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## **Brazil—Inflation**

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# Lower Inflation Forecast for 2019

- We have reviewed our forecast and now expect 2019 CPI to end the year at 3.5% (versus 3.7% previously).
- We consider GDP growth of 2.3% and an exchange rate of BRL4.00/USD for YE2019 (with an annual average of BRL3.80/USD). However, we emphasize that the Brazilian economy will continue to have a high idle capacity, implying that the output gap will remain negative until YE2020, according to our estimates.
- Core inflation as calculated by Santander has been below the 4.5% target since YE2016, and our models indicate that it should remain within a comfortable range of 3.0-3.5% in 2019.
- This scenario of benign inflation below the center of the Central Bank's target (4.25%) reinforces our view that the Selic rate will stay in 6.5% per year until the first quarter of 2020.
- We expect regulated prices to decelerate from 6.2% to 4.9%, due to lower gasoline prices. In addition, food at home inflation should remain well behaved due to increased crop production.
- On the other side, services inflation will accelerate from 3.3% to 3.7% following improved economic activity and the minimum wage increase.

Figure1: IPCA - Annual Variation

		2015	2016	2017	2018	2019 (E)
IPCA	Weight	10.7	6.3	2.9	3.75	3.5
Regulated	25.9	18.1	5.5	8.0	6.2	4.9
Gasoline	4.3	20.1	2.5	10.3	7.2	1.1
Electricity	3.8	51.0	-10.7	10.4	8.7	8.7
Free prices	74.1	8.5	6.5	1.3	2.9	3.0
Durable goods	7.7	3.3	1.4	-1.7	1.7	1.0
Semi-durable goods	7.5	5.3	4.1	2.3	0.8	2.2
Services	35.7	8.1	6.5	4.5	3.3	3.7
Core Services	22.3	9.5	6.3	3.7	3.1	3.6
Non-durable goods	23.3	12.3	8.7	-2.7	3.3	3.0
Food at home	15.9	12.9	9.4	-4.9	4.5	3.9

Source: IBGE and Santander.



#### Introduction

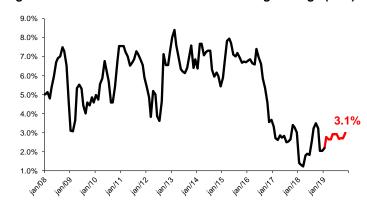
In this report, we detail our outlook for the 2019 CPI (IPCA in Portuguese). We expect an increase of 3.5% (versus 3.7% previously), below the Central Bank's target of 4.25%. We maintain our 2020 forecast of 4.0%. In analyzing the CPI's main categories, we used a bottom-up approach.

We consider GDP growth of 2.3% and an exchange rate of BRL4.00/USD at year end (an annual average of BRL3.80/USD). However, we emphasize that the Brazilian economy will continue to have a high idle capacity, implying that the output gap will remain negative until YE2020, according to our estimates. The output gap is a relevant explanatory variable for core inflation indicators, which react to side effects of various shocks that can affect the economy. As seen in Figure 3, core inflation as calculated by Santander has been below the 4.5% target since YE2016 and our models indicate that it should remain in the comfortable range of 3.0%-3.5% in 2019.

Figure 2: Output Gap (Estimates from 3Q18)



Figure 3: Santander Core Inflation –3M Moving Average (S.A.)



Source for both figures: IBGE, BCB and Santander.

This scenario of benign inflation below the center of the Central Bank's target (4.25%) reinforces our view that the Selic rate will stay at 6.5% per year until 1Q20.

In the following sections, we present our forecasts and main assumptions for the IPCA's main categories in 2019.

#### Regulated Prices (weight 25.9%)

The subcategories of regulated prices, which mainly includes public transport, regulated services and fuels, have been running above 4.5% since the beginning of 2014 due to supply shocks (lack of rainfall), BRL depreciation and sectoral measures that did not work. For 2019, we expect a slowdown for these subcategories, from 6.2% to 4.9%.

Figure 4: IPCA - Regulated Prices (%)

	2015	2016	2017	2018	2019 (E)
Utilities					
Water and Sewage	14.8	20.1	10.5	4.5	6.3
Telephone	-1.6	-1.2	-5.4	-1.3	-1.2
Electricity	51.0	-10.7	10.4	8.7	8.7
Fuel and transportation					
Bus fares	15.1	9.3	4.0	6.3	6.8
Gasoline	20.1	2.5	10.3	7.2	1.1
Health					
Medicinals	6.9	12.5	4.5	1.6	3.2
Health care plan	12.2	13.6	13.5	11.2	8.1
Regulated Prices	18.1	5.5	8.0	6.2	4.9

Source: IBGE and Santander.

<sup>&</sup>lt;sup>1</sup> For all groups we consider the 2019 February weights



## Durable goods (weight 7.7%) and Semi-Durable Goods (Weight 7.5%)

Inflation for industrialized goods is correlated with economic activity and FX variations. Within the durable goods group, home appliances show greater sensitivity to FX movements, while automobiles have good adherence to the trend of vehicle sales.

We forecast a 1.0% increase for durable goods inflation, decelerating from 1.7% in 2018, while for semi-durable goods, we forecast inflation acceleration to 2.2%, up from 0.8%. Even with economic activity improving, our models show the output gap remaining negative, limiting the impact of increasing household consumption on inflation and reducing the exchange rate pass-through.

Figure 4: IPCA - Durable Goods (12M Accumulated)

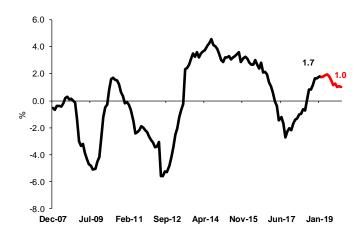


Figure 5: IPCA - Semi-Durable Goods (12M Accumulated)



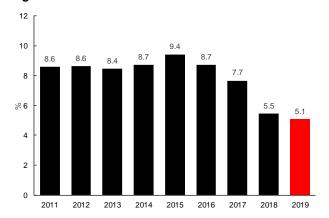
Sources for both figures: IBGE and Santander.

## Services (Weight 35.7%)

We forecast that inflation for services group will accelerate from 3.3% to 3.7% in 2019, with the resumption of growth and a slight real increase in the minimum wage. We divided our category analysis into two subcategories: services related to income and services related to economic activity.

Within services income-related inflation, we expect to have rents and health services accelerating due to a lower average unemployment rate and higher income, while education will decelerate due to lower costs (in 2018) and inertial inflation.

Figure 6: IPCA Education - Annual Variation



Sources for both figures: IBGE and Santander.

Figure 7: IPCA - Health Services - (12M Accumulated)





Within services related to the economic activity, the main subcategory is food away from home, which should accelerate from 3.2% to 3.9%, according to our projections, due to higher GDP growth.

Figure 8: IPCA Services – (12M Accumulated)



Figure 9: IPCA Food Away from Home - (12M Accumulated)



Sources for both figures: IBGE and Santander.

### Non- Durable Goods (Weight 23.3%)

Non-durable goods' main subcategory, food at home (weight 15.9%) and some sub-items such as ethanol. We forecast 4.0% deflation for biofuels in 2019 after price stability in 2018.

Figure 10: IPCA Non-Durable Goods - (12M Accumulated)

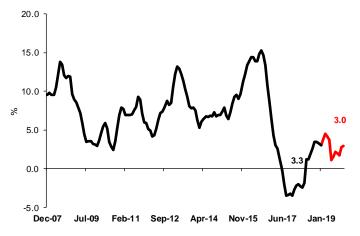
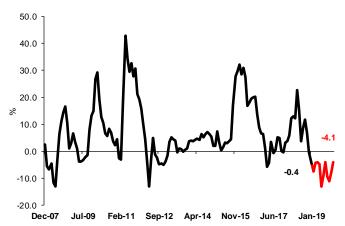


Figure 11: IPCA Ethanol – (12M Accumulated)



Sources for both figures: IBGE and Santander.

Food at home should decelerate from 4.0% to 3.9% in 2019, according to our projections. Starting with the weather, January and February were characterized by below average rainfall and relatively high temperatures, reflecting El Niño (weak intensity), as confirmed by the United States National Oceanic and Atmospheric Administration (NOAA); for the rest of the year, however, we expect weather normalization, which would be positive for food prices. In addition, we expect a reduction in input costs (animal feed), as strong crop production is expected for this year.



Figure 11: Corn - Total Production (000s tons)

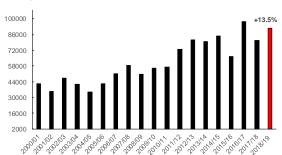
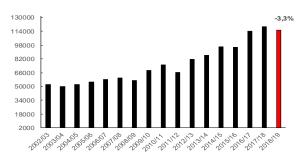


Figure 12: Soybeans- Total Production (000s tons)



Sources for both figures: CONAB and Santander.

We expect a larger grain harvest will help the protein sector (beef, chicken and milk) present relatively stable inflation compared to 2018, even with increased household consumption, noting that these sectors are also highly sensitive to income improvement in the short term.

Figure 13: IPCA Food at Home – (12M Accumulated)

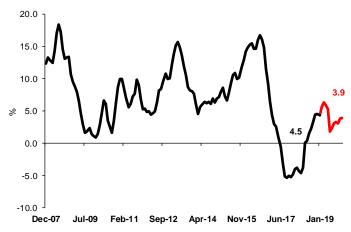
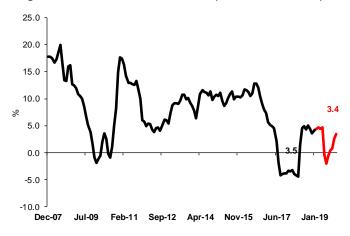


Figure 14: IPCA Protein inflation – (12M Accumulated)



Sources for both figures: IBGE and Santander.

#### Conclusion

We expect the IPCA to increase by 3.5% in 2019. Regulated prices is the main group responsible for the deceleration, while free prices are expected to accelerate from 2.9% to 3.1%, driven by services and semi-durable goods inflation.

This scenario of well-behaved and below the center of the target inflation reinforces our perspective that the Selic rate will stay in 6.5% per year until the first quarter of 2020.

Figure 15: IPCA - Annual Variation

		2015	2016	2017	2018	2019
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Regulated	25.9	18.1	5.5	8.0	6.2	4.9
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Source: IBGE and Santander.



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