

## Asian Credit Strategy

## Asia credit weekly spotlight (week of 4 to 10 January)

Emerging Markets

## Asia HY outperformed led by China; higher rates

Asia IG and Asia HY tightened 1bp/23bp WoW to 124bp/604bp respectively. For Asia IG, China IG (-5bp WoW to 128bp) tightened most, followed by Hong Kong IG (-3bp WoW to 121bp), while Indo IG widened 3bp WoW to 172bp. For Asia HY, China HY (-53bp WoW to 976bp) outperformed the most, followed by India HY (-39bp WoW to 484bp), while Macau gaming widened 16bp WoW. China HY property tightened 200bp WoW to 2,721bp, led by Road King on early USD bonds redemption, and China non-prop HY (corp) tightened 51bp WoW to 890bp. This, with higher rates, generated a negative total return of -0.23% (-0.34% for IG, +0.59% for HY). For WoW spread performance, please see Exhibit 15. We continue to prefer HY over IG on 1) relative value, 2) buffer for downside risk, and 3) limited default risk. We think China HY commodity names, trading above 5year average level, see room for tightening as China growth stabilize in 2024.

## LTM default rate by count at 7.5%

We did not see any default case this week, the LTM default rate by amount/count remained unchanged at 20.8%/7.8%. YTD24, Vedanta and Lippo Malls were added in our default list on completion of LME and the tender offer early in the year.

## US\$6.2bn fixed USD supply this week

This week saw strong supply of US\$6.2bn driven by financial bonds (US\$4.0bn) and Korea IG corps (US\$1.9bn). Korea accounted for 63% of the total issuance.

## Sector highlight: what has happened

**China LGFV:** issuance of 364-day USD bonds suspended by regulators per Reuters; we expect lower USD LGFV bond supply and better technical support.

**Asia tech:** SK Hynix issued USD1.5bn bonds and mulls increasing DRAM production in 1Q24; Chinese tech giants cut chip purchases from Nvidia, turning to local suppliers per Bloomberg. JD's listed unit Dada Nexus found suspicious practices in its internal audit.

**Macau gaming:** 2024: 1) Macau aims to attract 3mn overseas visitors, similar to 2019 level per MGTO authority; 2) Macau Intl Airport expects to see a 10-15% YoY increase in passenger volume. Following Sands China, Melco announced to increase salary for non-management employees by 2.5%, effective from April 1st.

**China Industrials:** China Grand Auto to repay CHIGRA 9.125% '24 maturing Jan 30th on schedule per REDD. Hongqiao issued RMB1bn 1yr short-term bill onshore. ENN Natural Gas launched a tender offer for VEYONG 3.375% '26 note.

**China property:** PBoC and NFRA called for financial support for long-term rental housing. Road King redeemed its USD bonds. Vanke briefed creditors its 2024 offshore repayment plan. Longfor intends to early repay two syndicated loans due in 2025.

**India corporates:** Moody's downgraded Vedanta Resources to Caa3 from Caa2; Adani Green secured funds for its '24 USD bond; ReNew Power's asset sales; 3Q24 steel production +12% YoY for JSW Steel, -0.3% YoY for Tata Steel

We add tables of Top 10 and bottom 10 performing bonds (see Exhibit 27).

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

**BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Refer to important disclosures on page 22 to 24.**

12644741

Timestamp: 11 January 2024 06:30PM EST

12 January 2024

Global Emerging Markets | Corporate Credit  
Asia

## Table of Contents

Sector highlights	2
Return	3
Valuation	4
Supply	8
Defaults	9
Fund flows	11
Top 10 and bottom 10 performers	12
Repayment schedule for Asian HY issuers	13
Appendix	14

**Joyce Liang**  
Research Analyst  
Merrill Lynch (Hong Kong)  
+852 3508 3817  
joyce.liang@bofa.com

**Di Miao, CFA**  
Research Analyst  
Merrill Lynch (Hong Kong)  
+852 3508 5058  
dmiao@bofa.com

**Sirius Chan**  
Research Analyst  
Merrill Lynch (Hong Kong)  
sirius.chan@bofa.com

**Xiang Gao, CFA**  
Research Analyst  
Merrill Lynch (Hong Kong)  
xiang.gao@bofa.com

**Suyang Lu**  
Research Analyst  
Merrill Lynch (Hong Kong)  
suyang.lu@bofa.com

**Vikash Agarwalla, CFA**  
Research Analyst  
Merrill Lynch (Hong Kong)  
vikash.agarwalla@bofa.com

**Lefu Li, CFA**  
Research Analyst  
Merrill Lynch (Hong Kong)  
lefu.li@bofa.com

**Jing Peng**  
Research Analyst  
Merrill Lynch (Hong Kong)  
jing.peng2@bofa.com

GGR: gross gaming revenue  
HY: High Yield  
IG: Investment Grade  
LTM: last 12 months  
MoU: Memorandum of Understanding  
POE: privately-owned enterprise  
SOE: state-owned enterprise  
WoW: week over week  
DRAM: dynamic random-access memory

# Sector highlights

## Asia technology

SK Hynix issued USD 1.5bn dual tranche offshore bonds with 3-year and 5-year tenor. The new bonds were rated Baa2/BBB-/BBB by M/S/F. Separately, SK Hynix is reported to mull increasing the production of dynamic random-access memory (DRAM) chips in 1Q24 as demand is climbing, per media reports. Tencent and other Chinese tech giants will cut purchases of chips from Nvidia and rely more on local and in-house production, according to Bloomberg. JD's Nasdaq-listed subsidiary Dada Nexus will conduct an independent audit review as it found certain suspicious practices during its routine internal audit, per company announcements. Lenovo Group's 4Q23 shipments of personal computers (PCs) edged up 3.9% YoY as the industry downturn seems to have bottomed out, according to IDC.

## Macau gaming

**Market:** Macau aims to attract around 3mn overseas visitors in 2024, similar to 2019 level (3.07mn overseas visitors), said by Macao Government Tourism Office (MGTO) authority. Macau International Airport expects to see a 10-15% YoY increase in passenger volume in 2024, from 5.15mn in 2023. S&P published its industry credit outlook for 2024: it expects Macau mass GGR to be 5-15% higher than 2019 in 2024 (up 20-30% YoY), with issuers' EBITDA at 95% of 2019 level on average. **Company operation:** [in line with our expectation \(see note\)](#), Melco and SJM also plan to distribute special discretionary bonus equivalent to 1 month salary to their employees, and following Sands China, Melco announced to increase salary to non-management employees by 2.5%, effective from April 1st. Again, this may result in a higher opex for operators in 2024.

## China HY industrial

China Grand Auto was considering several options including exchange offers for the repayment of 9.125% bond (US\$232 outstanding) maturing on Jan 30th according to media reports, and later this week, the company said it would repay the bond on schedule per REDD. China Hongqiao offered RMB1bn 1yr onshore short-term bills. ENN Natural Gas launched a tender offer to purchase up to US\$120mn of VEYONG 3.375% '26 note (US\$770mn outstanding), at \$94/ \$94.8 min/ max bid price. Early tender (early participation date: Jan 22, 2024) offers US\$1 premium.

## China Property

PBoC and NFRA called for financial support for construction and operation of long-term rental housing. Road King redeemed US\$100mn/ US\$55mn/ US\$127mn of ROADKG '24/ Mar '25/ Sept '25 notes. Vanke briefed creditors its 2024 offshore repayment plan: it will repay VNKRL 5.35% '24 (due in Mar) by internal cash resources, and to repay 3.45% '24 (due in May) and 4.2% '24 (due in Jun) with offshore bank loans. Longfor intends to early repay two syn loan due in 2025.

## LGFV: lower USD supply and better support expected

Based on Reuters, Chinese regulators have recently suspended issuance of 364-day USD bonds from LGFVs. And further, the China onshore media also reported some of the LGFV new issuance plans in overseas could not get registration, and some of the commercial banks will no longer be able to provide the Standby Letter of Credit (SBLC) to the LGFV bonds. The key reason is that the overseas bond issuance has a much higher funding cost than that in China onshore bond market now, thus such high-cost financing activity undermines the Chinese government efforts to reduce the interest burden of LGFVs. We think the tightening policy on LGFV issuance is credit positive for the USD bond, as it will reduce the supply thus increase the technical support on the sector. The positives should be more than enough to mitigate the negative impact from the credit rating pressure in 2024.

## India Corporates

Moody's downgraded **Vedanta Resources** Limited's (VRL) corporate family rating (CFR) to Caa3 from Caa2, lowered its rating on VRL's USD bonds to Ca from Caa3, and maintained negative outlook, citing its debt restructuring as a distressed exchange.

**Adani Green** announced that it has secured funds for its USD750mn 2024 bond at holdco level through 1) USD169mn in reserve accounts, 2) USD300 from TotalEnergies JV consideration; and 3) USD281mn from initial tranche of the promoter preferential allotment.

**JSW Steel** announced consolidated crude steel production in 3Q24 rose 12% YoY to 6.87mn tons on higher capacity utilization at its India plants.

**Tata Steel** said 3Q24 steel output volume decreased 0.3% YoY to 7.49mn tons amid weakness at its Netherlands plant.

**ReNew Power** agreed to sell its 300-megawatt (MW) project, ReNew Solar Urja Private, to India Grid Trust for an enterprise value of USD 199mn. The transaction is expected to result in cash inflow of USD82mn for ReNew.

## Return

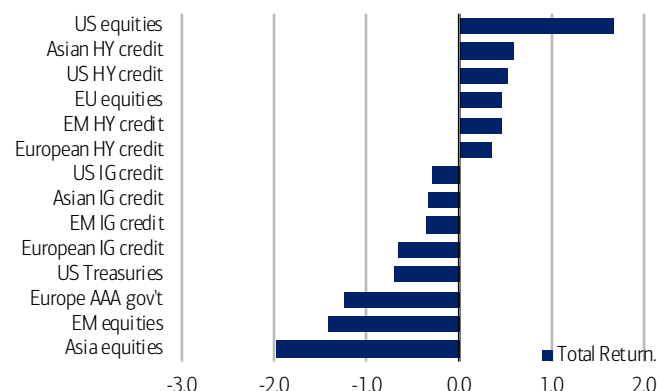
### Asia HY outperformed led by China; higher rates

In this week, Asia IG and Asia HY tightened 1bp/23bp WoW to 124bp/604bp respectively. In Asia IG space, China IG (-5bp WoW to 128bp) tightened most, followed by Hong Kong IG (-3bp WoW to 121bp), while Indo IG widened 3bp WoW to 172bp. For Asia HY, China HY (-53bp WoW to 976bp) outperformed the most (now around 47% 5yr percentile), followed by India HY (-39bp WoW to 484bp), while Macau gaming widened 16bp WoW due to profit-taking. China HY property tightened 200bp WoW to 2,721bp, led by Road King on early redemption of USD bonds, and China non-property HY (corp) tightened 51bp WoW to 890bp. This, with higher rates, generated a negative total return of -0.23% for overall Asia credit (-0.34% for IG, and +0.59% for HY). For WoW spread performance, please see Exhibit 15.

In terms of valuation, we continue to prefer HY over IG on 1) relative value, 2) more buffer for downside risk, and 3) limited default risk. We think China HY commodity names, now trading above 5year average level, see room for tightening as China growth stabilize in 2024.

### Exhibit 1: Weekly global returns

WoW, US equities outperformed most, followed by Asia HY credit and US HY credit; Asia equities underperformed

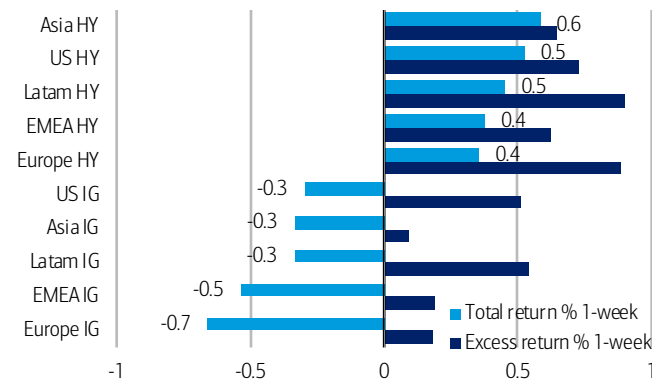


Source: ICE Data Indices, LLC, Bloomberg

BofA GLOBAL RESEARCH

### Exhibit 2: Global credit weekly returns

WoW, Asia HY outperformed, followed by US HY and Latam HY; IG credit saw negative returns, Europe IG underperformed the most

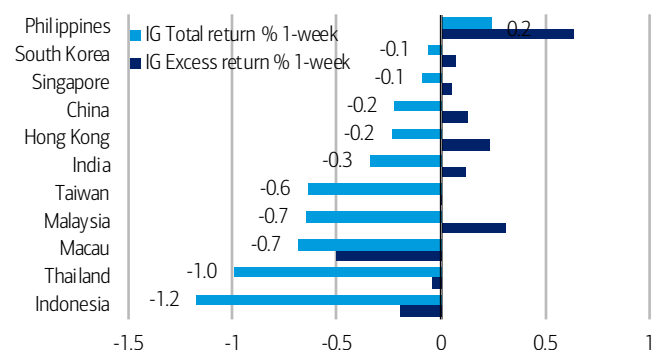


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 3: Asian high-grade weekly returns by country and region**

WoW, most regions saw negative returns; Philippines IG outperformed most; Indo IG underperformed most, followed by Thailand and Macau

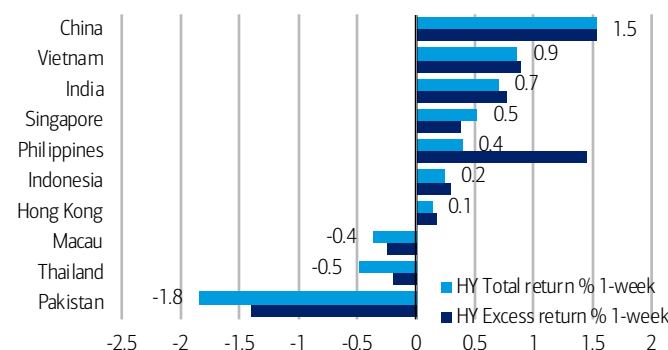


Source: ICE Data Indices, LLC. (Used ACIG index)

BofA GLOBAL RESEARCH

**Exhibit 4: Asian high-yield weekly returns by country and region**

WoW, China HY led the performance, followed by Vietnam HY and India HY; Pakistan HY underperformed the most

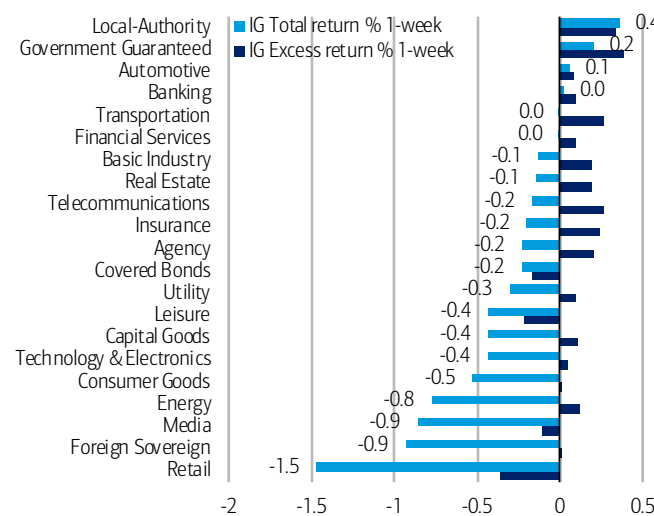


Source: ICE Data Indices, LLC. (Used ACHY index)

BofA GLOBAL RESEARCH

**Exhibit 5: Asian high-grade weekly returns by sector**

WoW, local authority led the performance, followed by govt guaranteed and auto; retail underperformed the most, followed by foreign sovereign

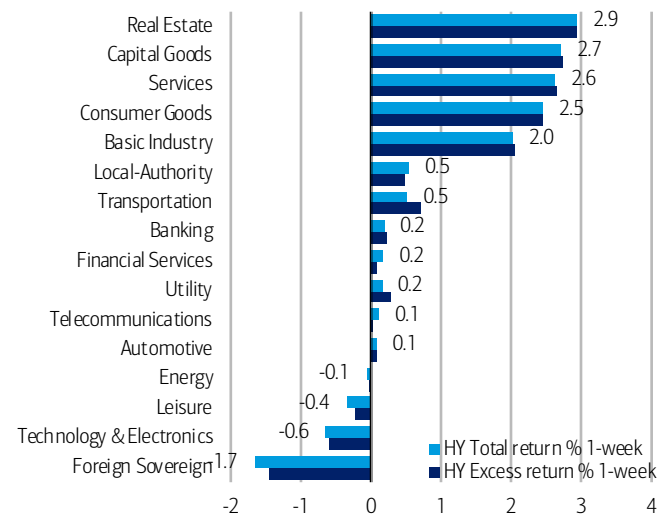


Source: ICE Data Indices, LLC. (Used ADIG index)

BofA GLOBAL RESEARCH

**Exhibit 6: Asian high-yield weekly returns by sector**

WoW, real estate led the performance, followed by capital goods and services; foreign sovereign underperformed the most



Source: ICE Data Indices, LLC. (Used ADHY index)

BofA GLOBAL RESEARCH

## Valuation

**Weekly spread changes:** In this week, Asia IG and Asia HY tightened 1bp/23bp WoW to 124bp/604bp respectively. In Asia IG space, China IG (-5bp WoW to 128bp) tightened most, followed by Hong Kong IG (-3bp WoW to 121bp), while Indo IG widened 3bp WoW to 172bp. For Asia HY, China HY (-53bp WoW to 976bp) outperformed the most (now around 47% 5yr percentile), followed by India HY (-39bp WoW to 484bp), while Macau gaming widened 16bp WoW due to profit-taking. China HY property tightened 200bp WoW to 2,721bp, led by Road King on early redemption of USD bonds, and China non-property HY (corp) tightened 51bp WoW to 890bp. Asia financials overall tightened 3bp WoW to 122bp, led by bank AT1 (-10bp WoW to 162bp). For WoW spread performance, please see Exhibit 15 and the Appendix.

**Asia credit spread pick-up against US:** In the past week, the performance of Asia HY was largely comparable to US HY, while Asia IG underperformed US peers. The pick-up of Asia IG over US IG 5- to 7-year corps widened 4bp WoW to 16bp (below the 5yr avg.

of 39bp), as US IG 5- to 7-year corps (-5bp WoW to 108bp) tightened more than Asia IG (-1bp WoW to 124bp). The pick-up of Asia HY over US HY slightly tightened 1bp WoW to 252bp (below the 5-year avg. of 457bp). A further breakdown shows that the pick-up of Asia non-China HY over US HY widened 9bp WoW to 98bp (below the 5-year avg. of 151bp), while the pick-up of China non-property HY (corp) over US HY tightened 30bp WoW to 540bp (above the 5-year avg. of 359bp).

#### Exhibit 7: Asian high-grade corporate spread history

WoW, Asia IG tightened 1bp to 124bp, below 5-year average of 161bp

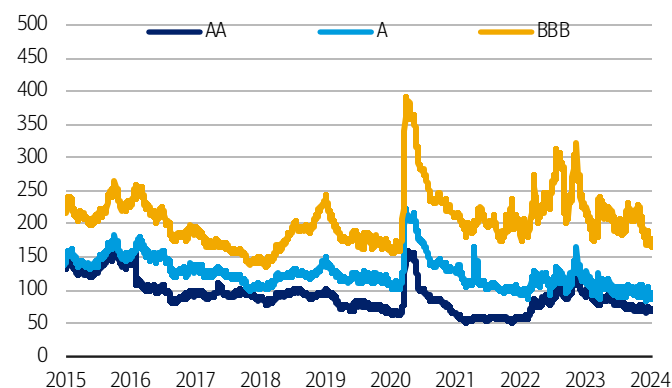


Source: ICE Data Indices, LLC. (Used ACIG index)

BofA GLOBAL RESEARCH

#### Exhibit 8: Asian high-grade spreads by rating category

WoW, Asia AA remained at 70bp, Asia A tightened 3bp to 92bp, and Asia BBB remained at 172bp



Source: ICE Data Indices, LLC. (Used ACIG index)

BofA GLOBAL RESEARCH

#### Exhibit 9: Asian high-yield corporate spread history

WoW, Asia HY tightened 22bp to 602bp, below 5-year average of 891bp

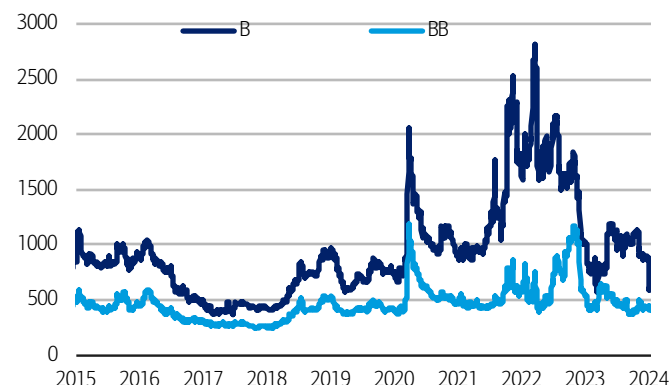


Source: ICE Data Indices, LLC. (Used ACHY index)

BofA GLOBAL RESEARCH

#### Exhibit 10: Asian high-yield spreads by rating category

WoW, Asia BB tightened 11bp to 408bp, and Asia B -9bp to 597bp

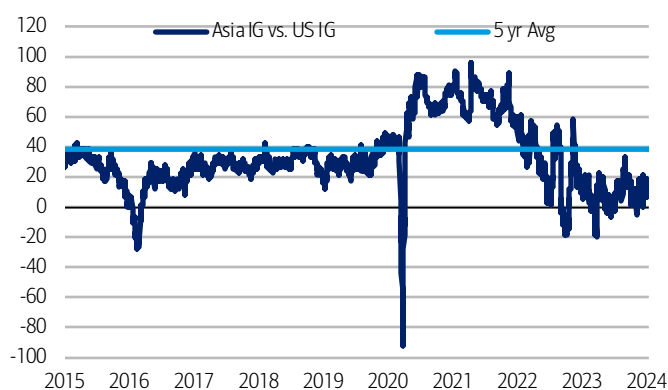


Source: ICE Data Indices, LLC. (Used ACHY index)

BofA GLOBAL RESEARCH

**Exhibit 11: Asian corporate high-grade spreads vs. US IG (5-7yr)**

WoW, the pick-up of Asia IG over US IG (5-7yr) widened 4bp to 166bp, below 5-year average of 38bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 12: Asian corporate high-yield spreads vs. US HY**

WoW, the pick-up of Asia HY over US HY tightened 1bp to 252bp, below the 5-year average of 457bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 13: Asian high-yield excl. China property spread history**

WoW, Asia HY excl. China prop (incl. financial) tightened 15bp to 436bp, below 5-year average of 581bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 14: Asian HY excl. China property spreads vs. US HY**

WoW, the pick-up of Asia HY excluding China property (including financial) over US HY widened 6bp to 86bp, below 5-year average of 148bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 15: Summary of spread changes**

WoW, Asia IG and HY spread both tightened; in Asia IG, only Indo widened 3bp to 172bp while the rest regions tightened; in Asia HY, China HY property led the tightening, but Macau gaming widened; Asia financial overall tightened 3bp to 122bp

	Current spread	WoW change	MTD change	YTD change
<b>Overall</b>				
Asia IG	124	-1	2	2
AA	70	0	1	1
A	92	-3	1	1
BBB	172	0	2	2
Asia HY	602	-22	-47	-47
BB	408	-11	-36	-36
B	597	-9	-28	-28
Asia HY excl. China property	436	-15	-39	-39
<b>By country/region</b>				
<b>IG</b>				
China	128	-5	-3	-3
Hong Kong	121	-3	0	0
Korea	87	-2	1	1
Singapore	78	-2	1	1
Indonesia	172	3	17	17

**Exhibit 15: Summary of spread changes**

WoW, Asia IG and HY spread both tightened; in Asia IG, only Indo widened 3bp to 172bp while the rest regions tightened; in Asia HY, China HY property led the tightening, but Macau gaming widened; Asia financial overall tightened 3bp to 122bp

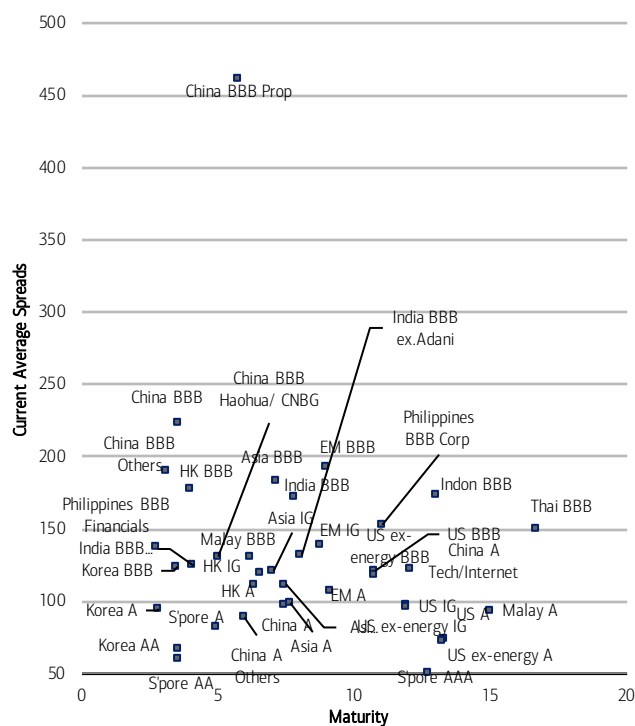
	Current spread	WoW change	MTD change	YTD change
India	158	-1	2	2
<b>HY</b>				
China	976	-53	-88	-88
Indonesia	391	-9	-42	-42
India	484	-39	-55	-55
Macau	327	16	-1	-1
<b>By sector</b>				
China HY property	2721	-200	-299	-299
China non-property HY	890	-51	-115	-115
BAT	123	2	2	2
China oil majors	72	-7	2	2
<b>Asia financial</b>				
Overall	122	-3	-1	-1
Bank senior	64	-4	-1	-1
NBFI senior	137	-2	0	0
Bank Tier 2	149	0	4	4
Bank AT1	162	-10	-17	-17

Source: ICE Data Indices, LLC, BofA Global Research

BofA GLOBAL RESEARCH

**Exhibit 16: Asia Corp spreads and duration by country and rating (IG)**

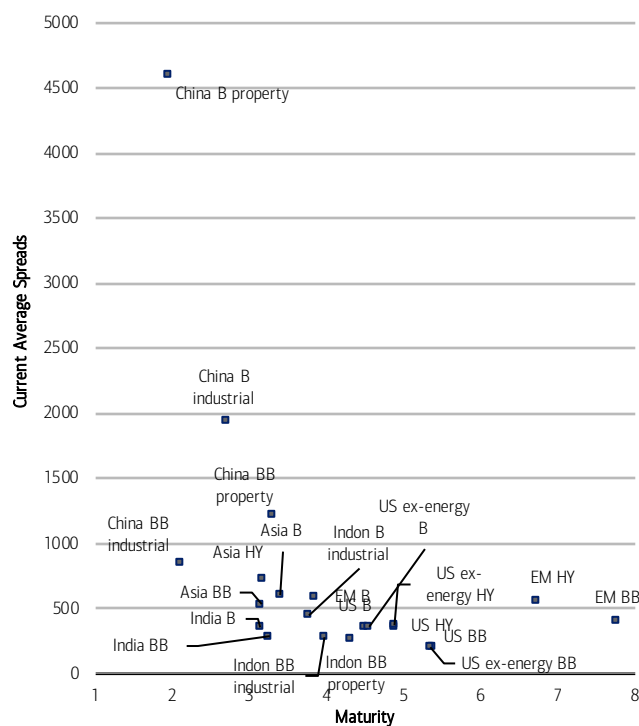
Within the same ratings, China BBB and China A tech look attractive in IG universe



BofA GLOBAL RESEARCH

**Exhibit 17: Asia Corp spreads and duration by country and rating (HY)**

Within the same ratings, China B/BB property and China B industrial look attractive in HY universe



BofA GLOBAL RESEARCH

# Supply

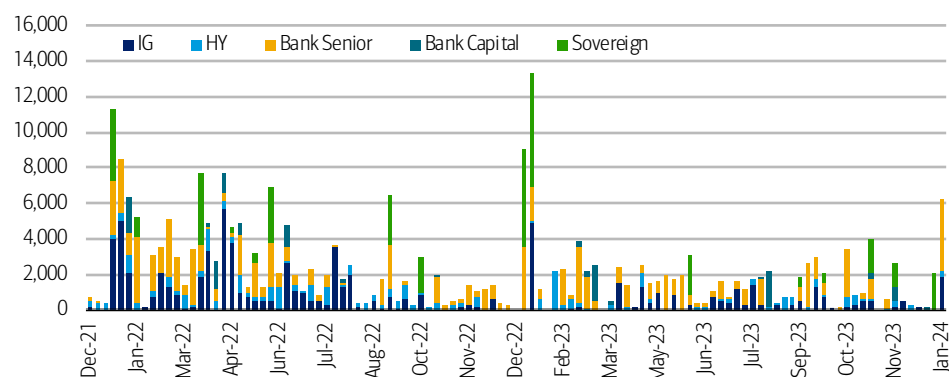
This week saw strong supply of US\$6.2bn driven by financial bonds and Korea IG corps. Bank senior bond issuance reached US\$4.0bn, 50% of which came from Export Import Bank of Korea. In IG corporate space, SK Hynix saw US\$1.5bn issuance. Korea accounted for 63% of the issuance this week. In addition, there was US\$0.8bn USD floating notes issuance. Note that we only track issuance larger than US\$100mn and maturity/call/put longer than one and a half years.

## New issues: financial sector was very active

In primary market, the financial sector was very active in the week. SBIIN issued a five-year senior bond with the credit spread at 117bp and size at USD600mn. The credit ratings are low BBB by S&P and Fitch. BOCAVI with A- ratings from S&P and Fitch issued 5-year senior as well with credit spread at 125bp. CICC announced issued USD1.2bn with fixed rate 3-year senior bond priced at 90bp vs the initial price talk(IPT) at 130bp. The credit rating is BBB+ from Fitch. Rizal Commercial Banking Corp (RCBPM) issued USD400mn, 5-year senior bond at 165bp with credit rating at Baa3. Korean quasi-sovereign issuer Export-Import Bank of Korea (EBIKOR) issued USD 2bn senior bonds. The pricing level for the 3-year/5-year/10-year was 53bp/63bp/73bp with Aa2/AA/AA- rating.

### Exhibit 18: Asian USD fixed bond weekly supply, US\$mn

US\$6.2bn supply this week (Jan 4 to 10), driven by financial and IG corps



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

### Exhibit 19: Bond performance: Newly issued Asian USD bonds in the past one month

The price of newly issued bonds (in the past one month) up 0.2ppt from the issue price (median); yield -5bp (median); spread tightened 6bp (median)

Issuers	Bond	Issue date	Tranche US\$mn	Country	Price	Issue Yield %	Spread	As of Jan 10, 2024			Change from issue date		
								Price	Yield %	Spread	Price %	Yield (bp)	Spread (bp)
Hanwha Totalenergies	SAMTOT 5.5 '29	9-Jan-24	400	Korea	99.9	5.53	153	100.0	5.50	153	0.1%	-3	0
BOC Aviation USA Corp	BOCAVI 5 '29	9-Jan-24	500	China	98.9	5.25	125	99.0	5.23	126	0.1%	-2	1
SK Hynix Inc.	HYUELE 5.5 '29	8-Jan-24	1000	Korea	99.5	5.61	167	99.8	5.54	156	0.3%	-7	-11
SK Hynix Inc.	HYUELE 5.5 '27	8-Jan-24	500	Korea	99.9	5.54	145	100.0	5.50	137	0.1%	-4	-8
Zhejiang Xinchang Investment	ZJXCID 6 '27	8-Jan-24	300	China	100.0	6.00	186	100.2	5.93	180	0.2%	-7	-6
Export Import Bank of Korea	EIBKOR 4.625 '27	4-Jan-24	800	Korea	99.8	4.69	53	100.1	4.59	47	0.3%	-9	-6
Export Import Bank of Korea	EIBKOR 4.5 '29	4-Jan-24	800	Korea	99.5	4.61	63	100.0	4.50	53	0.5%	-11	-11
Export Import Bank of Korea	EIBKOR 4.625 '34	4-Jan-24	400	Korea	99.1	4.73	73	99.4	4.71	68	0.2%	-3	-5
Cixi State Owned Assets	CIXISO 5.8 '26	18-Dec-23	200	China	100.0	5.80	166	100.1	5.75	139	0.1%	-5	-27
<b>Average</b>											<b>0.2%</b>	<b>-5</b>	<b>-6</b>

Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

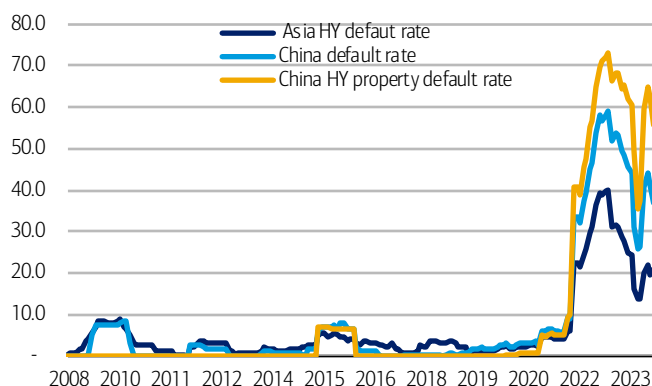


# Defaults

We did not see any default case this week, the LTM default rate by amount/count remained unchanged at 20.8%/7.8%. YTD24, Vedanta and Lippo Malls were added in our default list on completion of LME and the tender offer early in the year.

## Exhibit 20: LTM default rate by amount: Asia vs. China vs. China HY property

As of 12 January, Asia HY: 20.8%, China HY: 36.9%; China HY property: 56.0%

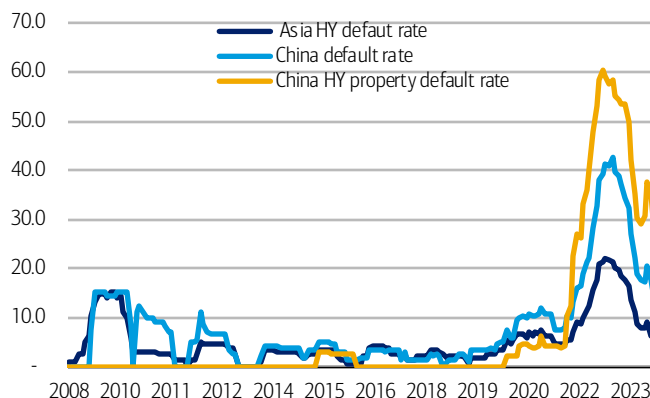


Source: BofA Global Research

BofA GLOBAL RESEARCH

## Exhibit 21: LTM default rate by count: Asia vs. China vs. China HY property

As of 12 January, Asia HY: 7.5%; China HY: 14.6%; China HY property: 28.6%



Source: BofA Global Research

BofA GLOBAL RESEARCH

## Exhibit 22: Asian default cases (index and non-index) since 2022

Since 2022, we have seen US\$104bn default in Asia corporate space, among which US\$80bn is index-eligible; dominated by China property

Month	Ticker	Issuer Name	Country	Type Of Default	# of Bonds	Amt (US\$m)	Include in the index or not
Jan-22	SHXREG	Xiang Sheng Overseas Ltd	China	Distressed Exchange	1	275	N
Jan-22	GZRFPR	Guangzhou R&F	China	Distressed Exchange	1	725	Y
Jan-22	RISSUN	RiseSun Real Estate	China	Distressed Exchange	1	500	Y
Jan-22	DAFAPG	Dafa property	China	Distressed Exchange	1	185	N
Jan-22	YUZHOU	Yuzhou Group	China	Distressed Exchange	2	582	Y
Feb-22	YIDCHL	Yida China Holdings	China	Distressed exchange	1	191	N
Feb-22	SUNSHI	Yango Group	China	Missed interest payment and cross default	5	1,497	Y
Feb-22	GUOPRO	Glory Land	China	Distressed Exchange	1	324	Y
Mar-22	DAFAPG	Dafa property	China	Missed interest payment and cross default	1	360	Y
Mar-22	YUZHOU	Yuzhou Group	China	Missed interest payment and cross default	10	4,854	Y
Mar-22	GUOPRO	Glory Land	China	Missed interest payment and principal	1	5	Y
Mar-22	JINGRU	Jingrui Holdings	China	Distressed exchange	1	190	N
Mar-22	ZHPRHK	Zhenro property	China	Distressed Exchange	1	300	Y
Mar-22	YANGOG	Fujian Yango	China	Missed interest payment (cross defaulted earlier)	2	406	N
Mar-22	SHNSUN	Shinsun Holdings	China	Missed interest payment and cross default	3	486	N
Mar-22	REDPRO	Redco Properties	China	Distressed Exchange	1	321	Y
Apr-22	ZHPRHK	Zhenro property	China	Missed interest payment and cross default	6	1,963	Y
Apr-22	GWTH	Golden Wheel	China	Completed debt restructuring	1	178	Y
Apr-22	EHOUSE	E-House (China) Enterprise	China	Missed interest payment and cross default	2	600	Y
May-22	BJHKWY	Beijing Hongkun Weiye Real Estate	China	Missed interest payment	1	193	N
May-22	SUNAC	Sunac China	China	Missed interest payment and cross default	12	7,762	Y
May-22	ZHLGHD	Zhongliang Holdings	China	Distressed Exchange	1	450	Y
May-22	DTGRHD	Datang Group	China	Distressed Exchange	1	300	N
Jun-22	JIAZHO	Zhongnan Construction	China	Distressed Exchange	1	73	Y
Jun-22	LEAHOL	Leading Holdings Group Ltd	China	Distressed Exchange	1	119	N
Jun-22	GRNLGR	Greenland	China	Distressed Exchange	1	500	Y
Jun-22	JINGRU	Jingrui Holdings	China	Missed interest payment and cross default	2	610	Y
Jun-22	SKYFAM	Skyfame Realty	China	cross default	2	566	Y
Jul-22	SHIMAO	Shimao Group	China	Missed interest and principal payment and cross default	8	5,720	Y
Jul-22	RONXIN	Roshine China	China	Missed interest payment and cross default	5	2,072	Y
Jul-22	PWRLNG	Powerlong	China	Distressed Exchange	1	300	Y



**Exhibit 22: Asian default cases (index and non-index) since 2022**

Since 2022, we have seen US\$104bn default in Asia corporate space, among which US\$80bn is index-eligible; dominated by China property

Month	Ticker	Issuer Name	Country	Type Of Default	# of Bonds	Amt (US\$m)	Include in the index or not
Jul-22	GZRFPR	Guangzhou R&F	China	Distressed Exchange	9	4,360	Y
Jul-22	SUNKWP	Sunkwan Properties Group	China	Distressed Exchange	1	210	N
Jul-22	XIN	Xinyuan	China	Missed interest and principal payment and cross default	2	531	Y
Jul-22	SHXREG	Xiang Sheng Overseas Ltd	China	Missed interest payment	1	134	N
Jul-22	HUIJHK	Huijing Holdings Co Ltd	China	Distressed Exchange	1	107	N
Jul-22	HKJFPC	Junfa Property	China	Missed interest payment	1	237	N
Jul-22	CSCHCN	China South City	China	Distressed Exchange	3	1,341	Y
Aug-22	LOGPH	Logan Group	China	Missed interest payment and cross default	10	3,209	Y
Aug-22	REDSUN	Redsun property	China	Missed interest payment and cross default	3	1,055	Y
Aug-22	JIAUYA	Jiayuan International Group Ltd	China	Missed interest payment and cross default	3	776	Y
Aug-22	HONGSL	Hong Seng Ltd	China	Missed interest payment and principal	1	275	Y
Aug-22	FRETAI	Future Retail	India	Missed interest payment	1	500	Y
Sep-22	YCINTL	Yincheng International Holding	China	Distressed Exchange	1	115	N
Sep-22	KWGPRO	KWG Group Holding	China	Distressed Exchange	3	1,600	Y
Oct-22	GZFYRE	Guangzhou Fineland Real Estate	China	Missed interest payment	1	340	Y
Oct-22	CIFIHG	CIFI Holdings Group	China	Cross default	8	3,680	Y
Oct-22	LSEAGN	Landsea Green Management Ltd	China	Distressed Exchange	1	119	N
Oct-22	HLBCNH	Helenbergh China Holding	China	Distressed Exchange	1	350	Y
Oct-22	SINOCL	Sino-Ocean Capital	China	Distressed Exchange	1	282	N
Oct-22	GNGLNG	Ganglong China Property	China	Distressed Exchange	1	158	N
Nov-22	SUNKWP	Sunkwan Properties Group	China	Missed payment and cross default	2	362	N
Nov-22	RISSUN	RiseSun Real Estate	China	Distressed Exchange	2	741	N
Nov-22	JIAZHO	Jiangsu Zhongnan Construction	China	Missed interest payment	1	250	Y
Nov-22	GWTH	Golden Wheel	China	Missed interest payment	1	470	N
Nov-22	ZHLGHD	Zhongliang Holdings	China	Distressed Exchange	3	898	N
Dec-22	GRNLGR	Greenland	China	Distressed Exchange	8	2,702	Y
Dec-22	DEXICN	Dexin China Holdings	China	Missed interest payment and principal	1	348	Y
Dec-22	JINKE	Jinke Properties	China	Missed interest payment	1	325	Y
Dec-22	REDPRO	Redco Properties	China	Suspended payment	1	252	Y
Dec-22	JYGMHD	JY Grandmark	China	Distressed Exchange	1	152	N
Dec-22	YESTAR	Yestar Healthcare	China	Missed interest payment and principal	1	198	N
Dec-22	KJAIJ	Kawasan Jababeka	Indonesia	Distressed Exchange	1	300	Y
Jan-23	TPHL	Times China	China	Suspended payment	6	2,650	Y
Jan-23	HUIJHK	Huijing Holdings Co Ltd	China	Missed interest payment	1	108	N
Feb-23	SRAILT	Sri Lankan Airlines	Sri Lanka	Missed interest payment	1	175	N
Mar-23	YCINTL	Yincheng International	China	Missed interest payment and principal; cross default	2	211	N
Apr-23	CENCHI	Central China	China	Distressed Exchange	2	630	Y
Apr-23	HYDOO	Guangdong-Hongkong Greater Bay Area Holding	China	Distressed Exchange	2	379	N
May-23	KWGPRO	KWG Group Holding	China	Missed interest payment and principal; cross default	7	2,525	Y
May-23	DTGRHD	Datang Group	China	Missed interest payment and principal	1	284	N
Jun-23	CENCHI	Central China	China	Suspend payment	3	849	Y
Jun-23	LEAHOL	Leading Holdings Group Ltd	China	Missed interest payment and principal	1	119	N
Jul-23	PWRLNG	Powerlong	China	Distressed Exchange	1	420	Y
Aug-23	SINOCE	Sino Ocean Group	China	Distressed Exchange (coupon extension)	3	1,798	Y
Sep-23	SINOCE	Sino Ocean Group	China	Suspend payment	3	1,320	Y
Oct-23	CHINSC	China SCE Group	China	Cross default triggered by missed payment of a syn loan	4	1,800	Y
Oct-23	COGARD	Country Garden	China	Cross default triggered by missed payment of HKD 470mn debt	15	9,913	Y
Nov-23	DALWAN	Wanda properties	China	Distressed Exchange	1	600	Y
Nov-23	PWRLNG	Powerlong	China	Missed interest payment and cross default	2	1,035	Y
Dec-23	MOLAND	Modern Land China	China	Distressed Exchange	5	1606	N
Jan-24	VEDLN	VEDanta Resources	India	Distressed Exchange	4	3751	Y
Jan-24	LMRTSP	LMIRT Capital	Indonesia	Distressed Exchange	1	188	Y

Source: BofA Global Research

Note: For companies included in the index, the number only accounts for the No. of bond, and outstanding amounts which are index-eligible.

BofA GLOBAL RESEARCH



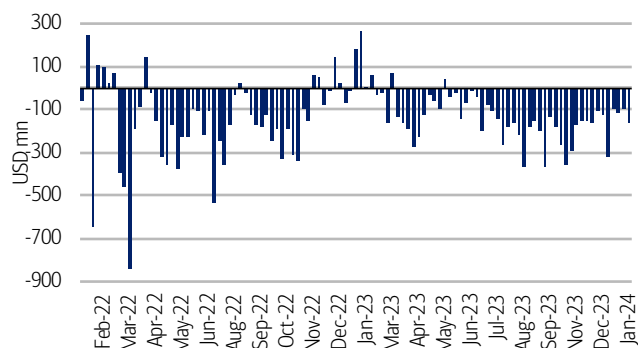
# Fund flows

Based on EPFR, from 4 Jan to 9 Jan, Asia excluding Japan (AxJ) hard currency funds saw outflow of US\$163mn (-0.66% of assets under management-AUM), rising from US\$99mn in the previous week. For all EM market, the hard currency funds saw outflow of US\$371mn (vs. US\$542mn in the previous week). Looking at US funds, IG funds saw inflow surging to US\$7.4bn, from US\$3.7bn in the previous week. On the other hand, US HY funds saw inflows of US\$0.85bn vs. outflow of US\$0.90bn in the previous week.

In YTD24, US IG corporate funds saw the biggest inflows of +0.6% (as a percentage of AUM at the beginning of the year) and US HY funds saw +0.1%. However, AxJ hard currency saw the biggest outflows of -0.8% and EM hard funds saw outflows of -0.5%.

## Exhibit 23: Asia excl. Japan (AxJ) hard currency fund flows, USD mn

AxJ hard currency funds outflows at US\$163mn this week (from 4 Jan to 9 Jan), rising from US\$99mn in the previous week



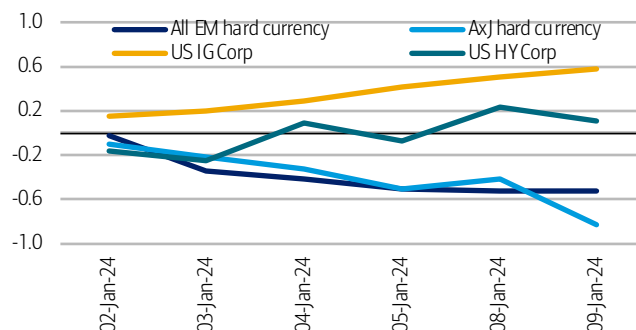
Source: EPFR

Note: we made adjustment to the fund flows on Mar 10 for EM hard and AxJ hard funds, removing the impact of the structural change of one fund.

BofA GLOBAL RESEARCH

## Exhibit 24: 2024 YTD cumulative fund flows as % of AUM

In YTD 2024, US IG corporate fund saw inflows of 0.6% of AUM and US HY corporate saw 0.1%; however, AxJ hard currency saw outflows of 0.8% and EM hard currency saw outflows of 0.5%



Source: EPFR

Note: we made adjustment to the fund flows on Mar 10 for EM hard and AxJ hard funds, removing the impact of the structural change of one fund.

BofA GLOBAL RESEARCH

# Top 10 and bottom 10 performers

## Exhibit 27: Top 10 & bottom 10 performer over the past week

Top 10 and bottom 10 performers in Asia market (ADOL index)

Top 10 performer	Total Return (weekly)	Bottom 10 performer	Total Return (weekly)
ROADKG 6% 2025	17.90%	PKSTAN 8.875% 2051	-4.70%
ROADKG 5.125% 2026	16.83%	INDON 3.2% 2061	-4.24%
ROADKG 5.9% 2025	14.18%	INDON 3.35% 2071	-4.23%
ROADKG 5.2% 2026	13.49%	BABA 3.25% 2061	-4.17%
DALWAN 11% 2026	8.55%	PHILIP 3.2% 2046	-3.99%
YLLGSP 5.125% 2026	8.43%	BABA 3.15% 2051	-3.94%
VEDLN 9.25% 2026	7.90%	ICBPIJ 4.745% 2051	-3.66%
AGILE 6.05% 2025	6.68%	INDON 3.05% 2051	-3.56%
VEDLN 8.95% 2025	6.61%	PHILIP 2.65% 2045	-3.56%
DALWAN 11% 2025	6.57%	TOPTB 5.375% 2048	-3.54%

Source: ICE Data Indices, LLC. (Data as at 10 January, 2024)

BofA GLOBAL RESEARCH

## Exhibit 25: Top 10 corporate and bank performers over the last week and YTD on total return basis (by category)

Top 10 corporate and bank performers in this week & YTD

Issuer	Total Return (weekly)	Issuer	Total Return (YTD2024)
<b>Investment Grade Corporates</b>			
SYNGEN 5% 2026	1.67%	TELPN 3.45% 2050	4.82%
HBSLFT 3.1% 2025	1.64%	ADSEZ 5% 2041	2.48%
TELPN 3.45% 2050	1.48%	ADSEZ 3.828% 2032	2.19%
ADSEZ 5% 2041	1.35%	UPLIN 4.625% 2030	2.07%
CKINF 4% 2026	1.33%	HBSLFT 3.1% 2025	1.67%
CKINF 4.2% 2026	1.25%	SYNGEN 5% 2026	1.43%
UPLIN 4.625% 2030	1.20%	ADSEZ 3.1% 2031	1.28%
CHPWCN 3.08% 2026	0.86%	UPLIN 4.5% 2028	1.26%
ADSEZ 3.828% 2032	0.69%	GRNCH 2.3% 2025	1.13%
HONHAI 2.5% 2030	0.62%	GENMMK 3.882% 2031	1.07%
<b>High Yield Corporates</b>			
ROADKG 6% 2025	17.90%	RONXIN 7.1% 2025	95.71%
ROADKG 5.125% 2026	16.83%	ROADKG 5.9% 2025	22.64%
ROADKG 5.9% 2025	14.18%	AGILE 6.05% 2025	21.39%
ROADKG 5.2% 2026	13.49%	ROADKG 6% 2025	20.62%
DALWAN 11% 2026	8.55%	ROADKG 5.125% 2026	18.41%
YLLGSP 5.125% 2026	8.43%	ROADKG 5.2% 2026	16.81%
VEDLN 9.25% 2026	7.90%	YLLGSP 5.125% 2026	13.65%
AGILE 6.05% 2025	6.68%	GLPSP 4.6% 2027	13.30%
VEDLN 8.95% 2025	6.61%	DALWAN 11% 2026	12.06%
DALWAN 11% 2025	6.57%	GLPSP 4.5% 2026	12.05%
<b>Banks / Financial Institution</b>			
SUNSHG 4.5% 2026	3.03%	SUNSHG 4.5% 2026	3.58%
SMIND 2.125% 2026	1.94%	NANYAN 7.35% 2028	1.72%
WHGBIO 2.9% 2025	0.97%	RCBPM 6.5% 2025	1.49%
GRWALL 3.875% 2027	0.68%	BNKEA 5.825% 2025	1.32%
NANYAN 7.35% 2028	0.68%	AIA 2.7% 2026	0.93%
ZHONAN 3.125% 2025	0.68%	ZHONAN 3.125% 2025	0.84%
GZINFU 2.85% 2026	0.63%	ZHONAN 3.5% 2026	0.82%
		WHGBIO 2.9% 2025	0.72%
BNKEA 5.825% 2025	0.55%	KEBHNB 3.5% 2026	0.67%
CSSSHI 3% 2030	0.54%	GZINFU 2.85% 2026	0.64%

Source: ICE Data Indices, LLC. (Data as at 10 January, 2024)

BofA GLOBAL RESEARCH

## Exhibit 26: Bottom 10 corporate and bank performers over the last week and YTD on total return basis (by category)

Bottom 10 corporate and bank performers this week & YTD

Issuer	Total Return (weekly)	Issuer	Total Return (YTD2024)
<b>Investment Grade Corporates</b>			
BABA 3.25% 2061	-4.17%	PLNIJ 4.375% 2050	-5.80%
BABA 3.15% 2051	-3.94%	PERTIJ 4.175% 2050	-5.59%
ICBPIJ 4.745% 2051	-3.66%	PLNIJ 4.875% 2049	-5.51%
TOPTB 5.375% 2048	-3.54%	PERTIJ 4.7% 2049	-4.89%
TENCNT 3.24% 2050	-3.49%	IDASAL 5.8% 2050	-4.84%
BABA 4.2% 2047	-3.29%	ICBPIJ 4.805% 2052	-4.76%
PERTIJ 5.625% 2043	-3.27%	PLNIJ 5.25% 2047	-4.73%
PERTIJ 4.15% 2060	-3.25%	PERTIJ 6% 2042	-4.72%
BABA 4.4% 2057	-3.24%	ICBPIJ 4.745% 2051	-4.65%
TENCNT 3.29% 2060	-3.23%	PERTIJ 6.5% 2048	-4.42%
<b>High Yield Corporates</b>			
PAKWNP 7.5% 2031	-1.84%	PAKWNP 7.5% 2031	-1.52%
LNGFOR 3.95% 2029	-1.22%	FTLNHD 4.625% 2025	-1.23%
MPLE 5.625% 2027	-1.16%	CWAHK 4.85% 2026	-1.00%
CWAHK 4.85% 2026	-1.02%	MGMCHI 4.75% 2027	-0.92%
WYNMAC 5.625% 2028	-1.02%	PUMAFN 5% 2026	-0.76%
STCITY 5% 2029	-0.71%	HEXWIN 5.375% 2026	-0.74%
HEXWIN 5.375% 2026	-0.65%	STAREN 6.75% 2033	-0.38%
WYNMAC 5.5% 2026	-0.61%	MGMCHI 5.25% 2025	-0.33%
MPLE 5.375% 2029	-0.50%	WYNMAC 5.5% 2027	-0.29%
SJMHOL 4.85% 2028	-0.41%	WYNMAC 5.5% 2026	-0.26%
<b>Banks / Financial Institution</b>			
TEMASE 2.75% 2061	-3.45%	TEMASE 2.25% 2051	-3.32%
HKAA 3.25% 2052	-2.48%	TEMASE 2.75% 2061	-3.10%
HKAA 2.625% 2051	-2.46%	TEMASE 2.5% 2070	-3.07%
		AIA 4.5% 2046	-3.06%
TEMASE 2.25% 2051	-2.21%	HKAA 3.25% 2052	-3.05%
AIA 4.875% 2044	-2.14%	INRCIN 3.95% 2050	-2.94%
TEMASE 2.375% 2041	-2.10%		
AIA 4.5% 2046	-2.09%	AIA 4.875% 2044	-2.61%
TEMASE 3.375% 2042	-1.82%	HKAA 2.625% 2051	-2.52%
BBLTB 3.466% 2031	-1.72%	TEMASE 3.375% 2042	-2.31%

Source: ICE Data Indices, LLC. (Data as at 10 January, 2024)

BofA GLOBAL RESEARCH

# Repayment schedule for Asian HY issuers

## Exhibit 28: USD Bond repayment and coupon schedule from Asian HY issuers in the next one month

Total principal (including put) repayment and coupon payment from Asian HY issuers in the next one month is US\$1.1bn

Sector	Bond	Offshore Bond Ticker	Company Name	Currency	Payment date	Coupon or Principal	Payment (USD mn)
China property	ROADKG 5.2 '26	ROADKG	Road King Infrastructure	USD	12-Jan-24	Coupon	13.0
China property	FUTLAN 4.45 '25	FUTLAN	Seazen Group Ltd.	USD	13-Jan-24	Coupon	7.0
China property	GRNCH 5.65 '25	GRNCH	Greentown China Holdings	USD	13-Jan-24	Coupon	8.0
India HY	RPVIN 4.5 '28	RPVIN	10 RENEW POWER SUBSIDIAR	USD	14-Jan-24	Coupon	13.5
China property	FTLNHD 4.625 '25	FTLNHD	New Metro Global Ltd.	USD	15-Jan-24	Coupon	7.0
China property	PWRLNG 7.125 '26	PWRLNG	Powerlong Real Estate	USD	15-Jan-24	Coupon	9.0
China property	PWRLNG 4 '24	PWRLNG	Powerlong Real Estate	USD	15-Jan-24	Coupon	4.0
Macau gaming	STCITY 6 '25	STCITY	STUDIO CITY FINANCE LTD	USD	15-Jan-24	Coupon	12.3
Macau gaming	STCITY 6.5 '28	STCITY	STUDIO CITY FINANCE LTD	USD	15-Jan-24	Coupon	16.6
Macau gaming	STCITY 5 '29	STCITY	STUDIO CITY FINANCE LTD	USD	15-Jan-24	Coupon	28.1
Macau gaming	WYNMAC 5.5 '26	WYNMAC	WYNN MACAU LTD	USD	15-Jan-24	Coupon	28.1
Macau gaming	MPEL 5.625 '27	MPEL	MELCO RESORTS FINANCE	USD	17-Jan-24	Coupon	17.3
India HY	SHFLIN 4.15 '25	SHFLIN	SHRIRAM FINANCE LTD	USD	18-Jan-24	Coupon	8.4
China property	DALWAN 11 '25	DALWAN	Dalian Wanda Commercial Management Group	USD	20-Jan-24	Coupon	22.0
Macau gaming	MPEL 5.75 '28	MPEL	MELCO RESORTS FINANCE	USD	21-Jan-24	Coupon	25.0
India HY	VEDLN 13.875 '24	VEDLN	VEDANTA RESOURCES	USD	21-Jan-24	Coupon	70.9
China property	GRNLGR 8.25 '31	GRNLGR	Greenland	USD	22-Jan-24	Coupon	10.0
Indo HY	LPKRIJ 8.125 '25	LPKRIJ	THETA CAPITAL PTE LTD	USD	22-Jan-24	Coupon	9.8
Indo HY	BSDEIJ 5.95 '25	BSDEIJ	GLOBAL PRIME CAPITAL	USD	23-Jan-24	Coupon	2.7
India HY	TATAIN 5.45 '28	TATAIN	ABJA INVESTMENT CO	USD	24-Jan-24	Coupon	27.9
China property	GUOPRO 14.25 '24	GUOPRO	GLORY LAND	USD	25-Jan-24	Maturity	9.0
China property	GUOPRO 14.25 '24	GUOPRO	GLORY LAND	USD	25-Jan-24	Coupon	1.0
China property	ROADKG 5.125 '26	ROADKG	Road King Infrastructure	USD	26-Jan-24	Coupon	13.0
China HY Industrial	ANTOIL 8.75 '25	ANTOIL	ANTON OILFIELD SERV GRP/	USD	26-Jan-24	Coupon	5.2
China property	GRNCH 2.3 '25	GRNCH	Greentown China Holdings	USD	27-Jan-24	Coupon	5.0
China property	GRNLHK 10.21 Perp	GRNLHK	Greenland HK	USD	27-Jan-24	Coupon	6.0
China HY Industrial	FOSUNI 5.05 '27	FOSUNI	FORTUNE STAR BVI LTD	USD	27-Jan-24	Coupon	12.9
Macau gaming	SJMHL 4.5 '26	SJMHL	CHAMPION PATH HOLDINGS	USD	27-Jan-24	Coupon	11.5
Macau gaming	SJMHL 4.85 '28	SJMHL	CHAMPION PATH HOLDINGS	USD	27-Jan-24	Coupon	12.4
China property	DALWAN 7.25 '24	DALWAN	Dalian Wanda Commercial Management Group	USD	29-Jan-24	Coupon	22.0
China property	EXCECP 4.3 '25	EXCECP	EXCELLENCE COM MGMT	USD	29-Jan-24	Coupon	2.0
India HY	GRNKEN 5.55 '25	GRNKEN	GREENKO SOLAR MAURITIUS	USD	29-Jan-24	Coupon	14.2
India HY	GRNKEN 5.95 '26	GRNKEN	GREENKO SOLAR MAURITIUS	USD	29-Jan-24	Coupon	16.3
India HY	RPVIN 5.875 '27	RPVIN	RENEW POWER PVT LTD	USD	29-Jan-24	Coupon	8.1
China HY Industrial	CHIGRA 9.125 '24	CHIGRA	GRAND AUTOMOTIVE SERVICE	USD	30-Jan-24	Maturity	231.7
China HY Industrial	CHIGRA 9.125 '24	CHIGRA	GRAND AUTOMOTIVE SERVICE	USD	30-Jan-24	Coupon	10.8
Indo HY	MEDCIJ 6.75 '25	MEDCIJ	MEDCO PLATINUM ROAD PTE	USD	30-Jan-24	Coupon	1.2
Indo HY	MEDCIJ 6.375 '27	MEDCIJ	MEDCO BELL PTE LTD	USD	30-Jan-24	Coupon	17.2
China HY Industrial	CHIGRA 9.125 '24	CHIGRA	GRAND AUTOMOTIVE SERVICE	USD	30-Jan-24	Coupon	10.8
China property	AGILE 7.875 Perp	AGILE	Agile Property Holding	USD	31-Jan-24	Coupon	20.0
India HY	TATAIN 5.95 '24	TATAIN	ABJA INVESTMENT CO	USD	31-Jan-24	Coupon	30.4
Macau gaming	MGMCHI 4.75 '27	MGMCHI	MGM CHINA HOLDINGS LTD	USD	01-Feb-24	Coupon	18.2
India HY	GMRLIN 4.75 '26	GMRLIN	GMR HYDERABAD INTERNATIO	USD	02-Feb-24	Coupon	7.0
Indo HY	ABMMIJ 9.5 '26	ABMMIJ	ABM INVESTAMA TBK PT	USD	05-Feb-24	Coupon	7.8
Macau gaming	SANLTD 5.375 '25	SANLTD	SANDS CHINA LTD	USD	08-Feb-24	Coupon	49.1
Macau gaming	SANLTD 5.375 '25	SANLTD	SANDS CHINA LTD	USD	08-Feb-24	Coupon	0.4
Macau gaming	SANLTD 5.65 '28	SANLTD	SANDS CHINA LTD	USD	08-Feb-24	Coupon	54.7
Macau gaming	SANLTD 5.65 '28	SANLTD	SANDS CHINA LTD	USD	08-Feb-24	Coupon	0.2
Macau gaming	SANLTD 3.5 '31	SANLTD	SANDS CHINA LTD	USD	08-Feb-24	Coupon	10.7
Macau gaming	SANLTD 3.5 '31	SANLTD	SANDS CHINA LTD	USD	08-Feb-24	Coupon	0.0
India HY	VEDLN 6.125 '24	VEDLN	VEDANTA UK INVESTMENTS	USD	09-Feb-24	Coupon	29.8
India HY	CONTLE 4.5 '27	CONTLE	CONTINUUM ENERGY LEVANTE	USD	09-Feb-24	Coupon	11.5
Indo HY	LMRTSP 7.5 '26	LMRTSP	LMIRT CAPITAL PTE LTD	USD	09-Feb-24	Coupon	5.5
India HY	ACMSOL 4.7 '26	ACMSOL	INDIA CLEANTECH ENERGY	USD	10-Feb-24	Coupon	7.1
Indo HY	BUMAIJ 7.75 '26	BUMAIJ	BUKIT MAKMUR MANDIRI UTA	USD	10-Feb-24	Coupon	15.0

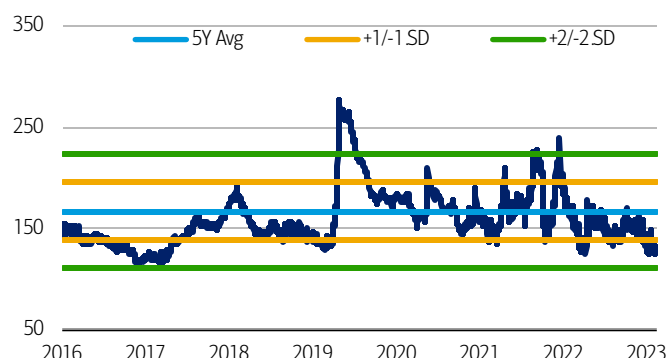
Source: Bloomberg, BofA Global Research; Note: excludng defaulted Chinese developers

# Appendix

## By country

### Exhibit 29: China IG spread

WoW, China IG spread tightened 5bp to 128bp, below the 5-year average of 167bp



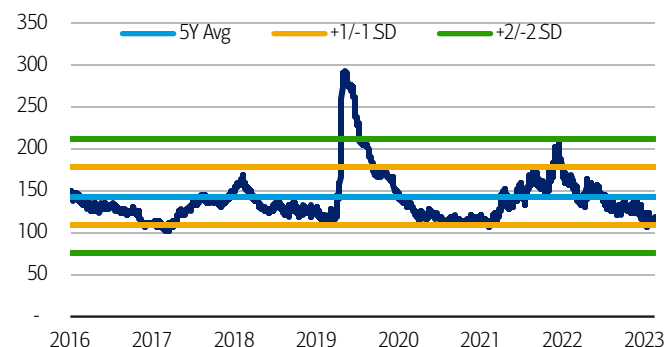
Source: ICE Data Indices, LLC

Note: the spread data is based on ECNI index

BofA GLOBAL RESEARCH

### Exhibit 31: Asia non-China IG spread

WoW, Asia non-China IG tightened 1bp to 114bp, below 5-year average of 144bp



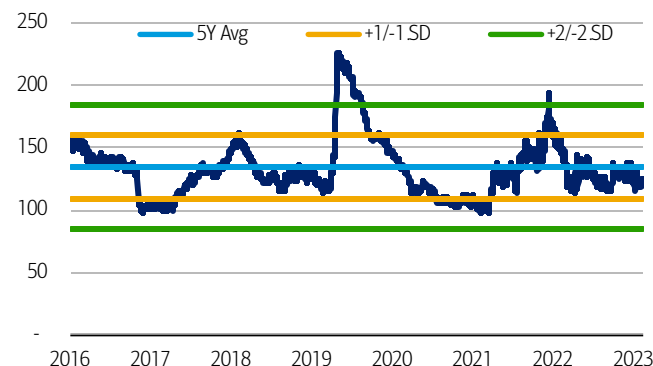
Source: ICE Data Indices, LLC

Note: the spread data is based on EMIA index

BofA GLOBAL RESEARCH

### Exhibit 33: Hong Kong IG spread

WoW, Hong Kong IG spread tightened 3bp to 121bp, below 5-year average of 134bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

### Exhibit 30: Pick-up of China IG over US IG

WoW, China IG over US IG pick-up remained at 24bp, below 5-year average of 38bp



Source: ICE Data Indices, LLC

Note: the spread data is based on ECNI index

BofA GLOBAL RESEARCH

### Exhibit 32: Pick-up of China IG over Asia non-China IG

China IG over Asia non-China IG tightened 4bp to 14bp, below 5-year average pick-up of 23bp

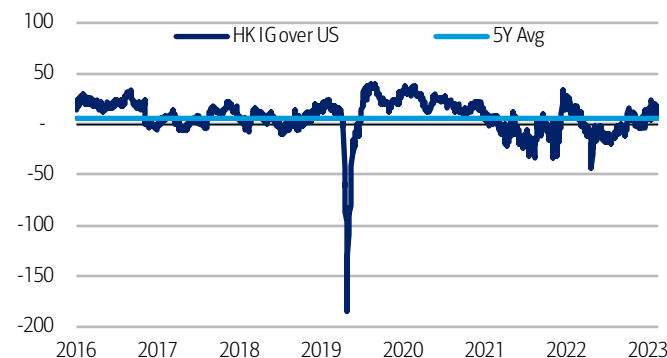


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

### Exhibit 34: Pick-up of Hong Kong IG over US IG

WoW, pick-up of Hong Kong IG over US IG widened 2bp to 17bp, above 5-year average pick-up of +6bp

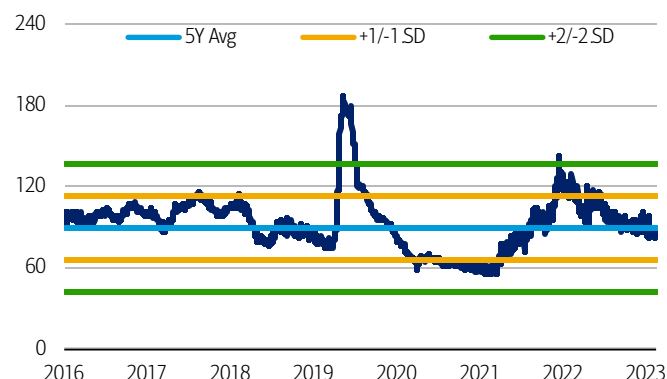


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 35: Korea IG spread**

WoW, Korea IG spread tightened 2bp to 87bp, below the 5-year average of 90bp

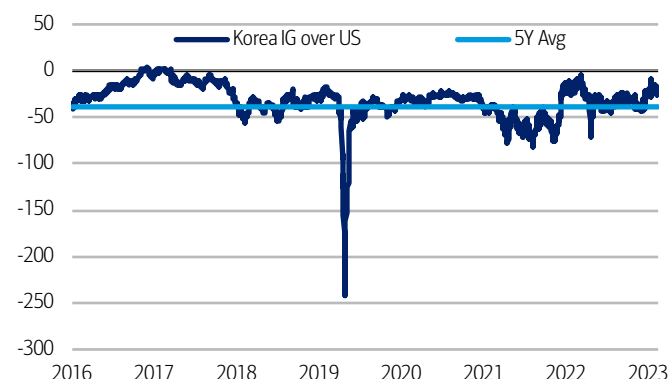


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 36: Pick-up of Korea IG over US IG**

Korea IG is now trading 17bp tighter than US IG, vs. 5-year average difference of -39bp

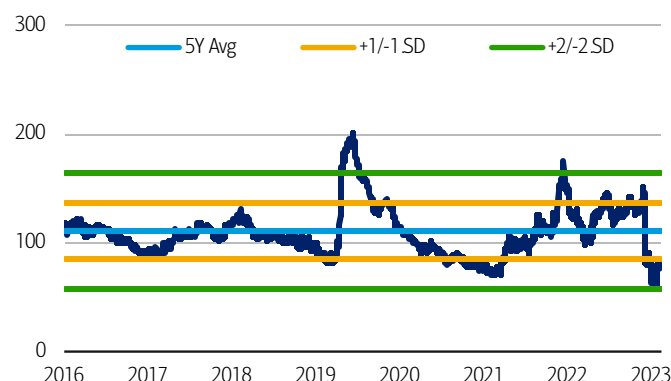


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 37: Singapore IG spread**

WoW, Singapore IG spread tightened 2bp to 78bp, below the 5-year average of 111bp

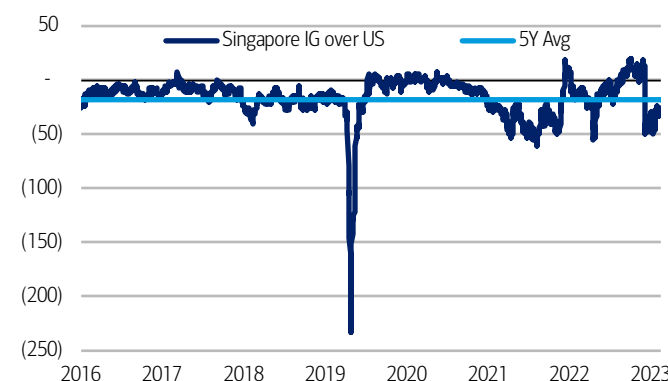


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 38: Pick-up of Singapore IG over US IG**

WoW, pick-up of Singapore IG over US IG was at -26bp, vs. 5-year average difference of -18bp

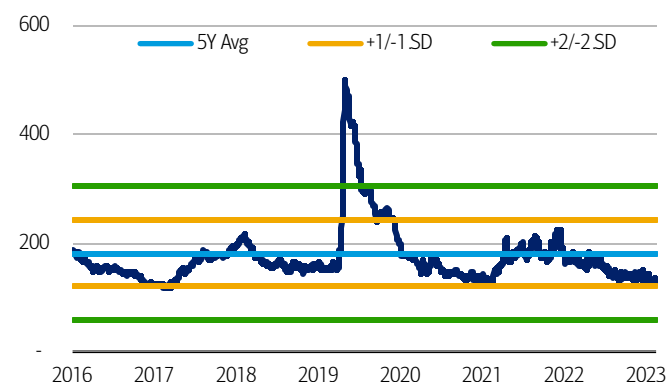


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 39: Indonesia IG spread**

WoW, Indonesia IG spread widened 3bp to 172bp, below the 5-year average of 225bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 40: Pick-up of Indonesia IG over US IG**

WoW, Indonesia IG over US IG pick-up widened 8bp to 68bp, below the 5-year average of 97bp

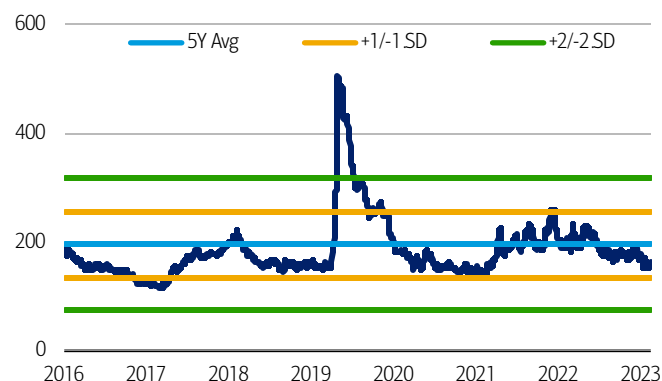


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 41: India IG spread**

WoW, India IG spread tightened 1bp to 158bp, below 5-year average of 196bp

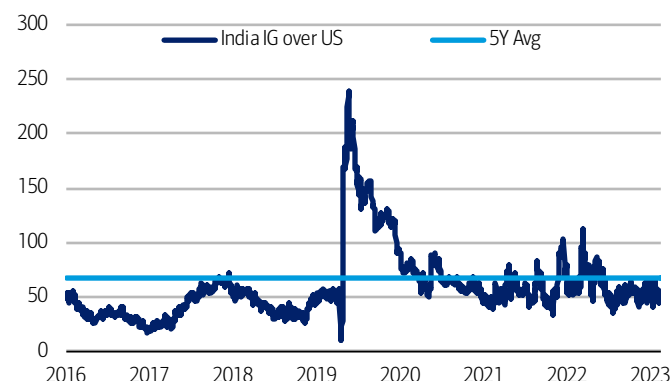


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 42: Pick-up of India IG over US IG**

WoW, India IG over US IG pick-up widened 4bp to 54bp, below 5-year average of 67bp

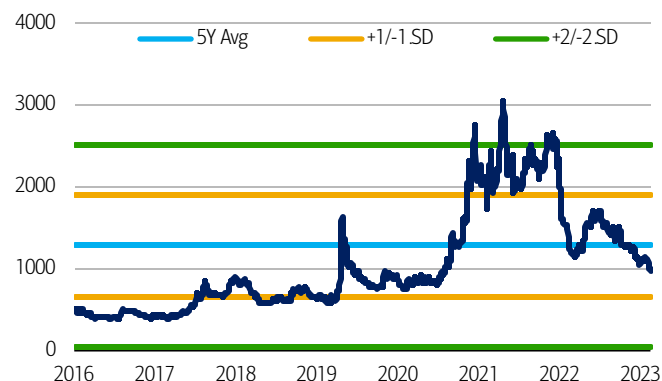


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 43: China HY spread**

WoW, China HY spread tightened 53bp to 976bp, below the 5-year average of 1,277bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 44: Pick-up of China HY over US HY**

WoW, China HY over US HY tightened 32bp to 626bp, below the 5-year average of 847bp

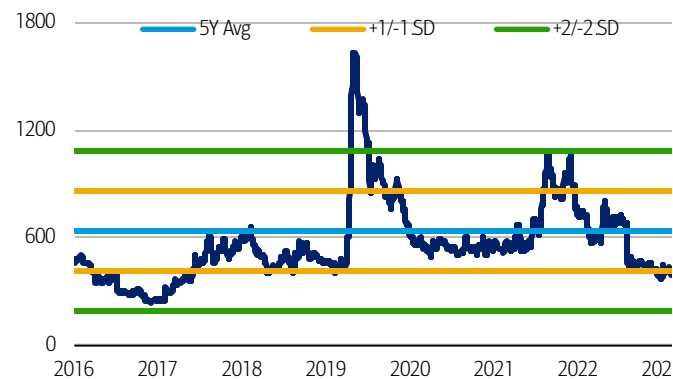


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 45: Indonesia HY spread**

WoW, Indonesia HY spread tightened 9bp to 391bp, below the 5-year average of 637bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 46: Pick-up of Indonesia HY over US HY**

WoW, Indonesia HY over US HY widened 12bp to 41bp, below 5-year average of 207bp



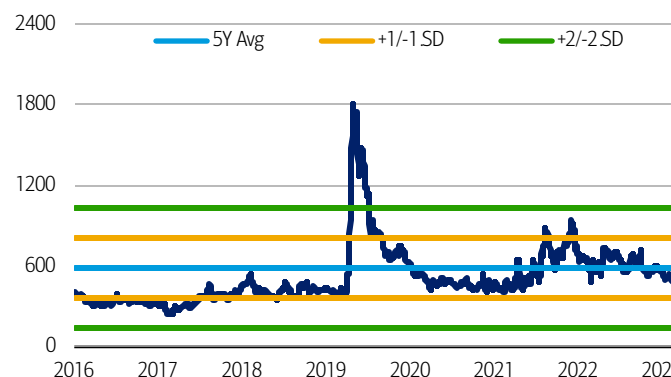
Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH



**Exhibit 47: India HY spread**

WoW, India HY spread tightened 39bp to 484bp, below the 5-year average of 586bp

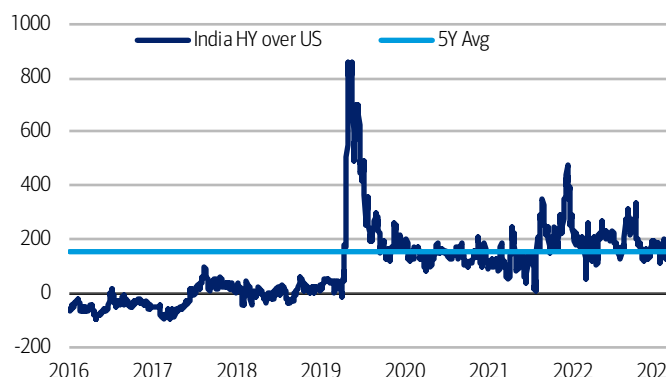


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 48: Pick-up of India HY over US HY**

WoW, India HY over US HY tightened 18bp to 134bp, now below the 5-year average of 155bp

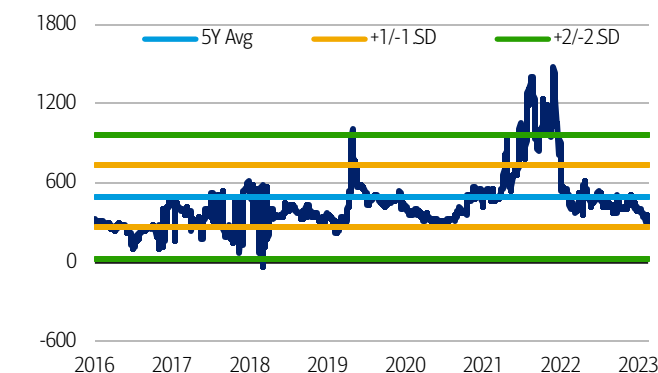


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 49: Macau HY spread**

WoW, Macau HY spread widened 16bp to 327bp, below 5-year average of 499bp

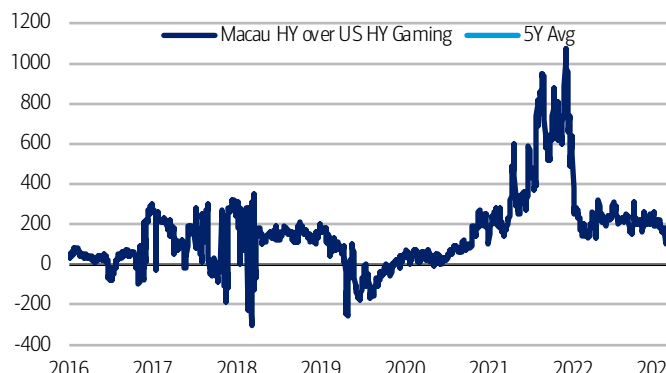


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 50: Pick-up of Macau HY over US HY Gaming**

WoW, Macau HY over US HY Gaming widened 37bp to 162bp, below the 5-year average of 184bp

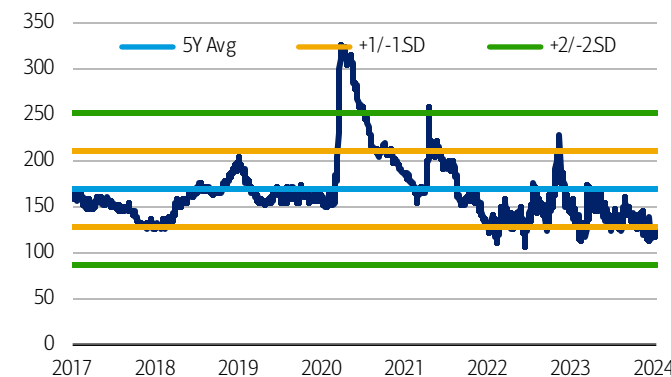


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Asia financial vs non-financial corporate****Exhibit 51: Asia financial spread**

WoW, Asia financial spread tightened 3bp to 122bp, below the 5-year average of 170bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 52: Pick-up of Asia non-financial corporate over Asia financial**

WoW, Asia non-financial corporate pick-up over Asia financial tightened 1bp to 83bp, below the 5-year average of 166bp



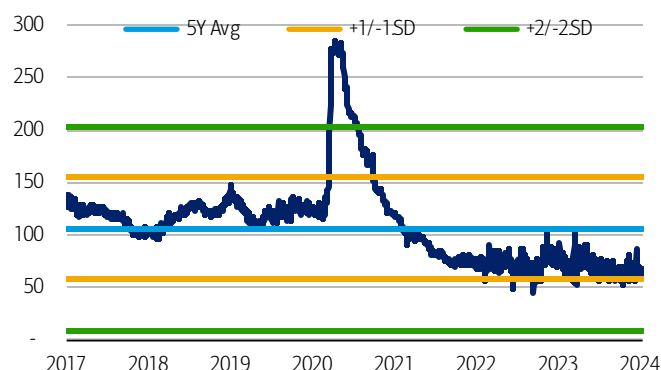
Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH



**Exhibit 53: Asia bank senior spread**

WoW, Asia bank senior spread tightened 4bp to 64bp, below the 5-year average of 106bp

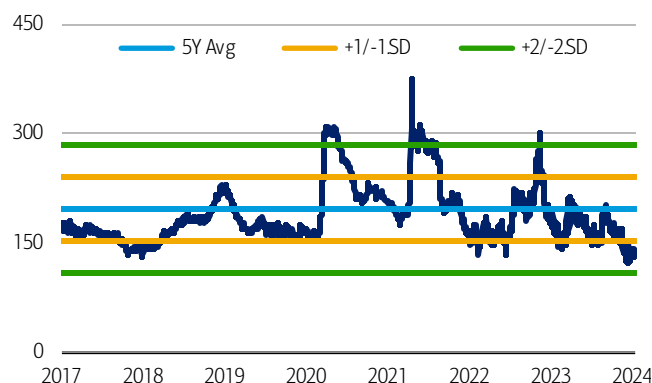


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 55: Asia NBFI senior spread**

WoW, Asia NBFI senior tightened 2bp to 137bp, below the 5-year average of 197bp

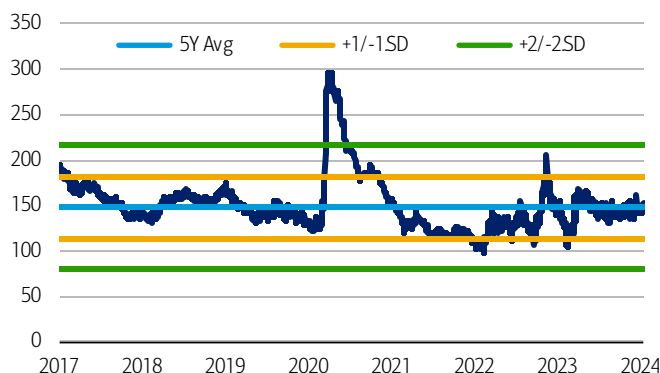


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 57: Asia bank Tier 2 spread**

WoW, Asia bank Tier 2 spread remained at 149bp, now above 5-year average of 148bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 54: Pick-up of Asia A corporate over bank senior**

WoW, Asia A corporate pick-up over bank senior widened 2bp to 31bp, above the 5-year average of 12bp



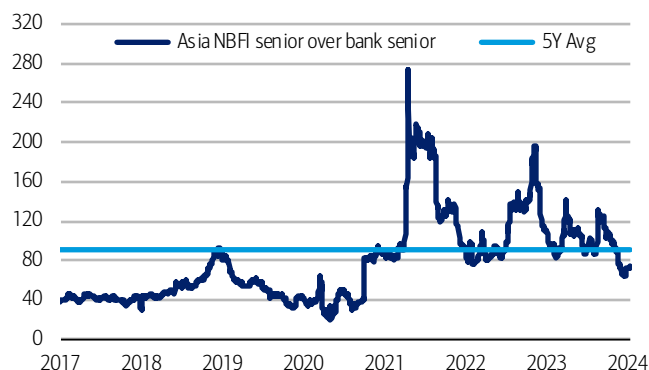
Source: ICE Data Indices, LLC

Note: the average rating of Asia bank senior has been between BBB+ and A- in the past 7yr; depending on weight of China bank senior (A-rated), which is now around 60% of the bank senior

BofA GLOBAL RESEARCH

**Exhibit 56: Pick-up of Asia NBFI senior over bank senior**

WoW, Asia NBFI senior pick-up over bank senior widened 2bp to 73bp, below 5-year average of 91bp

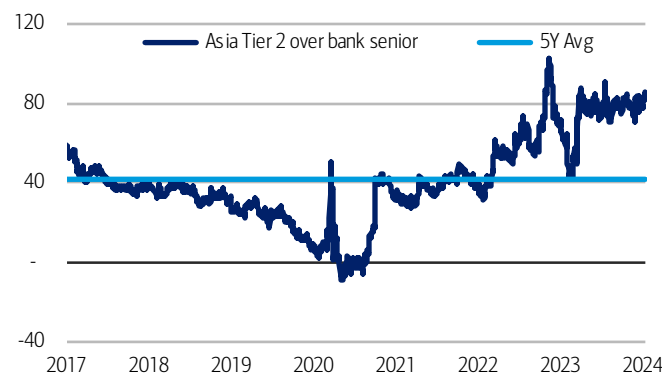


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 58: Pick-up of Asia Tier 2 over bank senior**

WoW, Asia bank Tier 2 pick-up over bank senior widened 4bp to 85bp, above the 5-year average of 42bp

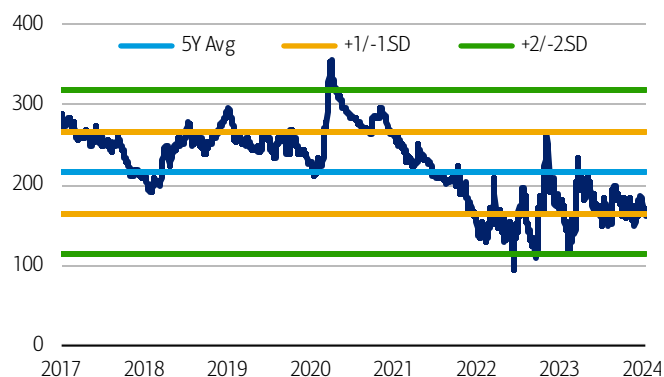


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 59: Asia bank AT1 spread**

WoW, Asia bank AT1 spread tightened 10bp to 162bp, below the 5-year average of 215bp

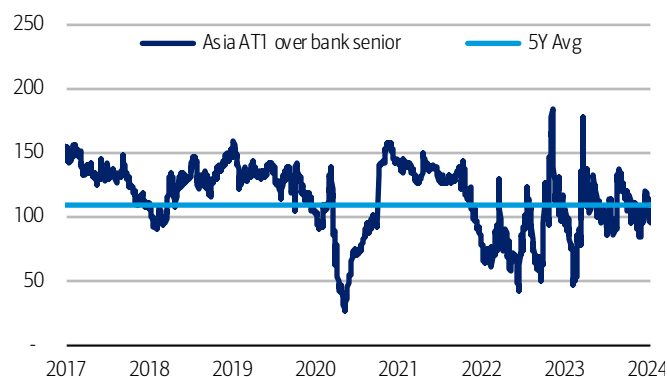


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 60: Pick-up of Asia AT1 over bank senior**

WoW, Asia AT1 pick-up over bank senior tightened 6bp to 98bp, now below the 5-year average of 109bp

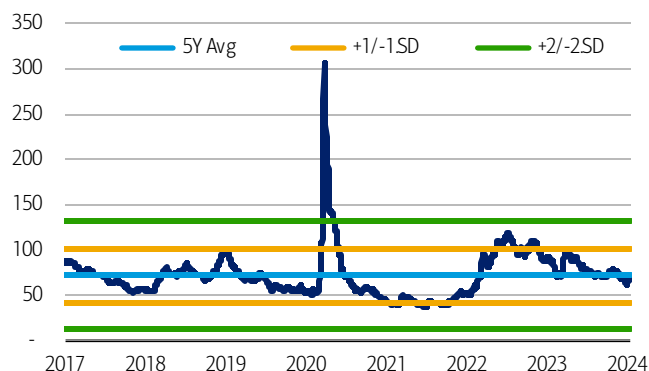


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 61: Australia bank senior spread**

WoW, Australia bank senior tightened 2bp to 67bp, below 5-year average of 72bp

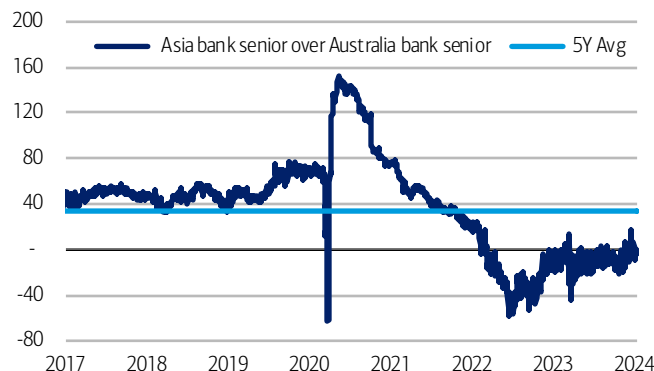


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 62: Pick-up of Asia bank senior over Australia bank senior**

Asia bank senior is trading 3bp tighter than Australia bank, vs. 5-year average pick-up of +34bp

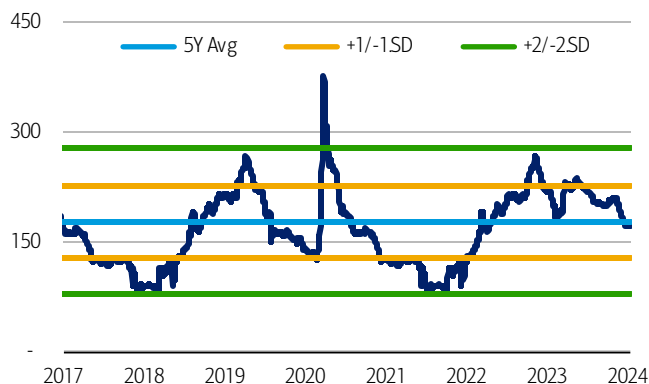


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 63: Australia bank Tier 2 spread**

WoW, Australia bank Tier 2 tightened 3bp to 172bp, below 5-year average of 179bp

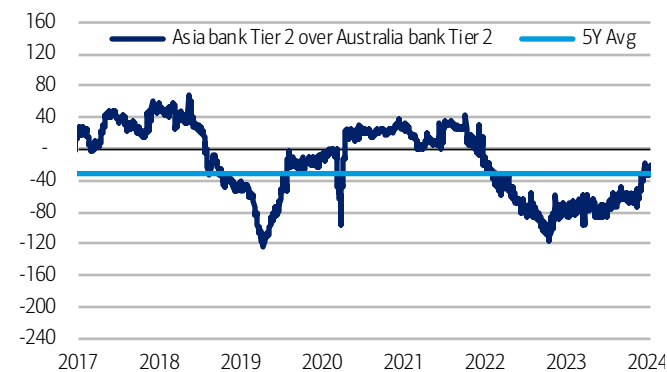


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 64: Pick-up of Asia bank Tier 2 over Australia bank Tier 2**

Asia bank Tier 2 is now trading 23bp tighter than Australia bank Tier 2, vs. 5-year average of -31bp

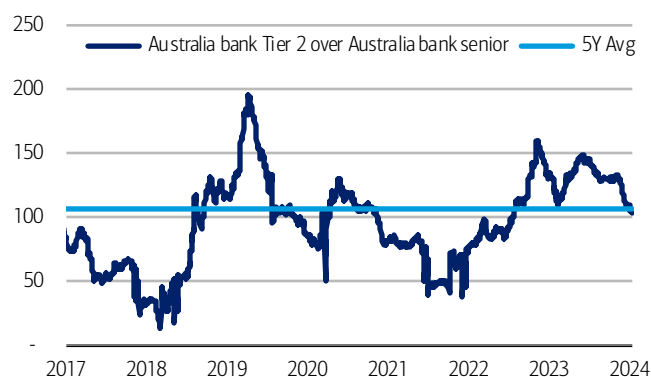


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 65: Pick-up of Australia bank Tier 2 over Australia bank senior**

WoW, Australia bank Tier 2 pick-up over bank senior tightened 1bp to 104bp, below the 5-year average of 107bp

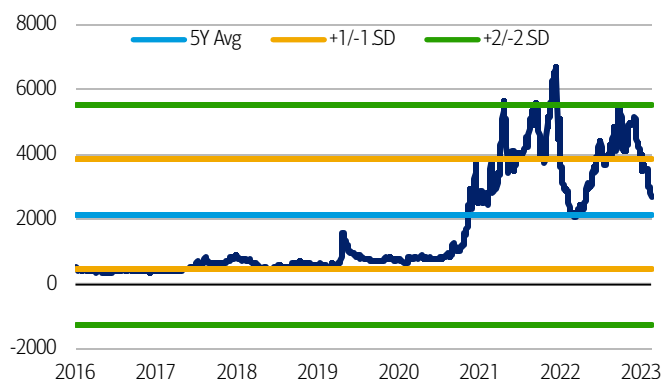


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**By sector****Exhibit 66: China HY property spread**

WoW, China HY property spread tightened 200bp to 2,721bp, above the 5-year average of 2,147bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 67: Pick-up of China HY property over US HY**

WoW, China HY property over US HY tightened 179bp to 2,371bp, above the 5-year average of 1,717bp

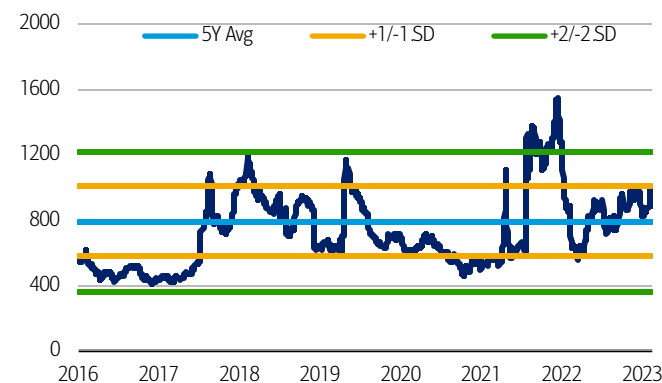


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 68: China non-property HY (corporate) spread**

WoW, China non-property HY spread (corporate) tightened 51bp to 890bp, above the 5-year average of 791bp



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 69: Pick-up of China non-property HY (corporate) over US HY**

WoW, the pick-up of China non-property HY (corporate) over US HY tightened 30bp to 540bp, above the 5-year average of 361bp

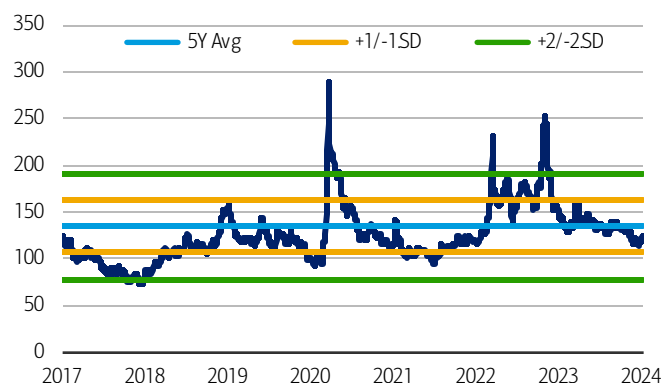


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 70: BAT (BABA, BIDU, TENCNT) spread**

WoW, China BAT spread widened 2bp to 123bp, below 5-year average of 135bp

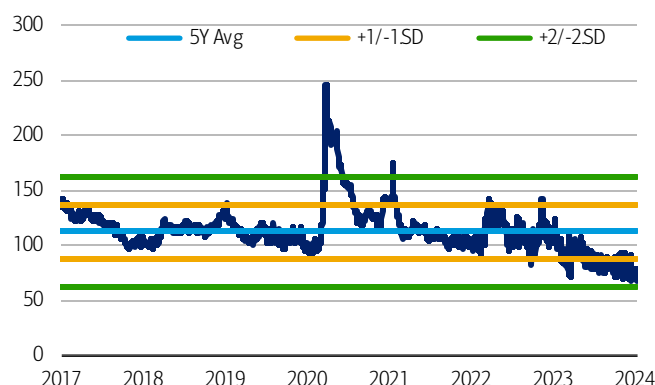


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 71: China oil major spread**

WoW, China oil major spread tightened 7bp to 72bp, below 5-year average of 113bp

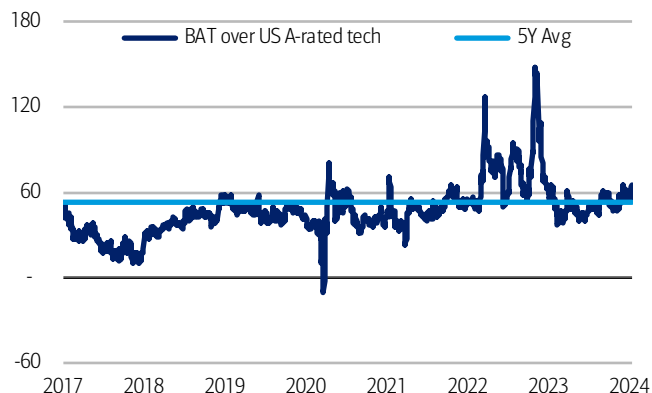


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 72: Pick-up of BAT over US A-rated tech**

WoW, China BAT over US A-rated tech widened 8bp to 65bp, above 5-year average of 53bp

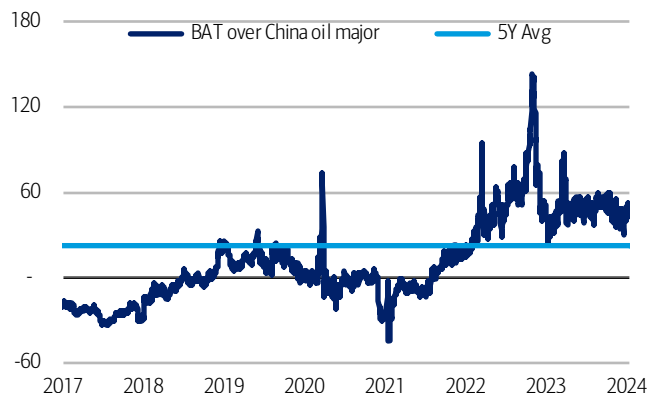


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 73: Pick-up of BAT over China oil major**

WoW, China BAT over China oil major widened 8bp to 51bp, above 5-year average of 22bp

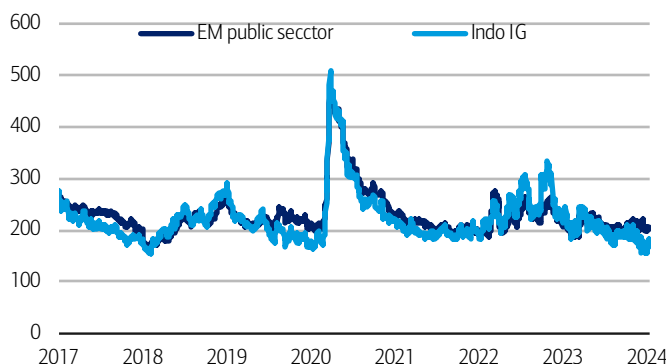


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

**Exhibit 74: Indonesia IG vs. EM public sector spread**

Indonesia IG is trading 30bp tighter than EM public sector issuer



Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

## Special Disclosures

Some of the securities discussed herein should only be considered for inclusion in accounts qualified for high risk investment.

## Disclosures

### Important Disclosures

#### BofA Global Research Credit Opinion Key

BofA Global Research provides recommendations on an issuer's bonds (including corporate and sovereign external debt securities), loans, capital securities, equity preferreds and CDS as described below. Convertible securities are not rated. An issuer level recommendation may also be provided for an issuer as explained below. BofA Global Research credit recommendations are assigned using a three-month time horizon.

**Issuer Recommendations:** If an issuer credit recommendation is provided, it is applicable to bonds and capital securities of the issuer except bonds and capital securities specifically referenced in the report with a different credit recommendation. Where there is no issuer credit recommendation, only individual bonds and capital securities with specific recommendations are covered. Loans, CDS and equity preferreds are rated separately and issuer recommendations do not apply to them.

BofA Global Research credit recommendations are assigned using a three-month time horizon:

**Overweight:** Spreads and/or excess returns are likely to outperform the relevant and comparable market over the next three months.

**Marketweight:** Spreads and/or excess returns are likely to perform in-line with the relevant and comparable market over the next three months.

**Underweight:** Spreads and/or excess returns are likely to underperform the relevant and comparable market over the next three months.

BofA Global Research uses the following rating system with respect to **Credit Default Swaps (CDS)**:

**Buy Protection:** Buy CDS, therefore going short credit risk.

**Neutral:** No purchase or sale of CDS is recommended.

**Sell Protection:** Sell CDS, therefore going long credit risk.

Due to the nature of strategic analysis, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

BofA Securities fixed income analysts regularly interact with sales and trading desk personnel in connection with their research, including to ascertain pricing and liquidity in the fixed income markets.

### Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

This report may refer to fixed income securities or other financial instruments that may not be offered or sold in one or more states or jurisdictions, or to certain categories of investors, including retail investors. Readers of this report are advised that any discussion, recommendation or other mention of such instruments is not a solicitation or offer to transact in such instruments. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor for information relating to such instruments.

Rule 144A securities may be offered or sold only to persons in the U.S. who are Qualified Institutional Buyers within the meaning of Rule 144A under the Securities Act of 1933, as amended. SECURITIES OR OTHER FINANCIAL INSTRUMENTS DISCUSSED HEREIN MAY BE RATED BELOW INVESTMENT GRADE AND SHOULD THEREFORE ONLY BE CONSIDERED FOR INCLUSION IN ACCOUNTS QUALIFIED FOR SPECULATIVE INVESTMENT.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

The securities or other financial instruments discussed in this report may be traded over-the-counter. Retail sales and/or distribution of this report may be made only in states where these instruments are exempt from registration or have been qualified for sale.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

This report, and the securities or other financial instruments discussed herein, may not be eligible for distribution or sale in all countries or to certain categories of investors, including retail investors.

#### Information relating to Affiliates of BofAS, MLPF&S and Distribution of Affiliate Research Reports:

Refer to [BofA Global Research policies relating to conflicts of interest](#).

**"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.**

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at [www.bofam.com/BofASEdisclaimer](http://www.bofam.com/BofASEdisclaimer); BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan

Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

#### General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

This report may contain a trading idea or recommendation which highlights a specific identified near-term catalyst or event impacting a security, issuer, industry sector or the market generally that presents a transaction opportunity, but does not have any impact on the analyst's particular "Overweight" or "Underweight" rating (which is based on a three month trade horizon). Trading ideas and recommendations may differ directionally from the analyst's rating on a security or issuer because they reflect the impact of a near-term catalyst or event.

Certain investment strategies and financial instruments discussed herein may only be appropriate for consideration in accounts qualified for high risk investment.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

#### Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. IQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.