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Global Economics | North America

Global Inflation Monitor

Global headline dropped, 5.5%Y in Feb (vs 6%Y in Jan). The slowdown was mostly driven by energy prices. Global supply chains have been healing since 2H22; what does it mean for goods inflation? We analyze the cases of US and EA in our thematic piece.

We estimate the effect of supply chain improvement on goods inflation in US and EA

- Our model forecasts a more meaningful effect in US (-1.6% from Jun-22 to Dec-23) than in EA (-0.9%). The effect on PPIs is more substantive for both economies.

- While US goods inflation has been decreasing on the back of better supply chains since mid-2022, the effect of supply chain easing started to kick in 1Q23 in EA.

- Cars prices are more important for the US outlook because: (i) they increased more during 2020/21, (ii) cars are more important in the goods CPI basket in the US.

- In the most recent US CPI, new car prices rose again, but a slowing new cars market and tighter lending standards should soften prints this year. Going forward we might see a temporary boost in used prices as auction prices have ticked up recently.

Downward path in headline %Y rates in US and EA. An upward surprise in UK. We think headline in Japan and Australia already peaked

- In the **US**, headline CPI decreased to 5%Y in March (6%Y in Feb). Core goods sequential inflation accelerated again due to higher new cart prices, but rents and OER decelerated at the margin.

- **EA** HICP strongly declined in March (6.9%Y vs 8.5%Y in Feb), driven entirely by energy. But core inflation increased to 5.7%Y (vs 5.6%Y in Feb), and food surprised to the upside. We expect strong core prints ahead, mainly driven by services.

- In the **UK**, headline CPI surprised to the upside, 10.4%Y in Feb (vs 10.1%Y in Juan), but data collection day was on Valentine's day possibly biasing numbers upwards, especially hospitality and catering.

- In **Japan**, headline CPI decreased to 3.3%Y in Feb from the previous reading of 4.3%Y. But US-style core exceeded 2%Y for the first time since Dec-92, mainly driven by goods and reflecting increasing import prices.

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- In **Australia**, monthly headline inflation fell to 7.3%Y in Feb from 7.1%Y in the previous month. We see a downward path ahead as large drivers like food, recreation, and housing purchases decelerate.

Low inflation in China despite the rebound, food-driven volatility in India, non-core explains prints in Korea and Indonesia

- In **China**, Jan-Feb CPI came in at a mild 1.6%Y (vs. 1.8%Y in Dec-22), while core CPI remained subdued at 0.8%Y (0.7% in Dec-22). We expect manageable inflation ahead due to labor market slack and idle capacity utilization.

- In **India**, there is a bumpy path for headline CPI as food represents ~40% of the CPI basket. Headline CPI for March slowed to 5.7%Y from 6.4% in Feb. Core showed a broad-based drop too.

- Oil and food mostly explain recent prints in Korea and Indonesia, respectively. Lower oil prices caused a drop in headline to 4.8%Y in Feb (5.2% in Jan) in **Korea**, and food acceleration boosted headline in **Indonesia** to 5.5%Y in Feb (5.3%Y in Jan). But core decelerated a touch in both economies.

More uncertain path ahead in Russia, upward surprise in South Africa, headline remains elevated in Turkey and CE3

- In **Russia**, inflation decreased a bit: 11%Y in Feb (vs 11.8%Y in Jan). Pressures are broad-based and core remains above headline. A weaker ruble, stronger consumption and fiscal spending add upward pressure to the outlook.

- In **Turkey**, headline decreased in Feb (50.5%Y vs 55.2%Y in Jan). The decline reflects FX stability and base effects.

- In **CE3**, inflation came out broadly in line with expectations (Hungary: 25.2%Y in March, Poland: 18.4%Y in Feb, Czech: 16.7%Y in Feb). Food and energy inflation started to decelerate while core inflation remains on an upward path in **Hungary** and **Poland**. In **Czech Rep** core inflation continued it's gradual descent helped by lower imputed rents.

- In **South Africa**, headline surprised to the upside with 7%Y in Feb (6.9%Y in Jan). Load-shedding is likely playing a role. We see a downward path ahead but CPI remains ahead of target (4.5%Y) until 3Q24.

On a downward trajectory in Brazil, Mexico, Chile, the idiosyncratic cases are Colombia and Argentina

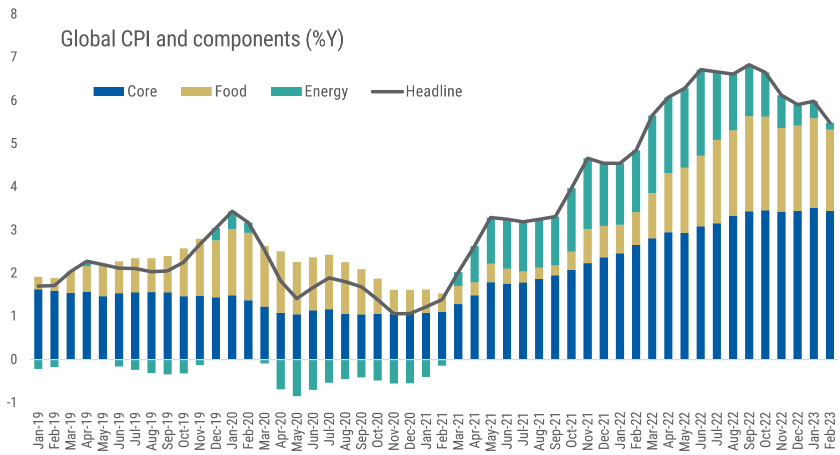
- In **Brazil**, decreased again, 4.65%Y in March (vs 5.6%Y in Feb). The drop in annual rates since last year is mainly driven by non-core, but core inflation decelerated at the margin the last print.

- In **Mexico**, CPI data surprised to the downside in 1H/Feb (7.76%Y), after bad January numbers (7.88%Y 2H/Jan). There is persistence in core inflation, with concerns mostly centered on core services.

- In **Argentina** inflation came at 102.5%Y in Feb (98.9%Y in Jan). The bulk of price pressures came from food and beverages amid a severe drought. Tariff adjustments and hotels and restaurants were also key components.

- **Chile**'s surprised to the downside but it is still high (11.9%Y vs 12.3%Y in Jan), services inflation is accelerating at the margin. **Colombia**'s inflation keeps increasing (13.3%Y in Feb) and it is broad-based.

Exhibit 1: Global inflation dropped in February



Source: Haver Analytics, Morgan Stanley Research. Global inflation excludes Russia, Ukraine, Turkey and Argentina. China's CPI weights are the ones inferred by Bloomberg.

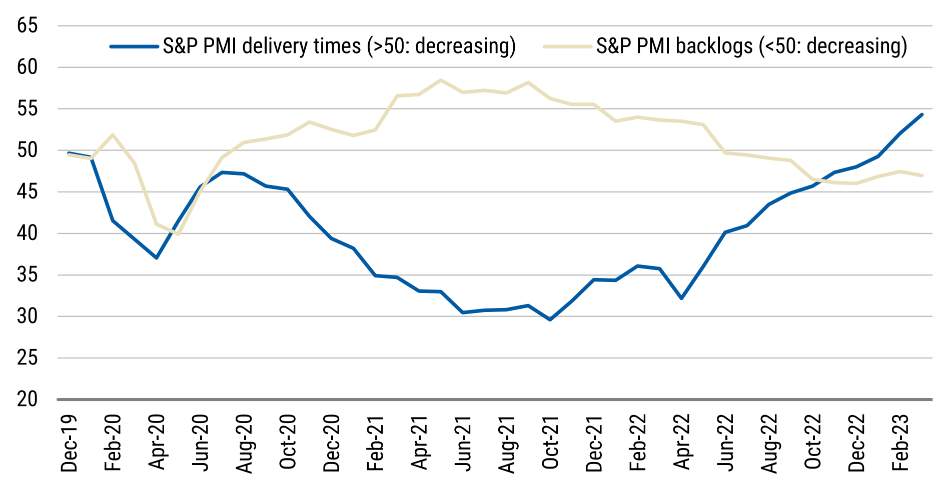
Goods inflation amid supply chains healing

Diego Anzoategui

Core goods inflation will likely be an important source of core disinflation in US and EA this year. We have been highlighting progress in global supply chains since last year, but how exactly will this progress affect core goods inflation? We use a simple model relating our Morgan Stanley Supply Chain Index (MSSCI) with core goods inflation. Our results point to 160 and 90bp disinflation coming from supply chains form mid-2022 to Dec-23 in US and EA, respectively. The effect on producer price index (PPI) inflation is larger for both economies.

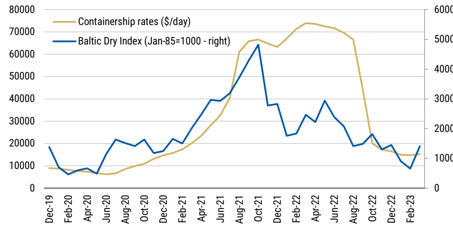
Supply chains have been healing for a while. PMI delivery times and backlogs, both key components of the index, have been improving since 2Q21. In terms of shipping costs by sea, both the Baltic Dry Index (BDI) and containership rates decreased meaningfully. BDI is now at pre-COVID levels, and containership rates are still 50% higher than 2019 levels but way below the peak in 1Q22. Airfreight rates also decreased; still not reaching pre-COVID levels, but the improvement is meaningful especially considering foreign carriers as reflected by the US BLS airfreight import price index.

Exhibit 2: Overall delivery times and backlogs are improving



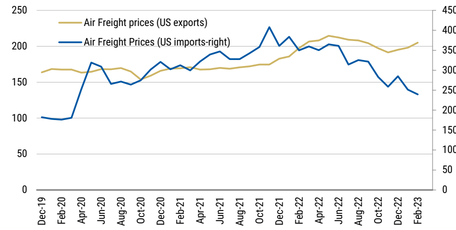
Source: Haver, Morgan Stanley Research. Note: Series are PPP weighted averages across G4, China, Korea and Taiwan

Exhibit 3: Shipping by sea is now cheaper..



Source: Clarksons Research, Haver, Morgan Stanley Research.

Exhibit 4: ...and airfreights prices also dropped, especially in foreign carriers



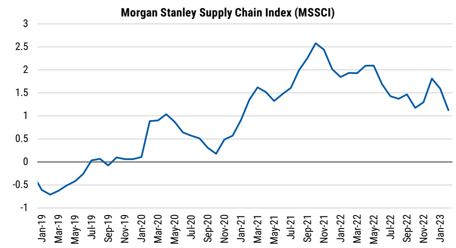
Source: Haver, Morgan Stanley Research.

We have been keeping track of the state of supply chain conditions in our monthly release of the MSSCI, an index that summarizes the series shown above and more granular data for individual economies.[1] Our data release consists of two indexes, the MSSCI that keeps tracks of supply-side developments (MSSCI Index on BBG), and the MSSCI supply and demand (MSSCISD Index) which summarizes the interplay between supply and demand. That is, the MSSCI aims to capture the effect on supply chains from supply shocks like lockdowns, whereas the MSSCISD is affected by both supply and demand factors and, therefore, it is also driven by swings in global demand for goods.

Both indexes show great progress since 4Q21, with some bumps. Both the MSSCI and MSSCISD peaked in 4Q21 and are now in a clear downward path. But there are two clear bumps in the series, perhaps more clearly reflected in the MSSCI path. The first one was in 1Q22 during the start of the Russian invasion to Ukraine, that hit delivery times and containership rates. The second happened in 4Q22, when progress in overall backlogs and charter rates stalled, and individual indicators for China worsened as COVID cases spiked after lifting the zero-COVID policy. Both MSSCI and MSSCISD are way below their peaks, but progress has been sharper for MSSCISD, reflecting the importance of lower global demand conditions reducing bottlenecks. Exhibit 7 shows a reduction in our proxies for global demand: overall PMI new orders and purchases. Both series moved to contractionary territory from 2Q22 with a recent uptick after China's reopening.

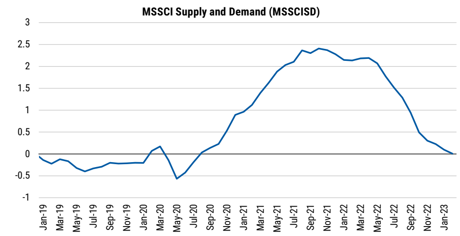
Keeping track of both MSSCI and MSSCISD is key for assessing the goods inflation outlook. Short-run fluctuations in the state of global supply chains reflect the interplay of both demand and supply conditions. The global business cycle determines the demand side of the equation, and therefore it is natural to see cyclical fluctuations in the MSSCISD, the index that incorporates demand conditions. And these cyclical fluctuations are useful to identify inflationary pressures in the short run. For a given supply, a more depressed demand reduced bottlenecks and inflationary pressures. But supply-side factors are critical when we start thinking of future inflation once the current downturn ends, and that is why the MSSCI is useful. If supply conditions don't come back to normal levels, inflationary pressures on goods will likely be more pronounced once the global economy regains momentum.

Exhibit 5: MSSCI is on a clear downward path, but still above normal levels..



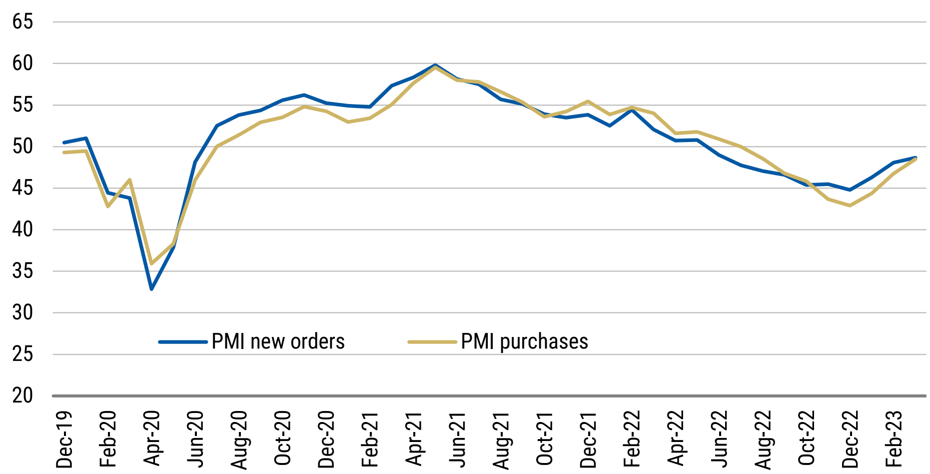
Source: Morgan Stanley Research.

Exhibit 6: MSSCISD is now at historical levels due to depressed global demand



Source: Morgan Stanley Research.

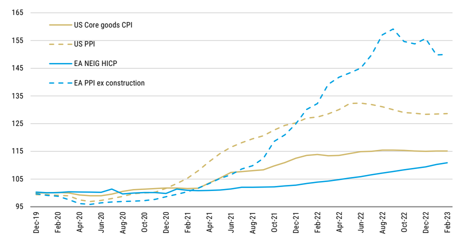
Exhibit 7: A drop in global demand is playing a role



Source: Haver, Morgan Stanley Research. Note: Series are PPP weighted averages across G4, China, Korea and Taiwan.

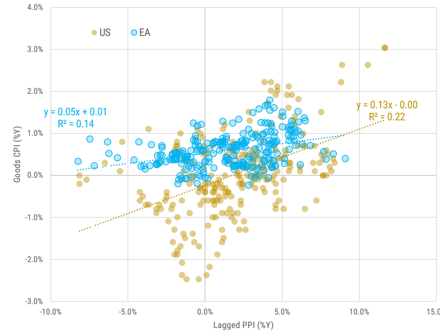
There has been deceleration in PPI in both US and EA, perhaps pointing to lower goods inflation ahead. PPIs measure the cost of inputs for goods producers and are often used as predictors of goods inflation. These indexes have been decreasing since 2H22 in US and EA - both PPIs dropped ~3% from their peaks recently. And as Exhibit 9 shows, pre-Covid data points to a correlation between core goods inflation and lagged PPIs annual rates. And this simple relationship points to goods disinflation coming ahead. In fact, we have already seen a meaningful slowdown in goods inflation rates in the US.

Exhibit 8: PPI indexes are receding in both US and EA..



Source: Haver, Morgan Stanley Research.

Exhibit 9: And core goods and lagged PPIs are correlated

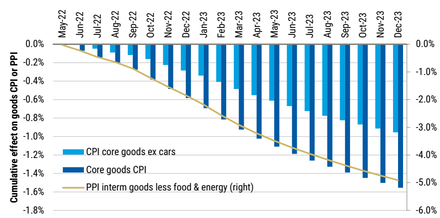


Source: Haver, Morgan Stanley Research. Notes: using pre-COVID data, PPI lag was chosen to maximize R2, and the resulting lags are 12 months for EA and 15 months for US.

Supply chains is a clear force behind the recent and upcoming PPI and goods CPI prints. We have been providing suggestive evidence on the link between MSSCI and core goods inflation in our monthly data releases, This time we take a deeper dive and use an econometric model to quantify the effect of recent supply chain easing on goods inflation and PPI. In particular, we estimate a structural vector autorregressive model including data on: the MSSCISD index, goods CPI, PPI, and also adding FX and energy prices to control for other factors that might affect production costs (see box below for more details). Both Exhibit 10 and Exhibit 11 summarize the effect on goods CPI and PPI levels of the sequence of negative shocks on MSSCISD that started in Jun-22. They show the contribution of supply chains healing to historical prints (up to Feb-23), and also detail how recent supply chains shocks shape model's forecasts ahead. Several points emerge from the charts:

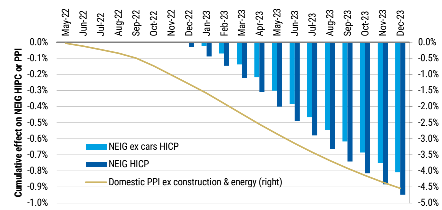
- In terms of PPI, our model points to about 5pp and 4.5pp of supply-chain-induced disinflation in from Jun-22 until Dec-23 for US and EA, respectively.
- After supply chain easing, core goods inflation reacts faster in the US than in EA. Our estimates imply that easier supply chains started to have an effect on core goods in 3Q22 in the US, but only reduced goods inflation in 1Q23 in EA.
- The total disinflationary effect on core goods is expected to be larger in the US: -1.6% from mid 2022 through Dec-23 (vs -0.9% in EA). The expected delayed response in EA plays a role, but this result also reflects the fact that more domestic factors, like energy prices, are currently driving goods inflation in EA.
- Lastly, the comparison between goods CPI and goods ex cars CPI reveals that automobile prices are more important for the US outlook. Our model expects goods ex cars disinflation to be less pronounced than overall goods inflation (including cars) in the US. But goods disinflation with and without cars is similar in EA. And this result is not surprising considering that (i) car prices increased much more during 2020 and 2021 in the US, and (ii) the importance of cars in the core goods basket is more important in the US (32%) vs EA (12%). See here for a deeper analysis on car prices in the US and EA.

Exhibit 10: US supply-chain-driven goods disinflation



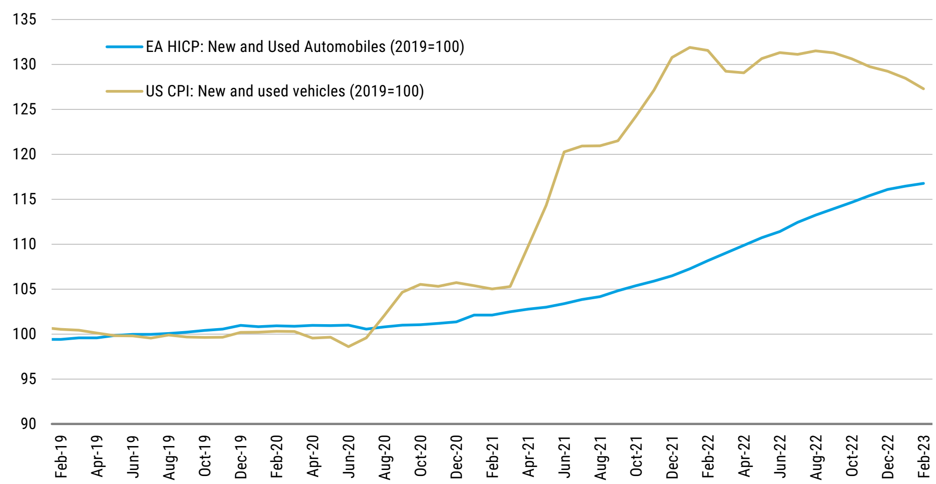
Source: Morgan Stanley Research, Haver, Bloomberg.

Exhibit 11: EA supply-chain-driven goods disinflation



Source: Morgan Stanley Research, Haver, Bloomberg.

Exhibit 12: Different paths for car prices in US and EA



Source: Haver, Morgan Stanley Research.

Our results highlight supply chains as an important disinflationary force for 2023. But looking beyond 2023, we do want to see the supply-side index (MSSCI) at normal levels to be sure that goods inflationary pressures won't reemerge as the global economic cycle turns.

A model relating supply chains, PPI and core goods inflation

We estimate a vector autoregressive model (VAR) with data on MSSCISD, core goods CPI, PPI, FX (Fed trade weighted dollar index for US and MS EUR trade weighted index for EA), and energy prices (WTI for the US and PPP weighted average of TTF prices for the EA). The model lags were chosen using the Akaike information criterion (AIC), and all variables are included in first differences except the MSSCISD index. Supply chain shocks are identified using a Cholesky decomposition ordering the supply chain index first.

To compute the contribution of global supply chains on recent goods and PPI inflation we simulate the VAR model shutting down the global supply-chain shocks from Jun-22 onwards, and then compare the results with simulations coming from the full model including shocks to the MSSCISD. The difference between these two simulations measures the importance of supply chains shocks in historical prints from Jun-22 to Feb-23, and the effect of past shocks on model forecasts from Mar-23 to Dec-23.

Global Inflation Outlook Table

Exhibit 13: Global Economics Inflation Forecast Profile (as of April 14, 2023)

	Base Case														
	Quarterly												Annual		
	2022				2023E				2024E				2022	2023E	2024E
Consumer Price Inflation (%Y)	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			
Global*	**6.4**	**8.3**	**8.7**	**8.2**	**6.7**	**5.2**	**4.9**	**4.6**	**4.2**	**3.9**	**3.6**	**3.6**	**7.9**	**5.3**	**3.9**
G10	**6.3**	**7.7**	**8.1**	**7.9**	**6.6**	**5.1**	**4.0**	**2.9**	**2.6**	**2.3**	**2.3**	**2.3**	**7.5**	**4.7**	**2.4**
US	8.0	8.6	8.3	7.1	5.8	4.1	3.2	2.7	2.3	2.3	2.3	2.5	8.0	4.0	2.4
Euro Area	6.1	8.0	9.3	10.0	8.0	6.8	5.5	3.5	3.3	2.7	2.6	2.4	8.4	6.0	2.7
Japan	0.9	2.4	2.9	3.9	3.5	3.0	2.1	1.7	1.4	1.6	1.7	1.2	2.5	2.6	1.5
UK	6.2	9.2	10.0	10.8	10.1	7.3	5.3	2.9	2.2	1.5	2.1	2.2	9.0	6.4	2.0
Canada	5.8	7.6	7.1	6.6	5.8	4.0	3.1	2.7	2.4	2.1	2.1	1.8	6.8	3.9	2.1
Norway	3.8	5.8	6.7	6.6	6.6	5.5	4.1	3.5	3.1	2.7	2.3	2.2	5.8	4.9	2.6
Sweden	4.7	7.4	9.7	11.6	11.4	9.8	7.2	5.0	3.9	3.1	2.7	2.0	8.4	8.4	2.9
Australia	5.2	6.1	7.3	7.8	6.9	6.0	4.9	3.6	2.9	2.6	2.3	2.2	6.6	5.3	2.5
EM*	**6.5**	**8.8**	**9.2**	**8.4**	**6.9**	**5.3**	**5.6**	**5.9**	**5.5**	**5.1**	**4.6**	**4.6**	**8.2**	**5.8**	**5.0**
CEEMEA	**22.0**	**30.5**	**32.2**	**30.7**	**23.6**	**17.8**	**18.0**	**18.3**	**16.7**	**15.6**	**14.6**	**14.1**	**29.0**	**19.3**	**15.2**
Russia	11.5	16.9	14.4	12.2	8.9	3.5	5.6	6.5	6.1	5.0	4.5	4.3	13.8	6.1	5.0
Poland	9.6	13.9	16.3	17.3	17.2	13.8	11.5	9.0	7.4	6.3	5.0	4.6	14.3	12.9	5.8
Czech Rep	11.2	15.8	17.6	15.7	16.4	11.7	8.5	8.7	3.5	2.7	2.4	2.7	15.1	11.3	2.8
Hungary	8.2	10.6	16.5	22.7	25.4	23.6	18.0	11.6	7.9	6.5	5.3	4.9	14.5	19.6	6.2
Ukraine	11.5	18.6	23.5	26.6	24.1	17.6	15.5	16.2	18.1	17.4	15.2	12.4	20.0	18.4	15.8
Turkey	54.8	74.1	81.1	77.4	54.8	45.2	46.0	47.5	43.5	42.3	40.6	39.6	72.3	48.1	41.3
South Africa	5.8	6.6	7.7	7.4	7.0	6.5	5.3	5.2	5.2	4.9	4.8	4.9	6.9	6.0	4.9
Saudi Arabia	1.6	2.3	2.9	3.1	3.3	3.2	2.6	2.1	2.0	1.8	2.0	2.2	2.5	2.8	2.0
AXJ	**2.7**	**2.3**	**2.9**	**3.1**	**3.3**	**3.2**	**2.6**	**2.1**	**2.0**	**1.8**	**2.0**	**2.2**	**2.5**	**2.8**	**2.0**
China	1.1	2.2	2.7	1.8	1.3	1.0	1.6	2.4	2.6	2.4	2.0	2.2	2.0	1.6	2.3
India	6.3	7.3	7.0	6.1	6.3	5.2	5.9	5.8	5.2	4.9	4.5	4.6	6.7	5.4	5.0
Hong Kong	1.5	1.5	2.7	1.5	2.2	2.1	2.2	2.9	3.0	3.0	3.1	3.1	1.8	2.4	3.1
Korea	3.8	5.4	5.9	5.2	4.7	3.2	3.0	3.2	3.1	2.4	1.8	1.8	5.1	3.5	2.3
Taiwan	2.8	3.5	2.9	2.6	2.6	1.9	2.0	1.9	1.1	1.1	1.0	1.0	2.9	2.1	1.1
Singapore	4.6	5.9	7.3	6.6	6.2	5.7	5.3	5.1	4.8	4.1	3.2	2.6	6.1	5.6	3.7
Indonesia	2.3	3.8	5.2	5.5	5.2	4.1	3.6	3.2	3.5	3.3	3.0	3.2	4.2	4.0	3.2
Malaysia	2.2	2.8	4.5	3.9	3.8	2.9	2.4	2.1	2.3	2.2	2.2	2.2	3.4	2.8	2.2
Thailand	4.7	6.5	7.3	5.8	3.9	2.1	1.9	1.7	1.7	1.6	1.4	1.8	6.1	2.4	1.6
Philippines	3.4	5.5	6.5	7.9	8.3	6.6	5.5	3.9	2.8	3.3	3.2	3.2	5.8	6.1	3.1
LatAm*	**8.8**	**10.0**	**9.2**	**8.0**	**7.5**	**6.2**	**5.9**	**5.7**	**5.0**	**4.3**	**4.2**	**3.8**	**9.0**	**6.3**	**4.3**
Brazil	10.7	11.9	8.7	6.1	5.3	3.9	5.2	5.6	5.2	4.5	4.3	4.1	9.3	5.0	4.5
Mexico	7.3	7.8	8.5	8.0	7.5	6.1	5.0	4.9	4.3	4.1	4.1	3.6	7.9	5.9	4.0
Chile	8.3	11.5	13.6	13.0	11.8	9.6	7.1	5.7	4.9	4.1	3.5	3.0	11.6	8.2	3.4
Peru	6.2	8.3	8.6	8.4	8.6	7.4	6.0	5.5	4.8	4.0	3.8	3.6	7.9	6.8	4.1
Colombia	7.8	9.3	10.8	12.6	13.2	12.4	11.0	9.2	6.4	4.9	4.2	3.8	10.2	11.4	4.8
Argentina	52.7	60.9	77.5	91.7	101.5	106.5	105.9	110.5	146.2	161.0	153.5	133.5	72.4	106.8	147.1
Core Inflation (%Y)															
Global (G4+BRIC)	**3.8**	**4.5**	**4.4**	**4.4**	**4.2**	**3.8**	**3.7**	**3.5**	**3.1**	**2.8**	**2.7**	**2.7**	**4.3**	**3.8**	**2.8**
G4	**3.7**	**4.1**	**4.4**	**4.8**	**4.9**	**4.9**	**4.3**	**3.5**	**2.8**	**2.4**	**2.3**	**2.3**	**4.2**	**4.4**	**2.4**
US (core PCE)	5.3	5.0	4.9	4.8	4.7	4.6	4.1	3.6	3.0	2.6	2.5	2.5	5.0	4.2	2.6
Euro Area	2.6	3.7	4.4	5.1	5.5	5.7	5.2	3.8	3.1	2.6	2.5	2.4	3.9	5.0	2.7
Japan^	-0.9	0.9	1.5	2.8	3.4	3.6	2.8	2.2	1.5	1.0	1.0	1.1	1.1	3.0	1.2
UK	5.1	6.0	6.3	6.4	5.9	5.5	4.8	3.8	3.0	2.2	2.1	2.1	5.9	5.0	2.3
BRIC	**4.0**	**4.8**	**4.3**	**3.9**	**3.5**	**2.6**	**3.1**	**3.6**	**3.5**	**3.4**	**3.2**	**3.1**	**4.3**	**3.2**	**3.3**
China	1.1	0.9	0.7	0.6	0.8	0.9	1.4	2.0	1.9	2.1	2.0	2.0	0.9	1.2	2.0
India	6.3	6.6	6.2	6.3	6.2	5.4	5.7	5.6	5.3	5.3	5.3	5.3	6.3	5.7	5.3
Brazil	9.3	11.2	10.6	8.6	7.7	6.7	6.0	5.6	5.1	4.3	3.9	3.6	9.9	6.5	4.2
Russia	12.5	19.7	17.8	15.2	11.2	3.9	5.7	7.0	6.6	5.2	4.5	4.1	16.3	6.9	5.1

Source: IMF, Morgan Stanley Research forecasts. Note: Global and regional aggregates are GDP-weighted averages, using PPP weights. Global core inflation includes G4 and BRIC. CPI numbers are period averages. ^: Japan headline inflation includes VAT and free education impact. *: Global, EM, and LatAm aggregates exclude Argentina. Japan's core CPI is excluding energy and fresh food, and ex VAT and Free child education impact.

Exhibit 14: Inflation commentary at a glance

G10	Key Drivers of Inflation Dynamics	Outlook	Central Bank Inflation Stance	Risks to the outlook
US	Headline inflation continues to decline, due to lower commodity prices. Core inflation should continue to soften as core goods prices decelerate (albeit at a slower pace), however shelter inflation is likely to remain elevated for some time. In the short-term. core goods deflation is likely to take a pause for a month or two as the recent decline in car prices is expected to stagnate. However, price pressures in core goods are expected to continue to abate, as car prices ultimately resume their trend lower later in the year. Price pressures in core services are expected to cool, as a decline in medical prices over the next few months is expected to alleviate some price pressures in core services. However inflationary pressures in core services are still expected to persist, due to persistent shelter inflation.	Inflation continues to remain elevated on a year-over-year basis, but we expect this to decline rapidly until the base effects from higher energy and food prices have rolled off. Core inflation is expected to fall, due to core goods deflation, and a deceleration in services. However, we expect this to occur at a more moderate pace in comparison to headline. We see core PCE inflation slowing further by the end of 2023 to 3.0%Y in Q4, and then to 2.3%Y in Q4 of 2024, alongside moderating demand and reduced supply pressures.	The Fed wants to see inflationary pressures ease substantially. As the FOMC sets policy, it will be looking for noticeable progress on supply-side pressures and not assume significant near-term supply-side relief. Furthermore, though headline inflation is past its peak, we believe core inflation will be key for the FOMC going forward. However, the composition of core inflation will matter going forward. More sustained core services pressures, specifically in core services ex-housing, could see the Fed contemplate a longer tightening cycle.	There is upside risk if supply chain disruptions do not abate, and high prices become embedded in inflation expectations. Also, if medical services and/or core goods prices do not fall as expected, this could pose further upside risk as well. Lastly, if there is a sharp reversal higher in energy prices, this would lead to increased price pressures for headline inflation. Conversely, there is downside risk if goods prices reverse quickly, due to faster-than-expected improvements in global supply chains. Further, if core services see a sharp reversal in shelter inflation, this would lead to core inflation falling much faster than expected.
Euro Area	The March HICP print fell to 6.9%Y, primarily driven by energy (down to -0.9%Y from 13.7%Y), while food inflation (15.4%Y from 15.0%Y) and core inflation (5.7%Y from 5.6%Y) increased further.	The March print delivered several key messages. First, food inflation is resilient and we expect additional strong prints in the coming months. Second we think February could have been the peak for goods inflation and we forecast a decrease from there, at a moderate pace. Third the momentum in services inflation is likely to strengthen further, leaving core above 5.6% for the first half of 2023.	The ECB hiked by 50bp at the March meeting but dropped its forward guidance, which signalled significant future rate hikes at a steady pace. It did not pre-commit to future hikes or their size, and instead reinforced its data-dependent, meeting-by-meeting approach. Assuming a full resolution of recent events and market turbulence receding, we would expect the ECB to continue hiking at upcoming meetings. We expect the ECB to deliver a 25bp rate hike in May, rather than 50bp as previously anticipated. We maintain our call that the ECB will continue tightening monetary policy in June and July at 25bp increments at each meeting. We anticipate that it will stop its hiking cycle in September, with a terminal rate of 3.75%	With energy inflation now significantly down, the focus has shifted to food and core inflation, with risks tilted to the upside for both. On food, while producer prices have been slowing down, there remains significant pipeline pressures for retail prices. On core, we see services inflation as the main driver in the coming months. With wages expected to accelerate, there is a risk that services inflation proves even stronger than we think.
Japan	Japan's headline inflation has been driven by energy and food inflation due a sharp rise in import prices on a yen basis. The recent rise in inflation of core goods also reflects the lagged impact from higher import prices. Japan's import prices prices peaked in 3Q22, but it will likely continue to support core goods inflation 1H23. Inflation in services remain at around 1%Y, due to a gradual pace of wage hikes and housing rent remaining at around 0% in the CPI stats.	The headline inflation already peaked on a YoY basis in Jan 2023, partly thanks to the government's subisides to public utility charges. The US-style core CPI excluding energy and food will likely remain above elevated in 1H23.	The BoJ maintains its view that Japan's inflation is driven by cost-push factors and it thus expects the Japan-style core CPI to fall below 2% in 2H FY2023. It emphasizes the importance of inflation accompanied by wage growth in order to achieve the 2% inflation target in a sustainable and stable manner.	The ongoing cost-push inflation may change Japan's social norm of no price hikes, potentially leading to prolonged inlfation. Recent strong spring wage negotitions, especially among large companies, were also an upside risk to service inlfation. Downside risks from softer aggregate demand amid slower global growth.
Canada	February's CPI declined to 5.2%Y from 5.9%Y prior, due to a base-year effect for the second straight month. Energy prices saw a decline on the month as Canadians paid less for gas amid higher crude oil inventory levels in the US. Shelter costs remain elevated due to tighter financial conditions, but February saw shelter costs rise at a slower pace year-over-year for a third straight month. Grocery prices continue to remain elevated. Food purchased from stores rose 10.6%Y, marking the seventh straight month of double-digit increases. Putting upward pressure on grocery prices have been supply constraints due to unfavorable weather in growing regions and higher input costs.	We expect headlline inflation to come under pressure in 2023 and into 2024, as inflationary pressures from commodities prices ease. We expect 4-quarter headline CPI inflation to fall to 2.9% in 4Q23, and 1.8% in 4Q24 primarily driven by lower food and energy prices. Excluding food and energy, we expect core inflation to be 2.8% in 4Q23 and 2.0% in 4Q24 as disruptions from global supply chains recede and excess demand moderates.	The Bank of Canada expects inflation to falling to around 3% in the middle of 2023 and reach the 2% target in 2024. Though the Bank welcomed the recent declines in headline CPI, inflation still remains well above their target. Given this, the Bank is still concerned about the upside risks to their inflation outlook. Though price pressures are trending lower, the Bank is concerned that services price inflation could be stickier than initially projected if eleveated inflation expectations and/or labor costs prove stickier than expected.	Upside risks include stubbornly persistent supply chain bottlenecks, cost pressures stemming from both global and domestic factors, continued excess demand, a reacceleration in global energy prices, and wage pressures from a tight labor market. Downside risks include a deterioriation in financial conditions, a larger than expected contraction in economic activity, a large reversal of core inflation (both goods and services), and a larger-than-expected decline in housing prices.
Norway	Norwegian inflation figures for February printed in a downside surprise. Headline inflation came in at 6.3%Y, after 7.0%Y in January and CPI-ATE at 5.9%Y after 6.4%Y in January, both below consensus and our expectations. Energy inflation continued its decline and domestic goods started their journey downward as well, providing relief to core .	We think that both headline and core inflation are now past their peak. Lower energy prices – namely, of natural gas exert downward pressures, while on the other hand, NOK has been depreciating rather sharply since December, and risks to imported prices and, by extension, core inflation are skewed to the upside.Wage negotiations in the spring will also be complex, and could exert inflationary pressures. Our inflation forecasts see CPI-ATE at 4.9%Y in 2023 and 2.6%Y in 2024.	Norges Bank is concerned about inflation, given a tight labour market and, as they describe them, "persistent global price pressures". They have upgraded their medium-term inflation projections in December, and now see underlying inflation above 2% across the forecast horizon - i.e. in 2025 as well. They have hiked their policy rate to 3.0% already, and we expect them to hike by 25bp in May and June, until 3.5%.	Upside risk from continued supply chain disruptions, volatile energy prices and labor market tightness, including labor mismatches.
Sweden	The February CPIF inflation came in at 9.4%Y, while the headline inflation was 12.0%Y, both slightly below our forecast but in a large beat to the consensus. While the CPIF print was in line with Riksbank forecast, the underlying measure CPIF-ex energy rose by 9.3%Y, which was a beat to the 8.0%Y expected by Riksbank. The print was primarily driven by an increase in food prices (22.1%Y), with interest rate costs for mortgages contributing 2.7% to the headline CPI.	We expect to see wage growth of at least ~3.5%Y next year as the unions demand a 4.4%Y increase at the upcoming negotiation round. Combined with elevated core goods and electricity prices, we expect headline inflation to remain high next year at 8.7%Y, with CPIF at 6.2%Y, driven by still-elevated core goods and import-based inflation.	Riksbank has revised inflation forecasts at the February meeting, with energy-related base effects taking the headline CPIF figure a touch lower in 2023, and to 1.9%Y in 2025, but with upward revisions to CPIF ex energy in the near term. Riksbank is looking to continue their tightening cycle in April, we think, with a 50bp hike, due to the focus on the krona and to match the ECB.	Upside risk from higher-than-expected wage growth and more-persistent supply chain disruptions boosting food and energy prices. Downside risk from a sharper FX appreciation.
Australia	The largest contributors to the pick up in inflation over the past year remain fuel and construction prices, although the upward movement in trimmed mean inflation shows a broadening in price pressures, with rents and market services prices now starting to increase from low levels	We expect core and headline inflation peaked in 4Q22.From 1Q23 we expect inflation to ease as goods and fuel inflation starts to normalise.	The RBA's central forecast is for both headline and core inflation to exceed its 2-3% target band until 2025. It is focussed on wage and inflation expectations to assess the persistency of the inflation pulse	Faster wage acceleration would support a more elevated core inflation outlook for 2023
EM CEEMEA				
Russia	Russia invasion of Ukraine, a major risk off and subsequent economic Western sanctions resulted in RUB depreciation, causing inflation spike to 17.8%Y in Apr-22. Since then, inflation surprised on the downside, helped by RUB appreciation, a drop in consumer demand and a new harvest. A significant decline in inflation expectations is also playing a role.	The strong RUB supported by a record-high CA surplus, the sharp drop in demand and the new harvest more recently were the key reasons for the recent inflation slowdown. Consumer demand remained subdued with retail sales down 9.5%Y on average in April-December. We expect average CPI to slow down from 13.8%Y in 2022 to 6.1%Y in 2023.	Following Russia invasion in Ukraine, the CBR delivered an emergency hike to 20.00% and implemented capital controls amidst the risk-off. Since then the CBR brought the key rate down to 7.50%. In February the CBR turned more cautious and saw higher inflation risks coming from accelerated fiscal spending. According to the CBR's forecast, annual inflation will decline to 5-7%Y by end-2023 and to 4.0%Y in 2024.	The geopolitical, economic and inflation outlook in particular remain uncertain, with the risks of further western economic sanctions and fiscal expansion domestically creating additional inflation risks.
Poland	The February CPI print came out at 18.4%Y, accelerating from the January 16.6%Y inflation print (which was revised down by 0.6pp). The February print was in line with our expectation for 18.4%Y. Taken together, the January and February CPI prints stand some 30bp above the NBP's latest quarterly forecast. The acceleration in February inflation was primarily due to unfavourable base effects in fuels and food prices while core inflation continued its steady upward trajectory, reaching 12%Y in February against 11.7%Y in January.	We expect inflation to emabrk on a downard path in March, helped by strong and favourable base effects. We see inflation reaching single digits in September. Unlike headline, we expect core inflation to remain robust close to 12%Y over the first three quarters of the year on the back of the significant minimum wage increases and the tight labour market.	The NBP considers that the deterioration in external economic conditions, together with monetary policy tightening by major central banks, will curb global inflation and hamper GDP growth in Poland. Under these conditions, the so far delivered tightening by the NBP will help Poland's inflation to decelerate to target with short-term inflation remaining high, according to the MPC. With that, we expect the central bank to keep its policy rate unchanged this year.	Risks to the inflation and rates outlook are currently balanced. On the one hand, the NBP retains its readiness to raise rates additionaly should inflation surprise to the upside materially and puts the achievement of the inflation target at risk. On the other hand, the lower energy prices accross Europe and in Poland together with the weaker-than-expected GDP growth are likely to help inflation decelerate somewhat faster in 2H23 and could offer the opportunity for the NBP to cut rates already at the end of this year.
Czech Rep	The February CPI came out at 16.7%Y, decelerating from 17.5%Y in January but above our (16.4%Y), consensus (16.6%Y) and CNB's (16.5%Y) expectations. The main drivers of the deceleration were energy and food inflation with the latter decelerating for a third consecutive month and down to 23.9%Y from 24.8%Y in January. Core inflation ticked lower to 12%Y from 12.3%Y in January with imputed rents contributing to the downside again.	We expect inflationto continue to ease in the rest of the year, helped by favourable base effects but also now by decelerating core goods infaiton. We see inflation reaching single digits in July but to reach the 2%Y target only in mid-2024 due to sticky core services inflation.	At its March meeting the CNB kept its policy rate unchanged at 7.00%, in line with our expectations. Forward guidance remained unchanged as well, with the statement guiding towards an on-hold or hike decision for the upcoming May core meeting, despite the recent rise in uncertainty about future actions from major central banks amid the developments in financial markets. The MPC also maintained its assessment that the risks around the outlook are significant and tugging in both directions. The MPC reiterated that it stands ready to raise rates, especially if the risk of a wage-price spiral increases.	Risks to our forecast are broadly balanced. In the bear case, core inflation can decelerate faster than we expect due to domestic demand contracting at a faster than the current pace which will allow the CNB to ease monetary policy earlier or more aggressively than we expect. In the bull case scenario, inflation could overshoot our and CNB's expectations on the back of the still tight labour market and the robust wage growth.
Hungary	The March inflation print came out at 25.2%Y, decelerating slightly from 25.4% in February. Food inflation continued to decelerate and reached 42.6%Y against 43.3%Y in February. Core goods inflation remained relatively robust. Services inflation kept rising to 13% against 11.6%Y in Feb.	Looking ahead, we see inflation continuing to decelerate gradually until the summer and to remain above 20%Y. The main driver of the deceleration will be favourable base effects in 1H23 while we expect core inflation to remain sticky due to the tight labour market and strong wage growth.	At its March meeting the NBH kept both its base and 1-day deposit rates unchanged while also maintaining its excess liquidity absorption framework unchanged, in line with our expectations. Still, the central bank announced that it will phase out its FX reserves support for energy imports as of March 31 due to the decline in energy prices and in the reduced FX hedging need of energy-importing companies. Forward guidance remained on the cautious side, with the statement continuing to guide to the need for a persistent improvement in risk perceptions when considering changes in the 1-day depo rate and the emergency measures introduced in mid-October. In the statement, the central bank said it saw an improved risk assessment of the Hungarian economy relative to mid-October but that the increased uncertainty in global financial markets has led to strong volatility in EM.	Uncertainty about our rates call remains high as global financial conditions remain key for the central bank to start easing its emergency measures which we currently expect to happen in June. Risks are mainly related to the global financial conditions' pass-through to HUF where a renewed FX weakness will keep postponing the beginning of the easing cycle. Downside risks are related to inflation suprirsing to the downside against ours and the central bank's expectations, leading to a faster easing cycle than we currently expect.
Ukraine	Following Russia's invasion of Ukraine, and 26% UAH weakening, inflation accelerated to 26.6%Y by October, but then has been surprising on the downside, down to 26.0%Y in Jan-23. In January, the key downside pressure came from food as food inflation slowed down to 33.0%Y from 34.4%Y in December. Non-food inflation remained broadly flat at 20.8%Y. Core CPI went up to 23.3%Y versus 22.6%Y. Hence, although headline inflation surprised on the downside and has been growing somewhat below the NBU's forecast, core CPI maintained its upward trajectory.	We expect weak domestic demand to keep the headline inflation on the downward trajectory, while core would remain more sticky on the back of supply disruptions and shortages of some goods. We see headline inflation slowing down to 17.9%Y by end-2023 vs. 26.6%Y in Dec-2022, and down to 12.0%Y by end-2024.	The NBU is facing an uneasy dilemma of targeting inflation amidst a major shock to growth. On June 2, the NBU hiked the key policy rate to 25.00% from 10.00% previously. Most recently, in January, the NBU kept the key rate on hold at 25.00%, as expected. The NBU now expects inflation to slow down to 18.7%Y in 2023, 10.4%Y in 2024 and 6.7%Y in 2025. Importantly, the NBU gave a more specific forward guidance. It said that "the revised forecast envisages keeping the key policy rate at 25% at least until the end of 1Q24".	In Ukraine, the geopolitical, economic and inflation outlook in particular are associated with major uncertainty, with inflation risks skewed to the upside.
Turkey	Base effects drove a decline in year-on-year inflation to 50.5%Y from 55.2%Y previously (consensus: 51.3%Y, MS: 51.8%Y). Food and services groups pushed inflation up, while energy was a restricting factor thanks to a decline in oil prices and stable FX. Core goods inflation was also subdued, driven by a monthly decline in clothing prices. As a result, core inflation (CPI-C) declined to 47.4%Y from 50.6%Y previously.	We see headline inflation declining further to 45%Y in May, around the time of elections, and 42%Y in June. Potential upside adjustment in USD/TRY in the short term post-elections, along with potential adjustments in wages and administered prices, implies a rise in inflation momentum in 2H23. Beyond short-term outlook will depend on the macro policy framework that will be put in place post-elections.	The CBT sees the current policy rate of 8.5% adequate to support the necessary recovery in the aftermath of the earthquakes. The CBT prioritises growth, and sustains low interest rates relying on banking sector regulations and active reserves management. May elections will be consequential for macro policy design. We do not see a decisive turn in interest rate policy in case of no political change but expect a significant monetary tightening in case of an opposition win.	Amid deeply negative real rates and widening twin deficits the pressure on central bank reserves and FX has increased recently. There are upside risks on inflation related to the path of FX, and potential adjustments in wages and administered prices in the short term as well as earthquake related demand-supply imbalances. The macro policy framework post-elections will be crucial for inflation outlook especially in 2024.
South Africa	Food and oil shocks have been the key drivers of inflation momentum until now. More recently however the cost of backup power solutions are showing in inflation prints, creating a new idiosyncratic risk for the SARB to worry about.	Headline CPI peaked earlier than expected, on our estimates, but services remains sticky and core inflation has risen. With a tight policy stance being achieved we believe the SARB is either at, or very close to, the top of the cycle.	The SARB is far advanced in its normalisation cycle. What is unclear is whether it is content to let the decline in inflation do the work on real rates or whether it feels additional nominal tightening is required. We see a sharp increase in real rates via the former approach.	Near-term inflation risks stem mainly from a lagged pickup in services inflation. A recovery in shelter costs, a normalisation in medical insurance and administered prices are the key categories we are watching. Load shedding poses a threat to the projected decline in food inflation.
AXJ				
China	Reflation could remain benign and manageable despite the robust recovery, as slack in labour market and manufacturing capacity could be reduced in tandem with demand.	We expect core CPI to remain soft at ~1% in 1H23, before firming up to ~2% YoY in 4Q; alongside moderating food inflation, headline CPI would thus average ~2%Y in 2023.	As reflation would remain manageable, we expect the PBoC to maintain an accommodative stance with target relending programs and MLF/PSL.	Stronger-than-expected policy easing and/or growth recovery may pose upside risks via demand-pull inflation.
India	[illegible]	[illegible]	[illegible]	[illegible]
Korea	[illegible]	[illegible]	[illegible]	[illegible]
Indonesia	[illegible]	[illegible]	[illegible]	[illegible]
LatAm				
Brazil	[illegible]	[illegible]	[illegible]	[illegible]
Mexico	[illegible]	[illegible]	[illegible]	[illegible]
Argentina	[illegible]	[illegible]	[illegible]	[illegible]
Andeans	[illegible]	[illegible]	[illegible]	[illegible]

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1 The MSSCI incorporates over 30 series, and uses principal components to calculate a common factor that best summarizes the dataset.

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