Morgan Stanley | RESEARCH

IDEA

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metal&ROCK | Europe

Why Is Aluminium Not Higher?

Aluminium tightness is playing out more in timespreads and regional premiums than flat price. On top, the tight forward curve is encouraging destocking at end users and positioning was already long. However, supply is likely to face challenges for some time, bringing upside risks if demand improves.

Key Takeaways

- A rapidly tightening aluminium market has left investors questioning why the LME aluminium price has not rallied more.
- Timespreads and regional premiums reflect the stress more clearly – the cash-3m spread is the highest since 2007 and European premiums are back at 2022 levels.
- Steep backwardation is discouraging end users from holding excess inventory.
- However, destocking cannot continue indefinitely, and if demand improves, aluminium may start to feel tighter, bringing upside price risks.

We see aluminium in a large deficit for 2026: Events in the Middle East have removed >4% of global aluminium supply, with damage to facilities bringing an extended (12-month) restart timeframe for a large share of this. With China hitting its smelting capacity cap and tight power markets constraining supply elsewhere, this pushes the market into a 1.85 Mt deficit for 2026 on our estimates.

Timespreads and regional premiums better reflect the tightness so far: With this deficit, many investors are asking why the LME 3m aluminium price is only up 12% since the start of the conflict. However, spot prices are up 14% as the forward curve has tightened, while regional premiums have rallied strongly – European duty-paid premium +55%, MJP (Japan) +72% and Midwest premium +9%.

Demand destruction/deferral may also be holding prices/premiums back: Exhibit 2 shows the sharp shift in the forward curve, with Dec'26 aluminium now trading $160/t below spot. While this can contribute to the 'roll yield' for financial participants, it makes holding excess inventory punitive for end users as the value of material erodes over time. Platts notes that this is weighing on spot market activity, particularly in the US and Japan as end users destock. This cannot go on indefinitely, in our view, but is likely keeping markets looser than they would otherwise be. Over time, we may also see less copper-to-aluminium switching and more aluminium-to-steel substitution, e.g. in autos and potentially solar panels.

But the tightness may still be ahead: Destocking cannot go on indefinitely, and if we do see an improvement in global growth sentiment, aluminium demand is likely to pick up too. On top, supply losses may be felt more acutely as time goes on, and restarts in the Middle East will take some time. This keeps the risk-reward for aluminium prices skewed upwards and provides good downside support for current price levels too.

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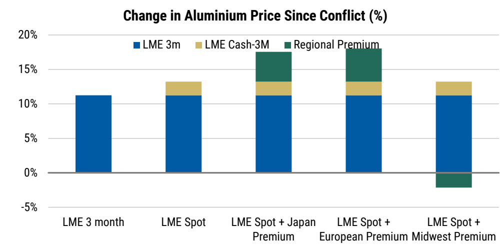
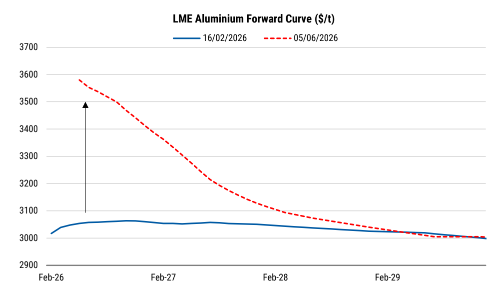
Exhibit 1 : A lot of the price move has been seen in timespreads and physical premiums, with less impact on the 3m LME price



Source: Bloomberg

Exhibit 2 : The forward curve has shifted into a steep backwardation, discouraging holding inventory at end users



Source: Bloomberg

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Aluminium

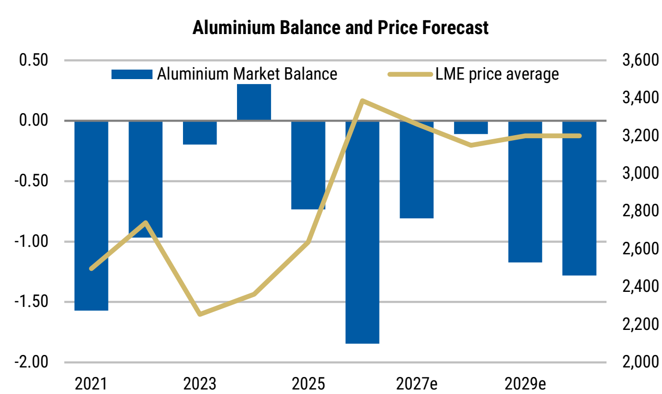
Aluminium is expected to be in a large deficit in 2026...

With our early April price deck, we modelled ~3 mtpa of Middle East smelting lost since the start of the Middle East conflict (>4% of global supply), driven by strikes and raw material shortages. Wood Mackenzie also estimates an additional 400-500 kt of output loss in Iran following a direct attack on one smelter as well as supply chain issues. This materially tightens an already constrained market, especially with South32's 500 ktpa Mozal smelter also shutting in March. Restarts elsewhere look limited given still-challenging power costs. Indonesia remains the main source of growth, though ramp-up may be constrained by power availability. China's capacity cap should limit expansion, although high margins may incentivise increased amperage, which can allow production to exceed capacity.

We model 1.4% growth in global aluminium demand this year despite softer construction and solar demand in China. Energy storage systems are an increasingly important source of demand, with shipments expected to grow by 50% in 2026, driving a ~490 kt increase in aluminium demand.

Together, these push aluminium to a near-record 1.85 Mt deficit, with further production at risk if the Strait of Hormuz remains closed and the still-operating smelters start to run out of alumina.

Exhibit 3: We model a 1.85 Mt deficit for aluminium in 2026



Source: Wood Mackenzie, Morgan Stanley Research estimates (e)

Exhibit 4: Middle East disruptions have removed about 4% of global aluminium supply Do

Smelter	Company	Country	Capacity (ktpa)	Cuts (kt) (annualised)
Al Taweelah	EGA	UAE	1575	1575
Qatalum	QatarEnergy/Norsk Hydro	Qatar	638	383
Alba	Alba	Bahrain	1620	1134
Total			3833	3092
Unconfirmed	-	Iran	650	450
Total			4483	3542

Source: Wood Mackenzie, Company data, Morgan Stanley Research estimates

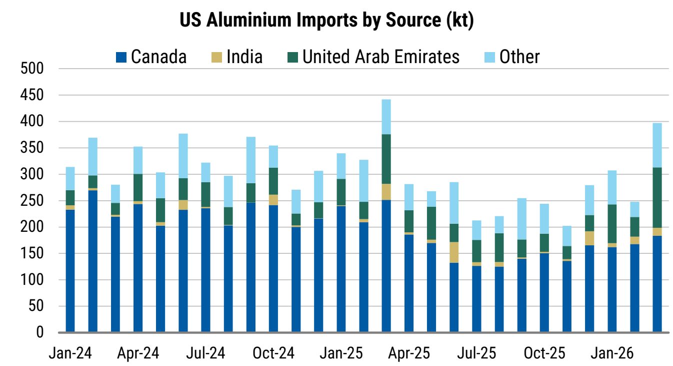
...but prices have not moved as much as many expected

The 3-month LME aluminium price is only up 12% since end-Feb, despite the significant disruption to supply, and only up 7% since Iranian strikes were reported on the Alba and Al-Taweelah facilities at the end of March.

From a supply-demand balance perspective, we see a few factors that may have eased the pressure until now.

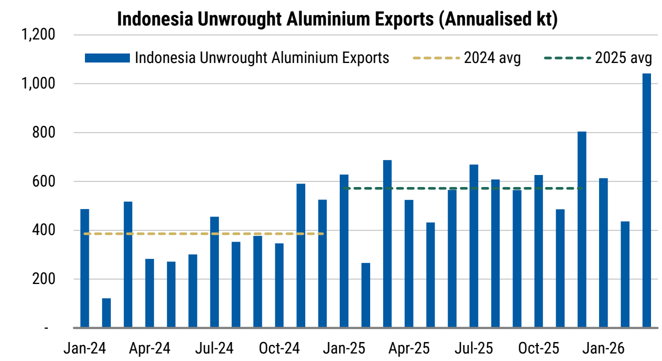
1) Strong shipments/arrivals before the conflict: US imports reached the highest level since March 2025 (the month US import tariffs were announced), driven by volumes from the Middle East. This is likely to have provided some buffer for end users in the US, even if Middle East flows drop sharply from here. Indonesia also reported a large surge in exports in March as new smelting capacity ramped up, which is likely still arriving at destinations. Tsingshan has applied for its Hua Chin aluminium to be LME-deliverable, which could also bring more supply to the exchange. European imports may also have been higher in Q4 ahead of CBAM.

Exhibit 5: US imports were up 60% MoM in March, driven by a surge in arrivals from the UAE



Source: TradeMap

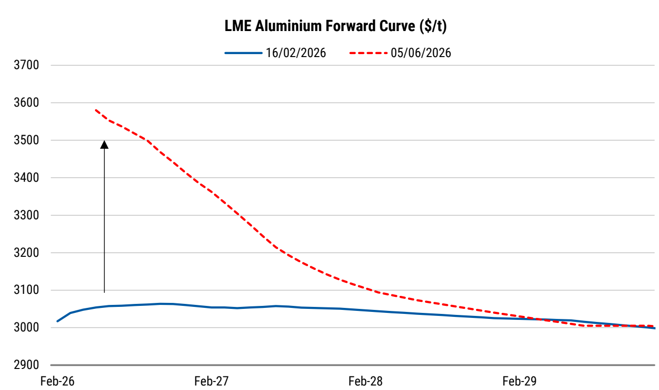
Exhibit 6: Indonesia's exports were also very strong, up 164% MoM with China and Vietnam as the main end markets



Source: TradeMap

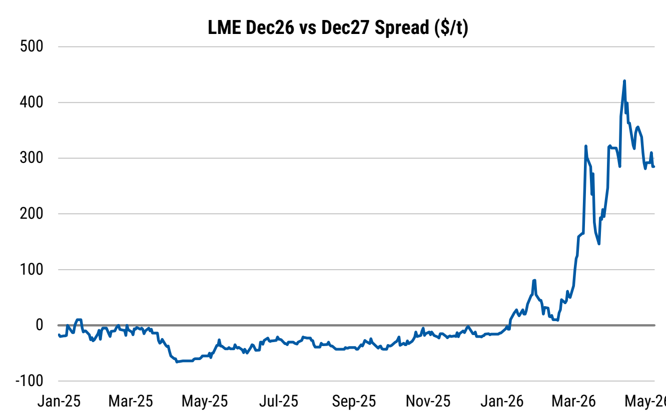
2) Backwardation is driving downstream destocking: More of the supply tightness has been seen in aluminium timespreads than in prices directly, with the curve moving into a steep backwardation. This indicates near-term tightness but also impacts inventory decisions. For example, Dec'26 aluminium is now trading ~$160/t below spot. While this can contribute to the 'roll yield' for financial participants, it makes holding excess inventory punitive for end users as the value of material erodes over time. Platts notes that this is weighing on spot market activity, particularly in the US and Japan as end users destock. This cannot go on indefinitely, in our view, but is likely keeping markets looser than they would otherwise be.

Exhibit 7: The shape of the forward curve is discouraging holding inventory at end users



Source: Bloomberg

Exhibit 8: The Dec26-Dec27 spread has risen sharply too

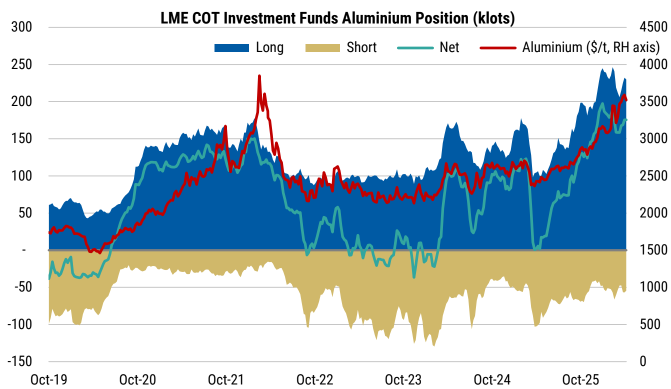


Source: Bloomberg, Morgan Stanley Research

3) Positioning was already long: Aluminium has had the longest positioning amongst the LME metals for some time already, supported by the positive roll yield as well as structural factors such as tight power markets, capped output in China and limited growth elsewhere. The cost curve has also been rising for the marginal supplier – for example, at the Mozal smelter which recently shut down, South32 was offered power at $100/MWh versus being willing to pay $50 – this would have added $725/t to production costs, eating up most of the price increase.

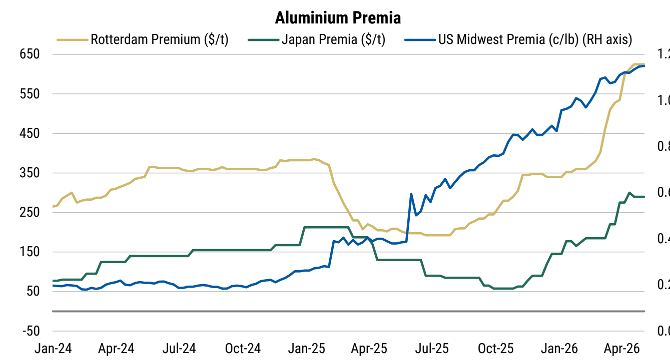
4) Premiums have done some of the work: Aluminium also has regional premiums in Europe, the US and Japan, which have rallied significantly since the start of the conflict. The all-in European duty-paid price is up 27%, much more than the 16% rise in 3m aluminium. This reflects each region's specific tightness and need to attract metal/destroy demand.

Exhibit 9: Positioning was already long ahead of the ME conflict, with very limited shorts



Source: Bloomberg

Exhibit 10: Premiums have done some of the work



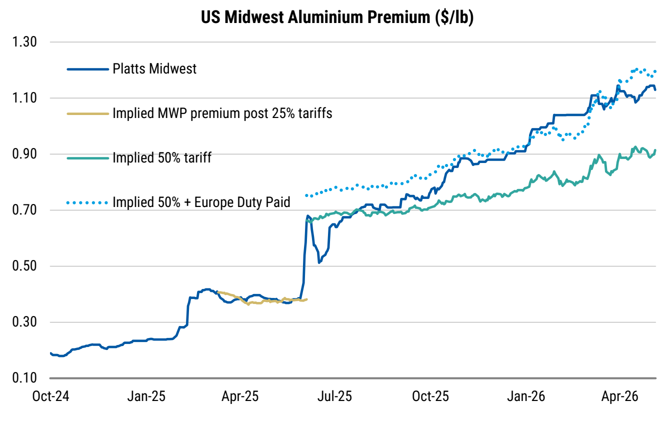
Source: Bloomberg

How could things play out from here?

Tightness may still be ahead of us: In our view, destocking at end users cannot continue indefinitely and could bring support for prices when inventories are depleted, especially if demand sentiment improves. We also see a potential shift back towards Just-In-Case inventory management as a more medium-term impact of the conflict, which could support higher inventory levels on a more medium-term view. Even with higher amperage from China, growing output in Indonesia and inventory destocking, it will be difficult to fully offset the 3-3.5 mln tonnes of lost production.

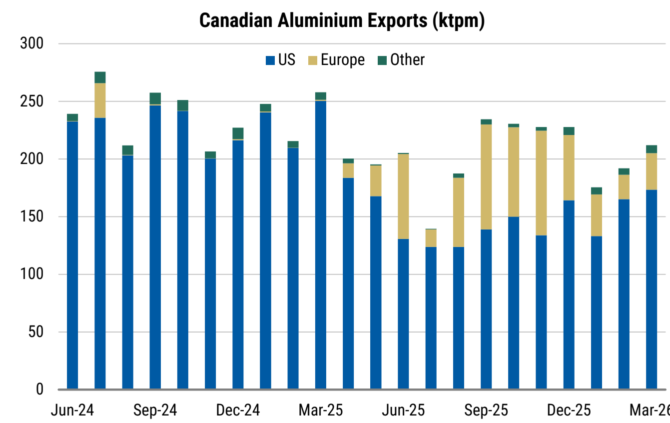
The US and Europe are likely to need to compete for Canadian tonnes: The higher arrivals from the Middle East into the US in March are unlikely to be repeated in April, meaning the US will need to attract tonnes from Canada where shipments remain well below pre-tariff levels. Exhibit 11 highlights how the Midwest premium is having to cover not only the tariff cost (green line) but also the European duty-paid premium (dotted blue line) in order to attract metal. Meanwhile, Europe has been absorbing more Canadian metal as premiums have risen.

Exhibit 11: The Midwest premium has rallied as the US and Europe compete for Canadian aluminium



Source: Bloomberg, Morgan Stanley Research

Exhibit 12: Canada's exports to the US increased through Q1, but Europe has been taking more share since the US tariffs

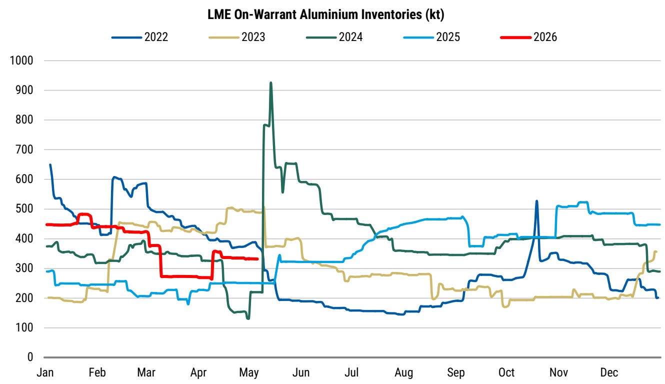


Source: TradeMap

There may be a call on LME exchange inventories, bringing upside risks to timespreads: LME exchange inventories have been relatively stable so far, with 92% of on-warrant metal of Russian origin. However, if tightness becomes more acute, these inventories may be used to plug gaps. Already, Reuters has reported that Rusal has re-routed some metal from China to Japan given Japan's previous reliance on Middle East imports. Japan's imports from Russia fell from >500 kt in 2021 – the year before the start of the Russia-Ukraine conflict – to just 68 kt in 2025. If Russian metal were to be taken off the LME exchange too, this would likely drive cash-3m spreads even higher and boost spot prices. For example, when LME on-warrant copper inventories fell to 14kt in 2021, the cash-3m spread spiked to a record >$1,000/t.

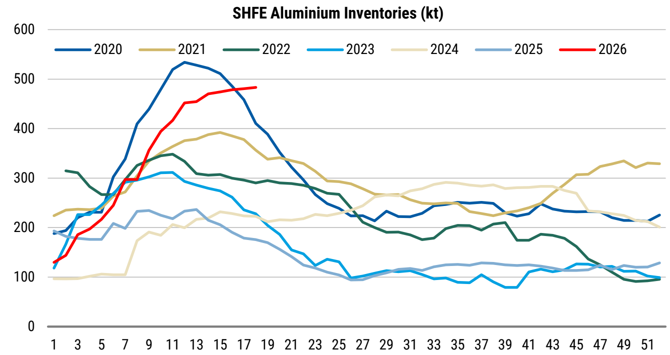
China's exports may rise, drawing down China exchange inventories too: China's aluminium inventories have stayed surprisingly high post-CNY relative to usual seasonality, and also stand in sharp contrast to copper inventories, which have seen much faster-than-normal drawdowns. This likely reflects continued strong aluminium smelter margins, incentivising maximum throughput, as well as lower demand from solar and EVs/appliances this year. China mainly exports aluminium in the form of semi-fabricated products (400-500 ktpm) rather than unwrought metal (~45 ktpm). We have seen a small uptick in exports so far (Exhibit 16), but relative price action suggests more may come – the LME price is up 12% since end-Feb versus a 5% increase in SHFE prices. In our view, this should incentivise more exports from China and help to draw down Chinese inventories, but may ease some of the RoW tightness.

Exhibit 13: LME stocks have been quite stable, with on-warrant metal 92% Russian origin at the end of March



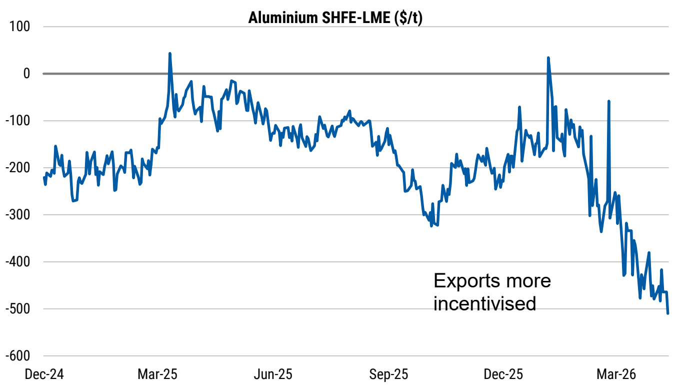
Source: Bloomberg

Exhibit 14: China inventories have not started to draw yet, suggesting softer demand and strong output



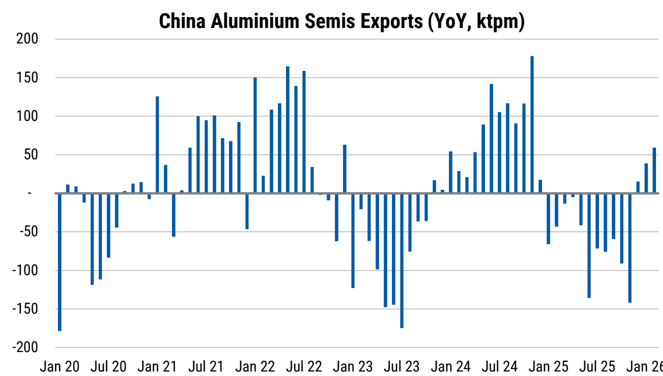
Source: Bloomberg

Exhibit 15: LME aluminium has been outperforming SHFE, working to encourage more China exports



Source: Bloomberg

Exhibit 16: China's semis exports have picked up modestly, but there is likely more to come



Source: Antaike, Morgan Stanley Research

MS outlook

Base case: As highlighted in our recent price deck, we look for sustained strength in aluminium with the price holding at ~$3,500/t by 4Q as Middle East supply cuts add meaningful, long-lasting disruptions to an already tight market. In our price deck, we assumed modest demand pressure across the metals complex as a result of events in the Middle East, while shifting central bank expectations are potentially an added headwind, with aluminium expected to be relatively more resilient. Higher Chinese exports would also help ease some global tightness. However, with aluminium holding steady at $3,500/t even with destocking at end users, we think risks from here are skewing higher. We explore the bull case below.

Bull case: Our bull case would see aluminium moving above $4,000/t. This could play out in a number of scenarios including a swifter Middle East resolution, which brings improving sentiment and a weaker USD, supporting metals and particularly driving a restock at end users. So far, aluminium continues to underperform on 'de-escalation' days for the Middle East conflict, but given the long timeframe needed to restart smelters, we think this may offer buying opportunities, particularly further down the forward curve where the backwardation offers lower price levels.

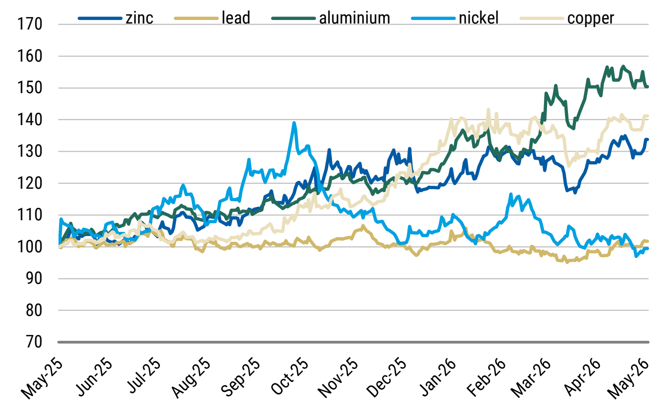
Aluminium could also see further support, in LME prices or regional premiums, if we see further curtailments in the Middle East if the Strait of Hormuz is closed for longer, bringing shortages of raw materials to smelters that are still running. A meaningful drawdown in the remaining LME inventories, a limiting buffer in the market, could also push prices sharply higher. So far, end-user destocking has moderated the impact of the supply losses, and it is hard to predict how long this can continue, but it likely can't continue indefinitely, even if the backwardation persists. This could bring upside to both the LME price and regional premiums.

Bear case: For now, we give higher probability to our bull case than our bear case. Our bear case sees aluminium falling to ~$2,500/t, which could come through on a more prolonged conflict, where aluminium's long positioning would likely work against it if demand destruction concerns came more into focus. A pick-up in exports from China could also help rebalance ex-China markets, but would likely also help to draw down China inventories.

Week in Review

Base Metals: Base metals posted a mixed performance this week as the market reacted to changing headlines around a potential resolution in the Middle East. Aluminium and nickel were down 0.5% and 1.8% WoW. With production of both impacted either directly or indirectly by the conflict, a potential resolution could ease some supply pressures. COMEX copper rose 5.1% WoW, outperforming LME copper (+4.5%) and the rest of the complex on improving sentiment, with zinc and lead up 2.9% WoW and 0.9% respectively.

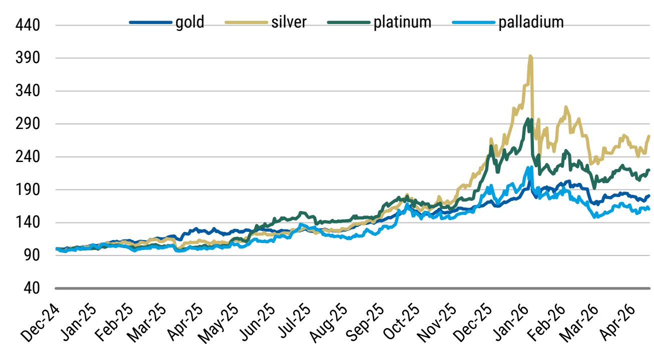
Exhibit 17: Base metals price indices (12-month rolling)



Source: Bloomberg, Morgan Stanley Research

Precious Metals: Resolution headlines also brought gains to precious metals last week, as a conflict resolution scenario reduces inflation concerns and brings increased likelihood of Fed rate cuts. Silver outperformed, rising 5.8% WoW, while gold was up 2.1%. Platinum was up 3% WoW but palladium was down 1.6%.

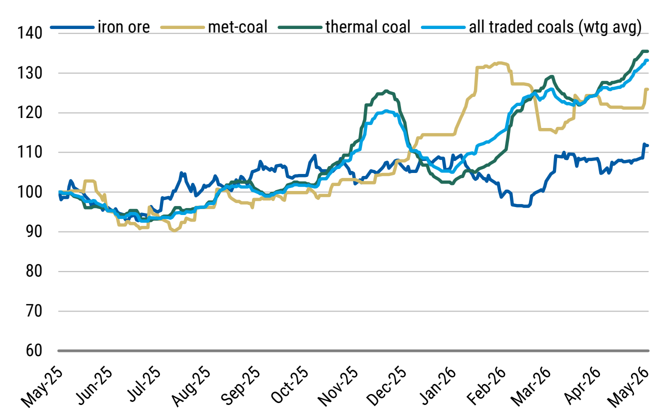
Exhibit 18: Precious metals indices (12-month rolling)



Source: Bloomberg, Morgan Stanley Research

Bulks: Iron ore gained 3.3% this week supported by rising diesel and freight costs. Thermal coal fell 1.7% WoW, tracking the rest of the energy complex lower on easing tensions in the Middle East. Met coal was up 3.3% WoW.

Exhibit 19: Bulk commodity price indices (12-month rolling)



Source: Platts, Bloomberg, Morgan Stanley Research

Morgan Stanley Price Forecasts

Exhibit 20: Summary of Morgan Stanley's commodity price forecasts (set on 8 April 2026)

commodity group	unit	1Q 26a	2Q 26e	3Q 26e	4Q 26e	1Q 27e	2Q 27e	3Q 27e	4Q 27e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	LT real	LT nom.
Base Metals																		
LME Aluminium	US$/lb	1.45	1.54	1.56	1.59	1.54	1.47	1.45	1.45	1.20	1.54	1.48	1.43	1.45	1.45	1.36	1.13	1.30
	US$/t	3,195	3,400	3,450	3,500	3,400	3,250	3,200	3,200	2,638	3,386	3,263	3,150	3,200	3,200	3,000	2,500	2,871
LME Copper	US$/lb	5.81	5.15	5.44	5.90	5.90	5.90	5.22	5.22	4.56	5.58	5.56	5.22	5.22	5.22	5.22	4.40	5.05
	US$/t	12,818	11,350	12,000	13,000	13,000	13,000	11,500	11,500	10,053	12,292	12,250	11,500	11,500	11,500	11,500	9,700	11,141
COMEX Copper	US$/lb	5.83	5.17	5.50	6.01	6.01	6.01	5.32	5.32	4.85	5.63	5.67	5.32	5.32	5.32	5.32	4.49	5.15
	US$/t	12,852	11,407	12,120	13,260	13,260	13,260	11,730	11,730	10,691	12,410	12,495	11,730	11,730	11,730	11,730	9,894	11,364
LME Nickel	US$/lb	7.86	7.26	7.71	7.48	7.48	7.48	7.48	7.48	6.94	7.58	7.48	7.48	7.71	8.16	8.16	7.44	8.54
	US$/t	17,325	16,000	17,000	16,500	16,500	16,500	16,500	16,500	15,294	16,706	16,500	16,500	17,000	18,000	18,000	16,400	18,836
LME Zinc	US$/lb	1.47	1.29	1.32	1.41	1.36	1.32	1.32	1.32	1.31	1.37	1.33	1.32	1.32	1.36	1.36	1.27	1.46
	US$/t	3,235	2,850	2,900	3,100	3,000	2,900	2,900	2,900	2,879	3,021	2,925	2,900	2,900	3,000	3,000	2,801	3,217
LME Lead	US$/lb	0.88	0.79	0.82	0.93	0.95	0.95	0.95	0.95	0.90	0.85	0.95	1.00	1.01	1.13	1.13	1.02	1.17
	US$/t	1,930	1,750	1,800	2,050	2,100	2,100	2,100	2,100	1,978	1,883	2,100	2,200	2,238	2,500	2,500	2,250	2,584
Precious Metals																		
Gold	US$/oz	4,865	4,400	5,200	5,200	5,000	5,000	5,000	4,800	3,469	4,916	4,950	4,500	4,000	4,000	4,000	2,500	2,871
Silver	US$/oz	83.7	62.9	74.3	74.3	71.4	71.4	71.4	68.6	40.5	73.8	70.7	64.3	57.1	57.1	57.1	31.3	35.9
Platinum	US$/oz	2,215	1,850	1,950	1,962	1,974	1,987	1,999	2,012	1,291	1,994	1,993	2,043	2,095	2,148	2,202	1,940	2,228
Palladium	US$/oz	1,723	1,400	1,400	1,409	1,418	1,426	1,435	1,444	1,160	1,483	1,431	1,312	1,345	1,379	1,414	1,250	1,436
Bulks																		
Iron Ore (fines 61% Fe, cfr N.China)	US$/t	104	105	98	95	95	95	95	100	102	100	96	98	100	100	100	90	103
Hard Coking Coal (spot, fob Aus)	US$/t	235	225	240	225	225	225	225	230	188	231	226	214	215	215	215	191	219
Thermal coal (spot, fob Newc)	US$/t	123	170	160	150	140	140	140	130	107	151	138	125	130	135	135	120	138
Other																		
Manganese ore (44%)	US$/mtu	5.2	5.6	5.6	5.4	5.4	5.5	5.5	5.5	4.6	5.4	5.5	5.6	5.7	5.8	5.8	5.2	6.0
Alumina (spot, fob Aus)	US$/t	307	310	310	320	320	325	325	325	362	312	324	350	350	380	400	380	436
Lithium carbonate (spot China, ex-VAT)	US$/t	19,360	23,500	25,500	23,000	20,000	20,000	18,000	18,000	9,300	22,840	19,000	16,000	14,000	15,000	16,000	14,800	16,998
Cobalt	US$/lb	25.9	27.0	27.0	27.0	27.0	27.0	27.0	27.0	17.5	26.7	27.0	17.5	15.0	15.0	17.5	14.0	16.1
Uranium - spot	US$/lb	88.5	90.0	95.0	100.0	105.0	100.0	90.0	80.0	73.5	93.4	93.8	70.0	70.0	70.0	70.0	61.0	70.1
Exchange Rates																		
1 AUD = USD		0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.65	0.70	0.70	0.70	0.70	0.69	0.69	0.71	0.70
1 USD = BRL		5.26	5.40	5.50	5.20	5.20	5.20	5.30	5.30	5.72	5.34	5.25	5.30	5.87	5.98	6.08	5.65	6.71
1 USD = CAD		1.37	1.37	1.36	1.36	1.36	1.36	1.36	1.37	1.40	1.37	1.36	1.28	1.28	1.28	1.28	1.29	1.29
1 USD = ZAR		16.34	17.00	16.50	16.62	16.75	16.87	17.00	17.13	17.82	16.62	16.94	17.45	17.98	18.53	19.09	17.00	22.21
1 EUR = USD		1.17	1.17	1.17	1.18	1.18	1.18	1.18	1.19	1.14	1.17	1.18	1.19	1.20	1.21	1.23	1.27	1.23
1 USD = CNY		6.93	6.95	7.00	7.05	7.03	7.00	6.98	6.95	7.18	6.98	6.99	7.15	7.12	7.01	6.89	7.90	6.95

Source: LME, Bloomberg, Platts, Morgan Stanley Research estimates (e). Note: Exchange rate forecasts are the assumptions that are compiled and used by Global Resources Equity Team: all prices are nominal, unless otherwise indicated.

Commodity Thermometer

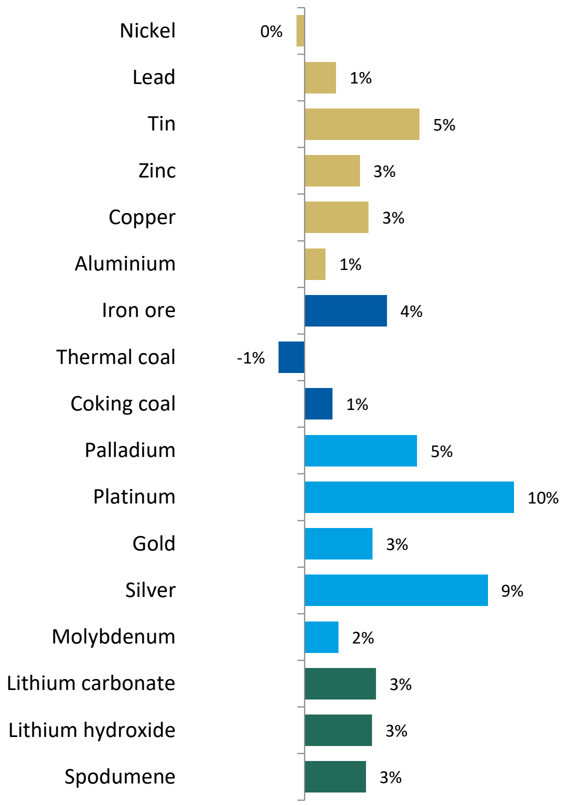
Exhibit 21: Metals & Mining Commodity Thermometer

Commodity	Bearish Neutral Bullish	Thesis
Lithium carbonate	■■■■■■	Zimbabwe export ban drives meaningful near-term tightness while continued strength in ESS deployment and an accelerated rotation to energy-transition sectors post conflict should support lithium demand.
Thermal coal	■■■■■■	Thermal coal has rallied on energy market tightness, and we see further upside in higher-CV grades, as gas-to-coal switching in North Asia lifts power sector demand into summer. More limited gains for low-CV grades on Indonesian spare capacity.
Uranium	■■■■■■	Energy market tightness is driving uranium upside, with rising term prices and contracting activity, improving nuclear sentiment and limited mine supply growth supporting the market.
Gold	■■■■■	Gold's liquidity has contributed to recent weakness, but with Fed rate cuts viewed as more likely than hikes this year, we see upside for gold through 2H26. Conflict resolution would likely also be supportive.
Aluminium	■■■■■	The market is continuing to tighten as Middle East production cuts drive meaningful, long-lasting supply disruption. With capacity constrained elsewhere and demand holding up, we see further upside for aluminium through 2026.
Platinum	■■■■	Platinum is likely to continue tracking gold with a modest underlying deficit providing support, though downside risks to auto and jewellery demand may limit further upside.
Cobalt	■■■■	Cobalt remains supported by DRC export restrictions, while potential impacts on Indonesian supply from sulphur shortages add modest upside.
Palladium	■■■■	Palladium is moving towards balance as supply constraints are offset by weakening autos demand.
Hard Coking Coal	■■■	Met coal is likely to remain range bound in 2026, with cost-driven support from higher fuel and freight prices offset by weaker Chinese seaborne demand and growing supply.
Silver	■■■	Silver is likely to remain volatile in 2026, with industrial demand risks and ETF selling combined with tight inventories and resilient Chinese demand.
COMEX Copper	■■■	COMEX copper remains resilient on continued US stockpiling demand, while a supportive tariff decision in July may provide further upside.
Nickel	■■■	Policy uncertainty in Indonesia and forecast surpluses cap potential upside from sulphur-related supply disruptions and potential for stronger-than-expected demand from energy-transition sectors post conflict.
Alumina	■■■	Alumina faces pressure from reduced smelting demand and rising seaborne supply, though Guinea export restrictions could limit downside.
Manganese Ore	■■■	Manganese ore is seeing cost support from higher freight and diesel prices, however weakening fundamentals add downward pressure and limit upside.
LME Copper	■■■	Copper faces near-term growth risks related to an ongoing Middle East conflict, but with Chinese demand seen to be improving and growing focus on strategic stockpiling, structural drivers remain supportive of a rebound in the medium term.
Lead	■■	Lead remains structurally challenged as ICE vehicle demand declines, though battery replacement and ESS provide some support.
Iron Ore	■■	Iron ore is shifting to oversupply on stronger seaborne supply and softer Chinese demand, though cost curve pressures and Chinese import restrictions are likely to provide short-term support.
Zinc	■■	Zinc fundamentals are softening as refined supply recovers, tipping the market into a surplus this year and weighing on prices.

Source: Morgan Stanley Research. Note: Order of preference based on 2Q/3Q26 forecasts vs last two weeks' average prices ending 6 April 2026.

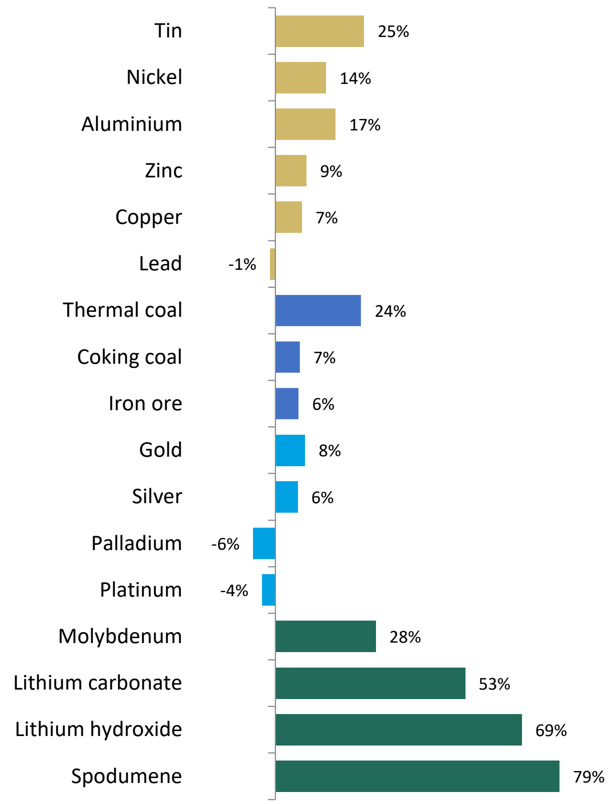
Commodity Price Snapshot

Exhibit 23: Key metals: one-week absolute performance



Source: Bloomberg, Morgan Stanley Research

Exhibit 24: Key metals: YTD absolute performance



Source: Bloomberg, Morgan Stanley Research

Exhibit 25:

Base Metals: Price Snapshot

Base Metals	06-May-26	29-Apr-26	WoW Change (%)
Copper	13,392	13,005	3.0%
Aluminium	3,523	3,489	1.0%
Nickel	19,199	19,272	-0.4%
Zinc	3,399	3,314	2.6%
Lead	1,978	1,949	1.5%
Tin	52,465	49,800	5.4%

Source: Bloomberg, Morgan Stanley Research; WoW = Week on week

Exhibit 26: Precious Metals: Price Snapshot

Precious	06-May-26	29-Apr-26	WoW Change (%)	02-Jan-26	YtD (%)
Gold	4,691	4,548	3.2%	4332.29	8.3%
Silver	77	71	8.5%	72.8181	6.2%
Platinum	2,064	1,881	9.7%	2142.88	-3.7%
Palladium	1,535	1,459	5.2%	1636.36	-6.2%

Source: Bloomberg, Morgan Stanley Research; WoW = Week on week

Exhibit 27: Bulks: price snapshot

Bulks	06-May-26	29-Apr-26	WoW Change (%)
Iron ore	110	106	3.8%
Thermal coal	132	134	-1.2%
Coking coal	235	232	1.3%

Source: Bloomberg, Morgan Stanley Research; WoW = Week on week

Exhibit 28: Other Metals: price snapshot

Other metals	06-May-26	29-Apr-26	WoW Change (%)
Molybdenum	29	28	1.6%
Lithium carbonate	22,461	21,740	0
Lithium hydroxide	21,639	20,983	0
China Spodumene 6% min CIF	2,607	2,534	3%

Source: Bloomberg, Morgan Stanley Research; WoW = Week on week

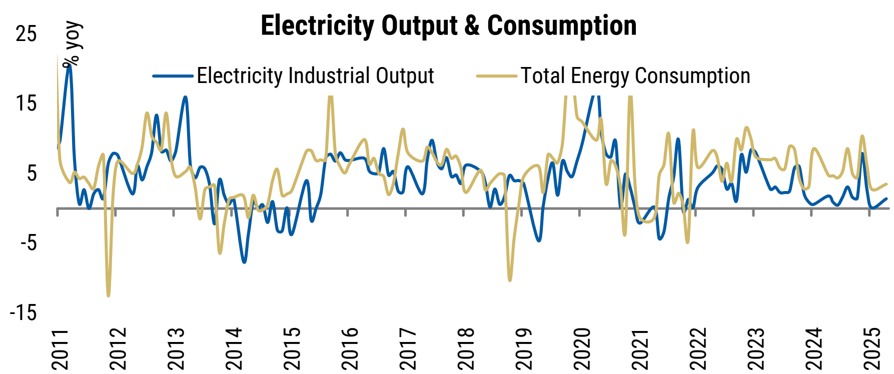
Exhibit 29: Exchange rate snapshot of major metal producing countries

Currency	06-May-26	29-Apr-26	WoW Change (%)
1 AUD = USD (Australian $)	0.7	0.7	2%
1 EUR = USD (Euro)	1.2	1.2	1%
1 USD = BRL (Brazilian Real)	4.9	5.0	-1%
1 USD = CAD (Canadian $)	1.4	1.4	0%
1 USD = CLP (Chilean Peso)	890.8	908.1	-2%
1 USD = CNY (Chinese Renmimbi)	6.8	6.8	0.0
1 USD = KZT (Kazakh Tenge)	463.1	462.4	0%
1 USD = MXN (Mexican Peso)	17.3	17.5	-2%
1 USD = NOK (Norwegian Krone)	9.3	9.3	0%
1 USD = PEN (Peruvian New Sol)	3.5	3.5	-2%
1 USD = SEK (Swedish Krona)	9.2	9.3	-1%
1 USD = ZAR (S. African Rand)	16.4	16.8	-3%
1 USD = ZMW (Zambian Kwacha)	19.0	18.9	1%

Source: Bloomberg, Morgan Stanley Research; WoW = Week on week

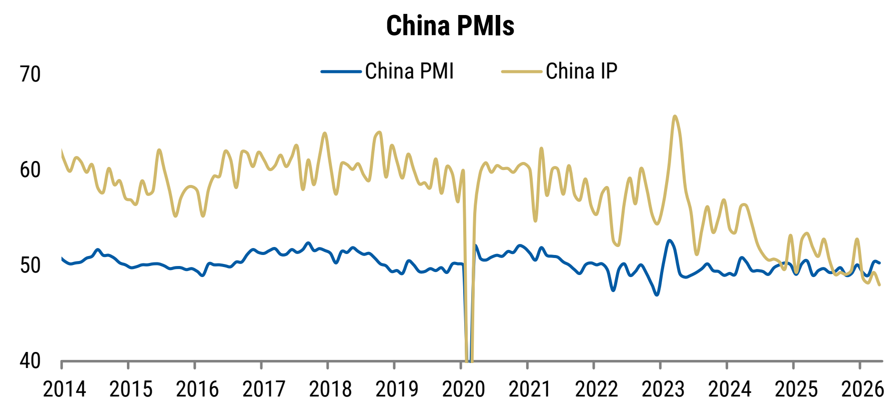
China's Macro Indicators

Exhibit 30: China's Electricity Output & Consumption



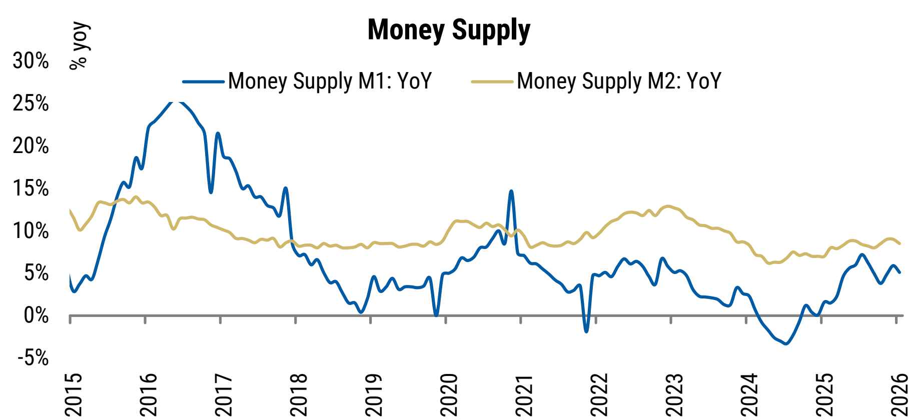
Source: CEIC, Morgan Stanley Research

Exhibit 31: China's Purchasing Managers Index and Industrial Production (IP)



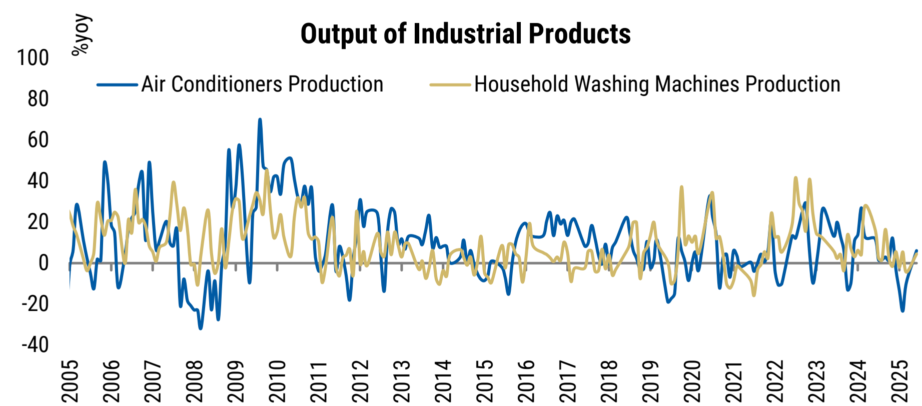
Source: CEIC, Morgan Stanley Research

Exhibit 32: China's Money Supply



Source: CEIC, Morgan Stanley Research

Exhibit 33: China's Output of Industrial Products

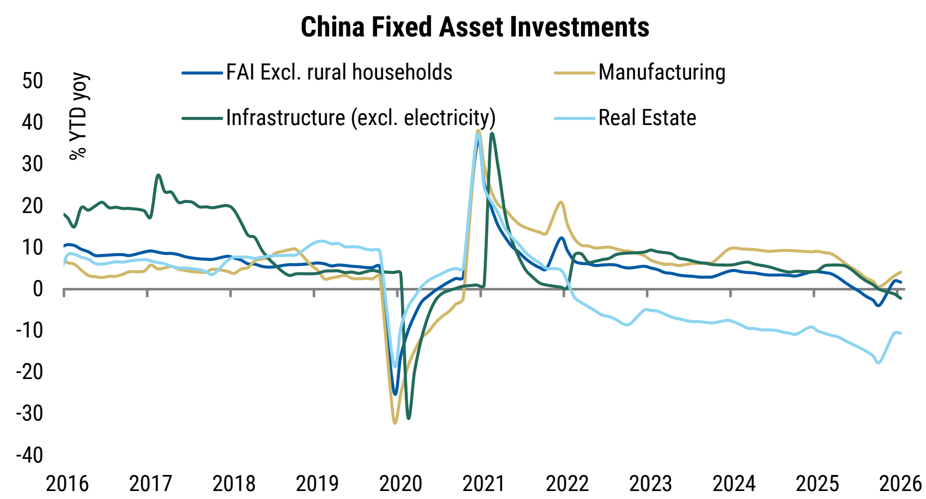


Source: CEIC, Morgan Stanley Research

Exhibit 34: China's Infrastructure Fixed Asset Investments (FAI)

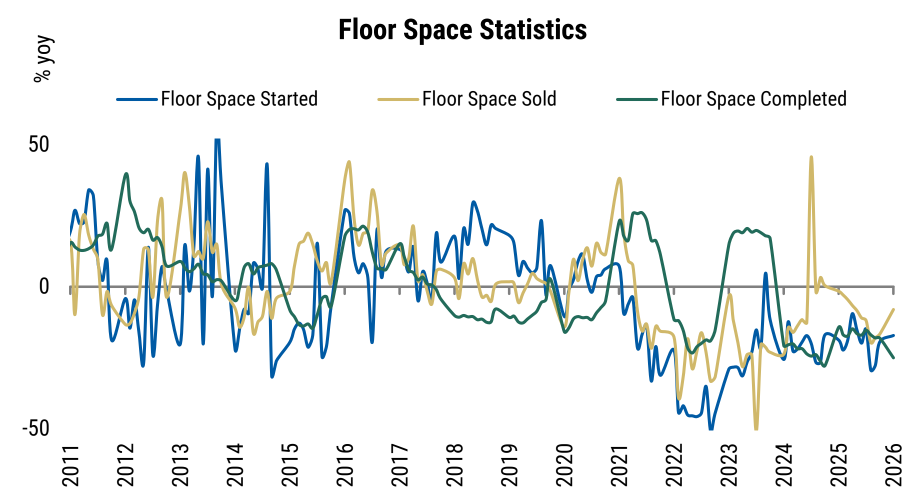
Source: CEIC, Morgan Stanley Research

Exhibit 35: China's Fixed Asset Investments



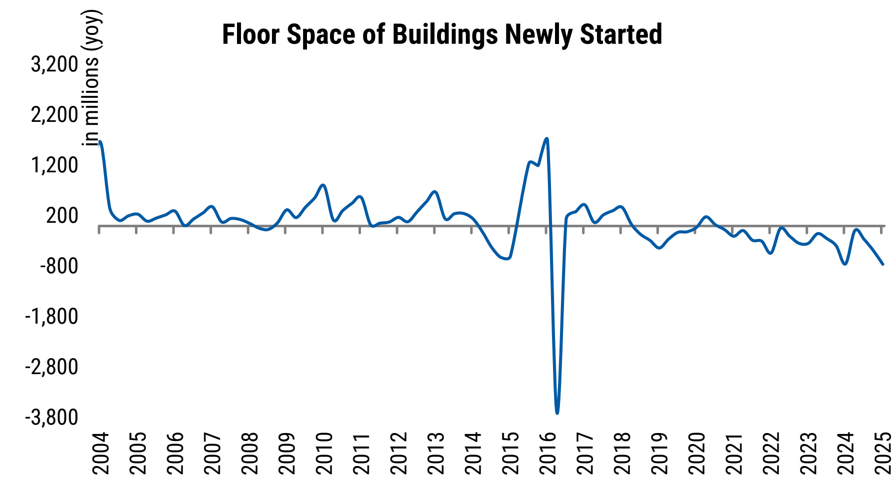
Source: CEIC, Morgan Stanley Research

Exhibit 36: China's Floor Space Started, Sold and Completed



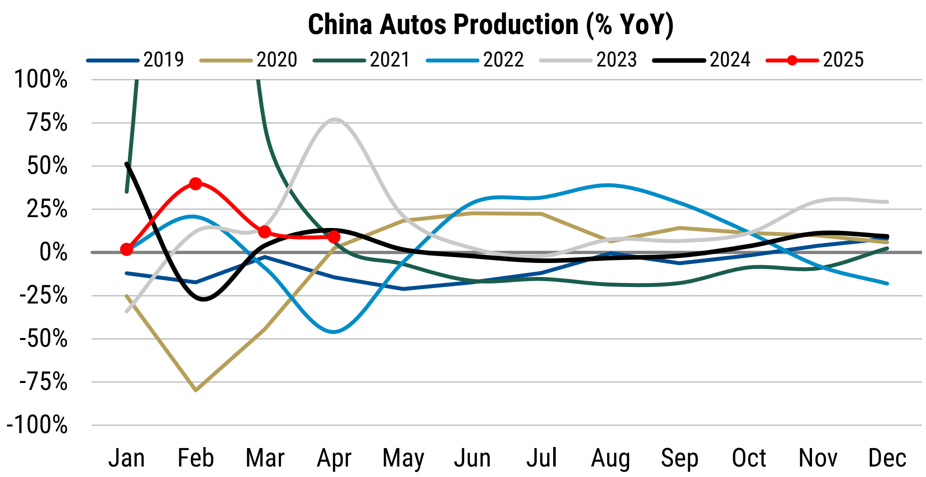
Source: CEIC, Morgan Stanley Research

Exhibit 37: Floor Space of Buildings Newly Started



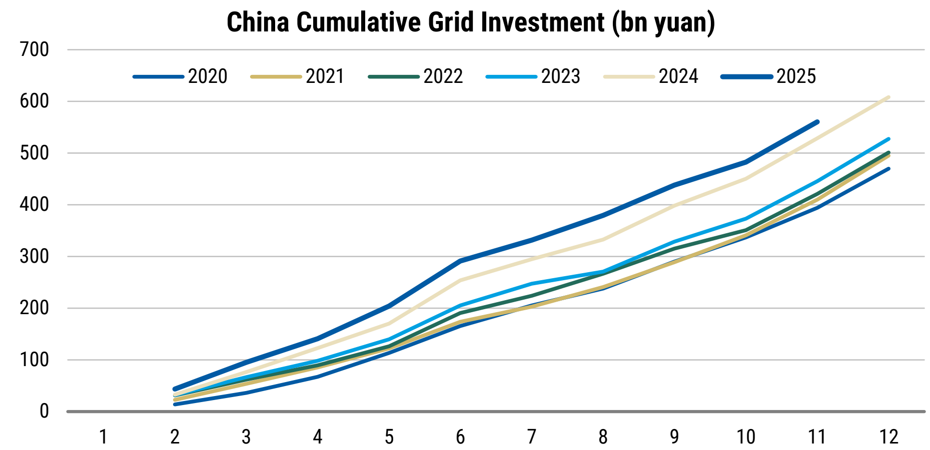
Source: CEIC, Morgan Stanley Research

Exhibit 38: China Autos Production



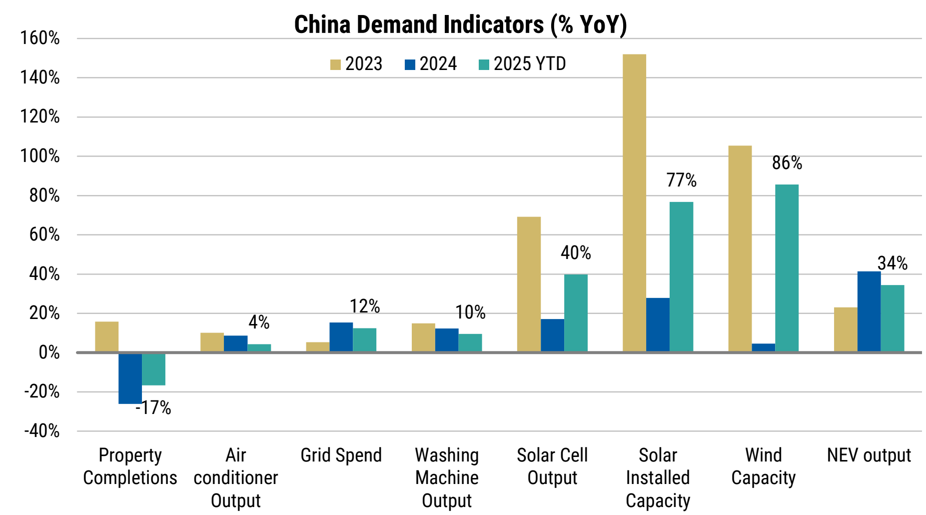
Source: CEIC, CAAM

Exhibit 39: China Cumulative Grid Investment



Source: Bloomberg

Exhibit 40: China Demand Indicators



Source: Bloomberg, CEIC

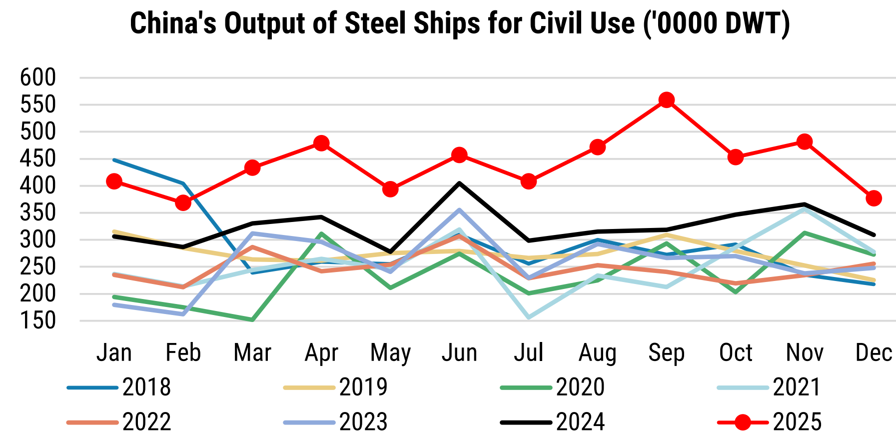
Exhibit 41: China Excavator Sales

Source: CEIC

Exhibit 42: China Railway FAI YTD

Source: CEIC

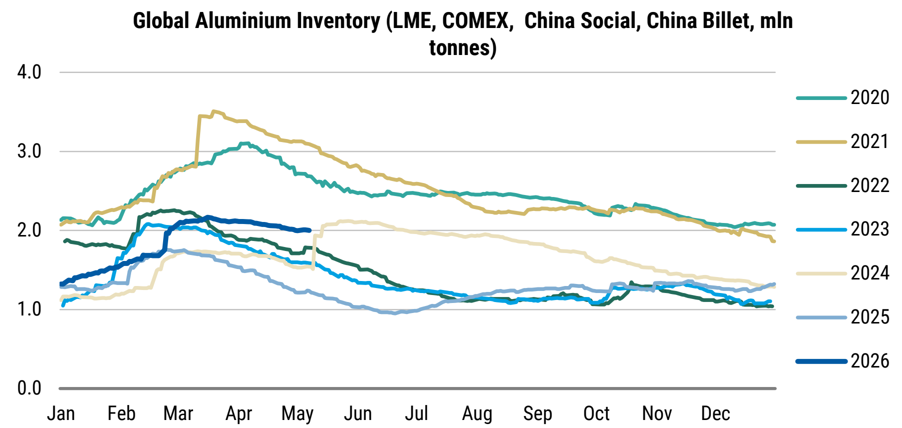
Exhibit 43: China Shipbuilding Output



Source: NBS

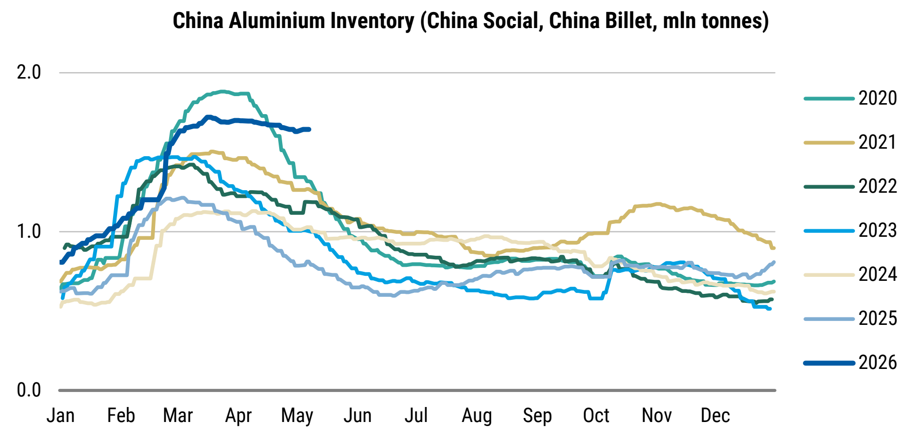
Aluminium

Exhibit 44: Global Aluminium Inventories



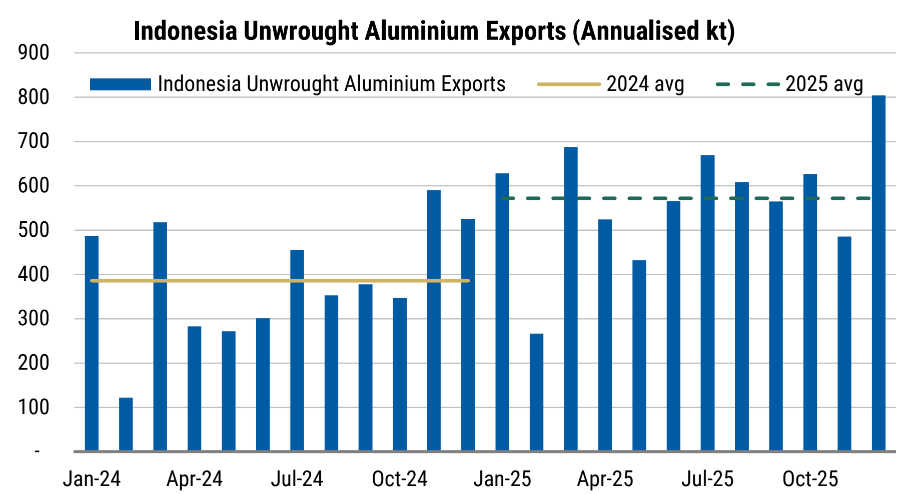
Source: Bloomberg

Exhibit 45: China Aluminium Inventories



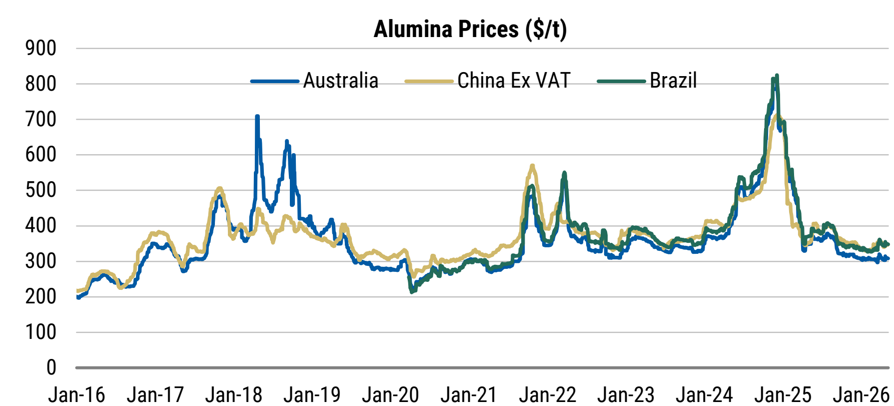
Source: Bloomberg

Exhibit 46: Indonesia Aluminium Exports



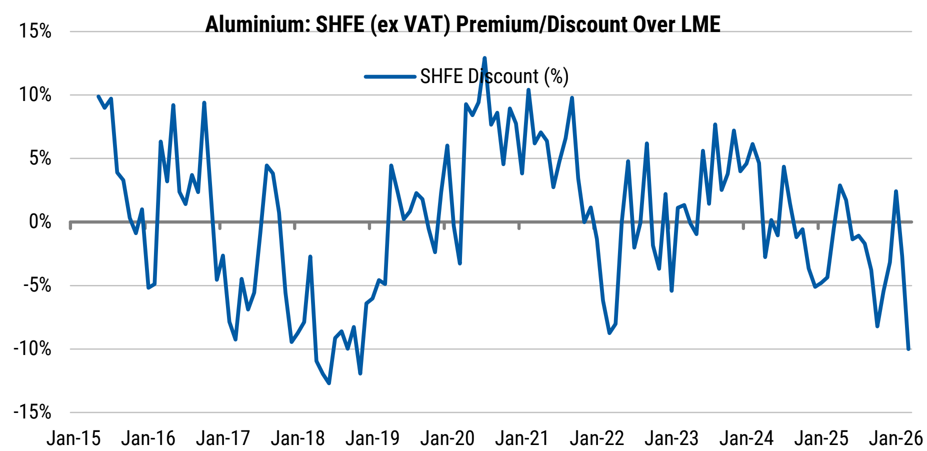
Source: Trademap

Exhibit 47: Raw Materials: Spot Alumina vs China Domestic Price



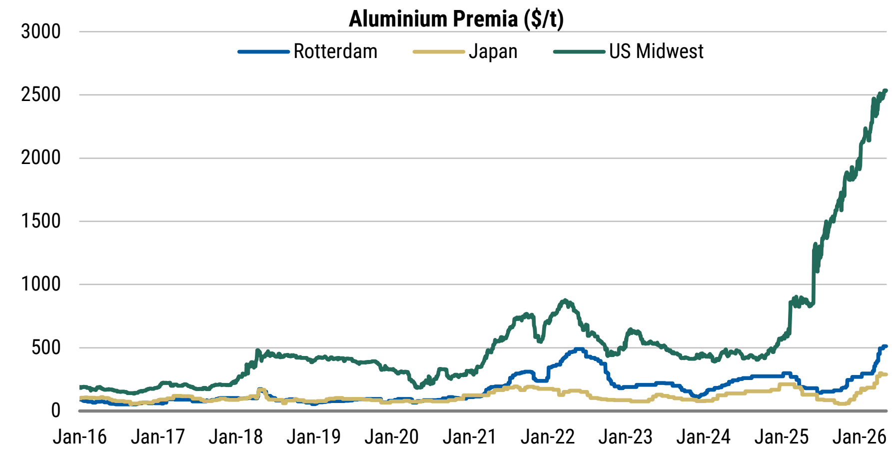
Source: Platts, Bloomberg

Exhibit 48: Price Differentials: SHFE vs LME



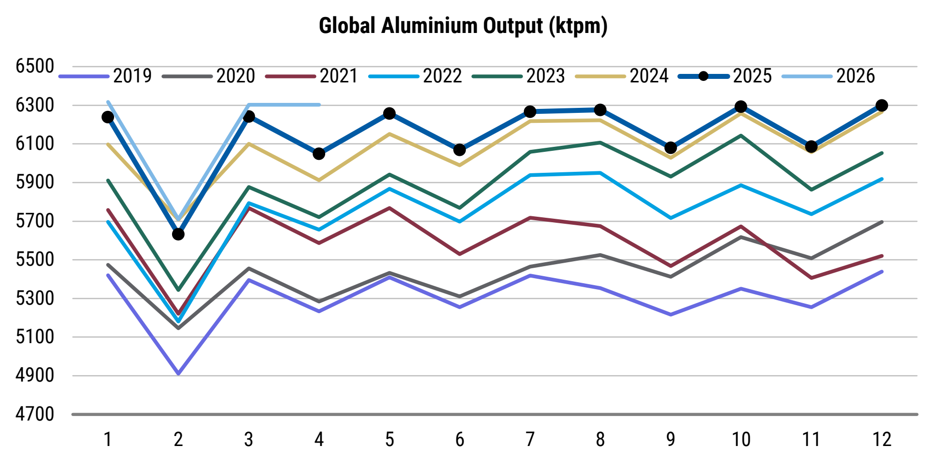
Source: Bloomberg

Exhibit 49: Physical demand: aluminium premia, by region



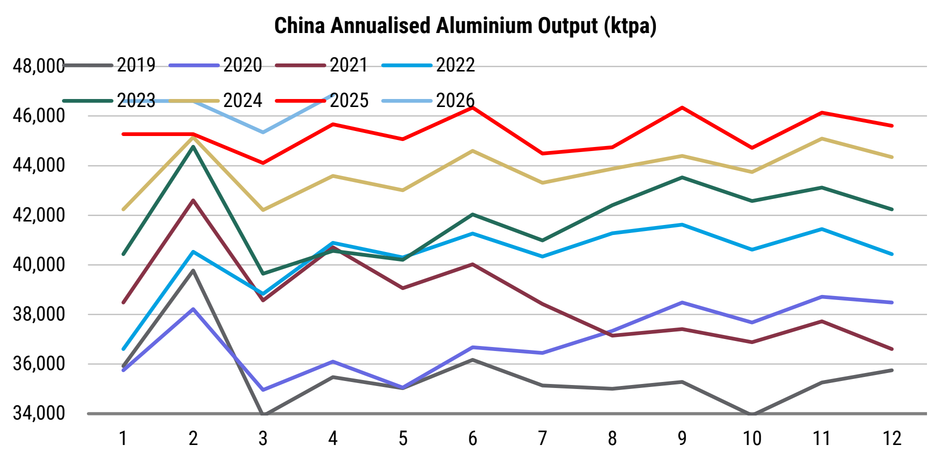
Source: Platts, Bloomberg

Exhibit 50: IAI Global Aluminium Production



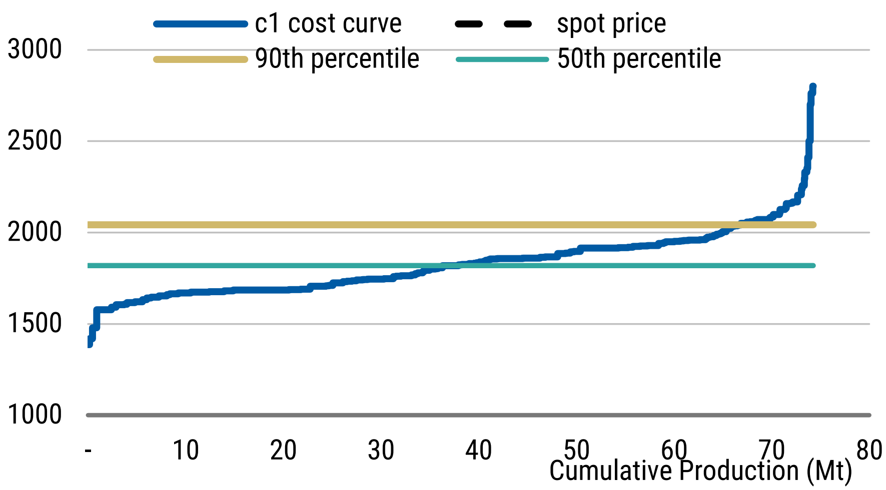
Source: IAI

Exhibit 51: China Aluminium Production



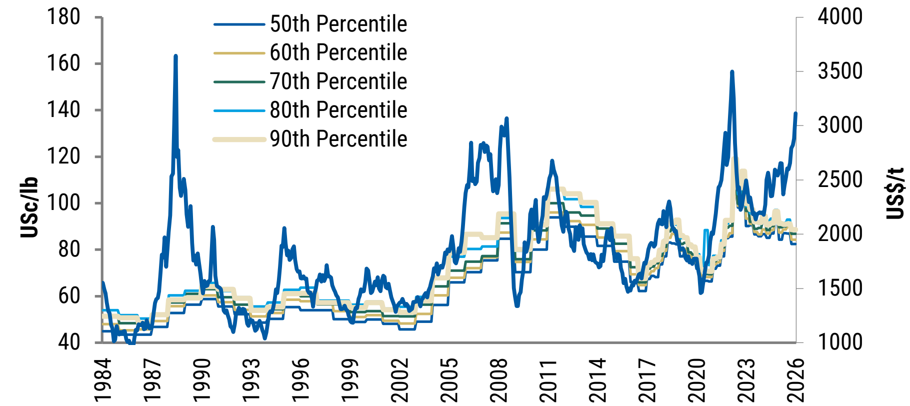
Source: Bloomberg

Exhibit 52: Aluminium C1 Cost Curve vs Spot ($/t)



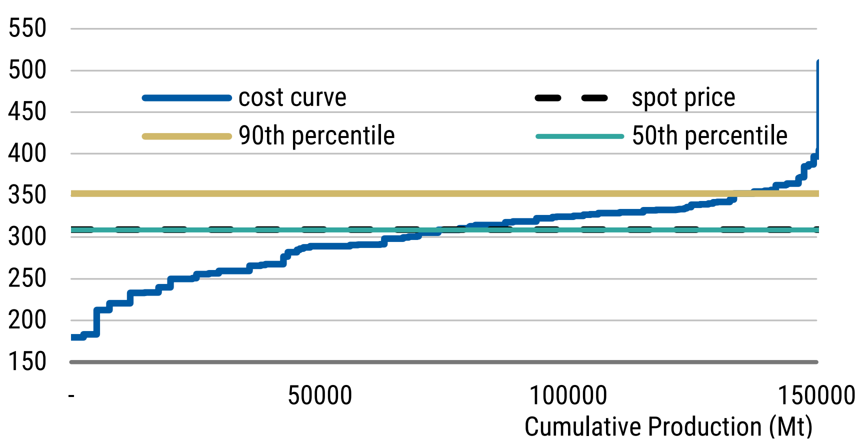
Source: Wood Mackenzie

Exhibit 53: Aluminium Cost Curve Evolution



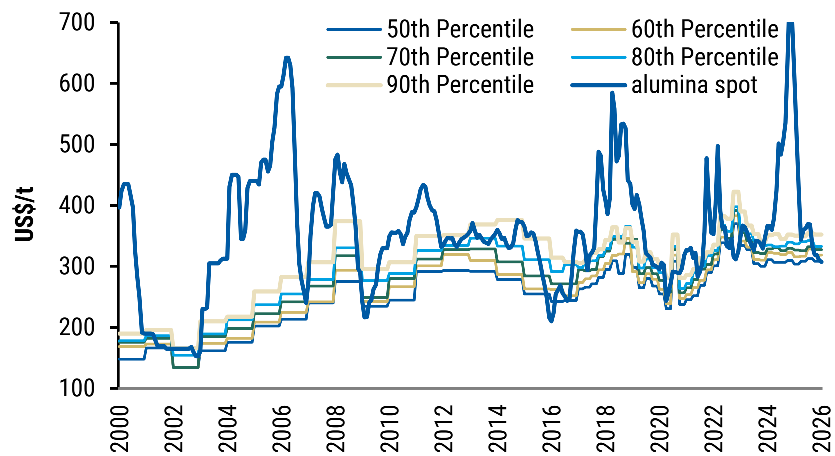
Source: Wood Mackenzie

Exhibit 54: Alumina Total Cost Curve vs Spot ($/t)



Source: Wood Mackenzie

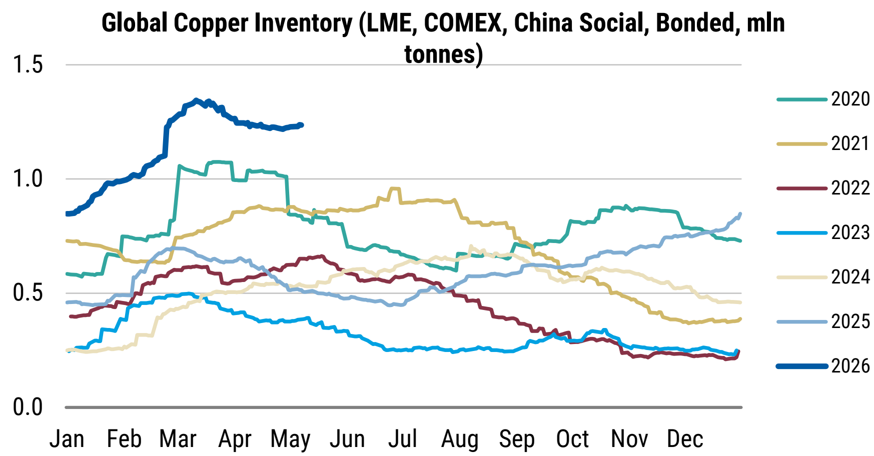
Exhibit 55: Alumina Cost Curve Evolution



Source: Wood Mackenzie

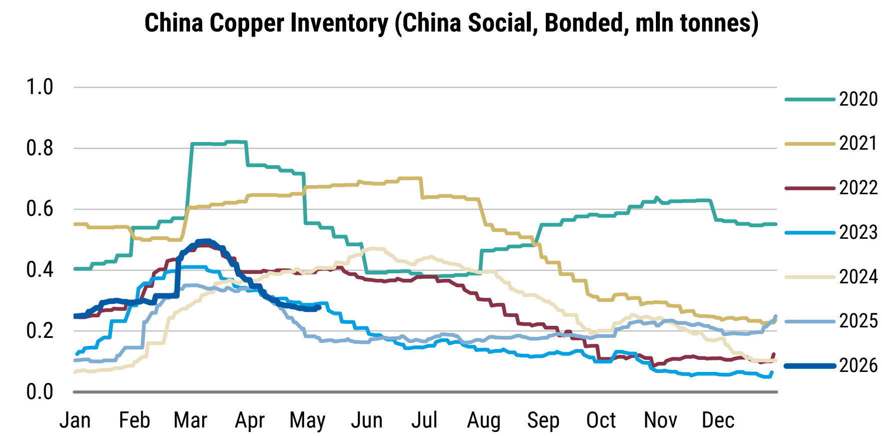
Copper

Exhibit 56: Global Copper Inventories



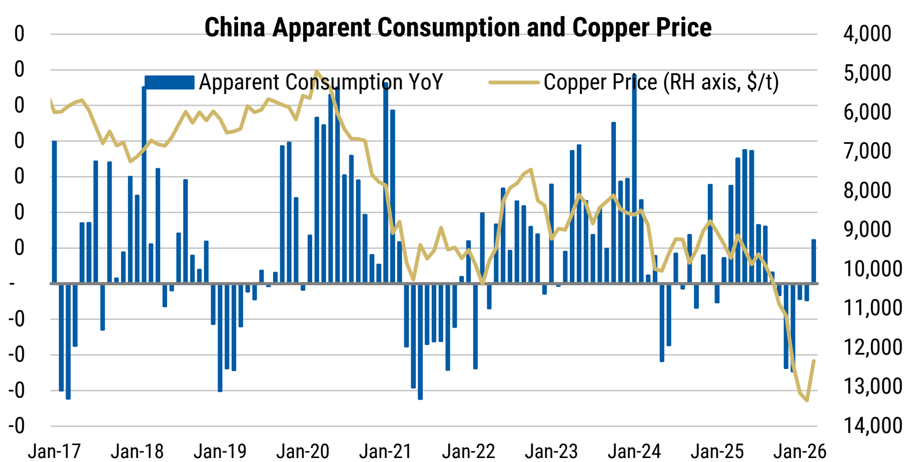
Source: Bloomberg

Exhibit 57: China Copper Inventories



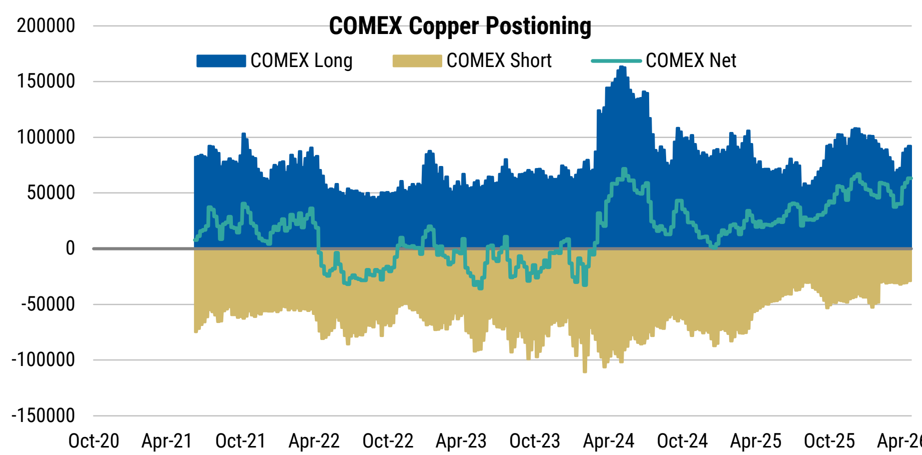
Source: Bloomberg

Exhibit 58: Copper Price versus China Apparent Consumption



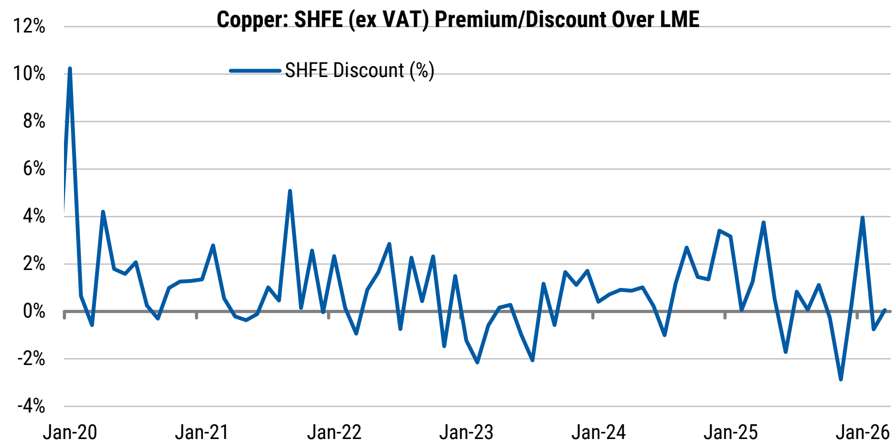
Source: Bloomberg, Morgan Stanley Research

Exhibit 59: Copper CFTC Positioning



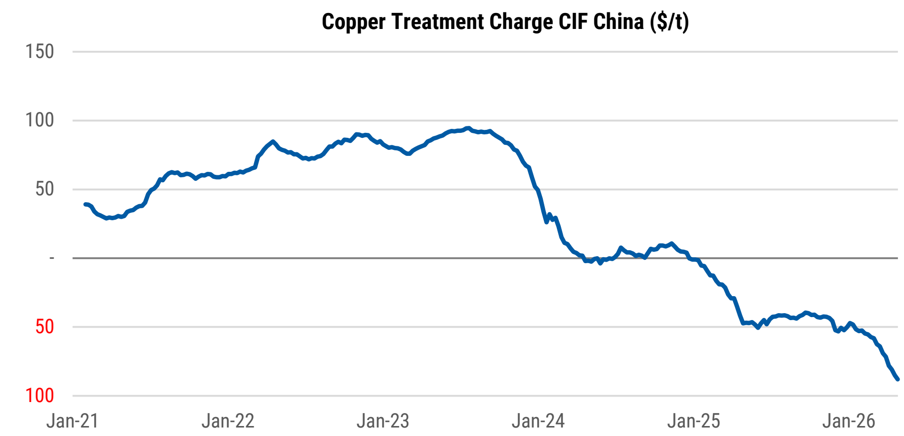
Source: COMEX

Exhibit 60: Price Differentials: SHFE vs LME



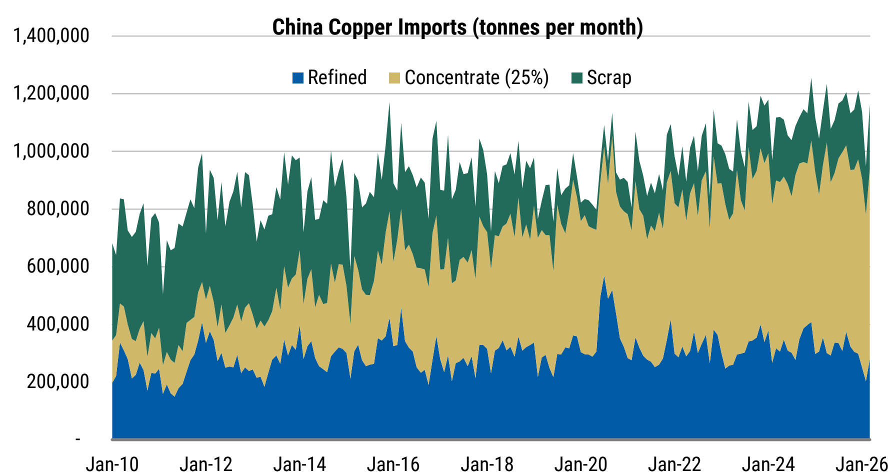
Source: Bloomberg

Exhibit 61: Copper treatment charges (TCs)



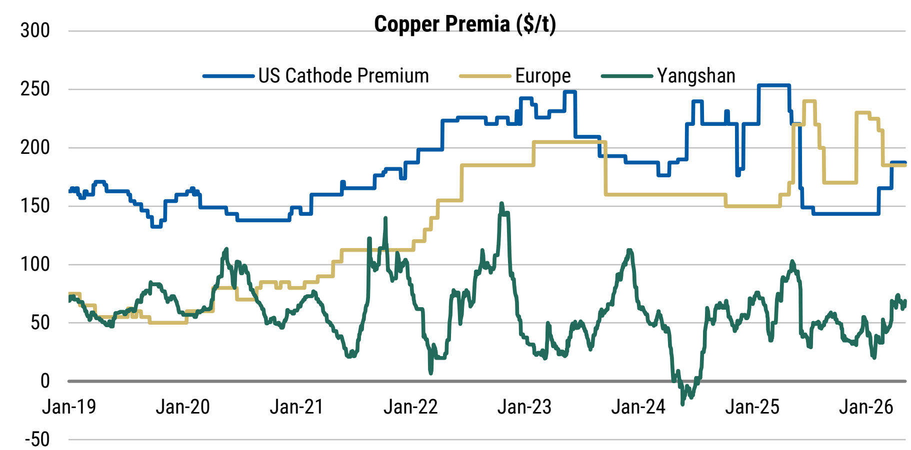
Source: Platts, Bloomberg

Exhibit 62: Raw materials: China's copper concentrate, refined and scrap monthly import



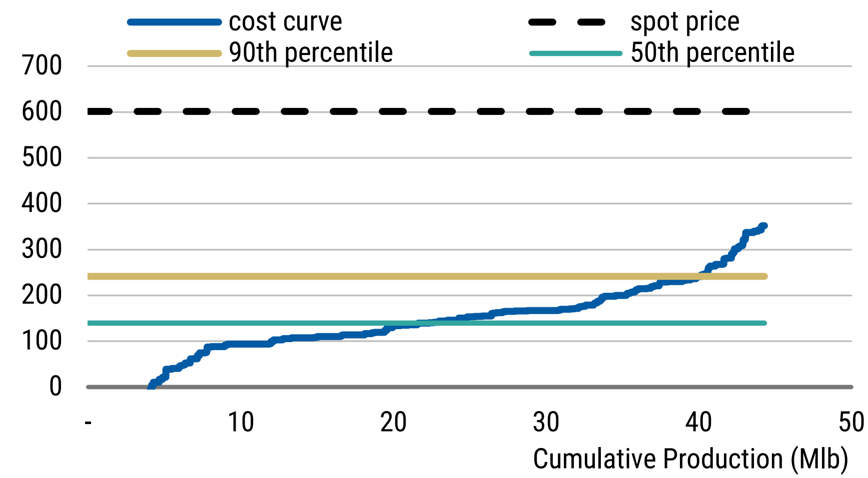
Source: China Customs, Morgan Stanley Research

Exhibit 63: Physical Demand: Copper Premia By Region



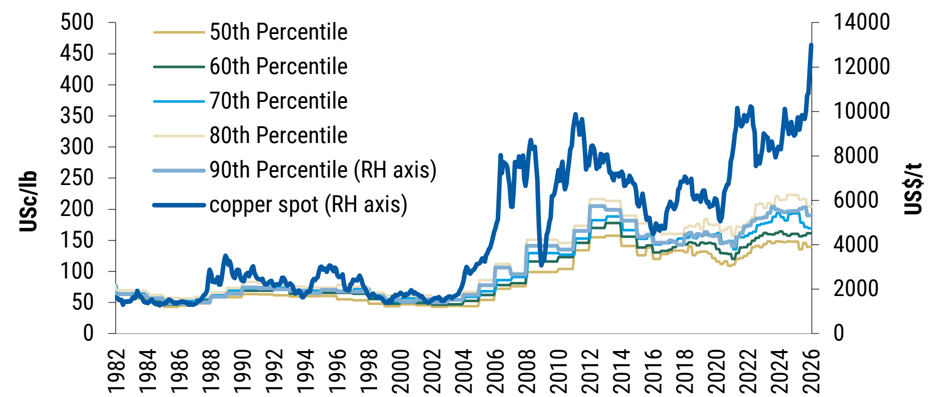
Source: Argus, Bloomberg

Exhibit 64: Copper C1 Cost Curve vs Spot (USc/lb)



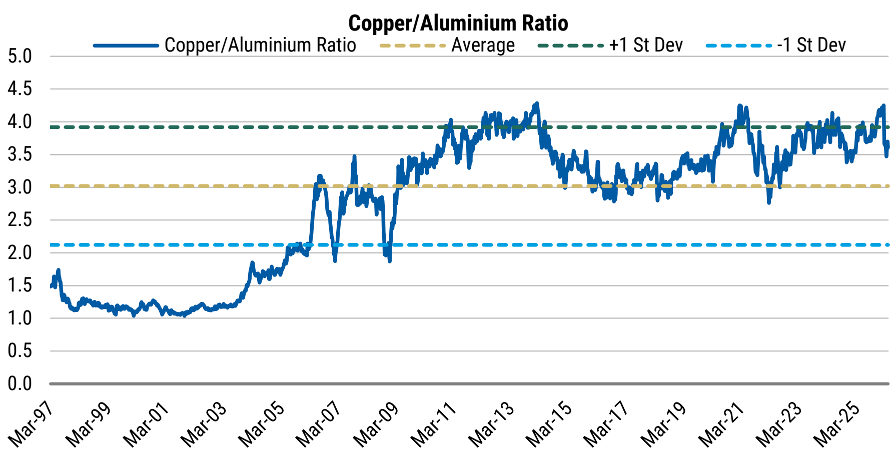
Source: Wood Mackenzie

Exhibit 65: Copper Cost Curve Evolution



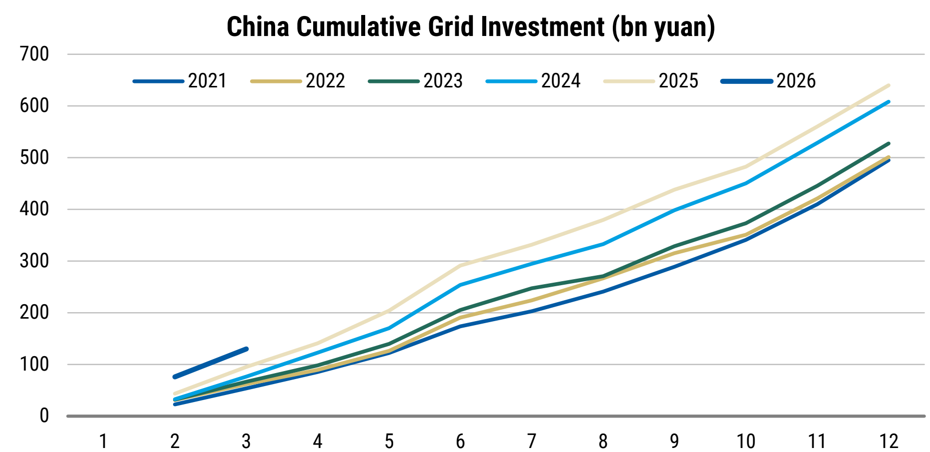
Source: Wood Mackenzie

Exhibit 66: Copper: Aluminium Ratio



Source: Bloomberg, Morgan Stanley Research

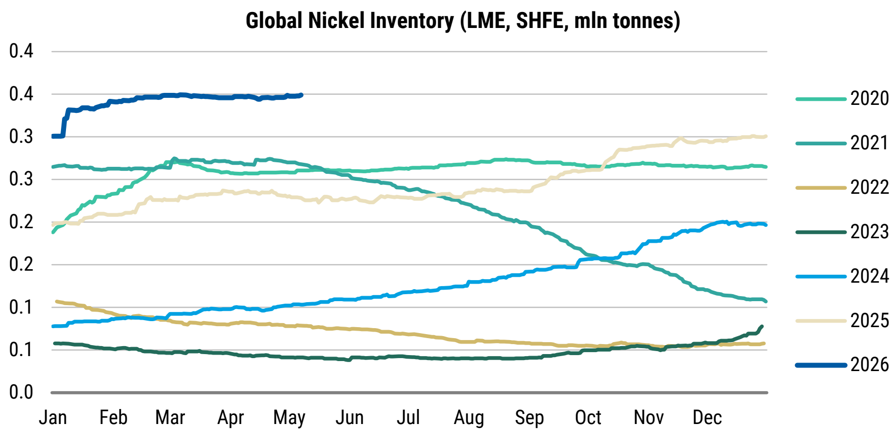
Exhibit 67: China Grid Investment



Source: Bloomberg, Morgan Stanley Research

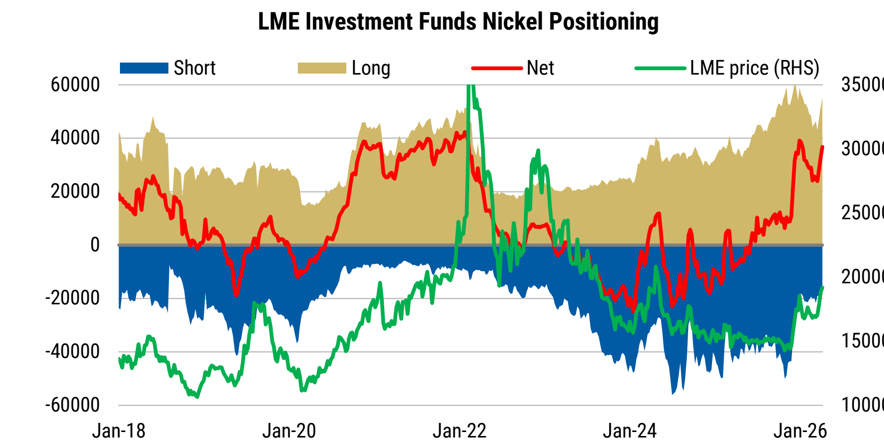
Nickel

Exhibit 68: Global Nickel Inventories



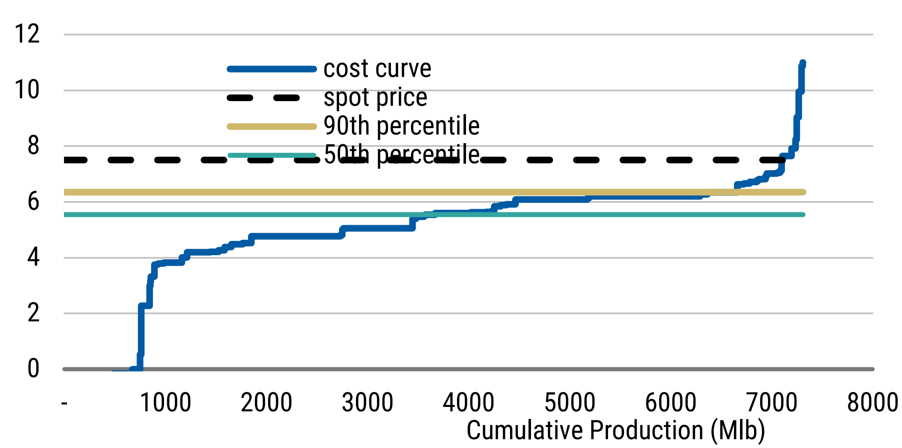
Source: Bloomberg

Exhibit 69: LME Nickel Positioning



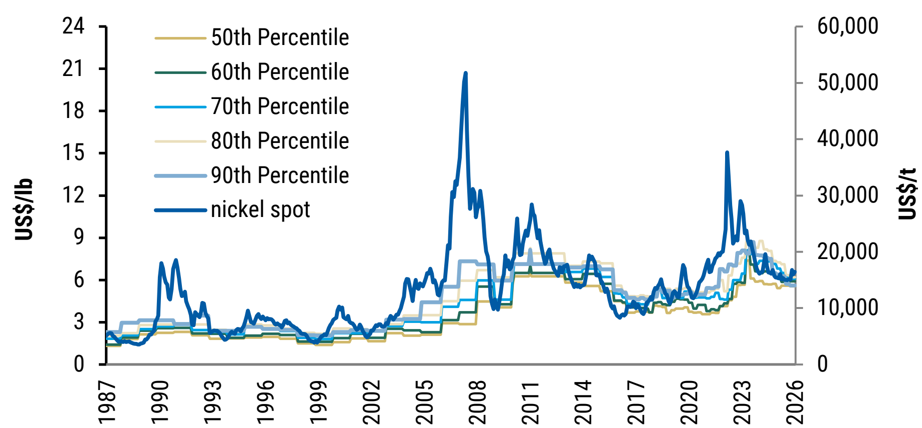
Source: Bloomberg

Exhibit 70: Nickel C1 Cost Curve vs Spot (USc/lb)



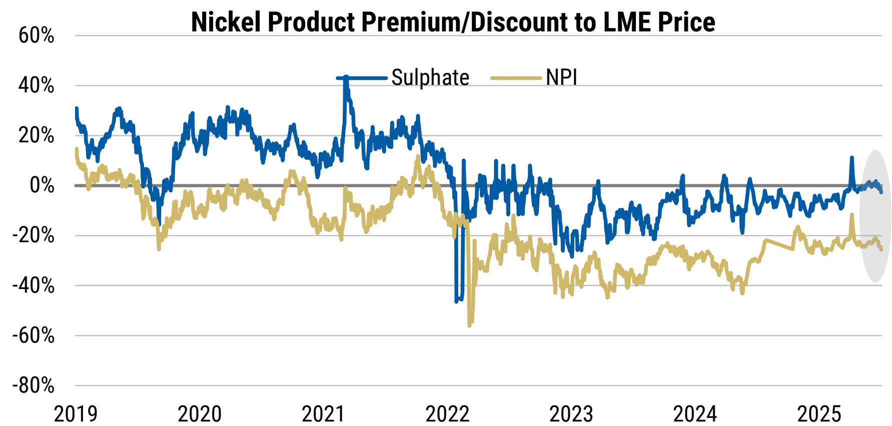
Source: Wood Mackenzie

Exhibit 71: Nickel Cost Curve Evolution



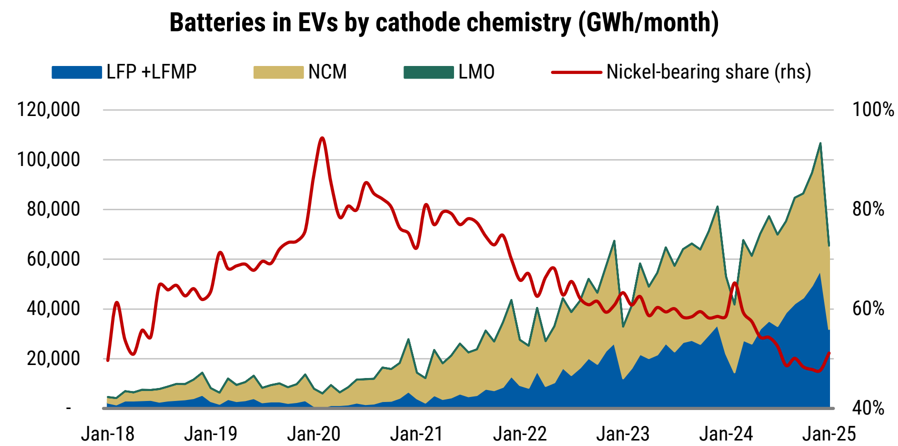
Source: Wood Mackenzie

Exhibit 72: Nickel Product Spreads vs LME Price



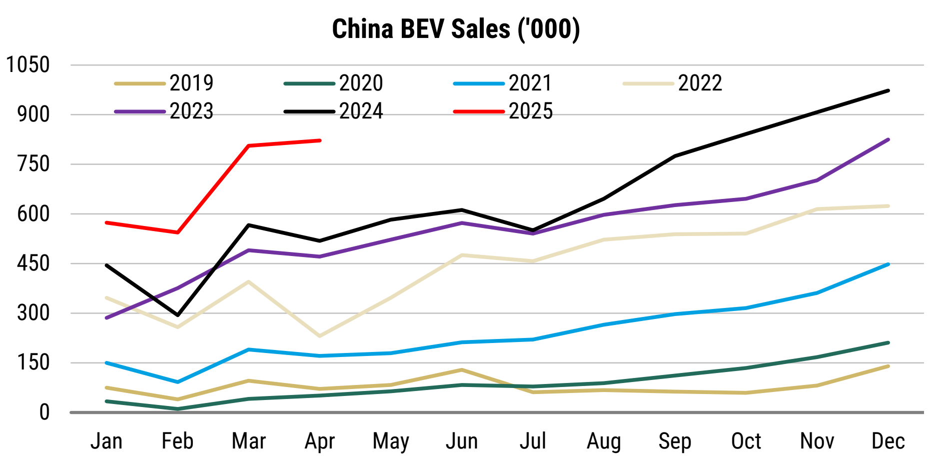
Source: Argus Metals

Exhibit 73: Global Battery Deployment by Chemistry



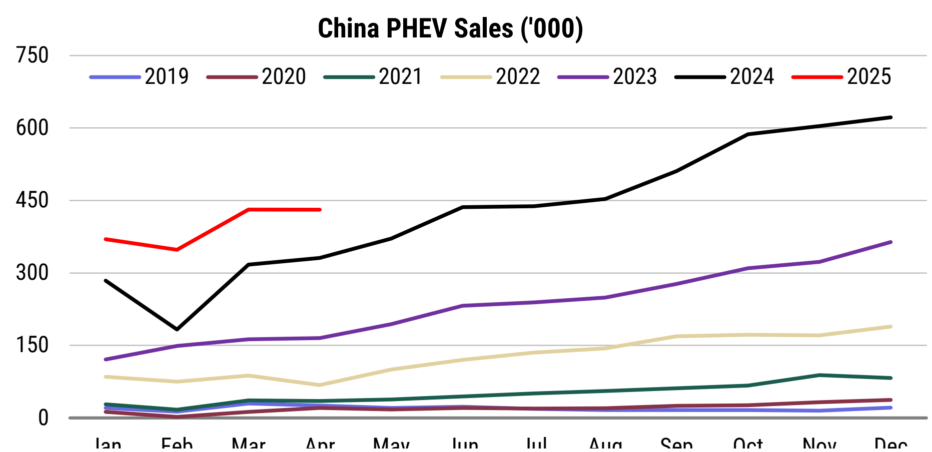
Source: Rho Motion

Exhibit 74: China NEV Sales



Source: CEIC, CAAM

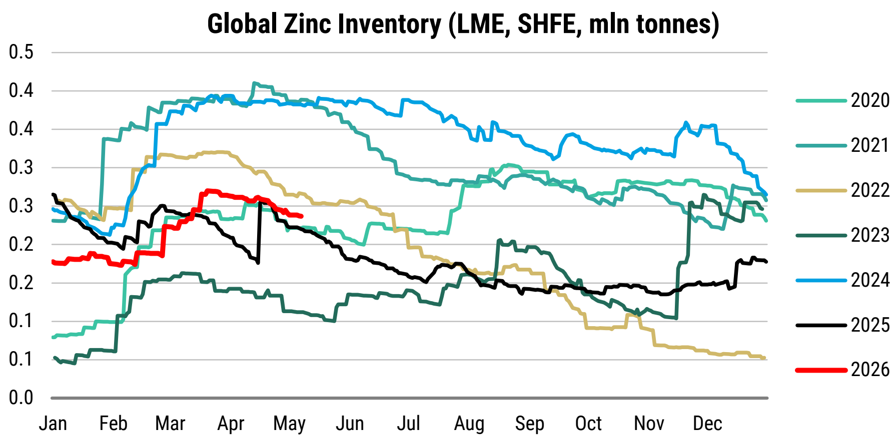
Exhibit 75: China PHEV Sales



Source: CEIC, CAAM

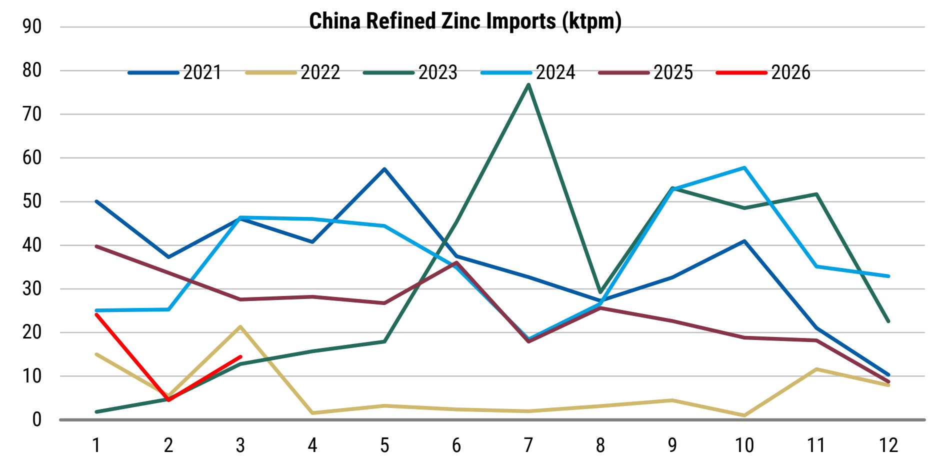
Zinc

Exhibit 76: Global Zinc Inventories



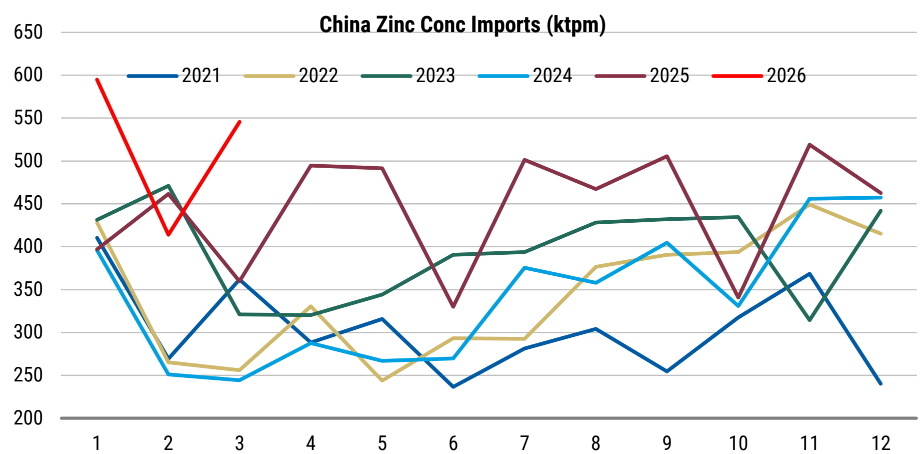
Source: Bloomberg

Exhibit 77: China Refined Zinc Imports



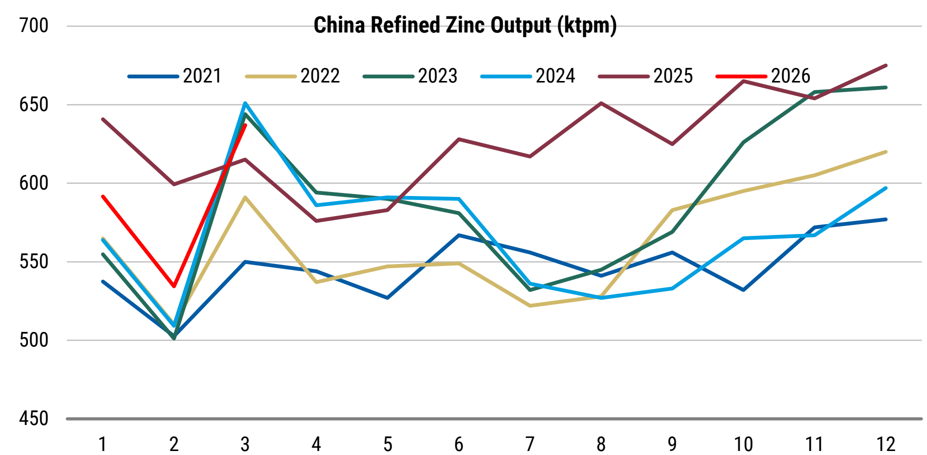
Source: Bloomberg

Exhibit 78: China Zinc Concentrate Imports



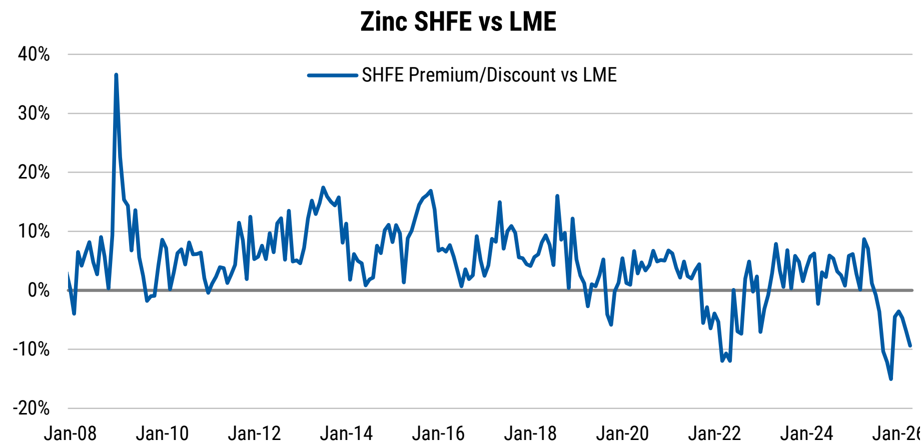
Source: Bloomberg

Exhibit 79: China Refined Zinc Output



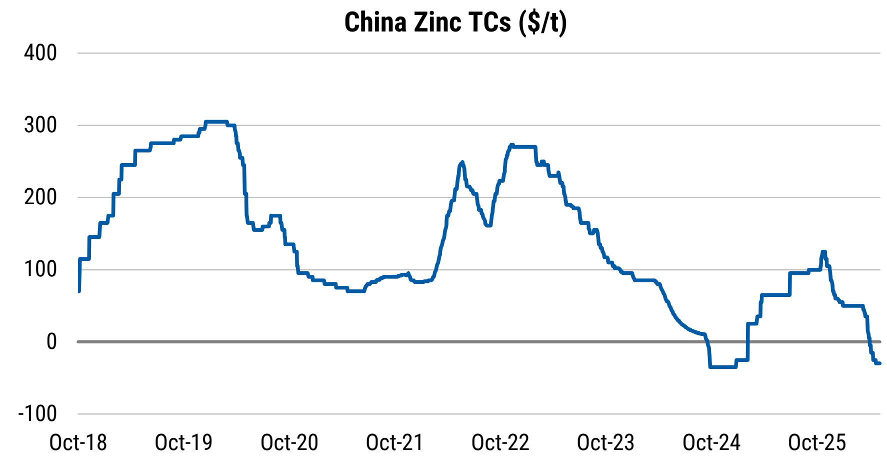
Source: Bloomberg

Exhibit 80: Price Differentials: SHFE vs LME



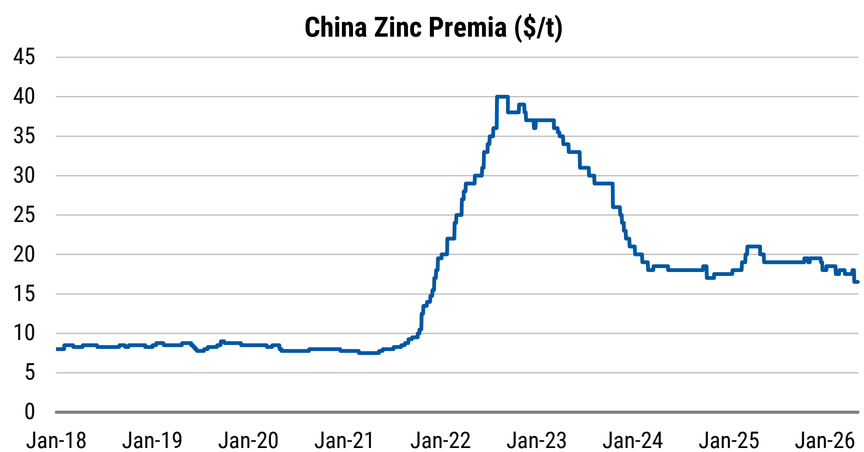
Source: Bloomberg

Exhibit 81: Zinc Treatment Charges



Source: Bloomberg

Exhibit 82: Zinc Premia

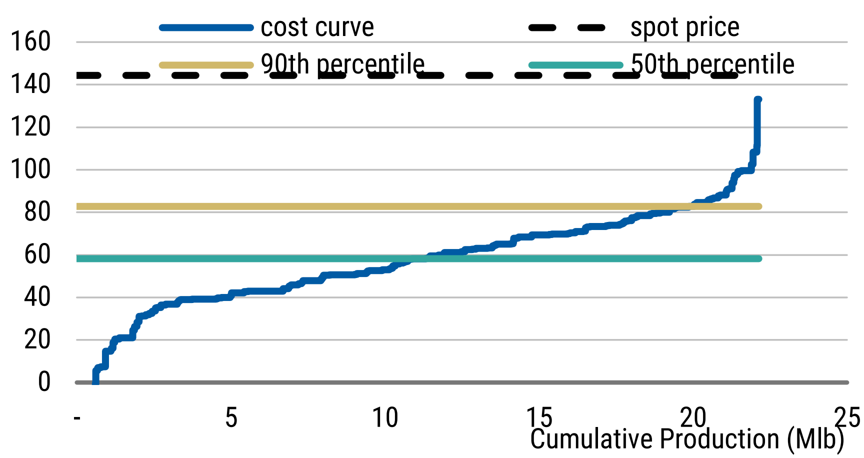


Source: Bloomberg

Exhibit 83: Zinc/Lead Ratio

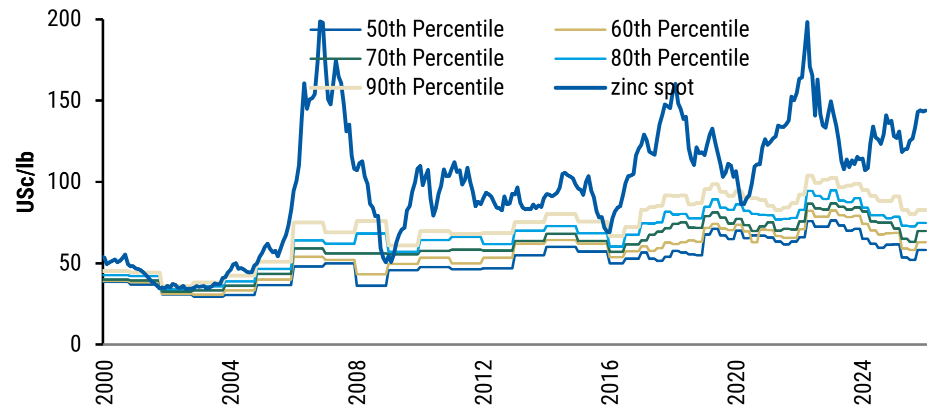
Source: Bloomberg

Exhibit 84: Zinc C1 Cost Curve vs Spot ($/t)



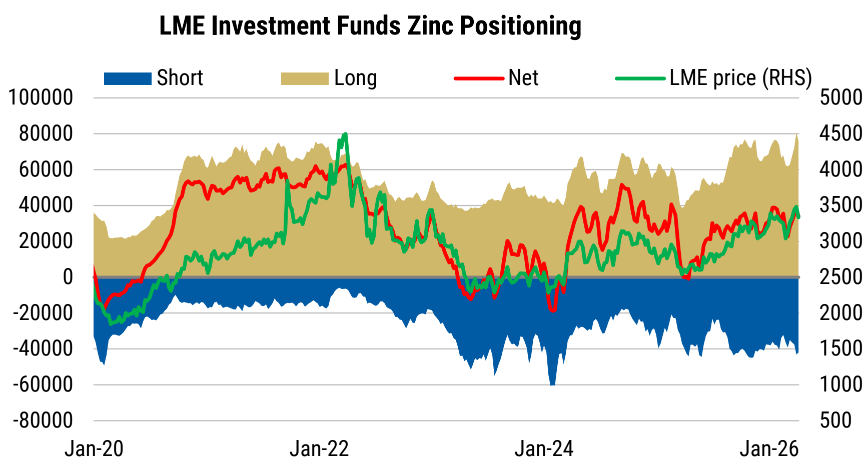
Source: Woodmac

Exhibit 85: Zinc Cost Curve Evolution



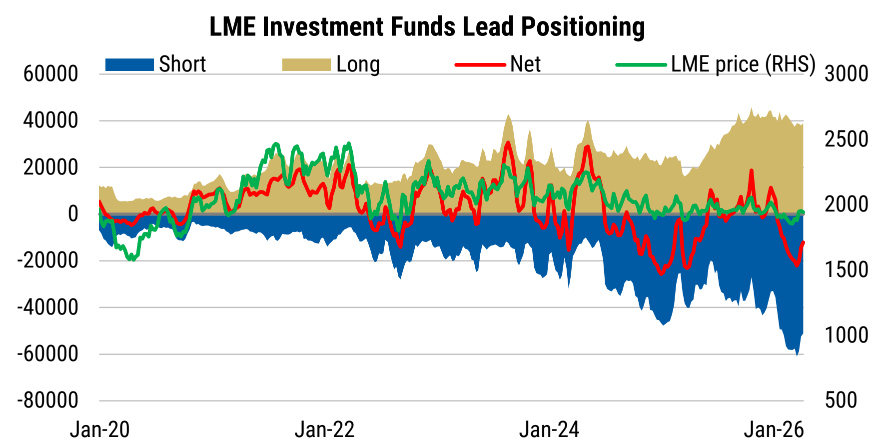
Source: Woodmac

Exhibit 86: Zinc Positioning



Source: Bloomberg

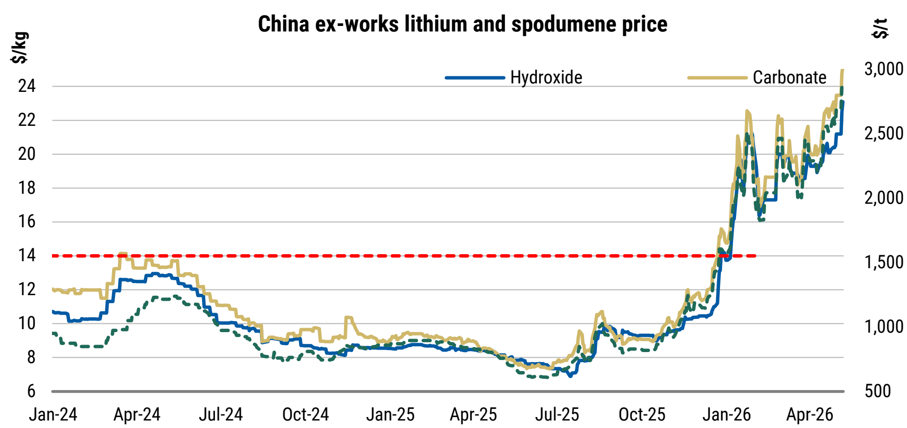
Exhibit 87: Lead Positioning



Source: Bloomberg

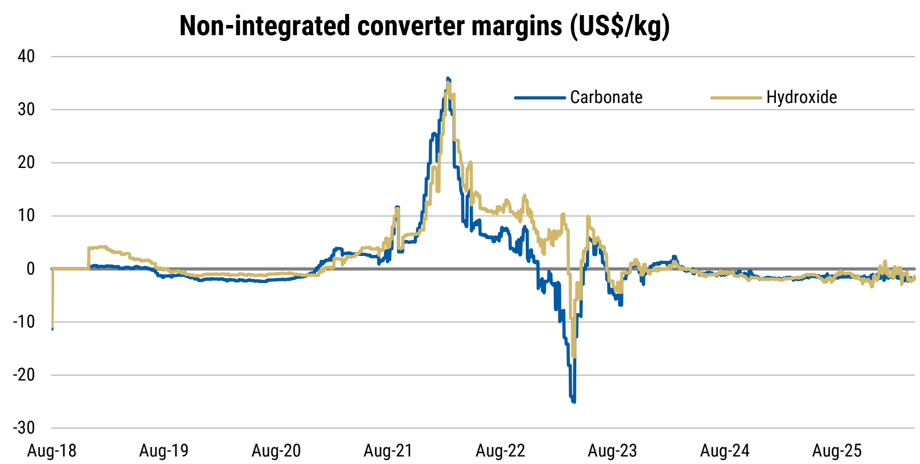
Lithium

Exhibit 88: Lithium Chemical Prices



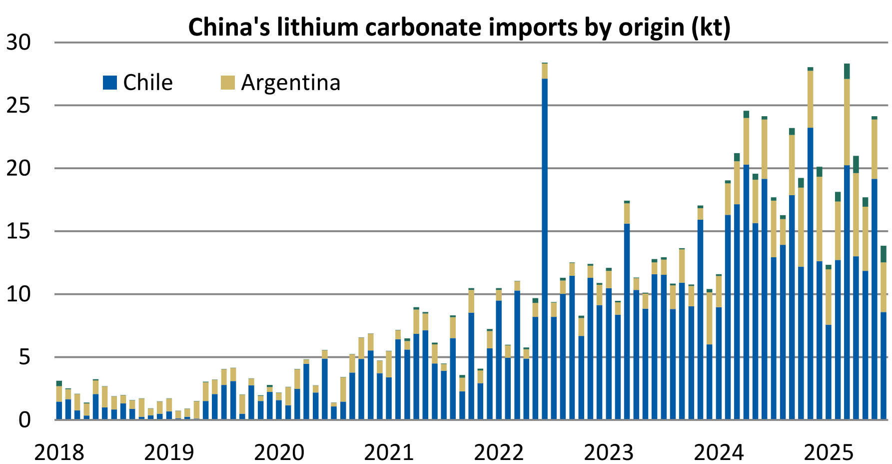
Source: Fastmarkets, Morgan Stanley Research

Exhibit 89: Non-integrated Convertor Margins



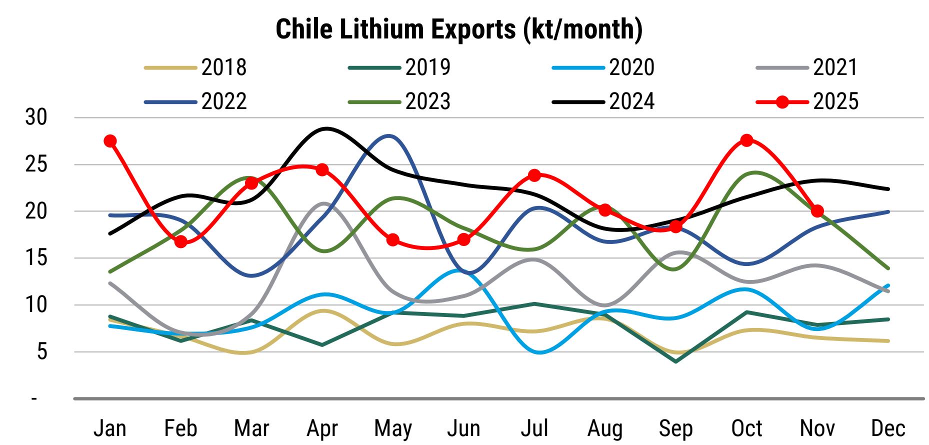
Source: Fastmarkets, Morgans Stanley Research

Exhibit 90: China Lithium Carbonate Imports



Source: Rystad, Morgan Stanley Research

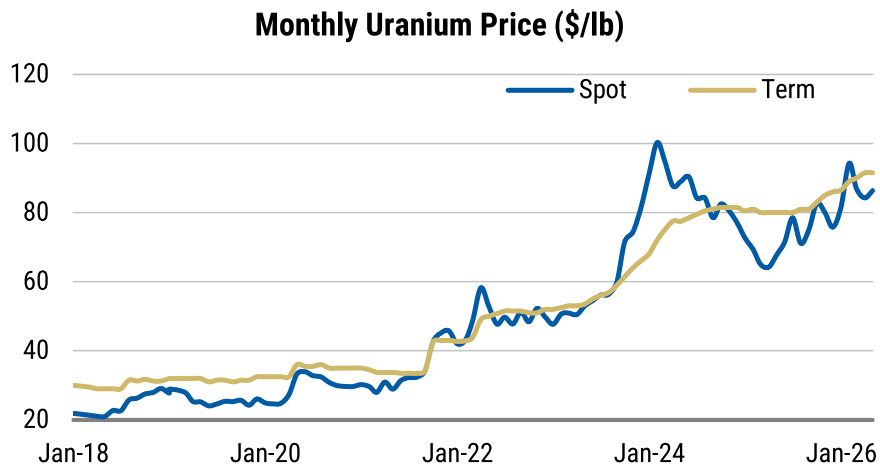
Exhibit 91: Chile Lithium Exports



Source: Chile Customs, Morgan Stanley Research

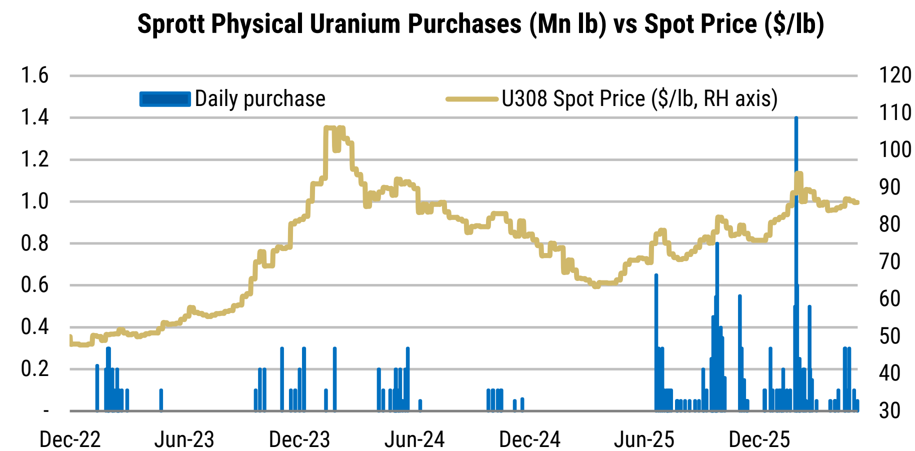
Uranium

Exhibit 92: Uranium Price (Spot and Term)



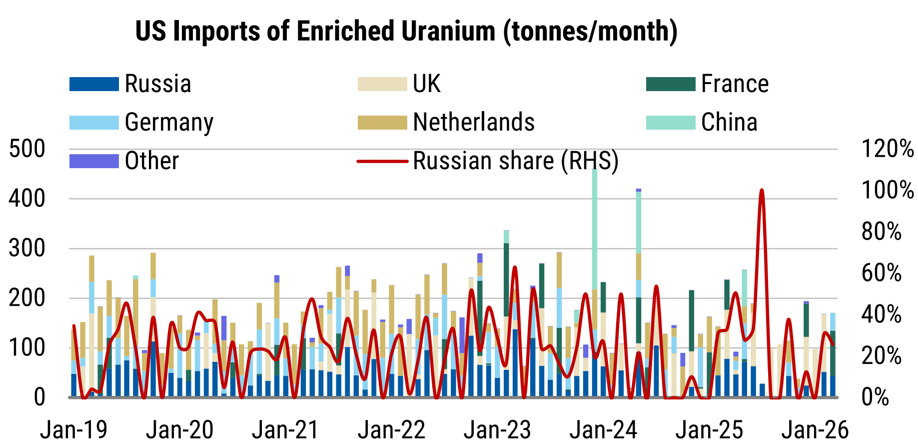
Source: Cameco

Exhibit 93: Sprott ETF Purchases



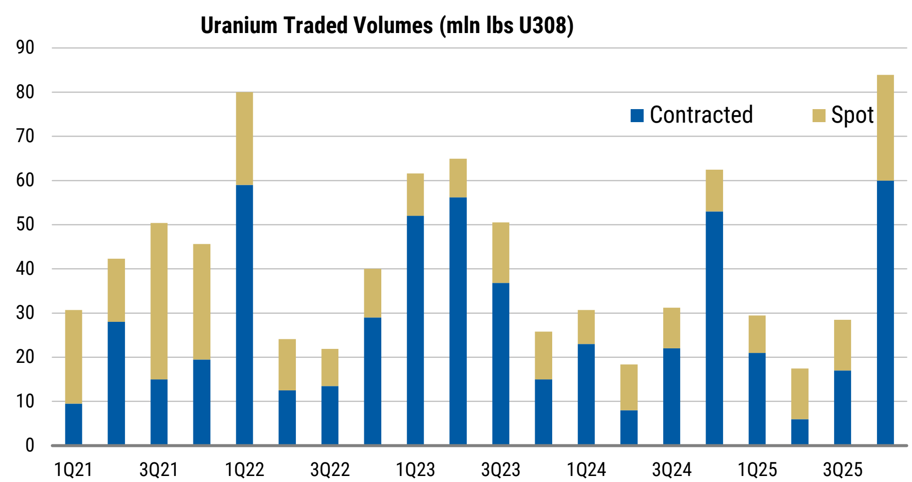
Source: Sprott, UxC, Morgan Stanley Research

Exhibit 94: US Enriched Uranium Imports



Source: Trademap

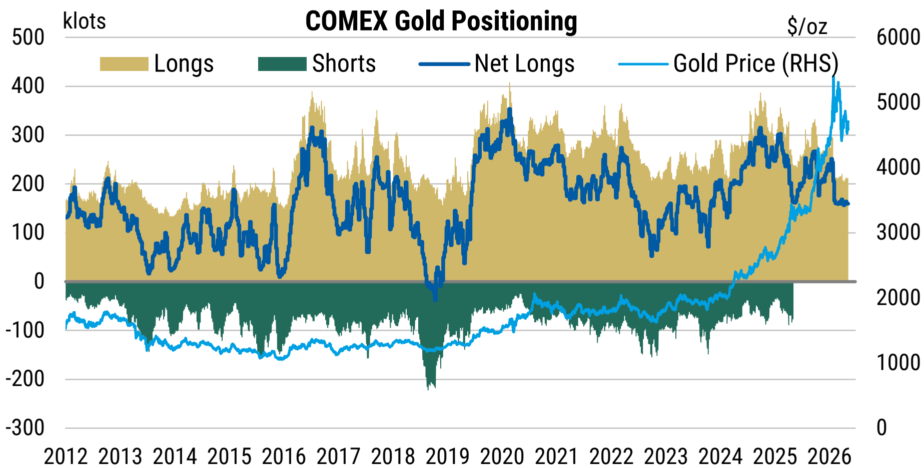
Exhibit 95: Quarterly contracting volumes



Source: Kazatomprom

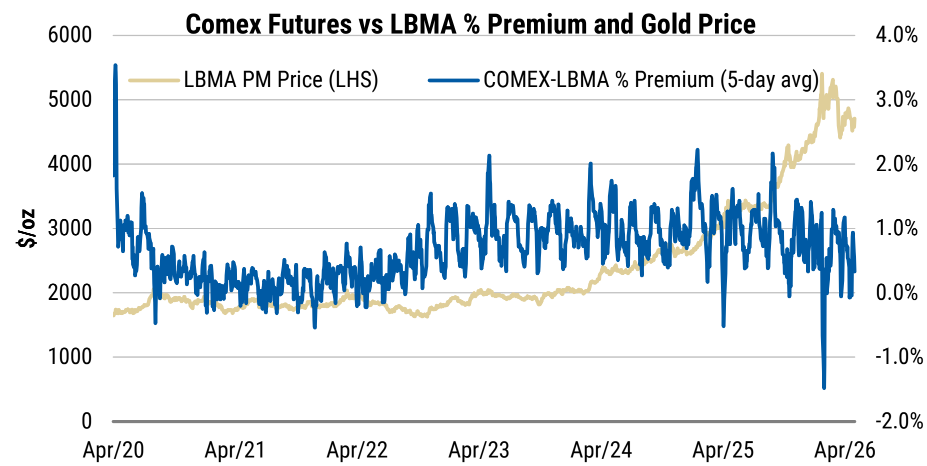
Gold and Other Precious Metals

Exhibit 96: CFTC Gold Futures Positioning



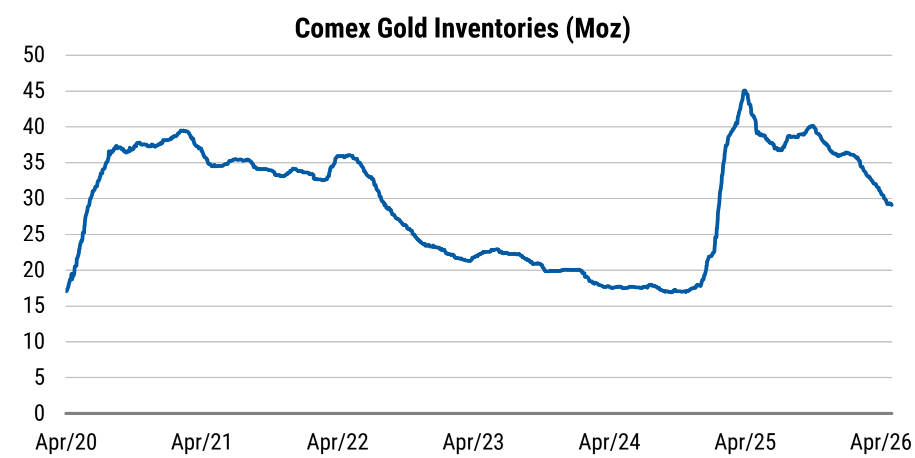
Source: Bloomberg

Exhibit 97: COMEX-LBMA Gold Premium



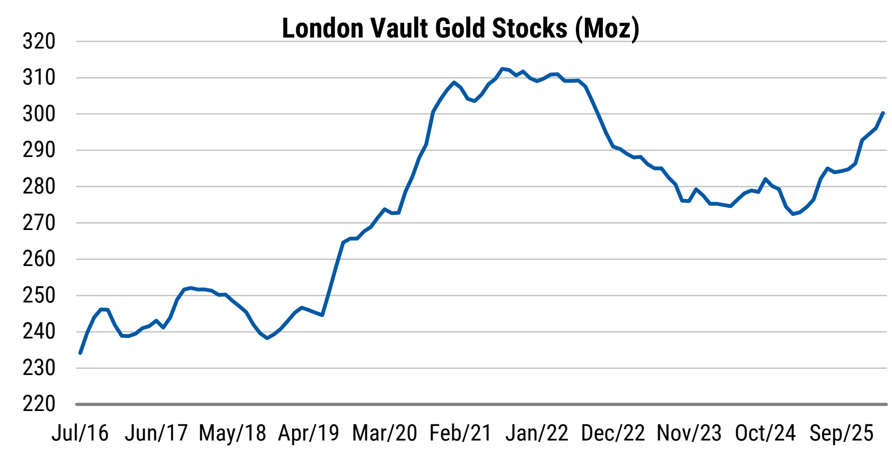
Source: Bloomberg

Exhibit 98: COMEX Gold Inventories



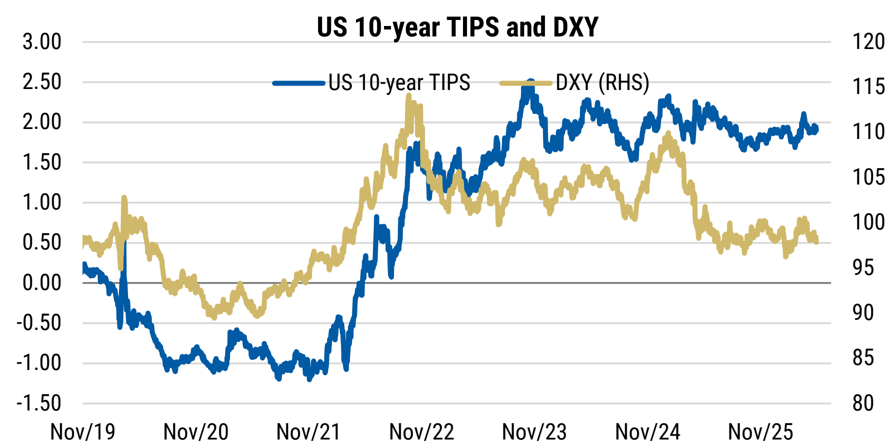
Source: Bloomberg

Exhibit 99: London Gold Vault Stocks



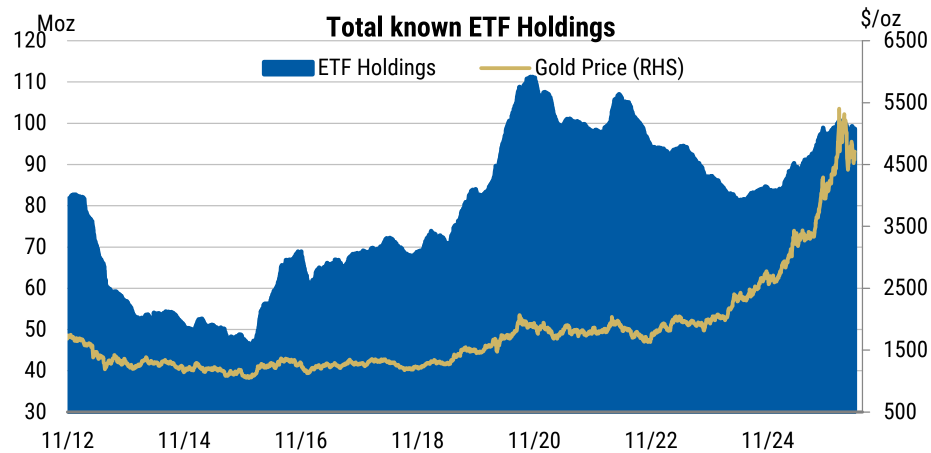
Source: LBMA

Exhibit 100: US 10 Year TIPS and DXY



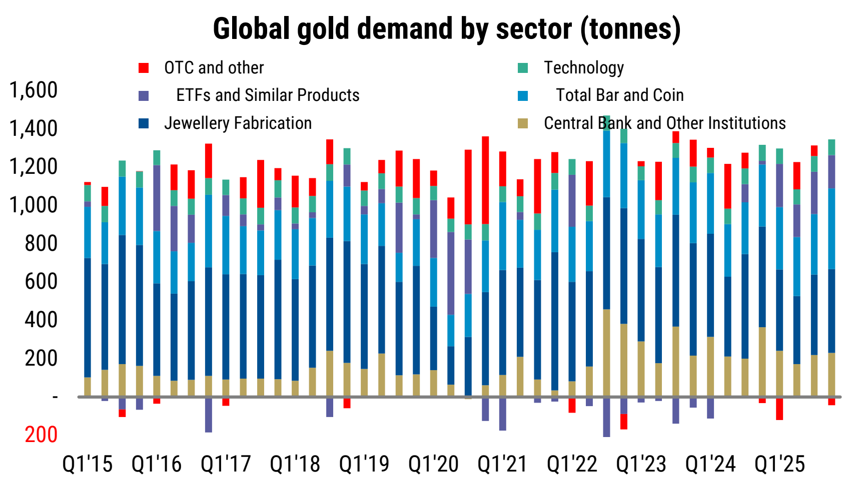
Source: Bloomberg

Exhibit 101: ETF Holdings vs Gold Price



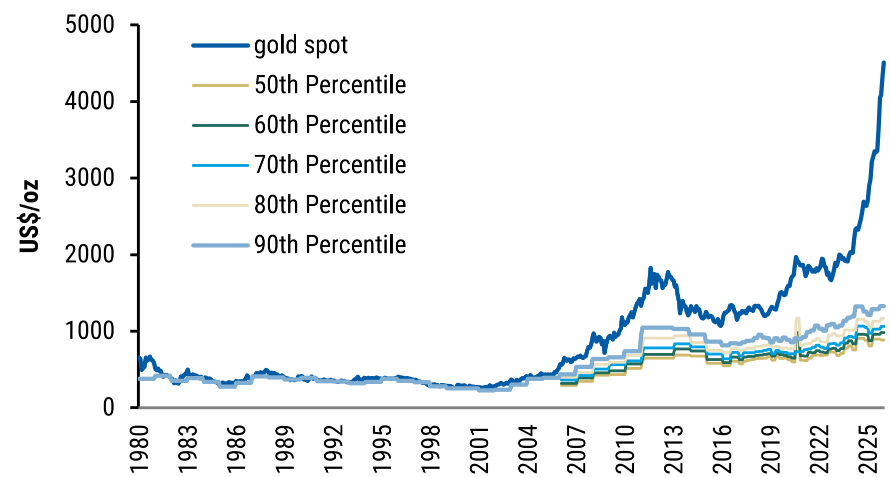
Source: Bloomberg

Exhibit 102: Global Gold Demand by Sector



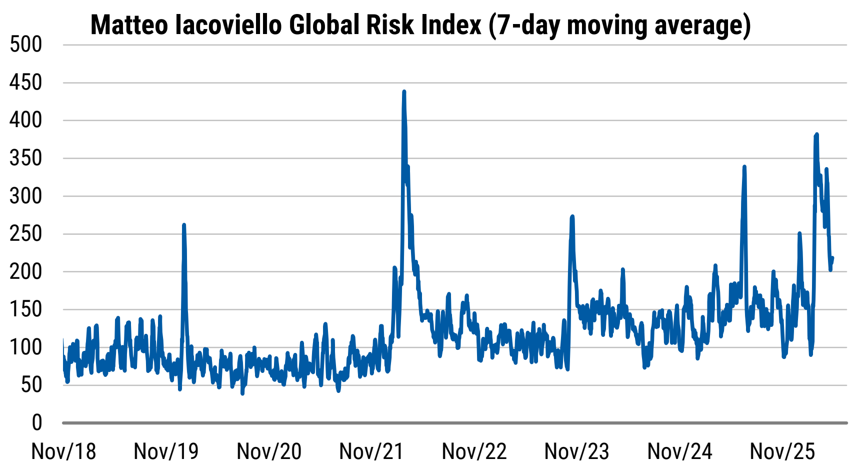
Source: World Gold Council

Exhibit 103: Gold Cost Curve Evolution



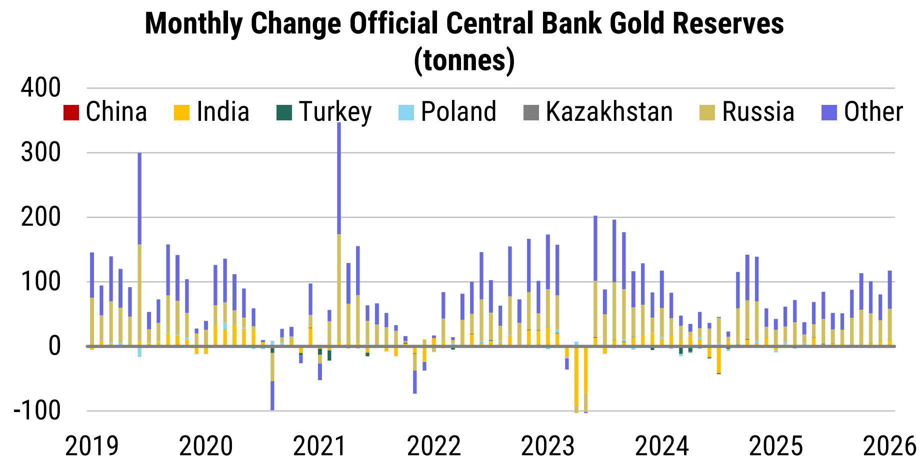
Source: Woodmac

Exhibit 104: Geopolitical Risk Index



Source: Mateo Iacoviello

Exhibit 105: Monthly Central Bank Purchasing

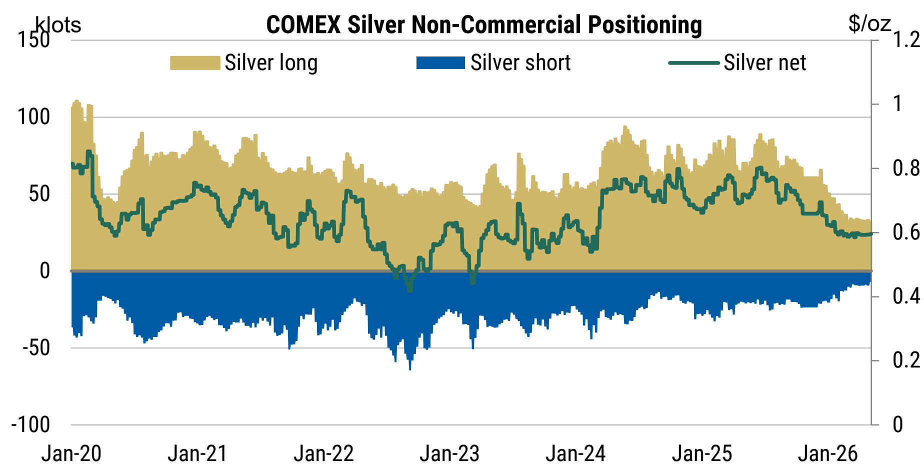


Source: World Gold Council

Exhibit106: Gold/Silver Ratio

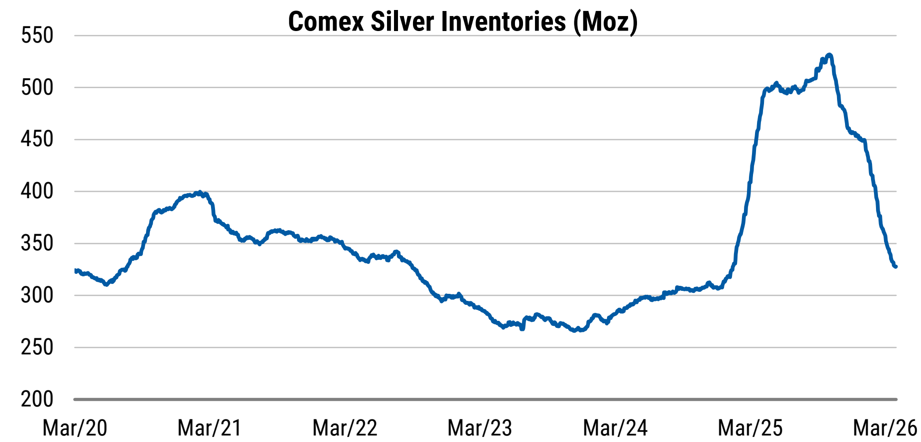
Source: Bloomberg

Exhibit107: CFTC Silver Futures Positioning



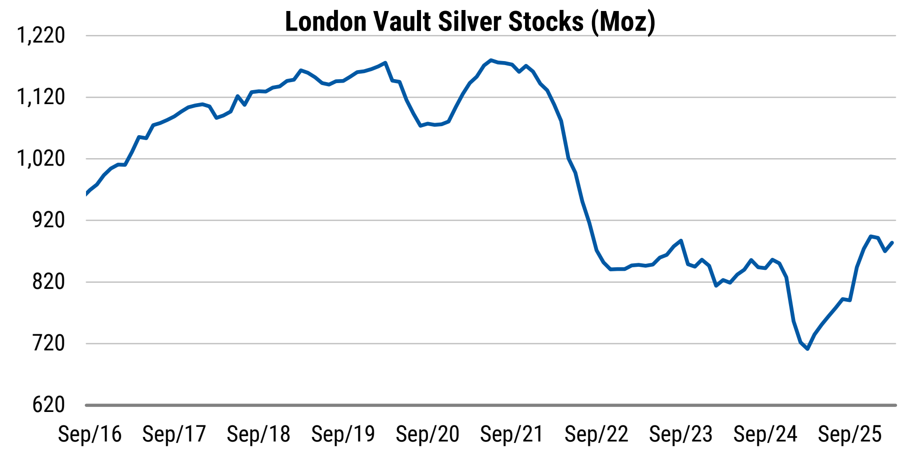
Source: Bloomberg

Exhibit 108: COMEX Silver Inventories



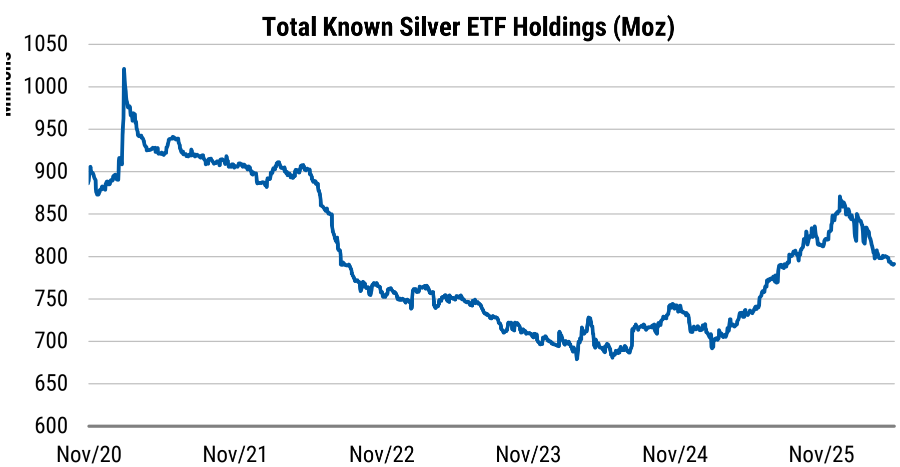
Source: Bloomberg

Exhibit 109: London Vault Silver Stocks



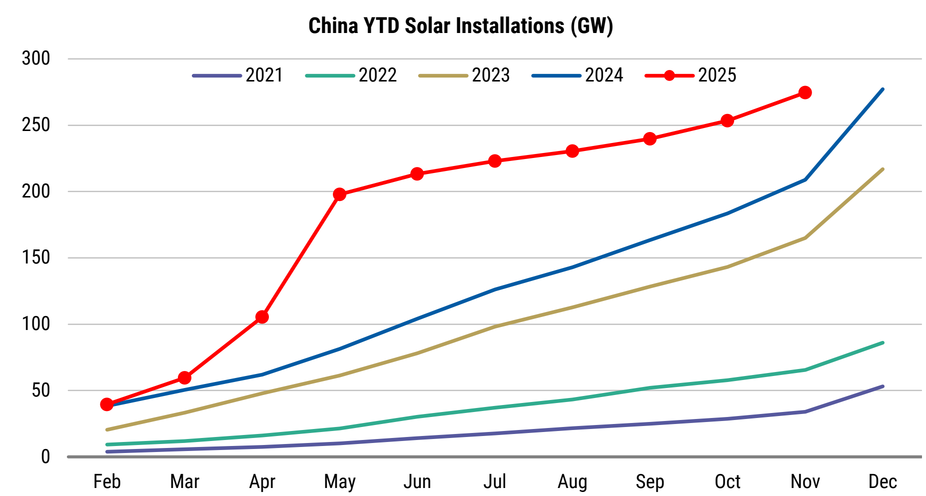
Source: LBMA

Exhibit 110: Total ETF Holdings



Source: Bloomberg

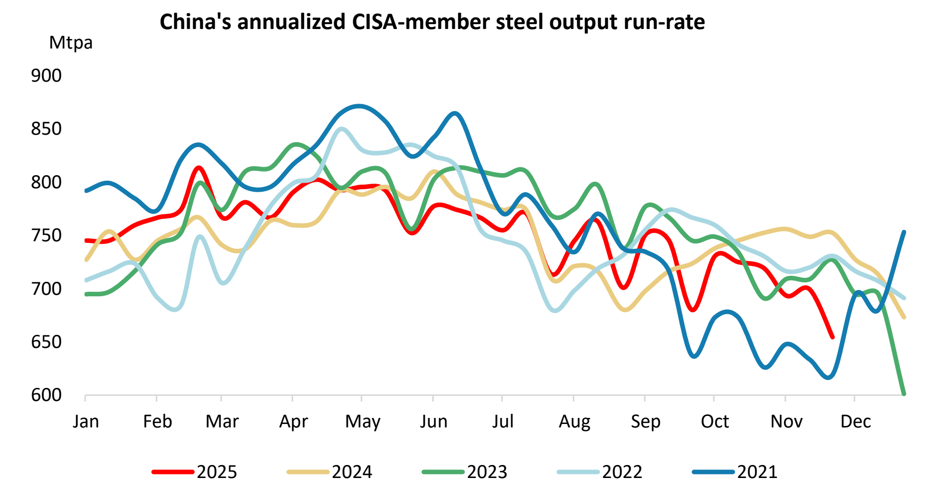
Exhibit 111: China Solar Installations



Source: Bloomberg

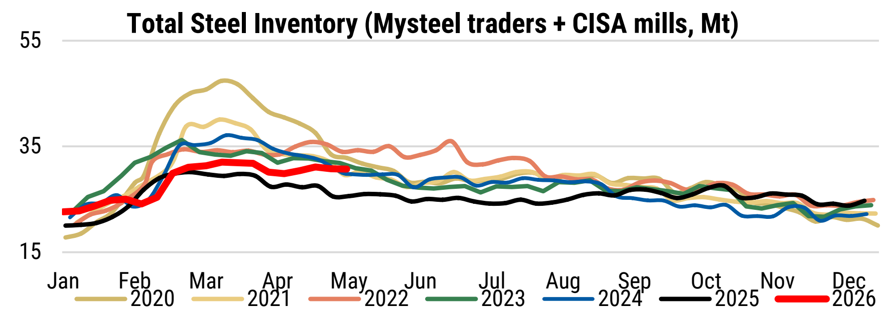
Iron Ore & Steel

Exhibit 112: China CISA Steel Production



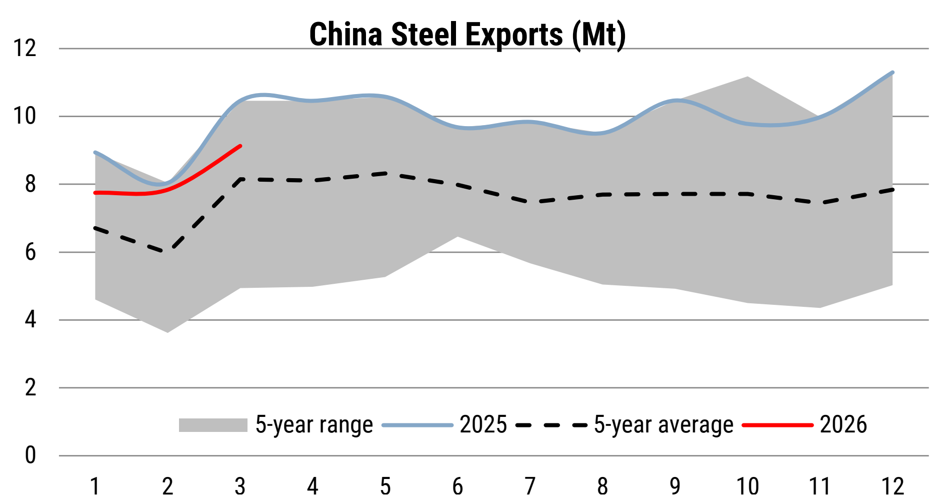
Source: CISA

Exhibit 113: China Steel Inventory



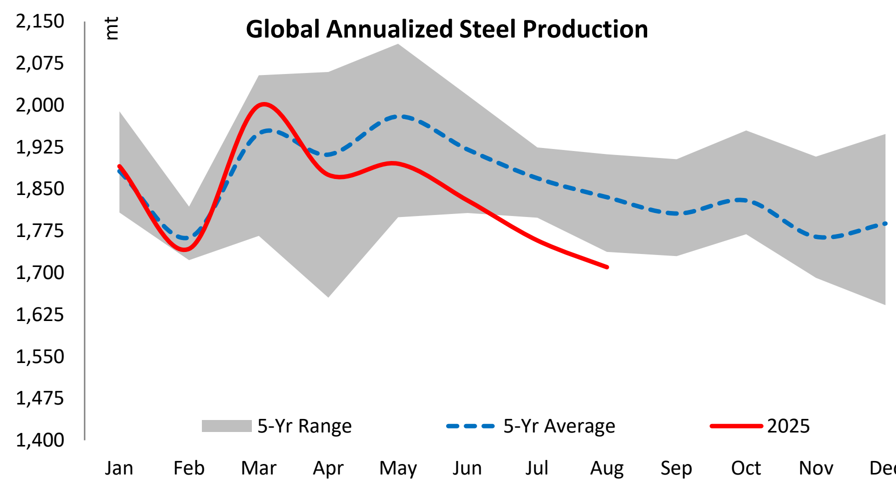
Source: Mysteel

Exhibit 114: China Steel Exports



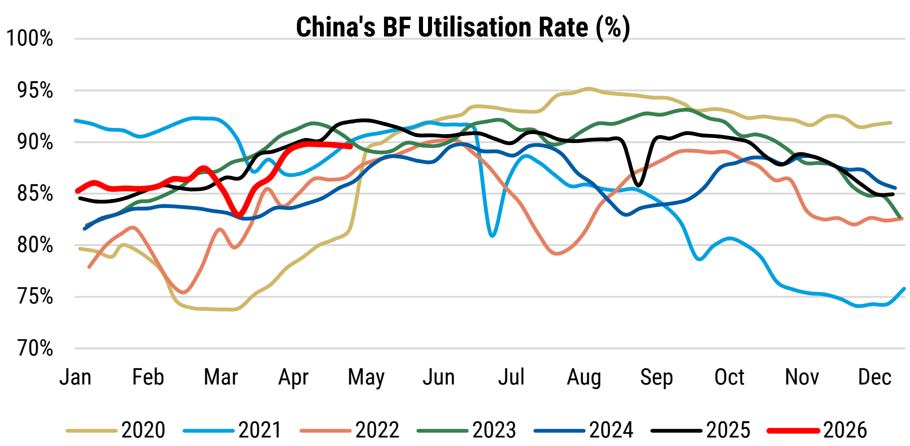
Source: Bloomberg

Exhibit 115: Global Steel Production



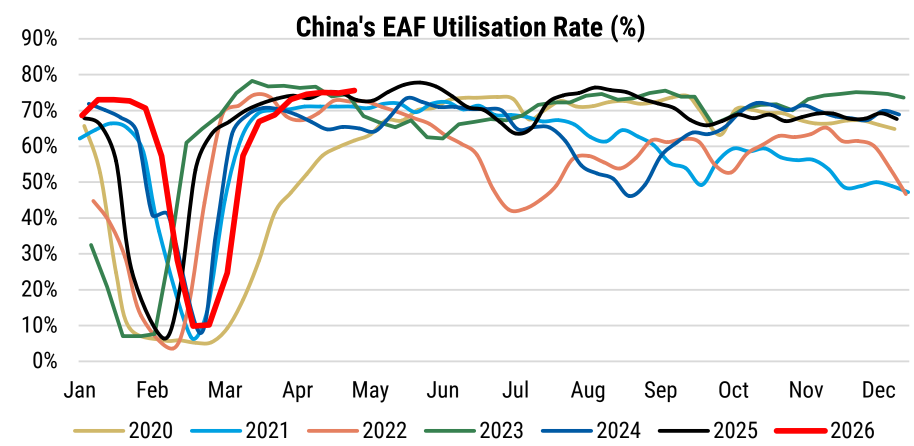
Source: WSA

Exhibit 116: China BF Utilisation Rate



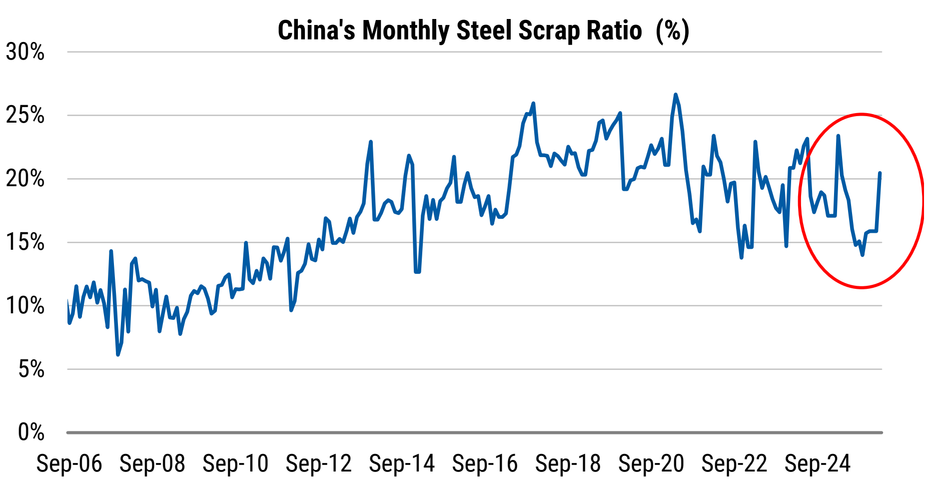
Source: Mysteel

Exhibit 117: China EAF Utilisation Rate



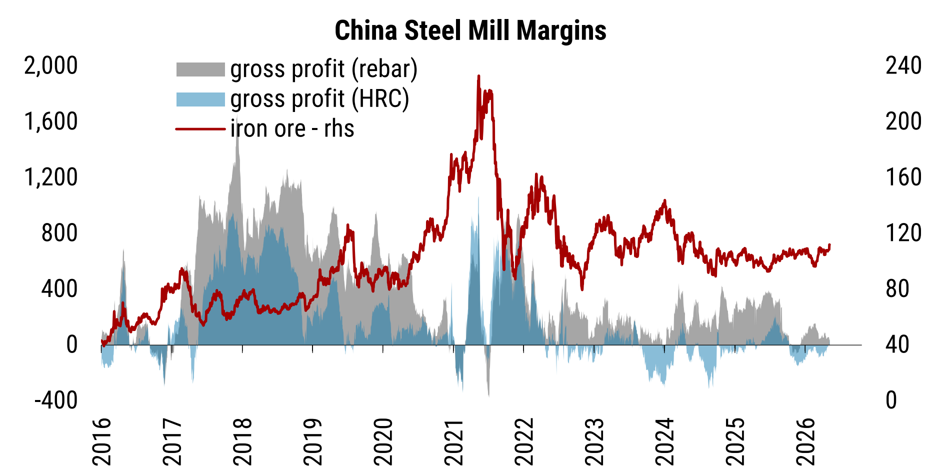
Source: Mysteel

Exhibit 118: China Steel Scrap Ratio



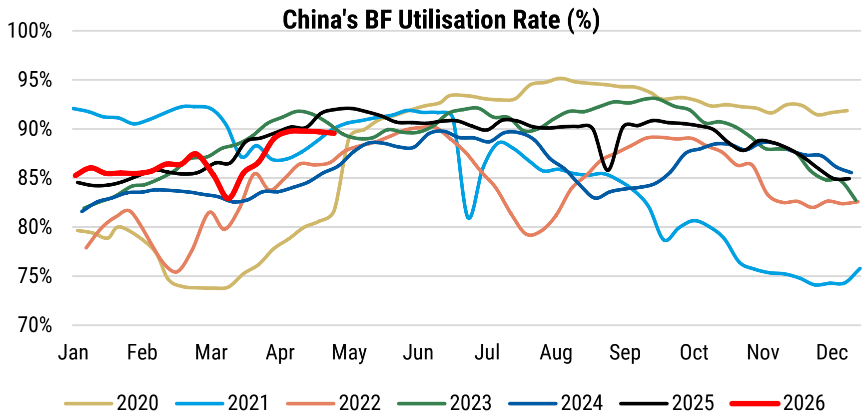
Source: Bloomberg

Exhibit 119: China Steel Mill Margin



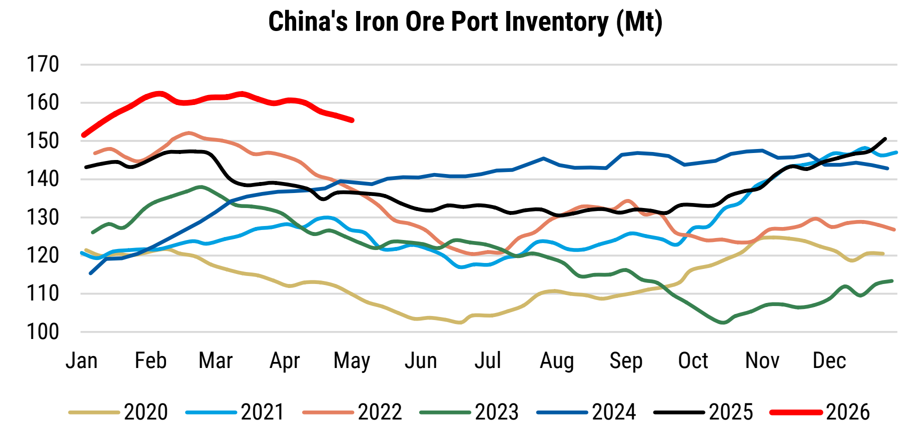
Source: Mysteel

Exhibit 120: China BF Utilisation



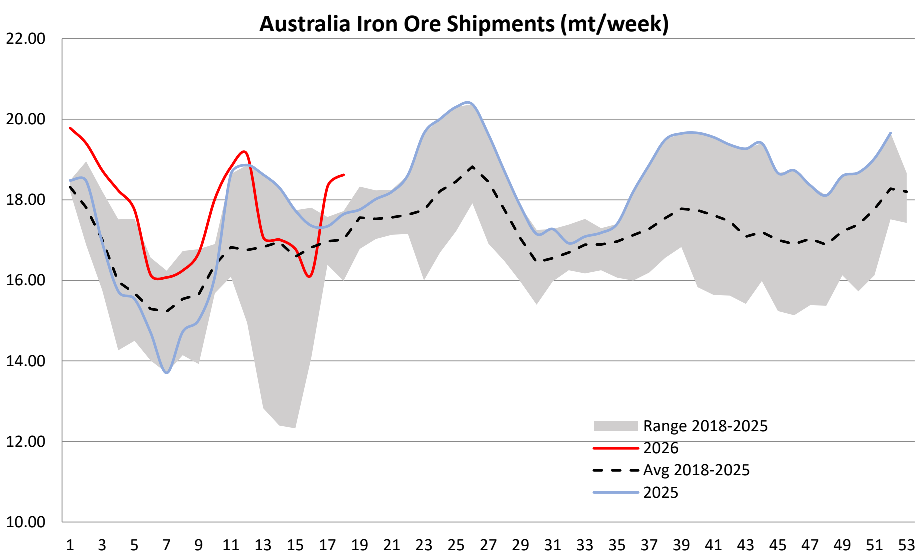
Source: Bloomberg

Exhibit 121: China Iron Ore Port Inventory



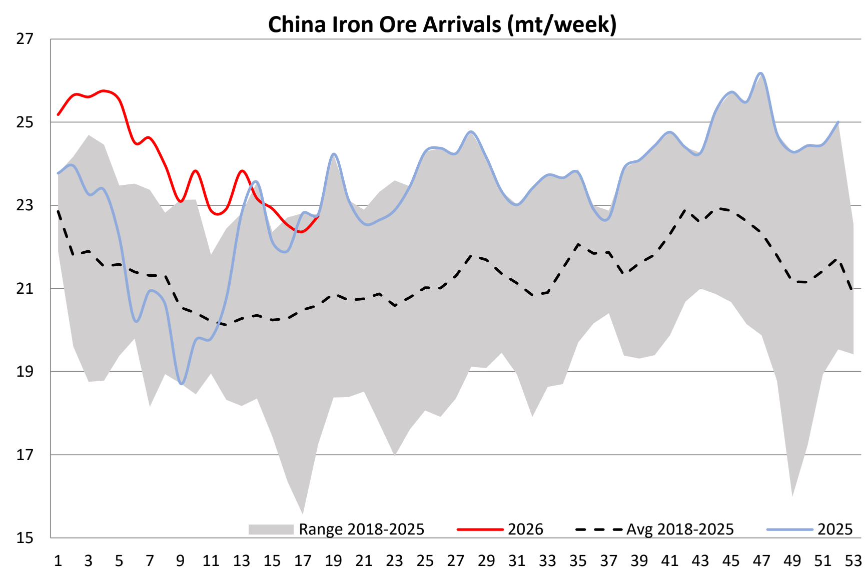
Source: Mysteel

Exhibit 122: Australia Iron Ore Shipments



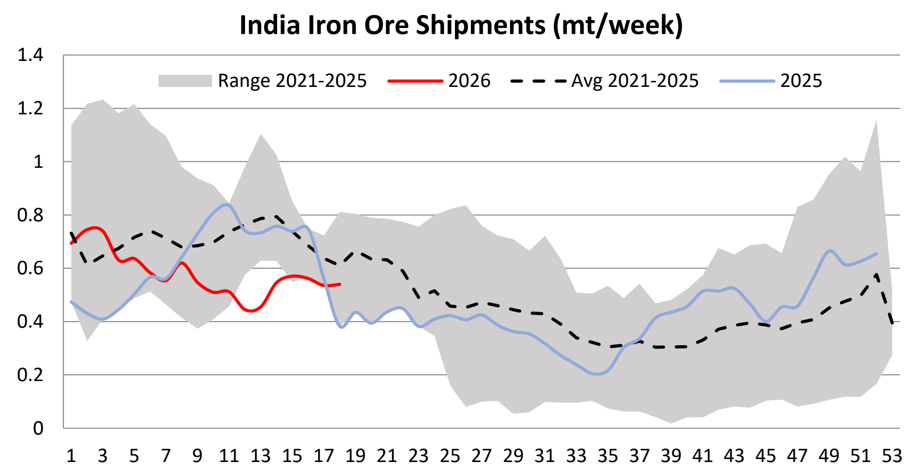
Source: Eikon

Exhibit 123: China Iron Ore Arrivals



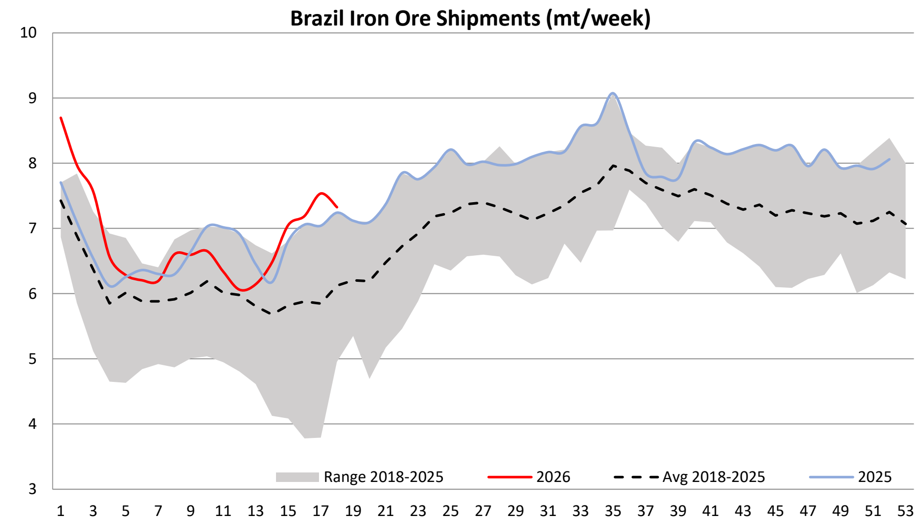
Source: Eikon

Exhibit 124: India Iron Ore Shipments



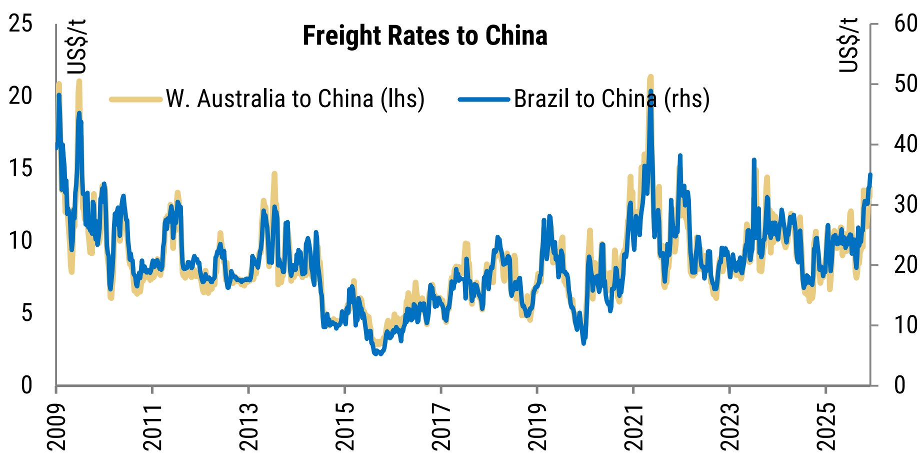
Source: Eikon

Exhibit 125: Brazil Iron Ore Shipments



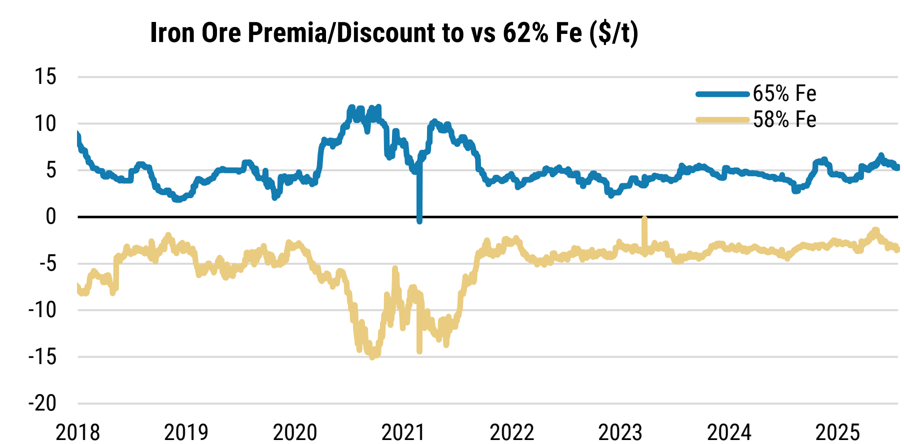
Source: Eikon

Exhibit 126: Freight Rates to China



Source: Bloomberg

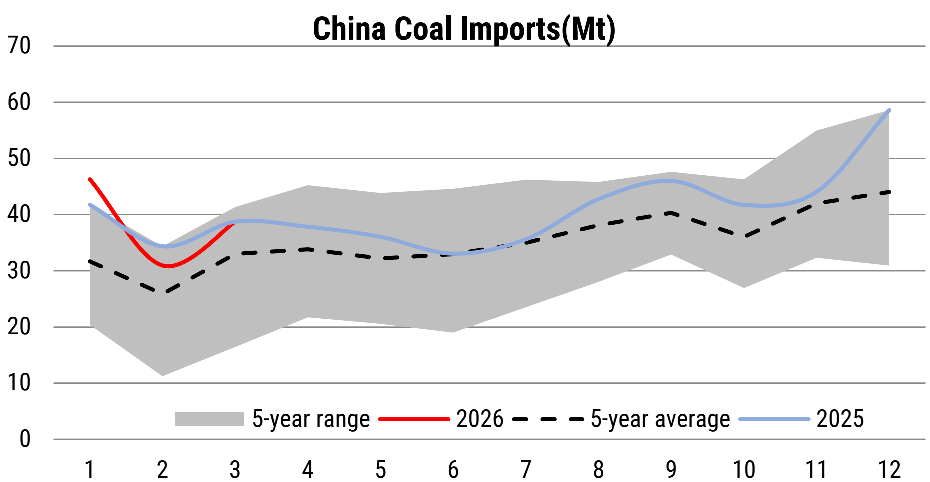
Exhibit 127: Iron Ore Premia/Discount



Source: Platts

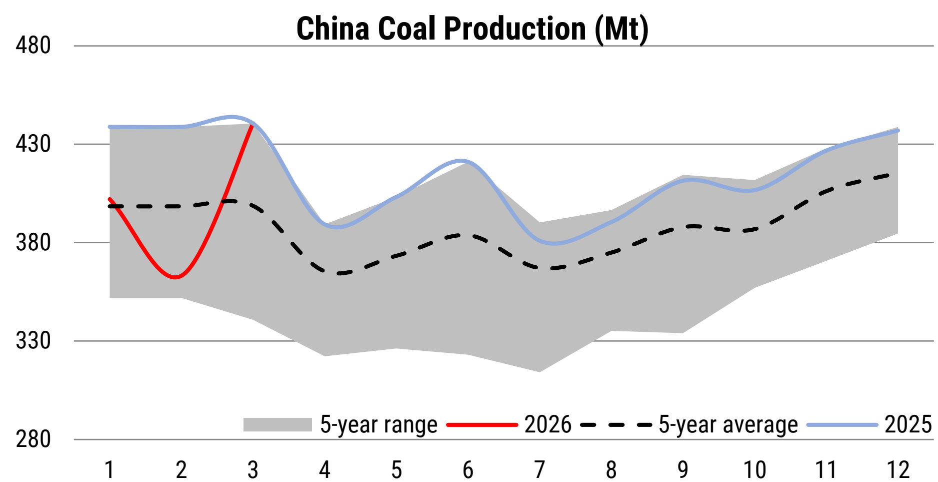
Coal

Exhibit 128: China Coal Imports



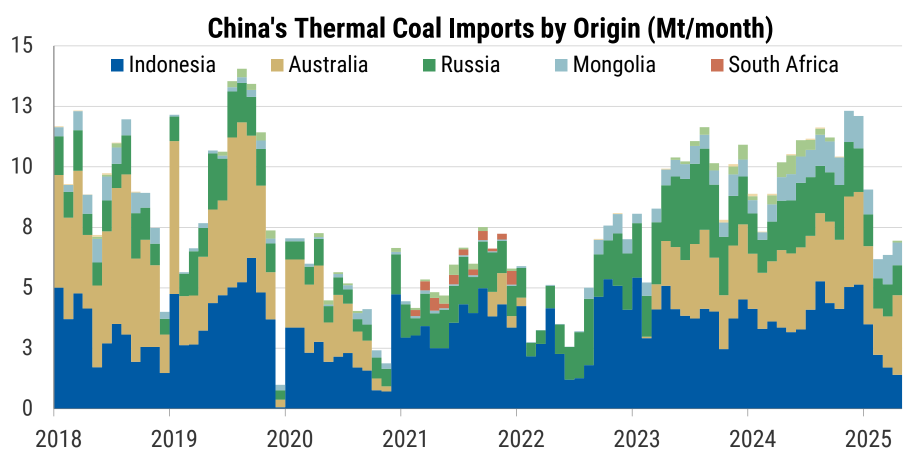
Source: Bloomberg

Exhibit 129: China Coal Production



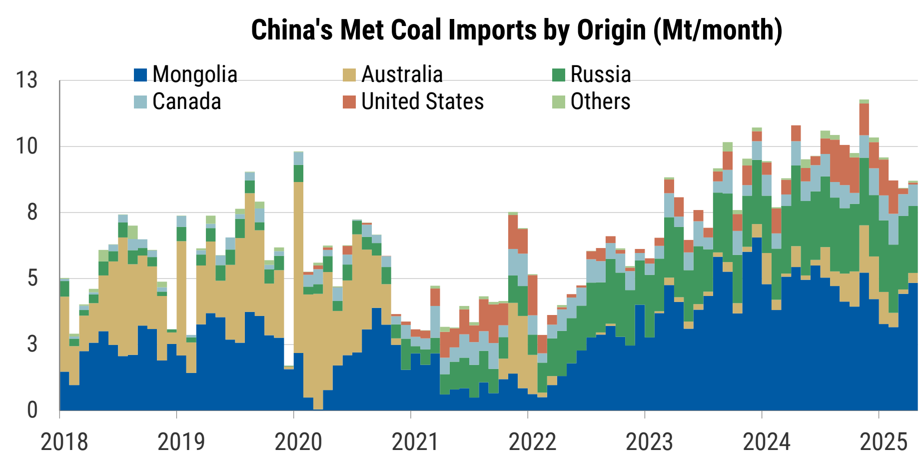
Source: Bloomberg

Exhibit 130: China Thermal Coal Imports



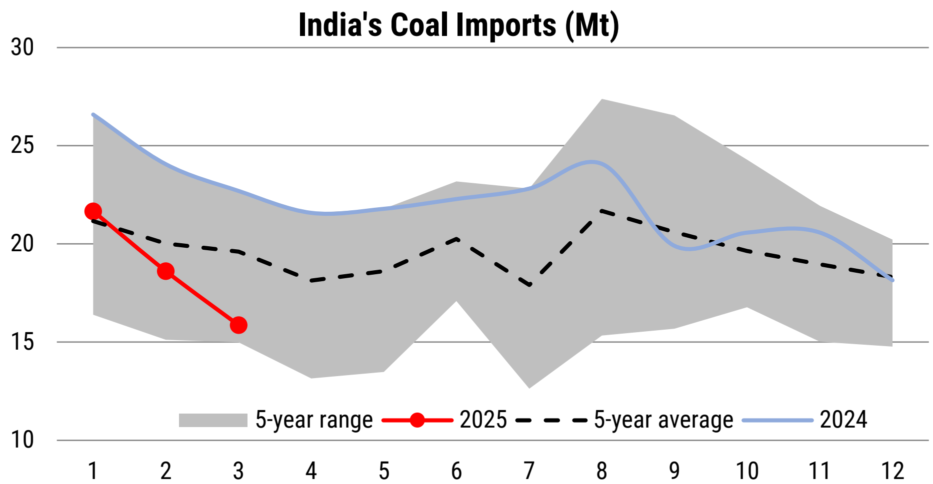
Source: McCloskey

Exhibit 131: China Met Coal Imports



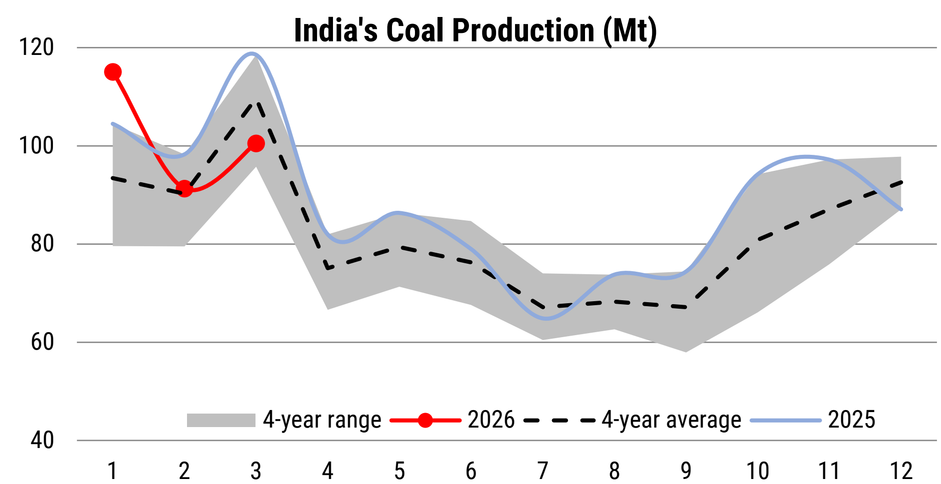
Source: McCloskey

Exhibit 132: India Coal Imports



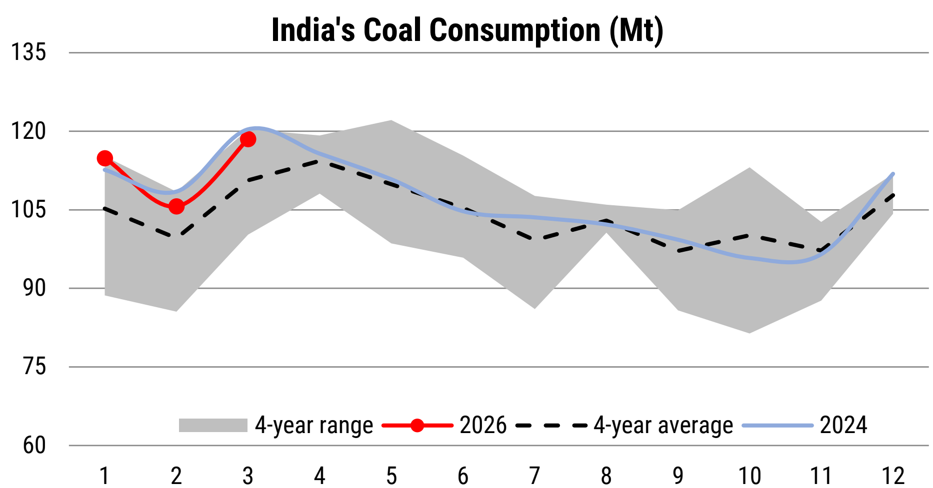
Source: McCloskey

Exhibit 133: India Coal Production



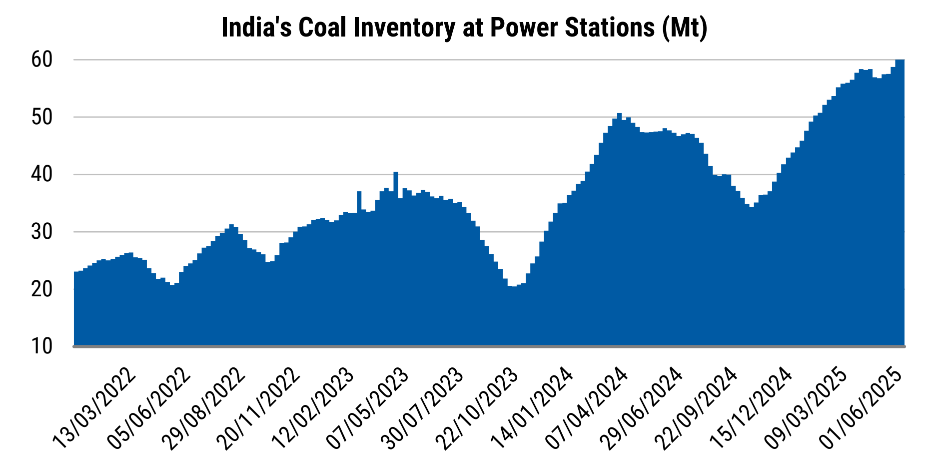
Source: Ministry of Coal, Government of India

Exhibit 134: India Coal Consumption



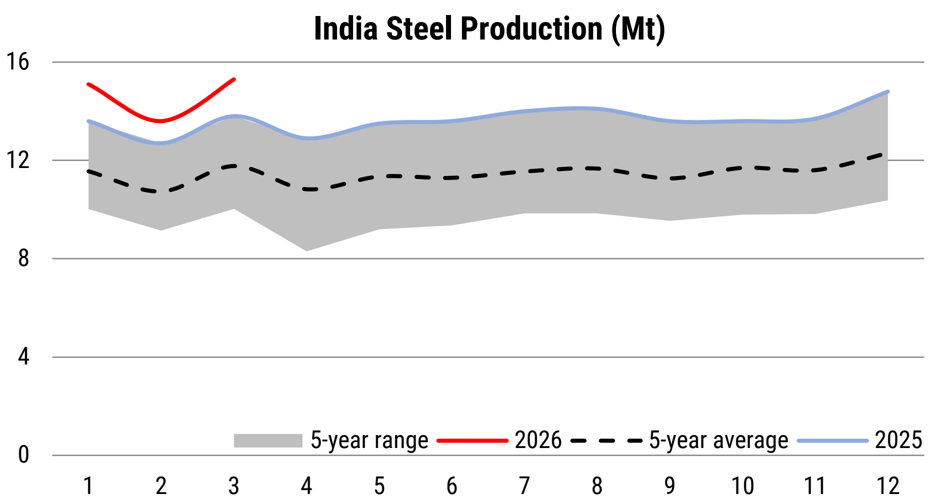
Source: Ministry of Coal, Government of India

Exhibit 135: India Coal Inventory at Power Station



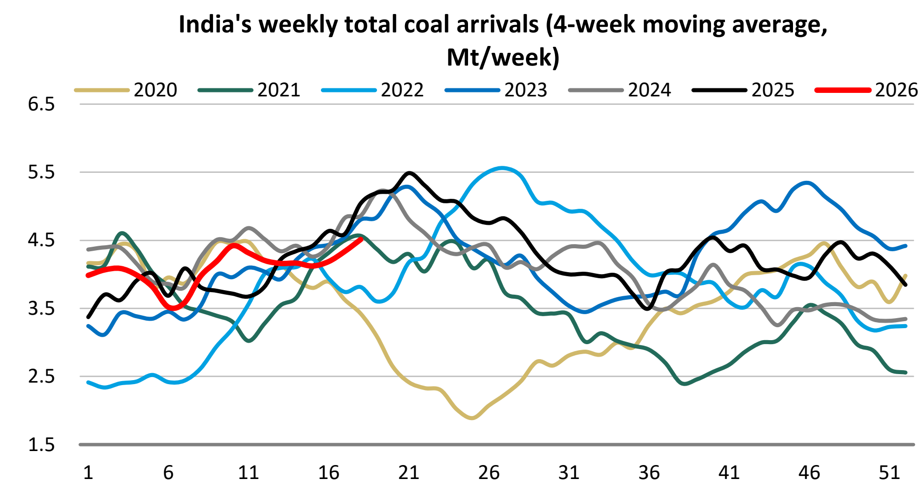
Source: McCloskey

Exhibit 136: India Steel Production



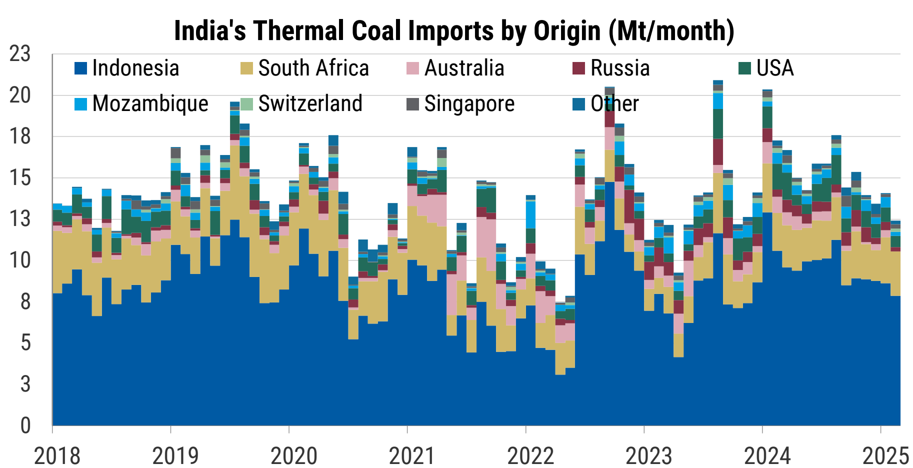
Source: Bloomberg

Exhibit 137: India Coal Arrivals



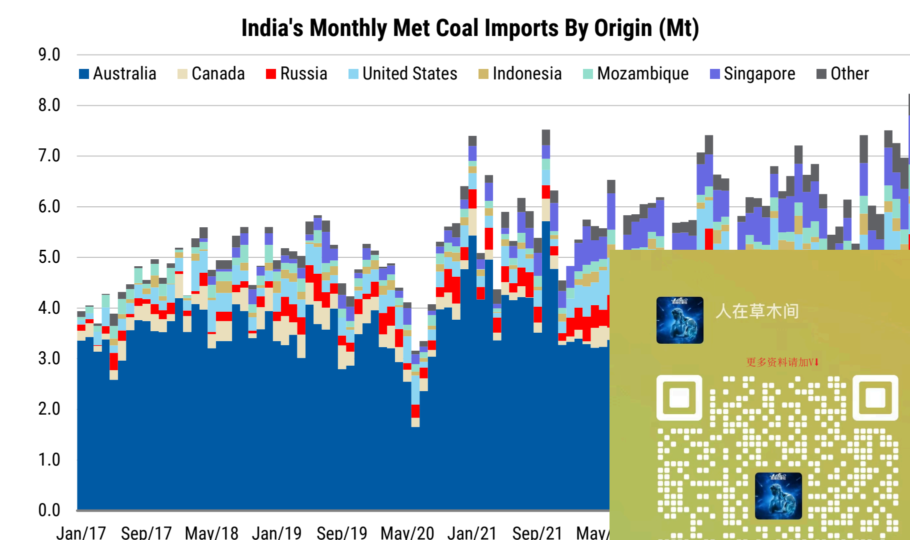
Source: Eikon

Exhibit 138: India Thermal Coal Imports



Source: McCloskey

Exhibit 139: India Met-Coal Imports



Source: McCloskey

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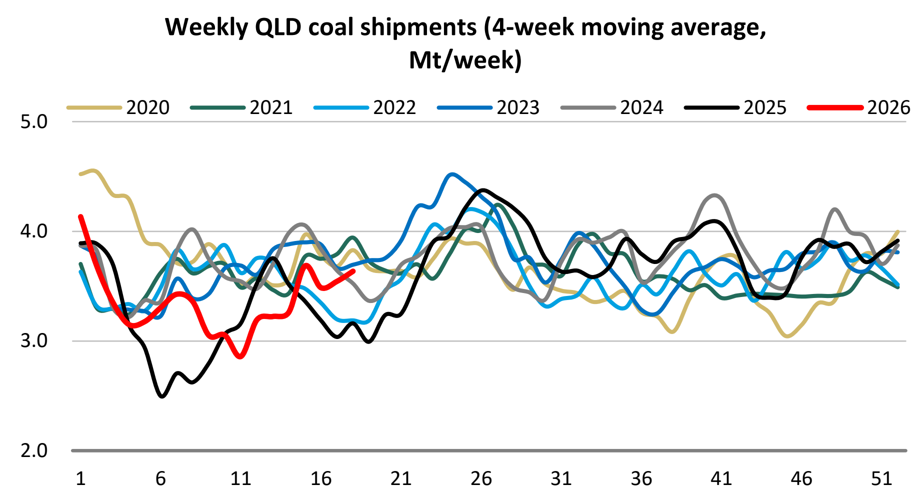
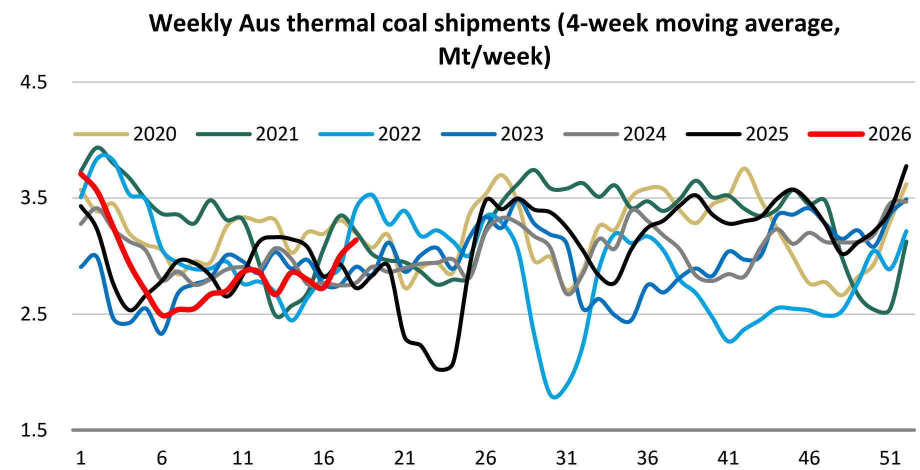
Exhibit 140: Queensland Coal Shipments



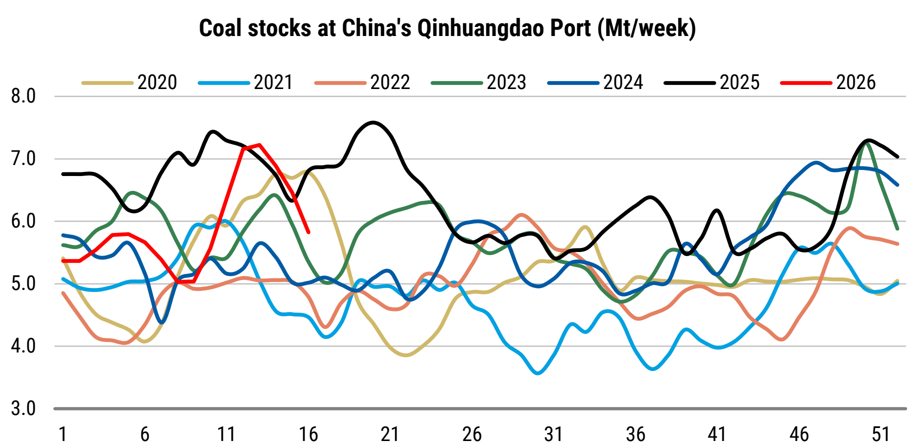
Source: Eikon

Exhibit 141: Australia Thermal Coal Shipments



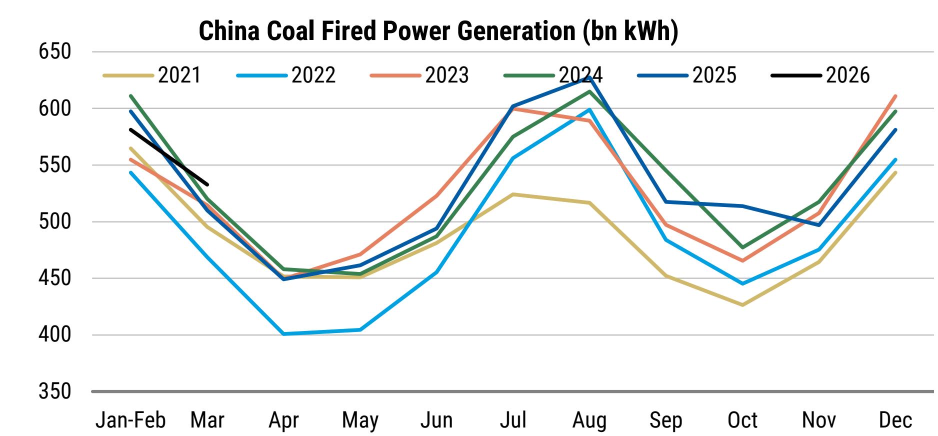
Source: Eikon

Exhibit 142: Coal Stocks at Qinhuangdao Port



Source: Bloomberg

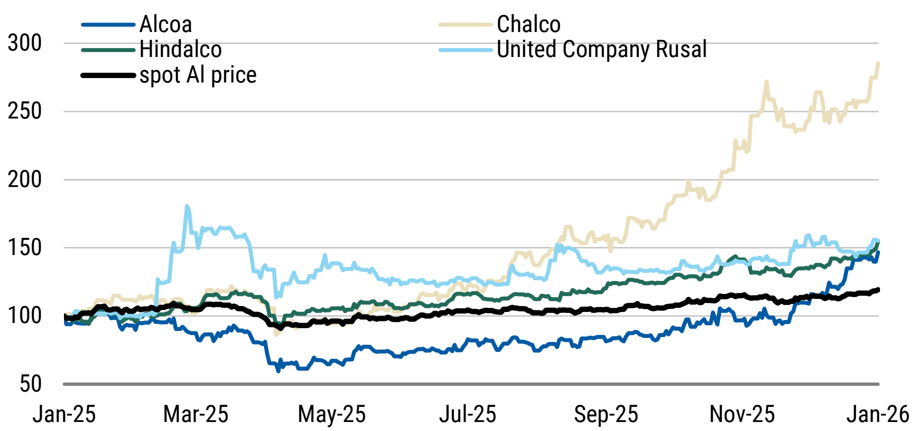
Exhibit 143: China Coal-fired Power Generation



Source: Bloomberg

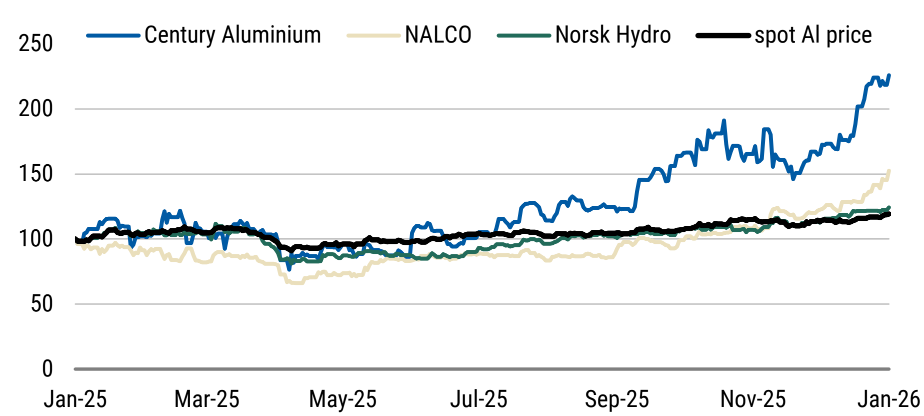
Equity vs. Commodity – Relative One-Year Performance

Exhibit 144: Aluminium (large cap)



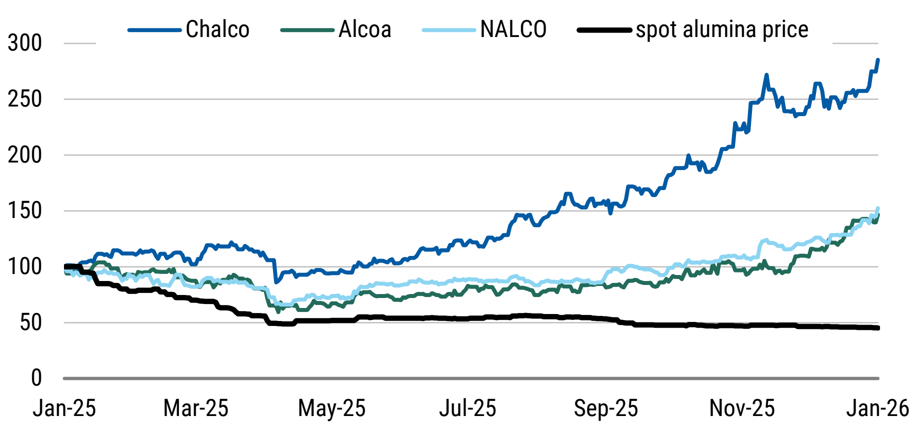
Source: Bloomberg, Morgan Stanley Research

Exhibit145: Aluminium (small-medium cap)



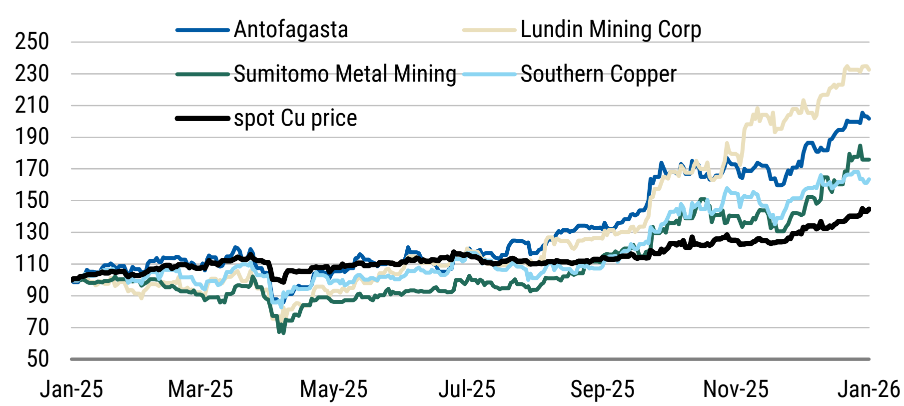
Source: Bloomberg, Morgan Stanley Research

Exhibit146: Alumina



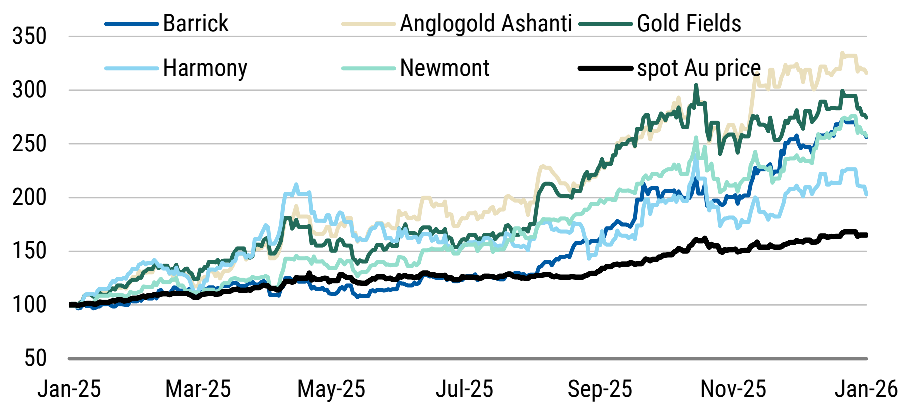
Source: Bloomberg, Morgan Stanley Research

Exhibit 147: Copper



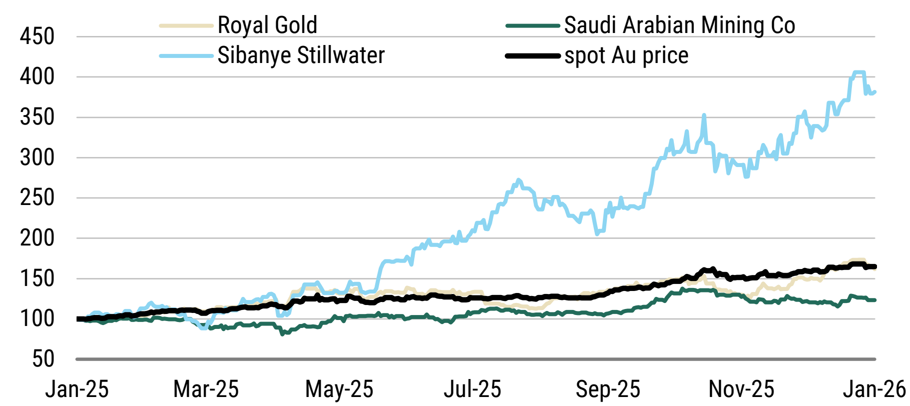
Source: Bloomberg, Morgan Stanley Research

Exhibit152: Gold (large cap)



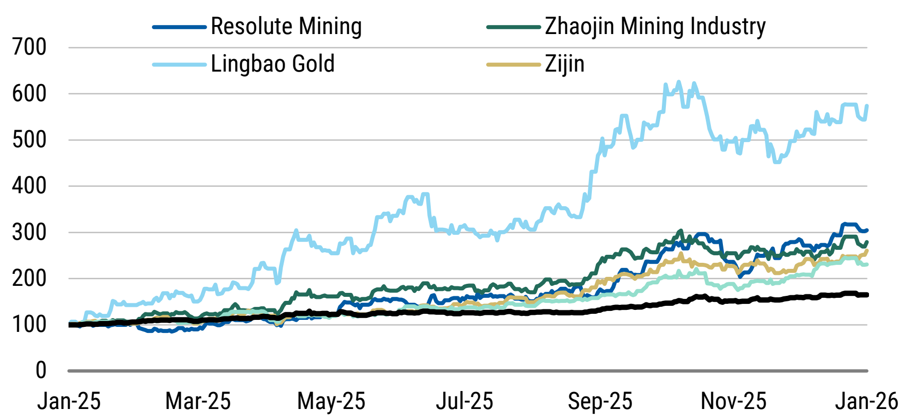
Source: Bloomberg, Morgan Stanley Research

Exhibit153: Gold (small/medium cap)



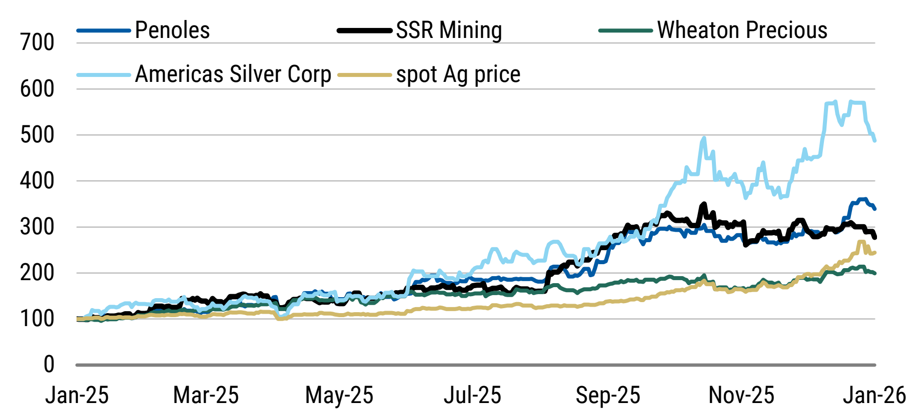
Source: Bloomberg, Morgan Stanley Research

Exhibit154: Gold (small / medium cap)



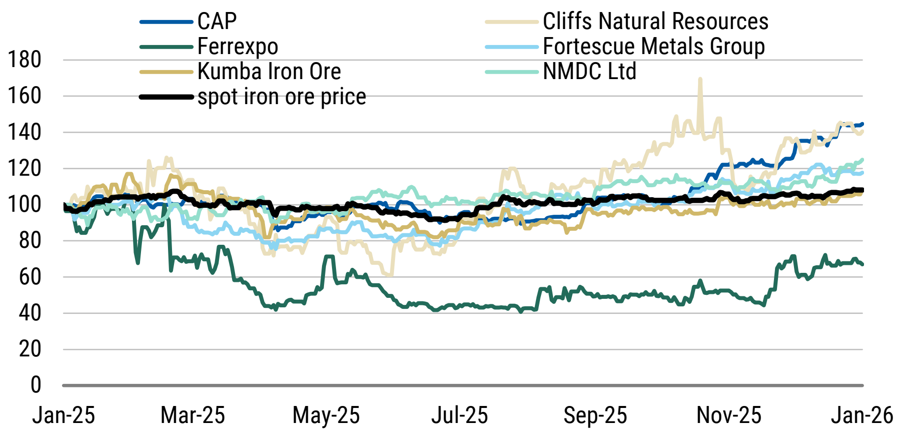
Source: Bloomberg, Morgan Stanley Research

Exhibit155: Silver



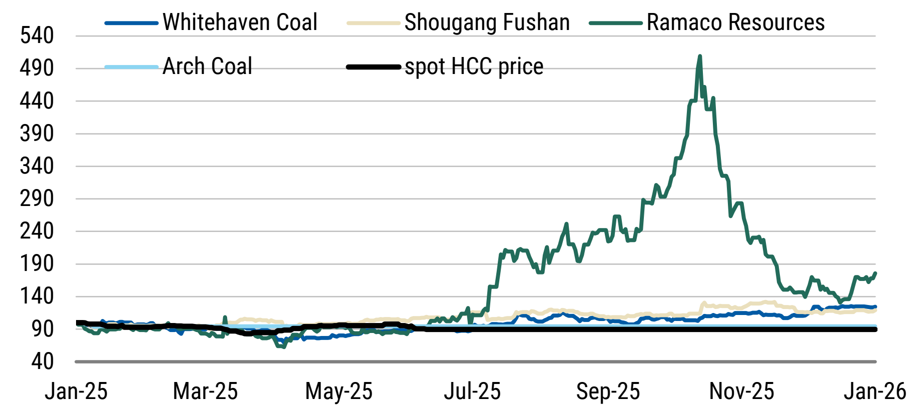
Source: Bloomberg, Morgan Stanley Research

Exhibit156: Iron ore



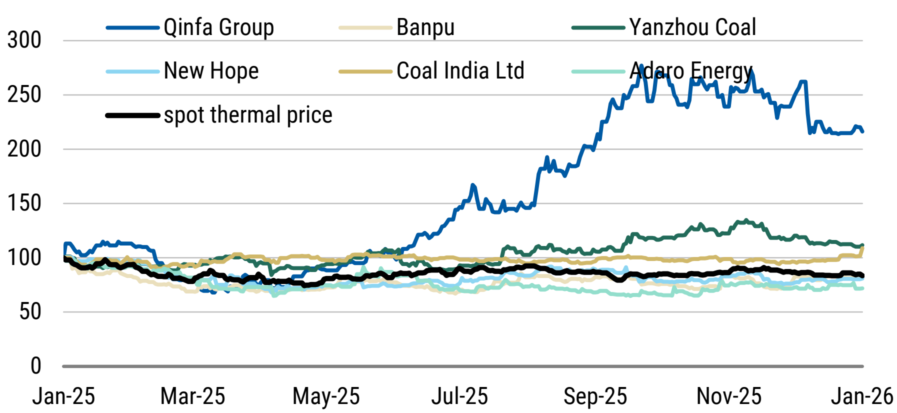
Source: Bloomberg, Morgan Stanley Research

Exhibit157: Metallurgical coal



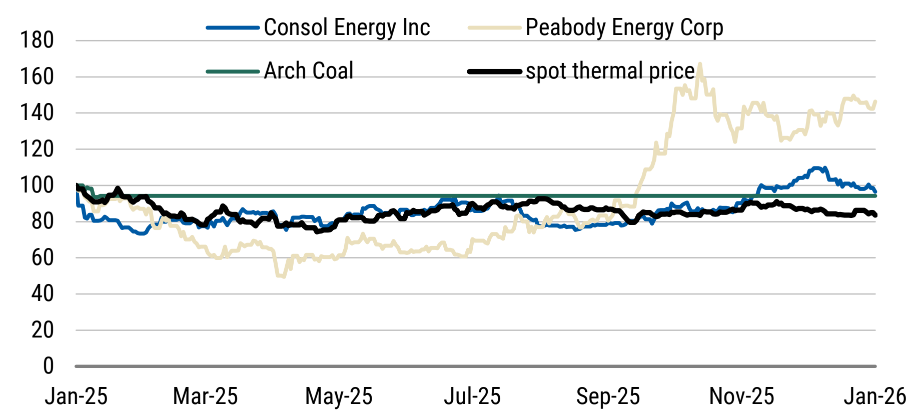
Source: Bloomberg, Morgan Stanley Research

Exhibit158: Thermal coal – Asia



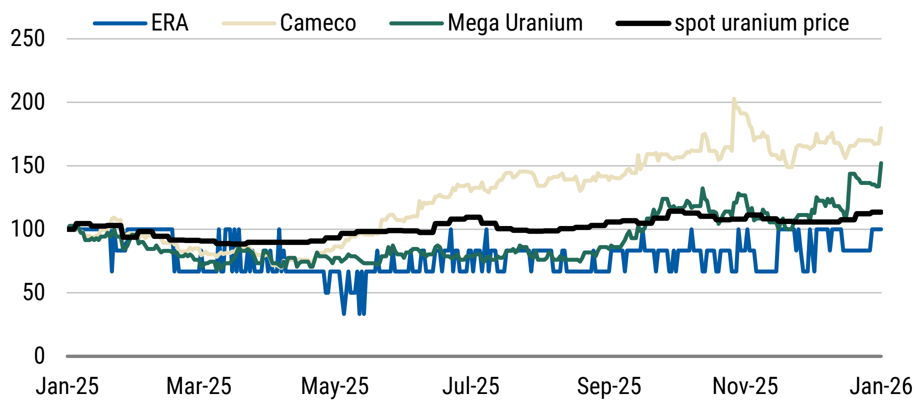
Source: Bloomberg, Morgan Stanley Research

Exhibit 159: Thermal coal – North America



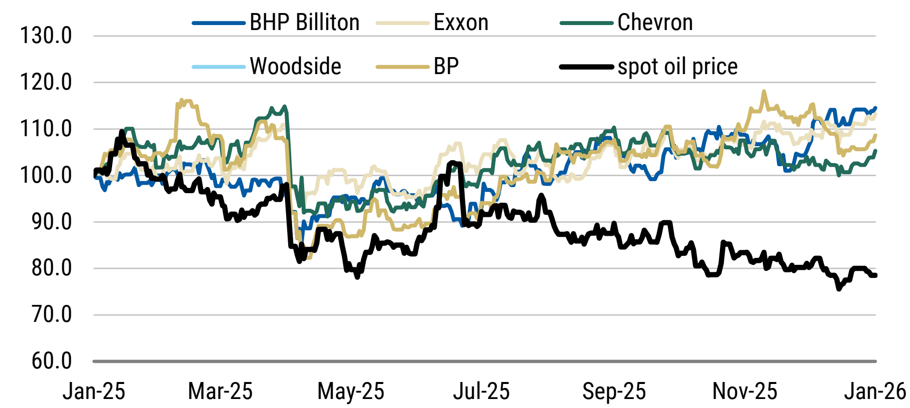
Source: Bloomberg, Morgan Stanley Research

Exhibit160: Uranium



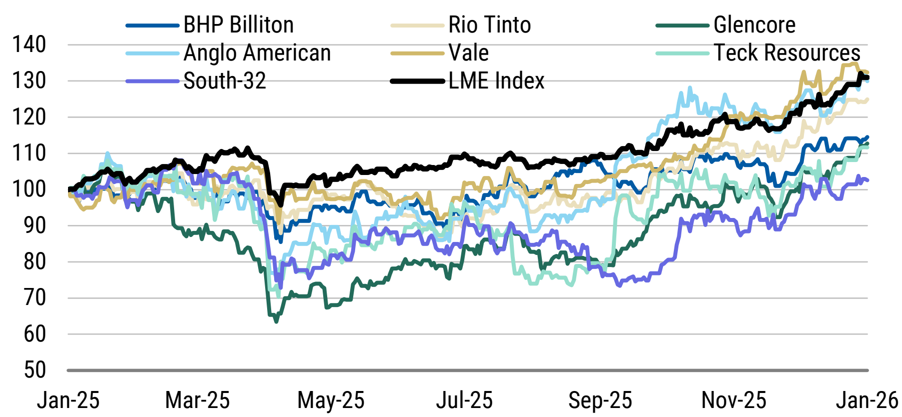
Source: Bloomberg, Morgan Stanley Research

Exhibit161: Oil



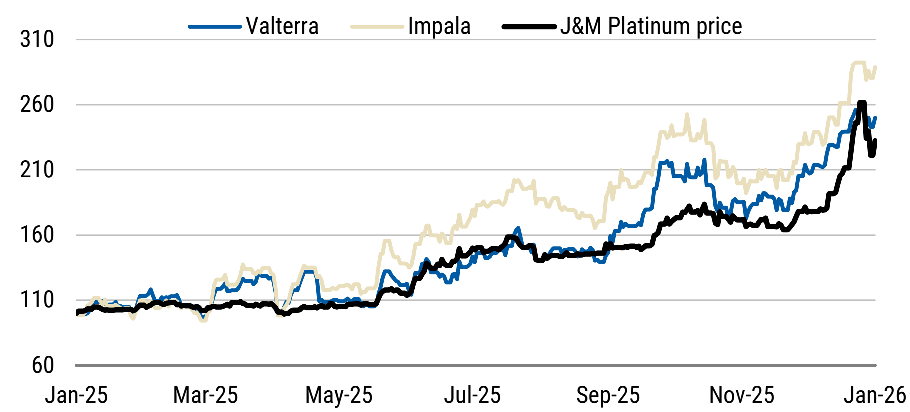
Source: Bloomberg, Morgan Stanley Research

Exhibit162: Diversifieds



Source: Bloomberg, Morgan Stanley Research

Exhibit 163: PGM



Source: Bloomberg

Key Morgan Stanley Forecasts

Exhibit 164: Base metals price forecasts

Period	Aluminium			Copper			Nickel			Zinc			Lead		
	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear
		US$/lb			US$/lb			US$/lb			US$/lb			US$/lb	
2026e	1.77	**1.54**	1.18	6.40	**5.58**	4.34	8.98	**7.58**	6.74	1.52	**1.37**	1.17	0.98	**0.85**	0.76
2027e	1.78	**1.48**	1.18	6.67	**5.56**	4.56	9.36	**7.48**	5.99	1.59	**1.33**	1.13	1.07	**0.95**	0.86
2028e	1.71	**1.43**	1.17	6.26	**5.22**	4.43	9.73	**7.48**	5.61	1.64	**1.32**	1.12	1.20	**1.00**	0.90
2029e	1.81	**1.45**	1.23	6.78	**5.22**	4.69	10.02	**7.71**	5.40	1.64	**1.32**	1.18	1.22	**1.01**	0.91
2030e	1.81	**1.45**	1.23	7.04	**5.22**	4.69	10.61	**8.16**	5.72	1.70	**1.36**	1.22	1.36	**1.13**	1.02
2031e	1.70	**1.36**	1.16	7.04	**5.22**	4.69	10.61	**8.16**	5.72	1.63	**1.36**	1.16	1.36	**1.13**	1.02
LT nom.	1.50	**1.30**	1.17	6.57	**5.05**	4.30	11.11	**8.54**	5.98	1.61	**1.46**	1.17	1.29	**1.17**	0.94

Source: Morgan Stanley Commodities Research estimates (e)

Exhibit 165: Precious metals price forecasts

Period	Gold			Silver			Platinum			Palladium			Rhodium		
	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear
		US$/oz			US$/oz			US$/oz			US$/oz			US$/oz	
2026e	6,026	**4,916**	4,176	100.21	**73.79**	52.64	2,282	**1,994**	1,706	1,693	**1,483**	1,273	11,718	**10,214**	8,711
2027e	5,940	**4,950**	4,208	99.00	**70.71**	56.57	2,392	**1,993**	1,594	1,860	**1,431**	1,002	18,397	**10,221**	7,154
2028e	5,625	**4,500**	3,825	90.00	**64.29**	51.43	2,656	**2,043**	1,839	1,575	**1,312**	919	31,436	**10,479**	7,335
2029e	5,200	**4,000**	3,400	80.00	**57.14**	45.71	2,723	**2,095**	1,885	1,614	**1,345**	942	24,226	**8,075**	5,653
2030e	5,400	**4,000**	3,400	77.14	**57.14**	48.57	2,792	**2,148**	1,933	1,655	**1,379**	966	24,837	**8,279**	5,795
2031e	5,400	**4,000**	3,400	77.14	**57.14**	48.57	2,863	**2,202**	1,982	1,697	**1,414**	1,131	25,464	**8,488**	5,942
LT nom.	4,738	**2,871**	2,441	68.19	**35.89**	30.51	3,231	**2,228**	1,894	1,723	**1,436**	1,149	25,842	**8,614**	6,030

Source: Morgan Stanley Commodities Research estimates (e)

Exhibit 166: Bulks price forecasts

Period	Iron Ore (spot)			Hard Coking Coal (spot)			Thermal Coal			Manganese ore (44%)			Lithium (fob LatAm)			Uranium (spot)		
	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear	Bull	Base	Bear
		US$/t			US$/t			US$/t			US$/lb			US$/lb			US$/lb	
2026e	115	**100**	89	266	**231**	197	193	**151**	115	6.3	**5.4**	4.8	25,554	**21,279**	16,149	111	**93**	72
2027e	125	**96**	77	294	**226**	181	179	**138**	110	6.6	**5.5**	4.4	28,880	**18,050**	10,830	131	**94**	66
2028e	132	**98**	73	289	**214**	160	163	**125**	100	6.7	**5.6**	4.5	30,400	**15,200**	9,120	105	**70**	53
2029e	135	**100**	75	290	**215**	161	169	**130**	98	6.9	**5.7**	4.6	28,000	**14,000**	9,800	105	**70**	56
2030e	135	**100**	75	290	**215**	161	176	**135**	101	7.0	**5.8**	4.7	30,000	**15,000**	10,500	105	**70**	56
2031e	135	**100**	75	290	**215**	161	176	**135**	101	7.0	**5.8**	4.7	32,000	**16,000**	11,200	105	**70**	56
LT nom.	150	**103**	78	296	**219**	165	179	**138**	103	6.6	**5.5**	4.4	33,996	**16,998**	10,199	105	**70**	56

Source: Morgan Stanley Commodities Research estimates (e)

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	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
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Equal-weight/Hold	1568	43%	358	39%	23%	715	44%
Not-Rated/Hold	4	0%	0	0%	0%	1	0%
Underweight/Sell	555	15%	84	9%	15%	202	12%
Total	3,673		909			1627	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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