METALS & MINING | Ferrous Chartbook | 20 April 2023

China's March economic data supportive of steel margins

- **Macro data from China confirms ongoing recovery in steel demand with scope for pick-up in the peak June quarter**
- **Run-up in China's steel production in March could pose a risk to near-term operating margins if demand recovery falters**
- **Steel margins likely to settle at mid-cycle level in FY24; earnings accretion from next expansion wave key to watch. Prefer TATA and JSP**

Kirtan Mehta, CFA
research@bobcaps.in

Global steel demand to recover in CY23 and CY24: In its Short Range Outlook Apr'23, WSA forecasts a modest 2.3% recovery in global steel demand in CY23 from a 3.2% decline in CY22, on the back of revival across China, the US, Japan, Korea and emerging markets supported by India and ASEAN.

Seasonally strong June quarter to support demand in China: March data from China confirms that economic recovery is underway, with industrial production broadly in line with consensus, infrastructure FAI at high levels, and signs of easing of real estate stress. While the recent softening of steel prices suggests a slow start, we expect an uptick in steel demand during the peak season (Apr-Jun) and a sustained revival through CY23 aided by China's infrastructure push, potential for a slight pick-up in real estate in H2CY23 and continuing growth in the auto sector, albeit softer than last year. WSA expects China to clock 2% demand growth this year before flattening out.

Steel margins could come under pressure if demand falters: China's steel production has run up beyond 1.1bnt (annualised) in March, though this was needed to rebuild stocks ahead of the seasonally peak June quarter. Mysteel expects production to climb down from April with the start of maintenance shutdowns. Chinese steel exports have been higher in Q1CY23 at 20mt levels and should ease over Q2 as domestic demand perks up and production softens. However, should demand recovery falter, we could see pressure on regional margins till the market in China rebalances.

Raw material prices to ease after wet season: We believe coking coal and iron ore prices will ease from May/June as supply improves once the rainy season in Australia and Brazil draws to a close. Coking coal prices have eased below US$ 300/t from a peak of US$ 375/t in February. For iron ore, Vale's Q1 production results show that supply could improve in H2CY23 given a build-up of inventories.

Constructive on Indian ferrous players: We expect (i) margins to stabilise at mid-cycle levels in FY24 as recovery in China takes hold, and (ii) investor focus to shift to delivery of the next wave of expansion projects. Retain BUY on TATA (TP Rs 140) and JSP (TP Rs 670). Read our **Q4FY23 Preview** for our earnings outlook.

Recommendation snapshot

Ticker	Price	Target	Rating
JSP IN	585	670	BUY
JSTL IN	716	715	HOLD
SAIL IN	83	95	HOLD
TATA IN	108	140	BUY

Price & Target in Rupees | Price as of 20 Apr 2023

China revival to steady global steel margins

Domestic steel prices in China have improved 17% from Oct'22 lows despite giving up 5% of their gains over the last month. Price recovery has helped push gross margins for Chinese steel players closer to 10-year average levels of US$ 225/t. Recovery has coincided with improving sentiment following the opening up of China, even as ramp-up of steel production above the 1.1bnt annualised run-rate in Mar'23 confirms industry optimism about revival.

In India, steel prices have given up 5% of recent gains over the last month partly because recovery has lagged domestic industry expectations. We expect raw material prices to ease as the supply of coking coal and iron ore will improve from May/June once the rainy season draws to an end in Australia and Brazil. This benefit may be passed on to consumers in the form of lower steel prices and hence the focus should be on margins instead of prices to gauge the strength of the recovery.

We note that China's steel production at 1.1bnt annualised in March has run up above the country's demand of 920mt, but this surplus is also needed to help the industry restock. Chinese exports have remained high in Q1CY23, but we expect a slowdown as domestic demand picks up meaningfully during the peak Q2 season. Mysteel believes domestic crude steel production will back down from Q2 as the industry starts taking maintenance shutdowns.

Outside China as well, we expect recession fears to subside as central banks pause rate hikes and the global economy likely revives through the second half of the year. China, the US, Japan, Korea and India will be the key drivers for steel demand growth during CY23, in our view. Stabilisation of demand should start translating into an operating margin upside to mid-cycle levels for the Indian steel industry during H2CY23. We do not see margins strengthening much above this level as excess capacity in China will likely cap any material upside.

Global steel demand to recover in CY23 and CY24

The World Steel Association (WSA) forecasts a modest 2.3% recovery in global steel demand in CY23 from a 3.2% decline in CY22 on the back of revival across China, the US, Japan, Korea and emerging markets supported by India and ASEAN (Short Range Outlook, April 2023). Even so, recovery is likely to be limited by persistent inflation and the recessionary impact of high interest rates. For CY24, WSA expects global steel demand growth of 1.7%, assuming acceleration in developed economies offsets a flat China as the infrastructure stimulus fades. Sustained inflation is a key downside risk to this assumption.

- **China – Recovery likely in CY23:** WSA highlighted that the decline in China steel demand in CY22 at 3.5% was lower than its previous forecast of 4% despite an anaemic real estate sector. The steel body now looks for a 2% demand recovery in CY23, more bullish than the -1% to +1% growth forecast by ArcelorMittal, before flattening out in CY24. Like many agencies, WSA also expects a slight pick-up in China's real estate sector in the later part of CY23 followed by recovery in CY24.

The strong momentum in local infrastructure investments in CY22, although less steel-intensive upfront, should support steel demand in CY23 on project follow-through. The automobile sector although softer than CY21-CY22 will continue to grow over CY23-CY24, as per WSA.

- **Developed world – Expect several pockets of improvement outside the EU:** Demand in developed economies proved significantly weaker than anticipated in CY22 (-6.2% vs. -1.7% forecast by WSA in Oct'22), with weakness spreading to most pockets even though the EU proved more resilient against energy shocks. WSA expects a modest decline to continue in the EU in CY23 and believes steel demand in developed economies will collectively revive by 1.3% steered by the US, Japan and South Korea.

  In the US, the infrastructure push via the 2021 Infrastructure Law and the Inflation Reduction Act (IRA), coupled with a pick-up in auto sales, should offset negative pressure on residential construction, slower growth in manufacturing and recessionary stress on the economy. Similarly, planned investments are likely to support demand in Japan, as will automotive and shipbuilding in South Korea.

- **Emerging markets ex-MENA to recover in CY23:** Emerging markets fared better than the developed world in CY22 with a mild decline of 0.3% in steel demand. In CY23, WSA expects growth to recover to 3.3% supported by India and ASEAN countries.

- **India recovery to continue over CY23-CY24:** After rebounding 8.2% in FY22, WSA expects India's steel demand growth to continue at a healthy rate on the back of increasing investments.

Fig 1 – Steel demand forecasts by World Steel Association

Region (mt)	Steel demand forecasts (Apr'23 assessment)			Demand growth forecast (Apr'23 assessment)			Oct'22 assessment	
	2022	2023F	2024F	2022	2023F	2024F	2022	2023F
Europe	191	193	204	(6.9)	1.3	5.7	(3.6)	(0.4)
USMCA	133	135	138	(3.1)	1.6	2.3	0.9	1.8
Asia ex-China	346	364	380	(0.1)	5.3	4.3	2.6	4.1
Others	191	190	193	(3.6)	(0.1)	1.1	(3.4)	0.8
World ex-China	**861**	**883**	**915**	**(2.9)**	**2.6**	**3.6**	**(0.4)**	**2.0**
China	921	939	939	(3.5)	2.0	0.0	(4.0)	0.0
World	**1,782**	**1,822**	**1,854**	**(3.2)**	**2.3**	**1.7**	**(2.3)**	**1.0**

Source: WSA, BOBCAPS Research

Based on commentaries from several global market observers, we believe that key drivers for recovery will be (i) infrastructure investments (supporting non-residential construction), and (ii) demand from the automobile sector offsetting a slowdown in residential construction due to higher interest rates across global markets.

China – Seasonally strong June quarter to lend cheer

Revival underway and could strengthen further in Jun quarter…

March economic data supports our view that steel demand in China will recover this year. High production across the metals basket (steel, aluminium, coal) also indicates that the domestic industry is anticipating a revival. Further, China's spokesperson for the National Bureau of Statistics (NBS) expects a material uptick in domestic production during the April-June quarter – typically peak demand season – as recovery continues to take hold.

- **Q1 economic data compares well with consensus.** While China's Q1CY23 GDP (4.5% YoY vs. 4% for consensus) and retail sales growth (10.6% vs. 7.5%) were ahead of expectations, industrial production (3.9% vs. 4.0%) was broadly in line. Fixed asset investment (FAI) in infrastructure also held up well, rising 8.8% vs. 9.4% in CY22, though overall FAI turned a bit soft at 5.1%.
- **Macro indicators showed sequential improvement post the Lunar holidays.** We note 2.2% QoQ improvement in GDP in Q1. Further, there has been an uptick in March industrial production (3.9% vs. 2.4% in Jan-Feb) and retail sales (10.6% vs. 3.5%). FAI Infrastructure also held up well (8.8% in Q1 vs. 9% in Jan-Feb).
- **Real estate decline eased in Q1 and property sales saw net growth.** This is reflected in the slower contraction in FAI Property (-5.8% YoY over January-March vs. -10% in CY22), new construction by area (-19.2% vs. -39.4%), and funds raised (-9% vs. -25.9%). Property sales turned positive (+4.1% YoY vs. -27%) on the back of growth in residential sales (+7.1% vs. -28.3%).
- **Infrastructure support continues.** FAI in Infrastructure grew 8.8% in Q1 driven by state-owned FAI growth of 10%.
- **Industrial production recovery continued in March.** While manufacturing IP was up 4.2% YoY, utilities IP grew 5.2%. The recovery was across several segments, viz. raw chemical materials (7.1%), ferrous metals smelting (6%), non-ferrous metals smelting (7%), automobile manufacturing (13.5%), railways/ships (+8.6%), machineries (+16.9%), and power and heat (5.3%).
- **Apparent oil demand rose 9% YoY in March.** Refining throughput also improved to 14.9mbpd. However, the industry is geared to move into a maintenance season in Q2CY23 which may impact throughput by ~1mbpd.

… but steel margin could come under pressure if demand falters

Though China's economy is showing progress with reopening, steel production appears to have risen beyond domestic demand levels, to support inventory restocking. This could pose an interim risk of increase in exports in case domestic demand recovery is slow to take off over Q2. If exports show a pick up, then stabilisation of global steel margins to mid-cycle levels could be delayed.

- **High steel production in March:** China's steel production has increased sharply to 95.7mt in Mar'23 (1.1bnt annualised vs. 0.9bnt in Dec'22) and is now outstripping domestic demand of 0.9bn seen in CY22. Some of this increase in production is required for restocking as inventory at steel mills and traders is running below the historical levels required for catering to a peak quarter.

- **Export risk if domestic demand recovery falters:** Steel exports from China were high at 7.9mt in March and 20mt in Q1CY23 as production recovery was essential ahead of demand recovery. With China's NBS spokesperson guiding for a noticeable pick-up in domestic production in Q2, domestic demand and channel restocking could absorb a significant proportion of the increase. Further, Mysteel, a local media house, expects crude steel production to start easing from April with the onset of maintenance shutdowns.

  However, if demand is slower to recover than domestic expectations, this additional production could pose the risk of higher exports in coming months, putting pressure on regional steel producer margins.

Key drivers for demand revival in China

- **Infrastructure push:** On the back of projects started in CY22 and significant funding raised during the year, FAI Infrastructure is holding up well, rising 8.8% in Q1. However, investments could come under pressure if state finances become constrained during the latter half of the year. To support investments, the government has also instructed various policy banks (Agricultural Development Bank of China, China Development Bank, and Export-Import Bank of China) to increase lending for infrastructure projects.

  More than 900 key projects are currently either under construction or planned by central state-owned enterprises (SOE) for CY23, covering major projects listed in the 14th Five-Year Plan and other national plans (State-owned Assets Supervision and Administration Commission, SASAC). Previously in February, the SASAC has directed central SOEs to expand effective investments focusing on critical areas such as major national projects, infrastructure, and strengthening and supplementing industrial chains.

- **Potential revival in real estate:** Most observers anticipate a pick-up in China's real estate sector during H2CY23. March data does suggest easing stress and initial signs of sale restart. Chinese households have accumulated excess savings of RMB 10tn (~US$ 1.5tn) above the normal trendline over CY22 amid Covid-related uncertainties and a downturn in the property market, as per a survey by People's Bank of China (PBoC). As the uncertainty around lockdowns and income loss has reduced post opening up, property buyers could return to the market from Q2.

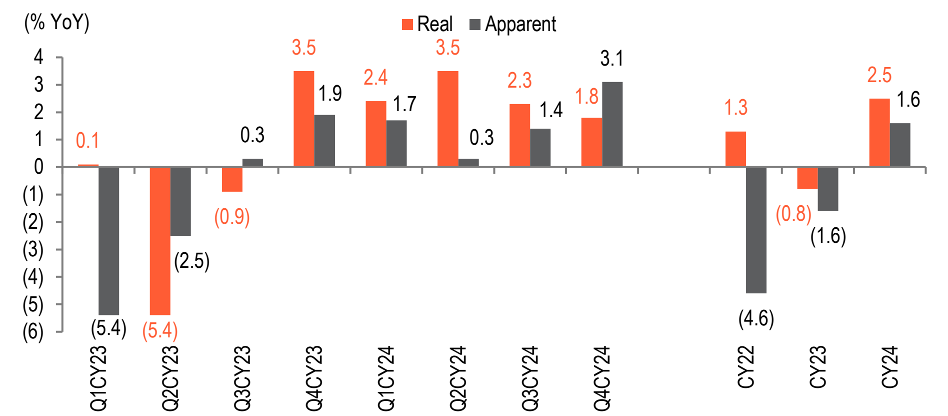
- **Delivery on GDP target this year:** Against the government's target of 5% GDP growth for CY23, the current consensus expectation stands at 5.3% with some upgrades made in the wake of the positive March data points.

- **Additional government support:** In case construction activity in China does not recover in line with the official 5% GDP target, we believe there is a higher chance of additional economic support from the government this year with a clear shift in focus toward stabilisation of the economy.

Europe – Channel restocking to extend support

- During **our call with ArcelorMittal (MT)** on 13 March, the global steel major flagged improving market sentiment amid reduced fears of recession. MT anticipates a double-digit HoH rise in apparent demand over Jan-Jun'23. The company confirmed the restart of most of its shut-in European capacity (20% of its total), given lengthening of the order book.
- European Steel Association Eurofer, however, has a more pessimistic forecast of a further 1.6% YoY decline in apparent steel demand for CY23 after a 4.6% drop in CY22. That said, Eurofer expects the decline to moderate through H1 and turn positive in H2 of CY23.

Fig 2 – European steel consumption growth forecast by Eurofer



Source: Eurofer Economic and steel market outlook 2023-2024 – First Quarter Report, BOBCAPS Research

- We note the idling of 14 blast furnaces with ~22mt of capacity in Europe during CY22, keeping the market balance tight. Even if the decline in demand was to moderate, we believe restarts could lag demand on the return, keeping the European market constrained through CY23. We are already seeing the opening up of a spread between European NWE steel prices and China export prices, encouraging imports.

US – Infrastructure bills to lend support

Although the US is likely to face recessionary pressures and a decline in residential construction as a result of the spike in interest rates, steel demand is likely to see a modest recovery in CY23 supported by an infrastructure push and recovery in automotive production. Two key infrastructure acts that underpin investments are:

- **Inflation Reduction Act (IRA):** This Act is aimed at supporting a new, multi-year upcycle in capex, elevating the role of the government in supporting steel consumption in the US. It encourages investment in areas such as the electric vehicle supply chain and solar panel production.
- **Infrastructure Investment and Jobs Act (IIJA), Bipartisan Infrastructure Framework:** Passed in CY21, this bill has authorised US$ 1.2tn in investments for transportation and infrastructure spending, including US$ 0.55tn for new investments and programmes until CY26. While progress was slow in CY22, we may see execution improving in CY23 as the government addresses project licensing delays.

Raw material prices likely to ease

Coking coal – Supply to rise after wet season

Following an increase in January-February, coking coal prices have retracted below US$ 300/t owing to improvement in supply. We expect prices to average at US$ 263/t in FY24 as Australian supply scales up and the inflow of Russian coal into China and India rises.

- Australian producers are looking to ramp up coal exports back to CY19 levels of 173mt from 160mt in CY22. Last year, coking coal production was affected by severe weather, labour shortages and the crossover of some grades into thermal coal markets. This year, the increase should be supported by lower rainfall, restart of production (from Crinum, Cook, Burton, Millennium, Burton and Bluff), and the start of new projects (such as Aquila, Iron Bark No.2, Broadmeadow East, Olive Downs Complex, and Malaba).
- There is a possibility that China may lift the informal ban on coal imports from Australia at some point in CY23. This could ease trade dislocations in a gradual manner and reduce the premium on coking coal prices that was required for China to attract supply from marginal players.
- Russian exports may reduce 15-20% YoY to ~40mt in CY23 as unsustainable price discounts shrink. Sales are also limited by rail restrictions and lower coal quality. However, these exports are likely to find buyers in China, India and Southeast Asia, and will continue to provide competition to alternate coal sources.

Iron ore – Seasonal improvement in supply likely in Q2

Vale's Q1CY23 production data released on 18 Apr confirmed that a sharp seasonal drop in iron ore sales for the quarter coupled with a spike in China's steel production has driven up iron ore prices to US$ 130/t levels.

However, Vale highlighted that the reduction in sales was much higher than the reduction in production due to logistics issues stemming from adverse weather. Sales of iron ore fines at 46mt were down 44% QoQ in Q1, whereas the production decrease was far more modest at 17% QoQ and available inventory should help restore sales in H2CY23. Vale has maintained its annual iron ore production guidance at 310-320mt despite the weaker Q1 sales.

We expect iron ore prices to ease from May/June with restoration of supply as the rainy season ends in Brazil and Australia.

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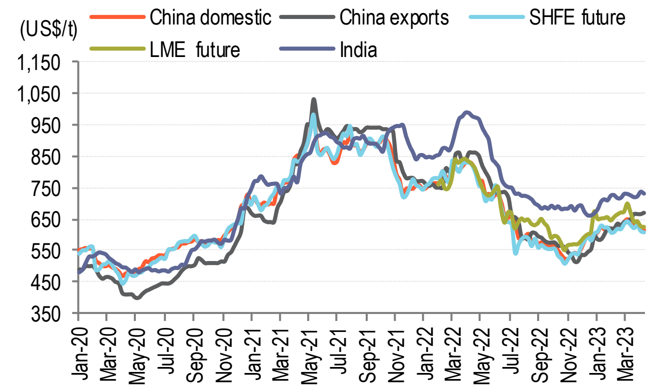
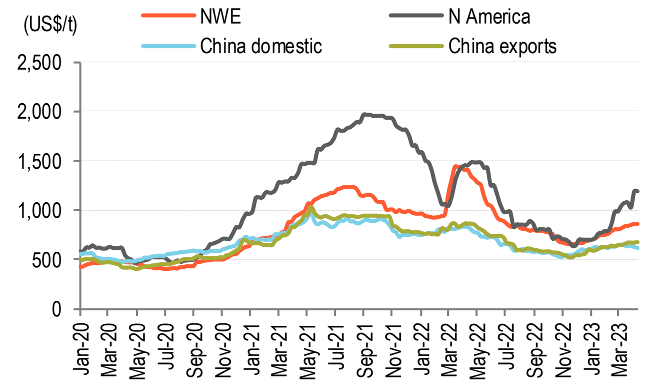
Prices

Fig 3 – HRC steel prices (China and India)



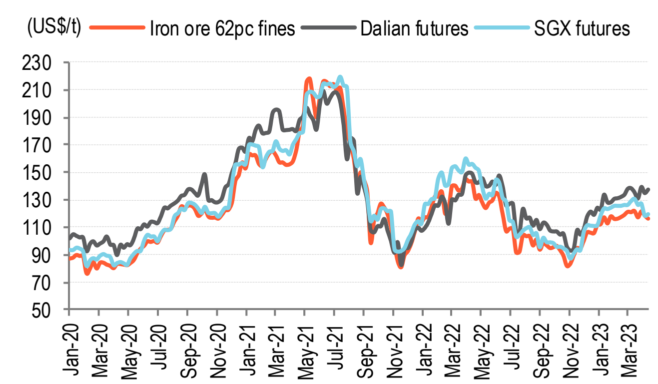
Source: Bloomberg, BOBCAPS Research | HRC: Hot Rolled Coil

Fig 4 – Regional HRC steel prices



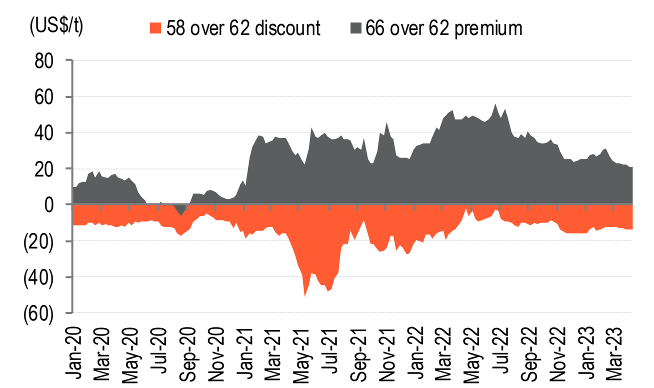
Source: Bloomberg, BOBCAPS Research

Fig 5 – Iron ore prices



Source: Bloomberg, BOBCAPS Research

Fig 6 – Iron ore grade premium/discount



Source: Bloomberg, BOBCAPS Research

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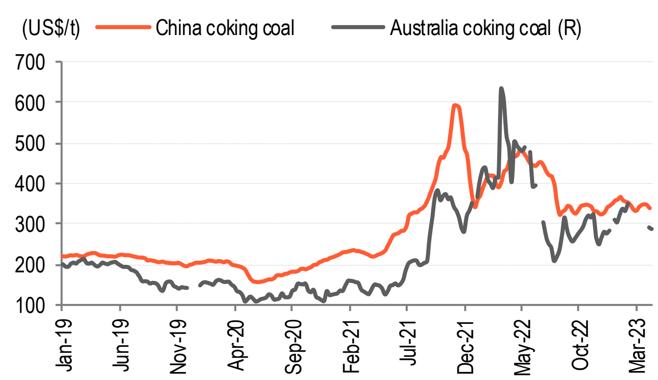

Source: Bloomberg, BOBCAPS Research

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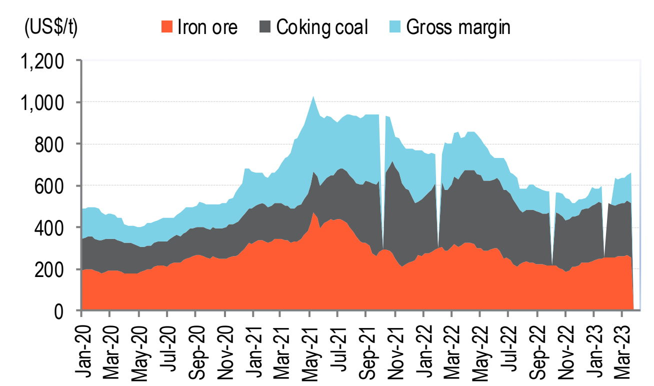
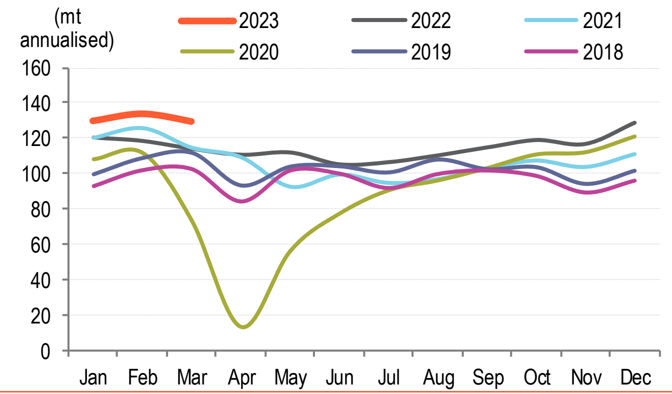


Source: Bloomberg, BOBCAPS Research

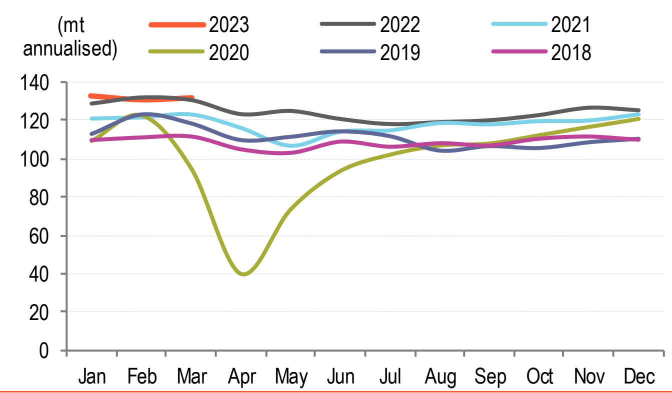
India steel demand-supply and prices

Fig 9 – India steel consumption



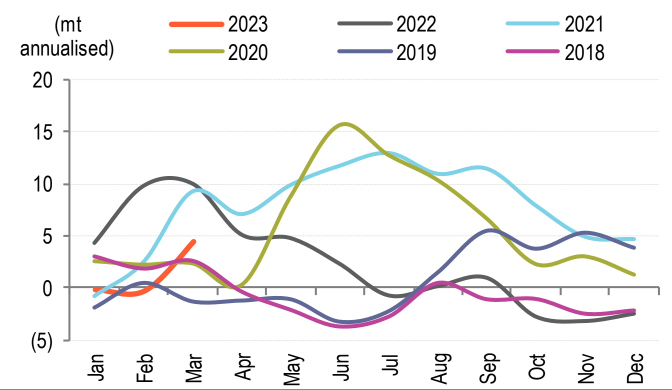
Source: CMIE, BOBCAPS Research

Fig 10 – India steel production



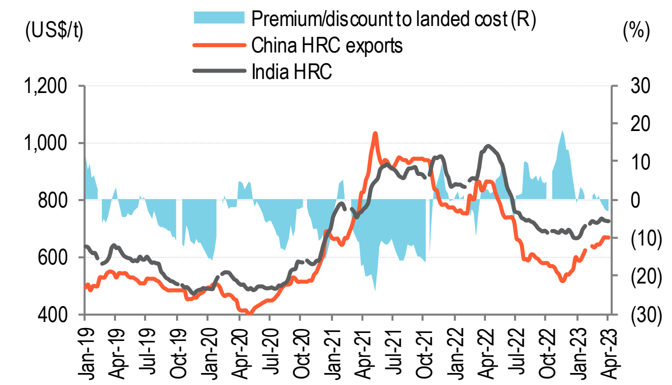
Source: CMIE, BOBCAPS Research

Fig 11 – India steel exports



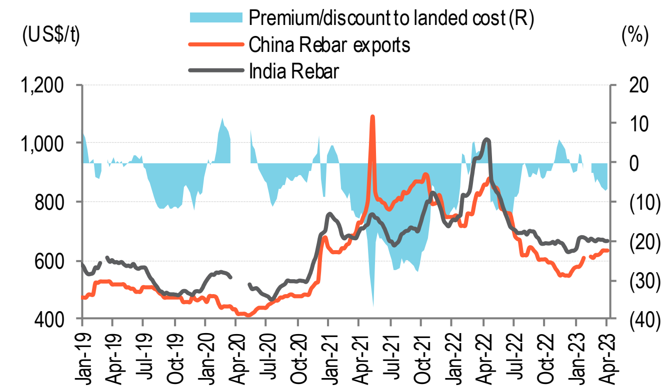
Source: CMIE, BOBCAPS Research

Fig 12 – India HRC premium/discount



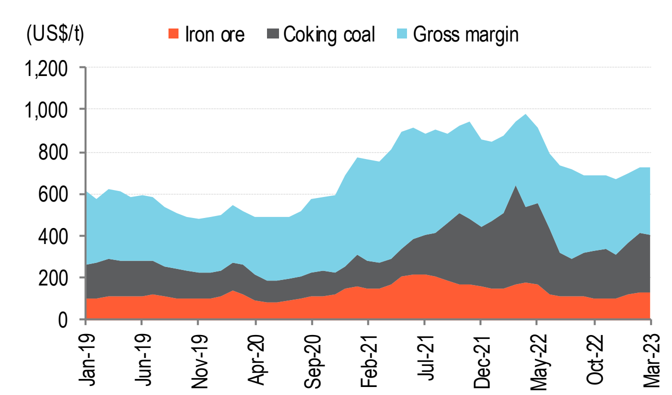
Source: Bloomberg, CMIE, BOBCAPS Research

Fig 13 – India rebar premium/discount



Source: : Bloomberg, Steelmint, BOBCAPS Research

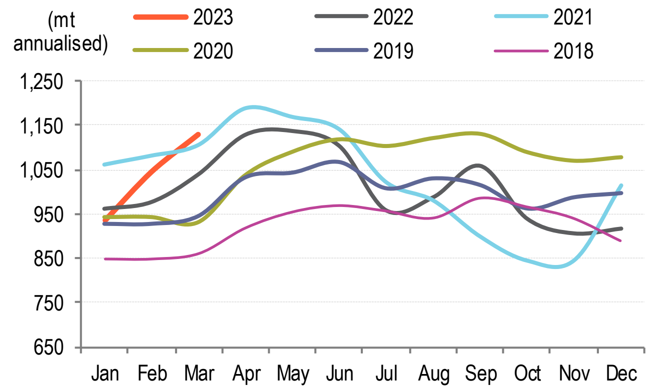
Fig 14 – India HRC gross margin proxy (monthly)



Source: Bloomberg, CMIE, Steelmint, BOBCAPS Research

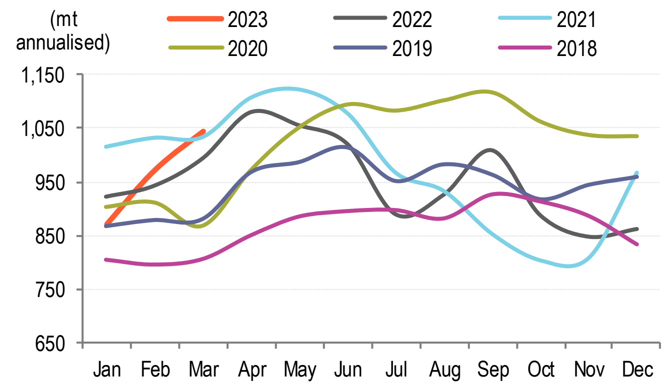
China steel production and consumption

Fig 15 – China steel production



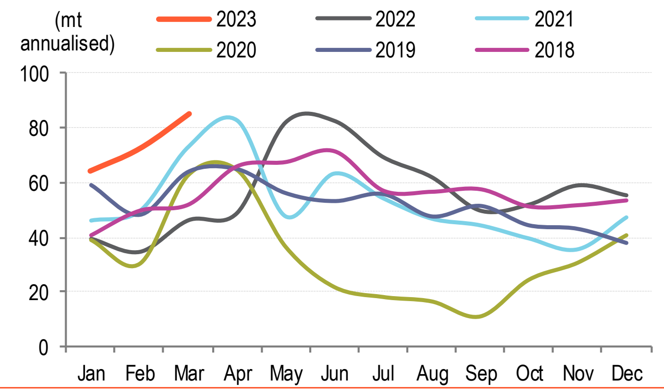
Source: Bloomberg, China National Bureau of Statistics, BOBCAPS Research

Fig 16 – China apparent steel consumption



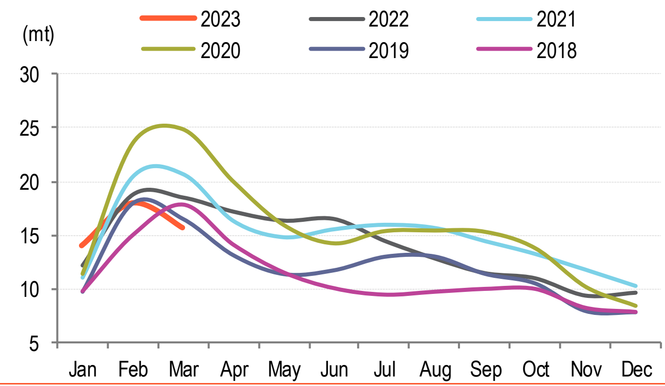
Source: Bloomberg, China Customs, China National Bureau of Statistics, BOBCAPS Research

Fig 17 – China net steel exports



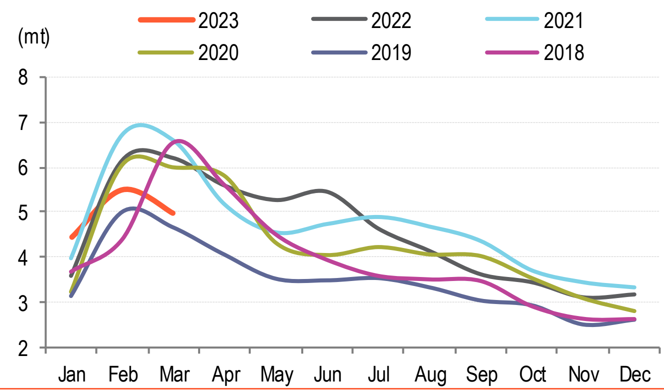
Source: Bloomberg, China Customs, BOBCAPS Research

Fig 18 – China steel inventory for marketplace



Source: Antaike, Bloomberg, BOBCAPS Research

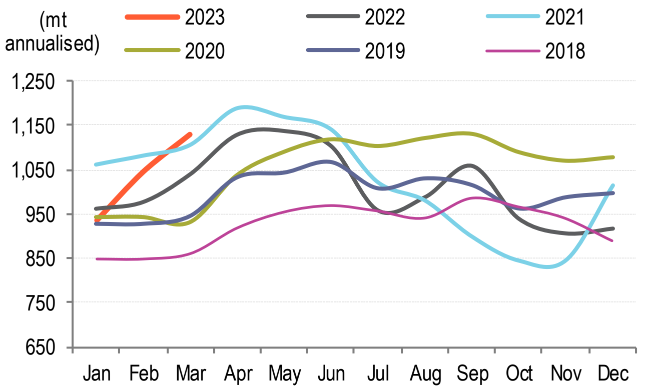
Fig 19 – China steel inventory of traders



Source: Bloomberg, Steelhome, BOBCAPS Research

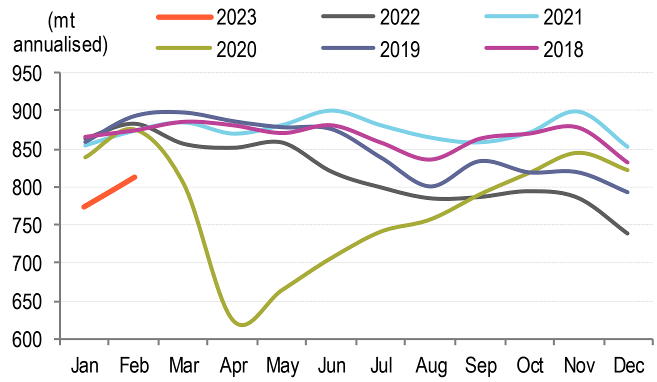
World steel production

Fig 20 – China production



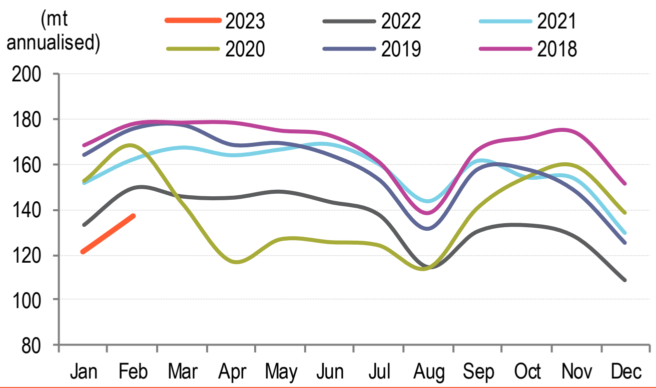
Source: Bloomberg, China National Bureau of Statistics, BOBCAPS Research

Fig 21 – Ex-China production



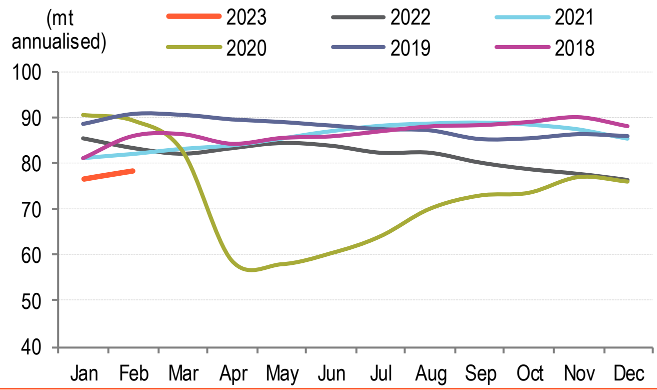
Source: Bloomberg, World Steel Association, BOBCAPS Research

Fig 22 – EU production



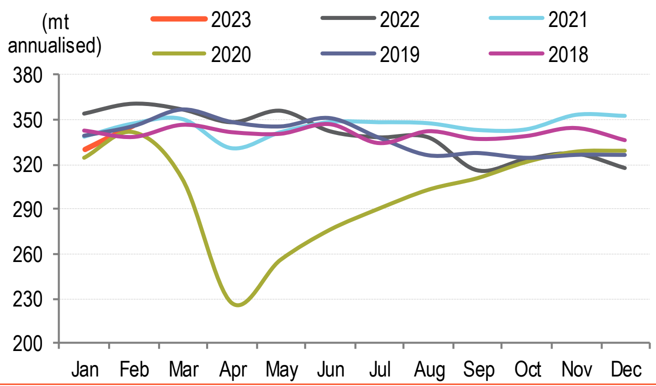
Source: Bloomberg, World Steel Association, BOBCAPS Research

Fig 23 – US production



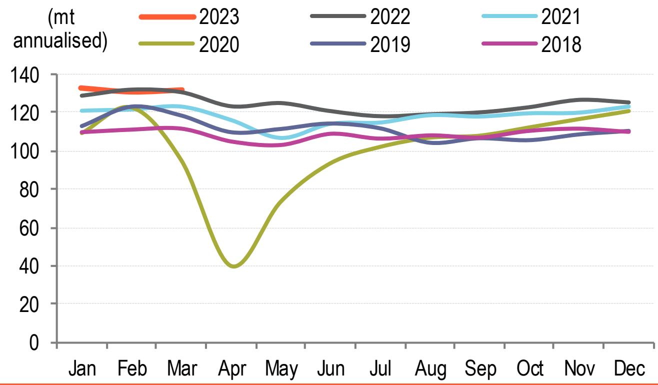
Source: Bloomberg, World Steel Association, BOBCAPS Research

Fig 24 – Asia ex-China production



Source: Bloomberg, World Steel Association, BOBCAPS Research

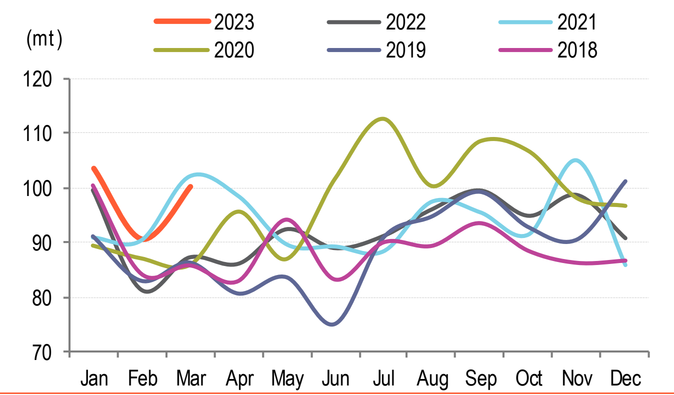
Fig 25 – India production



Source: CMIE, BOBCAPS Research

Iron ore imports/exports

Fig 26 – China iron ore imports



Source: Bloomberg, China Customs, BOBCAPS Research

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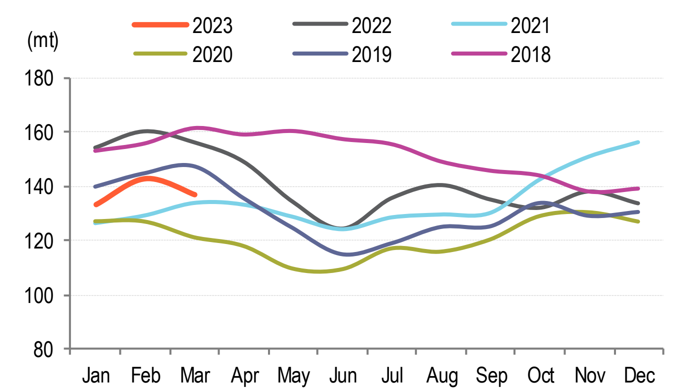
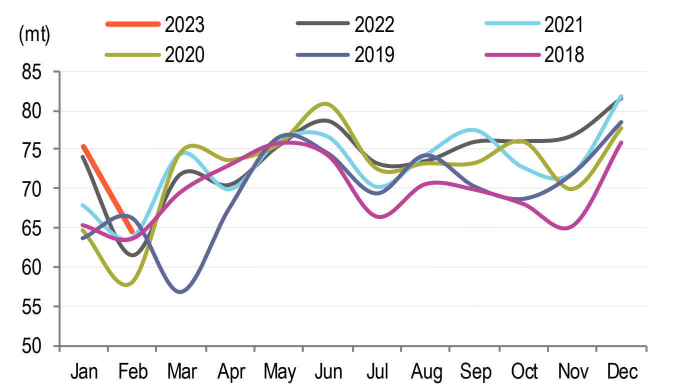


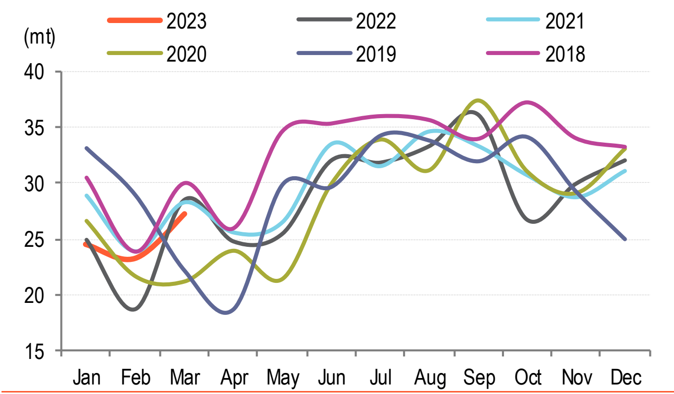
Source: Bloomberg, Steelhome, BOBCAPS Research

Fig 28 – Australia iron ore exports (monthly)



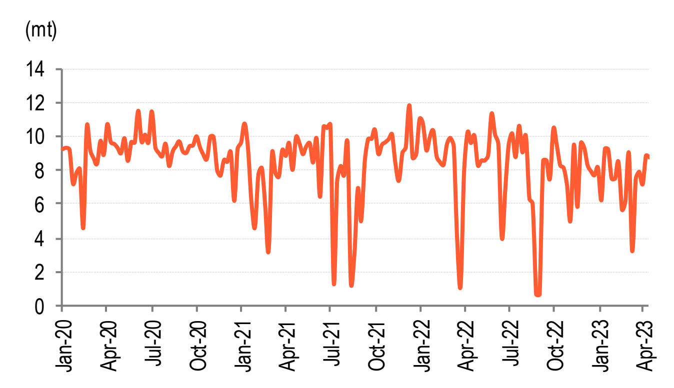
Source: Bloomberg, Australian Bureau of Statistics, BOBCAPS Research

Fig 29 – Brazil iron ore exports (monthly)



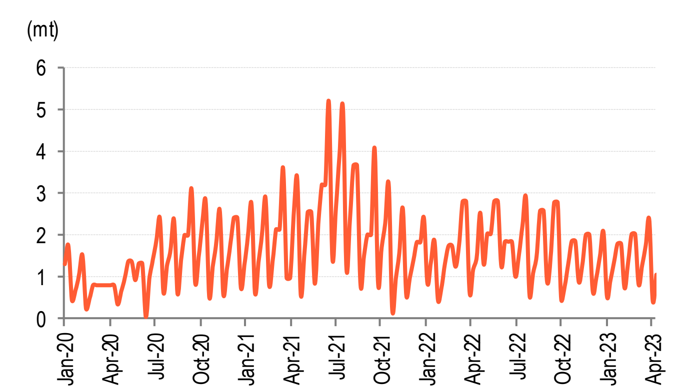
Source: Bloomberg, Brazil Ministry of Commerce, BOBCAPS Research

Fig 30 – Australia Port Headland iron ore exports (weekly)



Source: Bloomberg, Global Ports, BOBCAPS Research

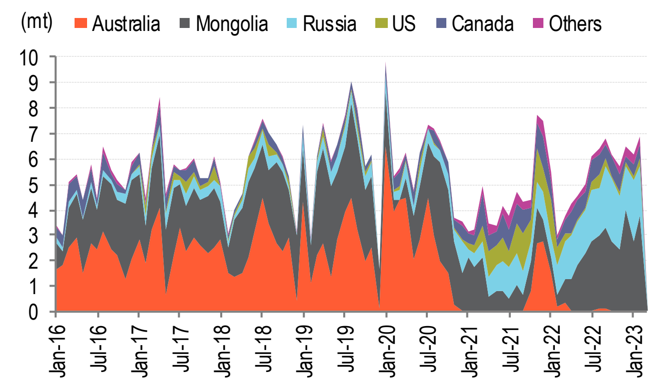
Fig 31 – Brazil iron ore exports (weekly)



Source: Bloomberg, Brazil Ministry of Commerce, BOBCAPS Research

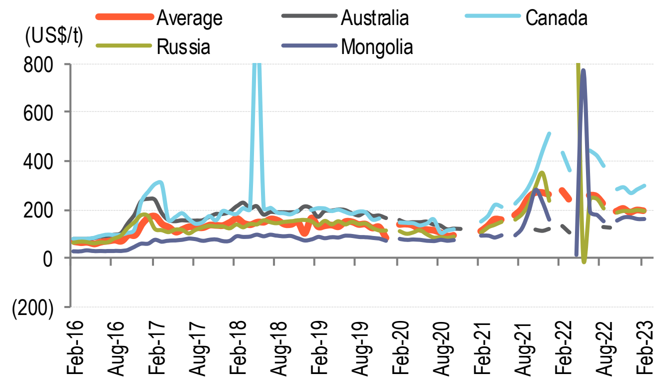
Coking coal

Fig 32 – China coking coal imports



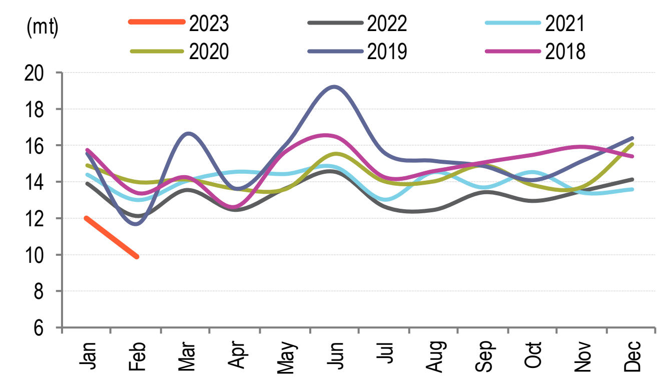
Source: Bloomberg, China Customs, BOBCAPS Research

Fig 33 – China coking coal import price



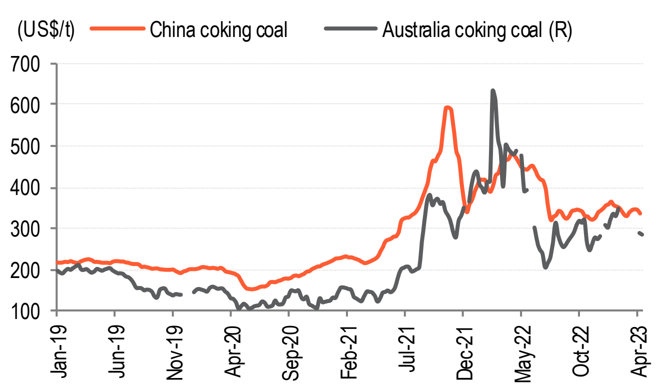
Source: Bloomberg, China Customs, BOBCAPS Research

Fig 34 – Australia coking coal exports



Source: Australian Bureau of Statistics, Bloomberg, BOBCAPS Research

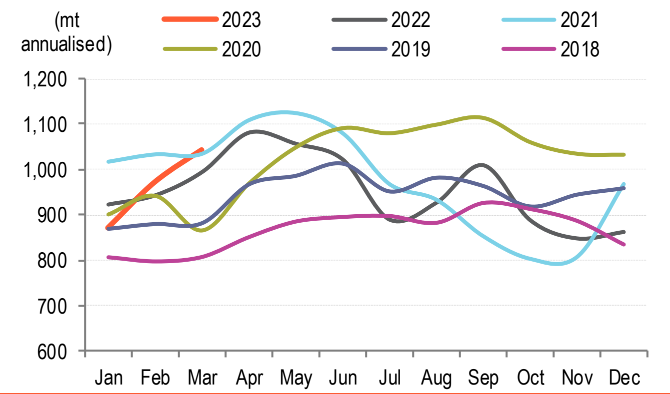
Fig 35 – Coking coal price



Source: SteelMint, BOBCAPS Research

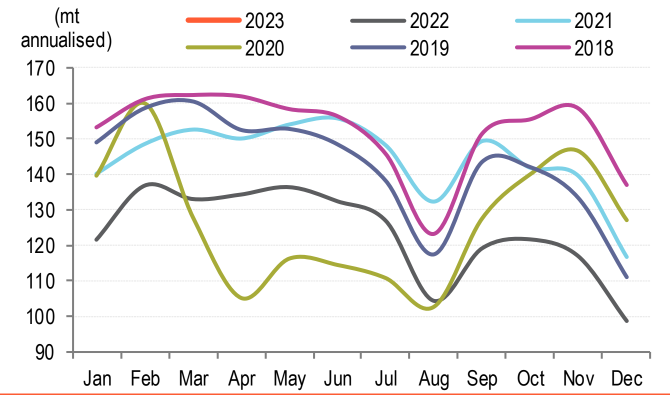
Apparent steel demand

Fig 36 – China



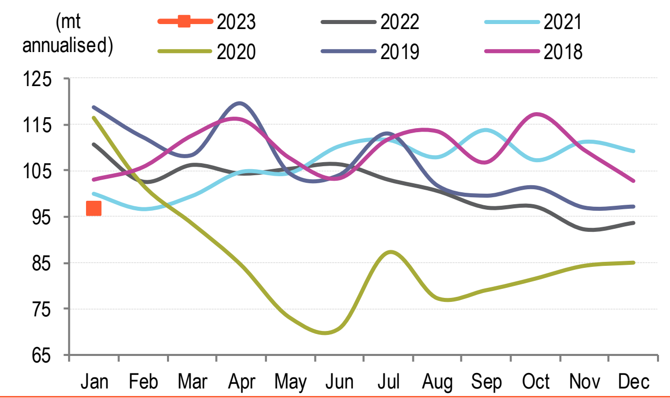
Source: Bloomberg, China Customs, National Bureau of Statistics, BOBCAPS Research

Fig 37 – Europe



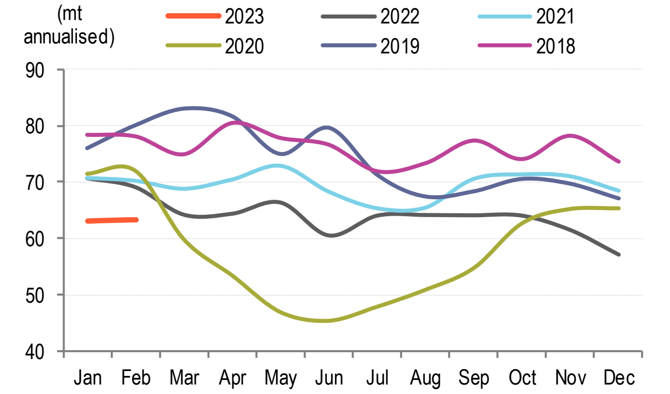
Source: Bloomberg, Eurofer, World Steel Association, BOBCAPS Research

Fig 38 – US



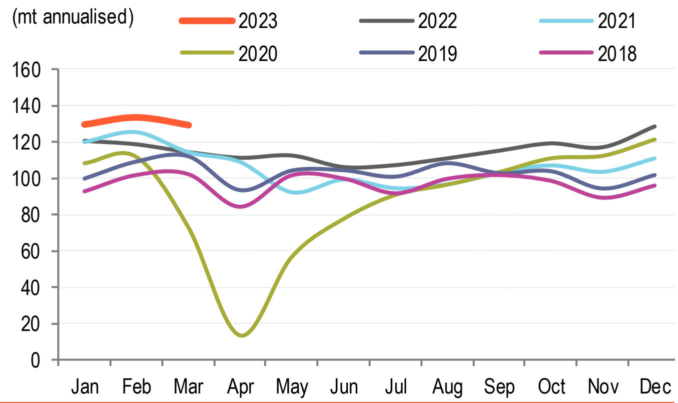
Source: Bloomberg, US Census Bureau, World Steel Association, BOBCAPS Research

Fig 39 – Japan



Source: Bloomberg, Ministry of Finance Japan, World Steel Association, BOBCAPS Research

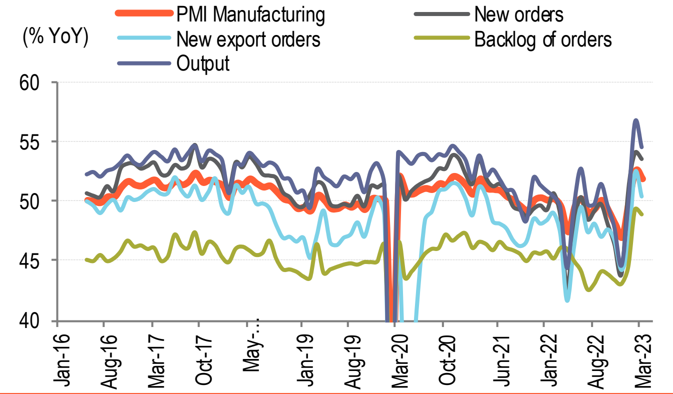
Fig 40 – India



Source: CMIE, BOBCAPS Research

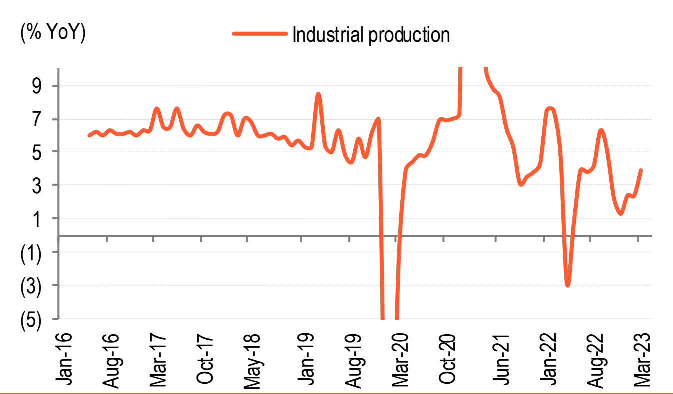
China demand indicators

Fig 41 – China manufacturing PMI



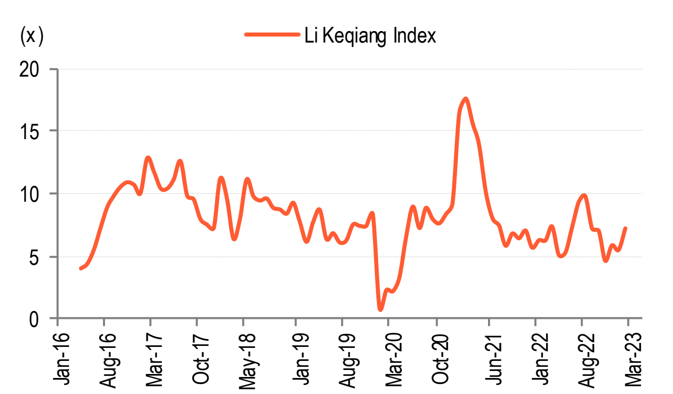
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 42 – China industrial production growth



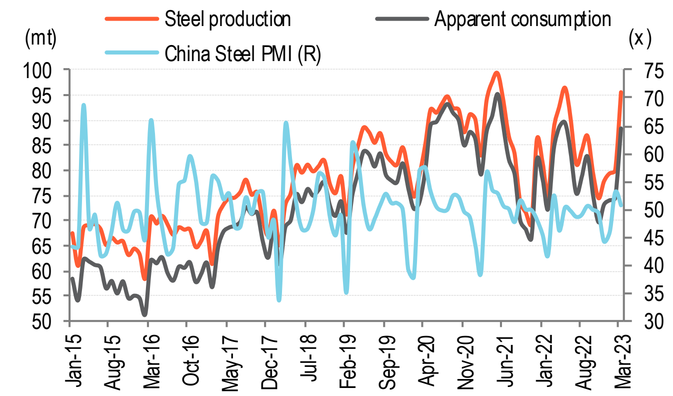
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 43 – China Li Keqiang Index (economy proxy)



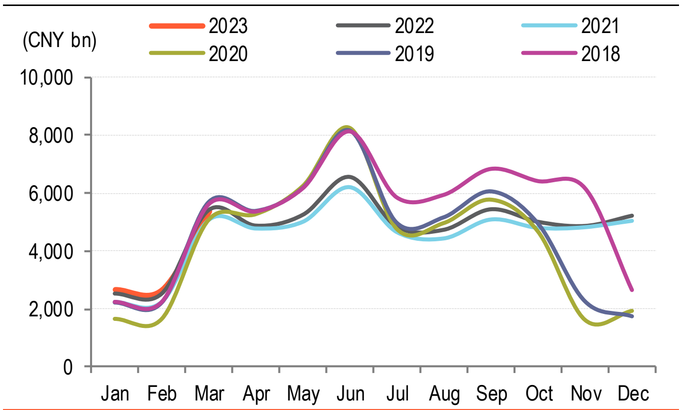
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research | FAI – Fixed Asset Investment

Fig 44 – China steel PMI



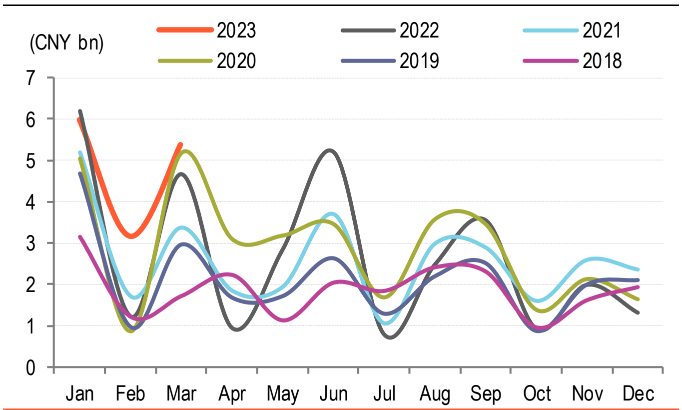
Source: Bloomberg, Steelhome, BOBCAPS Research

Fig 45 – China FAI ex-rural households



Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research | FAI – Fixed Asset Investment

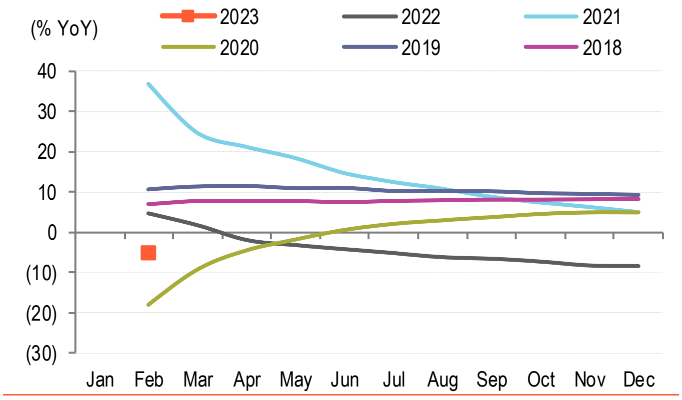
Fig 46 – China aggregate financing



Source: Bloomberg, BOBCAPS Research

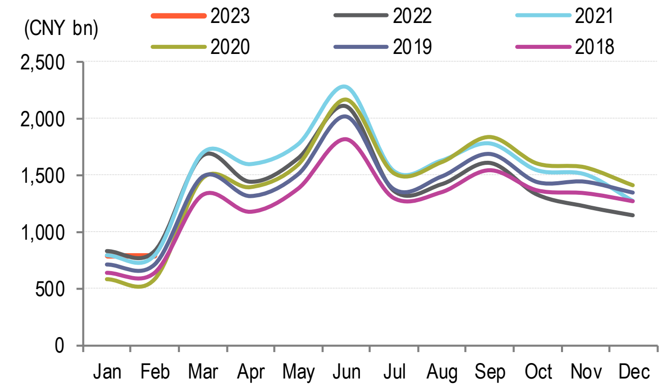
China property sector indicators

Fig 47 – China real estate FAI, YTD growth



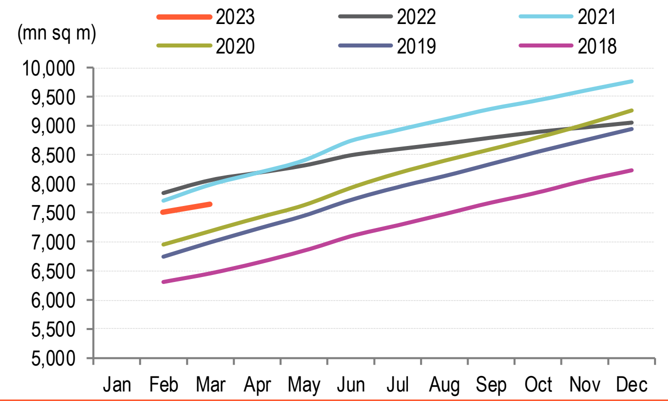
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 48 – China real estate FAI



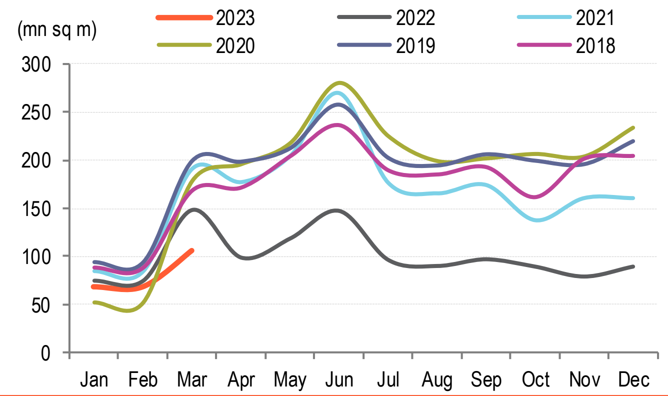
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 49 – China real estate floor space under construction



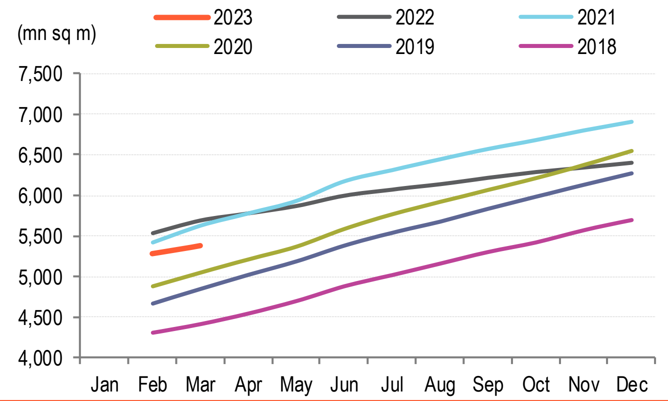
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 50 – China real estate floor space newly started



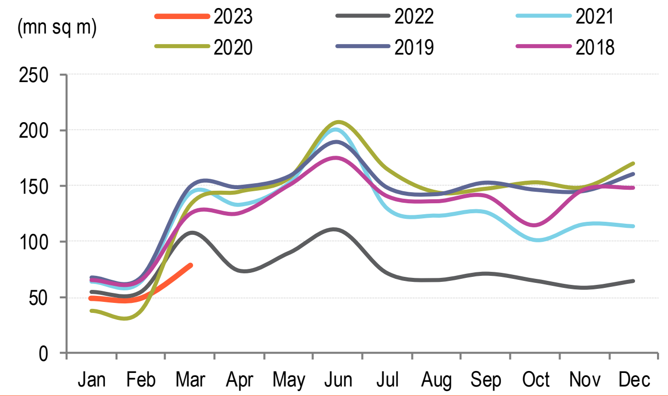
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 51 – China residential floor space under construction



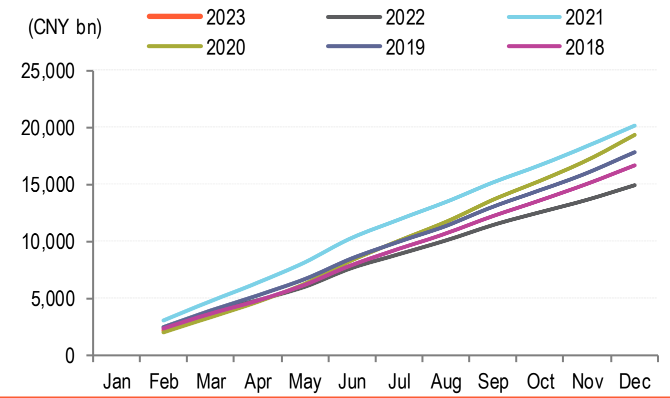
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 52 – China residential floor space newly started



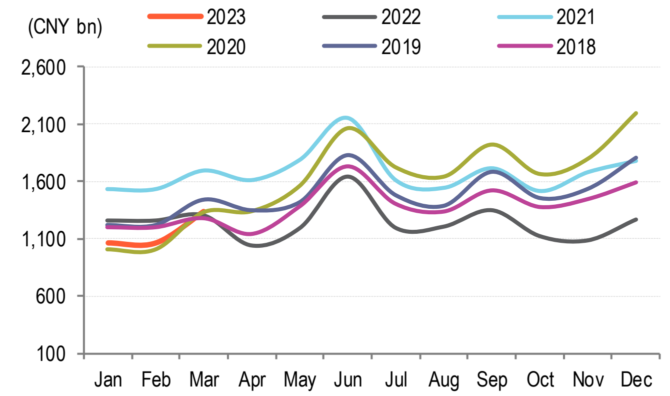
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 53 – China real estate – total funds cumulative



Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

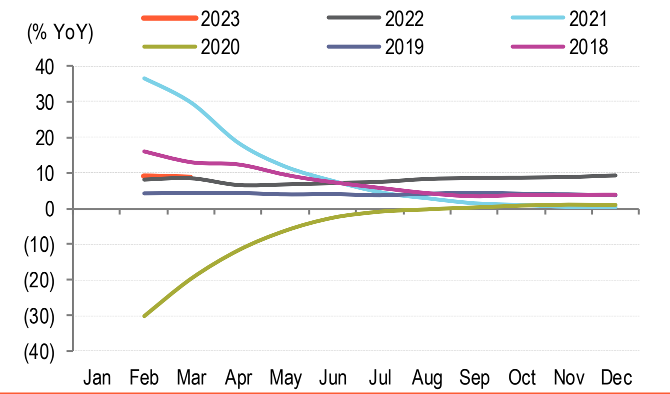
Fig 54 – China real estate – total funds monthly



Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

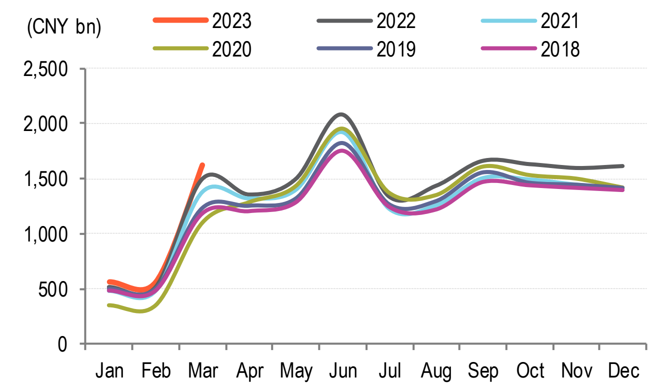
China infrastructure sector indicators

Fig 55 – China infrastructure FAI excluding electric power, heat power, gas and water, YTD growth



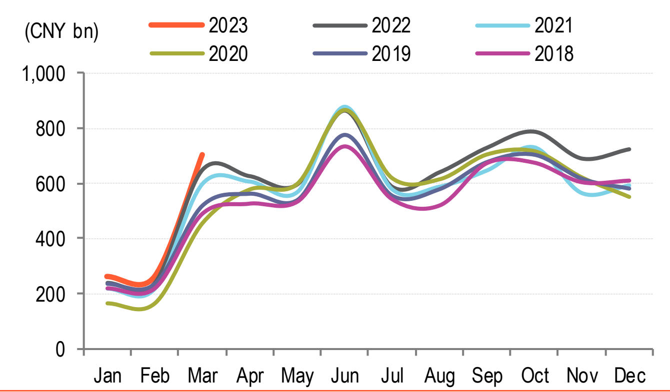
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 56 – China infrastructure FAI excluding electric power, heat power, gas and water



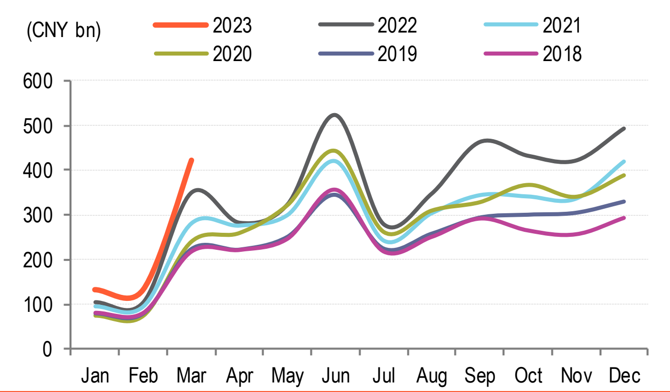
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 57 – China transport, storage, posts FAI



Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

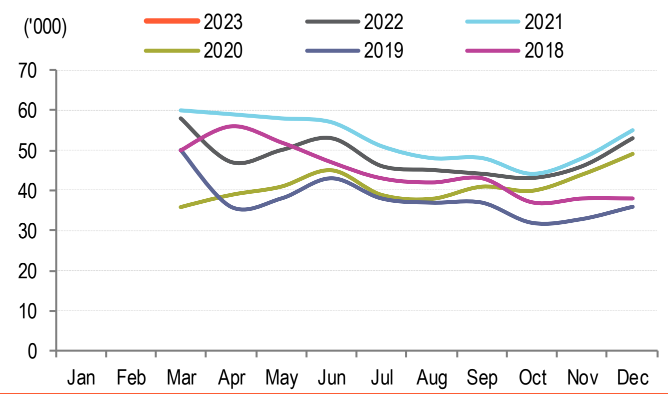
Fig 58 – China power, gas and water FAI



Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

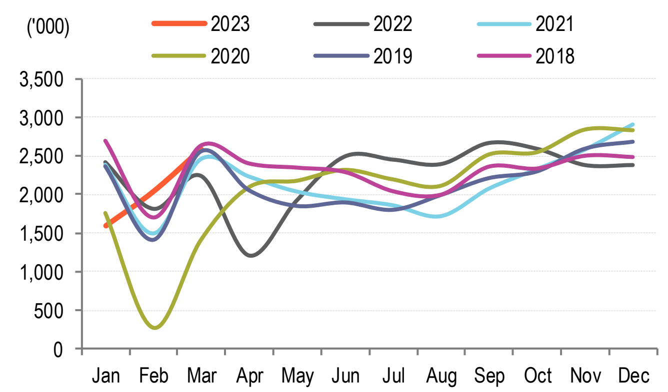
China downstream demand indicators

Fig 59 – China machinery: Metal cutting machine production



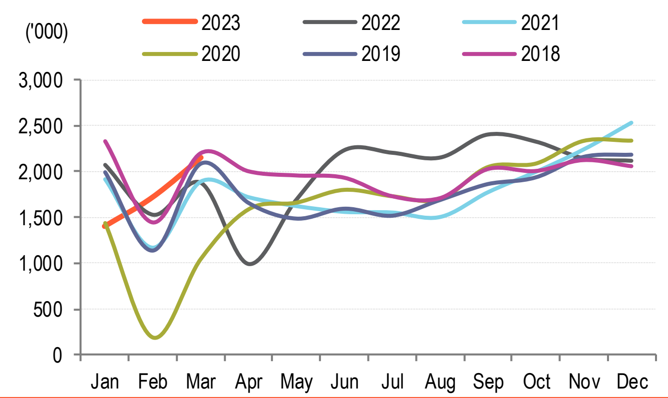
Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

Fig 60 – China automobiles: Vehicle production



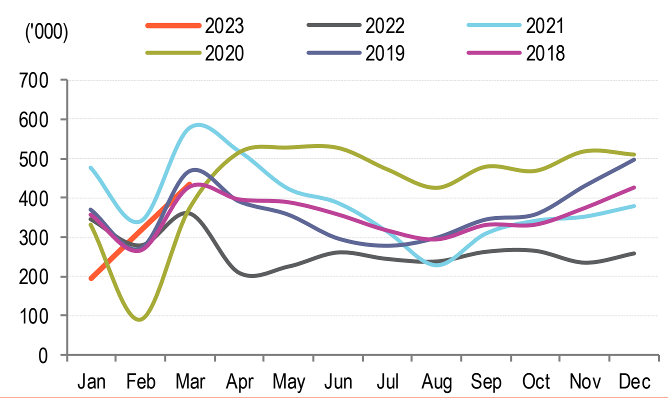
Source: Bloomberg, China Automotive Information Net, BOBCAPS Research

Fig 61 – China automobiles: Passenger vehicle production



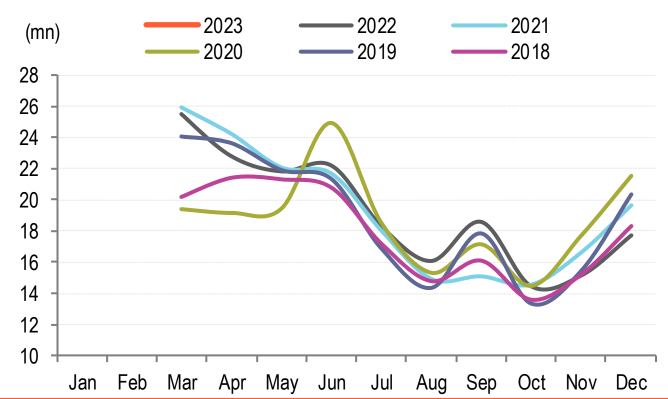
Source: Bloomberg, China Automotive Information Net, BOBCAPS Research

Fig 62 – China automobiles: Commercial vehicle production



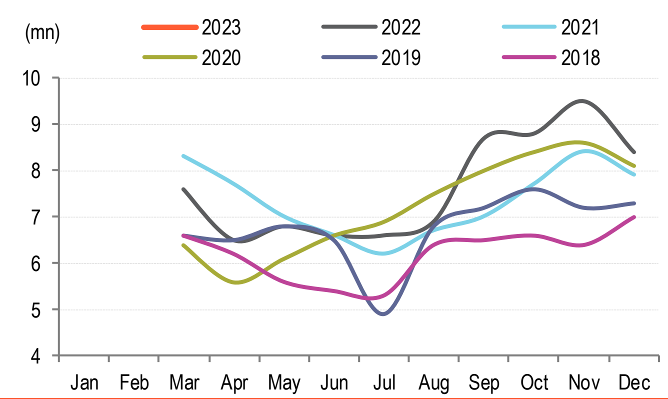
Source: Bloomberg, China Automotive Information Net, BOBCAPS Research

Fig 63 – China appliances: Air-conditioner production



Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

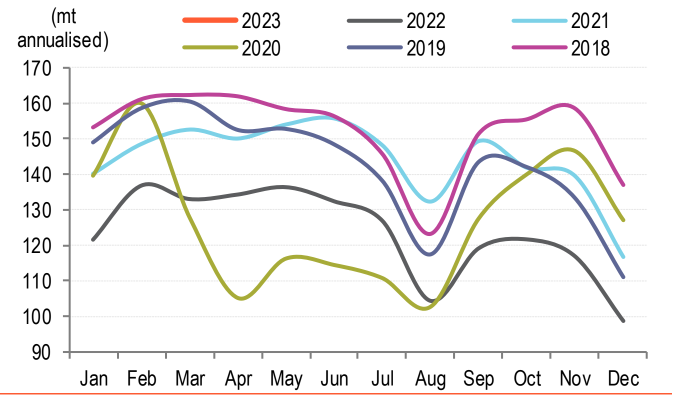
Fig 64 – China appliances: Washing machine production



Source: Bloomberg, National Bureau of Statistics, BOBCAPS Research

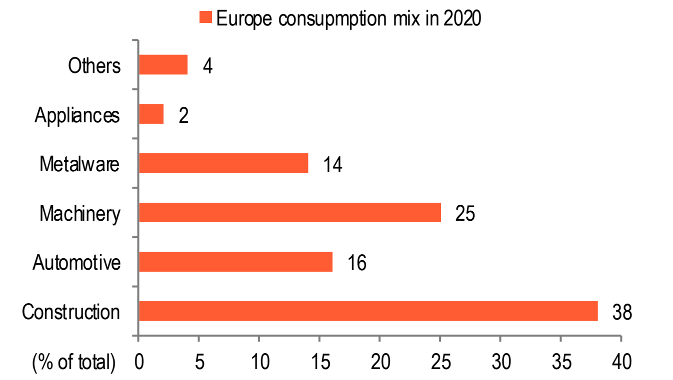
Europe: Steel demand indicators

Fig 65 – Europe apparent demand



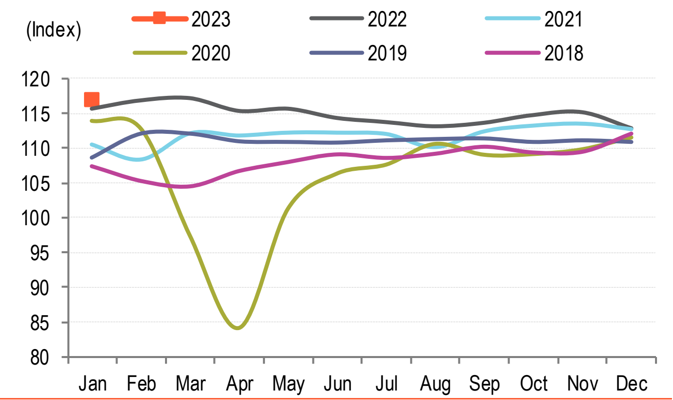
Source: Bloomberg, Eurofer, World Steel Association, BOBCAPS Research

Fig 66 – Europe demand break-up



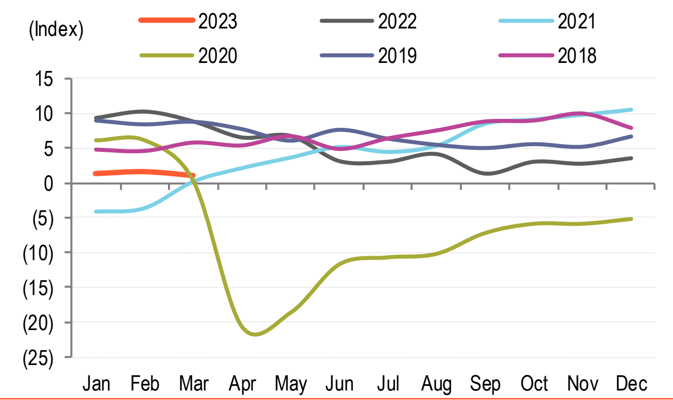
Source: Eurofer, BOBCAPS Research

Fig 67 – Europe construction index seasonally adjusted



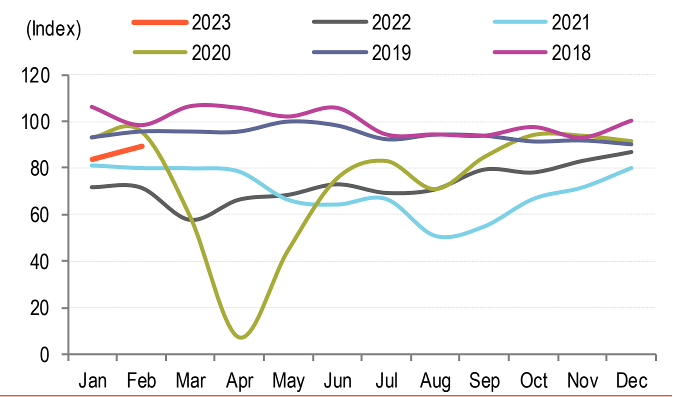
Source: Bloomberg, Eurostat, BOBCAPS Research | SA – Seasonally Adjusted

Fig 68 – Eurozone construction confidence indicator SA



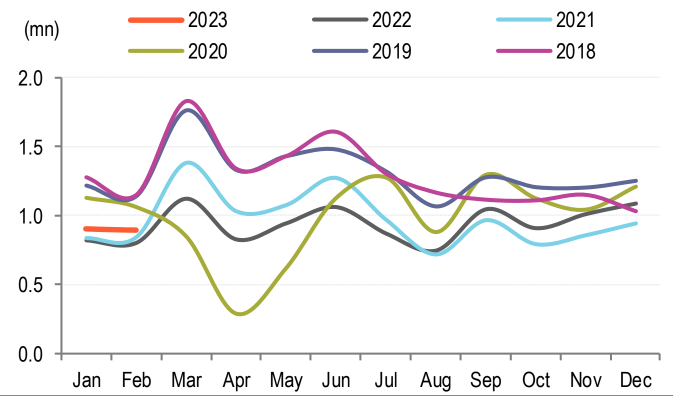
Source: Bloomberg, European Commission, BOBCAPS Research | SA – Seasonally Adjusted

Fig 69 – EU motor vehicle production index



Source: Bloomberg, Eurostat, BOBCAPS Research

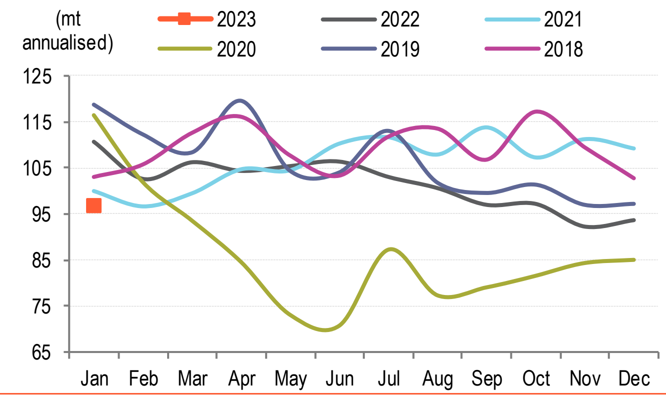
Fig 70 – Europe vehicle registration



Source: ACEA, Bloomberg, BOBCAPS Research

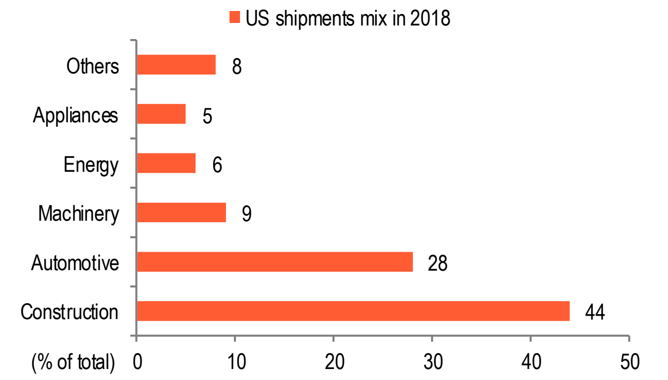
US steel demand indicators

Fig 71 – US apparent steel demand



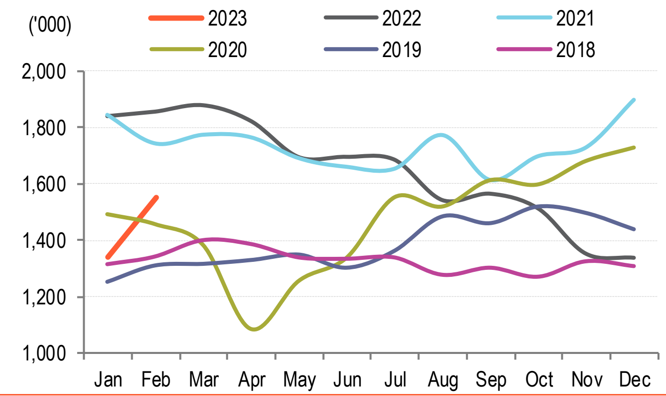
Source: Bloomberg, US Census Bureau, World Steel Association, BOBCAPS Research

Fig 72 – US steel shipments break-up (2018)



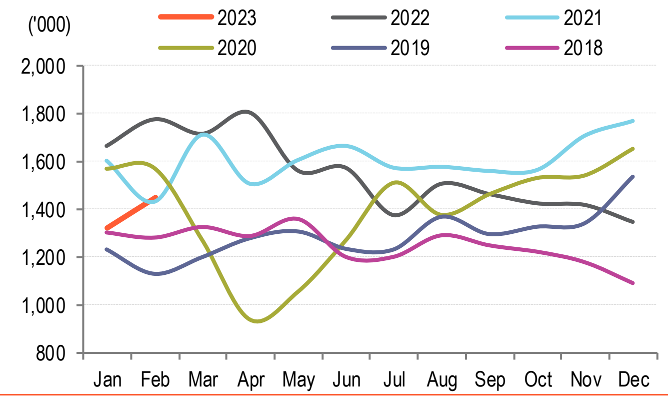
Source: AISI, BOBCAPS Research

Fig 73 – US housing permits



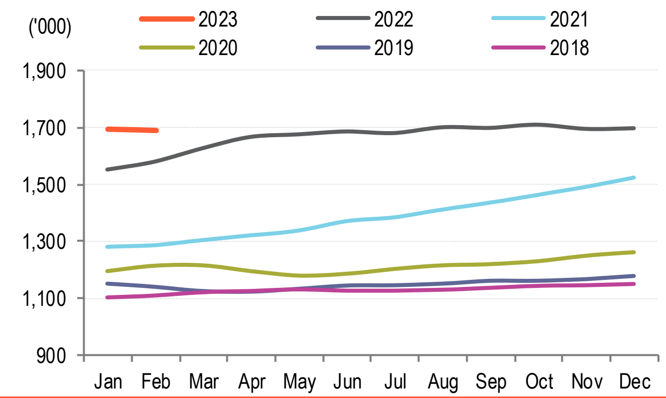
Source: Bloomberg, US Census Bureau, BOBCAPS Research

Fig 74 – US housing starts



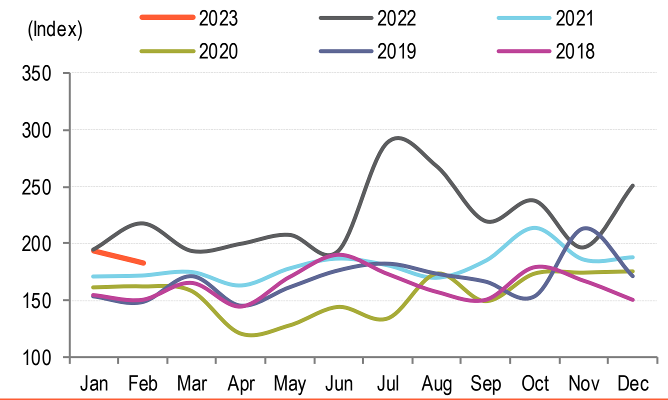
Source: Bloomberg, US Census Bureau, BOBCAPS Research

Fig 75 – US new homes under construction



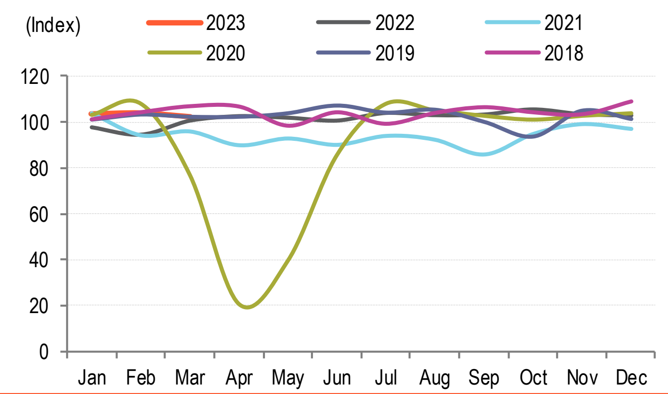
Source: Bloomberg, US Census Bureau, BOBCAPS Research

Fig 76 – US FW Dodge Construction Index



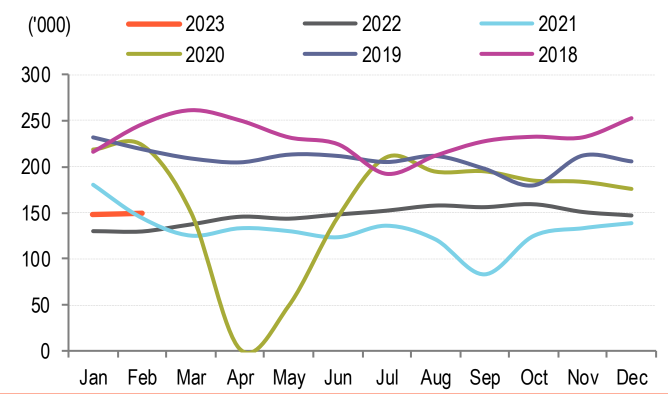
Source: Bloomberg, FW Dodge, BOBCAPS Research

Fig 77 – US motor vehicle and parts production manufacturing SA index



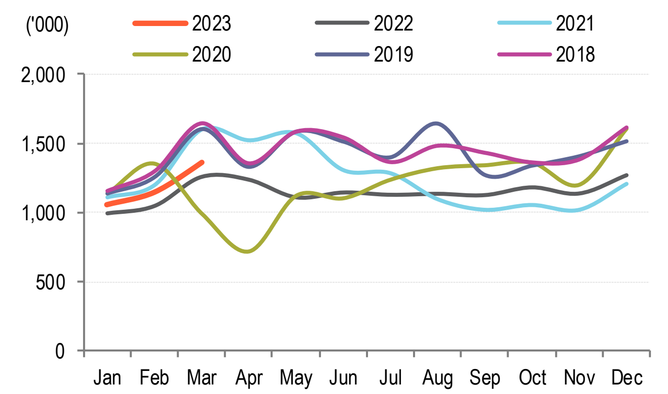
Source: Bloomberg, US Federal Reserve, BOBCAPS Research | SA – Seasonally Adjusted

Fig 78 – US domestic auto production



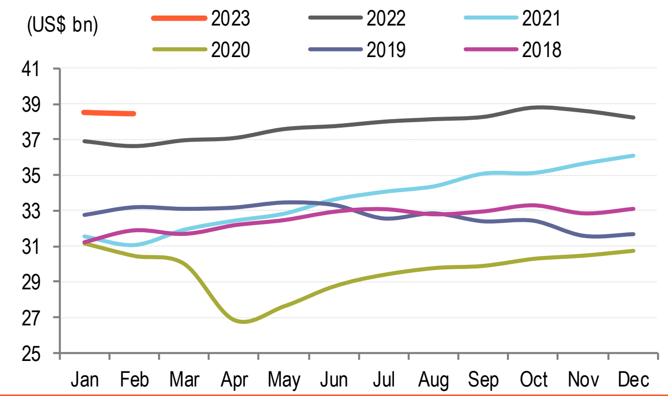
Source: Bloomberg, Bureau of Economics, BOBCAPS Research

Fig 79 – US truck and car vehicle sales



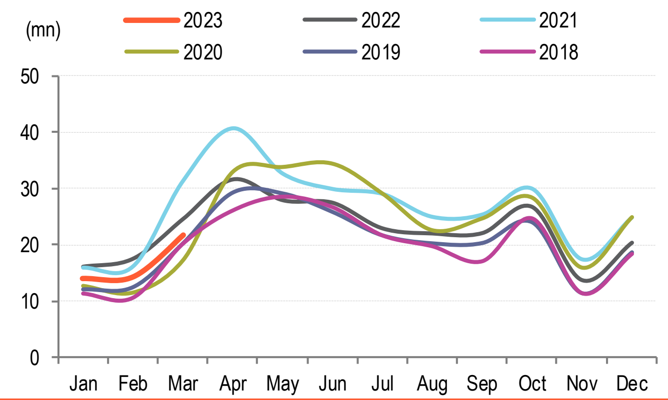
Source: Bloomberg, Bureau of Economics, BOBCAPS Research

Fig 80 – US machinery shipments



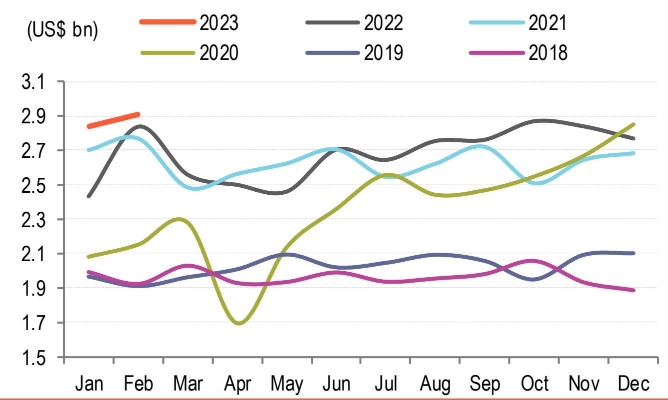
Source: Bloomberg, US Census Bureau, BOBCAPS Research

Fig 81 – US farm wheel tractor retail sales



Source: Association of Equipment Manufacturers, Bloomberg, BOBCAPS Research

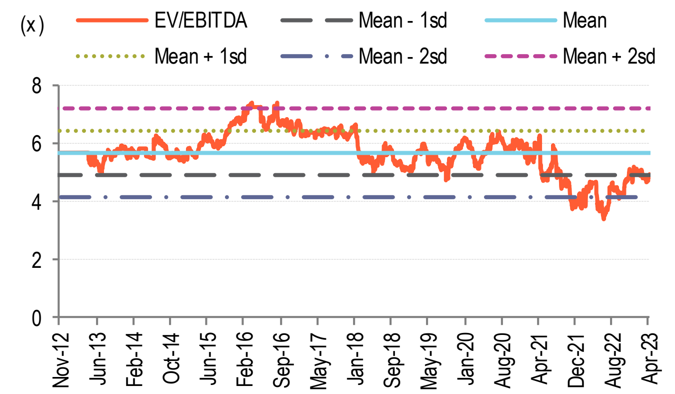
Fig 82 – US appliances new orders



Source: Bloomberg, US Census Bureau, BOBCAPS Research

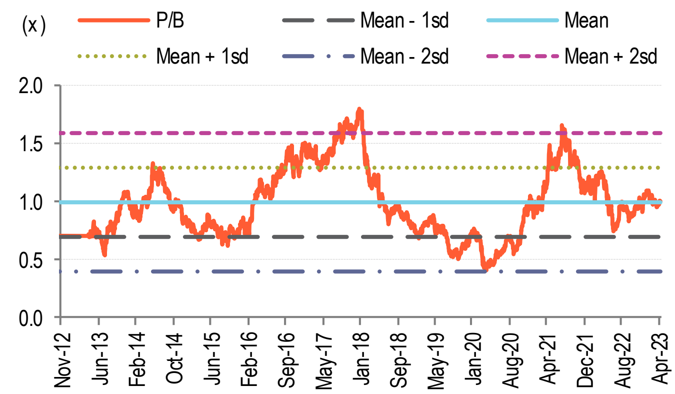
India steel sector valuations

Fig 83 – Tata Steel EV/EBITDA 2Y forward



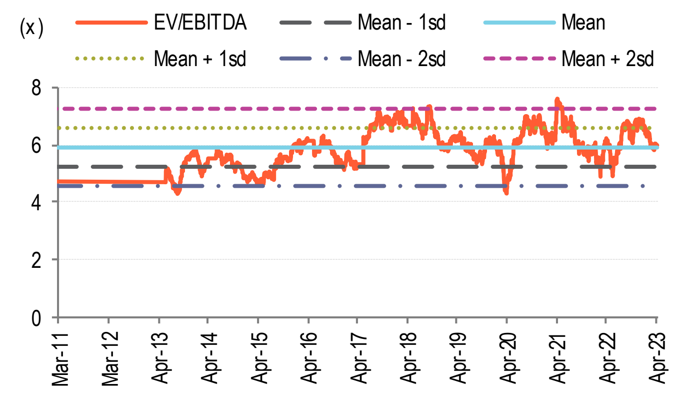
Source: Bloomberg, BOBCAPS Research

Fig 84 – Tata Steel P/B 1Y forward



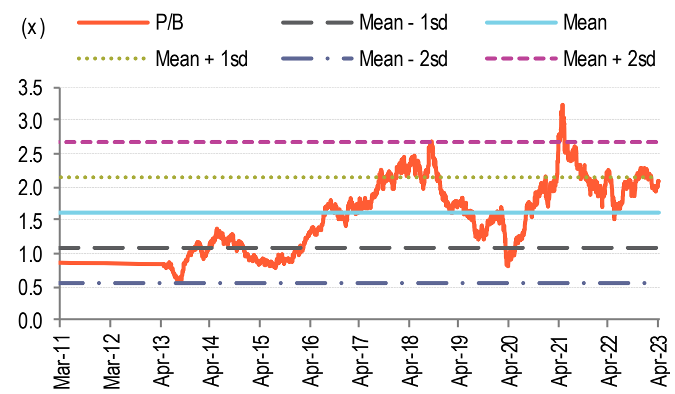
Source: Bloomberg, BOBCAPS Research

Fig 85 – JSW Steel EV/EBITDA 2Y forward



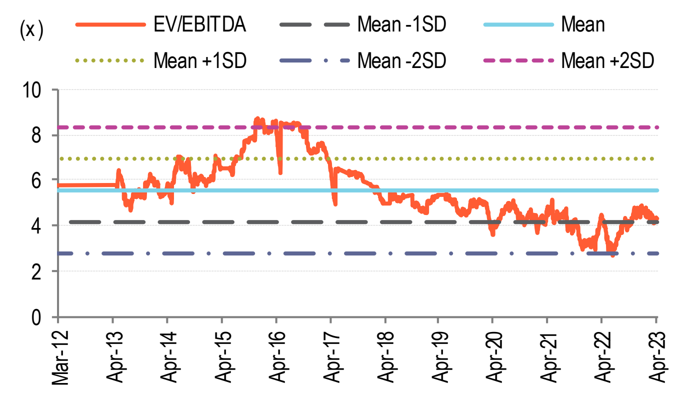
Source: Bloomberg, BOBCAPS Research

Fig 86 – JSW Steel P/B 1Y forward



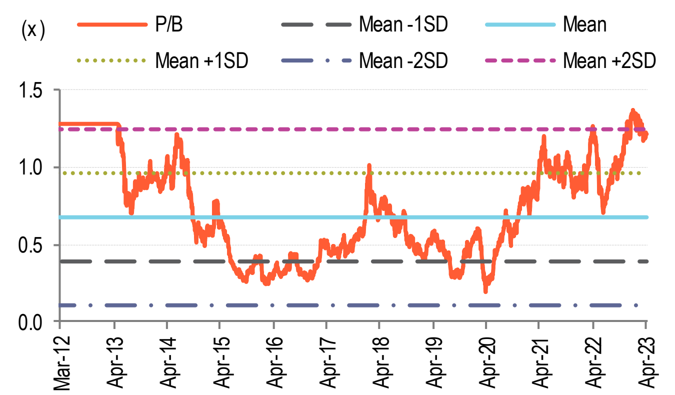
Source: Bloomberg, BOBCAPS Research

Fig 87 – Jindal Steel & Power EV/EBITDA 2Y forward



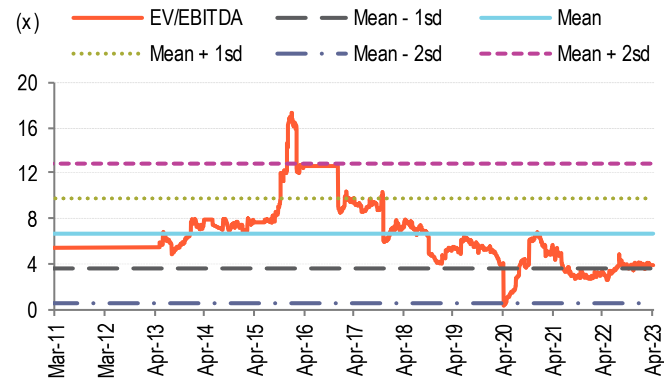
Source: Bloomberg, BOBCAPS Research

Fig 88 – Jindal Steel & Power P/B 1Y forward



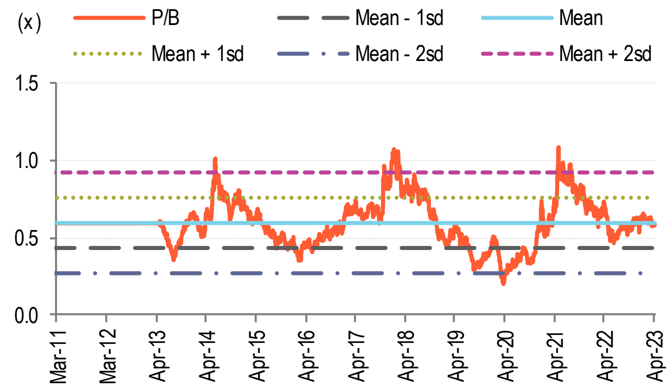
Source: Bloomberg, BOBCAPS Research

Fig 89 – SAIL EV/EBITDA 2Y forward



Source: Bloomberg, BOBCAPS Research

Fig 90 – SAIL P/B 1Y forward



Source: Bloomberg, BOBCAPS Research

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HOLD – Expected return from -6% to +15%

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Note: Recommendation structure changed with effect from 21 June 2021

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