

Shipping

Sector Study

June 2023

Together. Creating Value.

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Container Ships

A ship structured specifically to hold huge quantities of cargo compacted in different types of containers.

Bulk Carrier

The cargo transported in such ships is loose cargo i.e. without any specific packaging to it and generally contains items like food grains, ores etc.

Tanker Ships

Specialized ships for carrying a large amount of liquid cargo. They are further sub-divided into different types i.e. Oil Tankers, Liquefied Gas Carriers etc.

Roll-on Roll-off Ships

These are the ships that are used to carry wheeled cargo i.e. Cars, trucks, buses etc.

Source: Marine Insights

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Introduction | Types of Ships

Passenger Ships

As the name suggests, these are used for transiting passengers. Mainly classified into: Ferries & Cruise Ships.

Offshore Ships

These ships mainly help in oil exploration and construction jobs at sea. These include supply ships, pipe layers, crane barges etc.

Fishing Ships

These ships are used for recreational and commercial fishing at sea. These are classified into two types i.e. Trawlers and non-trawler ships.

Specialty Ships

These ships have onboard machinery and equipment to perform special tasks. These include: anchor handling tug supply, drilling ships etc.

Source: Marine Insights

Introduction | Types of Ships

High-Speed Craft Ships

As the name suggests, these are high speed water ships also called fast ferry. Most high speed craft serve as passenger ferries but largest ones also carry cars, buses, large trucks and freight.

Dredgers

Dredgers are types of ships that have excavation tools used for removing sand and other types of deposits from the seabed. Dredgers are used for several purposes, such as deep-sea mining. They are classified into two types: mechanical dredgers & hydraulic dredgers

Source: Marine Insights

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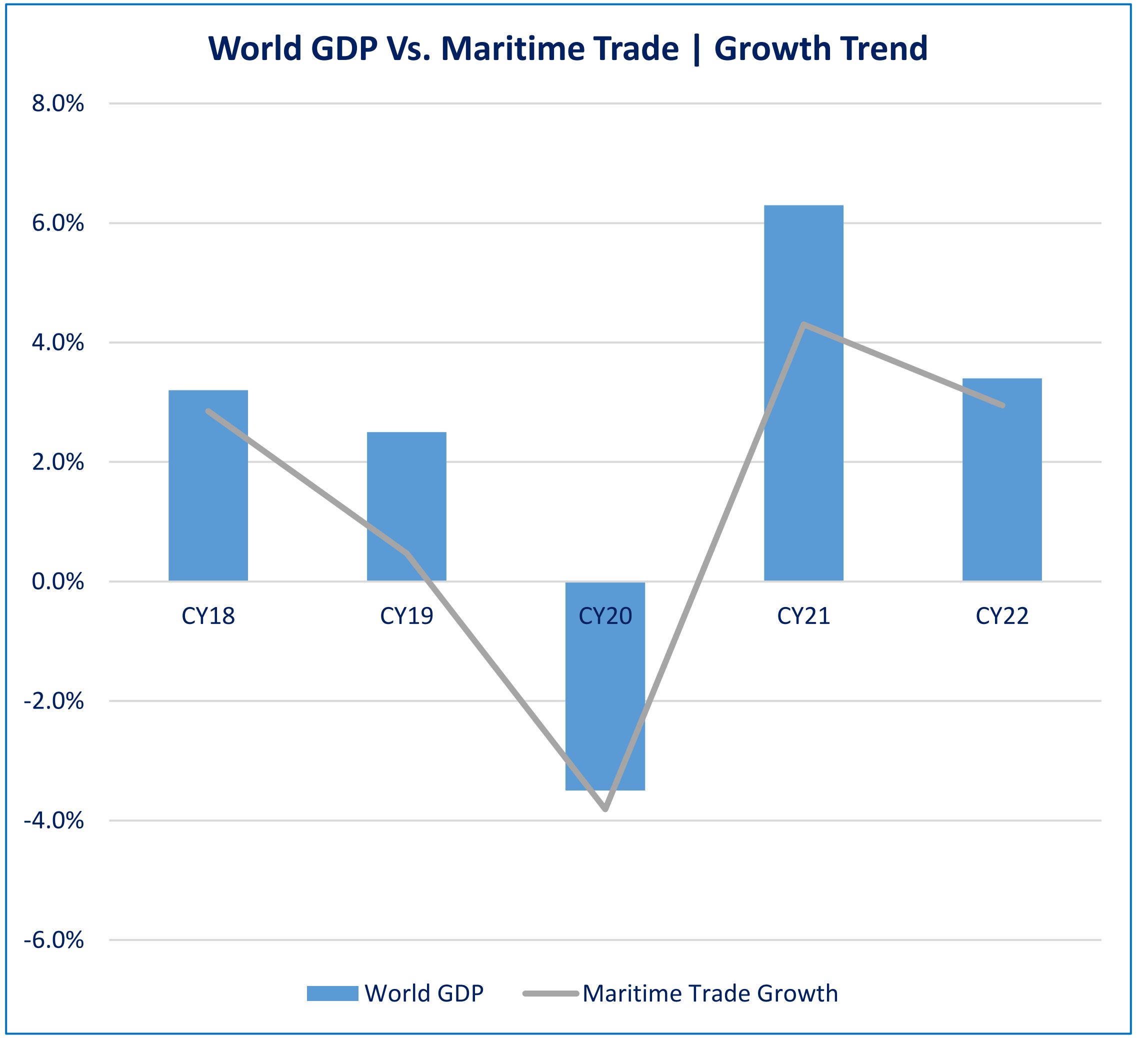
Global | Overview

- The Shipping Industry, plays an essential role in the global trade. It accounts for ~80%, of the world trade (every year) which includes international bulk transportation of raw materials, commodities, dry and liquid goods, perishable food items, manufactured goods and capital goods. Intercontinental trade would have been negligible if it were not for the shipping industry.
- In early CY22, the world shipping fleet comprised of ~102,899 ships compared to CY21 of ~99,800 ships.
- In Jan'22, global fleet reached a carrying capacity of ~2.2bln dead weight ton (dwt)*, ~63mln dwt more than the previous year.
- Seeing as the Shipping Industry operates globally, its regulations are agreed upon, adopted and implemented on a global level through the regulatory body, International Maritime Organization (IMO) in the United Nations system.
- Maritime trade generally moves in tandem with the World Gross Domestic Product (GDP). We can observe this pattern in the chart on the right as well, wherein growth in seaborne trade slowed to ~3.0% in CY22 (CY21: ~4.3%), following a similar trend to the World GDP that also shrunk to ~3.4% in CY22 (CY21: ~6.3%).



**Deadweight* is measured in tons and is a measure of a ships weight carrying capacity, not including the empty weight of the ship.*

Source: World Bank, Review of Maritime Transport, 2022, UNCTAD

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Global | Overview

- Combined commercial value of the ships around the globe stands at USD~1,358bln as of Jan’22 with the highest share of China amounting to USD~155bln which is ~11%.
- Trade volume by ships declined by ~0.9% to ~11bln MT from ~11.1bln MT in CY21 (CY20: ~10.6bln MT).
- Average age of the ships around the globe is ~22 years. The highest proportion is attributed to more than ~20 years old ships (~41%).
- Asia contributes the highest of ~42% to maritime trade while Greece maintains its position at the top in terms of carrying capacity around the world at ~17.6%.
- Panama, on the other hand, grabs the highest position as a leading flag registration country in terms of DWT.

Jan’22		
Maritime Trade Growth	**Total Global Fleet (by carrying capacity in DWT)**	**Capacity**
~2.95%	**~55,000** Ships	**~2.2** Million DWT (Jan’22)
Trade Volume	**Average Age**	**Highest Proportion**
~11 Billion Metric Tons	**~21.9** Years	**~> 20** Years Old Ships
Highest Maritime Trade Share	**Top Owners – Carrying Capacity**	**Country Leading Flag Registration (DWT)**
Asia ~42%	**Greece** ~17.6%	**Panama** ~15.9%

Note: *a Flag State refers to a nation where shipowners or shipping companies get their commercial or recreational ships registered. Hence, the registered ships have to carry the flag of that state. Panama is the largest flag State in the world.*

Source: Review of Maritime Transport 2022

Global | Overview

- Total trade volume loaded for CY21 stood at ~10.9bln MT as opposed to ~10.6bln MT in CY20. The volume of cargo discharged for both years was nearly similar to volume of cargo loaded; and can be seen in the table on the right.
- On the other hand, the share of the developing economies maintained its proportion of ~55% in terms of cargo loaded during CY21, while the share of the developed economies remained at ~45%.
- During CY21, developing economies constituted ~63% to cargo discharged similar to that in CY20, whereas, the share of developed economies stood at ~37% both in CY21 and CY20.

Seaborne Trade Statistics | CY21

(mln MT)		Cargo Type - Loaded				Cargo Type - Discharged			
Economy	Year	Crude oil	Other tanker trade	Dry Cargo	Total Goods	Crude oil	Other tanker trade	Dry Cargo	Total Goods
World	CY21	1,700	1,252	8,033	**10,985**	1,846	1,273	7,856	**10,976**
	CY20	1,716	1,203	7,727	**10,645**	1,864	1,222	7,545	**10,633**
Developing Regions	CY21	1,271	749	4,029	**6,049**	968	843	4,887	**6,698**
	CY20	1,277	714	4,269	**6,331**	986	828	4,710	**6,524**
Developed Regions	CY21	429	503	4,005	**4,936**	878	400	2,836	**4,110**
	CY20	439	489	3,893	**4,821**	879	430	2,969	**4,278**

Note: *Latest data available is for CY21 in the Review of Maritime Transport 2022*

Source: Review of Maritime Transport 2022

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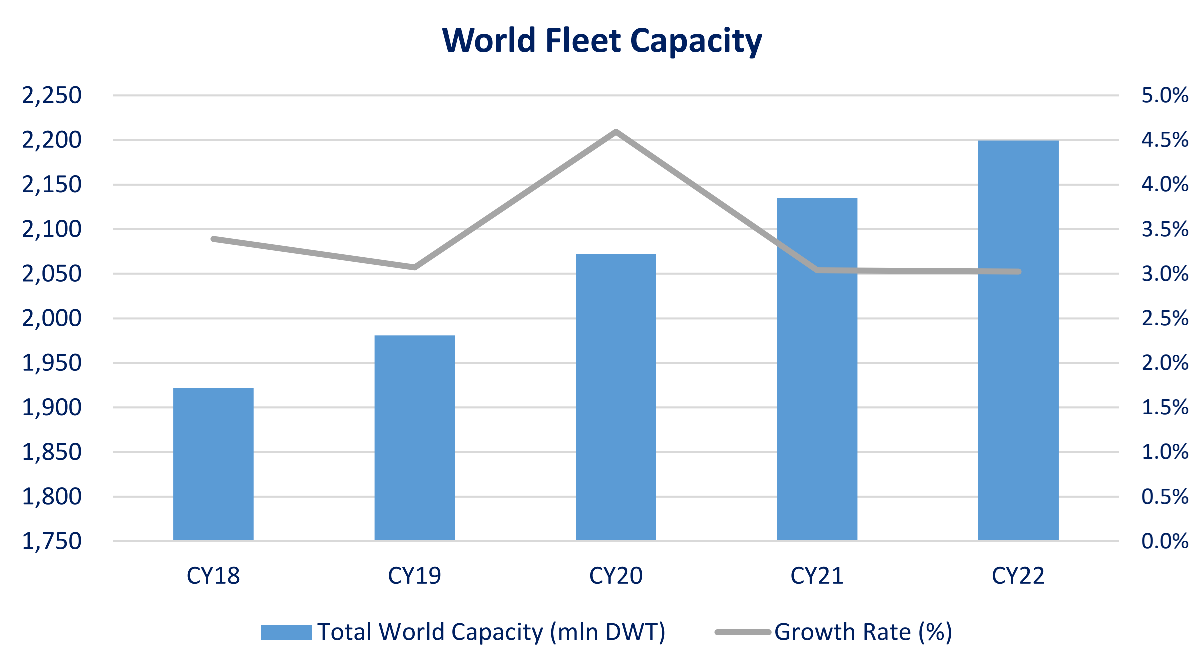
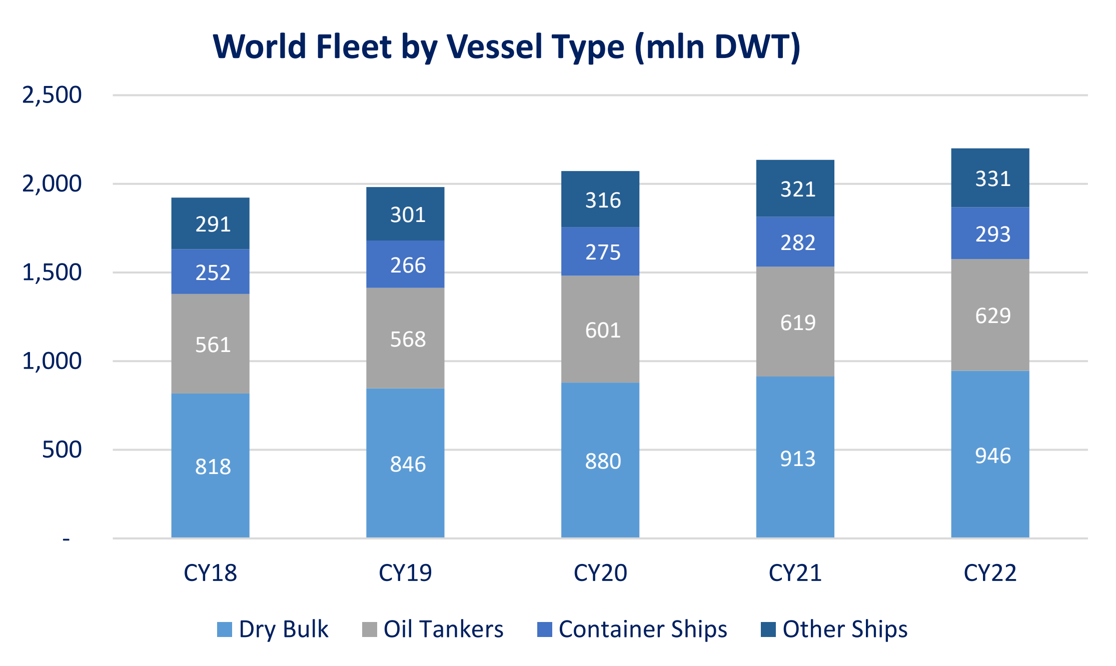
Global Fleet





- The global capacity of fleet expanded by ~3% YoY in CY22 and stood at ~2,200mln DWT as compared to ~2,135mln DWT in CY21.
- In the global fleet principal ships type, the proportion of the Dry Bulk is highest at ~43%, followed by Oil Tankers (~29%), Containers (~13%), and Other Ships (~15%). All these proportions are exactly the same as last year.
- During CY22, both offshore supply ships and gas carriers contributed the highest to "Other Ships" (~25%), closely followed by general cargo ships (~24%). Amongst other types are; chemical tankers (~15%), ferries and passenger ships (~2%) and Others (~9%).

Source: Review of Maritime Transport 2022

Global | Top Fleet Owners

- As per carrying capacity in deadweight tons (DWTs), the top ten countries with the highest ownership of the world fleet are listed below.
- Greece has a total capacity of ~384mln DWTs, highest in the world with a ~17.6% of the global share, followed by China with a share of ~12.7% and Japan with a share of 10.9%.

Ownership of Global Fleet by Carrying Capacity in DWT | CY22

	Country/ Territory	Total No. of Ships	Deadweight Tonnage (mln DWT)	Total as % of World
1	Greece	4,870	384.4	17.6%
2	China	8,007	277.8	12.7%
3	Japan	4,007	236.6	10.9%
4	Singapore	2,799	136.2	6.3%
5	China, Hong King SAR	1,822	111.6	5.1%
6	Republic of Korea	1,680	92.3	4.2%
7	Germany	2,221	79.6	3.7%
8	Bermuda	507	63.4	2.9%
9	Norway	1,987	59.9	2.8%
10	United Kingdom	1,380	58.7	2.7%
	Rest of the World (ROW)	25,757	679.3	31.2
	World	**55,037**	**2,180.1**	**100.0%**

Source: Review of Maritime Transport 2022

Global | Ship Recycling & Breaking

Top Ship Recycling Countries | CY21 (000 Gross MT)*								
Ship Type	**Bangladesh**	**Pakistan**	**India**	**Türkiye**	**China**	**Rest of the World**	**World Total**	**Percentage**
Oil Tankers	4,565	2,200	1,044	318	42	45	8,214	54%
Others	1,407	368	1,371	606	38	339	4,129	27%
Bulk Carriers	2,011	477	133	112	60	22	2,815	18%
Container Ships	42	0	101	0	0	27	170	1%
Total	**8,025**	**3,045**	**2,649**	**1,036**	**140**	**433**	**15,328**	**100%**

- Ship recycling decreased by ~12% YoY in CY21 (from ~17mln MT in CY20 to ~15mln MT in CY21). Although this decline was mostly due to strong markets that encouraged owners to retain ships rather than dismantle, there were also other factors such as limits on imports of ships (Bangladesh and Pakistan) that led to the decline.
- Oil tankers had the highest proportion of ~54% in global ship recycling in CY21, while the “Others” category comprised a ~27% share. Bulk carriers accounted for ~18% of the global ship recycling.
- Bangladesh continues to account for the highest in the global recycling with a share of ~52% in CY21, whiles shares of India, Türkiye and China stood at ~17%, ~7% and ~4%, respectively.
- Pakistan’s share in global recycling stood at ~17% in CY21 (same as in CY20). The recycled volume in Gross MT increased slightly by ~5% YoY from ~2,890,000 MT in CY20 to ~3,045,000 MT in CY21. The dominance of ship recycling in Asia can primarily be attributed to lower labor costs and limited scope of health and environment regulation as opposed to western countries where ship breaking is negligible due to strict regulations specially in Eurozone countries regarding the environmental impacts of ship recycling.

***Note:** Latest data available is for CY21 in the Review of Maritime Transport 2022*

*Gross Tons reflect the size of the ship

Source: Review of Maritime Transport 2022, IRSA

Global | Ship Recycling & Breaking

- Until the 1970s, ships were dismantled mainly in Europe and the US, when social and environmental protection laws became stricter, the industry shifted to areas where legal frameworks are weaker i.e., Asia. Today, the vast majority of ships are broken in South Asia (Bangladesh, Pakistan, India, China and Türkiye) which account for ~97% of ship breaking and recycling.
- Ship breaking and recycling has a number of hazardous results such as workers being killed, impaired for life, exposed to toxics that cause cancers, and sensitive coastal environments are ruined.
- The minimal ship breaking activities that happen in Europe have strict rules and regulations laid down by the International Ship Recycling Association (ISRA) and is founded by the EU. The association promotes and facilitates the environmentally sound and safe recycling of ships and ensures important social, human health and environmental impacts of ship recycling are not violated.
- The three goals of ISRA are (i) ensuring that the EU does not export its waste challenges to third countries, (ii) making it easier to transport waste for recycling and reuse in the EU and (iii) better tackling illegal waste shipments.
- In CY21, recycling increased most for chemical tankers, by ~143%, and for oil tankers, by ~331% which accounted for more than half of the recycled volumes. Owners of other ship types were more likely to hang on to their existing tonnage in view of potential profitability. Thereby, recycling declined by volume for container ships by ~9% and for bulk carriers by ~70%.
- The ship breaking and recycling industry is an important source of scrap metal, despite a slowdown in recycling in CY21, the ship breaking industry has been performing well, therefore it is anticipated to remain have a stable outlook.

Note: *Latest data available is for CY21 in the Review of Maritime Transport 2022*

Source: Review of Maritime Transport 2022, IRSA,

Global | Outlook

- The shipping sector has been transformed by horizontal and vertical integration through mergers and acquisitions. Consolidation in the shipping market reduces competition and constrains supply. It can lead to market power abuse, higher shipping costs for businesses and thus higher prices for consumers.
- Over the last 25 years (1998-CY23), the top 20 carriers in the shipping industry have almost doubled their market share from ~48% to ~91%, whereas, the four largest carriers now control more than half of the global container shipping capacity.
- Global maritime trade is expected to slow down to ~2.1% annually for the period CY23-27, slower than the average growth rate of ~3.3% recorded during the past 3 decades (1992 to CY22).
- External factors like the Russian-Ukraine war, climate changes and geopolitical tensions have caused chaos for maritime transport such as over-crowding on some ports while closing down others, that have resulted in delays and pushed up shipping costs.
- Additionally, ship owners are holding off buying new ships, despite greater demand, and are maintaining existing fleets because of surging borrowing costs, a possible economic slowdown and strict environmental regulations. Also, as a result of new environmental regulations, ship owners are having uncertainties regarding the most efficient alternative fuels and ways of reducing carbon.
- Rapidly slowing growth in Europe's largest economies amid general high inflation and soaring electricity prices, and a gloomy situation for global economic growth, pose risks to the industry as a whole.
- Therefore, in light of these circumstances, the outlook of global shipping industry seems to be slightly weaker but stable since ~80% of world trade is dependent on seaborne transport.

Source: Review of Maritime Transport, 2022, UNCTAD, Moody's

SHIPPING

Local | Overview

- Seaborne trade holds a significant importance for the economy of Pakistan as the country enjoys an imperative coastal geographical location, with sea front ranging from the Iranian border in the west to Sir Creek in the east.
- Pakistan's coastline (>~1,000km) dominates sea traffic to and from the Suez Canal, Arabian Sea and Persian Gulf on one side and India to Far East on the other.
- Gwadar port, a key component of CPEC (China Pakistan Economic Corridor), is a shorter trading route between China, Middle East, Africa and Europe and can be used to bring not only oil but also goods to and from Pakistan.
- The economy of Pakistan relies heavily on shipping industry for its international trade. At present, ~95% of the external trade is based on sea transportation.
- Seaborne trade of the country dropped by ~2.7% to ~107mln DWT in FY22 from ~110mln DWT in FY21.
- The gross revenue of the industry increased by ~117% from PKR~13bln in FY21 to PKR~28bln in FY22. For 9MFY23, the revenue jumped by ~53% YoY (9MFY23: PKR~43bln, 9MFY22: PKR~16bln, 9MFY21: PKR~10bln).

Particulars	FY21	FY22	9MFY23
Gross Revenue (PKR mln)	12,789	27,714	42,379
Number of Local Companies	1	1	1
Structure	Listed & Monopolistic		
Total Seaborne Trade (mln MT)	110	107	107*
PNSC Share in Total Seaborne Trade	10%	11%	11%*
Fleet Size	11	13	12
Tankers	6	8	7
Dry Bulk Carriers	5	5	5

Note: *Gross Revenue is reflective of one sector player and includes Local Sales and others.*
**Latest Available figures are of FY22.*

Source: PACRA Database, PNSC

Local | Overview

- In 1974, Pakistan's shipping sector was nationalized with all ship-owning businesses merged under the Pakistan Shipping Corporation (PSC). Later, Pakistan National Shipping Corporation (PNSC) was established in 1979 after the National Shipping Corporation (NSC) was merged with Pakistan Shipping Corporation (PSC). PNSC is listed on Pakistan Stock Exchange since 1980.

- As of 9MFY23, PNSC is majorly owned by the Government of Pakistan (GOP) (~87.3%), through the Ministry of Maritime Affairs, followed by the PNSC Employees Empowerment Trust (~1.83%), bringing the total GOP holding to ~89.13%.

- The Ministry of Maritime Affairs oversees the Corporation and monitors its regulatory framework.

- PNSC has a unique distinction of being the only national flag carrier with 100% Pakistani fleet including both dry bulk and liquid bulk carriers. A staggering ~80% of the oil imported into Pakistan is transported through the PNSC.

- As of Dec'22, the company's fleet comprised ~13 ships (~8 tankers and ~5 dry bulk carriers) with a total deadweight capacity of ~1,046,020 DWT. The fleet is fairly new with an average age of ~16 years against the average age of ~22 years for the global fleet.

Pakistan's Fleet and Capacity (Dec'22)

Sr#	Ship Types	Name of Ship	Year of Manufacturing	Years of Purchase by PNSC	Age	Capacity (DWT)
1	TANKERS	M.T Quetta	2003	2008	18	107,215
2		M.T Mardan	2007	2022	15	107,123
3		M.T Sargodha	2008	2022	14	107,123
4		M.T Karachi	2003	2010	18	107,081
5		M.T Lahore	2003	2010	18	107,081
6		M.T Shalamar	2006	2014	15	105,315
7		M.T Khairpur	2012	2019	9	74,986
8		M.T Bolan	2013	2019	8	74,919
	Total Liquid Bulk					**790,843**
9	BULK CARRIERS	M.V Malakand	2004	2010	17	76,830
10		M.V Hyderabad	2004	2011	17	52,951
11		M.V Multan	2002	2012	19	50,244
12		M.V Chitral	2003	2010	18	46,710
13		M.V Sibi	2009	2011	12	28,442
	Total Dry Bulk					**255,177**
	Total					**1,046,020**

Source: PNSC, PACRA Database

Local | Seaborne Trade

- Pakistan currently expends a substantial USD~6.0bln on freight for seaborne trade.
- Pakistan's total seaborne trade decreased by ~3% in FY22 to ~106.8mln MT from ~110.3mln MT in FY21.
- PNSC holds a significant share in the country's Liquid Bulk (tankers) trade of ~30% and only a very minimal share of ~2% in the country's Dry Bulk (Bulk carriers) trade. The remaining trade of liquid and dry bulk takes place through fleets owned by India, UAE, China, Singapore, Saudia Arabia, Malaysia, Oman, Spain and France.
- In FY22, Dry Cargo trade dropped to ~1.32mln MT from ~1.54mln MT, whereas Liquid Cargo increased to ~10.7mln MT in FY22 from ~9.55mln MT.
- The term Slot Charter is used when only part of the ship is chartered in order to transport dry cargo in TEU.
- Break bulk in slot charter increased from ~0.01mln MT in FY22 from ~0.03mln MT in FY21.

	Dry Bulk			Liquid Bulk			Total		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Pakistan Seaborne Trade (*mln MT*)	66.6	78.0	70.7	27.7	32.3	36.1	94.3	110.3	106.8
Seaborne Trade | PNSC (*mln MT*)	1.5	1.5	1.3	7.3	9.6	10.7	8.8	11.1	12.0
PNSC Share as % of Total Seaborne Trade	2%	2%	2%	26%	30%	30%	9%	10%	11%

	Unit of Measurement	FY20	FY21	FY22
Dry Cargo (Bulk Carrier)	mln MT	1.53	1.54	1.32
Liquid Cargo (Tanker)	mln MT	7.28	9.55	10.7
Slot Charter				
Break Bulk***	Higher of MT or CBM** (W/M)	0.01	0.01	0.03
Containerized Cargo	000' TEUs*	1.68	1.73	2.16

Latest Available figures are of FY22.

**TEU is acronym for twenty feet container. **CBM is acronym for cubic meter. ***Break Bulk is cargo that is not containerized.*

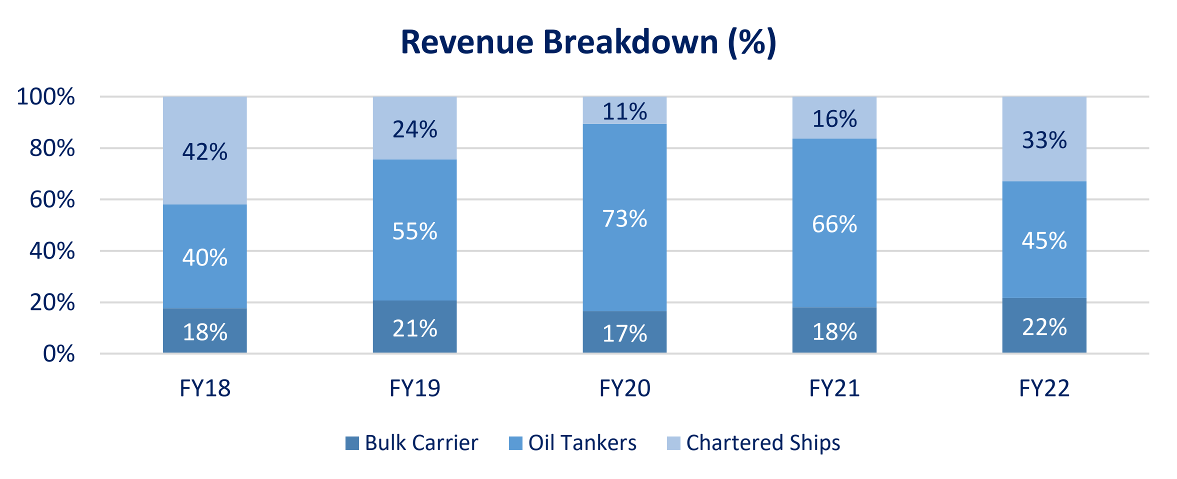
Source: PNSC, UNCTAD, UNCTADSTAT

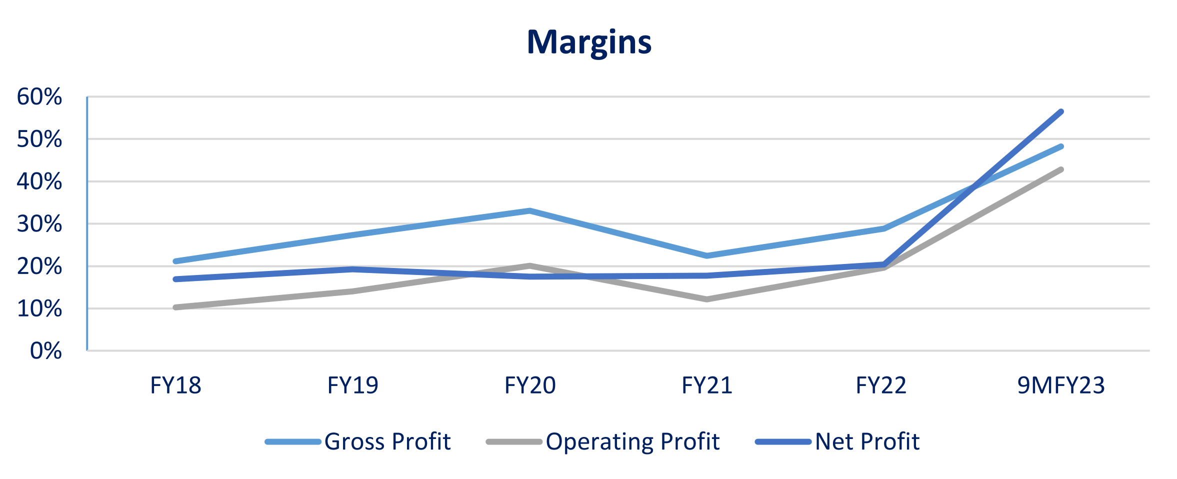
Local | Business Risk

- Total local revenue of the sector stood at PKR~24bln in FY22, up by ~96.5% YoY (FY21 PKR~12bln). Revenue earned from oil tankers was PKR~11bln and constituted the highest chunk (~45%) of the total shipping revenue (FY21: Revenue from oil tankers stood at PKR~8bln and constituted ~66% of the total shipping revenue), whereas chartered ships and bulk carriers contributed ~33% (PKR~8bln) and ~22% (PKR~5bln), respectively (FY21: ~16% and ~18%, respectively).

- Gross and operating margins increased from ~22% and ~18% in FY21 to ~29% and ~20%, respectively, in FY22. Whereas, in 9MFY23, gross margin rose by ~24% when compared with SPLY to reach ~48%. There was an even greater increase seen in net margin which increased by ~42% (9MFY23: ~57%, 9MFY22: ~15%).

- In 9MFY23, the revenue earned by the sector stood at PKR~42bln (9MFY22: PKR~16bln) and was the highest in the history of PNSC. This tremendous increase can be explained by an increase in shipping operations and due to the revenue from two new vessels (MT Mardan and MT Sargodha), as well as due to the sale of one tanker vessel 'M.T. Karachi'. Additionally, the revenue (in PKR) also got impacted due to a considerable increase in exchange rate, since revenue earned is in USD.



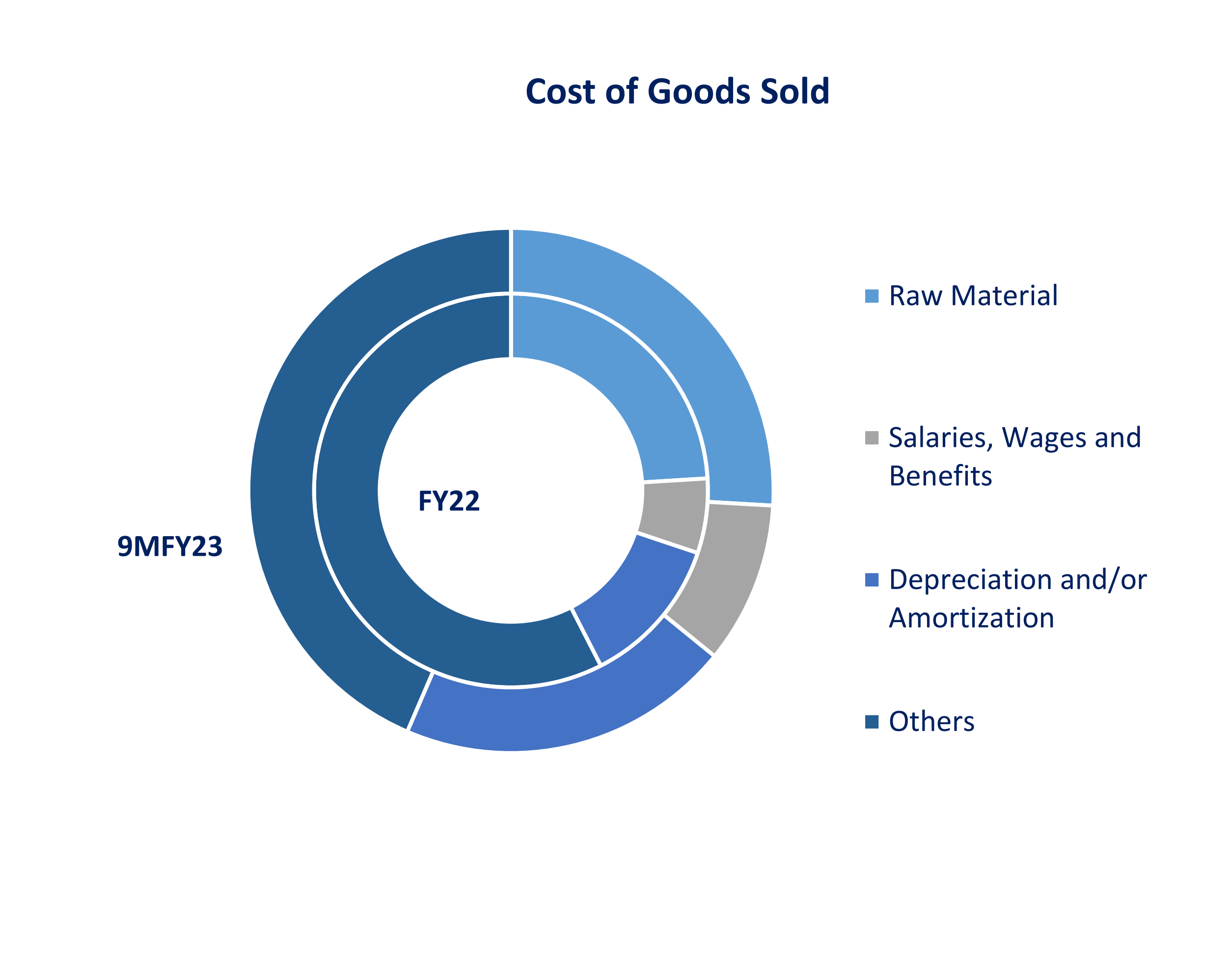


Note: *Calculation based on PNSC Financials.*
Latest data available is for FY22 for Revenue Breakdown

Source: PACRA Database, PNSC

Local | Business Risk

- In 9MFY23, the cost of goods sold stood at PKR~21,917mln (9MFY22: PKR~12,325mln). “Others” in cost of goods sold constitutes the highest proportion of ~44% (PKR~ 9,541mln), while the percentage of Others in total revenue in 9MFY22 was also ~44% (PKR~5,366mln).
- Raw material cost rose by ~78% YoY in 9MFY23 as compared to SPLY (from PKR ~3,195mln to PKR~5,681mln), and the costs are expected to go up further with globally high inflation. For the 9MFY23 period, this comprised ~26% of the total costs incurred (SPLY: ~24%).
- An increase of similar magnitude (~78%) was seen in depreciation costs as well as in salaries & wages components of total cost, when comparing 9MFY23 with 9MFY22. During 9MFY23, these made up ~21% and ~10% of the total cost of goods sold, respectively.
- Depreciation rose from PKR~2,538mln to PKR~4,513mln across the said periods, due to an increase in the number of vessels, whereas, salaries and wages rose from PKR~1,227mln in 9MFY22 to PKR~2,182mln in 9MFY23.

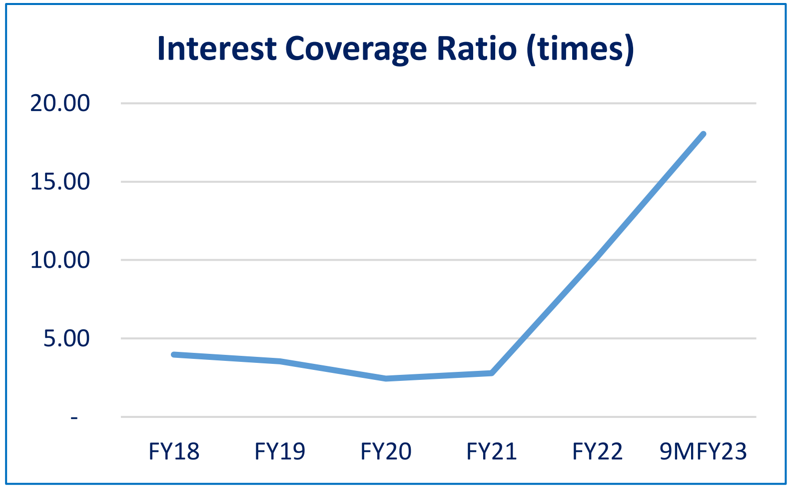


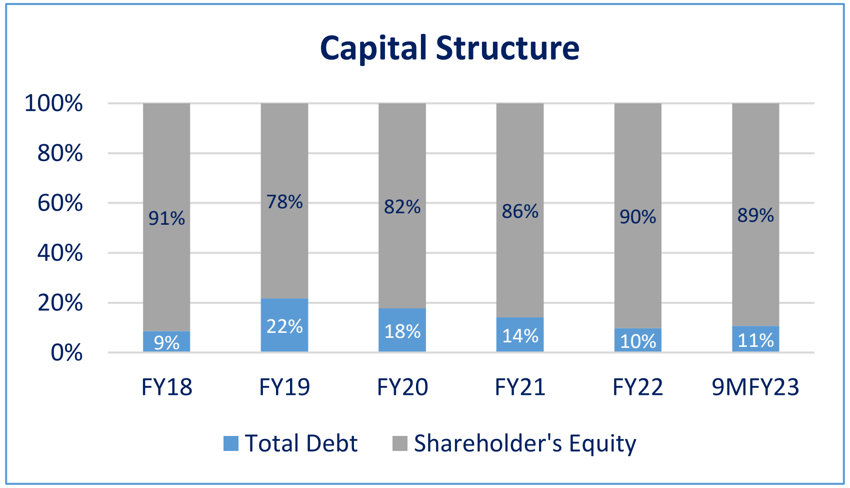
Note: *Calculation based on PNSC Financials. Others include, but are not limited to, Charter Hire and related expenses, Demurrage expenses and Custom dues,.*

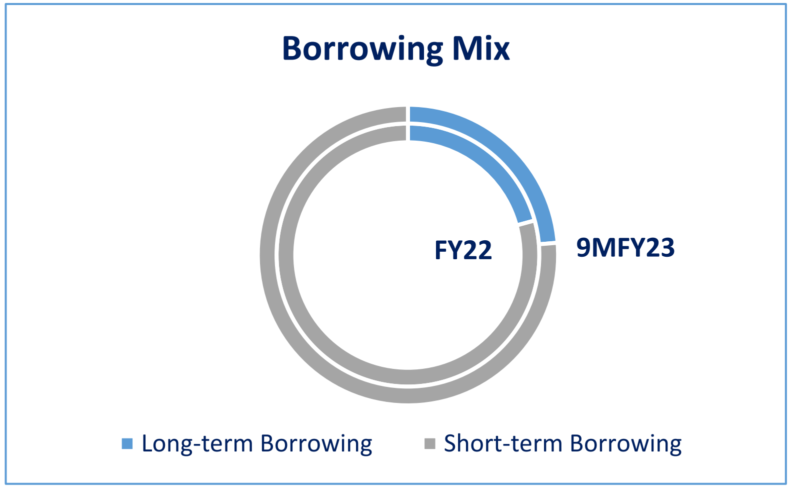
Source: PACRA Database, PNSC

Local | Financial Risk

- Total borrowings of the industry stood at PKR~4,609mln in FY22, down by ~25% from PKR~6,136mln in FY21. A major portion (~79%) of the borrowings is reflective of long-term borrowings.
- In FY22 due to lower borrowings, capital structure has improved as compared to FY21. Debt-to-Leverage was recorded at ~11% in FY22 (FY21: ~17%), depicting robust internal capital generation , leverage slightly increased by 1% (~12% in 9MFY23), similar to the same period last year.
- For the 9MFY23 period, total borrowings of the sector stood at PKR~7,812mln which was ~61% more than the borrowings for the same period last year (9MFY22: PKR~4,853mln), this considerable increase in borrowings is due to the induction of two new tankers (M.T. Sargodha and M.T Mardan). Long-term borrowings make ~79% of the total borrowings while short-term borrowings contribute only ~21%, during the said period.
- The interest coverage ratio stood at ~18x in 9MFY23 (9MFY22: ~7x) depicting a considerably high capacity of meeting financial obligations compared to the same period last year (FY22: ~10x; FY21: ~2.8x).





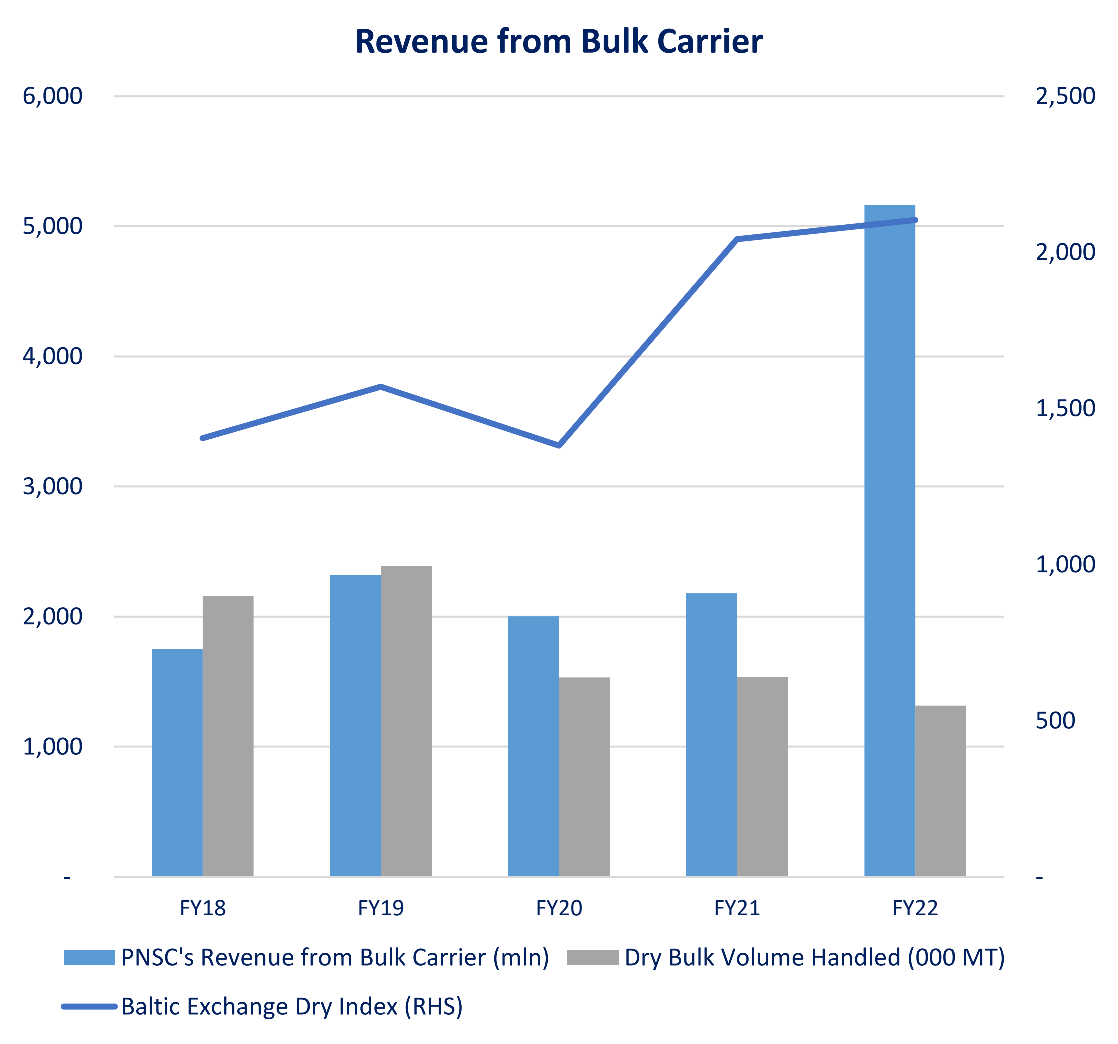


Business Risk | Baltic Exchange Dry Index

- The Baltic Dry Index (BDI) is a measurement to track international demand for dry raw materials and its cost to transport them by shipping vessel. The Baltic Dry Index issued by London-based Baltic Exchange, takes into account ~23 different shipping routes carrying coal, iron ore, grains and many other commodities.

- In FY22, the pricing of the dry bulk carrier based on the Baltic Dry Index rose to ~2,103 points (FY21: ~2,042 points) indicating rebound of trading activities that picked up pace after the world especially China completely opened for trade post resurgence of COVID-19 pandemic. However, it fell to ~1,434 points in Mar'23 (SPLY: ~2,206 points), because of the trade sanctions on Russia, economic slowdown and expected recession in the two major economies of the world (China & USA).

- Baltic Exchange Dry Index influences the revenue inflows of the sector directly as it is a measurement to track international demand for dry bulk and its cost to transport them and it is a reflection of changes in economic activity but despite just ~3% jump in the index, the revenues from dry bulk stood at PKR~5,164mln, an increase of ~137% in FY22 as opposed to FY21 (PKR~2,79mln). Although volumes handled dipped by ~14% during the same period, the increase in revenue can be likely due to steep PKR depreciation.



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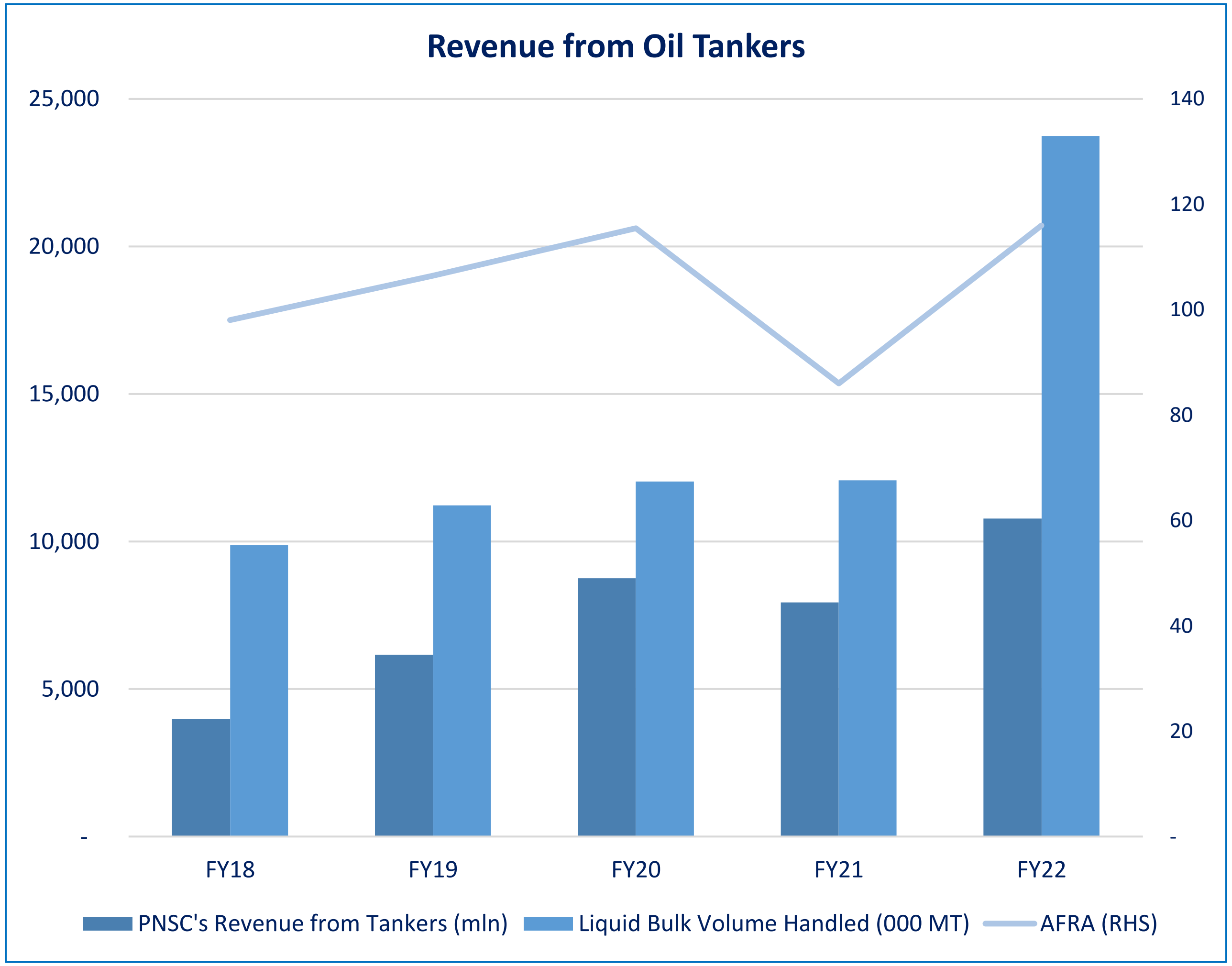
Business Risk | Average Freight Rate Assessment (AFRA)

- The global crude oil and refined product tanker fleet uses a classification system known as Average Freight Rate Assessment (AFRA) to standardize contract terms, establish shipping costs and determine the ability of ships to travel into ports or through certain straits and channels.

- AFRA was established by the Royal Dutch Shell and is overseen by the London Tanker Brokers' Panel (LTBP), an independent group of shipping brokers. AFRA uses a scale that classifies tanker vessels according to DWT MT.

- Sector's revenue from oil tanker segment is pegged to AFRA rates. In FY22, the AFRA rate increased by ~35% (from an average of ~86 points in FY21 to an average of ~116 points in FY22) and therefore the direction of the revenue saw an uptrend.

- Revenue from liquid bulk increased by ~36% in FY22 with respect to FY21 (PKR~11bln in FY22 ; PKR~8bln in FY21).

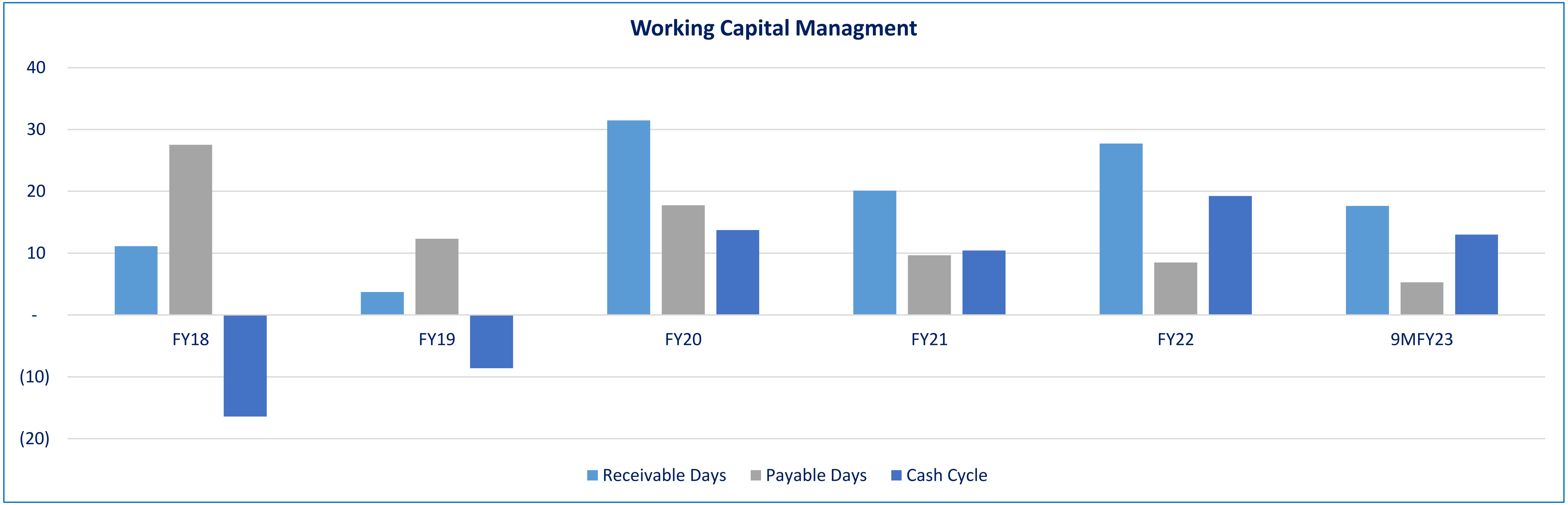


Source: PNSC, EIA

Financial Risk | Working Capital Management

- The cash conversion cycle of the sector deteriorated in FY22 in contrast to FY21 by ~9 days, since the receivable days rose while the payable days dropped. A major chunk of receivables (~82%) reflects trade debts owed by the Pakistan State Oil Company (PSO).

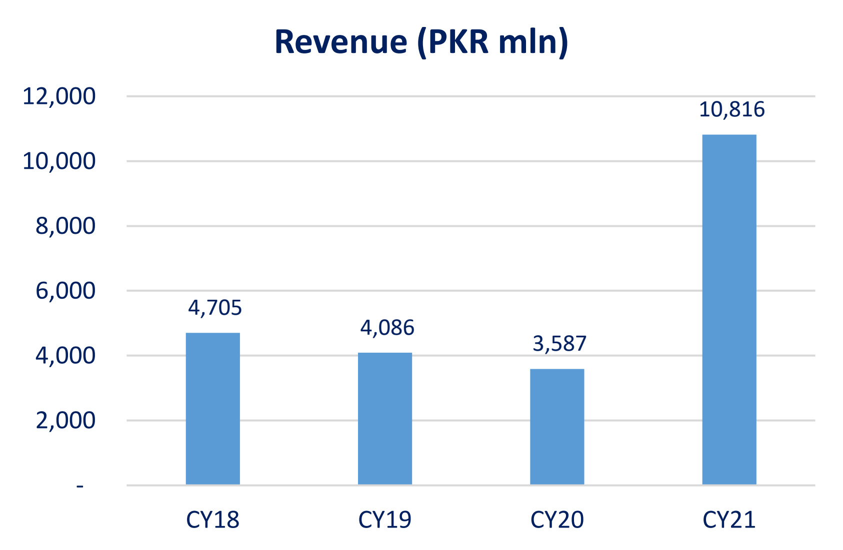
- The cash cycle however, has reduced to ~13 days in 9MFY23, ~3x lower than that in 9MFY22. This has been largely driven by receivable days, which fell from ~28 days in FY22 to ~18 days in 9MFY23.

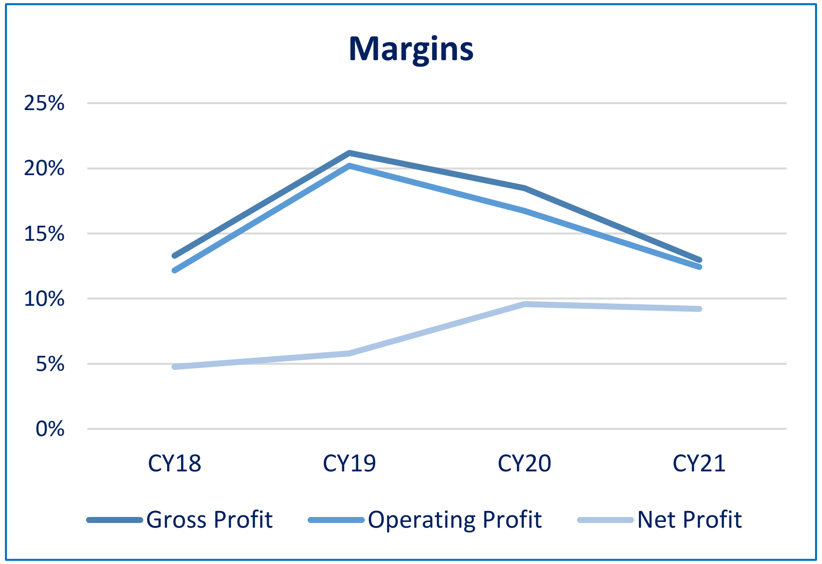


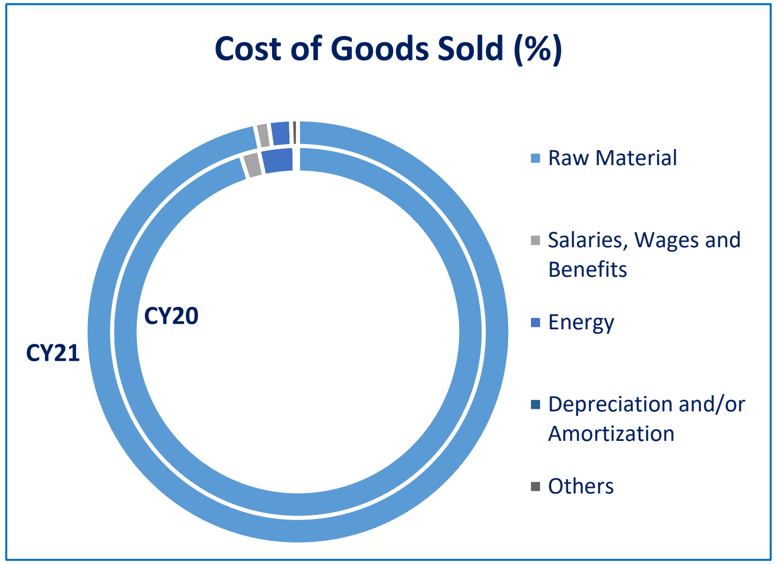
Source: PES, PNSC

Ship Recycling & Breaking | Business Risk

- In CY21, ship breaking witnessed a growth of ~200%, generating a turnover of PKR~10,816mln against PKR~3,587mln in CY20. This increase was due to the rising demand of steel in the local market along with increased steel prices. A growth in steel demand can be directly linked with construction activities in Pakistan.
- The cost of goods sold since CY18 has been primarily composed of raw materials (more than ~90%). Raw material cost in CY21 was ~97% of the cost of goods sold (CY20 ~95%), whereas, salaries/wages and energy costs have been hovering around ~1%-3%.
- Gross profit margins deteriorated from ~18.5% in CY20 to ~13% in CY21. This fall in gross profit margins was attributable to higher cost of goods sold, which rose by ~220% during the said period, hence, the resulting steep decline gross in margins. The decline in net profit margins can likely be explained by increase in finance costs of ~152%.



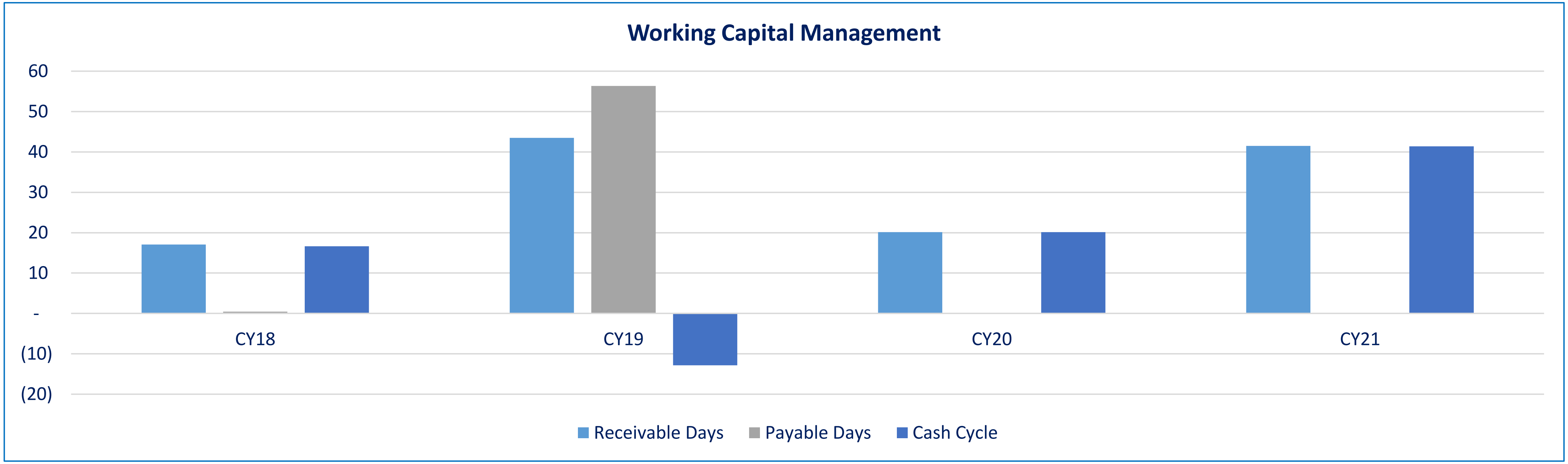




Note: Calculation based on Company's financials.
Latest data available is for CY21 for Revenue Breakdown

Ship Recycling & Breaking | Financial Risk

- The cash conversion cycle deteriorated in CY21 in contrast to CY20 (from ~20 days in CY20 to ~41 days in CY21), since the receivable days doubled from ~20 days in CY20 to ~42 days in CY21, while the payable days stayed nil in both in CY21 and CY20
- A longer cash cycle means that a company's cash is tied up in accounts receivable for a very long period. This can lead to cash flow constraints and make it more difficult for the company to meet its short-term obligations, such as paying employees and other operating expenses



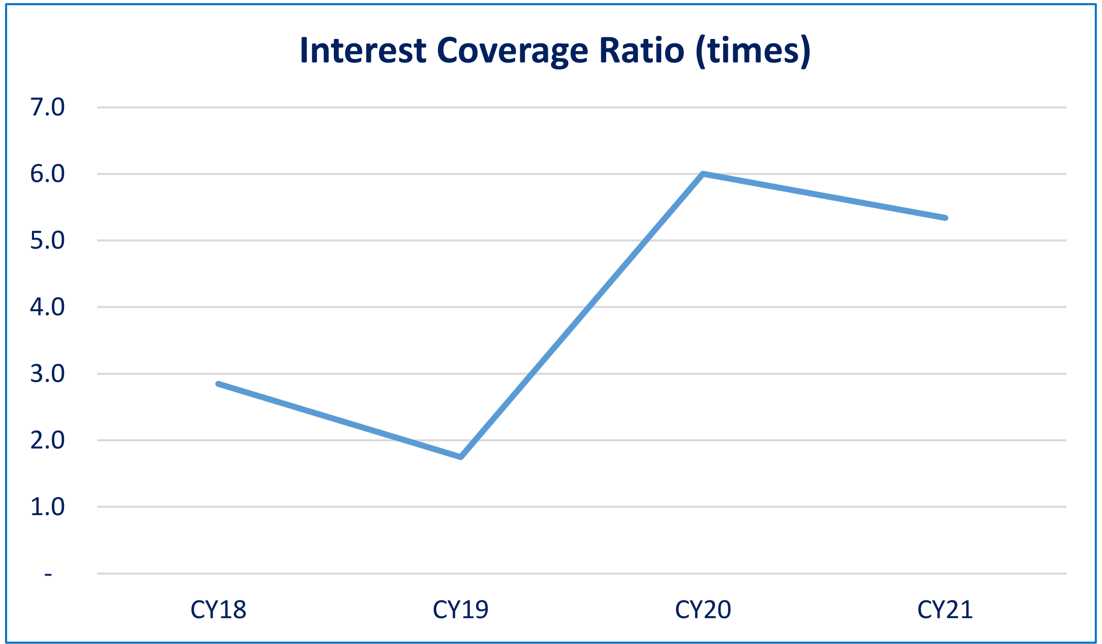
Note: *Calculation based on Company's financials..*

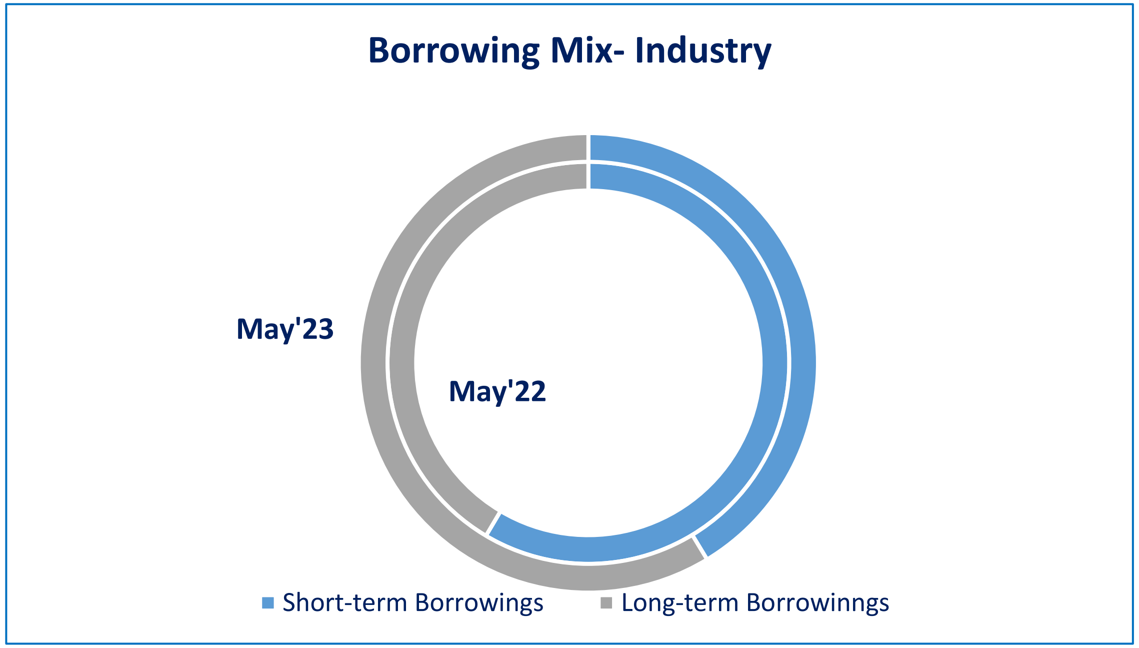
Source: PACRA Database

Ship Recycling & Breaking | Financial Risk

- In May'23, the total borrowings of the segment stood at PKR~11,886mln, ~23% more than the borrowings in May'22 when they stood at PKR~9,662mln. Out of the total borrowings in May'23, ~59% are long -term borrowings while ~41% were short-term borrowings. Financial leverage of the segment fell by ~8% and was recorded at ~64% in CY21 (CY20: ~72%) , this could be an indication of reduced risk and improved financial health.

- Interest coverage has fallen from ~6.0x in CY20 to ~5.3x in CY21, which may reflect lower efficiency for the segment with regards to meeting financial obligation in CY21 in comparison to CY20. This may prove to be an additional challenge in the high interest rate environment that prevailed through most part of CY22, especially 2HCY22.





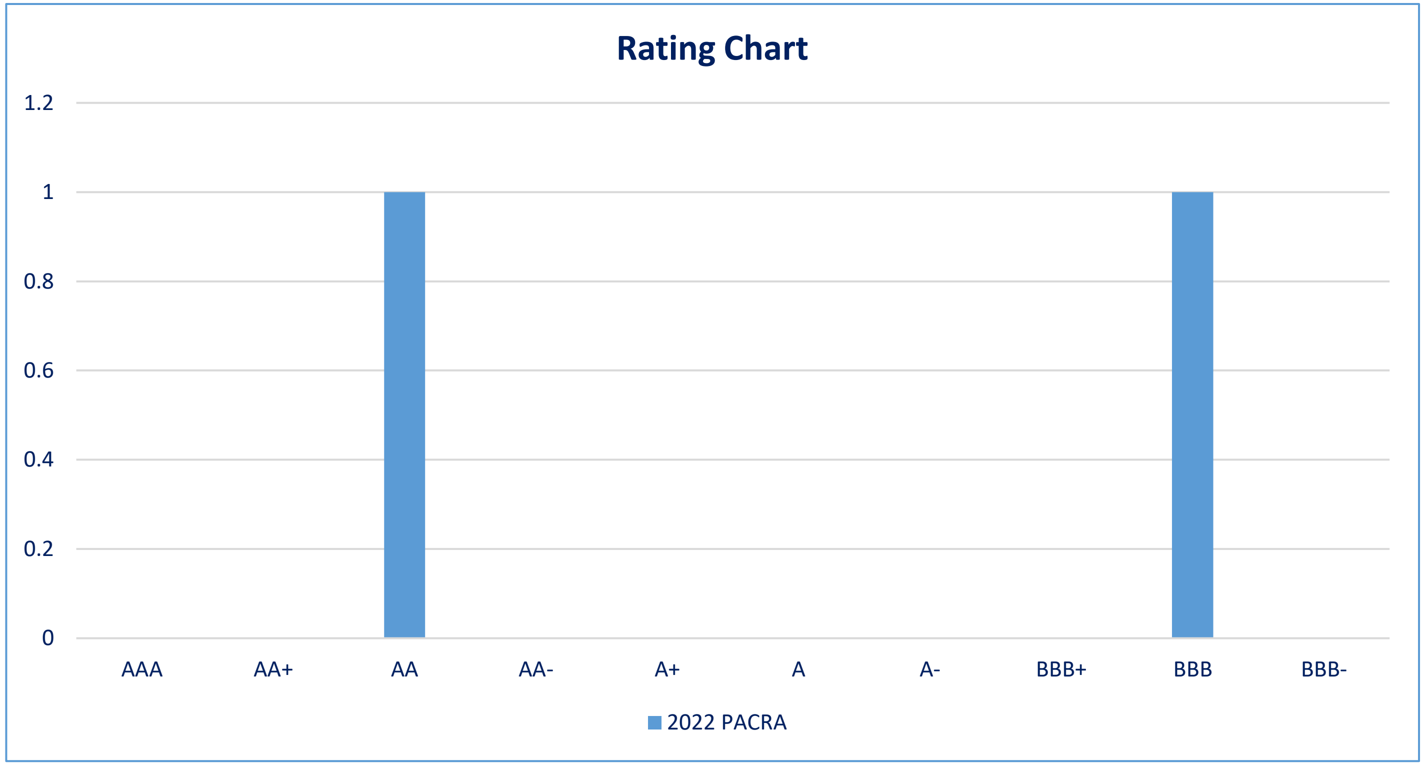
Note: Calculation based on Company's financials..

Source: PACRA Database, SBP

SHIPPING

PACRA | Rating Chart

PACRA rates one client in the shipping sector, and one in the ship-breaking segment, with long-term ratings falling in ‘AA’ and ‘BBB’ categories, respectively.



Together. Creating Value.

SWOT Analysis

- An International sector in true essence, wherein compliance and safety requirements are devised, managed and monitored on a global scale.
- Significantly important sector of the economy in terms of catering over ~95% of the country's external trade movement.
- Regulated.
- Sovereign Control.
- Capital intensive thus high barrier to entry.

- Significant dependence on specific trade routes
- Inability to set pricing, dependence on international index.
- High reliance on global trade dynamics.
- Lack of technological expertise and resources to increase penetration in shipping landscape.

- Litigation risks.
- Major accidents or oil spillage.
- Fluctuation in Interest rate.
- Volatility in fuel Cost.
- Adverse changes in global laws e.g., taxation policies.
- Economic uncertainty in the country.
- Strict protective measures on import.
- Affected by exchange rate movements.

- Unique coastal geographical position of the country holds the potential to grow tremendously on global shipping services.
- Strategic alliances and joint ventures
- Web-Enabled logistic operations.
- Bilateral agreements for development and growth.
- Decarbonization fuel regulations.

SHIPPING

Outlook: STABLE

- During FY22, in order to cater the country's ever rising energy needs, PNSC successfully acquired two new tanker vessels M.T. Mardan and M.T. Sargodha which also resulted in an increase in liquid cargo weight capacity by ~214,246 MT. PNSC is also aggressively pursuing to induct one Aframax and one LR-1 product tanker by the end of current fiscal year (FY23) and two chemical tankers for the transportation of edible oil. Despite unfavorable international conditions in FY22, the PNSC Group in 9MFY23 , managed to achieve ~162% increase in sales and ~879% increase in Profit After-Tax (PAT) when compared with the same period last year.
- Additionally, the performance of seaborne trade and its volume is also directly dependent on the economic activity within the country. Where Pakistan's GDP grew by ~5.9% in FY22, it slowed down to ~0.29% in FY23. Still, the sector's performance remained resilient, reflected in increased gross margins and improved interest coverage ratio. Gross and operating margins increased from ~22% and ~18% in FY21 to ~29% and ~20%, respectively, in FY22. Whereas, in 9MFY23 gross margin rose by ~24% when compared with SPLY to reach ~48%. There was an even greater increase seen in net margin which increased by ~42% (9MFY23: ~57%, 9MFY22: ~15%). The interest coverage ratio stood at ~18x in 9MFY23 (9MFY22: ~7x), depicting a considerable higher probability of meeting financial obligations compared to the same period last year (FY22: ~10x; FY21: ~2.8x).
- Baltic Exchange Dry Index influences the revenue inflows of the sector directly as it is a measurement to track international demand for dry bulk and is a reflection of changes in economic activity. Despite just ~3% jump in the index, the revenues from dry bulk stood at PKR~5,164mln, an increase of ~137% in FY22. The increase in revenue was likely due to steep PKR depreciation. Going forward, the index is expected to exhibit sluggish growth, owing to recessionary fears.
- Sector's revenue from oil tanker segment is pegged to AFRA rates. In FY22, the AFRA rate increased by ~35% to ~116 points in FY22, therefore, the direction of the revenue saw an uptrend. Revenue from liquid bulk increased by ~36% in FY22 with respect to FY21 (PKR~11bln in FY22 ; PKR~8bln in FY21). Although there has been a decline in petroleum products' sales and imports (except HSD, which was being smuggled into the country) during the 10MFY23 period, owing to lower crude prices, petroleum imports are expected to pick up pace again. Additionally, the potential benefits to the economy from recent developments, including the opening of sea trade with Russia and the arrival of oil shipments has enhanced the importance of the sector even more.
- Overall, the outlook for the shipping sector appears to be stable, as fears of a possible sate default seem to fade away (approval of IMF 9th Review is expected soon), especially now that the Government has lifted import restrictions. Therefore, a healthy impact on the overall economic activity is anticipated that will positively affect numerous industries including shipping.

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