

GEMs Flow Talk

Focus on LDM outflows this week, as rate duration exposure in survey is very bullish

Negative week: EXD & LDM suffered outflows, same as US HY. US IG was positive.

EPFR flows (% of AUM).

1	All ex CN	EXD	LDM ex CN	Blend	EM Eqty	US HY	US IG	ETF EXD	ETF LDM
1w	-0.1%	-0.2%	-0.3%	0.4%	0.1%	-0.2%	0.4%	-1.1%	0.4%
YTD	-1.2%	-1.5%	0.1%	-1.7%	0.1%	1.3%	3.6%	-4.1%	3.8%
2023	-7.2%	-9.9%	-2.9%	-1.7%	1.9%	-0.5%	4.0%	1.0%	16.7%
2022	-11.5%	-10.5%	-9.3%	-18.5%	1.1%	-10.5%	5.6%	-0.8%	3.3%
Trend	3↘	4↘	1↘	1↗	1↗	1↘	3↗	4↘	6↗

Source: BofA Global Research, EPFR. Note: Trend is # of consecutive wks up or down – shown 1w, YTD, FY 2023 & FY 2022

BofA GLOBAL RESEARCH

Rate duration is most bullish ever, as per BofA FX & Rates Sentiment Survey (Ex1).

See [full report](#). Contact us to participate in the survey.

Good news for active managers? EXD rotation from active to passive may have run out of steam. Now seeing 2 months of active flows better than passive.

We don't see good support for EXD inflows yet. Outflows have been 1.5% YTD, annualizing to 10%. 2022 and 2023 each had about 10% outflows. EM needs the macro picture to lead with rate cuts, inflation down and good fiscal policy.

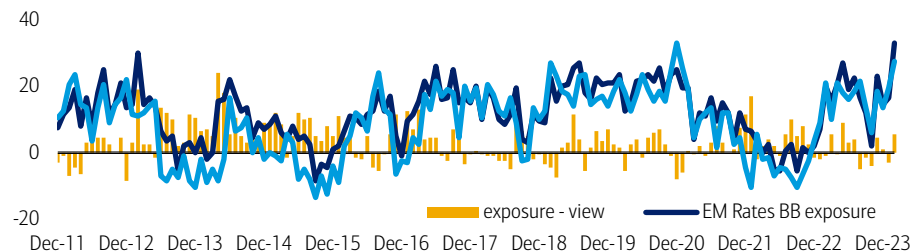
EM BBB spreads now 15bp wide of US corp BBB after EM lagged in last 2 months.

Crossover demand might decline in the near term. EM enjoyed spillover demand from crossovers partly due to US IG big wave inflows YTD, and higher than US IG supply. This drove crossover investors to reach for EM issues. But the bubble might burst as our US IG colleagues expect that [US IG supply finally caught up with demand this week](#) and that February US IG supply is now at a record, not good for EM.

****NEW:** EPFR Country Flows: EXD: ↗SA & TR ↘ZA & PE. LDM: ↗PL & RO ↘BR & ZA

Exhibit 1: Duration exposure and view: EM

Sentiment improved to the best since post-COVID, exposure jumps to records.



Source: BofA Global Research FX and Rates Sentiment Survey. Note: BB is the Bull-Bear Index for exposure and view. It weights responses to create an index ranging from -100 to +100, zero representing neutral.

BofA GLOBAL RESEARCH

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 20 to 22.

12665991

Timestamp: 29 February 2024 08:04PM EST

29 February 2024

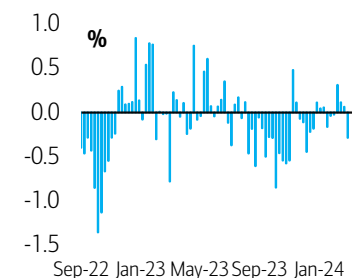
GEM Fixed Income Strategy
Global

Jane Brauer
Sovereign Debt FI Strategist
BofAS
jane.brauer@bofa.com

Lucas Martin, CFA
Sovereign Debt FI Strategist
BofAS

LDM debt funds ex China weekly flows

LDM flows down -0.3% of AUM

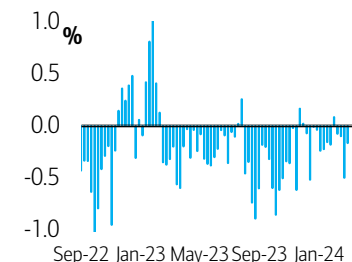


Source: EPFR Global, BofA Global Research

BofA GLOBAL RESEARCH

EXD debt funds weekly flows

EXD flows down -0.2% of AUM



Source: EPFR Global, BofA Global Research

BofA GLOBAL RESEARCH

Quick Links :

[<Foreign Holdings of LDM>](#) [<LDM Real Money Positioning>](#) [<China>](#)

[<EXD Issuance/Supply>](#) [<EPFR Flows>](#)

[<Ratings>](#) [<40 Flows & Issuance Charts>](#)

EM Debt Facts at your fingertips

Crossover sentiment

- End-Jan Crossover Credit investor survey indicates that US IG investors have increased their EM allocations to 13% from 8% in Nov, while HY investors have cut it to zero from 12% in Nov.
- US pension funds are fully funded, risk reduction may be coming.

LDM flows

- 2023 LDM ex-China foreign holdings flows into govt bonds are up \$26bn.
- Fleeing China: Foreign holdings of China local debt were down \$2bn in 2023 and China LDM funds AUM tracked by EPFR have fallen from a high of \$57bn to around \$13bn as of Jan 11.
- Indonesia foreign holdings share of local debt down from peak of 40% to 14%

Default statistics

- 21% total of USD sovereign debt is in default or is rated CCC or below.
- Of EUR-denominated sovereign bonds, 6% is in default or is rated CCC or below.
- Since the pandemic started, 2023 has the fewest % downgrades.

Default rates

- 18% of face value in the EMGB index in Jan 2020 has defaulted at some point between 2020 and 2023.
- 32% of face value in the DGHY index in Jan 2020 has defaulted at some point between 2020 and 2023.
- 99% of face value of EM sovereign bonds rated CCC+ or below in Jan 2020 defaulted.
- Asia: Last 12m corporate default rate by amount/count = 20.8%/7.5% for Asia HY, 36.3%/14.6% for China HY & 56.0%/28.6% for China HY property (Feb 9).

EXD Issuance / stock

- There is US\$2.7tn face of index eligible debt. \$1.2tn sovs & \$1.5tn corps.
- Our 2024 forecast total sovereign & corporate issuance is \$397bn.
- Negative net issuance since Feb 2022 (corp & sov) = -\$333n (-11.8%),
- Negative net in 18 of the last 23 months means money has come back to investors to offset some of the outflows, supporting prices.
- China EXD new issuance as % of all issuances dropped significantly from 48% in 2018 to just 15% in 2023.
- 61% of sovereign debt measured market cap is IG, and 74% of corporate debt.
- Jan is a high issuance month (monthly avg \$86bn).

ESG flows

- In 2023 EM ESG outflows were 2.9% of AUM, vs 10.0% outflows from EM non-ESG funds, 30% less outflow pressure from ESG funds.

EM TRR YTD: EXD = -0.3%, LDM = -2.5%

Foreign Holdings of Local Debt Markets

We estimate weekly and monthly flows into local currency debt markets (LDM) by tracking changes in foreign holdings of domestic bonds, adjusted to account for inflation (see Methodology for details). We track data for holdings of 19 countries.

Exhibit 2: Foreign Holdings flows improving lately

Adjusted FH, new reported #s in green and red bold (changes in current period USD bn - see note on next page for adjustment methodology)

Weekly data	23-Feb	16-Feb	9-Feb	2-Feb	26-Jan	19-Jan	12-Jan	YTD \$ wkly avg	2022 \$ wkly avg	2021 \$ wkly avg	2020 \$ wkly avg	2019 \$ wkly avg
India	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	-0.1	-0.1	-0.2	0.0
Indonesia	-0.3	-0.1	-0.1	-0.3	0.0	0.2	-0.3	0.1	-0.2	-0.1	-0.1	0.2
Hungary	-0.3	0.7	-0.1	-0.1	0.1	-1.5	0.5	0.0	0.0	0.0	0.0	0.0
Türkiye	0.2	0.4	0.3	0.1	-0.1	0.0	0.5	0.1	-0.1	-0.1	-0.1	-0.1
Mexico	na	0.7	-1.2	0.2	0.3	-1.8	-0.2	-0.1	0.0	-0.3	-0.2	-0.1
Monthly Data	January	December	November	YTD (%)	YTD (\$)	2022 (\$)	2021 (\$)	2020 (\$)	Current Holdings	Foreign Holdings	Total debt (\$)	% FH flows since 2/29/20
China	6.3	13.5	15.9	1%	4.1	-30.4	86.7	78.7	326	8%	4,104	4%
Korea	na	-2.2	1.4	12%	13.4	15.9	34.0	18.8	170	22%	775	15%
India	0.1	0.0	0.5	-6%	-1.1	-2.9	-2.6	-12.7	9	1%	1,224	-3%
Indonesia	-0.1	0.4	1.4	5%	3.7	-10.4	-6.8	-6.8	55	15%	369	7%
Malaysia	na	-0.2	0.6	6%	2.4	-1.7	3.5	3.1	44	34%	128	7%
Thailand	na	-0.5	0.0	-6%	-1.7	-0.7	2.7	-0.5	26	11%	231	-6%
Asia	6.3	11.1	19.7	4%	20.9	-30.2	117.5	80.6	630	9%	6,832	6%
Czech Republic	na	11.1	-0.6	47%	12.7	-0.2	-0.2	-1.2	49	35%	138	44%
Hungary	3.1	-3.4	-0.2	14%	2.0	1.0	-1.4	0.3	20	19%	106	4%
Ukraine	na	0.0	-0.1	-20%	-0.6	-1.5	-0.1	-1.2	1	3%	40	-12%
Poland	na	0.5	-0.3	-19%	-6.8	0.7	-4.1	-7.0	35	14%	257	-20%
South Africa	0.1	-1.7	1.5	1%	0.3	-3.2	0.6	-1.2	47	26%	180	-1%
Romania	na	na	na	13%	1.4	5.2	-2.1	2.4	17	26%	65	67%
Russia	0.0	-0.3	-0.1	-15%	-6.3	-11.7	-2.6	3.6	12	7%	170	-17%
Israel	na	-1.0	-2.5	18%	2.6	-2.7	6.8	5.3	23	10%	229	37%
Türkiye	0.0	1.7	1.6	49%	4.1	-3.1	-0.5	-5.2	6	6%	112	34%
EEMEA	3.2	7.0	-0.7	4%	9.5	-15.4	-3.6	-4.3	211	16%	1,298	3%
Brazil	3.4	-2.5	-0.3	12%	10.2	-16.2	15.5	0.5	128	10%	1,288	10%
Mexico	-1.6	5.0	0.4	-2%	-1.8	-2.1	-17.6	-12.5	103	15%	669	4%
Peru	-0.8	0.0	-0.1	-12%	-2.3	-3.3	-0.8	1.3	17	36%	47	-14%
Colombia	-0.9	-0.6	0.1	-25%	-6.2	3.1	2.4	2.6	29	21%	137	-32%
LatAm	0.0	1.8	0.1	0%	-0.1	-18.6	-0.5	-8.1	276	13%	2,141	2%
China	6.3	13.5	15.9	1%	4.1	-30.4	86.7	78.7	326	8%	4,104	4%
Total ex China	3.2	6.3	3.3	4%	26.2	-33.8	26.8	-10.5	791		6,167	4%
Total so far	9.5	19.9	19.2	3%	30.3	-64.2	113.5	68.3	1117		10,272	4%

Source: BofA Global Research, Local government websites. See notes in page 3. Note: % FH face change since 2/29 is in local currency. For this column, a cpn reinvested is counted as an increase in face value

BofA GLOBAL RESEARCH

Ex-China flows

- Jan ex-China flows are at **↗\$3.2bn**, with **↗\$3.4bn into Brazil** and **↗\$3.1bn into Hungary**, and **↘\$1.6bn out from Mexico**. 10/18 countries reported.
- Dec ex-China flows are at **↗\$6.3bn**, with **↗\$11.1bn into Czech Republic**, **↗\$5.0bn into Mexico** and **↘\$3.5bn out from Hungary**. 17/18 countries reported.

Including China

- Jan flows are at **↘\$2.5bn** so far with **↗\$6.3bn into China**.
- Dec flows are at **↗\$19.9bn** so far with **↗\$13.8bn into China**.

Flows winners: China, Brazil and Hungary

- Jan: China (+\$6.3bn), Brazil (+\$3.4bn) and Hungary (+\$3.1bn).

Flows losers: Peru

- Jan: Peru (-\$0.8bn).



Methodology: What makes our FH approach different?

Foreign holdings show true local bond flows

Our Foreign Holdings (FH) statistics track investments denominated in local currency. Since countries with higher inflation rates tend to pay higher coupons, we believe that FH flows should be adjusted by inflation levels to avoid overestimating their growth in the long term. We grow the prior month's holdings by annual inflation divided by 12 and compare that to the current holdings in local currency. The net foreign purchase is that difference converted to USD, applying FX rate at the end of the period. Current holdings are converted at current FX at the end of each period; YTD year-to-date growth is the sum of monthly net purchases divided by holdings at the end of last year converted to USD at the year-end FX rate.

LDM Real Money Positioning Tracker (02/15)

Our tracker compares the holdings of 38 large local currency debt funds (\$33bn AUM) to benchmark weights to estimate overweight and underweight positioning in bonds and FX. The funds are benchmarked to the GBI-EM local market benchmark, not Libor.

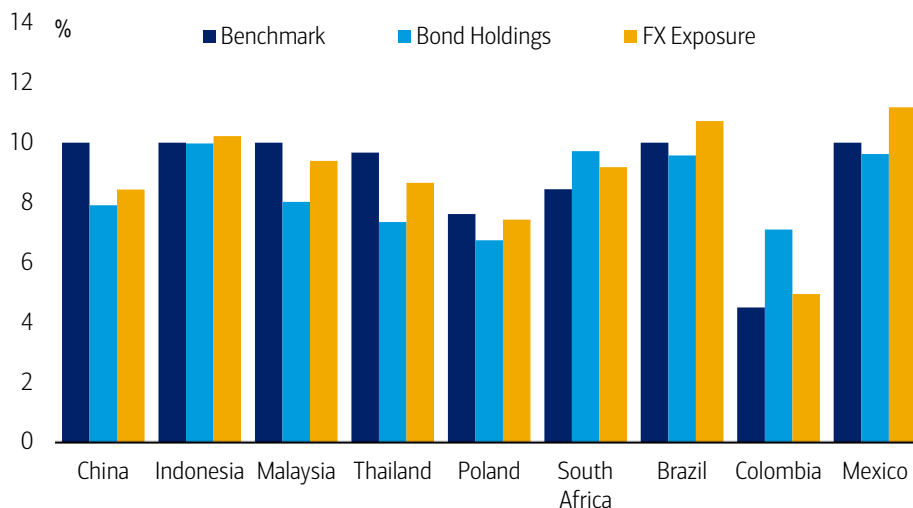
In our monthly real money positioning tracker, reporting end December positioning, we found that:

- **Cash levels increased in December** (at 5.5 from 5.0 in November).
- **Duration** was up in December (at 5.65 from 5.59 in November).
- **Bonds exposure:** Colombia (2.60% overweight) bonds continued to be most favoured by funds we track followed by South Africa (1.27% overweight). In December, funds continued to remain underweight in China, Indonesia, Malaysia, Thailand, Poland, Brazil and Mexico.
- **FX exposure:** In December, MXN (1.18% overweight) continued to be the most favored currency by GBI-EM indexed funds we track followed by ZAR. Funds continued to be overweight in IDR, BRL and COP and remained underweight in CNY, MYR, THB and PLN.

[GEMs FI & FX Strategy Watch: Real Money Tracker – Playing defense 15 February 2024](#)

Exhibit 3: South Africa bonds and COP most favored in the EM

Emerging Markets Bond holdings and FX exposure in Dec-23



Source: BofA Global Research, Fund factsheets

BofA GLOBAL RESEARCH

Our view of large real money fund limitations to reduce bond exposure

- Their benchmark is long bonds and thus also long FX exposure.
- Liquidity declines when there is increased volatility, making it hard to trade size even if managers wanted to lighten up or hedge. There are fewer dealers and with smaller balance sheets prepared to provide bond liquidity,
- Large money managers have become even larger, and assets are concentrated so they need more liquidity to move their positions,
- Real money fund managers have more long-term money, which is “sticky” with investors who don’t close out when markets decline.
- FX is far more liquid than the bond market and 2013 demonstrated that the FX is a quick, easy and better hedge than selling bonds.
- Cash buildup hurts returns in a rally → investors need to put money to work quickly.

Sentiment survey of crossover investors

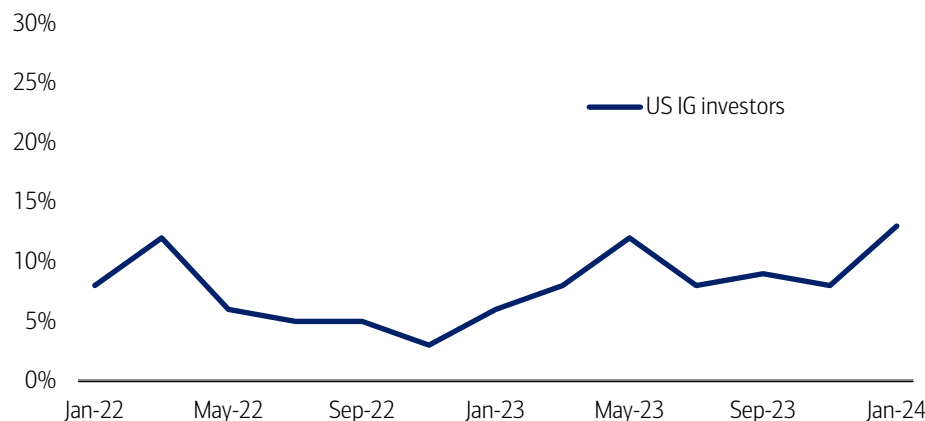
We publish a periodic report consolidating six crossover investor surveys in credit, equities and FX, [What do crossover investors think of EM? 26 February](#)

From Crossover US credit bi-monthly investor survey (Jan 22-26, 2024)

- When asked what was their largest allocation outside of their primary focus, 0% of the HY participants chose EM vs 12% in Nov.
- **The view from US IG investors = 13%, up from 8% in Nov.**
- Geopolitical risk is #1 concern, Recession #2, Commercial Real Estate #3.

Exhibit 4: US Credit investors: EM allocation history

IG investors rose to 13% invested in EM, while HY went down to 0%



Source: BofA US Credit Investor Survey

BofA GLOBAL RESEARCH

[Credit Market Strategist: Jan '24 Credit Investor Survey: Optimistic investors 26 January 2024](#)



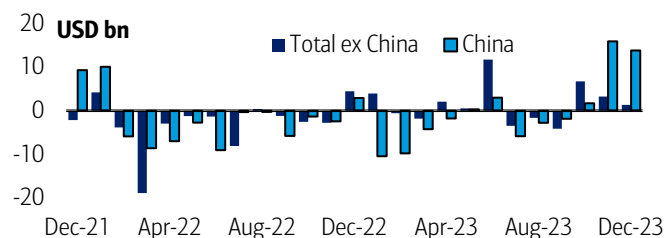
China (big inflows) vs ex-China

- **EM EXD Corp index face ex-China** was lost -\$6.8bn in the last 12m (-1% decline), due to negative net issuance & defaulting bonds removed. China is 20% of EM Corp Index.
- **China LDM flows** up +\$6.3bn (Jan) vs +\$13.8bn (Dec), posting its 4th inflow in a row. FH up to 7.9% from 7.8%.
- Year end 2023 foreign CGB flows turned to inflows after almost 2 years of consistent outflows.

As of Feb 9 '24 the [LTM default rate of China HY property bonds](#) was 56%/ 29% (by count/ amount). BofA Asian analysts are [expecting more outflows](#).

Exhibit 6: China got huge inflows again in Dec

Foreign Holdings change Total ex-China and China.



Source: BofA Global Research, Local governments' websites.

Note: Mar'20 ex-China was -\$45bn; Foreign holders include central banks.

BofA GLOBAL RESEARCH

Exhibit 8: China corps are 15% of all 2023, down vs 2018 peak of 48%.

Annual USD & EUR Corporate New Issuance (\$mn) for selected years

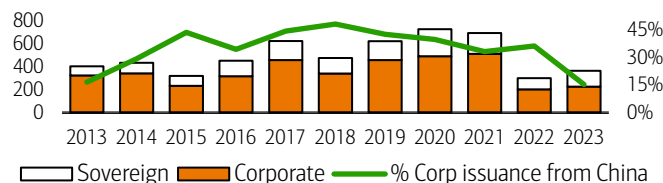
Country	2018	2020	2022	2023	2024 YTD
China	165,332	196,978	74,152	34,855	5,456
Rest of EM					
corp	178,063	295,206	129,348	192,444	56,613
Total	343,394	492,856	203,500	227,298	62,069
% China	48%	40%	36%	15%	9%

Source: BofA Global Research, EMDL on Bloomberg

BofA GLOBAL RESEARCH

Exhibit 10: China EXD issuance = 15% of all EXD corporate issuance

EXD issuance: 2013-23, China share down to the lowest point since '12



Source: BofA Global Research, Bloomberg. We believe that Central banks (CBs) may contribute about 20%-40% offshore flows and considering most of CBs only trade CGBs and that they are more stable buyers compared to others, we estimate that perhaps 60% of the flow is CBs

BofA GLOBAL RESEARCH

Exhibit 5: China got huge inflows in Dec

LDM China foreign holdings (FH) growth as of 31 Jan- in US\$

	FH Jan	Holdings USD (bn)	Changes in US\$				% of YTD flows
			1m	3m	6m	YTD '23	
China	6.3	325	6	36	33	4	14%
FH ex-CN	3.2	780	3	13	14	26	86%
Total FH	9.5	1105	10	49	47	30	100%

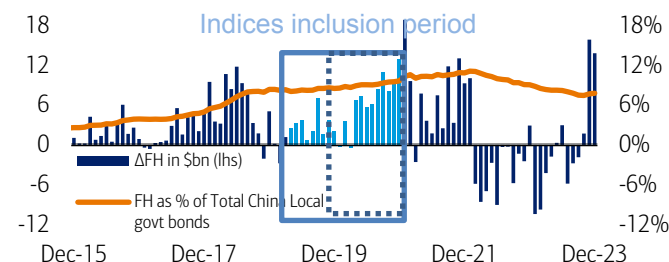
Source: BofA Global Research, Local government websites; Note: We think some FH may be from Central Banks, not only investors

BofA GLOBAL RESEARCH

- China local debt was added to 3 large benchmark indices starting in mid-2019: 1) the GBI-EM, 2) Blmbg Barclays Global Agg and 3) FTSE Russell WGBI Oct 2021-Oct 2024 (see [FTSE Russell China report](#)).

Exhibit 7: Dec ΔFH +\$13.8bn, FH at 7.8% of China GCB bonds

China Foreign Holdings. Inclusion in WGBI from Oct 2021 to Oct 2024

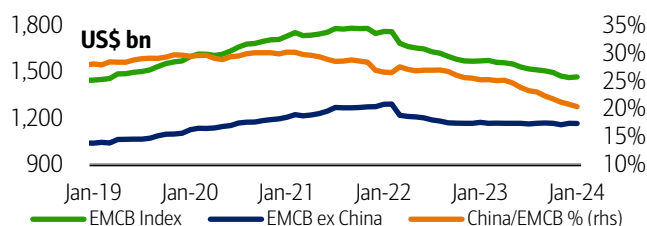


Source: BofA Global Research, Local governments' websites. Period of light blue bars was entry into the Bloomberg Barclays Agg (solid box) and inclusion of JPM GBI EM (dotted box).

BofA GLOBAL RESEARCH

Exhibit 9: China represents 20% of corporate index-eligible debt

EM Corp Index (EMCB) market value with & without China (peak 30%), Russia removed at a price of zero on 3-31-2022

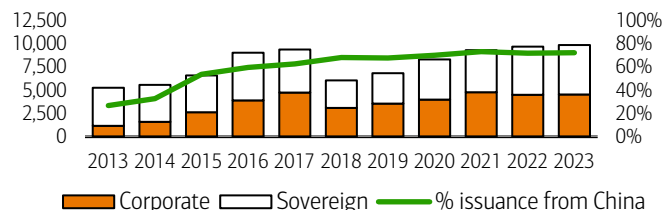


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC

BofA GLOBAL RESEARCH

Exhibit 11: China LDM issuance = 73% of all EM LDM issuance YTD

LDM issuance: 2012-22 China grew from 25% of 2012 LDM issuance



Source: BofA Global Research, Bloomberg

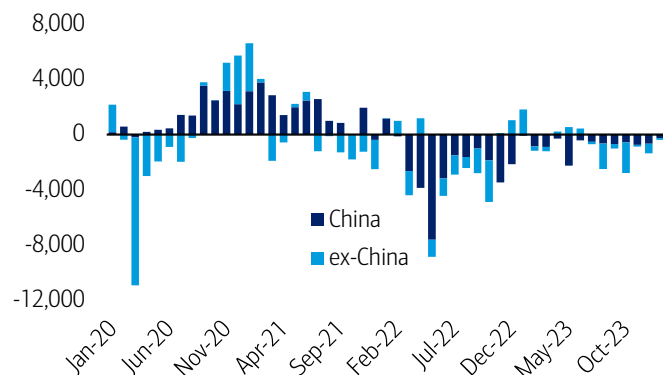
BofA GLOBAL RESEARCH

LDM ex-China posted outflows in '23, same as in '24 YTD

- **LDM ex-China EPFR reported funds showed smaller outflows in 2023 (-\$3bn) vs 2022 (-\$8bn).** Jan 2024's was at -\$125mn.
- **China funds also showed smaller 2023 outflows than those in 2022. And posted outflows in Jan too.**
- **Foreign holdings data** shows foreign investors sold China consistently in 2023.
- **China ETFs also show receding outflows in 2023** but they have not turned positive yet. Around 30% of the China flows reported by EPFR are via ETFs and the ETFs appear to be representative of the total flows. ETF flows can be observed via various Bloomberg tools.
- **China funds tracked by EPFR lost over half** of their assets due to outflows since the peak in Feb'22. They were added to many benchmarks beginning in 2019.

Exhibit 12: More outflows from China than from ex-China in Jan

EPFR flows into and out of China and ex-China funds, by month (in \$mn).

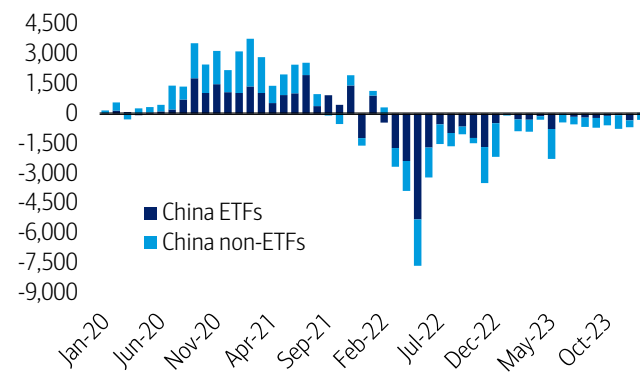


Source: BofA Global Research, EPFR Global.

BofA GLOBAL RESEARCH

Exhibit 13: The Jan China LDM outflows were mostly via non-ETFs

EPFR flows into & out of China ETFs and non-ETFs, by month (in \$mn).

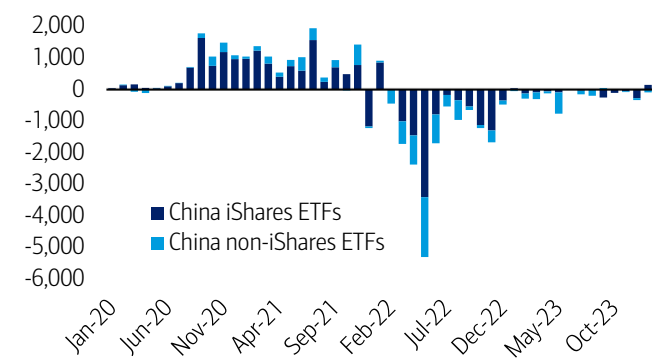


Source: BofA Global Research, EPFR Global.

BofA GLOBAL RESEARCH

Exhibit 14: Of the China LDM ETFs, small Jan inflows were mostly from iShares ETFs

EPFR flows into China iShares ETFs & non-iShares ETFs, by month (in \$mn).

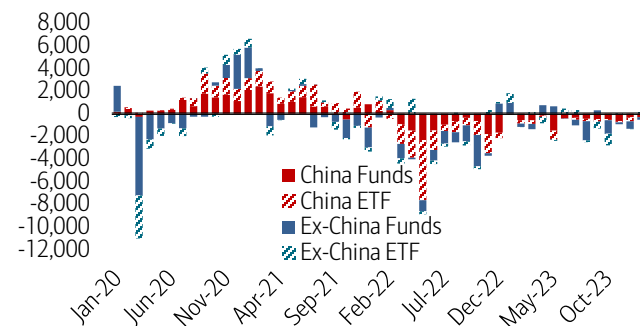


Source: BofA Global Research, EPFR Global.

BofA GLOBAL RESEARCH

Exhibit 15: China ETFs had become a large contributor to the EPFR headline LDM flows, although outflows have been quite big for a while

EPFR flows into China & ex-China funds, ETFs & non-ETFs, by mo (in \$mn).



Source: BofA Global Research, EPFR Global.

BofA GLOBAL RESEARCH

Issuance: Tracker, debt service, forecasts

We track primary market issuance of external sovereign and corporate EM bonds on a gross and net basis (i.e. gross issuance minus debt service). Newly issued bonds can be purchased with cash from debt service or fund inflows. When net issuance is positive, fund inflows are required into the asset class. When net issuance is negative and fund inflows are positive, there could be higher demand for bonds in the secondary market.

Our 2024 forecast total issuance is \$397bn (\$153bn sov, \$244bn corp) vs peak pf \$707bn in 2020. Forecasted gross issuance is 12% of the outstanding \$1.2tn EM sovereign external debt, offset with 6% principal coming due and 5% coupons being paid. Then just around 1% inflows of this would be needed in 2024 to cover the new issuance.

Jan gross & net issuance were at \$92bn and \$38bn. Net issuance by region: EEMEA +\$25bn, LatAm +\$13bn & Asia \$0bn.

Regular Feb: gross issuance is at \$41bn, and with just 1 business day left its just \$1bn lower than the \$42bn 5y Feb avg. 32% HY, almost 2x last 4y avg share. 9 sovs issued: Romania (€4bn), Panama (\$3.1bn), Türkiye (\$3bn), Bahrain (\$2bn), Kenya (\$1.5bn), Paraguay (\$1bn), Sharjah (\$0.75bn), Benin (\$0.75bn) & HK (\$0.2bn & €0.08bn). 64% came from EEMEA, 18% LatAm & 18% Asia.

EM scheduled debt payments for 2024 will be \$444bn. \$314bn from Corps & \$130bn from Sovs. Total by region: Asia \$226bn, EEMA \$147bn and LatAm \$ 71bn.

Exhibit 16: Forecast 2024 \$397bn vs \$347bn in 2023, \$293bn in 2022, \$688bn in 2021

2023-2024 monthly gross issuance (\$bn) and 2024 Forecast

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec 2023	Jan	Feb 2024F
Sovereign	46	7	14	11	11	5	1	1	11	4	21	1	131	45
Corporate	27	25	14	16	20	18	12	8	36	20	19	2	217	47
Total	73	32	29	27	31	23	13	9	47	23	40	3	347	92

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 17: Net issuance positive in Jan, interrupting its neg trend of 18 out of 23m w/ neg net issuance

Total negative net issuance since Feb 2022 = -11.8%

Net issuance of USD & EUR debt (gross issuance less debt service paid, including coupons)

Date	Scheduled			Total Net	Total	Net	Date	Scheduled			Total Net	Total	Net
	Total issued (\$bn)	Debt service (\$bn)	Total paid (\$bn)					Total issued (\$bn)	Debt service (\$bn)	Total paid (\$bn)			
Jan-22	70	42	51	19	3,044	0.6%	Jan-23	73	50	52	20	2,826	0.7%
Feb-22	30	24	30	0	3,051	0.0%	Feb-23	32	20	28	3	2,826	0.1%
Mar-22	33	56	61	-27	2,928	-0.9%	Mar-23	29	44	54	-25	2,815	-0.9%
Apr-22	29	50	68	-39	2,890	-1.4%	Apr-23	27	47	58	-31	2,826	-1.1%
May-22	23	30	41	-19	2,886	-0.6%	May-23	31	31	38	-7	2,807	-0.3%
Jun-22	25	23	36	-11	2,883	-0.4%	Jun-23	23	18	28	-4	2,789	-0.2%
Jul-22	11	43	49	-37	2,853	-1.3%	Jul-23	13	34	45	-32	2,775	-1.1%
Aug-22	9	19	27	-17	2,838	-0.6%	Aug-23	9	20	30	-21	2,763	-0.8%
Sep-22	17	43	44	-27	2,812	-1.0%	Sep-23	47	36	40	7	2,756	0.2%
Oct-22	23	38	40	-17	2,800	-0.6%	Oct-23	26	37	48	-22	2,740	-0.8%
Nov-22	19	36	40	-21	2,801	-0.7%	Nov-23	38	23	24	14	2,733	0.5%
Dec-22	3	28	36	-33	2,792	-1.2%	Dec-23	3	14	19	-16	2,728	-0.6%
FY 2022	293	433	522	-230	2,792	-8.2%	FY 2023	347	373	464	-117	2,728	-4.3%
							Jan-24	91	52	54	37	2,759	1.3%

Note: Total outstanding is in face value of EMCB & EMGB BofA indices. Source: BofA Global Research, Bloomberg, ICE Data indices, LLC.

BofA GLOBAL RESEARCH

Exhibit 18: Issuance trends – investors want higher quality. Corp issuance in 2023 was heavily IG @76%. GCC & LatAm are higher % than historical, Asia is lower.

Issuance by category 2021-2024 YTD

	IG	HY	Xover/NR	Asia	EEMEA	GCC	LatAm	Total
Sovereign								
2021	62%	33%	5%	22%	32%	17%	29%	100%
2022	68%	27%	5%	14%	45%	10%	31%	100%
2023	70%	25%	6%	15%	46%	16%	23%	100%
2024 YTD	74%	25%	1%	4%	40%	24%	32%	100%
Corporate								
2021	60%	29%	11%	60%	14%	11%	15%	100%
2022	75%	8%	17%	70%	7%	10%	12%	100%
2023	76%	15%	9%	50%	18%	19%	13%	100%
2024 YTD	73%	19%	9%	37%	14%	29%	20%	100%

Source: BofA Global Research, Bloomberg, Bond Radar

BofA GLOBAL RESEARCH

Exhibit 19: Debt service - \$444bn in 2024, Feb will drop to \$25bn

Scheduled debt service payments expected of USD & EUR debt for next months

Month	Total pymts	Corporates	Sovereigns	Maturities	Coupons	LatAm	EEMEA	Asia	as % of Total
Jan-24	52	29	23	35	16	10	19	23	12%
Feb-24	25	17	8	17	8	7	7	11	6%
Mar-24	46	31	16	36	11	6	22	18	10%
Apr-24	49	40	9	36	13	7	18	24	11%
May-24	31	24	6	22	8	5	9	17	7%
Jun-24	38	30	9	32	6	4	12	22	9%
Jul-24	44	32	12	29	15	11	9	24	10%
Aug-24	18	11	7	11	7	4	6	9	4%
Sep-24	40	26	13	30	10	4	13	22	9%
Oct-24	38	27	10	26	12	5	12	20	8%
Nov-24	42	31	11	34	8	4	16	22	9%
Dec-24	22	17	5	16	5	5	3	14	5%
FY 2024	444	314	130	325	120	71	147	226	100%

Source: BofA Global Research, Bloomberg, ICE Data indices, LLC

BofA GLOBAL RESEARCH

Exhibit 20: 1/3rd of Gross issuance forecast for 2024 is done. Forecast \$153bn, net of amortizations is \$81bn, and net of amort & coupons is just \$23bn. Compare to 2023 gross issuance which was \$131bn, net of amortizations \$74bn, and net also of coupons \$16bn.

External debt issuance forecasts - foreign currency, foreign law (in USD bn). Largest issuers left for 2024: Poland, Mexico, China, Romania, Philippines,

	Main Countries	2024 Gross EXD fcst	2024 YTD	Left to go in 2024	Remaining 2024 EXD Prin Due	Remaining 2024 net Issuance		Main Countries	2024 Gross EXD fcst	2024 YTD	Left to go in 2024	Remaining 2024 EXD Prin Due	Remaining 2024 net Issuance
Total	Non-G10	153	62	91	45	38							
Asia		22	2	20	11	9	MEAF/GCC		39	17	22	15	7
	China	8.6	0.0	8.6	4.6	4.0		Abu Dhabi	0.0	0.0	0.0	0.0	0.0
	Indonesia	8.0	2.1	6.0	4.1	1.8		Bahrain	4.0	2.0	2.0	1.0	1.0
	Hong Kong	0.3	0.3	0.0	1.0	-1.0		Dubai	2.0	0.0	2.0	0.0	2.0
	Philippines	5.0	0.0	5.0	1.0	4.0		Egypt	1.5	0.0	1.5	3.3	-1.8
CEE		43	20	23	8	7		Iraq	0.0	0.0	0.0	0.3	-0.3
	Hungary	4.1	4.1	0.0	1.0	-1.0		Israel	4.0	0.7	3.3	0.0	3.3
	Poland	14.4	4.1	10.3	2.7	7.6		Jordan	0.0	0.0	0.0	0.0	0.0
	Romania	11.0	8.3	2.7	3.1	-0.4		Kuwait	0.0	0.0	0.0	0.0	0.0
	Kazakhstan	2.0	0.0	2.0	1.5	0.5		Lebanon	0.0	0.0	0.0	0.0	0.0
	Serbia	1.0	0.0	1.0	0.0	1.0		Morocco	1.1	0.0	1.1	1.1	0.0
	Türkiye	10.0	3.0	7.0	8.9	-1.9		Nigeria	1.0	0.0	1.0	0.0	1.0
LatAm		37	19	18	2	16		Oman	0.0	0.0	0.0	1.8	-1.8
	Brazil	4.5	4.5	0.0	1.0	-1.0		Qatar	5.0	0.0	5.0	2.0	3.0
	Chile	4.0	1.7	2.3	0.0	2.3		Saudi Arabia	12.0	12.0	0.0	1.1	-1.1
	Colombia	3.0	0.0	3.0	0.7	2.3		South Africa	0.0	0.0	0.0	0.0	0.0
	Costa Rica	1.0	0.0	1.0	0.0	1.0		Tunisia	0.0	0.0	0.0	0.3	-0.3
	Dom Rep	2.5	0.0	2.5	0.0	2.5		Kenya	1.5	1.5	0.0	0.6	-0.6
	Panama	3.5	3.1	0.4	0.4	0.0		UAE	4.0	0.0	4.0	3.8	0.3
	Mexico	16.7	9.7	7.1	0.0	7.1		Sharjah	3.0	0.8	2.3	0.0	2.3
	Peru	1.5	0.0	1.5	0.0	1.5							
All Frontiers									13	4	9	8	0

Note: Frontier Markets include: **Other LatAm:** Argentina, Aruba, Bahamas, Bolivia, El Salvador, Guatemala, Honduras, Jamaica, Ecuador, Paraguay, Suriname, Trinidad, Uruguay, Venezuela.

Other EE: Bulgaria, Czech Republic, Georgia, Macedonia, Armenia, Albania, Azerbaijan, Tajikistan, Uzbekistan, Srpska, Ukraine, Montenegro.

Other MEAF/GCC: Angola, Benin, Cameroon, Gabon, Ghana, Rwanda, Ethiopia, Senegal, Namibia, Tanzania, Zambia, Ivory Coast.

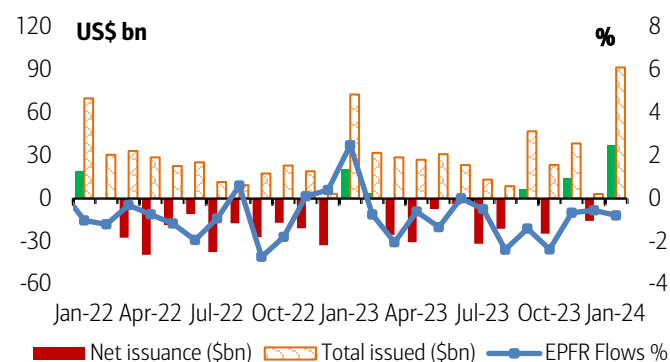
Other Asia: Fiji, Malaysia, India, Korea, Pakistan, Mongolia, Singapore, Sri Lanka, Thailand, Maldives, Vietnam.

Source: BofA Global Research. **Note:** Net issuance is only net of scheduled principal payments, not buybacks/tenders nor coupons.

Source: BofA Global Research BofA GLOBAL RESEARCH

Exhibit 21: Net issuance was positive in January

Gross and net monthly issuance (\$bn) and EPFR flows into EXD (%), as of Jan 31th. Positive net issuance in green, negative in red.

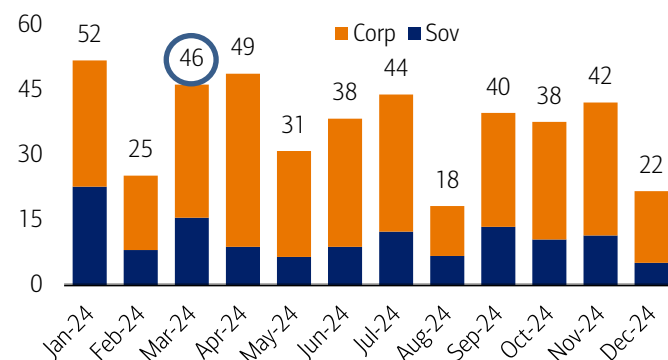


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC., EPFR Global

BofA GLOBAL RESEARCH

Exhibit 22: Mar debt service payment will be \$46bn.

Debt service payment (EM Corporate, EMCB, and Sovereign, EMGB)

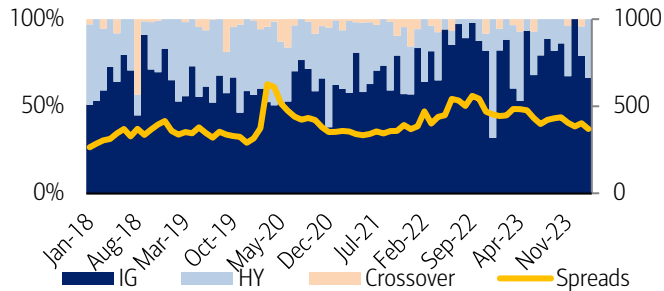


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC.

BofA GLOBAL RESEARCH

Exhibit 23: HY issuance had nearly disappeared by Sep'22, but has been recovering some since. Large Türkiye HY issuance dominated Dec

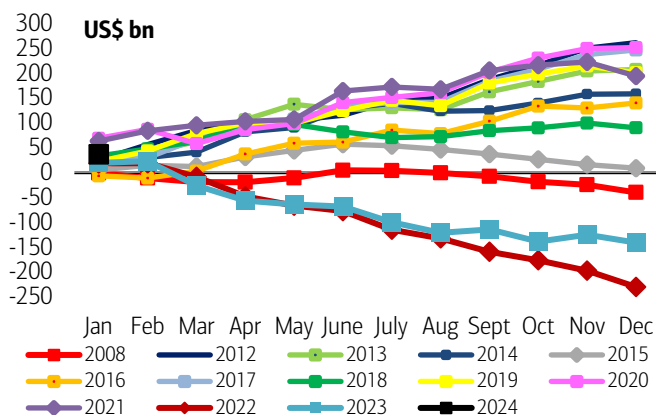
Monthly % of gross issuance by rating bucket and general sovereign spreads (without concessions, rhs) since Jan '18 – Feb '24



Source: BofA Global Research, Bloomberg Bond Radar, JPEIDISP Index (Sovereign spreads).
BofA GLOBAL RESEARCH

Exhibit 25: 2023 was negative following the worst year ever

Cumulative sov & corp net issuance in USD & EUR

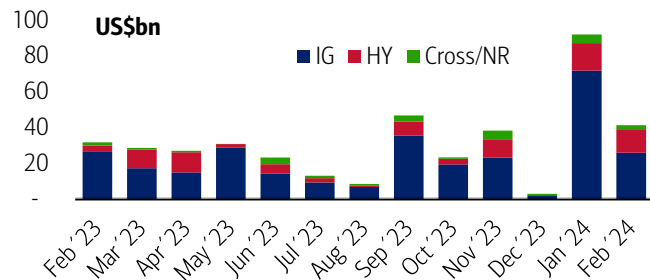


Note: Net issuance is total issuance less principal, interest and buybacks paid. Source: BofA Global Research, Bloomberg.

BofA GLOBAL RESEARCH

Exhibit 24: Regular Feb with large HY component

Monthly gross issuance by rating since Jan '23 – Feb '24 MTD

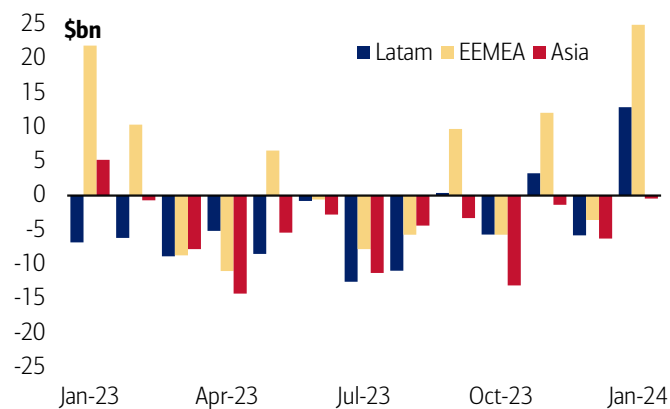


Source: BofA Global Research, Bloomberg Bond Radar.

BofA GLOBAL RESEARCH

Exhibit 26: Net issuance positive overall in January

Monthly net issuance by region



Note: Net issuance is total issuance less principal, interest and buybacks paid. Source: BofA Global Research, Bloomberg.

BofA GLOBAL RESEARCH

Fund Flows: EPFR data – focus on ex-China

EPFR (Emerging Portfolio Fund Research) tracks fund flows from a sample of funds that invest in external debt (EXD) and local debt markets (LDM). EPFR data is monitored by investors because it is a proxy for flows to the overall asset class. However, EPFR data requires careful interpretation due to its small sample (around 11% of the asset class, concentrated among European funds). We make our own adjustments to the data to improve its relevance (see Methodology for details).

Exhibit 27: Total EM Debt flows in 2022 were twice that of US HY flows in \$bn. Total EM flows = LDM ex-China + China LDM + EXD + Blend
EPFR fund flows (% of AUM or USD mn), omitting the 34% of the local funds that invest in the same country they were domiciled in

	1w (%)	1w (USD mn)	YTD (%)	YTD (USD mn)	2023 (%)	2023 (USD mn)	2022 (%)
LDM Funds ex China	-0.3	-275	0.1	63	-2.9	-2,802	-9.3
- LDM ETF	0.4	184	3.8	1,589	16.7	5,972	3.3
- LDM non-ETF	-0.9	-459	-2.9	-1,526	-11.4	-8,774	0.0
China LDM	-0.9	-107	-4.6	-591	-35.4	-7,010	-58.0
- China ETF	-1.0	-53	-1.6	-89	-27.3	-2,055	-68.0
- China non-ETF	-0.8	-55	-4.1	-502	-18.2	-4,955	0.0
EXD Funds	-0.2	-364	-1.5	-3,453	-9.9	-23,021	-10.5
- Corp flows	0.0	6	-2.3	-1,051	-17.1	-9,058	-16.8
- EXD ETF	-1.1	-543	-4.1	-2,061	1.0	264	-0.8
- EXD non-ETF	0.1	178	-0.8	-1,393	-9.1	-23,286	0.0
Blended Funds	0.4	234	-1.7	-913	-1.7	-834	-18.5
All EM debt	-0.1	-513	-1.3	-4,895	-8.6	-33,667	-16.4
All EM debt ex China	-0.1	-405	-1.2	-4,303	-7.2	-26,657	-11.5
EM Equity	0.1	714	0.1	1,578	1.9	24,171	1.1
US HY Corp	-0.2	-722	1.3	3,980	-0.5	-1,420	-10.5
US IG Corp	0.4	1,926	3.6	14,856	4.0	15,338	5.6

Note: We remove ~ \$61bn of the local funds that were domiciled in BG, CN, CO, IN, KR, MY, RO, RU, TH, TR and VN and of ETFs registered locally that invest in local debt (~\$6bn).

Source: BofA Global Research, Bloomberg, ICE Data indices, LLC, EPFR.

BofA GLOBAL RESEARCH

Exhibit 28: Most of EPFR-tracked funds are European domiciled; about 65% are EXD; fund AUM is just 9% of outstanding external debt and even less of local debt, but reflects fairly well the percentage inflows

AUM in EPFR flows for three classes: Small retail, high net worth ex-ETF, ETF (\$bn), including China

AUM (USDbn)	EXD	LDM	Total EM	EM Equity	US HY Corp	US IG Corp
Small retail	58	20	78	-	-	-
High net worth ex. ETF	116	65	181	-	-	-
ETF	49	24	72	-	-	-
Total	223	108	331	1,248	321	440
Europe domiciled	167	90	256	609	-	-
US domiciled	43	7	49	489	321	440
Asia & Others domiciled	14	11	25	150	-	-
Blend	-	-	54	-	-	-
Market Value of Benchmark (in \$bn)	2,482	5,805	8,287	7,035	1,248	8,128
Percent of EPFR that is US-domiciled	19%	6%	15%	39%		
Percent of market cap covered by EPFR	9%	2%	4%	18%		
Percent of EPFR that is ETF	22%	22%	22%			

Note: Market Cap of Benchmark is (EMGB + EMCB) for EXD no caps, LDMP for LDM (is capped), H0A0 for USHY, C0A0 for USIG and MXEF for equity; omitting the 34% of the local funds that invest in the same country they were domiciled in (mostly large Thai funds, and around 8% from China funds).

US IG Corp and US HY Corp are funds that invest strictly in Corporates, and do not include govts, agencies, mortgages, etc.

LDM AUM Includes China focused funds

Source: BofA Global Research, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 29: Asia focused funds represent over 11% of EPFR EXD AUM and 16% for LDM ex China
AUM by asset class by Geo Focus (in \$bn)

Fund Focus	EXD	LDM ex CN*	Total EM
ETFs - Global Emerging Markets	47	13	60
Non-ETFs - Global Emerging Markets	146	58	204
Asia ex-Japan Regional	25	15	40
Other	6	8	14
Total	223	95	319

Source: BofA Global Research, EPFR Global. Note: Based on daily data that may differ slightly from weekly or monthly data, omitting the 34% of the local funds that invest in the same country they were domiciled in (mostly large Thai funds). 20% of the GEMs LDM funds are ETFs; 30% of the GEMs LMD ETFs are iShares; 40% of the LDM ETFs are China ETFs and 80% of the China ETFs are iShares. China LDM funds AUM have fallen from a high of \$57bn to near \$12bn as of 02/28/24.

BofA GLOBAL RESEARCH

Methodology: What makes our EPFR approach different?

EPFR data requires special care and cautious interpretations

Although EPFR covers a small percentage of outstanding debt, investors persist in watching them, perhaps because of the larger proportionate representation in equities. It is an unreliable measure, and the flows appear small. EPFR's AUM includes a larger and larger percent of ETFs because they are growing fast, report daily and are thus accessible. EPFR base is mainly high net worth and smaller institutions. EPFR EM debt AUM is heavily weighted toward Europe, rather than US.

We clean LDM flows

We remove funds representing 34% of EPFR AUM. These are locally registered mutual funds or ETFs investing in same local debt, almost all local money market funds because they do not reflect global flows (32% are domestic local Thai mutual funds, 2% are other EM country domestic mutual funds investing in local debt).

Ratings actions, 2023 44% downgrades

- **Positive week:** 0 down & 2 up this week, vs 0 down and 0 up last week.
- **2023 positive: 56% upgrades.**
About 44% of EM ratings or outlooks have been downgrades
- **2020 downgrades were exceptionally high at 93%**

See our [Default Primer, Sept 2022](#).

Exhibit 30: 2023 more upgrades than downgrades vs 93% downgrades March 2020 - YE 2020

Number of sovereign ratings actions, including outlooks

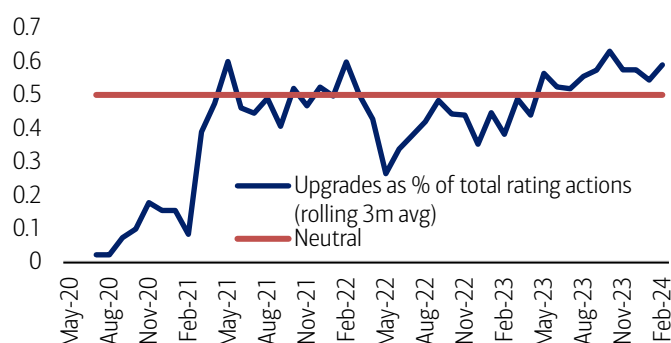
	Down	Up	% Downgrades
1/1/20-3/4/20	10	7	59%
3/4/00-YE2020	194	15	93%
2021	57	58	50%
2022	103	65	61%
2023	61	78	44%
2024 YTD	6	5	55%

Source: BofA Global Research, Bloomberg. Note: Suriname, Belize, Ecuador and Argentina were upgraded after restructurings of debt

BofA GLOBAL RESEARCH

Exhibit 31: After a negative 2022, upgrades have exceeded downgrades since 2023

Upgrades in rating or outlook as % of total rating actions 3m rolling avg



Source: BofA Global Research, Bloomberg Note: Suriname, Belize, Ecuador and Argentina were upgraded after restructurings of debt.

BofA GLOBAL RESEARCH

Exhibit 33: Defaulted debt cumulated \$196bn since '20, \$1bn in '23

Defaulted sovereign debt by country and year since 2020 (\$bn)

Year	Country	Amt Defaulted (\$bn)
2020	Argentina	61.5
2020	Ecuador	17.4
2020	Lebanon	24.1
2020	Suriname	0.7
2020	Zambia	2.3
2021	Belize	0.6
2022	Sri Lanka	12.6
2022	Russia	36.6
2022	Belarus	3.3
2022	Ukraine	22.8
2022	Ghana	13.2
2023	Ethiopia	1.0

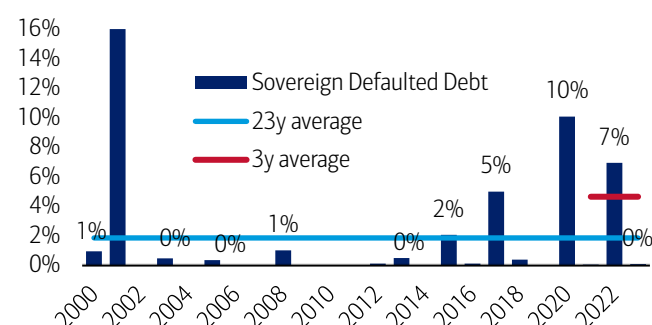
Source: BofA Global Research, Bloomberg.

BofA GLOBAL RESEARCH

- In 2020, 6% of the 78 countries defaulted or restructured, 9% of the EMGB index face value (\$107bn/\$1.2tn).
- In 2021, only Belize defaulted and restructured, 1% of issuers.
- In 2022, 6% of the 78 countries defaulted or restructured, 7% of the EMGB index face value (\$89bn/\$1.2tn).
- In 2023, only Ethiopia defaulted (\$1bn).

Exhibit 32: Sovereign defaults in 2020 hit 9% of face value of all sov bonds, (out of \$1.2tn face value). Avg 2% in 23yrs, 5% in last 4yrs. As a % of only EM sovereign high yield bonds avg 4% in 23y & 8% in 4yrs.

EM sovereign default rates as % of EM sov debt (USD & EUR)



Source: BofA Global Research, Bloomberg, ICE Data indices, LLC.

BofA GLOBAL RESEARCH

Comps: 2001 Argentina \$95bn of sovereign debt, but only \$45bn of that was in the index and the index was just \$294bn back then, so Argentina was 15% of the face. 2017 Venezuela sovereign default was less than 4% of the EM sovereign index at the time, but if we include PDVSA which was a quasi, it was more. We do not include quasies in our sovereign index. In both the Argentina and Venezuela cases, they were the main defaulters in their respective years. 2020 had 3 big defaults. That is key here.

In this environment, watch those low BBBs.

- 2 BBB- and 1 lower Croatia, Cyprus, and Trinidad.
- 3 BBB- Romania and India
- 2 BBB- and 1 higher Russia, Kazakhstan, Colombia and Italy.
- 1 BBB- and rest higher Mexico, Uruguay, Hungary and Portugal.

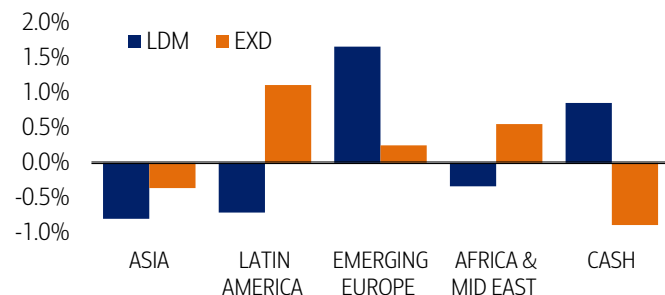
See [Default Primer Sept 2022](#) and [How sovereign fallen angels lost their wings: Mx, Col, Uru](#)

The default rate was 7% for sovereign debt in 2022, after the prior 22y average of 2%. But there are not many low rated issuers in EM anymore. **For 2023**, there are just 4 issuers that are CCC (Argentina, Ecuador, Ukraine, Bolivia) and have a price <\$50. **If they all defaulted, the face value of default would be \$85bn (7%).** The loss upon default would not be that high because the prices are already so low. The mkt value of those bonds is just \$27bn.

EM debt fund flows charts

Exhibit 34: Regional allocations – LDM & EXD into EE

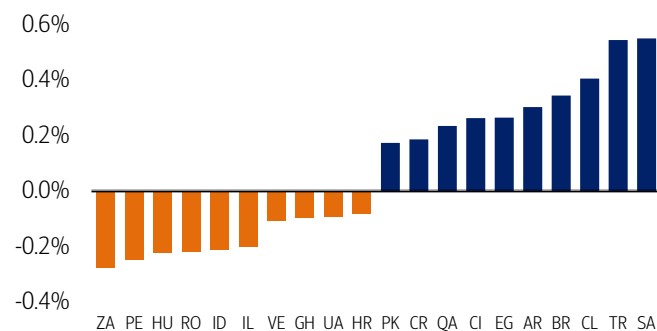
LDM and EXD 3m change in EPFR regional allocation 3m change 10/31/23-1/31/2024



Note: Reported on 2/23 for fund positions on 1/31. Source: BofA Global Research, EPFR Global
BofA GLOBAL RESEARCH

Exhibit 36: EXD country allocations - Large losses in market value from IL & RO assets, relative growth in TR & EG

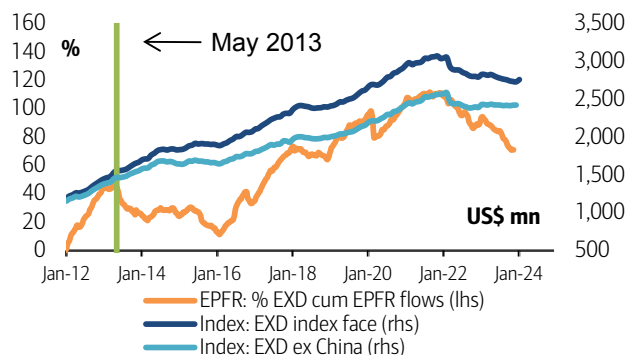
EXD EPFR 3m allocation change 10/31/23-1/31/2024



Note: Reported on 2/23 for fund positions on 1/31. Source: BofA Global Research, EPFR Global
BofA GLOBAL RESEARCH

Exhibit 38: Size of EXD market vs. inflows - Total EM corp and sov debt both rise at a faster pace faster with inflows, sharp drop. Close to \$100bn Russia bonds removed at a price of 0 on 3-31-2022

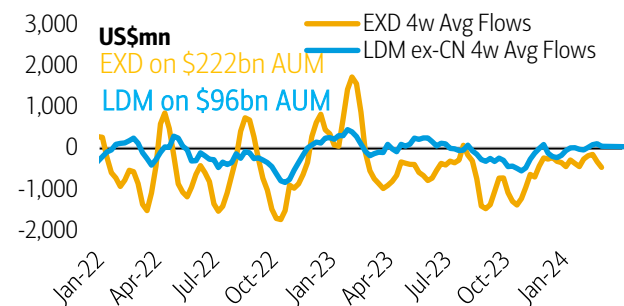
EXD total index eligible face value for EM corp and sov (face = new issues - bonds aging out of 1y maturity & retirements)



Note: EM Corp and Sov indices are EMCB and EMGB. Source: BofA Global Research, EPFR Global
BofA GLOBAL RESEARCH

Exhibit 35: Fund flow trends - EXD flows are more volatile than LDM. EXD flows are very volatile and turning positive while LDM ex-CN flows are negative though small

EXD and LDM ex-CN 4-week average flows (\$mn)

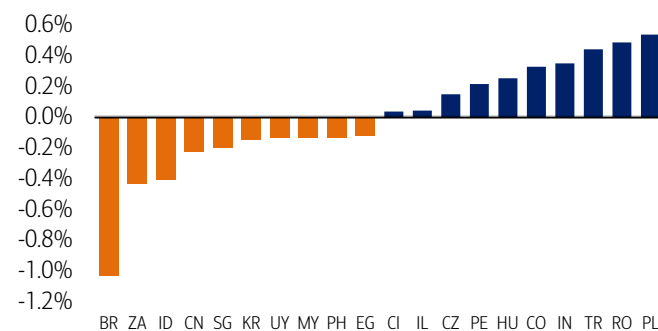


Source: BofA Global Research, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 37: LDM country allocations – Large losses in market value from BR & MX assets, relative growth into PL & RO

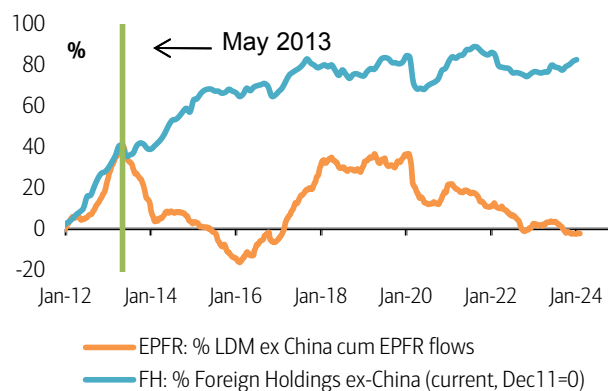
LDM EPFR 3m allocation change 10/31/23-1/31/2024



Note: Reported on 2/23 for fund positions on 1/31. Source: BofA Global Research, EPFR Global
BofA GLOBAL RESEARCH

Exhibit 39: Two measures of inflows, EPFR funds vs foreign holdings (FH). FH ex-China growing faster than EPFR rate

LDM Foreign holdings, with EPFR reported flows (% change in foreign holdings and EPFR cum flows)

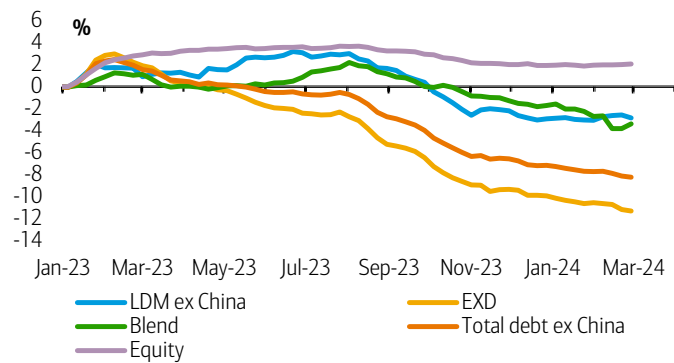


Source: BofA Global Research, local governments websites, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 40: % EM equity and debt outflows since Jan 2023

Cumulative EM debt and equity fund flows since Jan '23

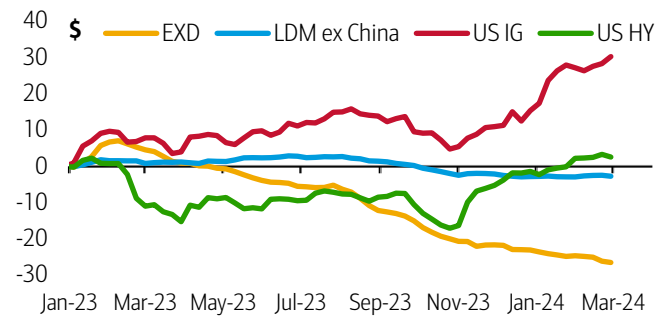


Source: BofA Global Research, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 41: USDConsistent EXD outflows. US IG & HY Corp steady inflows, IG asset class 5x larger than US HY corp

Cumulative flows by asset class since Jan '23 (in \$bn)

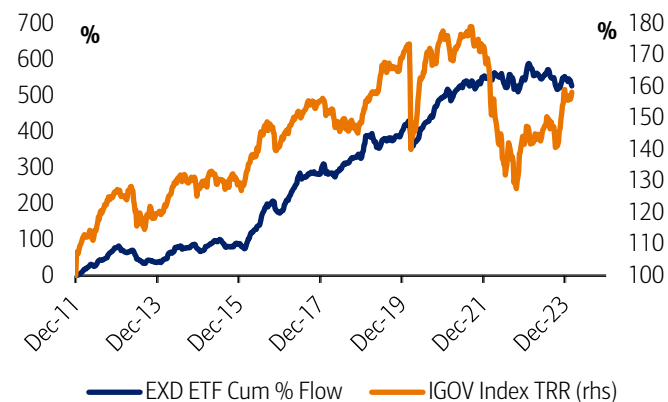


Source: BofA Global Research, EPFR Global, US Corp mkt is COAO, US HY mkt is HOAO

BofA GLOBAL RESEARCH

Exhibit 42: ETF-only EXD flows had moved strongly with performance until 2021, but not any more

ETF-only EXD flows vs IGOV Index returns since Dec '11

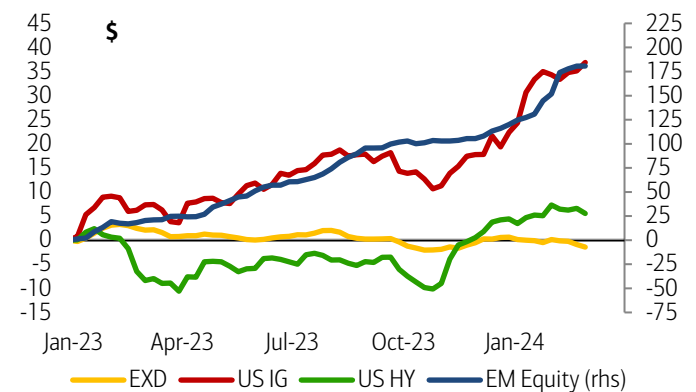


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC, EPFR Global.

BofA GLOBAL RESEARCH

Exhibit 43: ETFs in \$: EM equity (rhs) inflows increasing steadily as is trend for US IG; EXD and US HY see 2024 outflows

Cumulative flows of ETF by asset class since Jan '23 (in \$bn)



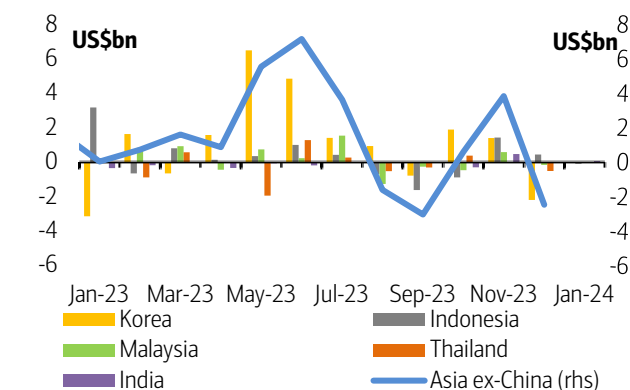
Note: This chart shows aggregate EPFR data, it names no specific ETF.

Source: BofA Global Research, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 44: Asia ex-China LDM flows peaked in May 2023

Asia ex-China foreign purchases of LDM by country in current period USDbn

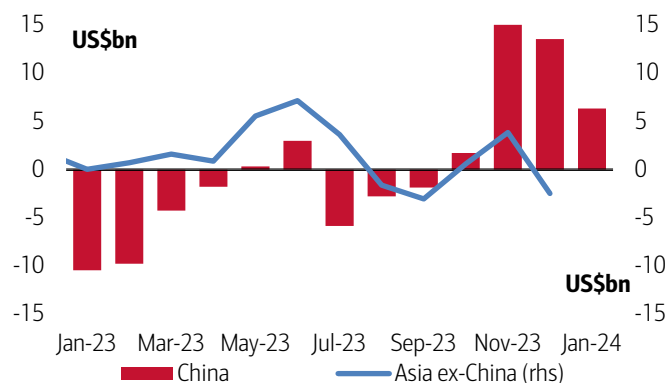


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 46: Big China recovery in the last 2 months of 2023

China and Asia ex-China foreign purchases of LDM in current period USDbn

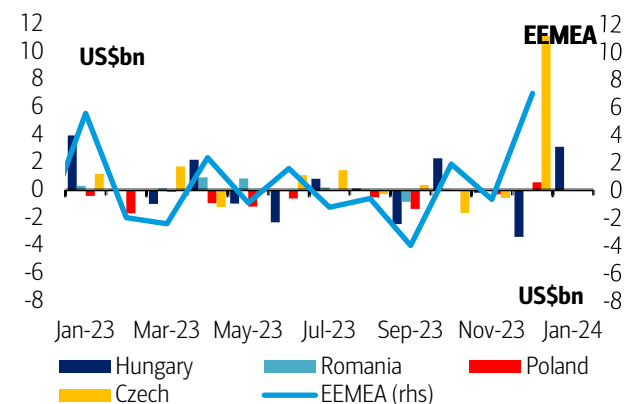


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 48: EEMEA LDM flows – Weak flows overall

EEMEA foreign purchases by country in current period USDbn



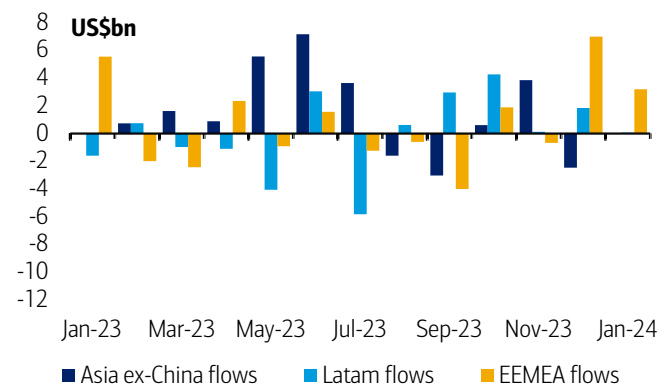
Note: EEMEA is the sum of all 8 EEMEA countries

Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 45: Foreign holdings of LDM – Flows turning positive

By region EM foreign purchases in current period USDbn

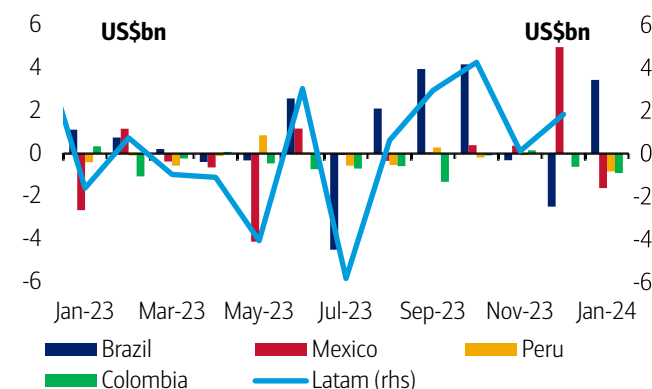


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 47: LatAm LDM flows – Low flows in 2023, except Mex

LatAm foreign purchases of LDM by country in current period USDbn

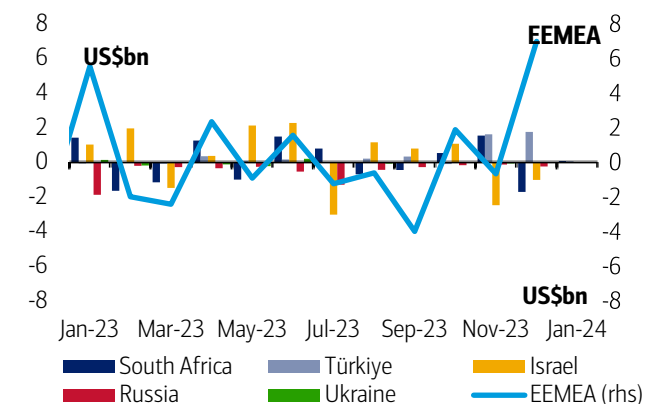


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 49: EEMEA LDM flows – Weak flows overall, except TR & ZA

EEMEA foreign purchases by country in current period USDbn



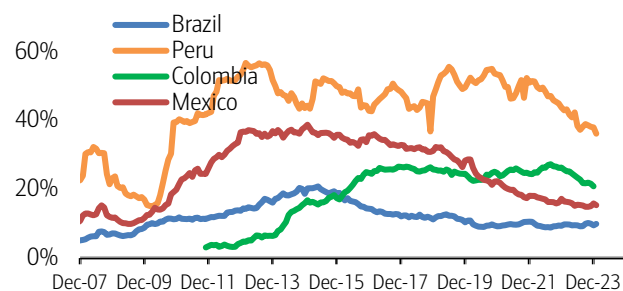
Note: EEMEA is the sum of all 8 EEMEA countries

Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 50: Foreign holdings share in LatAm- steepest decline is in Mex (outflows + big issuance). Peru now the largest (almost 40%)

LatAm foreign bond holdings share (% of foreign holdings)

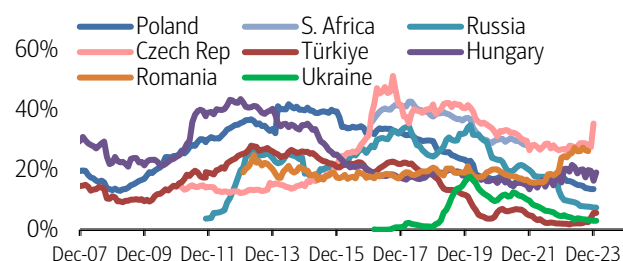


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 52: Foreign holdings shares in EEMEA – All declining since mid-2020, except Romania

EEMEA foreign bond holdings share (% of foreign holdings)

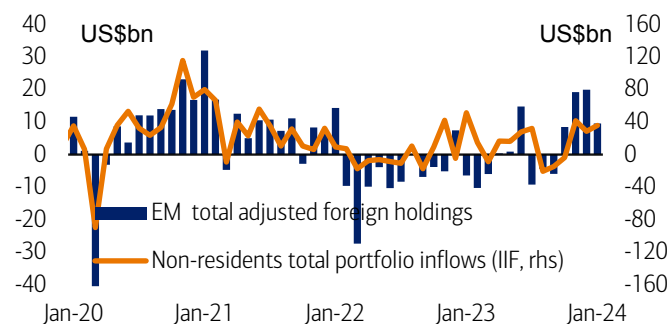


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 54: IIF portfolio flows have been recovering lately

Total EM foreign purchases of local debt (including China) versus IIF portfolio flows

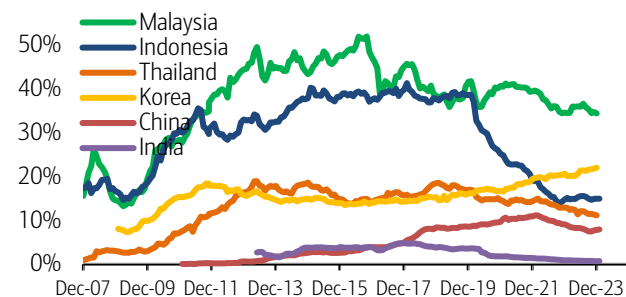


Note: Total portfolio inflows (IIF) are net non-resident purchases of EM stocks and bonds. Recent IIF points are estimates. BofA points are from countries that have already reported. Source: BofA Global Research, IIF.

BofA GLOBAL RESEARCH

Exhibit 51: Foreign holdings share in Asia – sharp decline in Indon (due to outflows + big issuance), declined from 40% to 15%

Asia foreign bond holdings share (% of foreign holdings)

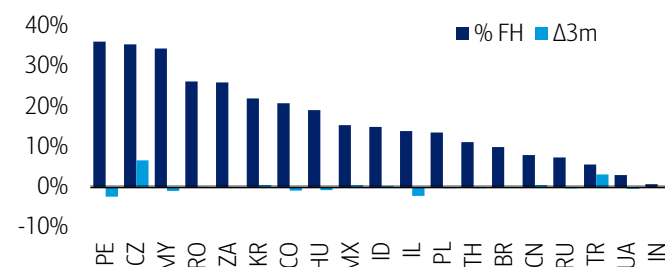


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 53: Foreign holdings share and 3m change - Declined the most in IL, HU and PE

Foreign holdings share and 3m change



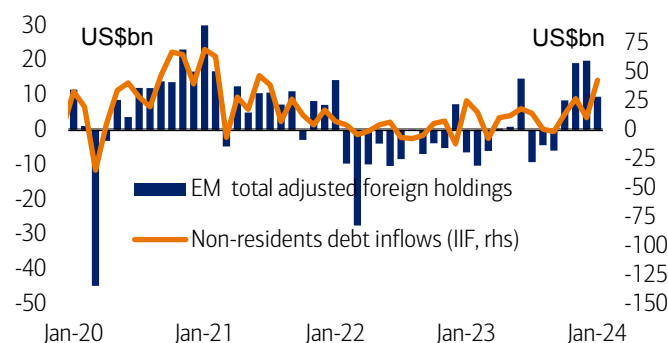
Note: Countries are ranked from highest to lowest % of foreign holding.

Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 55: IIF debt flows also indicate EM local debt flows have been doing better in the last few months – seen with debt flows

Total EM foreign purchases of local debt (including China) versus IIF DEBT flows



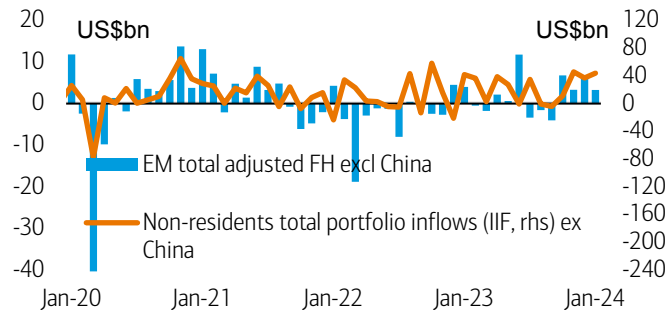
Note: Recent IIF points are estimates. BofA points are from countries that have already reported.

Source: BofA Global Research, IIF.

BofA GLOBAL RESEARCH

Exhibit 56: Ex-China flows have been positive in the last few months seen with IIF portfolio flows

Ex-China Total EM foreign purchases of local debt versus IIF portfolio flows ex-China

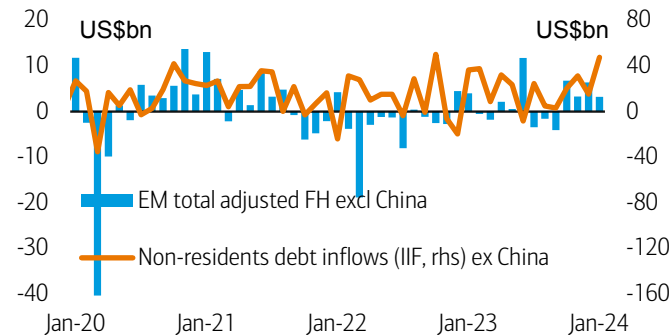


Note: Total portfolio inflows (IIF) are net non-resident purchases of EM stocks and bonds. Recent IIF points are estimates. BofA points are from countries that have already reported. **Source:** BofA Global Research, IIF.

BofA GLOBAL RESEARCH

Exhibit 57: Ex-China flows have been positive lately seen with IIF debt flows

Ex-China Total EM foreign purchases of local debt versus IIF DEBT flows ex-China



Note: Recent IIF points are estimates. BofA points are from countries that have already reported. **Source:** BofA Global Research, IIF.

BofA GLOBAL RESEARCH

Acronyms

EM: Emerging Markets // **DM:** Developed Markets // **EXD:** External debt // **LDM:** Local debt markets **ESG:** Environmental, Social & Governance // **AUM:** Assets under management // **Sov:** Sovereign // **Corp:** Corporate // **GCC:** Gulf Cooperation Council (political and economic alliance of countries: Saudi Arabia, Kuwait, United Arab Emirates, Qatar, Bahrain and Oman) // **MEAF:** Middle East & Africa // **EEMEA:** Eastern Europe, Middle East & Africa // **EMTA:** Emerging Markets Trader Association // **FH:** Foreign Holdings //

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 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

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.

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.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

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; 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 or 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.