

GEMs Flow Talk

As US rates keep on climbing, outflows from EM continue to mount

EXD saw its 2nd largest outflow since Nov'22, while LDM its largest one since Oct'22

EPFR flows (% of AUM).

	All ex CN	EXD	LDM ex CN	Blended	EM Equity	US HY	ETF EXD	ETF LDM
1w	-0.4%	-0.3%	-0.6%	-0.4%	-0.2%	-0.3%	0.1%	-0.7%
YTD	-6.0%	-8.6%	-2.1%	-0.5%	2.4%	-5.7%	-4.5%	16.1%
FY 2022	-11.5%	-10.5%	-9.3%	-18.5%	1.1%	-10.5%	-0.8%	3.3%
Trend	13↓	13↓	12↓	2↓	3↓	5↓	1↑	4↓

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

BofA GLOBAL RESEARCH

Not the best time for EM: Since Jan'22 nearly \$67bn has fled from EM ex-China (-16% of AUM), while 10y UST rates have jumped by 315bps from 1.7% to 4.9% (Ex 1). This major Fed tightening has negatively affected HY funds too, which suffered outflows of -\$54bn (-15.3% of AUM), while US IG had +\$26bn (+7.6% AUM) inflows. We believe crossover demand for EM bonds won't pick up until US rates stabilize and volatility declines, returns become positive and the fundamental EM story improves.

Spreads have widened in the last 2y for EM sovereigns overall, but mainly due to CCC-Cs rated countries. Overall, they haven't widened as much as US corps, and in fact have tightened for BBs and Bs. This indicates they are still relatively rich, and further adjustments would likely be needed to make them appealing to investors again.

Continues in page 2...

Exhibit 1: EM sov spreads are relatively tight vs US corp, except for Bs and CCC & lower

Spreads by rating bucket

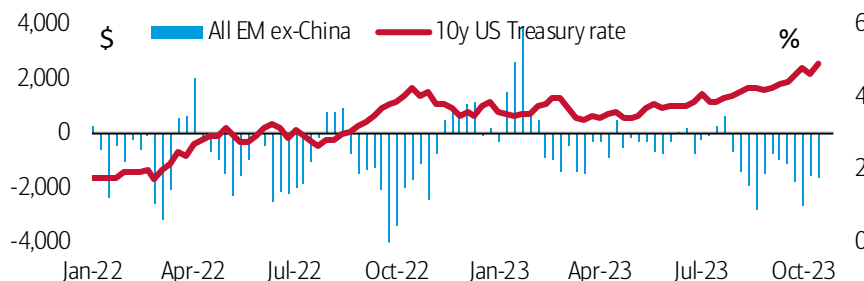
	Total	A-AAA	BBB	BB	B	CCC & lower
EM Sov	347	98	157	237	580	2,604
EM Corp	279	106	224	384	654	1,615
US Corp		107	163	310	472	1,014

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

BofA GLOBAL RESEARCH

Exhibit 2: As rates keep on climbing, outflows from EM are getting worse

All EM ex-China weekly flows in \$mn and 10y US Treasury bonds rate since Jan'22



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

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.

12617659

Timestamp: 26 October 2023 07:31PM EDT

26 October 2023

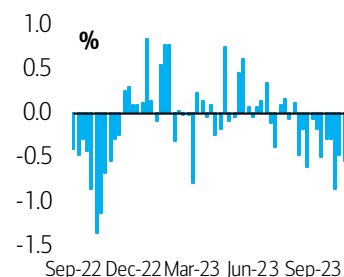
GEM Fixed Income Strategy
Global

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 were down -0.6% of AUM

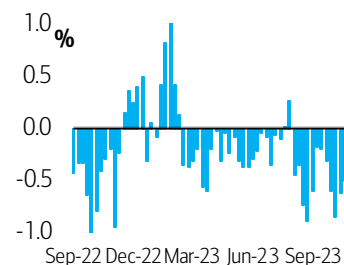


Source: EPFR Global, BofA Global Research

BofA GLOBAL RESEARCH

EXD debt funds weekly flows

EXD flows were down -0.3% 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 ESG not bad in 3Q: There is a large distinction in 3Q flows toward EM ESG funds, which have been protected from the outflows. The wave toward ESG continues – EM selling either moves to another asset class or moves to EM ESG. We find there is contrast by investor region more than by asset class, based on our client visits in Europe last week where the discussions were more heavily weighted toward ESG funds than we find is present with US investors.

Low Oct: gross issuance is at just \$16bn, ~30% of the past 5y avg of \$49bn for the month. 82% IG. 2 sovs issued. 50% EEMEA, 44% Asia and 6% LatAm.

Bad Sept for local govt bonds overall: China faced -\$1.8bn outflows, adding 3 consecutive months with outflows, and 17 in the past 20m (YTD at -\$33bn). While EM ex-China is at -\$6.2bn so far, much worse than in Aug (-\$2.3bn).

LDM Real Money Tracker: Funds reduced their bond holdings and FX exposure. Cash levels were increased after declining the past 2m, while duration was reduced slightly.

****NEW:** EPFR Country Flows: EXD: ↗TR & UA ↘MX & SA. LDM: ↗MY & IN ↘ZA & MX

EM Debt Facts at your fingertips

Crossover sentiment

- End-July Crossover Credit investor survey indicates IG investors decreased EM, but again zero HY investors said that EM is their largest non-core allocation.
- US pension funds are fully funded, risk reduction may be coming.

LDM flows

- YTD LDM ex-China foreign holdings flows into govt bonds are up \$3bn
- Fleeing China: Foreign holdings of China local debt are down \$33bn YTD and China LDM funds AUM tracked by EPFR have fallen from a high of \$57bn to under \$14bn as of Oct 24.
- Indonesia foreign holdings share of local debt down from peak of 40% to 14%

Default statistics

- 21% (\$151bn face value) total of USD sovereign debt in default (\$118bn) or is rated CCC or below (\$33bn).
- Of EUR-denominated sovereign bonds, 3.5% (\$15bn is in default (\$8bn) or is rated CCC or below (\$7bn)
- Currently over 9% of outstanding currently paying face value of EM sovereign USD debt is distressed with CCC+ or worse rating
- Since the pandemic started, 2023 has the fewest % downgrades.

Default rates

- In the last 3 years 5.5% of all EM sovereign bonds defaulted annually, though historically it averaged 2% annually for the last 22 years.
- As a % of high yield sovereign bonds, EM default rates have been 11% annually (32% cumulatively) for the last 3 years, though just 4% annually for 22 years.
- 18% of face value in the EMGB index in Jan 2020 has defaulted at some point in the last 3 years.
- 38% of face value of EM sovereign high yield bonds defaulted in the last 3 yrs.
- 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 = 24.8%/15.6% for Asia HY, 45.6%/32.3% for China HY, and 62%/50% for China HY property (May 24).

EXD Issuance / stock

- There is US\$2.7tn face of index eligible debt. \$1.2tn sovs & \$1.5tn corps.
- Our 2023 forecast total sovereign & corporate issuance is \$364bn.
- Sovereign issuance was front loaded in 2023 – sovereigns issued half of our annual issuance forecast in 1Q, but Corps only 30%.
- Largest remaining net 2023 sovereign issuance forecast will be from China.
- Negative net issuance since Feb 2022 (corp & sov) = -\$339bn (-11.1%),
- Negative net in 16 of the last 19months, is money coming back to investors supporting prices.
- China EXD new issuance as % of all issuances dropped significantly from 48% in 2018 to just 14% today.
- 61% of sovereign debt measured market cap is IG, and 74% of corporate debt.
- Sep is a high issuance month (\$59bn vs monthly avg \$46bn).

ESG flows

- EM ESG fund outflows in 2Q23 were -\$0.6bn vs non-ESG funds -\$5.6bn outflow.

EM TRR YTD is positive for LDM: EXD = 0.0%, LDM = +0.5%



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 3: Foreign Holdings flows deteriorating 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	20-Oct	13-Oct	6-Oct	29-Sep	22-Sep	15-Sep	8-Sep	YTD \$ wkly avg	2022 \$ wkly avg	2021 \$ wkly avg	2020 \$ wkly avg	2019 \$ wkly avg
India	-0.8	-0.3	0.0	-0.1	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.2	0.0
Indonesia	0.0	-0.3	-0.4	-0.9	0.0	-0.6	0.0	0.0	-0.2	-0.1	-0.1	0.2
Hungary	0.0	0.4	2.5	-2.5	-0.7	0.1	0.7	0.1	0.0	0.0	0.0	0.0
Türkiye	0.1	0.1	0.0	0.1	0.1	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	-0.1
Mexico	na	0.0	-0.1	1.2	-0.7	-0.4	-0.4	-0.2	0.0	-0.3	-0.2	-0.1
Monthly Data	September	August	July	YTD (%)	YTD (\$)	2022 (\$)	2021 (\$)	2020 (\$)	Current Holdings	Foreign Holdings	Total debt (\$)	% FH flows since 2/29/20
China	-1.8	-2.8	-5.8	-12%	-33.4	-30.4	86.7	78.7	281	8%	3,738	-21%
Korea	na	na	1.4	11%	11.9	15.9	34.0	18.8	169	21%	787	15%
India	-0.1	0.0	0.0	-7%	-1.3	-2.9	-2.6	-12.7	8	1%	1,187	-7%
Indonesia	-1.6	-0.7	0.4	4%	2.9	-10.4	-6.8	-6.8	54	15%	358	4%
Malaysia	-0.3	-1.3	1.5	6%	2.5	-1.7	3.5	3.1	42	35%	119	6%
Thailand	-0.3	-0.5	0.3	-6%	-1.5	-0.7	2.7	-0.5	25	11%	219	-8%
Asia	-4.1	-5.3	-2.3	-3%	-18.9	-30.2	117.5	80.6	578	9%	6,409	-6%
Czech Republic	na	-0.3	1.4	13%	3.5	-0.2	-0.2	-1.2	38	29%	130	0%
Hungary	-2.6	0.1	0.8	1%	0.1	1.0	-1.4	0.3	18	17%	101	-9%
Ukraine	0.0	-0.1	0.0	-16%	-0.5	-1.5	-0.1	-1.2	1	3%	37	-19%
Poland	na	-0.5	0.0	-16%	-5.6	0.7	-4.1	-7.0	33	15%	222	-17%
South Africa	-0.4	-0.7	0.8	0%	-0.1	-3.2	0.5	-1.3	44	26%	171	-2%
Romania	na	na	na	18%	2.0	5.2	-2.1	2.4	18	26%	68	84%
Russia	na	-0.5	-1.3	-13%	-5.4	-11.7	-2.6	3.6	13	8%	164	-27%
Israel	na	1.1	-3.0	29%	4.3	-2.7	6.8	5.3	22	10%	218	63%
Türkiye	0.3	0.2	0.0	10%	0.8	-3.1	-0.5	-5.2	3	3%	109	3%
EEMEA	-2.7	-0.6	-1.4	0%	-0.8	-15.4	-3.7	-4.4	189	15%	1,219	-5%
Brazil	na	2.1	-4.5	2%	1.5	-16.2	15.5	0.5	113	9%	1,217	5%
Mexico	0.1	-0.4	-0.1	-6%	-5.9	-2.1	-17.6	-12.5	97	15%	649	0%
Peru	na	-0.5	-0.6	-7%	-1.4	-3.3	-0.8	1.3	17	38%	44	-14%
Colombia	-1.3	-0.6	-0.7	-18%	-4.7	3.1	2.4	2.6	25	22%	114	-21%
LatAm	-1.2	0.6	-5.8	-5%	-10.5	-18.6	-0.5	-8.1	251	12%	2,024	-1%
China	-1.8	-2.8	-5.8	-12%	-33.4	-30.4	86.7	78.7	281	8%	3,738	-21%
Total ex China	-6.2	-2.6	-3.7	0%	3.2	-33.9	26.6	-10.6	737		5,914	0%
Total so far	-8.1	-5.4	-9.5	-3%	-30.2	-64.2	113.4	68.1	1018		9,652	-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 qpn reinvested is counted as an increase in face value

BofA GLOBAL RESEARCH

Ex-China flows

- **Sep ex-China flows are at ▼\$6.2bn**, with ▼\$2.6bn out from Hungary, ▼\$1.6bn from Indonesia and ▲\$0.3bn into Türkiye. 10/18 countries reported.
- **Aug ex-China flows are at ▼\$2.6bn**, with ▼\$1.3bn out from Malaysia, ▼\$0.7bn from Indonesia and ▲\$2.1bn into Brazil. 16/18 countries reported.

Including China

- Sep flows are at ▼\$8.1bn so far with ▼\$1.8bn out from China.
- Aug flows are at ▼\$4.9bn so far with ▼\$2.9bn out from China.

Flows winners: Israel, Türkiye and Mexico

- Sep: Türkiye (+\$0.3bn) and Mexico (+\$0.1bn). // Aug: Israel (+\$1.1bn).

Flows losers: Hungary, Indonesia, Colombia, Poland, S. Africa, Thailand, Malaysia and India

- Sep: Hungary (-\$2.6bn), Indonesia (-\$1.6bn), Colombia (-\$1.3bn), S. Africa (-\$0.4bn), Thailand (-\$0.3bn), Malaysia (-\$0.3bn) and India (-\$0.3bn). // Aug: Poland (-\$0.5bn).

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 (10/05)

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.

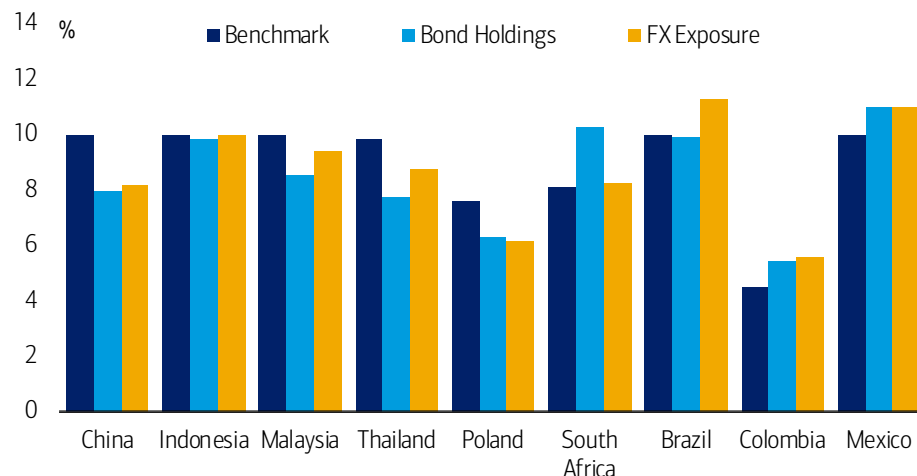
In our monthly real money positioning tracker, reporting end August positioning, we found that:

- **Cash levels increased in August** (at 6.0 from 5.0 in July).
- **Duration** was down in August (at 5.69 from 5.74 in July).
- **Bonds exposure:** South Africa (2.13% overweight) bonds continued to be most favoured by funds we track followed by Mexico and Colombia (0.97% and 0.93% overweight). In August, funds continued to remain underweight in China, Indonesia, Malaysia, Thailand, Poland and turned underweight in Brazil.
- **FX exposure:** In August, BRL (1.24% overweight) was the most favored currency by GBI-EM indexed funds we track followed by COP. Funds continued to be overweight in ZAR and MXN and remained underweight in CNY, IDR, MYR and PLN. Funds turned underweight in THB.

[GEMs FI & FX Strategy Watch: Real Money Tracker – Position reduction 06 October 2023](#)

Exhibit 4: South Africa bonds and COP most favored in EMLDM portfolios

Emerging Markets Bond holdings and FX exposure in Aug-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

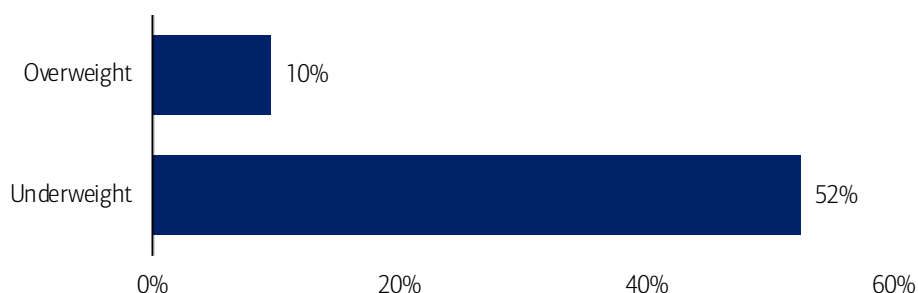
We publish a periodic report consolidating six crossover investor surveys in credit, equities and FX, [What do crossover investors think of EM? 25 October 2023](#)

From Crossover US credit bi-monthly investor survey (Sept 26-29, 2023)

- **New: For US IG investors that invest in EM, 52% are UW and only 10% are OW.**
- But US HY investors have returned to EM after 4 months. When asked what was their largest allocation outside of their primary focus, 12% of the HY participants chose EM (from 0% in the previous 4 months).
- The view from US IG investors = 9%, up from 8% in July.
- Recession is #1 concern, followed by inflation #2.

Exhibit 5: What is your positioning in EM issuer bonds?

Most investors are either not involved in EM or underweight EM



Source: BofA US Credit Investor Survey

BofA GLOBAL RESEARCH

[Credit Market Strategist: Sep '23 Credit Investor Survey: Living the rate shock 29 September 2023](#)

China vs ex-China

- **EM EXD Corp index face ex-China** fell in last 12m by \$2bn (0% decline), due to negative net issuance & defaulting bonds removed. China is 22% of EM Corp Index.
- **China LDM flows** down -\$1.8bn (Sep) vs -\$2.9bn (Aug), posting its 15th outflow in the last 18 months.
- 2023 foreign CGB outflows escalated and are nearly 4 times the rate of 2022, while local commercial banks were significant buyers in both primary and secondary issues and [BofA Asian analysts expect commercial bank demand to continue](#). Since February 2022, appetite for China bonds had disappeared, with net sellers of \$30bn (51% of foreign holdings). As of Oct 6 '23 the [LTM default rate of China HY property bonds](#) was 37%/ 28% (by count/ amount). BofA Asian analysts are [expecting more outflows](#).

Exhibit 6: China suffered outflows in Sept

LDM China foreign holdings (FH) growth as of 30 Sep- in US\$

	FH Sep	Holdings USD (bn)	Changes in US\$				% of YTD flows
			1m	3m	6m	YTD '23	
China	-1.8	284	-2	-10	-9	-33	111%
FH ex-CN	-6.2	740	-6	-12	2	3	-11%
Total FH	-8.1	1023	-8	-23	-7	-30	100%

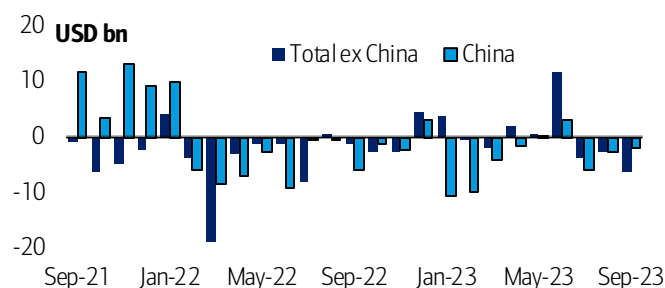
Source: BofA Global Research, Local government websites; Note: We think some FH may be from Central Banks, not only investors

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: China suffered outflows in Sept

Foreign Holdings change Total ex-China and China



Source: BofA Global Research, Local governments' websites. Note: Mar'20 ex-China was -\$45bn

BofA GLOBAL RESEARCH

Exhibit 9: China corp issuance share dropped to 14% in 2023, from 36% of all 2022, down from 48% peak in 2018.

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

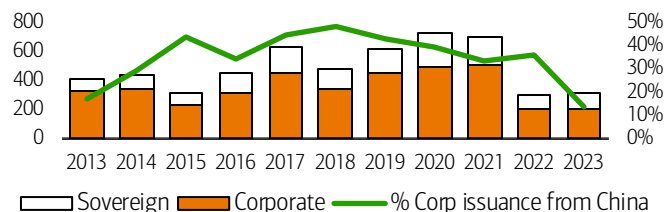
Country	2018	2020	2022	2023 YTD
China	165,332	196,978	74,152	27,458
Rest of EM corporates	178,063	295,206	129,348	173,299
Total	343,394	492,856	203,500	200,757
% China	48%	40%	36%	14%

Source: BofA Global Research, EMDL on Bloomberg

BofA GLOBAL RESEARCH

Exhibit 11: China EXD issuance = 14% of all EXD corporate issuance

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

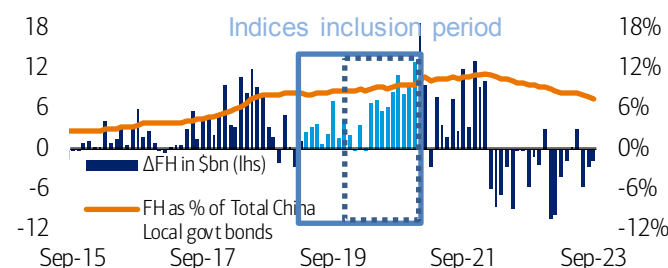


Source: BofA Global Research, EMDL on Bloomberg

BofA GLOBAL RESEARCH

Exhibit 8: Sep ΔFH -\$1.8bn, FH down to 7.5% of China GCB bonds

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

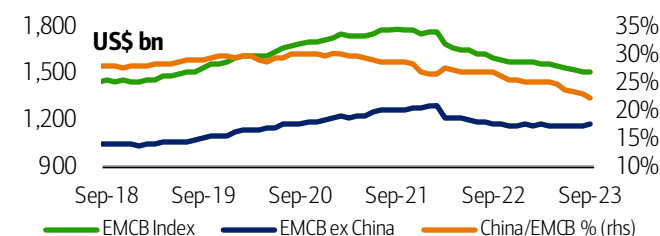


Source: BofA Global Research, Local governments' websites. Period of light blue bars was entry into the Bloomberg Barclays Agg (solid box) and inclusion of JPM GBI EM (dotted box).

BofA GLOBAL RESEARCH

Exhibit 10: China represents 22% 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

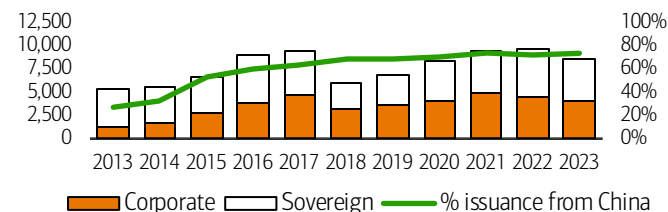


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC

BofA GLOBAL RESEARCH

Exhibit 12: China LDM issuance = 74% of all EM LDM issuance YTD

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



Source: BofA Global Research, Bloomberg

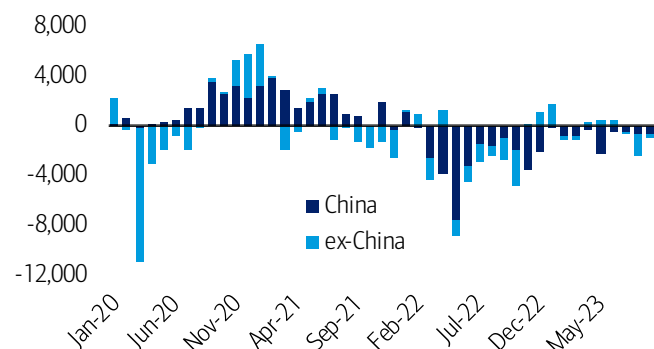
BofA GLOBAL RESEARCH

LDM ex-China posted outflows again

- **LDM ex-China funds show small outflows in 2023 vs -\$8bn outflows in 2022.** The outflows in 2023 are at -\$0.4bn.
- **China funds also show smaller 2023 outflows than those in 2022.**
- **Foreign holdings data** shows foreign investors have been selling China 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 13: More outflows from ex-China than from China in Sep

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

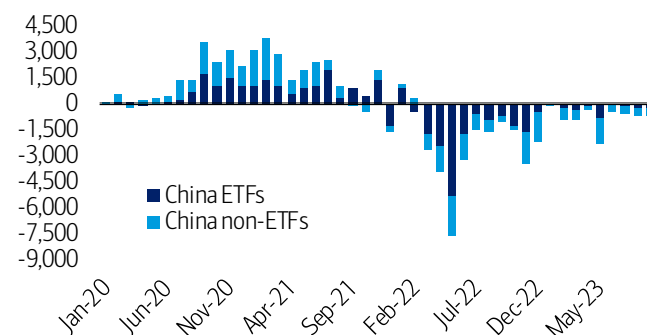


Source: BofA Global Research, EPFR Global.

BofA GLOBAL RESEARCH

Exhibit 14: The Aug China LDM outflows were mostly via funds

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

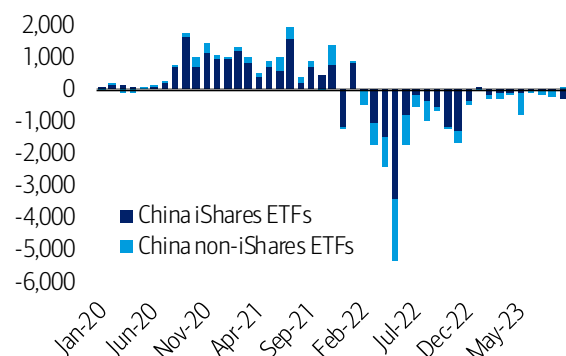


Source: BofA Global Research, EPFR Global.

BofA GLOBAL RESEARCH

Exhibit 15: Of the China LDM ETFs, small Sept outflows were mostly from iShares ETFs

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

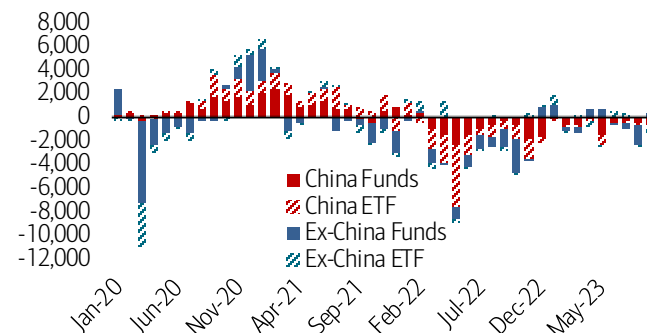


Source: BofA Global Research, EPFR Global.

BofA GLOBAL RESEARCH

Exhibit 16: 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 2023 forecast total issuance is \$366bn (\$137bn sov, \$229bn corp) vs peak pf \$707bn in 2020. Some issuers have already exceeded our original fcst. Forecasted gross issuance is 11% of the outstanding \$1.2tn EM sovereign external debt, offset with 5% principal coming due and 4% coupons being paid. Then just 2% inflows of this will be needed in 2023 to cover the new issuance.

Sep gross & net issuance were at \$47bn and \$7bn. Net issuance by region: EEMEA \$10bn, LatAm \$0bn & Asia -\$3bn.

Low Oct: gross issuance is at just \$16bn, ~30% of the past 5y avg of \$49bn for the month. 82% IG. 2 sovs issued: Chile (\$0.9bn) and Uzbekistan (\$0.7bn). 50% EEMEA, 44% Asia and 6% LatAm.

Exhibit 17: Forecast 2023 \$364bn vs \$293bn in 2022, \$688bn in 2021, \$707bn in 2020

2023 monthly gross issuance (\$bn), YTD and yearly since 2020

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	YTD	2023F	% Issued
Sovereign	46	7	14	11	11	5	1	1	11	2	107	137	78%
Corporate	27	25	14	16	20	18	12	8	36	15	192	229	84%
Total	73	32	29	27	31	23	13	9	47	16	299	366	82%

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 18: Net issuance positive in Sep, interrupting a neg trend of 16 out of 18m w/ neg net issuance

Total negative net issuance since Feb 2022 = -11.1%

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

Date	Scheduled			Total Net issuance outstanding (\$bn)	Net issuance as % of total outstanding	Date	Scheduled			Total Net issuance outstanding (\$bn)	Net issuance as % of total outstanding		
	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%	YTD	283	300	373	-90	2,756	-3.3%
Nov-22	19	36	40	-21	2,801	-0.7%							
Dec-22	3	28	36	-33	2,792	-1.2%							
FY 2022	293	433	522	-230	2,792	-8.2%							

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 19: Debt service - \$373bn in 2023, Oct will be \$37bn

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

Month	Total	Corporates	Sovereigns	Maturities	Coupons	LatAm	EEMEA	Asia
Oct-23	37	25	11	24	12	4	10	23
Nov-23	23	18	5	15	8	3	9	12
Dec-23	14	10	4	8	6	2	5	7

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

BofA GLOBAL RESEARCH

Exhibit 20: Issuance trends – investors want higher quality. Corp issuance in 2023 has been heavily IG @76%, like 2022, similar to early in the pandemic (Mar-Aug 2020), vs the low 60% in 2021

Issuance by category 2022 and 2021

	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 YTD	72%	24%	4%	15%	43%	20%	22%	100%
Corporate								
2021	60%	29%	11%	60%	14%	11%	15%	100%
2022	75%	8%	17%	70%	7%	10%	12%	100%
2023 YTD	77%	15%	8%	50%	16%	20%	14%	100%

Source: BofA Global Research, Bloomberg, Bond Radar

BofA GLOBAL RESEARCH

Exhibit 21: Gross issuance forecast for 2023 is \$137bn, net of amortizations is \$79bn, and net of amort & coupons is just \$27bn. 2022 gross issuance was \$91bn and net of amortizations was \$18bn, and also net of coupons was \$22bn.

Largest net issuance left is from China. By region, small for LatAm, MEAF & CEE (5, 5 & 7), large from Asia (14)

External debt issuance forecasts - foreign currency, foreign law (in USD bn)

	2023 Gross EXD fcst	2023 YTD	Left to go in 2023	Remaining 2023 EXD Prin Due	Remaining 2023 net Issuance		2023 Gross EXD fcst	2023 YTD	Left to go in 2023	Remaining 2023 EXD Prin Due	Remaining 2023 net Issuance
Main Countries						Main Countries					
Total	137	107	29	5	22						
Asia	29	15	14	0	13	MEAF/GCC	33	29	5	2	3
China	8.4	0.0	8.4	0.0	8.4	Abu Dhabi	3.0	0.0	3.0	0.0	3.0
Indonesia	8.0	3.8	4.2	0.3	4.0	Bahrain	2.0	2.0	0.0	0.0	0.0
Hong Kong	8.2	8.2	0.0	0.0	0.0	Dubai	1.0	0.0	1.0	0.0	1.0
Philippines	4.0	3.0	1.0	0.0	1.0	Egypt	2.0	1.5	0.5	0.5	0.0
CEE	41	34	7	1	3	Iraq	0.0	0.0	0.0	0.3	-0.3
Hungary	6.6	6.6	0.0	0.8	-0.8	Israel	2.1	2.1	0.0	0.1	-0.1
Poland	10.8	8.8	2.0	0.0	2.0	Jordan	1.3	1.3	0.0	0.0	0.0
Romania	9.7	9.7	0.0	0.0	0.0	Kuwait	0.0	0.0	0.0	0.0	0.0
Kazakhstan	2.0	0.0	2.0	0.6	1.4	Lebanon	0.0	0.0	0.0	0.0	0.0
Serbia	1.8	1.8	0.0	0.0	0.0	Morocco	2.5	2.5	0.0	0.0	0.0
Türkiye	10.0	7.5	2.5	3.3	-0.8	Nigeria	0.0	0.0	0.0	0.0	0.0
LatAm	26	21	5	1	4	Oman	0.0	0.0	0.0	0.0	0.0
Brazil	4.0	2.3	1.8	0.0	1.8	Qatar	0.0	0.0	0.0	0.0	0.0
Chile	4.0	4.0	0.0	0.0	0.0	Saudi Arabia	16.0	16.0	0.0	0.0	0.0
Colombia	3.3	1.8	1.5	0.0	1.5	South Africa	0.0	0.0	0.0	0.0	0.0
Costa Rica	3.0	1.5	1.5	0.0	1.5	Tunisia	0.0	0.0	0.0	0.7	-0.7
Dominican Republic	0.7	0.7	0.0	0.7	-0.7	Kenya	0.0	0.0	0.0	0.0	0.0
Panama	3.9	3.9	0.0	0.0	0.0	UAE	1.5	1.5	0.0	0.0	0.0
Mexico	6.9	6.9	0.0	0.0	0.0	Sharjah	1.8	1.8	0.0	0.0	0.0
Peru	0.0	0.0	0.0	0.0	0.0						
All Frontiers	8	8	0	1	-1						

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

Other EE: Bulgaria, Croatia, 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.

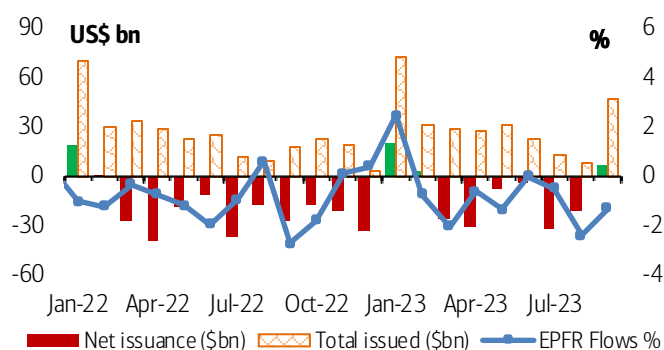
Note: Net issuance is only net of scheduled principal payments, not buybacks/tenders nor coupons, as of 6 Dec 22.

Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 22: Net issuance was positive in September

Gross and net monthly issuance (\$bn) and EPFR flows into EXD (%), as of Sep 30th. Positive net issuance in green, negative in red.

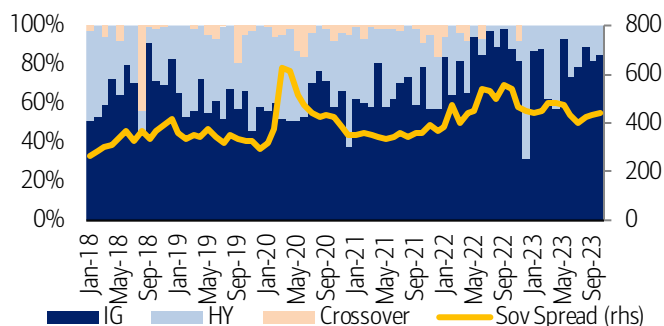


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 24: 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 – Sep '23 MTD

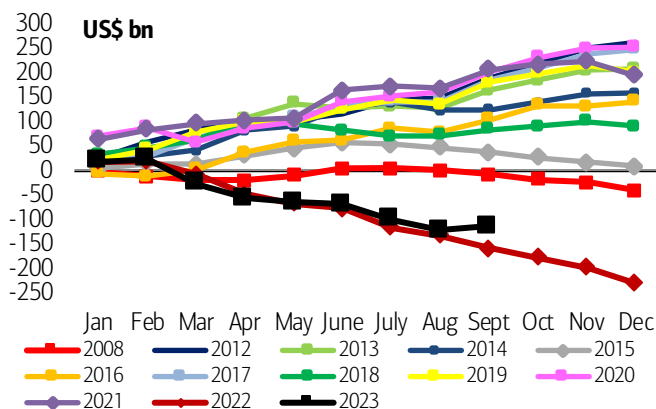


Source: BofA Global Research, Bloomberg Bond Radar, JPEIDISP Index (Sovereign spreads).

BofA GLOBAL RESEARCH

Exhibit 26: 2023 remains negative following the worst year ever

Cumulative sov & corp net issuance in USD & EUR

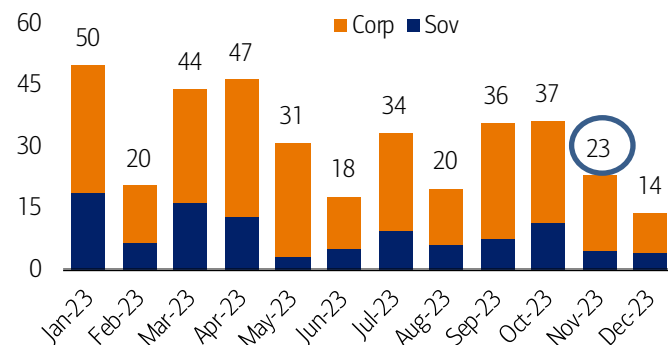


Note: Net issuance is total issuance less principal, interest and buybacks paid. Source: BofA Global Research, Bloomberg.

BofA GLOBAL RESEARCH

Exhibit 23: Oct debt service payment will be \$37bn.

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

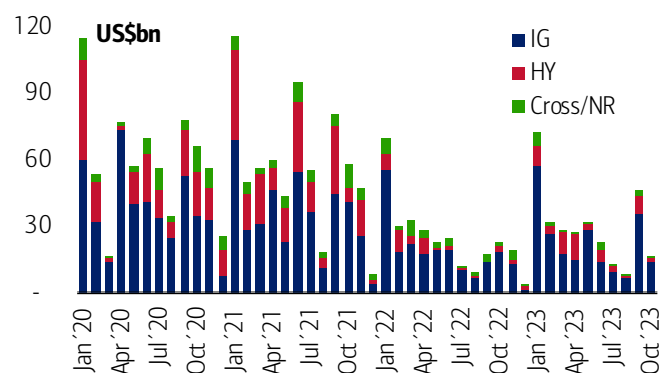


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC.

BofA GLOBAL RESEARCH

Exhibit 25: Low Oct with large IG component

Monthly gross issuance by rating since Jan '20 – Oct '23 MTD

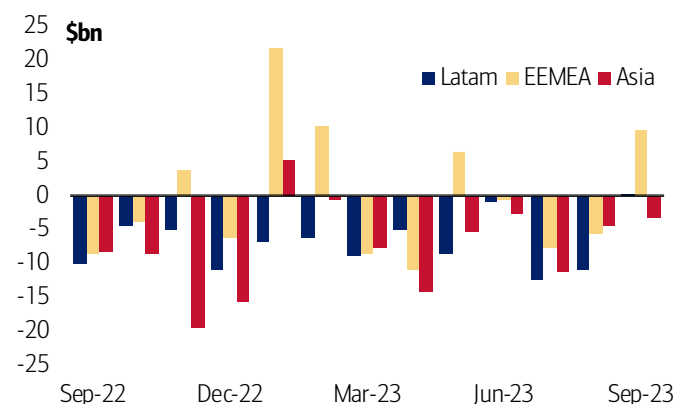


Source: BofA Global Research, Bloomberg Bond Radar.

BofA GLOBAL RESEARCH

Exhibit 27: Net issuance negative for the 18th consecutive month for LatAm

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 28: 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)	2022 (%)	2022 (USD mn)	2021 (%)
LDM Funds ex China	-0.6	-518	-2.1	-1,974	-9.3	-7,626	-5.8
- LDM ETF	-0.7	-292	16.1	5,746	3.3	1,076	-1.6
- LDM non-ETF	-0.5	-227	-14.4	-7,720	-11.3	-8,702	0.0
China LDM	-1.2	-168	-28.1	-5,566	-58.0	-28,520	77.8
- China ETF	-0.3	-19	-21.6	-1,626	-68.0	-16,523	76.8
- China non-ETF	-1.8	-148	-31.9	-3,940	-44.0	-11,997	0.0
EXD Funds	-0.3	-704	-8.6	-19,934	-10.5	-27,818	4.5
- Corp flows	-0.9	-385	-12.5	-6,607	-16.8	-10,866	10.9
- EXD ETF	0.1	45	-4.5	-2,375	-0.8	-321	9.5
- EXD non-ETF	-0.5	-749	-9.6	-17,559	-10.8	-27,498	0.0
Blended Funds	-0.4	-180	-0.5	-217	-18.5	-10,807	7.1
All EM debt	-0.4	-1,570	-7.1	-27,690	-16.4	-74,770	6.6
All EM debt ex China	-0.4	-1,402	-6.0	-22,124	-11.5	-46,250	2.7
EM Equity	-0.2	-1,946	2.4	29,238	1.1	17,981	6.3
US HY Corp	-0.3	-899	-5.7	-17,051	-10.5	-38,118	-0.5
US IG Corp	-0.7	-2,442	1.2	4,767	5.6	19,277	2.4

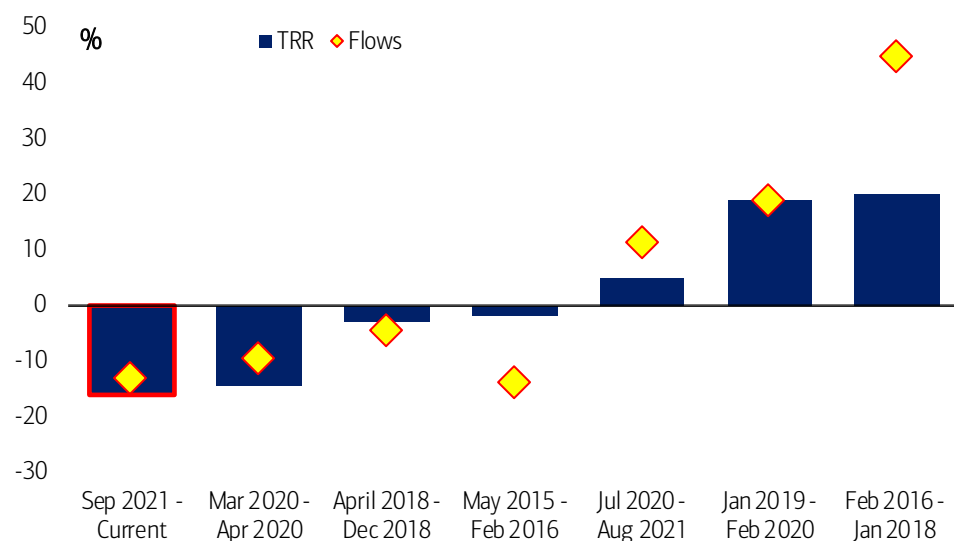
Note: We remove ~\$61bn of the local funds that were domiciled in BG, CN, CO, IN, KR, MY, RO, RU, TH, TR and VN and of ETFs registered locally that invest in local debt (~\$6bn).

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

BofA GLOBAL RESEARCH

Exhibit 29: Current period is most extreme case of large price correction (red box) with modest outflows (diamond).

EXD inflows and outflows periods when the flow does not always match the performance



Source: BofA Global Research, EPFR Global, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 30: 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	54	19	74	-	-	-
High net worth ex. ETF	109	61	170	-	-	-
ETF	44	23	67	-	-	-
Total	207	103	311	1,131	277	370
Europe domiciled	156	85	242	567	-	-
US domiciled	37	7	44	436	277	370
Asia & Others domiciled	13	11	25	128	-	-
Blend	-	-	48	-	-	-
Market Value of Benchmark (in \$bn)	2,315	5,178	7,493	6,304	1,186	7,511
Percent of EPFR that is US-domiciled	18%	6%	14%	39%		
Percent of market cap covered by EPFR	9%	2%	4%	18%		
Percent of EPFR that is ETF	21%	22%	22%			

Note: Market Cap of Benchmark is (EMGB + EMB) for EXD no caps, LDMP for LDM (is capped), HOA0 for USHY, COA0 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 31: Asia focused funds represent over 12% of EPFREXD AUM and 15% 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	42	13	54
Non-ETFs - Global Emerging Markets	136	56	191
Asia ex-Japan Regional	25	14	38
Other	5	7	13
Total	207	89	297

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 \$14bn as of 10/24/23.

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, 2022 61% downgrades

- **Negative week:** 3 down & 1 up this week, vs 0 down & 4 up last week.
- **2023 downgrades running at neutral.**
About 50% of EM ratings or outlooks have been downgrades
- **2020 downgrades were exceptionally high at 93%**

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

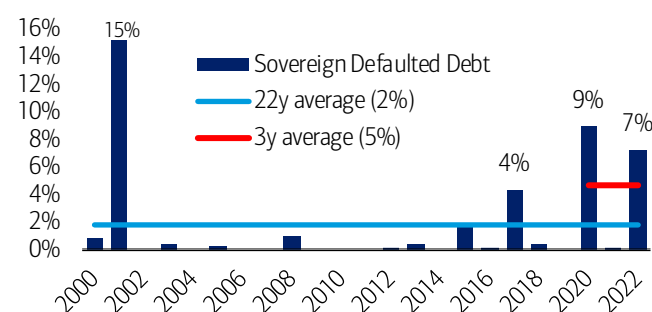
Exhibit 32: Downgrades were 93% of all ratings actions from March 2020 - YE 2020, but around 50% in 2021 and 60% in 2022
Number of sovereign ratings actions, including outlooks

	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 YTD	50	63	44%

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

BofA GLOBAL RESEARCH

Exhibit 34: Sovereign defaults in 2020 hit 9% of face value of all sov bonds, (out of \$1.2tn face value). Avg 2% in 22yrs, 5.5% in last 3y. As a % of only EM sovereign high yield bonds avg 4% in 22y & 11% in 3y.
EM sovereign default rates as % of EM sov debt (USD & EUR)

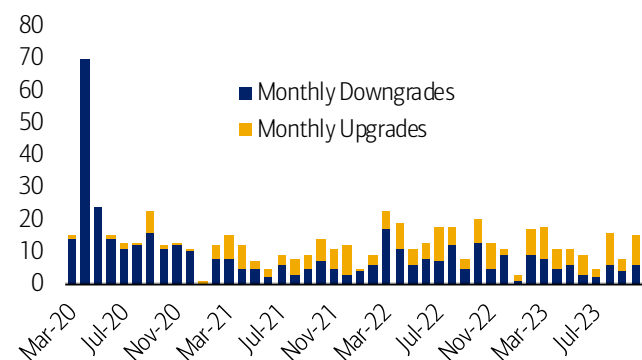


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC

BofA GLOBAL RESEARCH

Exhibit 33: After balanced upgrades and downgrades in 2021, downgrades have exceeded upgrades in 2022

Downgrades and upgrades in rating or outlook since Covid



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

BofA GLOBAL RESEARCH

Exhibit 35: Defaulted debt cumulated \$195bn since 2020, zero in 2023

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

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 one 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).

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.

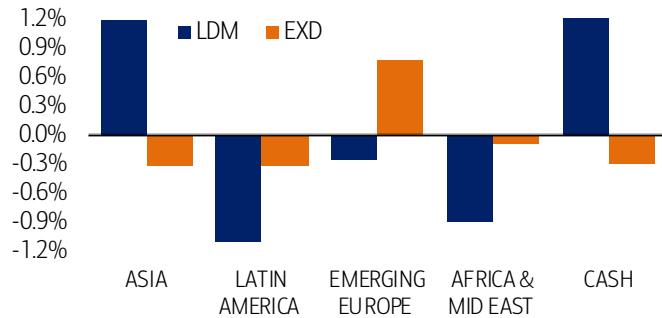
See [Default Primer Sept 2022](#) and [How sovereign fallen angels lost their wings: Mx, Col, Uru](#)

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 and have a price <\$50. That is not really a default price, per se, but **if they all defaulted, the face value of default would be \$85bn (7%)**. The loss upon 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 36: Regional allocations – LDM into Asia, EXD into EE

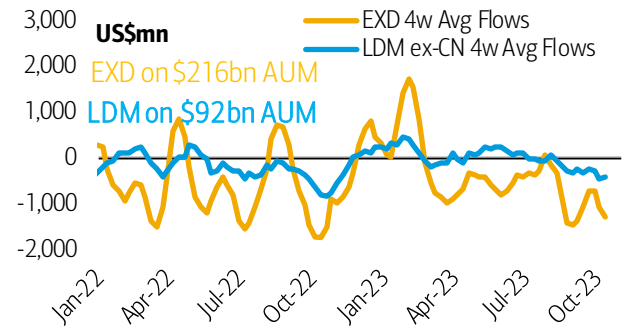
LDM and EXD 3m change in EPFR regional allocation 3m change 6/30/23-9/30/2023



Note: Reported on 10/23 for fund positions on 9/30. Source: BofA Global Research, EPFR Global
BofA GLOBAL RESEARCH

Exhibit 37: 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)

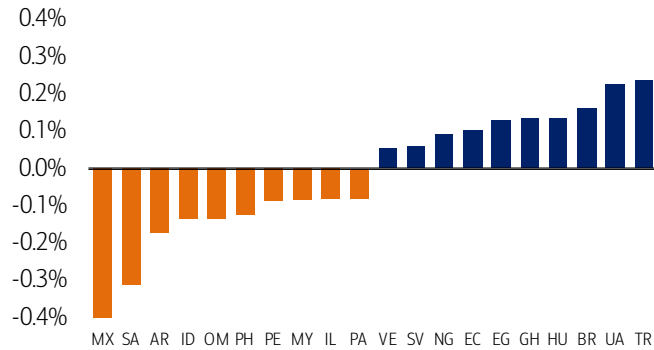


Source: BofA Global Research, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 38: EXD country allocations - Large losses in market value from MX & SA assets, relative growth in TR & UA

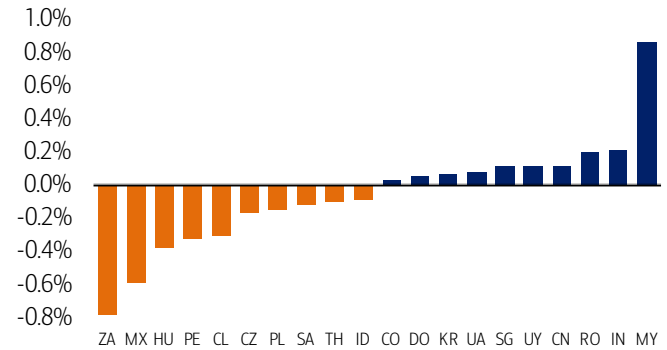
EXD EPFR 3m allocation change 6/30/23-9/30/2023



Note: Reported on 10/23 for fund positions on 9/30. Source: BofA Global Research, EPFR Global
BofA GLOBAL RESEARCH

Exhibit 39: LDM country allocations – Large losses in market value from ZA & MX assets, relative growth into MY & IN

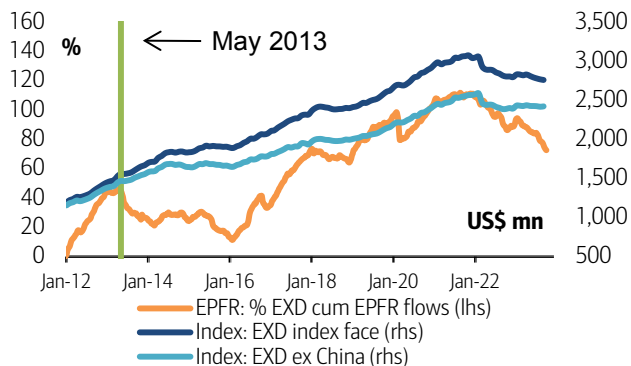
LDM EPFR 3m allocation change 6/30/23-9/30/2023



Note: Reported on 10/23 for fund positions on 9/30. Source: BofA Global Research, EPFR Global
BofA GLOBAL RESEARCH

Exhibit 40: 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

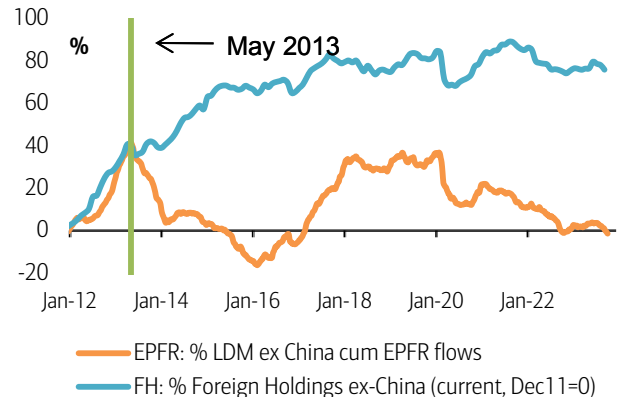
EXD total index eligible face value for EM corp and sov (face = new issues - bonds aging out of 1y maturity & retirements)



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

Exhibit 41: 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)

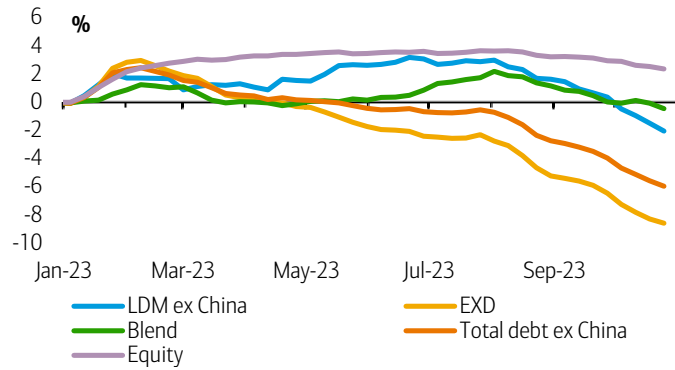


Source: BofA Global Research, local governments websites, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 42: Equity and LDM gained inflows YTD until July

Cumulative EM debt and equity fund flows since Jan '23

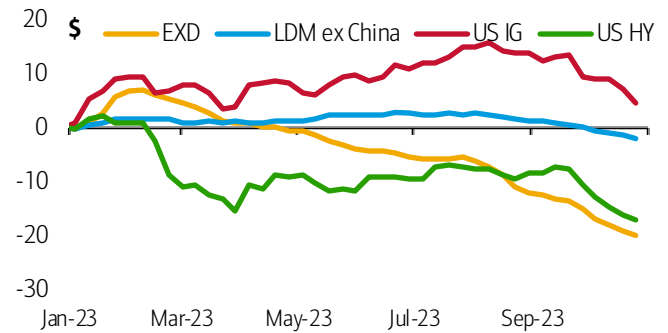


Source: BofA Global Research, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 43: US IG Corp asset class is 5x larger than US HY corp and IG has steady inflows, even while EM EXD and LDM ex China got soft. US HY outflows have been striking YTD

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

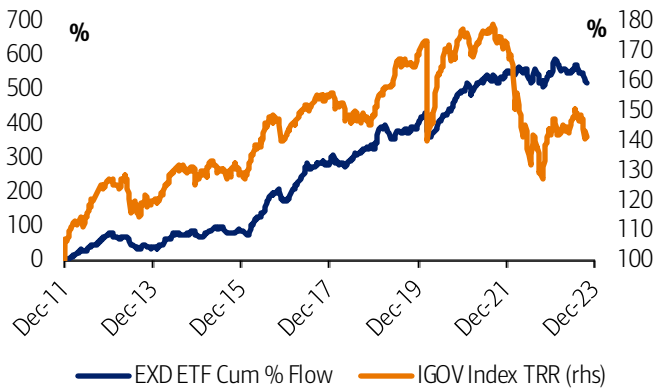


Source: BofA Global Research, EPFR Global, US Corp mkt is COAQ, US HY mkt is H0A0

BofA GLOBAL RESEARCH

Exhibit 44: 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

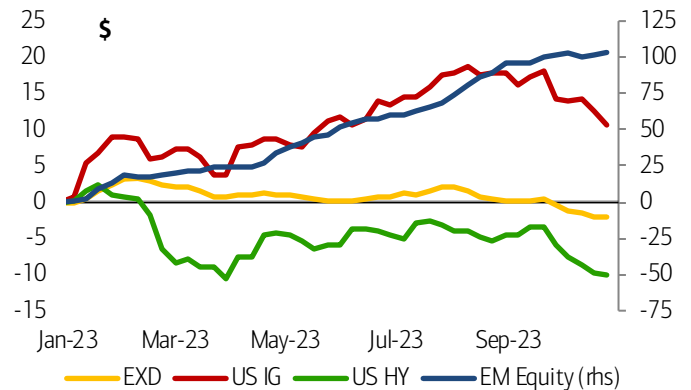


Source: BofA Global Research, Bloomberg, ICE Data indices, LLC, EPFR Global.

BofA GLOBAL RESEARCH

Exhibit 45: ETFs in \$: EM equity (rhs) inflows increasing steadily as is trend for US IG, but EXD drifting lower, but US HY doing worse

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



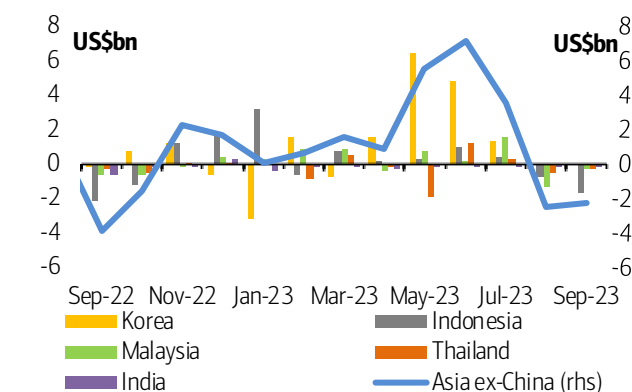
Note: This chart shows aggregate EPFR data, it names no specific ETF.

Source: BofA Global Research, EPFR Global

BofA GLOBAL RESEARCH

Exhibit 46: Asia ex-China LDM flows peaked in May 2023

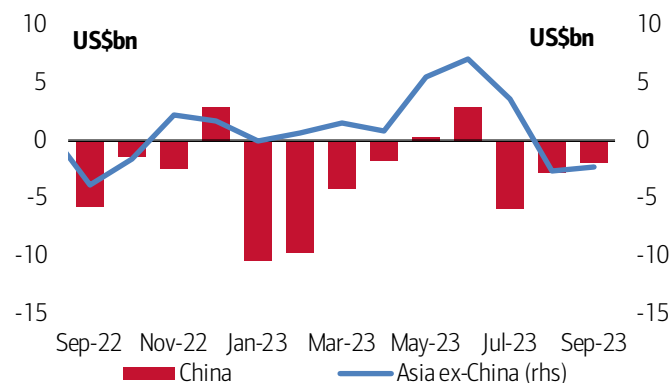
Asia ex-China foreign purchases of LDM by country in current period USDbn



BoFA GLOBAL RESEARCH

Exhibit 48: China has been suffering severe foreign outflows in 2023

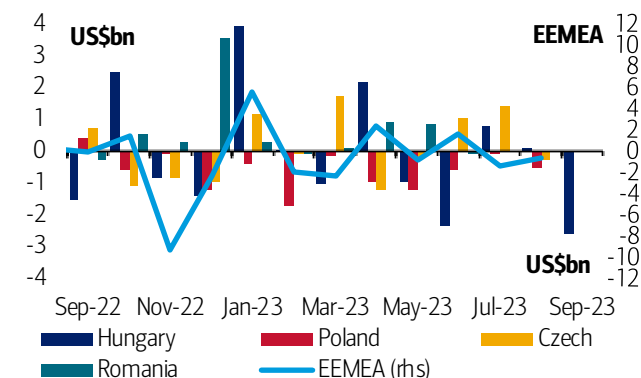
China and Asia ex-China foreign purchases of LDM in current period USDbn



BoFA GLOBAL RESEARCH

Exhibit 50: EEMEA LDM flows – Weak flows overall

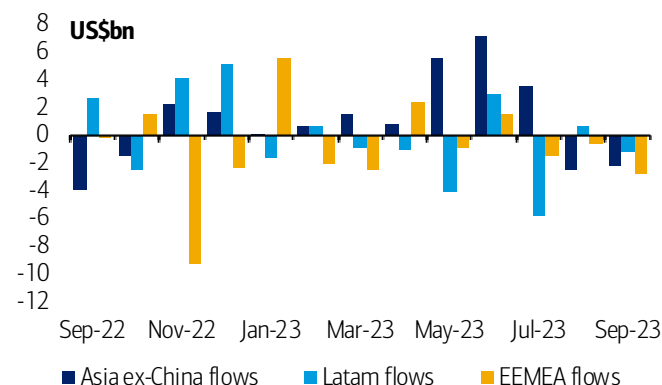
EEMEA foreign purchases by country in current period USDbn



BoFA GLOBAL RESEARCH

Exhibit 47: Foreign holdings of LDM – Flows turning negative

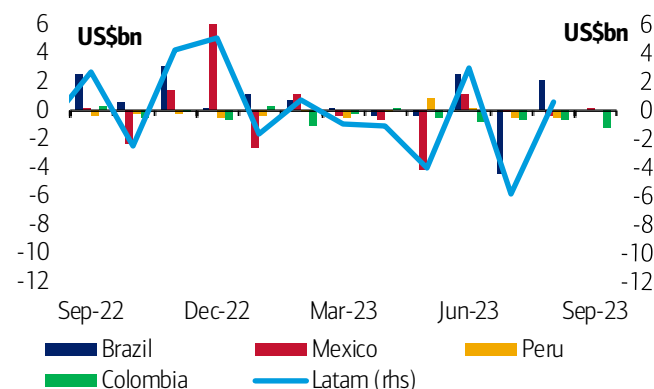
By region EM foreign purchases in current period USDbn



BoFA GLOBAL RESEARCH

Exhibit 49: LatAm LDM flows – Low flows in 2023

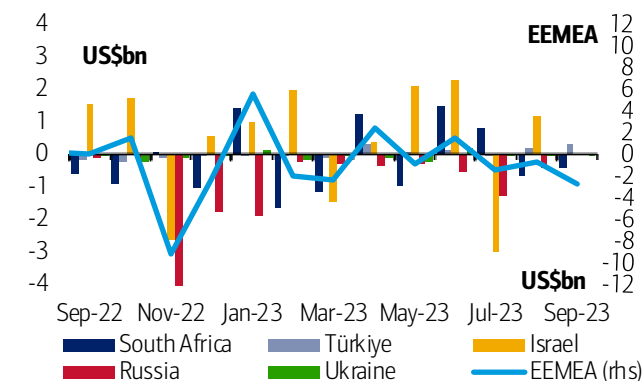
LatAm foreign purchases of LDM by country in current period USDbn



BoFA GLOBAL RESEARCH

Exhibit 51: EEMEA LDM flows – Weak flows overall, except TR & IL

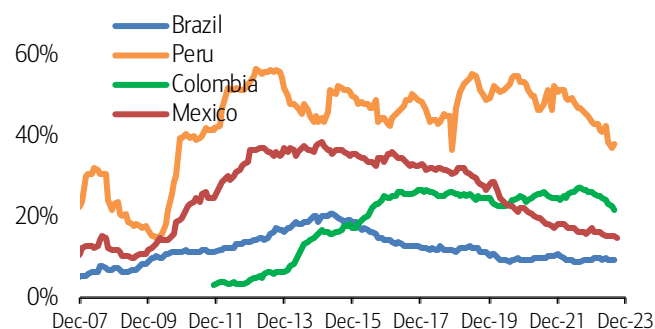
EEMEA foreign purchases by country in current period USDbn



BoFA GLOBAL RESEARCH

Exhibit 52: 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)

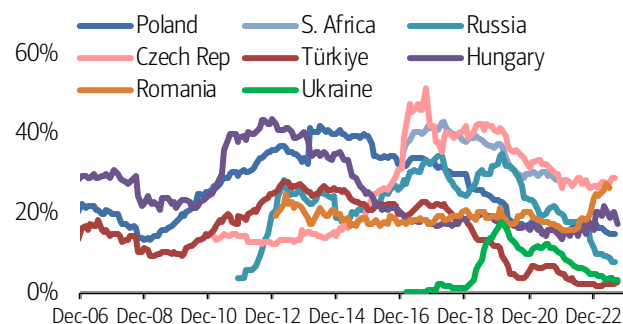


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 54: Foreign holdings shares in EEMEA – All declining since mid-2020, except Romania

EEMEA foreign bond holdings share (% of foreign holdings)

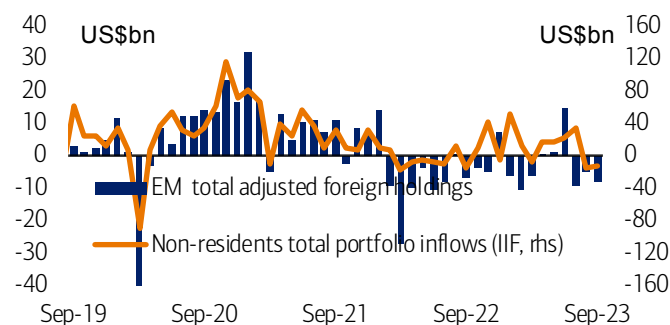


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 56: IIF portfolio flows have been recovering lately

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

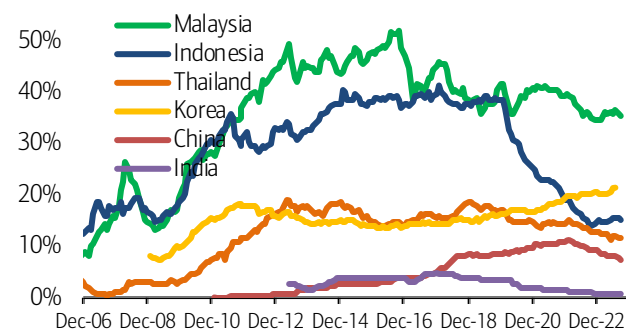


Note: Total portfolio inflows (IIF) are net non-resident purchases of EM stocks and bonds. Recent IIF points are estimates. BofA points are from countries that have already reported. Source: BofA Global Research, IIF.

BofA GLOBAL RESEARCH

Exhibit 53: Foreign holdings share in Asia – sharp decline in Indon (due to outflows + big issuance), declined from 40% to 16%

Asia foreign bond holdings share (% of foreign holdings)

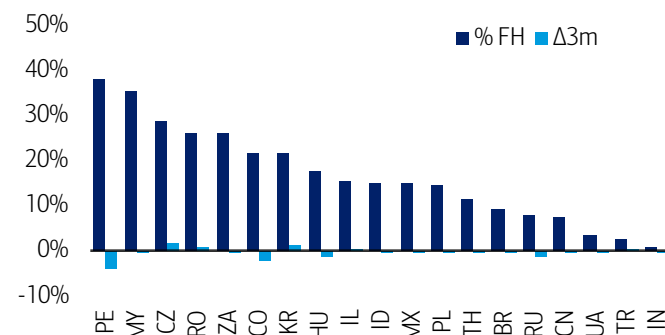


Source: BofA Global Research, local governments websites, Haver.

BofA GLOBAL RESEARCH

Exhibit 55: Foreign holdings share and 3m change - Declined the most in Peru and Colombia

Foreign holdings share and 3m change



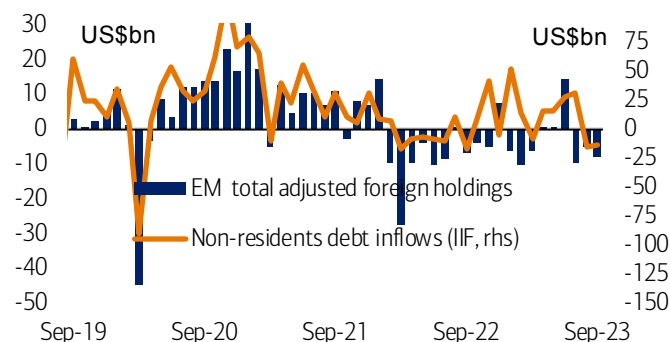
Note: Countries are ranked from highest to lowest % of foreign holding.

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

BofA GLOBAL RESEARCH

Exhibit 57: IIF debt flows also indicate EM local debt flows have been doing better in the last few months

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



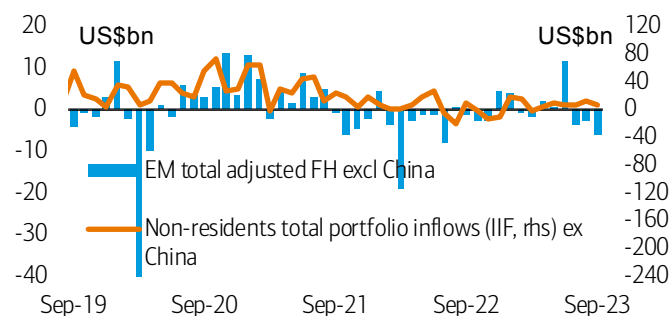
Note: Recent IIF points are estimates. BofA points are from countries that have already reported.

Source: BofA Global Research, IIF.

BofA GLOBAL RESEARCH

Exhibit 58: Ex-China flows have been positive in the last few months

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

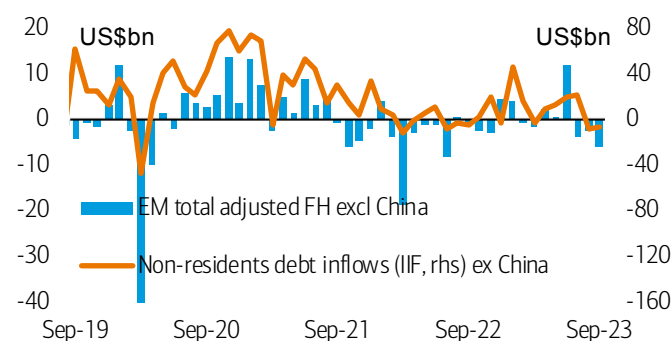


Note: Total portfolio inflows (IIF) are net non-resident purchases of EM stocks and bonds. Recent IIF points are estimates. BofA points are from countries that have already reported. **Source:** BofA Global Research, IIF.

BofA GLOBAL RESEARCH

Exhibit 59: Ex-China outflows have been challenging since Oct '21

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

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

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/BofASEdiscclaimer; 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 Investment Industry Regulatory Organization of Canada; 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 2023 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.