

Basic Materials - China (H)

Coal mine accident may support coking price; major commodity prices down

Industry Overview

Coal: weaker demand cut px; accident to support coking

The QHD 5,500kcal price was down 1.6% WoW to RMB912/t amid weak demand. The Liulin No.4 HCC price was down 2.0% WoW to RMB2,480/t. An accident in Henan Pingdingshan (PDS) on 12 Jan caused at least 13 death. Henan accounted for 2% of China's crude coal output; while PDS takes c.1/3 of Henan's crude coal output; and the involved company produced 30mnt coal in 2022 (incl. 11mnt coking coal). The accident may lead to safety checks in PDS or even border and lead to supply disruptions to coal especially coking coal to support short term price; while the magnitude is dependant on how broad and long the safety check last.

Cement: Price down amid lackluster demand

The average national cement price was down by 0.99% to RMB370/t as of 12 Jan. Cement prices in South China and Southwest China decreased by RMB10-50/t. Nationwide shipment ratio came at 34.2%, +0.4% WoW, while nationwide inventory ratio reached 67.0%, -0.1% WoW. Supported by ongoing construction activity in the South, national cement price demand was steady during the week. As actual practice of announced off-peak production schedule still takes time and cement producers have been destocking, price was down WoW.

Steel: Price down amid weak demand & loss-making

The rebar price was down 1.1% WoW to RMB3,992/t and HRC was down 0.6% WoW to RMB4,132/t. Iron ore prices -5.2% WoW to US\$135.8/t. Spot rebar cash margin +RMB61/t to -RMB384/t, and spot HRC cash margin +RMB46/t to -RMB548/t. Weekly rebar/HRC production was -0.8%/-2.1% and apparent consumption -3.6%/-3.8% WoW. Mill inventory -1.9% WoW, while social inventory +4.0% WoW. Subjected to industry-wide loss-making, steel mills were less willing to produce; consumption trended lower during off-season, while social inventory continued to ramp up.

Metals: Major metal prices down

LME aluminum price was -1.7% WoW to US\$2,235/t, while SHFE -0.9% WoW to RMB19,005/t. Domestic Al ingot inventory was up 1.5% WoW to 457kt. LME copper price -1.3% WoW at US\$8,355/t, SHFE was -0.45% WoW to RMB68,070/t. According to Baiinfo, 1.5mt of capacity was expected to resume and 1.25mt of new capacity was expected to launch in 2024. The Comex gold price up 0.04% WoW at US\$2,046/oz. Battery grade lithium carbonate price down by 0.3% WoW to RMB96.2k/t and battery grade lithium hydroxide price was down 1.9% WoW to RMB84.7k/t.

Paper: Lower price; Glass: restocking demand lifted price

Paper price was down by 0.11% WoW to RMB3,849/t as of 10 Jan. Paper price edged lower WoW due to no significant improvement on market transaction & lower OCC price. Supported by restocking demand under low inventory, national float glass price inched higher during week. According to SCI99, transaction may turn milder as small-size/mid-size processors starting to suspend production before Spring festival.

15 January 2024

Equity
China
Basic Materials

Matty Zhao >>
Research Analyst
Merrill Lynch (Hong Kong)
+852 3508 4001
matty.zhao@bofa.com

Edward Leung, CFA >>
Research Analyst
Merrill Lynch (Hong Kong)
+852 3508 3282
edward.leung@bofa.com

Miriam Chan, CFA >>
Research Analyst
Merrill Lynch (Hong Kong)
+852 3508 7478
miriam.chan@bofa.com

Cheng Gao >>
Research Analyst
Merrill Lynch (Hong Kong)
+852 3508 4340
cheng.gao2@bofa.com

Yiming Wang >>
Research Analyst
Merrill Lynch (Hong Kong)
+852 3508 5037
yiming.wang@bofa.com

Px: price

Incl.: including

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.

Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.

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 21.

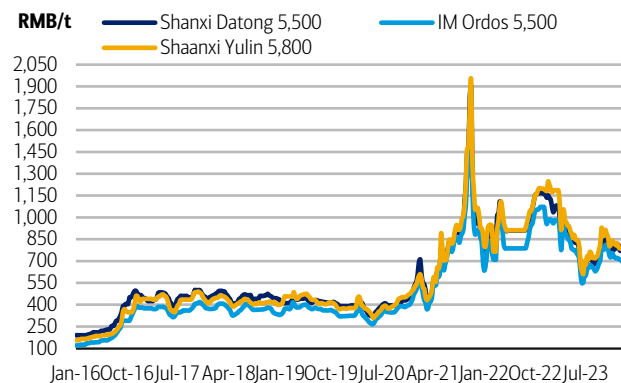
12645664

Timestamp: 14 January 2024 03:30PM EST

Key charts

Exhibit 1: ASP at coal mine pits since 2016

Thermal coal prices at mine pits changed by -0%/-2%/-1.4% WoW to RMB768/693/779 in Shanxi (Kcal5.5k), Inner Mongolia (Kcal5.5k) and Shaanxi (Kcal5.8k)

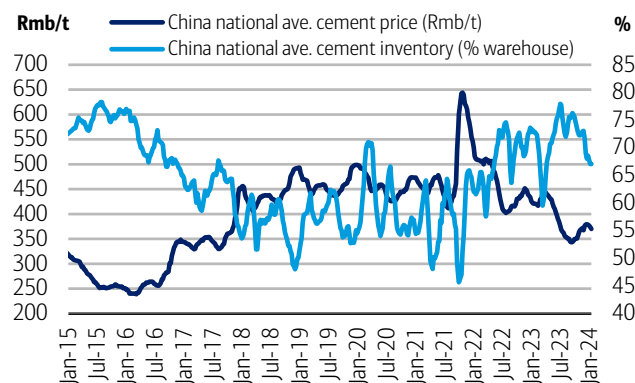


Source: Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 3: China national average cement price and inventory level

Both price and inventory were down WoW

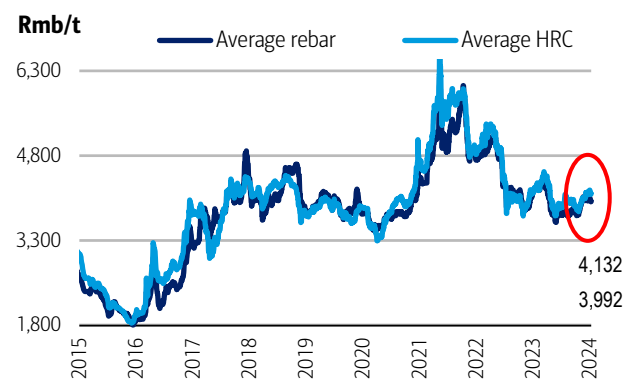


Source: Digital Cement, Company data, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 5: China domestic steel prices at key cities

Chinese steel prices at key cities -1.1%/-0.6% WoW for rebar/HRC

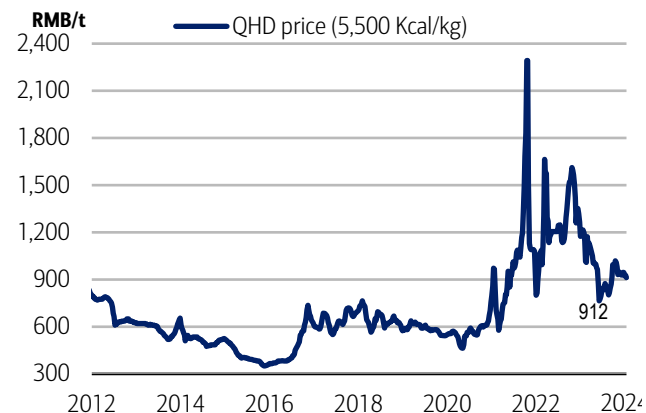


Source: Bloomberg, Wind, Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 2: ASP at Qinhuangdao port (Kcal5,500)

ASP of QHD 5,500kcal spot price down 1.6% WoW at RMB912t as of 12 Jan

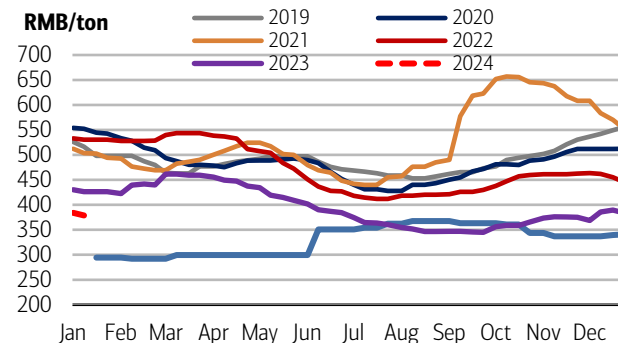


Source: Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 4: East China average cement price

East China cement prices down 1.4% WoW

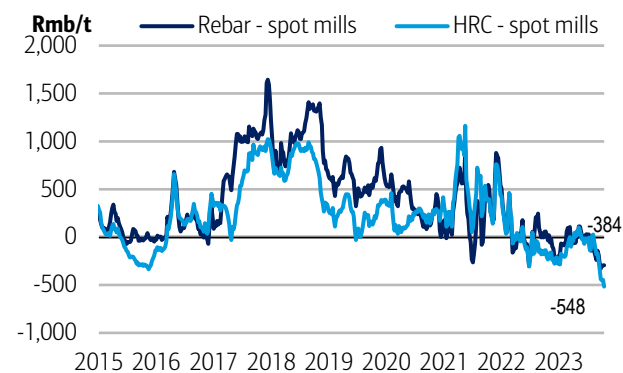


Source: Digital Cement, Company data, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 6: Spot cash margins at steel mills

Spot rebar cash margin +RMB61/t to -RMB384/t, and spot HRC cash margin +RMB46/t to -RMB548/t

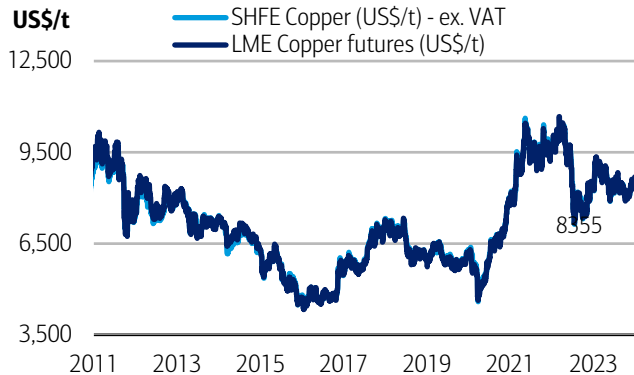


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 7: Price comparison in LME & SHFE copper

LME copper price down by 1.3% WoW at US\$8,355/t during the week ended 12 Jan, while SHFE -0.45% WoW to RMB68,070/t. SHFE is at a premium of 0.6% to LME price

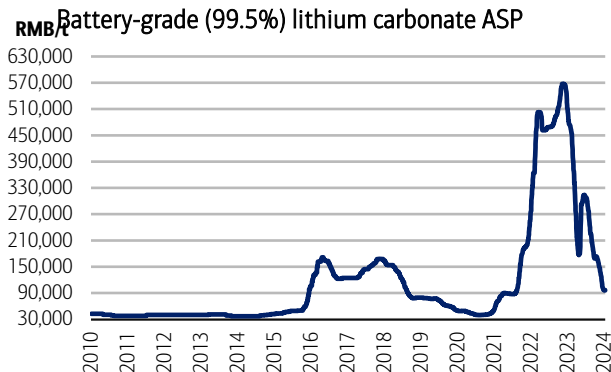


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 9: Domestic battery-grade lithium carbonate ASP

Average price of domestic battery-grade lithium carbonate (99.5%) down by 0.3% WoW to RMB96.2k/t

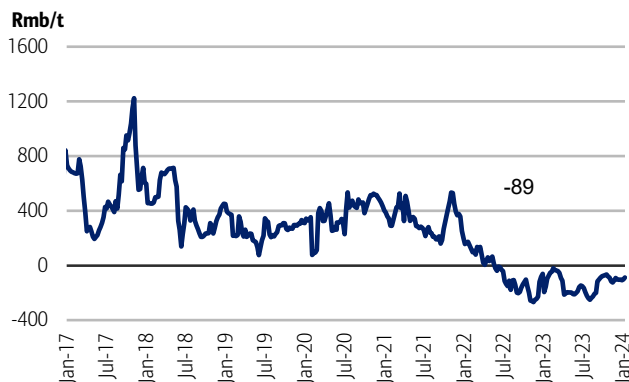


Source: SMM, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 11: Containerboard margin tracker

The Nine Dragons margin tracker is now indicating NP/t of -RMB89/t for this week, up 13.7% WoW.

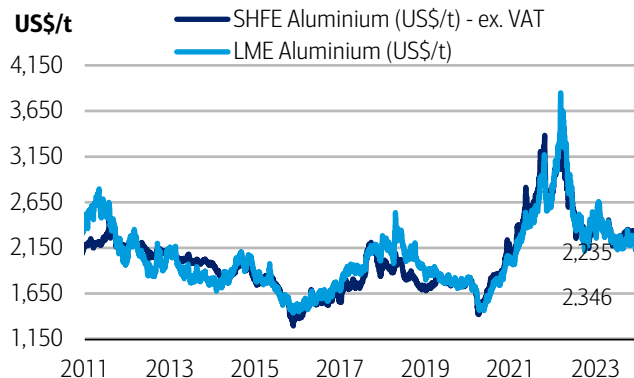


Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 8: Price comparison in LME & SHFE aluminum

LME aluminum price -1.7% WoW to US\$2,235/t during the week ended 12 Jan, while SHFE down 0.9% WoW to RMB19,005/t

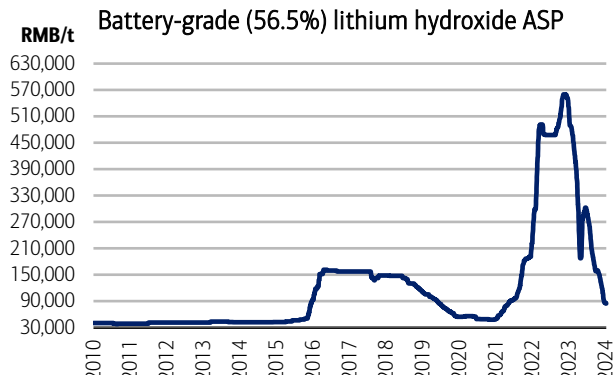


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 10: Domestic battery-grade lithium hydroxide ASP

Average price of domestic battery-grade lithium hydroxide was down by 1.9% WoW at RMB84.7k/t

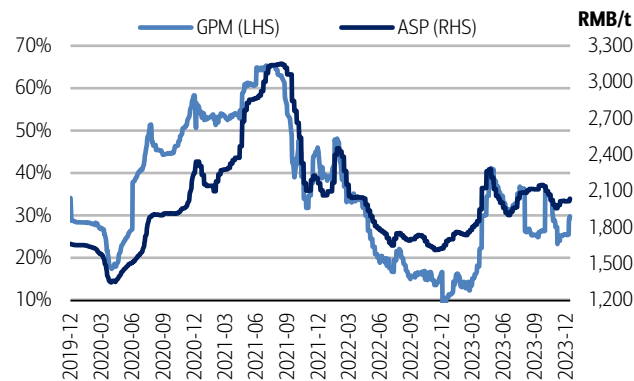


Source: SMM, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 12: National Float Glass Price and Xinyi float glass GPM

As of 11 Jan, the national average float glass price was up 0.9% WoW to RMB2,037/t. Our analysis shows Xinyi float glass GPM was up 4.4% WoW to 29.8%



Source: Wind, BofA Global Research, SC199

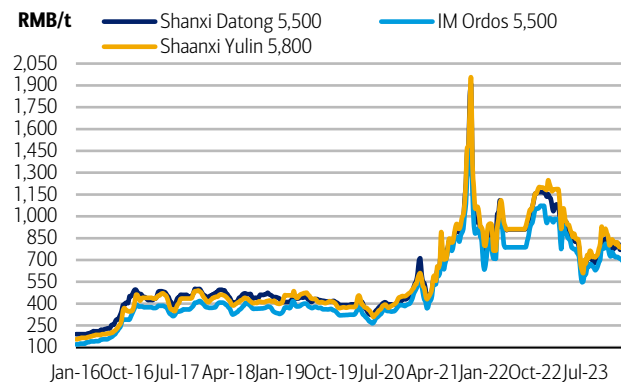
BofA GLOBAL RESEARCH

Coal: Price trended lower amid weak demand

The QHD 5,500kcal price was down 1.6% WoW to RMB912/t amid weak demand. NEWC 6,000K price was down 0.6% WoW at US\$130.75/t, at 13.1% of premium vs QHD price. The Liulin No.4 HCC price was down 2.0% WoW to RMB2,480/t. As of Jan 10, the water inflow of Three Gorges Reservoir was 6,700 cm/s, 15% higher than 2005-23 avg. of 5,847 cm/s, while storage was 31.0 bn cm, 15% lower than 2005-23 avg. of 36.5 bn cm.

Exhibit 13: ASP at coal mine pits

Thermal coal prices at mine pits changed by -0%/-2%/-1.4% WoW to RMB768/693/779 in Shanxi (Kcal5.5k), Inner Mongolia (Kcal5.5k) and Shaanxi (Kcal5.8k)

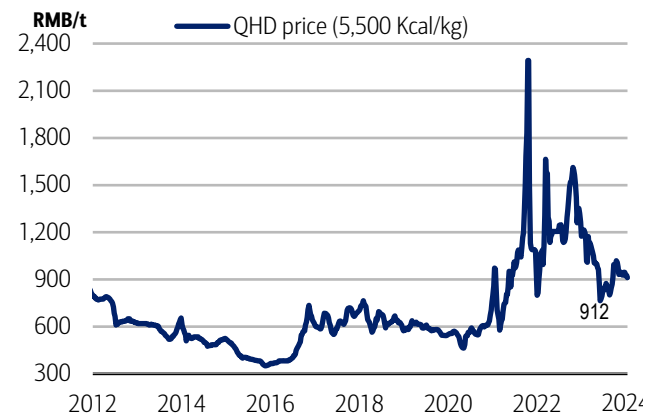


Source: Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 14: ASP at Qinhuangdao port (Kcal5,500)

ASP of QHD 5,500kcal spot price down 1.6% WoW at RMB912t as of 12 Jan

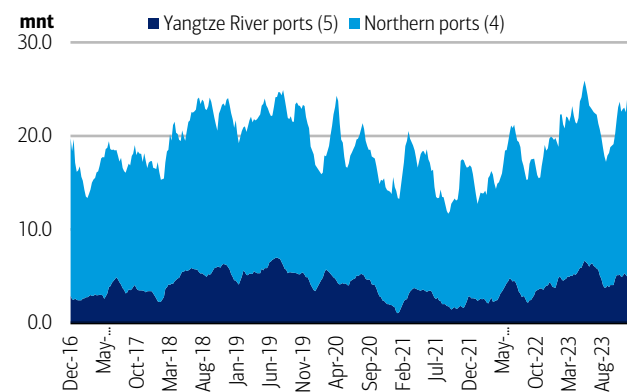


Source: Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 15: Ports inventory (Northern and Southern)

Ports inventory (Northern and Southern) -3.7% WoW to 19.98mnt as of 12 Jan

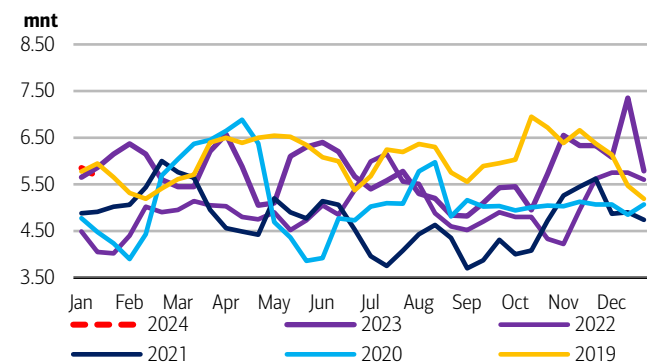


Source: Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 16: QHD port inventory

QHD port inventory was down 3.1% WoW to 5.67mnt

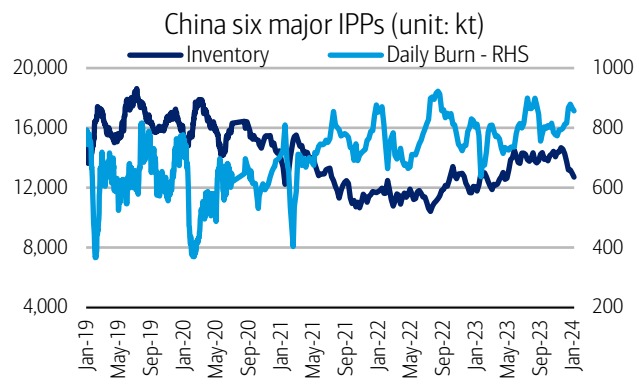


Source: Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 17: China six major IPPs (unit: kt)

Inventory at the six major IPPs down 1.9% WoW to 12.70mnt as of 7 Jan; daily burn down by 1.1% WoW at 857kt

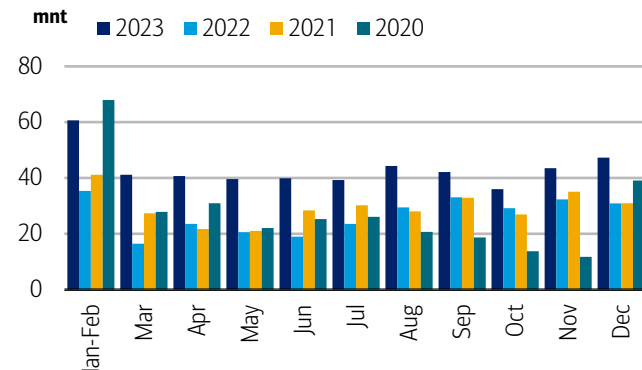


Source: Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 18: China monthly coal imports

Total coal (incl. lignite) imports +47.2% YoY to 53.2mnt in Dec 2023



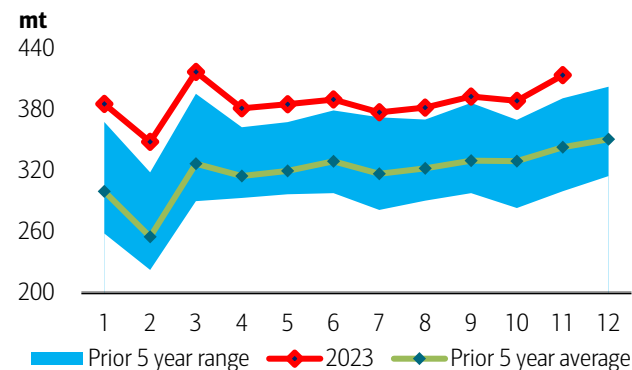
Source: China Customs, Wind, BofA Global Research

Note: Since 2020, no single-month trade data are available for Jan-Feb

BofA GLOBAL RESEARCH

Exhibit 19: YTD China coal production

China coal production in Nov 23 increased 4.6% YoY to 414.0mnt

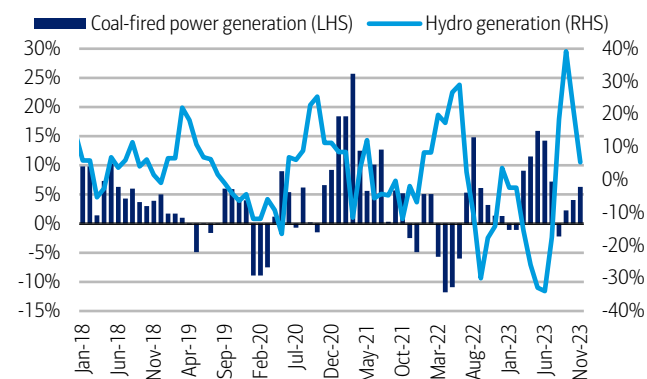


Source: China NBS, Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 20: Monthly power generation growth

Thermal power generation up 6.3% YoY in Nov'23, total power generation up 8.4% YoY in Nov'23

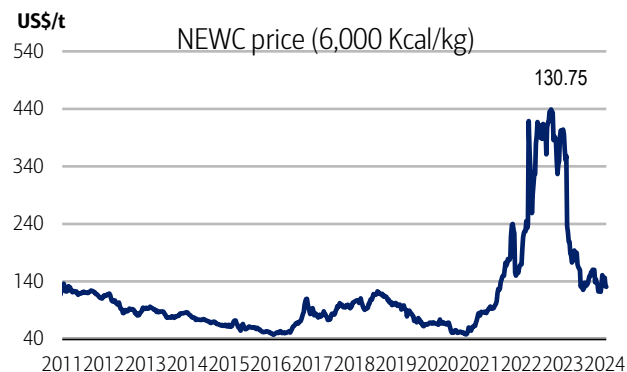


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 21: NEWC 6,000K thermal coal

NEWC 6,000K thermal coal was down 0.6% WoW to US\$130.75/t, at 13.1% of premium vs QHD price



Source: Sxcoal, Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 22: Liulin No. 4 hard coking coal price (incl. VAT)

Liulin No. 4 hard coking coal price down 2.0% WoW at RMB2,480/t during the week ended 12 Jan

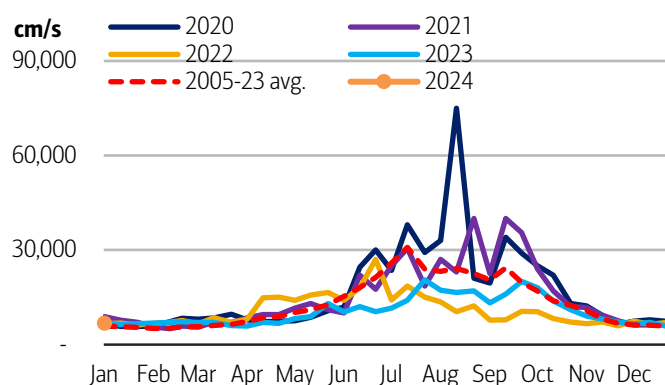


Source: Sxcoal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 23: Three Gorges Reservoir water inflow (cm/s)

As of Jan 10, the water inflow of Three Gorges Reservoir was 6,700 cm/s, 15% higher than 2005-23 avg. of 5,847 cm/s

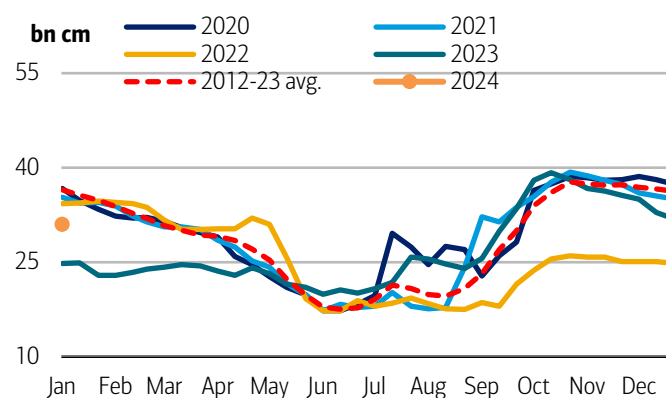


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 24: Three Gorges Reservoir water storage (bn cm)

As of Jan 10, the water storage of Three Gorges Reservoir was 31.0 bn cm, 15% lower than 2005-23 avg. of 36.5 bn cm



Source: Wind, BofA Global Research

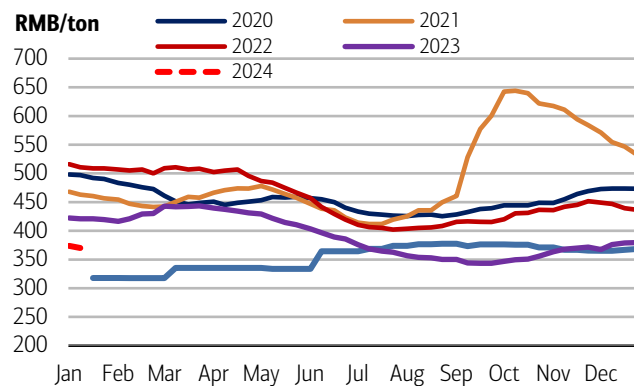
BofA GLOBAL RESEARCH

Cement: Price down amid lackluster demand

The average national cement price was down by 0.99% to RMB370/t as of 12 Jan. Cement prices in South China and Southwest China decreased by RMB10-50/t. Nationwide shipment ratio came at 34.2%, +0.4% WoW, while nationwide inventory ratio reached 67.0%, -0.1% WoW. Supported by ongoing construction activity in the South, national cement price demand was steady during the week. As actual practice of announced off-peak production schedule still takes time and cement producers have been destocking, price was down WoW.

Exhibit 25: National average Cement price

Average national cement price down 0.99% to RMB370/t as of 12 Jan

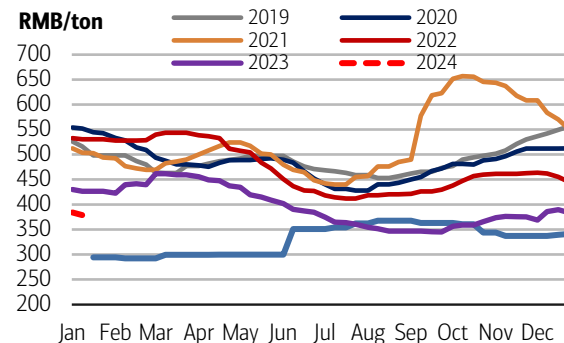


Source: Digital Cement, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 26: East China average cement price

East China cement prices down 1.4% WoW

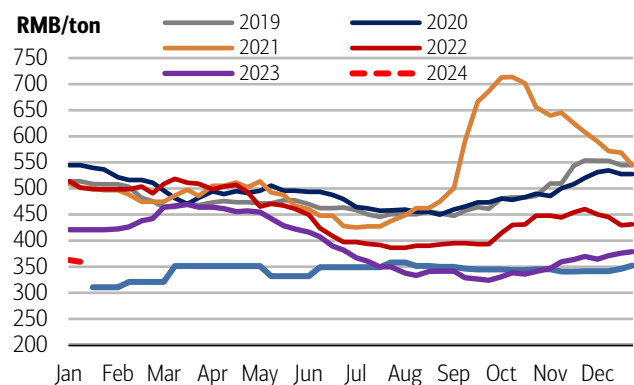


Source: Digital Cement, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 27: Central South China average cement price

Central South China cement prices down 0.9% WoW

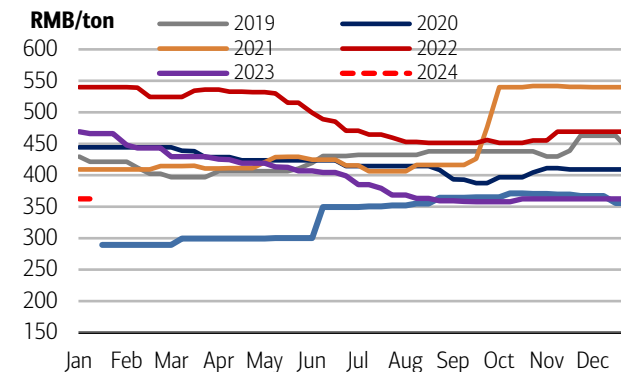


Source: Digital Cement, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 28: North China average cement price

North China cement prices were flattish WoW

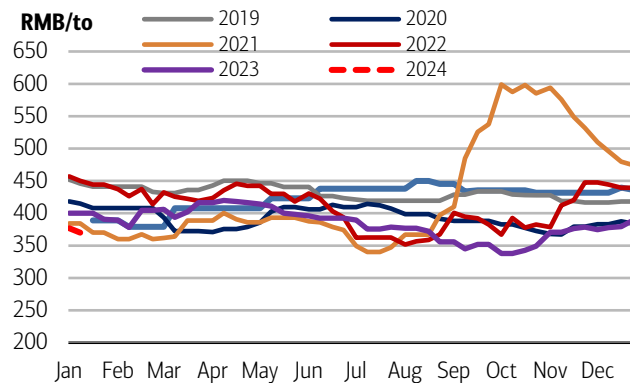


Source: Digital Cement, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 29: South West China average cement price

SW China cement prices down 1.8% WoW

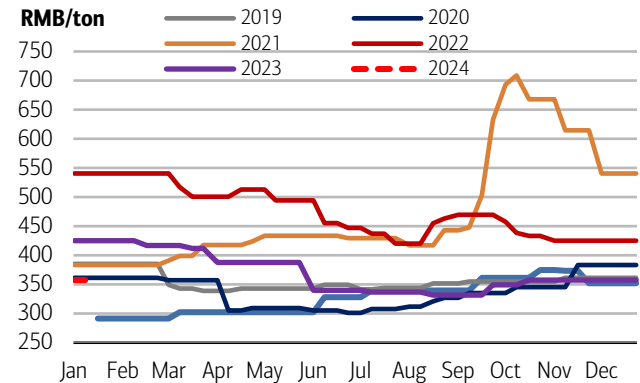


Source: Digital Cement, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 30: North East China average cement price

NE China cement prices were flattish WoW

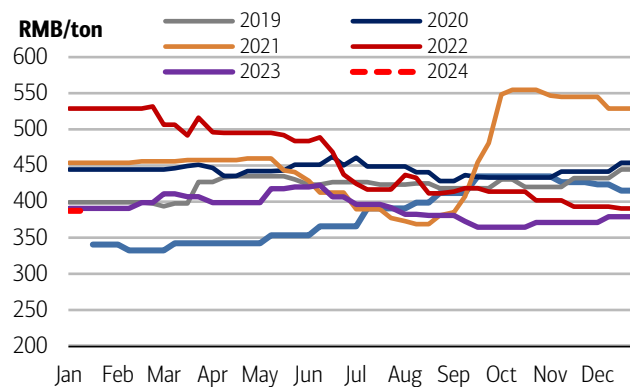


Source: Digital Cement, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 31: North West China average cement price

NW China cement prices were flattish WoW

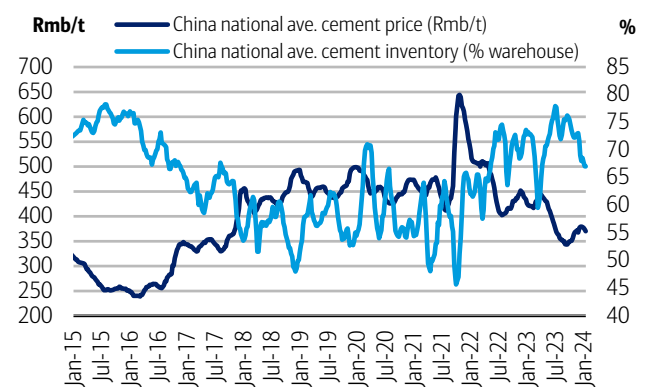


Source: Digital Cement, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 32: China national average cement prices vs inventory

Both price and inventory were down WoW



Source: Digital Cement, BofA Global Research

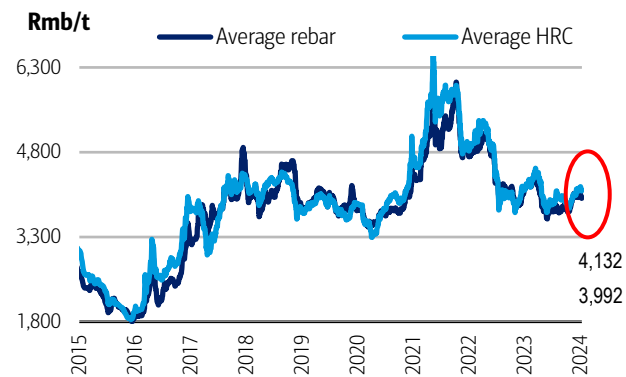
BofA GLOBAL RESEARCH

Steel: Price down amid weak demand & loss-making

The rebar price was down 1.1% WoW to RMB3,992/t and HRC was down 0.6% WoW to RMB4,132/t. Iron ore prices -5.2% WoW to US\$135.8/t. Spot rebar cash margin +RMB61/t to -RMB384/t, and spot HRC cash margin +RMB46/t to -RMB548/t. Weekly rebar/HRC production was -0.8%/-2.1% and apparent consumption -3.6%/-3.8% WoW. Mill inventory -1.9% WoW, while social inventory +4.0% WoW. Subjected to industry-wide loss-making, steel mills were less willing to produce; consumption trended lower during off-season, while social inventory continued to ramp up.

Exhibit 32: China domestic steel prices at key cities

Chinese steel prices at key cities -1.1%/-0.6% WoW for rebar/HRC

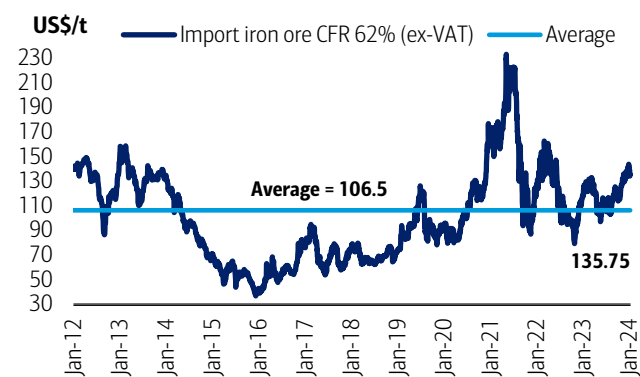


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 33: Imported iron ore CFR 62% prices at Tianjin Port

Iron ore price -5.2% WoW to US\$135.8/t as of 11 Jan

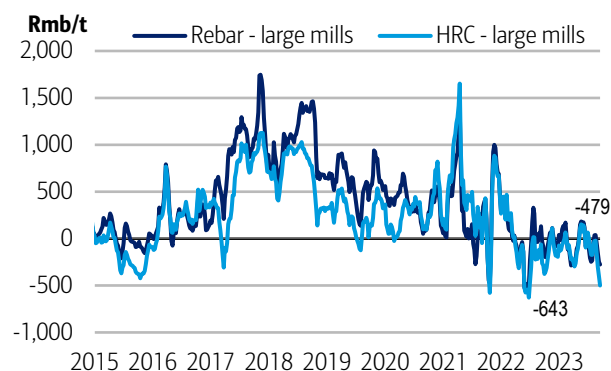


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 34: Cash margins at large mills (inventory lag)

Rebar cash margin at large mills -RMB70/t to -RMB479/t, and HRC cash margin at those mills -RMB85/t to -RMB643/t

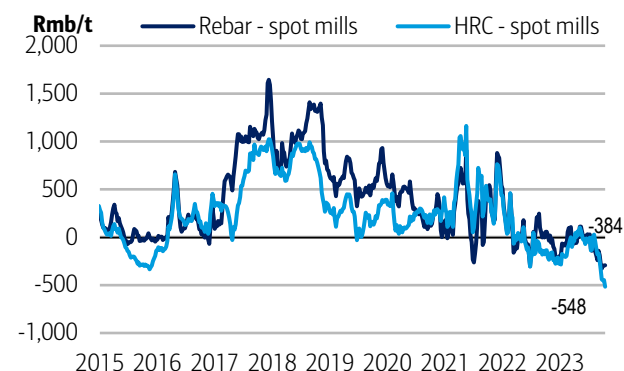


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 35: Spot cash margins at steel mills

Spot rebar cash margin +RMB61/t to -RMB384/t, and spot HRC cash margin +RMB46/t to -RMB548/t

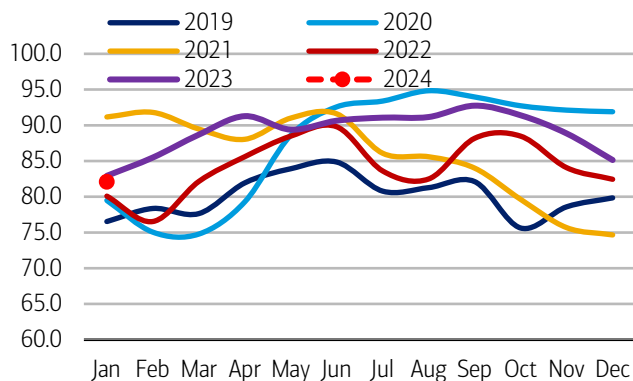


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 36: Utilization rates of blast furnaces across the nation

Utilization rates of blast furnaces across the nation +0.97ppt WoW to 82.56% as of 12 Jan

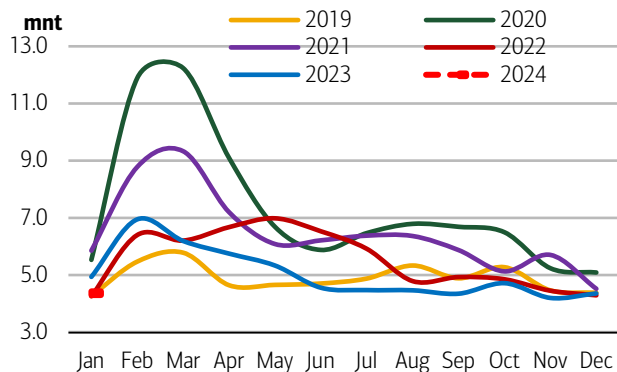


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 38: Steel inventory at mills

Steel inventory at mills down by 1.9% WoW to 4.32mnt

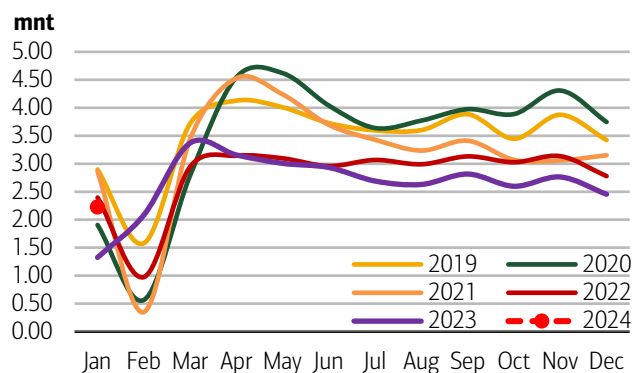


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 41: Weekly rebar apparent consumption

Weekly rebar apparent consumption was +3.6% WoW to 2.18mnt

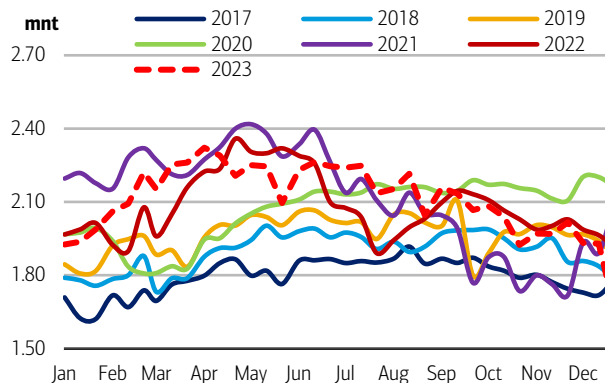


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 37: CISA crude steel output for large and median mills (10-day)

Daily crude steel production at CISA's sample was reported to be 1.666 mnt/day as of 31 Dec, compared with 1.29 mnt/day in the previous 10 days

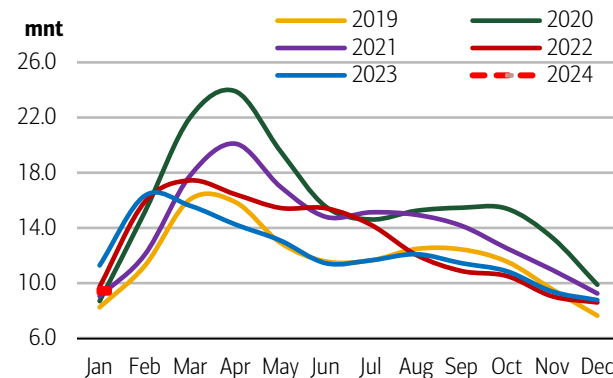


Source: CISA, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 39: Steel inventory at key cities (traders)

Steel inventory at key cities (traders) up by 4.0% WoW to 9.61mt

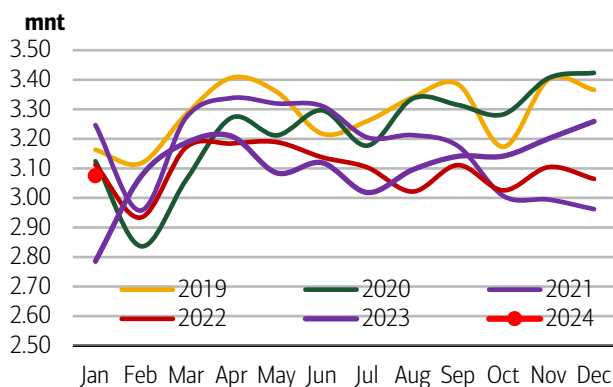


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 41: Weekly HRC apparent consumption

Weekly HRC apparent consumption was -3.8% WoW to 3.02mnt

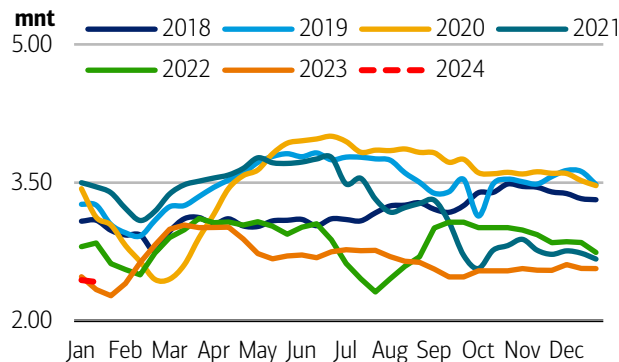


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 42: Weekly rebar output

Rebar output for the week ended 12 Jan decreased 0.8% WoW to 2.42mnt

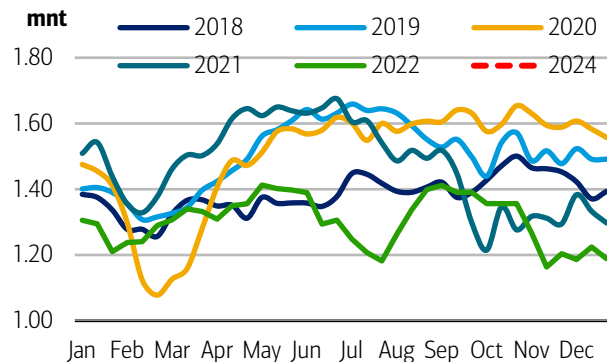


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 43: Weekly HRC output

HRC output for the week ended 12 Jan down by 2.1% WoW to 3.04mnt

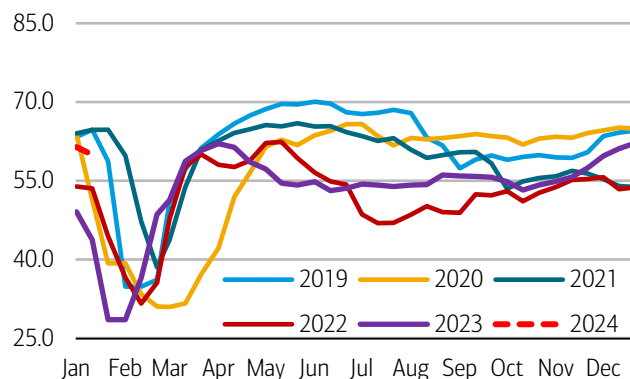


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 44: Operating rate of Electric-arc-furnace (EAF) mills

The operating rate of EAF mills -0.42ppt WoW to 59.97% in the week ended 12 Jan

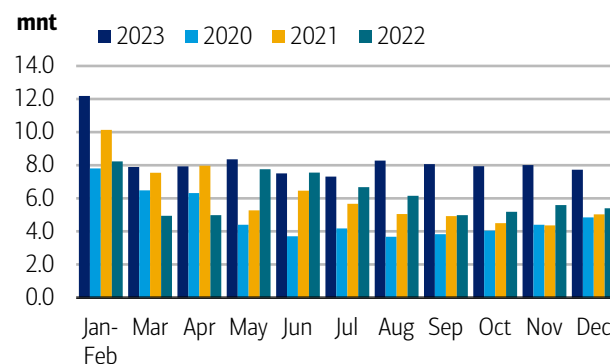


Source: Custeel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 45: China monthly steel product exports

In Dec 23, Chinese exports of steel were 7.73mnt, +43.1% YoY. YTD net exports reached 83.6mnt, +47% YoY

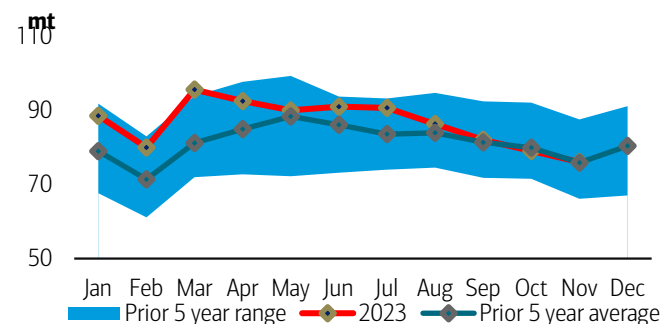


Source: China Customs, CEIC, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 46: YTD China crude steel production

China produced 76.1mnt of crude steel in Nov 2023, +0.4% YoY

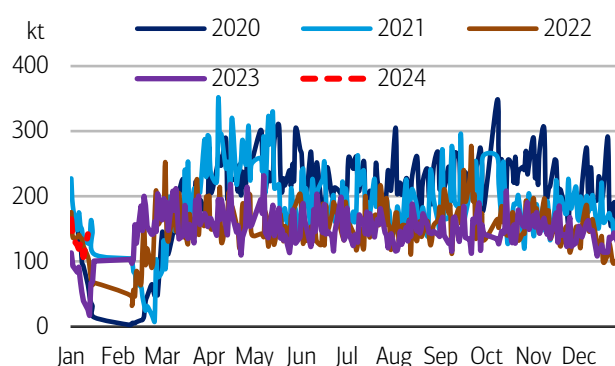


Source: NBS, CEIC, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 47: Construction steel trading volume

Construction steel trading volume +13.6% WoW to 141.8kt/d as of 11 Jan

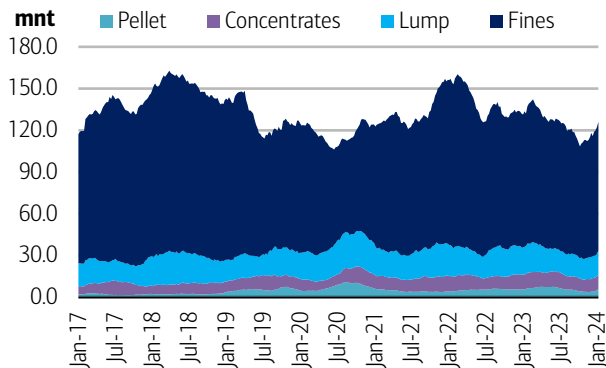


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 48: Iron ore port inventory by product type

Iron ore fine currently accounts for 73.6% of port inventory

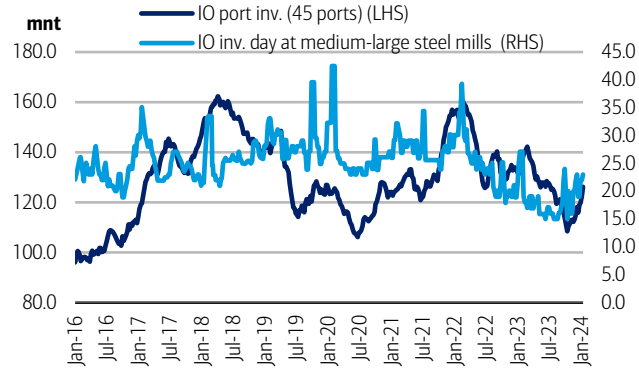


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 49: Iron ore inventory at large-medium steel mills and at ports

Iron ore port inventory ended at 126.17mnt, +2.1% WoW as of 12 Jan

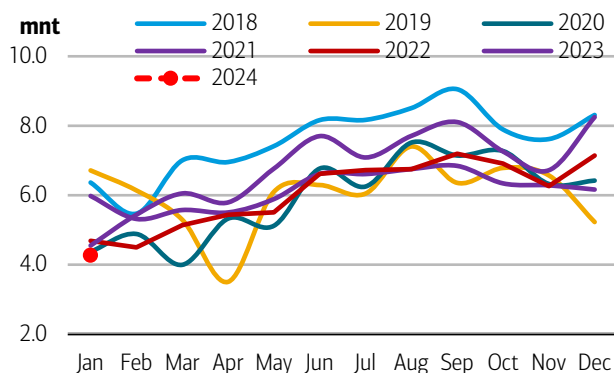


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 50: Weekly iron ore exports from major Brazilian ports

Weekly iron ore exports from major Brazilian ports – Jan 24 down 6.2% yoy as of 5 Jan

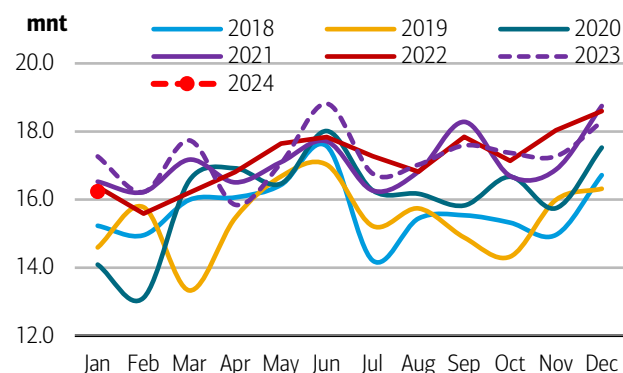


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 51: Weekly iron ore exports from major Australian ports

Weekly iron ore exports from major Australian ports – Jan 24 down 6.0% yoy as of 5 Jan

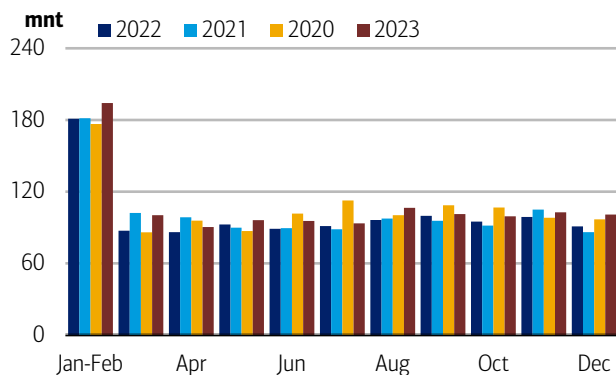


Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 52: China monthly iron ore imports

Chinese imports of iron ore in Dec 2023 were 100.9mnt, +11.0% YoY

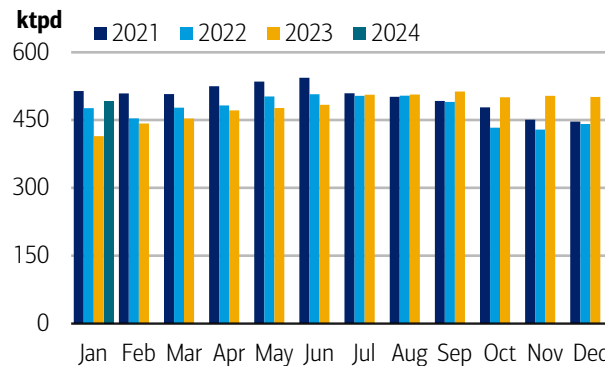


Source: China Customs, Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 53: Daily domestic iron ore concentrate production

Daily domestic iron ore concentrate production at 186 iron ore miners / 363 mines Jan 24 up 18.8% YoY, as of 12 Jan



Source: Mysteel, BofA Global Research

BofA GLOBAL RESEARCH

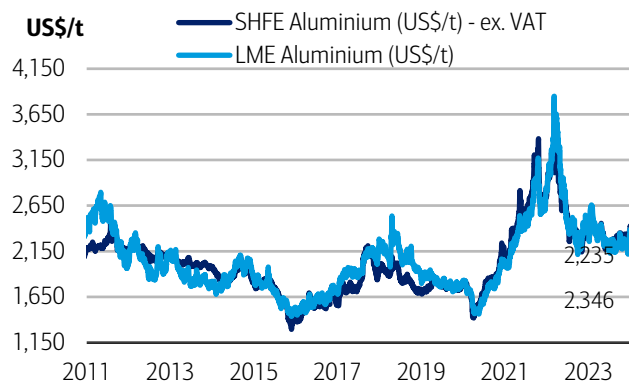
Metals: Major metal prices down

LME aluminum price was -1.7% WoW to US\$2,235/t, while SHFE -0.9% WoW to RMB19,005/t. Domestic Al ingot inventory was up 1.5% WoW to 457kt. LME copper price -1.3% WoW at US\$8,355/t, SHFE was -0.45% WoW to RMB68,070/t. According to Baiinfo, 1.5mt of capacity was expected to resume and 1.25mt of new capacity was expected to launch in 2024. The Comex gold price up 0.04% WoW at US\$2,046/oz. Battery grade lithium carbonate price down by 0.3% WoW to RMB96.2k/t and battery grade lithium hydroxide price was down 1.9% WoW to RMB84.7k/t.

Aluminum

Exhibit 54: Price comparison in LME & SHFE Aluminum

LME aluminum price -1.7% WoW to US\$2,235/t during the week ended 12 Jan, while SHFE down 0.9% WoW to RMB19,005/t

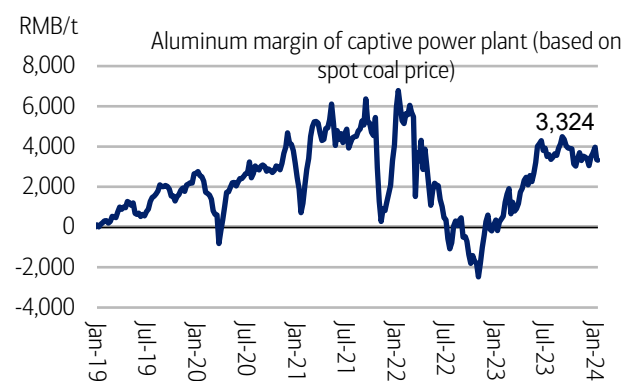


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 55: Aluminum margin of captive power plant

Aluminum margin of captive power plant -RMB181/t WoW to RMB3,324/t as of 12 Jan



Source: Bloomberg, SMM, Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 56: Avg. national aluminum margin (60% captive plant)

Avg. national aluminum margin -RMB262/t WoW to RMB2,438/t as of 12 Jan

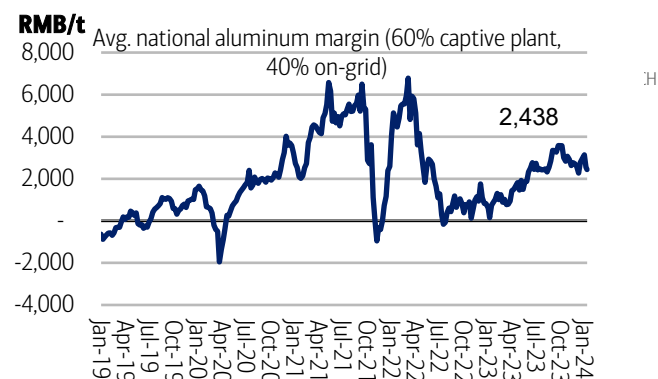
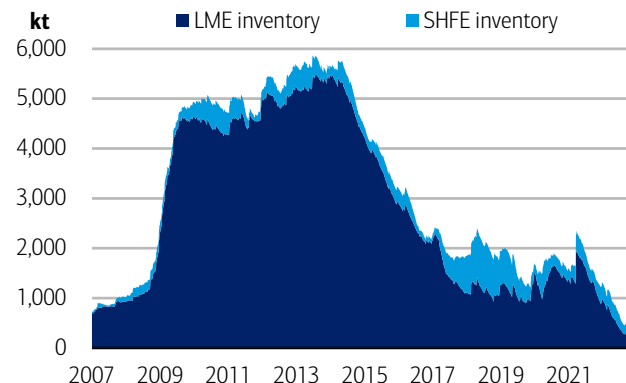


Exhibit 57: Inventory comparison in LME & SHFE Aluminum

LME aluminum inventory increased by 0.4% WoW to 561kt, and SHFE inventory was flattish WoW at 97kt

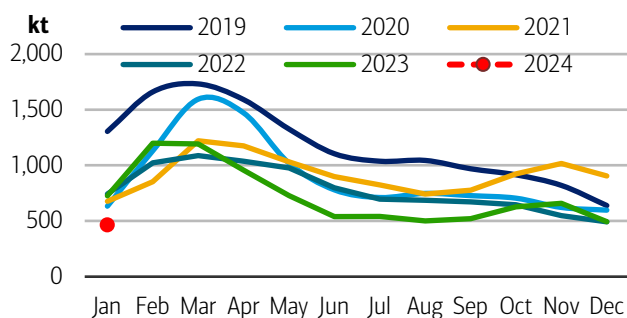


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 58: Aluminum ingot inventory

Domestic aluminum ingot inventory down 1.5% WoW to 457kt as of 11 Jan

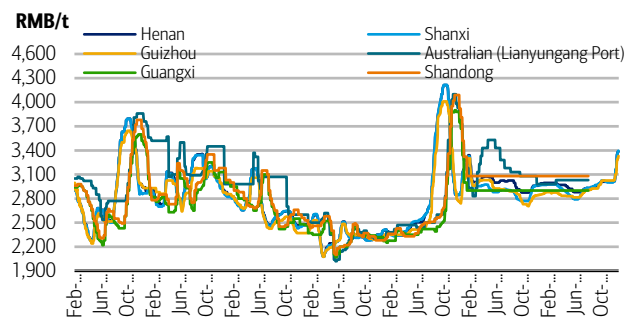


Source: SMM, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 59: Domestic alumina prices

Domestic alumina prices up 1.30% WoW to RMB3,370t as of 12 Jan



Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 61: Aluminum capacity change in 2024

1.5mt of capacity was expected to resume and 1.25mt of new capacity was expected to launch in 2024

	Suspension	Resumption	Expected resumption in remaining-24	Total expected resumption in FY24	New start	Expected new start in remaining-24	Total expected new start in FY24
Yunnan	-	-	-	1,235	-	530	530
Inner Mongolia	-	-	-	-	-	420	420
Shanxi	-	-	-	45	-	-	-
Guangxi	-	-	-	20	-	-	-
Xinjiang	-	-	-	-	-	200	200
Henan	-	-	-	-	-	-	-
Guizhou	-	-	-	135	-	100	100
Liaoning	-	-	-	-	-	-	-
Chongqing	-	-	-	-	-	-	-
Qinghai	-	-	-	-	-	-	-
Gansu	-	-	-	-	-	-	-
Sichuan	-	-	-	110	-	-	-
Shandong	-	-	-	-	-	-	-
Total	-	-	-	1,545	-	1,250	1,250

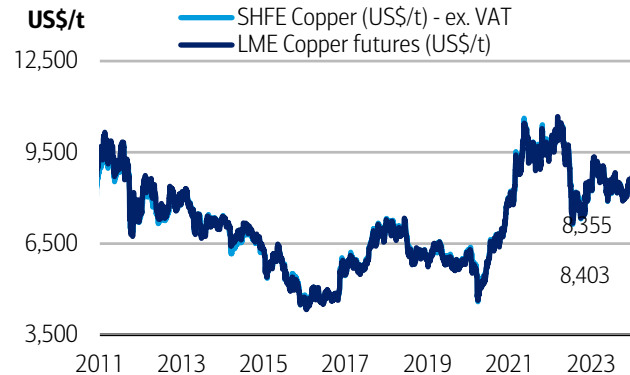
Source: Baiinfo, BofA Global Research

BofA GLOBAL RESEARCH

Copper & Gold

Exhibit 61: Price comparison in LME & SHFE copper

LME copper price down by 1.3% WoW at US\$8,355/t during the week ended 12 Jan, while SHFE -0.45% WoW to RMB68,070/t. SHFE is at a premium of 0.6% to LME price

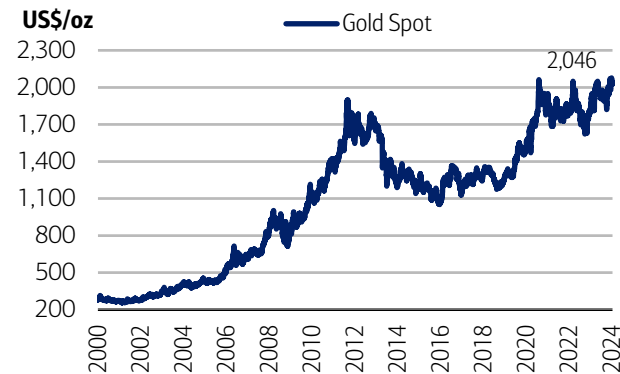


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 62: Gold spot price

The Comex gold (spot) price up 0.04% WoW to US\$2,046/oz

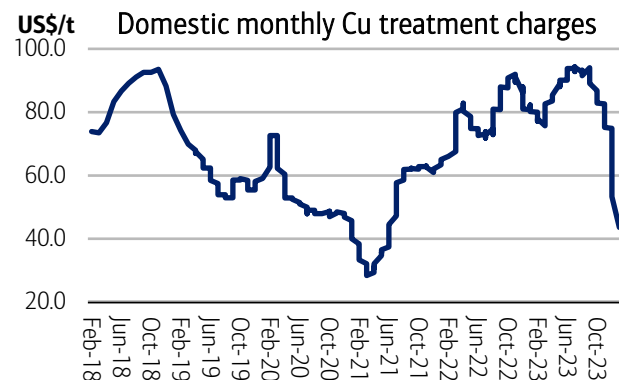


Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 63: Domestic monthly treatment charges on Cu concentrate

Domestic monthly treatment charges on copper concentrate: US\$43.6/t as of 12 Jan

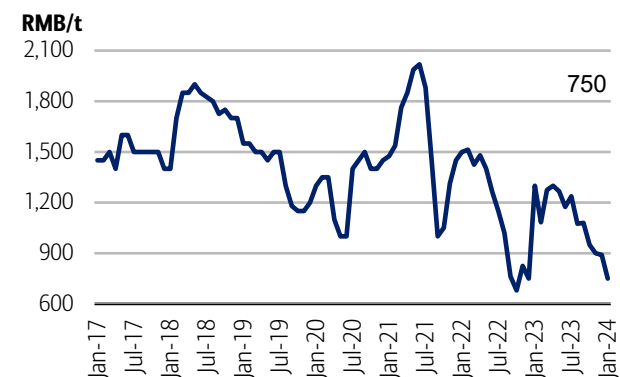


Source: Wind, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 64: Domestic monthly refining charges on blister copper

Domestic monthly refining charges on blister copper: Jan-avg.: RMB750/t

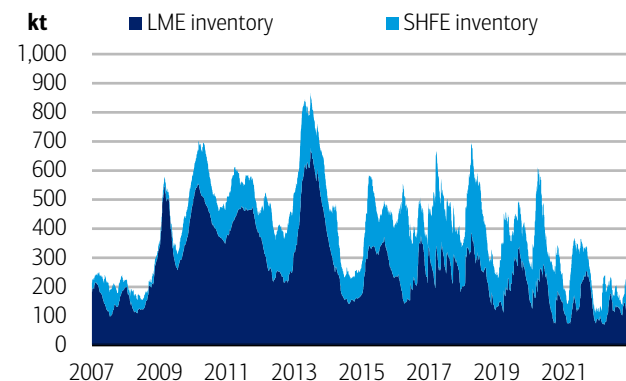


Source: Mymetal, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 65: Inventory comparison in LME & SHFE copper

LME copper inventory -3.6% WoW to 157kt, and SHFE inventory +30.0% WoW to 43kt



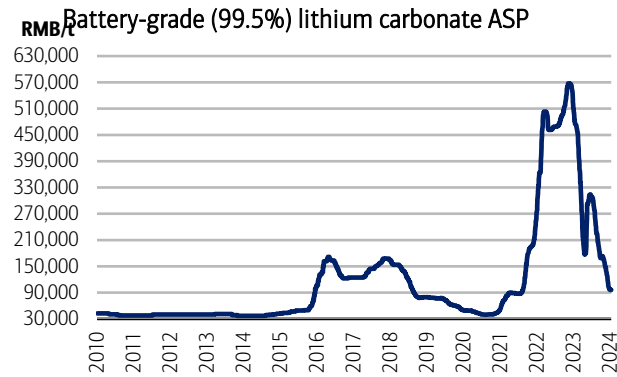
Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Lithium

Exhibit 66: Domestic battery-grade lithium carbonate ASP

Average price of domestic battery-grade lithium carbonate (99.5%) down by 0.3% WoW to RMB96.2k/t

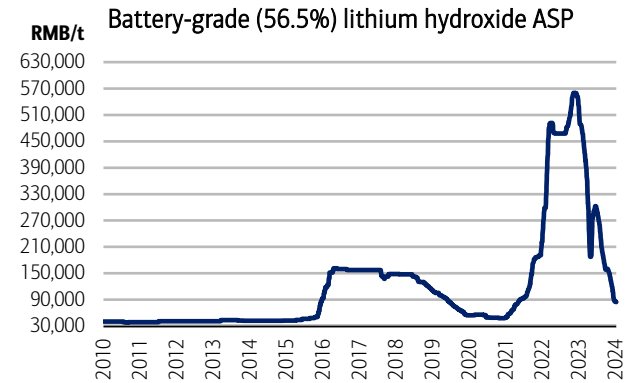


Source: SMM, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 67: Domestic battery-grade lithium hydroxide ASP

Average price of domestic battery-grade lithium hydroxide was down by 1.9% WoW at RMB84.7k/t

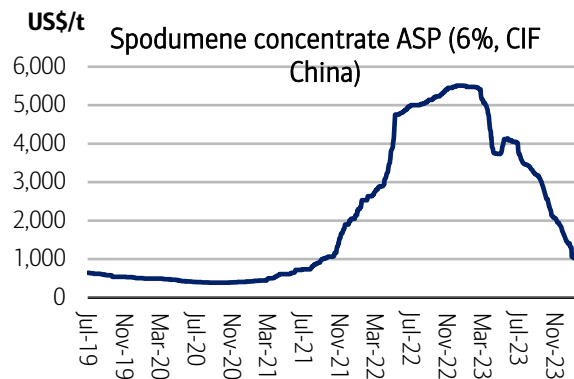


Source: SMM, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 68: Spodumene concentrate ASP (6%, CIF China)

Average price of spodumene concentrate ASP (6%, CIF China) down 3.32% WoW to USD1,020/t

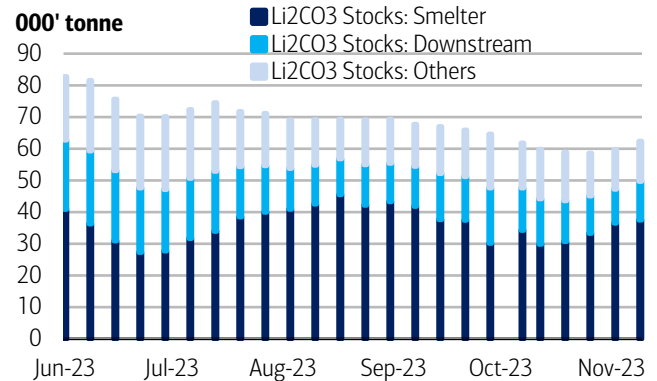


Source: SMM, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 69: Domestic lithium carbonate inventory

Lithium carbonate inventory trended lower since June



Source: SMM, BofA Global Research

BofA GLOBAL RESEARCH

Paper: Lower price amid weak demand

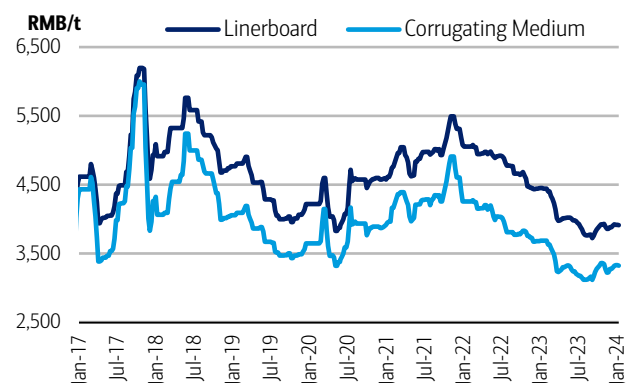
Raw paper: Paper price was down by 0.11% WoW to RMB3,849/t as of 10 Jan. Paper price edged lower WoW due to no significant improvement on market transaction & lower OCC price. Given lackluster terminal demand, downstream processors were conservative on restocking, causing lower shipment and higher inventory pressure among paper mills.

Waste paper: In the domestic market, the China OCC average was down by 2.1% WoW to RMB1,606/t.

Spread: The Nine Dragons margin tracker is now indicating NP/t of -RMB89/t for this week.

Exhibit 70: China linerboard and corrugating medium price

Paper was down by 0.11% WoW to RMB3,849/t as of 10 Jan.



Source: UMPaper, RISI

BofA GLOBAL RESEARCH

Exhibit 71: Nine Dragons Margin tracker

The Nine Dragons margin tracker is now indicating NP/t of -RMB89/t for this week, up 13.7% WoW.



Source: UMPaper, RISI, BofA Global Research

BofA GLOBAL RESEARCH

Glass: Price inched higher amid restocking demand

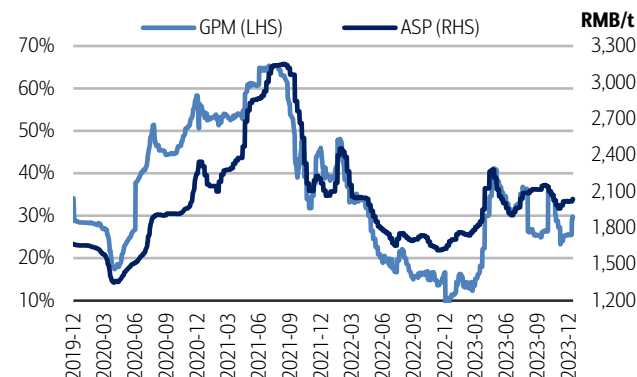
Supported by restocking demand under low inventory, national float glass price inched higher during week. According to SCI99, transaction may turn milder as small-size/mid-size processors starting to suspend production before Spring festival.

Market price and raw materials prices: As of 11 Jan, the national average float glass price (incl. VAT) was up by 0.9% WoW at RMB2,037/t. The soda ash price was down 12.2 % WoW to RMB2,579/t as of 12 Jan. National direct supplied pipeline natural gas remains RMB2.30/cbm. Our analysis shows Xinyi float glass GPM was up by 4.4% to 29.8%.

Inventory and capacity: As of 11 Jan, national inventory was 28.34mn weight case, representing 13.05 inventory days. Nationally effective capacity of all float glass lines was 172,365t/d.

Exhibit 72: National Float Glass Price and Xinyi float glass GPM

As of 11 Jan, the national average float glass price was up 0.9% WoW to RMB2,037/t. Our analysis shows Xinyi float glass GPM was up 4.4% WoW to 29.8%

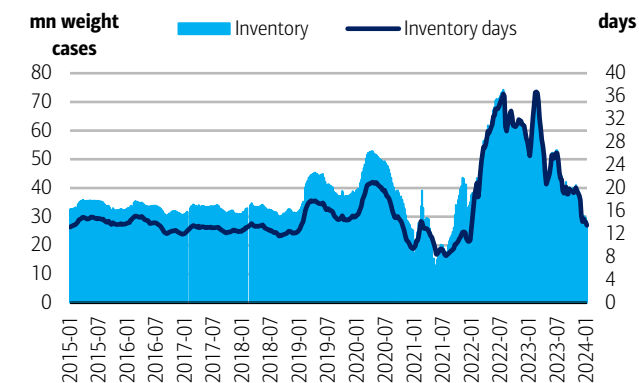


Source: BofA Global Research, Wind, SCI99

BofA GLOBAL RESEARCH

Exhibit 73: Inventory & Inventory day

As of 11 Jan, national inventory was 28.34mn weight case, representing 13.50 inventory days

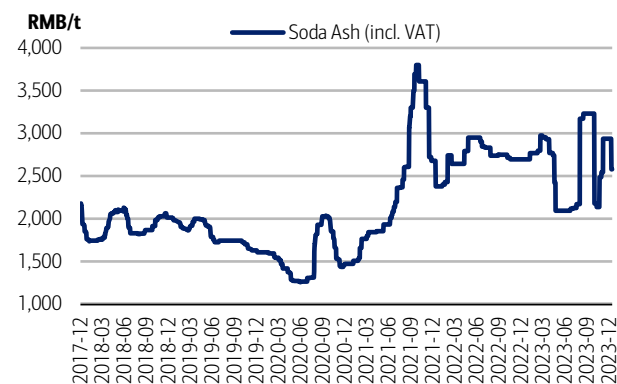


Source: BofA Global Research, Wind, SCI99

BofA GLOBAL RESEARCH

Exhibit 74: China Soda Ash Price (incl. VAT)

The soda ash price was down 12.2% to RMB2,579/t as of 12 Jan

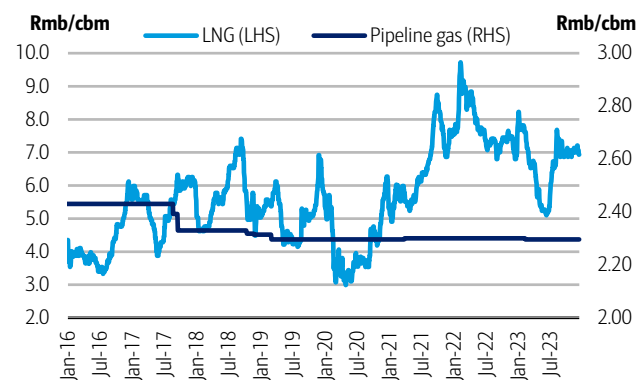


Source: BofA Global Research, Wind, SCI99

BofA GLOBAL RESEARCH

Exhibit 75: China Natural Gas Price

National direct supplied pipeline natural gas stayed at RMB2.30/cbm

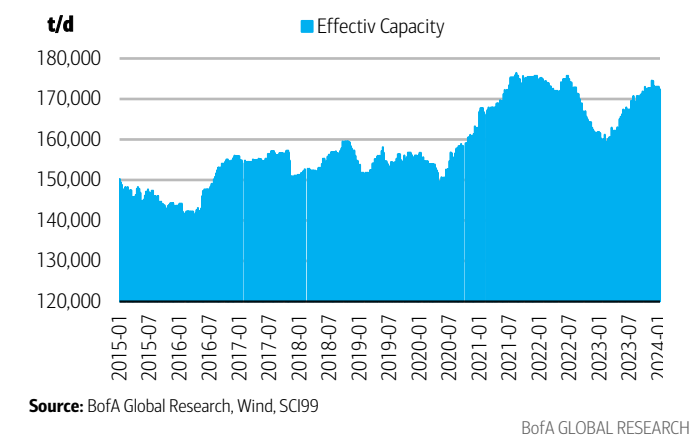


Source: BofA Global Research, Wind, SCI99

BofA GLOBAL RESEARCH

Exhibit 76: Effective capacity % of total capacity

Nationally effective capacity of all float glass lines was 172,365t/d.



Appendix

Exhibit 78: Glossary

Summary of terminologies/abbreviation mentioned in the report

Abbreviation	Elaboration
WoW	Week-on-Week
ASP	Average Selling Price
HRC	Hot Rolled Coil
LME	London Metal Exchange
SHFE	Shanghai Futures Exchange
OCC	Old Corrugated Containers
ND	Nine Dragon Paper (02689 HK)
GPM	Gross Profit Margin
NP	Net Profit
QHD 5,500kcal	Qinghuangdao port 5,500kcal thermal coal
NEWC 6,000K	Newcastle 6000kcal thermal coal
Liulin No.4 HCC	Liulin No.4 hard coking coal

Source: BofA Global Research

BofA GLOBAL RESEARCH



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.

Other Important Disclosures

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

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

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

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.

Officers of BofA 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.

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; BofA 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.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

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.

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

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

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

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

Copyright and General Information:

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

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

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

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

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

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

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

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

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