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SPECIAL REPORT - INFLATION

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Revisiting Inertial and Slack-Sensitive Services

- In this report, we analyze services and core services inflation from the perspective of their inertial and slack components, following the BCB's methodology.
- We found that all services components have been showing decelerating inflation, albeit at different rates, since their peaks last year.
- In the coming months, we expect prices that are neither related to inertia nor to slack will continue trending down, as per our forecasts.
- However, we expect the inertia-related component to see a stabilization/slight acceleration through 2023YE, in line with an acceleration in headline inflation (the main source of inertia, as it serves as the index for price adjustments) due to base-effects.
- The recent deceleration in the slack-sensitive services component is at odds with the tight job market and output gap.
- One possible explanation for this inconsistency is that nominal wage growth is also slowing down (despite
 the tightness of the job market). Nominal wage growth is the primary mechanism for transmitting signals of
 economic strength to service sector prices (since services are so labor-intensive). Right now, this
 mechanism seems to not be working as normal.
- Looking ahead, we continue to foresee a deceleration of slack-sensitive services inflation, not only because service sector prices currently seem immune to economic strength, but also because we anticipate a deceleration in economic activity.

Introduction

Annual core inflation has been falling by all measures since the second half of 2022. The disinflation process, driven largely by volatile items, has reached services inflation that has more weight in core metrics and tends to be stickier and procyclical (i.e. it is usually more inertial and dependent on the economic activity). Services disinflation was well-illustrated by the last IPCA print in August, that showed a faster-than-expected deceleration pace. Nevertheless, the broad core gauges are still above the inflation target, the job market is tight with a low historical unemployment rate, GDP growth is solid and has been surprising to the upside, and inflation expectations have been re-anchored only partially at 3.5%, 50 bps above the target. The services disinflation path ahead is, therefore, uncertain.

With this perspective in view, services inflation is being monitored carefully by both the Brazilian Central Bank (BCB) and market participants. In this report, we focus our attention on updating the BCB's "Analysis of services inflation in terms of slack and inertia" from their December 2022 Quarterly Inflation Report. In the BCB report,

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services inflation components were classified as more sensitive to slack, inertia, both, or none1. Moreover, we take one more step and repeat the analysis this time restricting the sample to core services, (excluding noncore services) to assess the progress of the stickier parts of services inflation in terms of the inertial and slack classification.

Intuitively, when headline inflation is on the rise or at a high level, inertial services inflation should also be strong and accelerating. When the job market is tight and the economy is growing beyond its potential, then slacksensitive service prices should be on an upward trajectory. Similarly, we would also expect lower headline inflation and slower economic activity to lead to disinflation for inertial services and slack-sensitive services respectively.

Results and Discussion

Inertial services peaked in September 2022 at 9.7% YoY and have been falling since then reaching 6.2% YoY in the last IPCA print in August. Non-inertial services peaked in the same month, at 8.1% YoY, and decreased to 5.6% YoY in August's. As headline inflation rebounds in the coming months (mostly due to base effects), we expect inertial services to finish 2023 around 6.1% YoY, despite its trend decline to 5.0% 3MMA-saar in the last IPCA print, its lowest value since January. Non-inertial services trend has fallen more steeply, reaching 3.8% 3MMA-saar in August, the lowest level since mid-2021. Our expectation is that it will be at 4.5% YoY by YE2023. Therefore, as headline inflation rebounds, we expect non-inertial service inflation to continue its downward trajectory, while inertial services inflation is expected to stay at a high level.

Figure 1. Inertial Services Inflation (%)

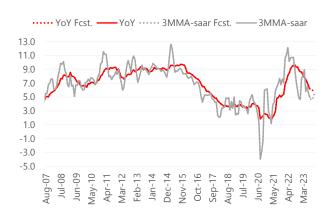


Figure 2. Non-Inertial Services Inflation (%)



Sources: BCB, IBGE and Santander.

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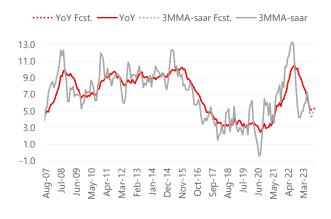
Looking at just inertial core services, the annual increase fell from 10.6% YoY in September 2022 to 5.3% YoY in August. We believe the trend, that decreased to 4.8% 3MMA-saar in the last IPCA, indicates that there might be space for a further fall. However, our forecast remains at 5.4% for YE2023. For non-inertial core services, the peak YoY number occurred in the last month of 2022 at 8.3%. It has since dropped to 5.8% in August. The trend at 3.6% 3MMA-saar also points to a downward path, supporting our 4.3% YE2023 projection. In other words, the conclusion for inertial and non-inertial core services is the same as for the whole sample. That is, non-inertial services inflation is expected to decline until December, while inertial services are likely to stay high as headline inflation rebounds.

¹ Check the BCB report for a detailed description of the methodology: https://bit.ly/3LBvWZo.

Inertial services composition: food-away-from-home, condominium fee, labor (repairs), repairs and maintenance, school transport services, vehicle voluntary insurance, vehicle maintenance, forwarding agent, club, animal care (clinic), tour package, cinema, theater and concerts, regular courses, and various courses

Slack-sensitive services composition: food-away-from-home, residential rental, moving house, labor (repairs), vehicle maintenance, parking, medical and dental service, seamstress, manicure, domestic services, hairdressing salon and barber, depilation, eyebrow, animal care (clinic), nightclub, accommodation, tour package, pet grooming service.

Figure 2. Inertial Core Services Inflation (%)



Sources: BCB, IBGE and Santander.

Figure 3. Non-Inertial Services Inflation (%)

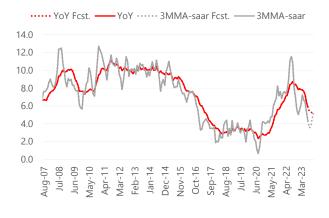


Sources: BCB, IBGE and Santander.

Slack-sensitive services also peaked in September 2022 at 8.8% YoY while non-slack services local maximum happened one month later at 9.6% YoY. Both measures have been falling and were reported at 5.9% and 6.0%, respectively in August. For non-slack services, its trend rebounded to 6.3% 3MMA-saar in August, the highest level in 2023, and we expect it to finish 2023 at 6.1% YoY.

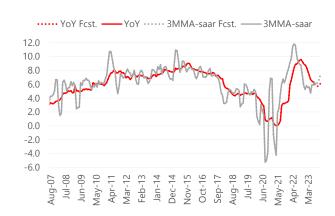
Currently, a great deal of uncertainty has been leading to open discussions about the output gap in the economy. On the one hand, the job market is tight (unemployment rate is at a low historical level) and GDP growth keeps surprising to the upside. On the other hand, economic activity appears to be decelerating as a result of restrictive monetary policy and core inflation gauges are decelerating. Therefore, slack-sensitive services trend and the YoY number may be indicators of the strength of the economy. According to August's IPCA, its trend fell to 4.3% 3MMA-saar, the lowest level since April 2021. We see the slack-sensitive service inflation falling to 5.3% YoY by YE2023. Thus, this slow deceleration and above target level may support the view that the economic activity is strong but not enough to spur inflation.

Figure 5. Slack-sensitive Services Inflation (%)



Sources: BCB, IBGE and Santander.

Figure 6. Non-Slack Services Inflation (%)

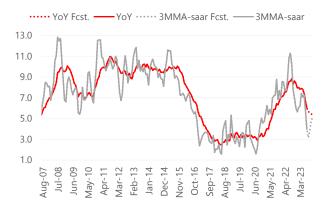


Sources: BCB, IBGE and Santander.

Looking at slack and non-slack sensitive core services, the story is similar to those above. These indices peaked late last year at 8.8% YoY and 11.3% YoY, respectively, and have been falling since then. In the last IPCA print, non-slack core services inflation was at 4.3% YoY, the lowest value since December 2021, but its trend moved to 5.4% 3MMA-saar. In contrast to whole sample non-slack services, we project that core non-slack services inflation will keep to a downward path, coming in at 3.8% by the end of 2023. In August, the slack-sensitive core inflation reached its lowest recent level for both the annual variation at 6.0% and the trend at 4.0%. A further fall in this group is likely, as we see it decreasing to 5.4% YoY by YE2023. Thus like the non-core group, these numbers suggest less inflationary pressure.

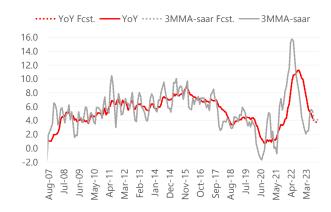


Figure 7. Slack-sensitive Core Services Inflation (%)



Sources: BCB, IBGE and Santander.

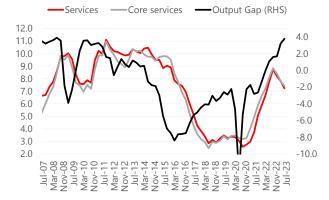
Figure 8. Non-Slack Core Services Inflation (%)



Sources: BCB, IBGE and Santander.

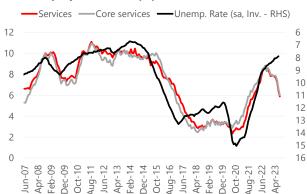
Lastly, we illustrate below the conflict between economic activity slack and inflation, where the first shows strength while the second is already falling. To compare the two, we plot quarterly slack-sensitive services and our estimate of the output gap – in which numbers below 0 means that the economy is below its potential and numbers above that threshold would indicate an overheated economy. Notice that in 2014 the output gap dropped significantly before the disinflation materialized in slack-sensitive services. However, as of now, not only do we estimate a positive gap with current inflation already in a downward trend, but this difference is increasing. The same pattern can be seen with the unemployment rate (inverted in Figure 10), as the unemployment rate increased before a fall in slack-sensitive service prices. However, we see them moving in the same direction in the remaining months of 2023.

Figure 9. Slack-sensitive Services Inflation (%) and Output Gap (%)



Sources: BCB, IBGE and Santander.

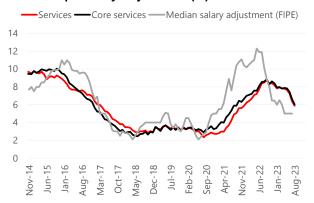
Figure 10. Slack-sensitive Services Inflation (%) and Unemployment Rate (%)



Sources: BCB, IBGE and Santander.

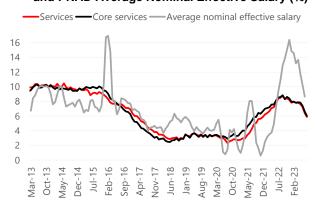
One possible explanation for this inconsistency is that nominal wage growth is decelerating. This then leads a smaller wage pass through to services inflation, as the sector is more labor intensive. The argument can be illustrated comparing the slack-sensitive services inflation with the median salary adjustment compiled by Fipe and the average nominal effective salary from IBGE. From these numbers, we can see that wages have been decreasing since last year, possibly anticipating a softening of slack-sensitive service inflation.

Figure 11. Slack-sensitive Services Inflation (%) and Fipe Salary Adjustment (%)



Sources: BCB, IBGE, Fipe, and Santander.

Figure 12. Slack-sensitive Services Inflation (%) and PNAD Average Nominal Effective Salary (%)



Sources: BCB, IBGE and Santander.

Conclusion

In this report, we analyzed services inflation in terms of its inertial and slack-sensitive component. We found that all services components have been showing decelerating inflation, albeit at different rates, since their peaks last year. Moreover, we expect this deceleration in inflation to continue in the coming months primarily as a result of deceleration in the items that are not related to inertia or slack together with deceleration in the slack-sensitive services component. However, our forecast for continued deceleration in slack-sensitive prices relies on our forecast for slower economic growth, as we do not believe the current discrepancy between the output gap and services inflation can be sustained in the medium term. We expect the inertia-related component to see a stabilization/slight acceleration through 2023YE, in line with an acceleration in headline inflation (the main source of inertia, as it serves as the index for price adjustments) due to base-effects.



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