

EM Spotlight: US rates and EM sovereign spread curves

Excessive steepness should normalize; Enter RV trades to position for eventual mean reversion

- EM sovereign 10s30s spread curves have steepened markedly, and we find that curves are excessively steep, as long-end bonds have underperformed beyond what is implied by historical relationships.
- We explore the relationship between US rates and the shape of EM spread curves, and find that a combination of the 10y UST yield and the shape of the 10s30s UST curve offer explanatory power.
- EM spread curves exhibit a negative beta versus both 10y UST yields and 10s30s UST, so EM curves flatten when rates rise and also when the UST curve steepens. There is higher sensitivity to the 10s30s UST curve than to the level of 10y UST.
- On aggregate, EMBIG 10s30s spread curve at 88bp looks about 17bp or 1.7 standard deviations too steep. The heightened rate volatility has likely contributed to the underperformance of long-end EM bonds.
- J.P. Morgan's US rates forecasts calling for higher rates, but a modestly flatter curve would suggest a small 1bp flattening EM 10s30s spread curves to year-end, but we see scope for larger flattening given the excessive steepness.
- **Trade ideas:** We recommend curve trades, all DV01-neutral and UST-hedged:
 - **Dominican Republic 10s30s flattener:** Sell DOMREP 4.5 30 (102 bid, z+276bp) and buy DOMREP 5.875 60(97.13 offer, z+415bp), with entry spread of 139bp, targeting 110bp
 - **Chile 10s30s flattener:** Sell CHILE 2.45 31 (100.50 bid, z+81bp) and buy CHILE 3.1 61(90.85 offer, z+153bp), with entry spread of 73bp, targeting 50bp.
 - **Indonesia 10s30s steepener:** Buy INDON 2.85 30 (101.74 offer, z+109bp) and sell INDON 3.5 50 (98.01 bid, z+157bp), entry spread of 48bp, targeting 75bp.
 - **Peru 10s30s steepener:** Buy PERU 2.783 31 (100.35 offer, z+116bp) and sell PERU 2.78 60 (81.20 bid, z+170bp) entry spread of 54bp, targeting 75bp

Exhibit 1: New 10s30s curve trade ideas

Trade description	Buy	Price	Z-spread	Sell	Price	Z-spread	Entry spread	Target spread
Dominican Republic 10s30s flattener	DOMREP 5.875 60	97.13	415	DOMREP 4.5 30	102.00	276	139	110
Chile 10s30s flattener	CHILE 3.1 61	90.85	153	CHILE 2.45 31	100.50	81	73	50
Indonesia 10s30s steepener	INDON 2.85 30	101.74	109	INDON 3.5 50	98.01	157	48	75
Peru 10s30s steepener	PERU 2.783 31	100.35	116	PERU 2.78 60	81.20	170	54	75

Source: J.P. Morgan. Note trade levels are as of 7am NYT and may not be idd

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See page 15 for analyst certification and important disclosures.

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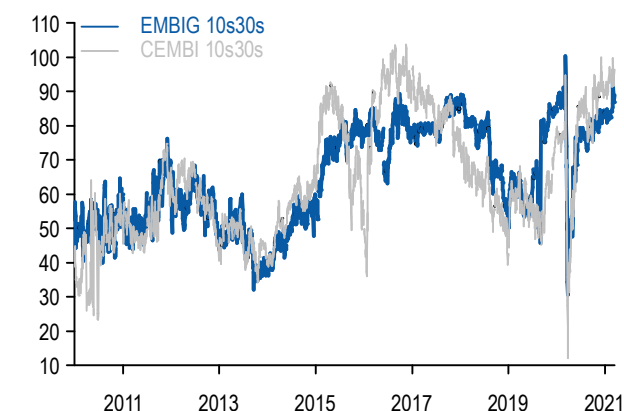
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Exploring the drivers behind the shape of EM sovereign 10s30s spread curves

The violent moves in US rates over the past month have been accompanied by a marked steepening in EM sovereign 10s30s spread curves. Our [EM USD 10s30s Spread Curve Report](#) shows that EM credit curves are close to historical highs, with the EMBIG 10s30s at 88bp currently, versus highs of 99bp (Exhibit 2). Both EMBIG IG and HY 10s30s have experienced sharp moves of late, and term premium among HY curves have broadly risen over the past few years, while IG curves remain more comparable to historical levels (Exhibit 3). Meanwhile, US IG curves have been sharply flattening and stands at just 30bp currently (see [CMOS](#), E. Beinstein).

Exhibit 2: The steepness in EM 10s30s spread curves are close to historical highs...

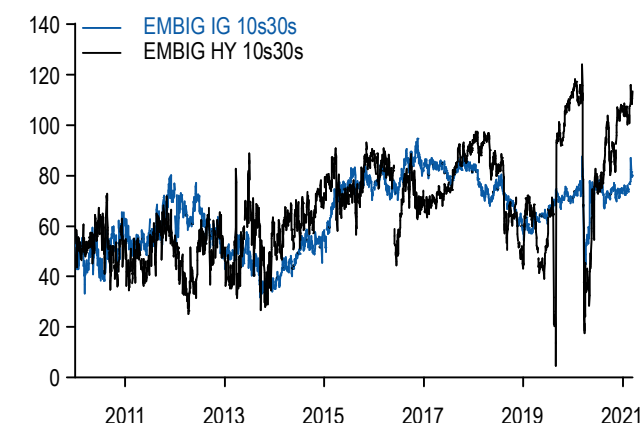
10s30s spread curve, bp



Source: J.P. Morgan.

Exhibit 3: ... with both EMBIG IG and HY 10s30s experiencing sharp moves of late

10s30s spread curve, bp

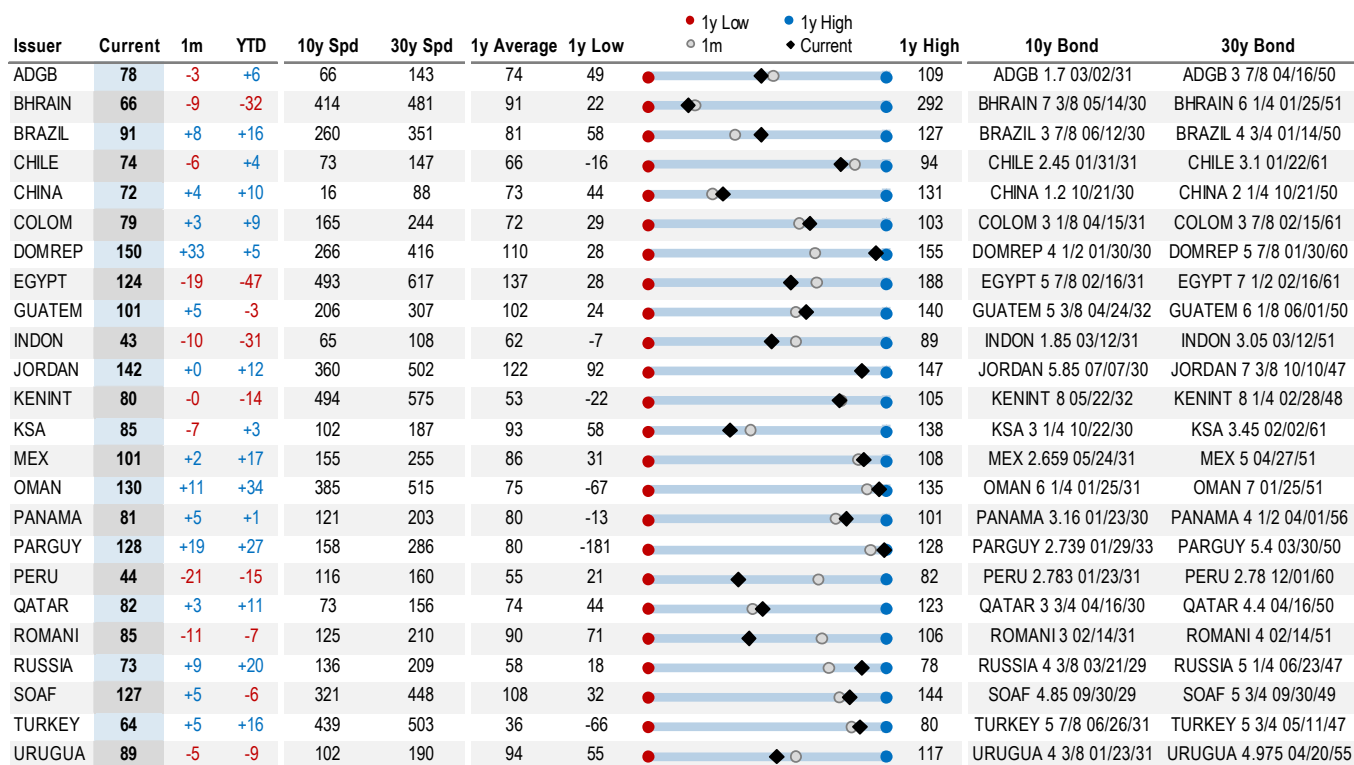


Source: J.P. Morgan.

The picture looks more nuanced at the country level, but some curves appear to be hovering close to their peaks. Exhibit 4 shows current EM sovereign 10s30s curves versus their 1y ranges, which highlights a mixed picture in terms of how curves screens versus their ranges, but there are places that are near the top, including Chile, Dominican Republic, Jordan, Kenya, Mexico, Oman, Panama, Paraguay, Russia, South Africa and Turkey.

Exhibit 4: Some EM sovereign curves are hovering around peak steepness

EM 10s30s spread curves versus their 1y range



Source: J.P. Morgan.

What is the relationship between US rates and EM curves?

We find that a combination of the 10y UST yield and the shape of the 10s30s UST curve offers explanatory power for EM spread curves. Intuitively, it is sensible to expect that the shape of EM curves would have an inverse relationship versus the shape of the UST curve. This relationship has an r-squared of 32% since 2010. However, the direction or level of US rates should be considered as well, as the US rates regime (for example, bear steepening versus bear flattening) also drives EM curves. Regressing EMBIG 10s30s versus UST yields and 10s30s UST over an 11-year gives us an r-squared of 48%; we summarize the coefficients in Exhibit 5. EM spread curves exhibit a negative beta versus both 10y UST yields and 10s30s UST, so EM curves flatten when rates rise, and when the UST curve steepens. There is higher sensitivity to the 10s30s UST than to the level of 10y UST, as EMBIG 10s30s curve flattens 0.8bp for every 10bp move higher in 10y UST yield, and flattens 2.7bp for every 10bp steepening in the 10s30s UST curve.

Exhibit 5: A combination of the 10y UST yield and the shape of the 10s30s UST curve offers explanatory power for EM spread curves

Regression of EM sovereign 10s30s spread curves versus 10y UST and 10s30s UST using daily levels from Jan 2010 to Dec 2020

Betas are bp move in EM 10s30s spread curves per 10bp move in 10y UST and 10s30s UST

	Beta vs 10y UST	Beta vs 10s30s UST	Constant	Rsqr (%)	Std err (bp)	Data points	Current 10s30s (bp)	Fair 10s30s (bp)	Deviation (bp)	Z-score (σ)
EMBIG	-0.8	-2.7	103.6	48	10.4	2745	88	70	18	1.7
EMBIG IG	-0.8	-2.3	99.8	41	10.6	2745	79	70	9	0.9
EMBIG HY	-0.8	-4.8	127.7	58	13.5	2745	115	78	37	2.8

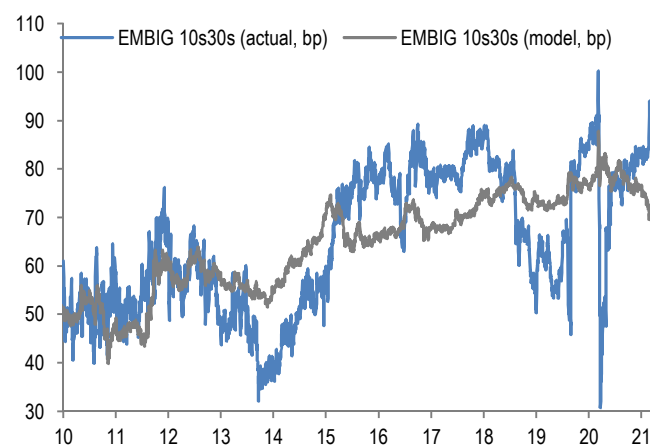
Source: J.P. Morgan.

Sense-checking: does it make sense that EMBIG spread curves are more sensitive to 10s30s UST compared to 10y UST yield levels? First, as EM bonds trade on price, an inverse relationship between 10s30s UST and EM 10s30s spread curve seems sensible. The relationship between EM curves and the level of 10y UST yields is less obvious. However, since 2010, the range of 10y UST yields have been a lot wider (0.5-4%) compared with the range of 10s30s UST (10-160bp), so on a long-term basis, the level of UST yields can matter quite a bit despite the beta against it being smaller.

On aggregate, the EMBIG 10s30s spread curve at 88bp looks about 17bp or 1.7 standard deviations too steep. The historical relationship would have suggested that EMBIG spread curves should have been flattening (Exhibit 6). The heightened rate volatility has likely contributed to the underperformance of long-end EM bonds. In particular, higher rates and fears of a Taper Tantrum repeat has not only hit duration, but also on higher-beta parts of the asset class. As such, some long-end bonds have seen a double whammy, such as long-end Dominican Republic, which has likely been exacerbated by crowded positioning as well. While the long-term regression does not correct very often and may not be a good tactical trading signal, the current deviation from fit looks close to historical highs, and are at levels which tend to mean-revert (Exhibit 7).

Exhibit 6: The historical relationship would have suggested that EMBIG spread curves should have been flattening

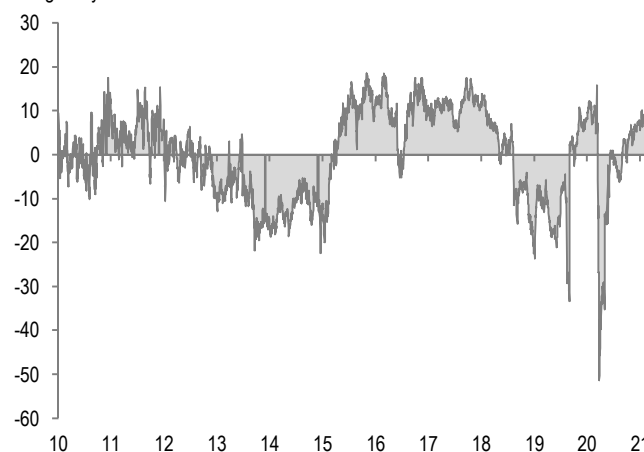
Actual versus fitted EMBIG 10s30s spread curves regressed against 10y UST and 10s30s UST using daily levels from Jan 2010 to Dec 2020



Source: J.P. Morgan.

Exhibit 7: The excess steepness is off the highs but still looks notable

Residual of EMBIG 10s30s spread curves versus 10y UST and 10s30s UST using daily levels from Jan 2010 to Dec 2020



Source: J.P. Morgan.

Where are curves heading based on our expectations of US rates?

Our US rates forecasts calling for higher rates but a modestly flatter curve would suggest a 3bp flattening of the EMBIG 10s30s spread curve. J.P. Morgan's revised US rates forecasts are calling for 1.95% for the 10y UST and 70bp for 10s30s at end-2021 (see [US Government Bond Strategy Weekly](#), J. Barry, 12 March 2021). Exhibit 8 shows the implied EMBIG 10s30s spread change under different scenarios of changes in the 10y UST yield and 10s30s UST curve. If our rates forecasts materialize, we would see a modest 1bp tightening on the fair EM 10s30s curve (3bp flattening from the 32bp move higher in 10y UST and 2bp steepening from the 7bp flattening in 10s30s UST), but we see scope for flattening beyond that magnitude given the excessive steepness currently.

Exhibit 8: J.P. Morgan's US rates forecasts would suggest very small impact on fair EM 10s30s spread moves

Change in EMBIG aggregate 10s30s under various scenarios of changes in 10y UST and 10s30s UST

UST bull flattening							UST bull steepening					
Change in UST 10s30s curve (bp)												
	-75	-60	-45	-30	-15	0	15	30	45	60	75	
Change in 10y UST yield (bp)	-75	26	22	18	14	10	6	2	-2	-6	-10	-14
	-60	25	21	17	13	9	5	1	-3	-7	-11	-15
	-45	24	20	16	12	8	4	0	-4	-8	-13	-17
	-30	23	18	14	10	6	2	-2	-6	-10	-14	-18
	-15	21	17	13	9	5	1	-3	-7	-11	-15	-19
	0	20	16	12	8	4	0	-4	-8	-12	-16	-20
	15	19	15	11	7	3	-1	-5	-9	-13	-17	-21
	30	18	14	10	6	2	-2	-6	-10	-14	-18	-23
	45	17	13	8	4	0	-4	-8	-12	-16	-20	-24
60	15	11	7	3	-1	-5	-9	-13	-17	-21	-25	
75	14	10	6	2	-2	-6	-10	-14	-18	-22	-26	
UST bear flattening						UST bear steepening						

Source: J.P. Morgan.

Looking at the country-level relationships with US rates

We apply the same historical analysis to country-level curves. We employ 10s30s curves from our [EM USD 10s30s Spread Curve Report](#) where available, and alternatively, use constant maturity 10y and 30y analytics otherwise, denoted by countries in *italics* in Exhibit 9. As with the index-level analysis, we look at an 11-year regression of EM spread curves versus UST yields and 10s30s UST curve from January 2010 to December 2020. There are more data limitations at the country level compared with the aggregate level. The r-squared results vary significantly, and we also show the number of data points available for each country. We show the deviation from fit in both bp terms and normalized in standard deviations (z-score). We would put more weight on the high z-scores for countries where there is a high enough r-squared. The majority of countries are displaying excess steepness versus the moves in US rates over this long-term regression.

Exhibit 9: The majority of countries are displaying excess steepness versus the moves in US rates over this long-term regression

Regression of EM sovereign 10s30s spread curves versus 10y UST and 10s30s UST using daily levels from Jan 2010 to Dec 2020

Betas are bp move in EM 10s30s spread curves per 10bp move in 10y UST and 10s30s UST

We use EM 10s30s curves from our [EM USD 10s30s Spread Curve Report](#) where available; those in *italics* use constant maturity 10y and 30y analytics

	Beta vs 10y UST	Beta vs 10s30s UST	Constant	Rsqr (%)	Std err (bp)	Data points	Current 10s30s (bp)	Fair 10s30s (bp)	Deviation (bp)	Z-score (σ)
EMBIG	-0.8	-2.7	103.6	48	10.4	2745	88	70	18	1.7
EMBIG IG	-0.8	-2.3	99.8	41	10.6	2745	79	70	9	0.9
EMBIG HY	-0.8	-4.8	127.7	58	13.5	2745	115	78	37	2.8
ADGB	-0.7	0.3	75.2	33	7.5	481	78	66	11	1.5
ANGOL	19.4	29.1	-380.9	19	72.8	216	71	159	-88	-1.2
BHRain	-5.7	-36.7	403.2	25	42.7	481	66	29	37	0.9
BRAZIL	-1.0	-3.8	116.3	58	11.4	2745	91	72	19	1.7
CHILE	-1.1	-0.9	85.3	16	14.8	2000	74	61	13	0.9
CHINA	-0.6	1.5	68.3	35	8.4	502	72	70	2	0.2
COLOM	-0.9	-2.5	108.6	41	11.9	2745	79	75	4	0.4
DOMREP	-1.3	-2.6	133.1	13	17.7	1648	150	92	58	3.3
EGYPT	-2.0	-7.7	190.0	52	30.3	1688	124	98	26	0.9
ELSALV	2.5	3.8	-19.8	17	36.7	1982	55	50	4	0.1
GHANA	9.5	-48.5	395.5	67	11.7	94	138	180	-42	-3.6
GUATEM	1.2	11.5	9.8	35	13.7	378	101	118	-18	-1.3
INDON	-0.8	-1.4	84.2	12	18.3	2745	43	61	-18	-1.0
ISRAEL	-1.3	-0.5	106.3	32	11.9	1894	68	82	-14	-1.1
JORDAN	-1.3	-4.0	172.1	3	20.9	666	142	120	22	1.0
KENINT	0.7	-5.5	100.3	23	33.0	690	80	70	10	0.3
KOREA	-2.4	-4.6	87.1	58	12.5	1393	68	13	55	4.4
KSA	-1.8	-4.5	138.7	30	11.5	481	85	75	10	0.9
MEX	-1.1	-1.0	101.7	33	11.9	2745	101	76	25	2.1
NGERIA	4.3	6.8	-47.7	28	40.0	787	77	75	3	0.1
OMAN	2.1	2.1	46.8	20	26.5	939	130	97	33	1.3
PANAMA	-0.8	0.4	81.2	28	9.7	1809	81	72	10	1.0
PARGUY	0.1	-0.3	88.0	0	18.1	1480	128	87	40	2.2
PERU	-0.1	-1.5	90.6	6	19.5	2164	44	78	-34	-1.7
PHILIP	-0.5	2.5	13.3	9	26.0	2744	67	25	42	1.6
QATAR	-1.2	-6.3	127.8	22	8.0	481	82	59	23	2.9
ROMANI	-1.9	-1.9	121.3	52	10.5	835	85	76	10	0.9
RUSSIA	-0.7	-3.0	91.2	11	23.7	2146	73	56	17	0.7
SOAF	-2.0	-4.8	130.0	39	21.4	2435	127	61	66	3.1
TURKEY	0.1	1.5	22.7	4	24.1	2745	64	36	27	1.1
URUGUA	-1.3	-4.7	147.7	26	23.5	2060	89	91	-2	-0.1

Source: J.P. Morgan.

Looking at a shorter-term relationship

We also explore a more short-term horizon as regime shifts may have occurred in EM spread curves' relationship versus US rates. We conduct the same regressions, but over a shorter, 2-year horizon from January 2019 to December 2020, and compare the results between the long-term and short-term analyses in Exhibit 10. The full 2-year regression results are in the Appendix. Even at the aggregate level, the relationship has seen some short-term shifts with regard to the beta versus the 10s30s UST curve. In particular, the beta is modestly positive versus the 10s30s UST over a 2-year horizon but negative over an 11-year horizon, i.e., EM spread curves have typically steepened alongside the steepening of the UST curve over the past 2 years. However, this beta is small (+0.1 for the EMBIG 10s30s, versus -2.7 for the

11-year regression). The shaded grey cells highlight divergent results between the long-term versus short-term, i.e., where there are opposite signs in either the betas or z-scores. We would be more inclined to look at the long-term relationship, as markets are digesting a regime shift in US rates which departs from easy conditions of the past 2 years.

Exhibit 10: Comparing a long-term and short-term analysis yields different results in some names

Betas and z-scores based on a longer-term 11-year regression (2010-2020) versus shorter-term 2-year regression (2019-2020) of EM 10s30s versus 10y UST and 10s30s UST

Cells are blanked out if the long-term analysis does not have at least 2 years of data points

Shaded grey cells highlight divergent results between the long-term versus short-term (i.e. opposite signs)

	Beta vs 10y UST		Beta vs 10s30s UST		Z-score		Rsqr (%)	
	11y	2y	11y	2y	11y	2y	11y	2y
EMBIG	-0.8	-0.5	-2.7	0.1	1.7	1.4	48	10
EMBIG IG	-0.8	-0.3	-2.3	0.9	0.9	1.4	41	19
EMBIG HY	-0.8	0.3	-4.8	0.1	2.8	1.1	58	1
ADGB		-0.7		0.3		1.5		33
ANGOL		19.4		29.1		-1.2		19
BHRAIN		-5.7		-36.7		0.9		25
BRAZIL	-1.0	-1.0	-3.8	-7.7	1.7	2.6	58	27
CHILE	-1.1	-1.2	-0.9	-1.4	0.9	2.0	16	32
CHINA	-0.6	-0.6	1.5	1.5	0.2	0.2	35	35
COLOM	-0.9	0.2	-2.5	1.5	0.4	0.4	41	2
DOMREP	-1.3	0.8	-2.6	9.0	3.3	1.1	13	10
EGYPT	-2.0	0.4	-7.7	12.3	0.9	-1.0	52	29
ELSALV	2.5	-3.6	3.8	-38.3	0.1	2.3	17	34
GHANA		9.5		-48.5		-3.6		67
GUATEM		1.2		11.5		-1.3		35
INDON	-0.8	1.5	-1.4	9.8	-1.0	-2.6	12	15
ISRAEL	-1.3	-1.7	-0.5	-4.0	-1.1	-0.2	32	37
JORDAN	-1.3	-3.6	-4.0	-24.3	1.0	3.6	3	48
KENINT	0.7	-0.1	-5.5	-19.5	0.3	1.0	23	41
KOREA	-2.4	0.1	-4.6	6.1	4.4	3.7	58	68
KSA		-1.8		-4.5		0.9		30
MEX	-1.1	0.4	-1.0	11.1	2.1	0.6	33	60
NGERIA	4.3	5.9	6.8	10.8	0.1	-0.2	28	29
OMAN	2.1	3.9	2.1	9.9	1.3	0.4	20	19
PANAMA	-0.8	0.5	0.4	8.8	1.0	-0.6	28	50
PARGUY	0.1	-0.6	-0.3	-8.6	2.2	2.2	0	11
PERU	-0.1	1.2	-1.5	-1.8	-1.7	-2.2	6	61
PHILIP	-0.5	1.7	2.5	18.3	1.6	0.1	9	35
QATAR		-1.2		-6.3		2.9		22
ROMANI	-1.9	5.0	-1.9	7.1	0.9	-8.6	52	64
RUSSIA	-0.7	-0.2	-3.0	-0.5	0.7	2.5	11	1
SOAF	-2.0	0.6	-4.8	11.4	3.1	0.7	39	34
TURKEY	0.1	-2.3	1.5	1.7	1.1	1.6	4	28
URUGUA	-1.3	-0.7	-4.7	0.8	-0.1	0.2	26	33

Source: J.P. Morgan.

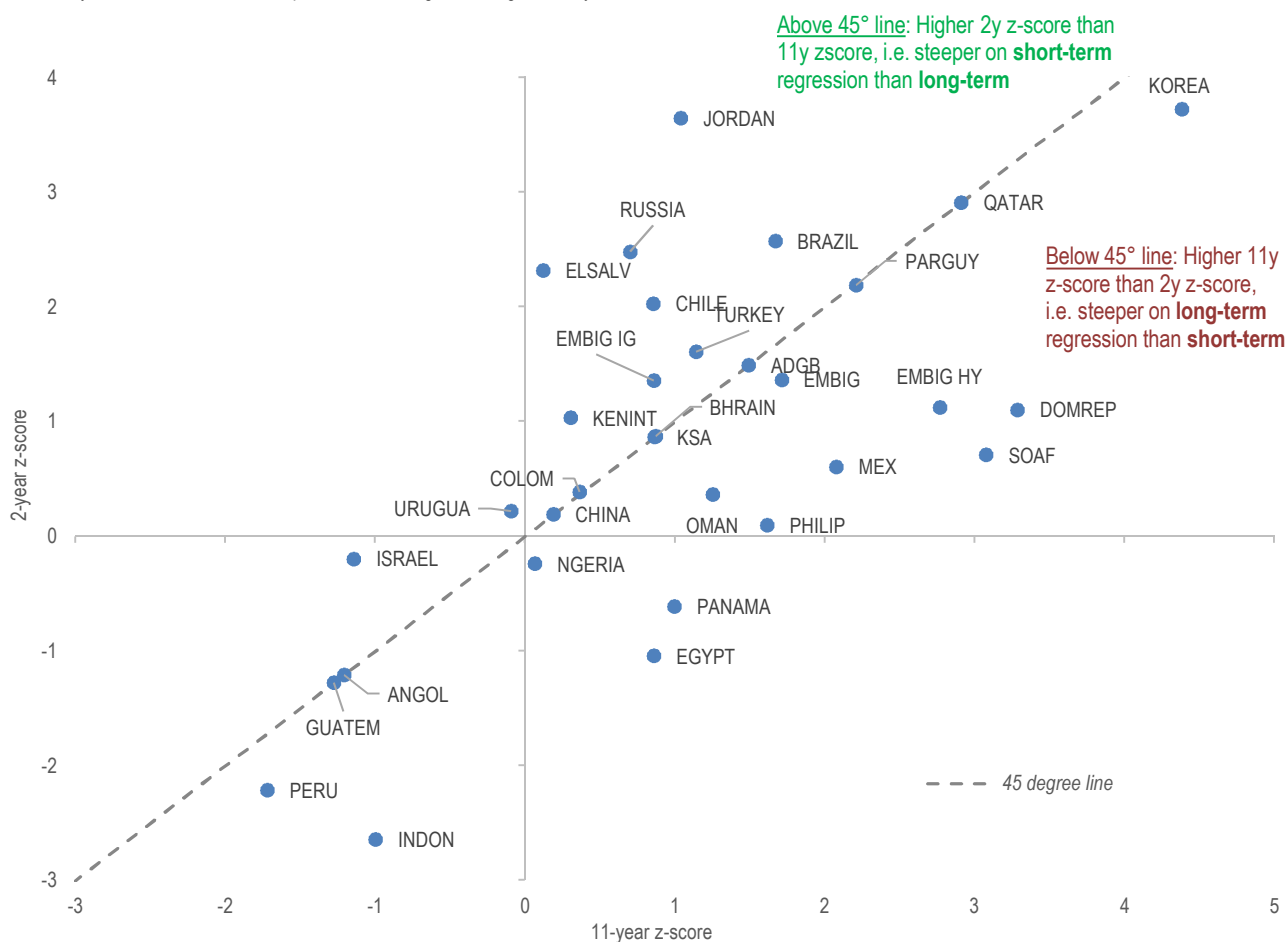
In any case, there are very few places where the z-scores display opposite signs, and both short-term and long-term regressions largely yield the same results in showing the relative steepness of EM curves. Exhibit 11 shows a scatter plot of z-scores for the 2-year and 11-year analysis, which largely shows countries plotting in

Quadrants I and III, i.e., z-scores with the same signs. The exceptions are Egypt, Panama, Philippines, Nigeria and Uruguay, but the magnitudes of these z-scores are small and close to zero. Quadrant I (top right) comprises the bulk of the countries that display excess steepness on both a long- and short-term analysis. Those above the 45 degree line are countries where there is a higher 2-year z-score than an 11-year z-score, i.e., their excess steepness is more pronounced on short-term regression than a long-term one. Conversely, those below the 45 degree line look steeper on a long-term basis.

Exhibit 11: Both short-term and long-term regressions largely yield the same results in showing the relative steepness of EM curves

y-axis: 2y z-score of EM 10s30s spread curves regressed against 10y UST and 10s30s UST

x-axis: 11y z-score of EM 10s30s spread curves regressed against 10y UST and 10s30s UST



Source: J.P. Morgan.

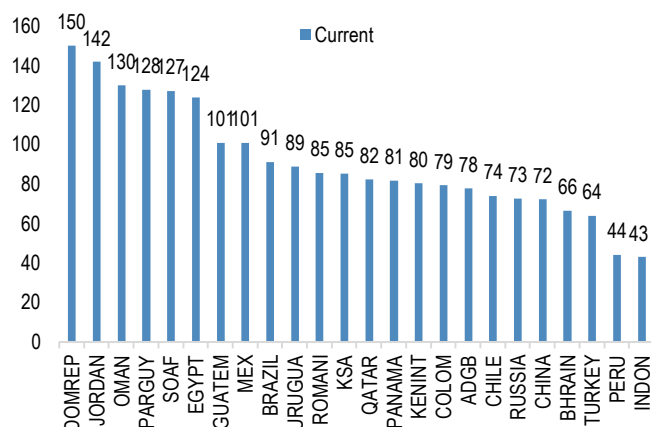
Trade ideas

Our analysis highlights several notable dislocations, particularly on flattener opportunities among very steep curves, but we also note some exceptions in flat curves as well. Some of the highest z-scores on both the long-term and short-term regressions include **Korea** (4.4, 3.7, respectively), **Dominican Republic** (3.3, 1.1), **South Africa** (3.1, 0.7), **Mexico** (2.1, 0.6), **Jordan** (1.0, 3.6), **Brazil** (1.7, 2.6) and **Chile** (0.9, 2.0). On the other hand, there are some exceptions on the flat end of the

spectrum, including **Peru** (-1.7, -2.2) and **Indonesia** (-1.0, -2.6). We recommend entering several curve flatteners in **Dominican Republic** and **Chile** to position for a mean-reversion in excess steepness. Korea looks steep, but liquidity and technicals are less conducive of a flattener trade. Curve flatteners are typically negative carry on a DV01-neutral weighting, so we also recommend entering curve steepeners in **Indonesia** and **Peru**, which are the two flattest EM sovereign curves (Exhibit 12).

Exhibit 12: Peru and Indonesia are the two flattest curves

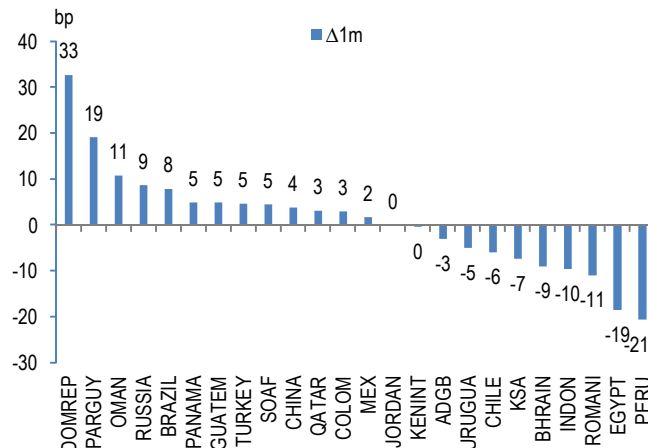
EM 10s30s spread curves, bp



Source: J.P. Morgan.

Exhibit 13: There have been notable moves in EM 10s30s

1m change in EM 10s30s spread curves, bp



Source: J.P. Morgan.

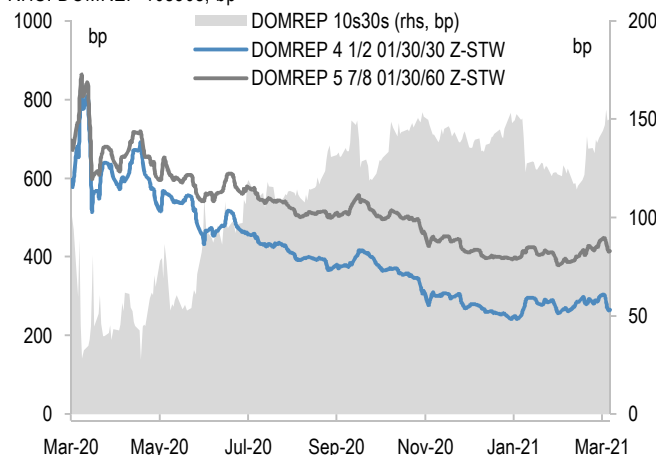
Dominican Republic: Sell DOMREP 4.5% 30 and buy DOMREP 5.875% 60

We enter a 10s30s flattener trade in Dominican Republic as the curve has steepened 33bp over the past month and, at 150bp is the steepest curve among EM sovereigns. DOMREP curve had started to normalize during the start of the year after screening steep for most part of the last year. However, the recent sharp move in US rates has seen the re-steepening of the DOMREP curve to its historical highs (Exhibit 14). Our analysis of curves versus US rates suggests that DOMREP is 3.3 standard deviations too steep on a long-term basis, but we do not stress this as a major argument for the trade, given the relatively low rsq of 3%. Rather, the curve exhibits a strong positive directional relationship to EMBIG 10s30s and is currently near 1.5 sigma too steep versus the level of the overall (Exhibit 15). DOMREP 30s is one of the two bonds in the curve that has not widened relative to a month-ago level and DOMREP 60s is one of the two bonds that is currently priced below par in the curve (Exhibit 16). Convexity on the DOMREP 60s should also be supportive. **Sell DOMREP 4.5 30 (102 bid, z+276bp) and buy DOMREP 5.875 60 (97.13 offer, z+415bp), DV01-neutral and UST hedged, with current spread of 139bp, inclusive of transaction costs, targeting 110bp.**

Exhibit 14: DOMREP 10s30s steepened back to historical highs during the recent sharp movement in US rates

LHS: DOMREP benchmark spreads, bp

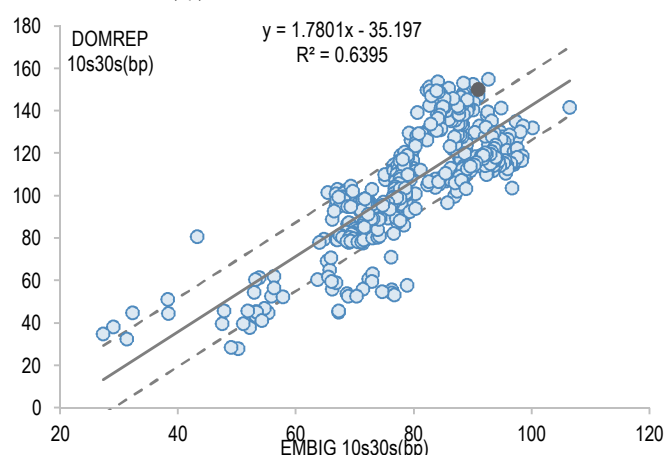
RHS: DOMREP 10s30s, bp



Source: J.P. Morgan

Exhibit 15: DOMREP 10s30s is nearly 1.5 std. deviation wide versus EMBIG 10s30s

Regression of DOMREP 10s30s against EMBIG 10s30s over 2y, lines show +/- 1 standard error (bp)



Source: J.P. Morgan

Exhibit 16: DOMREP 30s is one of the two bonds in the curve with spreads less than 1m ago while DOMREP 60s is one of the two bonds with current price below par

Bond	Mid Price	STW (bp)					Min (1y)			Max (1y)
		12-Mar-21	Δ1W	Δ1M	Δ3M			● Current	● 1m	
DOMREP 5 7/8 04/18/24	108.07	152	-5	12	-30		121	●	●	1028
DOMREP 5 1/2 01/27/25	110.09	206	-22	6	-43		175	●	●	858
DOMREP 6 7/8 01/29/26	116.76	228	-25	8	-28		202	●	●	961
DOMREP 5.95 01/25/27	112.64	248	-24	21	-16		214	●	●	927
DOMREP 6 07/19/28	112.12	265	-13	16	-9		217	●	●	898
DOMREP 4 1/2 01/30/30	102.11	267	-37	-3	-9		243	●	●	824
DOMREP 4 7/8 09/23/32	102.43	289	-30	15	-7		252	●	●	428
DOMREP 5.3 01/21/41	99.66	329	-31	-11			326	●	●	381
DOMREP 7.45 04/30/44	119.66	382	-30	4	-28		374	●	●	921
DOMREP 6.85 01/27/45	111.27	388	-32	11	-15		370	●	●	863
DOMREP 6 1/2 02/15/48	106.73	384	-32	10	-13		366	●	●	855
DOMREP 6.4 06/05/49	105.90	379	-29	6	-16		365	●	●	842
DOMREP 5 7/8 01/30/60	96.58	388	-31	17	-5		362	●	●	820

Source: J.P. Morgan.

Chile: Sell CHILE 2.45% 31 and buy CHILE 3.1% 61

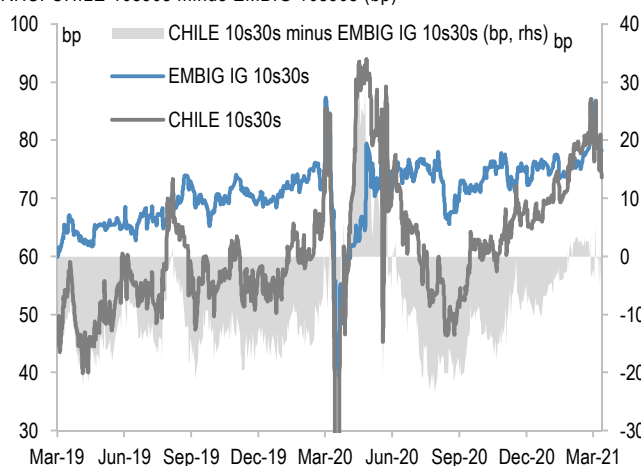
We enter a 10s30s flattener trade in Chile as the curve has now steepened close to its 2y highs (Exhibit 17). The belly of the Chile curve has rallied more than the long-end over the six month period (Exhibit 19), steepening the curve close to 2y highs. Chile 10s30s also closely tracks the shape of EMBIG IG 10s30s and the relationship over the past 2y indicates Chile curve flattens when EMBIG IG flattens (Exhibit 18). Chile's relationship versus US rates has strengthened in recent years, with a higher rsq over a 2-year horizon (32%) compared with the long-term regression (16%). As our analysis shows, the curve is 0.9 sigma on a long-term basis and 2 sigma too steep on a short-term basis. The recently issued CHILE 3.1% 61s is currently the only Chile bond trading below par value. **Sell CHILE 2.45 31 (100.50 bid, z+81bp) and buy CHILE 3.1 61(90.85 offer, z+153bp), DV01-neutral and**

UST hedged, with current spread of 73bp, inclusive of transaction costs, targeting 50bp.

Exhibit 17: Chile 10s30s steepness is now close to historical highs

LHS: CHILE 10s30s (bp), EMBIG IG 10s30s (bp)

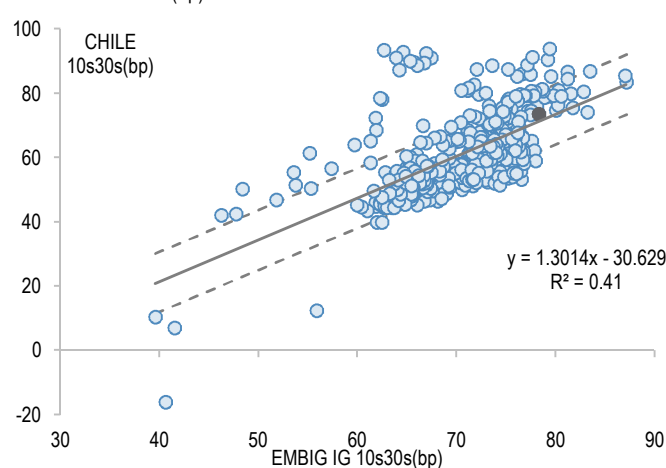
RHS: CHILE 10s30s minus EMBIG IG 10s30s (bp)



Source: J.P. Morgan

Exhibit 18: The positive directional relationship shows CHILE curve flattens when EMBIG IG curve flattens

Regression of CHILE 10s30s against EMBIG IG 10s30s over 2y, lines show +/- 1 standard error (bp)



Source: J.P. Morgan

Exhibit 19: The belly of the curve has rallied more than the long end over the past 6 months

Bond	Mid Price	STW (bp)						
		12-Mar-21	Δ1M	Δ3M	Δ6M	Min (1y)	● Current ● 1m	Max (1y)
CHILE 3 1/8 01/21/26	108.02	57	18	2	-6	33		344
CHILE 3.24 02/06/28	108.53	60	11	-12	-36	46		352
CHILE 2.45 01/31/31	100.77	74	9	-11	-32	64		182
CHILE 2.55 01/27/32	100.79	78	6	-13	-33	71		313
CHILE 3.86 06/21/47	106.30	122	8	-3	-11	115		317
CHILE 3 1/2 01/25/50	100.46	115	1	-13	-15	112		297
CHILE 3.1 01/22/61	90.74	115	-1			115		138

Source: J.P. Morgan

Indonesia: Buy INDON 2.85% 30 and sell INDON 3.50% 50

We enter a 10s30s steepener in Indonesia with the curve near 5-year lows (Exhibit 20). We highlighted earlier this month that the INDON curve bear flattened considerably, about 26bp since the start of February, and is the flattest 10s30s in the EM sovereign space (see Indonesia section in *EM Asia Sovereign Credit Strategy: Tapering concerns*, 04-Mar). While the INDON 10s30s offers some spread directionality, i.e., the 10s30s curve tends to flatten when 10y spreads widen (Exhibit 21), we think the current dislocation is large enough to limit the extent of potential further flattening and enter fresh steepeners. **Buy INDON 2.85 30 (101.74 offer, z+109bp) and sell INDON 3.5 50 (98.01 bid, z+157bp), DV01 neutral and UST-hedged, with current spread of 48bp inclusive of transaction costs, targeting 75bp.**

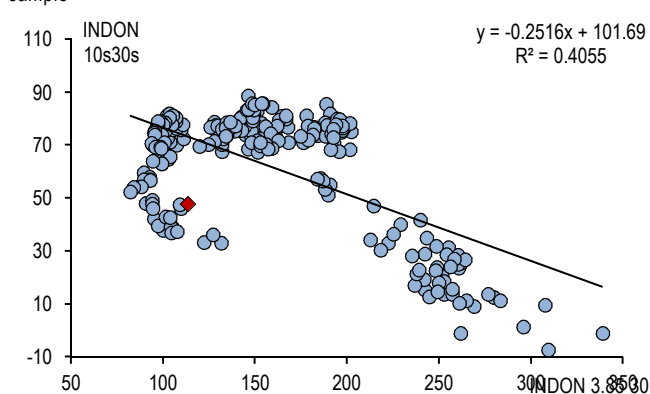
Exhibit 20: INDON 10s30s had one of the sharpest spread compressions in recent years



Source: J.P. Morgan as of 15-Mar

Exhibit 21: INDON 10s30s curve screens too flat versus the 10y

y-axis: INDON 10s30s (bp), x-axis: INDON 2.85 30 (bp). Red is latest. 1y sample



Source: J.P. Morgan as of 15-Mar

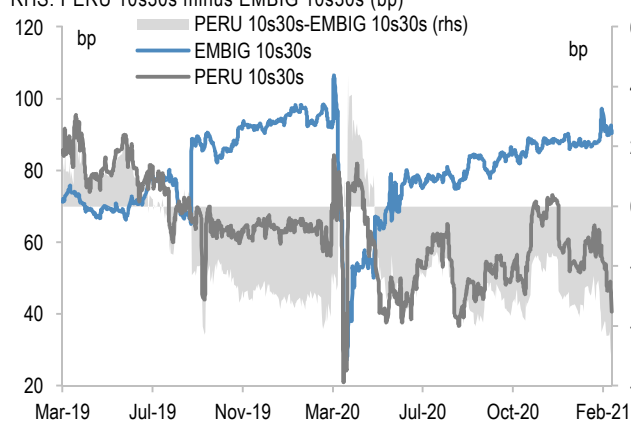
Peru: Buy PERU 2.783% 31 and sell PERU 2.78% 60

We enter a 10s30s steepener trade in Peru as the curve has bear flattened 21bp over the past month and at 44bp, is one of the flattest curves in EM. Peru curve reacted in the opposite direction to EMBIG 10s30s amid the recent sharp move in UST rates, with PERU 10s30s flattening close to 2y lows (Exhibit 22). The spread differential between PERU 10s30s and EMBIG 10s30s exhibits a moderately strong inverse directional relationship with EMBIG 10s30s, i.e., Peru curve steepens when EMBIG flattens (Exhibit 23). The current spread differential is around 1.5 sigma too tight versus the current EMBIG level. The spread widening in Peru in the run-up to the elections has seen the belly of the curve widening more than the long end (Exhibit 24). Furthermore, our analysis shows that Peru exhibits a strong relationship with US rates over the short-term (rsq of 61%) and is 2.2 sigma too flat currently. **Buy PERU 2.783 31 (100.35 offer, z+116bp) and sell PERU 2.78 60 (81.20 bid, z+170bp), DV01-neutral and UST hedged, with current spread of 54bp, inclusive of transaction costs, targeting 75bp.**

Exhibit 22: PERU 10s30s has seen significant flattening over the past month in contrast to EMBIG 10s30s steepening move

LHS: PERU 10s30s (bp), EMBIG 10s30s (bp)

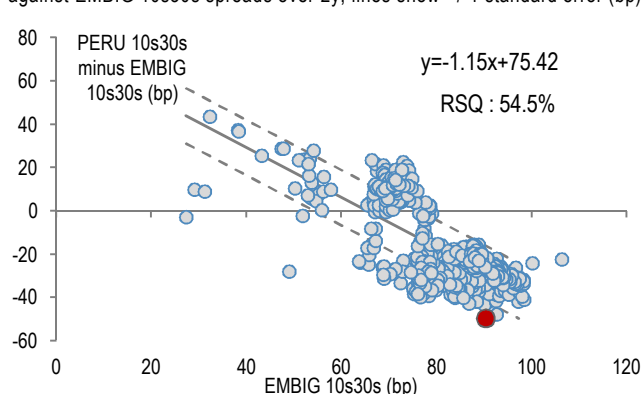
RHS: PERU 10s30s minus EMBIG 10s30s (bp)



Source: J.P. Morgan

Exhibit 23: The 2y historical relationship shows Peru curve steepens as EMBIG curve flattens and at current levels is 1.5 std. deviation tighter to EMBIG curve

Regression of spread differential between PERU 10s30s and EMBIG 10s30s against EMBIG 10s30s spreads over 2y, lines show +/-1 standard error (bp)



Source: J.P. Morgan

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Global Emerging Markets Research

EM Spotlight: US rates and EM sovereign spread curves

15 March 2021

J.P.Morgan

Exhibit 24: The belly of the Peru curve has widened more than long-end over the past 3 months

Bond	Mid Price	STW (bp)					Min (1y)	● Current ● 1m		Max (1y)
		12-Mar-21	Δ1W	Δ1M	Δ3M					
PERU 7.35 07/21/25	124.08	89	0	23	7		58	●	●	346
PERU 2.392 01/23/26	103.12	84	-11	19	6		61	●	●	191
PERU 4 1/8 08/25/27	112.18	93	-10	16	0		71	●	●	305
PERU 2.844 06/20/30	101.59	106	-13	31	13		64	●	●	305
PERU 2.783 01/23/31	99.93	117	-12	31	15		74	●	●	216
PERU 1.862 12/01/32	90.79	99	-17	28	5		65	●	●	123
PERU 8 3/4 11/21/33	154.42	171	-12	36	20		125	●	●	355
PERU 6.55 03/14/37	135.27	163	-22	33	14		113	●	●	323
PERU 5 5/8 11/18/50	131.14	159	-13	32	15		109	●	●	290
PERU 2.78 12/01/60	81.53	128	-18	12	0		106	●	●	150
PERU 3.23 07/28/21	80.38	165	-17	8	-5		152	●	●	189

Source: J.P. Morgan.

Trade recommendations summary

Exhibit 25: Outstanding EM sovereign outright and RV trades

Region	Trade description	Type	Entry		Trade leg	Notional (\$mn)	Description	Spread (bp)		P&L (\$)		
			date	B/S				Entry	Current	Since Entry	YTD 2021	1 Week Δ
EUROPE	Buy Ukraine GDP warrant**	Outright	24-Mar-17	B	8.1	Buy UKRAIN 0% 40		31.0	106.3	6,074,234	71,684	16,775
LATAM	Mexico 50 vs Colombia 51	RV	09-Jul-20	B	1.9	Buy MEX 4.5 50		340	254	-20,671	-317,873	28,465
				S	1.2	Sell 30y UST (UST hedge)		1.31	2.40	286,444	231,394	40,057
				S	1.9	Sell COLOM 4.125 51		315	249	104,205	324,802	-35,635
				B	1.3	Buy 30y UST (UST hedge)		1.31	2.40	-307,280	-248,226	-42,971
								25	4	62,698	-9,902	-10,084
EUROPE	TURKEY 10s30s Steepener	Curve	20-Nov-20	B	2.0	Buy TURKEY 5.25 30		459	438	-34,125	-75,599	29,260
				S	1.2	Sell Turkey 5.75 47		531	505	36,249	83,499	-10,094
				S	1.6	Sell 10y UST (UST hedge)		0.30	1.54	98,676	96,274	11,300
				B	0.6	Buy 30y UST (UST hedge)		0.31	2.40	-110,208	-104,886	-18,157
								72	67	-9,409	-711	12,309
EUROPE	TURKEY 5s10s CDS Steepener	Curve	20-Nov-20	B	1.0	Buy Turkey 10y CDS		343	368	24,217	24,217	-5,276
				S	1.8	Sell Turkey 5y CDS		306	323	-10,005	-10,005	8,016
								37	45	14,213	14,213	2,740
ASIA	Buy SRILAN 6.25 21**	Outright	08-Jan-21	B	10.0	Buy SRILAN 6.25 21		89.0	97.1	906,979	906,979	341,263
MENA	Buy IRAQ 6.752 23**	Outright	08-Jan-21	B	1.0	Buy IRAQ 6.752 23		98.5	100.3	29,773	29,773	8,878
LATAM	Buy PEMEX 5.95 31	RV	01-Feb-21	B	3.8	Buy PEMEX 5.95 31		555	500	40,123	40,123	59,061
	Sell MEX 2.659 31			S	3.0	Sell MEX 2.659 31		158	159	129,517	129,517	-23,260
								397	341	169,640	169,640	35,802
LATAM	Buy CHILE 3.5 50	RV	01-Feb-21	B	1.8	Buy CHILE 3.5 50		140	150	-174,927	-174,927	22,097
	Sell CDEL 3.7 50			S	1.9	Sell CDEL 3.7 50		180	193	184,976	184,976	-348
								40	44	10,049	10,049	21,748
ASIA	Buy PERTIJ 4.175 50	RV	04-Feb-21	B	2.0	Buy PERTIJ 4.175 50		182	241	-207,653	-207,653	51,769
	Sell INDON 3.5 50			S	1.9	Sell INDON 3.5 50		122	156	141,321	141,321	-42,178
								60	85	-66,333	-66,333	9,591
										7,191,843	1,125,391	439,021

Notes: **Entry level is the ask price, current level is the mid price

Source: J.P. Morgan. Data as of 12-Mar-21 COB; Note the table does not include trades initiated in this report.

Links to trade summaries EM sovereign analytic reports

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[EM Trade Tracker](#)

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[EM Sovereign Bond-CDS Basis](#)

[EM Sovereign Spread versus Rating Report](#)

[EM Credit Bond Rich / Cheap Analysis](#)

[EM Corporate Spread to Sovereign](#)

[EM USD 10s30s Spread Curve Report](#)

[EM Sovereign Cross-Currency Report](#)

Appendix: 2-year regression results

Regression of EM sovereign 10s30s spread curves versus 10y UST and 10s30s UST using daily levels from Jan 2019 to Dec 2020

Betas are bp move in EM 10s30s spread curves per 10bp move in 10y UST and 10s30s UST

We use EM 10s30s curves from our [EM USD 10s30s Spread Curve Report](#) where available; those in *italics* use constant maturity 10y and 30y analytics

	Beta vs 10y UST	Beta vs 10s30s UST	Constant	Rsqr (%)	Std err (bp)	Data points	Current 10s30s (bp)	Fair 10s30s (bp)	Deviation (bp)	Z-score (σ)
EMBIG	-0.5	0.1	78.6	10	12.2	501	88	71	17	1.4
EMBIG IG	-0.3	0.9	67.6	19	6.5	501	79	70	9	1.4
EMBIG HY	0.3	0.1	84.2	1	22.5	501	115	90	25	1.1
ADGB	-0.7	0.3	75.2	33	7.5	481	78	66	11	1.5
ANGOL	19.4	29.1	-380.9	19	72.8	216	71	159	-88	-1.2
BHRAIN	-5.7	-36.7	403.2	25	42.7	481	66	29	37	0.9
BRAZIL	-1.0	-7.7	142.5	27	9.4	501	91	67	24	2.6
CHILE	-1.2	-1.4	83.8	32	9.8	501	74	54	20	2.0
CHINA	-0.6	1.5	68.3	35	8.4	501	72	70	2	0.2
COLOM	0.2	1.5	62.2	2	8.5	501	79	76	3	0.4
DOMREP	0.8	9.0	39.8	10	24.9	501	150	123	27	1.1
EGYPT	0.4	12.3	47.4	29	23.9	501	124	149	-25	-1.0
ELSALV	-3.6	-38.3	295.8	34	47.7	500	55	-56	111	2.3
GHANA	9.5	-48.5	395.5	67	11.7	94	138	180	-42	-3.6
GUATEM	1.2	11.5	9.8	35	13.7	378	101	118	-18	-1.3
INDON	1.5	9.8	-15.0	15	15.9	501	43	85	-42	-2.6
ISRAEL	-1.7	-4.0	128.6	37	10.4	500	68	70	-2	-0.2
JORDAN	-3.6	-24.3	327.4	48	16.3	375	142	82	59	3.6
KENINT	-0.1	-19.5	196.8	41	33.2	501	80	46	34	1.0
KOREA	0.1	6.1	-2.2	68	5.8	500	68	46	22	3.7
KSA	-1.8	-4.5	138.7	30	11.5	481	85	75	10	0.9
MEX	0.4	11.1	2.7	60	11.1	501	101	94	7	0.6
NGERIA	5.9	10.8	-90.4	29	47.2	500	77	89	-11	-0.2
OMAN	3.9	9.9	-21.9	19	34.6	501	130	117	13	0.4
PANAMA	0.5	8.8	12.3	50	9.9	501	81	88	-6	-0.6
PARGUY	-0.6	-8.6	146.4	11	26.0	460	128	71	57	2.2
PERU	1.2	-1.8	58.1	61	8.9	501	44	64	-20	-2.2
PHILIP	1.7	18.3	-103.5	35	22.5	500	67	64	2	0.1
QATAR	-1.2	-6.3	127.8	22	8.0	481	82	59	23	2.9
ROMANI	5.0	7.1	-3.8	64	5.5	105	85	133	-47	-8.6
RUSSIA	-0.2	-0.5	60.3	1	7.4	501	73	54	18	2.5
SOAF	0.6	11.4	17.4	34	18.1	501	127	114	13	0.7
TURKEY	-2.3	1.7	38.8	28	30.4	501	64	15	49	1.6
URUGUA	-0.7	0.8	91.8	33	8.5	501	89	87	2	0.2

Source: J.P. Morgan.

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