

VALE

1Q24 Review: Are overhangs still hampering the stock performance?

LatAm Metals & Mining

Main takeaways:

(i) Consolidated net revenue was the only major line to be stable y/y; (ii) C1/t stable y/y, according to Genial Est, due to the offsetting effect between the exclusion of the one-off effect and the devaluation of the FX rate; (iii) SSY spot price rose in the quarter, but Vale wasn't as impacted; (iv) EBITDA shrank by -7.2% y/y with very weak nickel operations, a slowdown in the realized price of iron ore fines, but with an excellent performance in pellets; (v) Net income in line with projections, due to the offsetting effect between weaker nickel operations and the absence of provisioning for the Mariana (MG) accident, falling to US\$1.6bn (-32.3% q/q; -17.7% y/y); (vi) Are overhangs still hampering the stock performance? We asked investors and discussed the matter. It seems that the Mariana (MG) and railroad (EFVM and EFC) agreements are **already properly priced events**. Therefore, the **share prices recently moved back in line with iron ore**; (viii) We are adopting **more bearish assumptions than consensus in most the company's modeling variables** and we still see a discount. The company is currently trading at **4.1x EV/EBITDA 24E** (vs. 4.9x historical average), and we remain confident in its operating performance. We continue with our **BUY rating**, with a **12M Target Price of R\$72.30** for **VALE3-B3** or **US\$14.50** for **ADRS-NYSE**, which represents an **upside of +13.75%**.

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Company

VALE US Equity

Buy

Price: US\$ 12.15 (22-Feb-2024)

Target Price 12M: US\$ 14.50 (NYSE)

VALE3 BZ Equity

Target Price 12M: R\$ 72.30 (B3)

Vale **released its 1Q24** results yesterday, April 24, after the market closed. The figures were **mostly in line expectations in all P&L lines**. The main dynamic of the result is not related to the quarter but to the **release of the new provisioning guidance** (more on this later).

Net revenue was US\$8.4bn (-35.2% q/q; +0.1% y/y), down sequentially due to (i) weaker iron ore prices and (ii) the natural seasonality of Q1 in relation to rainfall. In the y/y comparison, where the **seasonality factor is excluded**, we see **stable revenue**. EBITDA was reported at US\$3.4bn (+2.5% vs. Genial Est.), down -45.3% q/q and -7.2% y/y. **Net income** was apparently **not affected by the pace of provisions for the Mariana (MG) accident**, diverging from what we initially expected. On the other hand, **Nickel operations suffered more than expected**, mainly in terms of costs. One situation offset the other, and net income came in perfectly in line with our projection, clocking in at US\$1.7bn (+3.7% vs. Genial Est.), down -32.3% q/q and -17.7% y/y.

Table1. Income Statement Summary (1Q24 vs. Genial Est.)

(US\$ millions)	Reported			Genial Est.			Reported		
	1Q24	1Q24E	% Diff.	1Q24	4Q23A	% q/q	1Q23A	% y/y	
Income Statement									
Net Revenue	8.459	8.512	-0,6%	8.459	13.056	-35,2%	8.454	0,1%	
Adjusted EBITDA	3.438	3.355	2,5%	3.438	6.290	-45,3%	3.703	-7,2%	
Net Income	1.679	1.618	3,7%	1.679	2.480	-32,3%	2.040	-17,7%	

Source: Genial Investimentos, Vale

Vale raised its provisioning guidance. We were considering a write-down in contaminated net income by R\$270mn Genial Est. of provision, which would be allocated to results of Affiliates and JVs, since the accident of the Torto dam rupture, in Mariana (MG), occurred through the operation of Samarco (JV between Vale and BHP) in 2015. Even though in 1Q24 no provision was made for this specific issue, Vale revisited its guidance and announced changes.

Although the amount related to Samarco in the new guidance remained stable at R\$900mn for 2024, the total amount figured between the years 2024-2038 rose to R\$4.4bn (+22% vs. previous guidance). The years 2026 and 2027 were the most penalized in the new guidance vs. the old one and are now disclosed at US\$800mn (2x more vs. US\$400mn) and US\$1bn (3.3x more vs. US\$300mn), respectively. Meanwhile, the total dilution period was also announced at +3 years compared to the previous provision curve, which helps to reduce the impact of higher figures on the NPV calculation, which accounts for ~2% of company's market cap if summed up also with the revision of Brumadinho's guidance.

Why did Vale raise its provision guidance? Our analysis suggests that the double-digit increase compared to the previous indication is a critical factor in this matter, as we interpret that Vale was previously underestimating the size of the potential agreement to be reached with the Federal Public Prosecutor's Office (MPF) and other public bodies regarding the compensation and reparation movements linked to the Mariana (MG) accident, as we have already reported in different passages in our publications.

How might the market react? We believe that a significant portion of this increase in provisions has already been priced in, but the **news is certainly no positive**. From the contact we have with investors, we have ascertained that a large part of the market is already putting in their models an agreement that varies between R\$126-155bn (50% responsibility for Vale and 50% for BHP). The more bearish the investor is about the case, the closer to the upper band of this range the assumption is. It should also be remembered that we should exclude the amount that Samarco + Renova Foundation have already paid over all these years, which today stands at ~R\$36bn.

If we make a back-of-the-envelope calculation, the accumulated sum of US\$4.4bn of the new provision guidance would imply a terminal agreement of ~R\$125bn (-3.8% vs. Genial Est.), which is ~R\$5bn (or ~US\$1bn) less than our projections and in line with a counter-proposal of R\$126bn (or ~US\$25bn) already offered by the MPF, which is coordinating the case before the Federal Regional Court of the 6th Region (TRF-6), in agreement with the governments of the states of Minas Gerais (MG) and Espírito Santo (ES).

Of course, beyond the estimate of the agreement terminal value, the impact on the NPV also depends on how each investor is modeling their assumptions, especially regarding the pace payment via cash flow disbursement vs. provision in the P&L. In this case, from the sentiment we've gleaned from rounds of conversations, our assumptions are tough compared to the vast majority of investors.

New guidance vs. Genial Est. Although the amount we are projecting for the agreement terminal value is R\$130bn Genial Est., which in fact does not fall within the upper band of the range we mentioned of R\$126-155bn, on the other hand the pace of provisioning vs. cash flow disbursement is very tight in our modeling, which causes the NPV to be penalized on purpose. Remember that we are assuming the payment of 20% of the value upfront with the renegotiation of the agreement being closed in 3Q24E, and with a term of 7 years, ending in 2030. The timeframe we have drawn as a basis seems very short to us in view of Vale's new expectations, which modified the guidance by extending the provisioning period to 2038 (+3 years vs. previous guidance), with an additional margin of +8 years vs. Genial Est.

Although the new guidance of US\$4.4bn, accumulated between 2024-2038, suggests an increase of +22% vs. the US\$3.6bn in the previous provisioning curve, with a positive nominal balance of +R\$800mn, even so the implicit value of the agreement, which would reach ~R\$125bn on a back-of-the-envelope calculation, **(i)** has not become greater than that previously disclosed by the Federal Prosecutor's Office-MPF (~R\$126bn), and **(ii)** is still below our estimate (~R\$130bn). In addition, we are convinced that **(iii)** our assumptions, which allude to the rate at which this amount would be provisioned and subsequently disbursed, offer much tighter conditions in terms of cash flow than the new guidance released by Vale.

Valuation and rating. We would like to emphasize that we are not going to converge our harshest assumptions in favor of the new guidance, since we are purposely approaching exaggerated pessimism as a way of defending the case, however contradictory it may seem at first glance.

Our idea, as mentioned in the last series of reports, was to pessimistically tighten the assumptions and see how much upside our model could generate compared to the current valuation level of the shares, **a stance that seems to be adopted much more by investors and less by other sell-side firms.** This is an approach to try to **convince investors** that even under stressed scenarios, with quite bearish assumptions, we still see Vale with a **24E FCF yield** of ~13% vs. 11.5% in January (before our model update), which is an **attractive cash flow generation figure** vs. the current share price.

Just as a reminder, our most bearish assumptions, inserted into our model in February, include: **(i)** an iron ore 62% Fe curve below consensus, with terminal value marked at US\$75/t in 28E (flat until perpetuity), and average value of US\$103/t in 24E; **(ii)** Payment of complementary grants on the EFVM and EFC railroads, also with 20% upfront; **(iii)** Conditions of the Mariana (MG) agreement, which have already been described; **(iv)** All-in premium projected at US\$2.7/t in 24E, below guidance US\$3-4/t and **(v)** C1 cost ex. purchase from third parties projected at US\$22.9/t in 24E, within the upper band of the guidance of US\$21.5-23/t.

These changes in assumptions led to a **cut in the 24E FCFF** generation forecast to **US\$6.8bn** (vs. US\$7.2bn previously). Even so, the **24E FCF yield has curiously improved**, now standing at 13% vs. 11.5%, based on the estimate made in January, before the change in the model. This improvement occurred as Vale's share price fell to ~R\$63.00 currently vs. ~R\$71.00 in the same period (Jan-Apr), or to ~US\$12.00 in the NYSE ADRs vs. ~US\$14.40, **suggesting a notable underpricing of the company by the market.**

In simpler words, even though our purposely more bearish assumptions forced cash generation downwards, the share price still fell more intensely than the cash flow outlook in our model, drawing on assumptions that we like to think would be part of the “worst-case scenario”.

For us, this is ample proof of the extent to which the market disproportionately penalizes shares in the face of a lack of precision about the future. **We don't deny that the scenario is indeed uncertain, but the level of discount implicit in the stock seems exaggerated.** Thus, despite the downward bias in our model, Vale still has solid financial metrics.

So, all in all, **Vale's changes to its provisioning guidance** can be interpreted as **slightly negative** for the market. However, **we believe that investors won't put too much short pressure on the stock to further increase its already depressed levels.** The reason for this would be that investors were already, for the most part, more pessimistic than the previous guidance. On our side, the changes to the provisioning directed at Samarco also **do not imply a reduction in the 12M Target Price**, since the conditions, although tighter than the previous guidance, are looser than those we already had in our model.

Currently, the company is trading at **4.1x EV/EBITDA 24E** (vs.4.9x historical average), which seems discounted considering that we are using purposely bearish assumptions to deliberately force cash flow generation down. Despite the uncertainties linked to **(i)** China, **(ii)** the Mariana (MG) agreement and the railroads (EFVM and EFC), as well as **(iii)** government pressure amid attempts at political intervention in the company's management (suspension of the Onça Puma and Sossego licenses), we maintain our confidence in the operating performance. We continue with our **BUY rating**, with a **12M Target Price of R\$72.30** for **VALE3-B3** or **US\$14.50** for **ADRs-NYSE**, which represents an **upside of +13.75%**.

Rear-view mirror: Production and Sales

In our financial results preview, published after the release of Vale's production and sales report on April 16, the link to which is attached ([Vale 1Q24 Preview: Not so bad, but not good enough](#)), we commented on the realized price of iron ore fines, a major negative focus of the quarter, the surprising price of pellets and the difficult situation of nickel.

Continued ramp-up of S11D. After looking at the production and sales report, we saw an iron ore production volume above our expectations, reporting 70.8Mt in 1Q24. This result is due to the continued ramp-up of S11D, which delivered a surprising production of 17.7Mt, up +8.5% y/y. The significant improvement at Vargem Grande, coupled with the soft ramp-up at Itabira and the resumption of activities at the Ponta da Madeira Terminal (MA) helped Vale's shipments, which were recorded at 52.5Mt (-35% q/q; +14.6% y/y), as the company was able to ship iron ore from the northern system again.

Premiums and the realized price of fines were the main concerns. In our view, the realized price of iron ore fines was at the heart of the result. The 62% Fe iron ore curve fell during 1Q24 and reached an even lower value at the start of 2Q24. As we explained in the previous report, Vale uses a methodology of pricing at 3 different times, realizing part of the contracts at lagged price, part at the spot price and the rest of the contracts provisioned forward. As the company closed, as usual, some contracts marked in the forward system, in addition to not being able to impute premiums once again, which increased the discount compared to last quarter (-US\$1.6/t vs. -US\$1.1/t), the realized price, after removing the humidity and FOB adjustments, was marked at US\$101/t (-14.9% q/q; -7.3% y/y).

1Q24 Review

Net revenue, the only major line stable y/y. Trended close to our projection, net revenue was the only major line that did not fall on a yearly basis. The consolidated net revenue clocked in at US\$8.4bn (-0.6% vs. Genial Est.), down -35.2% y/y and stable at +0.1% y/y. Breaking down revenue into segments, net revenue from iron ore fines was R\$5.2bn (+0% vs. Genial Est.), down -42.6% y/y due to the seasonality of the rainy season, but up +6.2% y/y with the resumption of shipments at the Ponta da Madeira (MA) terminal, which were restricted in the same period last year.

The division responsible for the best result in the quarter was pellets, which showed a positive surprise in the realized price, reaching US\$171.9/t (+5.2% q/q; +5.8% y/y). In addition, despite the -10.3% q/q drop due to the seasonal effect, the level of pellet sales was robust, with a +13.4% y/y growth in shipments, which we attribute to the ramp-up of fines production in Brucutu (MG) and subsequent pelletizing process at the terminal plant in Tubarão (ES). Net revenue from the pellet operation stood at R\$1.5bn (+0% vs. Genial Est.), down -5.7% y/y and posting an eye-catching rise of +19.9% y/y.

Table2. Net Revenue Vale (1Q24 vs. Genial Est.)

(US\$ millions)	1Q24	1Q24E	% R/E	4Q23	% q/q	1Q23	% y/y
	Reported	Genial Est.		Reported		Reported	
Net Revenue	8.459	8.512	-0,6%	13.056	-35,2%	8.454	0,1%
Iron Ore Fines	5.292	5.291	0,0%	9.214	-42,6%	4.982	6,2%
Pellets	1.585	1.586	0,0%	1.681	-5,7%	1.322	19,9%
Nickel operations	836	901	-7,2%	1.177	-29,0%	1.509	-44,6%
Copper operations	639	590	8,2%	855	-25,3%	524	21,9%
Others	107	144	-25,5%	180	-40,6%	117	-8,5%

Source: Genial Investimentos, Vale

We saw the consolidation of anemic nickel revenues, reaching US\$836m (-7.2% vs. Genial Est.), down -29.0% q/q and -44.6% y/y. The weaker performance is explained by a number of factors, including: **(i)** maintenance stoppages at the Onça Puma plant, reducing shipments, as well as **(ii)** subsequent stoppages at plants in Canada in 2Q24, which forced Vale to hold inventory during 1Q24 to cover future contracts, as well as **(iii)** a realized price extending the slowdown to US\$16,848/t (-8.5% q/q; -33.3% y/y), showing the effect of oversupply.

As for copper, we had slight positive surprises, with the unit's revenue growing above expectations, and registering US\$639mn (+8.2% vs. Genial Est.), up +21.9% y/y, despite the -25.3% q/q drop. The negative effect on q/q is due to the seasonality of the winter copper production season at Thompson, in Canada.

C1/t flat y/y, according to Genial Est. In 1Q23, Vale had mentioned a one-off cost effect, including the anticipation of maintenance activities, since the shipments flow from the Ponta da Madeira Terminal (MA) was interrupted. In 1Q24, with the regularization of the terminal, this effect was removed and was supposed to help the cost on an annual basis to be reported at a lower value.

However, the exchange rate prevented the company from capturing this drop in cost. Vale has a significant part of its i.o. mining costs in BRL. When the USD/BRL exchange rate is higher, the company is able to dilute its costs in BRL due to the disparity in strength between the two currencies. As the average USD/BRL exchange rate in 1Q24 was R\$4.94 vs. R\$5.18 in 1Q23, this dilution capacity was weakened, nullifying the effects of the regularization of shipments.

As a result, the C1/t (ex. purchase from third parties) observed was US\$23.5/t, very much in line with our expectation (-0.4% vs. Genial Est.) and stable on an annual basis, with a marginal difference of -0.4% y/y, and a rise of +13.8% q/q, driven by the seasonality of lower sales affecting the ability to dilute fixed costs.

Freight costs were hardly affected. Despite the oscillations of SSY (Tubarão-Qingdao), pressured by the rise in bunker's value (maritime fuel), Vale's freight cost in 1Q24 moved slightly, following the trend we predicted, and reached US\$19.3/t (-2.9% vs. Genial Est.), with a milder increase of +2.8% q/q, despite the rise of +8.1% y/y. This is because, although the SSY spot price increased by +US\$7/t y/y (it reached ~US\$26/t), Vale does not fully capture the volatility of freight in the spot market, since the company signs long-term contracts with shipowners and does not follow the same dynamics of price adjustments.

EBITDA shrinking y/y, in line with estimates. Consolidating different dynamics, we see proforma EBITDA (ex. Brumadinho) shrinking to US\$3.4bn (-8% vs. Genial Est.), a sharp drop of -52.9% q/q and -22.4% y/y. The main culprits were **(i)** very depressed price dynamics in iron ore fines and nickel and **(ii)** an increase in nominal COGS y/y. Despite a result above expectations in pellets, the fines operation is much more relevant and pulled EBITDA down. On the other hand, we expected a broader impact related to expenses with Brumadinho and dam de-characterization, which ended up at US\$41m (-86% vs. Genial Est.). Therefore, Vale reported Adjusted EBITDA of US\$3.4bn (+2.5% vs. Genial Est.), down -45.3% q/q and -7.2% y/y.

Table 3. EBITDA Vale (1Q24 vs. Genial Est.)

(US\$ millions)	1Q24			4Q23		1Q23	
	Reported	Genial Est.	% R/E	Reported	% q/q	Reported	% y/y
Proforma EBITDA	3.479	3.780	-8,0%	6.686	-48,0%	3.814	-8,8%
Iron Ore Fines	2.577	2.668	-3,4%	5.467	-52,9%	3.320	-22,4%
Pellets	882	842	4,7%	925	-4,6%	667	32,2%
Nickel operations	17	214	-92,0%	152	-88,8%	353	-95,2%
Copper operations	284	239	18,7%	375	-24,3%	220	29,1%
Others	(281)	(184)	53,0%	(233)	20,7%	(746)	-62,3%

Source: Genial Investimentos, Vale

Net income in line with projections, due to offsetting effect. Net income stood at US\$1.6bn (+3.7% vs. Genial Est.), down -32.3% q/q and -17.7 y/y. Although we didn't see any significant provisioning linked to the Mariana (MG) accident, given that the provisions linked to this fact are processed through the results line of Affiliates and JVs, due to the fact that the dam failure occurred through the operation of Samarco (JV between Vale and BHP), net income was still in line with our estimates.

We believe this was the result of offsetting effects in our model vs. Vale's release. While we estimated a better nickel operation than it turned out to be, we also considered a provision for commitments with Samarco & Renova, which we did not realize in the 1Q24 result. The magnitude of the nominal worsening of base metals EBITDA vs. Genial Est. turned out to be similar to the amount we projected for the Samarco provision, neutralizing the effect on net income.

Table 4. Income Statement Vale (1Q24 vs. Genial Est.)

(US\$ millions)	1Q24			4Q23		1Q23	
	Reported	Genial Est.	% R/E	Reported	% q/q	Reported	% y/y
Net Revenue	8.459	8.512	-0,6%	13.056	-35,2%	8.454	0,1%
COGS	(5.897)	(4.964)	18,8%	(6.855)	-14,0%	(4.949)	19,2%
Adjusted EBITDA	3.438	3.355	2,5%	6.290	-45,3%	3.703	-7,2%
EBITDA Margin (%)	40,6%	39,4%	1,23p.p	48,2%	-7,53p.p	43,8%	-3,16p.p
Adjusted EBIT	2.724	2.658	2,5%	5.435	-49,9%	3.047	-10,6%
EBIT Margin (%)	32,2%	31,2%	0,98p.p	41,6%	-9,43p.p	36,0%	-3,84p.p
D&A	(714)	(697)	2,4%	(855)	-16,5%	(656)	8,8%
Financial Result	(437)	(530)	-17,5%	(874)	-50,0%	(530)	-17,5%
Net Income	1.679	1.618	3,7%	2.480	-32,3%	2.040	-17,7%
Net Margin (%)	19,8%	19,0%	0,84p.p	19,0%	0,85p.p	24,1%	-4,28p.p

Source: Genial Investimentos, Vale

Our Take on Vale

If iron ore price averages were similar, why was realization significantly lower in 1Q24?

We strongly recommend reading our preview report for investors who still have doubts about the mechanics of forward price provisioning, and how the rapid deceleration of the iron ore price by 62% Fe over the course of January to March ended up influencing a significantly lower price realization in 1Q24, even though the average price that prevailed in the quarter was very similar to last quarter and a year ago.

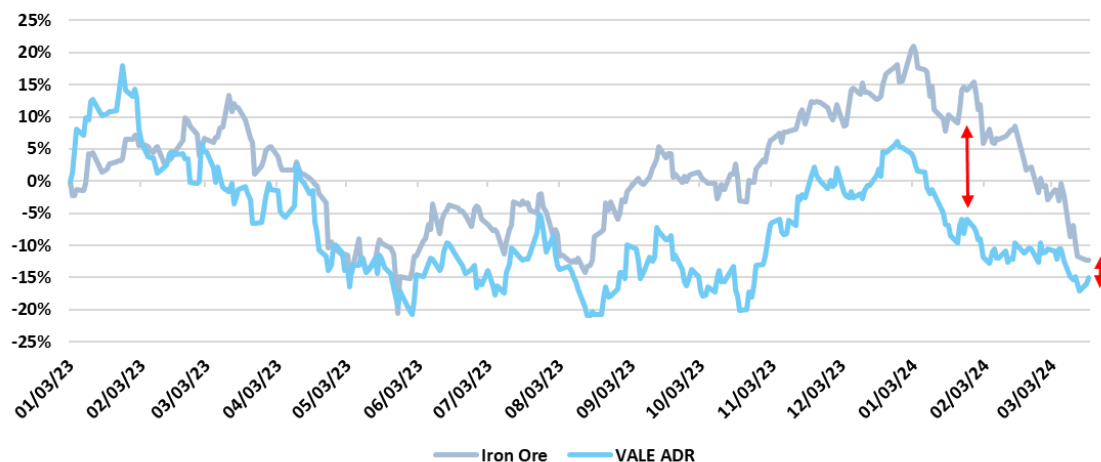
We would point out that Vale's pricing system, and that of several other mining companies, is not as simple as calculating the average and assigning the quality premium. In quarters with high volatility, as was the case in 1Q24, the result of the realized price can differ greatly from the average. The preview report that amplifies the reasons for this is attached ([Vale 1Q24 Preview: Not so bad, but not good enough](#)).

Are overhangs still hampering the stock performance? In the preview report, the link to which follows in the paragraph above, we also tried to explore the influence of overhangs on the shares, in the "Our take" section. Obviously, political and external noises don't help the stock unlock upside potential, but we don't believe they hinder it as much as some market insiders imagine.

Just to clarify, the overhangs we mentioned are: **(i)** pressure from the government to succeed Mr. Eduardo Bartolomeo as CEO, as well as **(ii)** the renegotiation of the Mariana (MG) agreement, which has not yet been finalized with the Brazilian authorities, **(iii)** the supplementary payment for the EFVM and EFC railroad concessions, and **(iv)** the suspension of the operating licenses at Onça Puma and Sossego.

To create an additional illustration, when talking to a group of investors more recently, we asked them what were the biggest fears that prevented them from adopting a long position in Vale's shares. To give hint of the weight we heard, we came up with an average of ~90% weight on uncertainties about China, compared to overhangs, which represent only ~10%.

Chart 1. Vale's ADRs vs. Iron Ore 62% Fe



Source: Genial Investimentos, Bloomberg

The arrows, in red, show the pace of the impact of the overhangs on the shares. The first (larger) arrow shows a gap between the 62% Fe iron ore curve and the price of Vale's NYSE ADRs. Therefore, both parameters are in dollars (USD). At the time the market was creating theses based on the supposed consequences of the overhangs. However, looking at the second (smaller) arrow, we see a narrowing between the two curves, indicating that the overhang events have been priced in and the stock is once again correlated with the price of the commodity.

We believe that it is a fact that the **vast majority of investors are bearish**, and that they can model harsh assumptions, since they don't know the conditions of the Mariana (MG) agreements and the EFVM and EFC railroads, for example. That's why we believe that the **change in Vale's guidance** on the Mariana (MG) accident, through the provisioning for Samarco, **won't bring much additional negativity to the shares**.

However, **what makes it difficult to return to a long position** in the stock after such a large discount seems to be, at the moment, more **the uncertainties linked to the Chinese economy** and the structural demand for iron ore from now on, than necessarily the overhangs. This set of 4 points that we listed as overhangs seems to have already entered the share price completely. On the other hand, we've talked to investors who have a **short mentality about iron ore**, since it's notorious for its extreme dependence on China, which is undergoing structural rather than cyclical changes that should last.

We are not saying that political pressures are irrelevant, as they do end up hindering the company's operations, as we have just witnessed with the suspension of operations at Onça Puma and Sossego. However, we believe that the macro projection should be made with an eye to a more pessimistic tone, as we have established in our model, considering a long-term curve reaching US\$75/t (below the consensus).

Although for much of last year and until the end of February this year, the gap between the 62% Fe spot iron ore price and Vale's shares was very significant, today that gap has shortened a lot, **basically reducing the difference to zero**. Therefore, when the gap was formed, it was the moment when we believed that the overhangs weighed more heavily.

Today, with this gap basically non-existent, we believe that the shares are sideways **"waiting for a Chinese miracle"**. However, as we elaborated in an extensive study on the Chinese economy, in another sector report published a short time ago and attached ([Metals & Mining: Has China's economic model run out of steam?](#)), **this miracle is unlikely to happen...**

If we are not bullish about China, why do we recommend buying the stock?

Our goal, in the end, is to demonstrate the upside that exists in the stock, even if we adopt tougher assumptions with the complementary concession payment on the EVFM and EFC railroads, a more severe pace and payment for the Mariana (MG) agreement and more skeptical macro estimates.

Nevertheless, based on the production and sales report and the recent quarters with high operating levels, and in line with what we had mentioned in the 1Q24 Preview, **we decided to increase our iron ore production volume assumption to reach the upper band of the guidance (320Mt)**. However, **Vale increased the provision guidance for the Brumadinho (MG) agreement to a total amount of US\$3.3bn** vs. the US\$2.8bn of the previous estimate and did not change the pace of provisioning, **which resulted in an offsetting effect**, preventing us from making a positive change to our 12M Target Price.

On the other hand, the other pessimistic assumptions remain. As a reminder, we are modeling: **(i)** an iron ore curve 62% Fe below consensus, with terminal value marked at US\$75/t in 28E (flat until perpetuity), and average value of US\$103/t in 24E; **(ii)** Payment of complementary grants on the EFVM and EFC railroads, also with 20% upfront; **(iii)** Conditions of the Mariana (MG) agreement, which have already been described in the initial part of this report (please read the introduction); **(iv)** All-in premium projected at US\$2.7/t in 24E, below guidance of US\$3-4/t and **(v)** C1 cost ex. projected to reach US\$22.9/t in 24E, within the upper guidance band of US\$21.5-23/t.

Currently, the company trades at **4.1x EV/EBITDA 24E** (vs.4.9x historical average), which seems discounted considering that **we are using purposely bearish assumptions to deliberately force cash flow generation down**. Despite the uncertainties linked to **(i)** China, **(ii)** the Mariana (MG) agreement and the railroads (EFVM and EFC), as well as **(iii)** government pressure amid attempts at political intervention in the company's management (suspension of the Onça Puma and Sossego licenses), we maintain our **confidence in the operating performance**. We continue with our **BUY rating**, with a **12M Target Price** of **R\$72.30** for **VALE3-B3** or **US\$14.50** for **ADRs-NYSE**, which represents an **upside** of **+13.75%**.

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	41.292	42.126	43.842	44.830	48.448
(-) COGS	(23.944)	(26.237)	(26.383)	(27.586)	(29.085)	(31.495)
Gross Profit	13.098	15.055	15.743	16.257	15.745	16.953
(-) Expenses	(3.420)	(3.321)	(3.160)	(2.765)	(2.418)	(2.559)
Adjusted EBITDA	12.824	15.437	16.030	17.078	17.049	18.243
(-) D&A	(3.192)	(3.356)	(3.512)	(3.661)	(3.802)	(3.936)
EBIT	9.633	12.081	12.518	13.417	13.247	14.307
(+/-) Financial Result	(1.943)	(2.033)	(2.254)	(2.277)	(2.260)	(2.326)
(-) Taxes	(889)	(1.275)	(1.395)	(1.563)	(1.567)	(1.742)
Net income	6.801	8.773	8.869	9.578	9.420	10.239
Profitability						
Net margin (%)	18,36%	21,25%	21,05%	21,85%	21,01%	21,13%

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	41.292	42.126	43.842	44.830	48.448
(-) COGS	(23.944)	(26.237)	(26.383)	(27.586)	(29.085)	(31.495)
Adjusted EBITDA	12.824	15.437	16.030	17.078	17.049	18.243
Adjusted EBIT	9.633	12.081	12.518	13.417	13.247	14.307
(-) Taxes	(889)	(1.275)	(1.395)	(1.563)	(1.567)	(1.742)
(+) D&A	3.192	3.356	3.512	3.661	3.802	3.936
(+/-) Brumadinho and Samarco	(1.988)	(1.446)	(1.204)	(915)	(875)	(733)
(+/-) Δ WK	3.404	831	140	(27)	(149)	(51)
(-) Capex	(6.500)	(6.500)	(6.500)	(6.500)	(6.500)	(6.500)
FCFF	6.852	7.048	7.071	8.074	7.958	9.216

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