GERDAU · INDEPENDENT OUTSIDE-IN RESEARCH

Why does Gerdau produce materially different EBITDA per tonne across two regions with comparable shipment volumes?

PUBLISHED	DATA CUTOFF	VERSION	SECTOR	GEOGRAPHY
September 2026	2Q26	1.2	Steel & Metals	Brazil, North America

EVIDENCE BASIS	COMPANY INVOLVEMENT
Public sources only	None

EXECUTIVE FINDING

What we observed (OBSERVED + DERIVED) — in 2Q26, Gerdau's Brazil and North America segments shipped almost identical physical tonnage (1.352 Mt vs. 1.347 Mt), and North America generated roughly 3.7× more Adjusted EBITDA per tonne (R$1,930 vs. R$521). Over the fuller 6M26 window, shipments remain comparable (≈2.68 Mt Brazil vs. ≈2.62 Mt North America) — the near-identical-volume pattern is not a single-quarter artifact.

What it may mean (INFERRED) — the pattern is consistent with the same physical unit of capacity carrying a materially different economic value depending on the surrounding system state — backlog, demand mix, and how far ahead a commitment is made. This is our reading of the gap, not itself an observed fact: revenue, EBITDA, shipments and EBITDA/tonne are OBSERVED/DERIVED; "the same tonne is a different economic object depending on system state" is INFERRED. Public evidence shows Gerdau already runs sophisticated forecasting, order-acceptance and scheduling functions

individually; the open question is whether the value of committing capacity now, versus holding it for later, is priced consistently across those functions.

What remains unresolved — public information does not show whether constrained capacity is explicitly repriced as conditions change, or whether the loss of future flexibility from a commitment is made visible at the point the commitment is made.

WHY IT MATTERS

If future optionality is not consistently priced across the order-acceptance-to-planning horizon, that could change:

- how much value is left on the table when North America's high-backlog capacity is committed early
- how Brazil's comparatively available capacity should be allocated across domestic and export options
- the timing of commercial commitments relative to the 3–6 month planning horizon
- management assumptions about how much of the regional EBITDA gap is structural versus timing-dependent

EVIDENCE

Key findings

OBSERVED DERIVED Finding 01

A 3.7× EBITDA-per-tonne gap (2Q26) on near-identical volume.

OBSERVED — Brazil 2Q26: 1.352 Mt shipped, R$705m Adj. EBITDA, 10.5% margin. North America 2Q26: 1.347 Mt shipped, R$2.600bn Adj. EBITDA, 25.7% margin, backlog above 100 days. These are the reported figures.

DERIVED — EBITDA per tonne (R$521/t Brazil, R$1,930/t North America) and the resulting 3.7× ratio are calculated from the observed figures above, specifically for 2Q26. The same calculation on the 6M26 window (using a different internal audit table) yields ≈R$479/t Brazil and ≈R$1,850/t North America — ≈3.9×. Both are real, correctly computed ratios for different periods; they are not the same number, and the 2Q26 figure of 3.7× is the one used as this page's headline.

Interpretation — the gap cannot be reduced to one variable — pricing, mix, market structure, inputs and operations all plausibly contribute.

Decision relevance — establishes the scale of the question worth validating; a gap this size, on this little volume difference, is unlikely to be explained by shipment volume alone.

What would change this conclusion — a full product-mix and cost-structure reconciliation showing the gap is fully explained by known structural differences between the two markets.

INFERRED Finding 02

North America capacity is economically scarce in the current decision environment.

OBSERVED — North America backlog stands above 100 days; 2Q26 shipments, Adj. EBITDA and margin are as reported above; Gerdau's own commentary describes record shipments under the current industrial configuration.

DERIVED — annualizing 2Q26 North America shipments against installed capacity gives a mechanical utilization figure of roughly 90%. This is our calculation from public disclosures — it is not a company-reported utilization rate, and it is a portfolio-level estimate, not a per-plant one.

INFERRED — a backlog above 100 days combined with a ~90% mechanical utilization estimate is consistent with capacity being economically scarce in the relevant decision environment. This does not establish that any individual plant is capacity-constrained — that would require a per-plant utilization disclosure this research does not have.

Decision relevance — if capacity is genuinely scarce, assigning it early to a lower-value order carries a real opportunity cost — the foundation of the optionality-pricing question this research raises.

What would change this conclusion — a disclosed per-plant utilization rate materially below 90%, or evidence that backlog length reflects scheduling choice rather than a capacity constraint.

OBSERVED Finding 03

Gerdau already runs sophisticated decision layers individually.

Evidence — public evidence shows a 3–6 month strategic forecast by segment/country/product, ~60-day order-acceptance optimization and conflict resolution, explicit portfolio/sales trade-offs between EBITDA and market share, and S&OP-guided production scheduling with corrective action on deviation. A public Gerdau/Ouro Branco digital-twin scheduling project reported a 1% monthly production increase without added infrastructure.

Interpretation — the available evidence is consistent with each of these four functions operating with real sophistication individually. That is not the same as a claim about the full internal decision architecture, or about whether the four functions are reconciled against a shared, cross-horizon objective — see Finding 04.

Decision relevance — this is the evidence base the central inference builds on; it rules out "Gerdau lacks sophistication" as an explanation.

What would change this conclusion — evidence that these four functions operate on inconsistent or conflicting objectives rather than a shared one.

INFERRED Finding 04

The same future resource is valued on different horizons.

Evidence — a commitment moves from order acceptance (now), to near-term order conflicts (~60 days), to the market/commercial plan (3–6 months), to finance and structural decisions (6 quarters+).

Interpretation — a commitment that is locally correct inside one decision window can still change the economics of another: a profitable order can consume a scarce option — a product family, a production campaign, a downstream slot, a scarce future week — that another opportunity could have used later.

Decision relevance — combined with Finding 02 (North America capacity scarcity), this is the mechanism by which committing capacity early can carry an opportunity cost. In Brazil,

comparatively available capacity poses the opposite problem — value can come from finding the best economically acceptable use of it, including domestic/export reallocation.

What would change this conclusion — evidence that order-acceptance, commercial planning and financial horizons already share a single, reconciled value function for future capacity.

DERIVED Finding 05

A value equation for accepting an order.

Evidence — framed from the observed and inferred evidence above: the value of accepting an order is its direct contribution, minus the value of the best displaced future alternative, plus or minus system effects.

Interpretation — this reframes "accept the order" from a single-period question into a cross-horizon one — every accepted commitment changes the set of decisions that remain available later.

Decision relevance — gives a concrete, reproducible form to what "pricing future optionality" would actually mean in Gerdau's context.

What would change this conclusion — if Gerdau's own order-acceptance criteria already include an equivalent displaced-alternative term, this derivation adds no new value.

UNKNOWN Finding 06

Whether lost flexibility is made visible at the point of commitment.

Evidence — public information does not show whether constrained capacity is explicitly repriced as system conditions change, whether local order-acceptance objectives remain economically coherent with 3–6 month commercial expectations and longer financial priorities, or — when a commitment consumes future flexibility — whether that loss is made visible (which feasible alternatives disappeared, their expected value, and how much optionality remains).

Decision relevance — this is the specific, bounded question this research identifies as worth validating internally — not a claim that a gap definitely exists.

WHAT DOES NOT FIT CLEANLY

What does not fit cleanly

Gerdau's four decision layers (forecasting, order acceptance, portfolio/sales, production scheduling) are each individually well evidenced and sophisticated — yet a 3.7× (2Q26) EBITDA-per-tonne gap persists on near-identical shipped volume. Sophistication at each layer does not, by itself, explain whether the layers are reconciled against a single value function across time horizons. Public information does not resolve this either way, so it is recorded as **UNKNOWN** rather than assumed in either direction.

HYPOTHESIS TOURNAMENT

Alternative explanations considered

Four competing explanations for the regional gap were weighed against each other, including two structural drivers already covered above (product mix, geographic/market structure — both partially supported, see Findings 01 and 04) and two candidate mechanisms tested directly against the evidence:

> ### Administrative automation gap — weakened
>
> Could the gap simply reflect Brazil running less automated administrative processes? **Weakened** by Finding 03: public evidence shows sophisticated forecasting, order-acceptance, portfolio and scheduling functions operating in both regions, including a documented digital-twin scheduling gain at Ouro Branco (Brazil). A pure administrative-automation gap is a poor fit for that evidence.

> ### Working capital, treated as an inefficiency diagnosis — weakened
>
> Could the gap be a working-capital inefficiency specific to Brazil? **Weakened** as a primary explanation: a generic efficiency drag would be expected to show up more

broadly across margin lines, not concentrate this cleanly into a regional EBITDA/tonne split on near-identical shipped volume. Not ruled out as a contributing factor — weakened as the primary diagnosis.

Temporal coordination gap — not proven

Could the four decision functions (forecast, order acceptance, portfolio, scheduling) simply be poorly coordinated across time? **Not proven:** Findings 03–04 show the ingredients for a coordination question (different horizons, a value-equation gap) but no public evidence directly demonstrates a coordination *failure* versus a deliberate, structurally different response to two different markets.

Opportunity-cost layer left unpriced — best current UNKNOWN

Could the gap reflect future optionality (Finding 05's value equation) that is not yet consistently priced when a commitment is accepted? This is the strongest open candidate: it is the only explanation directly supported by the observed backlog/scarcity asymmetry (Finding 02) *and* not weakened or ruled out by any evidence reviewed. It remains **UNKNOWN** — not confirmed — because no public evidence shows whether it is already priced internally (Finding 06).

Product mix and geographic/market structure remain plausible partial contributors (see Findings 01 and 04) and are not tournament losers — they were not designed to explain the same mechanism as the four candidates above and can coexist with any of them.

WHAT WOULD CHANGE OUR VIEW

What would falsify the working hypothesis?

The working hypothesis — that future optionality is not fully and consistently priced across Gerdau's decision horizons — would be weakened or closed by evidence that:

- constrained capacity is already explicitly repriced as backlog, product mix, customer demand, downtime and new capacity change;
- the objective used in near-term order acceptance is already reconciled with 3–6 month commercial expectations and longer financial/structural priorities;

- when a commitment consumes future flexibility, the decision already shows which feasible alternatives disappeared, their expected value, and how much optionality remains afterward.

If the existing process already systematically selects a portfolio no worse than the available alternatives, the hypothesis closes.

Possible outcome: no material gap. If a measurable gap exists, it becomes quantifiable before any production integration or change in decision authority.

WHAT REMAINS UNKNOWN

What remains unknown

- Whether constrained capacity is explicitly repriced as system conditions change
- Whether near-term order-acceptance objectives are reconciled with 3–6 month and multi-year financial priorities
- Whether the loss of future flexibility from a commitment is made visible at the point of commitment
- How much of the 3.7× (2Q26) gap is structural (mix, geography) versus timing-dependent (backlog, optionality pricing)

QUESTIONS FOR MANAGEMENT

Questions for management

> ### 1. Is constrained capacity explicitly repriced as conditions change?
>
> Do backlog, product mix, customer demand, downtime and new capacity change the value assigned to the same future production slot as conditions evolve?
>
> *Why this question matters:* directly confirms or falsifies Finding 06.

2. Are near-term and long-term objectives reconciled?

Does the objective used in ~60-day order acceptance remain consistent with the 3–6 month commercial plan and longer financial/structural priorities?

Why this question matters: tests the coherence claim in Finding 04.

3. How much of the 3.7× (2Q26) gap is mix versus timing?

What share of the EBITDA-per-tonne gap between Brazil and North America is attributable to product mix and geography versus backlog/optionality effects?

Why this question matters: quantifies the value at stake and distinguishes between alternative explanations.

4. Is lost flexibility made visible when a commitment is accepted?

When a commitment consumes future flexibility, does the decision record which feasible alternatives disappeared and their expected value?

Why this question matters: closes a specific listed unknown.

5. Has the digital-twin scheduling gain been extended beyond production?

Has the 1% monthly production-increase result from the Ouro Branco digital-twin project been extended to order-acceptance or commercial planning, or does it remain scoped to production scheduling alone?

Why this question matters: tests whether cross-horizon coherence is already being built.

DECISION CORRIDOR

Decision Corridor

Not a forecast. Not a recommendation. A description of what changes the available decision space.

If optionality pricing stays implicit — the decision space remains largely function-by-function: forecasting, order acceptance, portfolio/sales and scheduling each optimize well locally without a shared cross-horizon value function.

If Gerdau formalizes cross-horizon optionality pricing — a new option becomes available: capacity in North America and Brazil could be actively repriced and reallocated (including domestic/export shifts) as backlog and demand conditions change, rather than committed on a rolling, order-by-order basis.

Observable trigger — a disclosed extension of the digital-twin or S&OP methodology into commercial/order-acceptance decisions, or a materially narrower regional EBITDA-per-tonne gap without a corresponding volume or mix shift.

Constraint — customer relationships and contractual commitments already made may limit how much near-term capacity can be reallocated even if a repricing model is adopted.

SCOPE

Scope

INCLUDED

- Gerdau 2Q26 Results (SEC)
- Gerdau 2025 Form 20-F (SEC)
- Public Gerdau role postings (Market Forecast Manager, Regional Sales Manager, Production Scheduler)
- AIST / Gerdau digital-twin scheduling publication

NOT INCLUDED

- Internal pricing or allocation models
- Customer-level contract terms
- Employee interviews
- Unpublished segment cost detail

SOURCES

Sources

SOURCE	TYPE	QUALITY
Gerdau 2Q26 Results (SEC)	Regulatory filing	Primary / Official
Gerdau 2025 Form 20-F (SEC)	Regulatory filing	Primary / Official
Gerdau Market Forecast Manager posting (Mar 2026)	Job posting	Secondary / Supporting
Regional Sales Manager posting (Aug 2026)	Job posting	Secondary / Supporting
Production Scheduler posting (Sep 2026)	Job posting	Secondary / Supporting
AIST / Gerdau digital-twin scheduling publication	Industry publication	Secondary

Open limitation: this register lists sources by document and type, as originally compiled. Per-claim linked citations with exact URLs and access dates were not preserved at that granularity in the original compilation and are not fabricated here to look more precise than they are. Upgrading to fully linked per-claim citations is a follow-up task, not yet done.

CORRECTIONS

Revision history

VERSION	DATE	CHANGE
1.0	Sep 10, 2026	Initial publication.
1.1	Sep 12, 2026	Republished under the aiclavis Research Page Standard v1 template (research question, evidence chain, alternative explanations, decision corridor, scope, source register added; removed "re-checked" framing from summary copy). No change to findings or conclusions.
1.2	Sep 12, 2026	Evidence-discipline pass: pinned the 3.7× headline ratio to 2Q26 everywhere it appears and disclosed that the same calculation on the 6M26 window yields ≈3.9×; added the 6M26 comparable-shipment figures; explicitly marked "the same tonne is a different economic object" as INFERRED rather than fact; added a new Finding 02 with an explicit OBSERVED → DERIVED → INFERRED chain for the North America capacity-scarcity claim (previously asserted without that structure); softened Finding 03's interpretation to avoid overclaiming the internal decision architecture; replaced the alternative-explanations list with a four-way hypothesis tournament (administrative automation and working-capital diagnoses weakened, temporal coordination gap not proven, opportunity-cost layer as the leading UNKNOWN); featured the falsification criterion as a pull-quote; renumbered Findings 02–05 to 03–06 and corrected all cross-references. No change to the underlying conclusion.

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The PDF is a direct rendering of this page (v1.2) — same findings, same evidence labels, same data cutoff.

RESEARCH LEAD

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