genial Equity Research

VALE

3Q24 Preview: It's not as good as it sounds

LatAm Metals & Mining

Main takeaways:

(i) Iron ore fines production exceeded our expectations, reaching **90.97Mt** (+7.6% vs. Genial Est), up +5.5% y/y; **(ii) Shipments** of 69.3Mt (+3.4% vs. Genial Est), up marginally q/q and down -0.5% y/y, consolidating an **operating inventory of 5.5Mt**, through a larger than expected production vs. sales gap; **(iii) Pellet production** accelerated +12.9% y/y, totaling 10.4Mt (+3.8% vs. Genial Est.), marking a record since 2018, with shipments also surprising at 10.2Mt (+3.6% vs. Genial Est.), showing an increase of +0.6% y/y; **(iv) Realized price** of **i.o. fines** falls to **US$90.6/t** (-2.1% vs. Genial Est.), showing a contraction of -7.7% q/q; **(v)** Discount on the **quality premium for i.o fines** came to **-US$1.9/t** (vs. -US$3.2/t in 2Q24), **(vi) Realized price** for **pellets** was recorded at **US$148.2/t** (+0.5% vs. Genial Est.), contracting -5.7% q/q; **(vii)** All-in premium closes 3Q24 at +US$1.7/t; **(viii)** Realized nickel price falls to US$17,012/t, reflecting a drop of -8.7% q/q, but still above the LME curve; **(ix)** Nickel production reaches 47.1Kt (-0.8% Genial Est.), achieving significant growth of +68.8% q/q; **(x)** Realized copper price is marked at US$9,016/t (+3.3% Genial Est.), indicating a drop of -2.0% q/q, mainly impacted by lower LME reference prices, with production of 85.9Kt (+9.3% t/t); **(xi) C1/t ex. third party purchases** should be **US$21.1/t Genial Est.** (-15.3% q/q; -3.9% y/y), benefiting from a more favorable production mix and positive seasonality; **(xii)** Greater exposure to spot should increase freight costs; **(xiii)** Despite good production volume and sales slightly above estimates, we expect the realized price to negatively impact **adjusted EBITDA,** projected at **US$3.7bn Genial Est**, down **-17.7% q/q** and **-11.2% y/y**; **(ix)** Trading at an **EV/EBITDA 25E** of **3.1x** (vs. 5.0x historical average), with an **FCF Yield 25E** of **14.5%** that would support a **Dividend Yield 25E** of **~10%**, in addition to the buyback program, Vale's shares are penalized vs. their own past performance. We believe that the **elimination of overhangs**, coupled with the prospect of a **partial recovery in iron ore prices**, could unlock value. We therefore reiterate our **BUY rating**, based on a **12M Target-Price** for **VALE3-B3** of **R$78.50** and **US$14.00** for **ADRs-NYSE**, with an **upside** of **+28.33%**.

Vale released its **3Q24 Production and Sales** report yesterday (October 15), after the market closed. In general, we assess the **production as good figures** and the **realized price as worse than expected**. We put the **pellet operating indicators as a positive highlight**, with production being marked at 10.3Mt (+3.8% vs. Genial Est.) and sales with a great performance, reaching 10.1Mt (+14.3% vs. Genial Est.).

Table 1. Operational Summary (3Q24 vs. Genial Est.)

(Thousand Tonnes - kt)	Reported	Genial Est.		Reported				
Summary	**3Q24A**	**3Q24E**	**% Diff.**	**3Q24A**	**2Q24A**	**% q/q**	**3Q23A**	**% y/y**
Iron Ore Production	90.971	84.514	**7,6%**	90.971	80.598	**12,9%**	86.239	**5,5%**
Iron Ore Fines Shipments	69.344	67.052	**3,4%**	69.344	68.512	**1,2%**	69.714	**-0,5%**
Pellets Production	10.363	9.987	**3,8%**	10.363	8.955	**15,7%**	9.175	**12,9%**
Pellets Shipments	10.143	8.876	**14,3%**	10.143	8.864	**14,4%**	8.613	**17,8%**

Source: Genial Investimentos, Vale

Analysts

Igor Guedes
+55 (11) 3206-8286
igor.guedes@genial.com.vc

Luca Vello
+55 (11) 3206-1457
luca.vello@genial.com.vc

Isabelle Casaca
+55 (11) 3206-8244
Isabelle.casaca@genial.com.vc

Company

VALE US Equity
Buy

Price: US$ 10.79 (15-Oct-2024)
Target Price 12M: US$ 14.00 (NYSE)

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

As for **iron ore fines**, although **production also surprised**, coming in at **90.9Mt** (+7.6% vs. Genial Est), significantly above what we had in our model and also showing an increase compared to the street (+6.3% vs. consensus), it is worth mentioning that the gap between production vs. sales accelerated by +4.6p.p. y/y, consolidating a more aggressive figure than our estimate (23.8% vs. 20.9% Genial Est.), and we already had a gap projection higher than the consensus, with an increase of +1.7p.p y/y and **5.5Mt of operating inventory** was built up.

This means that even though we produced more than expected, this increase was not reflected in a substantial improvement in **shipments of iron ore fines**. As a result, we saw the level of shipments stand at **69.3Mt** (+3.4% vs. Genial Est.), only **marginally better than we had projected**, even shrinking by -0.5% y/y. In the sequential movement, there was a slight improvement of +1.2% q/q, also based on more robust production due to the typical seasonality of the 3Qs, consolidating a period of less rainfall in both the North and Southeast systems.

As for the **realized price**, the indications in the report released yesterday by Vale were not positive. The realized price of **iron ore fines** was **US$90.6/t** (-2.1% vs. Genial Est.), below our projection, and showing a contraction of -7.7% q/q and -13.8% y/y, mainly due to the strong deceleration of the 62% Fe curve during 3Q24 and a premium for quality with a higher discount than our estimates. With a marginally higher sales volume and a lower realized price than we expected, the performance of the iron ore fines unit will be very close to what we had already anticipated in our operational preview report, which is attached below (Vale Operational Preview 3Q24). The financial results will be released on October 24, after the market closes.

Table2. New 3Q24 Est. vs. Old one

(US$ millions)	Genial Est.	Old Est	
Income Statement	**3Q24E**	**3Q24E**	**% Diff.**
Net Revenue	9.727	9.485	**2,5%**
Adjusted EBITDA	3.728	3.651	**2,1%**
Net Income	1.879	1.819	**3,3%**

Source: Genial Investimentos

Table3. New 3Q24 Est. vs. 2Q24 and 3Q23

Genial Est.				
3Q24E	**2Q24A**	**% q/q**	**3Q23A**	**% y/y**
9.727	10.031	**-3,0%**	10.618	**-8,4%**
3.728	4.529	**-17,7%**	4.198	**-11,2%**
1.879	3.514	**-46,5%**	2.925	**-35,8%**

Source: Genial Investimentos

Valuation and rating. We can say that Vale reported **positive results on the operational side**, with better numbers than our estimate in the ferrous division, both for production and shipments, in iron ore fines and pellets. Although it did occur, the increase in shipments of iron ore fines was relatively marginal compared to what we had expected. On the other hand, the strong **pellet production and sales figures are noteworthy**, marking deliveries well above expectations, reaching the highest quarterly production since 2018. Even so, the realized price of iron ore fines was a disappointment, being reported at US$90.6/t (-2.1% vs. Genial Est.), with a contraction of -7.7% q/q and -13.8% y/y.

The drop in the realized price can be attributed to the high elasticity of iron ore supply at Chinese ports vs. a cooler Chinese domestic demand, which catalyzed a deep deceleration in the 62% Fe curve during 3Q24 (-11.3% q/q). As we said in our last report, Vale's realized price actually fell less q/q than the reference curve (-7.7% vs. -11.3%), due to **(i)** an improvement in the composition of the mix, with more volume of BRBF (blend with a higher % of Fe) and fewer shipments of high silica products (low % of Fe), **(ii)** an increase in the iron ore fines premium, but still in negative territory, reaching -US$1.9/t vs. -US$3.2/t in 2Q24, as well as **(iii)** less expressive use of third-party iron ore. Even counting on the effect of the forward provisioning mechanism to also help a price slowdown that had less impact vs. the 62% Fe curve, the premium for quality, although it increased q/q, still translated into a significant discount, which was worse than we expected. We characterize the less than desirable improvement in the premium as the main factor behind the consolidation of the price below our projection.

It's not the first time we've commented on the distrust of investors we come into contact with regarding price realization in the face of weak premiums in negative territory. We understand that the adherence of Chinese mills to high Fe content products is very low. **Vale's strategy of "value over volume" seems to us to be far removed from the current market reality**. The major consequence of this situation is not only more depressed realized prices, but also the perception that the company's main competitive advantage over the other majors (BHP, Rio Tinto and Fortescue) is gradually being eroded, which is precisely the quality premium for iron ore from Carajás (PA), in the Northern system. Although we believe that the uncertainties about China's macroeconomic scenario, which are directly related to the company's pricing, are already widely known by the market, we believe that 3Q24 has amplified the evidence of how much this could harm the quality premium. It's true that the premium has improved, reducing the discount a little, but it's still a long way from what we'd like to see. The company is still very price-sensitive, and increasing volume with a falling price doesn't seem to improve EBITDA.

Our analysis suggests that, with domestic demand in China weakening, local steel mills are going through an increasingly long period of margin compression. This situation is reducing the appetite for quality premium in iron ore fines and raising questions about the sustainability of the productivity strategy with its emphasis on high grade. Even with government fiscal and monetary impulses stimulating aggregate demand channeled into the Chinese real estate sector - which even fell short of what the market consensus predicted last week - distrust of the economic revival focused on iron ore is, at the very least, acceptable. We understand investors' pain when looking at a sector with a low probability of growing demand. Seeing Vale, once again, register **a premium far below the pre-crisis period in China** (-US$1.9/t in 3Q24 vs. +US$4/t average 2017-22), corroborates this discouragement, whose allocation around the name continues to be heavily penalized. As we commented earlier, **we see many fund managers with allocations well below their historical percentage in the company's shares**, especially the local ones.

From this point of view, potential investors interested in increasing their exposure to Vale today can only do so because of the excessive discount that the shares are suffering in the face of an undeniably weak scenario. It's not that the outlook is positive, but rather that, given the negative bias that the shares have been submerged in, the reduction in allocation by fund managers has been so profound that it has penalized the company beyond what we believe to be fair. This is proven by analyzing some important metrics. Compared to its global peers, since last quarter the company continues to **occupy the position of the most discounted major vs. the price of iron ore in the world** (with a discount almost 20% above historical levels).

In addition, trading at an **EV/EBITDA 25E** of **3.1x** (vs. 5.0x historical average), with an **FCF Yield 25E** of **14.5%** that would support a **Dividend Yield 25E** of **~10%**, in addition to the buyback program, Vale's shares are penalized vs. their own past performance. We believe that **(i)** the elimination of the overhangs (Mariana Agreement, renewal of the CEO position and renegotiation of the EFVM and EFC railroads), together with **(ii)** the prospect of a partial recovery in iron ore prices, even if in the short term linked to speculation (fiscal stimulus in China), could unlock value for the shares, which remain severely punished by investors. We therefore reiterate our **BUY rating**, based on a **12M Target Price** for **VALE3-B3** of **R$78.50** and **US$14.00** for the **NYSE ADRs**, with an **upside** of **+28.33%**.

Preview 3Q24: In detail!

Iron ore fines production far exceeds our expectations. In our last report, we projected a slight reduction of -2% y/y in the volume of iron ore fines production, even considering the favorable seasonality of the third quarter, driven by dry weather and the potential for increased production in the Northern System. However, Vale exceeded our estimates, reporting production of 90.9Mt (+7.6% vs. Genial Est.), representing a robust advance of +12.9% q/q and +5.5% y/y. Despite a strong annual base, with 3Q23 having already shown solid performance, the company managed to raise its production, defying our initial more conservative outlook.

Change in commercial strategy, with weak shipments in fines vs. production. Regarding shipments, we believe that Vale increased its iron ore fines inventories, justified by the increase in the gap between production vs. sales by +4.6p.p. y/y, reaching 23.8% (vs. 20.9% Genial Est.). We believe that there has been a change in commercial strategy, considering that in 2Q24 the company opted to ship a very large amount of volume. We believe that this change occurred due to the unfavorable price dynamics that prevailed during the quarter, justified by the increase in the gap between production vs. sales by +4.6 p.p. y/y, reaching 23.8% (vs. 20.9% Genial Est.). Even though we had already anticipated an increase in the gap compared to the same period last year due to the belief that more inventories would be built up, thus already considering the seasonal effect present in the 3Qs, the intensity of the increase still surprised us.

To put this into context, the 62% Fe curve started the year at ~US$140/t and fell to an average of US$99/t in 3Q24, with a few moments at the US$90/t line. The company reported shipments of 69.3Mt (+3.4% vs. Genial Est.), resulting in an increase of +1.2% y/y and a decrease of -0.5% y/y. Therefore, we can consider that the level of sales was weak compared to the robustness of production. On the other hand, we would stress that it would not be correct to say that stockpiling is equivalent to the entire gap. The strong pellet production figures indicate that part of this more robust gap was probably used in the pelletizing process and did not constitute operating stockpiles of iron ore fines, which amounted to 5.5Mt.

As mentioned in the previous report, the approach adopted by the company last quarter contributed to the excessive accumulation of iron ore port stocks that we are currently seeing in China, reaching the highest level in the last 5 years since the end of May. However, we already anticipated a strategic reversal due to: **(i)** an improvement in the mix in 3Q24, **(ii)** an increase in the premium (albeit in negative territory), **(iii)** less expressive use of third-party ore and **(iv)** a reduction in the level of sales. This last point did not materialize due to the significant increase in the production of fines, which impacted shipments in a way we had not anticipated, although we had already signaled a possible change in Vale's commercial strategy. Even with the product mix showing a lower silica content (-29.2% y/y) and a greater share of BRBF (+14% y/y), the premium remains at negative levels and lower than desired.

Table 4. Production Summary Vale (3Q24 vs. Genial Est.)

Vale **Production Summary (Kt)**	3Q24 **Reported**	3Q24E **Genial Est.**	**% R/E**
Iron Ore[1]	90.971	84.514	7,6%
Pellets	10.363	9.987	3,8%
Nickel	47	47	-0,8%
Copper	86	82	4,2%

Production Summary (Kt)	3Q24A **Reported**	2Q24A **Reported**	**% q/q**	3Q23A **Reported**	**% y/y**
Iron Ore[1]	90.971	80.598	12,9%	86.239	5,5%
Pellets	10.363	8.955	15,7%	9.175	12,9%
Nickel	47	25	89,2%	42	11,9%
Copper	86	79	9,3%	82	5,3%

[1] Including third-party purchases, run-of-mine and feed of other pelletization plants.

Source: Genial Investimentos, Vale

Significant increase in pellet production and sales. Pellet production showed a substantial increase of +12.9% y/y, reaching 10.4Mt (+3.8% vs. Genial Est.) and growing +15.7% q/q. This growth was due to **(i)** seasonality typical of third quarters and **(ii)** Vale's good accumulated production performance in 1H24. As mentioned in our last report, the sequential improvement is due to the logistical delay between the extraction of iron ore fines and the arrival of cargo from Brucutu (MG) and Itabira (MG) at the pelletizing plant yard in Tubarão (ES), as well as the time needed to transform fines into pellets.

Normally, we expect an increase in pellet production in the quarters following those with more elastic production of iron ore fines. In this case, we believe that part of the high fines production, both in the previous quarter and this quarter, was used in pellet production, justifying this strong figure.

With regard to pellet shipments, the company also increased its volume to 10.2Mt (+3.6% vs. Genial Est.), an increase of +14.4% q/q and +0.6% y/y. This figure was higher than projected due to **(i)** the accumulation of iron ore fines; **(ii)** the interchangeable passage of quarters, where the stronger production of fines last quarter and this quarter helps in the production of pellets and subsequent sales, considering what we mentioned about the logistical delay. In this way, it is even possible to imagine that the 5.5Mt of inventories built up will be converted into sales in 4Q24.

Table 5. Shipments Summary Vale (3Q24 vs. Genial Est.)

Vale Shipments Summary (Kt)	3Q24A **Reported**	3Q24E **Genial Est.**	**%R/E**
Iron ore fines	69.344	67.052	3,4%
Pellets	10.143	8.876	14,3%
ROM	2.351	2.232	5,3%
Nickel	41	41,8	-2,7%
Copper	75	70,4	6,8%

Shipments Summary (Kt)	3Q24A **Reported**	2Q24A **Reported**	**% q/q**	3Q23A **Reported**	**% y/y**
Iron ore fines	69.344	68.512	1,2%	69.714	-0,5%
Pellets	10.143	8.864	14,4%	8.613	17,8%
ROM	2.351	2.416	-2,7%	2.232	5,3%
Nickel	40,7	34,3	18,7%	39,2	3,8%
Copper	75,2	76,1	-1,2%	73,8	1,9%

[1] Including third-party purchases

Source: Genial Investimentos, Vale

Realized price of iron ore fines lower than expected. The realized price of iron ore fines was US$90.6/t (-2.1% vs. Genial Est.), representing a decrease of -7.7% q/q and -13.8% y/y. As expected, the downward movement of the 62% Fe reference curve during 3Q24 occurred as a reflection of a deflationary environment due to the slowdown in Chinese economic growth, resulting in weaker domestic demand for steel, in addition to the piling up of iron ore at ports, as we have already commented. These pressure vectors, both from reduced demand and oversupply, led the average price of the 62% Fe benchmark to fall back to US$99/t (-11.3% q/q), in line with our projected curve since February, anticipating the sharp fall in price ahead of consensus. However, even with a **(i)** better mix and **(ii)** forward provisioning system, both of which helped the retraction in the realized price to occur at a lower intensity than the 62% Fe reference curve, the premium for quality in iron ore fines fell short of what we had projected, being reported with a discount of -US$1.9/t (vs. -US$0.8/t Genial Est.).

Realized pellet price also falls, but all-in premium improves. In the pellet segment, the realized price also fell, reaching US$148.2/t (+0.5% vs. Genial Est.), contracting -5.7% q/q and -8.1% y/y. The situation could be worse if it weren't for the help of a higher negotiated premium, reaching +US$35/t (+US$6/t vs. 2Q24). We saw the 65% Fe reference curve regress to an average of ~US$120/t in 3Q24 (-5.8% y/y). Combining the weighted effect of pellets (+US$3.6/t) and iron ore fines (-US$1.9/t), the all-in premium closed 3Q24 at +US$1.7/t (vs. -US$0.1/t in 2Q24), expunging last quarter's negativity, mainly due to the higher pellet sales volume raising its weighted contribution margin.

Nickel: Production resumes growth with normalization of operations, prices remain under pressure. Vale reported a realized nickel price of US$17,012/t (-2.4% Genial Est.), representing a drop of -8.7% t/t and -19.9% y/y. Prices came under pressure, slightly below our estimates, reflecting the lower level of the average of the LME reference curve at US$16,496/t (-11.6% t/t), configuring the resumption of the downward trend in nickel prices after the stabilization of the conflicts in New Caledonia, which, among other reasons, had previously helped to temporarily reduce the oversupply sentiment driving prices last quarter. However, the drop was partially offset by higher realized premiums (+5.6% q/q).

Nickel production totaled 47.1Kt (-0.8% Gen. Est.), achieving significant growth of +68.8% t/t and +11.9% y/y, in line with expectations. This stronger figure is explained by the good performance of Sudbury (ON), the continued ramp-up of the Voisey's Bay (NL) underground mines, both in Canada, and the more favorable seasonality in the Pará (PA) mines, with the period of less rainfall in Brazil. Sales totaled 40.7Kt (-2.7% vs. Genial Est.), up +18.7% t/t and +3.8% y/y, reflecting the absorption of higher production.

Copper: production up, sales suggest stockpiling. The realized copper price was US$9,016/t (+3.3% Genial Est.) indicating -2.0% q/q and +16.6%y/y, mainly impacted by lower LME reference prices at US$9,333/t (-5.0% q/q). Production was 85.9Kt (+4.2% vs. Genial Est.), an increase of +9.3% q/q and +5.3% y/y, due to the better performance of the Sossego (PA) and Canada mines, which offset the drop in production at Salobo (PA), caused by the impact of the fire at the Salobo 3 plant. Copper sales, however, did not keep pace with production, totaling 75.2Kt (+6.8% vs. Genial Est.), despite coming in higher than we had projected, there was still a gentle slowdown of -1.2% q/q and a marginal increase of +1.9% y/y. This mismatch suggests a possible build-up of inventories as part of the strategy to capture better opportunities in the future, given the current contraction in copper prices.

Net revenue down due to the negative impact of the realized price. We project consolidated net revenue to reach US$9.7bn Genial Est. (-3.0% q/q; -8.4% y/y). Our model points to iron ore fines revenue of US$6.3bn Genial Est. (-6.6% q/q; -14.3% y/y), affected by the lower realized price. We believe that the impact of the drop in price was greater than the potential upside in sales volume brought about by the good operational performance. On the other hand, pellet revenues should reach US$1.5bn Genial Est. (+7.9% q/q; +8.3% y/y), reflecting a robust execution, driven by the significant increase in shipments. For base metals, we project a significant drop in copper revenues (-13.0% q/q) and a substantial increase in nickel operations (+18.5% q/q), even with the price drop, considering the resumption of the operational process after the maintenance sections last quarter.

Table 6. Net Revenue Vale (3Q24 Genial Est.)

(US$ millions)	3Q24E Genial Est.	2Q24A Reported	% q/q	2Q23A Reported	% y/y
Net Revenue	**9.727**	**10.031**	**-3,0%**	**10.618**	**-8,4%**
Iron Ore Fines	6.283	6.728	-6,6%	7.327	-14,3%
Pellets	1.503	1.393	7,9%	1.388	8,3%
Nickel operations	1.042	879	18,5%	1.023	1,9%
Copper operations	678	779	-13,0%	660	2,7%
Others	186	175	6,3%	185	0,6%

Source: Genial Investimentos, Vale

C1/t should show a considerable sequential reduction. We project C1/t ex. third-party purchases at US$21.1/t Genial Est. (-15.3% q/q; -3.9% y/y), benefiting from a more favorable production mix. The higher proportion of own production (84Mt vs. 73Mt in 2Q24) coupled with a volume of purchases from third parties reducing to 6.9Mt (-5.6% q/q; -3.6 y/y), favors a more efficient dilution of fixed costs, leading C1/t to a downward trajectory. In addition, the historically higher volumes in the 2Hs, driven by a more favorable seasonality with less rainfall, also contribute to this reduction. It is important to note that this downward trend in C1/t had already been signaled by the company during the Investor Tour (September 11), confidently reaffirming the achievement of the annual guidance of US$21.5-23/t.

Greater spot exposure should increase freight costs in 3Q24. Vale traditionally signs long-term freight contracts with shipowners, which protects it from price fluctuations in the shipping market. However, during 3Q24 we believe that the company resorted to spot freight services to accommodate the additional demand for cargo transportation, especially given the more favorable seasonality in the sequential movement of iron ore fines and the good performance in pellets. This exposes the company to a higher freight cost compared to long-term fixed contracts, pressuring the freight cost to US$21.3/t Genial Est. (+8.6% q/q). The trend is for bunker costs to rise, correlating with fluctuations in the price of Brent-type oil, which could put an even greater burden on freight costs in the coming months.

Table 7. COGS Vale (3Q24 Genial Est.)

(US$ millions)	3Q24E Genial Est.	2Q24A Reported	% q/q	2Q23A Reported	% y/y
COGS	**(6.069)**	**(6.129)**	**1,0%**	**(6.237)**	**2,7%**
Iron Ore Fines	(3.439)	(3.556)	3,3%	(3.408)	-0,9%
Pellets	(812)	(705)	-15,2%	(669)	-21,4%
Nickel operations	(683)	(731)	6,6%	(925)	26,2%
Copper operations	(293)	(391)	25,0%	(341)	14,0%
Others	(84)	47	-279,5%	(114)	26,1%
D&A	(757)	(793)	4,5%	(780)	2,9%

Source: Genial Investimentos, Vale

Table 8. EBITDA Vale (3Q24 Genial Est.)

(US$ millions)	3Q24E Genial Est.	2Q24A Reported	% q/q	3Q23A Reported	% y/y
Proforma EBITDA	**3.957**	**4.529**	**-12,6%**	**4.503**	**-12,1%**
Iron Ore Fines	2.682	3.117	-14,0%	3.725	-28,0%
Pellets	683	729	-6,3%	712	-4,2%
Nickel operations	360	108	233,2%	100	259,9%
Copper operations	354	351	0,8%	269	31,5%
Others	(121)	225	-153,7%	(303)	-60,2%

Source: Genial Investimentos, Vale

EBITDA in contraction: despite good consolidated volume, we expect the realized price to weigh more heavily. The company presented interesting sales figures in almost all of its operations, but the realized price (especially in iron ore fines) will still be an important detractor in the result. Therefore, our new adjusted EBITDA estimate stands at US$3.7bn Genial Est. (-17.7% q/q; -11.2% y/y), comprising a very significant drop. This result is corroborated by the still negative premium in iron ore fines (-US$1.9/t vs. -US$0.8/t Genial Est.), which once delivered less than we expected, did not allow for more considerable help in curbing the price contraction caused by the deceleration of the 62% Fe curve, as we have already commented.

Therefore, for iron ore fines, we project an EBITDA of US$2.68bn Genial Est (-14.0% q/q; -28.0% y/y). Another point that stands out in our model is the pellet operation, which was unable to sustain last quarter's good realized price even with a higher premium and should deliver an EBITDA of US$683mn Genial Est. (-6.3% qqt; -4.2% y/y). In addition, the nickel and copper operations performed differently. We project an EBITDA of US$360mn for the nickel operations, a significant increase of +233.2% q/q and +259.9% y/y, driven by the significant increase in volume and improved cost dynamics, while the copper operations should record an EBITDA of US$354mn, with a slight increase of +0.8% q/q and an increase of +31.5% y/y. When adding up the business units, we arrive at a consolidated Proforma EBITDA of US$3.9bn Genial Est. (-12.6% q/q; -12.1% y/y).

We expect a significant drop in net income. Even with the expectation of a cooler financial result of -US$746mn Genial Est. (-40.4% q/q), the excessive compression of EBITDA intensely shrinks net income in our model, reaching a value of US$1.9bn Genial Est. (-46.5% q/q; -35.8% y/y). It is important to note that we are considering a provision for the Mariana agreement of ~US$318mn Genial Est, which is being processed by the 3Q24 P&L and will certainly influence the intensification of the forecast reduction. This provision amount has fluctuated compared to our estimates, since Vale seems to draw on Samarco's balance sheet more often than BHP. Perhaps with the consolidation of the agreement, which is expected by the end of the month or in November, due to the renegotiation underway by the TRF-6, it will be easier to have a higher level of accuracy in this line.

Table 9. Income Statement Vale (3Q24 Genial Est.)

(US$ millions)	3Q24E Genial Est.	2Q24A Reported	% q/q	3Q23A Reported	% y/y
Net Revenue	**9.727**	**10.031**	**-3,0%**	**10.618**	**-8,4%**
COGS	(6.069)	(6.129)	1,0%	(6.237)	-2,7%
Adjusted EBITDA	**3.728**	**4.529**	**-17,7%**	**4.198**	**-11,2%**
EBITDA Margin (%)	38,3%	45,2%	-6,82p.p	39,5%	-1,21p.p
Adjusted EBIT	**2.971**	**3.736**	**-20,5%**	**3.418**	**-13,1%**
EBIT Margin (%)	30,5%	37,2%	-6,7p.p	32,2%	-1,65p.p
D&A	(757)	(793)	-4,5%	(780)	-2,9%
Financial Result	(746)	(1.252)	-40,4%	(385)	93,9%
Net Income	**1.879**	**3.514**	**-46,5%**	**2.925**	**-35,8%**
Net Margin (%)	19,3%	35,0%	-15,71p.p	27,5%	-8,23p.p

Source: Genial Investimentos, Vale

Our Take on Vale

Improvement in i.o. prices vs. stimulus announcements should not be interpreted as structural. Reinforcing what has already been said, we believe that the recent increase in the price of iron ore, driven by the Chinese government's economic stimulus announcements, should not be seen as a silver bullet. The price jumped from US$92/t to US$108/t, an increase of +17% in ~10 days. However, the market is expected to have overestimated the announcement of measures. In short, a correction to ~US$104/t (-3.7% in three days), returning to the “purely” speculative aspect with no basis in impactful fundamentals. In the short term, we see detrimental pressures on the price, justified by the imbalance between supply and demand, linked to the ineptitude of concrete and significant stimuli as a way of sustaining a consistent rise.

The utilization rate of BFs in China is lower than in the same period last year. From a quantitative perspective that ratifies our thinking after the collapse of the real estate bubble in 2022, steel mills, the biggest drivers of steel demand, are operating below their capacity of 1.2Btpy, with a blast furnace utilization rate of around ~84% (-9p. p y/y). On a seasonal basis, this level still contrasts with an already weak 2023, with domestic demand falling short of expectations. In other words, there are no fundamentals that anticipate structural changes to the housing crisis ~90 million completed and unoccupied homes and ~48 million pre-sold homes that have yet to be built.

Why shouldn't the stimulus revive real demand for iron ore? The oversupply of real estate has unfolded along structural lines. For example, the difference between the number of finished properties and those under construction refutes the permeability of structural restoration in demand for steel, while buyers prefer finished homes, thus promoting the inoperability of construction companies and steel mills. This is evident when, in 1H24, 27% of new sales were of completed homes (+10% vs. 1H21).

The stimulus package announced by the Chinese government, which includes **(i)** a reduction in mortgage rates and **(ii)** a reduction in the down payment, does not seem to solve the problem of properties under construction or the excess of properties. The continued fall in prices in the real estate market intensifies the trend exemplified above. This behavior should continue to restrict developers' appetite for new projects, negatively affecting the demand for steel, even with the package of measures in place.

It's not as good as it sounds. Following the release of Vale's Production and Sales report yesterday, we made small upward revisions to our estimates for 3Q24, driven mainly by the good performance of the pellets division. The iron ore fines division, which comprises ~65% of total revenue, showed minimal growth compared to the assumptions we used for the quarter, with a new net revenue projection of US$6.2bn Genial Est. (+1.3% vs. the old estimate). Consolidated net revenue is now projected at US$9.7bn Genial Est. (+2.5% vs. old estimate), reflecting a drop of -3.0% q/q and -8.4% y/y. C1/t ex. third parties cost remains at US$ 21.1/t Genial Est., maintaining a substantial sequential slowdown, partly due to an increase in own production, as we commented throughout the report. Adjusted EBITDA is projected at US$ 3.7bn Genial Est. (+2.1% vs. old estimate), still representing declines of -17.7% q/q and -11.2% y/y.

Despite the fact that the operational indicators beat estimates, with strong production volumes in iron ore fines and pellets, we still forecast a weak quarter, emphasizing that the recent operational performance has not significantly altered expectations. Therefore, on the rational side, we don't see any triggers for an upward movement in the shares as a reaction to the production and sales data when the trading session opens today. We believe that the consensus should make moves similar to the one we made, with a calibration of mild adjustments to previous estimates, measured in only marginal increases in the Net Revenue, EBITDA and Net Income lines.

If the scenario is challenging, why position yourself in Vale now? Compared to its peers (BHP, Rio Tinto and Fortescue), Vale has remained, since the previous quarter, the most discounted company in relation to iron ore in the world, trading at an **EV/EBITDA 25E** multiple of **3.1x** (vs. 5.0x in the historical average that includes times of absolute low of the commodity) with an **FCF Yield 25E 14.5%**, which would support a **Dividend Yield 25E** of **~10%**, in addition to the share buyback program. Gradually, the potential total extinction of overhangs is added to this. We have already ascertained that the risk of political interference in the company's management has been eliminated, for example, as a result of Mr. Gustavo Pimenta, the former CFO, taking over as CEO in advance. Regarding the Mariana (MG) agreement, we expect the definitive conditions for the renegotiation to be officially disclosed between the end of this month and November, possibly on the day of the 3Q24 results (October 24).

We believe that the conditions may be more lenient than we initially anticipated, especially with regard to the timeframe for disbursing the compensation, with our base scenario predicting **12 years** (requested by the AGU/MPF) vs. the 20 years claimed by Vale and BHP.

If this happens, we believe that there could be a boost to the shares as more investors rebalance their positions in the face of reduced uncertainty about the terms of the agreement. The amount will probably be **~R$100bn** (~US$18bn) in new money compensation and **R$30bn** (~US$5.3bn) in obligations still "to be done" of a reparatory nature. When added to the R$37bn already disbursed by Vale + BHP, the terminal value of the agreement would reach **~R$167bn** (~US$30bn), in line with what we have in our proprietary model. We believe that **(i)** the elimination of overhangs, coupled with **(ii)** the prospect of a partial recovery in iron ore prices, even if in the short term linked to speculation (fiscal stimulus in China), could unlock value for the shares, which remain severely punished by investors, especially local ones. We therefore reiterate our **BUY rating**, based on a **12M Target Price** for **VALE3-B3** of **R$78.50** and **US$14.00** for the **NYSE ADRs**, with an **upside** of **+28.33%**.

Appendix: Vale

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

Income Statement	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**38.701**	**39.152**	**39.956**	**39.136**	**40.138**	**41.163**
(-) COGS	(23.761)	(23.119)	(24.141)	(23.723)	(24.096)	(24.553)
Gross Profit	**14.939**	**16.033**	**15.815**	**15.413**	**16.042**	**16.609**
(-) Expenses	(1.947)	(2.686)	(2.532)	(2.021)	(1.679)	(1.735)
Adjusted EBITDA	**16.066**	**16.777**	**16.674**	**16.966**	**18.130**	**18.823**
(-) D&A	(3.083)	(3.226)	(3.419)	(3.614)	(3.816)	(4.007)
EBIT	**12.984**	**13.551**	**13.255**	**13.352**	**14.314**	**14.817**
(+/-) Financial Result	(2.777)	(2.167)	(1.876)	(2.077)	(2.290)	(2.418)
(-) Taxes	(817)	(1.877)	(1.925)	(1.920)	(2.067)	(2.148)
Net income	**9.389**	**9.507**	**9.454**	**9.355**	**9.957**	**10.251**
Profitability						
Net margin (%)	24,26%	24,28%	23,66%	23,90%	24,81%	24,90%

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

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**38.701**	**39.152**	**39.956**	**39.136**	**40.138**	**41.163**
(-) COGS	(23.761)	(23.119)	(24.141)	(23.723)	(24.096)	(24.553)
Adjusted EBITDA	**16.066**	**16.777**	**16.674**	**16.966**	**18.130**	**18.823**
Adjusted EBIT	**12.984**	**13.551**	**13.255**	**13.352**	**14.314**	**14.817**
(-) Taxes	(797)	(1.635)	(1.657)	(1.684)	(1.882)	(1.975)
(+) D&A	3.083	3.226	3.419	3.614	3.816	4.007
(+/-) Brumadinho and Samarco	(97)	(1.940)	(1.629)	(1.176)	(1.025)	(747)
(+/-) Δ WK	266	986	957	(238)	349	(26)
(-) Capex	(6.470)	(7.018)	(7.018)	(7.559)	(7.559)	(7.559)
FCFF	**8.969**	**7.170**	**7.328**	**6.309**	**8.013**	**8.517**

Disclosure Section

1. GENERAL DISCLAIMER

This report has been produced by the research department ("Genial Institutional Research") of Genial Institutional Corretora de Câmbio, Títulos e Valores Mobiliários S.A. ("GENIAL INSTITUTIONAL CCTVM"). Genial Institutional is a brand name of Genial Investimentos CCTVM.

Genial Rating

	Definition	Coverage
Buy	Expected return above +10% in relation to the Company's sector average	**49%**
Neutral	Expected return between +10% and -10% relative to the Company's industry average	**41%**
Sell	Expected return below -10% in relation to the Company's sector average	**5%**
under Review	Under review	**5%**

This report may not be reproduced or redistributed to any other person, in whole or in part, for any purpose, without the prior written consent of GENIAL INSTITUTIONAL CCTVM. GENIAL INSTITUTIONAL CCTVM accepts no liability whatsoever for the actions of third parties in this respect.

This research report is for distribution only under such circumstances as may be permitted by applicable law. This research report has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient, even if sent only to a single recipient. This research report is not guaranteed to be a complete statement or summary of any securities, markets, reports or developments referred to in this research report. Neither GENIAL INSTITUTIONAL CCTVM nor any of its directors, officers, employees or agents shall have any liability, however arising, for any error, inaccuracy or incompleteness of fact or opinion in this research report or lack of care in this research report's preparation or publication, or any losses or damages which may arise from the use of this research report

GENIAL INSTITUTIONAL CCTVM may rely on information barriers, such as "Chinese Walls" to control the flow of information within the areas, units, divisions, groups, or affiliates of GENIAL INSTITUTIONAL CCTVM.

Investing in any non-U.S. securities or related financial instruments (including ADRs) discussed in this research report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the U.S. Securities and Exchange Commission. Information on such non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect within the United States.

The value of any investment or income from any securities or related financial instruments discussed in this research report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments.

Past performance is not necessarily a guide to future performance and no representation or warranty, express or implied, is made by GENIAL INSTITUTIONAL CCTVM with respect to future performance. Income from investments may fluctuate. The price or value of the investments to which this research report relates, either directly or indirectly, may fall or rise against the interest of investors. Any recommendation or opinion contained in this research report may become outdated as a consequence of changes in the environment in which the issuer of the securities under analysis operates, in addition to changes in the estimates and forecasts, assumptions and valuation methodology used herein.

The locally listed shares of Brazilian companies may only be purchased by investors outside of Brazil who are "eligible investors" within the meaning of applicable laws and regulations.

2. ANALYST(S) DISCLOSURES AND CERTIFICATION

The principal analyst, IGOR GUEDES, is responsible for the content of this report and for meeting the requirements of Securities and Exchange Commission of Brazil (CVM) Instruction 598/2018.

The analysts hereby certify that the views expressed in this research report accurately reflect their personal views about the subject securities or issuers and it was prepared in an independent manner, including with respect to the person and to GENIAL INSTITUTIONAL.

The analyst hereby certifies that he (she) has no connection with any individual who works for the issuer(s) discussed in this report.

The analyst hereby certifies that he (she), or his (her) spouse or companion, either directly or indirectly, in his or her own name or on behalf of a third party, does not hold any of the securities covered in this report.

The analyst hereby certifies that he (she), or his (her) spouse or companion, is not directly or indirectly involved in the purchase, disposal or brokering of the securities covered in this report.

The analyst hereby certifies that he (she), or the his (her) spouse or companion, has no direct or indirect financial interest in the issuer covered in this report (other than trading shares in investment funds, in which the analyst cannot control, directly or indirectly, the administration or management of the fund, or which do not concentrate investments in sectors or companies that are covered by reports produced by the analyst).

The analyst’s compensation is, directly or indirectly, determined by income from GENIAL INSTITUTIONAL´s business and financial operations.

In addition, the analysts certify that no part of their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

The compensation of the analyst who prepared this report is determined by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues, however, compensation may relate to the revenues of GENIAL INSTITUTIONAL CCTVM, its affiliates and/or subsidiaries as a whole, of which investment banking, sales and trading are a part. Compensation paid to analysts is the sole responsibility of GENIAL INSTITUTIONAL CCTVM.

The analyst hereby certifies that he (she), or his (her) spouse or companion, does not serve as an officer, director, or advisory board member of the subject company.

The principal analyst is responsible for the content of this report and for meeting the requirements of Securities and Exchange Commission of Brazil (CVM) Instruction 598/2018.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

3. ADDITIONAL DISCLOSURE

(i) This document was prepared by GENIAL INSTITUTIONAL Research and is hereby supplied for the sole purpose of providing information about companies and their securities.

(ii) The information contained herein is provided for informational purposes only and does not constitute an offer to buy or sell, and should not be construed as a solicitation to acquire, any securities in any jurisdiction. The opinions expressed herein regarding the purchase, sale or holding of securities, or with respect to the weighting of such securities in a real or hypothetical portfolio, are based on careful analysis by the analysts who prepared this report and should not be construed by current or future investors as recommendations for any particular investment decision or action. The investor's final decision should be made considering all of the risks and fees involved. This report is based on information obtained from primary or secondary public sources, or directly from companies, and is combined with estimates and calculations prepared by GENIAL INSTITUTIONAL CCTVM. This report does not purport to be a complete statement of all material facts related to any company, industry, security or market strategy mentioned. The information has been obtained from sources believed to be reliable, but GENIAL INSTITUTIONAL CCTVM does not make any express or implied representation or warranty as to the completeness, reliability or accuracy of such information. The information, opinions, estimates and projections contained in this document are based on current data and are subject to change. Prices and availability of financial instruments are indicative only and subject to change without notice. GENIAL INSTITUTIONAL CCTVM is under no obligation to update or revise this document or to advise of any changes in such data.

(iii) The securities discussed in this report, as well as the opinions and recommendations contained herein, may not be appropriate for every type of investor. This report does not take into account the investments objectives, financial situation or particular needs of any particular investor. Investors who wish to buy, sell or invest in securities that are covered in this report should seek independent financial advice that takes individual characteristics and needs into consideration, before making any investment decision with respect to the securities in question. Each investor should make independent investment decisions after carefully analyzing the risks, fees and commissions involved. If a financial instrument is denominated in a currency other than an investor's currency, changes in exchange rates may adversely affect the price or value of, or the income derived from the financial instrument, and the reader of this report assumes all foreign exchange risks. Income from financial instruments may vary, and therefore their price or value may rise or fall, either directly or indirectly. The information, opinions and recommendations contained in this report do not constitute and should not be interpreted as a promise or guarantee of a particular return on any investment. Past performance does not necessarily indicate future results, and no representation or warranty, express or implied, is made herein regarding future performance. Therefore, GENIAL INSTITUTIONAL CCTVM, its affiliated companies, and the analysts involved in this report take no responsibility for any direct, indirect or consequential loss resulting from the use of the information contained in this report, and anyone using this report undertakes to irrevocably indemnify GENIAL INSTITUTIONAL CCTVM and its affiliates from any claims and demands.

(iv) Prices in this report are believed to be reliable as of the date on which this report was issued and are derived from one or more of the following: (i) sources as expressly specified alongside the relevant data; (ii) the quoted price on the main regulated market for the security in question; (iii) other public sources believed to be reliable; or (iv) GENIAL INSTITUTIONAL CCTVM's proprietary data or data available to GENIAL INSTITUTIONAL CCTVM.

(v) No representation or warranty, either express or implied, is provided in relation to the accuracy, completeness or reliability of the information contained herein, except with respect to information concerning GENIAL INSTITUTIONAL CCTVM, its subsidiaries and affiliates. In all cases, investors should conduct their own investigation and analysis of such information before taking or omitting to take any action in relation to securities or markets that are analyzed in this report.

(vi) GENIAL INSTITUTIONAL CCTVM makes no representations herein that investors will obtain profits. GENIAL INSTITUTIONAL CCTVM will not share with investors any investment profits nor accept any liability for any investment losses. Investments involve risks and investors should exercise prudence in making their investment decisions. GENIAL INSTITUTIONAL CCTVM accepts no fiduciary duties on behalf of recipients of this report and in communicating this report is not acting in a fiduciary capacity. This report is not to be relied upon in substitution for the exercise of recipient's independent judgment. Opinions, estimates, and projections expressed herein constitute the current judgment of the analyst responsible for the substance of this report as of the date on which the report was issued and are therefore subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of GENIAL INSTITUTIONAL CCTVM as a result of using different assumptions and criteria. The information, opinions and recommendations contained in this report do not constitute and should not be interpreted as a promise or guarantee of a particular return on any investment.

(vii) Because the personal views of analysts may differ from one another, GENIAL INSTITUTIONAL CCTVM, its subsidiaries and affiliates may have issued or may issue reports that are inconsistent with, and/or reach different conclusions from, the information presented herein. Any such opinions, estimates, and projections must not be construed as a representation that the matters referred to therein will occur. Prices and availability of financial instruments are indicative only and subject to change without notice. Income from financial instruments may vary, and therefore their price or value may rise or fall, either directly or indirectly.

(viii) This document may not be: (a) photocopied or duplicated in any manner, in whole or in part, and/or (b) distributed without GENIAL INSTITUTIONAL CCTVM's prior written consent. GENIAL INSTITUTIONAL CCTVM accepts no liability whatsoever for the actions of third parties in this respect.

(ix) Neither GENIAL INSTITUTIONAL CCTVM nor any of its affiliates, nor any of their respective directors, employees or agents, accepts any liability for any loss or damage arising out of the use of all or any part of this report.

(x) GENIAL INSTITUTIONAL CCTVM (or its affiliates, officers, directors or employees) may, to the extent permitted by law, have acted upon or used the information herein contained before the publication of this report and may have a position in securities issued by the companies mentioned herein and may make a market or act as a principal in any transactions in any such securities. Genial Institutional may from time to time perform investment banking or other services to, or solicit investment banking or other business from, the companies mentioned herein.

4. IMPORTANT DISCLOSURES FOR U.S. PERSONS

This research report was prepared by Genial Institutional CCTVM, a company authorized to engage in securities activities in Brazil. Genial Institutional CCTVM is not a registered broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to “major U.S. institutional investors” in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the “Exchange Act”) and is not being provided pursuant to a soft-dollar arrangement.

Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through Auerbach Grayson & Company LLC ("AGCO"), a registered broker dealer in the United States with an office at 20 West 55th Street New York, NY 10019, (212) 453-3523 . Under no circumstances should any recipient of this research report effect any transaction to buy or sell securities or related financial instruments through Genial Institutional CCTVM.

If the report is to be distributed to anyone other than Major U.S. Institutional Investors in the United States. AGCO accepts responsibility for the contents of this report as provided for in relevant SEC releases and SEC staff no-action letters.

The analyst whose name appears in this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority (“FINRA”) and may not be an associated person at Auerbach Grayson & Company LLC ("AGCO") and, therefore, may not be subject to applicable restrictions under FINRA Rules on communications with a subject company, public appearances and trading securities held by a research analyst account.

The disclosures contained in research reports produced by GENIAL INSTITUTIONAL CCTVM and distributed by Auerbach Grayson & Company LLC ("AGCO") in the U.S. shall be governed by and construed in accordance with U.S. law. This report may not be reproduced or redistributed to any other person, in whole or in part, for any purpose, without the prior written consent of GENIAL INSTITUTIONAL CCTVM. Additional information relative to the financial instruments discussed in this report is available upon request.

UK Disclaimer:

(i) This document is STRICTLY CONFIDENTIAL to the recipient, may not be distributed to the press or other media and may not be reproduced in any form. this document is directed only at persons who are “INVESTMENT PROFESSIONALS” falling within article 19(5) of the FSMA 2000 (FINANCIAL PROMOTION) ORDER 2005, or HIGH NET WORTH BODIES falling within ARTICLE 49(2) of that order (together THE “RELEVANT PERSONS”). This document must not be acted on or relied on by persons who are not RELEVANT PERSONS.

(ii) The distribution of this document in other jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe, any such restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of any such other jurisdiction.

Copyright 2024 GENIAL INSTITUTIONAL CCTVM