are below the poverty line.



Regionalized poverty line

Distribution of poverty and of the *Bolsa Família* Program – children and adolescents

- The graph below shows the distribution, by UF, of poor children and adolescents (**bars**) and of those living in households where a member receives *Bolsa Família** (**line**);
- Among children and adolescents who live in households where a member receives *Bolsa Família*, the distribution by UF is similar to the poverty distribution.



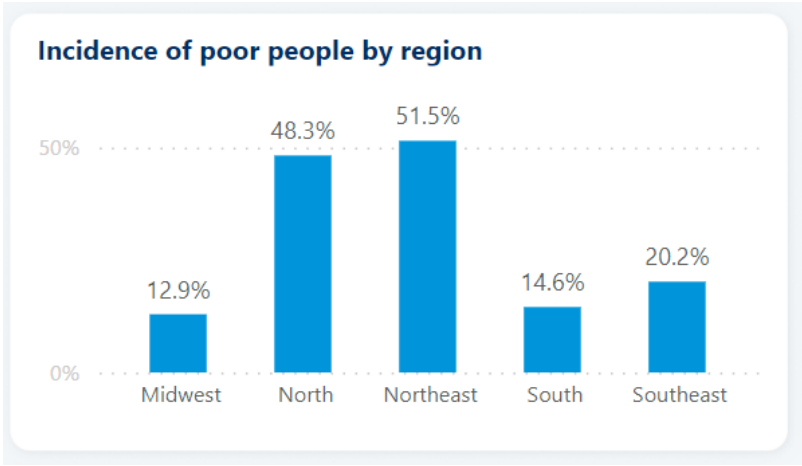
Regionalized poverty line

* The *Bolsa Família* Program extreme poverty line is R$ 89.00/month per capita and the poverty line is R$178.00/month per capita.

Among the UFs, Maranhão has the highest incidence of poverty among children and adolescents

- In Maranhão, for every 100 children and adolescents, almost 60 lived in poverty in 2019;
- This incidence is in line with the result of the Northeast region, where for every 100 children and adolescents, 50 lived in poverty in 2019.

Regionalized poverty line

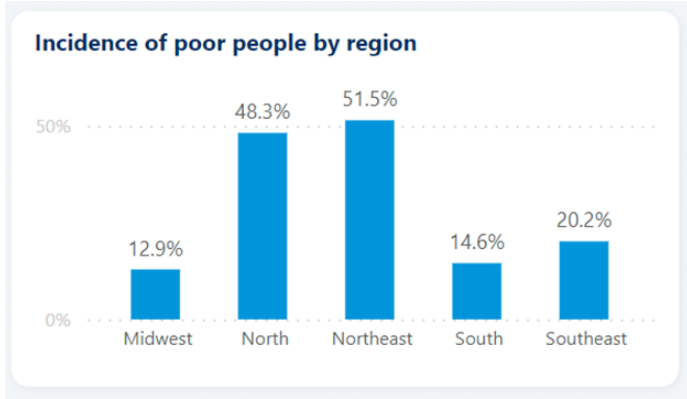


Regionalized poverty line

Among the UFs, Santa Catarina has the lowest poverty incidence among children and adolescents

- In **Santa Catarina**, for every 100 children and adolescents, approximately 9 live in poverty (8.7%);
- This result is below that seen in the Southern region, where the incidence is 14.6%.

Regionalized poverty line

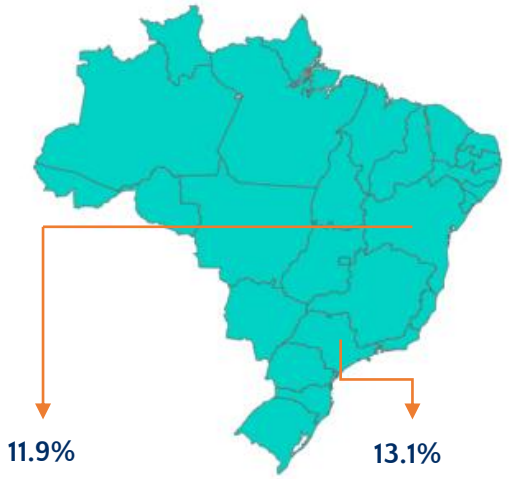


Regionalized poverty line

The poorer UFs: children and adolescents

- **São Paulo** is the UF that concentrates the largest portion of impoverished children and adolescents in Brazil, with 13.1%, which is equivalent to 2.07 million children and adolescents, followed by **Bahia**, with 11.9% (1.89 million);
- The poverty rate in these UFS is 20.2% and 49.4%, respectively. This means that, despite concentrating the largest portion of poverty, the likelihood is that a child or adolescent in São Paulo would be in a situation of less poverty than in Bahia, where the probability is almost 2.5 times greater.

Poverty distribution by UF: BA and SP

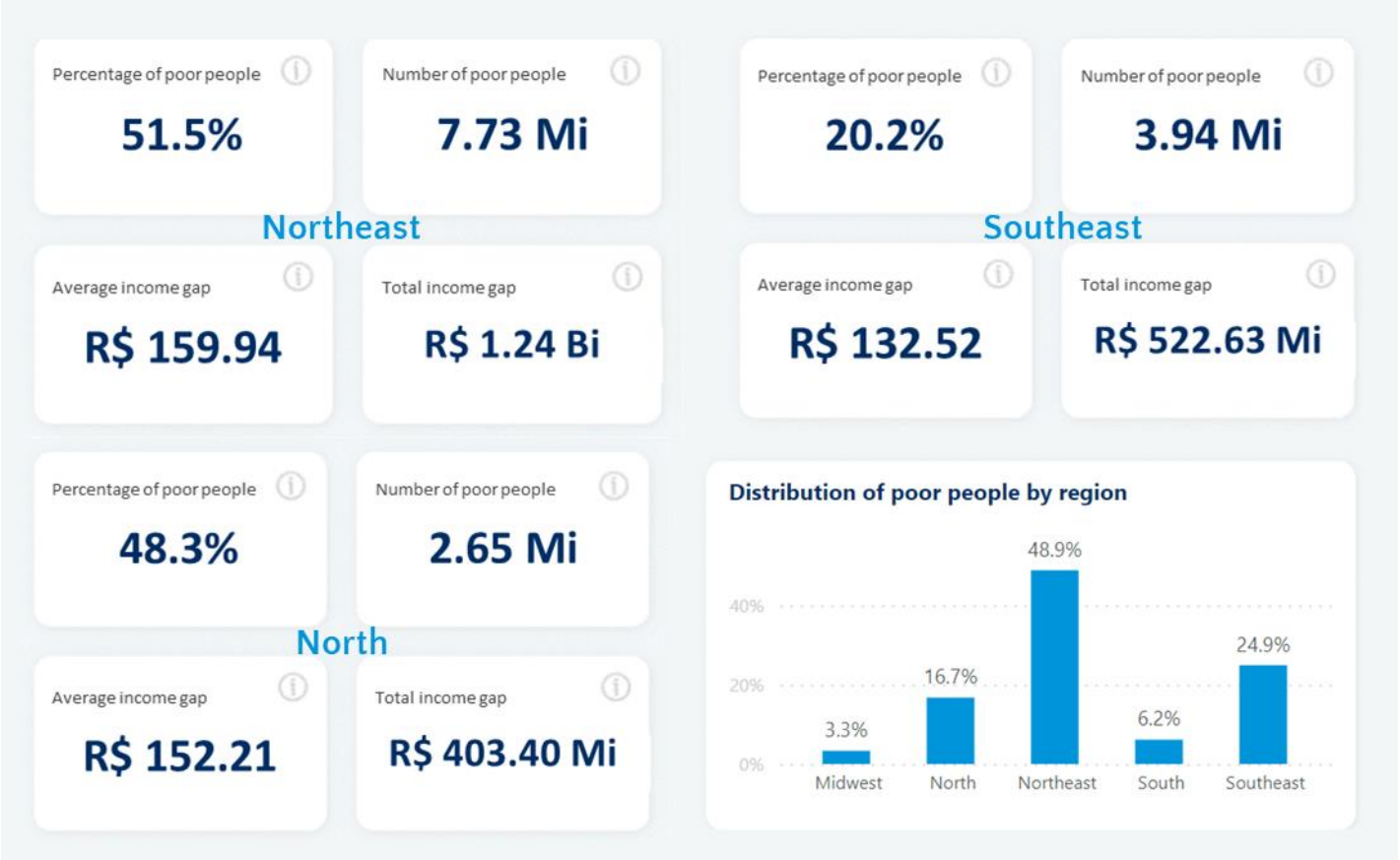


Bahia		São Paulo	
Percentage of poor people	Number of poor people	Percentage of poor people	Number of poor people
49.4%	1.89 Mi	20.2%	2.07 Mi
Average income gap	Total income gap	Average income gap	Total income gap
R$ 157.36	R$ 297.07 Mi	R$ 133.44	R$ 276.73 Mi

Regionalized poverty line

Poorer regions: children and adolescents

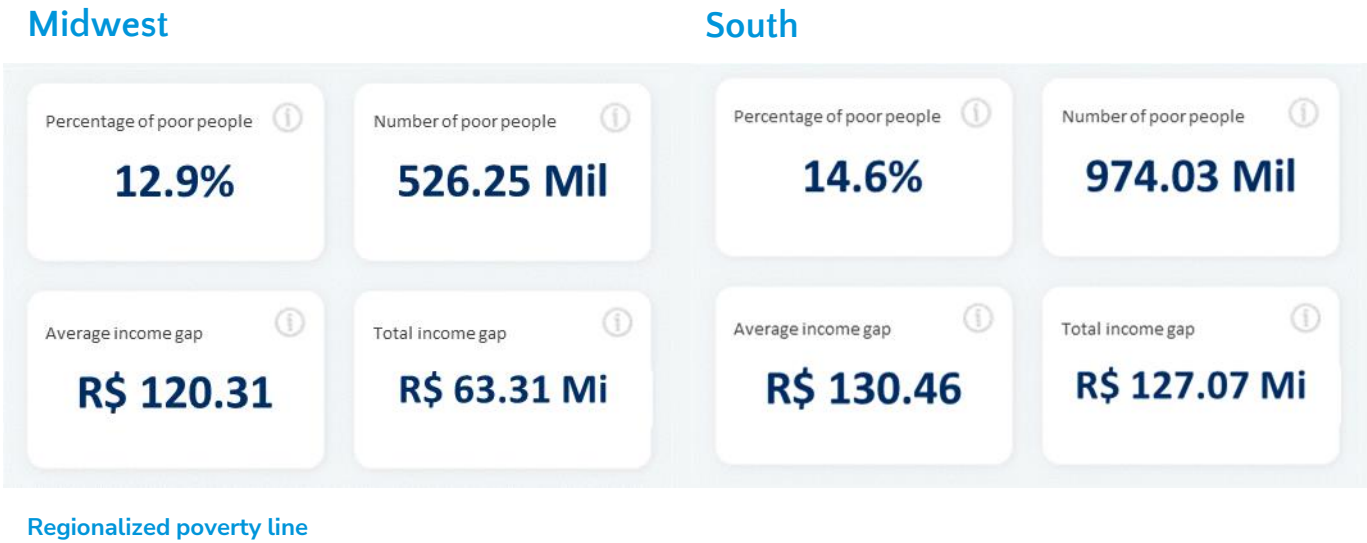
- The **Northeast** is the region where there is the highest incidence (51.5%) and concentration (48.9% - 7.73 million) of poor children and adolescents. Thus, it is the region that needs the highest volume of resources for poverty eradication (over R$ 1 billion per month, or R$ 14.9 billion per year);
- The second highest incidence is in the **North** (48.3%), *i.e.*, this region presented, in 2019, the second greatest likelihood of a child or adolescent being poor. However, the second largest concentration is in the **Southeast** (24.9%), where 3.94 million children and adolescents are poor.



Regionalized poverty line

Regions with less poverty: children and adolescents

- The South and Midwest regions, which have the lowest concentrations of poor children and adolescents, 6.2% and 3.3%, respectively, also have the lowest incidences of poor people (14.6% and 12.9%).



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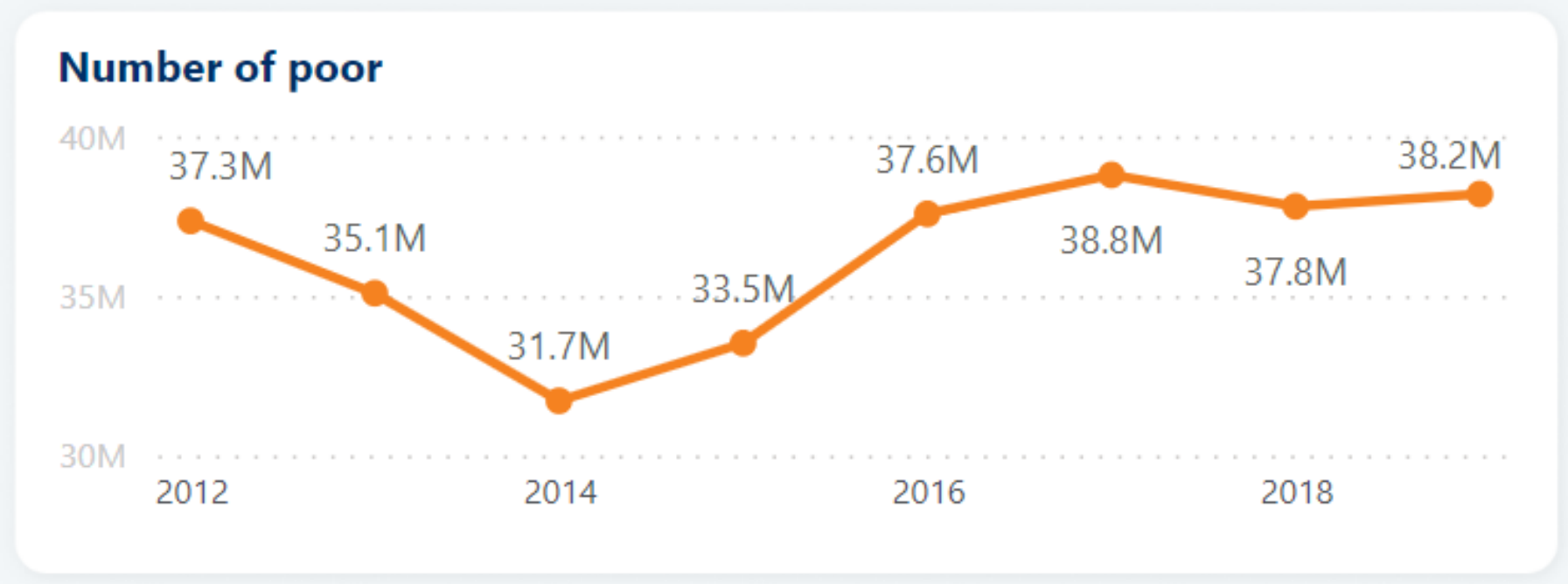
Poverty throughout the 2010s

0-to-17-year-old children and adolescents in Brazil

Absolute number of poor people in Brazil – Total population



Regionalized poverty line

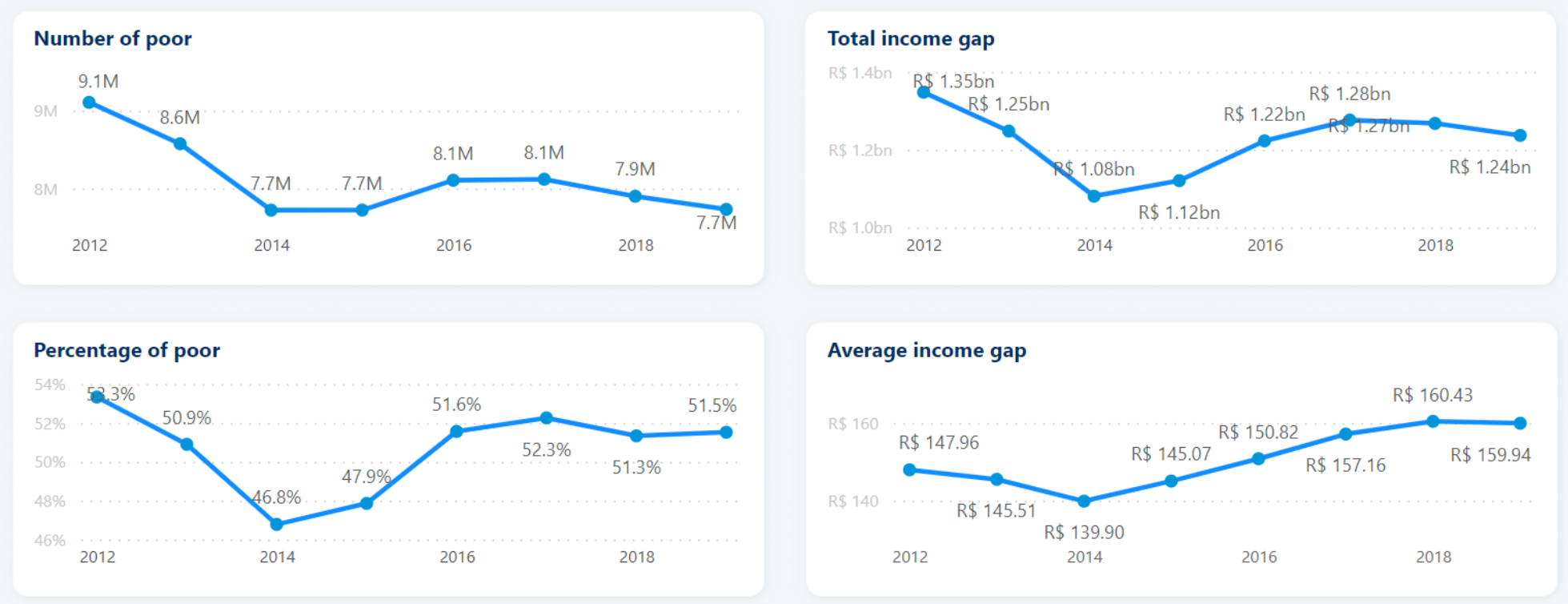
Evolution of results of the regionalized line – Brazil

- From 2015, there is an increase in the number of poor people, with a decrease in 2018;
- This is a movement verified in the other results, with an increase in the average income gap until 2018 and a reduction in 2019;
- In 2019, the Northeast, Midwest and South were the regions that showed a reduction in the number of poor people.

Regionalized poverty line

Evolution of results of the regionalized line – Northeast

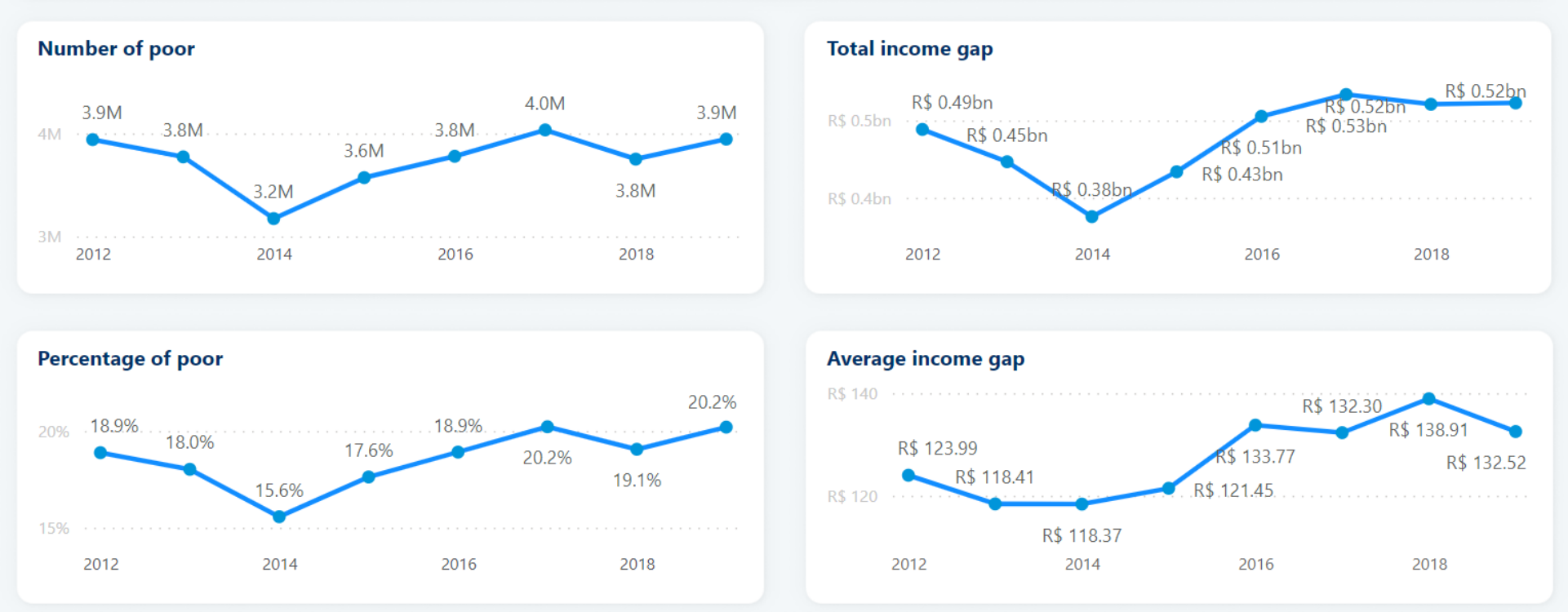
- Unlike Brazil, the Northeastern region responds to the growth of poverty levels more slowly, with an increased number of poor people from 2016 (5.05% of variation over the previous year);
- Nevertheless, the percentage and the income gap already show an increase in 2015.



Regionalized poverty line

Evolution of results of the regionalized line – Southeast

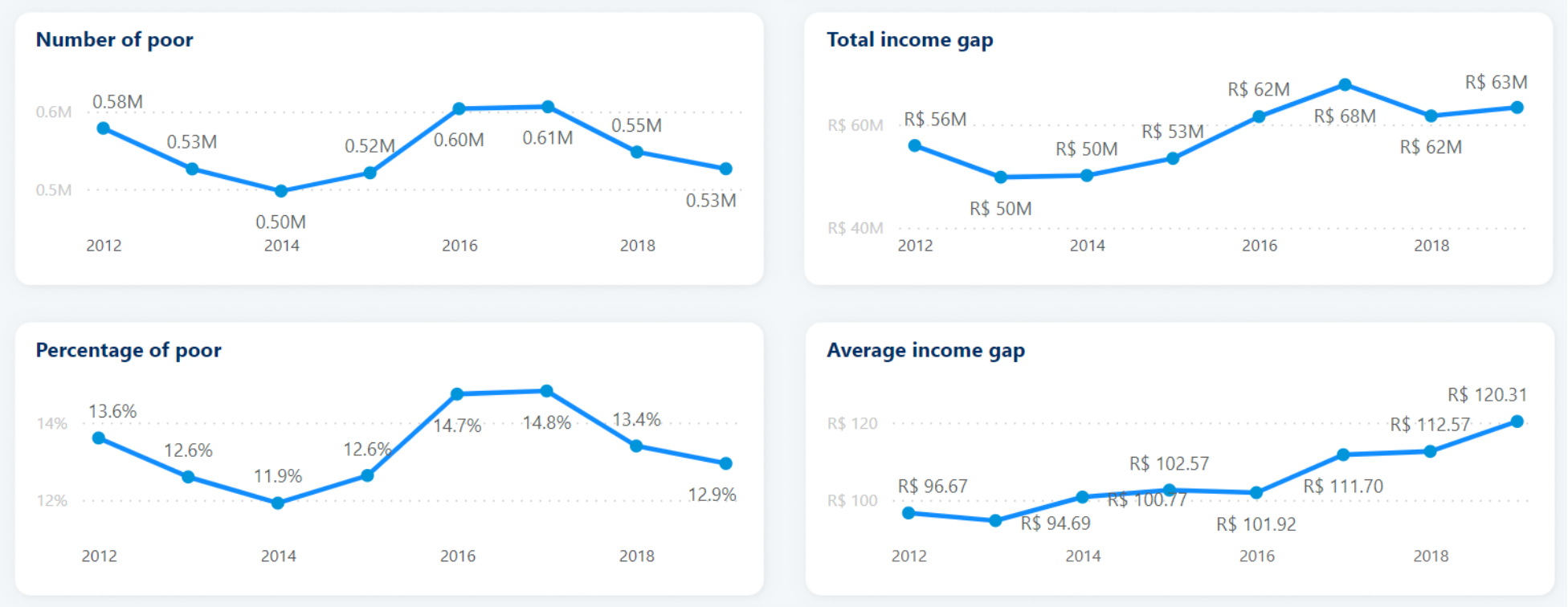
- The Southeastern region, on the other hand, has already presented a very sharp elevation in the number (variation between 2014 and 2015 of 12.62%) and in the percentage of poor people since 2015, as well as elevation of other results, which may be a sign of the impact of the economic recession on employment in this region.



Regionalized poverty line

Evolution of results of the regionalized line – Midwest

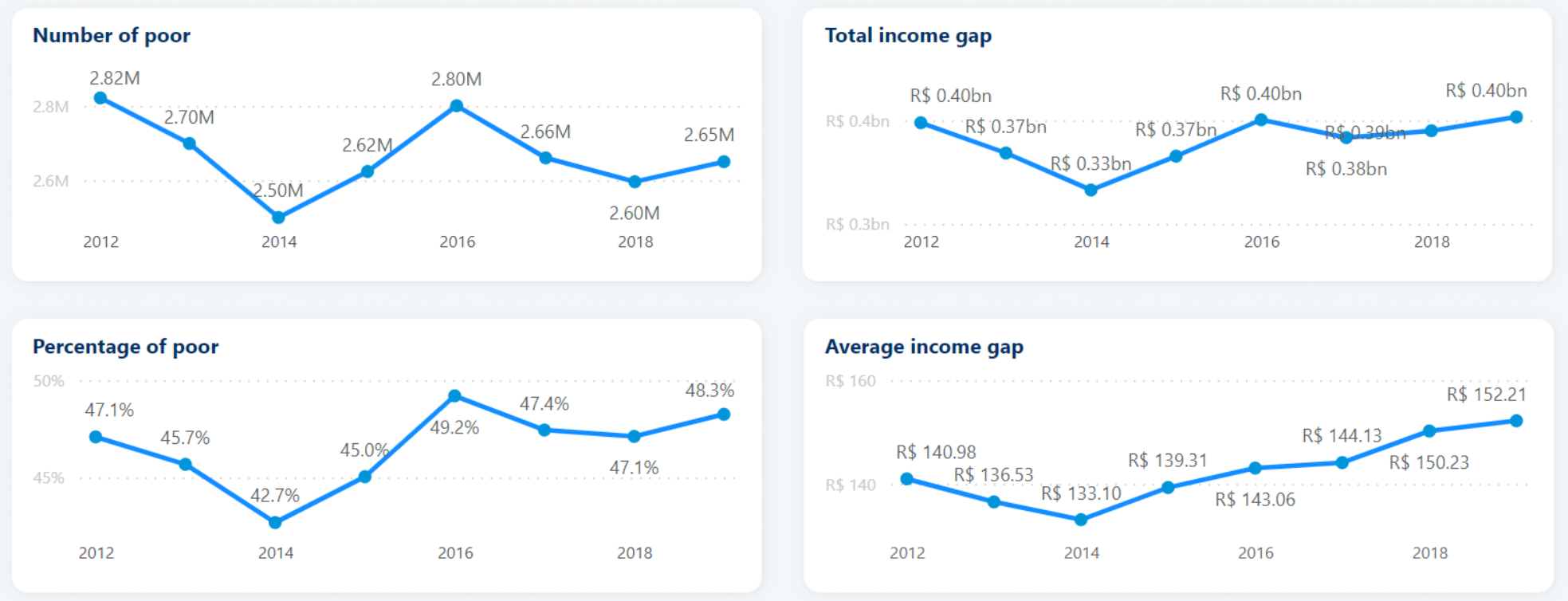
- The Midwest region has also seen an increase in the number of poor people since 2015, but at a slower pace than the Southeast, with a variation of 4.83% between 2014 and 2015;
- The income gap, both the total and the average, rise in 2019, differently from the movement verified in the average for Brazil.



Regionalized poverty line

Evolution of results of the regionalized line – North

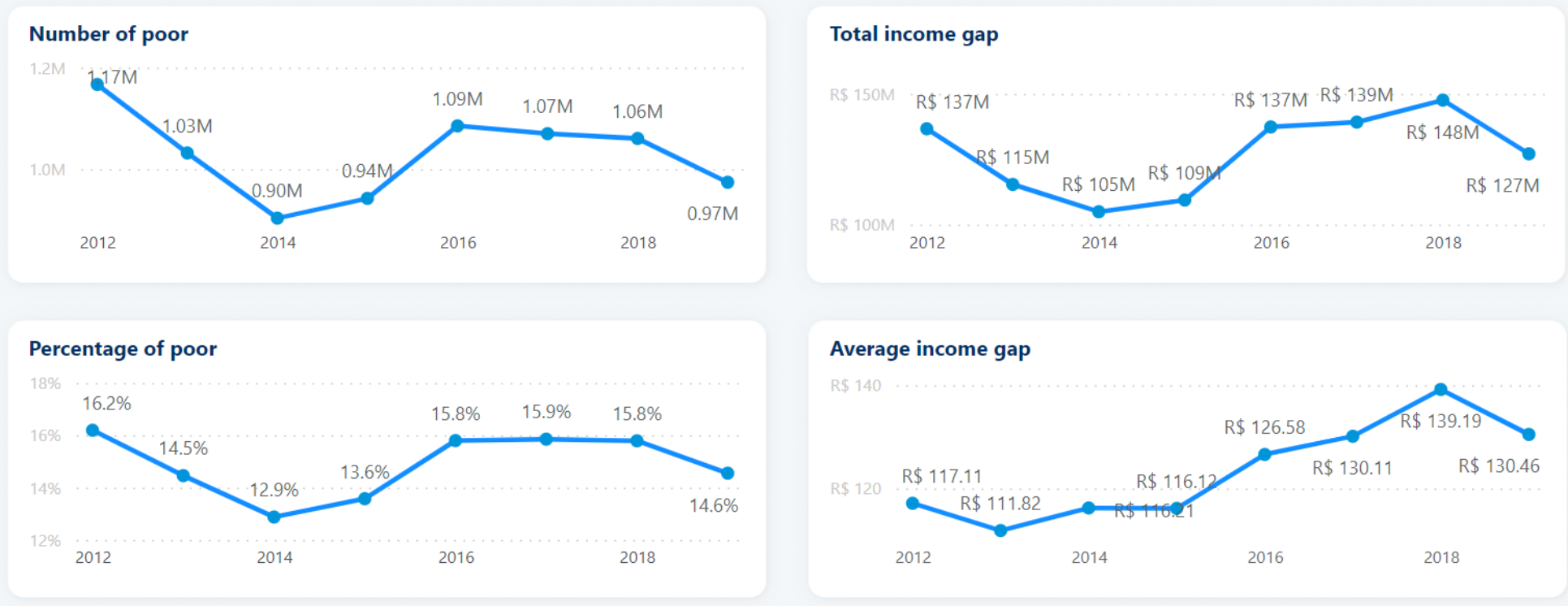
- The Northern region, unlike the others exhibited so far, after the elevation in the number of poor people from 2015, already presents a drop in 2017;
- The total gap behavior also follows this pattern, with a reduction in 2017, although it already increases as of 2018.



Regionalized poverty line

Evolution of results of the regionalized line – South

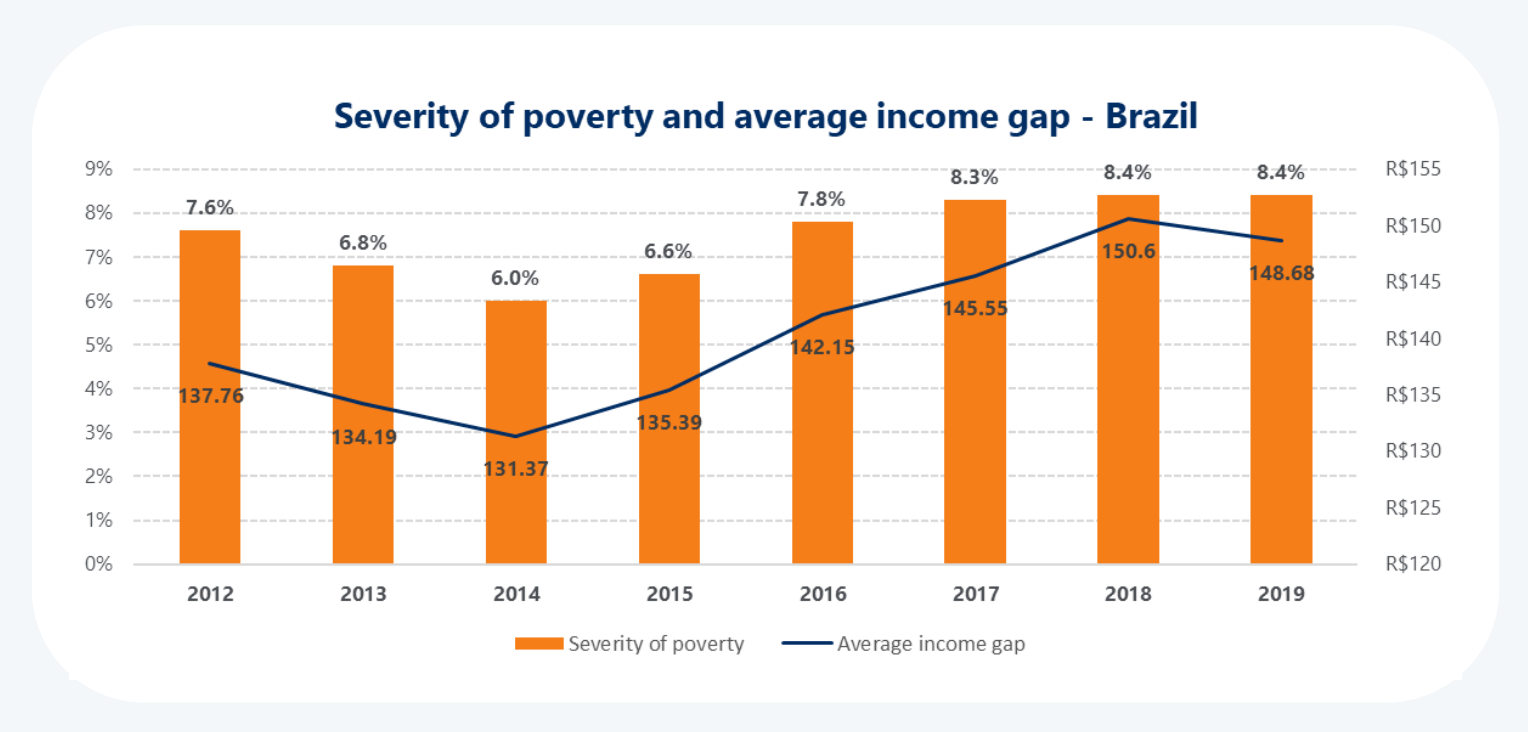
- The southern region also presents an increase in the number of poor people by 2016, with a gradual reduction and then a sharper drop between 2018 and 2019 (variation of -8.49%, the largest verified among the regions);
- The results of the region show reduction in both the total income gap and in the average gap in 2019.



Regionalized poverty line

Severity of poverty and average income gap – children and adolescents

- The measure of severity of poverty attributes greater weight to those people who are more distant from the poverty line, so as to consider inequality among the poor;
- Calculated based on gaps in income as percentages of the poverty line squared, it is expressed in percentage and the closer to zero, the lower the severity of poverty;
- An example of the behavior of the measure is, if an income transfer program removes those who are closer to the line, this does not necessarily mean that the severity of poverty will fall; it may even increase, if people who remain below the line are very far from it;
- The behavior of the average gap and the severity of poverty are similar, as presented in the following series.



Regionalized poverty line

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Children and adolescents: magnitude of poverty and extreme monetary poverty in Brazil.

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