

### Brazil—Inflation

#### The Power of Trade-Off

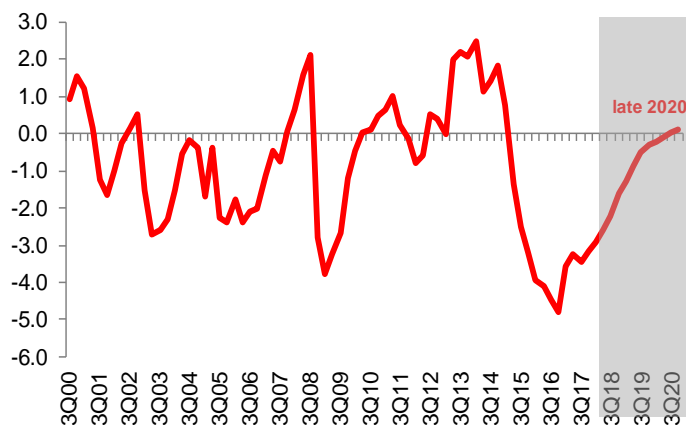
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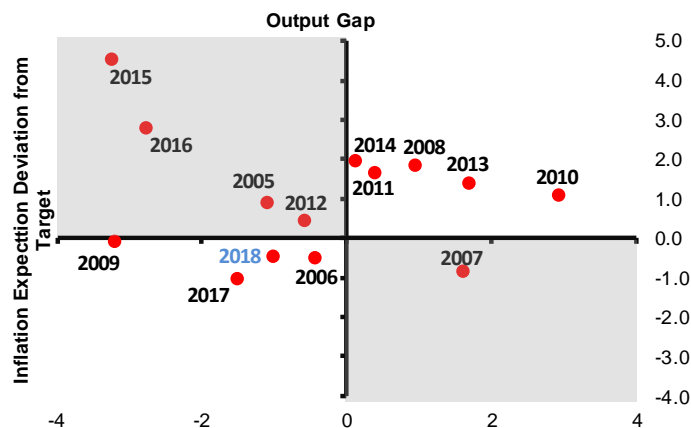
- We are revising upward our 2018 IPCA forecast to 3.9% from 3.5%, basically to include the impact of price hikes due to the supply shortage of some important goods (e.g., foodstuff and fuel) in June.
- Unfortunately, the normalization of supplies did not wipe out the effect of the supply shortage on prices on full year inflation. We estimate that the transportation strike will have a 40-b.p. net impact.
- We expect supply normalization to bring inflation back to a mark of 0.2% m/m in July, resulting in deflation in August; however, we do not expect this disinflation process to be sufficient to wipe out June's inflation acceleration (up 1.26% m/m).
- We maintain our call for the Selic: we foresee the monetary authority holding the Selic rate at 6.5% p.a. for the remainder of this year and until 4Q19. Bear in mind that our baseline scenario is conditioned upon the election of a reformist president in October.
- According to our exercises, the credibility of the monetary authority, the current economic slack coupled with a gradual economic recovery limit the pass-through of shocks to the prices (i.e., limit the propagation of hike in prices that are not directly affected by the shock).
- Consensus inflation expectations for 2018 and 2019 were revised upward recently due to the transportation strike. However, because of the strong trade-off between economic activity and inflation, we expect consensus to revise its inflation expectation downward in the upcoming months.

Figure 1. Output Gap (Actual GDP - Potential GDP) - %



Sources: IBGE and Santander estimate.

Figure 2. Economic Activity and Inflation Trade-Off



Positive output gap = effective GDP growth below the potential, and vice-versa.

Sources: BCB, IBGE and Santander estimates.

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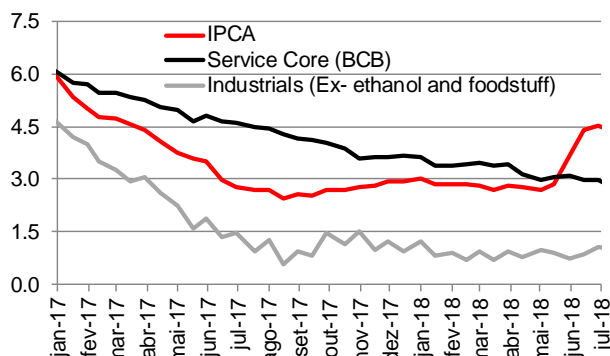
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## The importance of the output gap

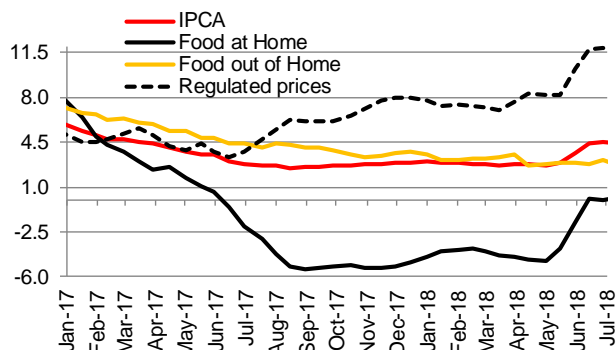
Indeed, the shortage of supply in mid-May due to the trucker' strike resulted in some prices skyrocketing during May-June, especially fuel and foodstuff prices. June IPCA registered a price increase of 1.26% m/m, when food at home and fuel registered inflation at 3.1% m/m and 4.5% m/m, respectively, while food out of home and services registered inflation at 0.17% m/m and 0.39%, indicating zero or very low pass-through of the primary shock to remaining prices in the economy.

**Figure 3. Services and Industrial Inflation (y/y)**



Sources: IBGE and Santander estimate.

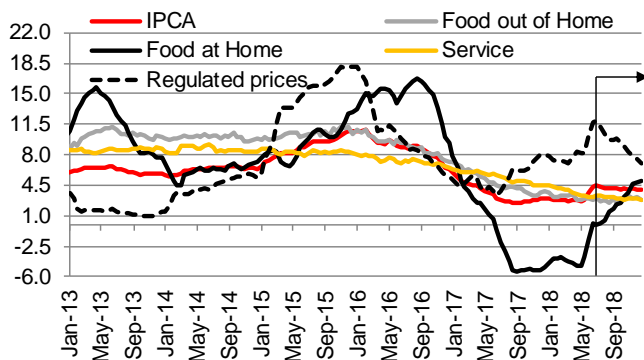
**Figure 4. Foodstuff and Regulated (y/y)**



Sources: IBGE and Santander estimate.

As we highlighted in our report “*Truck Strike: A Preliminary Assessment*“, published on May 29, there was no reason for prices to remain high, once the situation normalized. Most prices have returned almost entirely to pre-crisis levels. We expect supply normalization to bring inflation back to a mark of 0.2% m/m in July, resulting in deflation of around 0.10% in August; however, we do not expect this disinflation process to be sufficient to wipe out the inflation acceleration posted in June. Nevertheless, we estimate that the transportation strike will add 40 p.p. to the IPCA this year; hence, we are revising upward our 2018 IPCA forecast to 3.9% from 3.5%.

**Figure 3. Inflation Breakdown (y/y)**



Sources: IBGE and Santander estimate.

**Figure 4. Inflation Breakdown (y/y)**

	2015	2016	2017	2018(F)	2019(F)
<b>IPCA</b>	<b>10.7</b>	<b>6.3</b>	<b>2.9</b>	<b>3.9</b>	<b>4.0</b>
Foodstuff	12.9	94.0	-4.9	4.2	5.1
Regulated Prices	18.1	5.5	8.0	7.1	5.0
Core Inflation	7.3	6.6	3.6	2.2	3.4
Industrial (ex-food)	6.2	4.8	1.0	1.5	1.8
Services	8.1	6.5	4.5	2.9	4.3
BCB service core	9.4	6.3	3.7	2.6	3.8
Tradables (ex-food)	4.6	4.0	0.7	2.9	1.8
Non-tradables (ex-food)	8.2	6.1	4.3	2.9	4.2

Sources: IBGE and Santander estimate.

We forecast inflation below target and below 4% still, mainly due to economic slack. We believe that in a credible monetary policy, the trade-off between economic activity and inflation is valid (i.e., there is a direct relation between economic activity and inflation — a wider output gap leads to higher inflation, and vice-versa). Historically, this trade-off worked perfectly in Brazil, as shown in Figure 2 above). Since 2005, we have had five years when the trade-off did not work, and these instances were mostly the result of the weaker credibility of monetary policy. In our view, this will definitely not be the case in 2018 and in 2019: according to our GDP growth estimate, the output gap will close only at late 2020, implying that the trade-off will continue to work in favor of containing the effects of eventual price shocks.

Furthermore, we expect consensus to revise downward its inflation expectations, as the trade-off shows its effects on inflation in the upcoming months. Currently, consensus inflation expectations for 2018 and 2019 are at 4.11% and 4.1%, respectively, having been revised upward due to the transportation strike. But it seems that the pessimistic inflation behavior lost steam, and if monthly inflation returns to the mark of 0.20%, inflation expectations should recede in kind.



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## Conclusions

We see the impact of the transportation strike on inflation as marginal, not leading to a change in the scenario for monetary policy in the short and long term.

That said, we maintain our call for the Selic: we forecast the Selic rate at 6.5% p.a. during the remainder of this year and until 4Q19. Bear in mind that our baseline scenario is conditioned upon the election of a reformist president in October. A significant probability of a non-reformist being elected will reduce market confidence in fiscal reform approval, having negative impacts on asset prices, as currency depreciation, and on macro fundamentals, as inflation acceleration, which will result in earlier hikes of the interest rate.



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