Country	China
Sector	Steel and ferrous rolled products
Coverage	4 companies, 12.8% of crude steel output
Reporting currency	Chinese yuan

China steel: maintenance spending drives valuations, and all four companies fail the quality screen

A series of administrative decisions sets Chinese steel prices. The regulator controls three of the four components of the price per tonne: output, access to export markets and the hurdle for adding capacity. Only the cost of raw materials is market-determined, and four mining companies controlling 69% of seaborne trade set that price. Forecasting Chinese steel therefore means forecasting policy. The relevant evidence is the policy track record: targets with named parties responsible achieve 80–113% of the announced level, while targets for industry structure achieve 0–72%. The central question in this report is how the dominant force shapes the pricing regime. With a concentration index of 327 and utilisation of 79.7%, a 10% price increase would cost producers volume rather than add revenue. The marginal producer's margin has therefore stayed at $3.9 per tonne for a fifth consecutive year.

Required maintenance investment explains the largest range of valuation outcomes for all four stocks. A recovery in the marginal producer's margin ranks below it in every case: the downside sensitivity to the cycle is ¥0.330, ¥0.297, ¥0.508 and ¥0.342 per share, respectively, against ¥1.384–11.513 for maintenance investment. The required spending ranges from ¥180 to ¥393 per tonne, against actual 2025 spending of ¥70–589. This difference, rather than a margin recovery, explains the gap between valuation and price for each company. For an investor holding a basket of Chinese steelmakers, diversification within the sector offers little protection: the same input dominates all four valuations, and changes in it move them in the same direction.

The quality hurdle was set before stock selection and consists of four tests. All four companies fail it, leaving the best-ideas list empty. In a year that was better for the industry than the current one, three of the four earned a return on invested capital below their own required return: 5.0% versus 8.20%, 4.7% versus 8.37%, and 1.7% versus 15.94%. The only company with a positive spread, +4.86 pp, fails the maintenance spending test at ¥70 per tonne against a ¥251 requirement. It also falls 1.20 percentage points short of returning one third of earnings to shareholders: 32.13% versus a 33.33% hurdle, a dividend shortfall of ¥122m. The report specifies the level at which each company would pass. Hunan Valin is the closest, with a return shortfall of 3.67 percentage points.

Steel has shifted from a construction-cycle industry to a manufacturing industry in four years: manufacturing's share of demand rose from 42% to 50%, while construction starts fell 23.4%. Holding a Chinese steelmaker as a bet on a property recovery reflects the industry's former demand mix. The industry remains in decline: crude steel output fell 72.0m tonnes over five years, and the sales margin exceeded 2% only in 2021. Exports absorbed excess supply for five years, but licensing from 1 January 2026 is closing that outlet. The exit of weaker producers offers little prospect of a margin recovery: market forces have driven out no major producer in twenty years.

The four stock calls are SELL Baoshan at a target of ¥5.18 versus a market price of ¥5.76, SELL Hunan Valin at ¥2.85 versus ¥3.73, BUY CITIC Pacific Special Steel at ¥17.49 versus ¥13.89, and SELL HBIS at minus ¥2.11 versus ¥2.13. The sole BUY fails the quality hurdle and is a special situation rather than a best idea. Its mechanism is accumulated underinvestment of ¥14,146m, or ¥2.80 per share, and its deadline is the 2026 cash flow statement. The report publishes HBIS's negative price target as calculated. No admissible input produces a positive target. The model's minus 197.4% total return is an arithmetic result; limited liability for an ordinary shareholder puts the floor at minus 98.1%, the loss of the full share price and no more. The negative target indicates that no positive residual equity value remains.

Table 1. Coverage: one BUY, three SELLs and no best ideas. Each of the four stocks fails the quality hurdle, which requires passing all four tests.

Company	Price	Valuation	Target	Total return	Rating	Disclosure class	Cost rank	Horizon	Controlling owner
CITIC Pacific Special Steel 000708	13.89	16.68	17.49	+30.6%	BUY	Partly reconstructed	2 of 4	12 months	Central state group CITIC, 75.05%
Baoshan 600019	5.76	5.06	5.18	−4.9%	SELL	Disclosed	4 of 4	12 months	Central state owner, 44.20%
Hunan Valin 000932	3.73	2.78	2.85	−19.4%	SELL	Partly reconstructed	3 of 4	12 months	Hunan Province, 45.76%
HBIS 000709	2.13	−1.79	−2.11	−197.4% (floor −98.1%)	SELL	Fully reconstructed	1 of 4	12 months	Hebei Province, 63.88%

Source: research model, run on 17.08.2026; prices as of 07.08.2026. The hurdle H is the required return for the same model, currency and date, at 8.74%, 8.20%, 8.37% and 15.94%. The width B of the neutral band is 10 pp. A stock must pass all four quality tests. Section 12 defines the disclosure class, which limits the strength of the conclusion. ‘Partly reconstructed’ and ‘fully reconstructed’ indicate the extent of reconstruction.

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Part II. The market

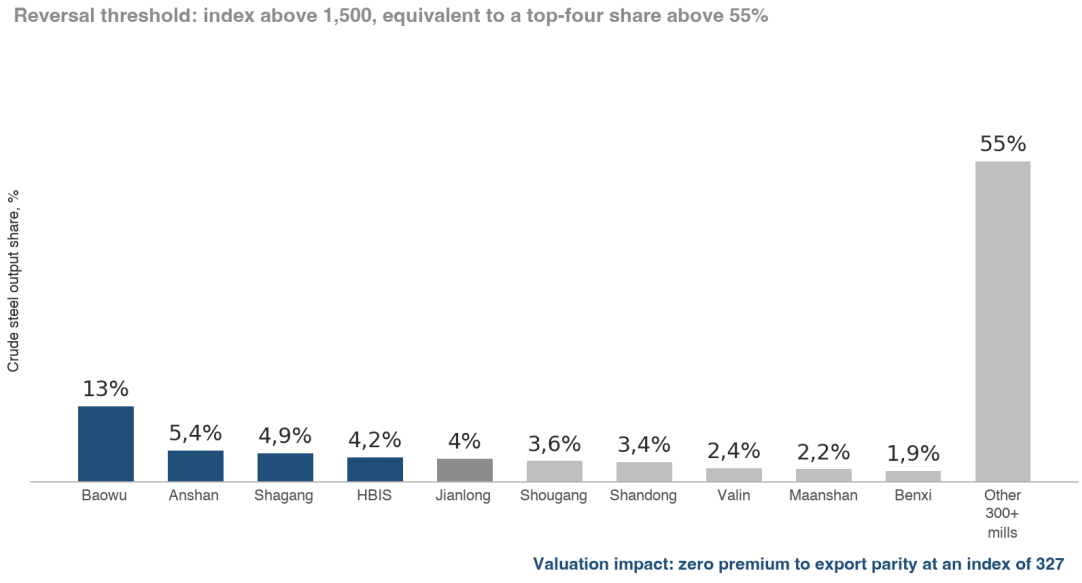
1. Market boundaries: thirty-one equal sellers in a declining market that nobody exits

Analytical basis: concentration, a standalone framework in the register with two required exhibits. Industry life cycle: emergence, growth, shakeout, maturity and decline.

This report covers ferrous rolled products made and sold within mainland China. The removal of export tax rebates and introduction of licensing separate it from the global market (Section 3). The threat of substitutes from adjacent materials is weak: electric arc furnaces have accounted for 10.2% for five consecutive years, while aluminium and composites replace steel only at the margins of the product range, where the finished product rather than the rolling process sets the price. Substitution within the industry matters more. A different steelmaking route changes the cost base for the same seller and customer. Section 5 examines whether investment in that route is viable.

Within this market, the concentration index implies thirty-one equally powerful sellers, while the actual count runs into hundreds of mills. The distribution reflects how the industry was built. Provinces built capacity for their own needs, locating mills where jobs and tax revenue were needed rather than at logistics hubs. The resulting fragmentation has no parallel in any other large steelmaking country: no single seller can influence prices. The largest group makes 13.0% of crude steel and the top four make 27.5%. Hundreds of other mills account for the remaining 72.5%. The sum of squared shares gives an index of 327, against 1,500 for an unconcentrated market and 2,500 for a highly concentrated one (Figure 1).

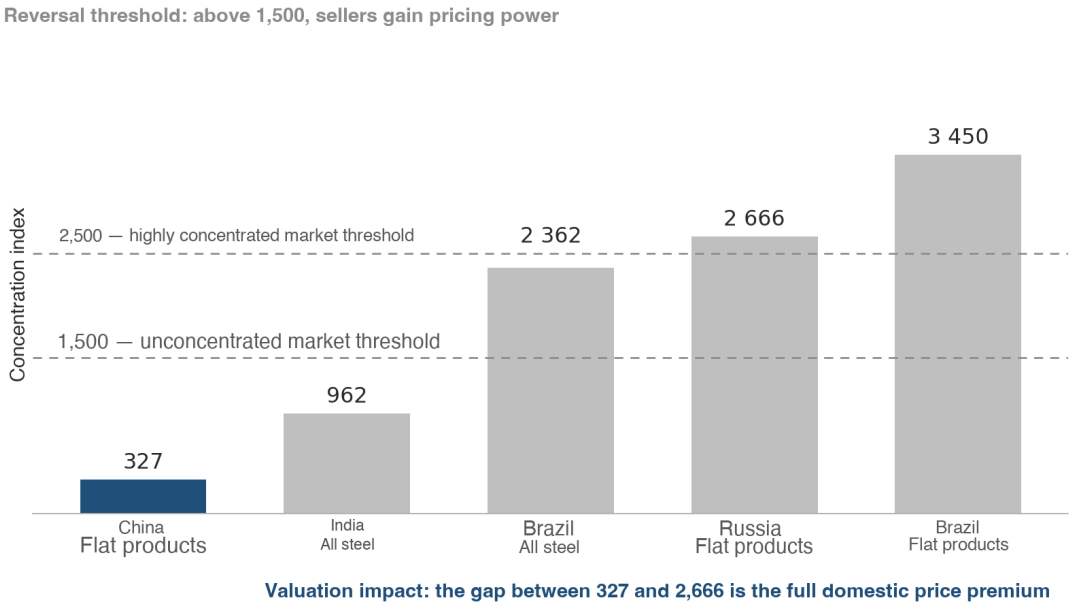
Figure 1. Market shares: the top four account for 27.5% of crude steel output, with a concentration index of 327 and no price setter. Reversal threshold: an index above 1,500, corresponding to a top-four share above 55%. Valuation impact: the premium to export parity is zero at an index of 327.



Source: research estimates based on 2025 crude steel market shares, 17.08.2026. Units: share of crude steel output, %.

The next exhibit compares the index across markets to put it in context. A premium to export parity requires both few sellers and high import barriers. At an index of 327 the report finds the first condition far from satisfied. The top four would have to raise their share of crude steel output above 55% from 27.5% today to gain bargaining power. Figure 2 shows that China's index is 4.6 times below the threshold.

Figure 2. Two of the five markets have a concentration index below 1,500. China's 327 is 4.6 times below that level. Reversal threshold: an index above 1,500 moves the market into a regime in which sellers can set prices. Valuation impact: the difference between regimes at 327 and 2,666 is the full domestic price premium.

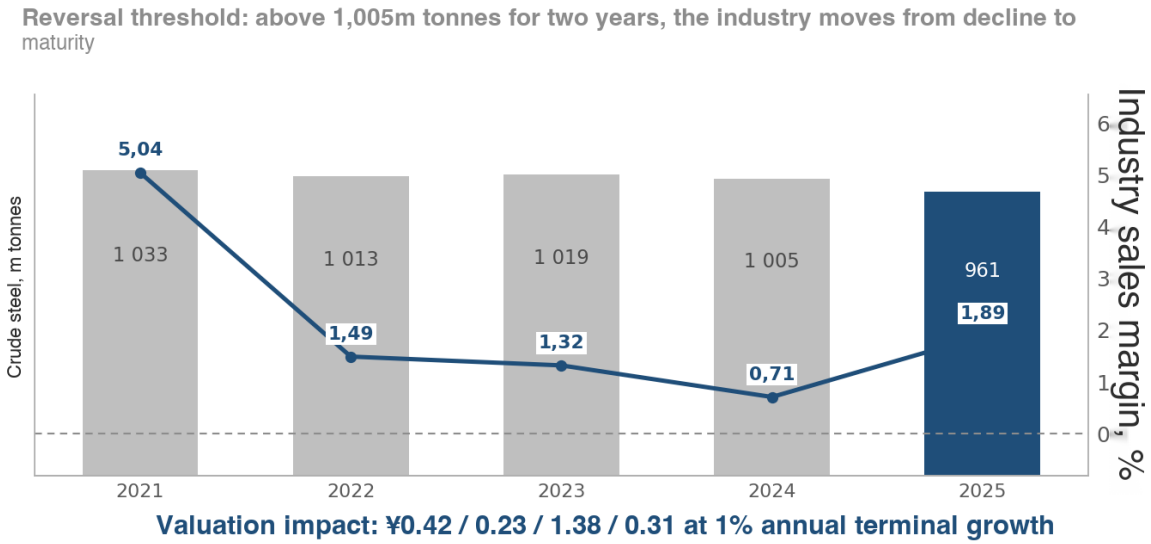


Source: research country reports dated 11.08.2026 and research estimates dated 17.08.2026. Units: concentration index. The market covered by each bar is labelled. Indices for different market definitions are not directly comparable.

Two of the five markets fall below the lower threshold. China's 327 is four and a half times below it and India's 962 is one and a half times below it. Brazil scores 2,362 for all steel, Russia 2,666 for flat products and Brazil 3,450 for flat products. Above 1,500, sellers have room to negotiate and domestic prices hold above export parity. No seller in China has that leverage.

Two data series place the industry in decline. Crude steel output fell by 72.0m tonnes in five years: 1,032.8, 1,013.0, 1,019.1, 1,005.1 and 960.8m tonnes. Only 2023 saw a year-on-year increase. The industry sales margin over the same years was 5.04%, 1.49%, 1.32%, 0.71% and 1.89%. Only 2021 was above two percent. The industry fits none of the emergence, growth or shakeout stages. A shakeout would require departures, and market forces have driven out no major producer in twenty years. Figure 3 combines both series. Crude steel output above 1,005m tonnes for two consecutive years would move the industry from decline to maturity. The observed stage directly supports the model's zero terminal growth assumption.

Figure 3. The industry is in decline: output changed by −72.0m tonnes in five years and the margin exceeded 2% in only one of those years. Reversal threshold: crude steel output above 1,005m tonnes for two consecutive years moves the industry from decline to maturity. Valuation impact: terminal growth of 1% a year adds ¥0.42, ¥0.23, ¥1.38 and ¥0.31 per share.



Source: National Bureau of Statistics of China and China Iron and Steel Association, 2021–2025. Units: million tonnes and percent.

Industry utilisation is 79.7%. One fifth of capacity stands idle and stays in place because mills do not make closure decisions. Exit barriers are unusually high. A mill employs local workers and provides the city's tax base. On closure, the owner loses an asset, the bank a loan and the city jobs and taxes. In China, all three parties are either the state itself or accountable to it, so there is nobody to bear the loss. The report measures exit barriers as a component of rivalry, which is how they operate in practice.

The customer mix changed quickly. Manufacturing's share of demand rose from 42% to 50% in four years, construction starts fell 23.4%, and rebar's share of the product mix fell. China publishes three different measures of demand: apparent crude steel consumption, rolled steel consumption, and consumption including the steel embodied in exported machinery and other goods. In 2025 the third exceeded the other two (Section 3). Comparisons of outside demand estimates need to start by identifying the measure used. The difference can reach one hundred million tonnes. For shareholders, machinery orders now drive demand more than the housing completion schedule. Manufacturing's move from 42% to 50% and the 23.4% fall in construction starts represent a structural change.

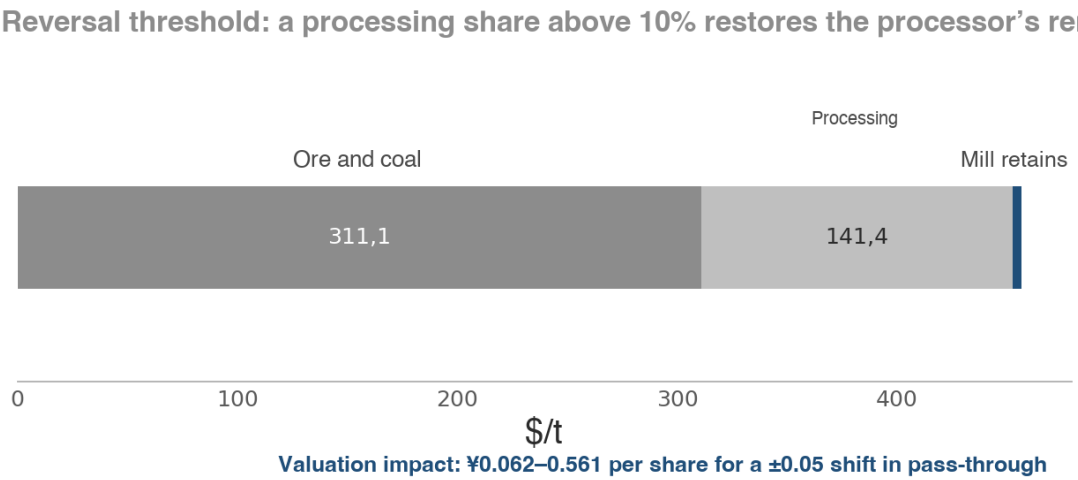
Effect on value per share. Fragmented supply and industry decline remove two common assumptions from the model. First, there is no concentration premium. At an index of 327, the domestic price cannot sustainably exceed the level that leaves the marginal producer $3.9 per tonne, so the four revenue forecasts use that level in place of a world price. Second, terminal growth is zero. Setting it at 1% a year would add around ¥0.42, ¥0.23, ¥1.38 and ¥0.31 per share. Both decisions weigh on valuations and follow from the measurements.

2. Value chain: the mill retains four dollars out of $456 per tonne

Analytical basis: value chain and profit pools.

Of the $456.3 per tonne, raw material suppliers receive $311.1, processing costs $141.4 and the mill owner retains $3.9, less than one percent. This split follows from industry structure and persists beyond a bad year. Ore supply is concentrated and processing is fragmented, so negotiating power lies at the opposite end of the chain from capital invested. Figure 4 shows the breakdown.

Figure 4. Mining captures the profit pool. The mill retains $3.9 of the $456.3 per tonne, less than one percent. Reversal threshold: a processing share above 10% of the price returns economic rent to the processor. Valuation impact: a ±0.05 shift in pass-through is worth ¥0.062–0.561 per share.

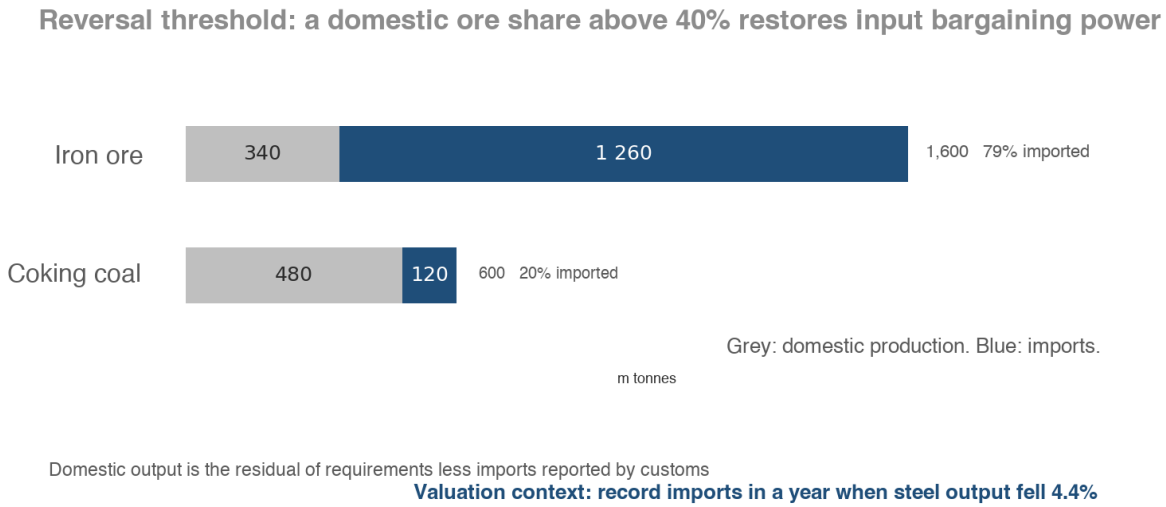


Source: research estimates based on China's supply and demand balance and price series, 17.08.2026. Units: US dollars per tonne.

Mining captures the profit pool because bargaining power differs sharply between inputs and output. Four sellers account for 69% of seaborne trade, while steelmaking is fragmented (Section 1). The problem recedes where this imbalance is absent. Russian mills have their own ore, so the question is how much of their cash reaches shareholders. Brazil has plentiful ore, and a stepped import ceiling supports prices. India operates below its import-parity ceiling. Among the four markets covered, only China combines fragmented supply with full dependence on imported raw materials. The split of a tonne reflects that combination. The general proposition that miners capture the steel profit pool has to be tested separately in each country.

Two parent groups own iron ore assets: Baowu has Simandou, and CITIC has Sino Iron in Australia. Both assets are outside the listed companies. Mining rent accrues to group shareholders. Shareholders in the listed steelmaker own the processing link, which retains $3.9 out of $456.3. Simandou enters the market in 2028 and will supply about 7% of global output. Its impact does not feed through within the forecast period.

Figure 5. Imports supply four fifths of iron ore: 1,260m tonnes against a requirement of about 1,600m. Reversal threshold: domestic ore above 40% restores bargaining power over inputs. Valuation context: imports set a record in a year when crude steel output fell 4.4%.

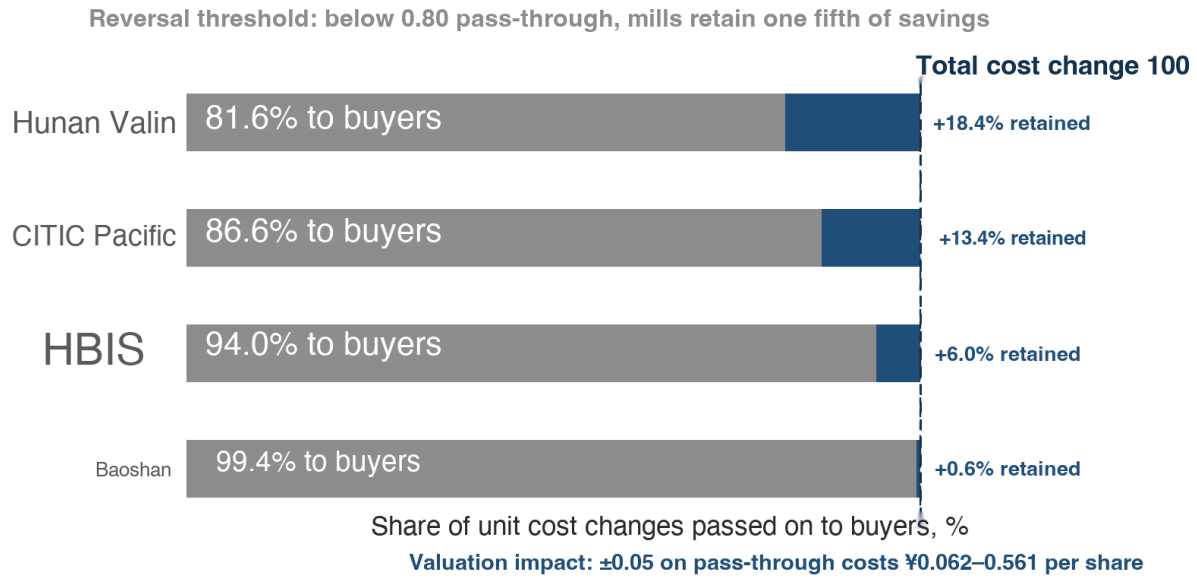


Source: General Administration of Customs of China, 2025. Requirements reconstructed from crude steel output at 1.67 tonnes of ore and 0.63 tonnes of coal per tonne of steel. Units: million tonnes.

Figure 5 illustrates the supply structure. Only imports are disclosed. Requirements are reconstructed from unit consumption, and the 480m tonnes of domestic coal production is a residual. Domestic iron ore meets about a fifth of demand. Record imports of 1,260m tonnes coincided with a 4.4% decline in crude steel output, so reliance on imports increased as output fell. Four companies control seaborne iron ore trade. They shipped about 1,102m tonnes in 2024 against global exports of 1,600m tonnes, or roughly 69%. China imported 120m tonnes of coking coal, half from Mongolia alone. A domestic ore share above 40% would restore bargaining power over inputs. China governs the price of its finished steel while taking the price of its raw materials.

The report measures supplier power in two ways. The more forward-looking measure is the share of a unit cost change passed on to the steel buyer. It shows how much of a decline in raw material prices shareholders would retain. For the stocks covered, the answer is very little.

Figure 6. Mills retain 0.6–18.4% of cost changes, with pass-through of 0.9944, 0.940, 0.866 and 0.816. Reversal threshold: pass-through below 0.80 lets the mill retain one fifth of a cost reduction. Valuation impact: ±0.05 on pass-through is worth ¥0.062–0.561 per share.



Source: research estimates based on 2022–2025 disclosures, 17.08.2026. Units: share of the change in costs.

Measured pass-through is 0.9944 at Baoshan, 0.940 at HBIS, 0.866 at CITIC Pacific and 0.816 at Hunan Valin. Mills retain 0.6–18.4% of changes in costs, and steel buyers receive the rest. Brazil's 2.182, 0.970 and 0.964 reflect a different market. Brazil's stepped import ceiling allows a steelmaker to pass through more than the cost movement, whereas competition among China's equally matched sellers (Section 1) requires them to pass almost all the effect on to buyers. The two measures have different roles in their models and should be compared on the basis set out in Section 12 (Figure 6).

Effect on value per share. The model takes cost pass-through as an input from the value chain analysis. A 0.05 shift is worth ¥0.062–0.561 per share across the coverage. The measurement is partly tautological because part of the underlying cost is a residual from disclosures. None of the four companies discloses its processing cost. This limitation is worth the full pass-through range of ¥0.062–0.561 per share.

3. Who sets the price: policy determines three price components out of four

Analytical basis: industry cost curve.

The price discussed here is the domestic hot-rolled coil price, ¥3,077 per tonne excluding VAT. It combines the marginal producer's full cost of $452.4 and its margin of $3.9 at an exchange rate of 6.7427. The section asks who

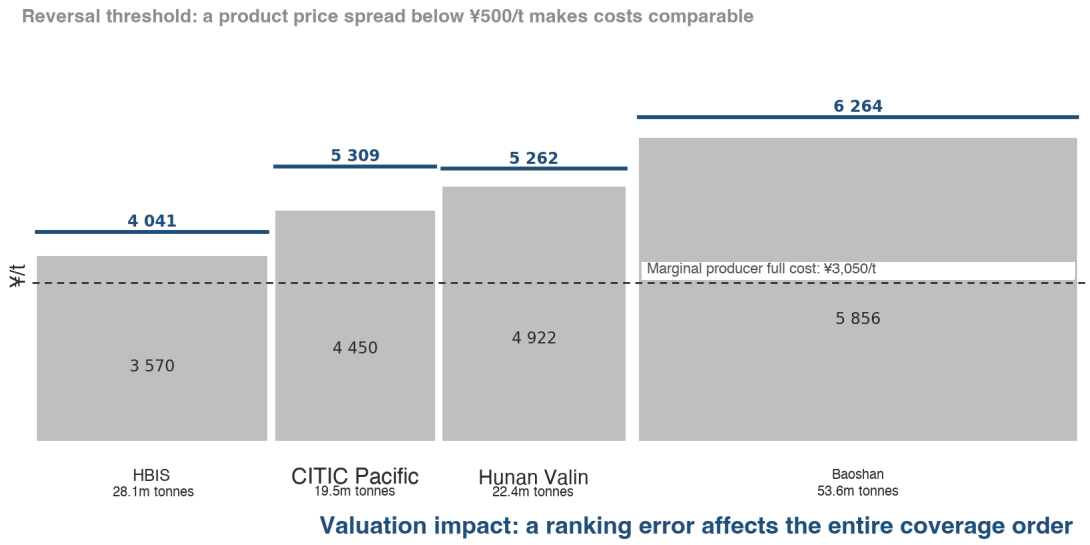
moves those components. The domestic price level itself has zero impact on the research model: the constant in the revenue equation is calibrated to the disclosed base-year quarter and absorbs the level. Sensitivity testing confirmed that a parallel $10 per tonne shift in the entire margin path moves all four valuations by ¥0.0000 per share. Only the shape of the path matters, meaning the difference between the margin in a forecast year and the base year. The two parts of that input are priced separately. Removing the margin recovery costs ¥0.330, ¥0.297, ¥0.508 and ¥0.342 per share. Changing just the base year from $3.9 to the observed minus $12.0 on 26 June 2026 adds ¥2.581, ¥2.210, ¥3.980 and ¥2.253 per share because it widens the same gap. The valuation debate is therefore whether, and from what base, the marginal producer's margin will recover.

The link with the world price was deliberately cut. On 1 May 2021, the Ministry of Finance withdrew the VAT rebate on 146 export product lines. The move appeared fiscal and changed market structure. A rebate equalises the tax burden on tonnes sold at home and abroad. While it applies, a mill is indifferent between the two markets, so arbitrage keeps domestic prices close to the world price less freight. Withdrawal increased the cost of exporting a tonne by roughly the tax and ended that indifference. Domestic prices have moved independently since then, with no clean parity to world prices.

The export outlet then came under pressure from both sides. Rolled steel exports rose from 53.67m tonnes in 2020 to 90.26m in 2023, 110.72m in 2024 and a record 119.02m in 2025, surpassing the 112.40m tonnes set in 2015. Imports were 6.06m tonnes. Between 2020 and 2025, output fell by 104m tonnes and exports rose by 65m. Two thirds of the fall in domestic demand went into world markets rather than production cuts. This mechanism prompted 113 trade remedies against Chinese steel, out of 395 in force worldwide. From 1 January 2026, the Ministry of Commerce imposed export licensing on 245 product lines, so clearing surplus now requires approval. The yuan strengthened from 7.1290 to 6.7427 per dollar, making exports less profitable as producers needed them more. In 2025, indirect exports exceeded direct exports and were the only channel outside the licensing regime. The outlet that absorbed excess supply for five years is closing. The 119.02m tonnes exported in 2025 will now have to be absorbed domestically, where margins are already zero.

The marginal producer of commodity rolled steel has a measured full cost of $452.4 per tonne, about ¥3,050. Its plant closes last and therefore sets the price for commodity grades. All four stocks covered sit above it. Figure 7 shows that a producer's position on this cost curve does not establish its competitiveness.

Figure 7. The low-cost mill earns ¥471/t and the high-cost mill ¥408/t. Product mix reverses the cost ranking. Reversal threshold: a grade price spread below ¥500/t makes costs comparable again. Valuation impact: a ranking error affects the entire coverage order.



Source: 2025 company annual reports and research estimates, 17.08.2026. Units: yuan per tonne. Bar width denotes sales volume.

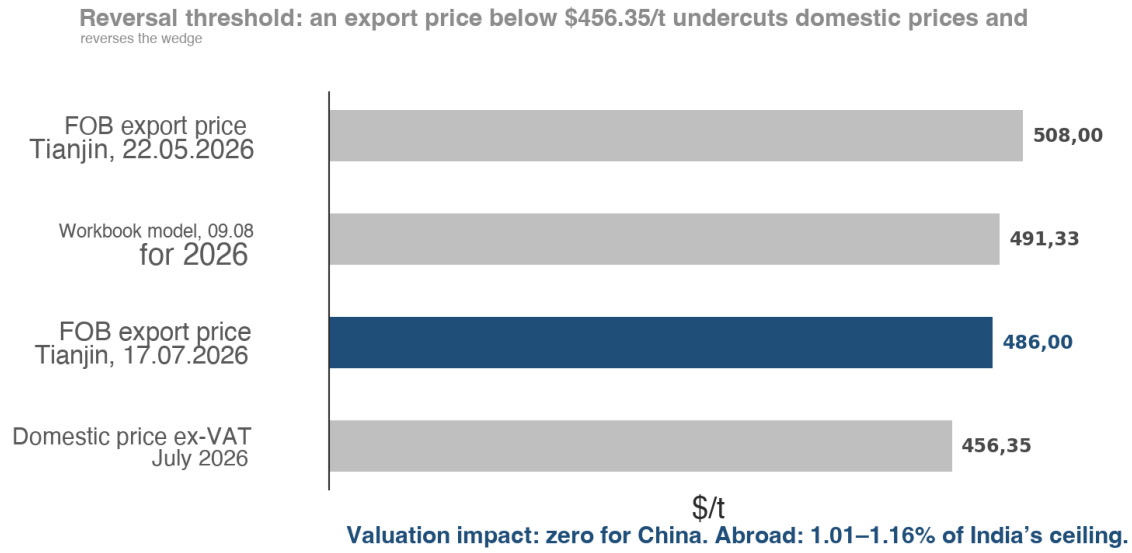
HBIS produces at the lowest cost and earns ¥471 per tonne. Baoshan has the highest cost and earns ¥408. CITIC Pacific earns ¥859 on a cost of ¥4,450. Product mix explains the difference: special steel sells for ¥5,309 per tonne versus ¥4,041 for commodity rolled steel. Comparing mills on unit costs without allowing for product mix reverses the ranking in this coverage. A grade price spread below ¥500 per tonne would make costs comparable (Figure 7).

The marginal producer sets the revenue base for the coverage. It is the plant whose last tonne buyers still need at the current demand level. Its full cost determines the floor beneath which market prices cannot stay for long. In a country where output is determined administratively, the marginal plant keeps running when prices fall below its full cost because the plant itself cannot decide to close. This explains why full costs of $452.4 per tonne and a price that leaves it $3.9 have persisted for a fifth consecutive year.

The source series for sector margins underpins all four revenue forecasts. The agency calculates the marginal producer's cash margin from 51 plants, excluding VAT and counting only processing costs. The sample is skewed towards large, modern plants. The measured $3.9 is therefore an upper estimate for the true marginal producer. Smaller plants outside the sample earn less, so a domestic price inferred from this series is more likely too high than too low. The effect is unquantified and listed in Section 11.

Observed export prices exceed domestic prices. The export price is an output of the report: China is the world's marginal supplier, so the model derives its export price from capacity, domestic demand, export policy and its position on the cost curve. The gap between export and domestic prices consists of non-recoverable input tax and port charges. These are expenses borne by the mill and are added to the domestic price. An earlier edition inverted the sign by confusing the border price with the mill's netback. The netback is lower, while the border price is above the domestic price by the tax withheld.

Figure 8. The wedge is positive at $486/t versus $456.35/t, or +$29.65/t on 17.07.2026. Reversal threshold: an export price below $456.35/t would put exports below the domestic price and reverse the wedge. Valuation impact: zero in China and 1.01–1.16% of India's price ceiling abroad.



Source: Mysteel export price assessment for SS400 3 mm hot-rolled coil at the port of Tianjin, 17.07.2026 and 22.05.2026. Domestic price from research estimates for July 2026. Units: US dollars per tonne.

The observed price was $486/t FOB on 17 July 2026 against the same month's domestic ex-tax price of $456.35/t, a wedge of +$29.65/t. On 22 May 2026, the $508/t quote gives a wedge of +$51.65. Both observations are positive. The model's $35/t export premium for 2026 exceeds the observed wedge by $5.35/t, or 18.0%. The path from $35 to $22/t shifts down by that amount in every year. The adjustment has zero impact on China's conclusions, since its domestic price uses the marginal producer's cost and margin and never references export prices. The full effect falls on countries where Chinese exports set the import-parity ceiling, amounting to 1.01–

1.16% of that ceiling. Reversing the sign would be worth 13.24% of the ceiling, four times the full premium recalculation. Restoring the export tax rebate or removing licensing would reopen arbitrage and once again anchor domestic prices to world prices less freight. Neither change appears in the announced 2026–2030 policy documents (Figure 8).

Effect on value per share. The regulator controls three of the four components of the price per tonne: output, access to export markets and the hurdle for new capacity. The raw material price remains market-based and is set by the four companies in Section 2. For a holder of Chinese steel stocks, this is a policy bet. The price anchor is classified as negotiated, following the decisions of 1 May 2021 and 1 January 2026. The forecast assumes a generous recovery in the marginal producer's margin to $3.9, $8.0, $12.5, $17.8 and $23.7 per tonne by 2030. Removing it entirely would reduce valuations by ¥0.330, ¥0.297, ¥0.508 and ¥0.342 per share. The base case is already at the most optimistic end of this range.

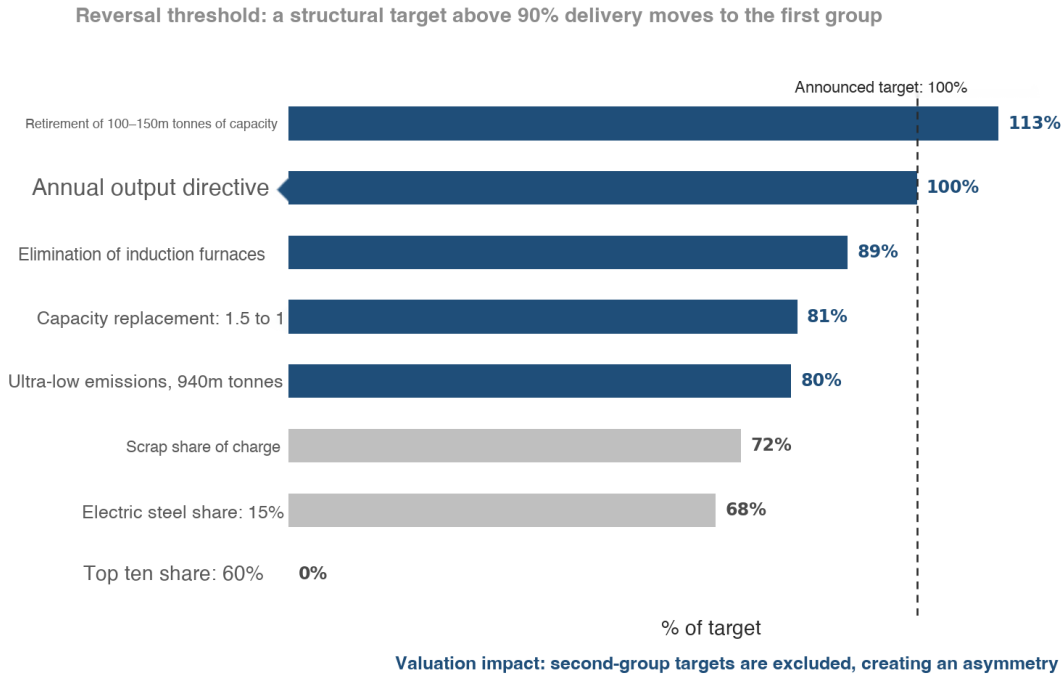
4. Who extracts value: extraction is continuous, while promises are kept only where a responsible party is named

Analytical basis: PEST. Politics covers the policy track record and export regime. Law covers the accounting environment and features of local disclosure.

The political and legal environment governs prices. Administrative decisions affect three of the four components of the price per tonne. Section 3 explains the structure. This section covers what the regulator takes from and returns to the industry. Withdrawal of the export tax rebate is a permanent, industry-wide cost. Completion of the ultra-low emissions programme, announced in January 2026, has the opposite effect. The expenditure has already been incurred and will not recur. Section 5 quantifies it. Corporate income tax of 25% and VAT of 13% apply equally across the coverage and therefore do not distinguish the investment cases.

The record of delivery against targets is central to this section because announced targets govern three of the four price components. The credibility of each target depends on how readily it can be verified.

Figure 9. Five targets with named responsible parties achieved 80–113% of the announced level, against 0–72% for three structural targets. Reversal threshold: delivery above 90% would move a structural target into the first group. Valuation impact: the second group is omitted from the valuation, creating an asymmetry.



Source: State Council decision dated 01.02.2016, industry development plan dated 14.11.2016, guidance dated 07.02.2022, Ministry of Industry and Information Technology notices dated 18.05.2026, and research estimates dated 17.08.2026. Units: percentage of target.

The track record falls into two groups based on how verifiable the target is. Targets such as retiring specified tonnage at named plants are met or exceeded. Removal of 100–150m tonnes of capacity reached 113%, the annual output directive 100%, elimination of induction furnaces 89%, capacity replacement at 1.5 to 1 reached 81%, and the ultra-low emissions programme reached 80%. The target of raising the top ten's share to 60% was set three times, deferred three times and achieved zero times, for 0%. The scrap share of the charge reached 72% of target and the electric steel share reached 68% of its 15% target. Treat the first group as evidence and the second as intentions. The distinction is whether a responsible party is named. Delivery above 90% would move a target from the second group to the first (Figure 9).

Three features of local disclosure and regulation change how the accounts should be read. First, three of the four stocks trade below book value: Baoshan at 0.60, Hunan Valin at 0.46 and HBIS at 0.37, against 1.61 for CITIC Pacific. In China this restricts new share issuance and closes dilution as a route to resolving debt problems. It affects HBIS's full refinancing range of about ¥2.02 per share. Second, Chinese operating profit includes investment results and revaluations, so it cannot be treated as profit from sales. The research team reconstructs earnings before interest and tax from disclosed components. The effect is ¥0.60 per share at Baoshan and ¥3.68 at HBIS, where bills payable were not extracted. Third, the usual translations of eight reporting terms change their meaning. Examples range from other operating expenses, a residual here, to maintenance investment, which the Chinese reporting format never identifies separately. Section 11 quantifies the effect.

Effect on value per share. The model includes first-group targets on capacity replacement, export licensing and annual output, plus one second-group target. It assumes the marginal producer's margin recovers from $3.9 to $23.7 per tonne by 2030, based on the industry plan's target of $25 per tonne and a delivery coefficient of 0.89. This is a structural target, a group with a 0–72% track record. Without it there is no trajectory for the domestic price. Removing it costs ¥0.330, ¥0.297, ¥0.508 and ¥0.342 per share to the downside, with full ranges of ¥0.371, ¥0.334, ¥0.571 and ¥0.384. The base case is already at the top of the report's most optimistic range. The model

omits the other structural targets, higher concentration and a higher electric steel share, and treats them as items to watch. If they are delivered, valuations will be too low. The review threshold is a sustainable industry margin above $25 per tonne for two consecutive years. Some levies are absent from the valuation. The model omits Hunan Valin's provision for additional tax, worth about ¥0.80 per share or 29% of its ¥2.78 valuation.

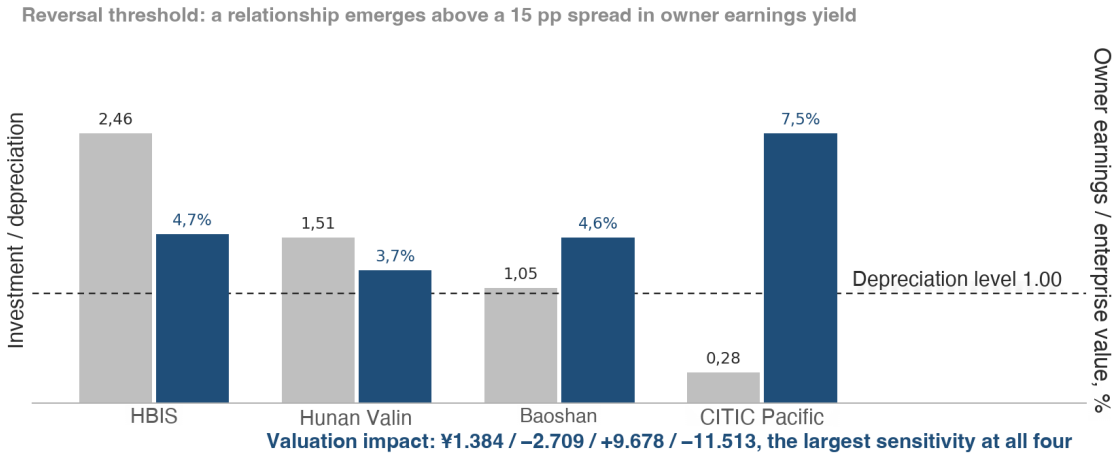
5. Where capital goes: building one tonne requires retiring one and a half

Analytical basis: the capital cycle, from returns to investment, capacity, supply, utilisation, margins and back to returns. Cost of capital and financing terms.

The capital cycle is a closed loop. China has administratively cut one link, so the cycle no longer completes on its own. Over thirty years the industry completed exactly two rounds, both ending unusually. In the first, 2001–2013, urbanisation lifted output from 128.5m to 822.0m tonnes. Oversupply pushed down utilisation and margins. In 2015 the industry made a loss for the first time since 2001, at minus 2.23% of revenue, and half the companies were unprofitable. Provinces made investment decisions, so falling returns did not stop spending. The second round, 2016–2020, began with a directive. On 1 February 2016 the State Council ordered the retirement of 100–150m tonnes of capacity. About 170m tonnes came out and profitability rose from minus 2.23% to an administratively created record of 6.93% in 2018. Improved returns failed to generate a new construction wave because replacement requirements restricted building, first at 1.25 to 1 and then at 1.5 to 1. The ongoing third round lacks the capacity link. Money changes the capacity mix without increasing tonnage, so volumes at two covered stocks are flat in the forecast.

Company accounts show three destinations for spending. First, the environmental programme is complete. In January 2026 China announced the completion of the ultra-low emissions programme. It brought 940m tonnes of capacity into compliance at ¥474 per tonne, or about ¥445bn, without adding a tonne of output or a yuan of revenue. That expenditure is now in the past. Second, production has moved towards the coast and out of cities. A mill built in a city of thirty million for domestic demand pays both for environmental compliance and for shipping imported ore inland. Relocation removes both costs, but requires a new site at full cost while old capacity closes at 1.5 to 1. Third, planned electric arc furnace spending has not materialised. Some 220m tonnes of capacity at 214 plants runs at 46% utilisation, and the route has held 10.2% for a fifth consecutive year against a 15% target. Scrap and electricity prices explain the gap. While the basic oxygen route is cheaper, stated targets will not attract capital to electric furnaces. The carbon standard tightens after 2027, within the forecast period, and could change the relative economics.

Figure 10. Investment as a multiple of depreciation differs by 8.8 times. Owner earnings as a share of enterprise value differ by 2.0 times. Reversal threshold: a relationship would emerge if the owner earnings yield spread exceeded 15 pp. Valuation impact: ¥1.384, –¥2.709, +¥9.678 and –¥11.513 per share, the largest sensitivity for all four stocks.



Source: 2022–2025 company annual reports and research model, run on 17.08.2026. Units: multiples of depreciation and percentages of enterprise value.

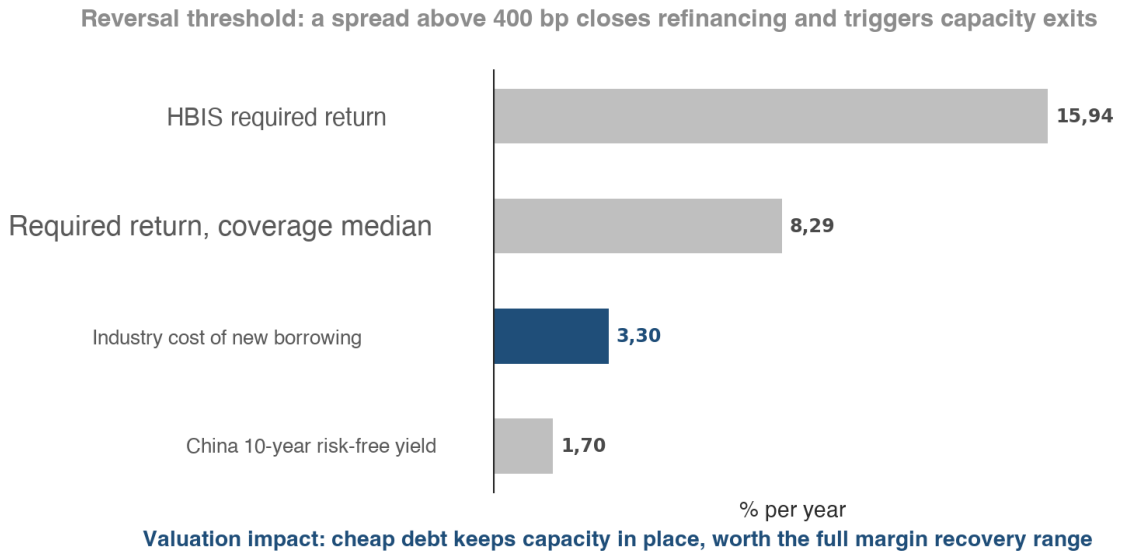
Figure 10 shows that capital discipline earns no premium in this industry. Investment to depreciation differs by 8.8 times between the four companies, at 2.46, 1.51, 1.05 and 0.28. Owner earnings yield on enterprise value ranges from 3.7% to 7.5%, a difference of just 2.0 times. The chart shows each company's pair. Spending nine times as much does not mean passing nine times less to the owner. Taken together, the three destinations show an industry spending to comply with constraints. These constraints will persist: 1.5 to 1 replacement applies for five years, the carbon standard is tightening, and the electric steel requirement remains in force.

One decision removed the valuation floor. Until 18 May 2026, tradable capacity permits offered a route around the 1.5 to 1 replacement rule. A weak mill could cease operations and sell its permit to a strong one. The permits had observable prices. The 2023 index gave ¥307 per tonne of pig iron and ¥701 per tonne of steel. Closing the market removed weak mills' only liquid asset unrelated to production. The report therefore finds no valuation floor for any covered stock.

Observed industry margins are near zero. The marginal producer's cash margin was +¥11.9 per tonne in 2024, +¥49.1 in 2025, +¥29.8 in the first half of 2026 and minus ¥81.0 on 26 June 2026. The industry sales margin was 0.864% in the half-year versus 1.421% in 2025, and profit fell 25.0%. Of the twenty-five steelmakers that had issued preliminary half-year estimates by 16 July, sixteen reported a loss. The series contains no year of sustained profitability and supports a zero terminal margin for the marginal producer.

New borrowing costs the industry 3.30% before tax, against a Chinese risk-free yield of 1.70%, a spread of 160 basis points. The required equity return across coverage ranges from 8.20% to 15.94%, with a median of 8.56%. New debt is 2.6 times cheaper than equity. Legal restrictions govern primary equity market access. Three of the four stocks trade below book value, which bars them from issuing new shares (Section 4).

Figure 11. The spread on new borrowing to the risk-free yield is 160 bp, allowing a zero-margin industry to refinance freely. Reversal threshold: a spread above 400 bp would close refinancing and trigger capacity exits. Valuation impact: cheap debt keeps capacity in place, an effect worth the full margin-recovery range.



Source: Chinese government bond yields as of 07.08.2026, borrowing costs disclosed by the covered companies, and research estimates dated 17.08.2026. Units: annual percentages.

Figure 11 shows that mills can borrow readily and cheaply despite the industry's weak finances. In a market economy, a zero-margin industry would already be restructuring its debt. Here it can refinance, and cheap debt keeps the idle fifth of capacity in place. The 160-basis-point spread quantifies the mechanism that keeps

producers from exiting, described in Section 1. Above 400 basis points, refinancing closes and capacity starts to exit. Announced policy contains nothing that would raise the spread to that level. An earlier edition discussed the same evidence as ‘market temperature’. That label lacked a numerical measure and could not support a claim.

Effect on value per share. Three inputs from the capital cycle and financing costs weigh on valuations. Volumes are flat at two companies because they lack permits for new capacity. Terminal growth and the marginal producer’s terminal margin are zero. Over thirty years, profitability never held at a given level for more than two years, leaving no usable cycle-average terminal margin. The gap between required and actual investment is central to the valuation debate. Section 7 prices it for each stock. Closing the capacity permit market on 18 May 2026 cost an HBIS shareholder about ¥2.02 per share against a share price of ¥2.13. Completion of the ultra-low emissions programme benefits all four companies.

Market summary: three of the five forces are at extremes

Analytical basis: Porter’s five forces. Rivalry dominates. Exit barriers are measured within rivalry (Decision 36).

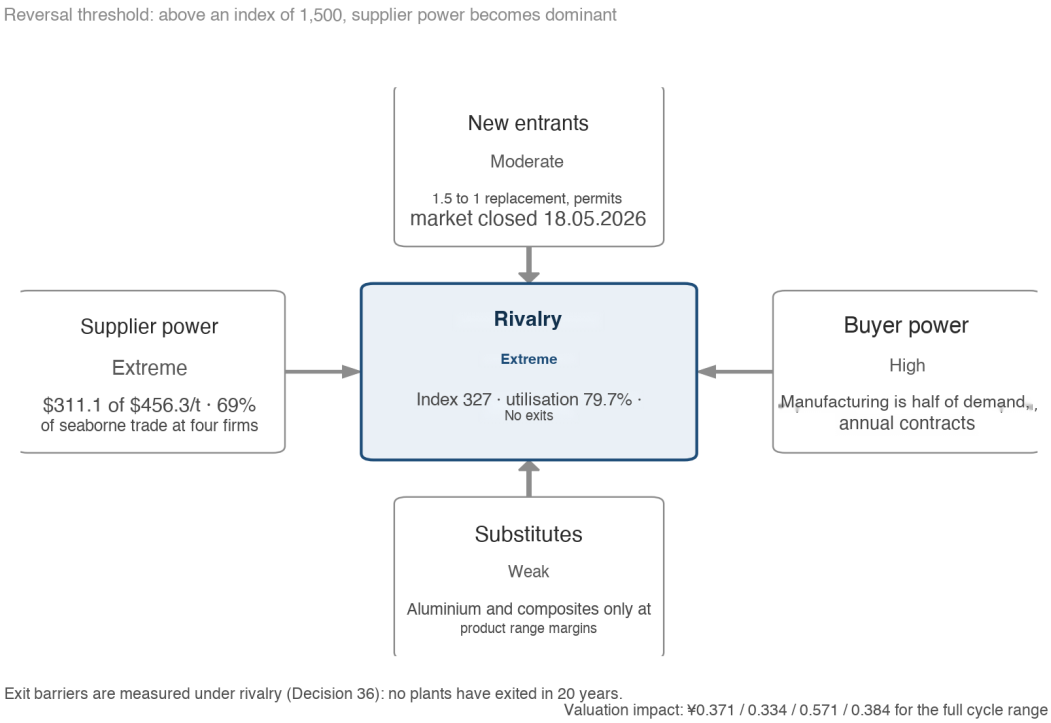
The preceding five sections address the market from the investor’s perspective. The table summarises the industry structure, giving each force’s measure, rating and the section that examines it.

Table 2. Three of the five forces are at extremes, all to the detriment of the steel processor’s shareholders: rivalry at an index of 327, supplier power at $311.1 out of $456.3 per tonne, and entry barriers at a replacement ratio of 1.5 to 1.

Force	Supporting measure	Valuation	Discussed in
Industry rivalry	Concentration index of 327 versus a threshold of 1,500. Top four: 27.5%. Utilisation: 79.7%. No major producer has been driven out of the market in 20 years. Exit barriers are measured under this force.	Extreme	Section 1
Supplier power	$311.1 out of $456.3 per tonne. Four companies control 69% of seaborne ore trade. Cost pass-through of 0.816–0.9944.	Extreme	Section 2
New entrants	1.5 to 1 capacity replacement. The permit market closed on 18.05.2026. Transfers only through mergers and after 24 months.	High barriers, rising	Sections 3 and 5
Buyer power	113 of 395 trade remedies worldwide target China. Change in construction starts: −23.4%. Manufacturing’s share of demand rose from 42% to 50%. Autos are an order of magnitude more concentrated than steel.	High and rising	Sections 1 and 3
Substitutes	Electric arc furnace route: 10.2% of output versus 15% target. Aluminium and composites substitute for steel at the margins of the product range.	Weak	Section 5

Source: research estimates, 17.08.2026. Each force is rated on a four-point scale with its supporting measure. Decision 36 removed the sixth force, with exit barriers measured under rivalry.

Figure 12. Rivalry dominates: concentration of 327 and utilisation of 79.7%, with no exits. Reversal threshold: an index above 1,500 would make supplier power the dominant force. Valuation impact: the full cycle range is ¥0.371, ¥0.334, ¥0.571 and ¥0.384 per share.



Source: research estimates, 17.08.2026. The test for the dominant force asks what happens if a company raises its price by 10% tomorrow.

The test identifies rivalry as the dominant force. If a company raises its price by 10% tomorrow, it loses volume to thirty equal sellers offering the same grade. This is the report's central pricing question. Two conditions underpin Table 2: supply is fragmented, with a concentration index of 327, and both entry and exit barriers are high. Together, the barriers produce persistent overcapacity that does not clear on its own. Rivalry explains near-zero margins and supplier power explains why shareholders retain little of a fall in input costs. The five forces imply a long-term industry return structurally below the cost of capital. The model reflects this in zero terminal growth and a zero terminal margin for the marginal producer (Figure 12).

Part III. Issuers

6. What the companies sell, who buys it and who supplies them: none owns ore, and two buy it from their own groups

Analytical basis: issuer competitive position.

This section presents the four companies as their buyers and suppliers see them. These are the two parties that determine how much of the value reaches shareholders.

Baoshan, 600019, Shanghai. The largest covered producer, with the deepest processing capability. It produces automotive sheet and electrical steel, where annual contracts with automakers set the price. It is the only covered company to derive more than half its revenue per tonne from the processing premium. It belongs to the world's largest steel group and owns no iron ore.

Hunan Valin, 000932, Shenzhen. A broad mix with no clear specialisation, and both prices and volumes fell in three years. Its own coking operation creates costs and is the subject of a dispute with tax authorities over environmental tax. It has the lowest free float in the coverage at 18.4%.

CITIC Pacific Special Steel, 000708, Shenzhen. It makes bearing, spring and tool steel, plus tube billets for energy customers. Customers buy a qualification as much as a grade. Suppliers must qualify with each machinery plant to sell it bearing steel, and once approved are not replaced over ten yuan per tonne. Its volumes rose 28.7% from 2022, the only covered company to grow in a falling market.

HBIS, 000709, Shenzhen. Commodity rolled products have prices closest to the commodity index and the lowest processing premium in the coverage. The distinguishing feature is its related-party transactions. Its provincial owner sets its input price administratively.

Table 3. None of the four owns iron ore and two have input prices set by their own group. Related parties account for 73.50% of HBIS purchases and 22.1% of Baoshan purchases.

Company	Product and volume	Customers	Suppliers	Controlling owner
Baoshan 600019	52.463m tonnes rolled in 2025, with revenue of ¥317,508m. Revenue of ¥6,052/t comprises a ¥2,970 commodity component at the common 2025 domestic price and a ¥3,082 processing premium, or 51%. It is the only company where processing accounts for more than half.	Automotive sheet and electrical steel. Market mix undisclosed. Volume rose from 49.763m tonnes in 2022 while revenue per tonne fell from ¥7,390. Price cuts won market share.	The listed company owns no ore. Related-party purchases were ¥65,220m, or 22.1%. On 30.01.2026, the group's resource unit acquired 51% of Simandou blocks 1 and 2.	China Baowu Steel Group, central state owner, 44.20%. Free float 45.3%. Minority interest 2.9266%.
Hunan Valin 000932	22.63m tonnes, ¥121,138m revenue. Revenue of ¥5,353 per tonne comprises a ¥2,970 commodity component and a ¥2,383 processing premium, or 45%.	Broad product range. Segment split undisclosed. Revenue fell from ¥168,099m and volumes from 26.55m tonnes in 2022. Both price and share declined.	No captive raw materials. Own coking operations are at the centre of a dispute over the interpretation of environmental tax.	Hunan Steel Group, provincial state owner, 45.76%. Free float 18.4%. Minority interest 31.0054%.

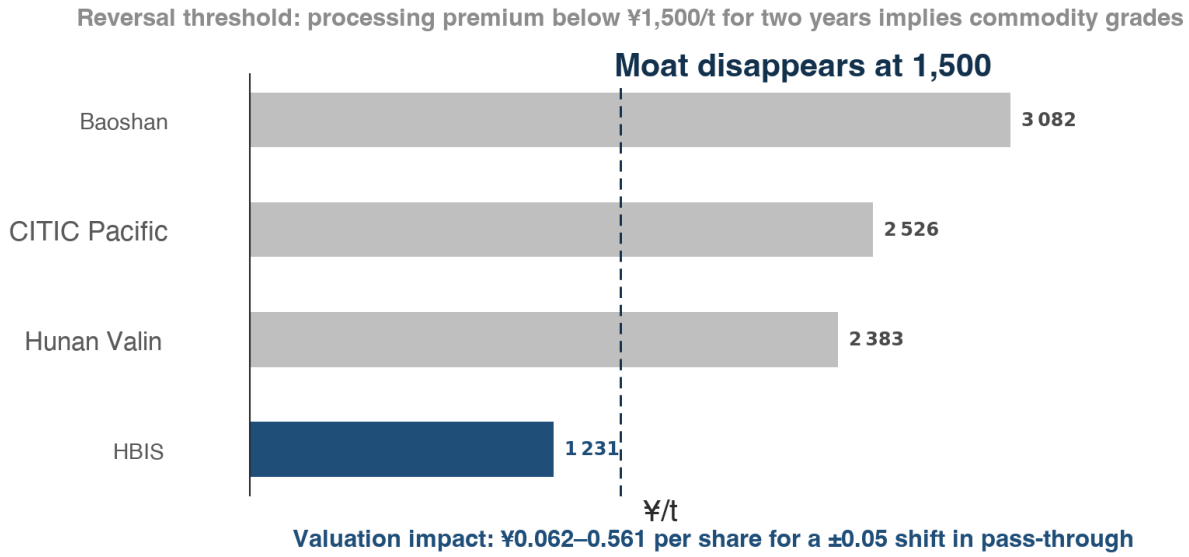
Company	Product and volume	Customers	Suppliers	Controlling owner
CITIC Pacific 000708	19.538m tonnes and ¥107,373m revenue. Revenue per tonne of ¥5,496 is highest in the coverage. It comprises a ¥2,970 commodity component and a ¥2,526 processing premium, or 46%.	Bearing, spring and tool steel, and tube billets. Deliveries are based on individual customer qualification. Volume rose 28.7% from 15.178m tonnes in 2022 in a declining market.	No captive raw materials. The charge uses more scrap and ferroalloys. CITIC Limited owns Sino Iron, which sits outside the listed entity.	CITIC Pacific, ultimately controlled by central state group CITIC, 75.05%. Free float 25.0%. Minority interest 0.0%.
HBIS 000709	28.12m tonnes, ¥118,137m revenue. Revenue of ¥4,201/t comprises a ¥2,970 commodity component and a ¥1,231 processing premium, or 29%, the lowest in coverage.	Commodity rolled products. Prices are the closest to the commodity index. Segment split undisclosed. Revenue fell from ¥143,470m in 2022.	Related parties account for 73.50% of purchases. The planned transaction ceiling for 2026 is ¥150.3bn. The third pricing tier is 'cost plus reasonable profit'.	HBIS Group, Hebei Provincial state asset authority, 63.88%. Free float 35.1%. Minority interest 58.8%.

Source: 2022–2025 company annual reports and research estimates dated 17.08.2026. The processing premium is revenue per tonne less the commodity component, measured at the domestic hot-rolled coil price.

Three points distinguish the four companies. First, they are not direct competitors in the ordinary sense. CITIC Pacific's bearing billets and Baoshan's automotive sheet serve different markets, are not substitutes and do not even reach the same buyers. Only HBIS and Hunan Valin overlap materially, in the most difficult segment, where a commodity index sets rolled steel prices. Second, all four buy from the same suppliers. Costs per tonne vary because the type and amount of raw material required varies, even at the same input prices. Third, their owners have different objectives, which matter more than product mix. A central state owner is accountable for group finances. A provincial owner answers for provincial jobs and revenue. An entity within a central group allocates capital between listed and other operations. Those objectives produce a ninefold gap in annual investment decisions. HBIS spent 2.46 times depreciation over four years to relocate plants and preserve jobs. CITIC Pacific spent 0.28 times depreciation and accumulated cash as it allocated capital across entities. Returns on listed shares drove neither decision.

The disclosed measure of competitive advantage is the processing premium: revenue per tonne less the value of the same metal at the domestic price. The common base for all four is the 2025 domestic hot-rolled coil price of ¥2,969.87 per tonne. A single base is necessary for the ¥1,500 per tonne threshold to have the same meaning for all four.

Figure 13. HBIS's premium of ¥1,231/t is already below the ¥1,500 threshold. Reversal threshold: a processing premium below ¥1,500/t for two years in a row implies commodity grades. Valuation impact: a ±0.05 shift in pass-through is worth ¥0.062–0.561 per share.



Source: 2025 company annual reports and research estimates, 17.08.2026. Units: yuan per tonne.

The report describes a threefold spread: ¥3,082 per tonne at Baoshan, ¥2,383 at Hunan Valin, ¥2,526 at CITIC Pacific and ¥1,231 at HBIS. Two advantages sustain it. Customer qualification gives a supplier enough protection that a machinery plant will not switch over ten yuan per tonne. Deep processing supports annual contracts with automakers. Both take time and reputation to build. The biggest spender therefore has the smallest premium, and the lowest spender has the highest return on capital. A premium below ¥1,500 per tonne for two consecutive years means the advantage has disappeared and the mill sells commodity grades. HBIS is already ¥269 below the threshold in the disclosed year. The second year was not measured, as Section 11 records (Figure 13).

HBIS's margin mechanism: how it earns money with three quarters of purchases from related parties. The ¥150.3bn plan for related-party transactions in 2026 appears incompatible with revenue of ¥118,137m. The ¥150.3bn is an approved ceiling covering both sides of transactions, with headroom across all categories, whereas ¥118,137m is one-way net revenue. The 73.50% refers to purchases from related parties and the company does not disclose total purchases, so an estimate cannot stand in for the disclosed total. Its profit margin is set administratively. Its ¥1,231 per tonne processing premium is positive and the lowest among the four stocks. At the third pricing tier of 'cost plus reasonable profit', the related supplier takes its profit upstream, leaving the mill what the owner decides. Historical margins therefore have little predictive power. A forecast based on them extrapolates decisions by the provincial owner.

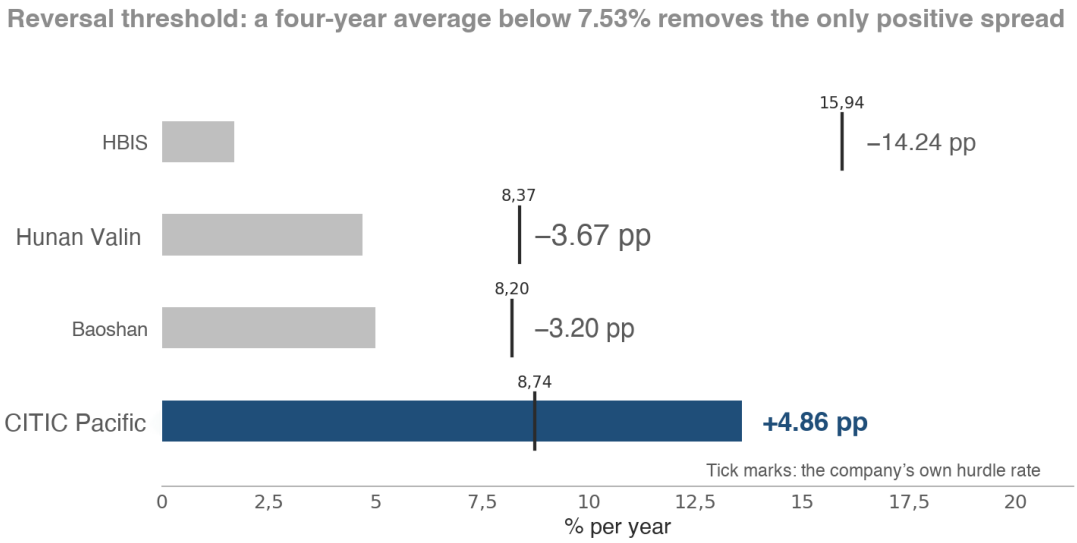
Effect on value per share. The supplier column determines the implications of Table 3. None of the four owns ore and two have input prices set partly or mainly by their group. A shareholder in the processor holds an embedded short option on raw materials. The parent holds the long side, the mining rent, and none of the group's vertical integration reaches the listed company's income statement. A 0.05 change in pass-through is worth ¥0.062–0.561 per share across the coverage. This range is the price of having input costs set by the same group at two of the four stocks.

7. Shareholder returns: three of the four earn below the hurdle, and all fail the quality screen

Analytical basis: owner earnings and capital allocation discipline (Decision 48).

The section asks how much the business earns on invested capital and how much of it reaches ordinary shareholders. The first concerns the business, the second the structure above it. The answers can differ for the same stock.

Figure 14. The spread of return over hurdle is positive at one stock: +4.86 pp, versus −3.20, −3.67 and −14.24 pp. Reversal threshold: a return below 7.53% on average in the four unmeasured years removes the sole positive spread. Valuation impact: zero, because the hurdle does not enter the cash flow. The test determines eligibility for the front page.



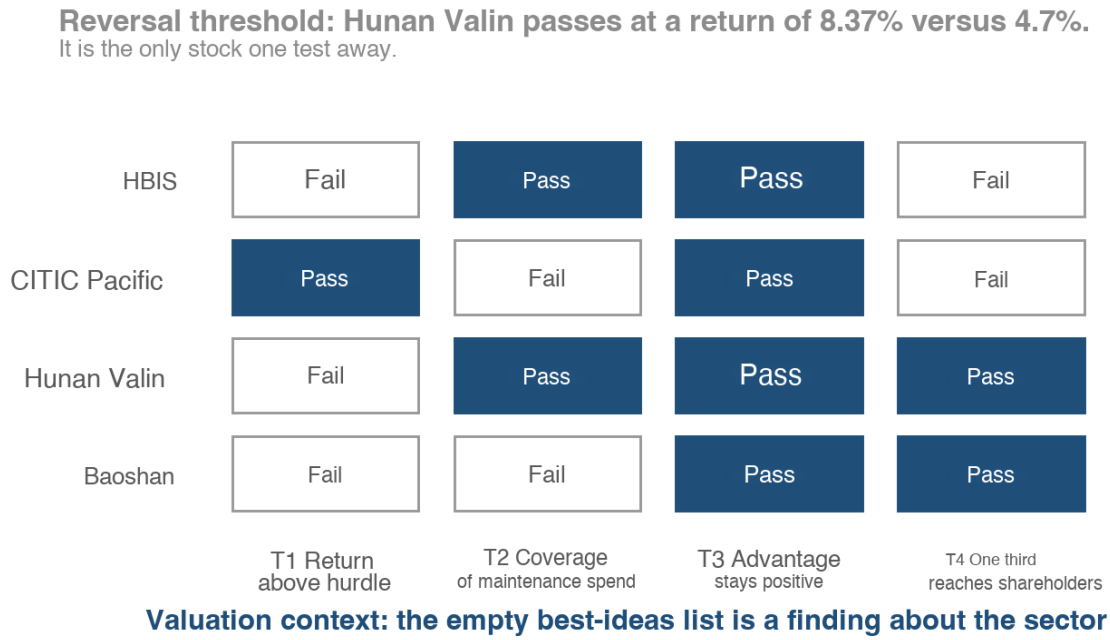
Valuation impact: zero. The hurdle controls front-page eligibility and is outside the cash flow.

Source: 2025 company annual reports and research model, run on 17.08.2026. Units: annual percentages.

The hurdle rate is the return below which shareholders are better off in another investment at the same risk. Leverage makes this rate company-specific. Debt makes HBIS's rate twice the coverage average. Whether a business creates or destroys value depends on the spread of return over its hurdle: +4.86 pp at CITIC Pacific, −3.20 at Baoshan, −3.67 at Hunan Valin and −14.24 pp at HBIS. This measures business performance. The recommendation band, H ± 10.0 pp, applies to total shareholder return. Three of the four destroyed value in a year that was better for the industry than the current one (Figure 14).

The four quality tests were set before stock selection and all must pass. Test 1: average return on invested capital over the period exceeds the required return for the same company, currency and date. Test 2: actual maintenance spending meets the model requirement. It tests spending itself. Test 3: the competitive advantage, measured in product units, keeps its sign in the worst year of the same period. Test 4: at least one third of earnings reaches ordinary shareholders. Tests 1, 3 and 4 use the longer of a full industry cycle or five years. Section 5 gives five years for both the completed and current cycle, so the period is 2021–2025.

Figure 15. The best-ideas list is empty. The four stocks pass 2, 3, 2 and 2 tests out of four, and none passes all tests. Reversal threshold: Hunan Valin would pass with a return of 8.37% instead of 4.7%. It is the only company one test away. Valuation context: the empty cell is a conclusion about the industry.



Source: research model, run on 17.08.2026. The hurdle was set at Gate G0l before selection of the coverage universe. All four tests must pass.

The report sets out the pass levels for each company. Baoshan passes two of four tests. It fails Test 1 with a return of 5.0% against 8.20%. A gross margin about ¥168 per tonne higher would lift the return to 8.20%. It fails Test 2 with spending of ¥353 per tonne against ¥393, or 0.898 times the requirement. Passing would take ¥393 per tonne, or another ¥2,099m. The requirement comes from Baoshan's own 2026 plan. The test uses spending, and a second measurement over 2022–2025 gives the same sign at 0.975 times the requirement. Hunan Valin passes three of four, the closest to the hurdle. It fails only Test 1 at 4.7% versus 8.37%, a gap of 3.67 percentage points. CITIC Pacific passes two of four. It fails Test 2 at ¥70 per tonne versus ¥251, or 0.279 times the hurdle. Passing requires ¥251 per tonne, or another ¥3,536m. It fails Test 4, returning 32.13% versus 33.33%. Passing would take a ¥3,381m dividend versus ¥3,259m, a shortfall of ¥122m or ¥0.024 per share. HBIS passes two of four. It fails Test 1 with 1.7% versus 15.94%, a gap of 14.24 percentage points. It fails Test 4 because 2025 owner earnings were minus ¥3,303m and the payout share is undefined. At the same dividend, it would pass with owner earnings above ¥1,239m (Figure 15).

Completeness of disclosure is recorded separately in Table 1. It limits the strength of the result. Returns were measured for one of five years. To reverse Test 1, the average of the four unmeasured years would need to be 9.00% at Baoshan, 9.29% at Hunan Valin and 19.50% at HBIS. The industry's 0.71–5.04% sales margin makes those levels implausible, so the three signs are robust. CITIC Pacific's result is sensitive: a return below 7.53% on average over the four unmeasured years would fail Test 1. That is normal for a steelmaker, so the Test 1 result remains unverified. Section 11 gives its valuation impact.

Capital allocation discipline does not confer an operating advantage in this sector. Normally the test is whether new investment earns more than the hurdle. The 1.5 to 1 replacement rule prevents capacity growth, while spending on emissions, relocation and equipment renewal secures the right to operate. More investment therefore leaves less for shareholders without raising earnings. Discipline only determines how much of the earnings bypasses shareholders.

Effect on value per share. The spread between return and hurdle explains price to book. The gap between required and actual maintenance spending explains the gap between value and the share price. Required spending is ¥180–393 per tonne versus actual 2025 spending of ¥70–589. CITIC Pacific's accumulated gap favours shareholders by ¥14,146m or ¥2.80 per share. Deducting that amount from ¥16.68 gives ¥13.88 versus ¥13.89 in the market, a difference of 0.08%. At HBIS the same gap was spent at the shareholder's expense and reached ¥3.21 per share. At Hunan Valin it reached ¥0.823.

The report's second testable claim. The only covered stock earning more than a ten percent return on capital is also the only one that does not pay for maintenance: CITIC Pacific spent ¥70 per tonne versus a ¥251 requirement. The estimate is ¥14,146m of accumulated underinvestment, or ¥2.80 per share, with a 0.08% gap to the quote. 2026 capital expenditure above ¥4,000m would confirm that previous profits partly reflected deferred costs. Below ¥1,500m at unchanged volume would confirm that the ¥2.80 belongs to shareholders. At a requirement of ¥245 per tonne instead of ¥251, the difference widens to 2.90%, and at ¥260 to 4.54%. At the other three stocks the same calculation gives deviations of 3.54–33.32%, so the match is specific to CITIC Pacific. The company does not disclose growth and maintenance investment separately, and analyst consensus works from EBITDA without addressing maintenance requirements. Buy only if you expect no catch-up spending. Source framework: owner earnings and capital allocation discipline.

The report's third testable claim. HBIS ordinary shareholders are exposed to all of the negative residual for the consolidated group, while a positive residual would be shared with subsidiary minorities at 58.8 to 41.2. Shareholders cannot recover their partners' share of a shortfall, while on a profitable branch subsidiary minorities take almost three fifths of the gain. The asymmetry is worth ¥1.0523 per share, or 49% of the ¥2.13 quote. Enterprise value is ¥85,445m against net debt of ¥103,944m. A disclosed obligation for subsidiary minorities to contribute their share of capital would remove the full adjustment. Disclosures report minority interest on one line and make no distinction between positive and negative residuals. Analyst consensus does not adjust for the asymmetry. Value the position as the junior tranche of a ¥125,962m structure. Source framework: competitive position and the PEST assessment of accounting.

8. The same state of the world produces different outcomes: required investment distinguishes the four stocks

The four companies share one scenario, with the same commodity basket path, currency, terminal rule and taxes. They differ in exposure, cost-curve position, product mix, balance sheet and capital allocation response.

Table 4. One state of the world, four outcomes. Required maintenance investment explains the largest range of valuation outcomes at all four stocks, ahead of the recovery in the marginal producer's margin.

Company	Business classification before valuation	Valuation V_0, ¥	Outcome range, ¥	Largest sensitivity and impact, ¥	Second sensitivity and impact, ¥
Baoshan	Accumulator	5.06	4.35 … 6.45	Required maintenance investment, +1.384	Discount rate ±100 bp, −0.688 to +0.898
Hunan Valin	Contraction	2.78	0.07 … 4.04	Required maintenance investment, −2.709	Pace of commodity basket decline, ±1.268
CITIC Pacific	Special situation	16.68	14.20 … 26.36	Required maintenance investment, +9.678	Discount rate ±100 bp, −2.482 to +3.264
HBIS	Capital trap	−1.79	−13.30 … −0.31	Required maintenance investment, −11.513	Discount rate ±100 bp, −1.113 to +1.480

Source: research model, run on 17.08.2026. Units: yuan per share. The quality label is assigned before considering price.

Recovering the marginal producer's margin, the cycle sensitivity, is worth ¥0.330, ¥0.297, ¥0.508 and ¥0.342 per share on the downside. The full range is ¥0.371, ¥0.334, ¥0.571 and ¥0.384. This is the smallest of the reported sensitivities on both measures. Table 4 shows three findings. First, the range changes the call on three of the four stocks. At its upper bound of ¥6.45, Baoshan exceeds its ¥5.76 quote and becomes a BUY. At ¥4.04, Hunan Valin moves into the neutral band. At its low of ¥14.20, CITIC Pacific exceeds its ¥13.89 quote by 2.2% and loses its BUY. HBIS alone is robust and stays negative at both ends. The range varies one factor at a time and is therefore a lower estimate of uncertainty. Second, the factor that sets the four stocks apart is the same for all four and lies outside the cycle. Third, no stock meets the quality hurdle, and the sole stock with a positive expected return is a special situation. The quality and price rankings diverge.

Effect on value per share. Table 4 shows why diversifying across a basket of Chinese steelmakers offers little protection: the same factor dominates all four, and changes in it move valuations in one direction. The ranges are ¥4.35–6.45 for Baoshan, ¥0.07–4.04 for Hunan Valin, ¥14.20–26.36 for CITIC Pacific and minus ¥13.30 to minus ¥0.31 for HBIS.

Part IV. Valuation and investment action

9. What is already priced in: required maintenance spending explains the price

What are investors paying for at current prices? To find out, solve for the value of each input that reproduces the observed price with other inputs held fixed.

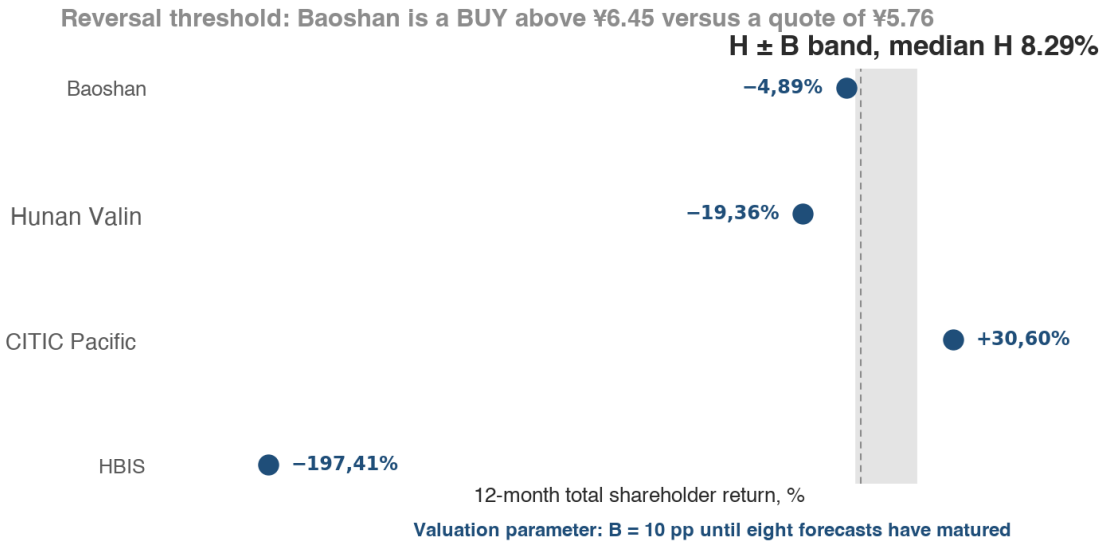
Table 5. Implied maintenance spending explains market prices. The cycle does not: the industry plan targets a marginal producer margin of $25 per tonne, while the shares imply $65.49 and $87.24.

Sensitivity	Implied by Baoshan price	Hunan Valin	CITIC Pacific	HBIS	Stated assumption
Required maintenance investment, ¥/t	372.85	147.93	303.20	115.70	393 · 180 · 251 · 294
Cycle delivery coefficient	3.11	4.21	—	—	1.00
Peak marginal producer margin, $/t	65.49	87.24	—	—	23.7 by 2030, plan target 25
Discount rate, %	6.49	5.53	—	—	7.295 · 7.277 · 7.240 · 6.970

Source: reverse valuation in the research model, run on 17.08.2026. Each input was solved with other inputs fixed. A dash means no admissible value reproduces the share price.

Table 5 shows that maintenance spending reproduces the quote at all four companies, at values within or near the measured range: 372.85 versus the stated 393 at Baoshan and 147.93 versus 180 at Hunan Valin. The cycle input cannot reproduce the quote. It would take peak marginal producer margins of $65.49 and $87.24 per tonne, compared with the industry plan's $25 target and the model's $23.7 maximum. That is three to four times the regulator's own target. Investors at current prices are paying for the assumption that mills will not have to catch up on maintenance spending. The 2026 cash flow statements will test that premise.

Figure 16. All four are outside the recommendation band: +30.6% at one company versus –4.9%, –19.4% and –197.4%. Reversal threshold: Baoshan becomes a BUY above a valuation of ¥6.45 versus a ¥5.76 quote. Valuation parameter: the band width is B = 10 pp until eight forecasts have matured.



Source: research model, run on 17.08.2026, and share prices on 07.08.2026. Units: 12-month total shareholder return, %.

The range around the valuation is broken down by source to determine whether to publish a point estimate. All four stocks fall outside the recommendation band: total returns are +30.6% at one company versus −4.9%, −19.4% and −197.4% at the other three. Baoshan becomes a BUY at a valuation above ¥6.45 compared with a ¥5.76 quote and a band of B = 10 pp.

The report's first testable claim. Required maintenance spending drives Chinese steelmaker valuations. At three of the four stocks it explains the largest range, worth ¥2.709, ¥9.678 and ¥11.513 per share against ¥0.297, ¥0.508 and ¥0.342 for margin recovery. The ratios are 9.1, 19.1 and 33.7 respectively. At Baoshan, it is worth ¥1.384, below the ¥2.581 impact of a shift in the marginal producer's base-year margin, which became visible when the input was split. Each ratio compares the two sensitivities for the same company. An industry margin above $25 per tonne for two consecutive years would make the cycle decisive. The observation that will resolve the question is the 2026 cash flow statement, due in March–April 2027. None of the four issuers discloses required maintenance spending or compares it with actual spending. Industry reports discuss the margin cycle. The key measure is absent from disclosures and market consensus. Investors should calculate what each mill needs to spend to stay in operation. Source framework: the capital cycle.

Model specification error is the gap to out-of-sample disclosures with inputs held fixed. The report measures it by running the published out-of-sample unit-cost error through the revenue equation, at ¥2.9, ¥38.9, ¥4.5 and ¥29.8 per tonne. None covers the quote, so the report publishes all four point estimates. Hunan Valin has the smallest margin for error: ¥38.9 measured, against a ¥43.1 threshold, a factor of 1.1. Outcome uncertainty, the movement in value as disclosed inputs change, is larger and can reverse three calls. It is published separately in Table 4. Only model specification error can block a point estimate. All four stocks fall outside the recommendation band, with total returns of +30.6% versus −4.9%, −19.4% and −197.4%. Baoshan becomes a BUY above ¥6.45 with a ¥5.76 quote and a band width of B = 10 pp (Figure 16).

10. Calendar of turning points: the sector catalyst is a line in the 2026 cash flow statement

For the next twelve months, investors in Chinese steel should follow spending at the four mills. The main sector catalyst is a line in the 2026 cash flow statement worth ¥2.80 per share, or one fifth of CITIC Pacific's valuation. Table 6 ranks observations by timing and valuation impact. The model's terminal year of 2035 has a separate entry, and none of the calendar's observations reaches it.

Table 6. Five of the eight entries concern spending and prices. None concerns output, which is set administratively and offers little scope for surprises.

When	What to watch	Decisive observation	Valuation impact
March–April 2027	CITIC Pacific's 2026 cash flow statement	Capital expenditure above ¥4,000m or below ¥1,500m at unchanged volume	¥2.80 per share, 20.2% of valuation. Main catalyst for the coverage.
During 2026–2027	Raw material basket and domestic coil price	Divergence in price and basket movements over a rolling 12 months	Basket above $303/t at a price no higher than ¥3,077 costs ¥0.33–0.57 per share. Divergence above 5 pp against a measured pass-through of 0.816–0.9944 costs ¥0.062–0.561.
Monthly, CISA release	Industry sales margin	Marginal producer margin above $25/t for two consecutive years	Makes the cycle decisive and overturns the report's first claim
By the end of 2026	Export tax rebate and licensing decision on 245 product lines	Restoration of the rebate or removal of licensing	Domestic price anchor moves from negotiation to parity and reprices all coverage revenues

When	What to watch	Decisive observation	Valuation impact
After 2027	Carbon standard for basic oxygen steelmaking	Tightening within the forecast period	Only measure that could redirect capital into electric arc furnaces. Current route share 10.2% versus target 15%.
2026 annual report, April 2027	HBIS processing premium	Second consecutive year below ¥1,500/t	Competitive advantage disappears and quality Test 3 flips, changing the business classification
2026 annual report	Hunan Valin's provision for additional taxes	Recognition of the provision	About ¥0.80 per share, 29% of the ¥2.78 valuation
2035, model terminal year	Terminal state: zero marginal producer margin and zero growth	No dated observation in the calendar reaches this point	Terminal share of enterprise value: 43.7%, 41.5%, 47.2% and 53.5%

Source: research calendar, 17.08.2026. Publication dates follow disclosure rules for the companies and the China Iron and Steel Association.

Restoration of the export tax rebate is the only pricing regime change to monitor separately. It moves the domestic price anchor from negotiated prices to parity and is the only stated event that reprices revenue across the entire coverage at once. There are two conditions that would undermine the thesis, both defined by inputs that drive margins. First, the 2027 raw material basket rises above $303 per tonne while domestic coil stays at or below ¥3,077 excluding tax. Second, over a rolling twelve months the domestic price falls more than 5 percentage points faster than the basket, invalidating the measured pass-through.

11. Quantified limitations: the most expensive is worth the entire valuation of one stock

Table 7 states the cost per share of every limitation.

Table 7. Fourteen quantified limitations. The most expensive is the predictive power of HBIS's historical margin, worth the full valuation.

Limitation	What it affects	Impact per share or on valuation	
Model specification error was measured in one out-of-sample year (2025). No distribution is available. The range uses the absolute value of one residual.		Width of the range around the valuation	Determines the entire sign of the Hunan Valin call with 1.1 times headroom. For the other three stocks the half-width includes up to ¥0.074 at Baoshan and ¥0.87 at HBIS.
Rule T-1: cost pass-through is estimated on costs that partly comprise a disclosure residual, so the estimate is partly tautological. None of the four companies discloses processing costs.		Whether pass-through can be described as measured	¥0.062–0.561 per share, the full ±0.05 pass-through range
Quality tests use one disclosed year out of five. Returns, processing premium and the share reaching shareholders are measured for 2025.		Strength of the quality finding	Test 1 is robust at three stocks. Reversal requires an average of 9.00%, 9.29% and 19.50% over the four unmeasured years. At CITIC Pacific, 7.53% is sufficient to reverse its only passed test, affecting the entire best-ideas cell.

Limitation	What it affects	Impact per share or on valuation	
Leverage limits were disclosed in the workbook on 09.08.2026 and removed from its text on 12.08.2026 without a quantified impact. Review on 17.08.2026 found that one limit was applied without disclosure. HBIS market D/E of 4.7208 was capped at 2.0, resulting in a levered beta of 2.749 = 1.10 × (1 + 0.75 × 2) and a debt share of 0.666 = 2 ÷ 3. The 0.5 debt share cap was not applied.	The hurdle rate at one of the four stocks	Removing the D/E cap gives a 4.9947 beta and a 27.57% hurdle versus 15.94%, and adds +¥0.139 to valuation. Applying the 0.5 debt share cap costs −¥2.159. The SELL holds in all three cases.	
The predictive value of HBIS's historical margin has not been discounted numerically despite 73.50% related-party purchases.		Whether a cash flow forecast is warranted	The full valuation. The processing premium of ¥1,231/t is the residual of the owner's policy.
HBIS's second year for the moat test was not measured. The disclosed premium of ¥1,231/t is below the ¥1,500 threshold.		Business classification and quality Test 3	The complete business classification. Confirmation of a second year flips quality Test 3.
Peer market estimates have not been collected and divergence from analyst consensus is unmeasured.		Assessment of divergence from the market	The rule on divergence above 30% cannot be applied. The report cannot specify where the market disagrees.
The impact of the benchmark ore index changing iron content from 62% to 61% on 02.01.2026 remains unmeasured.		2026 basket and cost levels	1.6% of the 2026 basket = ¥34/t of marginal producer cost
Required maintenance investment at three of four stocks equals unit depreciation: ¥179.5, ¥251.5 and ¥293.6 per tonne versus published assumptions of ¥180, ¥251 and ¥294. The Master §4B requires evidence that depreciation represents maintenance capex. No such evidence is available.	Whether the investment debate concerns the business itself or accounting	¥2.709, ¥9.678 and ¥11.513 per share, the full largest sensitivity for three stocks	
Quality Test 3 does not operate as a test. Competitive advantage is measured in one disclosed year instead of the weakest year of 2021–2025, so all four stocks pass by construction.	Strength of the four-test screen, with only three tests counting	The full HBIS business classification. The ¥1,231/t premium is already below ¥1,500.	
The committee returned the tonne revenue commodity component to one base on 17.08.2026: the 2025 domestic price of ¥2,969.87/t. Previous bases were ¥2,525, ¥2,673, ¥2,970 and ¥2,970/t, overstating processing premiums at two stocks.	Comparability of processing premiums and the common ¥1,500/t threshold	The common base cost ¥445/t at Baoshan and ¥297/t at Hunan Valin, or ¥0.908 and ¥0.730 per share. CITIC Pacific and HBIS already used the correct base. No business classification reversed.	
CITIC Pacific accumulated underinvestment uses four years. A three-year window gives a +4.97% difference from the quote and five years gives −5.12%.	Strength of the 0.08% match, which depends on the window selected	The entire special situation cell, worth ¥2.80 per share	
The path to permanent loss is shown only for HBIS and partially for Hunan Valin. The Baoshan and CITIC Pacific risk sections list measurement errors rather than how an error could cause loss of capital.	Required element under Master §2 at two of four stocks	Unmeasured for the only BUY in coverage	

Limitation	What it affects	Impact per share or on valuation	
Bills payable were not extracted for Hunan Valin and CITIC Pacific. The 2026 periods differ: six months for ore, seven for coal, six for the industry margin and a point price on 26.06.		Net debt and level of the base year	¥0.60 at Baoshan and ¥3.68 at HBIS using comparables. Up to ¥0.35 at Baoshan due to different base periods.

Source: research register, 17.08.2026. Items without a quantified impact are omitted.

The largest limitation concerns whether the margin can support a forecast. HBIS's historical margin is the residual of a provincial owner's policy. With 73.50% of purchases from related parties and the third pricing tier of 'cost plus reasonable profit', the related supplier takes its profit upstream. A model extrapolating that margin extrapolates an administrative decision. The research team has yet to measure how much to discount its predictive strength. The report publishes a conclusion on the stock because it rests on the balance sheet. Enterprise value is ¥85,445m against net debt of ¥103,944m.

12. Coverage universe, disclosure classes and common inputs: 12.8% of crude steel output covered

Four stocks cover 12.8% of national crude steel output. Selection priorities were set in advance: trading turnover, free float, market capitalisation and disclosure, in that order. Output size does not determine eligibility. Daily trading turnover is $94.0m, $59.8m, $30.8m and $30.0m, and free float is 45.3%, 18.4%, 25.0% and 35.1%. Shougang, Maanshan Iron & Steel, Benxi, Lingyuan Iron & Steel and Lianyuan were excluded because they trade less than $25m a day. Anshan was excluded because it does not report separate accounts for rolled products.

Value realisation and trade execution are evaluated separately and matter most for the three SELLs. Section 7 measures how much value reaches minority shareholders: 54.07%, 59.54% and 32.13%, with the fourth undefined. Execution asks whether the intended reader, an unrestricted global institutional investor, can act on the recommendation. Buying is possible in all four stocks. They trade on mainland exchanges and are available to non-residents via Stock Connect and the qualified foreign investor quota. Daily turnover of $94.0m, $59.8m, $30.8m and $30.0m allows a position the size of a day's turnover to be built in one to three days. A SELL can be executed only by exiting an existing holding. In practice, mainland shorting is largely closed to non-residents. Stock Connect borrowing is restricted by eligible list and volume, and the research team has not verified borrowing comparable to daily turnover for Baoshan, Hunan Valin or HBIS. Investors without positions should therefore avoid buying. Holders should sell. Exiting Hunan Valin in a position the size of daily turnover would take a week given its 18.4% free float. The cost of this restriction is that three of the four calls advise readers without positions to stay out rather than profit from a decline. HBIS's negative target is also separate from execution. The market price cannot fall below zero to minus ¥2.11, and the target indicates there is no positive residual value.

Disclosure classes follow a rule. 'Disclosed' requires all central inputs to come from disclosures and the disclosure residual to be below 3% of costs per tonne. 'Partly reconstructed' applies to a residual of 3–10% or to maintenance spending based on an industry benchmark rather than the company plan. 'Fully reconstructed' means the input that decides the sign comes from outside issuer disclosure. Baoshan is disclosed, with a residual of 2.61% of costs and a requirement from its own 2026 plan. Hunan Valin and CITIC Pacific are partly reconstructed, with residuals of 5.86% and 9.24% and a benchmark requirement. HBIS is fully reconstructed. Its residual is 5.89%, input prices are set by its group and growth investment is reconstructed as a residual. The class identifies the part of the conclusion that depends on reconstruction (Table 8).

Table 8. Common coverage inputs include the 6.7427 exchange rate and hurdle rates of 8.202%, 8.372%, 8.740% and 15.940%. The mill price follows its own costs through measured pass-through.

Input	Value	Derivation	Owner
Required equity return (hurdle H)	8.202 · 8.372 · 8.740 · 15.940%	Derived from observed inputs: risk-free yield 1.70%, equity risk premium 5.18%, unlevered beta 1.10, cost of debt 3.30% and tax 25%.	Research team, calculation disclosed
Terminal rule	Zero growth and zero marginal producer margin, 2035	Research assumption based on the observed industry stage	Research team
Required maintenance investment	¥393, ¥180, ¥251 and ¥294/t	Higher of the announced programme and the industry benchmark	Research team
Price anchor path	Negotiated regime with no return to parity. ¥3,077/t excluding tax in 2026.	Derived from two dates: 01.05.2021 and 01.01.2026	Research team
Pass-through into realised prices and margins	Revenue/t = pass-through × costs/t + exchange rate × marginal producer margin + base-year constant	Reconstructed by committee reviewer on 11.08.2026	Research team
FOB export price and export premium	$486/t, observed on 17.07.2026. Premium falls from $29.65 to $16.65/t.	Dated observation for 2026 and forecast thereafter	Research team. Used by country models with ceilings based on Chinese exports.
Raw material basket and marginal producer margin	$311.05 to $262.11/t. Margin from $3.9 to $23.7 to $0/t.	Based on actual prices and the Mysteel series	Research team
USD/CNY exchange rate	6.7427	Observed market rate, 07.08.2026	Market

Source: model workbook ‘China_Steel_Workbook_v10.8_2026-08-17.xlsx’ and export ‘EXPORT — China — v10.8 — 2026-08-17.json’. The four company workbooks inherit this table unchanged. Any unreported departure from a common input is a defect.

Research conclusion count for this window: 4 covered stocks, 4 with a directional conclusion and 0 recorded as ‘undetermined’ with the five required elements. The share without a conclusion is zero and has not increased for a second window.

Sources. Company annual reports for 2022–2025; Hunan Valin’s warning dated 09.07.2026; Mysteel’s cash margin series, 2024 steel market review and Tianjin hot-rolled coil export assessments on 17.07.2026 and 22.05.2026; the National Bureau of Statistics of China’s ferrous metals section; China Iron and Steel Association annual publications, 2016–2026; World Steel Association crude steel series; General Administration of Customs data on trade in rolled products, ore and coking coal; State Council decision dated 01.02.2016; industry development plan dated 14.11.2016; guidance dated 07.02.2022; Ministry of Industry and Information Technology notices dated 18.05.2026; Ministry of Finance withdrawal of export tax rebates on 01.05.2021; Ministry of Commerce export licensing from 01.01.2026; research reports on India, Brazil and Russia dated 11.08.2026 for comparisons of concentration, cost pass-through and cash reaching minority shareholders; and exchange data for the three months through 07.08.2026.