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Emerging Markets Outlook and Strategy

EM local markets balanced on resilient growth and inflation but defensive stance in EM credit warranted

Key topics

- A defensive stance still for EM assets but more concentrated, given uncertainty on recession timing and upcoming US debt ceiling deadlines which are an indirect impact on EM.
- We keep an UW in EM sovereign and corporate credit, but stay MW in EM rates where cuts are more than fully-priced and core inflation remains sticky. Move EM FX UW back to MW on timing uncertainty and divergent regional trends.

Macro developments

- 2023 EM growth forecast increased to 4.3% with a stronger China reopening bounce and resilient data elsewhere challenging our view for slowing, especially in Latam and EM Asia.
- While a large headline disinflation is underway in EM, core prices are sticky.
- EM tightening cycles are nearing an end, yet start of rate cuts pushed back further in 2H23 with risks of shallower cycles.

Top trading themes

- EM local markets FX: **MW overall**. Move MW EM FX (from UW) given the more mixed FX environment . In the model portfolio, we are UW in EMEA EM, MW in EM Asia and OW in Latam. We hold UW/short in EM Asia (PHP, KRW, TWD), EMEA EM (ZAR, TRY, RON), Latam (COP) and frontiers (KES). Our longs are in SGD, THB, MXN and BRL.
- EM local markets Rates: **MW overall**, with an OW stance in Latam, a small OW in EMEA EM and MW in EM Asia. While disinflationary forces are supportive, EM cuts are already fully priced with some hawkish pushback and core inflation is sticky. We hold longs across EM Asia (Malaysia, Hong Kong, Korea), EMEAEM (Czechia, Israel), Latam (Brazil, Mexico) and frontiers (Sri Lanka, Dominican Republic). We are short in Romania, Chile and Colombia, and hold a number of curve trades.
- EM sovereigns: We patiently stay UW EMBIGD despite spreads being rangebound over the past few months, as most outcomes ahead likely lead to spread widening. We recently took profits and moved MW Serbia (from OW), took partial profits on our OW Ecuador, moved OW Cote d'Ivoire (from MW), and recommend going long EGYPT 5.75 24s outright.
- EM corporates: We stay UW and maintain our preference for IG over HY in EM corporates despite the meaningful decompression to date.



Emerging Markets Strategy

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Spreads and yields

Asset	∆1m	YTD	Level
EMBIGD Spread	-3	+31	483bp
EMBIG Return	-0.19%	2.07%	
GBI-EM Yield	-8	-36	6.50%
GBI-EM US\$ Return	1.23%	6.53%	
CEMBI Spread	+3	+19	339bp
CEMBI Return	-0.04%	2.57%	
ELMI+	1.15%	4.17%	366
CDX.EM 5y	+11	+15	254bp
10y UST	+14	-31	3.52%
S&P 500	0.34%	7.28%	4,119
Oil (Brent)	-9.21%	-10.05%	77.28

Source: JPM, Bloomberg Finance L.P. Note: As of 09 May 23

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See page 35 for analyst certification and important disclosures.

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EM sovereign and local market top trade recommendations

Local and sovereign recommendations

_		FX		Rates		Sovereigns
	Singapore	Long S\$NEER spot basket	Malaysia	Long 5y MGS	ESKOM	OW
	Thailand	OW; Long THB vs INR, CNH, PHP	Hong Kong	Receive 3y IRS	Panama	OW
lish	Mexico	OW	Korea	Long 10y KTB	Saudi Arabia	OW
pul	Brazil	OW; Long 3m USD/BRL put spreads	Sri Lanka	Long 3m T-bill, FX-unhedged	Cote d'Ivoire	OW
/gr			Czechia	OW; Receive 5y IRS	Ecuador	OW
OW/ long/ bullish			Israel	ILS 2y2y receiver		
N N N			Brazil	OW; Jan26 DI receiver		
			Mexico	OW; Long Mbono May 2033		
			Dom Rep	Long Jan26 central bank bonds		
	Philippines	UW	Romania	UW	Azerbaijan	UW
۽	Korea	Short KRW NEER basket	Chile	UW	Bahrain	UW
aris	Taiwan	Short TWD vs USD, JPY, THB	Colombia	Pay 2y IBR	Chile	UW
UW/short/bearish	South Africa	UW; Long 11-Aug-23 USD/ZAR call			Colombia	UW
Lo Lo	Turkey	Long USD/TRY 6m forward			Guatemala	UW
N/s	Romania	Long EUR/RON 6m forward			Iraq	UW
5	Kenya	Long USD/KES via 6m NDFs			South Africa	UW
	Colombia	UW			Trin. & Tobago	UW
			Flatteners	THAIGB 3s20s	Ukraine	Buy UKRAIN 0% 40
RV /technical			Steepeners	IGB 5s30s, POLGB 5s10s, INDOGB 5s20s, HUF 1s3s IRS	Outright & RV Trades	Buy Oman 7% 51s vs sell Peru 5.625% 50s; Buy Eskom 6.35% 28s and buy South Africa Dec-28 maturity CDS; Buy PEMEX 10% 33s and sell MEX 4.875% 33s; Buy Egypt 5.75% 24s
					Options	3m CDX EM bear put spread

Corporate recommendations

			EM	Asia			EME	AEM	Latin /	America
	ADANEM	3.949% '30	CNOOC	7.875% '32	MEDCIJ	6.950% '28	 ADGLXY	2.940% '40	 BANORT	8.375% perp
	ADANIG	4.375% '24	CNOOC	4.250% '43	MEDCIJ	6.375% '27	AYDEMT	7.750% '27	ITAU	4.500% '29
	ADGREG	6.250% '24	EIBKOR	2.125% '32	MEITUA	2.125% '25	EIGPRL	3.545% '36		
	ADSEZ	3.375% '24	FRIDPT	5.315% '32	MEITUA	3.050% '30	ENGPRO	8.500% '27		
	ADTIN	4.000% '26	GMRLIN	4.250% '27	MINCAP	5.625% '37	ESKOM	7.125% '25		
	AGILE	5.500% '26	GRNKEN	3.850% '26	MINCAP	4.625% '30	ESKOM	8.450% '28		
-	AZUPOE	5.650% '24	GRNKEN	4.300% '28	MPEL	5.750% '28	FBNNL	8.625% '25		
Long	AZUPOE	3.575% '26	GRWALL	3.950% perp	MPEL	5.625% '27	IHSHLD	5.625% '26		
	BHARTI	5.650% perp	HAIDIL	2.150% '26	POWFIN	3.350% '31	NEPSJ	2.000% '30		
	BKCOML	4.000% '28	HRINTH	4.625% '26	RLCONS	3.970% perp	PRXNA	3.061% '31		
	CARINC	9.750% '24	INAPIN	6.250% '25	SHINFN	3.340% '30	PRXNA	4.987% '52		
	CHINSC	6.000% '26	INCLEN	4.500% '27	STDCTY	7.000% '27	SASOL	5.500% '31		
	CHITRA	2.625% '25	KBANK	3.343% '31	UTCMIN	2.800% '31	SGLSJ	4.500% '29		
	CMINLE	3.625% '29	LMRTSP	7.250% '24						
	CNOOC	4.200% '45	LPKRIJ	8.125% '25						
	BABA	2.125% '31	NANFUN	5.000% '28	SANLTD	4.300% '26			BFALA	3.750% '27
Ħ	BIDU	3.625% '27	NTPCIN	4.500% '28	SUNHUN	3.750% '29			BFALA	3.375% '32
Short	BNKEA	5.125% '28	RILIN	3.667% '27						
	HYSAN	4.850% perp	SANLTD	5.625% '25						

Source: J.P. Morgan

To see current outright trade recommendations in EM sovereign credit and EM local markets, see the <u>J.P. Morgan</u> <u>EM Trade Tracker</u>.

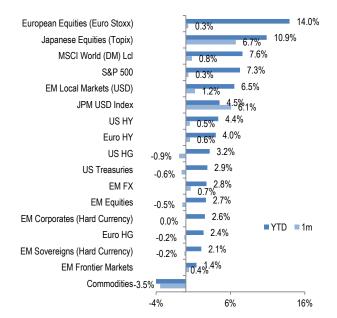
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Executive Summary

More concentrated bets as multiple drivers impact the near-term EM outlook

A defensive stance is still warranted for EM assets, but with more concentrated bets given the uncertainty on recession timing. The US recession that is forecast to start in Q4 and the aftermath of the largest Fed hiking cycle for 40 years keep us viewing EM fixed income assets within a latecycle context, where these large cyclical risks will dominate. But the uncertainty around the timing of this recession also gives a degree of tactical market-timing considerations for EM (and other markets) this year (Figure 1). Better growth at the start of the year and stickier inflation also give reasonable probabilities to alternative scenarios involving still tighter monetary policy. However, the low chance our economists give to a US soft-landing makes the case for a cautious EM risk stance. We reduced risk as DM banking stress rose in early March with a view that this may give little breathing room for markets before data begins to weaken. As it has turned out, credit conditions are tightening but at a slow pace, and some areas of the economy remain healthy (services, labor markets) while others (manufacturing, capex) have weakened, with forward-looking indicators pointing to a slowing given the already-delivered financial conditions tightening. We therefore concentrate our UW positions in EM credit rather than EM local markets.

Figure 1: A lower cross-correlation market over the past month has seen EM local outperform hard currency (returns, %)



Source: J.P. Morgan

Hold UW EM credit, MW in EM rates and cut EM FX

UW to MW. While the EM and global growth forecasts call for a slowdown from the start of the year, Q1 growth data was better than expected, although the flip-side is core inflation data that has not fallen as anticipated. In terms of other nearterm drivers, the DM banking stress and upcoming debt-ceiling deadlines are indirect risks for EM, impacting through their implications for US growth. Weighing these for EM assets ahead of a US recession starting later in the year leads us to stay UW in EM sovereign and corporate credit. Spreads are likely to be significantly wider in a US recession and EM sovereign debt levels leave them exposed to both scenarios of higher-for-longer rates and weaker growth. For EM FX, the starting point of USD valuations, better current account positions and lack of positioning build-up over the last cycle are providing some supports. Given resilience in US data and uncertainties about the near-term path, we move EM FX back to MW from UW. As a medium-term stance we are bullish on EM local duration due to the coming end of hiking cycles and slower growth ahead. However, near-term inflation is sticky, central banks are pushing back on cuts that are priced in, and the pick-up of EM bonds to DM is low both in nominal and real terms (Figure 2). We therefore stay MW in EM duration for now, regionally preferring Latam.

Figure 2: EM local real yields have fallen to 2018 levels versus DM GBI-EM ex-Russia yields deflated by current 12M CPI. DM yield calculated as the weighted average of real yields for 10Y UST, 10Y EUR and 10Y JPY (65%, 30%, and 5%).



Source: J. P. Morgan, Bloomberg Finance L.P.

Our 2023 full-year forecast for EM growth increased by 0.3%-pt to 4.2% compared to last month, on a stronger China reopening bounce and resilient 1Q23 GDP prints elsewhere. China's 1Q GDP came in well above expectations at 11.9%q/q, saar (full-year at 6.4%) driven by a rebound in goods and services activity, front-loaded policy support, strong export growth and signs of housing sector recovery. Trends by EM region were more differentiated with surprising strength in Latin America and EM Asia, and weakness in

EMEA EM. A rebound in incoming 1Q retail sales, services activity, and labor market data prompted us to revise up growth across Latam led by Mexico and Brazil. 1Q outcomes in EM Asia are bifurcated between those exposed to the tech cycle weakness like Korea and Taiwan and those lifted by non-tech exports such as India and Malaysia. CEE was an outlier where production and consumer spending data softened on high inflation and tight monetary conditions that led us to mark down 1Q GDP growth to a sub-par 1.3%ar.

Figure 3: J.P. Morgan global growth forecasts

%y/y for annual, %q/q saar for quarterly, %pt for growth diff

	Anr	nual		Quarterly					
	2022	2023	1Q23	2Q23	3Q23	4Q23			
Global	3.0	2.5	3.8	2.6	1.9	1.4			
DM	2.6	1.2	0.9	1.3	0.8	0.1			
United States	2.1	1.3	1.1	1.0	0.5	-0.5			
Euro Area	3.5	1.1	0.3	2.0	1.5	0.5			
EM	3.4	4.3	7.8	4.3	3.5	3.3			
EMX	3.8	2.2	3.8	2.3	2.1	1.8			
EMX ex. Russia	4.4	2.4	3.7	2.8	2.2	1.8			
EM Asia	3.6	5.4	9.6	5.7	4.4	4.2			
EMAX	3.7	2.5	3.2	4.5	2.5	2.0			
China	3.0	6.4	11.9	6.3	4.9	4.9			
India	7.1	5.1	8.0	4.3	4.8	4.6			
EMEA EM	2.2	1.4	3.2	1.3	1.2	1.2			
EMEA ex. Russia	4.7	1.5	2.2	3.2	1.0	0.6			
CEE	4.4	0.7	1.3	3.3	2.6	2.6			
Russia	-2.1	1.2	5.0	-2.0	1.5	2.2			
Latam	3.5	0.9	2.4	-0.8	0.7	0.4			
Brazil	2.9	0.9	3.0	0.2	-0.5	0.3			
Growth differentials (%	pt)								
EM-DM diff.	0.8	3.1	6.9	3.0	2.6	3.3			
EMX-DM diff.	1.1	1.1	2.9	1.0	1.3	1.7			

Source: J.P.Morgan

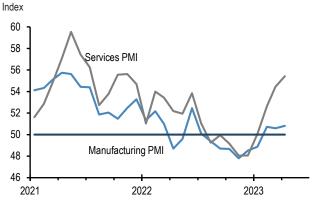
We still expect global growth to cool as the year progresses, but incoming data so far challenge that view. J.P. Morgan's global all-industry PMI strengthened in April by another 0.8-pt to 54.2 on the back of strong services and stabilizing manufacturing, consistent with a modest slowing in global growth to 3.3% ar this quarter, which is stronger than our 2.6% ar forecast. A disappointing 1Q GDP print in the US on the back of a surprisingly strong de-stocking masked otherwise strong consumer and government spending and only a modest cooling in labor markets. Going forward, our modal view assumes that the US would dip into a mild recession by late 2023, and for the sources of global growth to rotate to Asia and the Euro Area as these two regions shake off prior manufacturing and energy shocks. Likewise, early data on tourism and sales confirm China's strong reopening momentum remains intact, albeit with exports losing steam and

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imports softening on weaker commodities demand.

Figure 4: Global all-industry PMI ticks up on strong services, stable manufacturing



Source: S&P, J.P.Morgan

We expect slowing in EM ex China growth, led by EMEA EM and Latam, tempered by a modest rebound in EM Asia this quarter. Production across EM Asia stabilized in March, adding credence to our call for growth to accelerate in EM Asia ex China in 2Q as manufacturing improves, services activity gains strength and China's reopening lifts regional partners. We still expect aggressive tightening cycles to slow growth materially as the year progresses in Latam and EMEA. While the incoming data in EMEA EM align with that view, broad-based resilience in Latam's two behemoths (Mexico and Brazil) could imply upside to our call for 0.1%ar across the year. Our growth nowcasters are signalling upside risks to our 2Q GDP growth forecasts in EM broadly (outside of Taiwan), suggesting that the growth resiliency test may get shifted out further into 3Q23.

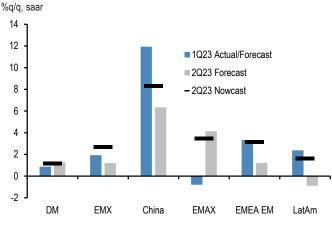


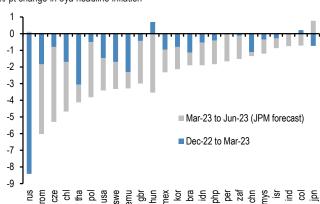
Figure 5: EM growth expected to slow this quarter, yet nowcasters say otherwise

Source: J.P.Morgan global economics

While a large headline disinflation is underway in EM, core prices are proving stickier than expected. Base effects from last year's surge in food and energy prices are starting to weigh on headline over-year-ago inflation rates. Close to 150bp of headline disinflation took place in March (130bp in core) and we estimate another 100bp is in the pipeline by June. Easing supply-side shocks, lower-than-expected crude oil prices, and a weaker USD are expected to contribute to the disinflation, especially in goods prices. However, notwithstanding the oya decline, core inflation momentum proved stickier in 1Q due to elevated services prices. We thus anticipate only a modest easing in momentum this quarter amid stubborn core inflation and a more limited declines in crude oil prices.

Figure 6: We still see significant disinflation by June aided by base effect

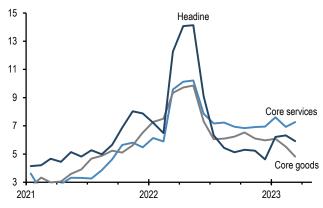
%-pt change in oya headline inflation



Source: J.P.Morgan

Figure 7: But EM inflation momentum in core services is proving stubborn

%3m, ar; excludes China and Turkey



Source: J.P.Morgan

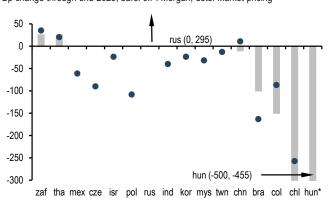
The EM tightening cycle is nearing an end, with a handful of EM economies now delivering their last hikes despite Global Emerging Markets Research Emerging Markets Outlook and Strategy 10 May 2023

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resilient growth and sticky core inflation. There are a few reasons for this: first, having raised rates more aggressively and earlier than their DM counterparts, EM central banks have built up more of a cushion against data surprises. Second, EM is not experiencing the financial stability concerns posed by US banking sector stress. Finally, the USD remained stable through this year's US rate volatility. With the Fed guiding towards a pause and the US expansion still on firm ground, domestic developments will likely drive EM policy in the coming months as central banks calibrate the end of cycles. With this in mind, Malaysia and Czechia last week delivered hawkish outcomes after being on prolonged pauses, while Colombia also hiked by 25bp in late-April amid stubborn inflation. We still look for South Africa, Thailand, and the Philippines to deliver a final round of 25bp rate hikes this month.

However, we see risks tilted towards shallower and later EM easing cycles. Provided the Fed is now done with rate hikes, we continue to believe that the EM easing cycle will start in 2H23. A substantial drop in headline inflation in 2Q23, amplified by a soft dollar and lower-than-expected oil prices, reinforces our call for the end of EM tightening cycles. However, with a few exceptions, the easing is likely be shallower compared to market pricing as EM central banks grapple with incoming growth and inflation data. Sticky core prices have led us to delay the start of easing that will eventually be led by Hungary, followed by Peru and Chile in July, and Colombia, Brazil and India in 4Q23. In addition to discussions about revisiting inflation targets, in recent weeks two central banks (SARB and CBR) have signalled they would revisit their neutral rates estimates (including considering country risk premia based on the worsening in their fiscal and debt metrics). If other EM central banks follow suit, that could render shallower EM easing cycles.



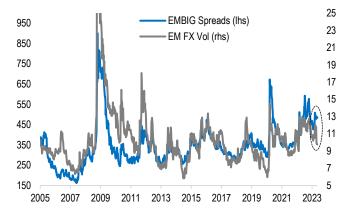


Source: J.P.Morgan *Hungary 1d deposit rate

Correlations in EM risk have broken following the recent banking stress, highlighting a market struggling for consistent direction. EM sovereign credit has underperformed both DM credit and EM local assets following March banking stress (see here), in a market environment that has struggled for overall direction. EMBIG spreads and EM FX volatility two measures of EM risk that have historically showed a high degree of co-movement – have diverged since mid-March (Figure 9), with the 6-months rolling correlation between them falling below 0.15 for the first time since 2017 (Figure 10). Given the other periods when this happened, this does not look simply like a feature of a late-cycle environment, given other periods were at varying cyclical points. This divergence, however, doesn't necessarily mean we should expect EM spreads to widen in the near-term. We look at previous episodes of divergence between these two measures of EM fixed income risk and find that, on average, EM FX volatility stays stable while EMBIG spreads converge down in the first few months following the divergence. On the returns side, EM fixed income assets show positive average returns with other sub-asset classes outperforming EM FX as the prior outperformance of EM FX is generally what leads to divergencies (Figure 11).

Figure 9: EM FX vol and EM credit spreads have co-moved historically, but diverged since mid-March

Left vertical axis (bp): EMBIG spreads (JPGCSOSD Index). Right vertical axis: JPM EM FX volatility index (JPMVXYEM Index).

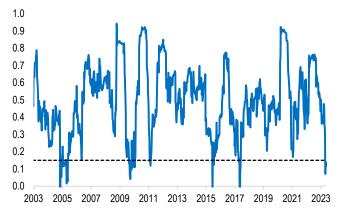


Source: J.P. Morgan, Bloomberg Finance L.P.

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Figure 10: 6-months rolling correlation between EM credit spreads and EM FX vol has fallen below 0.15 for the first time since 2017

Vertical axis: 26-week rolling correlation between EMBIG spreads (*JPGCSOSD Index*) and JPM EM FX volatility index (*JPMVXYEM Index*). Dotted line represents 0.15 correlation benchmark.



Source: J.P. Morgan, Bloomberg Finance L.P.

Figure 11: But this divergence has not historically meant bad news for EM fixed income assets

Averages of changes in EM risk metrics (see Figure 9) and total returns following previous episodes of correlations between EM credit spreads and EM FX vol falling below 0.15. These were: 2004-11-05, 2009-08-21, 2011-01-28, 2015-06-12, and 2017-04-14.

Average Change in EM Risk Metrics (change)										
	1-Month 2-Months 3-Months		6-Months							
EMBIG (spreads)	-18	-18	-11	-3						
EM FX Vol (index)	-0.04	0.04	0.32	0.02						
Average EM Fixed Income Performance (return, %)										
	1-Month	2-Months	3-Months	6-Months						
EMBIG GD	1.4%	2.4%	3.0%	4.4%						
CEMBI BD	1.0%	1.8%	2.3%	3.4%						
GBI-EM	2.2%	3.3%	4.0%	4.6%						
GBI-EM FX	1.1%	1.1%	1.2%	-0.2%						
GBI-EM FX Hedged	0.7%	1.4%	1.6%	2.6%						

Source: J.P. Morgan, Bloomberg Finance L.P.

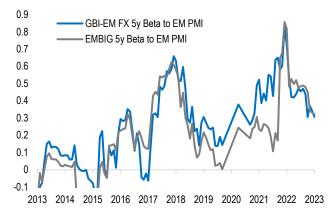
A 'carry-driven' late cycle environment. We have recently discussed how interest rate differentials have been a key driver of EM FX performance over the last months, replacing growth/term-of-trade factors seen at the start of the year (see <u>here</u>). Figure 12 shows that the beta of EM credit performance to growth has followed that of EM FX and also fallen after peaking in mid-2022. Although interest rate differentials have been the driving factor of performance over the last months, caution is warranted given historical evidence suggests bear market rallies are not worth chasing (see <u>here</u>). However, given the more mixed FX environment we have recently halved our COP UW (see <u>here</u>) and now add BRL OW (see <u>here</u>) moving our GBI-EM model portfolio EM FX stance to MW. We have also added some bullish EM rates

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positions over the last weeks, as market levels and fundamentals have adjusted, taking profit on our HGBs UW in the model portfolio and on our CLP and HUF 1y IRS payers (see here and here).

Figure 12: Beta of both EM FX and EM credit to EM growth has come down since peaking in mid-2022

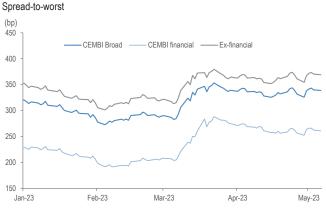
Vertical axis: 60-months rolling beta to changes EM manufacturing PMI in a model for monthly changes in GBI-EM FX returns (JGENVUUG Index) and EMBIG spread returns (JPGCCPSI Index) controling for changes in UST 10y yields.



Source: J.P. Morgan, Bloomberg Finance L.P., Haver Analytics.

EM banks have been relatively stable amidst another wave of concerns around US regional banks, with CEMBI financials lagging the overall index only by a small margin. Since US regional bank failures and DM bank concerns boiled up in early March, CEMBI financial sector spreads widened +57bp, which is almost the same as CEMBI Broad overall (+56bp). The +1.4% return in CEMBI Financials is actually slightly better than the 1.2% for the index, although this is partly due to the drag from real estate (-7.5%) on the non-financial sector. This is also only slightly worse than US HG financials (+37bp, +1.7%) during this period. We have been of the view that EM banks with external bonds outstanding are predominantly the largest and strongest banks within each banking system, which are likely to benefit from flight to quality and systemic support. In addition, we find that the fundamentals of these EM banks are mostly resilient, with stable funding profiles and conservative balance sheet management in recent years. Hence, we maintain our view that the issues in US regional banks will have limited direct implications on EM banks, with potential repercussions indirectly coming from the growth impact in the US from credit tightening.

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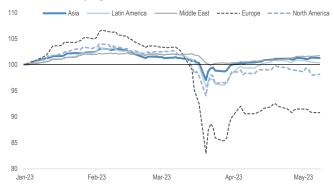


Source: J.P. Morgan

The performance for AT1 bank debt has been much more resilient for EM compared to DM banks. According to our CATIE index, the YTD return of subordinated bank capital is -6.3%, which is skewed by Europe (-9.2%) due to the writedown of the CS AT1s in March. However, other major European bank AT1s are also down significantly between -2% to -9% YTD. By contrast, Middle East AT1s are still delivering positive returns of +1.7% YTD followed by Asia at +1.3% YTD. Despite political noise in some of the countries, Latin America is also holding up at +0.3% YTD. The better performance of EM banks in the lowest rated part of the bond capital structure suggests that there are limited concerns on the fundamental ability of EM banks to maintain their capital adequacy and also to continue to call the subordinated instruments at or close to the first call date.

Figure 14: EM bank AT1 bonds have significantly outperformed DM banks

CATIE total returns by region, end-2022 = 100



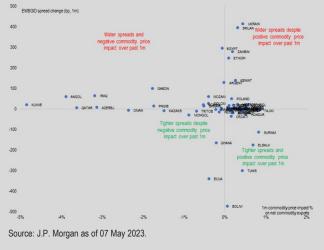
Source: J.P. Morgan.

Figure 13: CEMBI financial sector has performed mostly in line with the overall index

EM sovereign credit is typically sensitive to commodities moves, but the recent commodity moves have had an inconsistent impact. Commodities have started the year mixed and with (not atypical) volatility, given the variety of global growth and geopolitical narratives to underpin the moves. Brent oil is down -9.7%, agriculture (BCOMAG index) is down -1.8%, precious metals (BCOMPR index) are up +8.4%, and base metals (BCOMIN Index) are down -6.7%. Given the impact commodity prices have across EM sovereigns on their trade balances, external financing needs/sources, or as an input toward fiscal accounts, price moves should have an impact on spread performance as well. Figure 15 is a scatter showing the one month price change impact on respective EM sovereigns' net commodity exports and corresponding one month change in EMBIGD spreads. What is most striking is the lack of impact on EM sovereign spreads from commodity price moves. The top left quadrant shows minor spread widening only in countries mainly exposed to oil (e.g. Kuwait, Angola, and Iraq). In turn, while the bottom right quadrant shows credits which are net beneficiaries from the drop in oil prices, it is hard to distinguish spread movements solely on commodity price sensitivities given their distressed nature and the top right quadrant shows large underperformance in oil importers as well. So while recent spread movements have been more a function of oil prices, rather than other commodities, overall the market reaction to commodity price falls has so far been inconsistent.

Figure 15: EM sovereign credit sensitivities to commodities prices over past month

y-axis: EMBIGD spread change (bp, 1m); x-axis: weighted impact of commodity price change across four buckets (oil, agriculture, precious, and base metals) and country's respective net exports as % of GDP for each.

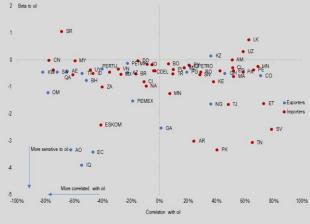


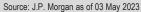
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Oil prices have moved sharply lower in recent weeks as global growth slowdown concerns become more pronounced, despite still resilient demand indicators. Oil prices were down -8.9% in the first four days of May before recovering a bit. They remain down -12.5% from their peak of just three weeks ago to around \$76/bbl handle (as of 09 May), and over a 6 month horizon are the biggest underperformer in the broader commodities complex. Despite the sharp move lower in recent weeks, oil prices are still broadly within the range observed over the past five months, and our commodities colleagues have forecast Brent crude oil prices to remain above \$90/bbl from 3Q23 throughout end 2024 (see Oil Markets Weekly, 28 April 2023). However, given the large impact oil has across EM sovereigns on their imports/ exports, external financing needs/sources, or as an input toward fiscal accounts, the recent move lower should have an impact on spread performance as well. Within EM Sovereign Credit, our "waiting for a recession" portfolio setup should benefit from the recent move lower in oil prices given we are net UW oil exporters (OW KSA vs UWs in AZERBJ, BHRAIN, COLOM, IRAQ, and TRITOB), with the UWs having also their own narratives and tight valuations too.

Figure 16: Angola, Iraq, Ecuador, and Oman are some of the more oil sensitive credits

x-axis: 3y correlation of EMBGID subindex spreads to oil prices; 3y beta of EMBIGD subindex spreads to oil prices; both using weekly data





The spread widening observed in some of the more oil-sensitive credits is in line with the recent move lower in oil prices. Given oil typically has the larger impacts on EM sovereign spreads, Figure 16 shows the 3y beta and correlation of EMBIGD subindex spreads and Brent oil price. As expected, some of the most oilsensitive credits include Angola, Iraq, Oman, and Ecua-

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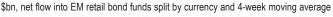
dor. Squaring the drop in oil prices over the past three weeks to the respective betas would imply a +37bp spread widening in ANGOL and +44bp in IRAQ (as of 04 May). These magnitudes are in line with the moves seen in recent weeks. The +7bp widening in KSA is also in line with the spread widening associated through its beta to oil prices. We remain OW KSA in the Model Portfolio, however, since spread levels are not too tight within their own 1y range, which is a rarity among IG credits with solid fundamentals.

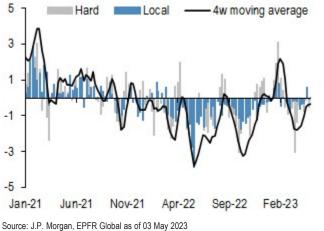
EM Technicals

Cleaner EM flows and positioning technicals

EM bond fund outflows continue but at a smaller magnitude. Since the middle of February, EM retail bond funds have only seen inflows on one week (out of the twelve). However weekly net outflows have recently reduced in size, with a 4-wk average of -\$340mn versus the -\$1.5-1.7bn averages observed between mid March and mid April (Figure 17). Considering the backdrop of tighter global liquidity conditions, relative attractiveness of risk-free assets, and risk sentiment, we continue to think that the path of least resistance is for further outflows. However, the change in the size of outflows is still a net slight improvement from a month or two ago on the technicals front.

Figure 17: Weekly EM retail bond fund outflows have reduced in size



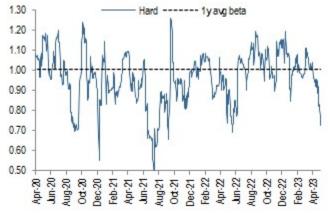


EMBI fund beta tracker drops sharply lower and is well below 1y averages. Asides from somewhat flat EM sovereign credit positioning (+0.5) in our EM Client Survey, we mentioned in last month's EMOS technical section that EMBI fund betas were reduced since the start of March and were close to 1y averages. Since then, fund betas have fallen even further and are now well below 1y averages and more in line with levels last observed about a year ago in May 2022 (Figure 18). Overall, the combination of smaller EM bond fund outflows, somewhat flat positioning in our EM Client Survey (Figure 25), and falls in fund betas indicate a cleaner flow and positioning outlook, especially for EM sovereign credit.

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Figure 18: EMBI fund betas have fallen sharply

21d rolling beta of EM-dedicated retail hard currency bond funds to their respective benchmarks, AUM-weighted



Source: J.P. Morgan, EPFR Global, Bloomberg Finance L.P.

Figure 19: Annual EM dedicated fund flows

		2019	2020	2021	2022	YTD
EM Total		55.5	26.5	153.3	-94.1	41.3
EM Bonds		67.1	23.3	52.5	-90.0	1.9
Fund Type	Retail	43.2	11.5	34.4	-81.8	-3.4
	Strategic	23.9	11.8	18.1	-8.2	5.3
	Hard	55.5	22.8	31.2	-44.8	1.9
Currency	Local	11.6	0.5	21.3	-45.3	-0.1
Exposure	o.w. Retail EM	5.3	-13.5	-2.6	-19.6	1.3
	o.w. Retail Chir	3.1	14.9	20.9	-24.1	-2.2
EM Equity (retail funds)		-11.6	3.2	100.8	-4.1	39.4

Source: J.P. Morgan, EPFR * Retail flows only

Primary market activity is set to remain restrained amid higher borrowing costs and low cash flow expectations in a typically quiet May. April issuance began strongly as EM sovereigns returned to primary markets post the mid-March shutdown following DM banking stress. EM sovereigns announced close to \$15bn new issuance in aggregate over the last week of March and the first week of April. However, since then, primary markets have gone quiet again with only \$2.9bn of new issuance from Mexico in the last week of April. The initial burst ensured that April remained a positive net issuance month for EM sovereigns despite large amortizations. Net issuance for the year currently stands closer to \$50bn, which is nearly twice the levels of 2022. That said, we expect the current slowdown in issuance activity to continue as many sovereigns have already front-loaded their annual borrowing needs, while lower-rated sovereigns are still looking to gain market access. May has been a relatively quiet issuance month historically and is also the lowest cash flow month this year (\$3.7bn).

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Figure 20: EM sovereign issuance enters a quiet phase after an energetic start

Annual EM sovereign issuance in \$bn

US\$bn	2020	2021	2022	2023YTD	2023F
a Gross issuance (b + c)	232.6	182.5	97.0	79.1	123.4
b New issuance	215.9	162.5	93.0	75.0	119.4
c Taps	16.7	20.1	4.0	4.1	4.1*
d Estimated cash flows (e + f)	101.3	111.8	112.6	49.3	107.1
e Amortizations	49.6	57.0	57.1	26.4	49.9
f Coupons	51.7	54.8	55.5	22.9	57.3
g Buybacks	9.2	2.9	13.1	4.1	10.0
h Net issuance (a - e - g)	173.7	122.6	26.8	48.5	63.6
i Net financing (h - f)	122.0	67.8	-28.7	25.6	6.3

Source: J.P. Morgan.

EM corporate primary market activity has continued to dwindle every month this year with \$17bn priced in April, marking a low for the month since 2009 (\$9bn). Regionally, Asia and ME&A were relatively more active with \$8bn and \$6bn issued, respectively. Thus, gross supply in 2023 totaled \$93bn at the end of April, down -26% y/y and tracking the lowest run-rate since 2016 (\$83bn). Slower supply during the month and robust cash flows (\$35bn scheduled and \$8bn unscheduled) kept net financing negative in April at -\$26bn. Historically, May has been an average supply month with a five-year average of \$33bn, though only \$19bn was priced last year. MTD supply has been minimal at \$1bn and we expect below average volumes for the month, given the US debt ceiling issue is likely to gain more prominence while broader market volatility still remains in place. Hence, net financing should remain negative considering the elevated scheduled cash flows of \$35bn in May.

Figure 21: EM corporate supply run-rate at multi-year low

(US\$ bn)	2019	2020	2021	2022	YTD	2023F
Gross issuance (a)	494	511	541	220	94	304
Estimated cash flows (b = c+d)	303	351	356	387	143	324
Amortizations (c)	199	239	244	285	107	238
Coupons (d)	104	112	112	103	36	87
Net issuance before tender/buyback/calls (e = a-c)	295	272	297	-65	-13	67
Net financing before tender/buyback/calls (f = a-b = e-d)	191	160	185	-168	-49	-20
Tender/buyback/calls (g)	98	93	130	92	21	50
Net issuance (j = e-g)	198	179	167	-158	-34	17
Net financing (k = f-g)	93	67	55	-260	-70	-70

Source: J.P. Morgan, Bloomberg Finance L.P., BondRadar. Data as of May 5, 2023.

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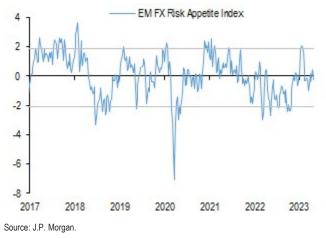
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EM Technicals Dashboard

EM FX Risk Appetite Index

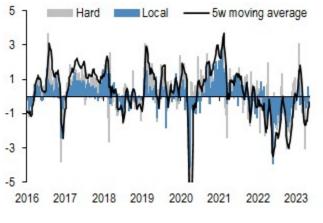
Figure 22: J.P. Morgan EM FX Risk Appetite Index

1st principle component measure derived from positioning, flow, vol, skew and technical indicators



Flow indicators (see **EM Flows Weekly**)

Figure 24: Weekly EM retail bond fund flows by currency \$bn

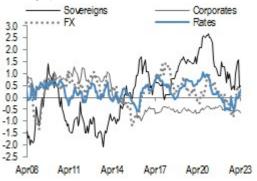


Source: J.P. Morgan, EPFR Global

Positioning indicators

Figure 23: Investor positioning in EM Client Survey

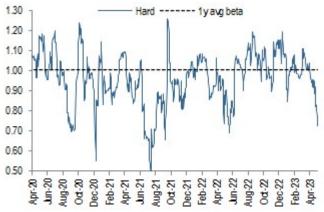
Positive number indicates an overweight position, negative number indicates an underweight position, 0 indicates neutral



Source: J.P. Morgan EM Client Survey

Figure 25: EM-dedicated retail hard currency bond fund beta

21d rolling beta of EM-dedicated retail hard currency bond funds to their respective benchmarks, AUM-weighted

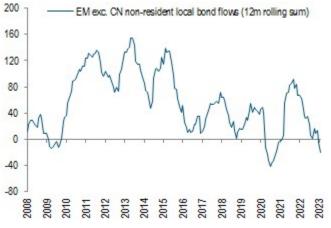


Source: J.P. Morgan, EPFR Global, Bloomberg Finance L.P.

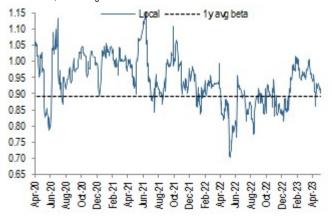
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Figure 26: Non-resident net flows into EM local currency bonds EM ex-China non-resident local bond flows, USD billion, 12m rolling sum



Source: J.P. Morgan, Bloomberg Finance L.P., national sources. EM ex-China: Brazil, Chile, Colombia, Czech Republic, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Peru, Poland, Romania, Russia, South Africa, Thailand, Turkey Figure 27: EEM-dedicated retail local currency bond fund beta 21d rolling beta of EM-dedicated retail local currency bond funds to their respective benchmarks, AUM-weighted



Source: J.P. Morgan, EPFR Global, Bloomberg Finance L.P.

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EM Local Markets Strategy

We stay MW EM Rates and move MW EM FX (from UW)

Figure 28: GBI-EM Model Portfolio and YTD performance

Portfolio Attribution YT	D (bp)			Portfolio Po	sitions			
	Bonds	FX	Total			Bond CTD	Bond Weight	FX Weight
Country positions	+2	-5	-3	Cou	ntry positions	0.175	6.79%	-0.25%
Overlay contribution	+4	-9	-5	Ov	erlay position	-0.175	-3.63%	0.25%
Final portfolio	+5	-14	-9		nal portfolio	0.00	3.15%	0.00%
Annualized TEV (bp)	+35			Annualized vol	of final portfolio	(inc overlay, targe	et: 150-250bp)	
1-month VaR (bp)	-18			Portfolio exces	s return at the 5t	h percentile over	1-month. Historical V	aR is -22bp
Г	Final po	ositions	С	ountry positio	returns (country p	ositions, bp)		
	Bond	FX	Bond	Bond	FX			
	View	View	CTD	Weight	Weight	Bonds	FX	Total
BI-EM	MW	UW	0.175	+6.79%	-0.25%	+2	-5	-3
M Asia	MW	MW	-	-	-	+1	+6	+6
MEAEM	OW	ÜŴ	0.025	+0.34%	-1.25%	-6	-13	-20
atin America	ÓŴ	ÓŴ	0.150	+6.45%	+1.00%	+7	+3	+10
China	MW	MW	-	-	-	-	-	-
ndonesia	MW	MW	-	-	-	-2	-2	-4
Aalaysia*	MW	MW	-	-	-	+3	-	+3
Philippines	MW	UW	-	-	-1.00%	-	-3	-3
hailand	MW	ÓW	-	-	+1.00%	-	+10	+10
Czech Republic	OW	MW	0.05	+1.00%	-	-3	+0	-3
gypt	MW	MW	-	-	-	-	-8	-8
lungary	MW	MW	-	-	-	-5	-6	-11
Poland	MW	MW	-	-	-	-	-1	-1
Romania	UW	MW	(0.025)	-0.66%	-	+3	-1	+3
urkey	MW	MW		-	-	-	-	-
Serbia	MW	MW	-	-	-	-	-	-
South Africa	MW	UW	-	-	-1.25%	-2	+2	+0
Brazil	OW	OW	0.10	+5.10%	+0.50%	+7	-	+7
Chile	ŬŴ	MW	(0.05)	-0.81%	-	+2	-4	-2
Colombia	MW	UW	-	-	-0.50%	-	-10	-10
ominican Republic	MW	MW	-	-	-	-	-	-
/lexico	OW	OW	0.10	+2.16%	+1.00%	-2	+13	+11
Peru	MW	MW		-	-	-	-	-
Jruquav	MW	MW	-	-	-	-	+3	+3

Source: J.P. Morgan; YTD statistics as of 09-May-23 COB. *FX returns calculated using Malaysia T-bills (up to 3m).

Figure 29: GBI-EM Global Diversified Return Forecasts

	Carry and Duration to end-23		Total Return		Yi	eld	Car	ry and Duratio	n Rt	FX Spot	vs. USD	FX Spot Return vs. USD		
	FX Spot vs. USD to end-23	YTD	To end-23	2023F	Current	4Q23F	YTD	To end-23	2023F	Current	4Q23F	YTD	To end-23	2023F
GBI-EM GD		7.0%	1.4%	8.5%	6.48%	6.45%	3.8%	4.6%	8.5%			3.2%	-3.0%	0.1%
China	l l	1.9%	1.6%	3.6%	2.78%	3.00%	1.4%	0.6%	2.0%	6.92	6.85	0.5%	1.0%	1.6%
Indonesia		10.4%	1.9%	12.5%	6.56%	6.60%	4.2%	4.0%	8.4%	14700	15000	5.9%	-2.0%	3.8%
Malaysia	-	3.0%	3.9%	7.1%	3.80%	3.70%	3.8%	3.1%	7.0%	4.44	4.40	-0.7%	0.8%	0.1%
Philippines		11.9%	-1.2%	10.5%	6.26%	6.70%	11.0%	0.1%	11.1%	55.26	56.00	0.9%	-1.3%	-0.5%
Thailand		4.1%	5.8%	10.2%	2.51%	2.40%	1.9%	2.3%	4.3%	33.87	32.75	2.2%	3.4%	5.7%
Czech Republic		10.3%	2.1%	12.6%	4.70%	4.00%	3.5%	6.8%	10.6%	21.25	22.22	6.5%	-4.4%	1.8%
Egypt		-21.5%	13.5%	-10.9%	24.25%	21.50%	-2.0%	21.6%	19.2%	30.80	33.00	-19.9%	-6.7%	-25.2%
Hungary		19.4%	-3.6%	15.0%	8.53%	8.50%	7.6%	5.7%	13.7%	338	370	10.9%	-8.8%	1.2%
Poland		12.4%	1.0%	13.5%	5.75%	6.00%	6.1%	2.7%	9.0%	4.14	4.21	5.9%	-1.7%	4.1%
Romania		9.0%	-1.7%	7.1%	7.09%	7.50%	5.0%	2.9%	8.0%	4.47	4.68	3.8%	-4.5%	-0.9%
Serbia		9.0%	0.4%	9.4%	6.18%	6.50%	5.6%	2.5%	8.2%	106.56	108.80	3.2%	-2.1%	1.1%
South Africa		-5.3%	-4.0%	-9.0%	11.23%	11.60%	1.9%	4.9%	6.9%	18.30	20.00	-7.0%	-8.5%	-14.9%
Turkey		-19.7%	-26.5%	-41.0%	15.78%	20.00%	-16.4%	-2.0%	-18.0%	19.50	26.00	-4.0%	-25.0%	-28.0%
Brazil		13.0%	3.5%	16.9%	12.06%	11.25%	6.1%	9.6%	16.2%	5.00	5.30	6.5%	-5.6%	0.5%
Chile		8.7%	-7.4%	0.7%	5.53%	6.50%	1.0%	-2.3%	-1.4%	797	840	7.6%	-5.2%	2.1%
Colombia		21.6%	-9.5%	10.1%	11.24%	13.00%	12.4%	-1.5%	10.7%	4504	4900	8.2%	-8.1%	-0.6%
Dominican Republic		13.4%	9.9%	24.7%	10.18%	9.50%	9.8%	9.5%	20.2%	54.45	54.25	3.3%	0.4%	3.7%
Mexico		13.1%	6.4%	20.4%	9.12%	8.25%	3.4%	10.1%	13.9%	17.78	18.40	9.4%	-3.3%	5.7%
Peru		10.0%	3.7%	14.1%	7.10%	6.50%	6.9%	8.2%	15.7%	3.71	3.87	2.9%	-4.2%	-1.4%
Uruguay		9.5%	3.0%	12.8%	9.99%	9.75%	7.1%	7.6%	15.3%	38.75	40.50	2.3%	-4.3%	-2.1%

-30% -20% -10% 0% 10% 20% 30%

Source: J.P. Morgan; Using current index weights for forward projections. As of 09-May-23 COB.

EM Asia

Macro Outlook : Tracing the regional and global threads

There are several ongoing developments that are driving the macro contours in EM Asia: the waxing and waning effects of China's reopening, the lackluster trend in goods output that is set against ongoing resilience in the services sector. The combination of these forces suggest that the composition of growth in much of the region will be driven by the non-goods sector which is also keeping core services inflation sticky. This is unusual relative to the past, where the goods sector tends to lead growth. In this context, we continue to watch for signs of a shift in trajectory of the goods sector, which on balance has been a touch better than feared but is expected to be buffeted by global headwinds in 2H23, and the expected fading of the services sector recovery, which should cool core inflation. The confluence of these factors have been to keep central banks on hold despite concerns of deteriorating external demand.

China's April PMI readings suggest that the momentum of post-reopening recovery is softening, in line with our forecast of growth deceleration from 11.9%q/q saar in 1Q to 6.3%q/q saar in the current quarter. Both NBS and Markit manufacturing PMI fell below the 50-threshold, and the decline is broad-based across sub-components and across different groups of enterprises. By contrast, the solid performance in services sectors, led by tourism-related industries, and policy focused sectors seem to have carried on well into early 2Q.

Although the recovery should continue in the current quarter, the underlying drivers will likely evolve. The export lift could soon fade and could turn into a headwind. The recovery in consumption and services activity are expected to continue, and the out-performance in policy tailwind sectors - investment in infrastructure, high-tech and green sectors - will also continue. Key uncertainties relate to two areas: private investment and new home starts. Both remain weak, in sharp contrast to public investment and new home sales. The concern is that this time it might be different if the weak confidence of private entrepreneurs and private real estate developers persists. Hence, private investment and housing market outlook in the next few months should be closely watched, and they will determine the risk bias for 2H23.

Services resilience in EMAX keeps core sticky and CBs on hold. Following the softening in industrial activity since 3Q22, production across the region looks to have stabilized in March with the exception of Taiwan, with sequential gains among the bellwethers of Korea, Japan and Singapore. Tech Global Emerging Markets Research Emerging Markets Outlook and Strategy 10 May 2023 J.P.Morgan

related uncertainty likely weighed on Taiwan's March output and export orders. Nonetheless, we expect that non-tech production will continue to lift, evident also in the capex nowcaster, and should benefit Korea and Japan. This adds to an ongoing labor market recovery that has been progressing despite the manufacturing slowdown, underscoring the resilience of the non-goods producing sector. Indeed, with China's outbound travel normalizing, this could further add to regional services employment and keep services inflation sticky. The confluence of these prospective sub-cycles – the stabilization if not turn in goods output, China's re-opening and the continuing stickiness in core inflation – suggests that central banks will remain on path of extended pause even as headline CPI eases.

Currency stability opens room for cuts for some. Set against this backdrop, there are some countries that bear watching. In the case of Indonesia, despite elevated uncertainty in March and April, the currency has remained resilient. This has thus allowed the BI fed funds rate differential to turn negative post the May fed funds like. Should this resilience continue, the prospect of inflation returning to the inflation target range and easing global demand, opens room for BI to consider easing in 2H23. Similarly, in the Philippines, the expected decline in headline inflation back to target could have drive the same calculus for the BSP in 4Q23 once it completes its tightening cycle with a final 25bp hike a the May 18 meeting.

Local Markets Strategy: Low beta participation in a recession run-in

Bullish lean on Asia rates. Given that Asian central banks had started tightening later and have hiked less than those in most other DMs and EMs over the past year, pockets of EM Asia rates somewhat surprisingly outperformed USTs since April even as the latter trod water. Cyclical weakness is not at the heart of these duration gains: April PMIs left most of the region solidly in expansionary territory, and sticky core services inflation should keep central banks on hold for the most part this year (BNM even surprised with a rate hike), especially without financial stability risks in the banking sector to contend with (link). Instead, Asia duration is a relative beneficiary of the comparatively shallow rate cuts priced into money market curves, in contrast to the steep inversion of DM and other EM curves. Without outsized domestic vulnerabilities (e.g. twin deficits), Asia rates are well placed to benefit from low beta participation in any global duration rally in the run-up to a US recession, with much lower negative carry penalty than elsewhere and with room for the '24-'25 segments of forward curves in particular to converge lower towards the USD curve. Bonds are likely to benefit more than usual relative to swaps in the run-up to potential rate cuts in 2024 given the likely shallowness of such easing cycles as well as favorable demand/supply dynamics in pockets of Asia LM such as Indonesia, where government cash buffers are adequate in theory to preclude further issuance for the rest of the year should market conditions turn unfriendly. We continue to run a suite of outright long rates trades (10y KTBs, 5Y MGS, 3Y HKD IRS) and steepeners (5s30s IGBs, 5s20s Indo GBs).

Defensive posture in Asia FX. We continue to view USD/ Asia as trading too low, with notable richness in PHP and TWD in particular. Our favored expression right now is to be bearish currencies with high cyclical exposure - we are short KRW and TWD (vs USD, JPY, THB equally weighted) where weak global demand stands to reduce electronics trade surpluses. For TWD, we also note that markets are not pricing in geopolitical risk premium even though cross-Straits tensions remain high. Aside from exports, equity flows into the region have largely dried up, with foreign flows for ex-China Asia being virtually flat after stellar inflows in January (the exception is India which has seen notable inflows, after outflows in January unlike the others). Moreover, we note that stress in global credit markets has historically coincided with notable equity outflows. Against this damp backdrop, Asia FX is trading relatively rich, which is most pronounced in PHP (we are 1% UW in GBI-EM). On the other hand, we see a bright spot in THB (long vs CNH, PHP, INR equally weighted; 1% OW in GBI-EM) as the tourism recovery continues and is expected to augur 28-30 million arrivals this year (2022: 11.2mn). We also remain long SGD basket given the upward

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slope of the NEER with no MAS easing in sight, yet FX forwards market pricing in the NEER to slip to the middle of the band in a year's time.

Market pricing of a cyclical slowdown in China is looking stretched; biased to fade growth pessimism. Financial markets have been downplaying China's strong 1Q GDP print while fixating on the paucity of forward looking growth catalysts. Mixed data and weaker-than-expected April PMIs added to market concerns over the durability of economic recovery in the absence of additional policy stimulus. Although the post-Covid rebound in business and consumer confidence is still in a nascent stage, market pricing of cyclical pessimism has started to look stretched. The breadth of EPS growth downgrades for Chinese equities for instance is not so far from Apr-22 / end-2022 extremes when Covid was the paramount concern (note). Similarly, CNY FX has weakened with the CFETS TWI giving back over 75% of its post-reopening gains. 10y CGB yields are only 10bps away from Nov-22 lows despite money market rates having risen substantially since then (+30bps). Over the short run, such pessimism may continue as high frequency activity data points to a weak/ unbalanced rebound in April (note). However, as the recovery slowdown is largely in the price and risks of a growth cliff remain limited, we are inclined to fade any extreme pessimism on growth as we expect the recovery path to broadly extend in the coming quarters. We take profit on a 1s5s NDIRS flattener and are on the lookout for catalysts for a potential repricing of China's cyclical outlook via shorts/UW in CNY rates and/or long CNH crosses.

Figure 30: EM Asia Local Markets Trade Recommendations

TRADE	DATE	ENTRY	CURRENT
FX - Basket			
Long "reduced" S\$NEER basket	7-Mar-22	100	107.27
Short KRW basket	15-Feb-23	100	102.80
Long THB basket	25-Feb-23	100	102.10
Short TWD basket	3-May-23	100	100.10
Rates - Duration			
Receive 3y HKD IRS	28-Oct-22	4.61	3.58
Long MGS 3.899 11/16/27	23-Nov-22	4.20	3.47
Long KTB 4.25 12/10/32	6-Jan-23	3.56	3.32
Rates - Curve			
IGB 5s30s steepener	7-Oct-22	20	21
THAIGB 3s20s flattener	23-Nov-22	174	95
INDOGB 5s20s steepener	1-Feb-23	60	67

Source: J.P. Morgan. As of 9-May-2023 Asia close.

EMEA EM

Macro Outlook: No more policy rate cuts in 2023

Except for Georgia and Ukraine, we no longer have policy rate cuts during 2023. While headline inflation is slowing in over-year-ago terms, the slowing in momentum remains less pronounced than expected across main countries in EMEA EM. The main driver behind this underperformance is linked to core inflation, particularly core services. In an environment of still strong inflation momentum, central banks have shifted in a less dovish direction or even outright hawkish. And the hawkish shift is most striking in two cases where growth recovery from COVID has been rather weak - Czechia and South Africa.

In Czechia, three voting members (out of seven) pushed for a 25bp rate increase, a shift from the 6-1 vote that supported a string of decisions since central bank stopped increasing rates last year. Core inflation momentum has remained too elevated to give comfort to the CNB, but the economy is extremely weak looking at growth and consumption, while FX has been the strongest in CE4. Retail sales are back at levels seen during COVID-19 lockdowns. We still see Czechia as a candidate for disinflation and rates cuts, but, considering the hawkish shift, we now see the cuts in February 2024 (August 2023 previously).

In South Africa, Governor Lesetja is increasingly arguing for a lower inflation target of 3% vs. the current 4.5% mid-point of the 3%-6% inflation target range. At the same time, the new QPM model implies a higher r* largely because of the high public debt ratio. These two developments probably will make policy easing in 2024 more shallow and more data-dependent. Over the short-term, even though inflationary pressures remained comparatively well contained for much of 2022, a spate of upside surprises has increased chances for a rate hike. We look for a 25bp hike to 8% this month, followed by a pause over the remainder of the year. Having said that, the May MPC meeting probably will be a delicate balancing act but if USD/ZAR stays in the 18.00-19.00 range we think a 25bp policy rate increase is more likely, with probably some votes for a pause, rather than a repeat of the 50bp delivered in March.

Hungary remains a central bank likely to be able to deliver some monetary easing by gradually removing some of the emergency tightening of 2022. The NBH will likely deliver a sequence of 100bps cuts, starting in May or June (we are inclined to June, but odds are nearly even for May), and ending in September/October, at which point it will equal the so-called base rate (13%, the policy rate level). But policymakers have been cautious despite improvement in senti-

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ment and have delayed easing they could have started already in March. Poland and Romania are both likely to stay unchanged this year. While Romania is not signalling any shift in its stance, some Polish MPC members started to signal rate cuts late in 2023 despite core inflation momentum actually accelerating. We don't see rate cuts possible in this environment.

Looking at growth dynamics, CE3 countries stand out with negative performance in retail sales in 1Q23 as consumers suffer from rate hikes. Despite tightening, Romania fairs better supported by policies aimed at wage growth and public investment with EU funds. Israel, South Africa and Turkey are also seeing further growth in retail sales. On the IP side, in line with global developments, growth has been weak - contraction in most economies, except for limited growth in Romania from very low levels. Looking at the current quarter, the nowcaster is pointing to positive growth with upside risks in Hungary, Romania, Russia and South Africa.

Türkiye is to hold presidential and parliamentary elections on 14 May 2023. For the presidential election, public opinion polls point to a tight race between incumbent President Erdogan and the opposition candidate, CHP Chairman Kilicdaroglu. We note that CHP Chairman Kilicdaroglu increased his support in most recent polls. If both incumbent President Erdogan and CHP Chairman Kilicdaroglu are short of the 50% threshold, the presidential election will go to a runoff which is scheduled for 28 May 2023. For the parliamentary election, polls indicate that either the ruling People Alliance or the Nation Alliance of six opposition parties may not be able to form the majority in the new parliament.

Local Markets Strategy: Back to OW duration stance, but stay UW FX via ZAR

We have turned OW duration (from MW) in EMEA EM but we remain UW FX via ZAR. We recently took profits on our long-standing UW stance on HGBs. Following this change, we are now OW duration via OW in CZGBs partially hedged by an UW in ROMGBs. We also have a bullish rates bias in our outright trades. In FX, we maintain an UW in ZAR and we increase the weight on this position tactically. We see a more bullish set-up in CE3, but entry levels are not favourable and hence we are on the sidelines there. We hold idiosyncratic longs in FX forwards in USDTRY and EUR-RON.

ZAR remains the best hedge to global growth risks in our region: we roll into a new 3m USDZAR call and increase the weight on our UW ZAR position. ZAR is currently trading about 3% rich in our BEER FV model. Our *EM Client Survey* indicates that investors are most OW ZAR since mid-2019. Meanwhile, we see ZAR particularly vulnerable to the 'end-of-cycle' dynamic with our house forecasts, indicating further 9% slide in ZAR's fair value by year-end (7.5% using market pricing for policy rates instead of J.P.Morgan's forecasts). Idiosyncratic drivers including energy shortages and wide fiscal position are also negative. Vols and skews in USDZAR continue to suggest little risk premia are built in.

CEE FX is in a much better shape, and we now have a bullish bias in HUF; but entry levels are unfavourable.

Latest BoP data are very positive for the region (Figure 3). CE3 current account positions for February improved on average 2.3% GDP in saar terms vs. January and 7.8% GDP vs. November 2022. March trade balance data released so far suggest a further improvement. Yet FX returns have already been substantial and the level of carry outside HUF is not compensating for increasing growth risks particularly well. We do not think this is a bearish set-up, but rather one that calls for hightened attention to entry levels.

Our highest conviction bullish rates trades are in the Czech Republic (OW in the GBI-EM Model Portfolio and received 5y IRS) and Israel (received 2y2y IRS). These two countries stand out with the best inflation profile in the region both in terms of momentum measures and the expected speed of convergence to their respective inflation targets. In both countries, rate cuts are now unlikely this year, but credible easing is possible from early 2024. In Israel, we judge immediate geo-/political risks have now decreased.

In idiosyncratic stories, we favor HUF 1s3s IRS steepeners into the imminent easing cycle; we also took profit on UW HGBs.Our economist forecasts 500bp of cuts to the 1d deposit rate over the next six months (in line with market pricing) with the first 100bp cut in June (base case) or May. Our analysis suggests that NBH has now good chance to deliver such cuts without undue market pressure (see <u>here</u>). Positioning for this via front-end receivers, however, is significantly negative carry/roll. We therefore prefer steepeners; 1s3s is very inverted to future inflation projections and policy rate expectations.

Meanwhile, with elevated ZAR risks and SARB's reaction function more hawkish we exit our remaining SA rates trades. ZAR rates have underperformed amid accelerating food inflation and the market pricing a more hawkish SARB, with the latest sell-off exacerbated by concerns over intensifying energy shortages. This has left front-end rates premia excessive in our view (Figure 16). However, gauging the SARB's reaction function has become trickier and the ZAR outlook more precarious. Accordingly, we exit 1y1y receivers. Elsewhere, we close also our 1y ZAR-USD xccy basis receivers (1m fwd) at a modest loss.

Figure 31: EMEA EM Outright Trade Recommendations

Rates	Entry Date	Entry	Current	Target
HUF 1s3s IRS steepeners	04-May-23	-426bp	-412bp	-225bp
Receive 5y CZK IRS	02-Feb-23	4.52%	4.73%	3.75%
Receive 2y2y ILS IRS	21-Nov-22	2.98%	3.05%	2.50%
POLGB 5s10s steepeners (DV01 neutral)	16-Nov-22	-18bp	-2bp	20bp
FX	Entry Date	Entry	Current	Target
11-Aug-23 USD/ZAR call (20), spot ref: 18.7954^	10-May-23	1.30%	1.30%	-
Long 06-Sep-23 EUR/RON fwd*	02-Mar-23	5.02	4.97	5.10
Long 13-Jul-23 USD/TRY fwd*	12-Jan-23	21.11	22.22	23.50
	24-Jan-22	113.55	136.61	126.00

Source: J.P. Morgan, Bloomberg Finance L.P. *levels reference forward; **levels reference spot; *Rolled from 23-May-23 USD/ZAR call (19), spot ref: 17.36 entered on 22-Nov-22 and closed on 10-May-23

Latin America

Macro Outlook: Still haunted by policy uncertainty

Not only the economic fundamentals are important, but the interaction of politics and policy in Latam is also key. Last month, we thought most countries' tightening was over but Colombia's BanRep hiked the policy rate by 25bp to 13.25%, responding to higher risk premia after President Petro called for the end of a political coalition with centrist parties. In Brazil, the new administration has shifted fiscal policy toward more spending, to be funded by an increase in revenues reducing tax loopholes for now, and has increased criticism over BCB policy. The debate about changing the inflation target is one of the reasons for the un-anchoring of inflation expectations, one of the factors that is preventing BCB from easing policy rates. Meanwhile, after rejecting the Convention constitution draft, Chilean conservatives gained majority in the constitutional council, what should offer a minimalist new constitution and helps to further decompress risk premium. Moreover, politics have also been in the spotlight in Argentina, which will hold elections in the second half of the year, and in Ecuador, where the Lasso administration has faced increasing governability challenges with a new attempt to impeach the president advancing in Congress. Finally, in Mexico, presidential elections will take place in one-year time, but on June 4, state elections will determine the momentum of both the governing party Morena, and the opposition Va por Mexico bloc. According to recent polls, *Morena* leads the opposition by 20%-pts.

Resilient GDP growth. LatAm was one of the first regions to start tightening interest rates back in 2021 and our call was that economic growth would continue to decelerate at the beginning of this year. However, so far the regional growth has been outperforming our expectations in most countries. The economic data have been surprisingly resilient, suggesting that the good momentum continued at the turn of 1Q to 2Q. In particular, the rotation from goods to services is keeping the latter strong across the board whereas goods production and consumption are decelerating. This two-speed economy is a result of the reopening post COVID-19, and the fact that the tradables sector was heavily impacted by global supply chain disruption and is more sensitive to interest rates, which in turn are at multi-year, and in some cases, multi-decade highs. We continue expecting a normalization of this within-sector divergence, with the overall LatAm economy decelerating over the course of the year, but so far the signals of such a phenomenon are, at best, limited in most of the countries.

Inflation coming down, but high core CPI persists. After peaking by mid-2022, at the beginning of this year inflation

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has been coming down from double-digits to more reasonable though still high levels. Most of this deceleration is led by the end of the energy shock of last year, and by goods prices due to the normalization of some supply chains and the reallocation of demand from goods to services. While there is also some deceleration in core prices, core CPI is coming down at a more moderate pace and continues running well above the central bank's targets. In particular, services CPI remains under pressure and worrying central banks. That said, in line with our view of a weakening of the regional demand, we see core inflation converging lower to levels last seen in the first half of 2021.

Rates to remain high for a while, still. Remaining political uncertainty across the region and generally resilient growth and inflation are likely to lead most central banks to keep rates high for a while still. Brazil's BCB is keeping rates stable until the disinflation process consolidates and inflation expectations anchor around the targets - we then expect cuts by 4Q23. But we recognize the risks of an earlier cut particularly if the government makes a credible and public commitment to the 3% target. Mexico's Banxico was one of the last to tighten and where the economic environment seems the brightest, making us expect cuts only next year. In Colombia, the higher political uncertainty and economic imbalances prompted us to recently push the start of the easing cycle to 4Q23. It seems more encouraging that the region's traditional low-yielders might be able to ease earlier. Chile is one of the countries where we are more comfortable in seeing a cut already in July, especially since the political stress is receding, and we predict cuts in Peru at the same month.

Local Markets Strategy: Add OW BRL amid resilient Latam markets

Latam FX continues to perform well, with carry being a major anchor for currencies; stay OW Latam FX. Carry continues to drive the appetite for the FX in the region, with most pairs trading at their strongest levels of the year. The resiliency of the pack has been supported by a bearish USD trend which looks prone to remain in place for the foreseeable future against Latam FX.

We are currently OW MXN, partially offset by an UW COP. We remain long in MXN as it continues to be backed up by high real rates and robust macro fundamentals, while keeping a <u>reduced UW COP</u>, given its weak external accounts, deteriorating real rates, and vulnerability to lower oil prices. Short term valuations are somewhat rich for some currencies, but longer term ones are generally still fair.

We are moving OW BRL in the Model Portfolio, taking advantage of the (expected) Fed-pause relief. With Brazil still offering the highest real rates in the EM space and BRL volatility being at the year's lows,BRL longs look appealing. BRL valuations are not stretched, and with some idiosyncratic risks out of the way, we think there is room for BRL to catch up to some of its peers' better performances. On the local front, the presentation of the fiscal framework and the two recently unveiled BCB nominations dissipated some tail risks. Discussions around the inflation target are the one remaining risk, but the likelihood of a market-friendly resolution seems to have increased as of late. We are also adding 3m USD/BRL 1x1 put spreads (4.89/4.69; spot ref: 4.9918; priced at 95bp).

We are OW Latam duration as real rates look appealing and central banks have generally reached the end of the hiking cycles. With the last hike from this Fed's tightening cycle likely behind us, and most Central Banks in the region facing a similar situation, we believe the outlook for duration has improved. We are OW Brazil and Mexico rates, now on an unhedged basis in both cases after adding an OW BRL, as they offer the most attractive valuations, while disinflation and fundamentals remain strong.

We think the opportunities for payers are becoming even more tactical; we only hold 2y payers in Colombia. Our 2y IBR payers are based on Colombia's significantly more concerning inflation outlook and rising political risk, amid still large external imbalances, downside risks for oil and attractive carry and roll. We believe the current environment is however more conducive for receivers, and payers can only work where curve inversion seems excessive or fundamentals are dislocated from market pricing of cuts. As such, we recently took profits in our 1y CLP payers. Global Emerging Markets Research Emerging Markets Outlook and Strategy 10 May 2023

Even if US front-end yields can move higher from here, Latam curves reactions have been more muted to core rates sell-offs lately. We see this by running rolling correlations between daily bp changes in 2-year US yields and in 2-year Latam yields (Mexico, Chile, Colombia, Brazil). We then re-run the correlations, but this time dividing the data between moves higher and lower in US yields and find out that since October 2022 Latam curves have tended to follow core rates more strongly when the latter rallied, and instead have been quite resilient during episodes of selloff in US rates. We find this indicative of the more advanced monetary cycle stage of Latam Central Banks.

Figure 32: Open trade recommendations

Rates		Entry	Entry Ivl	Last	Link
BZ	DI Jan26 receivers	11-Aug-22	11.67%	11.40%	link
MX	Long Mbono May 2033	12-Jan-23	8.65%	8.78%	link
DR	Long DR Central Bank bond 1/30/2026	28-Feb-23	12.60%	11.54%	link
CO	2y IBR payers	18-Apr-23	10.49%	10.38%	link
FX		Entry	Entry IvI	Last	Link
BRL	3m USD/BRL 1x1 put spreads (4.89/4.69; spot ref: 4.9918; priced at 95bp)	9-May-23	4.99	4.99	-

Source: Bloomberg Finance L.P., J.P. Morgan

Figure 33: Model Portfolio recommendations

Rates		Entry	Entry Ivi	Last	Link
CL	UW Local Rates	7-Apr-22	6.12%	5.53%	link
MX	OW Local Rates	21-Nov-22	9.36%	9.12%	link
BZ	OW Local Rates	11-Aug-22	12.46%	12.06%	link
FX		Entry	Entry Ivi	Last	Link
			,		
COP	UW COP	22-Nov-22	4945	4544	link
COP MXN	UW COP OW MXN	22-Nov-22 21-Nov-22			

Source: Bloomberg Finance L.P., J.P. Morgan

EM Hard Currency Strategy

EMBIG Model Portfolio: Pay it sideways

While EMBIGD spreads remain well off the February tights, they have been range-trading in the last two months since US banking stress emerged. At 483bp, the spread of the EMBIGD is 31bp wider on the year. But spreads remain a function of the swings in US Treasuries as EMBIGD yields are some 35bp tighter versus the mid-March highs and the total return of the index, riding stronger UST, is at 2.1%YTD, recovering all the gains that were lost in the March sell-off. We went underweight the EMBIGD in mid March, just after the SVB collapse, on the idea that a spread decompression event on the back of US recession was more likely, and potentially prone to be more pronounced. Some six weeks later, markets remain in limbo, however, with economic data mixed but overall firm enough to support J.P. Morgan's modal view for a relatively gradual path to a relatively shallow recession in Q4. Even so, UST point to Fed easing ahead, and oil markets have begun to break lower as manufacturing data continues to be soft. Thus alternative scenarios to the modal view seem to be alive and well, including that of an earlier/deeper US economic downturn, or alternatively US growth/inflation figures with sufficient inertia that the Fed may actually need to signal risks of additional hikes. In this foggy context, a risk-off event associated with the US debt ceiling showdown is also lurking. Manifestation of any of these alternative scenarios would be problematic for EM sovereign credit, in our view, and taken all together with still tight valuations (outside the distressed space) justify our Underweight.

Figure 34: EMBIGD looks especially tight in the IG space bb, difference between respective spreads



Source: J.P. Morgan

Tight valuations keep us cautious in the upper and middle rating bucket, but some stabilizing distressed stories could provide opportunities. EMBIGD IG has continued to outperform, with spreads only 13bp wider YTD, meaning its significant outperformance versus US IG (JULI) continues

unabated—a dynamic not matched by the IG bucket of the CEMBI (Figure 34). Within EMBIGD IG, the BBB bucket screens as the recent outperformer. But outside IG the BB bucket has also performed well, continuing to screen tight compared to the rest of EMBIGD and other credit markets. Moreover, the discrepancy between the BB bucket and HY overall illustrates just how beat up the distressed corners of the B bucket and especially the increasingly populated C bucket have become.

The middle-rated bucket within the EMBIGD will likely come under further stress when tighter monetary conditions further impact global growth and risk sentiment. Given these expectations, we remain cautious and hold UWs in Colombia, South Africa, Azerbaijan, Guatemala, and Trinidad and Tobago. We also moved MW Serbia from OW. That said, we acknowledge Cote d'Ivoire's underperformance over the past few months and moved OW (from MW) in the Model Portfolio. While lower rated names have underperformed markedly this year, very few names stand out as underperformers in the middle bucket. On the other hand, distressed sovereigns spreads have kept on widening further with a number of countries beyond the 1,000bp mark. While a fragile global growth outlook justifies higher risk premium for lower rated sovereigns, we believe stabilizing if not improving fundamental stories might provide some good opportunities to add risk. Though we reduce exposure, our OW stance in Ecuador supports this view, while recent positive headlines saw Tunisia and Kenya bonds rally.

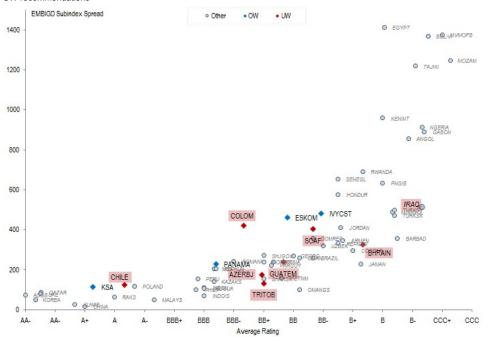
We patiently stay UW EMBIGD despite spreads being range-bound over the past few months as most outcomes ahead likely lead to spread widening. In EMEA EM, we take profits and moved MW Serbia (from OW) and moved OW Cote d'Ivoire (from MW). We also added a recommendation to buy Egypt 5.75% '24s outright (see *Egypt: The hard way, the only way*, 5 May 2023). In EM Asia, we are on the sidelines across markets. In Latam, we reduced our exposure to maintain our overall OW Ecuador and enter an RV trade going long PEMEX vs Mexico in the 10yr part of the curve. We hold existing OWs in Eskom, Panama, and Saudi Arabia and existing UWs in Azerbaijan, Bahrain, Chile, Colombia, Guatemala, South Africa, and Trinidad & Tobago. We also hold an outright 1m bear put spread option in CDX.EM.

Please see <u>EM Sovereign Credit Strategy: Pay it sideways, 05</u> <u>May 2023</u>, for more details

J.P.Morgan

Figure 35: EMBIGD Model Portfolio recommendations

EMBIGD subindex spread (bp, y-axis) versus average credit rating (x-axis); blues denote current OW reds denote current UW recommendations



Source: J.P. Morgan.

Figure 36: EMBIGD Model Portfolio recommendations and returns

Portfolio Returns	YTD							Portfolio /	Attribution	YTD	
Benchmark retu	rn				2.60%			Market p	osition re	turn (bp):	-
Portfolio return					2.85%			Credit se	20		
Portfolio Perfor	mance	(bp)			25	;		Portfolio Outperformance (b			
		As o	f May 04,	2023	Since Initiation			YTD Changes & Returns			
Credit		Current				Spread		Spread			
selection		Positio		Duratio	Initiation	Chg vs	Spread	Chg vs	Spread	Carry	Credit
returns	View	n	Spread	n	Date	EMBIG (bp)	Chg (bp)	EMBIG (bp)	Returns (bp)	Returns (bp)	Returns (bp)
Ecuador	OW	1.0%	1806	5.0	17-Apr-23	(96)	(83)	(96)	8	1	9
Eskom	OW	1.0%	467	3.1	1-Mar-23	70	114	70	0	(0)	(0)
Panama	OW	1.0%	230	9.4	1-Mar-23	(26)	18	(26)	4	(1)	3
Saudi Arabia	OW	1.3%	127	8.4	21-Nov-22	2	33	(6)	6	(2)	4
Cote d'Ivoire	OW		488	5.1	4-May-22						
Serbia	0W	0.5%	250	6.3	1 Mar 23	(38)	6	(38)	3	(0)	2
Azerbaijan	UW	-0.3%	186	4.0	1-Mar-23	(7)	37	(7)	(1)	0	(1)
Bahrain	UW	-1.0%	335	4.8	6-Oct-22	19	58	18	(1)	1	(1)
Chile	UW	-1.7%	124	10.8	21-Nov-22	(18)	(9)	(48)	(8)	2	(7)
Colombia	UW	-2.5%	427	7.7	21-Nov-22	20	58	19	(0)	0	0
Guatemala	UW	-0.9%	248	7.2	1-Mar-23	(4)	40	(4)	(1)	0	(1)
Iraq	UW	-0.3%	530	2.1	8-Feb-23	50	109	50	(1)	(0)	(1)
South Africa	UW	-0.5%	412	6.5	1-Mar-23	14	58	14	(0)	0	(0)
Trinidad and Tot	UW	-0.1%	207	3.0	6-Oct-22	79	50	11	(0)	0	(0)
Closed position return (bp) 10							Current C	redit selec	tion return(bp)	10

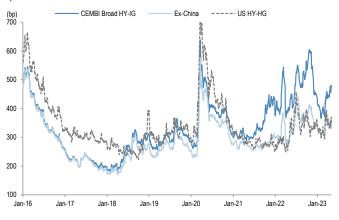
Source: J.P. Morgan.

EM Corporates: Maintain decompression view

We maintain our preference for IG over HY in EM corporates despite the meaningful decompression in spreads over the past months. This is based on our comfort on the fundamentals and resilience of IG credits and countries whereas the major HY segments are more vulnerable to market volatility as well as sovereign noise. The spread between CEMBI Broad IG and HY is now 477bp, which is +37bp wider YTD, but the basis decompressed by over 100bp from the low of 365bp recorded in early February. About half of the decompression is contributed by China HY as the HY-IG basis excluding China is narrower at 350bp and has expanded by slightly over 50bp during the same period. This is very similar to the trend in US credit. However, with CEMBI ex-China HY-IG spread only toward the middle of the historical range, we think there is room for this basis to decompress further, especially if market volatility picks up on debt ceiling fears. Indeed, estimates of when Treasury will run out of resources under the debt ceiling have been brought forward to early June, leaving very little time for Democrats and Republicans to reach an agreement. Our rate strategists think uncertainty is likely to remain elevated over the next few weeks, since even in the best case scenario they wouldn't expect a deal to be reached until closer to the end of the month (*link*).

Figure 37: CEMBI HY-IG basis decompressed meaningfully, but less so ex-China

Spread-to-worst



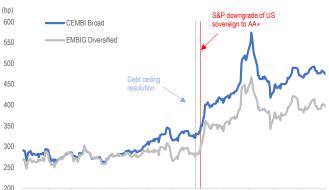
Source: J.P. Morgan

Our OWs are focused in IG credits across Asia and Middle East. We prefer IG corporates in consumer, financial, and commodity sectors, whereas we are generally UW real estate. By country, we have more OWs than UWs in China, Korea, Chile, Peru, Israel, and Saudi Arabia credits among IG countries while our recommendations are skewed towards UWs in Hong Kong, UAE, Qatar, and Oman. On the HY side, we are selective in Brazilian and Colombian corps and are OW South Global Emerging Markets Research Emerging Markets Outlook and Strategy 10 May 2023

Africa and Nigeria.

The performance of CEMBI during the debt ceiling concerns in 2011 paints a mixed picture. Spreads widened significantly during the year but returns were still positive due to the rapid decline in UST yields. In addition, the 2011 Eurozone sovereign crisis makes it difficult to isolate the debt ceiling effect. CEMBI spreads widened by 40-50bp to around 330bp in the buildup towards the debt ceiling resolution in late July 2011, but subsequently widened to 400bp following the S&P downgrade of the US on August 4. The renewed widening thereafter was mainly due to the concerns around Eurozone sovereigns which drove risk aversion and led to elevated volatility. Returns dropped to negative territory later in the year, but eventually recovered to end the year in positive as UST yields declined meaningfully.





Jan-11 Feb-11 Mar-11 Apr-11 May-11 Jun-11 Jul-11 Aug-11 Sep-11 Oct-11 Nov-11 Dec-11 Source: J.P. Morgan.

While the US debt ceiling issue may end up not having a lasting impact, we still think CEMBI can go through periods of volatility due to overall market sentiment which would put more pressure in HY. The level of volatility is likely to be lower than in 2011, when spread and return gyrated more than EMBIG, as the EM corporate asset class has been maturing over the past decade with the growth in the dedicated AUM and deeper understanding by investors. Moreover, the higher quality composition of the CEMBI compared to the EMBIG should keep it more resilient. Indeed, the track record over the past 10 years points to superior risk adjusted return for CEMBI and its sub-segments compared to other EM fixed income asset classes as well as most of the DM credit indices. However, we are less confident on CEMBI HY given the larger weight of issuers in weaker countries which may still keep volatility on the higher side. Additionally, we continue to expect EM corporate HY default rate to reach 5.5% this year, which suggests another 3% from now to year-end.



Growth and Inflation Outlook and Forecasts

		Real GDP				Real	GDP			In	flation			Infl	ation	
			%oya				a saar				Dec/Dec				ova	
	2022	2023	2024	Potential	1Q23	2Q23	3Q23	4Q23	2022	2023	2024	CPI target	1Q23	2Q23	3Q23	4Q23
DM	2.6	1.2	0.7	1.4	0.9	1.3	0.8	0.1	7.9	3.2	2.3	-	6.6	5.1	4.1	3.2
EM	3.4	4.3	3.9	4.3	7.8	4.3	3.5	3.3	5.9	4.1	3.7		5.2	3.6	3.7	4.1
EM ex. China	3.8	2.2	2.5	3.3	3.8	2.3	2.1	1.8	9.2	5.8	4.5	-	8.9	6.5	6.4	6.4
EM Asia	3.6	5.4	4.7	5.1	9.6	5.7	4.4	4.2	2.6	2.6	-	-	2.5	1.7	1.8	2.4
EMEA EM	2.2	1.4	2.4	2.5	3.2	1.3	1.2	1.2	21.1	12.5	7.9		17.8	12.3	12.8	12.4
Latin America*	3.5	0.9	1.0	1.9	2.4	-0.8	0.7	0.4	7.8	5.5	3.8		7.3	5.7	5.5	5.4
EM Asia	3.6	5.4	4.7	5.1	9.6	-0.0 5.7	4.4	4.2	2.6	2.6	-		2.5	1.7	1.8	2.4
China	3.0	6.4	5.3	5.5	11.9	6.3	4.9	4.9	1.8	2.0	2.6	3.5	1.3	0.5	0.9	1.8
Hong Kong	-3.5	5.4	1.4	2.8	22.9	6.1	2.0	0.0	2.0	2.5	2.4	-	1.9	2.6	2.1	2.6
India	7.1	5.1	5.0	6.5	8.0	4.3	4.8	4.6	5.7	5.6	5.1	4.0 (+/-2.0)	6.1	4.9	5.3	5.7
Indonesia	5.3	4.2	4.1	5.0	4.6	3.8	3.8	3.5	5.1	2.6	2.4	3.0 (+/-1.0)	5.2	3.6	2.8	2.6
Korea	2.6	1.1	1.8	2.7	1.1	3.5	1.0	1.0	5.0	2.6	1.6	2.0	4.7	3.5	2.0	2.0
Malaysia	8.7	3.4	3.0	3.0	8.0	6.0	3.0	2.5	3.5	2.0	2.1	2.0	3.6	3.0	2.7	2.7
Philippines	7.6	5.5	3.6	3.3	4.0	3.8	2.5	2.5	3.5 8.1	3.5	3.0	- 3.0 (+/-1.0)	8.4	6.7	5.2	3.7
Singapore	3.6	1.3	0.6	2.5	1.3	1.0	0.5	0.3	6.7	2.7	1.2	-	5.9	4.7	3.3	2.8
Taiwan	2.5	0.1	2.8	2.5	-6.4	7.2	3.1	2.4	2.7	1.9	1.2		2.6	2.1	2.2	2.0
Thailand	2.5	2.7	2.0	3.0	4.6	6.1	5.4	3.2	5.9	2.2	1.2	1.0-3.0	4.1	2.7	2.2	2.0
Latin America*	3.5	0.9	1.0	3.0 1.9	4.0 2.4	-0.8	0.7	0.4	7.8	5.5	3.8	1.0-3.0	7.3	5.7	5.5	5.4
Argentina	5.2	-3.3	-1.7	2.0	-2.0	-12.0	1.5	-2.0	95.0	130.0	3.0 85.0		102.0	108.6	110.2	122.2
Brazil	2.9	0.9	0.8	0.9	3.0	0.2	-0.5	0.3	5.8	5.5	3.5	3.5 (+/-1.5)	5.2	3.7	5.0	5.5
Chile	2.5	-0.2	2.4	3.5	3.0	-1.4	-0.5	1.0	12.8	5.1	3.9	3.0 (+/-1.0)	11.1	8.4	6.2	5.1
Colombia	7.5	-0.2	1.9	3.5	0.5	-1.4	2.0	1.0	12.0	8.6	4.7	3.0 (+/-1.0)	13.3	12.6	10.5	8.6
Ecuador	2.9	2.5	2.5	2.3	2.5	-2.0	3.0	2.5	3.7	2.5	2.0	3.0 (+/-1.0) -	3.1	2.2	2.0	2.4
Mexico	3.1	2.5	2.5	2.3	4.6	0.9	0.5	0.3	7.8	5.0	4.0	3.0 (+/-1.0)	7.5	5.9	4.9	4.9
Peru	2.7	2.5	3.0	3.5	-3.5	7.3	4.0	3.2	8.5	4.2	4.0	. ,	7.5 8.0	5.9 6.5	4.9 5.2	4.9
	6.3	0.4	2.5	2.5	4.5	-2.0	4.0	2.0	-58.2	7.1	6.0	2.0 (+/-1.0) 3.0-6.0	7.7	7.3	6.6	6.8
Uruguay EMEA EM	2.2	1.4	2.5	2.5	3.2		4.9	1.2	-36.2 21.1	12.5	7.9	3.0-0.0	17.8		12.8	12.4
Czech Republic	2.2	1.4 0.5	2.4 2.2	2.5 2.6	0.4	1.3 1.8	2.3	2.3	21.1 15.8	8.8	2.7	- 2.0 (+/-1.0)	17.8	12.3 11.7	8.6	9.0
Hungary	4.6	0.5	2.2	3.1	-1.5	2.3	3.0	2.5	25.4	9.7	5.5	3.0 (+/-1.0)	25.5	23.8	18.0	9.0
Israel	6.4	3.0	2.0	3.1	2.3	2.3	1.5	2.5	5.3	9.7 3.1	2.2	1.0-3.0	5.2	4.6	3.6	3.3
Poland	4.9	-0.3	2.9	3.5	1.5	4.0	2.5	2.8	16.6	8.5	5.3	2.5 (+/-1.0)	17.1	13.6	11.0	8.4
Romania	4.8	3.7	4.5	3.5	3.2	3.6	2.3	2.0	16.4	7.4	6.8	2.5 (+/-1.0)	5.4	-3.5	8.8	7.4
Russia	-2.1	1.2	1.8	1.5	5.0	-2.0	1.5	2.3	11.9	4.9	4.4	4.0	8.8	3.0	4.5	5.0
South Africa	2.0	0.3	1.0	1.3	1.1	0.5	1.0	1.5	7.2	5.3	4.6	3.0-6.0	7.0	6.3	5.4	5.4
Turkey	5.6	2.5	2.7	3.8	4.5	5.0	-2.0	-4.0	64.3	45.7	26.0	5.0 (+/-2.0)	54.3	42.0	42.8	44.0
Other EMEA EM	5.0	2.0	2.1	5.0	ч.5	0.0	-2.0	-4.0	04.5	45.1	20.0	3.0 (11-2.0)	54.5	42.0	42.0	
Angola	2.5	3.1	3.5	3.0					21.7	11.0	10.8	10.0 (+/-2.0)				
Ghana	3.1	2.0	2.6	6.0					31.8	31.2	13.9	8.0 (+/-2.0)	-			
Kazakhstan	3.3	4.2	4.1	3.0		-	-	-	15.0	15.3	10.3	5.0-7.0	-	-	-	-
Kenya	4.8	4.2	4.1	5.5					7.6	7.3	6.1	5.0 (+/-2.0)				
Nigeria	3.1	3.2	3.8	4.0					18.8	19.6	15.3	6.0-9.0	-		-	
Serbia	2.3	2.1	3.0	4.0					12.0	19.0	8.4	3.0 (+/-1.5)				
Ukraine	-29.1	3.1	9.0	4.0					20.2	15.4	15.4	5.0 (+/- 1.0)	-			
	-29.1	3.4	3.3	4.3					8.5	23.9	20.7	7.0 (+/- 2.0)	-			
Egypt GCC	7.7	3.4 1.8	3.5 3.6	4.3 2.9					0.5 3.5	23.9	1.6	7.0 (+/- 2.0)	-			
Saudi Arabia	8.7	1.0	3.0	3.0					2.5	2.3	1.6		-			
			3.7										-			
UAE	7.6	2.6	3.5	3.0	-			-	4.8	2.8	1.5	-	-	-	-	-

Source: J.P. Morgan. * Excludes Argentina and Ecuador.



EM Fiscal Balance and Current Account Forecasts

	Fisc	al Balance (% of	GDP)	CA	Balance (% of G	DP)
	2022	2023	2024	2022	2023	2024
Emerging markets	-3.8	-3.8	-3.0	1.5	0.8	0.7
EM ex. China	-4.0	-4.3	-3.7	0.8	0.4	0.9
Latin America	-3.7	-5.3	-4.9	-2.7	-2.3	-1.7
Argentina	-4.1	-5.2	-3.0	-0.9	-2.0	0.2
Brazil	-4.6	-7.5	-7.2	-2.9	-2.7	-1.9
Chile	1.1	-3.2	-2.8	-9.0	-4.4	-2.7
Colombia	-5.6	-3.8	-3.3	-6.3	-5.2	-4.2
Ecuador	-2.1	-2.6	-2.3	2.5	1.8	1.0
Mexico	-3.9	-4.2	-4.5	-0.9	-1.2	-1.4
Peru	-1.6	-2.5	-2.5	-4.4	-2.9	-2.0
Emerging Asia	-4.1	-3.6	-2.9	2.1	1.4	1.1
China	-3.6	-3.2	-2.2	2.3	1.2	0.6
Hong Kong	-4.9	-1.8	0.2	10.7	8.3	11.8
India	-10.2	-9.7	-9.3	-2.3	-2.0	-1.6
Indonesia	-0.5	-2.8	-2.6	0.8	-0.1	-1.2
Korea	-2.8	-0.3	-0.7	1.8	1.9	2.0
Malaysia	-6.2	-5.5	-3.5	2.6	3.0	3.3
Philippines	-7.5	-5.5	-4.8	-3.9	-2.8	-2.1
Singapore	-0.5	1.0	2.0	17.6	11.4	11.1
Taiwan	0.5	-0.6	-0.4	13.9	12.2	12.3
Thailand	-3.4	-3.8	-3.5	-4.1	2.8	4.7
EMEA EM	-2.5	-3.2	-2.0	2.1	0.3	0.9
Czech Republic	-4.5	-3.6	-2.8	-6.5	-2.9	-1.9
Hungary	-6.2	-3.4	-3.2	-7.1	-3.2	-2.9
Israel	0.6	-0.6	-1.3	3.8	3.9	4.2
Poland	-2.7	-5.0	-3.1	-2.9	-1.9	-1.3
Romania	-6.0	-4.3	-3.2	-9.2	-7.0	-6.2
Russia	-2.2	-1.9	-0.1	10.8	4.2	4.9
South Africa	-4.5	-5.6	-5.7	-0.1	-3.0	-2.8
Turkey	-0.9	-4.5	-3.5	-5.3	-3.0	-2.5
Other EMEA EM						
Angola	2.7	0.3	0.1	11.8	7.1	4.7
Ghana	-10.3	-6.4	-8.5	-2.4	-1.3	-1.4
Kazakhstan	-1.0	-1.8	-0.4	3.8	4.2	4.6
Kenya	-6.2	-5.9	-4.8	-4.9	-4.8	-4.9
Nigeria	-6.1	-6.2	-5.5	-0.4	0.1	1.0
Serbia	-3.1	-1.9	-1.5	-7.0	-5.1	-5.2
Ukraine	-15.7	-19.1	-15.0	5.0	1.2	0.5
Egypt	-6.1	-6.8	-6.8	-3.5	-2.6	-2.6
GCC	5.6	3.4	5.5	16.9	11.2	13.1
Saudi Arabia	2.6	0.7	2.9	13.6	9.7	10.9
UAE	8.6	6.6	7.9	15.2	10.0	12.0

Source: J.P. Morgan.



EM Monetary Policy Forecasts

				Quart	erly profile (%p.a.)		
	Official rate	Current (%p.a.)	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24
Developed markets	GDP-weighted	3.95	3.77	4.08	4.16	4.16	4.12	3.78
Emerging markets	GDP-weighted	5.00	4.99	5.01	5.51	5.41	5.25	5.10
EM ex. CN	GDP-weighted	7.24	7.23	7.27	8.27	8.06	7.73	7.45
Latin America	GDP-weighted	12.31	12.29	12.31	12.12	11.36	10.46	9.75
Brazil	SELIC O/N	13.75	13.75	13.75	13.75	12.75	11.75	11.00
Chile	Disc rate	11.25	11.25	11.25	10.00	8.25	7.25	6.25
Colombia	Repo rate	13.25	13.00	13.25	13.25	11.75	9.75	8.75
Mexico	Repo rate	11.25	11.25	11.25	11.25	11.25	10.75	10.25
Peru	Reference	7.75	7.75	7.75	6.25	5.50	4.75	4.00
Emerging Asia	GDP-weighted	3.44	3.43	3.45	3.45	3.42	3.39	3.37
China	MLF 1-year	2.75	2.75	2.75	2.75	2.75	2.75	2.75
Hong Kong	Disc. Window	5.50	5.25	5.50	5.50	5.50	5.50	5.00
India	Repo rate	6.50	6.50	6.50	6.50	6.25	6.00	6.00
Indonesia	BIRRR	5.75	5.75	5.75	5.75	5.75	5.75	5.75
Korea	Base rate	3.50	3.50	3.50	3.50	3.50	3.50	3.25
Malaysia	O/N rate	3.00	2.75	3.00	3.00	3.00	3.00	3.00
Philippines	Rev repo	6.25	6.25	6.50	6.50	6.50	6.50	6.50
Taiwan	Official disc.	1.875	1.875	1.875	1.875	1.875	1.875	1.875
Thailand	1-day repo	1.75	1.75	2.00	2.00	2.00	2.00	2.00
EMEA EM	GDP-weighted	7.44	7.42	7.46	10.97	10.97	10.67	10.33
Czech Republic	2-week repo	7.00	7.00	7.00	7.00	7.00	6.00	5.25
Hungary	Base rate	13.00	13.00	13.00	13.00	13.00	11.00	9.00
Israel	Base rate	4.50	4.25	4.50	4.50	4.50	4.25	4.00
Poland	7-day interv	6.75	6.75	6.75	6.75	6.75	6.50	5.75
Romania	Base rate	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Russia	Key policy	7.50	7.50	7.50	7.50	7.50	7.25	7.00
South Africa	Repo rate	7.75	7.75	8.00	8.00	8.00	7.75	7.75
Turkey	1-week repo	8.50	8.50	8.50	30.00	30.00	30.00	30.00

Source: J.P. Morgan.

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EM Hard Currency Sovereign Issuance and Cash Flows

US\$bn	2018	2019	2020	2021	2022	2023YTD	2023F
a Gross issuance (b + c)	149.9	177.3	232.6	182.5	97.0	79.1	123.4
b New issuance	140.2	161.3	215.9	162.5	93.0	75.0	119.4
c Taps	9.7	15.9	16.7	20.1	4.0	4.1	4.1*
d Estimated cash flows (e + f)	87.1	100.4	101.3	111.8	112.6	49.3	107.1
e Amortizations	36.1	46.6	49.6	57.0	57.1	26.4	49.9
f Coupons	51.0	53.8	51.7	54.8	55.5	22.9	57.3
g Buybacks	9.6	8.7	9.2	2.9	13.1	4.1	10.0
h Net issuance (a - e - g)	104.2	122.0	173.7	122.6	26.8	48.5	63.6
i Net financing (h - f)	53.3	68.2	122.0	67.8	-28.7	25.6	6.3

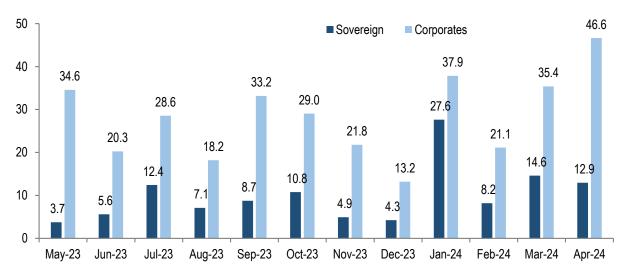
Source: J.P. Morgan, Bloomberg Finance L.P. *2023 tap forecast is YTD figure and data as of COB 08 May 2023

EM Hard Currency Corporate Issuance and Cash Flows

(US\$ bn)	2018	2019	2020	2021	2022	2023	2023F
Gross issuance (a)	379	494	511	541	220	94	304
Estimated cash flows ($b = c+d$)	267	303	351	356	387	143	324
Amortizations (c)	171	199	239	244	285	107	238
Coupons (d)	96	104	112	112	103	36	87
Net issuance before tender/buyback/calls (e = a-c)	208	295	272	297	-65	-13	67
Net financing before tender/buyback/calls (f = a-b = e-d)	112	191	160	185	-168	-49	-20
Tender/buyback/calls (g)	88	98	93	130	92	21	50
Net issuance (j = e-g)	120	198	179	167	-158	-34	17
Net financing (k = f-g)	24	93	67	55	-260	-70	-70

Source: J.P. Morgan, Bloomberg Finance L.P., Bond Radar. 2023 YTD as of May 5, 2023.

EM External Debt Cash flows for the next 12 months (USD billion)



Source: J.P. Morgan estimates.



EM Asia sovereign issuance forecast

US\$mn	2023F Gross Issuance Forecast	Issuance Forecast Revision	Full Year New Issuance	Full Year Taps	Full Year Buybacks	Full Year Total Gross Issuance	2023 Coupons	2023 Amortizations	2023 Cashflows
China	3,000	-	-	-	-	-	385	2,750	3,135
Fiji	-	-	-	-	-	-	-	-	-
Hong Kong	4,345	-	4,345	-	-	4,345	181	-	181
India	-	-	-	-	-	-	-	-	-
Indonesia	10,000	-	3,000	-	-	3,000	3,526	5,248	8,774
Laos	-	-	-				-	-	
Malaysia	-	-	-	-	-	-	136	-	136
Maldives	-	-	-	-	-	-	49	-	49
Mongolia	650	-	450	200	356	650	139	517	656
Pakistan	-	-	-		-	-	582	-	582
Papua New Guinea	-	-	-	-	-	-	-	-	-
Philippines	4,100	-	3,000			3,000	1,778	128	1,906
South Korea	3,000	-	-	-	-	-	213	1,000	1,213
Sri Lanka	-	-	-				-	-	
Vietnam	-	-	-	-	-		54	5	59
EM Asia	25,095		10,795	200	356	10,995	7,043	9,649	16,691

Source: J.P. Morgan

Latin America Sovereign Issuance Forecast

US\$mn	2023F Gross Issuance Forecast	Issuance Forecast Revision	Full Year New Issuance	Full Year Taps	Full Year Buybacks	Full Year Total Gross Issuance	2023 Coupons	2023 Amortizations	2023 Cashflows
Argentina	-	-	-	-	-	-	1,378	-	1,378
Aruba	-	-	-	-	-	-	14	28	42
Bahamas	-	-	-	-	-	-	205	-	205
Barbados	-	-	-	-	-	-	34	-	34
Belize	-	-	-	-	-	-	7	8	15
Bermuda	-	-	-	-	-	-	127	-	127
Bolivia	-	-	-	-	-	-	120	183	303
Brazil	3,000	-	2,250	-	-	2,250	1,944	-	1,944
Chile	6,000	-	-	-	-	-	1,008	-	1,008
Colombia	2,200	-	2,200	-	533	2,200	1,723	681	2,404
Costa Rica	1,500	-500	1,500	-		1,500	453	1,358	1,811
Dominican Republic	2,200	-	700	-	-	700	1,589	17	1,606
Ecuador	-	-	-	-	-	-	473	-	473
El Salvador	-	-	-	-	-	-	471	-	471
Grenada	-	-	-	-	-	-	10	13	23
Guatemala	-	-	-	-	-	-	319	-	319
Honduras	-	-	-	-	-	-	84	56	139
Jamaica	-	-	-	-	-	-	397	127	524
Mexico	13,000	-	6,941	-	1,960	6,941	3,513	-	3,513
Panama	3,500	-	1,000	800	-	1,800	1,367	139	1,506
Paraguay	500	-	-	-	-	-	295	238	532
Peru	1,000	-		-			1,114	-	1,114
Suriname	-	-	-	-	-	-	67	125	192
Trinidad & Tobago	-	-	-	-			100	-	100
Uruguay	750	-	-	-	-	-	757	267	1,024
Venezuela	-	-	-	-	-	-	-	-	-
Latin America	33,650	-500	14,591	800	2,493	15,391	17,569	3,239	20,809

Source: J.P. Morgan



EMEA EM and Global EM sovereign issuance forecast

US\$mn	2023F Gross Issuance Forecast	Issuance Forecast Revision	Full Year New Issuance	Full Year Taps	Full Year Buybacks	Full Year Total Gross Issuance	2023 Coupons	2023 Amortizations	2023 Cashflows
Albania	-	-	-	-	-	-	73	-	73
Angola		-		-	-	-	489	-	489
Armenia	-	-	-	-	-	-	83	-	83
Azerbaijan	-	-	-	-	-	-	96	-	96
Bahrain	2,000	500	2,000	-	-	2,000	1,263	1,500	2,763
Belarus	-	-		-			-	-	
Benin	-	-		-		-	108	-	108
Bulgaria	1,630	-	1,630	-		1,630	308	1,381	1,689
Cameroon	-	-			-	-	63	51	114
Congo		-		-			3	6	9
Ivory Coast	-	-		-	-	-	524	30	554
Croatia	1,500						442	1,500	1,942
Czech Republic	-	-					8	-	8
Egypt	1,500	_	1,500			1,500	2,748	1,750	4,498
Estonia	-	-	1,500			1,500	48	1,750	4,490
		-		-	-	-		-	
Ethiopia	-	-	•				66	-	66
Gabon	-	-	•	-	-	-	174	24	198
Georgia	-	-	•		-		14	-	14
Ghana	-	-	•	-	-	-	1,045	149	1,194
Hungary	4,700		4,250	450	1,000	4,700	916	1,935	2,851
Iraq	-	-		-	-	-	98	1,211	1,309
Israel	2,000	-	2,000	-	-	2,000	1,029	1,146	2,175
Jordan	1,250	1,250	1,250		-	1,250	345	-	345
Kazakhstan	-	-	-	-	-	-	370	591	962
Kenya	-	-		-		-	515	-	515
Kuwait	3,000	-	-	-	-	-	158	-	158
Latvia	971	-	809	161	-	971	166	1,202	1,368
Lebanon	-	-		-			-	-	
Lithuania	-	-		-			229	-	229
Macedonia	537	537	537			537	91	534	625
Montenegro	-	-	-	-		-	59	-	59
Morocco	2,500	2,500	2,500			2,500	295		295
Mozambique	-	2,000	2,000			2,000	45		45
		_					39	-	39
Namibia		-		-					
Nigeria	-	-	•	-	-	-	1,184	500	1,684
Oman	-	-	-		-	-	1,481	1,250	2,731
Poland	8,754	5,000	8,754	-	-	8,754	1,222	6,063	7,285
Qatar	-	-	•				1,810	5,000	6,810
Romania	7,500	-	3,993	2,471	246	6,463	2,229	1,184	3,412
Russia			•				-		•
Rwanda	-	-	-	-	-	-	36	61	97
Saudi Arabia	10,000	-	10,000			10,000	2,945	-	2,945
Senegal	-	-	-	-	-	-	252	-	252
Serbia	1,750	-	1,750	-	-	1,750	261	-	261
Slovakia	-	-	-	-	-	-	4	191	195
South Africa	2,000	-					1,229	-	1,229
Tajikistan	-	-		-	-	-	36	-	36
Tanzania	-	-					-	-	-
Togo	-	-			-		-	-	-
Tunisia		-					263	782	1,045
Turkey	10,000	4,000	7,500			7,500	5,462	5,952	11,414
Ukraine	-	4,000	-			-	-	-	-
United Arab Emirates	3,110	1,110	1,110			1,110	2,051	2,750	4,801
UAE	2,000	-	-		-	-	2,051	-	295
Abu Dhabi	-	-	-	-	-	-	1,210	2,000	3,210
Dubai	-	-	-			-	207	750	957
Sharjah	1,110	-	1,110	-	-	1,110	339	-	339
Uzbekistan	-	-	-	-	-	-	96	-	96
Zambia EMEA EM	-	-	-	-	-	-	197	•	197
	64,702	13,787	49,583	3,082	1,246	52,665	32,669	36,744	69,412

Source: J.P. Morgan.

Exchange rate end-of-period forecasts and forwards versus USD

		Forecasts					Forwards		
EMEA EM	Jun 23	Sep 23	Dec 23	Mar 24	EMEA EM	Jun 23	Sep 23	Dec 23	Mar 24
EUR/CZK	23.50	23.75	24.00	24.25	EUR/CZK	23.53	23.73	23.89	24.03
EUR/HUF	380	385	400	410	EUR/HUF	377	388	397	404
EUR/PLN	4.55	4.55	4.55	4.60	EUR/PLN	4.58	4.62	4.66	4.70
EUR/RON	5.00	5.05	5.05	5.10	EUR/RON	4.94	4.97	5.00	5.03
EUR/RSD	117.50	117.50	117.50	117.50	EUR/RSD	117.60	118.24	118.90	119.65
TRY	24.00	24.00	26.00	26.50	TRY	21.88	23.91	26.01	28.09
ILS	3.60	3.60	3.55	3.50	ILS	3.65	3.63	3.62	3.60
ZAR	19.00	19.50	20.00	20.50	ZAR	18.87	19.03	19.21	19.41
EGP	31.00	32.00	33.00	34.00	EGP	33.88	37.40	40.25	42.55
Latin America	Jun 23	Sep 23	Dec 23	Mar 24	Latin America	Jun 23	Sep 23	Dec 23	Mar 24
ARS	250	300	450	520	ARS	261.27	385.83	531.19	669.25
BRL	5.15	5.20	5.30	5.30	BRL	5.03	5.12	5.19	5.27
CLP	825	835	840	850	CLP	795	803	810	815
СОР	4750	4850	4900	4900	СОР	4606	4693	4780	4867
DOP	53.70	54.00	54.25	54.50	DOP	-	-	-	-
MXN	18.30	18.35	18.40	18.75	MXN	17.91	18.24	18.56	18.88
PEN	3.80	3.85	3.87	3.90	PEN	3.70	3.72	3.74	3.75
UYU	39.00	39.75	40.50	41.00	UYU	39.23	39.80	40.37	40.87
EM Asia	Jun 23	Sep 23	Dec 23	Mar 24	EM Asia	Jun 23	Sep 23	Dec 23	Mar 24
CNY	6.95	6.90	6.85	6.85	CNY	6.90	6.85	6.81	6.78
HKD	7.85	7.84	7.83	7.82	HKD	7.82	7.81	7.79	7.78
INR	83.00	84.00	85.00	85.00	INR	82.23	82.62	83.04	83.54
IDR	14800	14900	15000	15100	IDR	14767	14804	14846	14900
KRW	1330	1350	1360	1360	KRW	1321	1314	1307	1301
MYR	4.45	4.45	4.40	4.40	MYR	4.44	4.41	4.39	4.38
РНР	56.00	56.50	56.00	55.75	РНР	55.84	55.96	56.07	56.17
SGD	1.34	1.34	1.33	1.32	SGD	1.32	1.32	1.32	1.31
тнв	33.75	33.25	32.75	32.25	тнв	33.48	33.21	32.95	32.73
TWD	31.00	31.25	31.50	31.50	TWD	30.59	30.27	29.95	29.64

Source: J.P. Morgan. As of 10-May-23, 9am LDN time.

J.P.Morgan

Asia and Latin America Credit Ratings

	Sa	S & P		S & P Moody's		Fit	ch	Recent S	Recent S&P Action		Recent Moody's Action		Recent Fitch Action	
	Rating	Outlook	Rating	Outlook	Rating	Outlook	Rating Date	Outlook Date	Rating Date	Outlook Date	Rating Date	Outlook Date		
China	A+	Stable	A1	Stable	A+u	Stable	21-Sep-17	21-Sep-17	24-May-17	24-May-17	06-Nov-07	15-Oct-13		
Fiji	B+	Stable	B1	Stable	NR	NR	22-Sep-21	22-Sep-21	20-Apr-21	07-Oct-22	-	-		
Hong Kong	AA+	Stable	Aa3	Stable	AA-	Stable	21-Sep-17	21-Sep-17	20-Jan-20	20-Jan-20	20-Apr-20	20-Apr-20		
India	BBB-u	Stable	Baa3	Stable	BBB-u	Stable	25-Feb-11	26-Sep-14	01-Jun-20	05-Oct-21	01-Aug-06	10-Jun-22		
Indonesia	BBB	Stable	Baa2	Stable	BBB	Stable	31-May-19	27-Apr-22	13-Apr-18	13-Apr-18	20-Dec-17	20-Dec-17		
Malaysia	A-	Stable	A3	Stable	BBB+	Stable	08-Oct-03	27-Jun-22	16-Dec-04	11-Jan-16	04-Dec-20	04-Dec-20		
Mongolia	В	Stable	B3	Stable	В	Stable	09-Nov-18	09-Nov-18	18-Jan-18	16-Mar-21	09-Jul-18	09-Jul-18		
Pakistan	CCC+	Stable	Caa3	Stable	CCC-	NR	22-Dec-22	22-Dec-22	28-Feb-23	28-Feb-23	14-Feb-23	-		
Philippines	BBB+	Stable	Baa2	Stable	BBB	Neg	30-Apr-19	30-Apr-19	11-Dec-14	11-Dec-14	10-Dec-17	12-Jul-21		
Singapore	AAAu	Stable	Aaa	Stable	AAAu	Stable	25-Feb-11	02-May-08	14-Jun-02	22-Feb-10	14-May-03	07-Mar-08		
South Korea	AA	Stable	Aa2	Stable	AA-	Stable	07-Aug-16	07-Aug-16	18-Dec-15	18-Dec-15	06-Sep-12	25-Jul-16		
Sri Lanka	SD	Neg	Ca	Stable	D	NR	25-Apr-22	25-Apr-22	18-Apr-22	18-Apr-22	19-May-22	-		
Thailand	BBB+	Stable	Baa1	Stable	BBB+u	Stable	31-Oct-06	13-Apr-20	26-Nov-03	21-Apr-20	08-Mar-13	17-Mar-20		
Vietnam	BB+	Stable	Ba2	Stable	BB	Pos	26-May-22	26-May-22	06-Sep-22	06-Sep-22	15-May-18	01-Apr-21		

Source: Bloomberg Finance L.P.

	S & P		Mod	dy's	Fitch		Recent S	Recent S&P Action		Recent Moody's Action		Recent Fitch Action	
	Rating	Outlook	Rating	Outlook	Rating	Outlook	Rating Date	Outlook Date	Rating Date	Outlook Date	Rating Date	Outlook Date	
Argentina	CCC-	Neg	Ca	Stable	WD	NR	29-Mar-23	29-Mar-23	03-Apr-20	28-Sep-20	26-May-20	-	
Barbados	B-	Stable	Caa1	Stable	В	Stable	11-Dec-19	11-Dec-19	02-Jul-19	02-Jul-19	20-Oct-22	20-Oct-22	
Belize	B-	Stable	Caa2	Stable	NR	NR	09-Nov-21	09-Nov-21	16-Nov-22	16-Nov-22	-	-	
Bolivia	B-	Neg	Caa1 *-	NR	B-	Neg	19-Apr-23	19-Apr-23	24-Mar-23	-	14-Mar-23	14-Mar-23	
Brazil	BB-	Stable	Ba2	Stable	BB-	Stable	11-Jan-18	06-Apr-20	24-Feb-16	09-Apr-18	23-Feb-18	14-Jul-22	
Chile	А	Stable	A2	Stable	A-	Stable	24-Mar-21	24-Mar-21	15-Sep-22	15-Sep-22	15-Oct-20	15-Oct-20	
Colombia	BB+	Stable	Baa2	Stable	BB+	Stable	19-May-21	19-May-21	28-Jul-14	06-Oct-21	01-Jul-21	01-Jul-21	
Costa Rica	B+	Stable	B2	Stable	BB-	Stable	23-Feb-23	23-Feb-23	10-Feb-20	08-Dec-21	02-Mar-23	02-Mar-23	
DomRep	BB	Stable	Ba3	Stable	BB-	Stable	19-Dec-22	19-Dec-22	20-Jul-17	20-Jul-17	18-Nov-16	08-Dec-21	
Ecuador	B-	Stable	Caa3	Stable	B-	Stable	01-Sep-20	01-Sep-20	03-Apr-20	26-Feb-21	03-Sep-20	03-Sep-20	
El Salvador	CCC+	Neg	Caa3	Stable	CCC+	NR	01-Jun-22	01-Jun-22	04-May-22	03-Feb-23	05-May-23	-	
Guatemala	BB	Stable	Ba1	Stable	BB	Stable	11-Apr-23	11-Apr-23	01-Jun-10	15-Jun-22	16-Feb-23	16-Feb-23	
Honduras	BB-	Neg	B1	Stable	NR	NR	18-Jul-17	21-Jul-22	22-Sep-17	22-Sep-17	-	-	
Jamaica	B+	Stable	B2	Stable	B+u	Pos	27-Sep-19	04-Oct-21	11-Dec-19	11-Dec-19	31-Jan-19	07-Mar-23	
Mexico	BBB	Stable	Baa2	Stable	BBB-	Stable	26-Mar-20	06-Jul-22	08-Jul-22	08-Jul-22	15-Apr-20	15-Apr-20	
Nicaragua	В	Stable	B3	Stable	NR	Stable	25-Oct-22	25-Oct-22	14-Feb-20	14-Feb-20	-	11-Jun-21	
Panama	BBB	Neg	Baa2	Neg	BBB-	Stable	24-Nov-20	04-Aug-21	17-Mar-21	25-Oct-22	03-Feb-21	28-Jan-22	
Paraguay	BB	Stable	Ba1	Pos	BB+	Stable	11-Jun-14	15-Jun-16	20-Mar-15	22-Jul-22	11-Dec-18	11-Dec-18	
Peru	BBB	Neg	Baa1	Neg	BBB	Neg	18-Mar-22	12-Dec-22	01-Sep-21	31-Jan-23	15-Oct-21	20-Oct-22	
Trinidad & Tobago	BBB-	Stable	Ba2	Stable	NR	NR	26-Mar-20	21-Jul-22	19-Nov-21	19-Nov-21	-	-	
Uruguay	BBB+	Stable	Baa2	Stable	BBB-	Stable	26-Apr-23	26-Apr-23	29-May-14	13-Jul-17	07-Mar-13	15-Dec-21	
Venezuela	NR	NR	WR	Stable	WD	NR	20-Sep-21	-	14-Aug-19	09-Mar-18	14-Nov-17	-	

Source: Bloomberg Finance L.P.



EMEA EM and Developed Markets Credit Ratings

	S	& P	Mo	ody's	Fi	tch	Recent S	&P Action	Recent Mo	ody's Action	Recent Fitch Action	
	Rating	Outlook	Rating	Outlook	Rating	Outlook	Rating Date	Outlook Date	Rating Date	Outlook Date	Rating Date	Outlook Date
Angola	B-	Stable	B3	Pos	B-	Pos	04-Feb-22	04-Feb-22	13-Sep-21	20-Oct-22	21-Jan-22	15-Jul-22
Bahrain	B+	Pos	B2u	Stable	B+	Stable	01-Dec-17	25-Nov-22	02-Aug-18	21-Apr-22	14-Aug-20	14-Aug-20
Botswana	BBB+	Stable	A3	Stable	NR	NR	27-Mar-20	17-Sep-21	23-Apr-21	23-Apr-21	-	-
Bulgaria	BBB	Stable	Baa1	Stable	BBB	Pos	29-Nov-19	29-May-20	09-Oct-20	09-Oct-20	01-Dec-17	19-Feb-21
Croatia	BBB+	Stable	Baa2	Stable	BBB+	Stable	14-Jul-22	14-Jul-22	15-Jul-22	15-Jul-22	13-Jul-22	13-Jul-22
Czech Republic	AA-	Stable	Aa3	Neg	AA-	Neg	24-Aug-11	24-Aug-11	04-Oct-19	05-Aug-22	03-Aug-18	06-May-22
Egypt	В	Neg	B3	Stable	В	Neg	11-May-18	21-Apr-23	07-Feb-23	07-Feb-23	05-May-23	05-May-23
Gabon	NR	NR	Caa1	Stable	B-	Pos	01-Apr-16	-	08-Jun-18	04-Dec-20	24-Aug-21	26-Aug-22
Georgia	BB	Stable	Ba2	Neg	BB	Pos	11-Oct-19	25-Feb-22	11-Sep-17	28-Apr-22	22-Feb-19	27-Jan-23
Ghana	SD	Stable	Ca	Stable	С	NR	20-Dec-22	24-Feb-23	29-Nov-22	29-Nov-22	21-Dec-22	-
Hungary	BBB-	Stable	Baa2	Stable	BBB	Neg	27-Jan-23	27-Jan-23	24-Sep-21	24-Sep-21	22-Feb-19	20-Jan-23
Israel	AA-	Stable	A1	Stable	A+	Stable	03-Aug-18	03-Aug-18	17-Apr-08	14-Apr-23	11-Nov-16	11-Nov-16
Jordan	B+	Stable	B1	Pos	NR	Stable	20-Oct-17	20-Oct-17	26-Jun-13	17-Nov-22	-	07-Dec-21
Kazakhstan	BBB-	Stable	Baa2	Stable	BBB	Stable	17-Feb-16	03-Mar-23	11-Aug-21	11-Aug-21	29-Apr-16	29-Apr-16
Kenya	В	Neg	B2u	Neg	В	Stable	05-Mar-21	24-Feb-23	13-Feb-18	07-May-20	14-Dec-22	14-Dec-22
Kuwait	A+	Stable	A1	Stable	AA-	Stable	16-Jul-21	15-Jul-22	22-Sep-20	22-Sep-20	27-Jan-22	27-Jan-22
Latvia	A+	Neg	A3	Stable	A-	Stable	21-Feb-20	06-Dec-22	13-Feb-15	13-Feb-15	20-Jun-14	09-Oct-20
Lebanon	SD	Neg	С	NR	WD	NR	11-Mar-20	21-Feb-20	27-Jul-20	-	18-Mar-20	-
Lithuania	A+	Neg	A2	Stable	А	Stable	21-Feb-20	02-Dec-22	12-Feb-21	12-Feb-21	31-Jan-20	31-Jan-20
Morocco	BB+	Stable	Ba1	Stable	BB+u	Stable	02-Apr-21	02-Apr-21	22-Jul-99	01-Jul-22	23-Oct-20	23-Oct-20
Nigeria	B-	Neg	Caa1	Stable	B-	Stable	26-Mar-20	03-Feb-23	27-Jan-23	27-Jan-23	11-Nov-22	11-Nov-22
Oman	BB	Pos	Ba3	Pos	BB	Pos	25-Nov-22	31-Mar-23	23-Jun-20	06-Oct-22	15-Aug-22	11-Apr-23
Poland	A-	Stable	A2	Stable	A-	Stable	12-Oct-18	12-Oct-18	12-Nov-02	12-May-17	18-Jan-07	22-Jul-16
Qatar	AA	Stable	Aa3	Pos	AA-	Pos	04-Nov-22	04-Nov-22	26-May-17	02-Nov-22	28-Aug-17	28-Mar-23
Romania	BBB-	Stable	Baa3	Stable	BBB-	Stable	16-May-14	16-Apr-21	06-Oct-06	15-Oct-21	04-Jul-11	24-Mar-23
Russia	NR	NR	WR	NR	WD	NR	08-Apr-22	-	31-Mar-22	-	25-Mar-22	-
Saudi Arabia	Au	Stable	A1	Pos	A+	Stable	17-Mar-23	17-Mar-23	14-May-16	17-Mar-23	05-Apr-23	05-Apr-23
Serbia	BB+	Stable	Ba2	Stable	BB+	Stable	13-Dec-19	10-Jun-22	12-Mar-21	12-Mar-21	27-Sep-19	27-Sep-19
South Africa	BB-	Stable	Ba2	Stable	BB-	Stable	29-Apr-20	08-Mar-23	20-Nov-20	01-Apr-22	20-Nov-20	15-Dec-21
Tunisia	NR	NR	Caa2	Neg	CCC+	NR	18-Dec-13	-	27-Jan-23	27-Jan-23	29-Mar-23	-
Turkey	Bu	Neg	B3	Stable	В	Neg	30-Sep-22	31-Mar-23	12-Aug-22	12-Aug-22	08-Jul-22	08-Jul-22
Ukraine	CCC	NR	Ca	Stable	CC	NR	06-Apr-23	-	10-Feb-23	10-Feb-23	17-Aug-22	-
UAE	NR	NR	Aa2	Stable	AA-	Stable	-	-	14-May-16	26-May-17	11-Nov-20	11-Nov-20
Zambia	SD	NR	Ca	Stable	RD	NR	21-Oct-20	-	03-Apr-20	03-Apr-20	18-Nov-20	-

Source: Bloomberg Finance L.P.

	S & P		Mod	dy's	Fit	ch	Recent S	Recent S&P Action		Recent Moody's Action		Recent Fitch Action	
	Rating	Outlook	Rating	Outlook	Rating	Outlook	Rating Date	Outlook Date	Rating Date	Outlook Date	Rating Date	Outlook Date	
Australia	AAAu	Stable	Aaa	Stable	AAAu	Stable	25-Feb-11	06-Jun-21	20-Oct-02	13-Nov-03	28-Nov-11	13-Oct-21	
Austria	AA+	Stable	Aa1	Stable	AA+u	Neg	13-Jan-12	26-Aug-22	24-Jun-16	24-Jun-16	13-Feb-15	07-Oct-22	
Belgium	AAu	Stable	Aa3	Stable	AA-u	Neg	13-Jan-12	28-Feb-14	16-Dec-11	16-Dec-11	23-Dec-16	10-Mar-23	
Canada	AAA	Stable	Aaa	Stable	AA+u	Stable	29-Jul-02	18-May-07	03-May-02	24-May-06	24-Jun-20	24-Jun-20	
France	AAu	Neg	Aa2u	Stable	AA-u	Stable	08-Nov-13	02-Dec-22	18-Sep-15	21-Feb-20	28-Apr-23	28-Apr-23	
Germany	AAAu	Stable	Aaau	Stable	AAAu	Stable	13-Jan-12	13-Jan-12	09-Feb-86	28-Feb-14	10-Aug-94	06-Nov-07	
Greece	BB+	Pos	Ba3	Pos	BB+	NR	22-Apr-22	21-Apr-23	06-Nov-20	17-Mar-23	27-Jan-23	-	
Iceland	А	Stable	A2	Stable	А	Stable	17-Mar-17	17-Mar-17	08-Nov-19	08-Nov-19	08-Dec-17	18-Mar-22	
Ireland	AA-	Pos	Aa3	Stable	AA-	Stable	29-Nov-19	18-Nov-22	21-Apr-23	21-Apr-23	28-Jan-22	28-Jan-22	
Italy	BBBu	Stable	Baa3u	Neg	BBBu	Stable	27-Oct-17	26-Jul-22	19-Oct-18	05-Aug-22	03-Dec-21	03-Dec-21	
Japan	A+u	Stable	A1	Stable	Au	Stable	16-Sep-15	09-Jun-20	01-Dec-14	01-Dec-14	27-Apr-15	25-Mar-22	
Netherlands	AAAu	Stable	Aaau	Stable	AAAu	Stable	20-Nov-15	20-Nov-15	10-Jan-86	07-Mar-14	10-Aug-94	11-Jul-14	
New Zealand	AA+	Stable	Aaa	Stable	AA+	Stable	21-Feb-21	21-Feb-21	20-Oct-02	13-May-99	09-Sep-22	09-Sep-22	
Norway	AAA	Stable	Aaa	Stable	AAAu	Stable	09-Jul-75	28-May-09	30-Sep-97	13-May-99	13-Mar-95	18-Dec-07	
Portugal	BBB+u	Stable	Baa2	Stable	BBB+u	Stable	09-Sep-22	09-Sep-22	17-Sep-21	17-Sep-21	28-Oct-22	28-Oct-22	
Spain	Au	Stable	Baa1	Stable	A-u	Stable	20-Sep-19	18-Mar-22	13-Apr-18	13-Apr-18	19-Jan-18	19-Jan-18	
Sweden	AAAu	Stable	Aaa	Stable	AAAu	Stable	23-Jan-14	23-Jan-14	04-Apr-02	15-Nov-03	08-Mar-04	18-Dec-07	
Switzerland	AAAu	Stable	Aaau	Stable	AAAu	Stable	17-Feb-11	01-Dec-03	29-Jan-82	15-Nov-03	10-Aug-94	11-Jun-07	
United Kingdom	AAu	Stable	Aa3u	Neg	AA-u	Neg	27-Jun-16	21-Apr-23	16-Oct-20	21-Oct-22	27-Mar-20	05-Oct-22	
United States	AA+u	Stable	Aaa	Stable	AAAu	Stable	05-Aug-11	10-Jun-13	02-Aug-11	18-Jul-13	21-Mar-14	08-Jul-22	

Source: Bloomberg Finance L.P.



Local Currency Ratings (GBI-EM Broad Countries)

	S & P		Moody's		Fitch		Recent S&P Action		Recent Moody's Action		Recent Fitch Action	
	Rating	Outlook	Rating	Outlook	Rating	Outlook	Rating Date	Outlook Date	Rating Date	Outlook Date	Rating Date	Outlook Date
Argentina	CCC-	Neg	Ca	Stable	WD	NR	14-Mar-23	29-Mar-23	03-Apr-20	28-Sep-20	31-Oct-14	-
Brazil	BB-	Stable	Ba2	Stable	BB-	Stable	11-Jan-18	06-Apr-20	24-Feb-16	09-Apr-18	23-Feb-18	14-Jul-22
Chile	A+	Stable	A2	Stable	A-	Stable	24-Mar-21	24-Mar-21	15-Sep-22	15-Sep-22	15-Oct-20	15-Oct-20
China	A+	Stable	A1	Stable	A+u	Stable	21-Sep-17	21-Sep-17	24-May-17	24-May-17	09-Apr-13	15-Oct-13
Colombia	BBB-	Stable	Baa2	Stable	BB+	Stable	19-May-21	19-May-21	28-Jul-14	06-Oct-21	01-Jul-21	01-Jul-21
Czech Republic	AA	Stable	Aa3	Neg	AA-	Neg	24-Aug-11	24-Aug-11	04-Oct-19	05-Aug-22	03-Aug-18	06-May-22
DomRep	BB	Stable	Ba3	Stable	BB-	Stable	19-Dec-22	19-Dec-22	20-Jul-17	20-Jul-17	18-Nov-16	08-Dec-21
Hungary	BBB-	Stable	Baa2	Stable	BBB	Neg	27-Jan-23	27-Jan-23	24-Sep-21	24-Sep-21	22-Feb-19	20-Jan-23
India	BBB-u	Stable	Baa3	Stable	BBB-u	Stable	25-Feb-11	26-Sep-14	01-Jun-20	05-Oct-21	01-Aug-06	10-Jun-22
Indonesia	BBB	Stable	Baa2	Stable	BBB	Stable	31-May-19	27-Apr-22	13-Apr-18	13-Apr-18	20-Dec-17	20-Dec-17
Malaysia	А	Stable	A3	Stable	BBB+	Stable	27-Jul-11	27-Jun-22	16-Dec-04	11-Jan-16	04-Dec-20	04-Dec-20
Mexico	BBB+	Stable	Baa2	Stable	BBB-	Stable	26-Mar-20	06-Jul-22	08-Jul-22	08-Jul-22	15-Apr-20	15-Apr-20
Peru	BBB+	Neg	Baa1	Neg	BBB	Neg	18-Mar-22	12-Dec-22	01-Sep-21	31-Jan-23	15-Oct-21	20-Oct-22
Philippines	BBB+	Stable	Baa2	Stable	BBB	Neg	30-Apr-19	30-Apr-19	11-Dec-14	11-Dec-14	10-Dec-17	12-Jul-21
Poland	А	Stable	A2	Stable	A-	Stable	12-Oct-18	12-Oct-18	12-Nov-02	12-May-17	22-Jul-16	22-Jul-16
Romania	BBB-	Stable	Baa3	Stable	BBB-	Stable	16-May-14	16-Apr-21	06-Oct-06	15-Oct-21	22-Jul-16	24-Mar-23
Russia	NR	NR	WR	NR	WD	NR	08-Apr-22	-	31-Mar-22	-	25-Mar-22	-
South Africa	BB	Stable	Ba2	Stable	BB-	Stable	29-Apr-20	08-Mar-23	20-Nov-20	01-Apr-22	20-Nov-20	15-Dec-21
Thailand	A-	Stable	Baa1	Stable	BBB+u	Stable	14-Apr-09	13-Apr-20	26-Nov-03	21-Apr-20	22-Jul-16	17-Mar-20
Turkey	Bu	Neg	B3	Stable	В	Neg	30-Sep-22	31-Mar-23	12-Aug-22	12-Aug-22	08-Jul-22	08-Jul-22
Uruguay	BBB+	Stable	Baa2	Stable	BBB-	Stable	26-Apr-23	26-Apr-23	29-May-14	13-Jul-17	22-Jul-16	15-Dec-21

Source: Bloomberg Finance L.P.

Note: all rating tables are as of 09 May 23

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