



Steel

Research Team

Mohammad Abdul Rehman Khan | Supervising Senior
Muhammad Shahryar Butt | Associate Research Analyst

© The Pakistan Credit Rating Agency Limited.



Contents	Page.	Contents	Page.	Contents	Page.
Introduction	1	Trade	14	Long Steel Products	28
Value Chain	2	Net Trade	15	Flat Steel Products	32
Types of Technologies	3	Prices	16	Tubes & Pipes	36
Production Process	5	Outlook	17	Borrowing Mix	39
Global		Local		Duty Structure	40
Steel Making Capacity	6	Overview	19	SWOT Analysis	41
Production	7	Snapshot	20	Rating Curve	42
Production by Process	8	Supply	21	Outlook	43
Top Companies	9	Capacity Utilization	22	Bibliography	44
Consumption	10	Raw Material	23		
Per Capita Consumption	11	Input Cost	25		
Sector Wise Consumption	12	Demand	26		
Consumption & GDP Growth	13	Prices	27		

Steel

Introduction

- **Steel** is an alloy of iron and carbon, with other elements such as manganese, chromium and nickel added to achieve specific properties. Steel is one of the most widely used materials in the world due to its versatility, strength, and relatively low cost.
- It is one of the most commonly used metals in the world, with over ~3,500 different grades and serves as a primary input for most of the important sectors of the economy such as construction, energy, automobile, transportation, infrastructure, and machinery, among others.
- **Major raw materials** used in steel production are Iron Ore (a mineral substance which is heated to yield metallic iron and usually makes up ~98.0% of steel weight), Coal (to produce Carbon which is present in small amounts, i.e., ~0.2% to ~2.1%, which is, in turn, used as a hardening element in steel) and steel scrap (due to its recyclable nature).
- The growth in demand for steel is largely driven by global urbanization, infrastructure development, industrial growth, advancements in technology, and the push towards sustainability.
- As economies continue to develop and modernize, steel remains a fundamental material across various sectors, ensuring its continued importance and rising demand.



Steel

Value Chain

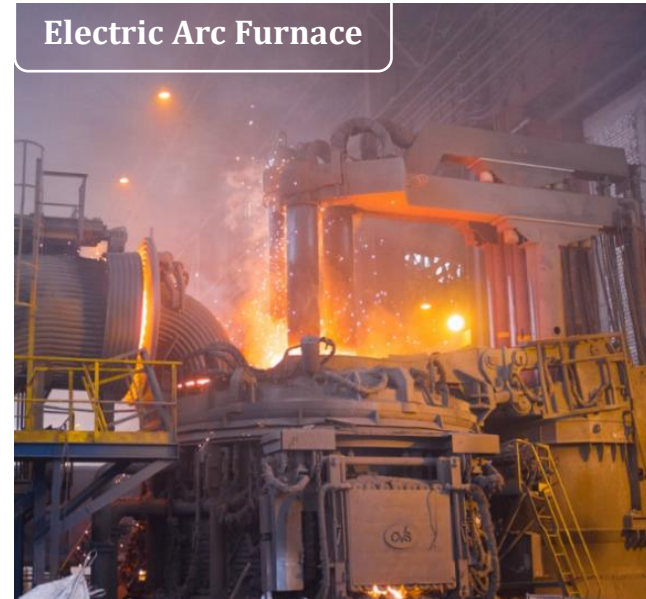
- The primary value chain of the metal industry can be divided into three segments namely Upstream, Midstream and Downstream.
 - **Iron-making** involves the production of hot metal by blasting iron, coke, and coal or reducing iron ore with natural gas or low-quality coke to produce iron products.
 - **Steelmaking** is a process that uses iron products as inputs (hot briquetted iron, direct reduced iron, etc.) into the Electric Arc Furnace or Basic Oxygen Furnace to produce crude steel products such as billets and blooms.
 - **Continuous Casting** is a process of solidifying molten metal (molten steel) into semifinished slab, billet, and bloom.
 - **Rolling** includes shaping and reducing the thickness of steel by passing it through a series of rollers. Long products thus produced include bars, rebars, wire rods, and sections, whereas examples of flat products include hot and cold-rolled coils.
 - **Finishing** involves coating steel products with materials to enhance their characteristics (galvanizing, painting, and powder coating, etc.).
 - **Downstream segment** involves further processing of finished long and flat products into secondary finished products.
- Pakistan's Steel Sector operates largely in the mid and downstream segments of the value chain, where steel scrap is recycled to produce the aforementioned long and flat steel products.



Steel

Types of Technologies

- The two most common methods of steel production are Basic-Oxygen Furnace (**BOF**) and Electric Furnace that includes two further types of technologies, namely, Electric Arc Furnace (**EAF**) and Induction Furnace (**IF**).
- While EAF relies on electricity and recycled metals, BOF depends on raw materials like Iron Ore and Coke as part of a process where oxygen is blown into the furnace at a high velocity, using significantly more energy.
- EAF technology offers a greener alternative by utilizing electricity to melt scrap metal, direct reduced iron (DRI) or hot briquetted iron (HBI). BOF, on the other hand, uses mainly coal-generated heat.
- Moreover, an EAF typically consumes ~400-700 kWh of electricity per MT of steel, depending on scrap quality. Additionally, EAFs have the flexibility to shut down and restart quickly, potentially allowing them to take advantage of lower electricity rates during off-peak hours. On average, the technology employs ~710 kg of recycled steel, ~586 kg of iron ore, ~150 kg of coal, and ~88 kg of limestone to produce ~1,000 kg of crude steel.
- On the other hand, the BOF uses, on average, ~1,370 kg of iron ore, ~780 kg of coal, ~270 kg of limestone, and ~125 kg of recycled steel to produce ~1,000 kg of crude steel. Pakistan's Steel Sector predominantly uses IF technology (over ~85% production), although a few players have installed EAF technology as well.
- According to the IEA's report, near-zero emission technologies should account for ~8% of primary steel production by CY30.



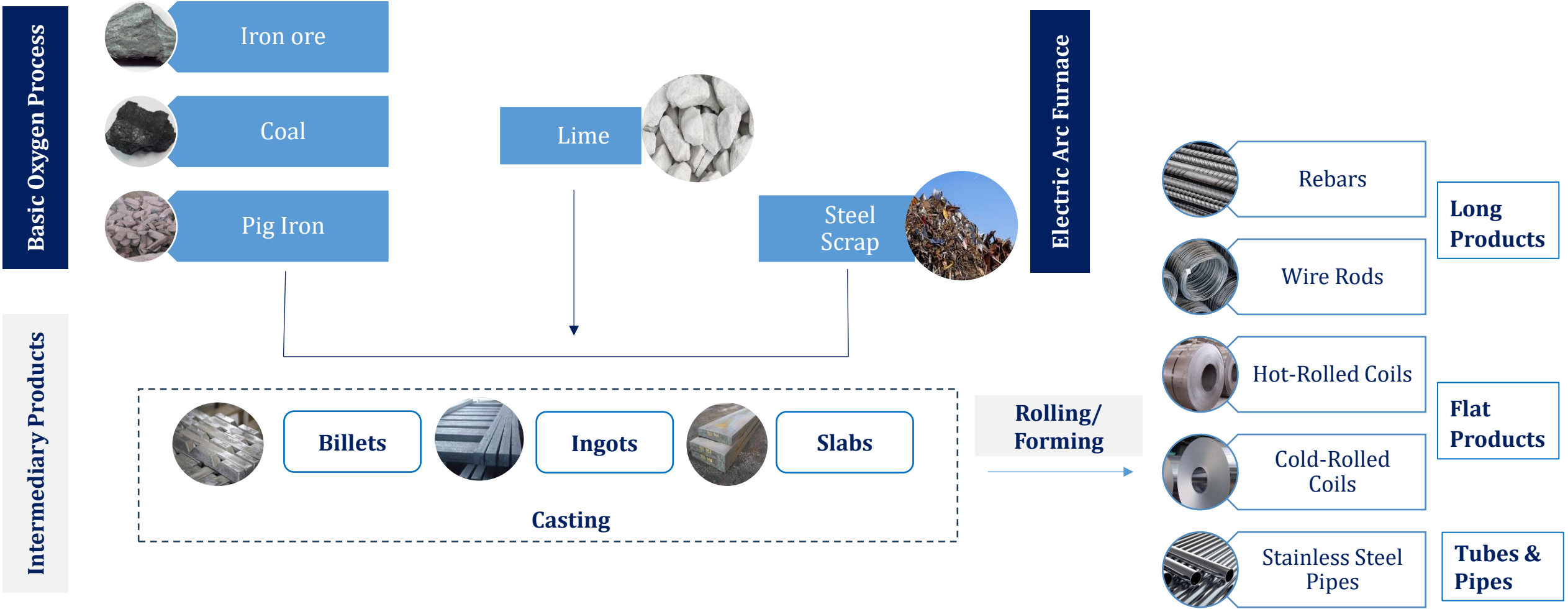
Technologies | IF vs. EAF

- Induction furnace has an advantage over Electric Arc furnaces as they can reach high temperatures quickly, making them ideal for smelting processes that require fast melting and precise temperature control.
- The scrap yield is ~90.0% in EAF. However, the technology allows for cheaper scrap use as compared to IF.
- EAF has lower energy consumption ~425-475 kWh/MT, as compared to IF furnace ~700-800 kWh/MT.
- Induction furnace is more in line with environmental protection requirements. It produces less exhaust gas, waste residue, and noise. The minimum carbon content of is ~0.02% while that of EAF is ~0.06%.

Induction Furnace (IF) vs. Electric Arc Furnace (EAF)		
Parameters	Induction Furnace	Electric Arc Furnace
Principal	Induction furnaces use the principal of electromagnetic induction to heat and melt steel scrap.	An Electric Arc Furnace use the principal of electric arc to heat and melt steel scrap.
Temperature	High	Low
Electricity Consumption	~700-800kWh/MT	~425-475kWh/MT
Slag Loss	~10-15Kg/MT	~60-70Kg/MT
Melting Loss	~1-2%	~7-10%
Applicable Raw Materials	Scrap iron, scrap steel, sponge iron (pressed into chunks).	Scrap iron, scrap steel, sponge iron (granular), pig iron, iron ore

Steel

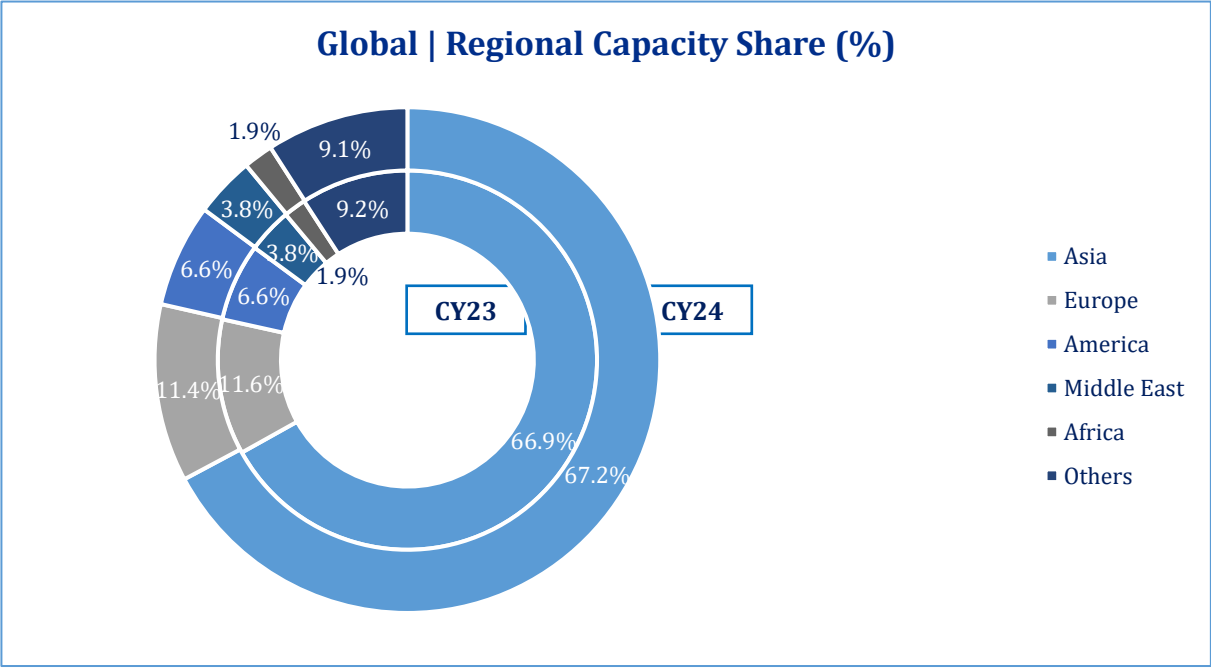
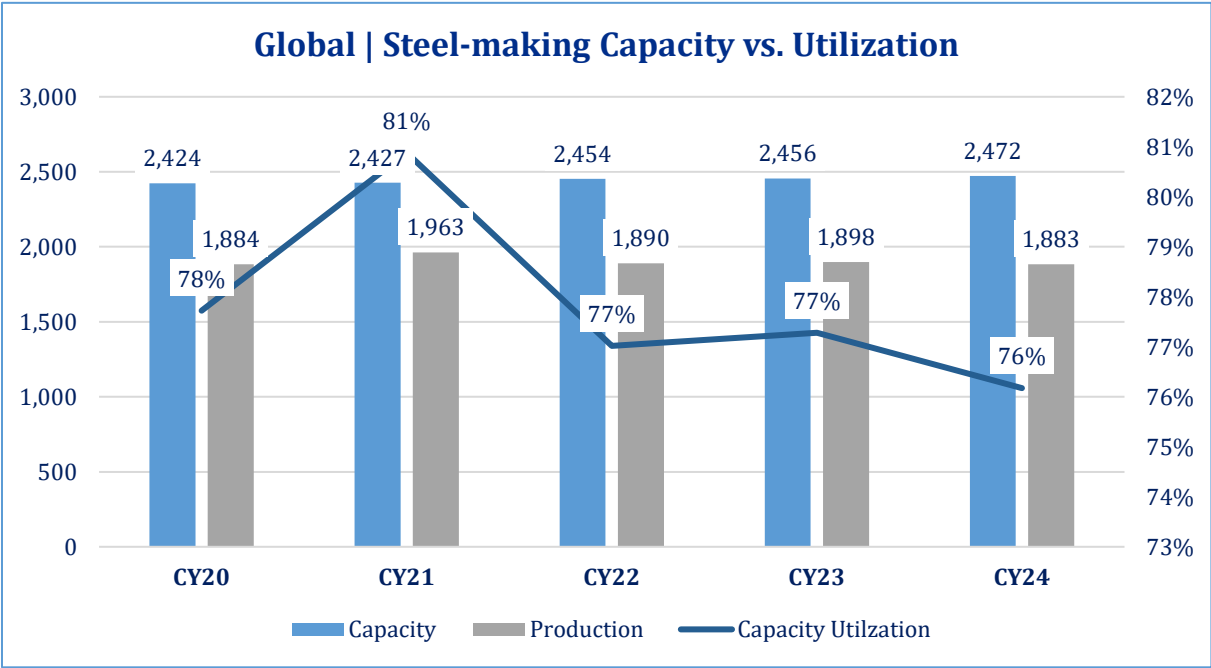
Production Process



Steel

Global | Steel-making Capacity

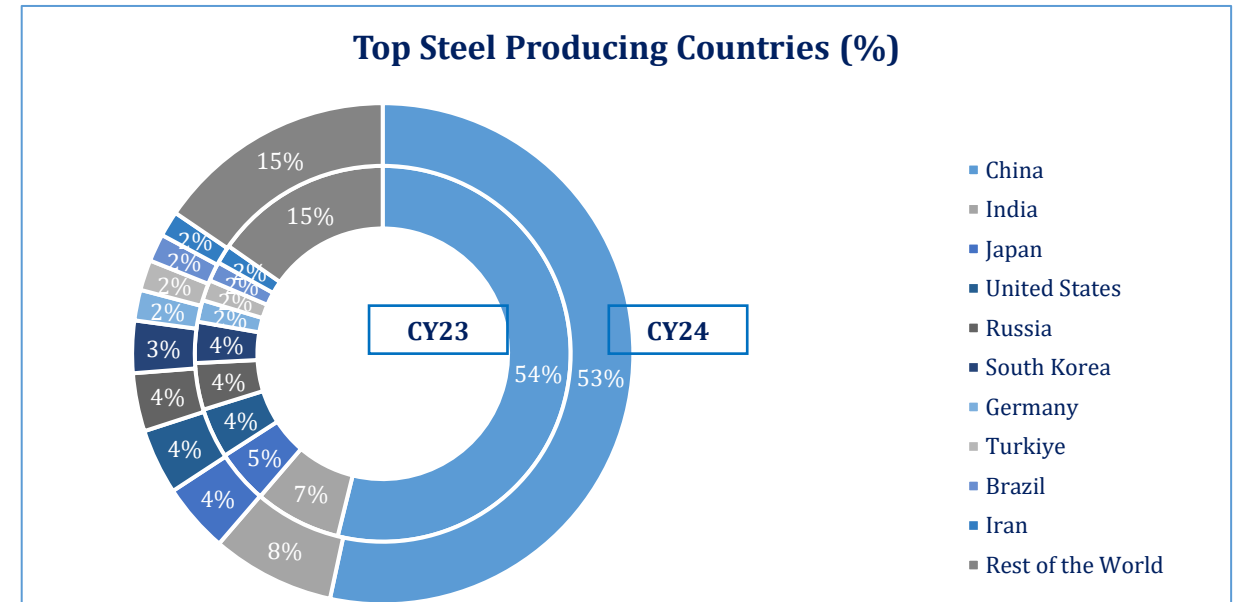
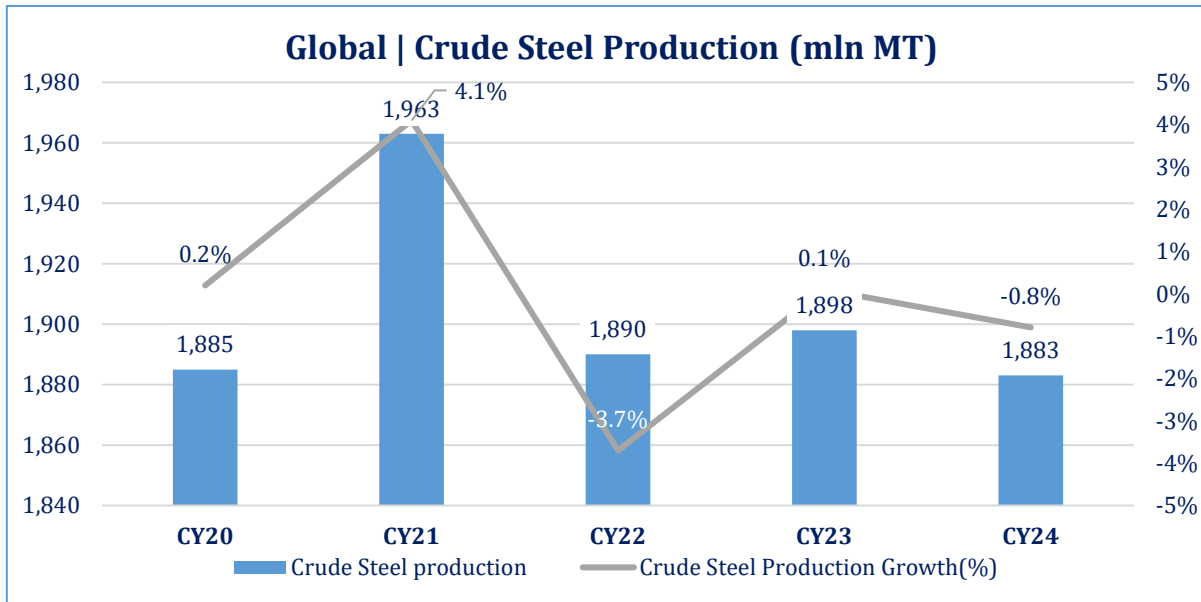
- During CY24, global average steel utilization capacity clocked in at ~76.0% as global steel production was recorded at ~1,883.0mln MT (CY23: ~1,898mln MT), down ~0.8% due to low demand in China and declining growth in developed markets. By CY27, major steel production capacity is expected to grow by ~721.0mln MT to reach ~3,193mln MT led by China, India, and the Association of Southeast Asian Nations (ASEAN).
- On the regional front, Asia held ~67.2% (or ~1,660.6mln MT) of global steel-making capacity in CY24 (CY23: ~66.9% or ~1,643.0mln MT). In Asia, China and India, the world's top steel producers, accounted for ~46.2% and ~7.3% of global capacity during the year (SPLY: ~46.2%, ~6.6%, respectively). In CY24, Türkiye and India expanded their production by ~9.4% and ~6.3% to ~36.9mln MT and ~149.6mln MT (CY23: ~33.7mln MT; ~140.8mln MT), respectively.



Steel

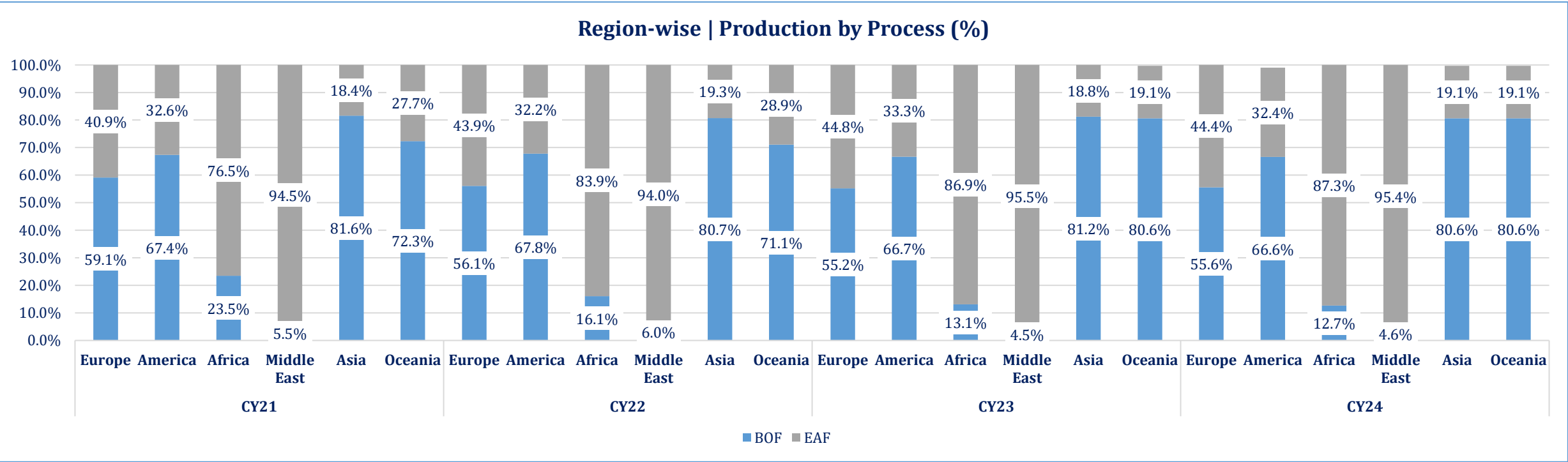
Global | Production

- During CY24, global crude steel production was ~1,883mln MT, a YoY marginal decrease of ~0.8%. The production has largely remained stagnated due to subdued demand in China and subdued growth in the developed markets.
- China remained the top producer of crude steel during CY24 as its production stood at ~1,005.1mln MT down ~1.7% YoY (CY23: ~1,022.5mln MT) while India's production rose ~6.3% YoY to ~149.6mln MT (CY23: ~140.8mln MT), as the government invested in its infrastructure projects including railway, logistics and city-wise development projects.
- Meanwhile, crude steel production in Japan and Korea declined ~4.0% YoY to ~147.5mln MT, owing to subdued demand from construction and manufacturing sectors.



Global | Production by Process

- During CY24, global crude steel produced through BOF and EAF comprised ~70.4% and ~29.6%, respectively, of the overall production (CY23: ~71.1%, ~28.9%, respectively). The share of EAF in global steel production is forecasted to increase from 29.6% in CY24 to ~50.0% by CY50.
- In Asia during CY24, ~71.0% was produced using BOF, while ~29.0% was produced using EAF. China, which accounted for ~72.5% of regional crude production in CY24, the BOF:EAF mix stood at ~90.1%:~9.9%, compared with ~90.5%:~9.5% in CY23.



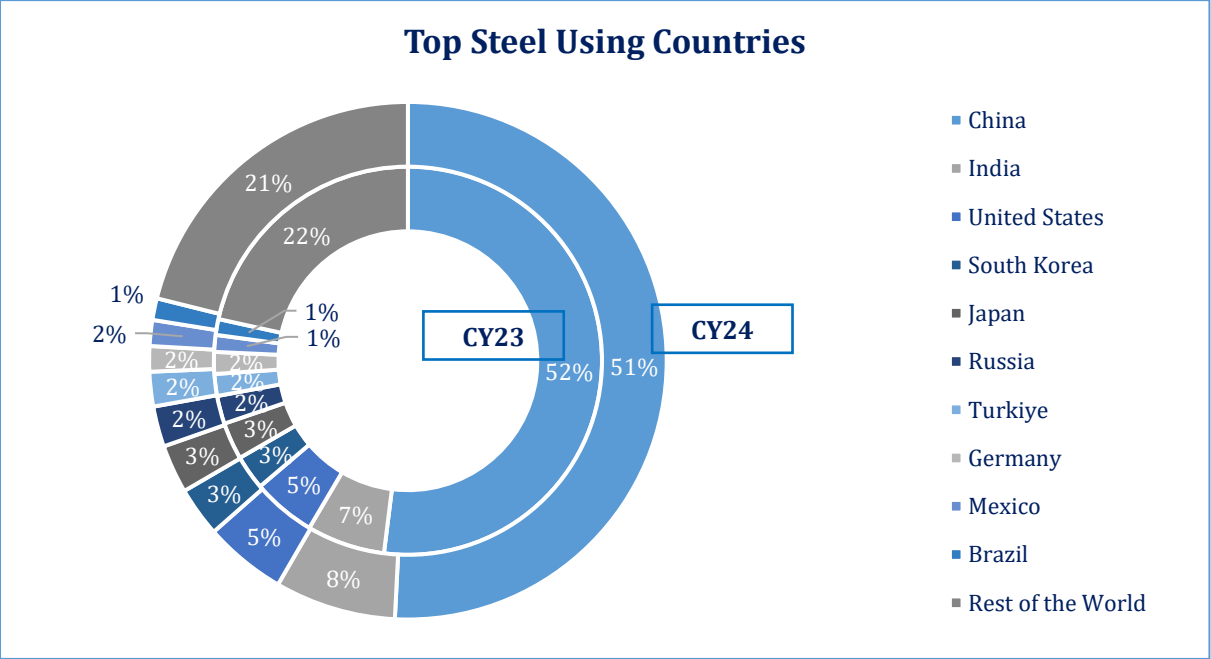
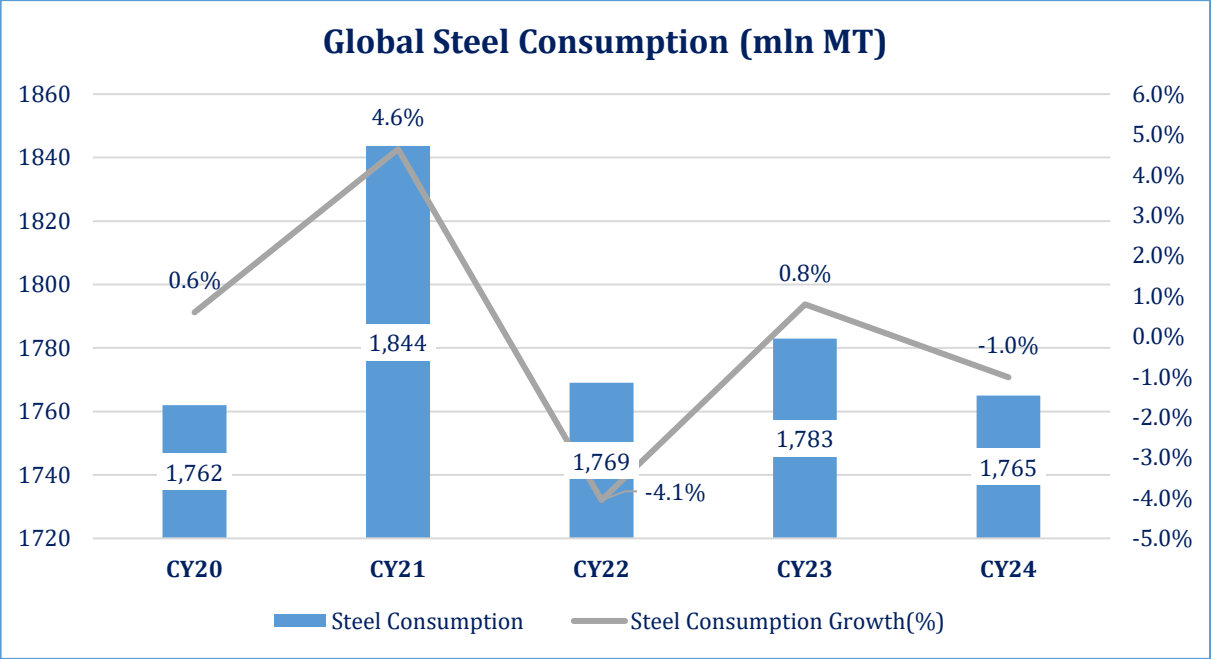
Global | Top Companies

- During CY24, steel production of the global top 10 companies stood at ~520.5mln MT in CY24 (CY23: ~519.2mln MT), a YoY increase of ~0.2%. Cumulatively, these formed ~27.6% of global steel produced in CY24 (CY23: ~27.4%), led by ~6 Chinese companies among the top 10 forming ~18.2% of the total global steel production.
- The largest steel producer, China Baowu Group, produced ~130.1mln MT in CY24, a YoY decrease of ~0.5%. However, it continues to hold the largest market share at ~6.9% during the year (SPLY: ~6.9%). Meanwhile, the second-largest producer, ArcelorMittal, recorded ~5.1% YoY lower steel production in CY24 and held a market share of ~3.4% (SPLY: ~3.6%).

Top Steel Producing Companies (mln MT)						
Sr.	Company	Headquarters	CY23	CY24	CY24 (YoY %)	Market Share CY24 (%)
1	China Baowu Group	China	130.8	130.1	-0.5%	6.9%
2	ArcelorMittal	Luxembourg	68.5	65.0	-5.1%	3.4%
3	Ansteel Group	China	55.9	59.5	6.4%	3.2%
4	Nippon Steel Corporation	Japan	43.7	43.6	-0.2%	2.3%
5	HBIS Group	China	41.3	42.3	2.4%	2.2%
6	Shagang Group	China	40.5	40.2	-0.7%	2.1%
7	POSCO Holdings	South Korea	38.4	37.8	-1.6%	2.0%
8	Jianlong Group	China	37.0	39.4	6.4%	2.1%
9	Shougang Group	China	33.6	31.6	-6.0%	1.7%
10	Tata Steel Group	India	29.5	31.0	5.2%	1.6%
11	Rest of the World		1,372.8	1364.2	-0.6%	72.4%
	Total Production		1,892.0	1,884.6	-0.4%	100.0%

Global | Consumption

- During CY24, global steel consumption remained largely flat ~1,765mln MT (CY23: ~1,783mln MT), down ~1.0% YoY, owing to lower demand growth in China and many emerging markets.
- Country-wise, China's demand for steel declined to ~895.7mln MT in CY23, down ~3.3% YoY as the country's construction Sector remained under pressure in CY23, while India's steel consumption increased to ~133.4mln MT, up ~14.9% YoY, driven by higher infrastructure spending. Meanwhile, steel utilization in the USA stood at ~90.5mln MT (CY22: ~94.5mln MT), down ~4.2% YoY, as the construction and manufacturing Sectors remained subdued in CY23.
- By End-CY24, steel consumption is forecasted to increase to ~1,793mln MT, or by ~1.7% YoY. China's consumption is expected to remain stable (low demand from the construction Sector likely to be set off by that from the manufacturing Sector), while India's steel consumption is expected to grow by ~8.0% YoY. The USA, Japan, and Korea are also expected to show a recovery in CY24 on the back of easing inflation and policy rate cuts.



Note: Steel Usage is representative of final steel products and is defined as Production + Imports – Exports

Global | Per Capita Consumption

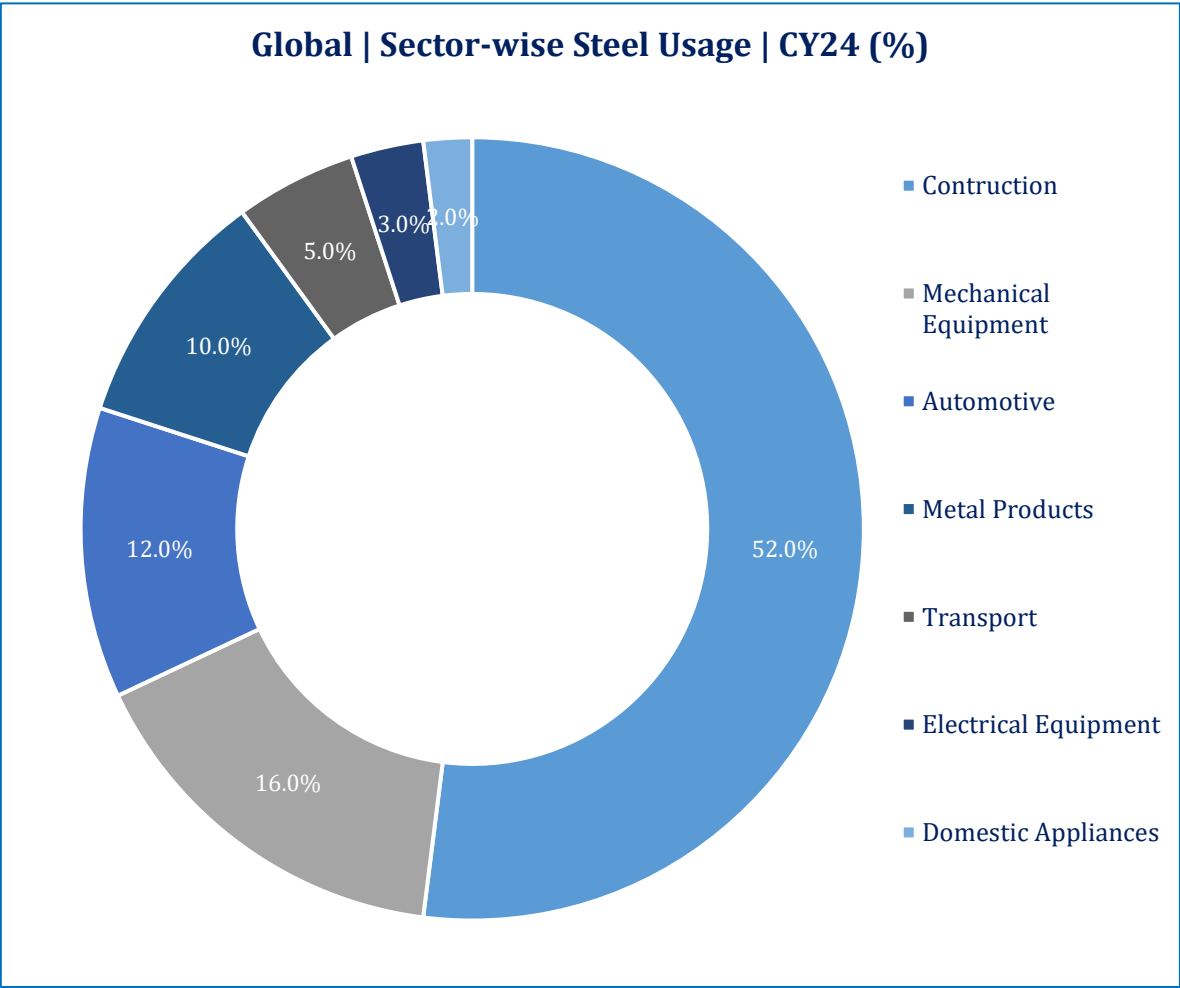
- Global average per capita steel consumption was recorded at ~214.7 kg during CY24 (CY23: ~219.3 kg/capita). South Korea’s per capita steel consumption far surpassed the global average at ~923.5 kg/capita during the year, down ~12.6% YoY, despite China being the largest consumer of steel owing to the latter’s greater population.
- South Korea's significant consumption of steel is driven by its highly industrialized economy, with major Sectors such as shipbuilding, automotive manufacturing, and construction requiring large amounts of steel.
- Meanwhile, Pakistan recorded per capita steel consumption at ~43.2 kg during FY25 (SPLY: ~47.0 kg/capita), while that for India recorded at ~102.6 kg/capita (CY23: ~93.0 kg/capita).

Global Steel Consumption (Kg/Capita)						
Sr.	Countries	CY20	CY21	CY22	CY23	CY24
1	South Korea	948.9	1 081.2	990.0	1 056.6	923.5
2	Taiwan	788.9	886.1	741.0	725.9	745.7
3	China	707.9	669.3	649.9	628.3	601.1
4	Czech Republic	599.2	754.2	631.1	534.1	532.3
5	Turkiye	350.4	393.7	380.8	443.8	443.6
6	Japan	420.2	460.7	443.6	432.5	419.0
7	Italy	343.1	447.3	425.8	399.6	388.5
8	Austria	409.7	504.0	459.0	356.5	335.9
9	Canada	361.4	379.2	351.6	328.0	329.4
10	Germany	376.1	425.7	389.7	336.5	312.7
	World	228.4	233.2	223.7	219.3	214.7

Steel

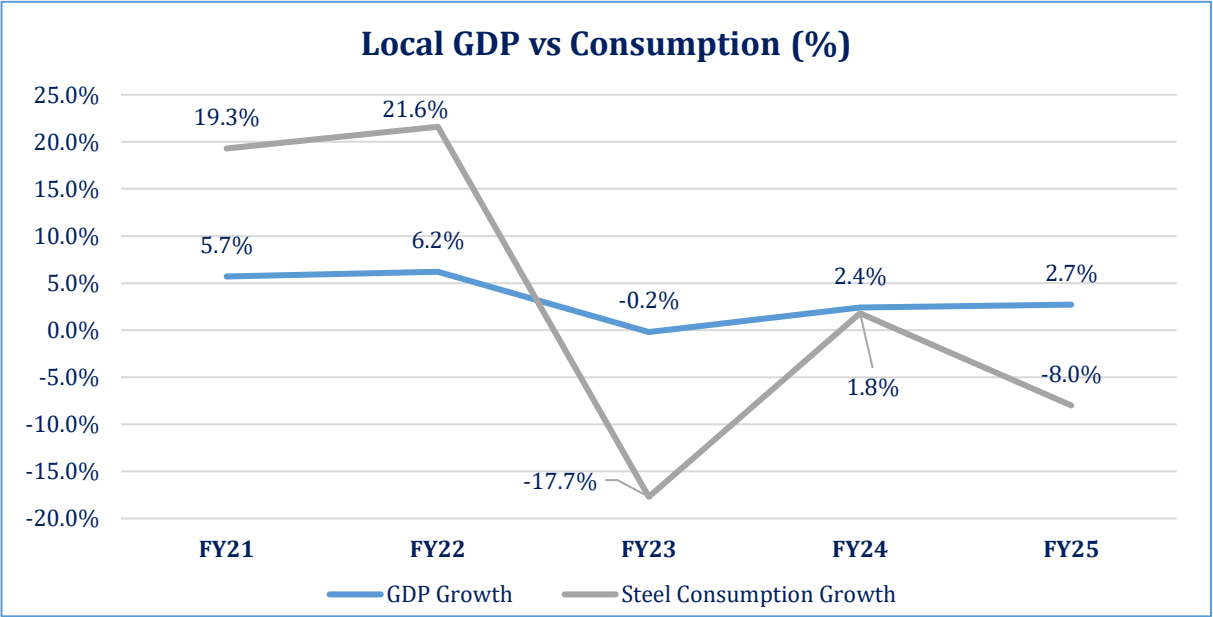
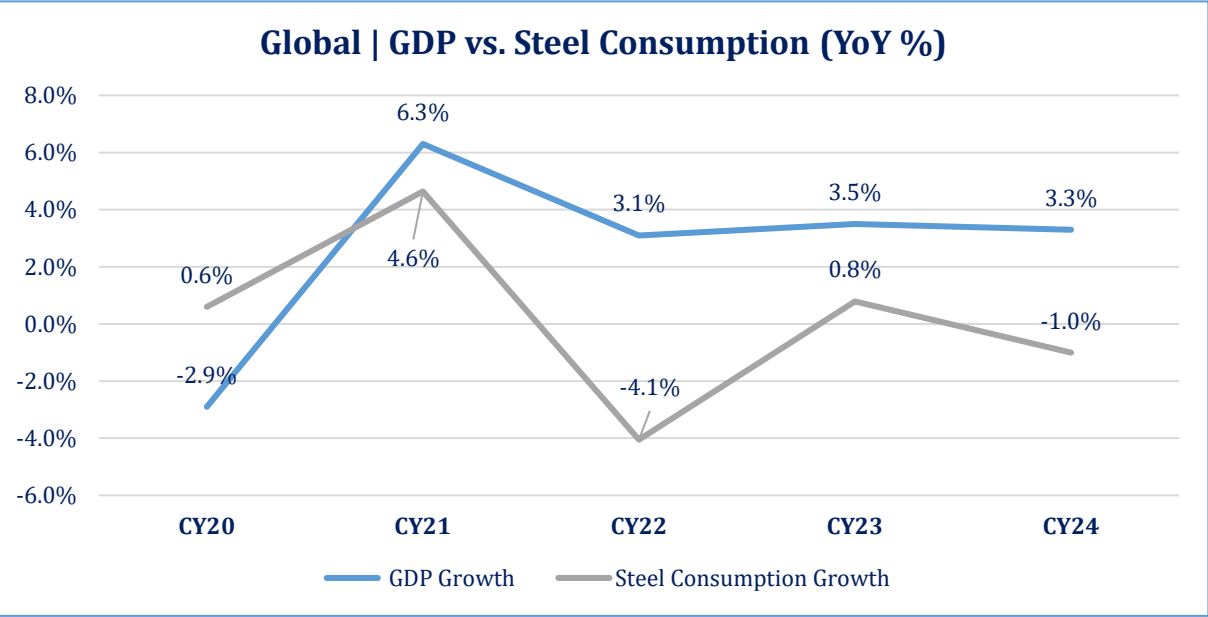
Global | Sector-wise Consumption

- During CY24, ~52.0% of the global steel produced was consumed by the construction and infrastructure Sector, as it is extensively used in the construction of buildings, bridges, railways, tracks, and airports.
- Steel plays a vital role in the manufacturing of heavy machinery, agricultural equipment, and industrial tools. In CY24, ~16% of total steel consumption was attributed to the production of mechanical equipment.
- The automotive Sector was the third-largest consumer of steel, making up ~12.0% of the total steel consumed. Here, steel is widely used in car bodies, frames, engines, and other components and remains metal of choice for automotive manufacturers.
- The remaining ~20% of steel is consumed in the manufacturing of metal products, transporting electrical equipment, and domestic appliances.



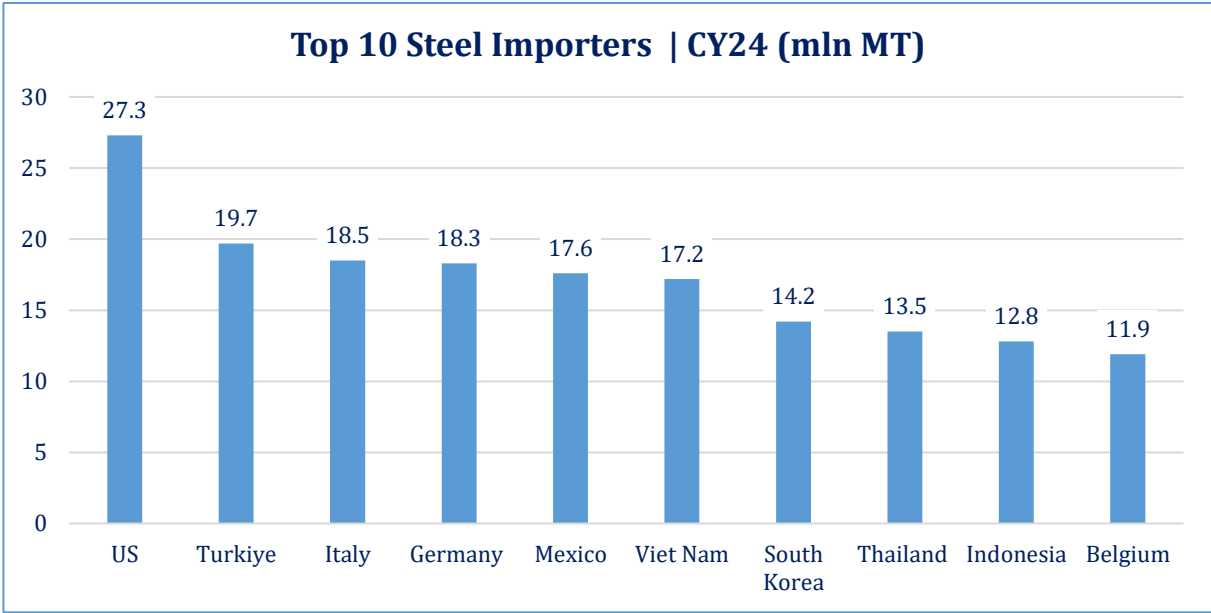
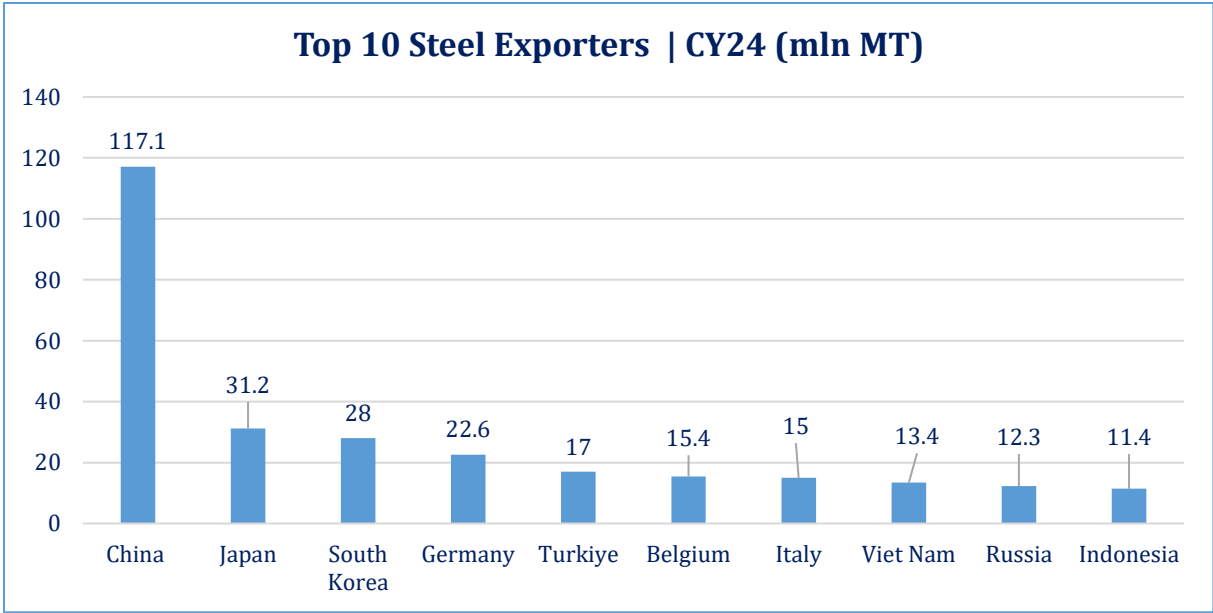
Global vs. Local | Consumption & GDP Growth

- Global GDP growth and steel consumption are closely linked, since steel is a fundamental material for Sectors like construction and manufacturing, which are strongly driven by overall economic activity.
- During CY24, global steel consumption declined by ~1.0% YoY, whereas global GDP growth rate slowed down to ~3.3% YoY. During CY25, the global GDP growth rate is projected to be ~3.0% YoY, while steel consumption is expected to grow by ~1.0% YoY. Global inflation is expected to fall to ~4.2% in CY25 and ~3.6% in CY26.
- During FY25, Pakistan’s real GDP growth rate (provisional) stood at ~2.7% YoY. In comparison, local steel consumption fell by ~8.0% due to slow activity in the large-scale manufacturing Sector and the construction Sector.



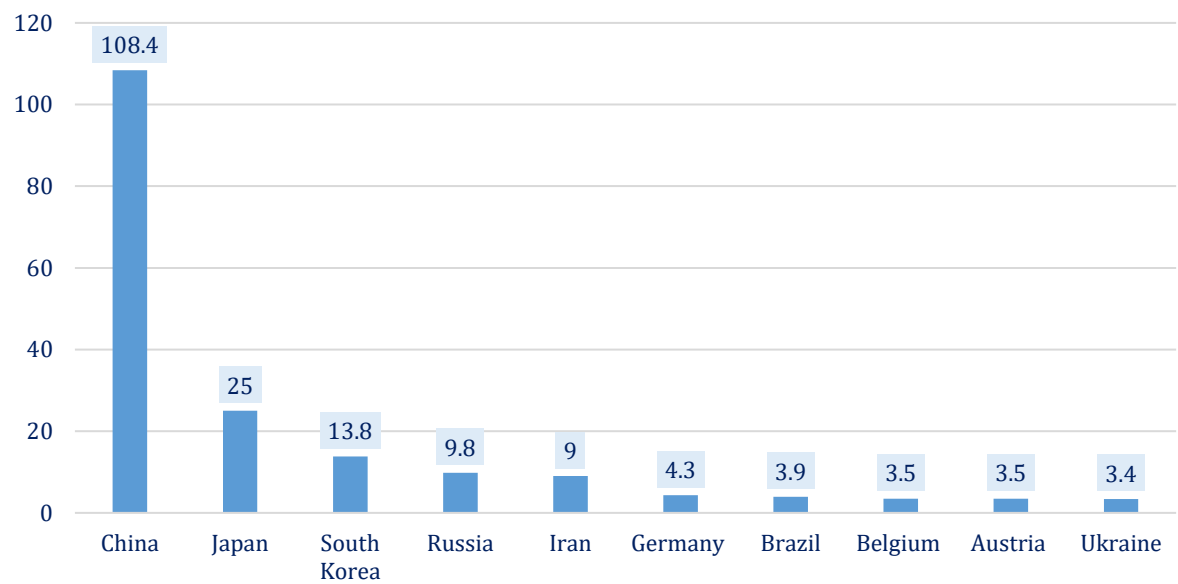
Global | Trade

- Total global steel products traded during CY24 recorded at ~449.2mln MT (CY23: ~434.7mln MT), a YoY increase of ~3.3%. The top 10 steel products exporters cumulatively comprised ~63.1% share in total exports during CY24 (SPLY: ~59.0%), while the top ten importers formed ~38.1% of global steel products imports (SPLY: ~38.0%).
- Overall steel product exports in CY24 comprised ~35.7% long steel, ~55.0% flat steel and ~8.8% other products (CY23: ~35.9%, ~54.1%, ~10.9%, respectively).
- China was the largest steel-exporting country during CY24, holding a dominating share of ~26.1% share in global exports (CY23: ~21.7%), while the country’s overall exports increased by ~24.2% YoY (SPLY: ~38.4% YoY growth). It was followed by Japan with a share of ~6.8% (CY23: ~7.4%) during CY23, while the country’s steel product exports recorded ~3.1% lower on a YoY basis.
- The USA and Turkey were the largest importers of steel products in CY24 with ~6.1% and ~4.4% shares in global imports (SPLY: ~6.1%, ~4.1%, respectively) and recorded ~3.4% and ~5.3% rise in their imports volume, respectively (SPLY: ~8.6%, ~10.9% YoY decline, respectively).

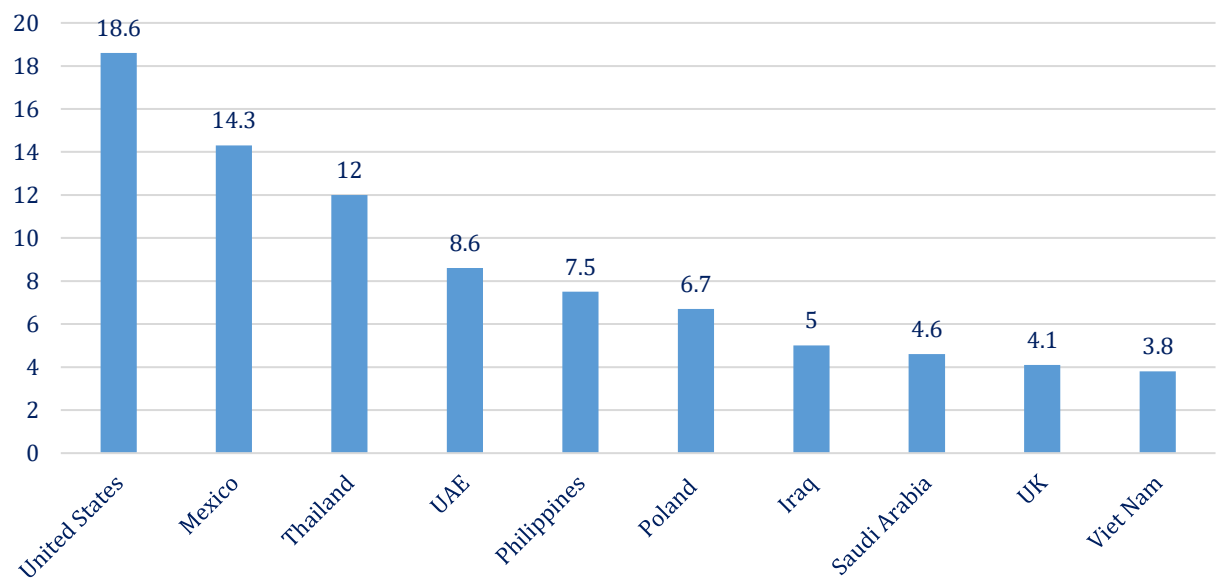


Global | Net Trade Position

Net Exports (mln MT) | CY24



Net Imports (mln MT) | CY24

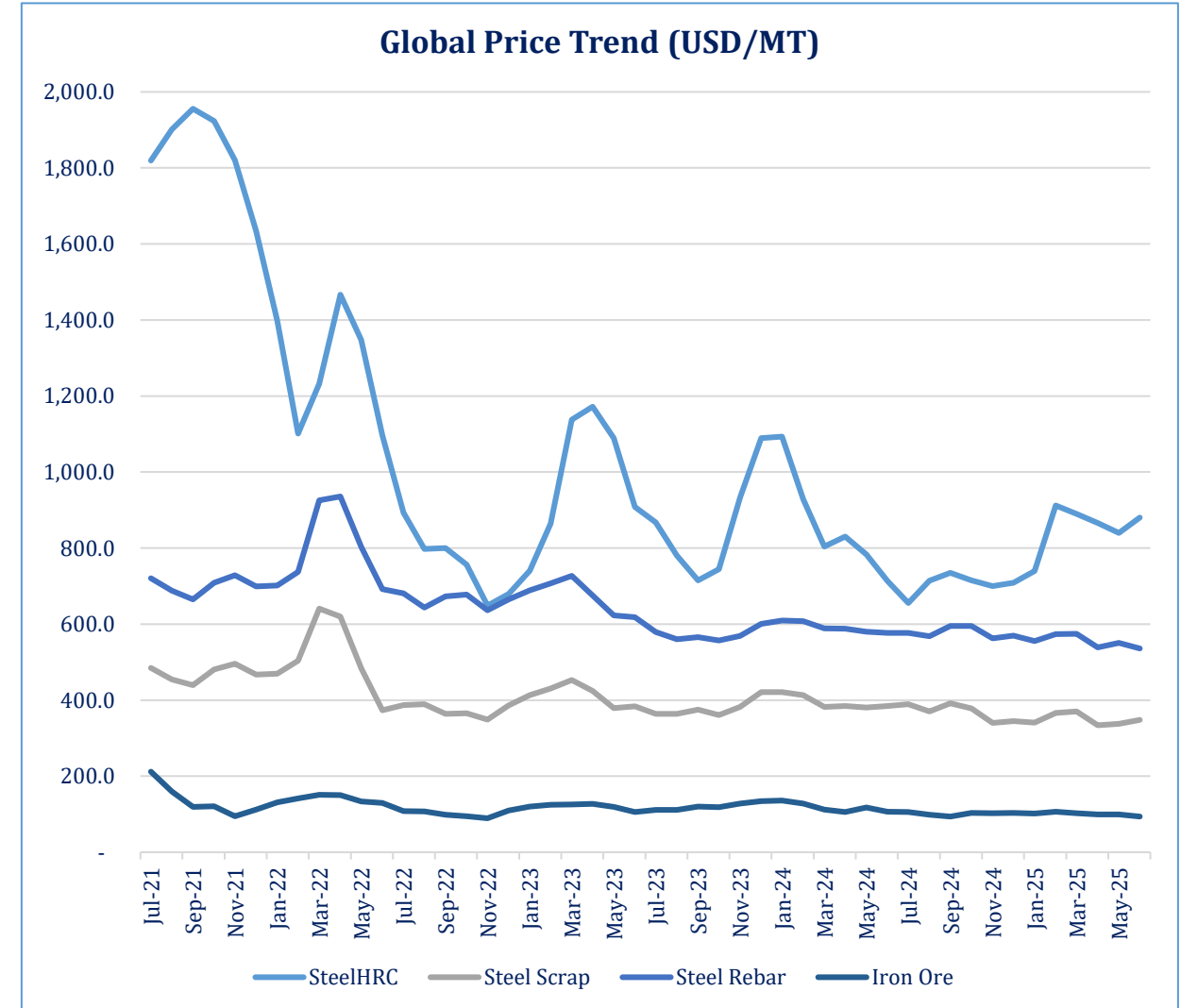


Particulars	CY20	CY21	CY22	CY23	CY24
Finished Steel Production (mln MT)	1,762.2	1,837.2	1,769.4	1,783.2	1,764.8
Finished Steel Products Exports (mln MT)	404.6	462.2	401.6	427.5	449.2
Exports (% of Total Production)	22.9%	25.2%	22.7%	23.9%	25.4%

Steel

Global | Prices

- During CY20-25, HRC prices peaked at USD~1,955/MT in Sep'21, owing to supply chain disruption and increased demand as COVID-19 restrictions were lifted. In Nov'22, HRC prices dipped to USD~648/MT, on the back of slow demand for steel in the construction and manufacturing Sectors as these Sectors continued to struggle and interest rates started to increase to counter inflationary pressures.
- In CY24, HRC prices averaged at USD ~781.8/MT (CY23: USD~920/MT), down ~15.0% YoY.
- Steel raw material prices (steel scrap and iron ore) averaged, USD~381.1/MT and ~109.6/MT during CY24 (CY23: USD~396.1/MT and USD~120.6/MT, respectively).
- As of End-May'25, steel scrap and iron ore were recorded at USD~337.5/MT and USD~99.1/MT while steel rebar was recorded at USD~551.0/MT.



Note: HRC prices reflect N. America data; Scrap prices reflect CFR Turkey and Rebar prices represent FOB Turkey.

Global | Outlook

- Global steel demand is expected to show marginal recovery in CY25, up by ~1.0% after contracting ~1.0% in CY24, to reach ~1,889mln MT, still slightly below CY23 levels. The modest improvement will be supported by stronger prospects in OECD economies and a slower pace of decline in China. While China's stimulus efforts could soften the drag from weak residential investment, they are unlikely to fully reverse the downtrend in Chinese steel demand.
- Developed markets such as the EU and the US are expected to benefit from lower interest rates and relatively accommodative monetary policies, translating into better investment and durable goods consumption.
- Looking ahead, global demand is projected to reach ~1,957mln MT by CY30, implying slow but steady growth. China's demand is set to decline by ~0.6% annually (CAGR ~-0.6% over CY25-30) due to structural adjustments in its growth model, where consumption-led expansion reduces steel intensity. Conversely, emerging markets, particularly India and ASEAN, are expected to drive global demand through infrastructure and housing investments. Modest growth is also projected for CIS, the Middle East, and Africa, while mature markets (Europe, North America, and developed Asia) will remain subdued with limited upside from new infrastructure activity.
- Despite this demand trajectory, global overcapacity remains a concern. The supply-demand gap could widen to ~721mln MT by CY27, with current capacity sufficient to cover demand growth for over a decade.
- On the production side, global steel production is forecasted to grow by ~0.7% in CY25 YoY. China's output will decline by ~0.6% (smaller than demand contraction), maintaining pressure on exports. Developed markets, however, are likely to record a modest recovery (~1.0% growth) as demand improves, with the EU, UK, North America, and developed Asia all showing better performance compared to CY24.
- Over the medium term (CY25-30), global production is expected to rise at an average of ~0.9% per annum. China's trajectory will depend on its ability to curb excess capacity (particularly blast furnace operations), manage domestic demand weakness, and balance exports amid profitability concerns.

Global | Outlook

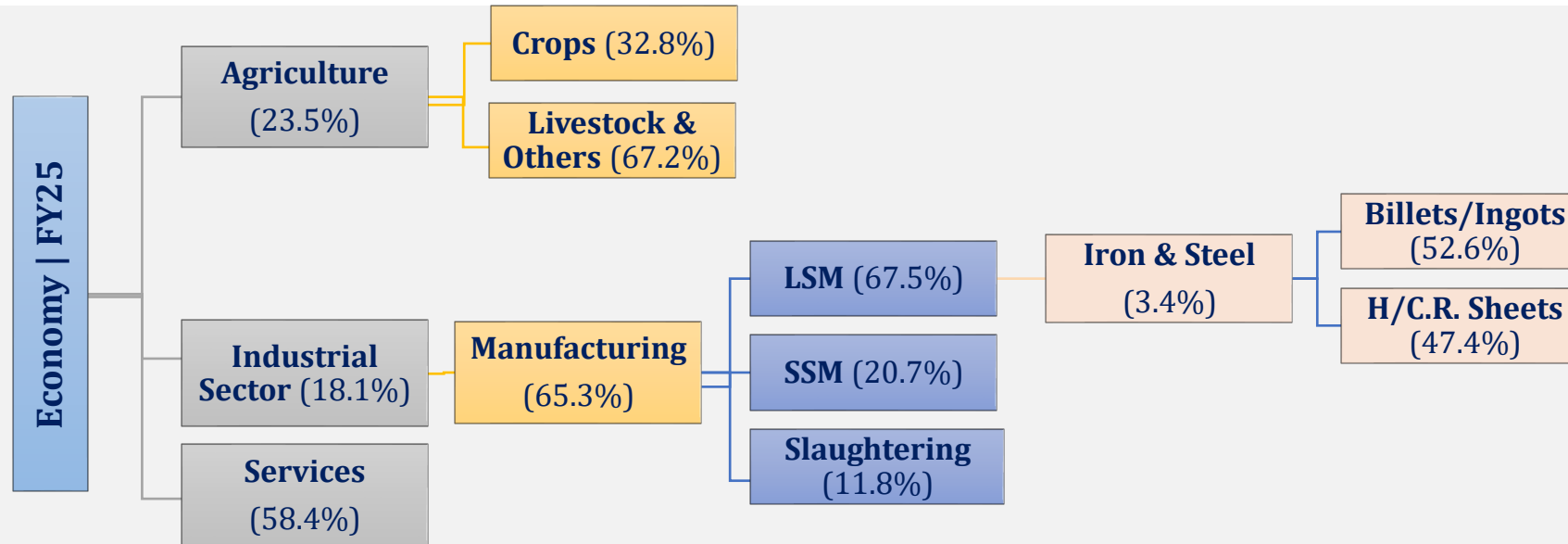
Towards Greener Steel

- China has the largest steel industry globally, accounting for more than half of global production, making decarbonization of the Steel Sector crucial to both achieving China's climate targets and mitigating global climate risks. Overall, the shift toward a carbon-neutral iron and steel industry is multi-pronged and generally involves the replacement of coal-based BF-BOF capacity with hydrogen-DRI or scrap-based EAF production.
- In 1H2024, no new coal-based steelmaking projects were permitted for the first time on a half-yearly basis in China, since the country announced its 'dual carbon goals' in Sep'20. To this end, the country's provincial governments permitted ~7.1MTPA of steelmaking capacity, all of which comprised EAF projects.
- Moreover, China could potentially mitigate ~200MMT of CO₂ from the steel industry by CY25, compared to the peak in CY20, or ~10% reduction, with measures to reduce steel output and increase scrap-based secondary steel from EAF, which amounts to the same amount as annual emissions from the EU's Steel Sector.
- In CY24, of the total ~774MTPA of steel-making capacity under development, ~223MTPA is in the construction phase. Together, China and India are responsible for ~53% of all developments, but especially dominate as developers of coal-based capacity. India especially emerged as the top developer of BOF capacity in SPLY, and the country is likely to phase out China as the top developer of overall steel capacity globally.
- On the other hand, of the total Carbon Capture and Storage (CCS) projects announced globally, only ~0.5% of capacity is planned for the Steel Sector over the next 20 years (CY24-54), despite steel being responsible for ~7-9% of global emissions.

Steel

Local | Overview

- In FY25, Pakistan's GDP (nominal) was recorded at PKR~114.7trn up ~9.1% YoY (FY24: PKR~105.1trn). In real terms, it rose by ~2.7% YoY (FY24: ~2.5% YoY). The industrial Sector held ~18.1% share in real GDP in FY25, while the service Sector made up ~58.4% of the total real GDP.
- Large-scale Manufacturing (LSM) in Pakistan is essential for economic growth, considering its linkages with other Sectors, as it represented ~67.5% value in total manufacturing activities and ~8.0% of the country's real GDP in FY25. The LSM, however, contracted by ~1.5% YoY in FY25 (FY24: ~0.9%).
- Steel & Iron products are classified under the Industrial Activities segment of the economy. In FY25, the Sector's weight in the Quantum Index of Manufacturing (QIM) was recorded at ~3.4%. Moreover, the Sector's performance in QIM experienced ~8.7% YoY negative growth during FY25 compared to FY24.



Steel

Local | Snapshot

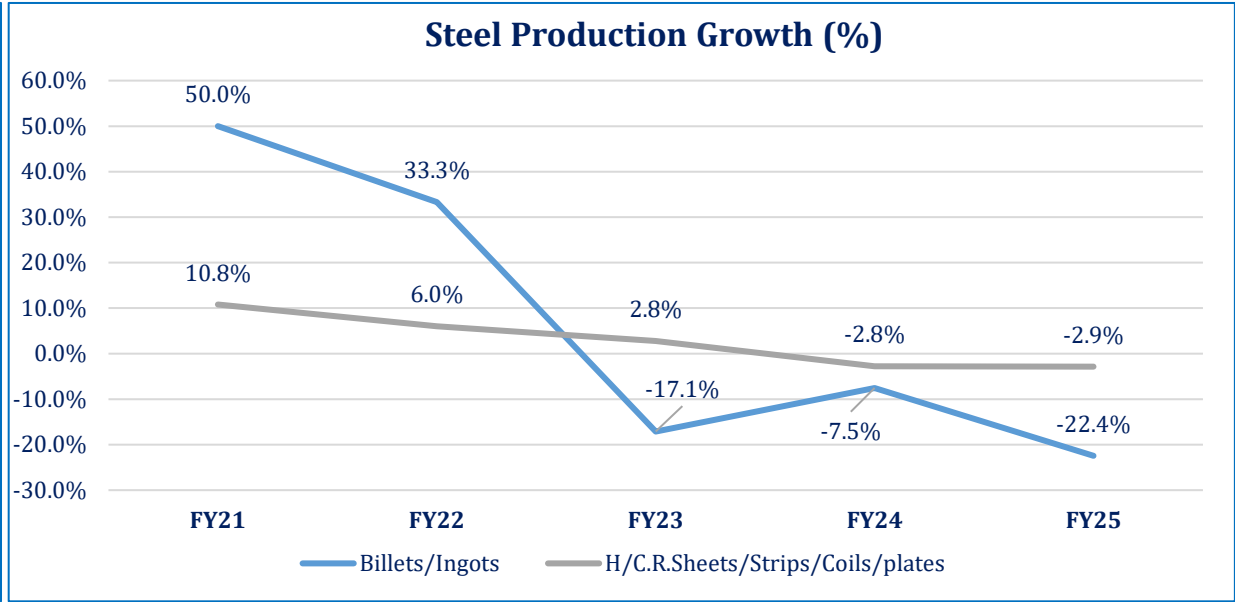
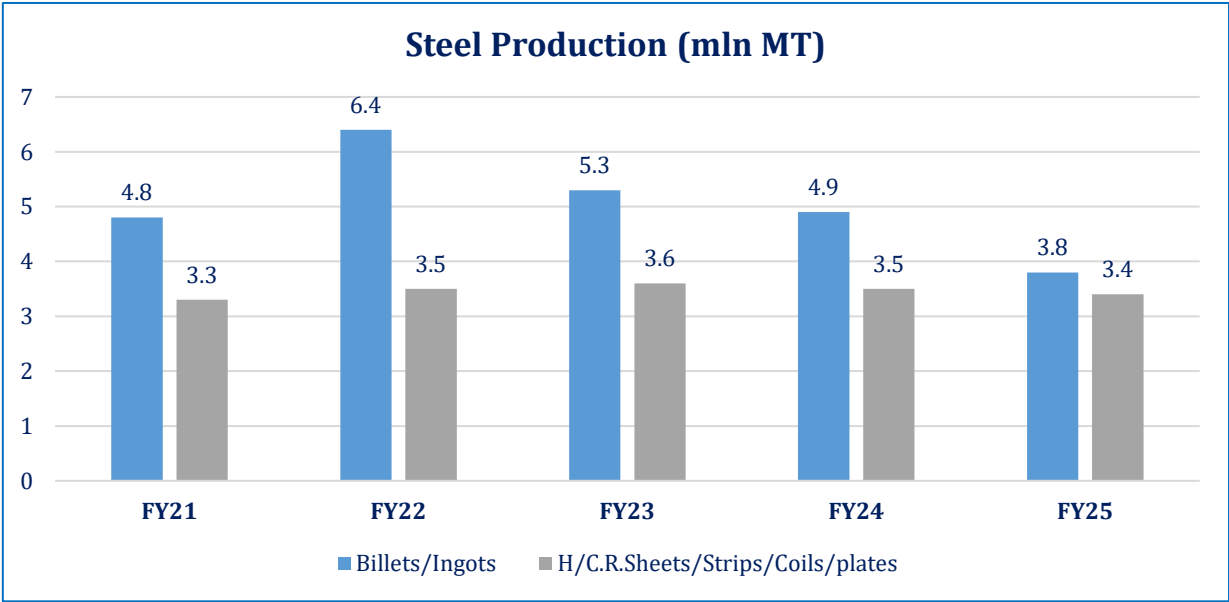
- In FY25, overall local steel production came down to ~7.2mln MT, a YoY decrease of ~14.3% (FY24: ~8.4mln MT).
- The production of Billets and Ingots (Long Steel) declined ~22.4% YoY to ~3.8mln MT in FY25, while Coil & Plates (Flat Steel) production stood at ~3.4mln MT, down ~2.9% YoY. While, on the other hand, steel imports rose to ~3.2mln MT in FY25, up ~10.3% YoY.
- The major raw material used in Pakistan’s Steel Sector is steel scrap. The Sector is highly dependent on imported steel scrap. The steel scrap imports rose by ~3.7% and clocked in at ~2.8mln MT (FY24: ~2.7mln MT), valuing at USD ~1,271mln as of FY25 (FY24: USD ~1,229mln). The rise in imports despite the fall in production can be attributed to the players procuring inventory due to lower prices.
- Pakistan’s Steel Sector is highly competitive, with ~168 members registered with Pakistan Steel Melters Association and ~173 members registered with Pakistan Steel Melters & Re-Rolling Association.
- The Sector is mainly driven by private entities since Pakistan Steel Mill, a state-owned steel producer with a capacity of ~1.1mln MT, has been non-operational since Jun’15.

Particulars	Unit	FY23	FY24	FY25
Production		8.9	8.4	7.2
Billets/Ingots	mln MT	5.3	4.9	3.8
Coils & Plates		3.6	3.5	3.4
Billets/ Ingots Growth	%	-17.1%	-7.5%	-22.4%
Coil & Plates Growth	%	2.8%	-2.8%	-2.9%
Contribution to GDP*	%	0.5%	0.4%	
Steel Product Imports	mln MT	2.2	2.9	3.2
Steel Product Imports	USD mln	1,869	2,042	2,233
Steel Scrap Imports	mln MT	2.5	2.7	2.8
Steel Scrap Imports	USD mln	1,152	1,229	1,271
Steel Product and Scrap Imports (share of Total Imports)	%	5.5%	5.9%	6.0%
Structure	Oligopoly			
Associations	Pakistan Steel Melters & Re-Rolling Association Pakistan Steel Melters Association Pakistan Association of Large Steel Producers All Pakistan Steel Traders Association Pakistan Steel Line Pipe Industry Association			

Steel

Local | Supply

- Local steel production stood at ~7.2mln MT in FY25, registering a YoY decline of ~14.3%. The production of Billets and Ingots (Long products) declined to ~3.8mln MT (FY24: ~4.8mln MT), forming ~52.8% of total steel production (SPLY: ~58.3%), while production of HCR Sheets/Strips/Coils/Plates (Flat Products) declined ~2.9% YoY to ~3.4mln MT, with these forming ~47.2% of total production during the year (SPLY: ~41.7%).
- The negative growth in steel production was mainly due to slow pace of industrial activities and lower demand from the construction/real estate Sector. Overall, the large-scale manufacturing Sector has shown a negative growth of ~0.7% during FY25.
- The economic indicators have improved with SBP cutting policy rate to ~11.0% as of Sept'25 (SPLY: ~17.5%). The Pakistan rupee appreciated ~1.4% against the USD, averaging PKR~279.3 for FY25, compared to PKR~283.3 in FY24. However, steel production remained subdued in 2MFY26.



Local | Capacity Utilization

- In FY24, the actual capacity for the Long Products and Flat Products remained the same, while capacity utilization declined due to lower demand and industrial performance. The capacity utilization came in at ~31.6% for Long Products (FY23: ~33.3%) and ~11.1% for Flat Steel Products (FY23: ~13.6%).
- In case of Tubes & Pipes segment, the capacity utilization improved from ~19.0% in FY23 to ~21.2% in FY24.

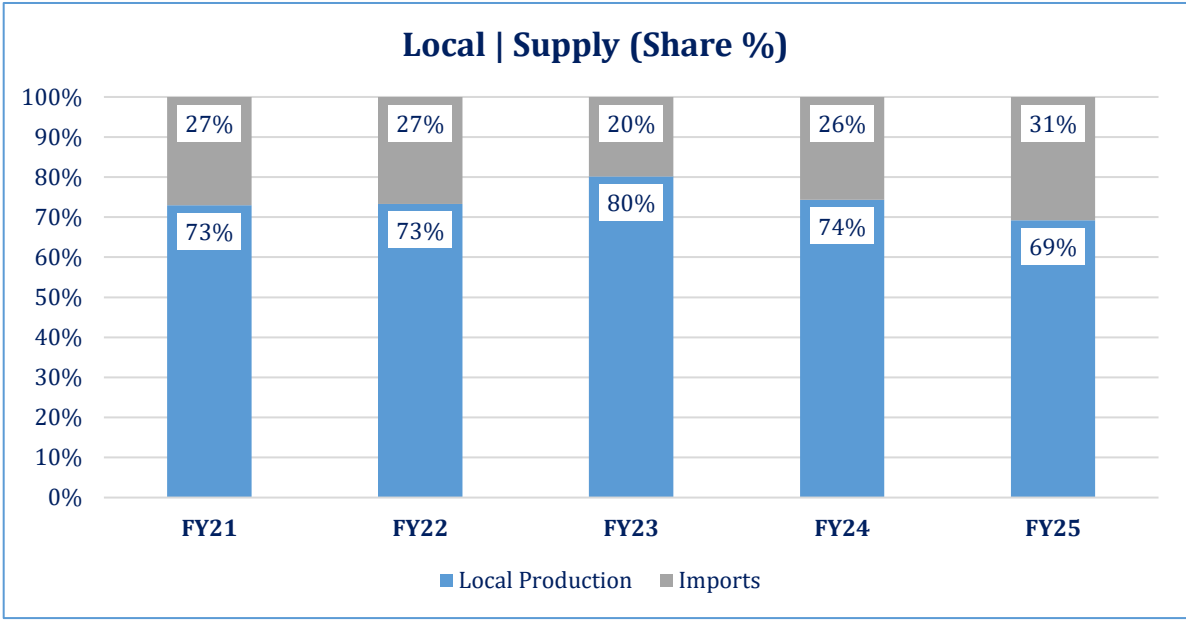
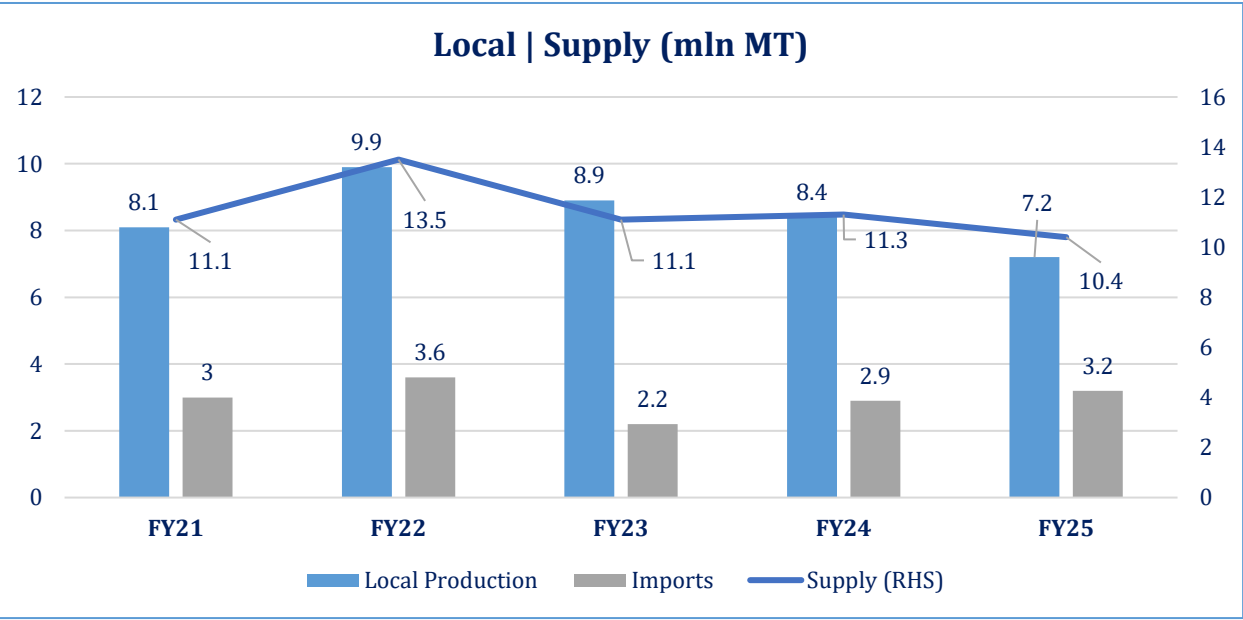
Figures in '000 MT

Actual Capacity vs. Capacity Utilization				
Particulars	FY21	FY22	FY23	FY24
Long Products				
Actual Capacity	3,220	3,213	3,303	3,303
Production	1,719	1,791	1,098	1,043
Capacity Utilization (%)	53.1%	56.2%	33.3%	31.6%
Flat Products				
Actual Capacity	1,700	2,200	2,200	2,200
Production	863	487	248	245
Capacity Utilization (%)	52.9%	22.7%	13.6%	11.1%
Tubes & Pipes				
Actual Capacity	824	796	796	796
Production	261	216	152	169
Capacity Utilization (%)	31.7%	27.1%	19.0%	21.2%

Steel

Local | Supply

- In FY25, the overall local supply of Steel products registered at ~10.4mln MT (FY24: ~11.3mln MT), a YoY decrease of ~7.9%. This decrease in total supply mainly owes to the ~14.3% decline in the local production.
- Local production share in consumption continues to decline and stood at ~69.2% in FY25 compared to ~74.3% in FY24 (FY23: ~80.2%), while imported finished steel share increased to ~30.8% (FY24: ~25.7%).
- Cheaper imported steel, mainly from China, made it difficult for local producers to compete and has been increasing in recent years. At the same time, subdued demand due to negative overall activity in the large-scale manufacturing Sector also contributed to the decline.

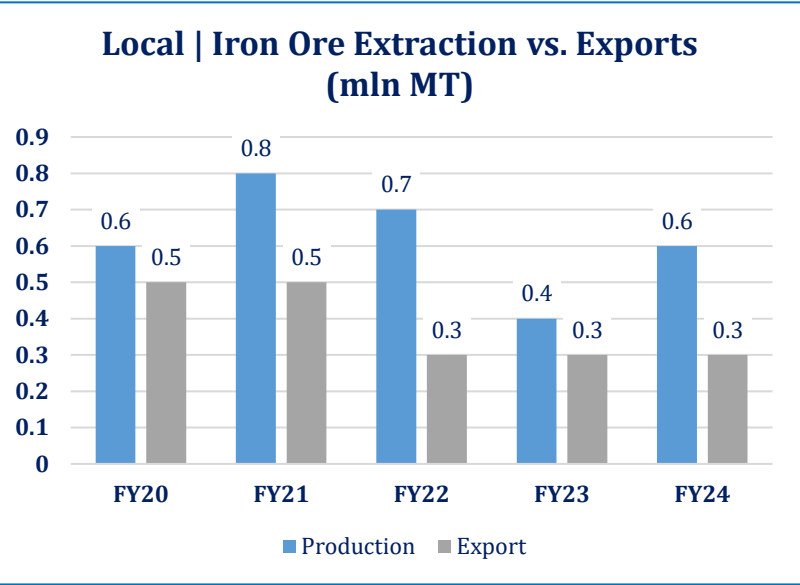
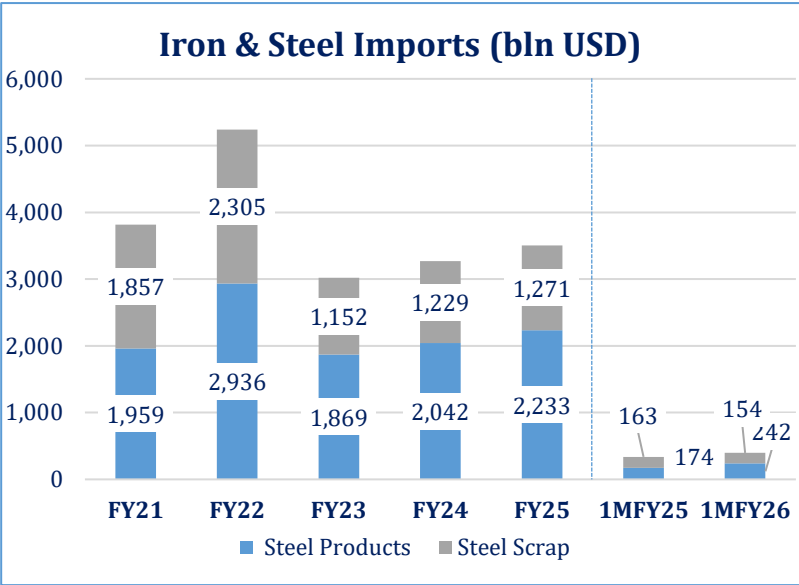
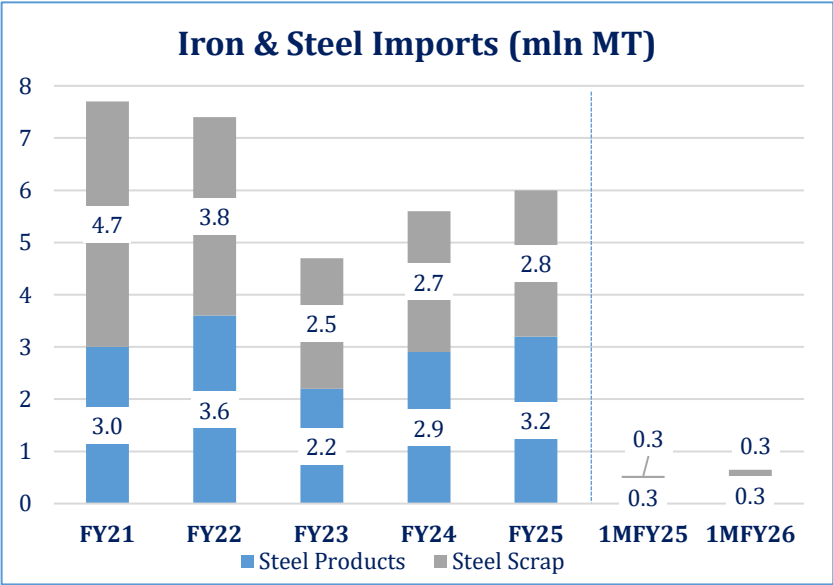


Note: Data for Imports are representative of HS Codes ~7206.1000, 7207.1110, 7209.1510, and 7213.1010.

Steel

Local | Raw Material

- Pakistan’s Steel Sector is dependent on imported raw material, i.e., steel scrap. During FY25, ~2.8mln MT (FY24: ~2.7mln MT) steel scrap worth USD~1,271mln (FY24: USD~1,229mln) was imported, a YoY increase of ~3.7% (up ~3.4% in value terms).
- These made up ~2.2% of the total import bill in FY25. During July’25, steel scrap imports remained the same ~0.3mln MT compared to the same period last year.
- Finished steel product imports were recorded at ~3.2mln MT in FY25 (FY24: ~2.9mln MT), a YoY increase of ~10.3%, while USD~2,233mln worth of finished steel products were imported in FY25 which contributed ~3.8% to country’s total import bill.
- During FY24, ~0.6mln MT of iron ore was extracted (SPLY: ~0.4mln MT), up ~63.8% YoY, of which ~0.3mln MT was exported to China.

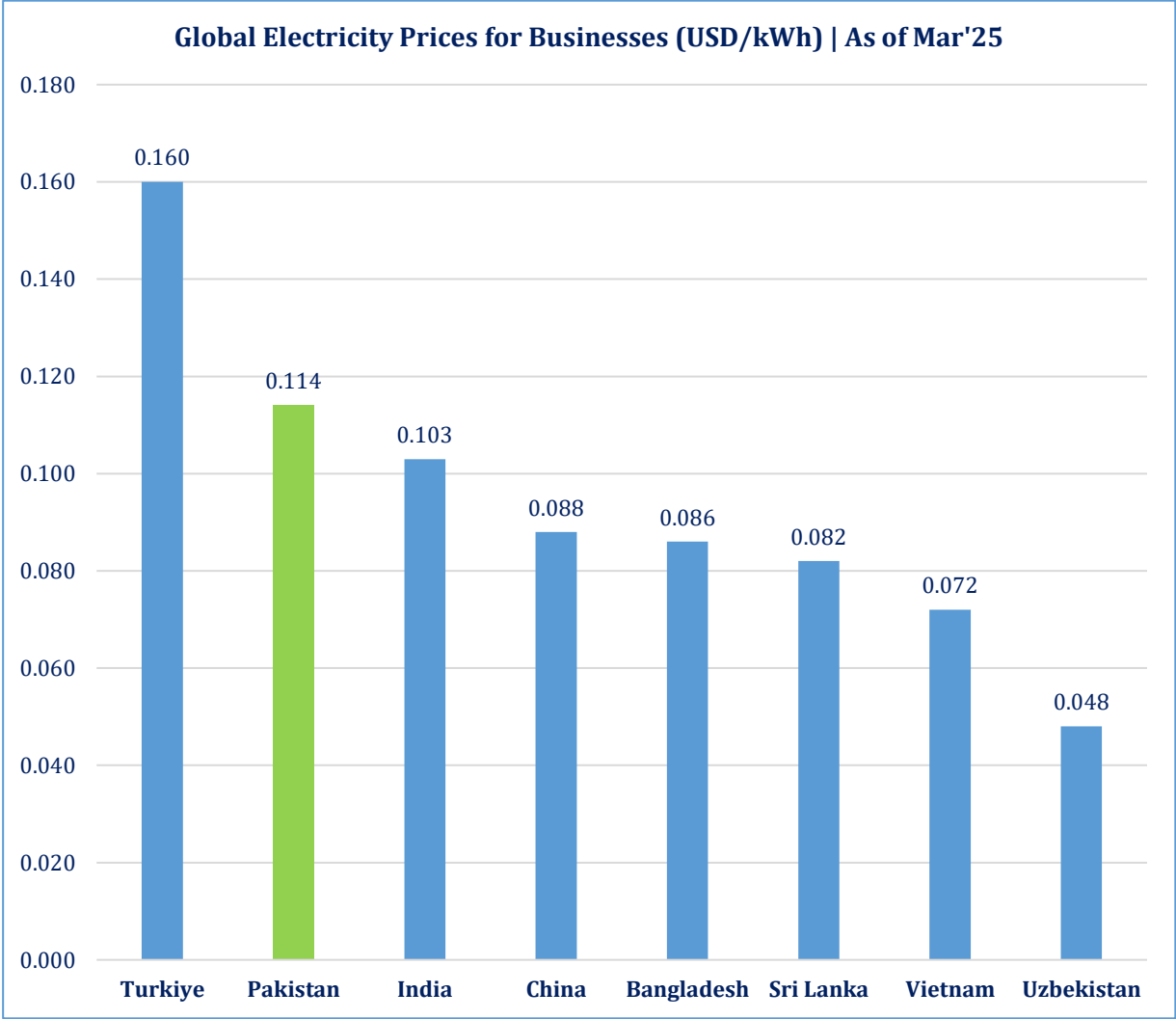


Note: Data for Iron Ore Exports includes HS Codes 2601.1100,2601.1200

Steel

Local | Input Costs

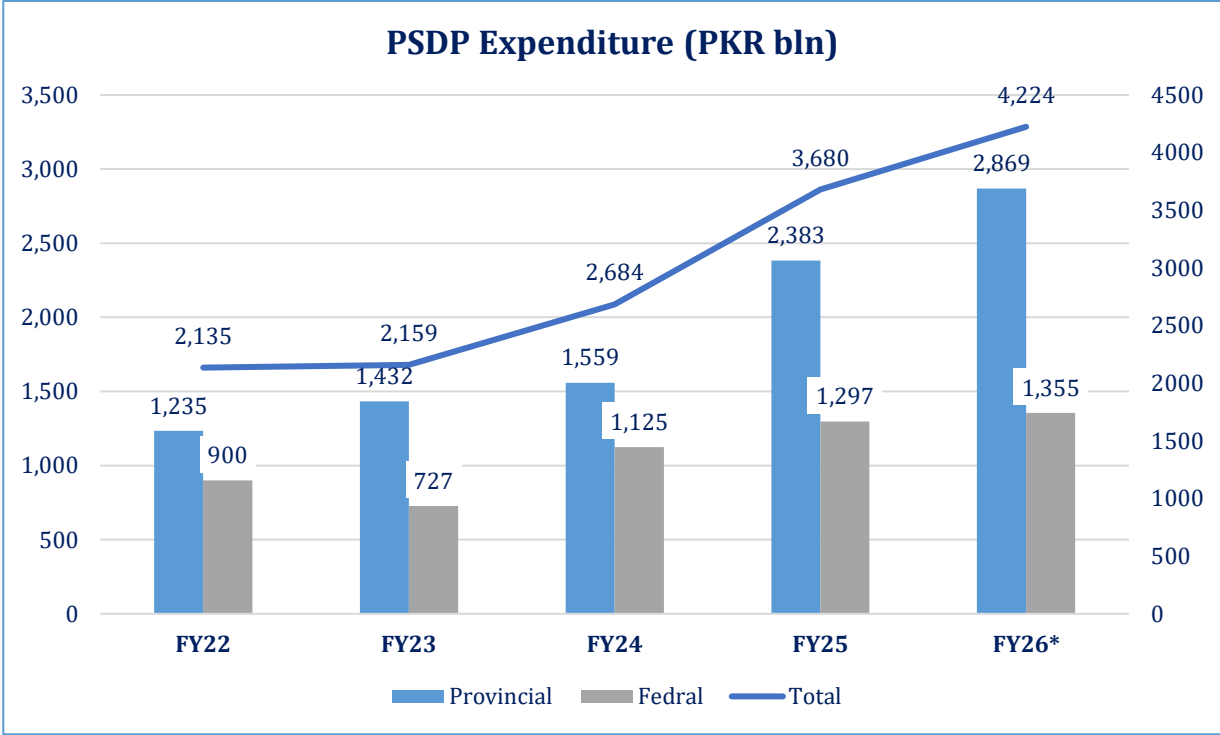
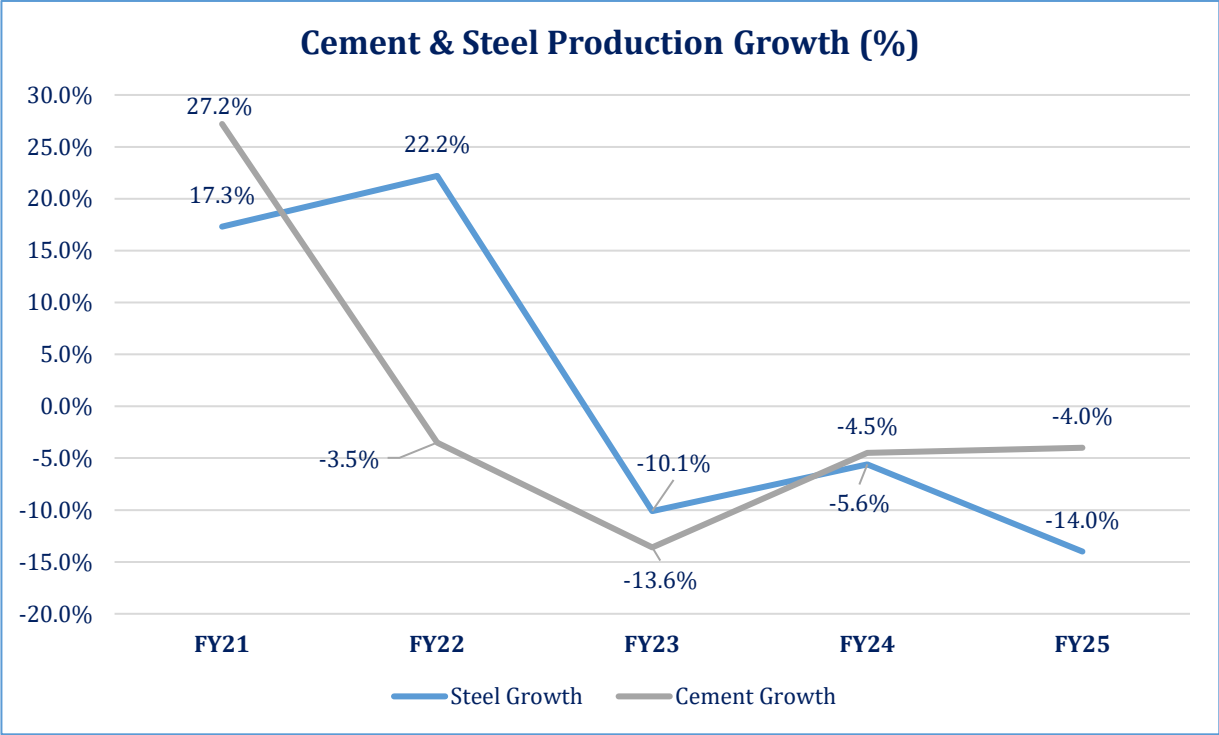
- In Pakistan, ~85.0% of the steel is produced through Induction Furnace (IF) technology, which uses electricity as a primary source of energy. Disruptions in electricity supply from the national grid (loadshedding and fluctuations) due to obsolete infrastructure make it challenging to rely on these energy supply sources.
- Moreover, tariff hikes hinder players' performance, with energy comprising ~8.0% of total costs for long Steel Sector players and ~2.0% for flat steel players.
- NEPRA provides electricity at a total cost of ~11.4 cents/kWh, which is higher when compared with the regional players, making Pakistan less competitive.
- The rising cost of electricity has led to increased overall production costs for steel manufacturers. This makes it difficult for local producers to maintain profitability, as the cost of production due to high electricity prices is passed on to consumers in the form of higher steel prices.



Steel

Local | Demand

- Steel demand is correlated with construction and infrastructure development, as ~52.0% of the steel produced globally is used in the building and infrastructure Sector. In Pakistan, the major demand for steel comes from government contracts for building infrastructure. The allocated budget for PSDP for FY26 is budgeted at PKR~4,224bln, an increase of ~14.8% YoY (FY25: PKR~3,680bln). However, despite higher PSDP allocation, steel production has declined as the Government has not undertaken large infrastructure projects.
- Moreover, the growth in cement and steel production has remained in tandem during FY21-25 (as depicted), whereas the correlation between the two exhibited a positive correlation factor of ~0.6.

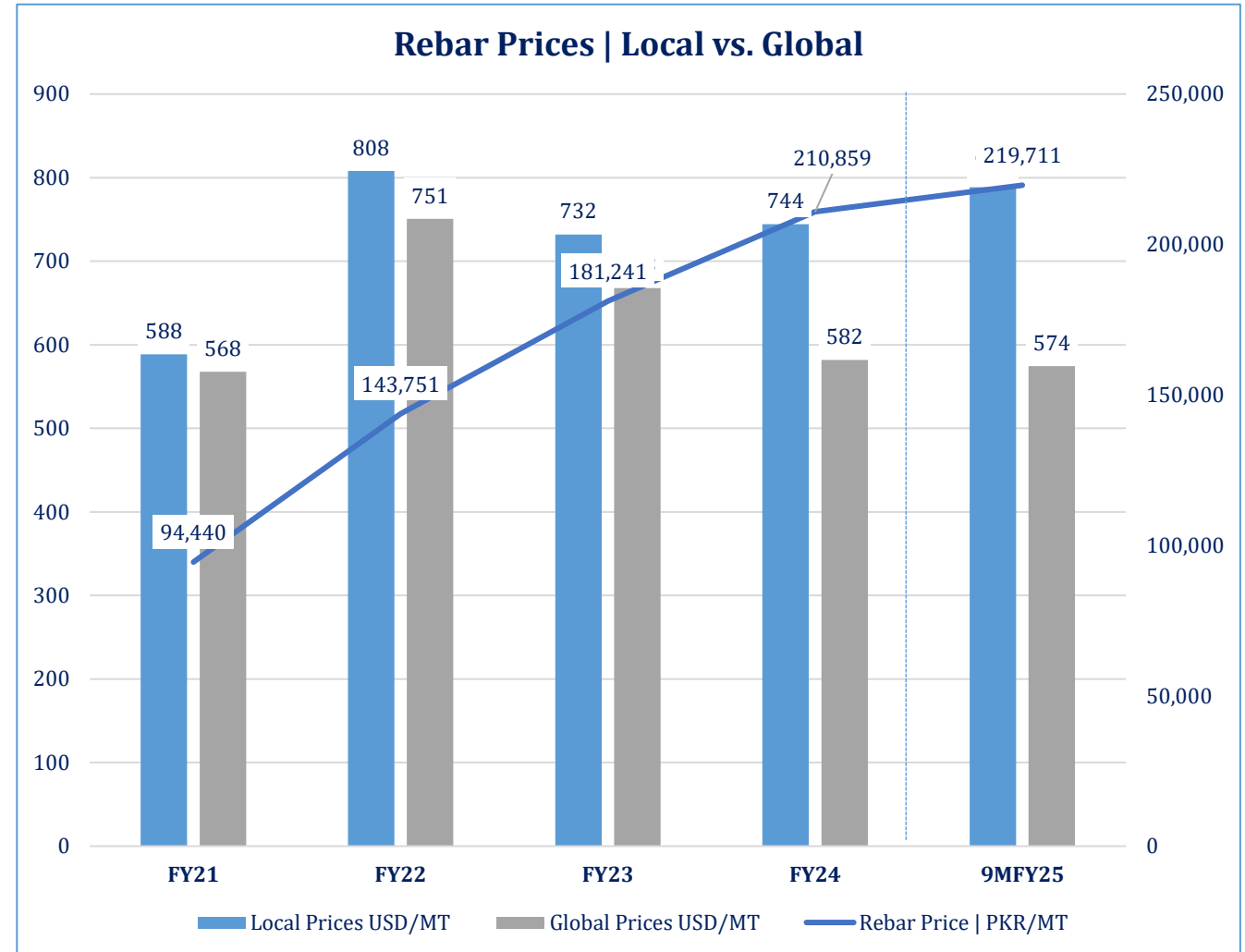


*Budgeted.

Steel

Local | Prices

- Steel rebar price in Pakistan, on average, has been ~10.0% higher than the global prices over FY20-24 period.
- During FY24, average local steel prices stood at USD~744.0/MT, up ~1.6% YoY. The delta between local and international prices increased to ~28.0% in FY24 (FY23: ~28.7%), as the PKR depreciated ~14.4% YoY during the year.
- During FY24, steel price in local terms increased to PKR ~210,859/MT (FY23: PKR~181,241/MT) a YoY increase of ~16.3%. This increase in the price of steel rebar was on the back of the higher cost of raw material due to higher energy, high inflationary costs, and interest rates.
- In 9MFY25, the trend continued as local steel rebar prices were recorded at PKR~219,711/MT. In USD terms, this was recorded at USD~789.0/MT, an increase of ~6.0% compared to FY24 and ~37.3% higher than the international rebar price of USD~574.0/MT.

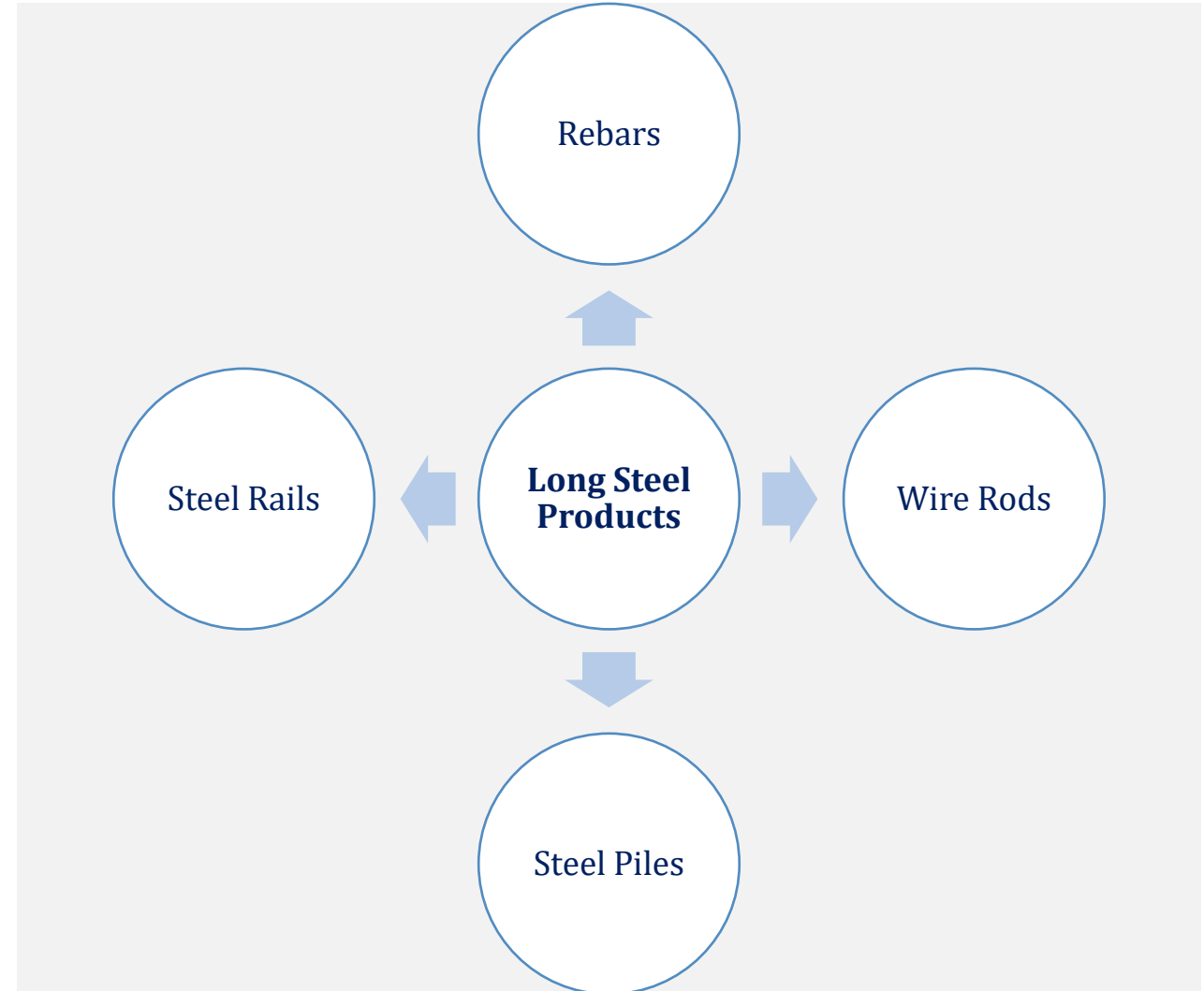


Long Steel Products

Steel

Long Steel Products | Introduction

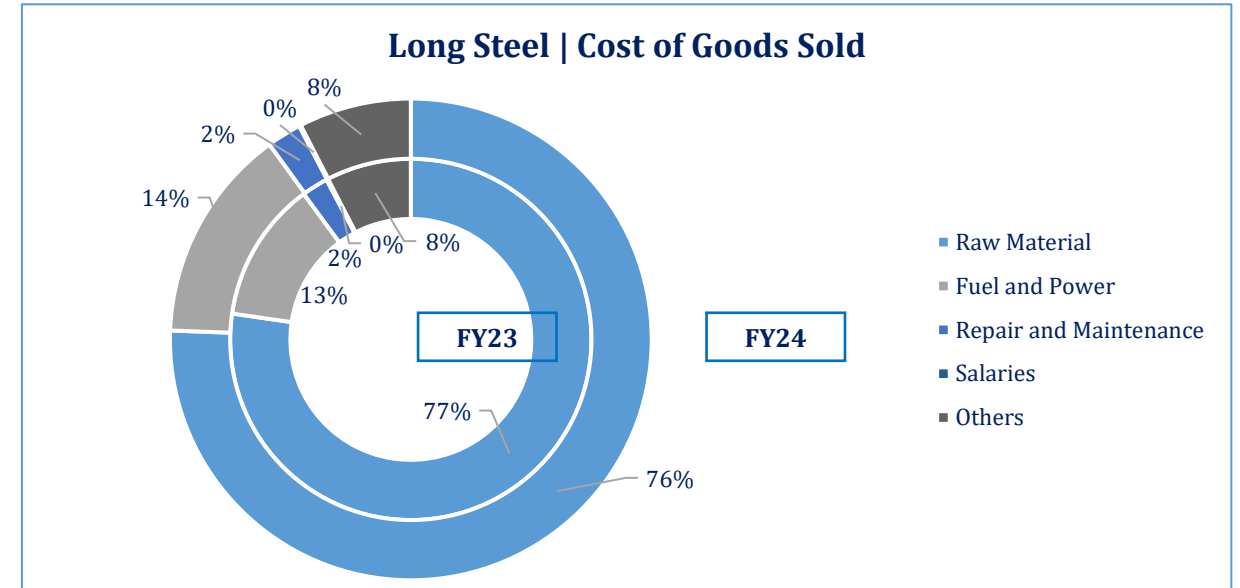
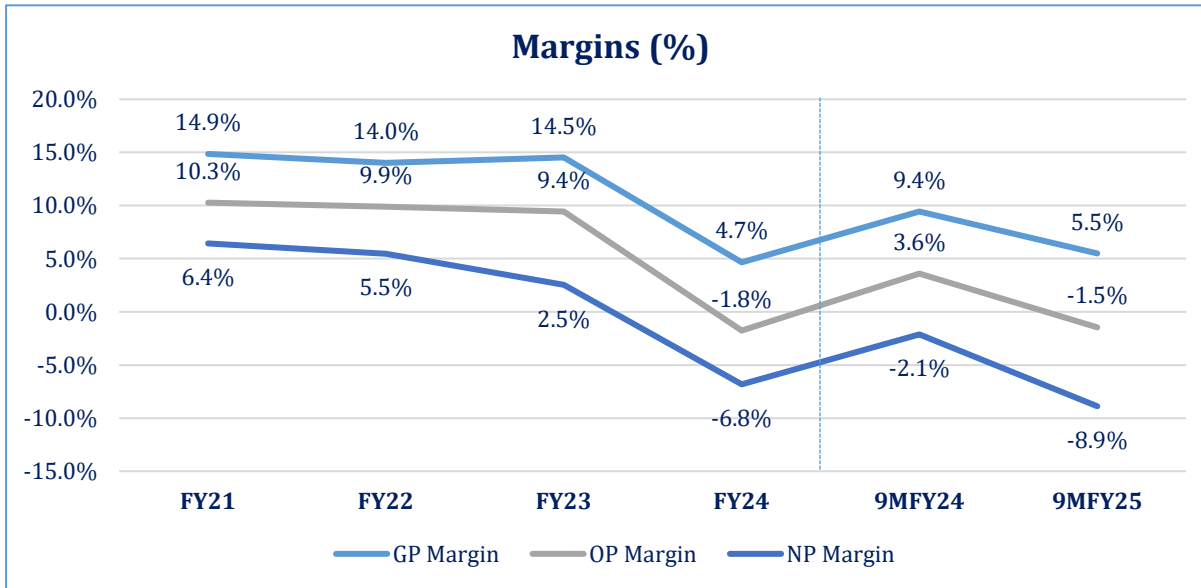
- Long steel products refer to steel items that have a longer shape and are primarily used in construction, infrastructure, and manufacturing. These products are generally characterized by their length and include items such as bars, rods, beams, and rails.
- Rebars** are steel bars used to reinforce concrete structures, providing tensile strength to the concrete, which is strong in compression but weak in tension. They are extensively used in the construction of buildings, bridges, roads, and other concrete structures.
- Wire rods** are hot-rolled and coiled steel products with a circular cross-section, and they can be further processed into wire, nails, springs, or mesh. These are used in construction, automotive, and engineering industries for various purposes, including wire drawing, welding, and the production of fasteners.
- Steel rails** are long steel products used in the construction of railway tracks. They are designed to withstand heavy loads and provide a smooth surface for train wheels. Apart from railway tracks, steel rails are also used in crane runways and other industrial applications.
- Steel piles** are long steel sections driven into the ground to provide deep foundation support for buildings and other structures. They are commonly used in construction projects, especially in soft or unstable soils, to support bridges, buildings, and other large structures.



Steel

Long Products | Margins & Cost Structure

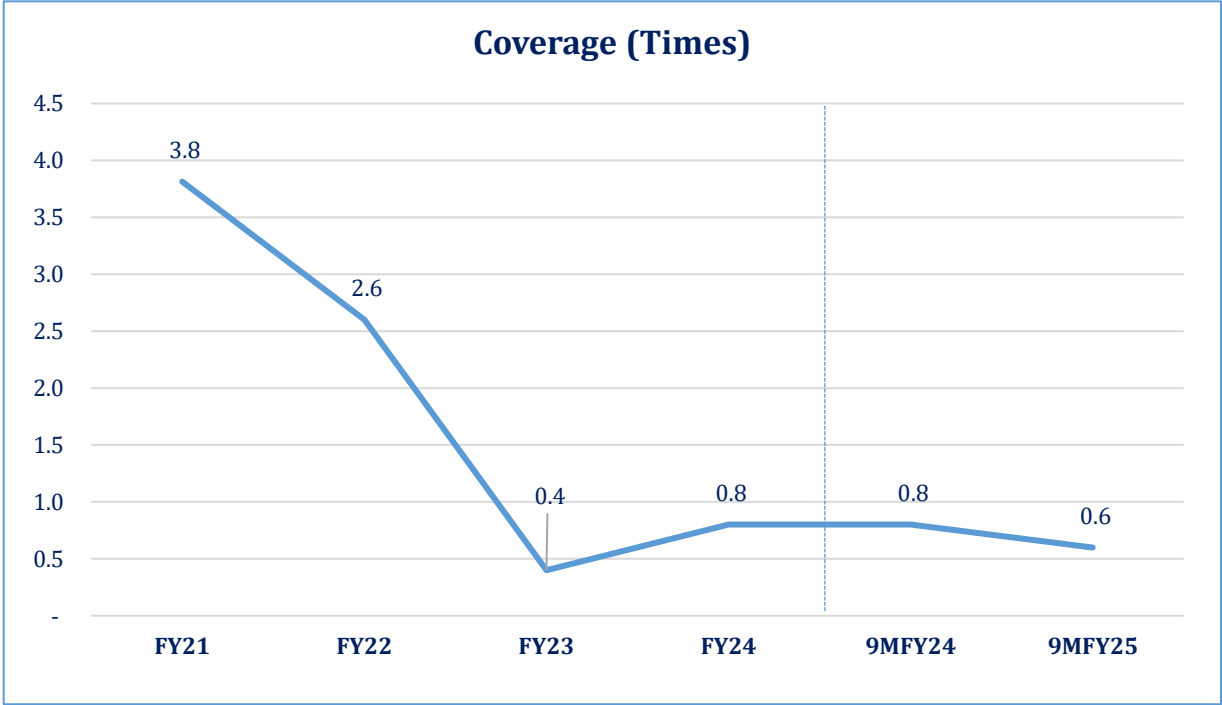
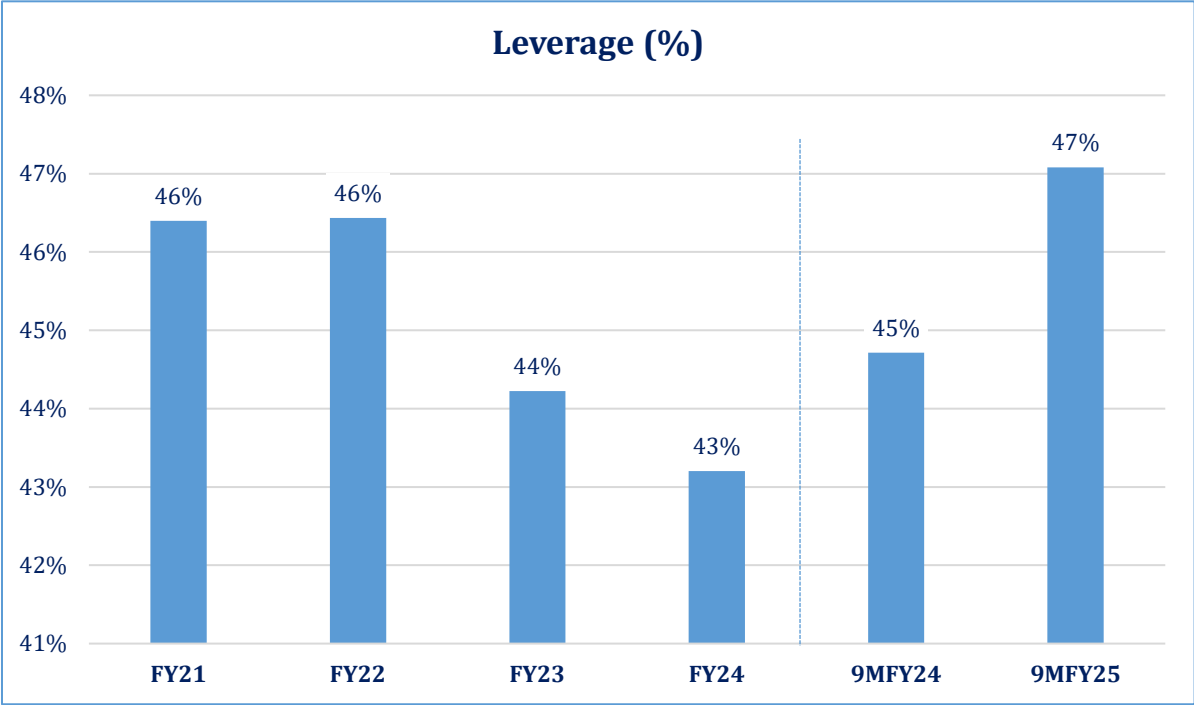
- In FY24, the segment's revenue stood at PKR~147,123mln, up ~3.8% YoY (FY23: PKR~141,748mln). However, in 9MFY25, revenue was recorded at PKR~89,415mln, down ~21.7% YoY (SPLY: PKR~114,257mln).
- Gross profit margins averaged ~12.0% during FY21-24. In FY24, gross profit dropped to ~4.7% on the back of high cost of goods sold, which constituted ~95.0% of the total revenue (FY23: ~85.0%). In 9MFY25, gross margins were recorded at ~5.5%, down from ~9.4% in the same period last year.
- Operating margins registered turned negative ~1.8% in FY24 (FY23: ~9.4%) while in 9MFY25 operating margins were recorded at negative ~1.5% (SPLY: ~3.6%). The Sector's net margins resultantly remained in negative territory, clocking in at negative ~6.8% in FY24 (FY23: ~2.5%) and negative ~8.9% in 9MFY25 (SPLY: negative ~2.1%).
- During FY24, finance cost rose by ~34.5% YoY on account of high monetary policy rate (End-June'24: ~22.0%), while in 9MFY25, finance cost declined by ~3.3% YoY as the policy rate eased to ~12.0% as of End-Mar'25 and further came down to ~11.0% as of Sept'25.
- The Sector relies heavily on raw material as it comprises ~76.0% (FY23: ~77.0%) of total cost in FY24. High dependence on imported raw material exposes the Sector to changes in international raw material prices and exchange rate fluctuations.



Note: Data is based on ~ 5 PACRA-rated/ listed segment players. Margins are revenue-weighted.

Long Products | Leverage and Coverage

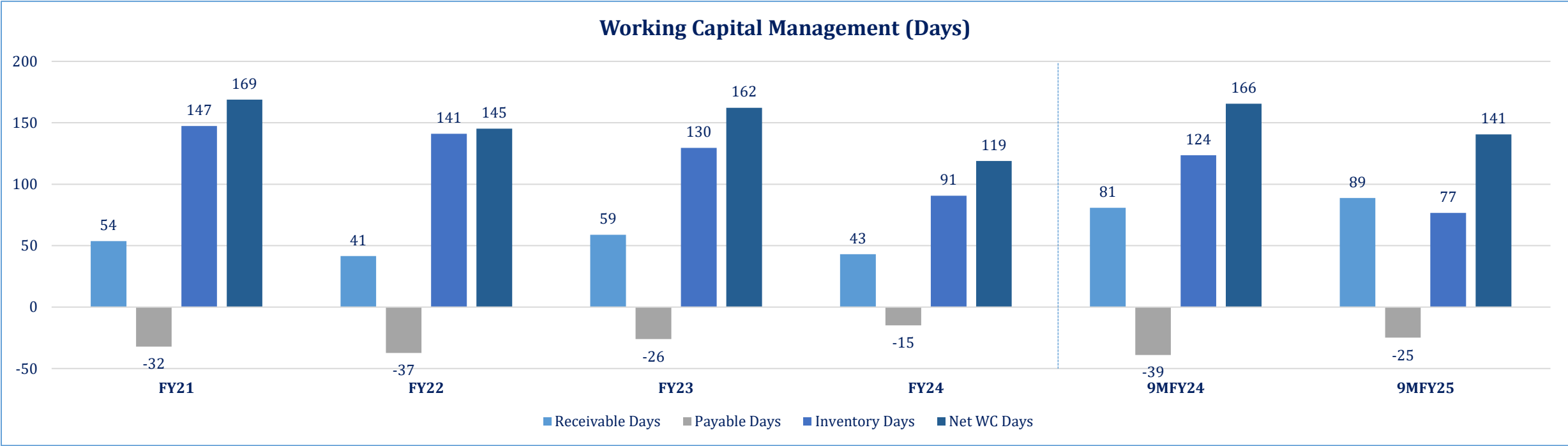
- During FY24, the average leverage of the Sector clocked in at ~43.0% as total borrowings rose by ~13.8% YoY while equity rose by ~34.5% YoY during FY24. In 9MFY25, average leverage increased by ~43.3%, as overall borrowing rose ~5.4%.
- Coverages remained negative in FY24 (-0.8%) due to pressure on cashflows and higher finance cost (up by ~34.5% YoY). In 9MFY25, the Sector’s coverage was recorded at ~0.6x as compared to ~0.8x in the same period last year.



Note: Data is based on ~5 PACRA-rated/ listed segment players.

Long Products | Working Capital Management

- During FY24, average net working capital days were recorded at ~119 days, down ~43 days due to a fall in average inventory days of the Sector compared to FY23, while net working capital days were also down to ~141 days in 9MFY25 (SPLY: ~166 days).
- Average inventory days decreased to ~91 days (FY23: ~130 days), while average receivable days decreased to ~43 days (FY23: ~59 days), whereas average payable days decreased to ~15 days (FY23: ~26 days).
- For 9MFY25, the average inventory days decreased to ~77 days (9MFY24: ~124 days) whereas average receivable days increased to ~89 days (9MFY24: ~81 days) and average payable days decreased to ~25 days (9MFY24: ~39 days).



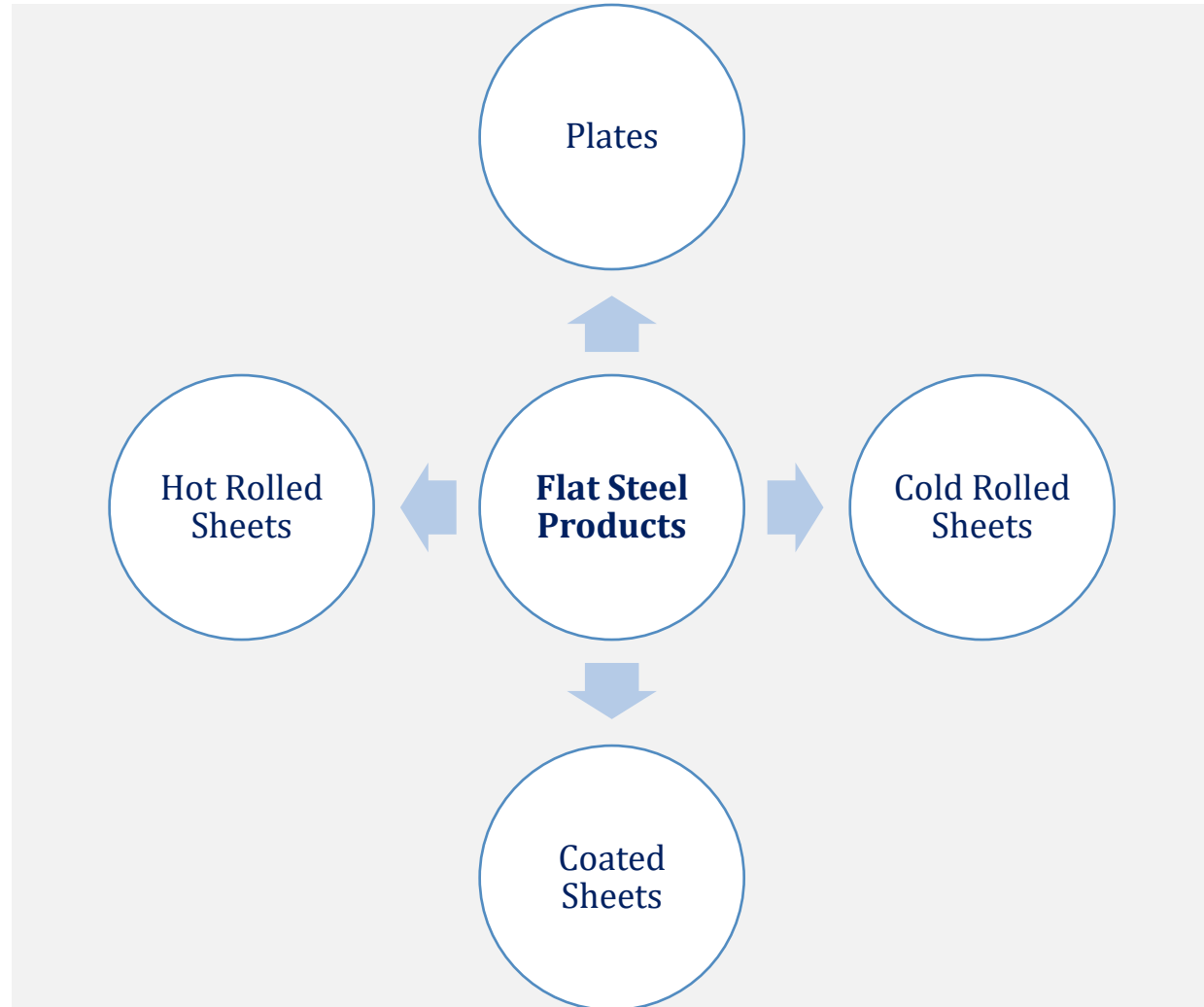
Note: Data is based on ~5 PACRA-rated/ listed segment players.

Flat Steel Products

Steel

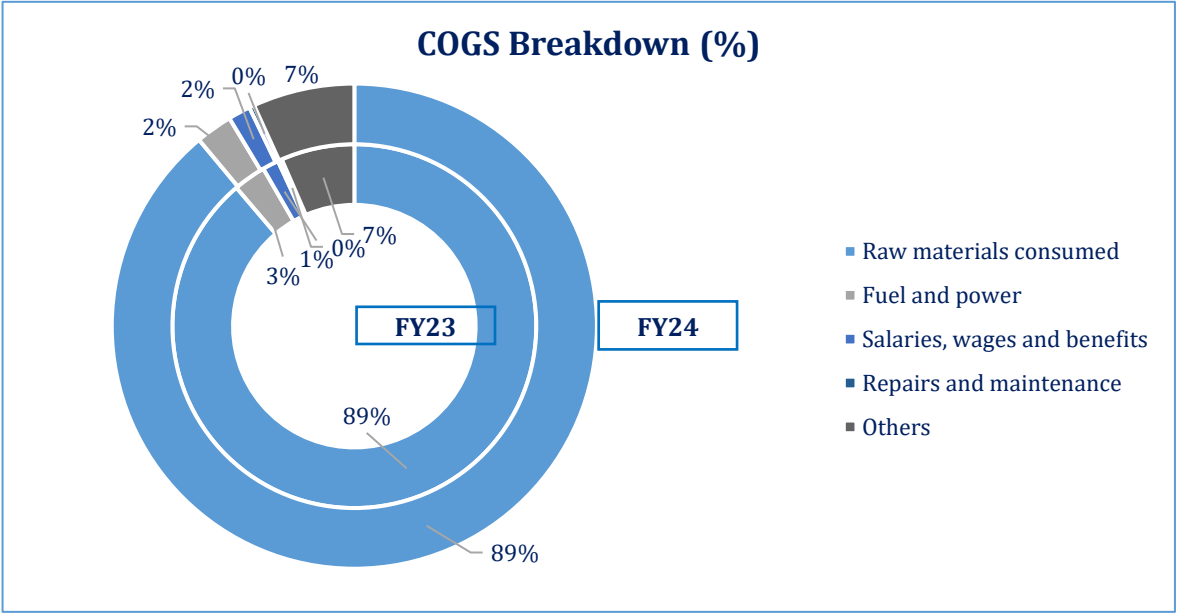
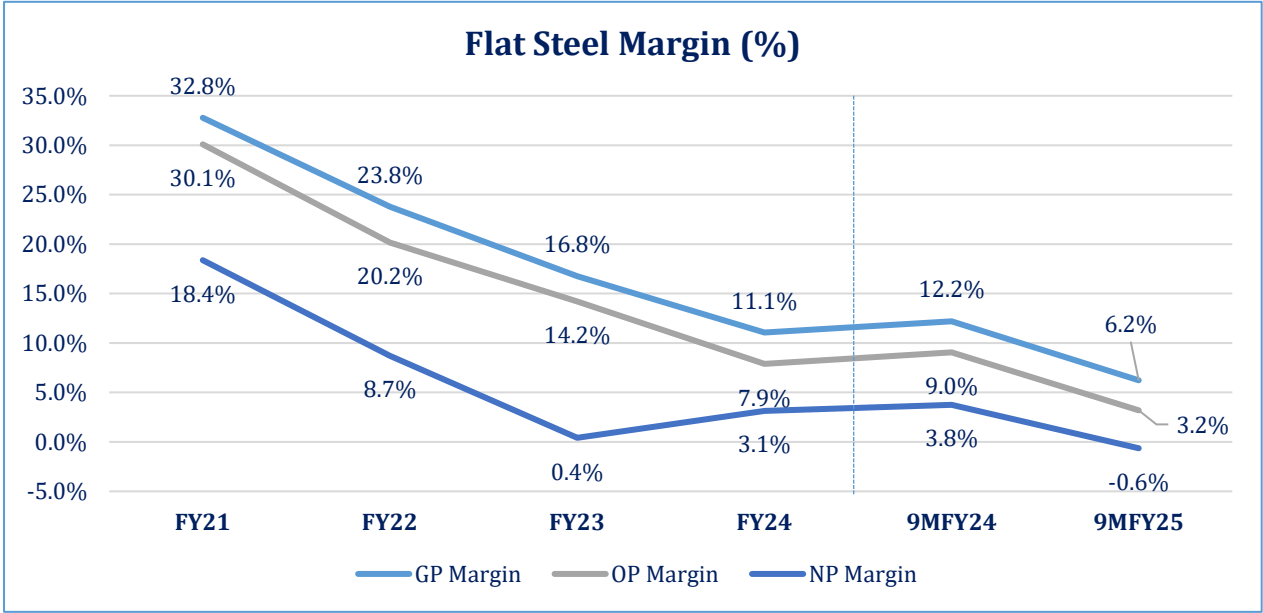
Flat Steel Products | Introduction

- Flat steel products are produced by rolling or pressing steel into thin, flat sheets or strips. These products are widely used in various industries due to their versatility, durability, and formability.
- Steel plates** are flat, rectangular steel products that are produced by rolling steel into specific thicknesses. They are among the most versatile and widely used steel products due to their strength, durability, and ability to be fabricated into various shapes and sizes.
- Hot-rolled steel** is produced by heating steel above its recrystallization temperature and then rolling it into flat sheets. The process allows the steel to be shaped into large sizes and thicknesses. It is commonly used in the construction of structural components, such as beams, columns, and bridges. It's also used in the production of pipes, automotive frames, and industrial machinery.
- Cold-rolled steel** is produced by further processing hot-rolled steel at room temperature. This process increases the strength and improves the surface finish of the steel. Cold-rolled steel is used in applications requiring higher precision and a smooth surface finish, such as in the manufacturing of appliances, furniture, and automotive body panels.
- Coated steel** involves applying additional protective coatings, such as aluminum and zinc, over galvanized or cold-rolled steel sheets to enhance quality and anti-corrosion properties. Coated steel is used in consumer products like household appliances, roofing, and automotive parts, where both aesthetics and corrosion resistance are important.



Business Risk | Margins & Cost Structure

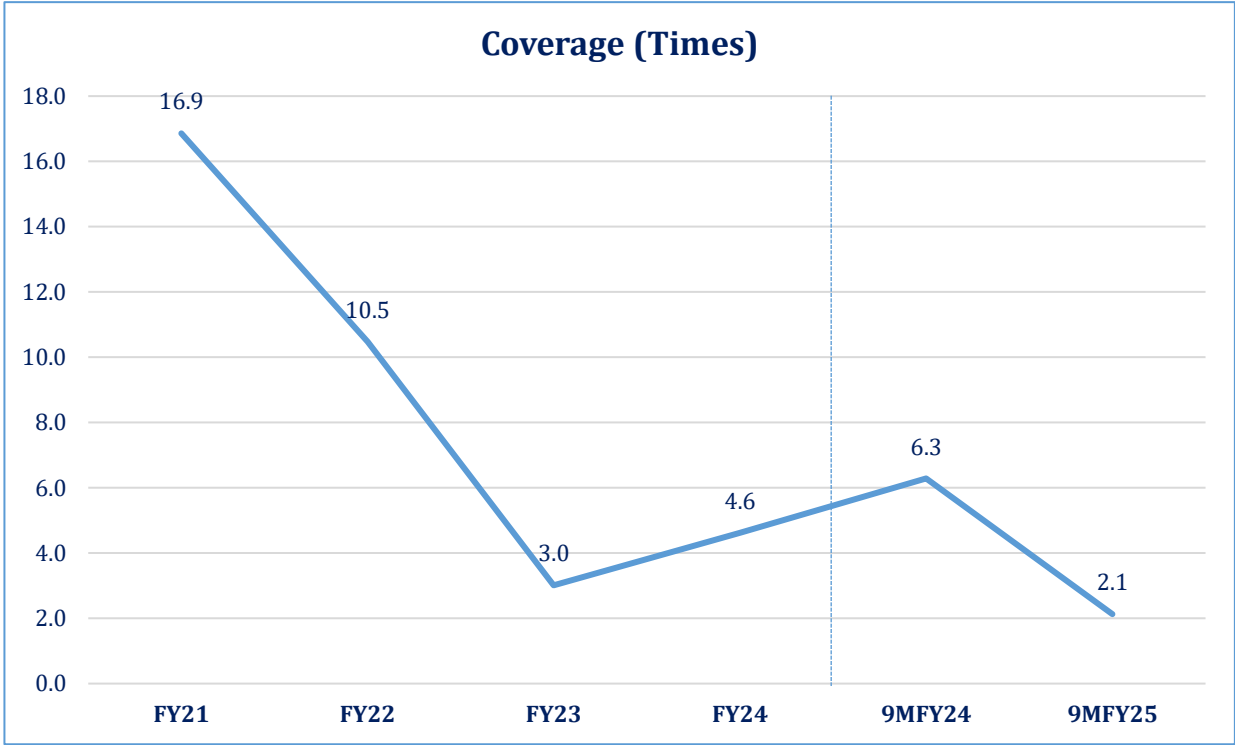
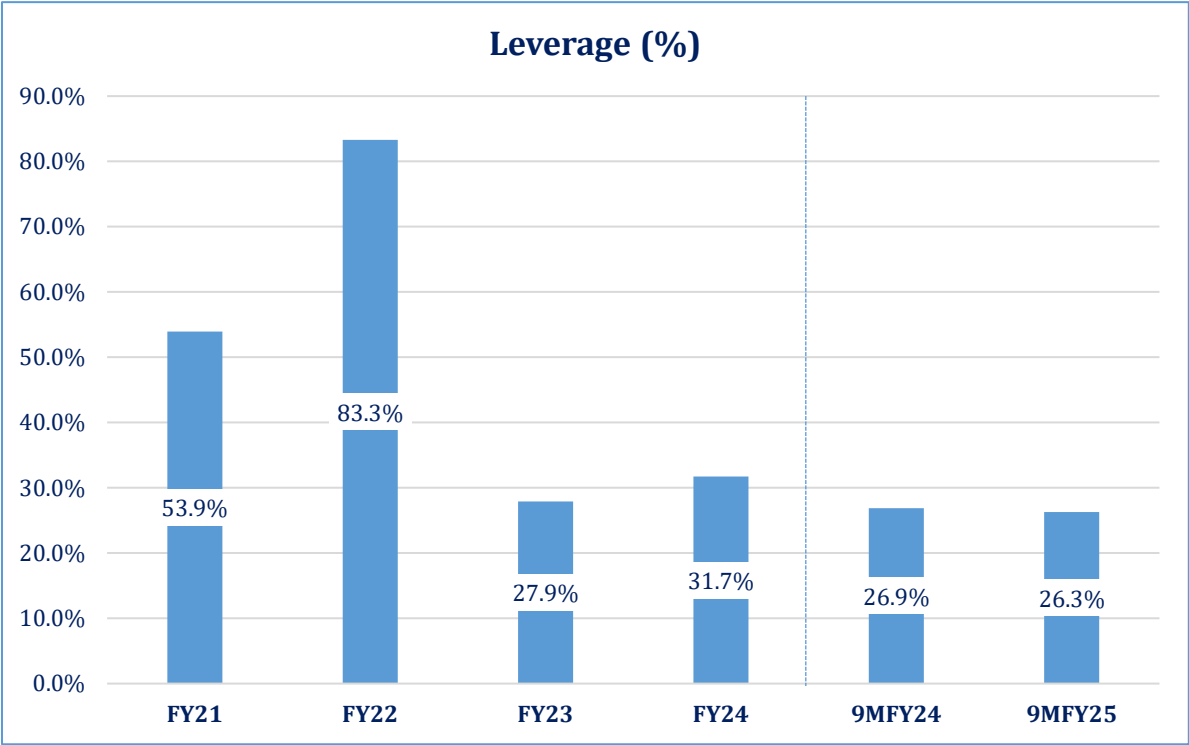
- During FY24, the segment’s gross profit margin declined to ~11.1% YoY (FY23: ~16.8%) while in 9MFY25, gross profit declined further to ~6.2% YoY (SPLY: ~12.2%).
- Moreover, operating profits decreased to ~7.9% YoY during FY24 (FY23: ~14.2%), while net profits improved marginally to clock in at ~3.1% (FY23: ~0.4%). Meanwhile, finance cost decreased by ~20.1% YoY as interest rates lowered while other income rose by ~32.0% YoY in FY24. During 9MFY25, operating profits were down to ~3.2% YoY, while net profits registered in negative ~0.6% in 9MFY25 (SPLY: ~3.8%).
- The Sector relies heavily on raw material as it comprises ~88.8% of the total cost in FY24. High dependence on imported raw material exposes the Sector to changes in international raw material prices and exchange rate fluctuations.



Note: Data is based on ~2 PACRA-rated/ listed segment players. Margins are revenue-weighted.

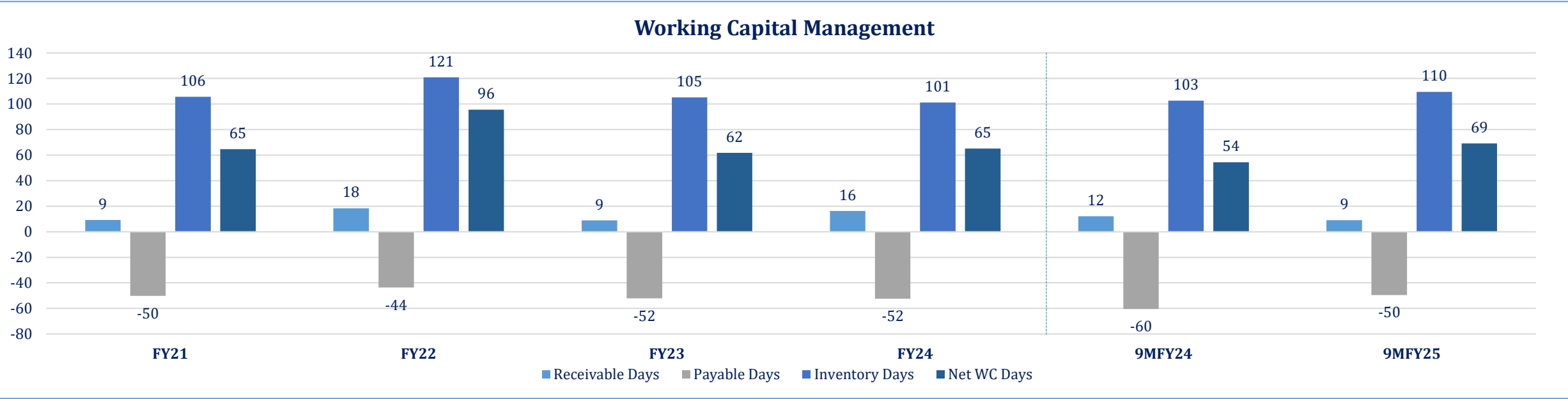
Flat Steel Products | Leverage and Coverage

- During FY24, the segment’s average leverage amounted to ~31.7% (FY23: ~27.9%) as total borrowings rose ~10.2% YoY, while in 9MFY25, average leverage was marginally down to ~26.3% (SPLY: ~26.9%).
- Average coverage rose during FY24 to ~4.6x, as finance cost declined by ~20.1% YoY however in 9MFY25, the Sector’s coverage stood at ~2.1x (SPLY: ~6.3x).



Flat Products | Working Capital Management

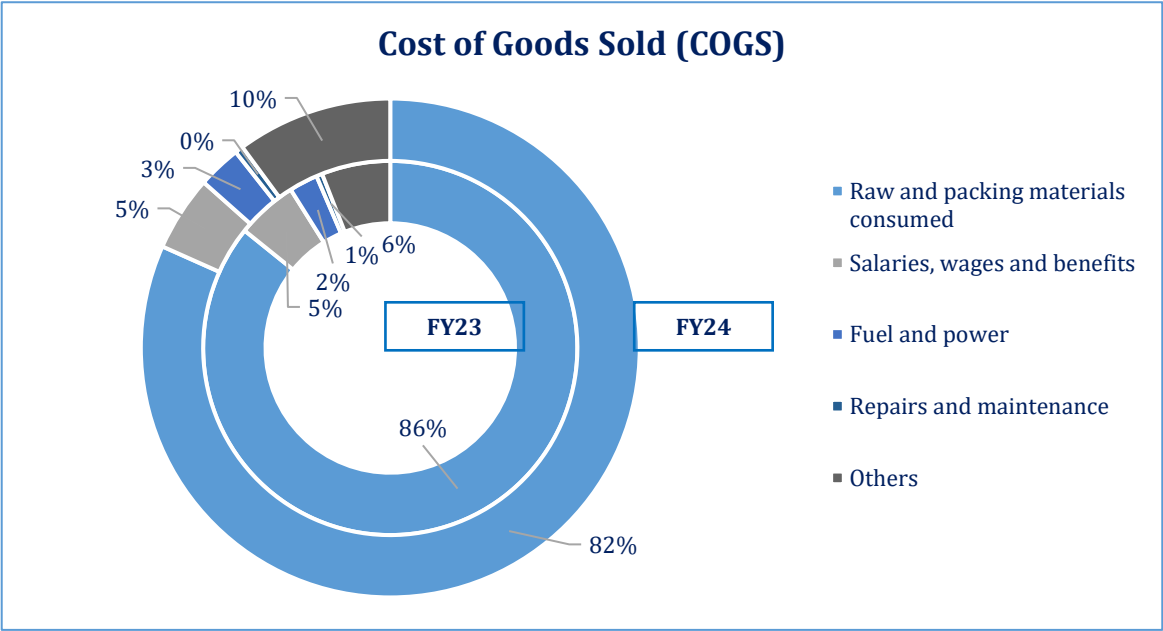
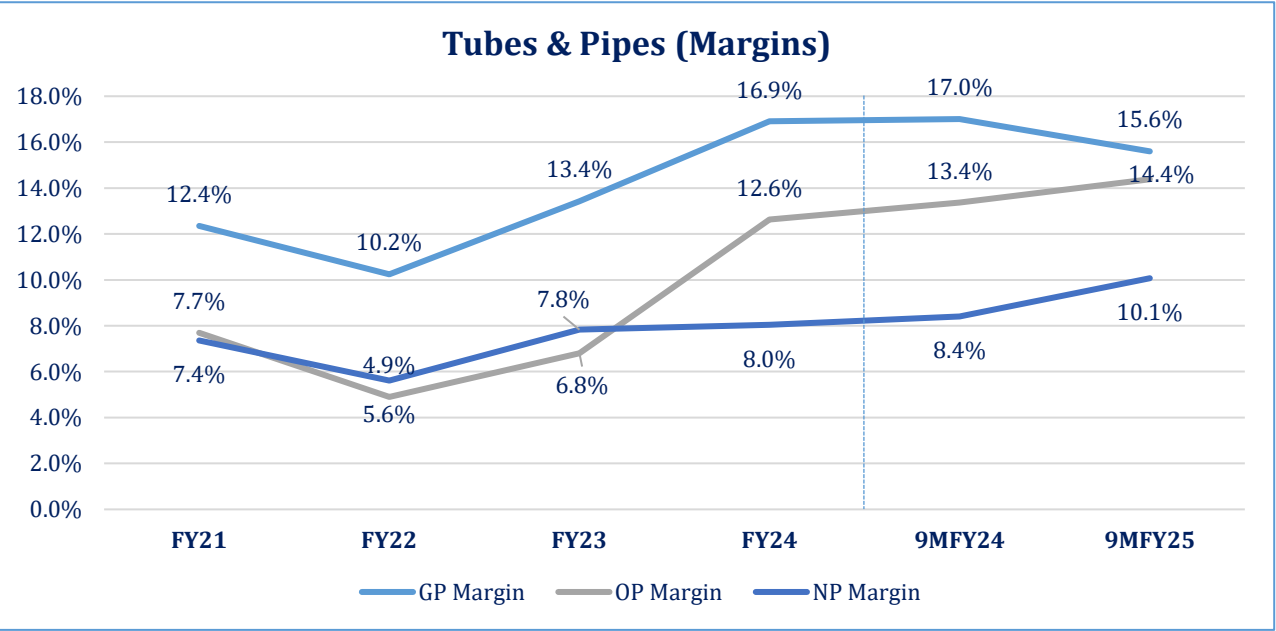
- During FY24, the Sector's average receivable days rose by ~7 days, to ~16 days in FY24 (FY23: ~9 days), while inventory days declined and stood at ~101 days, down ~4 days YoY (FY23: ~105 days).
- Payable days remained at ~52 days when compared to the same period last year, and therefore, net working capital stood at ~65 days, up ~3 days YoY (FY23: ~62 days).
- In 9MFY25, receivable days stood at ~9 days (SPLY: ~12 days), inventory days were recorded at ~110 days (SPLY: ~103 days), while payable days were recorded at ~50 days (SPLY: ~60 days). Resultantly, net working capital days were recorded at ~69 days for 9MFY25 as compared to ~54 days for the period of 9MFY24.



Tubes & Pipes

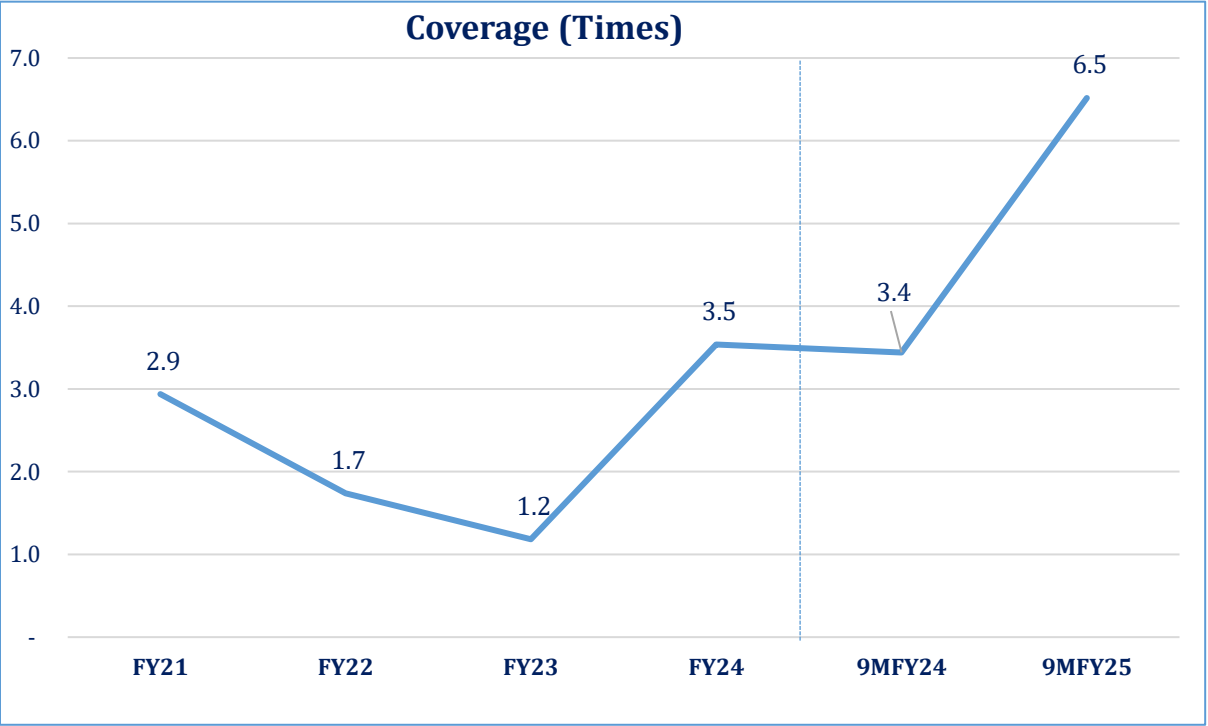
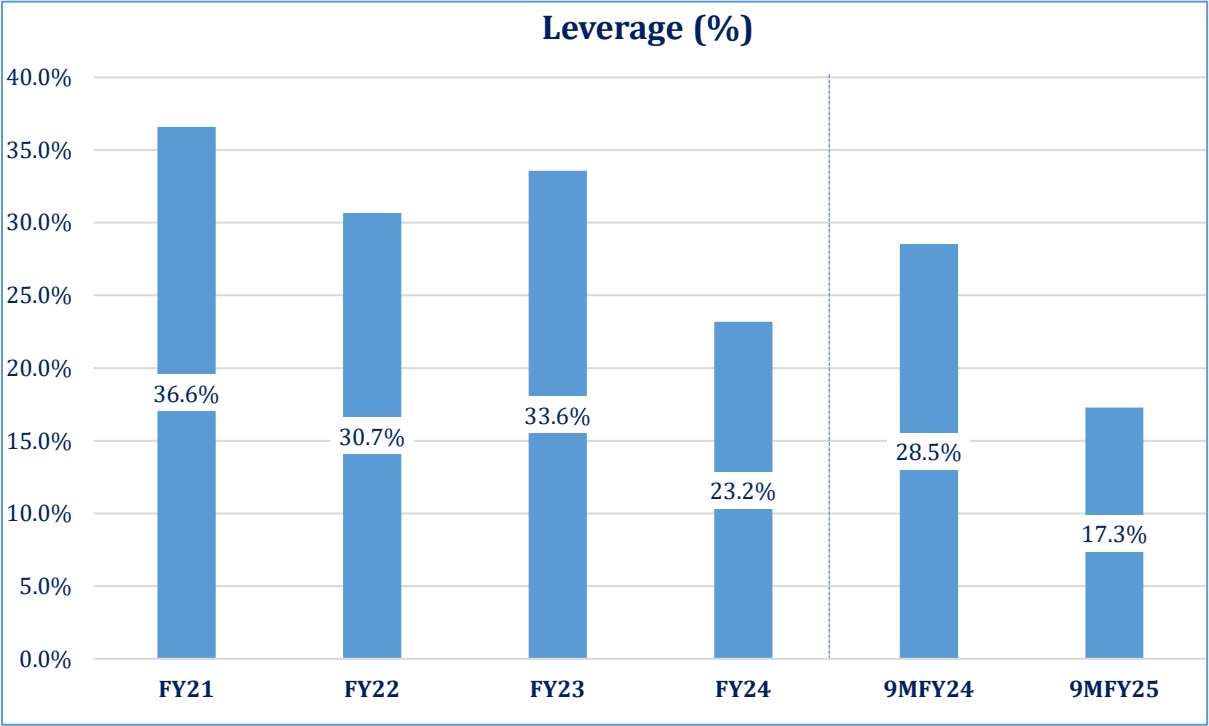
Tubes & Pipes | Margins

- During FY24, gross profit of the Sector rose by ~54.2% YoY; therefore, gross profit margin came in at ~16.9% YoY (FY23: ~13.4%) on the back of ~22.0% increase in the Sector’s sales. However, in 9MFY25, the Sector’s revenue declined by ~14.0% on the back of low sales; therefore, gross profit fell by ~21.5% and as a result, gross margins declined and were recorded at ~15.6% (SPLY: ~17.0%).
- Moreover, operating profit margin rose to ~14.4% in FY24 (FY23: ~13.4%), while net margins clocked in at ~10.1% YoY (FY23: ~13.4%). During the year, finance cost was down ~6.0% YoY, while other income also decreased by ~52.0% YoY.
- The Sector has a heavy dependence on imported raw material, which comprises ~81.7% of total cost in FY24 (FY23: ~86.0%), and hence is exposed to the changes in the international prices of the raw material along with the exchange rate fluctuations.



Tubes & Pipes | Leverage & Coverage

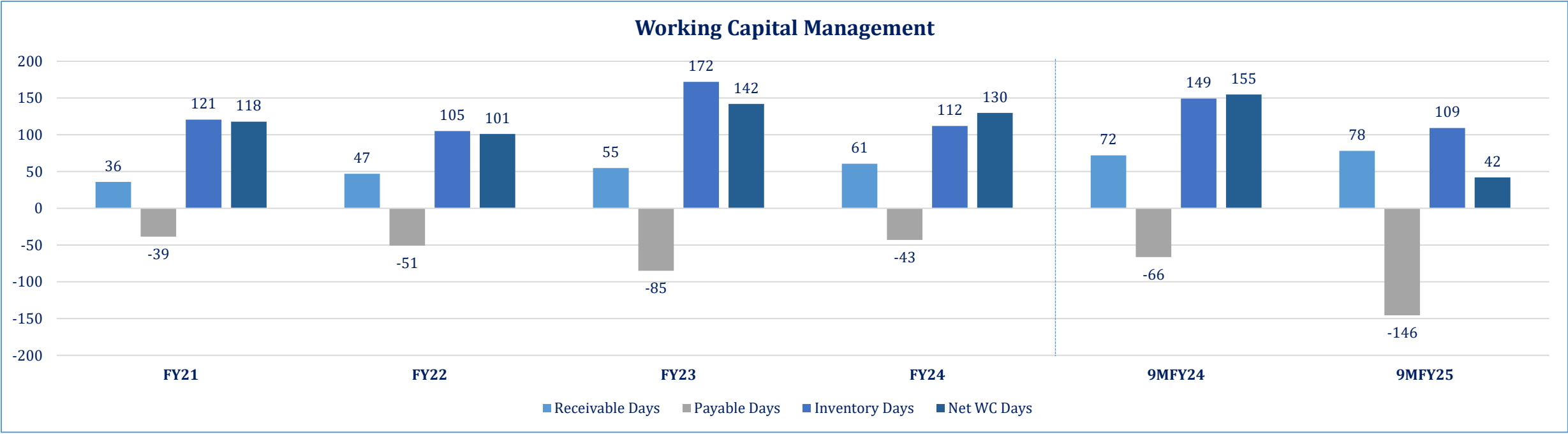
- During FY24, the segment’s average leverage decreased to ~23.2% (FY23: ~33.6%), as total borrowings declined ~19.8% during FY24 and total equity rose ~22.3% YoY. In 9MFY25, the Sector’s average leverage declined to ~17.3% (SPLY: ~28.5%) as borrowing lowered by ~37.5% YoY, while total equity rose ~20.1% YoY.
- Average interest coverage rose during FY24 increased to ~3.5x as the segment’s finance cost decreased by ~5.8% YoY. In 9MFY25, the Sector’s coverage was recorded at ~6.5x compared to ~3.4x in the same period last year.



Note: Data is based on ~2 PACRA-rated/ listed segment players.

Tubes & Pipes | Working Capital Management

- During FY24 average net working capital days decreased to ~130 days in FY24 (FY23: ~142 days). On the other hand, net working capital days were recorded at ~42 days in 9MFY25 (SPLY: ~155 days).
- Average inventory days were down to ~112 days in FY24 (FY23: ~172 days), while average receivable days increased to ~61 days (FY23: ~55 days) whereas average payable days reduced from ~85 days in FY23 to ~43 days in FY24.
- For 9MFY25, the average inventory days reduced to ~109 days (SPLY: ~149 days) whereas average receivable days increased to ~78 days (SPLY: ~72 days) and average payable days rose to ~146 days (SPLY: ~66 days).

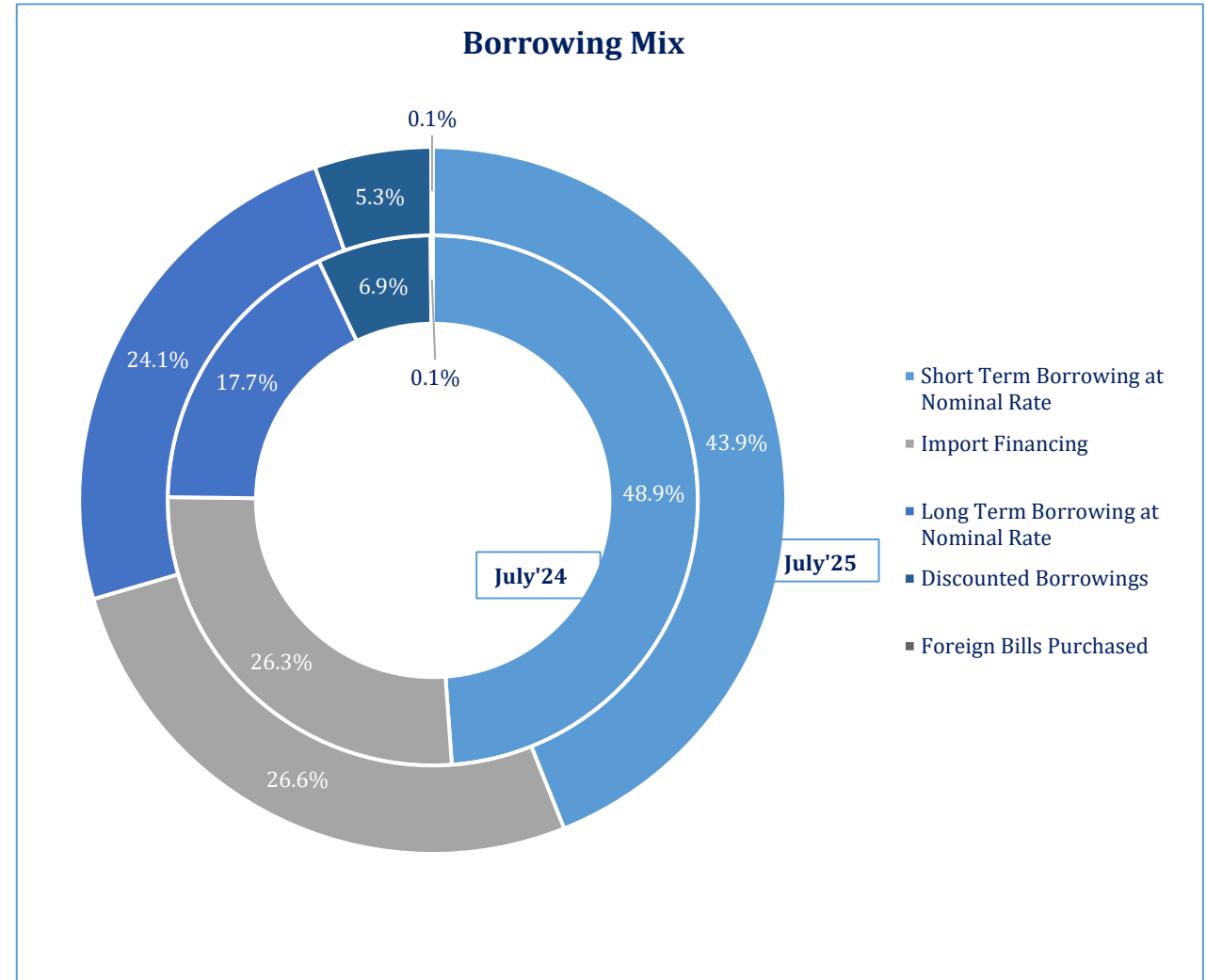


Note: Data is based on ~ 2 PACRA-rated/ listed segment players.

Steel

Borrowing Mix

- As of End-July'25, the Sector's overall borrowings stood at PKR~226.2bln (End-July'24: PKR~210.3bln) up ~7.6% YoY, driven by ~46.2% YoY uptick in long-term borrowings.
- Short-term borrowings (STBs) stood at PKR~99.4bln, down ~3.2% YoY as of End-July'25 (End-July'24: PKR~102.7bln), and held the largest share in the Sector's borrowing mix at ~43.9% (End-July'24: ~48.9%).
- Meanwhile, import financing clocked in at PKR~60.1bln (End-Jul'24: PKR~55.4bln), up ~8.5% YoY as of End-Jul'25, and held ~26.6% share in the total borrowing mix during the period (End-July'24: ~26.3%).
- Long-term borrowings (LTBs) stood at PKR~54.5bln (SPLY: PKR~37.3bln), up ~46.2% YoY and held a share of ~24.1% in overall borrowings (End-Jul'24: ~17.7%).
- Discounted borrowing (LTFF & EFS) stood at PKR~12.1bln (End-Jul'24: ~14.6bln), down ~17.3% YoY, and held a share of ~5.3% in the overall borrowing mix (End-July'24: ~6.9%).



Duty Structure

HS Code	Type	Description	Additional Customs Duty		Customs Duty		Regulatory Duty		Total	
			FY25	FY26	FY25	FY26	FY25	FY26	FY25	FY26
7202.3000, 7204.3000	Scrap	Waste, Scrap Of Tinned Iron/ Steel	2%	0%	0%	0%	5%	5%	7%	5%
7204.4100, 7204.4900	Scrap	Re-rollable; Waste, scrap of compressors	2%	0%	0%	0%	5%	5%	7%	5%
7204.4990	Scrap	Other	2%	0%	3%	0%	5%	5%	10%	5%
2601.1100	Iron Ore	Iron Ore	2%	0%	0%	0%	0%	0%	2%	0%
7206.1000, 9000	Semi-finished Long	Ingots	2%	0%	3%	0%	0%	0%	5%	0%
7207.1110	Semi-finished Long	Billets	2%	0%	11%	5%	15%	12%	28%	17%
7209.1510	Finished Flat	Flat-Rolled of secondary quality	6%	4%	20%	20%	10%	5%	36%	29%
7213.1010	Finished Long	Bars & Rods	6%	4%	20%	20%	30%	24%	56%	48%
7214.1010	Finished Long	Others Bars & Rods	6%	4%	20%	20%	30%	24%	56%	48%

Steel

SWOT Analysis

- Capital-intensive Sector
- Good margins in periods of demand boom.
- Significant Potential demand
- Strong dealership and distribution network
- Non-availability of substitute



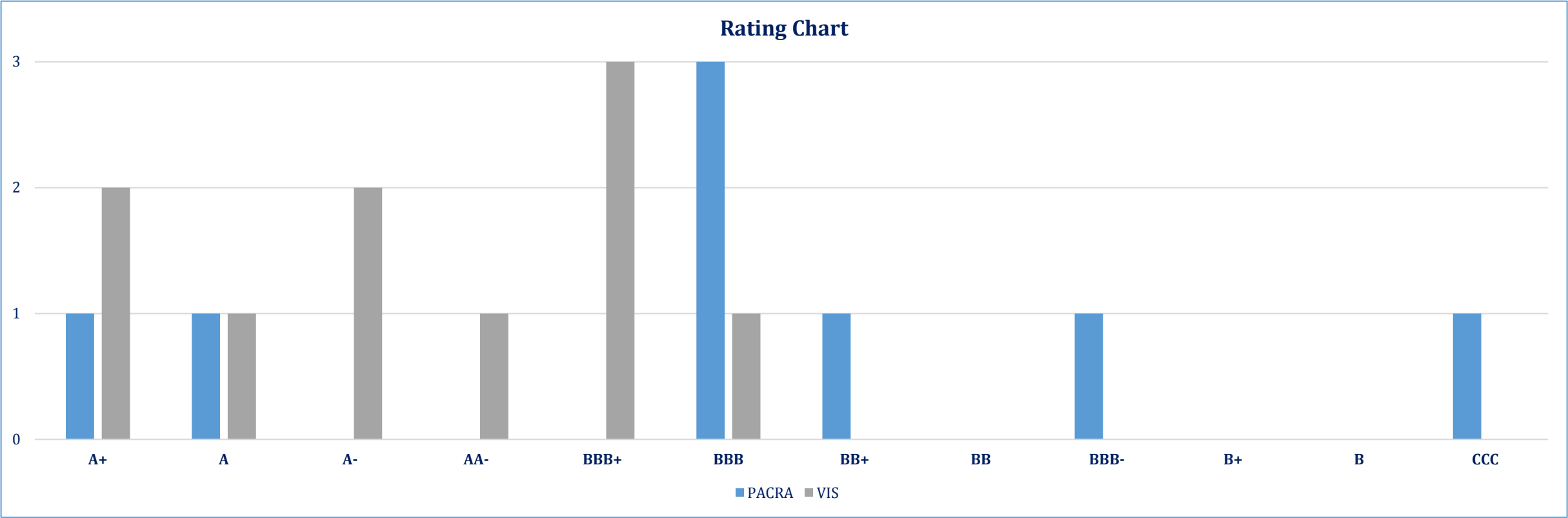
- Heavy reliance on imported raw material
- Exposure to exchange rate volatility
- Seasonality and uncertainty in demand
- Inability to pass on impact of increased cost in times of depressed demand

- High Production capacity – supply surplus
- Increasing cost of energy
- Inability of the government to spend on PSDP projects

- Low per capita consumption
- Government initiatives to spur construction activities and establish a large number of low-cost houses.
- Pakistan GDP recovery and reduced finance costs leading to opportunities for investment
- Initiation of large engineering projects

Rating Curve

- PACRA rates ~8 entities in the Steel Sector within a rating bandwidth from A+ to CCC. Additionally, PACRA also rates ~2 debt instruments.



Outlook: Negative

- In FY25, Pakistan's GDP (nominal) stood at PKR~114.7trn (FY24: PKR~105.1trn), up ~9.1% YoY. In real terms, Pakistan's GDP grew by ~2.7% YoY (FY24: ~2.5% YoY growth). Large-scale Manufacturing (LSM), which is an essential component of economic growth and represents ~67.5% (in terms of value) in manufacturing activities and ~8.0% of the country's real GDP in FY25.
- Pakistan's economy faced severe stress in FY23 with GDP contracting (-0.2%). IMF's SBA in FY24 stabilized reserves and confidence, though growth stayed modestly at ~2.5%. By FY25, inflation eased and came down at ~4.5% YoY (FY24: ~23.4%) and further eased in 2MFY26 to ~3.5% while reserves improved to USD~19.3bln, and policy rates fell from ~22.0% to ~11.0% (Sept'25).
- Local steel production stood at ~7.2mln MT in FY25, registering a YoY decline of ~14.3% (FY24: ~8.4mln MT). The production of Billets and Ingots (Long products) stood at ~3.8mln MT, forming ~52.8% of total steel production (FY24: ~4.9mln MT), and recording ~22.4% YoY decline. In comparison, production of HCR Sheets/Strips/Coils/Plates (Flat Products) declined ~2.9% YoY and clocked in at ~3.4mln MT (FY24:~3.5mln MT), with these forming ~47.2% of total production during the year.
- In FY25, the overall local supply of steel products declined to ~10.4mln MT (FY24: ~11.3mln MT), a YoY decrease of ~7.9%. Local production share in demand decreased further to ~69.2% in FY25 (FY24: ~74.3%) while imported finished steel share in demand increased to ~30.8% (FY24: ~25.7%).
- During 9MFY25, average local steel rebar prices stood at USD~789.0/MT, up ~6.0% compared to FY24 while in local currency the prices was recorded at PKR~219,711/MT, up ~4.2% compared to FY24 where the price of local rebar stood at PKR~210,859/MT (FY23: PKR~181,241/MT).
- With the "Iron & Steel" Sector recording a decline of ~8.7% in FY25, the Sector's demand prospects appear to remain constrained. During FY24, the Flat Steel products segment's gross profit declined to ~11.1% YoY while net profit clocked in at ~3.1% (FY23: ~16.8%, ~0.4% YoY, respectively). In 9MFY25, gross profit recorded a further dip and clocked in at ~6.2% YoY, while net profit dipped to negative ~0.6% YoY (SPLY: ~12.2%; ~6.2%, respectively).
- In FY24, Long Steel's gross margin slid to ~4.7% (from ~14.5% in FY23) and net margin turned to ~-6.8% (from ~2.5%), driven by cost of sales at ~95.0% of revenue (SPLY: ~85.0%). In 9MFY25, gross margin edged up to ~5.5% but net margin deepened to ~-8.9% (SPLY: ~9.4%). By contrast, Tubes & Pipes remained resilient: FY24 gross and net margins were ~16.9% and ~8.0%, and in 9MFY25 they stood at ~15.6% and ~10.1%. Overall, Long Steel continues to face cost-driven margin pressure, while Tubes & Pipes sustains stronger, improving profitability.
- Going forward, the construction industry is likely to see weak demand ahead. Public sector spending under PSDP (FY26 budget) is expected to stay constrained in line with fiscal consolidation efforts. Meanwhile, the recent floods and heavy rains (Jul-Sep'25) are set to weigh on the economy, pushing up inflation, raising import dependence, diverting public funds toward relief, and slowing development activity. As a result, steel demand from government projects will remain limited in the near term. Some recovery may come from private industrial activity, but overall sector margins are expected to stay under pressure in the short run.

Bibliography

- World Steel Association (WSA)
- World Bank (WB)
- Bloomberg
- London Metal Exchange (LME)
- Organization for Economic Cooperation and Development(OECD)
- International Energy Agency (IEA)
- Pakistan Bureau of Statistics (PBS)
- Federal Board of Revenue (FBR)
- Securities & Exchange Commission of Pakistan (SECP)
- Ministry of Planning, Development and Special Initiatives
- National Steel Advisory Council (NSAC)
- State Bank of Pakistan (SBP)
- Pakistan Stock Exchange (PSX)
- PACRA Database

Research Team	Mohammad Abdul Rehman Khan Supervising Senior Abdulrehman.khan@pacra.com	Muhammad Shahryar Butt Associate Research Analyst Shahryar.butt@pacra.com
Contact: +92 42 35869504		

DISCLAIMER

PACRA has used due care in the preparation of this document. Our information has been obtained from sources we consider to be reliable, but its accuracy or completeness is not guaranteed. The information in this document may be copied or otherwise reproduced, in whole or in part, provided the source is duly acknowledged. The presentation should not be relied upon as professional advice.