genial | Equity Research

Metals & Mining

Straight out from the Blast Furnace: Week 4, June 2024

LatAm Metals & Mining

Main takeaways on China:

(i) We believe that although inflation data suggests there is room for interest rate cuts, the cut faces **internal constraints** (narrowing of commercial banks' net interest margins) and **external constraints** (RMB/USD exchange rate); **(ii)** China plans to establish an initial carbon footprint management system by 2027 to measure carbon emissions. Looking to the short term, ministry announced the **"Action Plan for Energy Conservation and Carbon Reduction during 2024-25"**. The measures include **(iii)** continuing to control crude steel production, which has been singled out for carbon reduction, specifically targeting coal consumption in non-energy sectors (such as steel production). The **(iv)** domestic foundries are also set for energy and carbon cuts. **(v)** Blast furnace steel mills need to reduce crude steel production in the **range of -21.4Mt to -23.4Mt by the end of 2025** (or ~2% of 2023 production) to comply with the country's energy conservation and carbon reduction action plan for 2024-2025; **(vi)** Loosening of mortgage regulation helps tier I, but sector figures don't improve in smaller cities; **(viii)** The new measures surprised homebuyers, reducing the likelihood of new expectations of further softening. Therefore, our analysis suggests that the reflection will be a slight improvement over the next 3 to 6 months. Transaction volume in Shanghai recovered by +70% y/y after the policy changes (long way to go, since figures were subzero); **(ix)** In the week of June 17-21, the **main steel prices in China fell due to the seasonal drop in demand during the off-season** (the rainy season from late May to late July reduces demand for steel). In the face of rain, the construction sector (infrastructure + housing) slows down, impacting steel demand in the main downstream segments, apart from heavy industry; **(x) Blast furnace capacity utilization** in China **increased to 89.76% (+0.2p.p w/w).** Production among blast furnace mills continued to rise, as more mills resumed operations after maintenance due to the slight recovery in steel margins brought about by the fall in the price of met coke.

We present the first edition of our **weekly report on the Metals & Mining sector**, starting with **week 4 of June 2024**, based on data from the week prior to publication, which in this case covers the period from **June 17 to 21**. From then on, we will continue to update the market on important data for monitoring the **fundamentals of supply and demand for steel in China** and, consequently, for **iron ore** in the seaborne system. We are also working on the database for some indicators relating to the **Brazilian steel market**. Over the course of the next few weekly updates, we will shape the report to deliver an increasingly **accurate analysis** on **data that we consider essential for investors to follow** and that corresponds to the fundamentals of the companies in the sector that we cover (Vale, CMIN, Gerdau, CSN and Usiminas).

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Companies

VALE US Equity
Buy

Price: US$ 11.10 (26-Jun-2024)
Target Price 12M: US$ 14.50 (NYSE)

VALE3 BZ Equity
Target Price 12M: R$ 78.50 (B3)

CMIN3 BZ Equity
Buy

Price: R$ 5.09 (26-Jun-2024)
Target Price 12M: R$ 6.00

GGBR4 BZ Equity
Buy

Price: R$ 17.84 (26-Jun-2024)
Target Price 12M: R$ 23.40

CSNA3 BZ Equity
Neutral

Price: R$ 12.57 (26-Jun-2024)
Target Price 12M: R$ 15.50

USIM5 BZ Equity
Neutral

Price: R$ 7.54 (26-Jun-2024)
Target Price 12M: R$ 8.70

China

Macroeconomics

Inflation still low. It seems to us that China has room to cut interest rates, with the inflation index (CPI) still anemic. The May reading (released on June 12) showed an advance of +0.3% y/y (vs. +0.4% consensus). On the other hand, the producer price indicator (PPI) fell by -1.4% y/y (vs. -2.5% in the previous month), showing continued weak demand for consumer goods (the services sector still helps the PPI not to be so negative). New data (CPI and PPI) will be released on July 9th for June.

Interest rates without cuts. In April we published our estimate of a cut in the LPR from 1 to 3.35% and maintenance of the 5-year LPR at 3.95% at the monetary policy committee on June 19. However, the PBoC's decision was to keep both benchmark interest rates stable, with the 1-year LPR remaining at 3.45%, contrary to our estimate.

Our take on macroeconomics

At the time, when we published our cut estimate, we argued that our view was based on the process of low inflation magnitude and not the economic bias, since the government seems to insist on limiting economic policy with a tendency to force savings due to the absence of a clear pension system. We therefore leave the caveat that we could miss our cut estimate.

Even so, everything indicates that the PBoC will prioritize price stability in the economy and the moderate recovery of consumption in its policies. As we have already published in other sector reports, we believe that the instruments the PBoC has at its disposal to achieve these effects are: **(i)** cutting interest rates (1-and 5-year LPR), **(ii)** lowering the compulsory rate for commercial banks and **(iii)** other tools in a flexible manner, such as relaxation packages on measures restricting house purchases (without direct stimulus).

Why isn't the PBoC cutting interest rates? We believe that although inflation data suggests there is room for interest rate cuts, the cut faces **internal constraints** (narrowing of commercial banks' net interest margins) and **external constraints** (RMB/USD exchange rate).

Policy updates and market sentiment

Government formalizes restriction on crude steel production due to environmental impact. China plans to establish an initial carbon footprint management system by 2027 to measure carbon emissions. By 2027, standards will be launched to calculate the carbon footprint of around 100 major products, rising to 200 by 2030, according to a June 5 plan by the Ministry of Ecology and Environment. Looking to the short term, on the same occasion the ministry announced the "Action Plan for Energy Conservation and Carbon Reduction during 2024-25". The measures include **(i)** continuing to control crude steel production, which has been singled out for carbon reduction, specifically targeting coal consumption in non-energy sectors (such as steel production). The **(ii)** domestic foundries are also set for energy and carbon cuts.

Last week, the World Steel Association (WSA) advocated that Chinese steelmakers issue Environmental Product Declaration (EPD) reports. These reports, verified by a third party, reveal the environmental impact of a product or service throughout its life cycle, helping to build a positive international ESG image for the Chinese steel industry, which still needs to make progress in this area.Since peaking in 2021, China's crude steel production has fallen -2.8% y/y to 1.03Bt in 2021 and -1.64% y/y to 1.01Bt in 2022, due to weaker domestic demand. In 2023, crude steel production remained stable. The government will continue to focus on energy savings and reducing carbon emissions while adjusting crude steel production to align with the country's decarbonization goals.

How much will steel production be cut in 2024/25? Blast furnace steel mills need to reduce crude steel production in the **range of -21.4Mt to -23.4Mt by the end of 2025** (or ~2% of 2023 production) to comply with the country's energy conservation and carbon reduction action plan for 2024-2025. The steel sector must save energy equivalent to 20Mt of coal and reduce carbon dioxide emissions by ~53Mt. The action plan also calls for a reduction in energy consumption per unit of product through the Basic Oxygen Blast Furnace (BF-BOF) route by more than 1% by 2025, compared to 2023 levels.

Table 1. Estimated crude steel output (2025)

(Mt)

Region	High-efficiency BF-BOF production	Regular BF-BOF production
Northeast China	1,94	2,13
North China	8,06	8,83
East China	6,37	6,97
South China	1,35	1,48
Central China	1,69	1,86
Northwest China	0,93	1,02
Southwest China	1,08	1,19
Total	**21,42**	**23,47**

Source: My Steel, Genial Investimentos

Fiscal space vs. social housing. China's Ministry of Finance has announced that the final batch of ¥1 trillion (~US$138bn) in treasury bonds for 2024 will be completed in November. Since May 17, with the issuance of a ¥40bn (~US$5.5bn) 30-year note marking the first batch, the Chinese government has been issuing special ultra-long-term treasury bonds (20, 30 and 50 years) to support key national strategies and increase security capacity in important areas. These bonds will finance initiatives in 8 sectors, one of which is the promotion of a new urbanization program, known as social housing.

Our take on policy updates and market sentiment

We argued at the end of 2022 that the Chinese government would establish a control policy on crude steel production as early as 2023. However, it wasn't made official until 2024 (we were wrong by a year), when the ministry announced it at the beginning of June. Aside from issues of good environmental practice, the news of a government-imposed cut in steel production via the blast furnace is certainly detrimental to market sentiment.

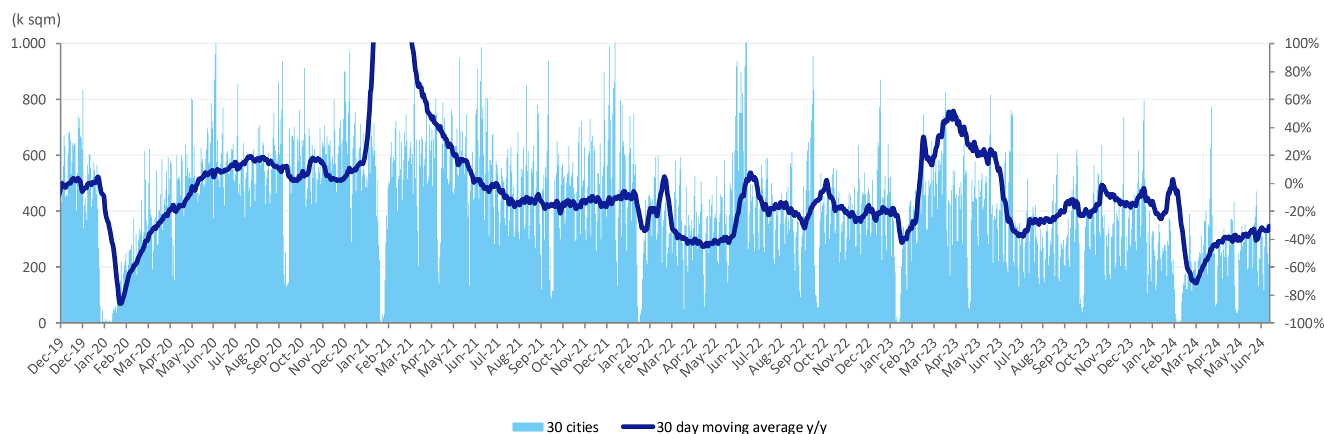
Although it indicates a reduction of only ~2% vs. 2023 production, it still shows that the government has little sensitivity to steel production output, which has been declining in recent years. As the restriction is aimed at reducing the consumption of coal and energy material, the coking coal industry is likely to suffer along with the steel industry. However, we expect the pet coke sector to have minimal impact in the short term.

Big stimulus? Probably not... Once again, we would like to emphasize that we are not considering major direct stimuli from the Chinese government, such as strong packages for the real estate market, in addition to the social housing policy already announced (and widely discussed in past sector reports). It seems to us that the Chinese government intends to grow in a more moderate and sustainable way compared to the last decade, and we recommend that investors stop looking backwards to find answers about the future. Growth mechanisms should be different from now on, and rates will certainly be lower. We reinforce our GDP estimate of 4.8% Genial Est. (below the 5% target) for 2024 and currently project 4.6% Genial Est. for 2025.

Real estate

Loosening of mortgage regulation helps tier I, but sector figures don't improve in smaller cities. Despite recent measures by the central government to stabilize the sector, including the announcement on May 17 by the PBoC and the National Financial Regulatory Administration to **(i)** abolish minimum mortgage rates, **(ii)** reduce minimum entry fees for commercial housing mortgages and **(iii)** decrease provident fund loan rates for individual homes, challenges persist.

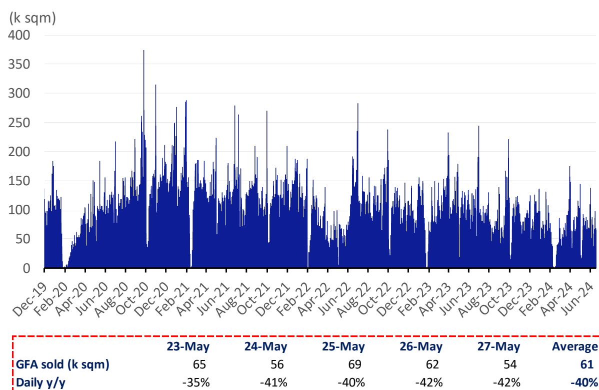
Graph 1. Daily sales of primary housing (30 major cities)



	4-Jun-24	5-Jun-24	6-Jun-24	7-Jun-24	8-Jun-24	9-Jun-24	10-Jun-24	11-Jun-24	12-Jun-24	13-Jun-24	14-Jun-24	15-Jun-24	16-Jun-24	17-Jun-24	Average
GFA sold (k sqm)	228	321	350	306	174	120	119	274	325	326	360	253	213	299	262
Daily y/y	-38%	-16%	-6%	-25%	-59%	-64%	-46%	-33%	-19%	-31%	-19%	-46%	-13%	37%	
30d MA y/y	-34%	-34%	-32%	-32%	-32%	-33%	-33%	-34%	-34%	-33%	-33%	-34%	-33%	-31%	

Source: Wind, Genial Investimentos

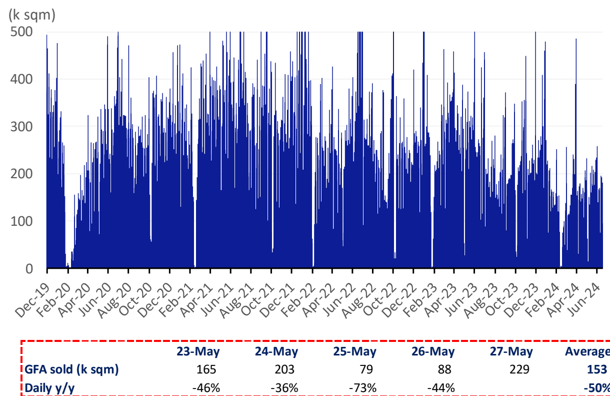
Graph 2. Daily sales of primary housing GFA (Tier 1)



	23-May	24-May	25-May	26-May	27-May	Average
GFA sold (k sqm)	65	56	69	62	54	**61**
Daily y/y	-35%	-41%	-40%	-42%	-42%	**-40%**

Source: Wind, Genial Investimentos

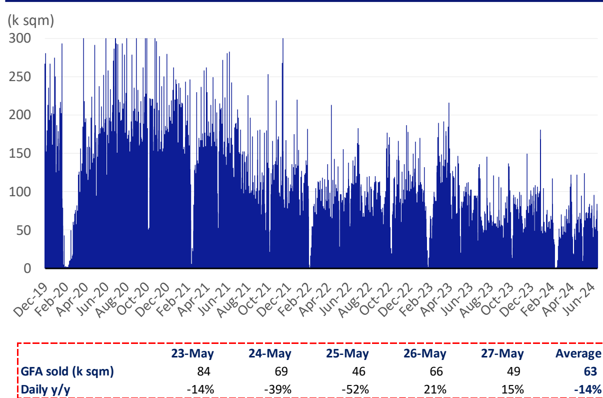
Graph 3. Daily sales of primary housing GFA (Tier 2)



	23-May	24-May	25-May	26-May	27-May	Average
GFA sold (k sqm)	165	203	79	88	229	**153**
Daily y/y	-46%	-36%	-73%	-44%		**-50%**

Source: Wind, Genial Investimentos

Graph 4. Daily sales of primary housing GFA (Tier 3)



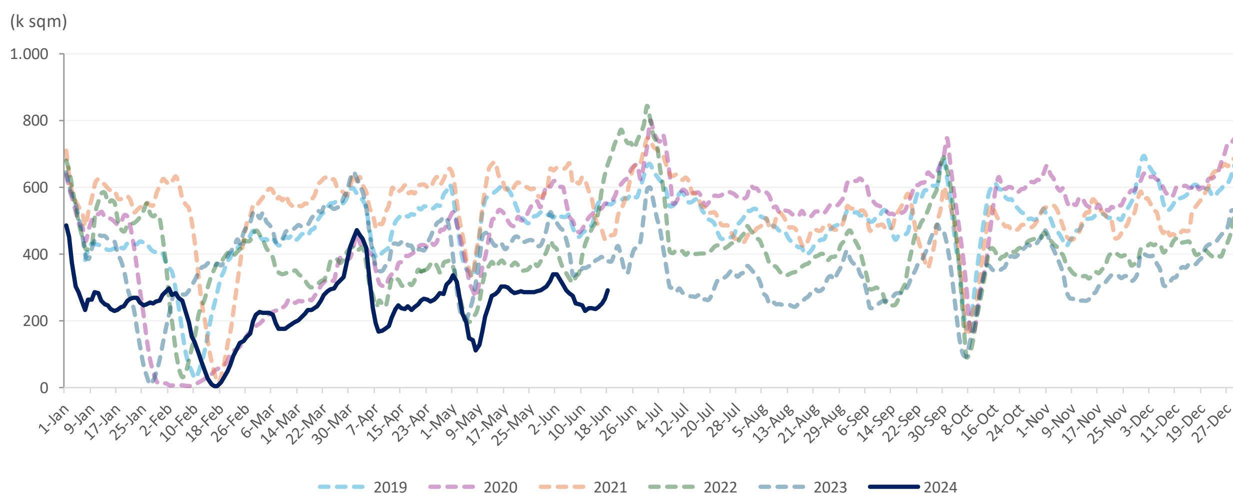
	23-May	24-May	25-May	26-May	27-May	Average
GFA sold (k sqm)	84	69	46	66	49	**63**
Daily y/y	-14%	-39%	-52%	21%	15%	**-14%**

Source: Wind, Genial Investimentos

2024 easing vs. 2023, improving being made. We believe it is important to compare the effects of the recent easing measures with the 3–4-week recovery following the August 2023 mortgage easing for Tier I cities. The new measures surprised homebuyers, reducing the likelihood of new expectations of further softening. Therefore, our analysis suggests that the reflection will be a slight improvement over the next 3 to 6 months. Transaction volume in Shanghai recovered by +70% y/y after the policy changes (long way to go, since figures were subzero), with primary housing transactions increasing by more than +100% y/y compared to +40-50% for secondary real estate transactions, as home sellers raised prices while developers, facing financial pressure, offered discounts.

Backfire for small and medium-sized cities. With the easing of restrictions on buying homes, we believe that buyers in satellite cities are likely to marginally increase their interest in real estate in Tier I cities, weakening demand in small and medium-sized cities (tier II and III) and lowering real estate prices there. On the other hand, Shanghai's outer ring, for example, will not suffer any impact in our view, while Shanghai's inner ring could see a recovery in prices, especially for secondary properties. There is a 20% price difference between primary and secondary housing in the inner ring areas, while the outer ring areas have no such difference.

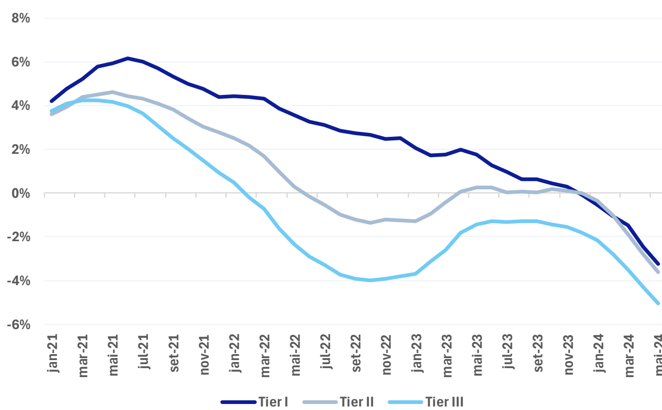
Graph 5. Daily primary housing GFA sales (30 major cities / 7 days Moving Average)



	7-Jun	8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun	17-Jun	Average
GFA sold (k sqm)	306,5	174,4	120,0	118,6	273,6	324,6	325,7	359,7	252,5	212,7	298,6	252
Daily y/y	-25%	-59%	-64%	-46%	-33%	-19%	-31%	-19%	-46%	-13%	37%	
7d Moving Average y/y	-26%	-27%	-31%	-36%	-35%	-35%	-39%	-37%	-35%	-30%	-23%	

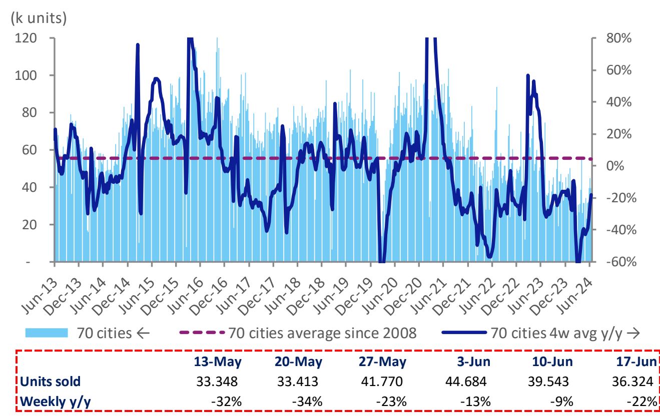
Source: Wind, Genial Investimentos

Graph 6. Price of newly built housing (by Tier)



Source: Wind, Genial Investimentos

Graph 7. Weekly primary housing sales (70 major cities)

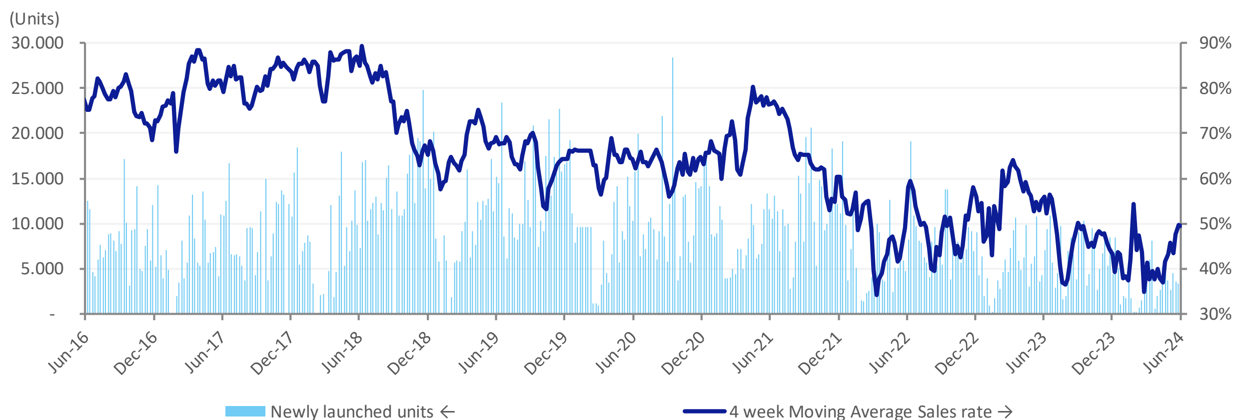


	13-May	20-May	27-May	3-Jun	10-Jun	17-Jun
Units sold	33.348	33.413	41.770	44.684	39.543	36.324
Weekly y/y	-32%	-34%	-23%	-13%	-9%	-22%

Source: Wind, Genial Investimentos

Barter policy is seen as less effective. We understand that the potential increase in demand in large cities to the detriment of small and medium-sized cities due to the relaxation of mortgage regulations is less effective because this situation was already underway even before the relaxations. So, as we commented some time ago, although the recent measures may help to revive primary sales volumes in Tier I cities to some degree, the real crux of the matter is still in Tier II and III cities.

Graph 8. Weekly housing launches and sales rate (9 major cities)



	21-Apr-24	28-Apr-24	5-May-24	12-May-24	19-May-24	26-May-24	2-Jun-24	9-Jun-24	16-Jun-24
Weekly new launch (units)	2.639	5.215	5.578	3.640	2.636	4.536	3.626	3.322	4.355
Sales rate	38%	37%	42%	43%	46%	43%	48%	50%	49%

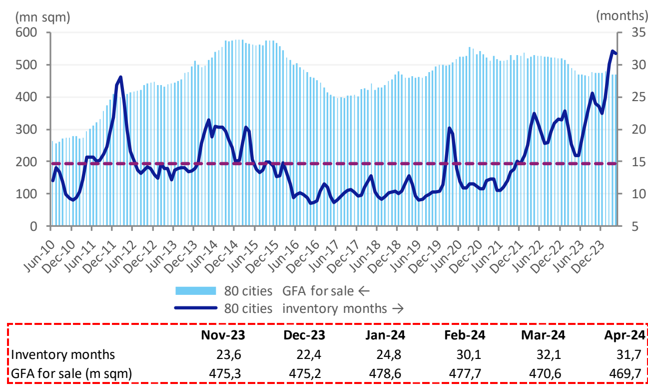
Note: The 9 major cities analised are Guangzhou, Shanghai, Shenzhen, Chengdu, Chongqing, Hangzhou, Nanjing, Wuhan and Suzhou.

Source: CREIS, Genial Investimentos

The purchase of housing inventory by local governments has obstacles. The policy of buying up the housing stock announced by local governments could reduce the inventory on the market and stabilize prices, but financing is a challenge. Our analysis suggests that the commission rate for secondary transactions is likely to remain stable, with possible increases in primary commission rates due to developers in financial difficulty reducing prices or offering higher commissions to clear inventory.

Housing inventory months are softening, although the value is still quite high. We believe that the relaxation of mortgage-related policies is slowly helping to reduce the inventory of ready built homes. In April, the number of months needed to sell the housing stock in China's 80 largest cities was already showing a decline to 31.7 vs. 32.1 in March. We expect the indicator for May and June to stand at ~28 months, still above the ~25 months in the y/y comparison.

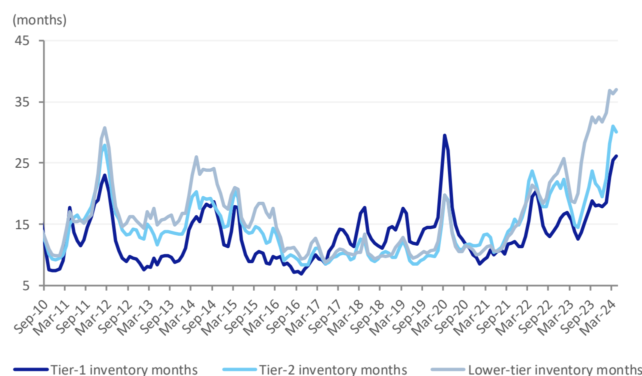
Graph 9. Inventory months (80 major cities)



	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
Inventory months	23,6	22,4	24,8	30,1	32,1	31,7
GFA for sale (m sqm)	475,3	475,2	478,6	477,7	470,6	469,7

Source: CRIC, Genial Investimentos

Graph 10. Inventory months (By city tier)



Source: CRIC, Genial Investimentos

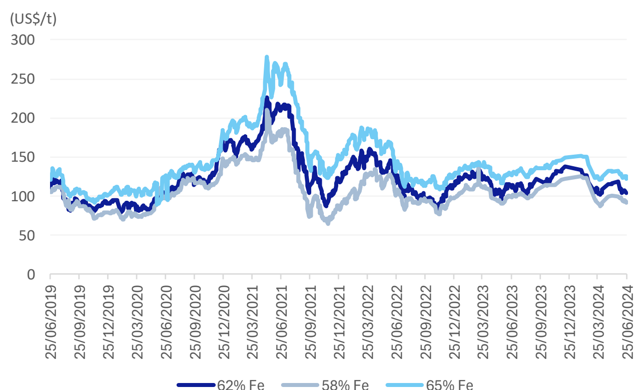
Steel and Iron Ore

Seasonal rainy season still restricts steel demand. In the week of June 17-21, the main steel prices in China fell due to the seasonal drop in demand during the off-season (the rainy season from late May to late July reduces demand for steel). In the face of rain, the construction sector (infrastructure + housing) slows down, impacting steel demand in the main downstream segments, with the exception of heavy industry.

Inputs: coke production and scrap prices remain weak. Operating rates at 110 Chinese coking coal washing plants averaged 66.57%, a six-week low, falling -2.6p.p w/w. This drop was influenced by the suspension of operations at coking coal mines in the city of Yan'an for safety monitoring. Chinese cokemakers reduced production during the week of June 13-19, with an average output of 536Kt/day, a drop of -1.8Kt/day w/w. The reduction was partly due to low margins, leading some producers to reduce their operations. Similarly, steel scrap prices in China continued to fall, with the national composite steel scrap price index at ~US$ 390/t on June 21, down -0.2p.p w/w.

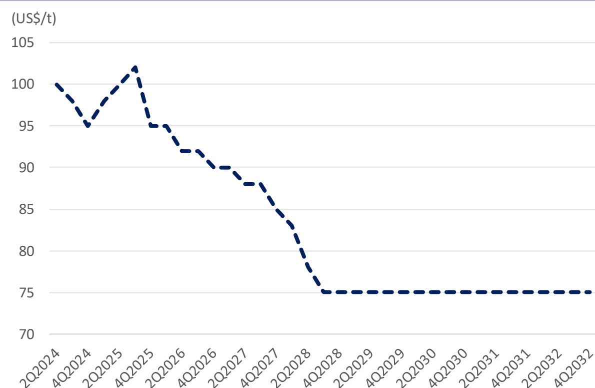
Iron ore: futures prices are narrowing at a faster pace. Despite reasonable overall demand for this level of supply, prices for imported iron ore in China remained at downward trend last week due to the sluggish real estate market and concerns about measures to control crude steel production. China's National Bureau of Statistics (NBS) reported an annual drop of -10.1% in real estate financing from January to May. Sentiment is worsening again even with the easing of mortgage rates, which has cooled the prices of 62% Fe iron ore futures for July and August contracts. We recognize that the price support is in supply constraints, but at the ports the level became above the margin of the last 5 years. With large amount of stockpile at the ports, the spot market price also fell last week (-1.5p.p w/w), reaching ~US$105/t.

Graph 11. Iron ore price (Spot - S&P Platts)



Source: S&P Platts, Genial Investimentos

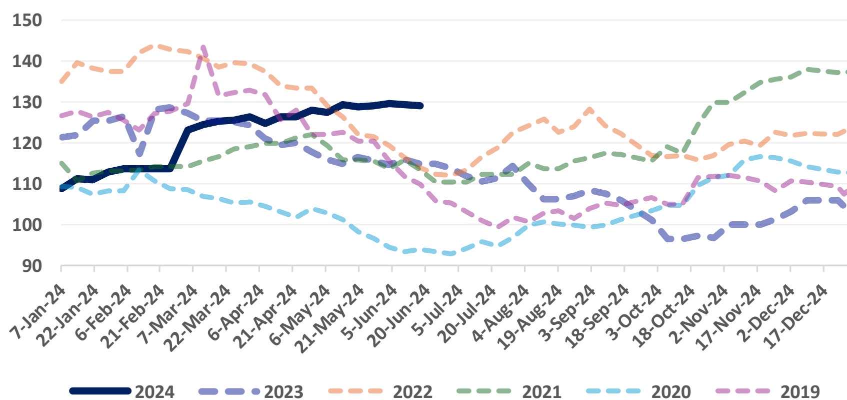
Graph 12. Iron ore price (Genial Est. 24-32E)



Source: CRIC, Genial Investimentos

Iron ore: port inventory fall, but supply is still higher than in the last 5 years. Inventory of imported iron ore at the 40 main Chinese ports monitored fell slightly between June 14 and 20. On June 20, port stocks decreased for the second week in a row by -310Kt or -0.2p.p w/w, reaching 129.2Mt. Port inventory are still above the level of the last 5 years, which has led to a reduction in the price of iron ore on the spot market, as we have already commented. The 5-year level was broken in May. We believe that the shipments recovery derived from Australia in recent months, after a more difficult start to the year due to weather conditions and other setbacks, together with the good operational job that Brazilian mining companies are doing so far throughout 2024, is generating this compensatory effect of supply at the ports.

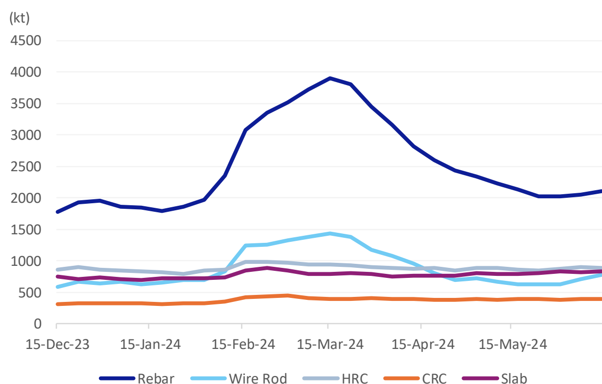
Graph 13. Iron ore port inventory (Mt)



Source: Bloomberg, Genial Investimentos

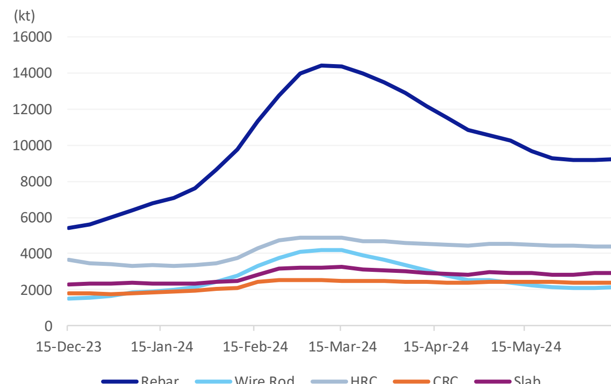
Steel: inventory held by the distribution segment rise. From June 14 to 20, inventory of the five main finished steel products held by trading houses in the distribution (retail) segment in China rose by +116.7Kt, more than the 88Kt in nominal increase vs. previous week. The hot and rainy weather has limited demand for steel, as we have already commented. On June 20, stocks of rebar, wire rod, hot-rolled coil (HRC), cold-rolled coil and slabs in 132 monitored cities increased by +0.6p.p w/w to 21.2Mt.

Graph 14. Steel mills inventory (130 major cities)



Source: My Steel, Genial Investimentos

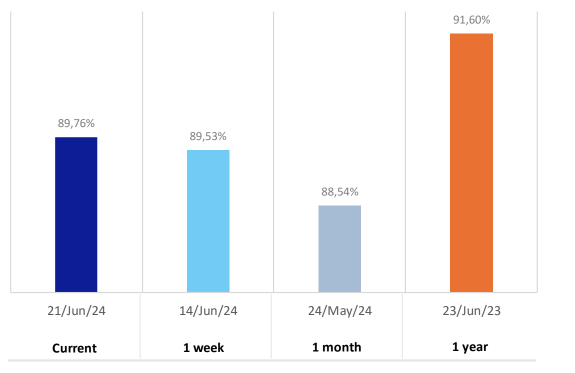
Graph 15. Traders's steel inventory (130 major cities)



Source: My Steel, Genial Investimentos

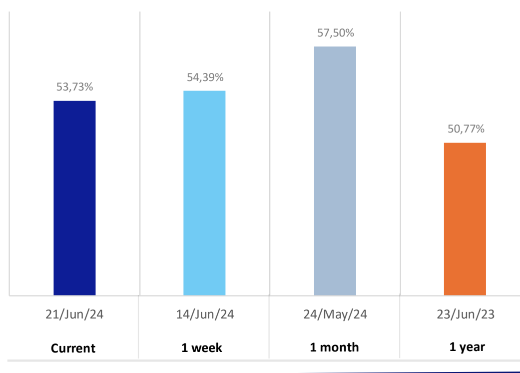
Steel: Blast furnace utilization rate rises again. Blast furnace (BF) capacity utilization in China increased to 89.76% (+0.2p.p w/w). Production among blast furnace mills continued to rise, as more mills resumed operations after maintenance due to the slight recovery in steel margins brought about by the fall in the price of metallurgical coke. On the other hand, electric arc furnace (EAF) mills in China reduced production again last week, after an earlier increase, as negative margins and weak steel demand reduced enthusiasm for production.

Graph 16. BF capacity % (weighted average)



Source: My Steel, Genial Investimentos

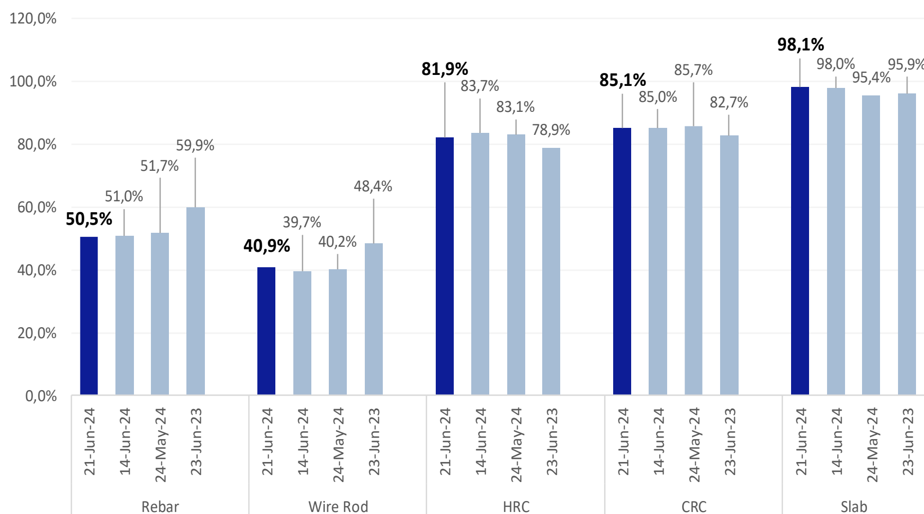
Graph 17. EAF capacity % (weighted average)



Source: My Steel, Genial Investimentos

Steel: rebar output falls for the third week in a row. Rebar production in China fell for the third week in a row in the period June 13-19, decreasing -0.8p.p or 18.8Kt, reaching a 1.5-month low of 2.31Mt, according to a database of ~130 steel mills. The reduction occurred mainly in eastern and northwestern China, where mills switched to products with better returns or took a break for maintenance, and in Xinjiang due to high inventory levels. The utilization rate at rebar mills stood at 50.5% (-0.5p.p y/y), reflecting the drop in production.

Graph 18. Blast-furnace capacity utilization (by product)



Source: CREIS, Genial Investimentos

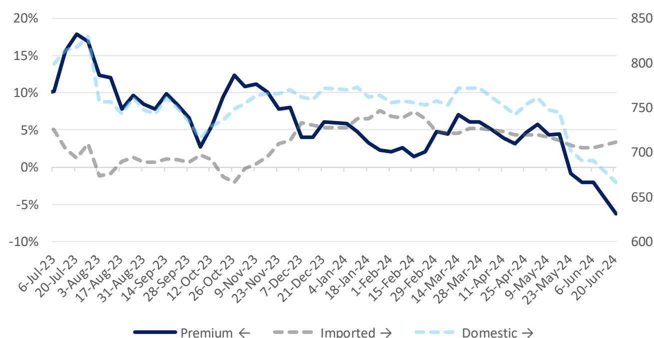
Steel: HRC production also decreases, interrupting upward cycle. China's hot-rolled coil (HRC) output suffered a reversal, falling -2.12% (or 69.3Kt), to 3.21Mt between June 17 and 21, after reaching a two-year high of 3.28Mt between June 10 and 14. This data includes 37 flat steel producers. As for the utilization rate in the mills for HRC, we found out through data clocking in at 81.9% (-1.8p.p w/w) in the week ending June 21, showing a setback in the process of increasing the rate seen up to the week of June 14.

Brazil

In May, market data suggests discounts for rebar. In the week ending May, (unofficial) market data showed lower prices for Brazilian domestic rebar and a drop in sales offers, especially outside the Southeast region. Some distributors were singled out for inexplicably low prices in a weak market.

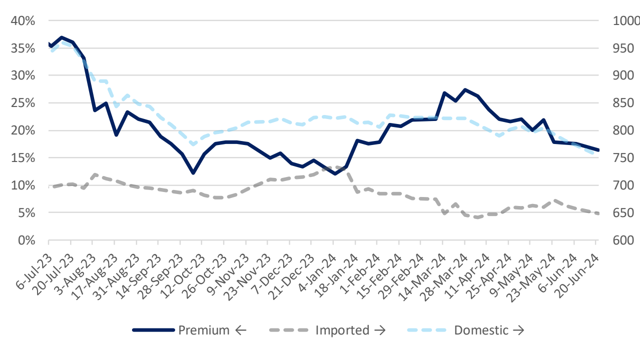
Mills are fighting for +8% price increase for long steel. In June up to the 21st, domestic prices remained stable, with steel mills announcing a +8% price increase for July, but that full take-up depends on local demand, which is still low. The price increase was considered unlikely by the main buyers due to the risk of a reduction in the order book by developers and home builders. Closing on June 21, Platts assessed the price of Brazilian domestic rebar at R$3,625/t (~US$660/t) in a range of R$3,500-3,750/t. Brazilian rebar was quoted at a negative premium of -6.3% vs. imported, which was delivered at ports at ~US$710/t.

Graph 19. Premium on rebar (Brazil vs. imported)



Source: S&P Platts, Genial Investimentos

Graph 20. Premium on HRC (Brazil vs. imported)



Source: S&P Platts, Genial Investimentos

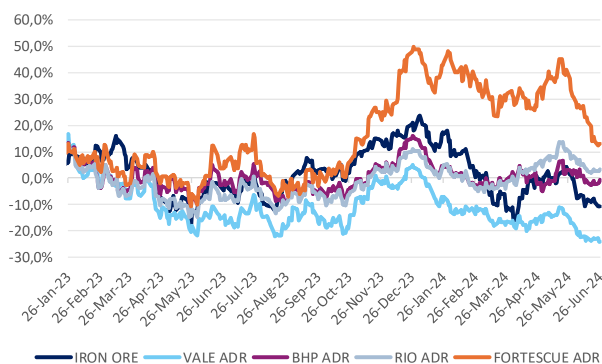
New import tariff quota system for flat steel came into effect in June. Brazil initiated new tariffs on imported steel during the month of June to protect local producers, causing confusion in the market about the handling of volumes, licenses and quotas. The Ministry of Development and Industry (MDIC) detailed the tariffs for 11 specific steel products (NCMs), focusing on flat steel and effective June 1 for one year. The 25% tariffs (vs. ~14% previously) will be applied to import volumes that exceed the prescribed quotas, calculated on the basis of 2023 volumes, with an additional 30% tolerance for average imports between 2020 and 2022. Quotas will be distributed every 4M, with 80% allocated to companies that purchase at least 3% of total imports from May 2023 to April 2024 and 20% available on a first-come, first-served basis via import license registration.

The quota system is complex and confusing, and it is uncertain whether it will be effective. Coated flat steel products will operate on a 60%/40% proportionality. The remaining balance of unused quotas in each 4M sub-period and refunds of canceled or replaced import licenses will not be added to the quota for the subsequent period. These details have led market participants (including us) to consider the new tariffs system confusing and very complex. Despite uncertainties about how effective the quota system will be, it may decrease imports due to the additional complications and risks. Our preliminary analysis is that Gerdau may benefit more on its flat steel mix, as it was better served in the selection of NCMs (IABr's request was for 30 by-products, MIDIC approved an increase to 11).

Decision may have been more political than technical. In November, IABr projected a -3pp. y/y drop in crude steel production for 2024, with steel imports expected to increase by +20pp. to 5.9Mt. The government's proposal aims to balance the interests of local producers and importers without increasing domestic inflation. Although known, the proportions of the quotas may not be effective. The ministry has stated that the decision will have no impact on prices and inflation, maintaining economic stability. The complexity stems from the possibility that the decision may have been more political than technical. The premium for domestic HRC vs. imported HRC closed the week of June 21 at +16%, stable w/w, with the price remaining in the R$4,000-4200/t (~US$750/t) range.

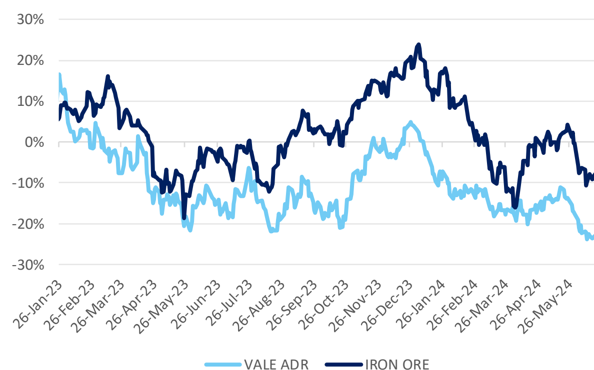
Key data to keep up with on companies' side

Graph 21. Mining majors (since Jan/23)



Source: Bloomberg, Genial Investimentos

Graph 22. Vale's ADRs vs. iron ore discount



Source: Bloomberg, Genial Investimentos

Table 2. Short position

Company	Ticker	Lending Rate	Float (%)
Vale	VALE3	4%	3,8
Cmin	CMIN3	66%	17,2
Gerdau	GGBR4	5%	4,51
Usiminas	USIM5	16%	8,34
Csn	CSNA3	17%	7,2

Source: Bllomberg, Genial Investimentos

Appendix: Vale

Figure 1. Vale – Income Statement in US$ Millions (Genial Est. 2024-2029)

Income Statement	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**37.042**	**41.308**	**42.539**	**44.345**	**45.317**	**48.849**
(-) COGS	(23.877)	(26.217)	(26.498)	(27.575)	(29.043)	(31.387)
Gross Profit	**13.165**	**15.091**	**16.042**	**16.770**	**16.273**	**17.461**
(-) Expenses	(3.420)	(3.321)	(3.186)	(2.796)	(2.448)	(2.584)
Adjusted EBITDA	**12.894**	**15.535**	**16.332**	**17.612**	**17.636**	**18.850**
(-) D&A	(3.194)	(3.373)	(3.543)	(3.715)	(3.895)	(4.066)
EBIT	**9.700**	**12.162**	**12.789**	**13.897**	**13.741**	**14.785**
(+/-) Financial Result	(1.865)	(1.927)	(2.244)	(2.321)	(2.286)	(2.353)
(-) Taxes	(1.010)	(1.395)	(1.509)	(1.661)	(1.644)	(1.791)
Net income	**6.825**	**8.840**	**9.037**	**9.914**	**9.811**	**10.641**
Profitability						
Net margin (%)	18,43%	21,40%	21,24%	22,36%	21,65%	21,78%

Figure 2. Vale– Cash Flow in US$ Millions (Genial Est. 2024-2029)

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**37.042**	**41.308**	**42.539**	**44.345**	**45.317**	**48.849**
(-) COGS	(23.877)	(26.217)	(26.498)	(27.575)	(29.043)	(31.387)
Adjusted EBITDA	**12.894**	**15.535**	**16.332**	**17.612**	**17.636**	**18.850**
Adjusted EBIT	**9.700**	**12.162**	**12.789**	**13.897**	**13.741**	**14.785**
(-) Taxes	(1.010)	(1.395)	(1.509)	(1.661)	(1.644)	(1.791)
(+) D&A	3.194	3.373	3.543	3.715	3.895	4.066
(+/-) Brumadinho and Samarco	(570)	(2.198)	(1.874)	(1.389)	(1.221)	(923)
(+/-) Δ WK	3.444	835	151	(49)	(176)	(70)
(-) Capex	(6.719)	(6.792)	(6.792)	(7.333)	(7.333)	(7.333)
FCFF	**8.039**	**5.984**	**6.308**	**7.179**	**7.261**	**8.732**

Appendix: CMIN

Figure 1. CMIN – Income Statement in R$ Millions (Genial Est. 2024-2028)

Income Statement	2024E	2025E	2026E	2027E	2028E
Net Revenue	**13.366**	**16.842**	**19.948**	**20.607**	**16.959**
(-) Cash COGS	(7.635)	(8.548)	(10.263)	(11.133)	(10.455)
Gross Profit	**4.149**	**6.427**	**7.516**	**6.999**	**3.724**
(-) SG&A and others	(1.702)	(2.114)	(2.452)	(2.456)	(1.928)
Adjusted EBITDA	**4.253**	**6.540**	**7.715**	**7.527**	**4.942**
(-) D&A	(1.582)	(1.867)	(2.169)	(2.475)	(2.780)
EBIT	**2.297**	**4.163**	**4.914**	**4.394**	**1.647**
(+/-) Financial Result	(1.087)	(993)	(911)	(934)	(1.002)
(-) Taxes	(377)	(989)	(1.248)	(1.079)	(201)
Net income	**832**	**2.181**	**2.755**	**2.381**	**444**
Profitability					
Net margin (%)	6,23%	12,95%	13,81%	11,55%	2,62%

Figure 2. CMIN – Cash Flow in R$ Millions (Genial Est. 2024-2028)

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E
Net Revenue	**13.366**	**16.842**	**19.948**	**20.607**	**16.959**
(-) COGS	(7.635)	(8.548)	(10.263)	(11.133)	(10.455)
Adjusted EBITDA	**4.253**	**6.540**	**7.715**	**7.527**	**4.942**
EBIT	**2.297**	**4.163**	**4.914**	**4.394**	**1.647**
(-) Taxes	(377)	(989)	(1.248)	(1.079)	(201)
(+) D&A	1.582	1.867	2.169	2.475	2.780
(+/-) Δ WK	254	(110)	23	146	290
(-) Capex	(1.589)	(2.681)	(3.867)	(5.411)	(5.480)
FCFF	**2.166**	**2.249**	**1.991**	**525**	**(964)**

Appendix: Gerdau

Figure 1. Gerdau – Income Statement in R$ Millions (Genial Est. 2024-2028)

Income Statement	2024E	2025E	2026E	2027E	2028E
Net Revenue	**65.957**	**66.628**	**67.907**	**69.433**	**71.736**
(-) COGS	(56.697)	(55.257)	(54.833)	(55.976)	(56.782)
Gross Profit	**9.261**	**11.371**	**13.074**	**13.458**	**14.954**
(-) Expenses	(1.875)	(1.777)	(1.802)	(1.823)	(1.871)
Adjusted EBITDA	**10.615**	**14.122**	**15.989**	**16.449**	**18.253**
(-) D&A	(3.230)	(3.569)	(3.900)	(4.197)	(4.464)
EBIT	**7.714**	**10.258**	**11.947**	**12.323**	**13.795**
(+/-) Financial Result	(1.041)	(1.067)	(880)	(711)	(780)
(-) Taxes	(1.127)	(1.807)	(2.153)	(2.218)	(2.510)
Net income	**5.545**	**7.384**	**8.914**	**9.394**	**10.505**
Profitability					
Net margin (%)	8,41%	11,08%	13,13%	13,53%	14,64%

Figure 2. Gerdau– Cash Flow in R$ Millions (Genial Est. 2024-2028)

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E
Net Revenue	**65.957**	**66.628**	**67.907**	**69.433**	**71.736**
(-) COGS	(56.697)	(55.257)	(54.833)	(55.976)	(56.782)
Adjusted EBITDA	**10.615**	**14.122**	**15.989**	**16.449**	**18.253**
EBIT	**7.714**	**10.258**	**11.947**	**12.323**	**13.795**
(-) Taxes	(1.127)	(1.807)	(2.153)	(2.218)	(2.510)
(+) D&A	3.230	3.569	3.900	4.197	4.464
(+/-) Δ WK	(822)	220	(430)	(474)	(212)
(-) Capex	(5.998)	(6.063)	(6.130)	(6.198)	(6.267)
FCFF	**2.997**	**6.177**	**7.135**	**7.631**	**9.270**

Appendix: CSN

Figure 1. CSN – Income Statement in R$ Millions (Genial Est. 2024-2028)

Income Statement	2024E	2025E	2026E	2027E	2028E
Net Revenue	**45.901**	**53.974**	**59.329**	**59.891**	**60.646**
(-) COGS	(29.066)	(30.548)	(31.526)	(33.403)	(33.448)
Gross Profit	**16.835**	**23.426**	**27.803**	**26.488**	**27.198**
(-) SG&A and others	(5.478)	(5.584)	(5.350)	(4.796)	(4.089)
EBITDA	**11.358**	**17.842**	**22.453**	**21.692**	**23.109**
(+/-) Financial Result	(3.127)	(3.761)	(4.309)	(4.288)	(4.245)
EBT	**4.059**	**9.247**	**12.846**	**11.730**	**12.786**
(-) Taxes	(1.618)	(3.144)	(4.368)	(3.988)	(4.347)
Net Income	**2.441**	**6.103**	**8.479**	**7.742**	**8.439**
Profitability					
Net Margin (%)	5,32%	11,31%	14,29%	12,93%	13,92%

Figure 2. CSN – Cash Flow in R$ Millions (Genial Est. 2024-2028)

Cash Flow	2024E	2025E	2026E	2027E	2028E
Net Revenue	**45.901**	**53.974**	**59.329**	**59.891**	**60.646**
(-) COGS	(29.066)	(30.548)	(31.526)	(33.403)	(33.448)
Adjusted EBITDA	**11.358**	**17.842**	**22.453**	**21.692**	**23.109**
EBIT	**7.186**	**13.008**	**17.155**	**16.018**	**17.031**
(-) Taxes	(1.618)	(3.144)	(4.368)	(3.988)	(4.347)
(+) D&A	4.172	4.834	5.298	5.674	6.078
(+/-) Δ WK	19	(689)	(236)	(298)	(78)
(-) Capex	(5.452)	(6.142)	(6.113)	(5.586)	(5.629)
FCFF	**4.306**	**7.867**	**11.737**	**11.819**	**13.055**

Appendix: Usiminas

Figure 1. Usiminas – Income Statement in R$ Millions (Genial Est. 2024-2028)

Income Statement	2024E	2025E	2026E	2027E	2028E
Net Revenue	**26.690**	**26.956**	**27.619**	**27.985**	**27.707**
(-) COGS	(24.033)	(23.371)	(23.699)	(24.035)	(23.603)
Gross Profit	**2.657**	**3.585**	**3.921**	**3.949**	**4.104**
(-) Expenses	(1.105)	(1.301)	(1.445)	(1.365)	(1.324)
Adjusted EBITDA	**2.590**	**3.377**	**3.626**	**3.834**	**3.769**
(-) D&A	(1.038)	(1.093)	(1.150)	(1.250)	(990)
EBIT	**1.552**	**2.284**	**2.476**	**2.585**	**2.779**
(+/-) Financial Result	545	391	469	746	837
(-) Taxes	(319)	(402)	(441)	(497)	(538)
Net income	**1.885**	**2.380**	**2.611**	**2.941**	**3.185**
Profitability					
Net margin (%)	7,06%	8,83%	9,45%	10,51%	11,50%

Figure 2. Usiminas– Cash Flow in R$ Millions (Genial Est. 2024-2028)

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E
Net Revenue	**26.690**	**26.956**	**27.619**	**27.985**	**27.707**
(-) COGS	(24.033)	(23.371)	(23.699)	(24.035)	(23.603)
Adjusted EBITDA	**2.590**	**3.377**	**3.626**	**3.834**	**3.769**
EBIT	**1.552**	**2.284**	**2.476**	**2.585**	**2.779**
(-) Taxes	(319)	(402)	(441)	(497)	(538)
(+) D&A	1.038	1.093	1.150	1.250	990
(+/-) Δ WK	978	20	(188)	(18)	158
(-) Capex	(1.813)	(1.559)	(2.573)	(2.058)	(1.955)
FCFF	**1.436**	**1.435**	**425**	**1.261**	**1.434**

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