The trade in iron ore during hectic times, when countries tighten protection on their steel industries

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The sequence

- Story 1: Global iron ore trade: A highly concentrated system
- Story 2: Global iron ore trade: A perfectly organised system
- Story 3: OECD outlook: A gloomy forecast for steel trade
- Story 4: How can so many countries produce steel when only a few of them import most of the iron ore?
- Story 5: Why is there so much tension in the steel market?
- Story 6: What challenges do European ports face?

Top exporters of iron ore

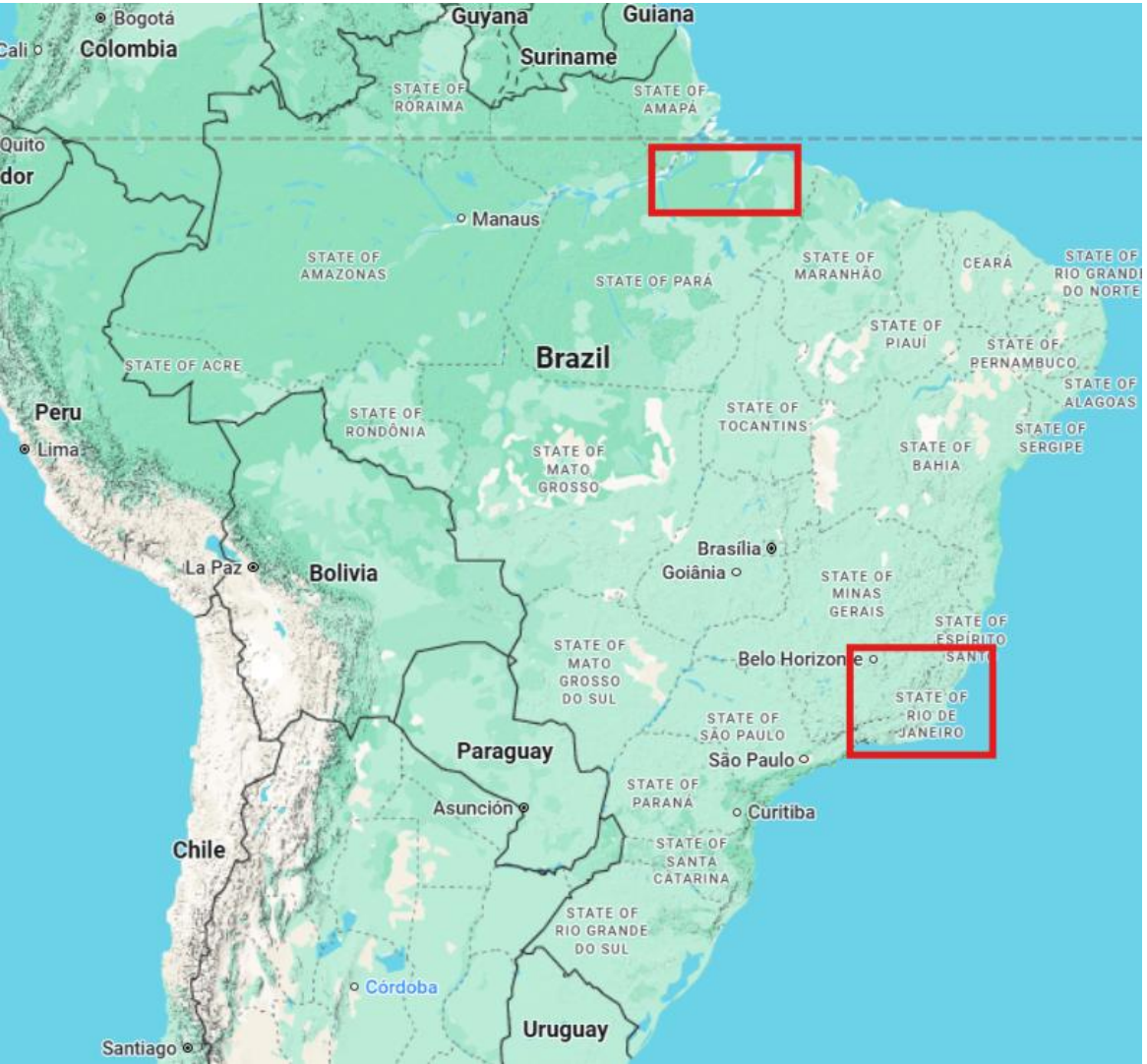
Rank	Country	2024	
1	Australia	$83.0bn	54.5%
2	Brazil	$29.9bn	19.6%
3	Canada	$6.4bn	4.2%
4	South Africa	$6.3bn	4.2%
5	China	$2.9bn	1.9%
6	Ukraine	$2.8bn	1.8%
7	India	$2.8bn	1.8%
8	Sweden	$2.6bn	1.7%
9	Peru	$1.8bn	1.2%
10	Chile	$1.6bn	1.0%

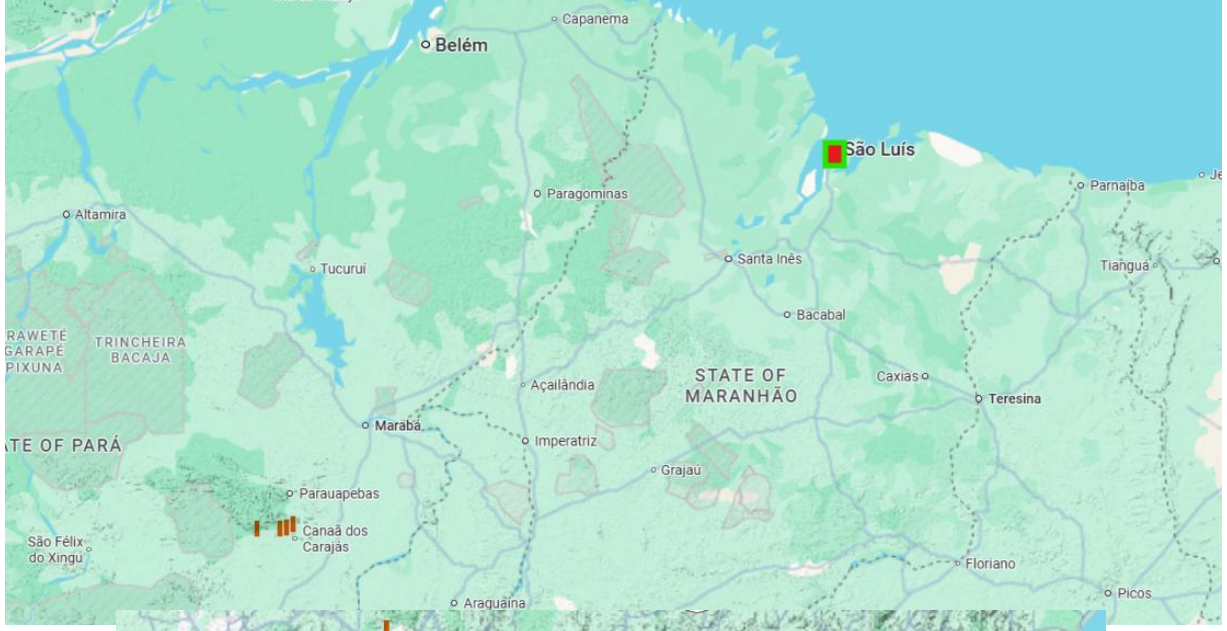
	Australia		Brazil	
Rank	Country	2023	Country	2023
1	China	84.1%	China	60.7%
2	South Korea	5.8%	Japan	6.5%
3	Japan	5.5%	Malaysia	5.1%
4	Taiwan	1.9%	Bahrain	3.6%
5	Indonesia	1.1%	Oman	2.8%
6	Vietnam	0.9%	Netherlands	2.2%
7	India	0.3%	Turkiye	1.5%

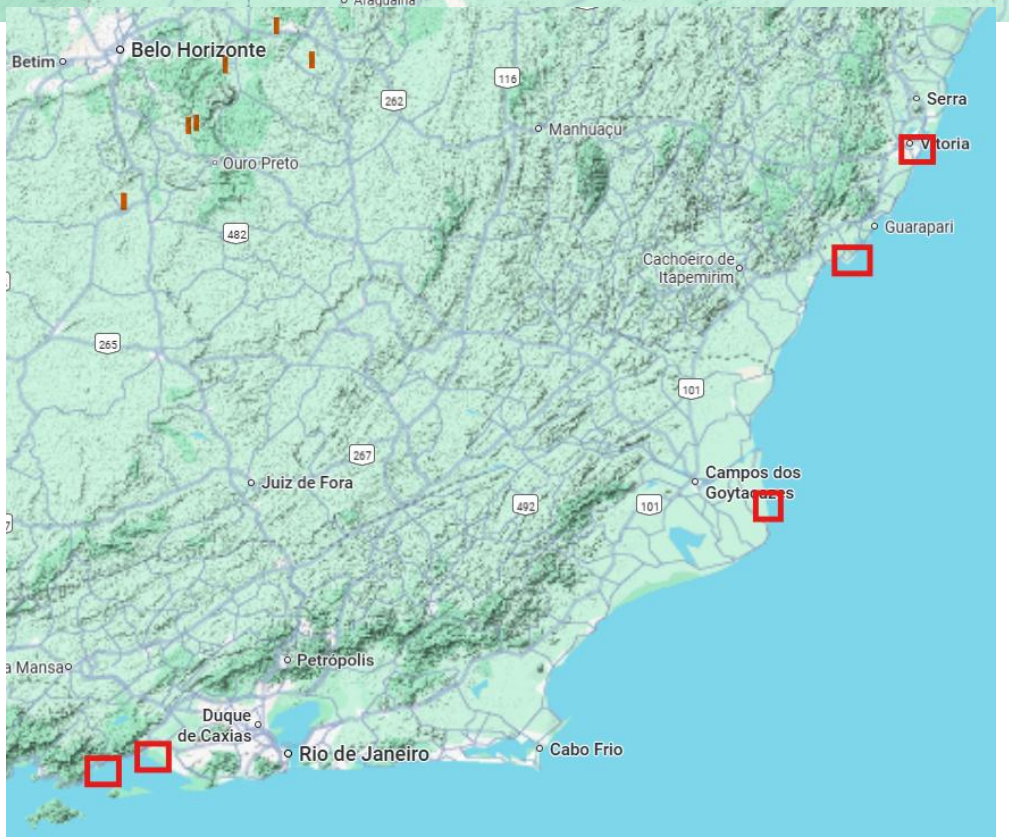
Source: World Top's Exports, Tendata & OEC World.

The Brockman Iron Formation in the Hamersley Range

The Carajás Formation & the Iron Quadrangle







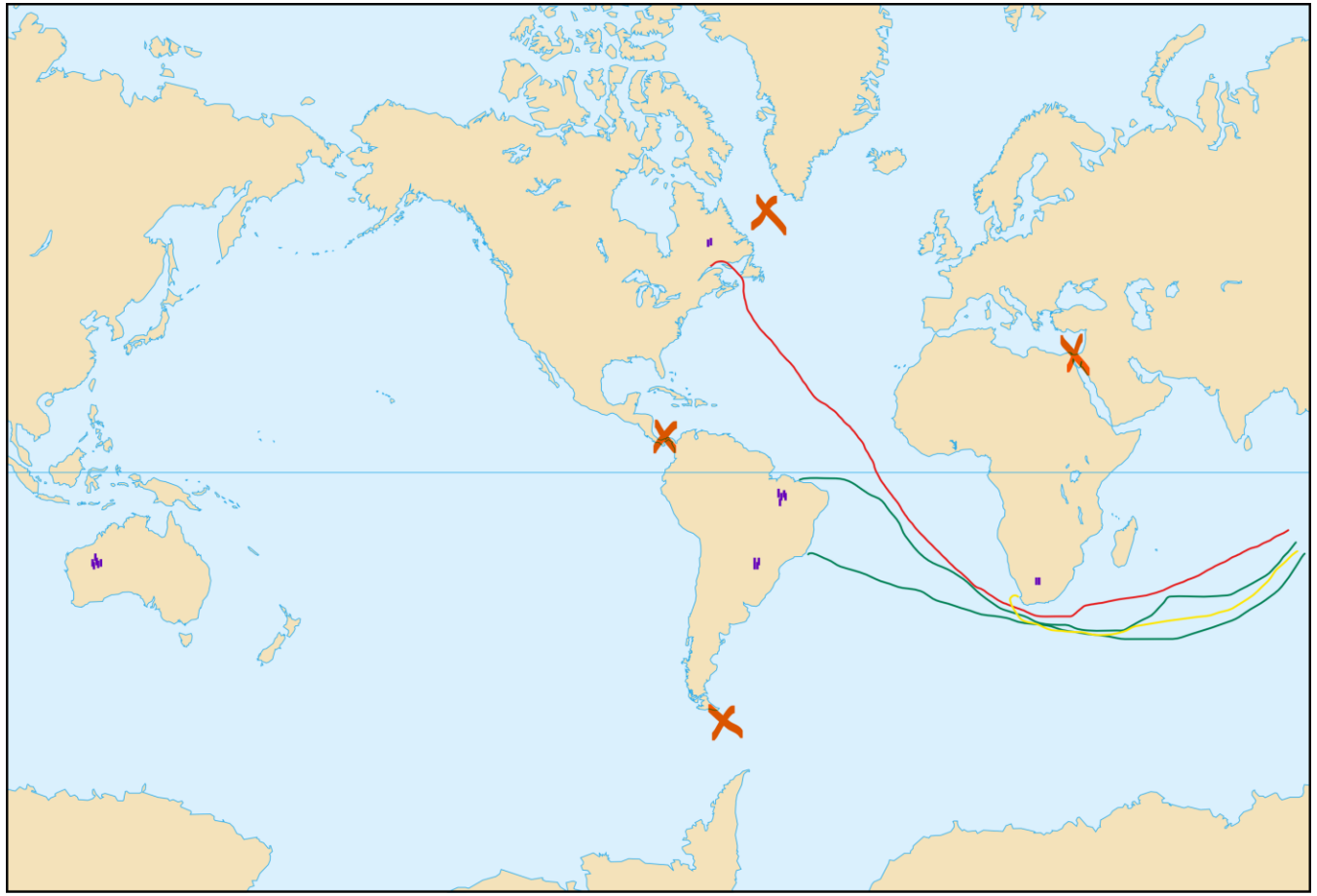
Iron ore market benchmarks

Benchmak	Description	Typical grade
Platts IODEX	Most referenced global spot price	62% Fe
TSI 62% Fe CFR China	Used by traders and steelmakers	62% Fe
Fastmarkets MB 65% Fe Brazil	Premium high-grade index	65% Fe
TSI 58% Fe CFR China	Low-grade benchmark	58% Fe
SGX Futures	Singapore Exchange futures contracts	62% Fe

Grade	Price US$/dmt July-October 2025	Description
62% Fe (IODEX CFR China	~$101–105	Most traded benchmark
65% Fe (Brazil)	~$117–120	Premium for high-grade ore
58% Fe (CFR China)	~$86-95	Discounted due to lower yield

Variable	Why it matters
Moisture content	Dry iron ore matters ~5–8% ~10-15% is too high
Gangue/impurity chemistry	Impacts cost and quality of steel
Particle size distribution	High fines leads to liquefaction risk

Transporting iron ore from Canada, Brazil and South Africa to East Asia



Main findings: OECD Steel Outlook 2025 (I)

- Global steelmaking capacity set to rise 6.7% (165 mmt) by 2027, intensifying oversupply risks.
- Asia will drive 58% of new steel capacity, led by China and India.
- Global steel demand to rise just 0.7% annually through 2030; flat in OECD, falling in China.
- Strong steel demand and supply expansion in ASEAN and MENA.
- Steel competition distorted by state policies: subsidies, import-reduction measures, and downstream support.
- Subsidies persist and are most prominent where capacity is expanding fastest — China, MENA, ASEAN.
- China’s subsidisation rate is 10× OECD levels, driven by cheap loans, energy subsidies, grants, and tax breaks.

Main findings: OECD Steel Outlook 2025 (II)

- Steel exports fell sharply in Europe & CIS/Ukraine, while Asia and MENA surged — led by China's record 118 mmt in 2024.
- In 2024, antidumping probes on steel soared to 81 across 19 governments, five times higher than 2023. Almost 80% were aimed at Asian exporters, led by China.
- Beyond product-specific dumping cases, many countries now use blanket tariff hikes to shield their steel industries.
- To ease the impact of trade measures, producers move exports to freer markets or switch to upstream/downstream products outside the scope of restrictions.
- Others route goods through intermediary countries for further processing before re-exporting to targeted markets.
- OECD analysis shows 21.5 mmt (EUR 13.3 bn) of suspicious steel trade in 2013–20, equal to 17.6% of targeted flows.
- Steel's overcapacity cuts profits and hampers green investment, while 40% of upcoming 165 mmt capacity will use high-emission BF/BOF routes.

Crude steel production (million tonnes)

Rank	Country	2023	2024	
1	China	1,028.9	1,005.1	53.3%
2	India	140.8	149.6	7.9%
3	Japan	87.0	84.0	4.5%
4	United States	81.4	79.5	4.2%
5	Russia	76.0	71.0	3.8%
6	South Korea	66.7	63.6	3.4%
7	Germany	35.4	37.2	2.0%
8	Turkiye	33.7	36.9	2.0%
9	Brazil	32.0	33.8	1.8%
10	Iran	30.7	31.4	1.7%
11	Vietnam	19.2	22.0	1.2%
12	Italy	21.1	20.0	1.1%
13	Taiwan	19.1	19.2	1.0%
14	Indonesia	16.8	18.0	1.0%

Source:
World Steel Association

Top exporters and importers of steel (million tonnes)

Rank	Country	2023	2024		Rank	Country	2023	2024	
1	China	94.3	117.1	26.1%	1	United States	26.4	27.3	6.1%
2	Japan	32.2	31.2	6.9%	2	Turkiye	18.0	19.7	4.4%
3	South Korea	27.0	28.0	6.2%	3	Italy	18.7	18.5	4.1%
4	Germany	22.5	22.6	5.0%	4	Germany	18.7	18.3	4.1%
5	Turkiye	12.7	17.0	3.8%	5	Mexico	17.5	17.6	3.9%
6	Belgium	14.6	15.4	3.4%	6	Vietnam	14.0	17.2	3.8%
7	Italy	16.1	15.0	3.3%	7	South Korea	15.0	14.2	3.2%
8	Vietnam	8.6	13.4	3.0%	8	Thailand	13.7	13.5	3.0%
9	Russia	13.9	12.3	2.7%	9	Indonesia	12.4	12.8	2.8%
10	Indonesia	9.6	11.4	2.5%	10	Belgium	11.6	11.9	2.6%
11	Iran	11.9	10.8	2.4%	11	Poland	11.6	11.5	2.6%
12	Brazil	12.3	10.3	2.3%	12	India	9.8	11.5	2.6%
13	France	9.9	9.8	2.2%	13	France	11.8	11.2	2.5%
14	India	9.9	9.7	2.2%	14	UAE	n.a.	10.6	2.4%

Product form	End-use sectors	Regional strength	Share of steel market
Flat products	Automotive, appliances, shipbuilding, pipelines	China, EU, Japan, South Korea lead in advanced flat steels	~55–60%
Long products	Construction (bars, beams), rail, rebar	China, Turkey, Russia, India; EU and U.S. produce high-end variants	~25–30%
Tubular products	Oil & gas pipelines, construction, engineering	U.S., China, Japan, EU (Germany and Italy)	~8–10%
Semi-finished products	Inputs for re-rolling into flats or longs	Russia, India, Brazil, Iran (key exporters of billets, slabs, blooms)	~10–15%
Specialty steels	Aerospace, energy, defense, hydrogen pipelines	Japan, Germany, EU, U.S.; China catching up in innovation	~5–8%

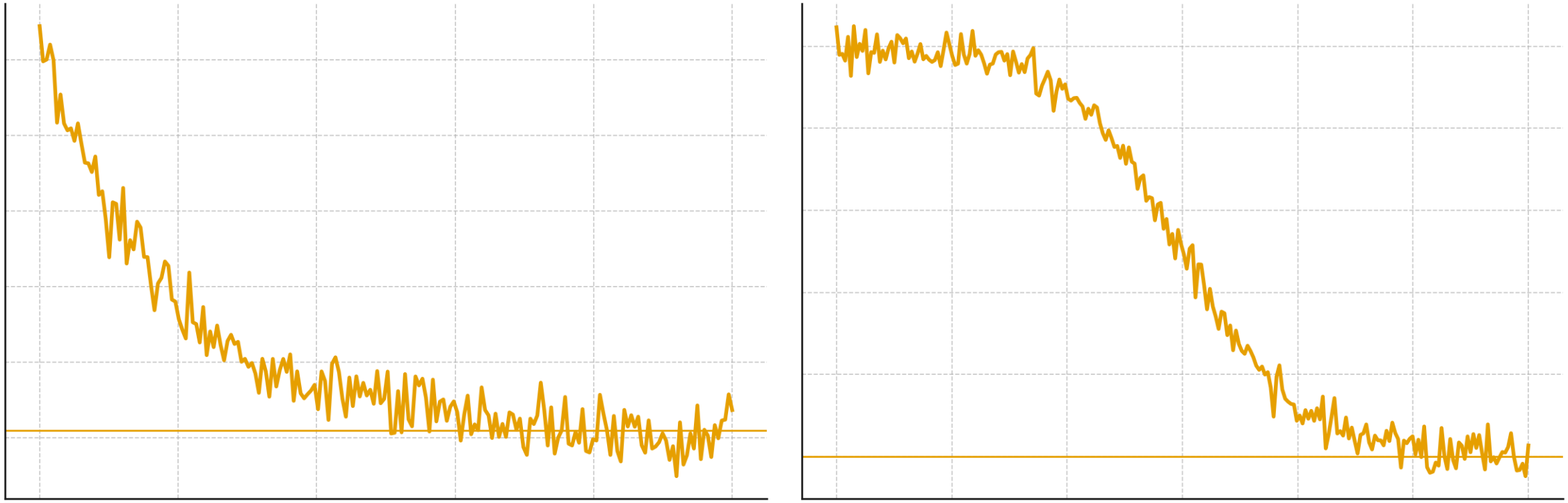
Steel types by market share, sectors, regions, and grades (I)

Grade family	Market share / Volume	End-use sectors	Regional strength	Share of ~3,500 grades
Carbon Steels (low, medium, high)	Very high (≈90% of global steel output)	Construction, infrastructure, pipelines, shipbuilding, rail	China, India dominate volume; also strong in Africa & LAC	≈25–30% (fewer distinct grades, but huge tonnage)
Alloy Steels (low-alloy, high-alloy)	Moderate (≈5–7%)	Energy, aerospace, automotive, pressure vessels	Europe, Japan, U.S. lead in specialty alloy production	≈15% (many tailored compositions)
Stainless Steels (austenitic, ferritic, martensitic, duplex)	Small but growing (≈2–3%)	Food processing, medical, chemical, marine, consumer goods	China largest producer; strong demand in EU, U.S., SE Asia	≈15% (large variety of grades across families)
Advanced High-Strength Steels (AHSS)	Niche but rising fast	Automotive lightweighting, crash safety, EV structures	EU, Japan, Korea lead in R&D; China scaling rapidly	≈10–12% (many variants within DP, TRIP, CP, 3rd gen)

Steel types by market share, sectors, regions, and grades (II)

Grade family	Market share / Volume	End-use sectors	Regional strength	Share of ~3,500 grades
Electrical Steels (GOES, NOES)	Small share (<1%) but strategic	Transformers, motors, EV drivetrains	Japan, China, EU dominate; demand surging in India	≈5% (specialized grades with fine distinctions)
Tool & Die Steels	Niche (<1%)	Cutting tools, dies, molds, machining	Germany, Japan, U.S. strong producers	≈8% (many grade variants for hardness, toughness, wear)
Specialty Steels (weathering, cryogenic, hydrogen-resistant, ultra-high strength)	Small but high-value	LNG tanks, bridges, hydrogen pipelines, defense	EU, Japan, Korea lead; China expanding	≈10% (innovation-driven, many niche grades)
Cast & Forged Steels	Moderate niche	Heavy machinery, turbines, pressure parts	China, India dominate volume; Germany, Italy strong in high-end forgings	≈5% (fewer grades, but critical applications)

Iron ore + steel resemble more the right



Thank you for joining me on this 25-minute journey

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