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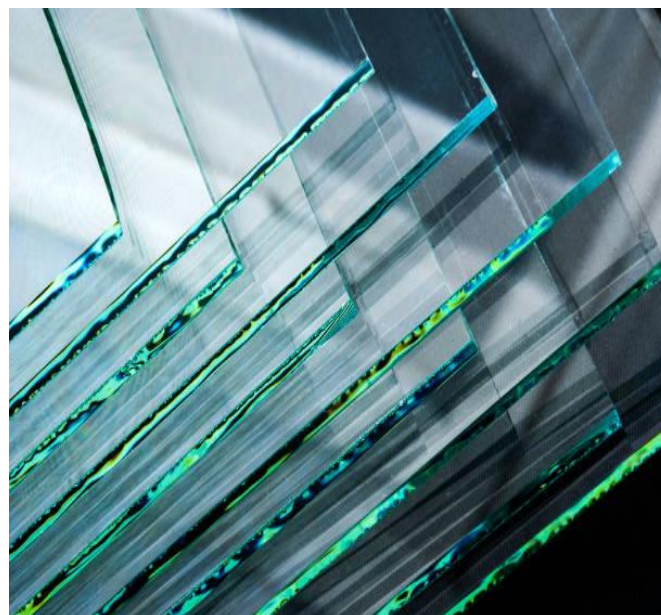
# GLASS

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# Glass

## Introduction

### Glass

Glass is a silica-based, non-crystalline amorphous solid material that has broad practical and technological properties as well as imperative function in decorative applications such as windows, tableware, and household appliances. Glass transmits, reflects, and refracts light, all qualities that can be enhanced through cutting and polishing for use in optical lenses, prisms, fine glassware, and optical fibres for high-speed data transmission that uses light.

### Raw materials

The production of glass requires materials such as Silica Sand (Silicon Dioxide), Limestone (calcium carbonate), Soda Ash (sodium carbonate), and waste glass (obtained through recycling of used glass). Soda ash reduces the melting point of sand and thus reduces energy consumption. Meanwhile, limestone acts as a stabilizer, which prevents the loss of chemical durability that occurs due to the use of soda ash. Soda-lime glass accounts for ~90% of all manufactured glass.

### Production Process

The manufacturing of glass is a relatively straightforward process. The raw materials are combined and heated in a furnace at ~1,500 Celsius (2,732 F). Once the liquid state is achieved, they are either poured on a flat surface to make sheets of glass or poured into molds to make bottles and other containers. Some types of glass containers are also made through 'blowing', where a lump of molten glass is wrapped around an open pipe. Air is blown through the pipe while it is rotated to give the glass its shape.

Different types of glass can have slightly different processes. For example, colored glass is made by adding various chemicals, oven-proof glass is made by adding boron oxide, and tempered glass is made by rapidly cooling the molten glass to increase its strength.



## Global | Overview

- The global glass manufacturing industry is continuing to grow, supported by progress in material technologies and the increasing use of energy-efficient production methods.
- By CY24, the market had reached USD~120.8bln, and it is expected to rise further to USD~127.8bln in CY25, with long-term projections indicating expansion to USD~190.2bln by CY32.
- Growth is largely fueled by demand from the automotive, construction, electronics, and renewable energy sectors, where advanced glass applications play a key role in meeting innovation needs and regulatory standards. The industry's direction is increasingly shaped by stronger sustainability expectations and the broader digital transformation influencing manufacturing processes worldwide.
- Container glass underpins packaging industries; fiberglass is pivotal in composite material production; float glass supports architectural requirements; specialty glass enables laboratory, medical, and precision optical use cases.
- The industry is fueled by trends such as smart glass innovation, tempered glass manufacturing, and investments in renewable energy solutions. The push for green buildings, efficient packaging, and touch-enabled devices further enhances growth opportunities.
- Fluctuations in raw material costs, stringent environmental regulations on CO2 emissions, and fierce competition present hurdles for manufacturers, potentially limiting growth in certain segments.
- Leading glass manufacturers focus on technological innovation and product diversification to enhance their market presence.
- Some major players operating in the glass manufacturing industry include: Saint-Gobain S.A., China Glass Holding Ltd., AGC Inc., and CSG Holdings Ltd.

Local | Overview

- Pakistan’s glass manufacturing industry comprises ~5–6 major players along with several smaller firms operating across float glass, containers, and tableware. The sector serves both consumer and industrial demand, including construction, pharmaceuticals, and food & beverages.
- The industry’s revenue reached PKR~88.7bln in FY25 (FY24: PKR~85.2bln), posting a YoY growth of ~4.0%. In 1QFY26, glass revenue rose further by ~12.3% YoY to PKR~19.8bln (SPLY: PKR~17.6bln).
- Glass plate and sheet production has been on a declining trajectory for the past 2 years. Output in FY25 stood at ~13.0mln Sq.M, down ~36.0% YoY (FY24: ~20.2mln Sq. M). The trend continued in 4MFY26, with production slipping by ~2.5% YoY to ~3.2mln Sq. M (SPLY: ~3.3mln Sq. M). The downturn reflects weaker industrial activity, as cement, iron, and steel production also contracted in FY25. Additionally, the temporary furnace closure of a key sector player further weighed on output.
- Despite lower production, sector revenue improved as manufacturers passed higher costs on to consumers through increased prices.
- Because domestic manufacturers primarily focus on float glass, tableware, and containers, a substantial share of demand for other glass categories is met through imports. Imports rose to USD~114.7mln in FY25, up ~31.8% YoY. In 4MFY26, imports increased by ~10.0% YoY to USD~40.1mln (SPLY: USD~36.5mln). Key import items include glass fibers (~25.0%) and glass containers (~23.0%).
- Conversely, glass exports weakened, falling by ~19.1% YoY to USD~33.2mln in FY25 (FY24: USD~41.0mln) and declining further by ~59.3% in 1QFY26.

Sector Snapshot	FY22	FY23	FY24	FY25	4MFY26
Estimated Revenue* (PKR mln)	66,779	75,588	85,248	88,668	19,819
Production of Glass					
Plates & Sheets (‘000’ Sq. M)	22,269	22,759	20,205	13,012	3,247
Glass Imports (USD 000)	123,522	75,855	83,233	114,742	40,118
Glass Exports (USD ‘000’)	42,293	39,423	41,068	33,222	6,322
No. of Players	~5-6 major players				
Market Structure	Oligopoly				
Product Segments	Float Glass, Tableware & Glass Containers				
Industry Association	Pakistan Glass Manufacturers Association (PGMA)				

**Note:** Revenue estimate is reflective of ~4 listed players in the sector.  
\*1QFY26

## Local | Market Segments and Capacities

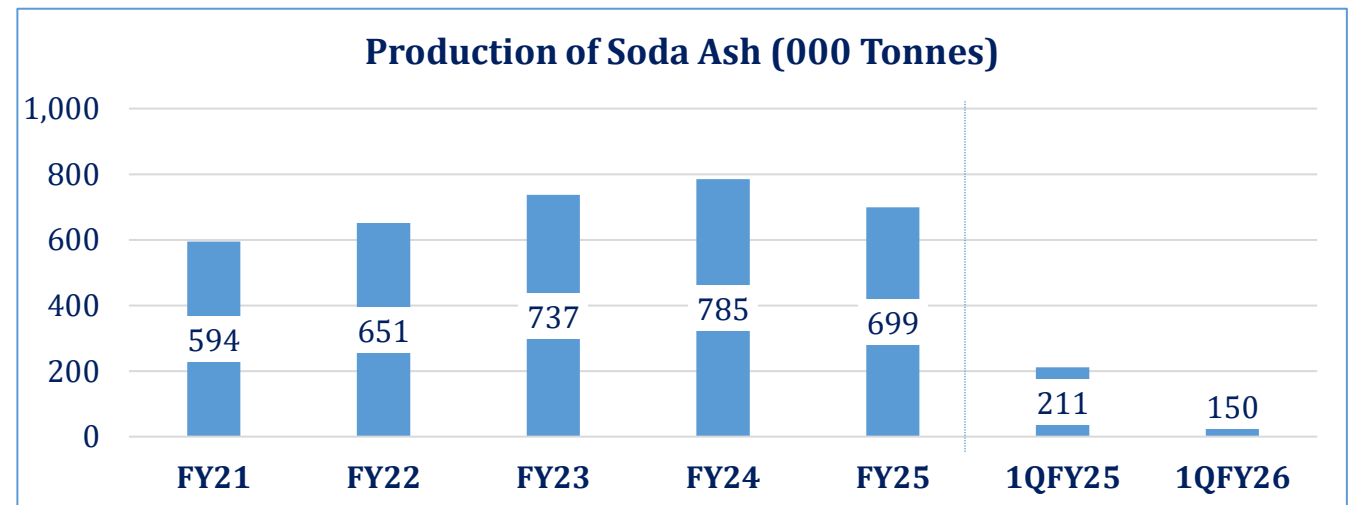
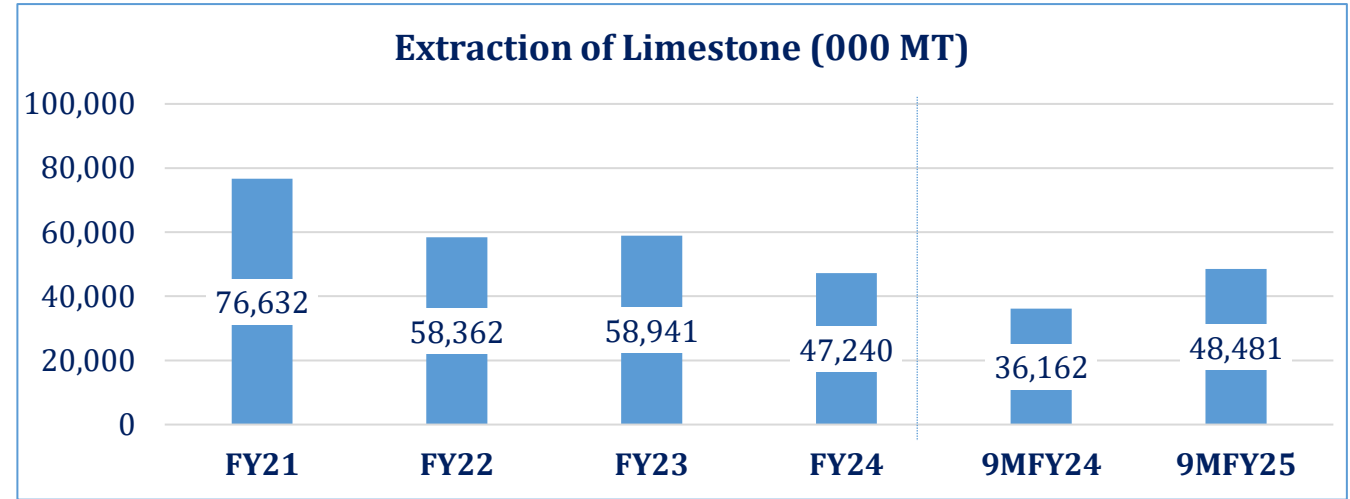
Local glass manufacturers are currently operating in three broad categories/segments, which can be classified as follows:

1. **Float Glass:** This type of glass is largely used in the construction of windows with different varieties that include clear, tinted, and mirrored float glass. There are three main players in this segment: Tariq Glass, Ghani Glass, and Ghani Value Glass, with a production capacity of ~1600 tpd.
2. **Tableware:** This includes products such as dinner sets, cups, mugs, etc. Tariq Glass is the largest player in this segment, with ~60.0% of total production capacity. Many other players, such as Balochistan Glass and Gunj Glass, are also operating within this segment. The estimated total production capacity of this segment stands at ~570 tpd.
3. **Containers:** This segment can be further divided into the following sub-segments:
  - I. Food & Beverage Containers: This includes products such as Pyrex containers and jars for food, as well as glass bottles used for carbonated beverages. The main players in this segment are Ghani Glass, Murree Brewery, and Tariq Glass, with a production capacity of ~435 tpd.
  - II. Pharmaceutical Containers: This segment includes medicine bottles and containers of different specifications, as well as vials, ampoules, and tubes (which are converted into ampoules). Ghani Global is the only local manufacturer of tubes, with the remaining demand being met through imports. It occupies a market share of ~54.0% in this subsegment. In the ampoules subsegment, there is significant competition with Ghani Global accounting for ~16.0% of the ampoules supply. Other large manufacturers of ampoules include pharmaceutical companies meeting their requirements, such as Sami, Bosch, and Indus, as well as commercial producers such as Friends Glass and TechnoGlass. Ghani's total manufacturing capacity stands at ~25.0 tpd.

# Glass

## Local | Raw Material

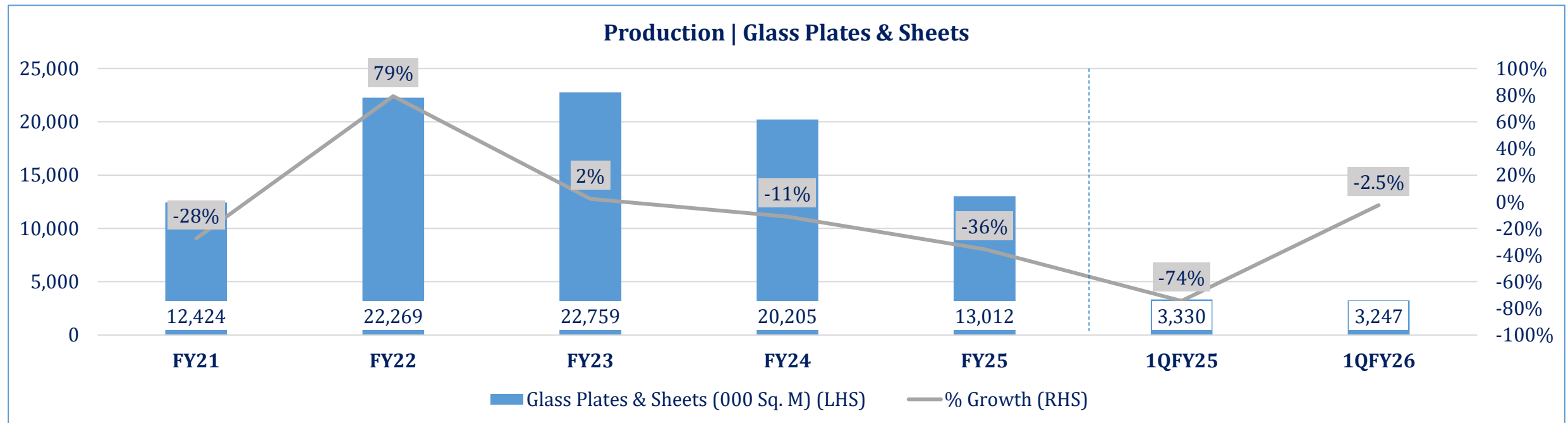
- The primary raw material for glass production is silica sand. However, most types of glass also require limestone (to reduce viscosity to make the molten glass easier to shape) and soda ash (to accelerate the fusion process).
- During FY25, the industrial sector remained constrained by subdued domestic demand, rising taxation costs, and stricter documentation requirements for the construction sector.
- The extraction of limestone saw an increase of ~34.1% YoY, and its production was recorded at ~48.4mln MT in 9MFY25 (SPLY: ~36.2mln MT).
- On the other hand, production of soda ash declined in FY25 to ~699,000 MT (FY24: ~785,000 MT), down ~10.9%. In 1QFY26, local soda production stood at ~150,000 MT, a decrease of ~28.9% as compared to the same period last year (SPLY: ~211,000 MT).



# Glass

## Local | Production

- Local glass production, as measured against the production of glass plates and sheets, declined further in FY25, down ~36.0% YoY, recording at ~13.0mln Sq. M (FY24: ~20.2mln Sq. M). The decline in production reflects weaker industrial activity, as cement, iron, and steel production also contracted in FY25.
- Additionally, the temporary furnace closures of Tariq Glass Industries Limited (one Tableware and one Float Glass furnace) and Ghani Global Glass Limited (one furnace) further weighed on output.
- The declining production trend persisted in 1QFY26, with the output recording at ~3.2mln Sq. M, a decrease of ~2.0% compared to the last year (SPLY: ~3.3mln Sq. M).

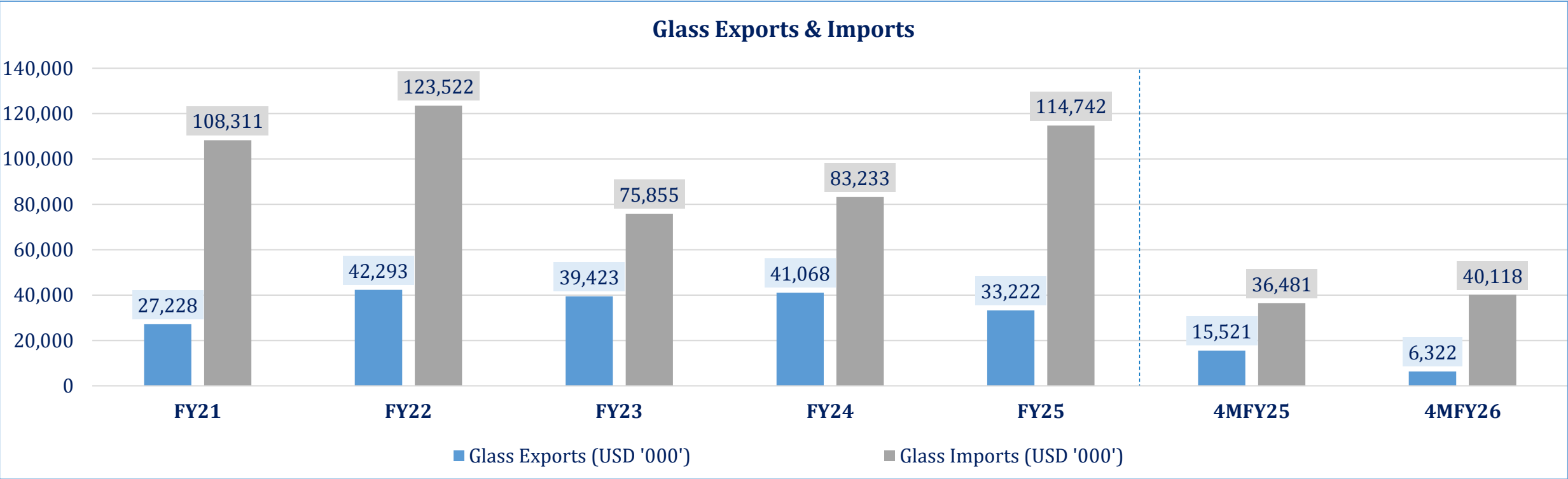




# Glass

## Local | Imports & Exports

- During FY25, total exports in value terms clocked in at USD~33.2mln (FY24: USD~41.1mln), down ~19.1% YoY, while imports rose by ~38.0% YoY to clock at USD~114.7mln (FY24: USD~83.2mln).
- In 4MFY26, glass exports continued to decline and were recorded in value terms at USD~6.3mln (SPLY: USD~15.5mln), down ~59.3% while imports rose by ~10.0% and were recorded at USD~40.1mln (SPLY: USD~36.5mln).

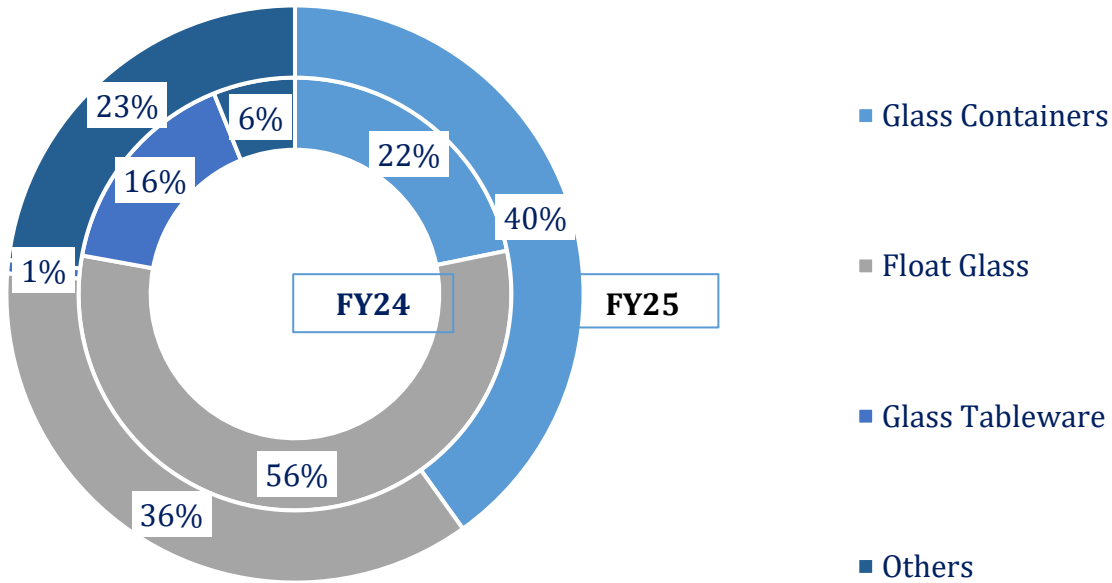


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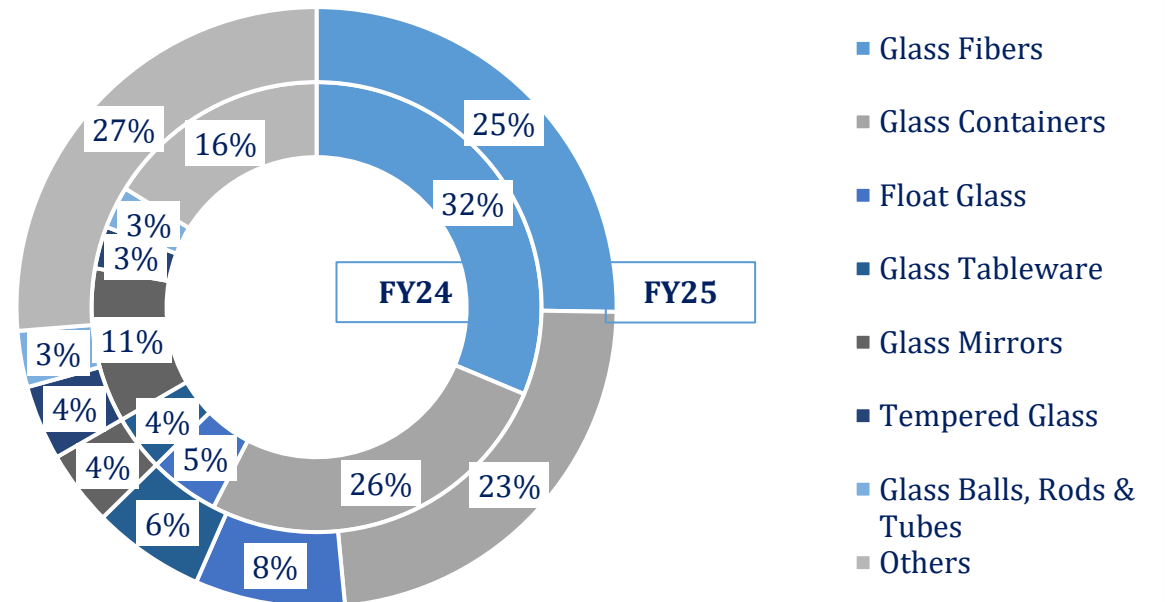
## Local | Imports & Exports

- Product-wise exports reveal that Glass Containers were the most exported category, accounting for ~40.1% of the total export share, while Float Glass had the second largest share in exports, accounting for ~36.0% of the total imports.
- Local glass manufacturers are currently limited to three segments: Float glass, Tableware, and Glass Containers. Consequently, imports are increasing to meet the demand for other types of glass. In FY25, USD~29.0mln (FY24: USD~25.9mln) Glass Fibers were imported, while USD~25.9mln worth of Glass Containers were imported, up by ~18.2% each, respectively.

Share of Exports



Share of Imports

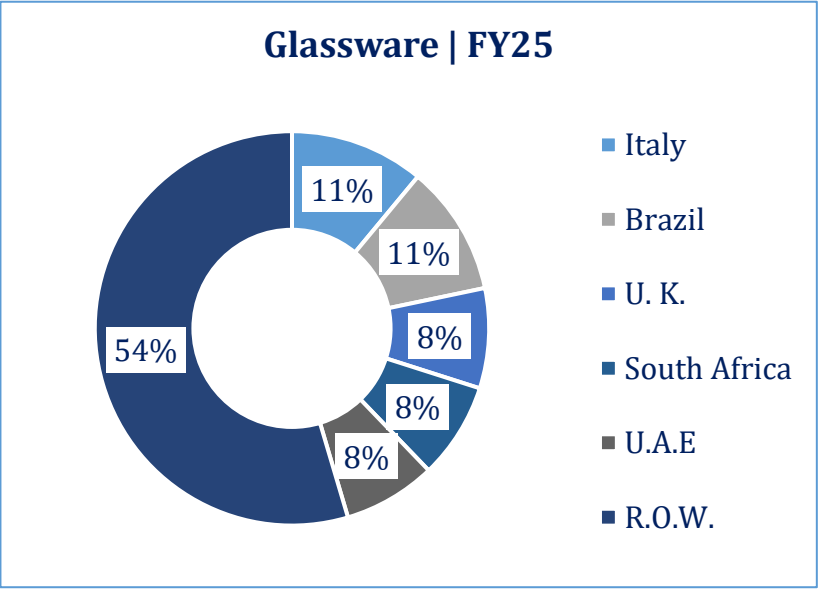
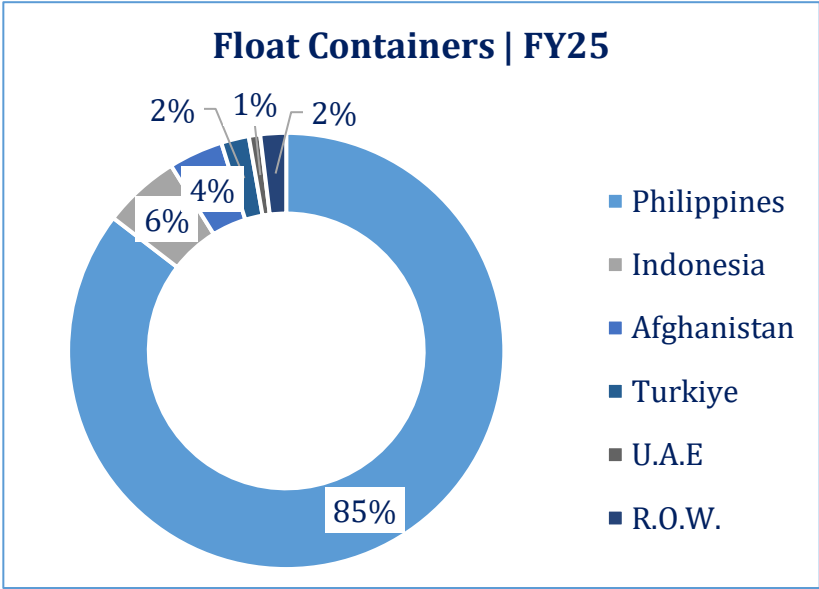
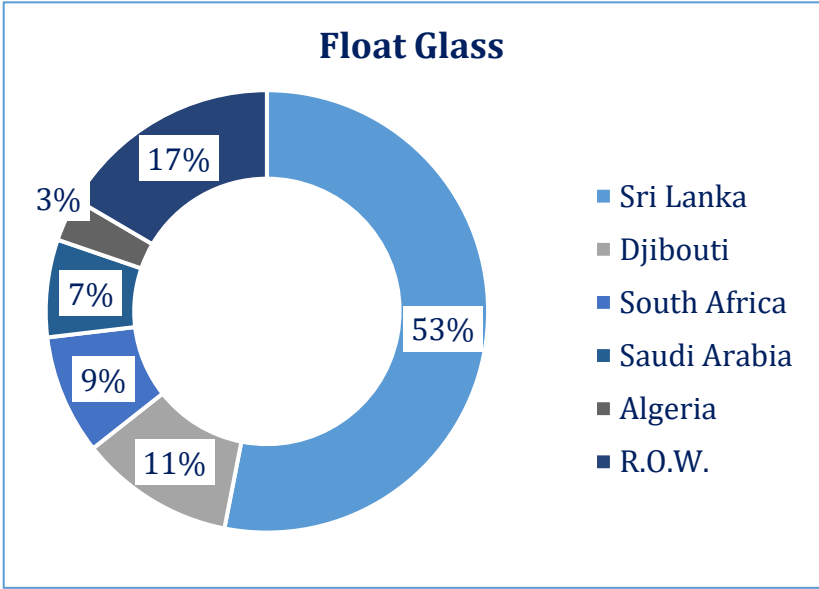


# Glass

## Export Destinations

Of the glass products, the most significant exports are of the following types:

- i. Containers:** Glass container exports made up ~40.1% of the total glass exports in FY25. The Philippines was the top destination for Glass containers (~85.4%, or USD~11.4mln), followed by Indonesia (~6.0%, or USD~0.7mln) and Afghanistan (~4.0% or USD~0.5mln).
- ii. Float Glass:** In FY25, the total export share of float glass was ~36.0%. Among the individual countries, Sri Lanka, Djibouti, South Africa, Saudi Arabia and Algeria had the largest share (~53.1%, ~11.3%, ~8.7%, ~7.1% & and ~3.2%) respectively.
- iii. Tableware:** Glassware (or Tableware) exports share remained low at ~0.7% of total glass exports in FY25. Major export destination of Glassware in FY25 was Italy and Brazil (~11.0% or USD~0.6mln; ~10.7% or USD~0.6mln), followed by the U.K., South Africa, and the U.A.E (~8.2% or USD~0.5mln; ~7.9% or USD~0.5mln; ~7.6% or USD~0.4mln).



# Glass

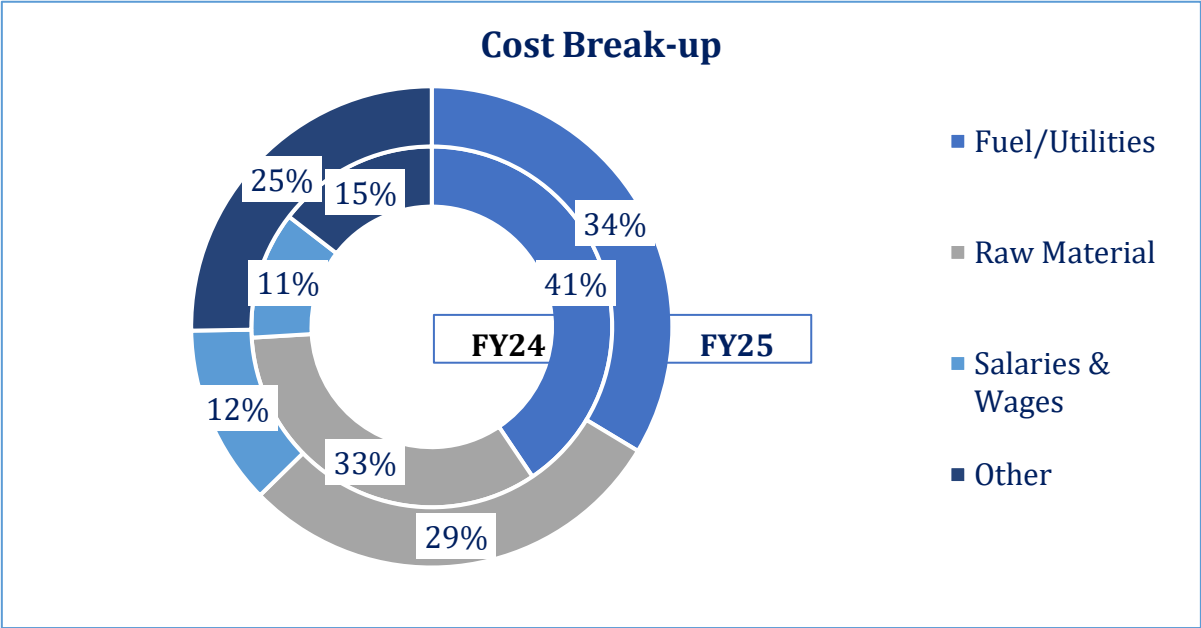
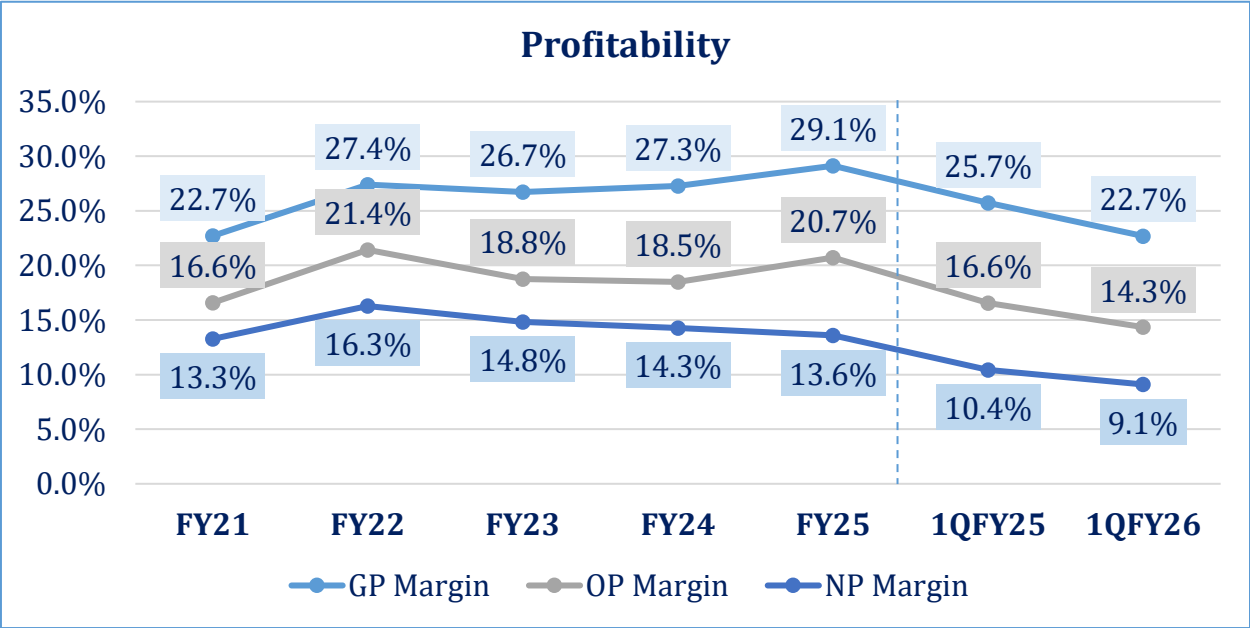
## Local | Business Risk

- **Demand Drivers:** The Glass Sector derives its demand from several industries, including construction, food & beverages, and pharmaceuticals. While the food & beverage, as well as pharmaceutical industries, have relatively inelastic demands, they account for smaller segments within the Glass Sector.
- The largest segment is the float glass used in the construction industry. Demand from the construction industry can fluctuate depending on overall economic conditions. In addition, the purchasing power of end consumers reduces during periods of economic downturn, which can impact demand for some segments, such as glass tableware.
- **Significant Energy Consumption:** The production process for manufacturing glass and glass products consumes a large amount of energy to power the furnaces at the required temperatures. Fuel and energy account for ~34.0% of the direct costs incurred during the manufacturing process. As the energy sector continues to grapple with circular debt, energy costs for industries have continued to rise.



Local | Margins & Cost Structure

- Over FY21–FY25, the sector's average gross margins stood at ~26.6%, while average net margins for the past 5 years were ~14.5%.
- In FY25, gross profit margin rose to ~29.1% (FY24: ~27.3%), driven by a ~4.0% increase in revenue. This improvement was mainly supported by higher prices and reductions in energy cost and raw-material expenses (down ~17.4% and ~13.6%, respectively).
- Operating profits were recorded at ~20.7% in FY25, up ~16.4% YoY (FY24: ~18.5%), while Net profit margins dropped by ~0.7%, clocking at ~13.6% in FY25 (FY24: ~14.3%), mainly due to higher taxation cost following the repeal of key tax incentives under new legislation.
- During 1QFY26, the sector’s margins came down due to weak construction activity and a ~2.7% increase in the cost of goods sold. As a result, gross and operating margins stood at ~22.7% and ~14.3%, respectively, while net margins were recorded at ~9.1% (SPLY: ~25.7%; ~16.6%; & ~10.4%, respectively).



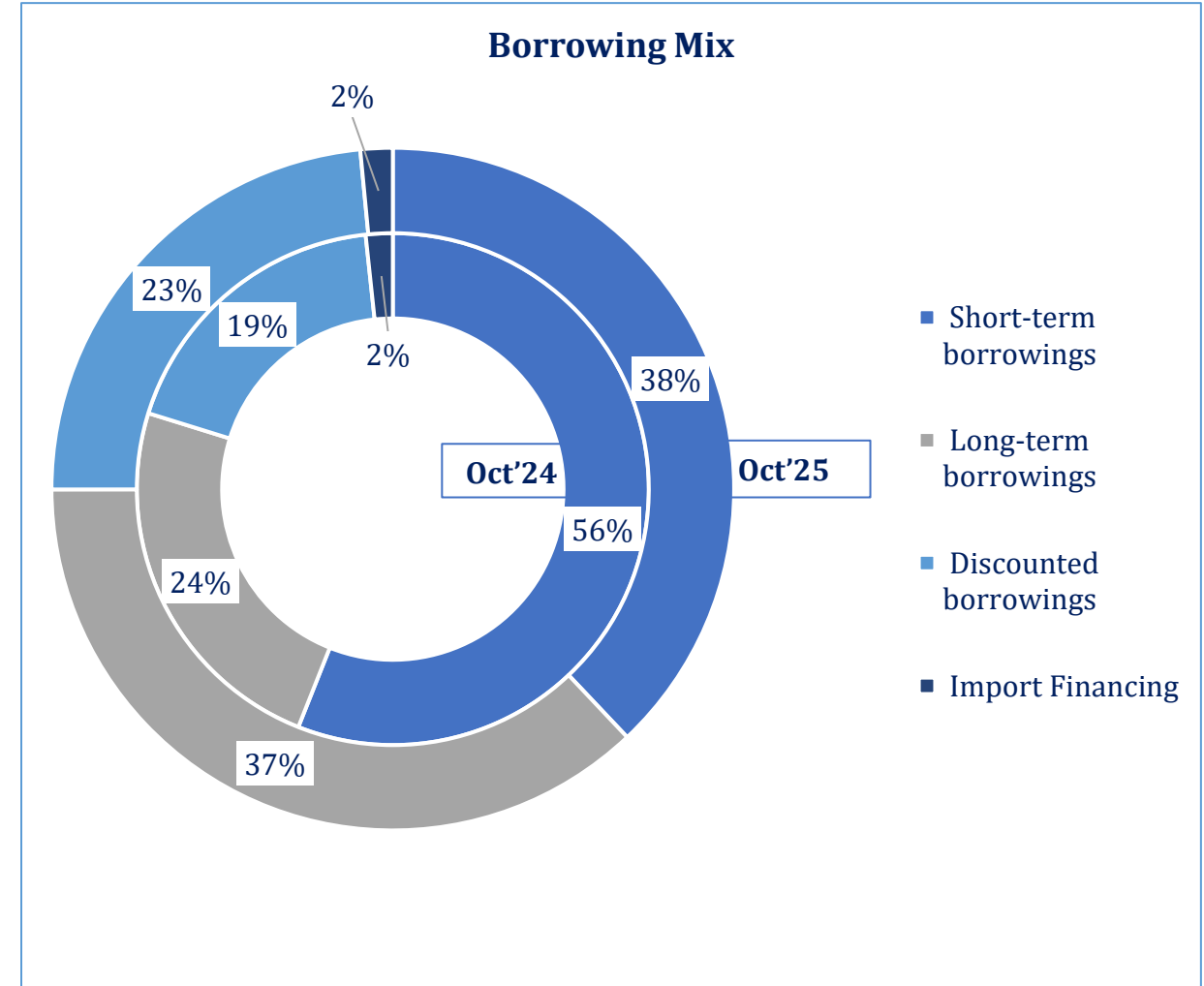
*Note: Margins & Cost Structure are reflective of ~4 listed players.*



# Glass

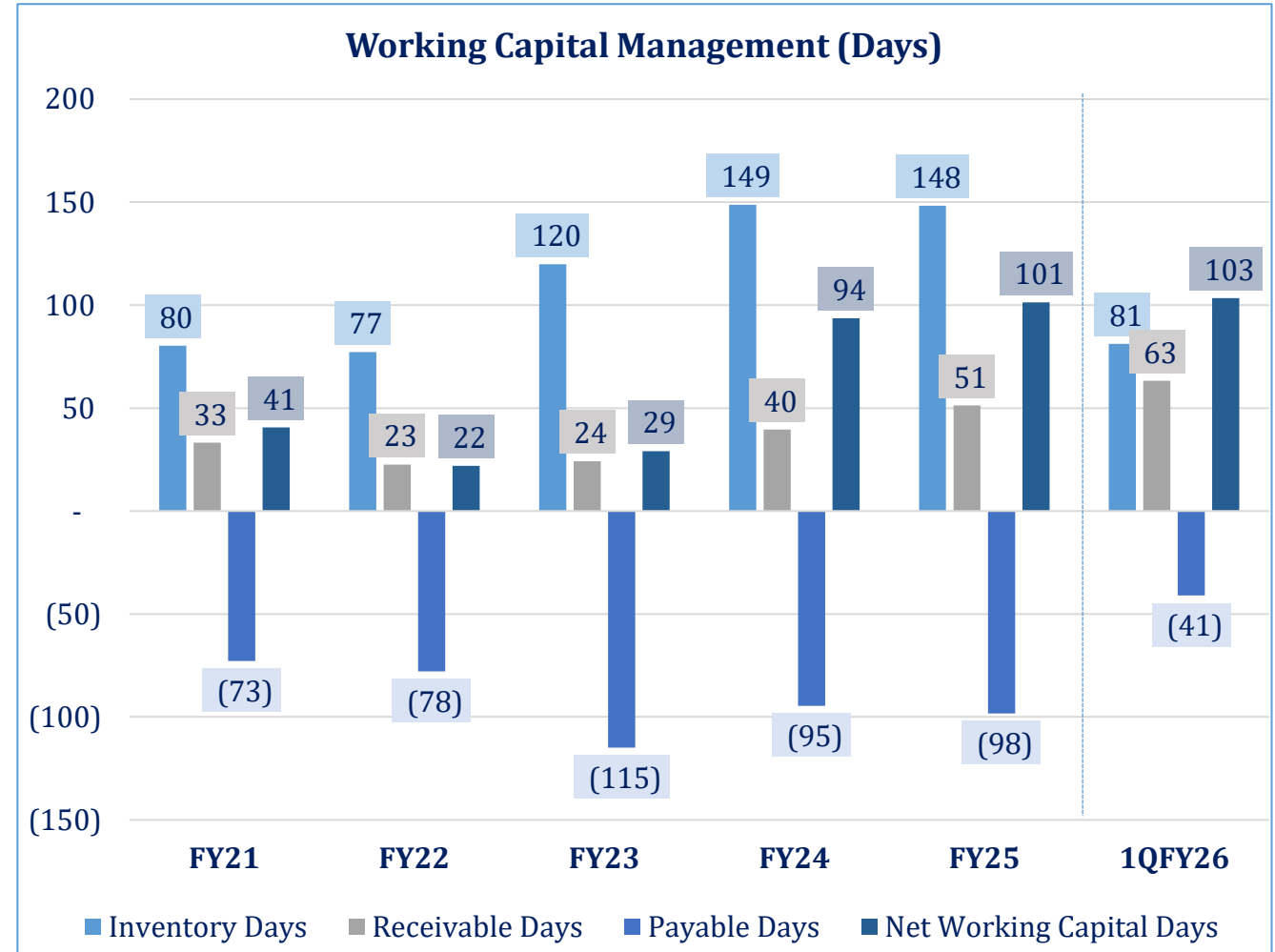
## Financial Risk | Borrowing Mix

- The Glass Sector's borrowings fell to PKR~6.1bln as of End-Oct'25, down ~51.5% YoY compared to PKR~12.5bln as of End-Oct'24..
- Short-term financing accounted for ~38.0% of the total borrowing mix, reflecting a ~67.1% YoY decline (Oct'25: PKR~2.3bln; SPLY: PKR~7.0bln). This sharp reduction is primarily attributed to Tariq Glass Limited, one of the sector's major players, which fully repaid its short-term liabilities in FY25.
- Long-term financing was recorded at PKR~2.2bln as of End-Oct'25 (SPLY: PKR~2.9bln), contributing ~37.0% YoY (SPLY: ~24.0%) to the borrowing mix.
- Discount borrowings comprised ~23.0% (SPLY: ~19.0%) of the total borrowings as of End-Oct'25, including the Long-Term Finance Facility (LTFF) and the Export Finance Scheme (EFF).
- Import Financing accounted for PKR~0.1bln as of End-Oct'25 (SPLY: PKR~0.2bln), representing ~2.0% of the borrowing mix.
- The leverage ratio of the sector remained low and was recorded at ~13.6% in FY25 (FY24: ~12.3%).



## Financial Risk | Working Capital Management

- The sector's working capital is largely a function of inventory and trade receivables.
- Inventory consists of raw material and finished goods, with work-in-process making a small contribution.
- The sector's average net working capital was calculated at ~48 days (FY21-25). However, the inventory buildup has been witnessed in recent years.
- During FY25, average working capital days stood at ~101 days (FY24: ~94days), an increase of ~7 days YoY.
- Receivable days rose by ~11 days, rising from ~40 days in FY24 to ~51 days in FY25, due to the sector offering favorable credit terms to compensate lower demand. This has added pressure on the overall cash flow of the sector.
- Payables days rose by only ~3 days in FY25 and were recorded at ~98 days compared to ~95 days in FY24.
- In 1QFY26, net working capital was recorded at ~103 days. Inventory days and receivable days were recorded at ~81 days and ~63 days, respectively, while payable days clocked in at ~41 days.



# Glass

## Duty Structure

HS Code	Description	Unit of Measure	Customs Duty	Customs Duty	Regulatory Duty	Regulatory Duty	Additional Customs Duty	Additional Custom Duty
			FY25	FY26	FY25	FY26	FY25	FY26
7001.0000	Cullet & Other waste/ scrap of glass	Kg	11%	10%	0%	0%	2%	0%
7002.1000	Glass in Balls, Rods or Tubes	Kg	20%	20%	0%	0%	6%	4%
7003.3000	Cast and Rolled Glass in Sheets or Profiles etc.	m <sup>2</sup>	20%	20%	0%	0%	6%	4%
7004.2000	Drawn and Blown Glass in Sheets	m <sup>2</sup>	20%	20%	0%	0%	6%	4%
7005.1000	Float Glass	m <sup>2</sup>	20%	20%	0%	24%	6%	4%
7006.0002	Glass of Bent, Edge worked, Engraved	Kg	20%	20%	0%	24%	6%	4%
7007.1111	Tempered Glass	u	35%	35%	0%	0%	11%	11%
7010.1000	Glass Bottles	Kg	20%	20%	20%	20%	6%	4%
7011	<b>Glass Envelopes</b>							
	For electric lighting	Kg	16%	15%	20%	20%	4%	2%
	For cathode-ray tubes	Kg	11%	10%	20%	20%	2%	0%
7013.1000	Glassware (Tableware)	Kg	20%	20%	20%	20%	6%	4%
7015.1000	Glasses of Clock, watch, Spectacle etc.	u	11%	10%	0%	0%	2%	0%
7016.1000	Glass Paving Blocks, Bricks, Squares	Kg	20%	20%	20%	20%	6%	4%
7017.9000	Laboratory, Hygienic or Pharmaceutical	Kg	3%	0%	0%	0%	2%	0%
7018.1000	<b>Glass Bead etc. and Articles NES</b>							
	Precious stones etc.	Kg	16%	15%	20%	20%	4%	2%
7018.9010	Glass microspheres	Kg	11%	10%	20%	20%	2%	0%
7018.9010	Glass eyes	Kg	11%	10%	20%	20%	2%	0%

## Ratings Chart

- PACRA rates 2 entities in the Glass Sector with a long-term rating bandwidth of A+ to BBB+



# Glass

## SWOT

- Diverse product segments that derive demand from multiple industries.
- Ample local production capacity.
- Glass is recyclable.

### Strengths

### Weaknesses

- Some segments have a low level of competition, which reduces the incentive to increase efficiency.
- Regular maintenance of fixed assets (furnaces) reduces production levels.
- High dependence on imports and energy-intensive production.

- Slowdown in other industries such as construction, pharmaceuticals, or reduced consumer spending power can hamper demand.
- High energy cost.
- Policy uncertainty.

### Threats

### Opportunities

- The incentives provided to the construction industry are likely to create demand for float glass.
- Opportunity for import substitution.
- Expansion into value-added products.



## Outlook: Stable

- In FY25, Pakistan's GDP (nominal) stood at PKR~114.7trn (FY24: PKR~105.1trn). In real terms, GDP rose by ~2.7% YoY (FY24: ~2.5% growth) and is expected to grow by ~3.25% according to SBP in FY26. Industrial activities in FY25 held ~18.1% share in the GDP, while manufacturing activities made up ~65.3% of the value addition. During FY25, the average CPI inflation dropped to ~3.2% from ~12.6% in FY24, while the policy rate was maintained at ~11.0% as of Oct'25.
- In 1QFY26, inflation was ~5.0% (SPLY: ~7.9%), in line with SBP's inflation target for the medium to long-term. The construction sector underperformed amidst higher taxation and transaction costs. This was also reflected in declining sales of cement and steel. This slowdown in activity put pressure on margins as energy, raw material, and operational costs rose.
- Despite a ~12.3% increase in revenue during 1QFY26, supported by elevated prices, overall profitability remained relatively low. Gross and operating profit margins stood at ~22.7% and ~14.3% YoY (SPLY: ~25.7% & ~16.6%, respectively), while net profitability was further constrained by higher taxation following the increase of super tax on the industry. Overall, the glass industry remains constrained by periodic plant shutdowns for maintenance, escalating energy costs, and muted expansion in the construction sector.
- The sector continues to operate across three major product segments, each characterized by significant competition and persistent cost pressures. As domestic production struggles to meet total demand across various glass categories, imports have risen sharply (FY25: up ~38.0%; 4MFY26: up ~10.0%). Glass fiber accounts for ~25.0% of total glass imports, underscoring a strong reliance on international suppliers for this category.
- The industry still has relatively higher margins and stable profitability, but the reduction in volumes is challenging. Construction activities remained subdued in FY25 and the ongoing FY26. However, LSM grew by ~4.1% in FY26, a positive sign for the glass sector. The sector is entering FY26 with strengthened capacity and technological upgrades, as key players expand vial and ampoule production, upgrade furnaces for advanced bottle manufacturing, and introduce value-added projects such as screen-printing lines. These investments signal a sector-wide shift toward higher efficiency, greater self-sufficiency, and improved export potential, positioning the industry for steady growth in the coming year.

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- Glass Alliance Europe
- Research and Markets

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