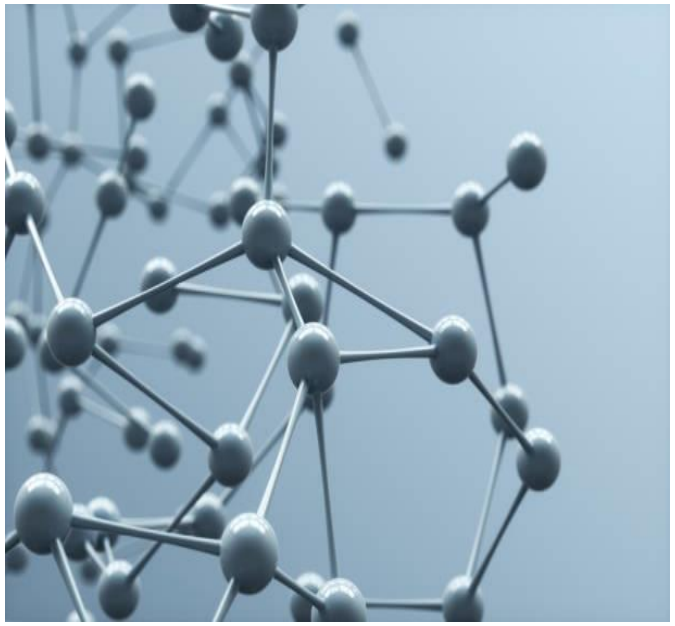
SECTOR STUDY | AUGUST 2025

Together. Creating Value.

Chemicals



Research Team

Saniya Tauseef | Senior Manager Research
Mohammad Abdul Rehman Khan | Supervising Senior
Haris Azeem | Associate Research Analyst

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Chemicals

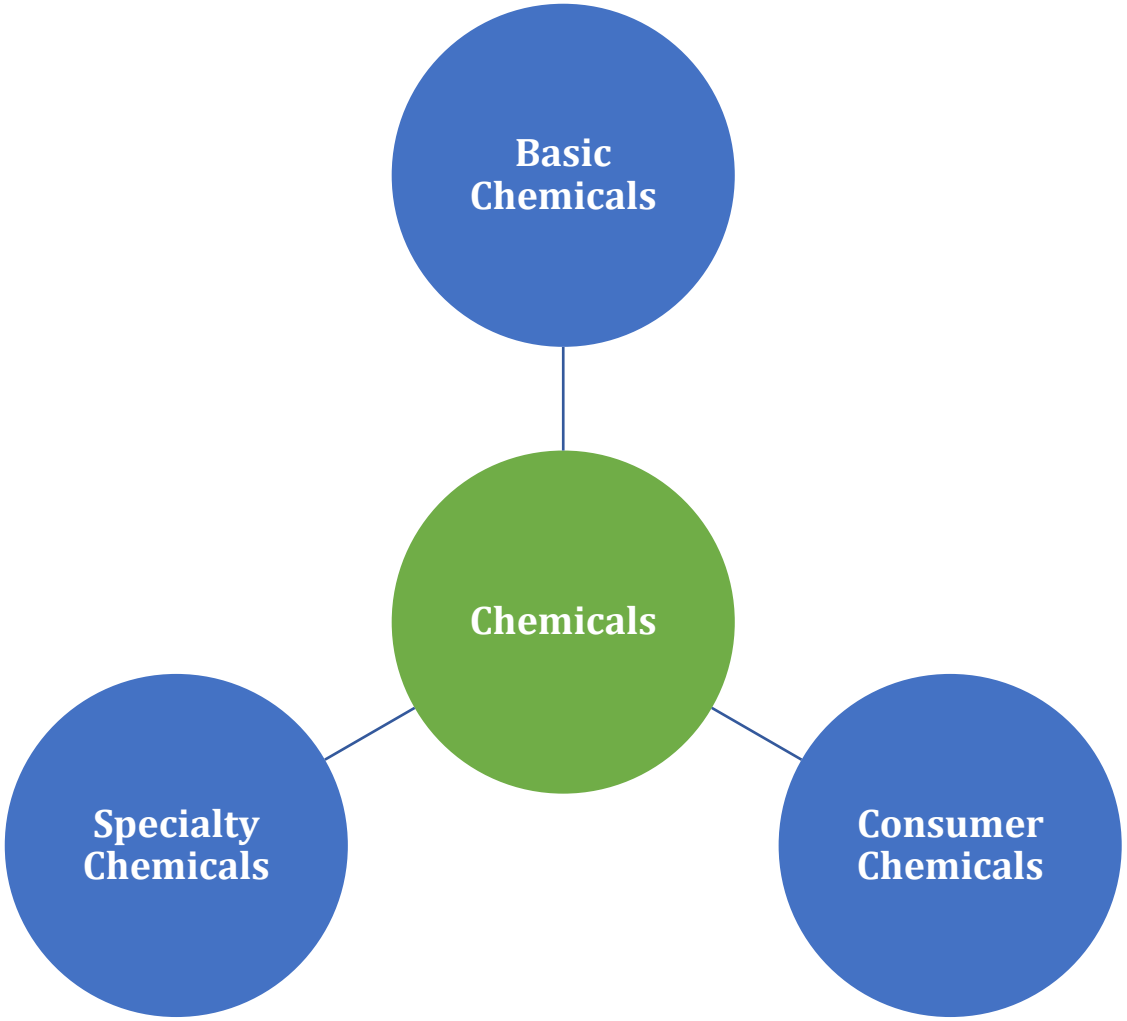
Introduction

- The Chemicals Sector plays a critical role in the global economy, producing a vast range of products that impact nearly every aspect of daily life

- The Sector includes products such as detergents, soaps, and perfumes that are sold directly to consumers, while others serve as essential inputs in industrial manufacturing.

- The Chemicals' Sector product portfolio can be divided into three broad categories, which are as follows:

    - **Basic Chemicals** include petrochemicals, polymers and basic inorganics.
    - **Specialty Chemicals** comprise a wide variety of chemicals for crop protection, paints and inks, colorants (dyes and pigments, pesticides, etc.).
    - **Consumer Chemicals** are sold directly to the public. These include detergents, soaps, other toiletries etc.



Source: ECI

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Global | Overview

- In CY24, the global chemical industry showed some early signs of recovery after a significant downturn seen in CY23. The overall chemical sales for the top 50 players recorded at USD~1.014trln (CY23:USD~1.036trln) only facing a ~0.07% YoY decline in comparison to the massive drop of ~10.7% YoY seen previously.
- The top three players maintained their positions, with the German-Based BASF leading the charts but its revenue declining from USD~74.5bln to USD~70.6bln (~5.2% YoY). It is followed by Sinopec and Dow Inc, with Sinopec maintaining its sales at remaining the same at USD~58.1bln and Dow Inc seeing decreased sales volume from USD~44.6bln to USD~43.0bln (~3.6% YoY).
- The combined profit of 37 companies (part of the top 50) recorded at USD~56.8bln in CY24 showing a ~8.1% YoY increase (CY23: USD~54.4bln). Along with this, companies have also witnessed rising capital expenditure (~3.5%) and increased R&D spending (~3.0% YoY). Big players like Asahi Kasei, Evonik and DSM-Firmenich showed strong profit growth or turnaround from previous losses.
- Although there were some positives, the attitudes of the firms were largely cautious. Firms faced multiple challenges under the strain of oversupply, weak global demand and high energy costs especially in Europe. Companies like LyondellBasell and Dow closed or sold plants due to losses. In Japan, companies such as Resonac and Mitsubishi Chemical began restructuring, while China's major players like Sinopec and Hengli saw flat sales in CY24 despite prior growth trends.

Sr.	Company	Country	Sector	Revenue (USD bln) | CY24
1	**BASF**	Germany	Diversified	70.6
2	**Sinopec**	China	Petrochemicals	58.1
3	**Dow Inc**	USA	Diversified	43.0
4	**PetroChina**	China	Diversified	42.8
5	**ExxonMobil**	USA	Petrochemicals	41.1
6	**Sabic**	KSA	Petrochemicals	37.3
7	**LG Chem**	South Korea	Petrochemicals	35.9
8	**LyondellBasell Industries**	USA	Petrochemicals	32.2
9	**Ineos**	UK	Basic & Speciality	31.2
10	**Linde**	England	Industrial gases	30.7
	Total Sales Revenue			**422.9**

Source: American Chemical Society

Chemicals

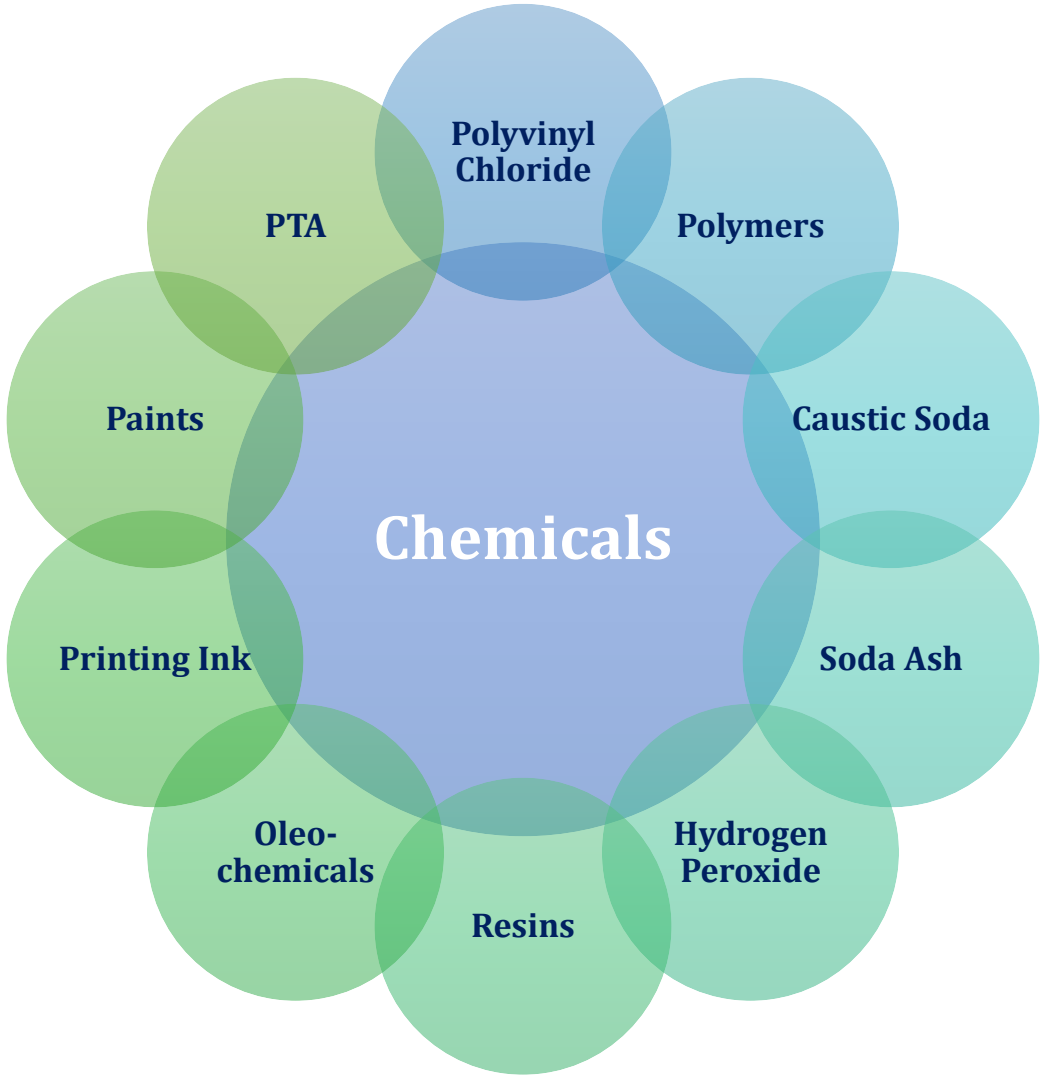
Local | Introduction

- Pakistan's Chemicals Sector holds immense potential, as it serves as a foundational pillar for a wide range of industries such as textiles, construction, agriculture, pharmaceuticals and packaging.

- Additionally, the use of chemicals is an essential part of our daily lives as well. Despite its strategic importance, the Sector's development has remained constrained by a series of factors such as limited diversification, low investment and a heavy reliance on imports for basic inputs.

- In terms of segments, the Chemicals Sector has made considerable progress over the years in basic inorganic chemicals like Polyvinyl Chloride, Caustic Soda, Soda Ash and Hydrogen Peroxide. Since chemicals are used in most industrial processes, the growth of the Chemical Sector is closely connected to overall industrial and economic development.

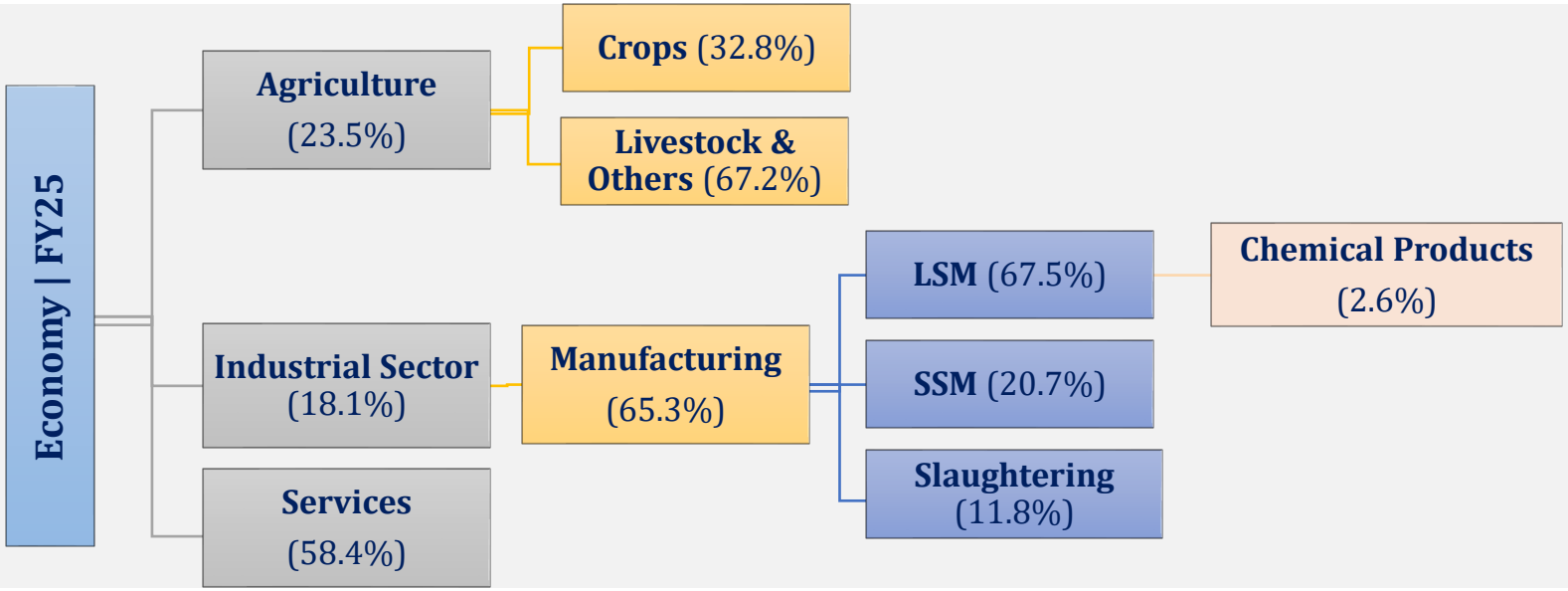
- The Sector is diversified into different branches of industries based on their types and usage. Although a variety of chemicals are used in a multiple industries, for the purpose of ease and clarity, this Sector Study will divide the Chemicals Sector into ten (10) main categories (refer diagram) and will be focused on the chemicals covered in these categories.



Chemicals

Local | Economic Overview

- In FY25, Pakistan's nominal GDP was estimated at PKR ~114.7trn, reflecting a real GDP growth of ~2.7% YoY—marginally surpassing the IMF's projection of ~2.6%. This indicates a moderate improvement in economic activity over the previous year. In comparison, FY24 recorded nominal GDP of PKR ~105.7trn (FY23: PKR ~83.9trn), with real GDP expanding by ~2.4% YoY. Looking ahead, the Government of Pakistan projects a more robust growth of ~4.2% YoY in FY26, underpinned by expectations of recovery across key economic sectors.
- Large Scale Manufacturing (LSM) in Pakistan is important for economic growth because it links with other sectors. LSM represented ~74.8% value of manufacturing activities in FY24. The country's LSM activity (according to QIM) showed a contraction (~1.5%) during FY24 which was less than FY23 that saw a steep decline of ~10.3% YoY. Even though the LSM is declining, there are hints of industrial revival moving forward.
- Chemical products are classified under the Industrial Activities segment of the economy. In FY25, the total weight of the Sector in QIM was recorded at ~2.6%, same as last year. The Sectors performance in QIM also decreased by 0.4% YoY in 10MFY25 as compared to 10MFY24.



Note: *Shares are based on nominal GDP excluding taxes and subsidies.*

Source: PBS, IMF

Chemicals

Local | Snapshot

- The Sector's total production was recorded at ~3.0mlnMT during FY24, down ~3.2% YoY. During FY25, this clocked in at 2.4mlnMT, registering a YoY decline of ~20.2%.
- The Chemicals Sector is highly dependent on imports for raw material procurement. Imports of chemical products during FY24 was recorded at PKR~1,549.8bln, up by ~23.5% YoY. In FY25, imports declined to ~1,522.0bln accounting for ~7.6% of the country's total import bill.
- Meanwhile, exports of the overall Chemicals Sector were recorded at PKR~76.9.0bln in FY24, a YoY decline of ~0.3%. In FY25, exports registered slight YoY decline of ~1.17%, accounting for ~0.9% of the country's total export receipts during the period.
- Considering its high linkages with other sectors of the economy, Chemicals is considered as one of the significant sectors of Pakistan. The Sector is considered as a backbone in the development of forward-linked industries like textile, leather, footwear, furniture, automobile, food and beverages. Chemical products are also used in backward-linked industries such as surfactants, which are used by oil refineries and oil extracting companies.

Particulars	FY23	FY24	FY25
Production ('000' MT)	3,109	3,008	2,399
Production Growth (YoY)	9.4%	-3.2%	-20.2%
Imports (PKR bln)	1,254.7	1,549.8	1,522.0
Exports (PKR bln)	77.1	76.9	76.0
Association	Pakistan Chemicals Manufacturer Association		
Members	71		
Structure	Oligopolistic		
No. of Listed Companies	25		

Production figures pertain to PBS QIM data for category " Manufacturing of Chemicals". Export & Import figures are reported from SBP (Products of Chemical or Allied Industries, excluding Fertilizers & Pharmaceuticals)

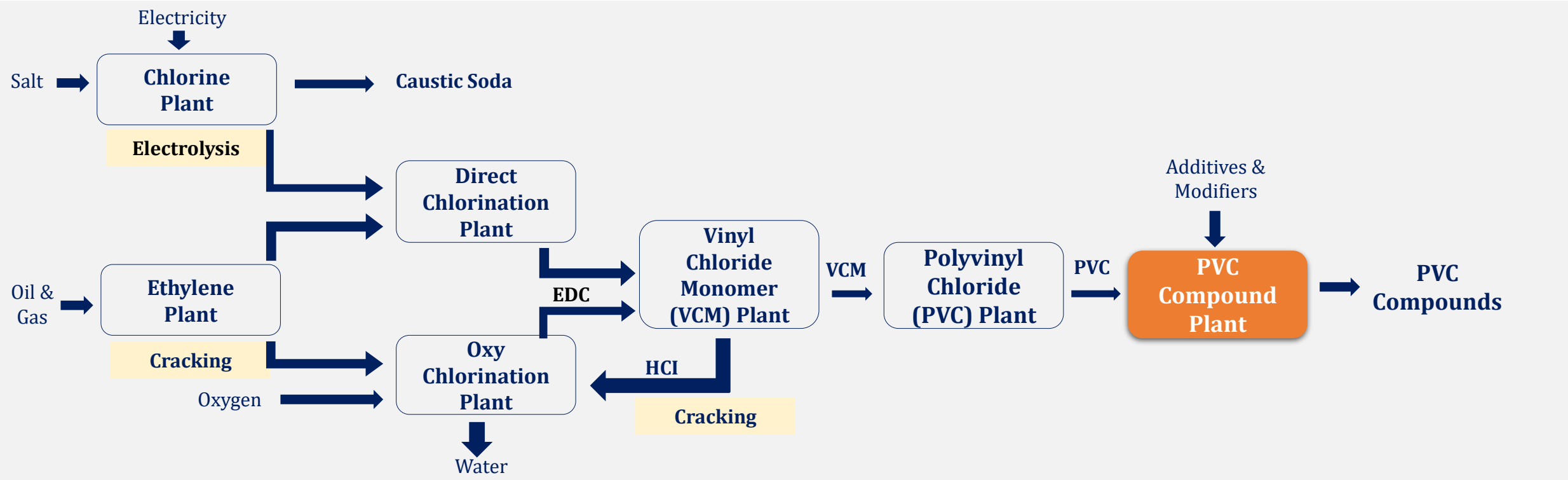
Source: PACRA Database, PSX, PBS, SBOP

Chemicals

Polyvinyl Chloride (PVC) | Production Process

- Chlorine is extracted from sea salt via electrolysis while ethylene is derived from hydrocarbon raw materials. These are then reacted to produce ethylene dichloride. The ethylene dichloride is then decomposed by heating in a high temperature furnace or reactor.

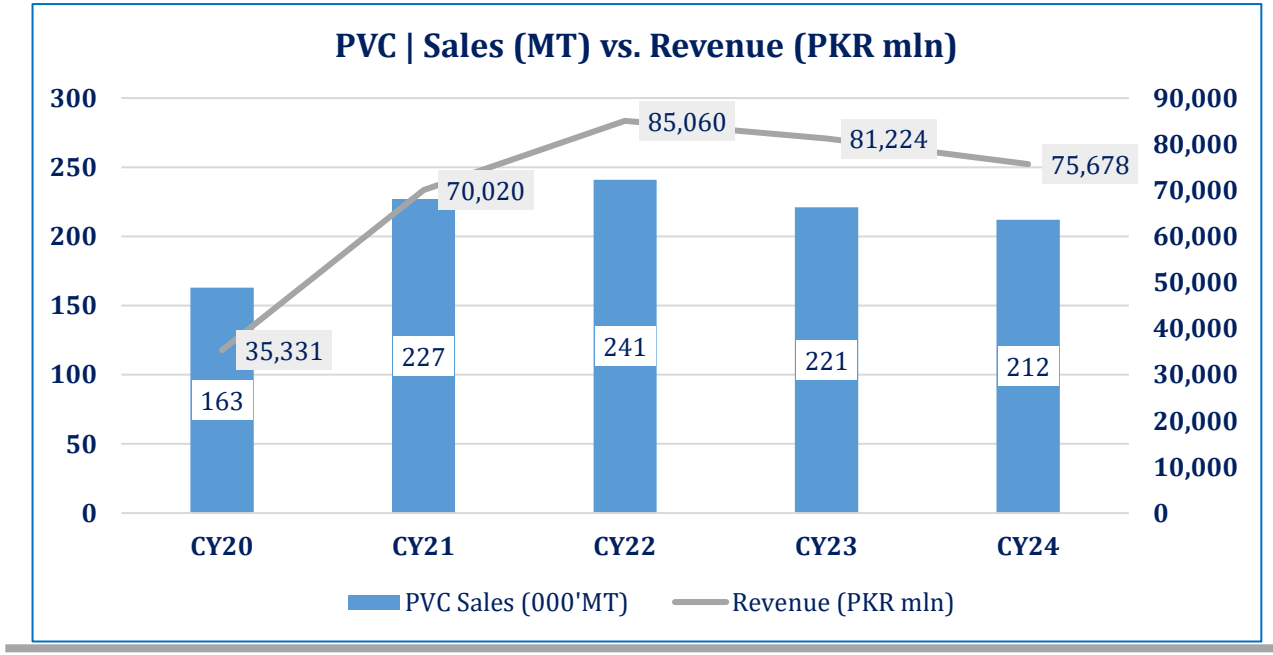
- PVC is made using a process called Addition Polymerization. The reaction opens the double bonds in the vinyl chloride monomer (VCM) allowing neighboring molecules to join together creating long chain molecules.

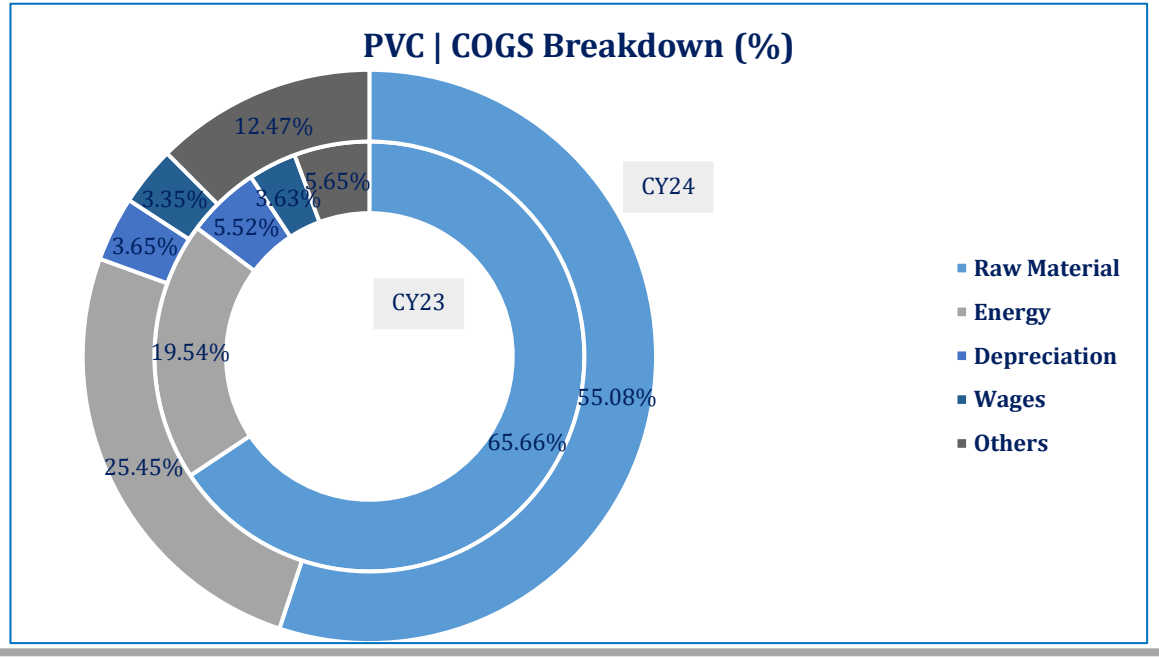


Chemicals

Polyvinyl Chloride (PVC) | Demand and Supply

- Engro Polymer & Chemicals Limited (EPCL), a subsidiary of Engro Corporation, is the only producer of PVC in Pakistan. The plant had an annual production capacity of ~295,000MT in CY24 (same as CY23). During the year, capacity utilization for PVC was recorded at ~71.9% (CY23: ~77.9%).
- The supply of two critical raw materials, Ethylene and EDC (Ethyl Dimethylaminopropyl Carbodiimide) is met through imports; therefore, the segment is exposed to exchange rate and international price fluctuations. Raw material accounted for ~55.1% of the total cost of production in FY24 (FY23: ~65.7%). As the production of PVC is an energy intensive process, therefore, energy costs are relatively higher accounting for ~25.5% (FY23: ~19.5%).
- PVC sales saw a stark decrease from ~221,000MT in CY23 to ~212,000MT in CY24, as the segment faced multiple challenges such as high interest rates, declining international prices and a slowing economy. The same trend was followed by the revenue which saw a decline of ~6.8% YoY to PKR~75,708mln (CY23: PKR~81,270mln).





Note: *Data is based on 1 PACRA-rated/ listed Sector players.*

Source: PSX

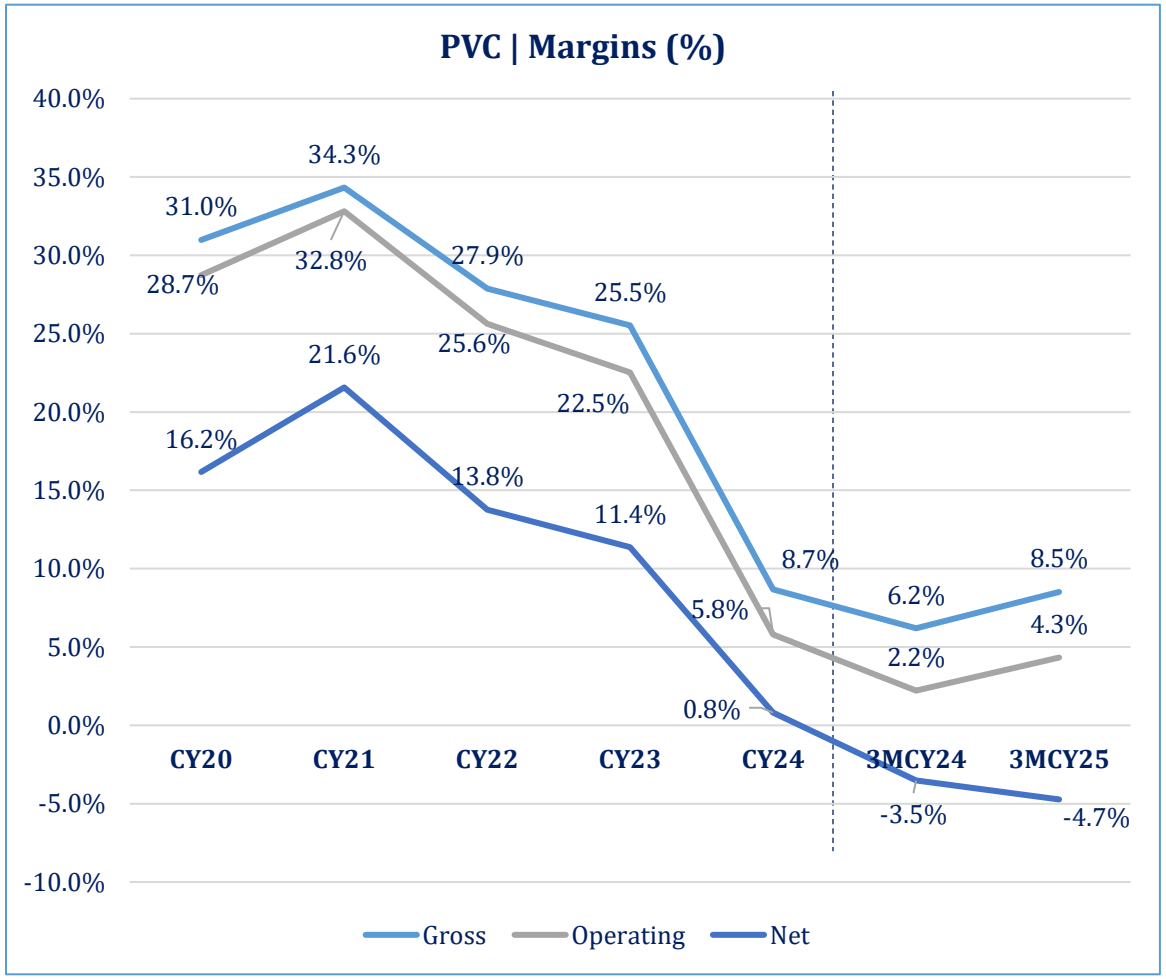
Chemicals

Polyvinyl Chloride (PVC) | Margins

- During CY24, gross margins for the segment declined to ~8.7%, due to lower PVC sales revenue (declining by ~6.8% YoY) and ~6.4% YoY higher cost of goods sold. The segments operating margins also dropped to ~5.8% (FY23: 26.7%) These issues are mainly caused by the bearish global prices and reduced demand for PVC.

- The segment's net profit was down ~93.0% YoY, this led to net profit margin declining to ~0.8% (CY23: ~11.4%) during the year. One of the main issues behind this stark decline is the due to a lower core delta (spread between the selling price of PVC and the cost of its key raw material, Ethylene).

- The declining trend in net profit margins persisted in 3MCY25, falling further compared to 3MFY24, as the core delta dropped to $240/MT by the end of the period. It has been predicted to keep falling in in CY25 further decreasing the margins.



Note: *Data is based on 1 PACRA-rated/listed Sector player.*

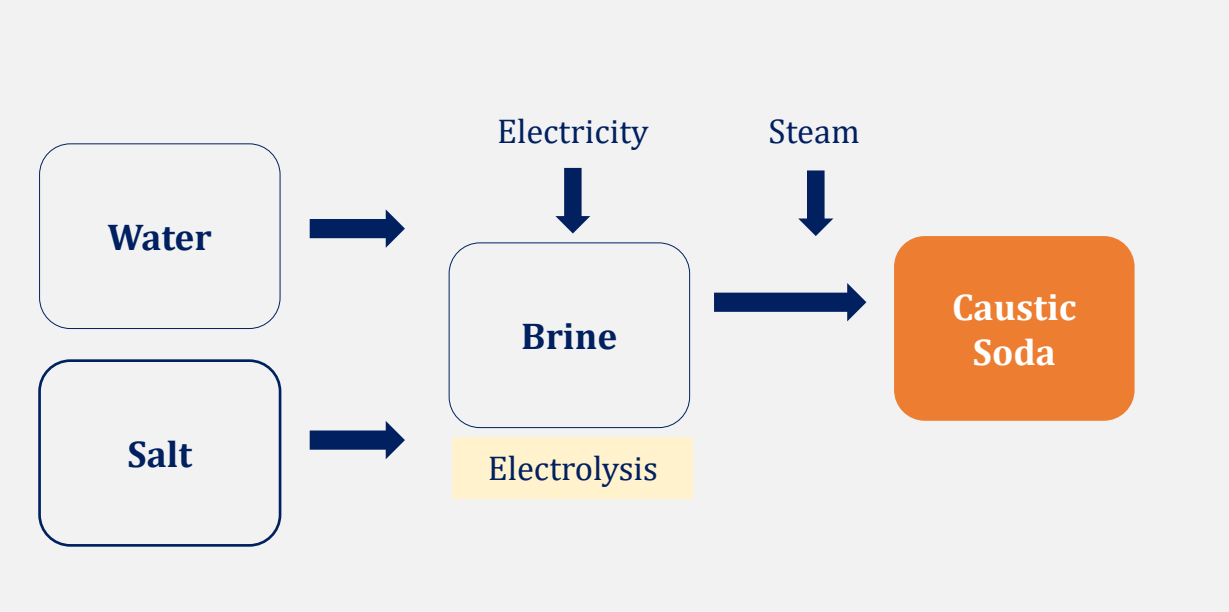
Source: PSX, ICIS

Chemicals

Caustic Soda | Production Process

- Nearly all caustic soda (Sodium Hydroxide, or NaOH) is produced through electrolysis of sodium chloride solution using one of the three cell types: mercury, diaphragm and membrane cells. The electrolysis process produces ~1.128MT of ~100.0% caustic soda with each MT of chlorine The primary raw material is common salt, usually in the form of underground deposits which are brought to the surface as a solution in a pumped high pressure water supply. The sodium chloride solution is often called Brine.

- Electrolysis is carried out by the mercury amalgam, diaphragm cell processes or membrane cell. Diaphragm cells need plenty of thermal energy to concentrate the caustic solutions but can be cheaper than mercury cells when steam costs are low and have relatively cheap construction costs. Use of membrane cells is growing due to lower capital and energy costs and an absence of environmental problems.

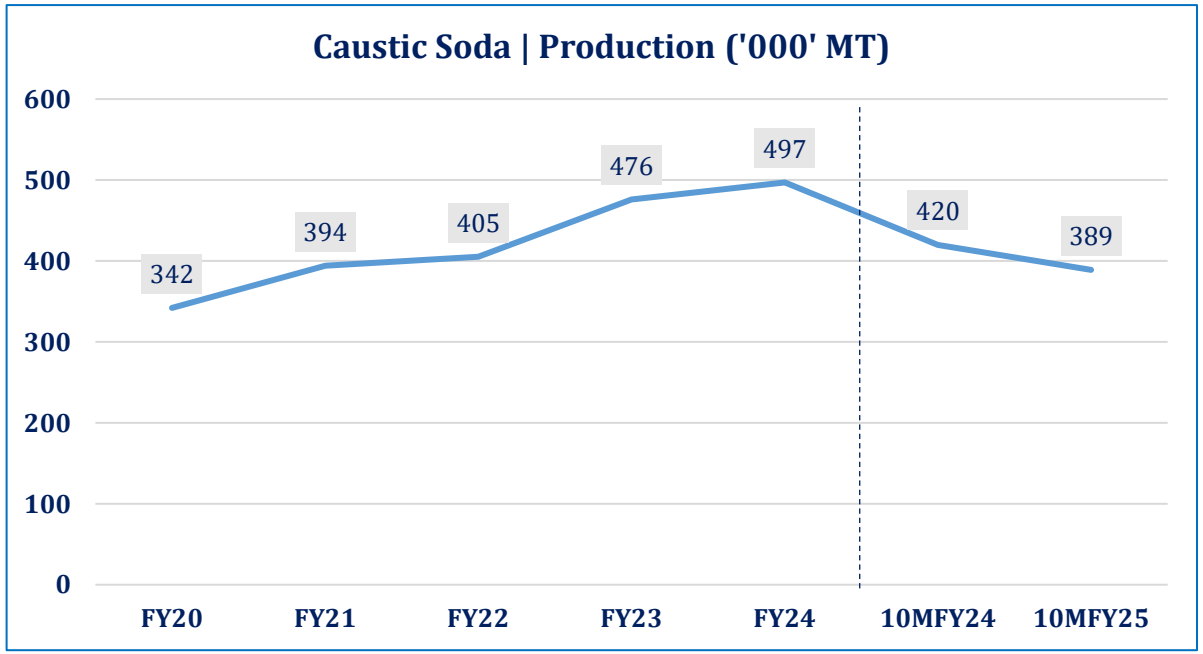


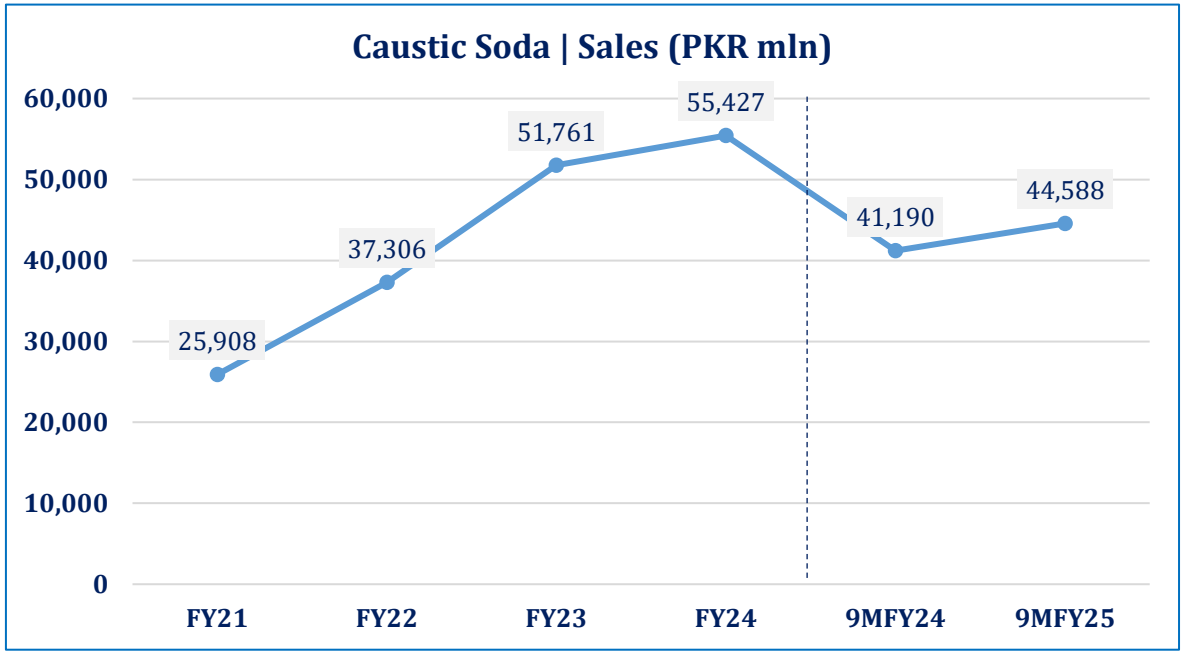
Source: EuroChlor

Chemicals

Caustic Soda | Demand and Supply

- The main raw material used in caustic soda production is sodium chloride. Pakistan's domestic production capacity of Caustic Soda was recorded at ~497,248MT in FY24, showing a ~4.5% YoY increase (FY23: ~475,668MT). On the other hand, the overall production capacity utilization during FY24 recorded at ~57.4% (FY23: ~64.6%). The imports for caustic soda recorded at ~9.2MT.
- Caustic Soda sales revenue during FY24 increased to PKR~55,427mln, a YoY increase of ~7.1% (FY23: PKR~51,761mln) on the back of better export volumes.
- A downward trend was however seen in 10MFY25, with production showing a YoY decline of ~7.4% but the sales revenue for 9MFY25 still recording an ~8.25% increase, on the basis of higher caustic soda prices due to elevated energy costs..



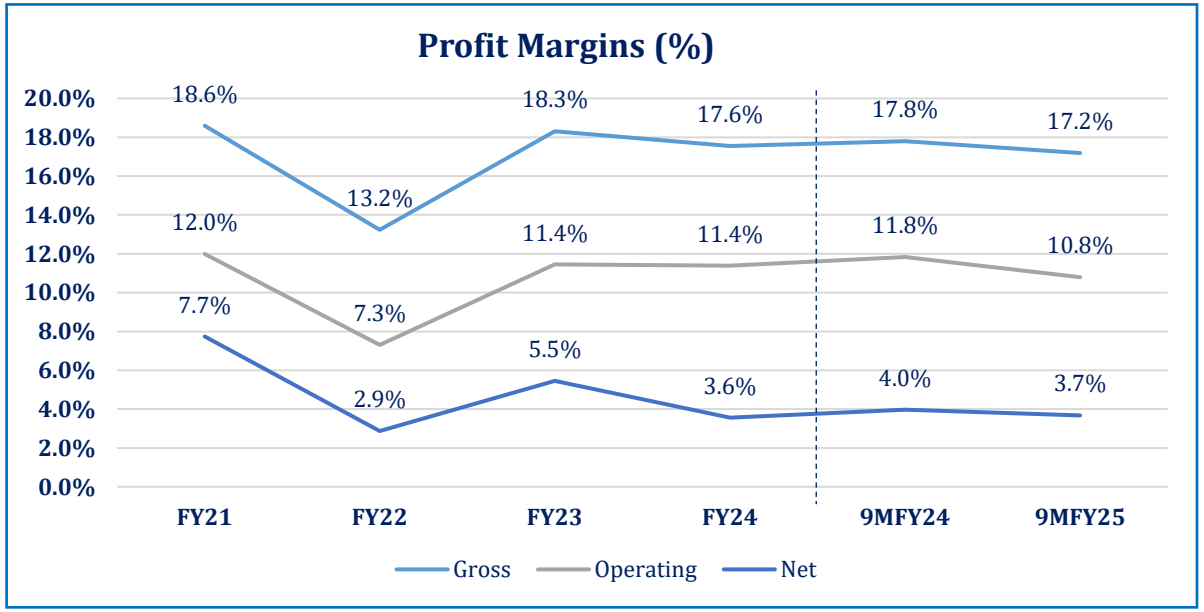


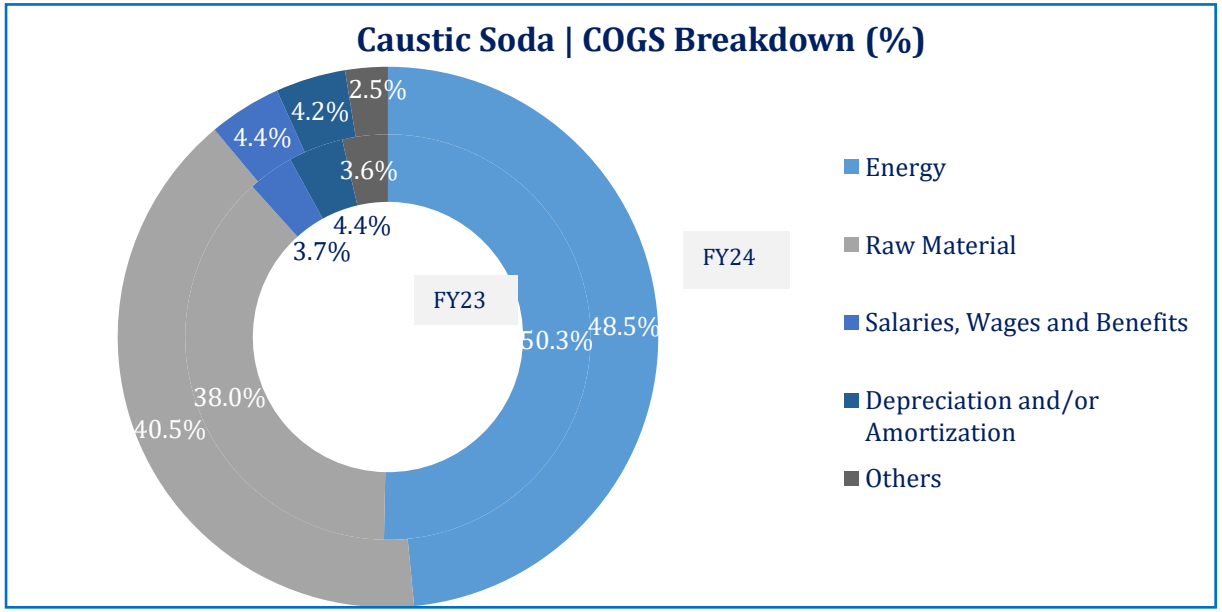
Note: *Data is based on 2 PACRA-rated/ listed Sector players. Imports reflect data for HS Code 2815.1100. Caustic Soda Production figures pertain to PBS QIM data classified under "Manufacturing of Chemicals".*

Source: PSX, PACRA Database

Caustic Soda | Margins

- During FY24, average gross margins for the segment decreased to ~17.6% (FY23: ~18.3%), due to a ~8.1% YoY increase in COGS. Meanwhile, the operating margin remained broadly stable at ~11.4 % (FY23: 11.4 %).. The segment's net profit decreased by ~34.9% YoY in FY24 to ~3.6% (FY23: 5.5%), on the basis of a ~41.7% YoY increase in finance costs for the segment.
- In 9MFY25, average profit margins slightly decreased from 9MFY24 to ~17.2%, ~10.8% & ~3.7%, respectively. These issues have been owed to sharp rises in energy costs.
- Caustic Soda is widely used in several sectors, particularly, textiles, detergents and soaps. The largest cost component for caustic soda comprises for energy as caustic soda production is a highly energy intensive process (especially during the electrolysis of brine) making up ~48.5% of the segment's total cost in FY24 (FY23: ~50.3%) recording a ~3.7% decrease. This was followed by raw materials which accounted for ~40.5% in total costs (FY23: ~38.0%), indicating a ~6.4% increase.





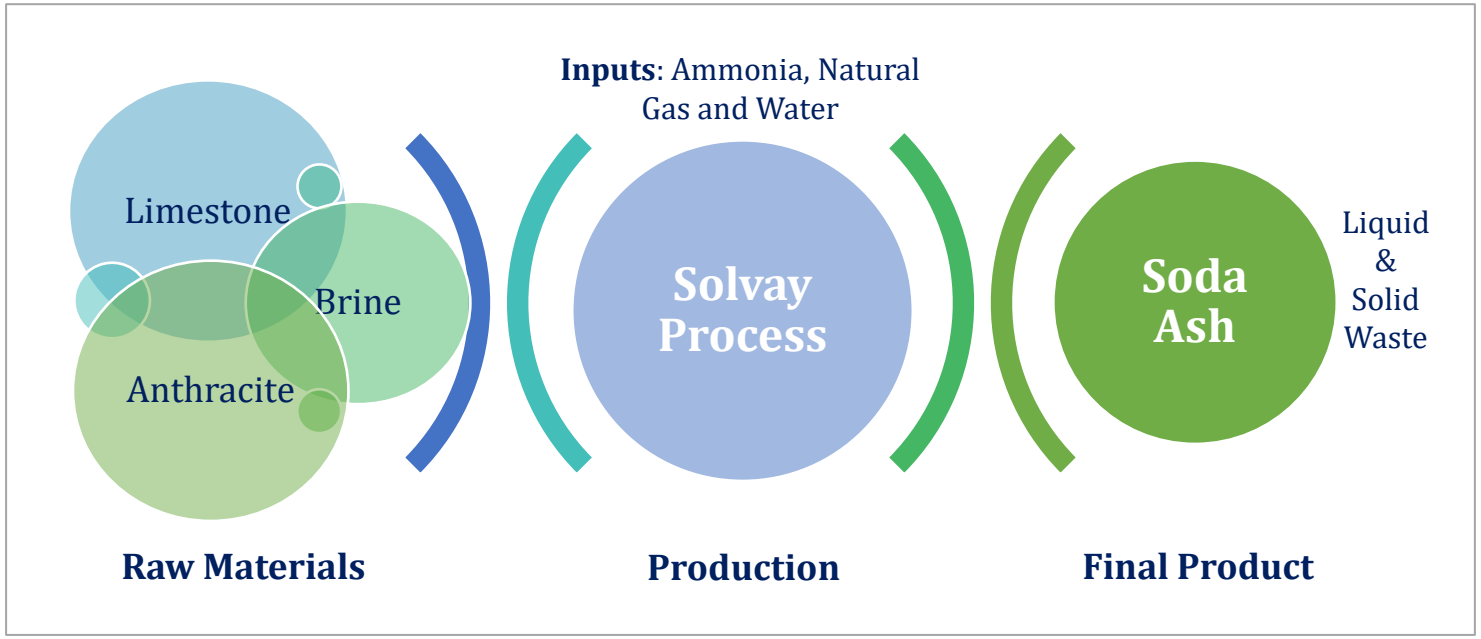
Note: *Data is based on 2 PACRA-rated/ listed Sector players.*

Source: PSX, PACRA Database

Chemicals

Soda Ash | Production Process

- Soda Ash (Na_2CO_3) is an anhydrous white powder or granular material that is available in two grades, light and dense. Dense soda ash is an anhydrous substance mostly used in the manufacturing of industrial chemicals. Light soda ash is used as a pH regulator in various industrial processes.
- In the ammonia-soda process, common salt, sodium chloride, is treated with ammonia and then carbon dioxide, under carefully controlled conditions, to form sodium bicarbonate and ammonium chloride. When heated, the bicarbonate yields sodium carbonate (soda ash), the desired product; the ammonium chloride is treated with lime to produce ammonia for reuse and calcium chloride.
- The ammonia-soda process encountered stiff competition from the older Leblanc process, but it ultimately prevailed because it produced soda ash more cheaply.



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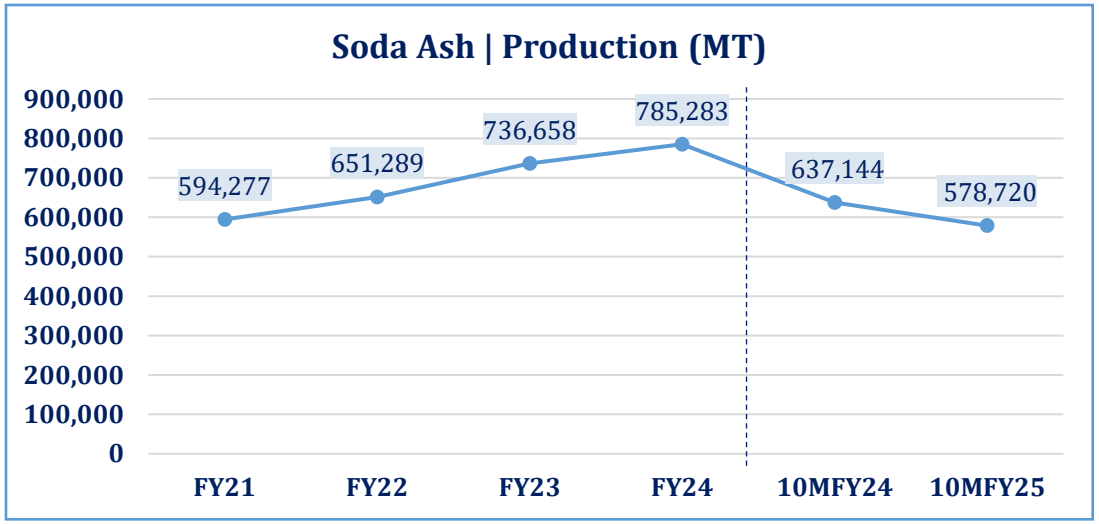
Soda Ash | Demand and Supply

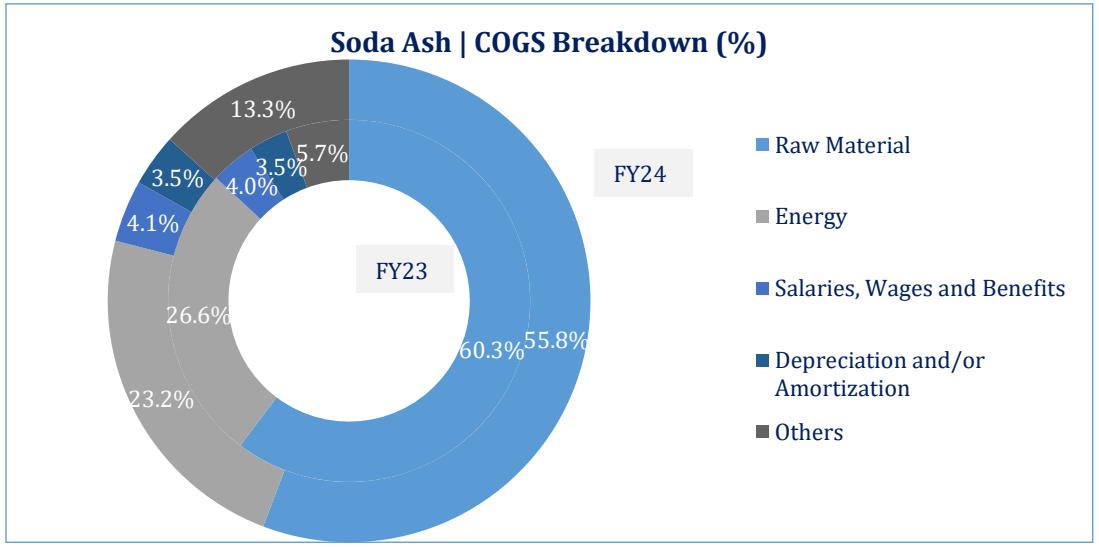
- The two major players of soda ash production in Pakistan include LCI (Lucky Core Industries) and Olympia Chemicals which amount to ~90% of the total Soda Ash production (remaining ~10% from imports). The overall local production of Soda Ash stood at ~785,283MT during FY24 (FY23: ~736,658MT), indicating a ~6.6% YoY change. On the contrary, in 10MFY25, there was a decrease ~9.2% to ~578,720MT in comparison to 10MFY24 (~637,144MT).

- Major raw materials required for soda ash production include sodium chloride (salt), limestone, coal and ammonia. Soda Ash holds ~0.1% weightage in the chemicals segment on LSM.

- Raw Materials is the largest component of the segment's total costs, comprising ~55.8% in FY24 (FY23: ~60.3%), it is than followed by energy at ~23.2% (FY23: ~26.6%).

- The demand outlook for the segment remains stable as there are no close substitutes of glasses, detergents and silicate. The threat of any substitutes in the Pharmaceutical sector is also mitigated due to rising population and disease burden in the country.





Note: *Data is based on 2 PACRA-rated/ listed Sector players. Production figures pertain to PBS QIM data classified under "Manufacturing of Chemicals, Chemical Products"*

Source: PSX, PACRA Database

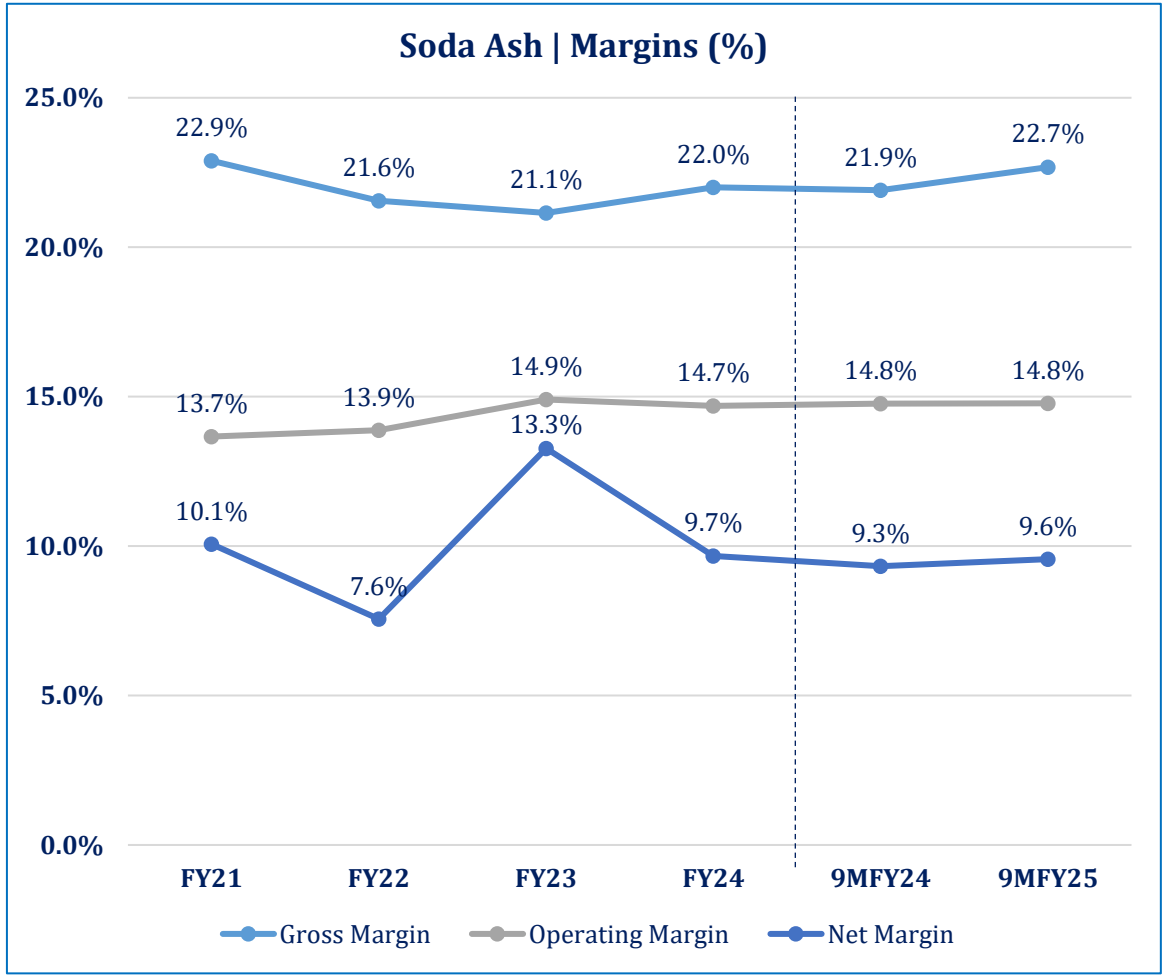
Chemicals

Soda Ash | Margins

- During FY24, the average gross margins for the segment improved slightly to ~22.0%, in line with ~6.6% YoY higher Soda Ash sales revenue. Meanwhile, average operating margins declined to ~14.7% due to cost push inflation in the country.

- Segment's net profit declined by ~27.1% YoY (FY23: ~13.3%) based on ~31.8% YoY higher finance costs for the segment. These sharp declines are due to multiple factors such as lower export prices, dumped imports (as soda ash depends majorly on raw materials), and weak domestic demand.

- In 9MFY25, average gross profit margins stood at ~22.7% owing to a ~16.1% YoY higher sales revenue (9MFY24: 21.9%). The operating margins remained the same while there was also an increase of ~3.2% YoY seen in the net margins.



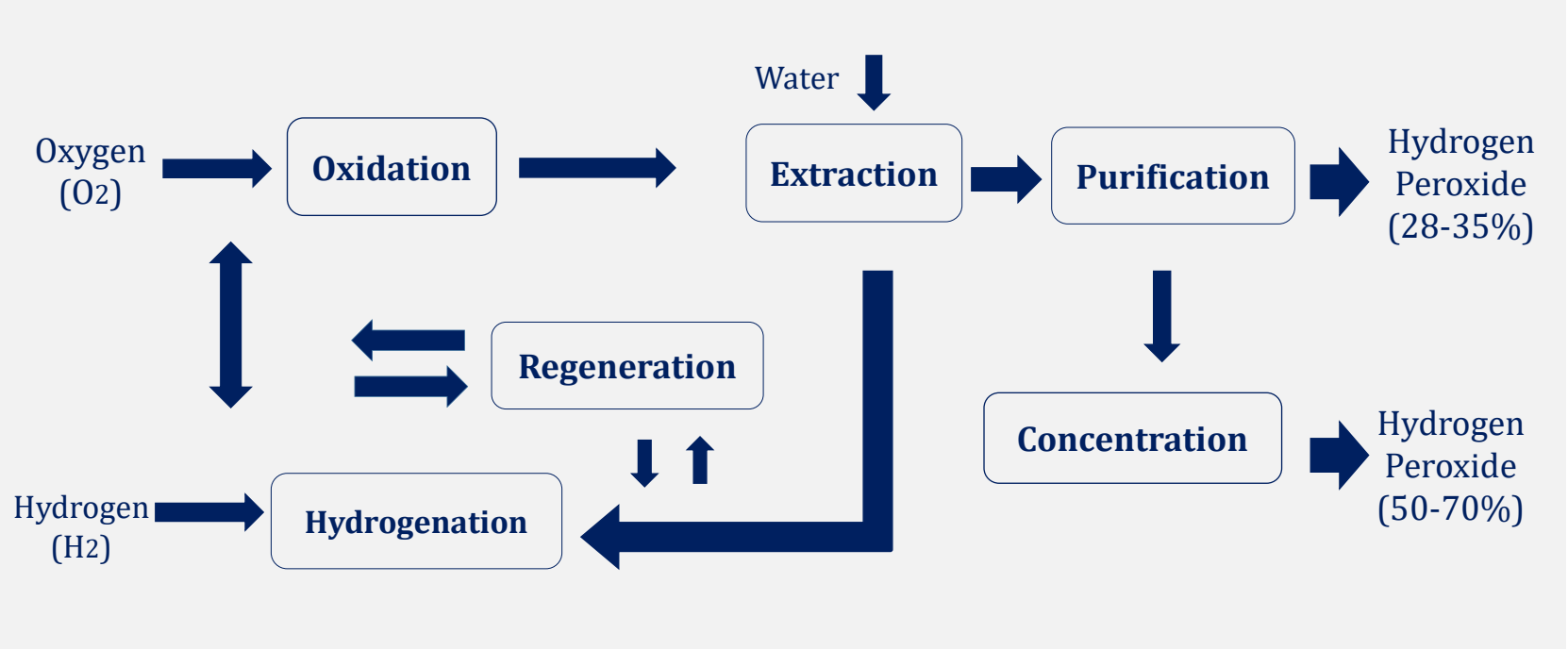
Note: *Data is based on 2 PACRA-rated/ listed Sector players.*

Source: PSX, PACRA Database

Chemicals

Hydrogen Peroxide | Production Process

- Hydrogen Peroxide (H_2O_2) is a colorless viscous unstable liquid with strong oxidizing properties. It can, however, act as a reducing agent for strong oxidants. Upon decomposition, it forms water and releases oxygen which makes it an environment-friendly product.
- It is an important chemical with demand driven from the industrial sectors where it is used as an oxidizing, bleaching and sterilizing agent. It is used in a variety of industries including textile, paper/pulp, food packaging and healthcare sectors.
- Palladium catalyzes the reaction between Hydrogen and Anthraquinone to create Anthrahydroquinone. The palladium catalyst is filtered out of the solution. The solution is then oxidized by blowing air through the solution, forming the H_2O_2 (Hydrogen Peroxide). The hydrogen peroxide is removed in a liquid-liquid extraction column and concentrated by vacuum distillation.

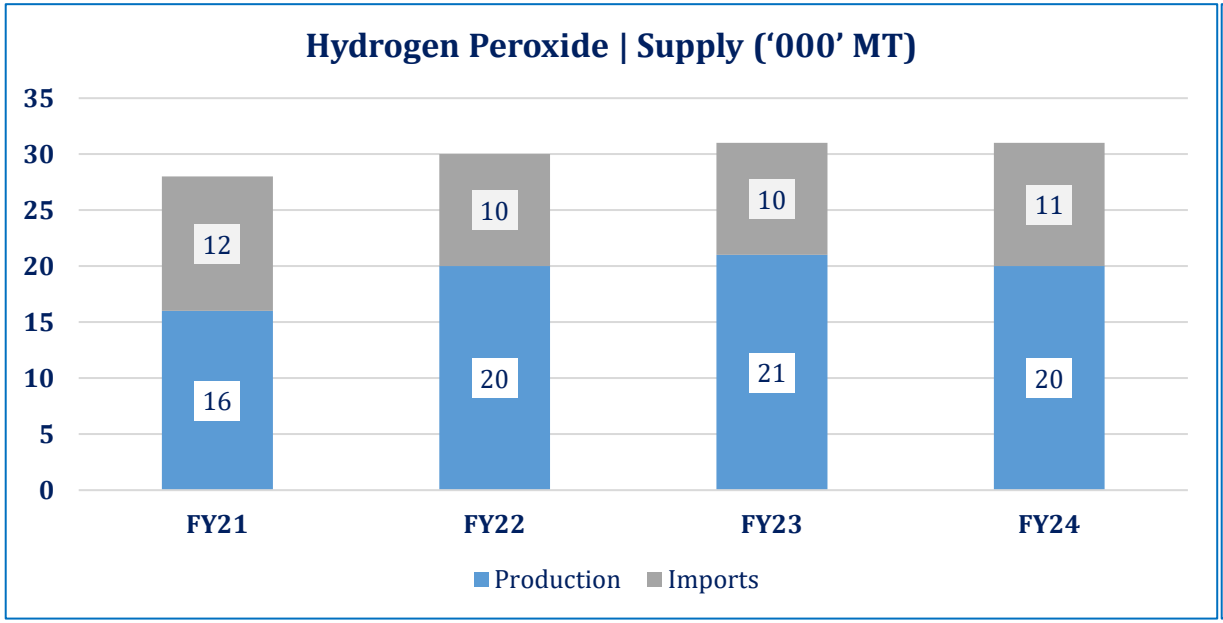


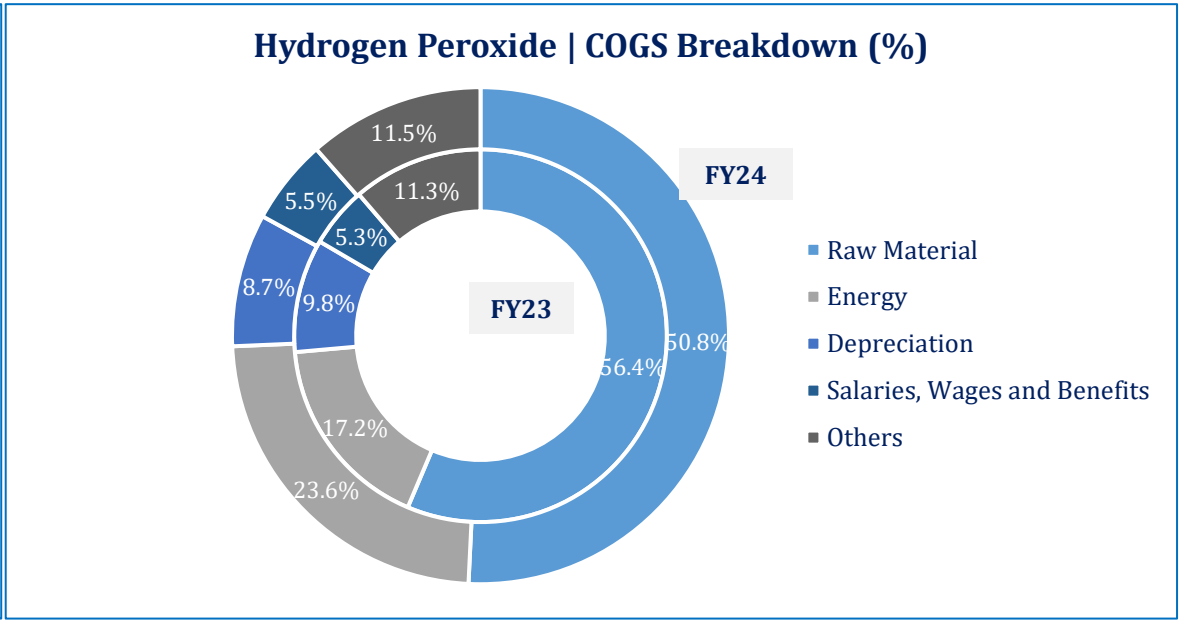
Source: Medical News

Hydrogen Peroxide | Demand and Supply

- Local supply for the segment comprises local production and imports, with ~64.3% and ~35.7% average shares during FY21-24, respectively. During FY24, local production registered ~4.2% YoY decrease while the imports increased to ~11,618MT (~15.2% YoY). Total supply for hydrogen peroxide increased to ~31,804MT, up ~2.1% YoY. As of Jun'24, the segment's production capacity remains the same at ~21,000MT, while capacity utilization decreased to ~96.1% (SPLY: ~100.3%).

- The segment's cost of goods is dominated by raw material and power expenses, among others. The two basic raw materials required in hydrogen peroxide production are hydrogen and oxygen, where these can be attained using multiple sources and chemicals. In FY24, raw materials accounted for ~50.8% (FY23: ~56.4%) of the total cost while power made up ~23.6% (FY23: ~17.2%). The electricity rate hikes seen during the year led to an increase in the overall share of this segment.





Note: *Data is based on 1 PACRA-rated/listed Sector player. Imports are reflective of HS code 2847.000.*

Source: PSX, PACRA Database

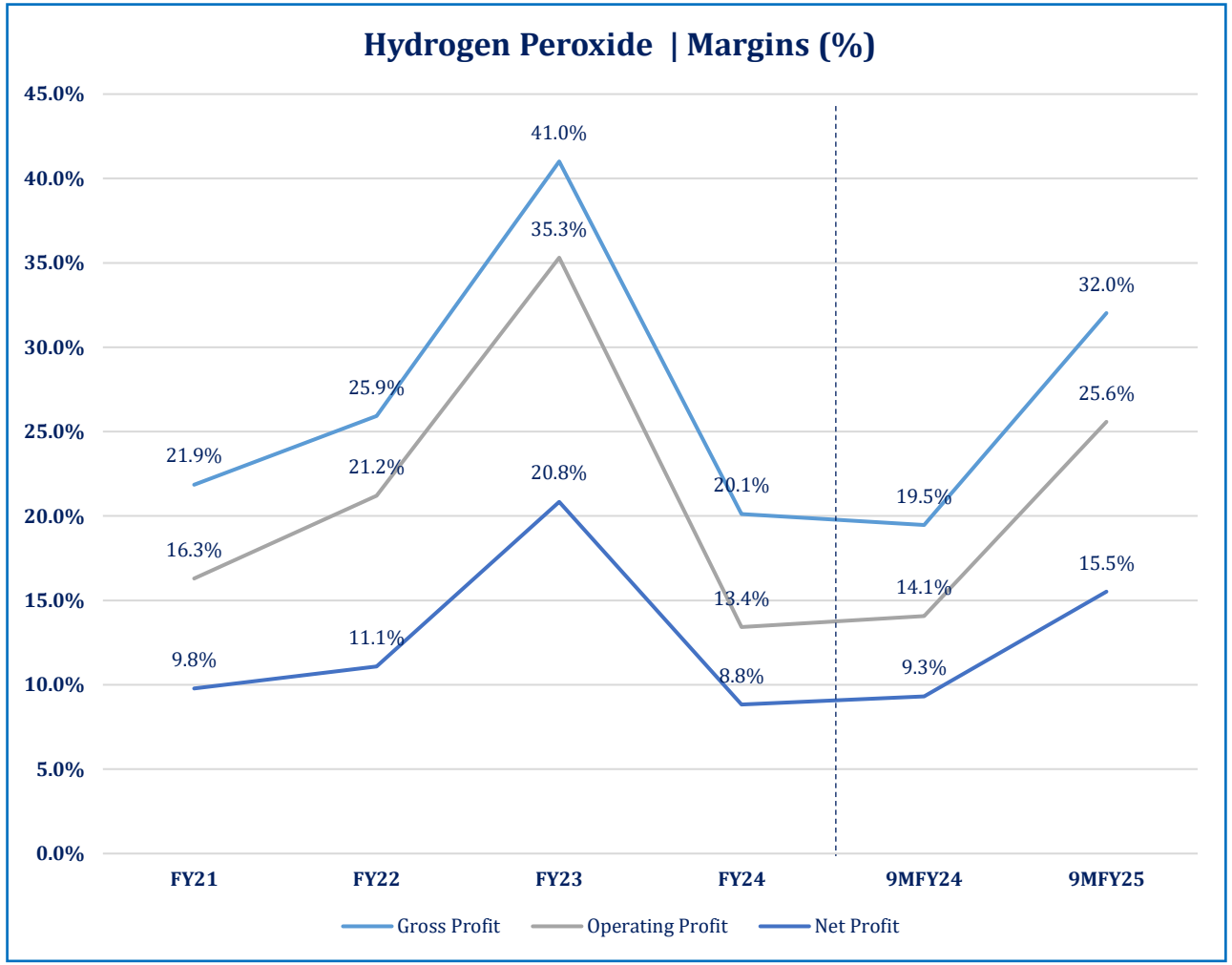
Chemicals

Hydrogen Peroxide | Margins

- In FY24, the gross margins declined to from ~41.0% to ~20.1% (~51.0% YoY). The operating and net margins also declined to ~13.4% (~62% YoY) and ~8.8% (~57.6% YoY), respectively. This is in line with ~14.6% YoY decline in Hydrogen Peroxide sales revenue.

- During FY24, all average margins showed massive declines mainly due to issues such as higher energy related costs, high taxation & foreign players (like China & Turkey) selling their products in the local market at unfairly low prices (dumping).

- In 9MFY25, gross profit margins increased to ~32.0%, owing to ~5.4% YoY higher sales revenue. The operating and net profit margins also saw an increase to ~25.6% and ~15.5%, respectively. This can be attributed to improved economic conditions (lower interest rates and inflation), which has boosted consumer confidence and spending.



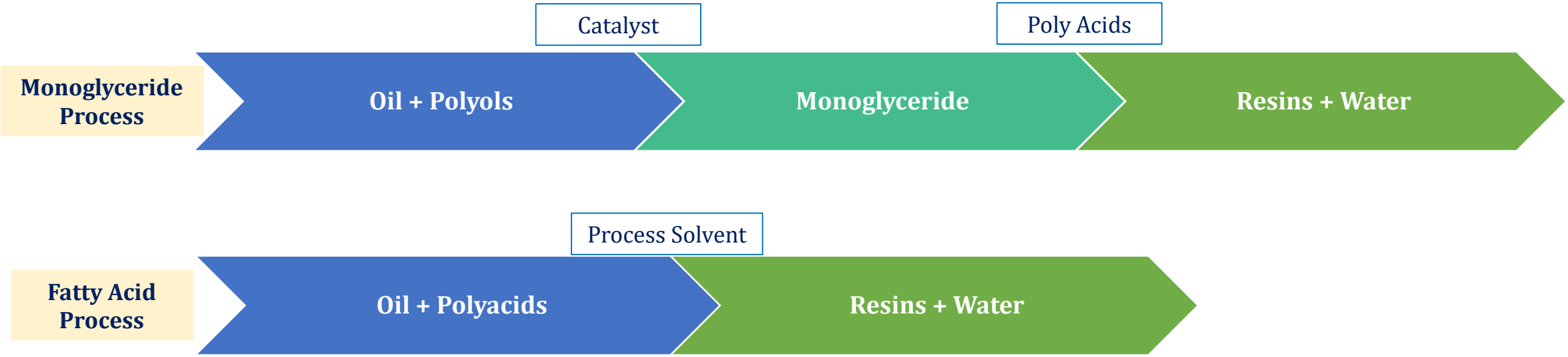
Note: *Data is based on 1 PACRA-rated/ listed Sector players.*

Source: PSX, PACRA Database

Chemicals

Resins | Production Process

- **Product Portfolio**: Resins include Alkyd Resins & Modified Alkyds Resins for Decorative, Refinish & OEM Paints, Amino Resins, Rosin Modified Resins, Acrylic, Styrene Acrylic & PVA Emulsion binders, Wetting Agent, Antifoam and drier (classified broadly as coatings and emulsions), Specialty chemicals for pre-treatment and finishing for textile as well as paper & pulp chemicals.
- **Production Process**: There are predominantly two processes used to produce resins: the monoglyceride process and the fatty acid process. The monoglyceride process first heats oil with polyols and catalysts, this makes the oil polar. In the second step, the monoglyceride formed is reacted with poly acids to form resin and water (a by-product).
- The fatty acid process completes the production in one step, which reduces the production cycle time. Oil is directly heated with poly acids and a process solvent which results in production of resins.



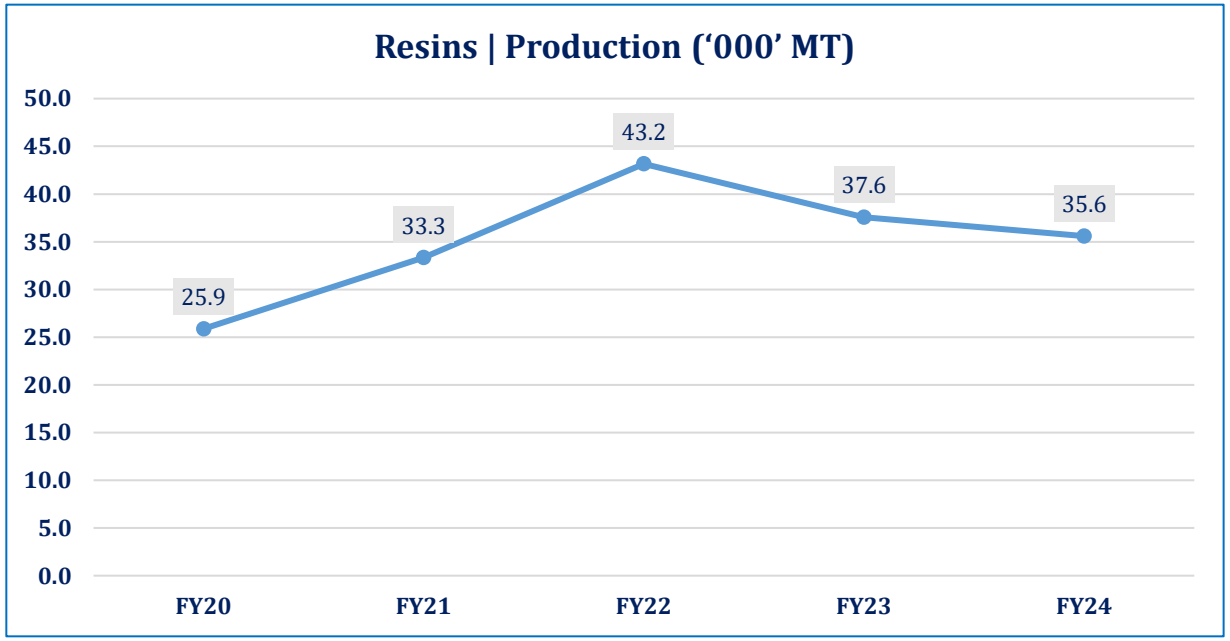
Note: *Data is based on 2 PACRA-rated/ listed Sector players.*

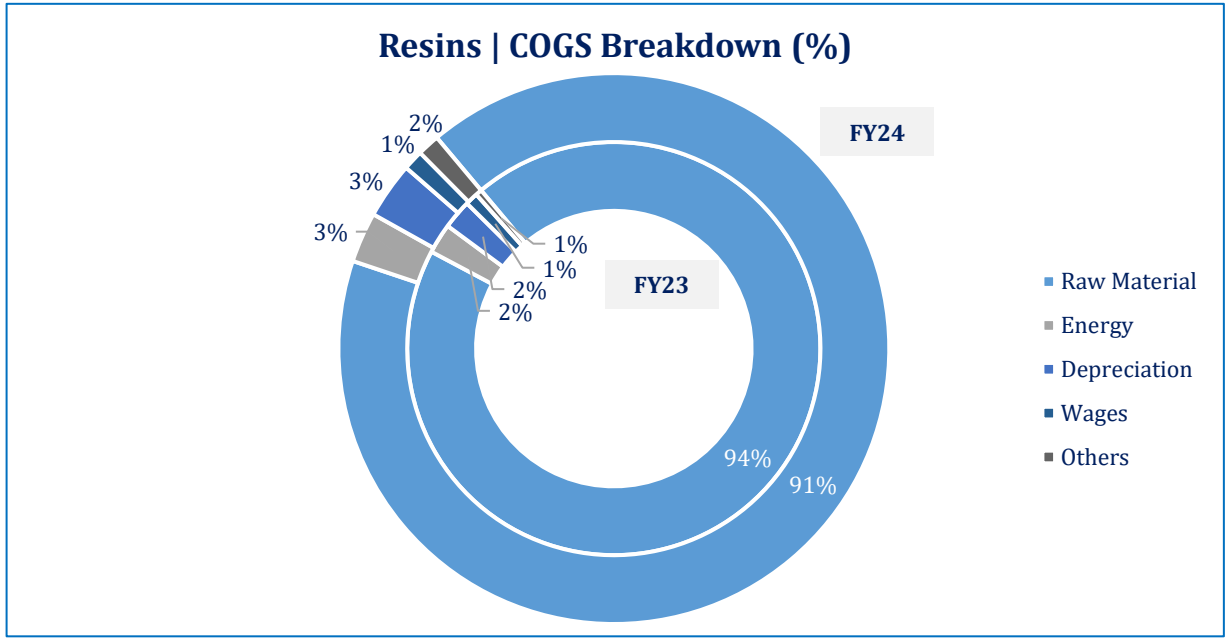
Source: ResinLibrary

Resins | Demand and Supply

- Local production of resins decreased by ~5.3% YoY in FY24, amounting to ~35,597MT, from ~37,583MT in FY23. The growth in resins segment is dependent upon the overall economic growth with major contribution coming from coatings and paints. The production capacity of the segment was ~61,560MT in FY24 (FY23: ~60,600MT). Meanwhile, utilization levels clocked in at ~62.0% during the year (FY23: ~57.8%).

- Raw material holds the biggest portion in the cost of production, accounting for ~91.3% of the cost breakup in FY24 (FY23: ~93.9%). Resins are made up of different grades and quality depending on the specific use for the relevant sector. Raw materials for resins production include lignin, polyol, solvent, catalyst, acid anhydride, and multi-epoxy compounds. These are mainly oil derivatives with strong linkage to international oil prices.





Note: *Data is based on 2 PACRA-rated/ listed Sector players.*

Source: PSX, PACRA Database

Chemicals

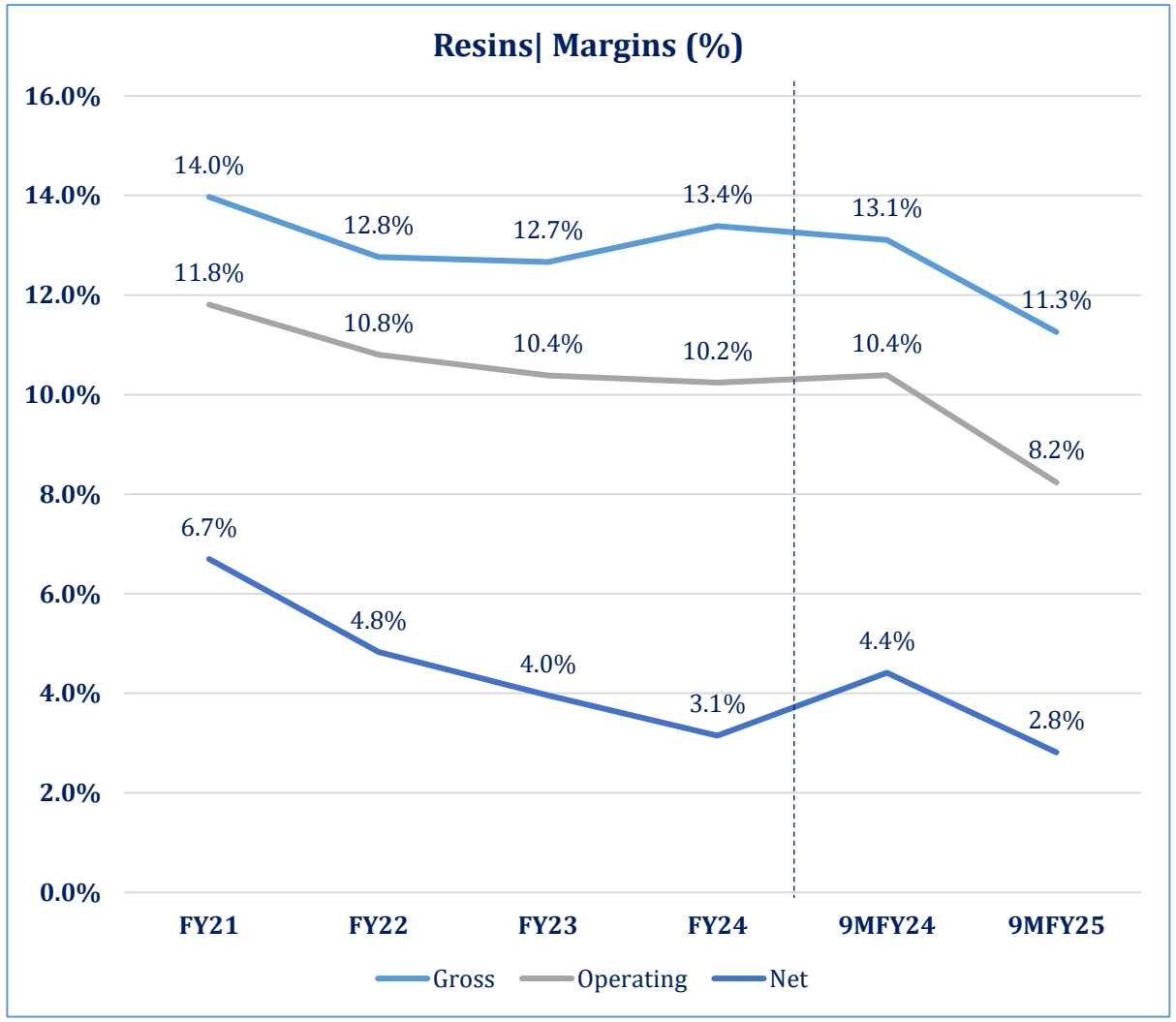
Resins | Margins

- The resins manufacturing segment operates in a highly competitive market owing to un-segmented and unorganized small producers who pose threat to large-scale manufacturers. Because of simplicity in the production process, the segment remains competitive while margins reported are relatively on the lower side.

- During FY24, average gross margins for the segment increased to ~13.4% (FY23: ~12.7%), due to ~10.3% YoY lower cost of goods sold. Meanwhile, operating margins declined to ~10.2% (FY23: ~10.4%).

- The segment's net profit margins declined to ~3.1% (FY23: ~4.0%), owing to ~10.8% YoY higher finance costs for the segment. This led to average net profit margin declining by ~29.0% YoY.

- In 9MFY25, gross and operating margin declined from ~13.1%, ~10.4% to ~11.3%, ~8.2% respectively. Net margins showed a similar trend recording at ~2.8% (9MFY24: ~4.4%). This is on the basis of issues such as elevated baseline costs, weak demand (in sectors like paints , textiles and paper) & global economic slowdown.



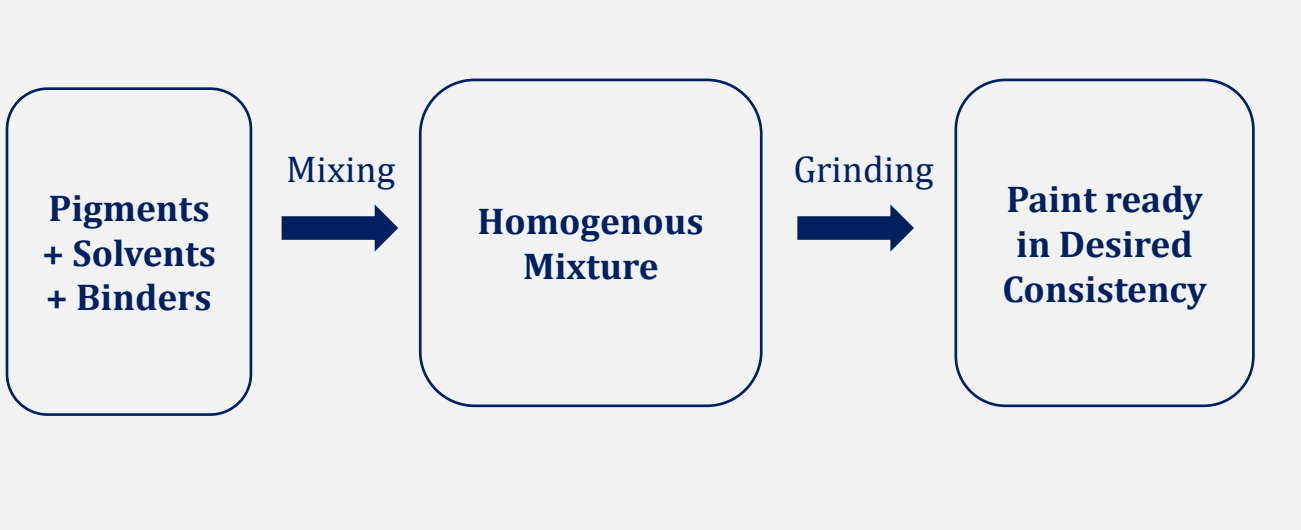
Note: *Data is based on 2 PACRA-rated/listed Sector players.*

Source: PSX, PACRA Database

Chemicals

Paints | Production Process

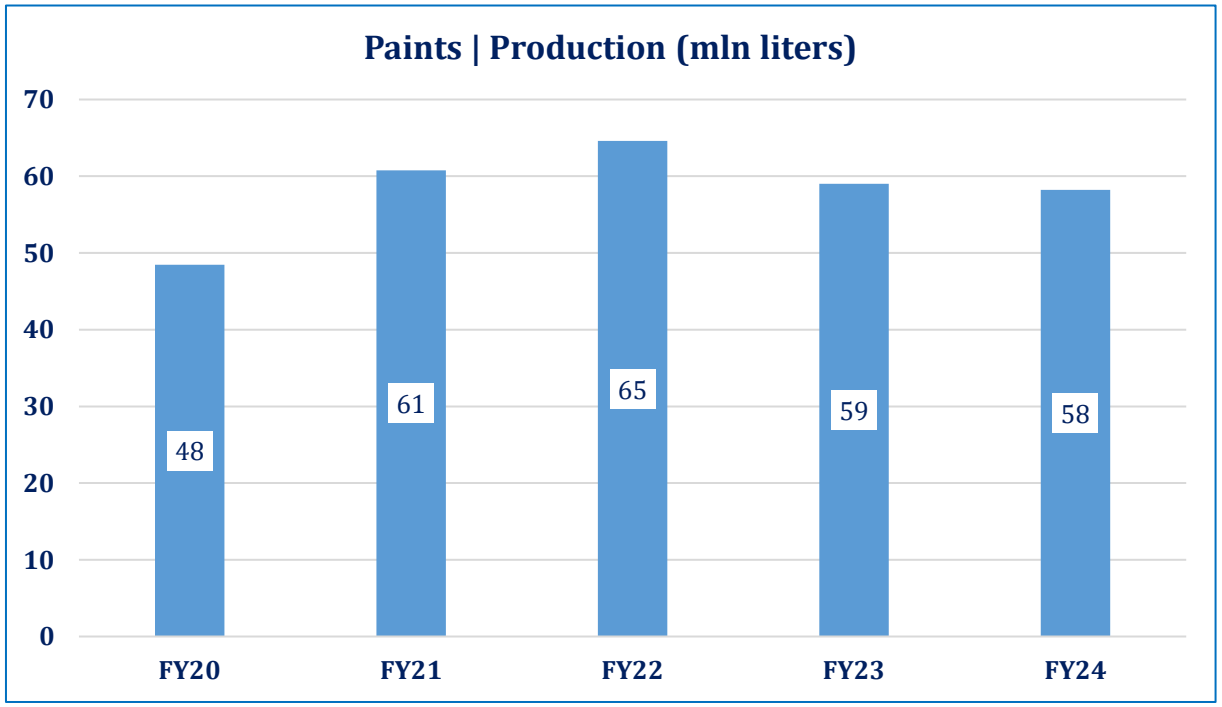
- **Segment Size:** was estimated at USD~400mln in CY23 and is expected to grow by ~3.5-4% annually over the next 4-5 years.
- **Segment Structure**: The segment comprises ~60.0% unorganized and ~40% organized players. The latter includes both multinational brands, such as AkzoNobel, Berger, Nippon and Kansai, as well as local players like Master Paints, Brighto Paints and Diamond Paints. The segment is represented by Pakistan Coating Association (PCA).
- **Product Portfolio:** The segment includes a variety of products falling under broad categories of Decorative (Primer, First Coat, Flat Paint, Gloss & Satin Finishing and Varnishes etc.) and Industrial (Solvent-based, Aquatic, Powder Coats and Anti-Fouling etc.) paints. Therefore, the segment is linked with industries such as construction, electronics, automobiles and various others.
- **Raw Materials**: These include pigments, solvent and binders, which are mixed together in the first step, with quantities determining the type of paint being produced. Once these have been mixed, a homogenous mixture is produced. After the homogenous mixture is ready, it is grinded using a mill to bring it to the desired consistency which also varies by the type of paint being produced. This completes the production process for paints.

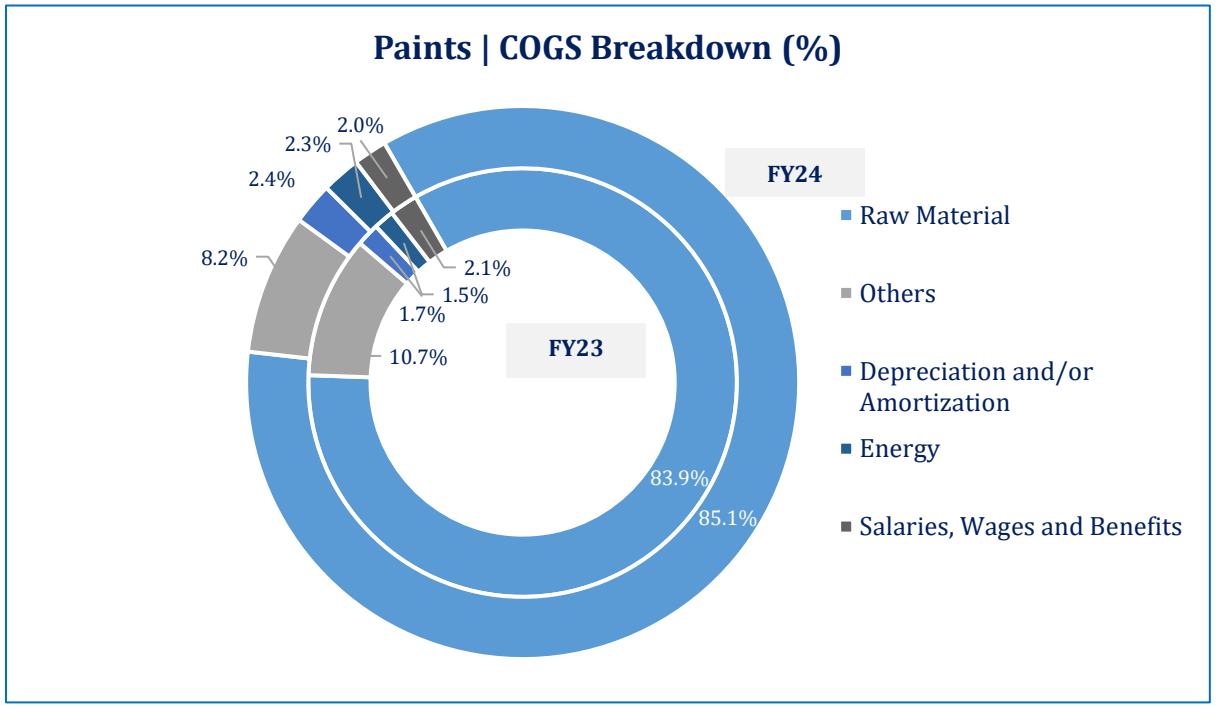


Source: Resene, TDAP, ITA

Paints | Demand and Supply

- The paints industry of Pakistan primarily serves the decorative and industrial sectors. It mainly produces coatings for buildings, infrastructure and machinery. Its demand is closely tied to construction activity, urban development and manufacturing growth. The total production of paints clocked in at ~58.2mln liters in FY24, ~1.4% YoY increase (FY23: ~59.0mln liters).
- Raw materials held the largest share of the cost breakdown at ~85.1% in FY24 (FY23: ~83.9%). These comprise mainly ethylene glycol, epoxide resin and emulsion grade, among others. The increase in raw material share in segment's total COGS during FY24 came likely on the back of ~29.3% YoY higher raw material imports. The 'Others' section contributed to ~8.2% of total cost of production in FY24 (FY23: ~8.2%).





Note: *COGS is based on 1 PACRA-rated/ listed Sector players. HS code pertaining to RM Imports include 3904.101, 3907.3, 2905.3.*

Source: PBS, PSX, PACRA Database

Chemicals

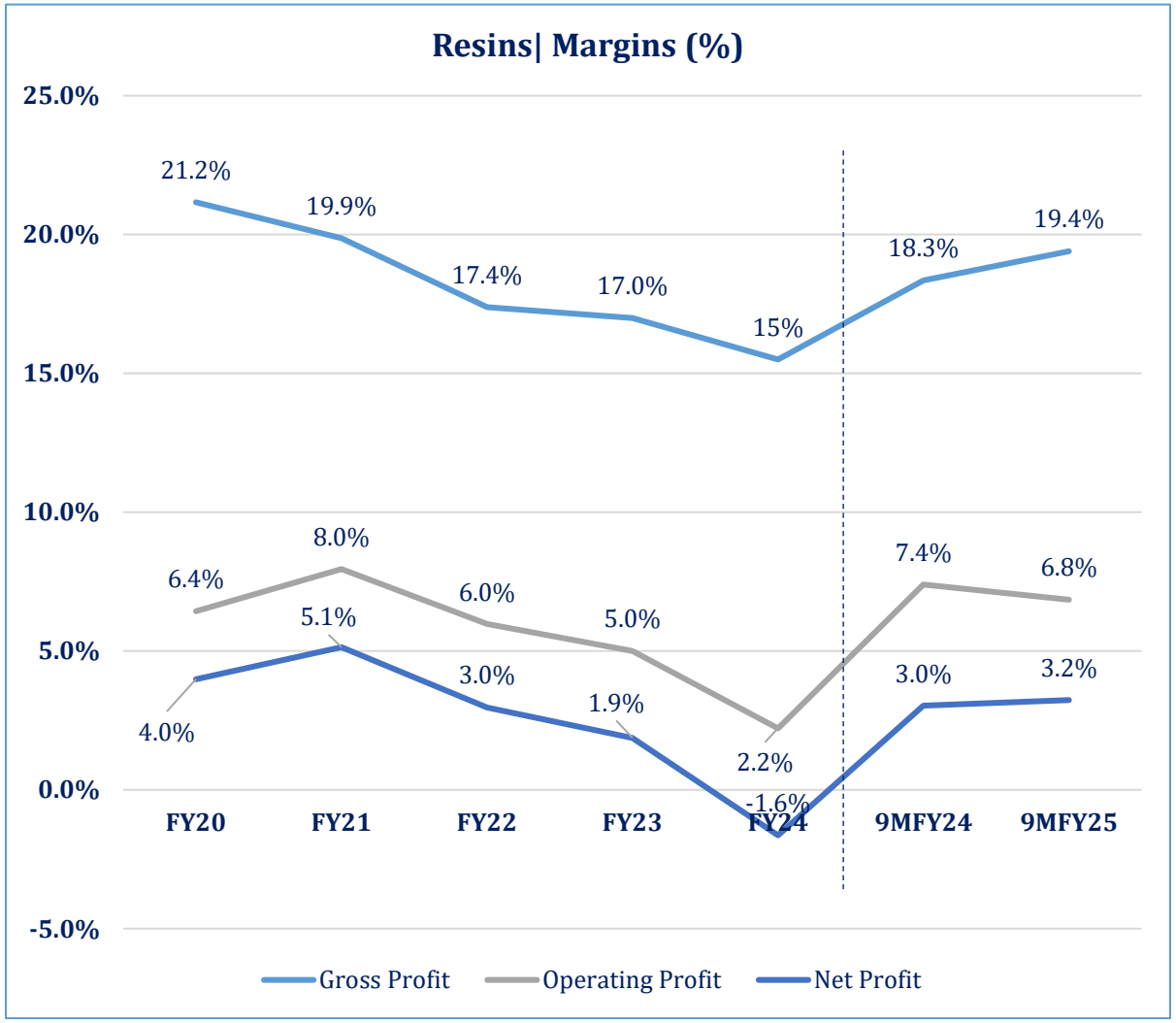
Paints | Margins

- During FY24, average gross margins for the segment decreased to ~15.0% (FY23: ~17.0%), showing a ~11.8% YoY increase in line with ~10.3%% YoY higher cost of goods sold despite a ~7.9% YoY higher sales revenue.

- Meanwhile, operating margin also declined to ~2.2% due to Akzo Nobel opening a new factory in Faisalabad leading to higher operational costs and administrative expenses.

- Segment's net margins were in a loss on the basis of a massive increase of ~96.2% YoY finance costs. The net margins recorded at ~-1.6% (FY23: ~1.9%), showing a loss of ~187.45% YoY.

- In 9MFY25, gross and net profit margins saw an increase, recording at ~19.4% and ~3.2%, respectively . The operating margins, however declined to ~6.8% (9MFY24: ~7.4%).



Note: *Data is based on 3 PACRA-rated/ listed Sector players.*

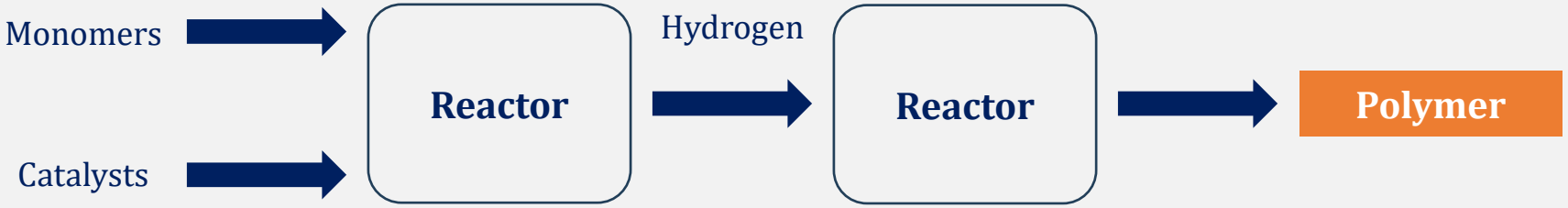
Source: PSX, PACRA Database

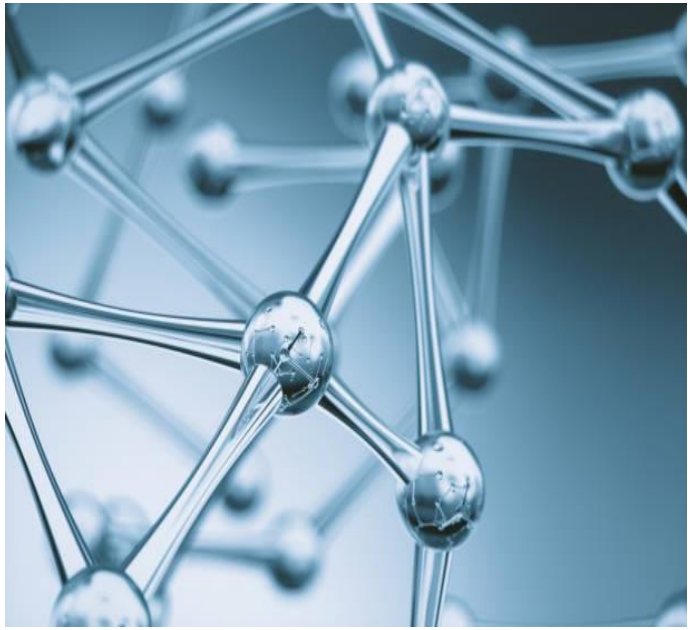
Chemicals

Polymers | Production Process

- Outlined below is the production process of polymers. Its primary inputs are monomers and catalysts. Production of polymers is a two-step process, where the materials go through two different reactors.

- The first step is to put the monomers and catalyst through a reactor, their reaction produces comonomer hydrogen which is then once again put through a reactor and its reaction produces polymers.

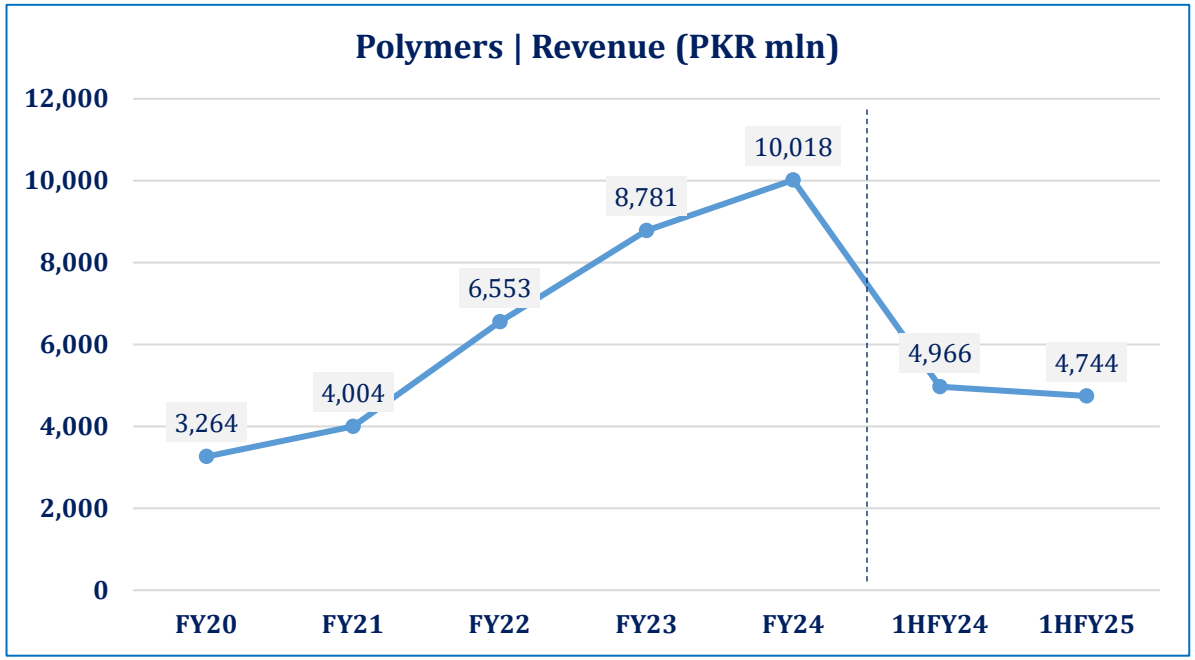


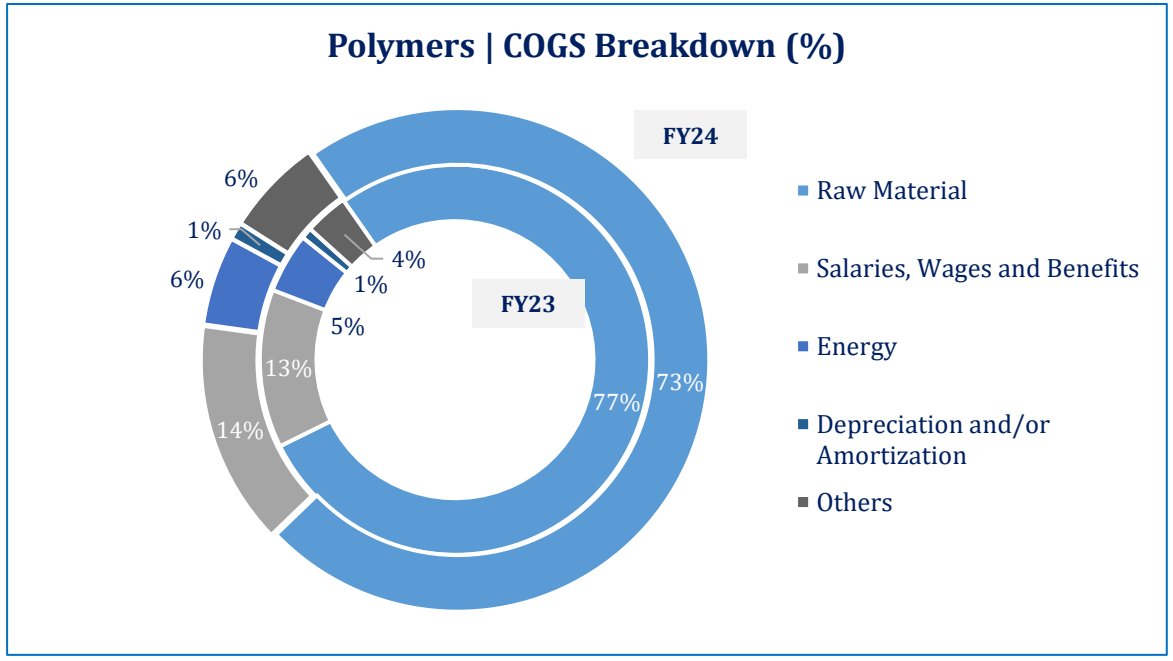


Source: Live Science

Polymers | Demand and Supply

- Polymers are used in the manufacturing of a diverse range of products, ranging from plastic bags and packaging to textiles, medical instruments and even cooking appliances. As a result, the demand for polymers comes from a set of diverse sectors. One of the most prominent use of polymers in Pakistan is in football manufacturing, of which Pakistan held ~70.0% global market share as of CY24. It also had recorder to manufacture almost 40 million balls annually, which is worth USD~210mln.
- Polymer sales revenue show an upward trend recording a ~14.1% YoY increase in FY24 to PKR~10,018mln (FY23: PKR~8781mln) with a CAGR of ~32.4% during FY20-24. Meanwhile, in 1HFY25, revenue recorded a slight decrease of ~4.7% YoY.
- Raw materials accounted for the majority of the segment's total costs, amounting for ~72.5% in FY24 (FY22: ~77.4%). The second largest contributor to cost were salaries which made up ~14.4% of total costs in FY23 (~13.1%).





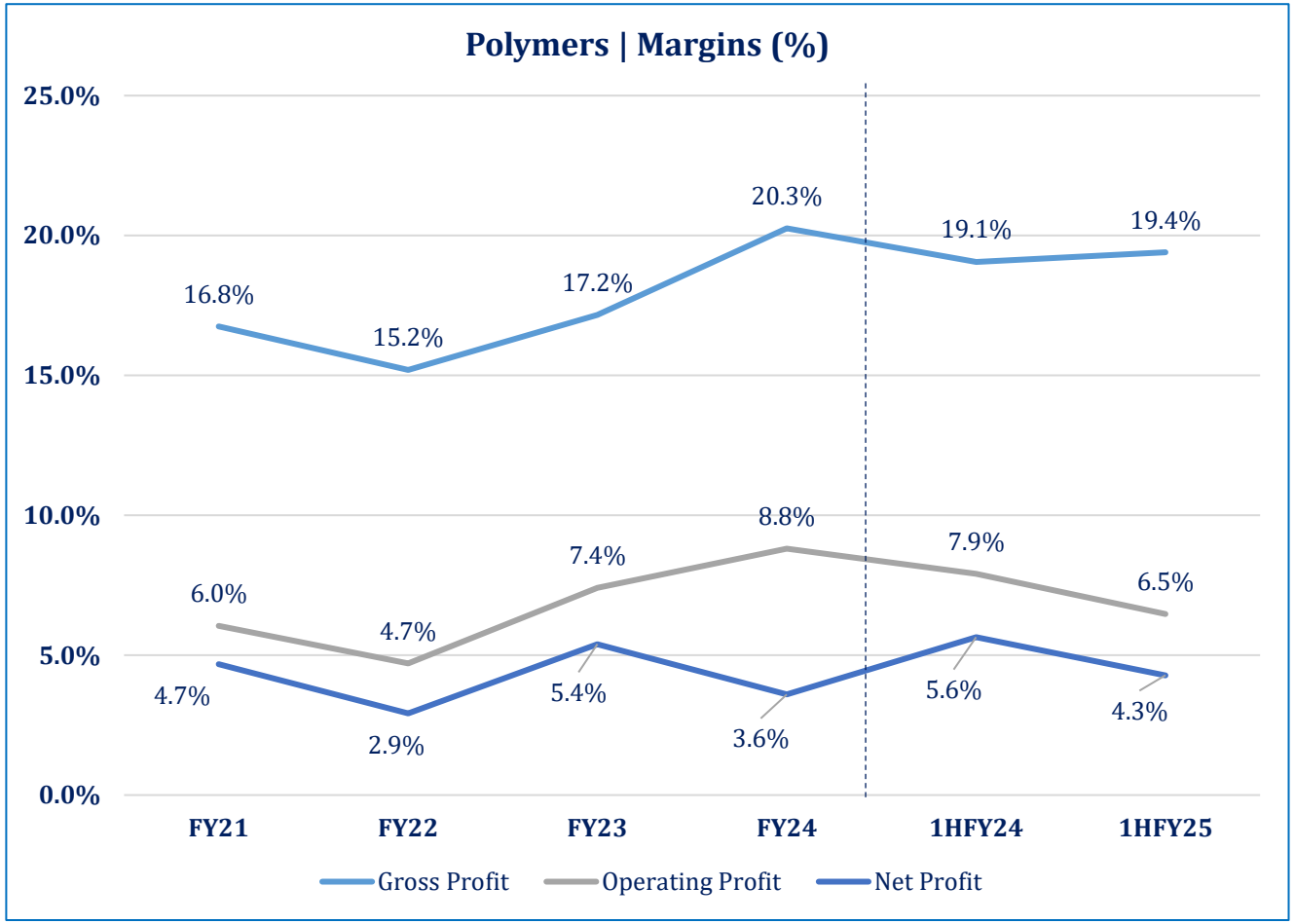
Note: *Data is based on 1 PACRA-rated players.*

Source: PACRA Database, ADB

Chemicals

Polymers | Margins

- During FY24, gross margins for the segment increased to ~20.3%, in line with ~14.1% YoY higher polymer sales revenue.
- Meanwhile, operating margin also increased to ~8.8% due lower inflation rates in the country (National CPI averaged ~12.6% compared with ~29.4% during FY23).
- Segment's net profit decreased by ~33.3% YoY (FY22: ~156.0% YoY growth), on the back of higher taxation (~367.5% YoY) for the segment. Therefore, net profit margin decreased to ~3.6% during the year.
- In 1HFY25, gross margins for the segment increased to ~19.4%, while gross and net margins declined to ~6.5% & ~4.3% respectively



Note: *Data is based on 1 PACRA-rated players.*

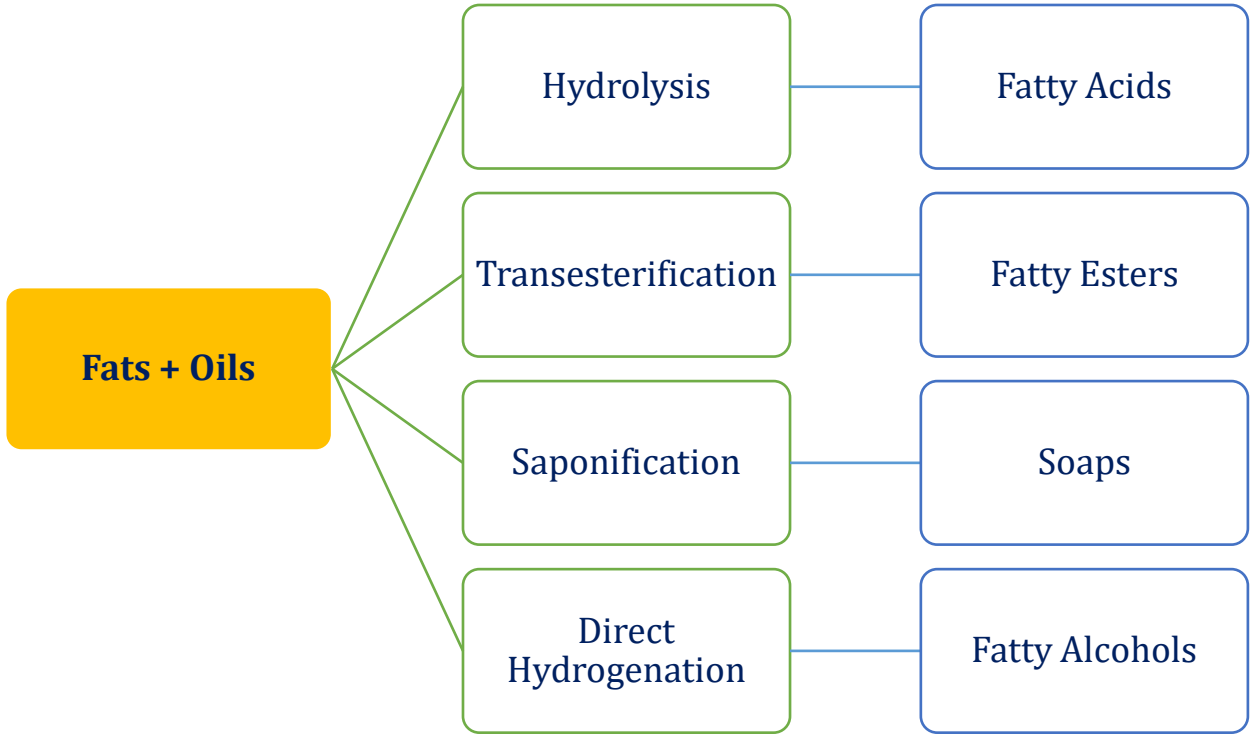
Source: PACRA Database

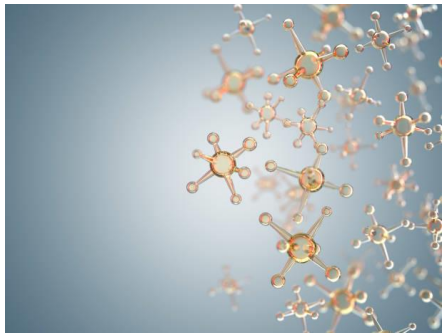
Chemicals

Oleochemicals | Production Process

- Oleochemicals have four different processes, each of which gives a different by-product for different product manufacturing. These process are: hydrolysis, transesterification, saponification and direct hydrogenation.

- The primary inputs for the manufacturing of oleochemicals are fats and oils. These depend on which type of process is used and by-product is needed.



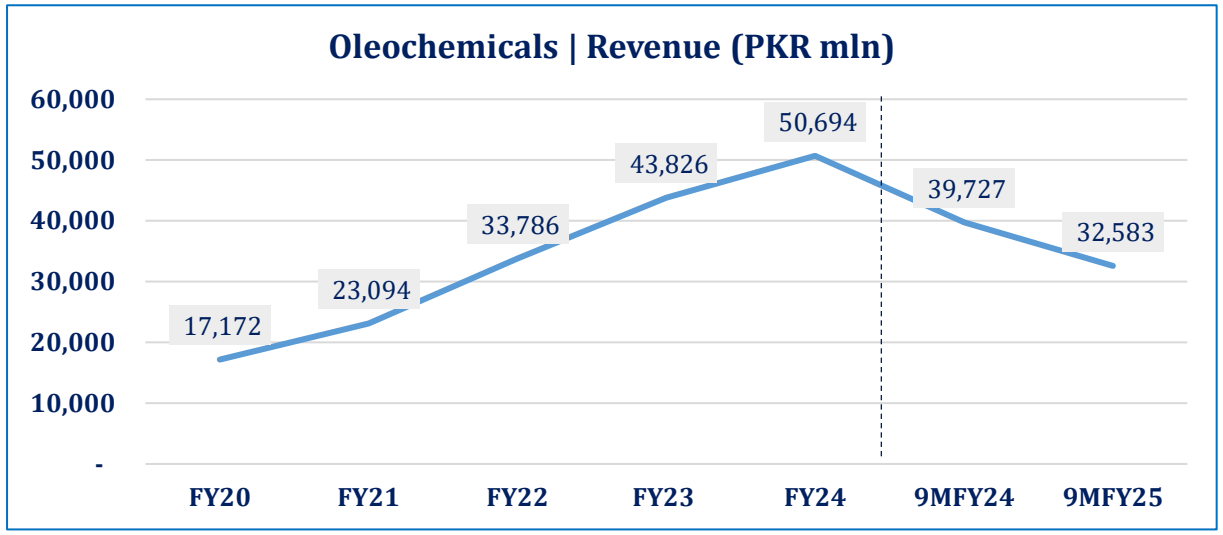


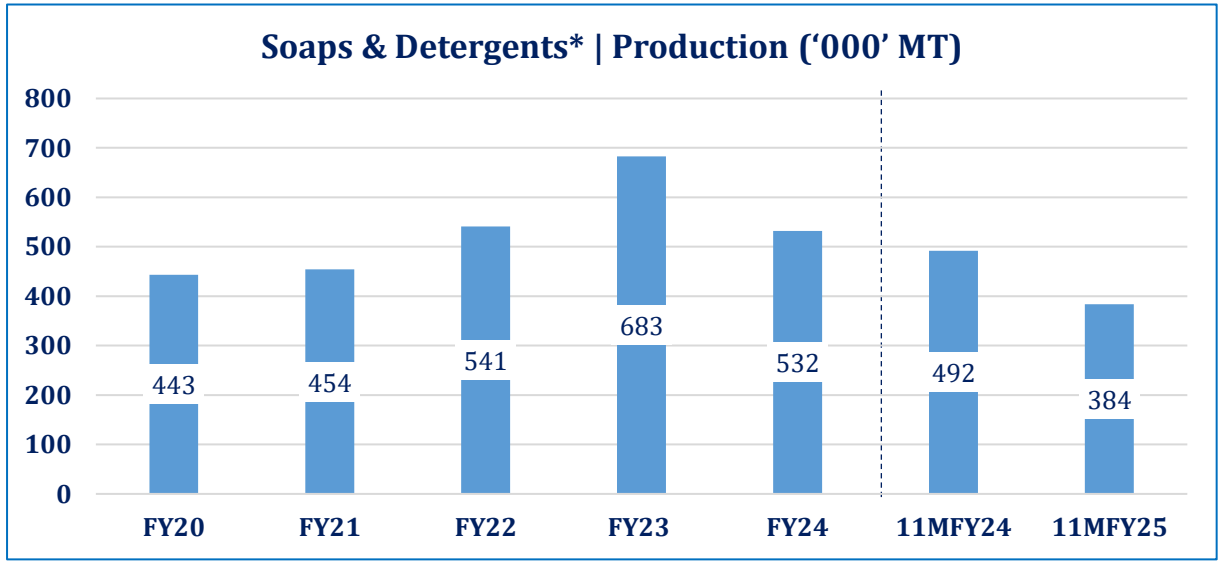
Source: Science Direct

Chemicals

Oleochemicals | Demand and Supply

- Oleochemicals are used in a wide range of products and therefore, is an important input for the lubricants, plastics, paper, soaps and lotions industries.
- The total installed capacity of the segment was recorded at ~140,000MT in FY24 (FY23: ~140,000MT). Nimir Chemicals holds majority market share in the oleochemicals segment.
- Segment's revenue has exhibited CAGR of ~24.2% during FY20-24, while registering ~15.7% increase YoY in FY24 to record at PKR~50,694mln (FY23: PKR~43,826mln).
- Total production of soaps and detergents (including toilet soaps) in the country recorded ~32.8% YoY decrease in FY24, with these forming ~11.12% share in chemicals products section of the Chemical Sector, as recorded in QIM. The same trend was seen in 10MFY25, where soaps and detergents recorded ~25.0% YoY decline in production levels and amounted to ~292,500MT.





Note: *Data is based on 2 PACRA-rated/ listed Sector players. *Soaps & Detergents also include toilet soaps, while data is representative of LSM QIM.*

Source: PACRA Database

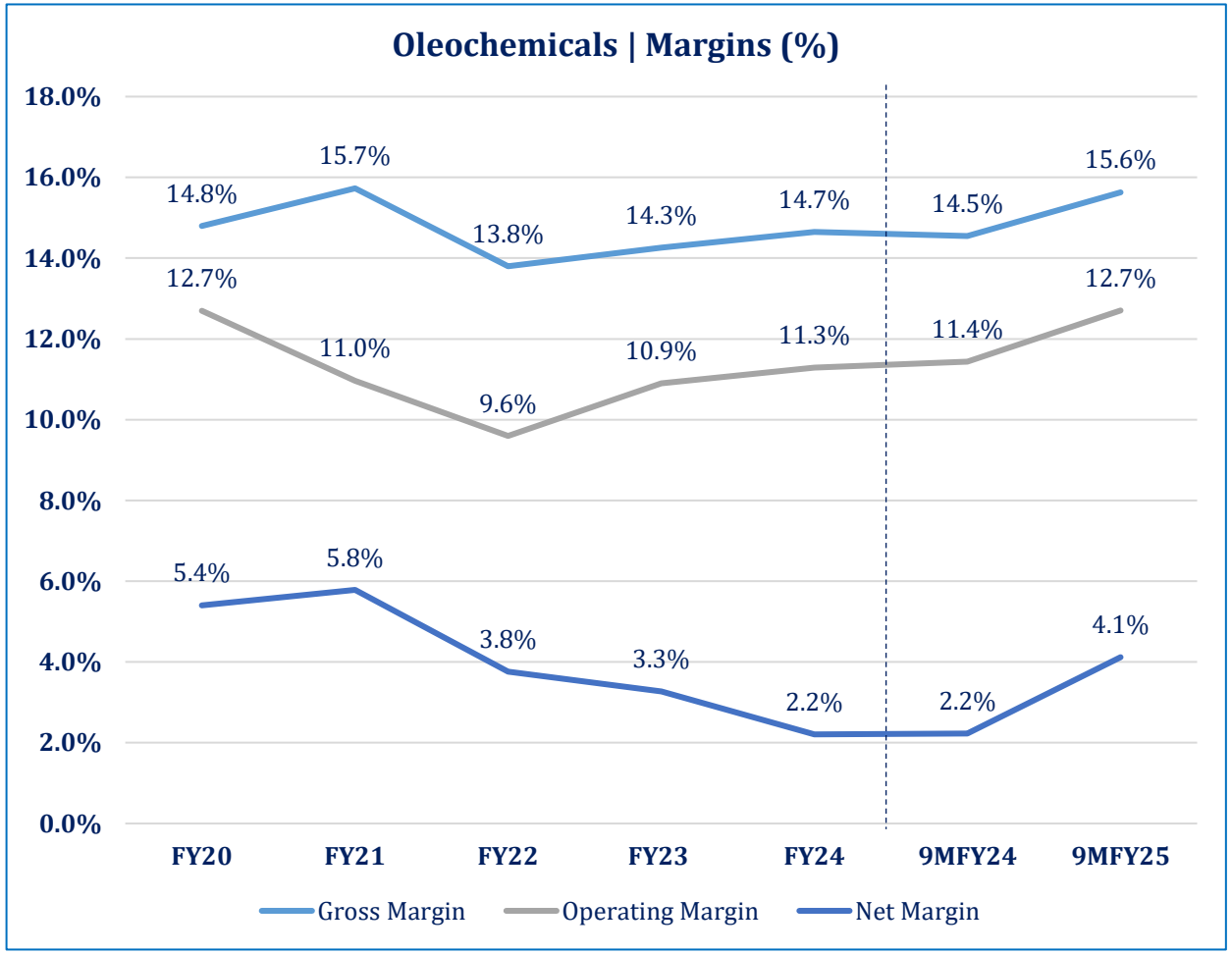
Chemicals

Oleochemicals | Margins

- The oleochemicals segment has largely been characterized by increasing finance cost during FY22-24 which has resulted in net profit margin declining from ~5.8% in FY21 to ~2.2% in FY24. Gross profit margins clocked in at ~14.7% in FY24 owing to a ~4.5% YoY decline in COGS. The operating margins increased from ~10.9% to ~11.3% (~3.7% YoY).

- In 9MFY25, gross and operating margins saw an upward trend on the back of a lower COGS (~2.1% YoY), to ~15.6% & ~12.7%, respectively. Net profit margins also saw an increase, clocking in at ~4.1% due to ~33.9% lower financial costs during this period.

- Raw materials held the largest share of overall costs at ~87.2% in FY24 (FY23: ~84.8%), comprising mainly fats and oils. Next to Raw materials was the Power component, which made up ~5.0% of overall costs in FY24 (FY23: ~4.5%).



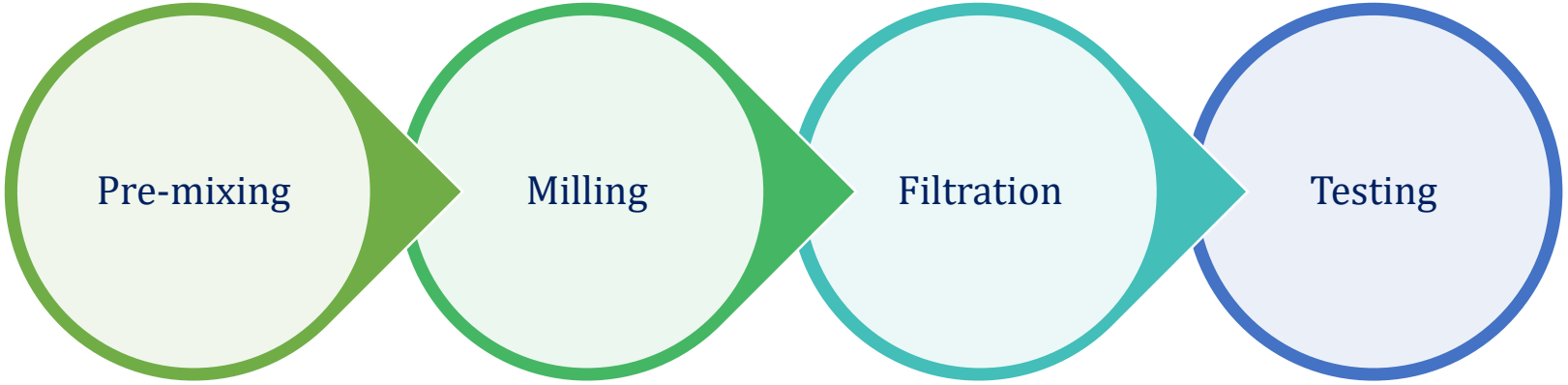
Note: *Data is based on 2 PACRA-rated/ listed Sector players.*

Source: PACRA Database

Chemicals

Printing Ink | Production Process

- **Premixing**: The addition of ingredients like pigments, waxes and driers is done at this stage.
- **Milling**: The ink is forced into the chamber and the rotating disks move the metal pellets through the ink, breaking the pigment down.
- **Filtration**: After milling, ink may be put through a series of filtration steps to remove any oversized particles.
- **Testing**: The finished ink can be tested for a wide variety of properties. Those particularly, tack, fineness of grind (pigment particle size), and water pickup (emulsification rate).



Source: Ink World

Chemicals

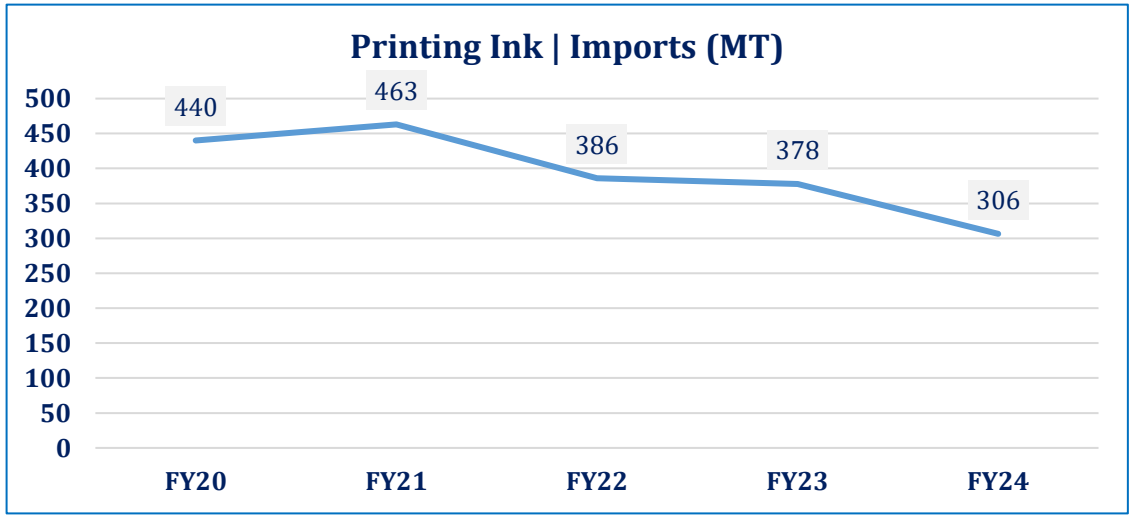
Printing Ink | Demand and Supply

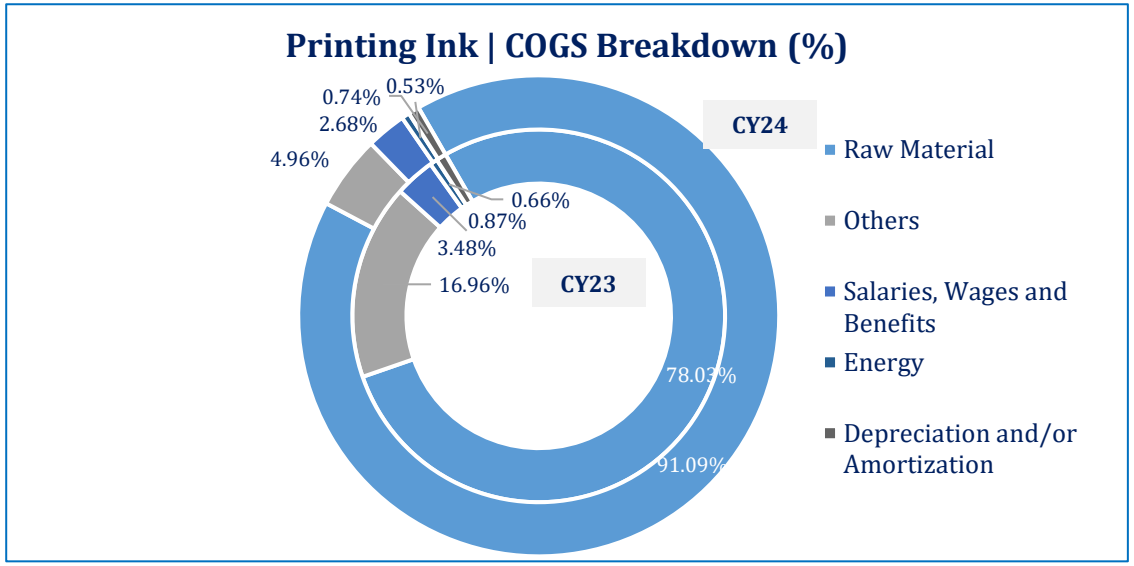
- Printing Ink is used by both direct consumers for personal printers as well as commercial users for packaging and branding purposes. Therefore, the use of printing ink is spread across a diverse range of sectors.

- The total revenue of segment recorded at PKR~11,750mln in CY24 (CY23: PKR~10,632mln), recording a YoY increase of ~10.5%.

- Printing Ink imports declined by ~19.1% YoY during FY24 and stood at ~306MT (FY23: ~378MT) mainly due to import contractions in the country during the period.

- Raw materials held the largest share of segment's overall costs at ~91.09% in CY24 (CY23: ~78.03%). The 'Others' section accounted for ~4.96%, making it the second largest contributor to cost (CY23: ~16.96%).





Note: *Data is based on 1 PACRA-rated segment player. HS Codex for imports: 3215.1190, 3215.1990. Revenue figure is estimated based on a prominent segment player's market share.*

Source: PACRA Database, PBS

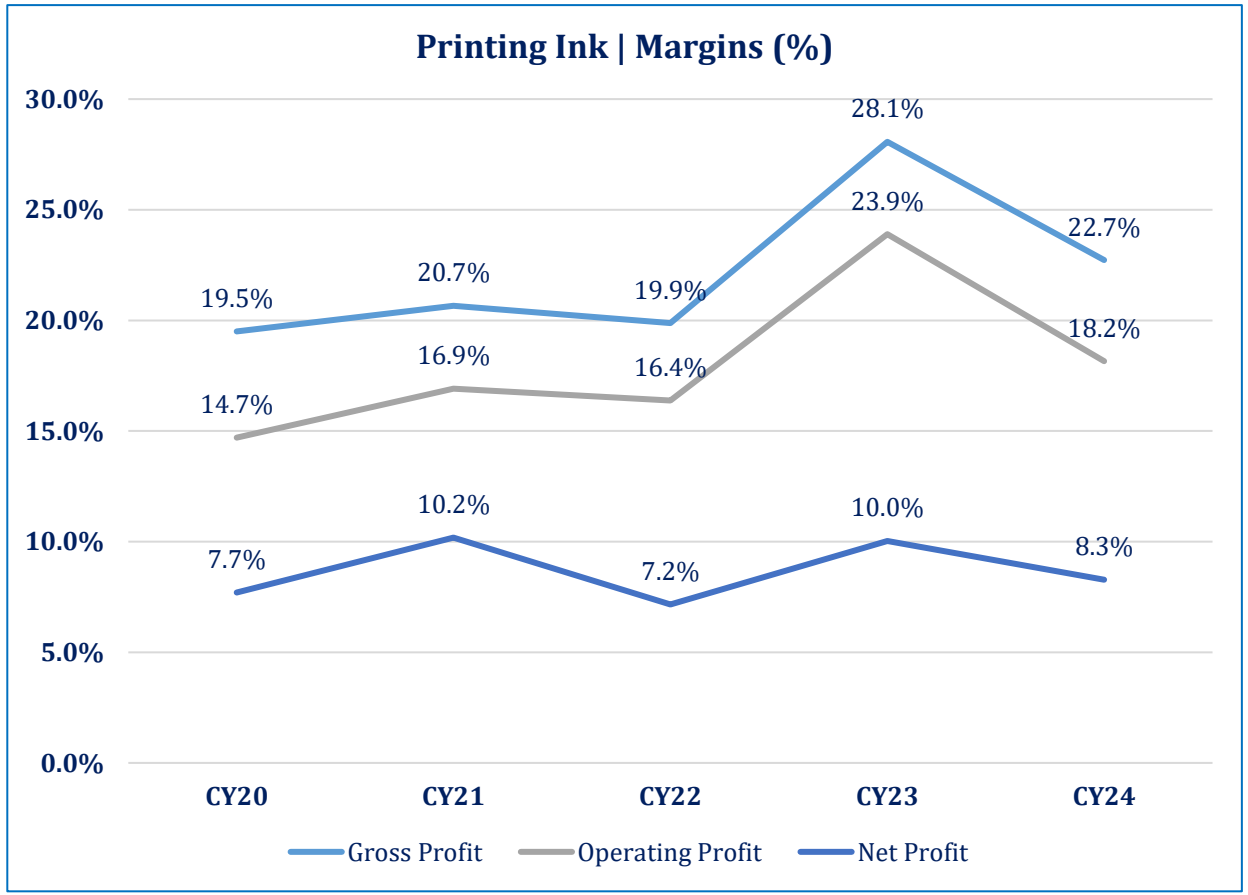
Chemicals

Printing Ink | Margins

- During CY24, the gross margins for the segment declined to ~22.7%, despite a ~10.5% YoY higher printing ink sales revenue, the cost of goods sold increased by ~18.7%.

- Meanwhile, operating margin also decreased to ~18.2% during CY24. due to higher operating expense for the period, showing an annual increase of ~21% YoY despite less inflation rates in the country as compared to CY23 (CPI going from ~29.4% in CY23 to ~12.6% in CY24) .

- Segment's net profit margins also declined to ~8.3%, in line with finance costs increasing by ~63.5% YoY despite a lower interest rates in the country as compared to CY23.



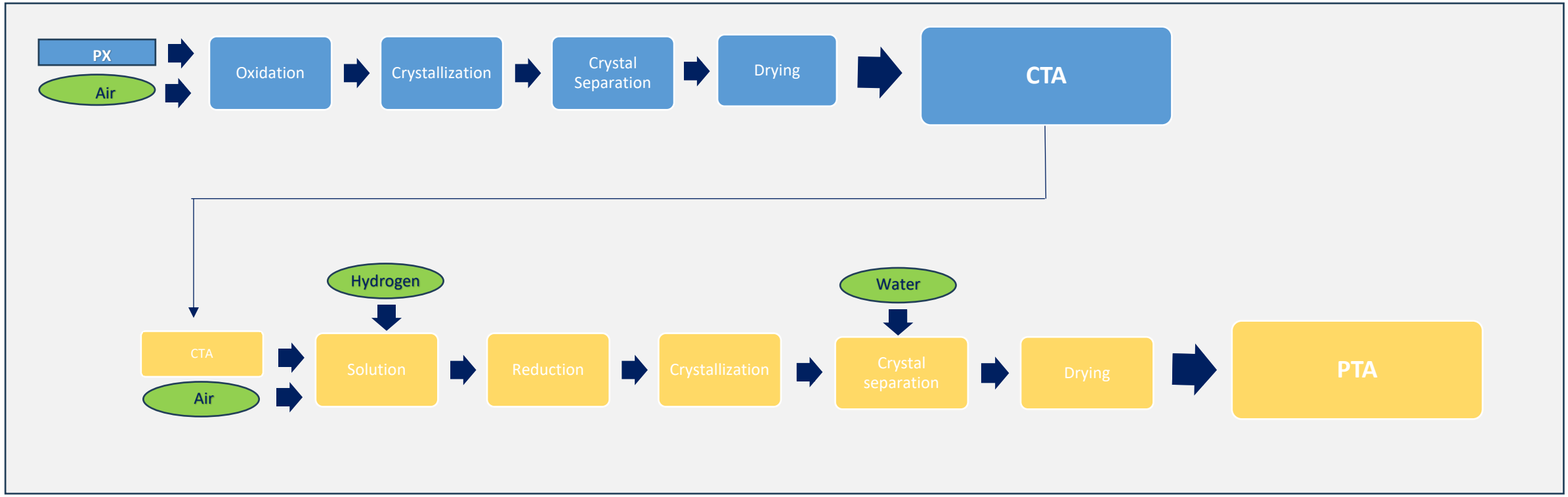
Note: *Data is based on 1 PACRA-rated segment player.*

Source: PACRA Database

Purified Terephthalic Acid (PTA) | Production Process

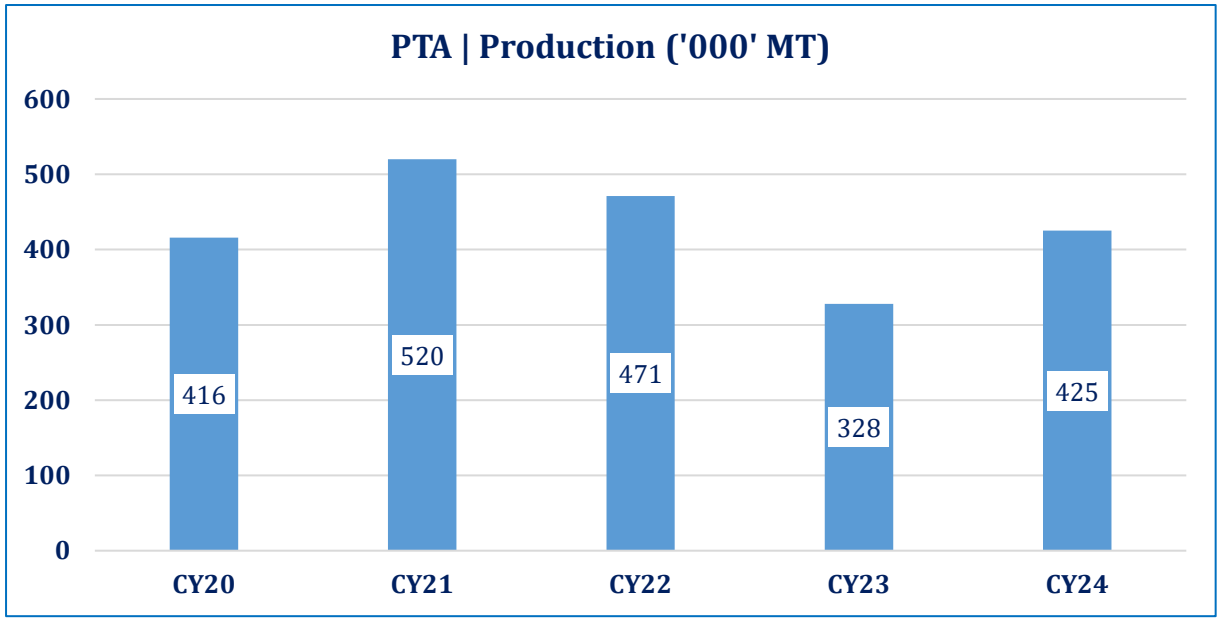
- The process of producing Purified Terephthalic Acid (PTA) is divided into two stages. The first stage is oxidation where Paraxylene (PX) is oxidized in acetic acid with a catalyst and air to produce Crude Terephthalic Acid (CTA). This is than crystallized and dried.

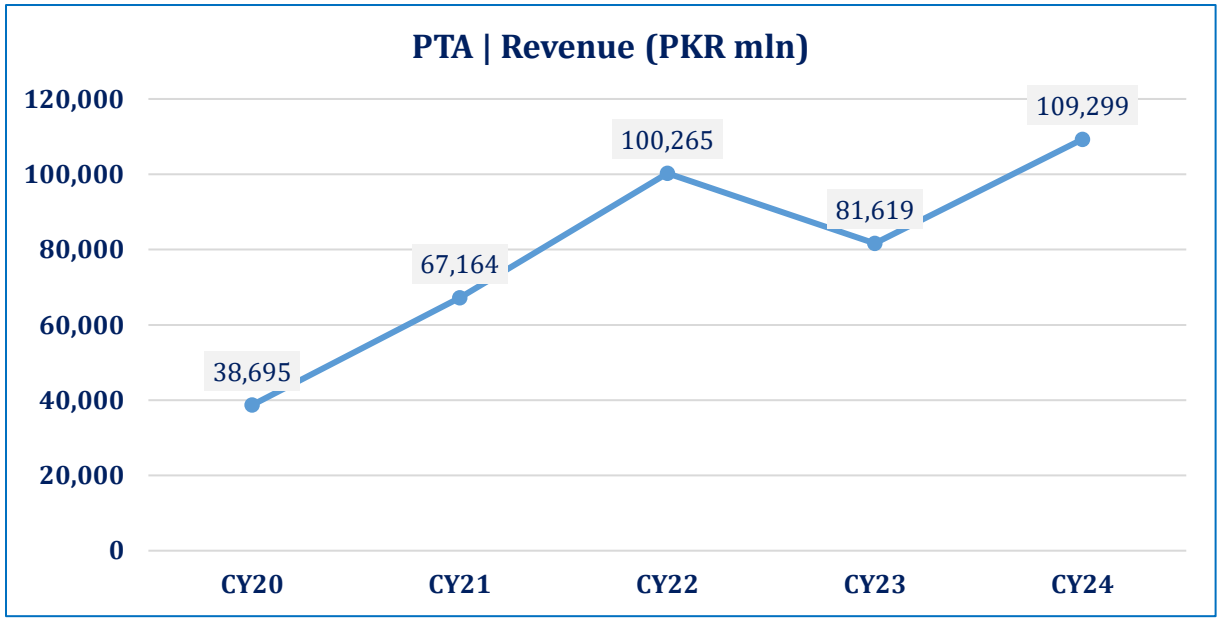
- Next is the purification stage in which the CTA is re-dissolved in hot water, the impurities are than removed through hydrogenation and the end product PTA is acquired. It is than again crystallized and dried for maximum purity.



Purified Terephthalic Acid (PTA) | Demand and Supply

- Lotte Chemical Pakistan Limited is the sole producer of PTA in Pakistan, operating entirely out of its Port Qasim facility in Karachi, boasts an annual production capacity of approximately ~500,000MT as of FY24. PTA is mostly utilized for producing polyester staple fiber, polyester filament yarn (used in textiles) and Polyethylene Terephthalate (PET). The main raw material for PTA is Paraxylene (PX) which is derived from crude oil, so its price is very much dependent on the crude oil prices in the market.
- The total production of PTA recorded at ~424,771MT in CY24 (CY23: ~327,829MT), showing a ~29.6% YoY increase. The capacity utilization for the period stood at ~83.8% (CY23: ~64.7%). This increase was most likely seen due to better utility supply and consistent plant performance.
- The total sales revenue for PTA recorded a YoY growth of ~33.4%, going from PKR~81,619mln in CY23 to PKR~109,299mln in CY24. This increase was mainly due to higher volume of PTA sold in that period.





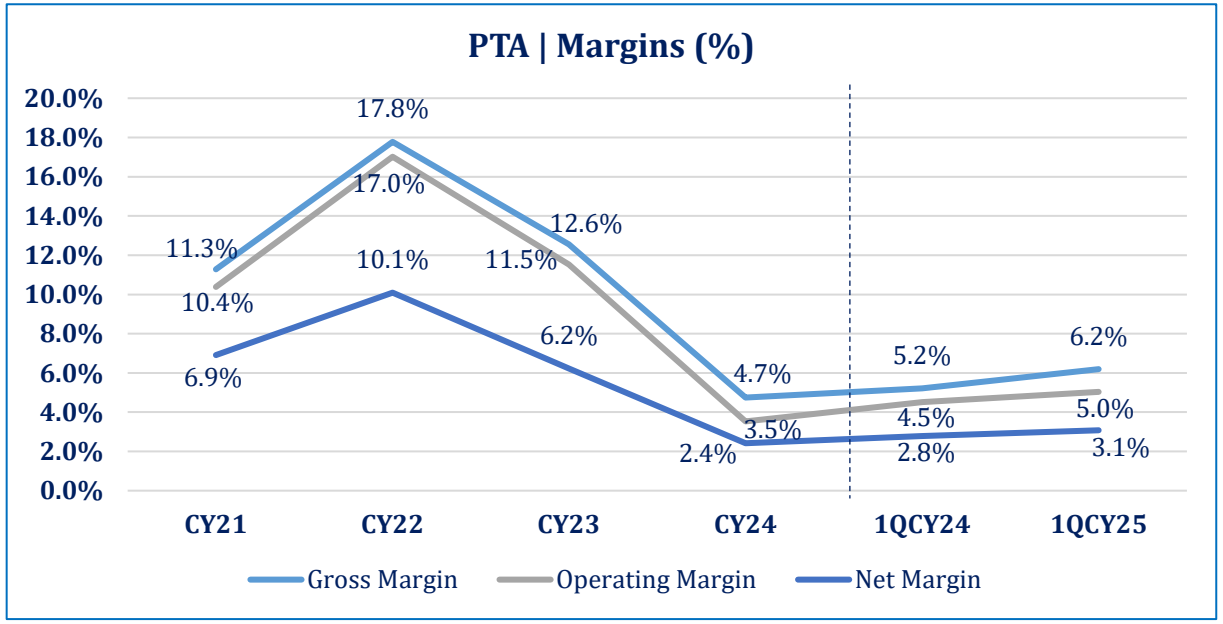
Note: *Data is based on 1 listed Sector player.*

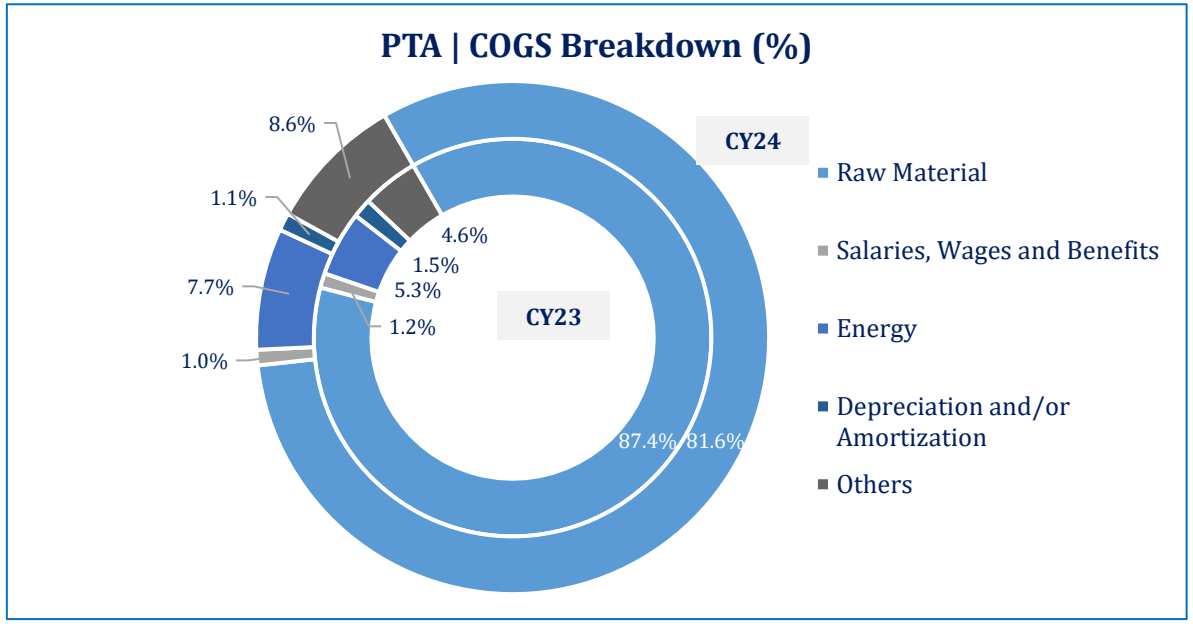
Source: PSX, PACRA Database

Chemicals

Purified Terephthalic Acid (PTA) | Margins

- Although sales revenue was high this period but the margins saw a downward trend. Gross margins declined to ~4.7% by ~62.7%, majorly due to a stark increase in cost of sales by ~33.6% YoY. This was mainly driven by higher energy costs. Operating and net margins also declined sharply to ~3.5% & ~2.4%, respectively. Some hope is shown in 1QCY25, showing gains in all three margins on the back of ~34.1% lower YoY cost of sales.
- Raw material (PX) is the basic component in production and hence raw material acquires the highest percentage of the segment, amounting to ~81.6% (CY23: ~87.4%). The 'others' section amounted for ~8.6% (CY23: 4.6%) while the energy section recorded at ~7.7% (CY23: ~5.3%).



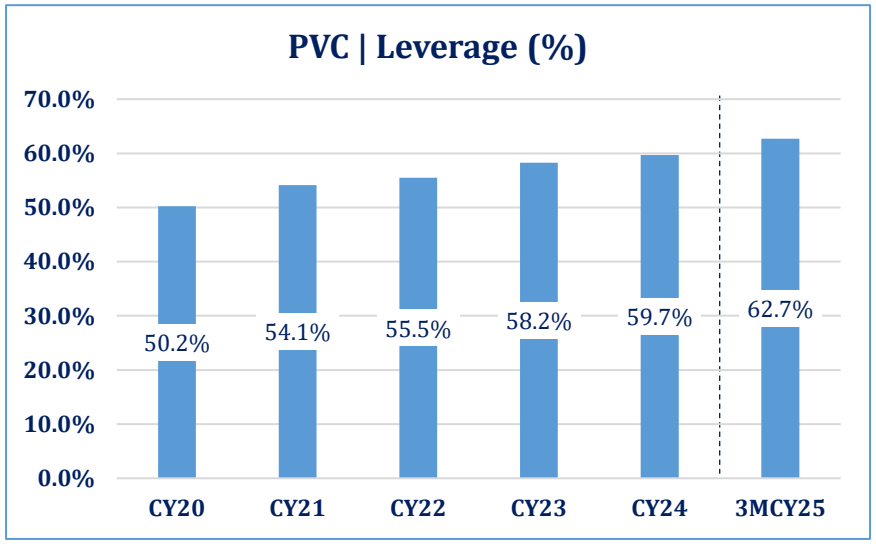


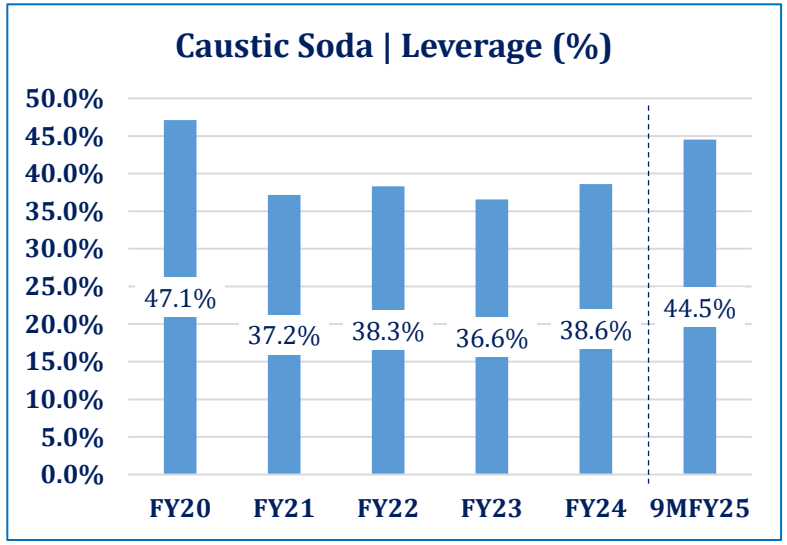
Note: *Data is based on 1 listed Sector player*

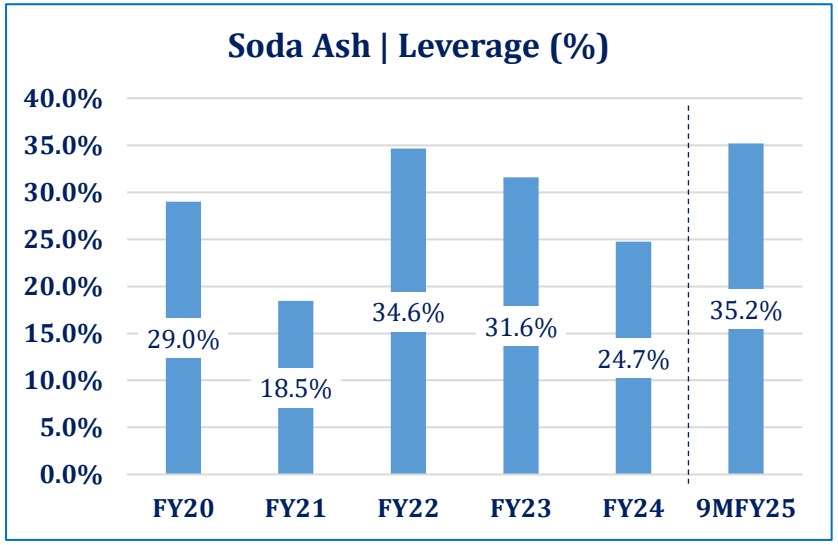
Source: PSX, PACRA Database

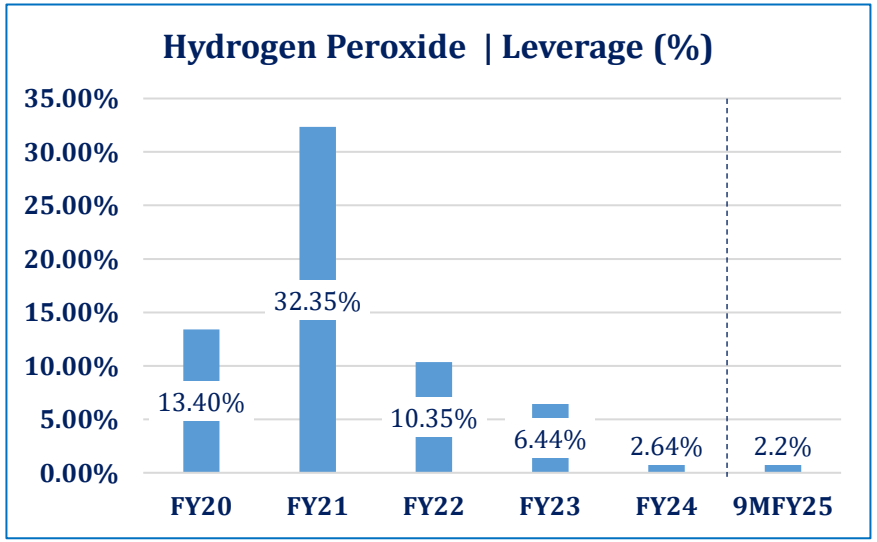
Chemicals

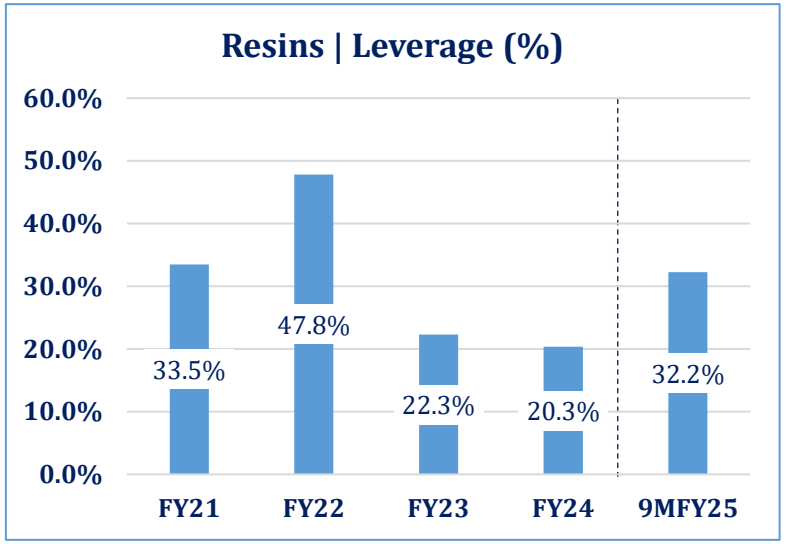
Financial Risk | Leverage

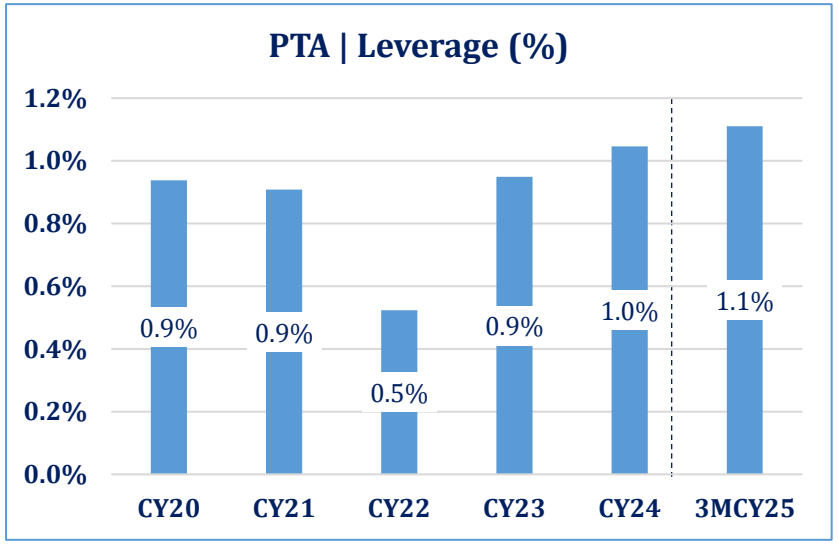










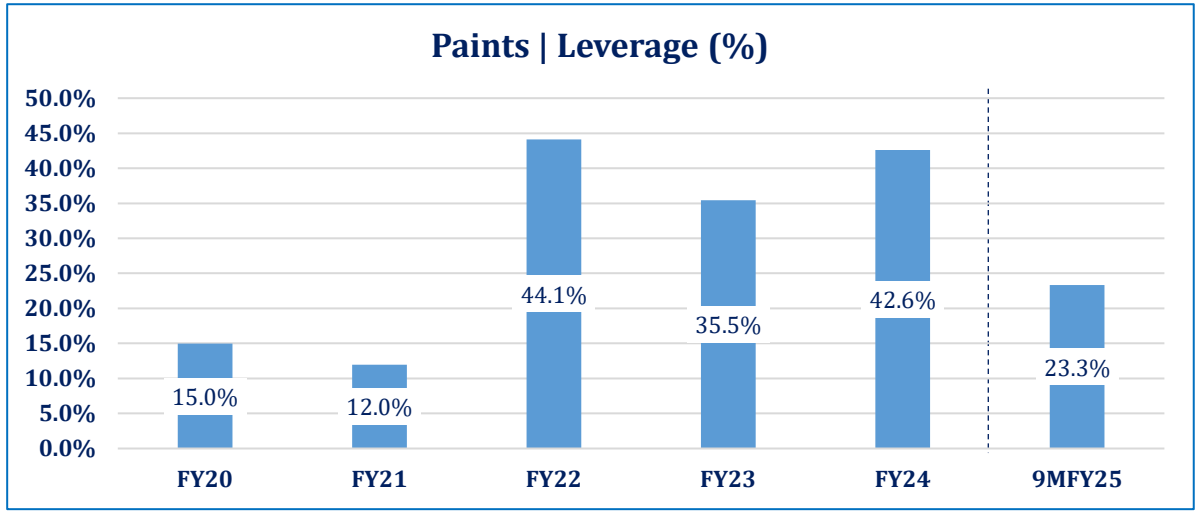


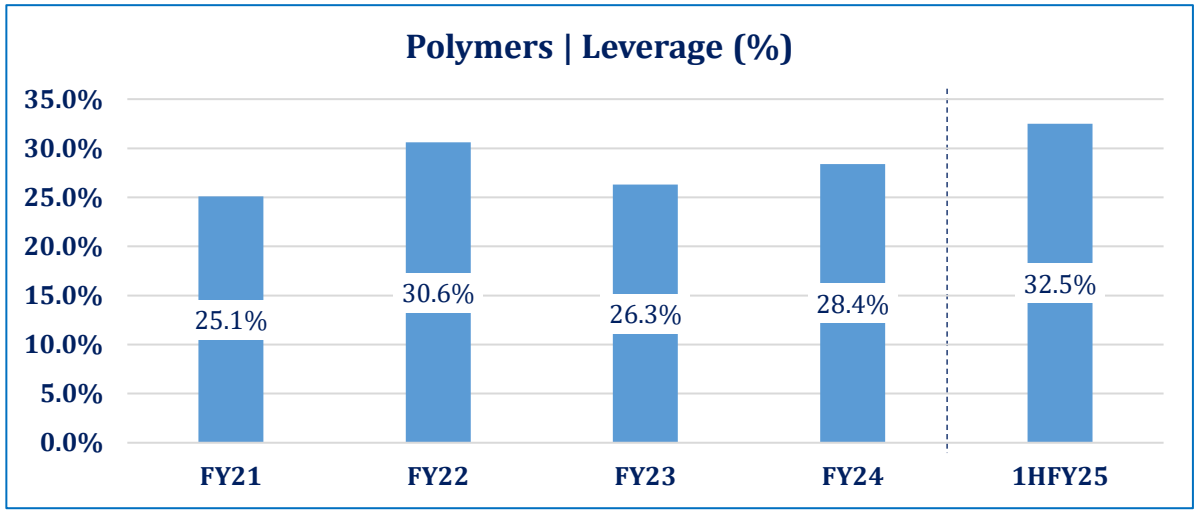
Note: *Data is based on 14 PACRA-rated/ listed Sector player.*

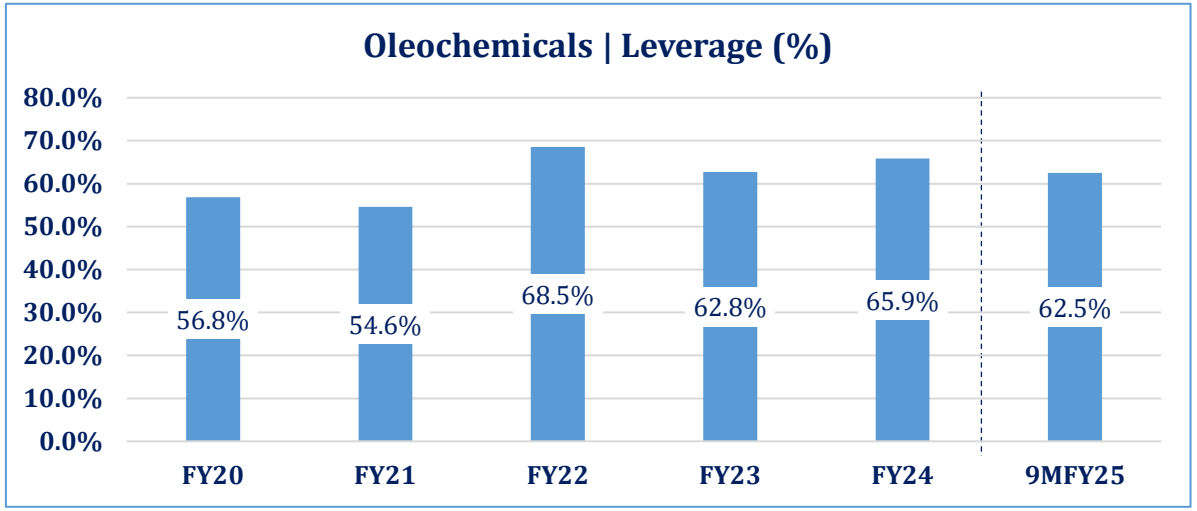
Source: PSX

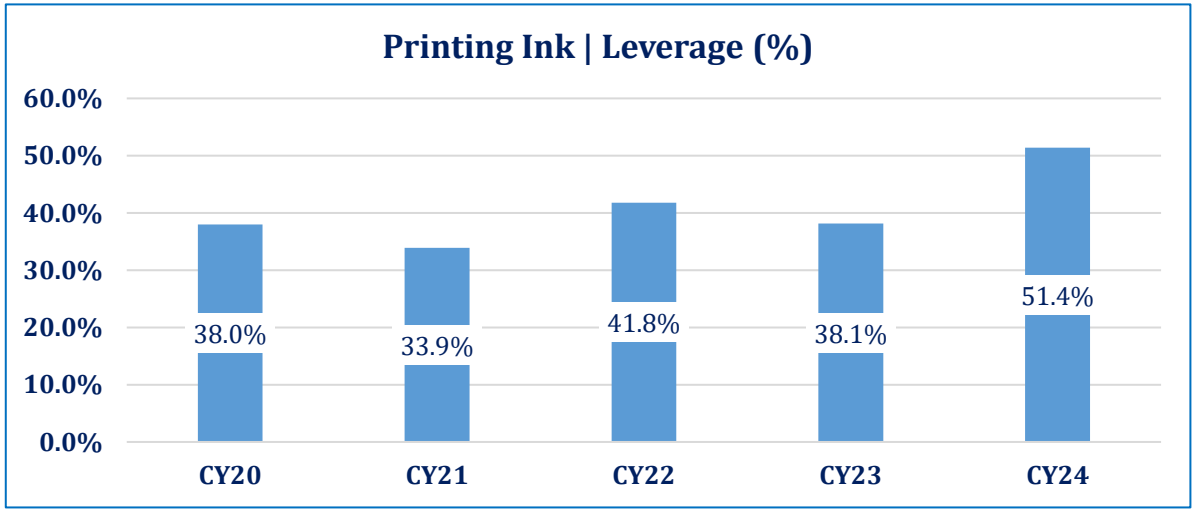
Chemicals

Financial Risk | Leverage







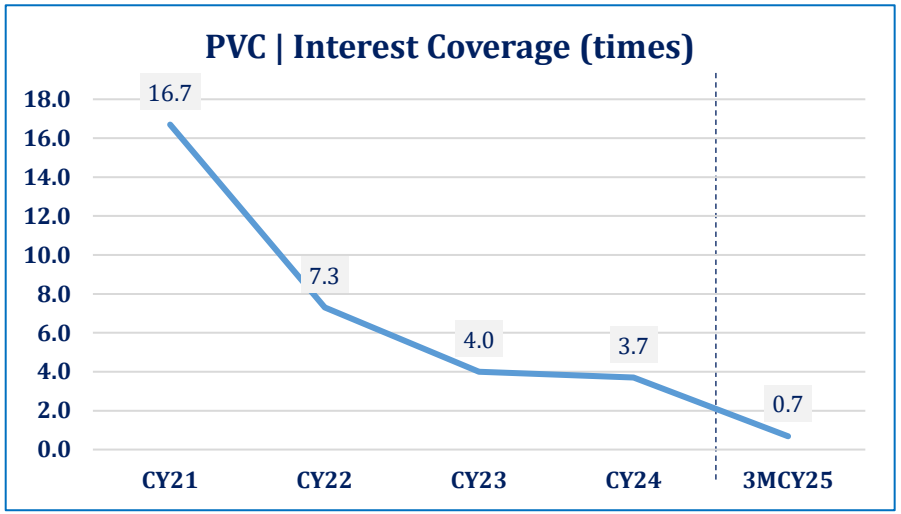


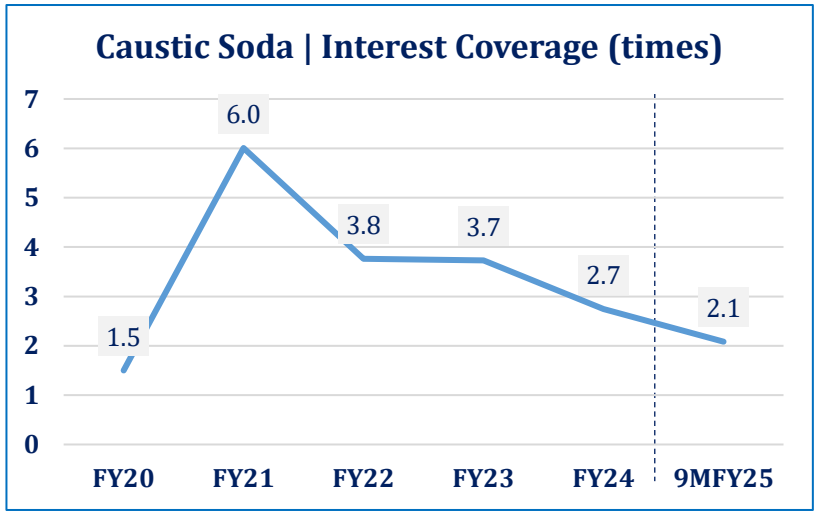
Note: *Data is based on 14 PACRA-rated/ listed Sector players.*

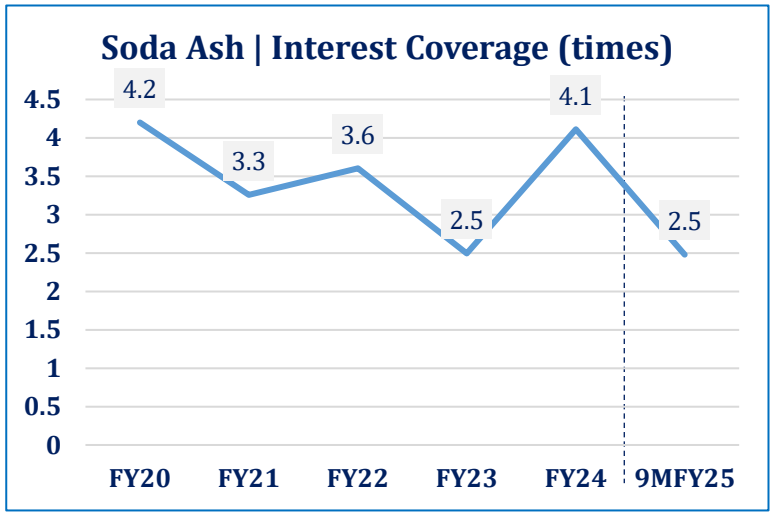
Source: PSX, PACRA Database

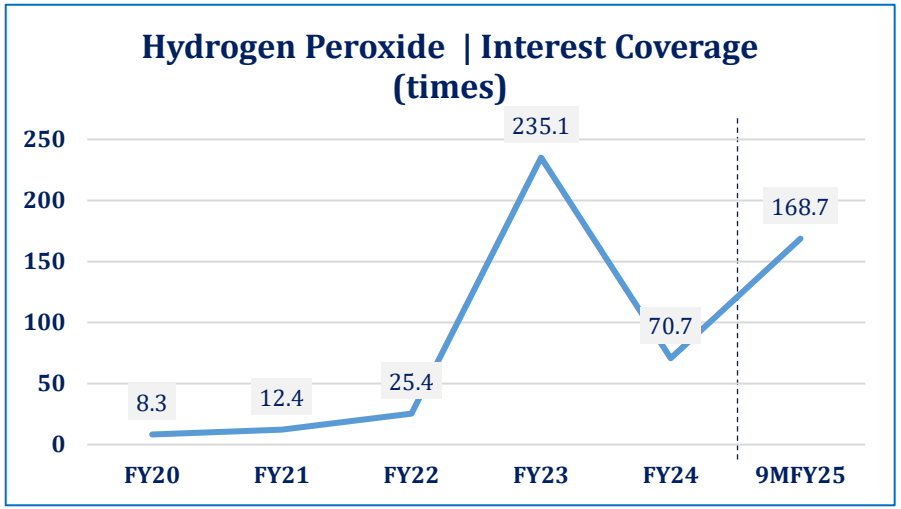
Chemicals

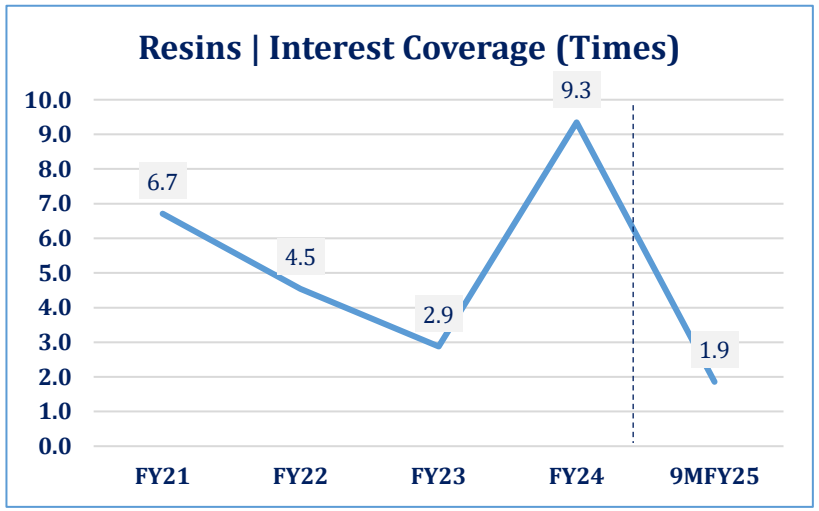
Financial Risk | Coverages

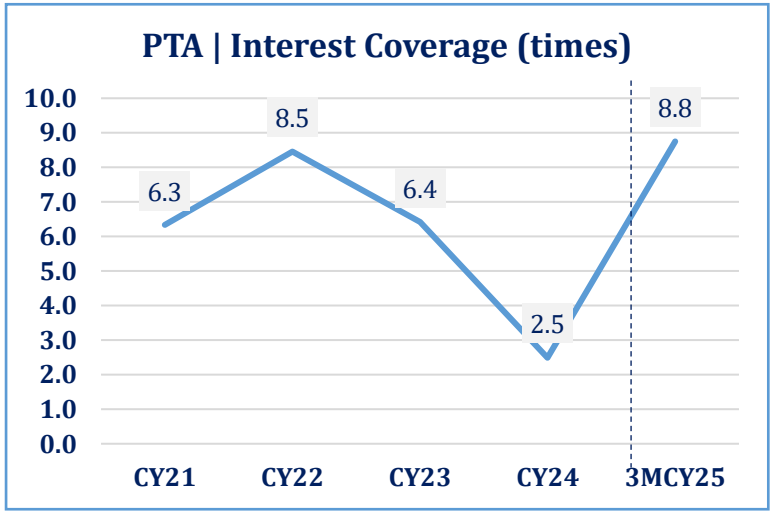










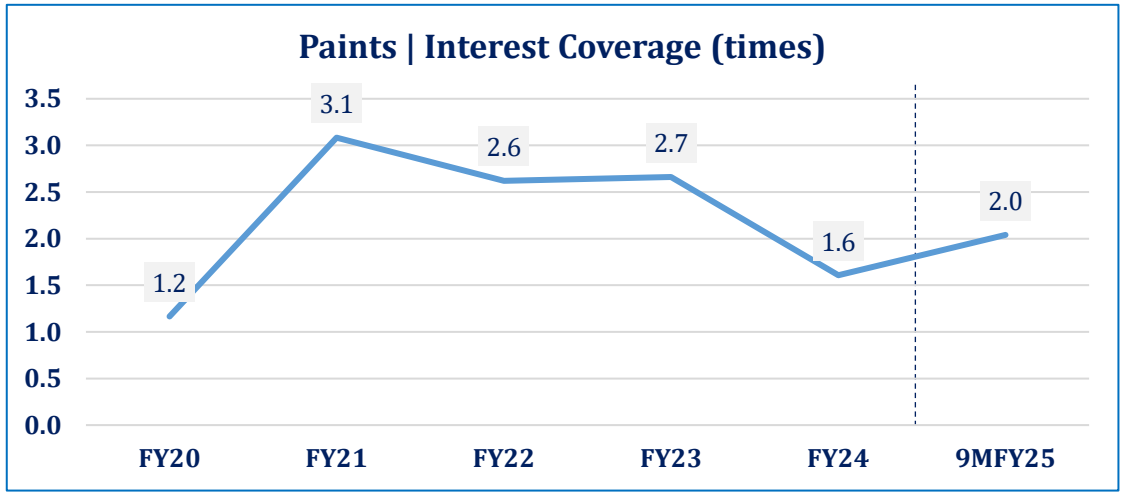


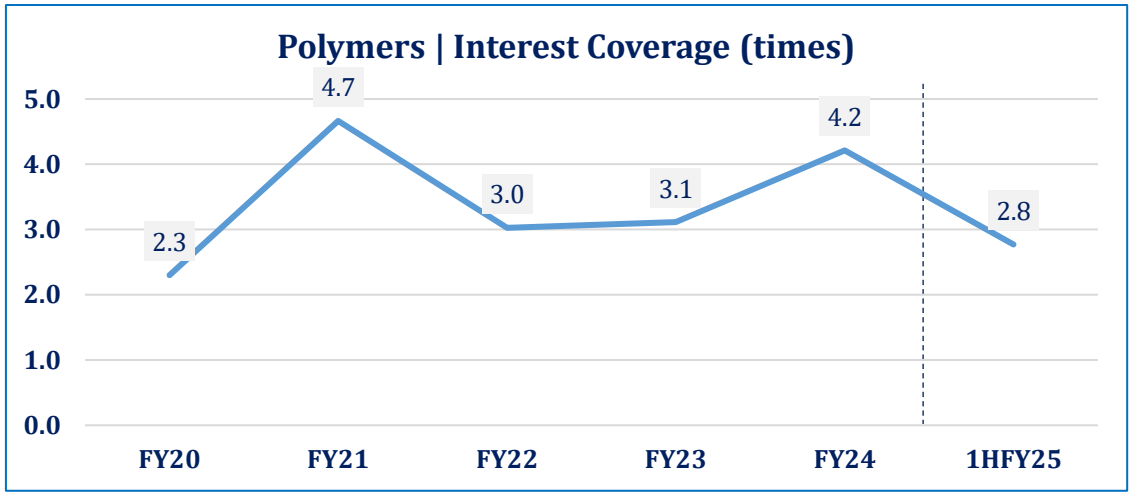
Note: *Data is based on 14 PACRA-rated/ listed Sector player.*

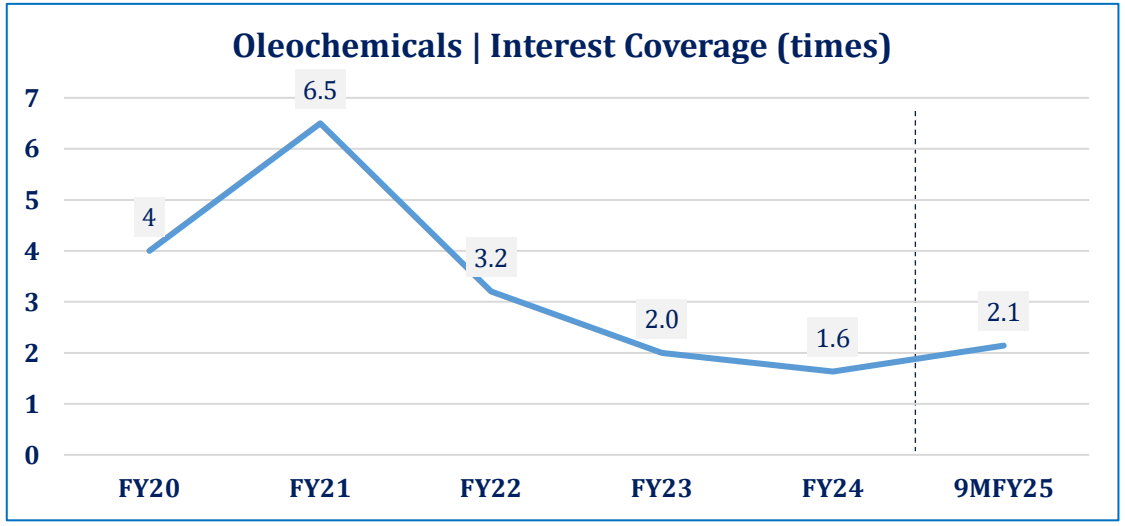
Source: PSX

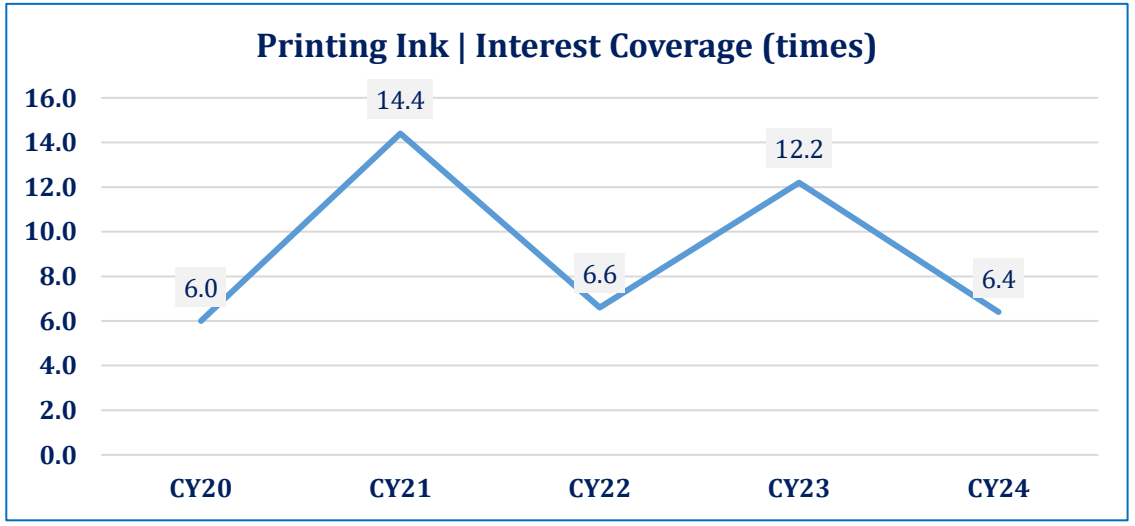
Chemicals

Financial Risk | Coverages







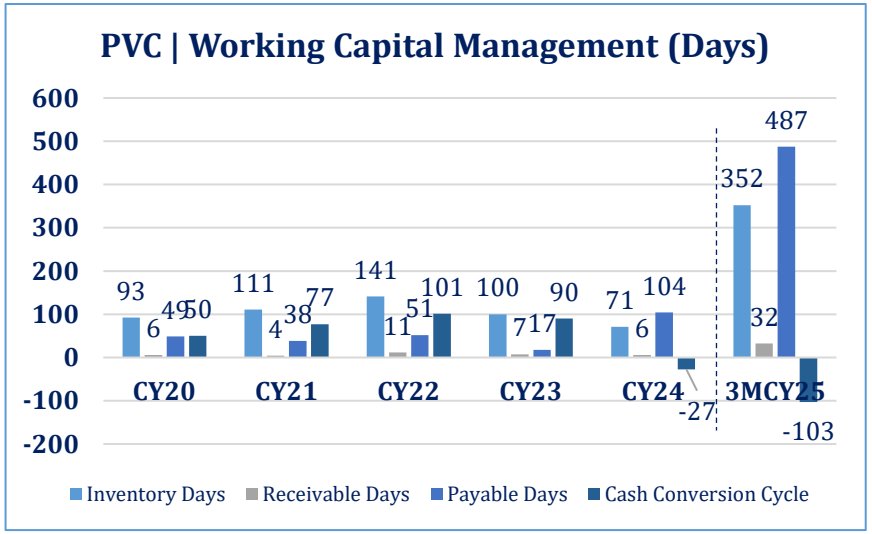


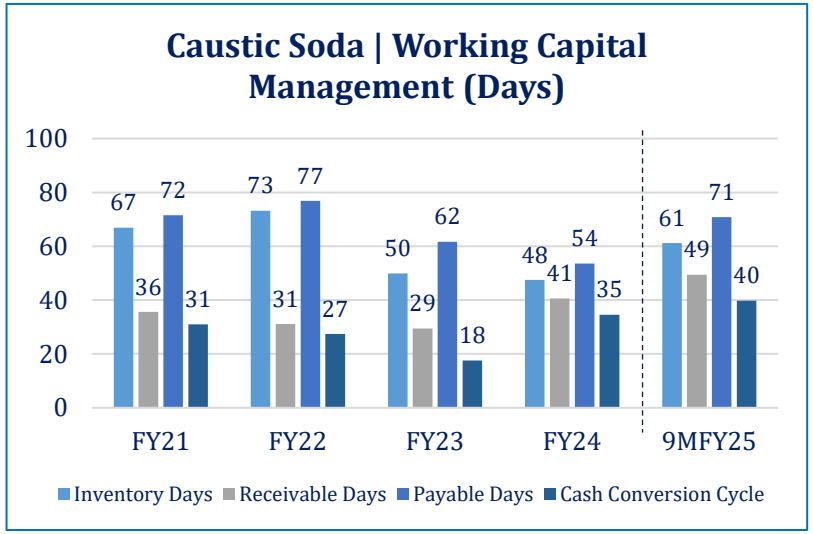
Note: *Data is based on 14 PACRA-rated/ listed Sector players.*

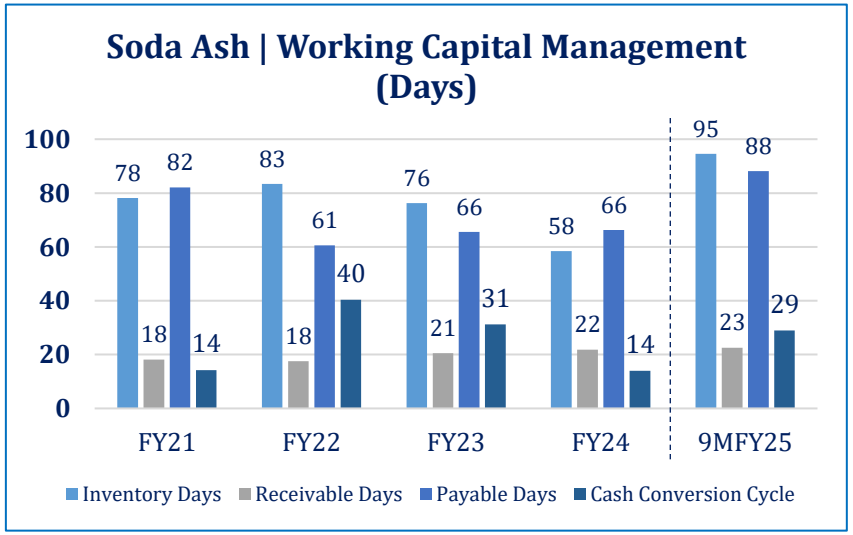
Source: PSX, PACRA Database

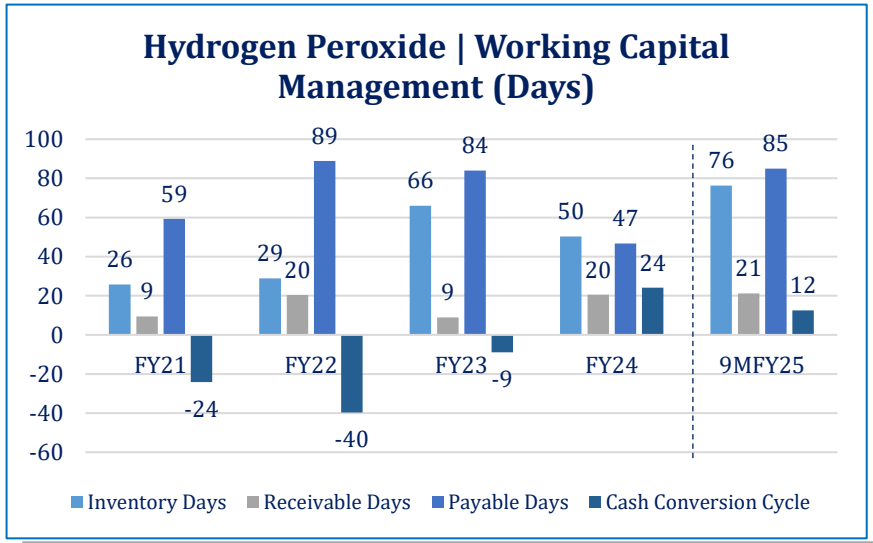
Chemicals

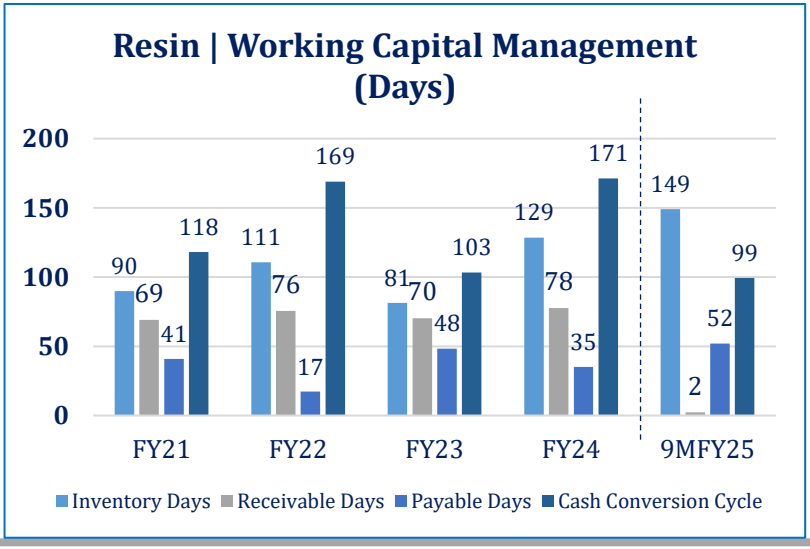
Financial Risk | Working Capital Management

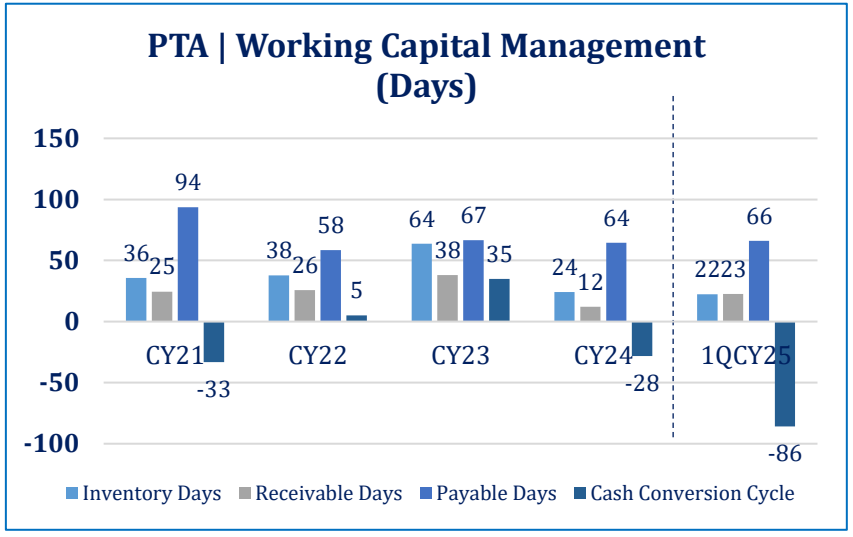










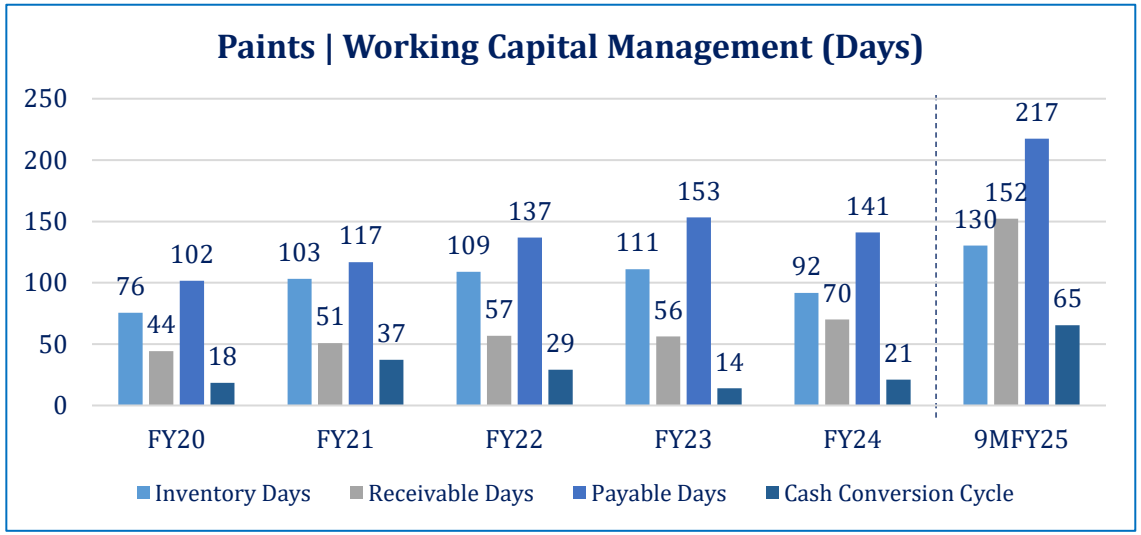


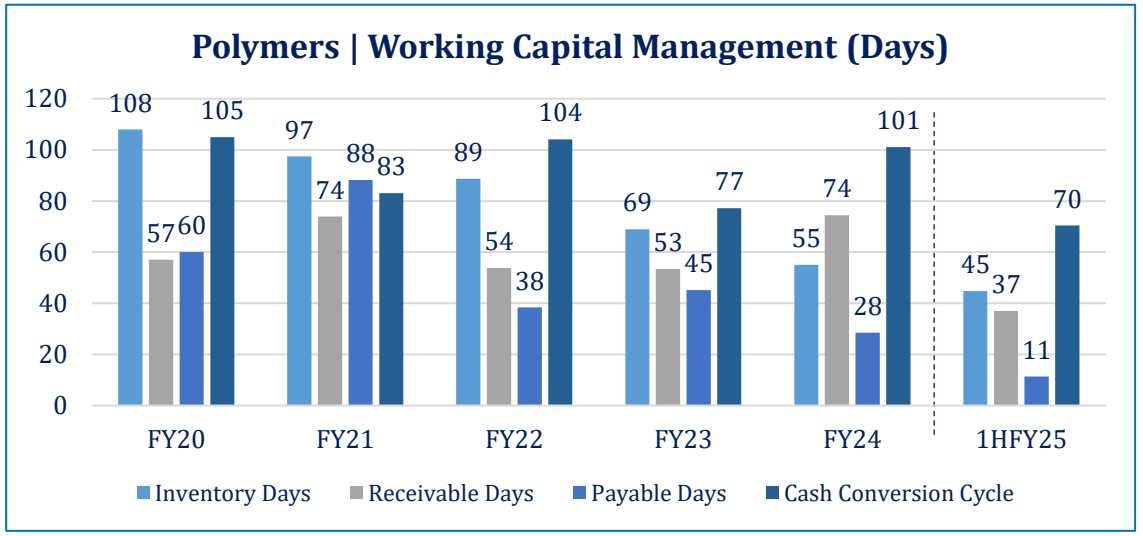
Note: *Data is based on 14 PACRA-rated/ listed Sector player.*

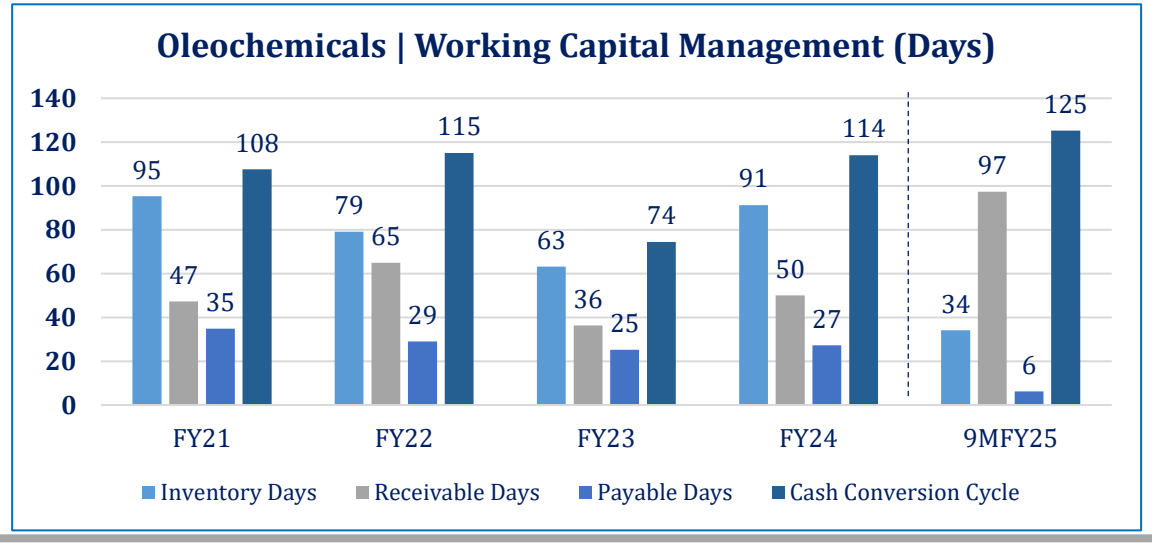
Source: PSX

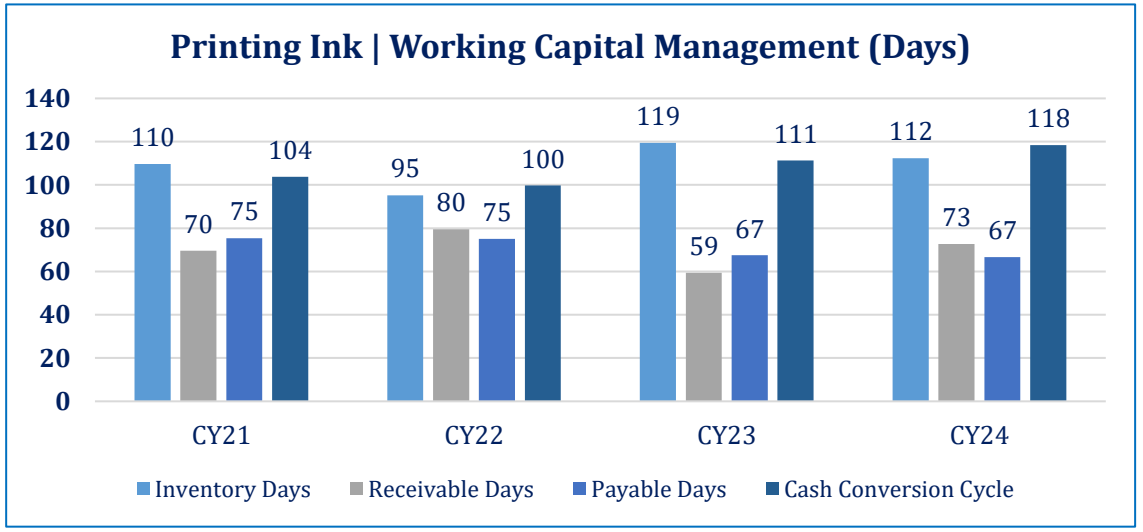
Chemicals

Financial Risk | Working Capital Management









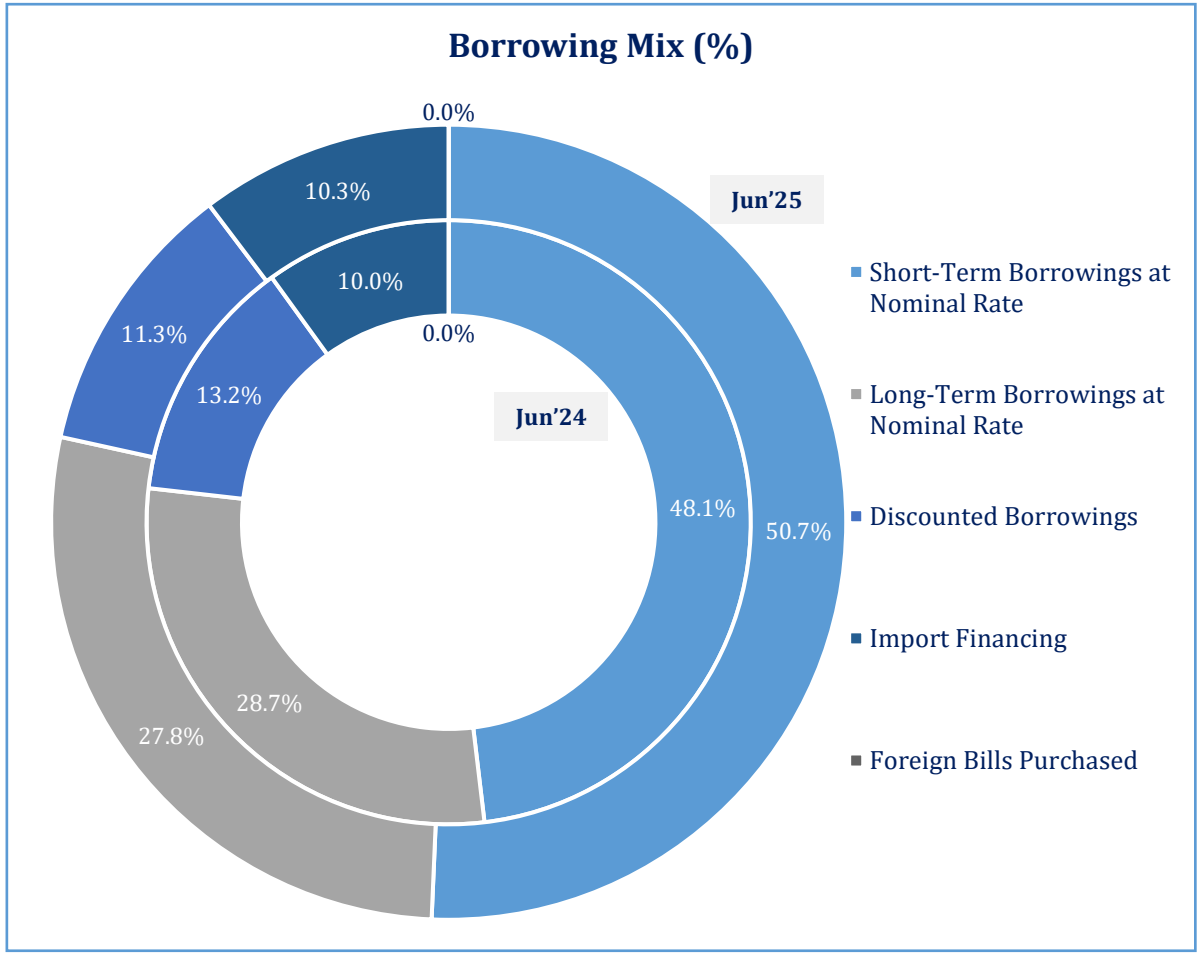
Note: *Data is based on 14 PACRA-rated/ listed Sector players.*

Source: PSX, PACRA Database

Chemicals

Financial Risk | Borrowing Mix

- As of End-Jun'25, the Sector's overall borrowings stood at PKR~199.1bln, up ~10.6% YoY (End-Jun'24: PKR ~180.1bln).
- Short-term borrowings (STBs) at nominal rate stood at PKR~100.9bln, up ~16.5% YoY, and held the largest share in the Sector's borrowing mix at ~50.7% (End-Jun'24: ~48.1%).
- Long-term borrowings (LTBs) at nominal rate stood at PKR~55.3bln, up~7.0% YoY and held a share of ~27.8% in overall borrowings (End-Jun'24: ~28.7%).
- Discounted borrowing (LTFF & EFS) stood at PKR~22.4bln (End-Jun'24: PKR~23.8bln), down ~5.9% YoY and held a share of ~11.3% in the overall borrowing mix (End-Jun'24: ~13.2%).
- Meanwhile, import financing stood at PKR~20.5bln (End-Jun'24: PKR~17.9bln), up ~14.3% YoY as of End-Jun'25, and held ~10.3% share in the total borrowing mix during the period (End-Jun'24: ~10.0%).



Note: *Data pertains to SBP Classification "Manufacture of basic chemicals ,paints varnish, printing ink and similar products".*

Source: SBP

Chemicals

Duty Structure

HS Code	Description	Customs Duty		Additional Customs Duty	Income Tax		Sales Tax		Regulatory Duty
		FY25	FY26	FY26	FY25	FY26	FY25	FY26	FY26
3904.22	Polyvinyl Chloride (Plasticized)	20%	15%	2%	12%	12%	18%	18%	0%
3904.21	Polyvinyl Chloride (Non-Plasticized)	16%	10%	0%	12%	12%	18%	18%	0%
3904.109	Polyvinyl Chloride (Others)	11%	10%	0%	12%	12%	18%	18%	0%
2815.11	Caustic Soda Solid	20%	0%	4%	12%	12%	18%	18%	0%
2847	Hydrogen Peroxide, whether or not Solidified with Urea	11%	10%	0%	12%	12%	18%	18%	3%
3903.909	Polymer (Others)	11%	10%	0%	12%	12%	18%	18%	0%
3208.201	Paints	16%	15%	2%	12%	12%	18%	18%	0%
3208.901	Paints (Varnishes)	11%	10%	0%	12%	12%	18%	18%	5%
3208.902	Paints (Other)	11%	10%	0%	12%	12%	18%	18%	5%
3215.192	Digital Printing Ink	20%	20%	4%	12%	12%	18%	18%	0%
3215.193	Other Processed Printing Ink	20%	20%	4%	12%	12%	18%	18%	0%
3215.199	Printing Ink (Other)	20%	20%	4%	12%	12%	18%	18%	0%
3215.119	Printing Ink (Black)	20%	20%	4%	12%	12%	18%	18%	0%

Source: FBR

Chemicals

SWOT Analysis

Strengths

- Steadily increasing demand.
- Local availability of raw materials.
- Ability to pass on increased cost of production.

Weaknesses

- Reliance on imported power source such as Oil, gas, coal.
- Exposure to exchange rate volatility.
- Shortage of locally available materials PVC, Polymer.

Threats

- Highly competitive.
- Exchange rate exposure.
- New entry of players.
- Volatility in energy cost.

Opportunities

- Low per capita consumption
- Export market to neighboring countries
- Room for research and development

Chemicals

Porter's 5 Forces

Potential New Entry

- **PVC** | Low|Capital Intensive
- **Caustic Soda** | Medium |Abundant Raw material, Technical Process
- **Soda Ash** | Low | Capital Intensive, Technical Process
- **HPO** | Medium| Abundant raw material, Technical Process
- **Resin** | High| Local Availability of raw material, Simplicity of production process
- **Paints**| Medium | Big players
- **Oleochemical** | Low | Monopoly
- **Polymer** | High
- **Printing Ink** | Low
- **PTA** | Low | Monopoly

Purchasing Power

- **PVC** | Low |Single Player
- **Caustic Soda** | High |Capacity greater than demand
- **Soda Ash** | Low
- **HPO** | Low | Two Players
- **Resin** | High | Numerous small Players
- **Paints** | High | Variety
- **Oleochemical** | High
- **Polymer** | High
- **Printing Ink** | Low
- **PTA** | Low | Single Player

Substitutes

- **PVC** | Low
- **Caustic Soda** | High |Multiple other products
- **Soda Ash** | Medium| Availability of other products
- **HPO** | Medium
- **Resin** | High
- **Paints** | Low | Expensive substitutes
- **Oleochemical** | High | Multiple products
- **Polymer** | High | Multiple products
- **Printing Ink** | Low
- **PTA** | Low

Supplier Power

- **PVC** | High| Imported raw material
- **Caustic Soda** | Low |Local availability of raw materials
- **Soda Ash** | Low |Local availability of raw materials
- **HPO** | Low| Local availability of raw materials
- **Resin** | Low| Easily available
- **Paints** | Low
- **Oleochemical** | High
- **Polymer** | Low
- **Printing Ink** | High
- **PTA** | High | Imported raw materials

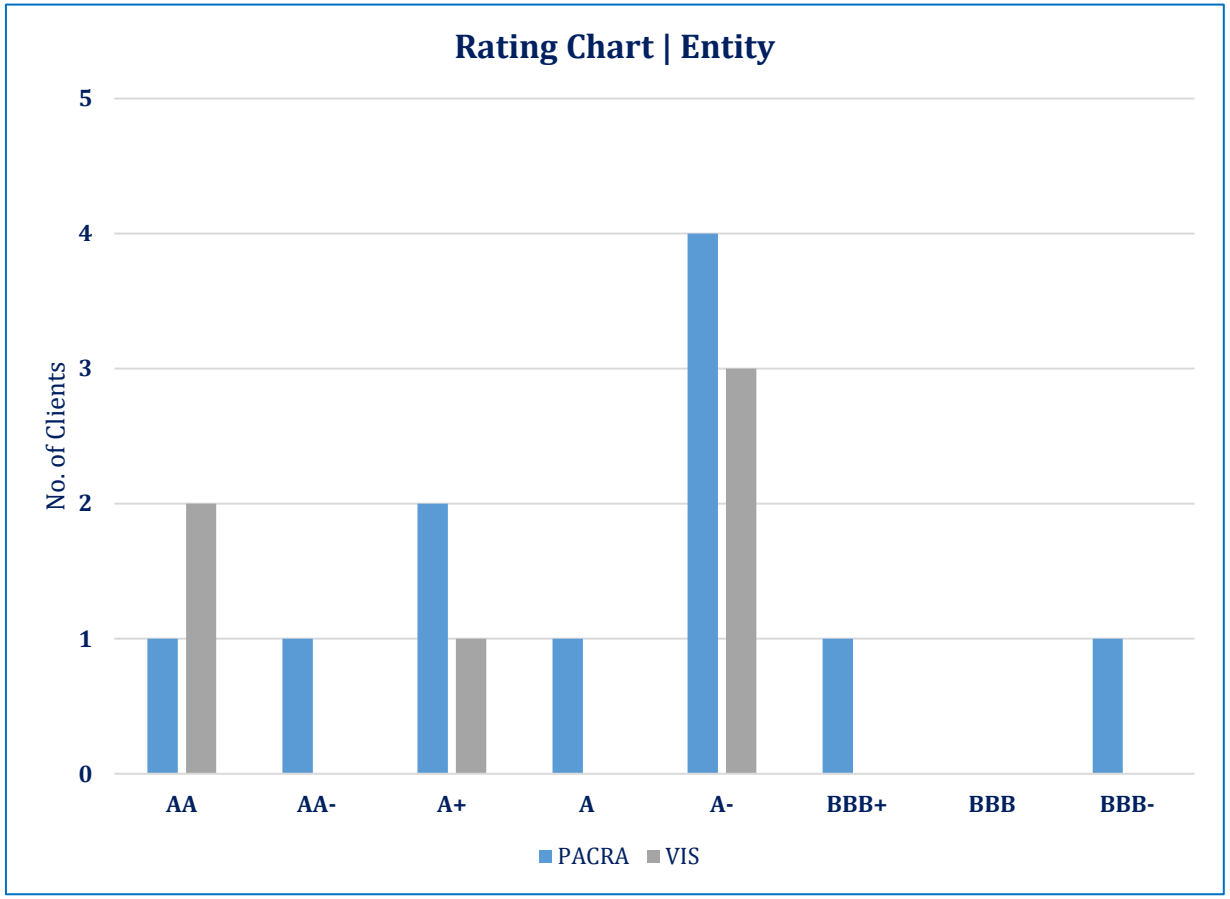
Competitive Rivalry

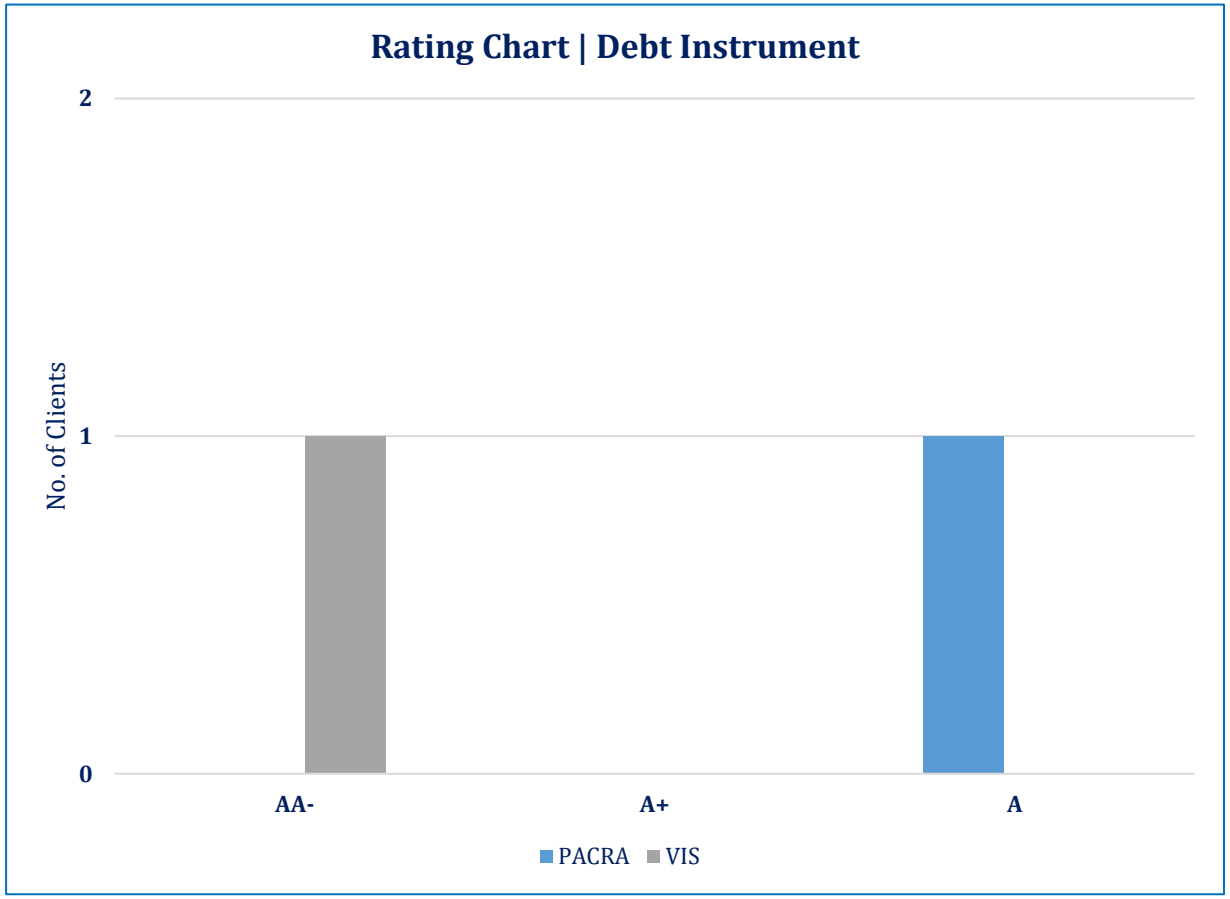
- **PVC** | Low | Single Producer
- **Caustic Soda** | High | Multiple Producers
- **Soda Ash** | Low |Two Players
- **HPO** | Low |Two Players
- **Resin** | High |Multiple producers
- **Paints** | High
- **Oleochemical** | Low | One producer
- **Polymer** | High
- **Printing Ink** | Low | Three major players
- **PTA** | Low | Single Producer

Chemicals

Rating Curve

- PACRA rates 11 entities of the Chemical Sector. Rating bandwidth is from AA to BBB-. PACRA also rates 1 debt instrument.





Chemicals

Segment-wise Outlook

PVC: Stable

- The segment recorded an annual production capacity of ~295,000MT in CY24, while production was down ~7.7% YoY.
- During CY24, gross margins for the segment declined to ~8.7%, in line with ~6.8% YoY lower PVC sales revenue and ~6.4% YoY higher cost of goods sold. Meanwhile, operating margin also dropped to ~5.8% on the back of periods of high inflationary levels in the country, which has yet to fully unwind.
- In CY24, leverage increased to ~62.7%, showing a ~5.0% YoY increase (CY23: ~59.7%) on the back of ~18.9% YoY higher borrowing. Meanwhile, interest coverage deteriorated to ~3.7x in CY24 (CY23: ~4.0x).
- Going forward, with inflation and interest rates easing down (during FY25, national CPI averaged ~4.5%, while MPR was reduced to 11.0% in May'25), profit margins are expected to improve, however, volatility in energy rates, currency fluctuations and global ethylene prices might adversely impact the Sector and hinder its growth.

Caustic Soda: Stable

- The segment's capacity utilization decreased during FY24 recorded at ~57.4% (FY23: ~64.6%). However, production capacity recorded a ~4.5% YoY increase.
- During FY24, average gross margins decreased to ~17.6%, because COGS rose by ~8.1% YoY. Meanwhile, average operating margin remained identical from FY23 at ~11.4%. Net profit also declined to ~3.6% in the period.
- In FY24, average leverage was up to ~38.6% (FY23: ~36.6%), while overall borrowings were up by ~27.9% YoY. Interest coverage also declined in the period to ~3.0x (FY23: ~2.6x).
- In FY24, national CPI declined to ~12.6% (FY23: ~29.4%), and has continued to fall as of Jun'25 (~3.2%). These are likely to impact the segment positively through lesser input prices and more profitability. However, margins have declined in 9MFY25 on the back of higher energy costs (mainly due to issues in the Middle East) which could cause some problems because caustic soda production is highly energy intensive.

Soda Ash: Stable

- Local production stood at ~785,283MT during FY24, a YoY increase of ~6.6%. During 10MFY25, it showed a decrease of ~9.2% YoY (~578,720MT).
- During FY24, average gross margins improved slightly to ~22.0%, in line with ~6.6% YoY higher Soda Ash sales revenue.
- During the year, segment's leverage increased to ~38.6% (FY23: ~36.6%) on the back of ~16.6% YoY increase in shareholder equity.
- Average interest coverage has increased by ~64.0% YoY to ~4.1x in FY24 (FY23: 2.5) owing to ~18.2% YoY less finance costs.
- The gross margins increased to The operating and net margins declined to ~14.7% & ~9.7% respectively. These margins were highly effected by price competitiveness in the global arena with Turkey selling cheap imports.
- Demand of the domestic soda ash markets will be impacted by issues such as weak downstream demand, inflation and competition from imports. While export volumes may provide some support, global oversupply and low margins (especially from China) will limit profitability.

Chemicals

Segment-wise Outlook

Hydrogen Peroxide: Stable

- Overall supply comprises local production and imports, with ~64.3% and ~35.7% average shares during FY21-24, respectively.
- During FY24, imports increased 15.2% YoY whereas local production decreased by ~4.2% YoY while total supply increased to ~31,804 MT during FY24.
- During FY24, gross margins decreased to ~20.1%, in line with ~14.6% YoY lower sales revenue.
- Meanwhile, operating margin also increased to ~13.4%. Segment's net profit decreased by ~57.7% YoY in FY24.
- In FY24, segment's leverage has seen a downward trend for the past 2 years and has dropped even further to ~2.6% (FY24: ~6.4%) owing to ~59.0% YoY lower borrowings, but interest coverage declined significantly to ~70.7x.
- Hydrogen peroxide faces multiple challenges (high taxes, energy costs and dumping) but signs of recovery in 9MFY25 due to improving economic conditions which can support a more stable outlook and gradual revival of the Sector.

Resins: Negative

- Local production of resins decreased by ~5.3% YoY in FY24, from 37,583~MT in FY23, to 35,597MT. The production capacity of the segment was ~61,560MT in FY24 (SPLY: ~60,600MT).
- During FY24, average gross margins for the segment increased to ~13.4% due to 10.3 lower YOY cost of goods sold. Meanwhile, operating margins declined to ~10.2%.
- In FY24, average leverage declined to ~20.3% (FY23: ~22.3%) while average interest coverage increased during FY24 to ~9.3x as compared to ~2.9x in FY23 (~220.7% YoY).
- The resins Sector is highly influenced by imported raw materials and hence is hindered by currency swings and price volatility. Going forward, a cost relief from lower international oil prices (OPEC+ decision on increasing supply) and a steady PKR should help bolster the segment, but as of the moment margins are continuously decreasing showing a negative trend.

Paints: Stable

- Overall production of paints clocked in at ~58.2mln liters in FY24, showing a ~1.4% YoY increase (FY23: ~59.0mln liters).
- During FY24, average gross margins for the segment decreased to ~15.0%, in line with ~10.3% YoY higher paints cost of goods sold. Meanwhile, operating and net margins also showed negative trends declining to ~2.2% & ~-1.6% respectively.
- In FY24, segment's leverage increased to ~42.6% (FY23: ~35.5%), while interest coverage dropped to ~1.6x.
- There are some positive signs for the Sector, supported by LSM recovery and easing import conditions. However, reliance on imported raw materials keeps it exposed to currency and price risks which makes its outlook stable.

Chemicals

Segment-wise Outlook

Polymers: Positive

- Sales revenues recorded a ~14.1% YoY increase in FY24 to clock in at PKR~10,018mln (FY23: PKR~8781mln).
- During the year, gross margins for the segment increased to ~20.3%, in line with ~14.1% YoY higher sales revenue
- Meanwhile, operating margin also increased to ~8.8% due to lower levels of inflation in the country (National CPI averaged ~12.6% compared with ~29.4% during FY23).
- In FY24, segment's leverage increased to ~28.4% (FY23: ~26.3%), while the segment's interest coverage improved during FY24 to ~4.2x (FY23: ~3.1x)
- The aforementioned improved economic outlook (inflation, interest rates), along with stable demand across various Sectors, are likely to keep the margins in check.

Oleochemicals: Stable

- Segment's revenue registered ~29.7% increase YoY in FY24 to record at PKR~43,826mln.
- Gross profit margins clocked in at ~14.7% in FY24 owing to ~15.7% YoY higher sales revenue. However, net margins declined to ~2.2% during the year, owing to ~27.0% YoY higher finance costs.
- In FY24, segment's leverage increased to ~65.9% (FY23: ~62.8%) resulting from ~5.5% YoY higher borrowings. Meanwhile, interest coverage declined to ~1.6x in FY24 (FY23: ~2.7x).
- Going forward, stable demand and lower import dependency are likely to keep margins rangebound.

Printing Ink: Negative

- Printing Ink imports decreased by imports declined by ~19.1% YoY during FY24 and stood at ~306MT (FY23: ~378MT)
- During CY24, gross margins for the segment decreased to ~22.7%, in line with ~18.7% YoY higher printing ink cost of goods sold Meanwhile, operating margin decreased to ~18.2% during CY24.
- In CY24, segment's leverage increased to ~51.4% (CY23: ~38.1%). Meanwhile, interest coverage, decreased during CY24, to ~6.4x.
- The segment is facing serious margin declines as the segment's performance depends on lower international prices and stable currency showing a negative outlook.

PTA: Negative

- In CY24, the sales revenues for PTA recorded a ~33.4% YoY increase, clocking at PKR~109,299mln (CY23: PKR~81,619mln)
- During the year, gross margins for the segment declined to ~4.7%, in line with ~33.6% YoY higher cost of sales.
- In CY24, the segment's leverage increased to ~1.0% (CY23: ~0.9%), while the segment's interest coverage declined during CY24 to ~2.5x (CY23: ~6.4x)
- PTA prices in 2025 may stay under pressure due to oversupply and weaker crude and PX markets, though tight PX supply and geopolitical risks could offer limited support but the issues persist.

Chemicals

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Research Team	**Saniya Tauseef** Senior Manager saniya.tauseef@pacra.com	**Muhammad Abdul Rahman Khan** Supervising Senior abdulrahman.khan@pacra.com	**Haris Azeem** Associate Research Analyst haris.azeem@pacra.com
Contact Number: +92 42 35869504			

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