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TECHNICAL NOTE

Why have food products caused the June 2018 Consumer Price Index increase to be the largest since 1995?

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On July 6th, the Brazilian Institute of Geography and Statistics (IBGE) published the Broad National Consumer Price Index (IPCA) for the month of June. The agricultural sector, which has recently been contributing greatly to the stability of the IPCA, ended up being one of those responsible for its largest monthly increase since 1995.

In fact, this sector has been playing an increasingly strategic role in the Brazilian economy. Given its critical contribution both to the internal demand for food and raw materials and in terms of the Trade Balance, the sector has had a significant impact on international trade and on the level of economic activity, and is most likely to continue to do so in future. There is also a direct relation between the price of agricultural products and inflation. The "food and beverages" group is responsible for the largest portion (24.27%) of the IPCA. Within this group, "household food items" account for 15.61% of the total IPCA.

The purpose of this technical note is to examine the behavior of the price of the agricultural products that make up the "food and beverages" group and to propose some reasons why these products had such a large impact on the IPCA last June.

The IPCA as a whole and the "food and beverages" category

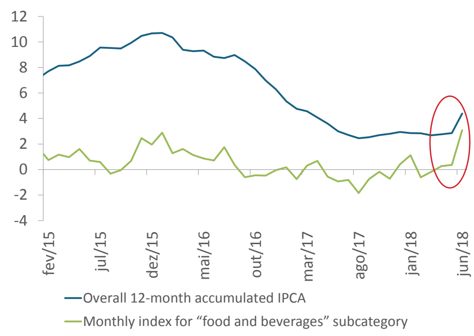
As in every year, a slight increase in the price of agricultural products is to be expected in June, as a result of the off-season. This should not, in principle, have made much of a difference this year, in view of the recent downward trend for the index. However, the data published by the IBGE show a significant reversal in the general direction of price fluctuations in Brazil, especially in the case of food. The overall index rose 1.26% in June, an increase three times greater than that of May (0.4%). This is the highest monthly increase since 1995 and the first time since January 2016 that monthly inflation has been above 1%. Table 1 shows the figures for the overall IPCA, the "food and beverages" group and the "household food" subcategory.

TABLE 1
Monthly Accumulated Consumer Price Index

	May 2018	June 2018	Accumalated (June/17 - May/18)	Accumulated (July/17 - June/18)
Overall IPCA	0.40%	1.26%	2.85%	4.39%
Food and Beverages	0.32%	2.03%	-1.45%	1.05%
Household food	0.36%	3.09%	-3.80%	0.11%

Source: IBGE.
Table produced by Dimac/Ipea.

GRAPH 1
Overall 12-month accumulated IPCA and monthly index for "food and beverages" sub-category, January 2015 - June 2018



Source: IBGE.
Graph produced by Dimac/Ipea.

According to Table 1, 12-month cumulative inflation jumped from 2.86% in May 2018 to 4.39% in June. This in part reflects the removal from the calculation of June 2017, which was a month that presented falling prices. With an increase of 2.03% in the month of June, the "food and beverages" category was the sector that had the greatest impact on the monthly IPCA as a whole, accounting for 40% of the inflation. This price increase fell almost exclusively on food consumed at home. The prices in this sub-category – which accounts for 2/3 of the "food and beverage" group items – rose 3.09% in June, while those for food consumed "outside households" rose only 0.17%.

As shown in Graph 1, the June increase in the prices of food products consumed at home changed the pattern for the price of household goods as a whole. Until last month, the overall IPCA had benefitted favorably from the behavior of 12 month cumulative food price inflation, holding steady at around 2.85%, which is thus well below the goal for accumulated annual inflation of 4.5%, with a ceiling of 6%. Deflation in the "food and beverages" group (-1.45%) was driven mainly by the fall of 3.80% in the price of food products consumed at home. But the increase of 3.09% in last June, the price of food consumed at home came to affect the overall IPCA, which, over the twelve-month period, jumped to 4.39%, very close to inflation target. Potatoes, milk, chicken and meat were the products that affected the IPCA the most.

TABLE 2
Household food products with highest price increases in the June 2018 IPCA

Potatoes	17.16%
Long-life milk	15.63%
Whole chicken	8.02%
Meat (beef and pork)	4.60%

Source: IBGE.
Table produced by Dimac/Ipea.

In fact, three of the four food products that suffered the highest increases in June had been identified in the Dimac Technical Note of June 5th as being some of those most likely to be affected by the truckers' strike and its ramifications. At this time of year, the occurrence of a certain mismatch between supply and demand, because it is the off-season. Long-life milk, which had seen a price increase of 2.65% in the month of May, surged by an average of 15.63% in June. The rise of 28.15% in the price of long-life milk in the first six months of the year is alone responsible for 9.2% of the 2.6% increase in the IPCA over the same period. The price of chicken and meat, however, which also rose in June (by 8.02% and 4.60%, respectively), had fallen by 0.99% and 0.38% in May. This upswing resulted in a significant loss of purchasing power for Brazilian households. It is worth bearing in mind that the increased price of chicken enabled a hike in the price of beef, as these products can substitute one another.

Finally, potatoes, the product that contributed most to inflation and whose price had gone up 17.51% in May, saw a further upsurge (17.16%) in June. In this case, the product is in season during this period – as of the second fortnight in June – which should to have helped to steady or bring down prices. In practice, even though increased supply should have led to a drop in mean retail prices, the effect of the increased cost of freight over-rode this and pushed prices even higher.

The truck drivers' strike, freight tariffs and the increase in food prices

Consumers and rural producers alike lost out as a result of the truckers' strike. While the former saw higher prices in the stores and shortages of some products during the stoppage, the latter (rural producers) lost income, as markets were partially or fully blocked off and it was impossible to bring in equipment and distribute products.

In the period between 21 May and 20 June, the prices of agricultural goods in the regions that produce them rose 3.03%.[1] Since, in the last ten days of May, rural producers were unable to guarantee delivery of their produce. This spike in demand, even when prices were high, did not necessarily result in higher sales (and income) for rural producers. They were, in fact, adversely affected by the loss and/or impossibility of distributing products and by the increased cost of some essential materials and equipment. With the end of the strike and the gradual return of distribution, the price increase of agricultural goods in the regions producing them settled down to 1.19% in

1 According to the Getúlio Vargas Foundation's Broad National Producer Price Index (IPA-M) for June 2018.

June. It is worth noting that this hike was significantly lower than that confronting the end-consumer in the same period, as borne out by the aforementioned June price rises, in terms both of the overall IPCA (+1.26%) and, more specifically, those relating to food consumed at home (+3.09%).

The Executive Order nº 832 of May 30th 2018, which introduced a minimum freight tariff also contributed to expand the surge in the prices set by producers and paid by consumers. Thus, according to a report by the Administrative Council for Economic Defense (CADE) for Brazil's Federal Supreme Court (STF), "the proposed freight price tariff is clearly contrary to the interests of consumers and truck drivers alike, as it will increase the price of end-products in the short term and severely distort the dynamics of the road haulage market in the medium to long term"[2] .

While, on the one hand, price fluctuations in June reflect both the immediate and longer-term impact of the strike per se, in July, the effects of freight tariffs is tending to become more visible in so far as it has an accumulative impact on the chain of production. The agricultural sector, in particular, is at the beginning of the agricultural year, when credit is needed in order to acquire equipment and raw materials. Preliminary surveys indicate the following effects on the sector in the month of July alone:

- The increased tariff is making it difficult for producers to take receipt of fertilizers for the planting season, which begins in the months of August and September. A total of 27 million tons of fertilizer have still not been delivered to various agricultural regions of the country. These fertilizers (80% of it imported) enter Brazil through eight main ports and are transported up to 2,000 km to farms. The volume of fertilizer delivered in May and June 2018 was 27% and 30% respectively, lower than the equivalent figures for 2017[3] ;

- The producers have already failed to sell 8.7 million tons of the upcoming soya-bean harvest. This means that they have sold only 13% of the 2018/19 harvest compared to an average of 20% for this time of the year[4] ; and

- At least 60 ships are stuck in Brazilian ports and this has a negative impact both on the unloading of goods and on the road transport of fertil-

2 Item 28 of Communication nº 2547/2018/CADE "Administrative Council for Economic Defense Statement on ADI nº 5,956".
3 According to a statement by the National Association for the Distribution of Fertilizers (ANDA) in the July 4th 2018 *Folha de São Paulo* article: "Freight holds back national fertilizer sector".
4 Data from the Brazilian Association of Vegetable Oil Industries (ABIOVE) presented in its 09/07/2018 Press Release: The Position of the ABIOVE on Executive Order 832 – Freight Tariffs"; and the Confederation of Brazilian Farmers (CNA) in Technical Note nº 20/2018: "Minimum Freight Tariffs" (05/06/2018).

izers by way of so-called "return freight". In view of the stalemate regarding freight, at least half of the trucks carrying grain to the ports are going back empty. Prior to the tariff, at least 80% used to return to agricultural regions carrying fertilizers and pesticides[5].

Final Remarks

Keeping inflation within the established goal since the beginning of 2017 has been crucial for the Brazilian economy. The inflation rates were way above target in 2015, with a 10.7% inflation, and in 2016 (6.3%). It was the 2016/2017 grain harvest that helped bringing down inflation back to the inflation target range – which was between 3% and 6% p.a. from January 2017 on.

The role agribusiness played in controlling inflation has been widely acknowledged. The 4.85% drop in the price of food consumed at home in 2017—made possible by the record harvest—resulted in a year-end inflation rate of 2.95%, lower even than the lower limit of the inflation target for that year.

This comfortable inflation rate helped bringing about one of the most prolonged cycles of interest rate reductions in Brazilian history, leading the SELIC rate to an all-time low of 6.5% per annum. Furthermore, the two best harvests in Brazilian history– in 2016/17 and 2017/18 – helped the Brazilian economy to weather the crisis of the past few years. The powerful chain of production of the agribusiness have also helped greatly to generate income and employment, and (through record exports) to stabilize the exchange rate, especially in this low growth period.

The immediate and longer-term effects of the truck drivers' strike has jeopardized this virtuous circle whereby agribusiness contributes to the macro-economic stability of the Brazilian economy. The uptick in inflation in June reflects the combined effects of three consequences of the strike on the price of food: *i)* a breakdown of logistics during the stoppage; *ii)* the need to replenish retail stocks and raw materials in the industry; and *iii)* the increased transport costs generated by the introduction of a freight charges tariff. The projection for July is that the inflationary pressure resulting from the first two factors will dwindle out, leaving only the effects of the freight tariff. The start of the agricultural year and the consequent need for materials and fertilizers will tend to accelerate the price increase passed on to consumers in the short to medium term, since distribution of the harvest

5 According to a statement by the Brazilian Minister of Agriculture, Blairo Maggi, on June 12th 2018.

will incur higher freight costs. In the longer term, there will be a shortfall in the supply of food products, if the 2018/19 planting season continues to be disrupted by these developments.

Institute for Applied Economic Research (Ipea)

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