

BRAZIL MACRO

DATA ANALYSIS – INFLATION

November's IGP-M: Deflation's Impact on Commodities Persists

Felipe Kotinda* felipe.kotinda@santander.com.br +5511 3553 8071

Daniel Karp* daniel.karp@santander.com.br +5511 3553 9828

- November's IGP-M surprised to the downside: -0.56% MoM vs. -0.35% MoM, as estimated by consensus, and our estimate of -0.30% MoM. From the last 22 prints, 18 surprised to the downside or did not surprise (82% of the prints were below or equal to expectations).
- IPA-Agro posted deflation of -1.46% MoM, with the trend falling to -10.3% 3MMA-saar (from -8.7% previously), below the 5.3% YoY reading.
- IPA-Industrial posted deflation of -0.74% MoM, with the trend rising to -6.8% 3MMA-saar (from -7.3% previously), meaning it is running well below the 5.9% YoY rate and suggesting further deceleration ahead.
- IPA-industrial core gauge posted -2.6% 3MMA-saar (from -1.9% before), running below the 3.1% YoY rate and signaling that the YoY rate will continue to trend downward.
- IGPs' reading has been more favorable at the margin, but the dichotomy between supply issues in commodities and a likely slowdown of the global economy still suggests an uncertain outlook ahead. We still expect commodity prices to rebound (particularly oil), but given recent surprises to the downside, our IGP-M 2022 tracking is now at 5.5% YoY.

November's IGP-M surprised to the downside: -0.56% MoM vs. -0.35% MoM, as estimated by consensus, and our estimate of -0.30% MoM. From the last 22 prints, 18 surprised to the downside or did not surprise (82% of the prints were below or equal to expectations). The headline trend remains in the negative camp, stable at -5.7% 3MMA-saar, and continues to run below the 5.9% YoY change, suggesting further deceleration ahead. Broadly, the breakdown of this reading was quite similar to November's IGP-10.

IPA-Agro posted deflation of -1.46% MoM, with the trend falling to -10.3% 3MMA-saar (from -8.7% previously), below the 5.3% YoY reading. Commodities continue to show deflation: livestock fell -2.6% MoM, still driven by the deflation of milk (-5.3% MoM), cattle (-2.2% MoM) and poultry (-2.8% MoM). Short-term cattle demand could rise given end-year seasonality and the games in Qatar. Nonetheless, we still see the prospects for cattle in 2023 as benign given our expectation of abundant supply. As for milk, prices paid to producers continue to fall, as supply from the Center-South region picks up. In agricultural, coffee deflation is the highlight (-21% MoM). Coffee prices have receded 30% YTD, and the prospect of higher supplies in 2023 could add to the bearish trend. On the other hand, in-natura goods (such as mandioca, tomato and orange) posted inflation, though it is decelerating. (Indeed, in the last reading of November's IPCA-15, food inflation decelerated a bit.

IPA-Industrial posted deflation of -0.74% MoM, with the trend rising to -6.8% 3MMA-saar (from -7.3% previously), meaning it is running well below the 5.9% YoY rate and suggesting further deceleration ahead. Iron ore fell -8% MoM, though prices rebounded in early November and are now inching close to US\$100/ton in the hopes of China providing further stimulus to the property sector. The latter, coupled with BRL depreciation, leads us to believe that this deflation trend will dissipate in the coming IGP readings. Deflation of oil-related items

IMPORTANT DISCLOSURES/CERTIFICATIONS ARE IN THE "IMPORTANT DISCLOSURES" SECTION OF THIS REPORT. U.S. investors' inquiries should be directed to Santander Investment Securities Inc. at (212) 583-4629 / (212) 350-3918. * Employed by a non-US affiliate of Santander Investment Securities, Inc. and is not registered/qualified as a research analyst under FINRA rules.

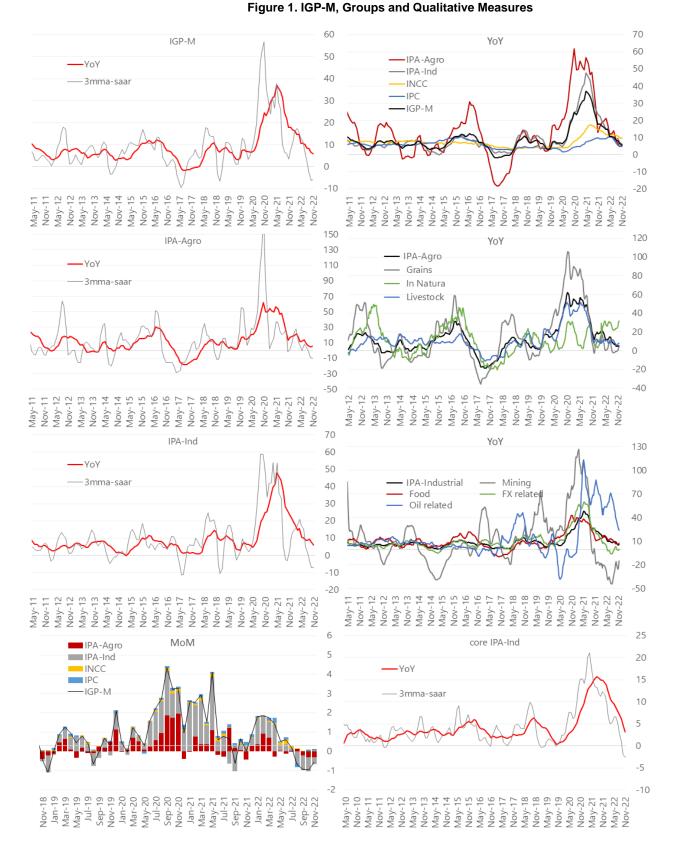
November 29, 2022

has been decelerating, with oil prices recently trading sideways as the market awaits the next OPEC+ meeting (scheduled for December 4) and further signs of where China is headed with respect to its zero-COVID policy.

IPA-industrial core gauge posted -2.6% 3MMA-saar (from -1.9% before), running below the 3.1% YoY rate and signaling that the YoY rate will continue to trend downward. This is important because the IPA-industrial core gauge (which excludes iron ore, food, medicines, and fuels from the IPA-industrial headline) is more correlated with the industrial goods group in IPCA (durable goods in general), so it is more optimistic news for IPCA. Indeed, durable goods inflation on IPCA continues to plunge.

IGPs' reading has been more favorable at the margin, but the dichotomy between commodity supply issues and a likely slowdown of the global economy still suggest an uncertain outlook ahead. We still expect commodity prices to rebound (particularly oil), but given recent surprises to the downside, our IGP-M 2022 tracking is now at 5.5% YoY.





Sources for all charts: FGV and Santander.



Figure 2. IGP-M, Groups and Qualitative Measures

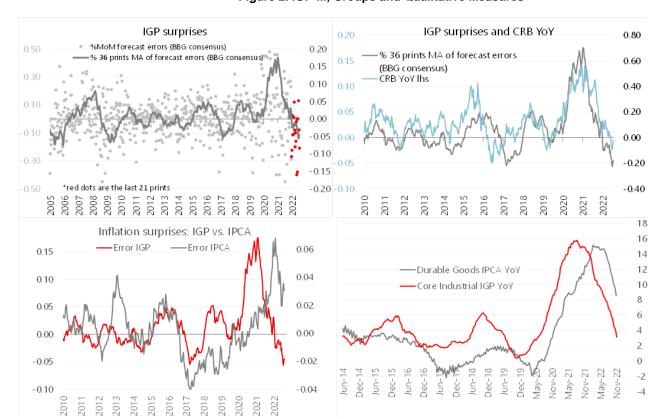




Figure 3. IGP-M, Groups and Qualitative Measures (continuation)

		Sep-22			Oct-22			Nov-22	
IGP chained %MoM	IGP-10	IGP-M	IGP-DI	IGP-10	IGP-M	IGP-DI	IGP-10	IGP-M	IGP-DI
IGP	-0.90	-0.95	-1.22	-1.04	-0.97	-0.62	-0.59	-0.56	
IPA	-1.18	-1.27	-1.68	-1.44	-1.44	-1.04	-0.98	-0.94	
IPA-Agro	-0.39	-0.99	-1.20	-1.33	-1.46	-1.79	-1.44	-1.46	
Grains	-0.82	-0.71	-0.83	-0.58	-0.35	-0.30	0.42	0.71	
In Natura	3.75	4.25	5.63	6.61	6.89	5.62	4.50	3.69	
Livestock	-1.19	-3.55	-3.99	-3.93	-4.00	-3.97	-2.78	-2.61	
IPA-Industrial	-1.50	-1.39	-1.88	-1.49	-1.43	-0.73	-0.79	-0.74	
Mining	-3.64	-3.97	-2.69	-0.41	-1.20	-4.84	-8.72	-7.32	
Food	0.04	0.03	-0.45	-0.92	-0.62	0.32	0.45	0.49	
FX related	-1.16	-1.22	-1.50	-1.27	-1.39	-1.50	-1.98	-2.06	
Oil related	-6.58	-5.79	-8.02	-5.61	-5.64	-2.06	-1.20	-0.37	
INCC	-0.02	0.10	0.09	0.01	0.04	0.12	0.19	0.14	
IPĊ	-0.14	-0.08	0.02	0.17	0.50	0.69	0.67	0.64	

		Sep-22			Oct-22			Nov-22	
IGP chained %YoY	IGP-10	IGP-M	IGP-DI	IGP-10	IGP-M	IGP-DI	IGP-10	IGP-M	IGP-DI
IGP	8.2	8.3	7.9	7.4	6.5	5.6	5.6	5.9	
IPA	8.4	8.6	8.3	7.7	6.5	5.2	5.2	5.8	
IPA-Agro	6.4	6.4	6.3	4.8	4.6	4.5	4.9	5.3	
Grains	-2.2	-1.4	-1.0	-0.9	-0.3	0.5	2.0	4.1	
In Natura	22.3	22.1	23.7	23.9	24.4	25.4	29.5	31.6	
Livestock	8.9	8.1	7.6	5.7	5.9	6.6	8.2	8.0	
IPA-Industrial	9.2	9.5	9.2	8.9	7.2	5.5	5.3	5.9	
Mining	-30.0	-25.2	-19.0	-15.8	-20.3	-25.7	-24.0	-14.9	
Food	9.2	8.3	6.6	6.5	6.6	6.0	6.6	7.3	
FX related	-0.1	1.3	2.7	2.9	0.3	-1.9	-1.6	0.0	
Oil related	50.3	49.1	41.3	38.4	35.2	28.3	25.9	24.1	
INCC	11.2	10.9	10.7	10.6	10.1	9.9	9.7	9.4	
IPĆ	6.2	5.6	5.1	5.0	5.0	5.0	4.9	4.7	

Sources for all charts: FGV and Santander.



CONTACTS / IMPORTANT DISCLOSURES

Brazil Macro Resea	arch		
Ana Paula Vescovi*	Chief Economist	anavescovi@santander.com.br	5511-3553-8567
Mauricio Oreng*	Head of Macro Research	mauricio.oreng@santander.com.br	5511-3553-5404
Jankiel Santos*	Economist – External Sector	jankiel.santos@santander.com.br	5511-3012-5726
Ítalo Franca*	Economist – Fiscal Policy	italo.franca@santander.com.br	5511-3553-5235
Daniel Karp Vasquez*	Economist – Inflation	daniel.karp@santander.com.br	5511-3553-9828
Tomas Urani*	Economist – Global Economics	tomas.urani@santander.com.br	5511-3553-9520
Lucas Maynard*	Economist – Economic Activity	lucas.maynard.da.silva@santander.com.br	5511-3553-7495
Felipe Kotinda*	Economist – Commodities	felipe.kotinda@santander.com.br	5511-3553-8071
Gabriel Couto*	Economist – Special Projects	gabriel.couto@santander.com.br	5511-3553-8487
Fabiana Moreira*	Economist – Credit	fabiana.de.oliveira@santander.com.br	5511-3553-6120
Gilmar Lima*	Economist – Modeling	gilmar.lima@santander.com.br	5511-3553-6327
Global Macro Rese			
Maciej Reluga*	Head Macro, Rates & FX Strategy – CEE	maciej.reluga@santander.pl	48-22-534-1888
Rodrigo Park *	Economist – Argentina	rpark@santander.com.ar	54-11-4341-1272
Ana Paula Vescovi*	Economist – Brazil	anavescovi@santander.com.br	5511-3553-8567
Juan Pablo Cabrera*	Economist – Chile	jcabrera@santander.cl	562-2320-3778
Guillermo Aboumrad*	Economist – Mexico	gjaboumrad@santander.com.mx	5255-5257-8170
Piotr Bielski*	Economist – Poland	piotr.bielski@santander.pl	48-22-534-1888
Mike Moran	Head of Macro Research, US	mike.moran@santander.us	212-350-3500
Fixed Income Rese	arch		
Juan Arranz*	Chief Rates & FX Strategist – Argentina	jarranz@santanderrio.com.ar	5411-4341-1065
Mauricio Oreng*	Senior Economist/Strategist – Brazil	mauricio.oreng@santander.com.br	5511-3553-5404
Juan Pablo Cabrera*	Chief Rates & FX Strategist – Chile	jcabrera@santander.cl	562-2320-3778
Equity Research			
Miguel Machado*	Head Equity Research Americas	mmachado@santander.com.mx	5255 5269 2228
Alan Alanis*	Head, Mexico	aalanis@santander.com.mx	5552-5269-2103
Andres Soto	Head, Andean	asoto@santander.us	212-407-0976
Walter Chiarvesio*	Head, Argentina	wchiarvesio@santanderrio.com.ar	5411-4341-1564
Mariana Cahen Margulies*	Head, Brazil	mmargulies@santander.com.br	5511-3553-1684
Electronic			

Electronic

Bloomberg

Reuters

SIEQ <GO>

Pages SISEMA through SISEMZ

This report has been prepared by Santander Investment Securities Inc. ("SIS"; SIS is a subsidiary of Santander Holdings USA, Inc. which is wholly owned by Banco Santander, S.A. "Santander"), on behalf of itself and its affiliates (collectively, Grupo Santander) and is provided for information purposes only. This document must not be considered as an offer to sell or a solicitation of an offer to buy any relevant securities (i.e., securities mentioned herein or of the same issuer and/or options, warrants, or rights with respect to or interests in any such securities). Any decision by the recipient to buy or to sell should be based on publicly available information on the related security and, where appropriate, should take into account the content of the related prospectus filed with and available from the entity governing the related market and the company issuing the security. This Banco Santander, S.A., London Branch. Santander London is authorized by the Bank of Spain. This report is not being issued to private customers. SIS, Santander London and Santander Investment Bolsa are members of Grupo Santander.

ANALYST CERTIFICATION: The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed, that their recommendations reflect solely and exclusively their personal opinions, and that such opinions were prepared in an independent and autonomous manner, including as regards the institution to which they are linked, and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report, since their compensation and the compensation system applying to Grupo Santander and any of its affiliates is not pegged to the pricing of any of the securities issued by the companies evaluated in the report, or to the income arising from the businesses and financial transactions carried out by Grupo Santander and any of its affiliates: Felipe Kotinda* and Daniel Karp*.

*Employed by a non-US affiliate of Santander Investment Securities Inc. and not registered/qualified as a research analyst under FINRA rules, and is not an associated person of the member firm, and, therefore, may not be subject to the FINRA Rule 2242 and Incorporated NYSE Rule 472 restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account.

The information contained herein has been compiled from sources believed to be reliable, but, although all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading, we make no representation that it is accurate or complete and it should not be relied upon as such. All opinions and estimates included herein constitute our judgment as at the date of this report and are subject to change without notice. From time to time, Grupo Santander and/or any of its officers or directors may have a long or short position in, or otherwise be directly or indirectly interested in, the securities, options, rights or warrants of companies mentioned herein.

Any U.S. recipient of this report (other than a registered broker-dealer or a bank acting in a broker-dealer capacity) that would like to effect any transaction in any security discussed herein should contact and place orders in the United States with SIS, which, without in any way limiting the foregoing, accepts responsibility (solely for purposes of and within the meaning of Rule 15a-6 under the U.S. Securities Exchange Act of 1934) for this report and its dissemination in the United States.

© 2022 by Santander Investment Securities Inc. All Rights Reserved.

