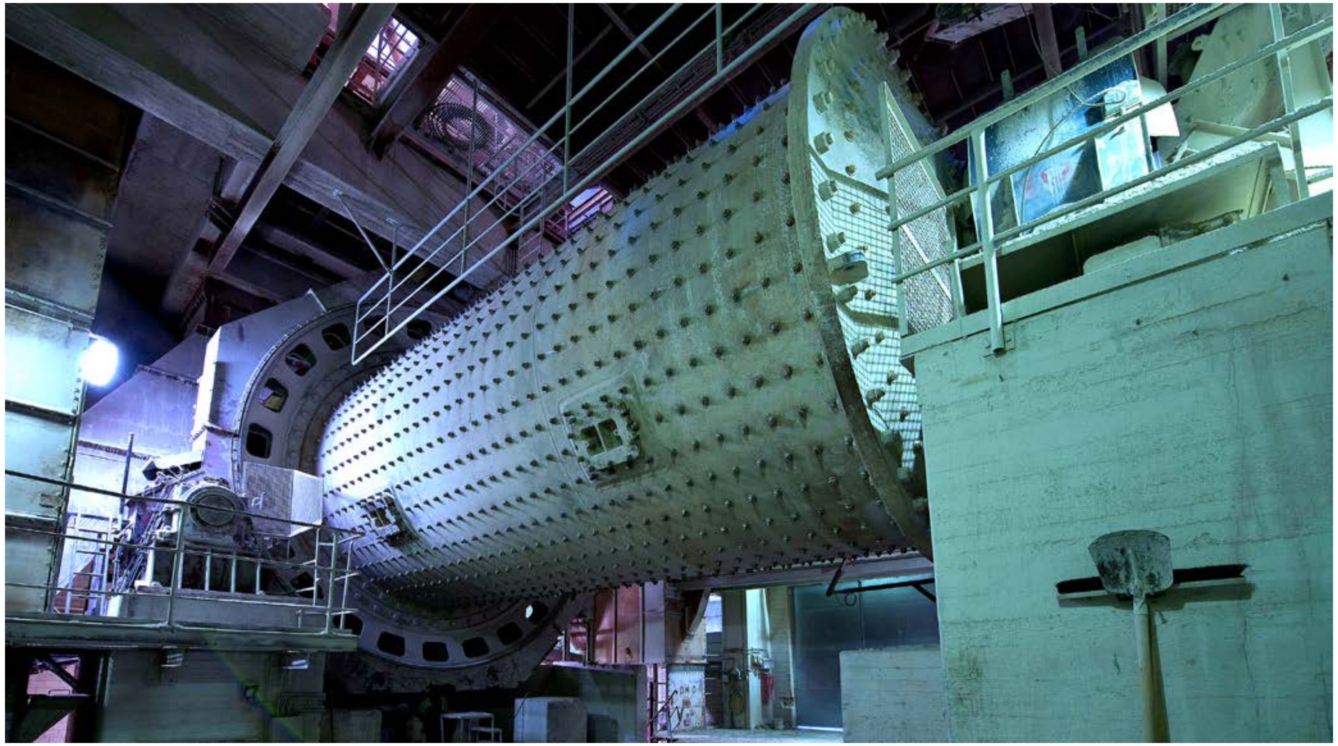
SECTOR STUDY . MARCH 2024

Together. Creating Value.

CEMENT



Research Team

Saniya Tauseef | Senior Manager Research
Ayesha Wajih | Supervising Senior Research
Sabeen Mirza | Research Analyst

Table of Contents

Cement

Global | Overview

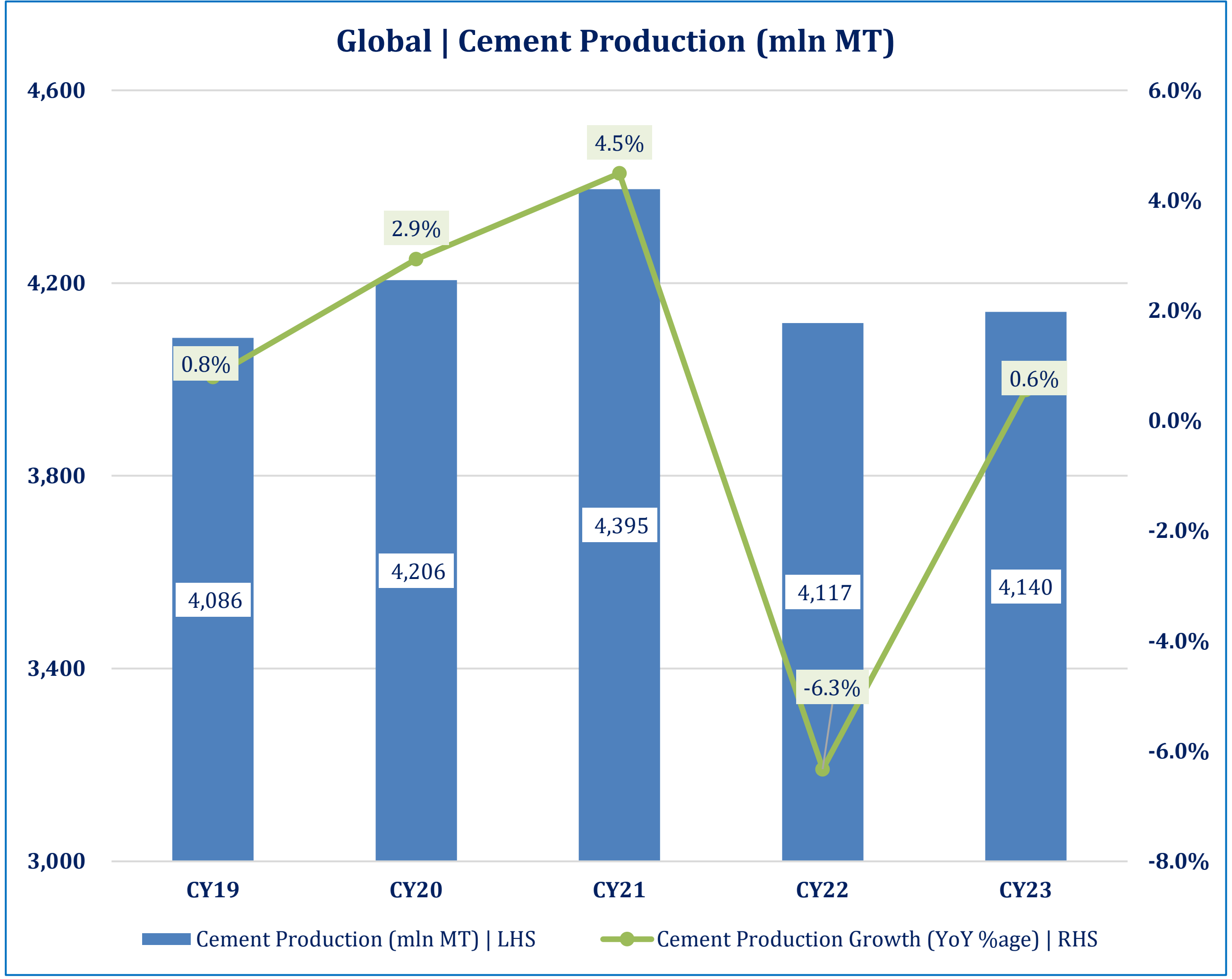
- In CY23, the global cement sector was estimated at USD~406bln (CY22: USD~341bln), increase of ~19.1% YoY while it contributed ~0.4% (CY22: ~0.4%) to global GDP. Global cement market size is expected to grow from USD~423bln in CY24 to USD~592bln by CY32 with a CAGR of ~4.3%. The sector also contributes ~7.7%* to global employment.

- Global cement production stood at ~4,140mln MT (CY22: ~4,117mln MT) recording an increase of ~0.6% YoY. Cement production volumes are highly dependent on clinkering capacity; the process is energy-intensive and clinker is the primary raw material of all cement blends.

- In CY23, global clinker production capacity grew by ~20mln MT and stood at ~3,795mln MT.

- Cement is a hydroscopic substance with a maximum shelf life not greater than 3 months, therefore cement consumption closely matches its production numbers.

- China is the largest producer and consumer of cement, contributing over half of the global cement production (~52.7%) in CY23.



*Sector's contribution to employment is as of CY21. **Note**: CY22 production levels of both clinker and cement are revised values.

Source: Fortune Business Insights, Global Trade, U.S Geological Survey

Cement

Global | Production

- The ~0.6% YoY increase in global cement production stated previously was attributed to a resurgence in China's cement production, which had experienced a significant decline of ~12.5% in CY22 due to the financial crisis among major real estate developers in the country.
- With reference to clinker capacity, the top five countries accounted for ~70.0% of global clinker production capacity (~2.7bln MT in CY23).
- Being an energy-intensive process, cement manufacturing is the third largest industrial polluter. However, tightening government regulations and increasing environmental concerns are pushing adoption of green cement.
- The Green Cement concept refers to cement manufactured from emissions reducing processes and/or use of lower clinker substituted with fly-ash or blast-furnace slag and is expected to contribute towards decarbonatization and sustainability.

Regional | Capacity and Production

Sr.	Country	Clinker Capacity		Cement Production	
		CY22	CY23	CY22	CY23
1	China	53.0%	52.7%	51.0%	50.7%
2	India	7.7%	7.9%	9.2%	9.9%
3	Vietnam	2.6%	2.9%	2.9%	2.7%
4	USA	2.6%	2.6%	2.3%	2.2%
5	Turkey	2.4%	2.4%	1.8%	1.9%
6	Iran	2.1%	2.1%	1.4%	1.6%
7	Russia	2.1%	2.1%	1.5%	1.4%
8	Indonesia	2.1%	2.1%	1.6%	1.5%
9	KSA	2.0%	2.0%	1.3%	1.3%
10	Brazil	1.6%	1.6%	1.6%	1.5%
11	ROW*	21.7%	21.6%	25.5%	25.4%
Total		100%	100%	100%	100%

**Includes Egypt, Japan, Korea and Mexico amongst others.*

Source: Fortune Business Insights, Global Trade, USGS

Cement

Global | Top 10 Players

- Cement sector's importance can be underpinned by its massive standalone output as well as its significance in being an essential part of the supply chain for some major industries such as construction, chemicals and exploration of natural resources.
- Due to capital-intensive nature of the business, the sector tends to be oligopolistic as the market is usually controlled by a few firms across countries around the world.
- China is the world's largest producer and consumer of cement as it accounts for ~52.7% of the total global production. Six of the top 10 global players (as depicted) are located in China.
- China's cement production is ~5x that of the world's second largest producer, India (~9.9%) where only 1 of the top 10 players is located.

Sr.	Company	Country	Capacity (MT)
1	**China National Building Material Group (CNBM)**	China	530
2	**Anhui Conch**	China	388
3	**Lafarge Holcim**	Switzerland	300
4	**Heidelberg**	Germany	176
5	**Jidong Cement**	China	170
6	**Ultra Tech Cement**	India	132
7	**Shanshui**	China	100
8	**Huaxin Cement**	China	100
9	**Cemex**	Mexico	83
10	**Hongshi Cement**	China	80
Total			**2,059**

Source: WCA

Cement

Global | Exports (CY22)

Sr.	Exporting Countries	Exports (USD mln)	Share in Exports Volume (%)	Clinker Exports (mln MT)	Cement Exports (mln MT)	Clinker Exports (USD/MT)	Cement Exports (USD/MT)
1	**Vietnam**	1,281	18.3%	15.6	14.0	40.7	46.0
2	**Turkiye**	1,662	17.9%	9.1	19.9	46.8	62.1
3	**Japan**	373	6.1%	4.4	5.5	37.2	38.0
4	**Indonesia**	377	5.6%	7.6	1.5	40.0	49.9
5	**Egypt**	570	5.5%	6.8	2.1	53.8	96.6
6	**Thailand**	380	4.9%	4.8	3.2	40.5	58.3
7	**Germany**	595	3.9%	0.1	6.3	81.7	93.6
8	**Spain**	429	3.4%	1.5	4.1	48.6	87.2
9	**Canada**	513	3.0%	0.6	4.3	78.8	108.6
10	**Pakistan**	166	2.2%	1.3	2.1	36.5	53.5
	ROW	5,655	29.2%	2.5	45.0	45.6	100.5
Total		**12,002**	**100%**	**54.2**	**107.9**	**62.9**	**79.6**

- In CY22, global clinker and cement export volumes stood at ~162.1mln MT (CY21: ~226.2mln MT), forming ~3.9% of global cement production (CY21: ~5.1%). Total export volumes comprised ~33.4% clinker (CY21: ~43.0%) and ~66.6% various varieties of cement including Portland Grey & White, Aluminous and others (CY21: ~57%).
- In USD terms, clinker held ~28.4% global market share (CY21: ~31.0%) while cement comprised ~71.6% of total exports (CY21: ~69.0%). The latter registered ~26.4% higher USD/MT export value as well as ~99.0% higher export volumes. The top 10 exporting counties held ~70.8% share in global exported volumes, while the top 7 exporting countries exported clinker at ~29.2% and cement at ~25.3% cheaper rates than the global average.

***Note**: Global Import and export values have a mismatch due to multiple factors including but not limited to estimations, different reporting periods, freight charges, insurance charges, tariffs and re-exports and reporting by Country.*

Source: UN Comtrade

Cement

Global | Imports (CY22)

Sr.	Importing Countries	Imports (USD mln)	Share in Imports Volume (%)	Clinker Imports (mln MT)	Cement Imports (mln MT)	Clinker Imports (USD/MT)	Cement Imports (USD/MT)
1	USA	2,690	23.2%	1.2	25.3	83.9	102.1
2	China	600	7.5%	8.3	0.1	55.0	102.1
3	Australia	347	4.1%	4.5	0.1	56.5	76.9
4	Israel	439	4.0%	0.8	3.8	74.3	99.4
5	Singapore	276	3.8%	0	4.3	169.4	63.6
6	Philippines	638	3.2%	3.6	0.0	59.5	44.1
7	Hong Kong	234	3.1%	0.6	3	61.9	65.9
8	Sri Lanka	182	2.5%	1.5	1.4	63.71	62.6
9	Kuwait	235	2.5%	2.2	0.7	74.3	113.6
10	Italy	263	2.4%	1.1	1.7	70.0	111.0
	ROW	7,477	43.7%	13.9	35.9	186.2	136.0
	Total	**13,383**	**100%**	**37.8**	**76.5**	**107.3**	**122.0**

- Global import volumes of cement and clinker stood at ~114mln MT in CY22 (CY21: ~178mlnMT), where ~33.1% were composed of clinker (CY21: ~44.0%) and ~66.9% of cement (CY21: ~56.0%). In USD terms, clinker held ~30.3% share (CY21: ~36.0%) while cement held ~69.7% (CY21: ~64.0%).
- The top 10 importing countries held ~56.3% share in global clinker imports (CY21: ~58.0%), with the USA holding ~23.2% share. With respect to cement imports, the top 10 importers held ~52.8% share (CY21: ~48.0%) with USA (~33.0% share; CY21: ~20%). Meanwhile, average import prices for cement were ~2.3% higher than those of clinker imports.

***Note**: Global Import and export values have a mismatch due to multiple factors including but not limited to reporting errors, estimations, different reporting periods, freight charges, insurance charges, tariffs and re-exports and reporting by Country.*

Source: UN Comtrade

Cement

Production Process

Mining of raw material including limestone, clay, gypsum and others.

Grinding raw material to a fine powder, called raw meal.

Raw meal is heated at a temperature of ~1,450 °C in a cement kiln to produce clinker.

Hot clinker exits from kiln and enters the clinker cooler to reduce its temperature from 1450 °C to 100 °C .

Cooled clinker mixed with gypsum and other additions. It is grinded into fine and homogenous powder, cement.

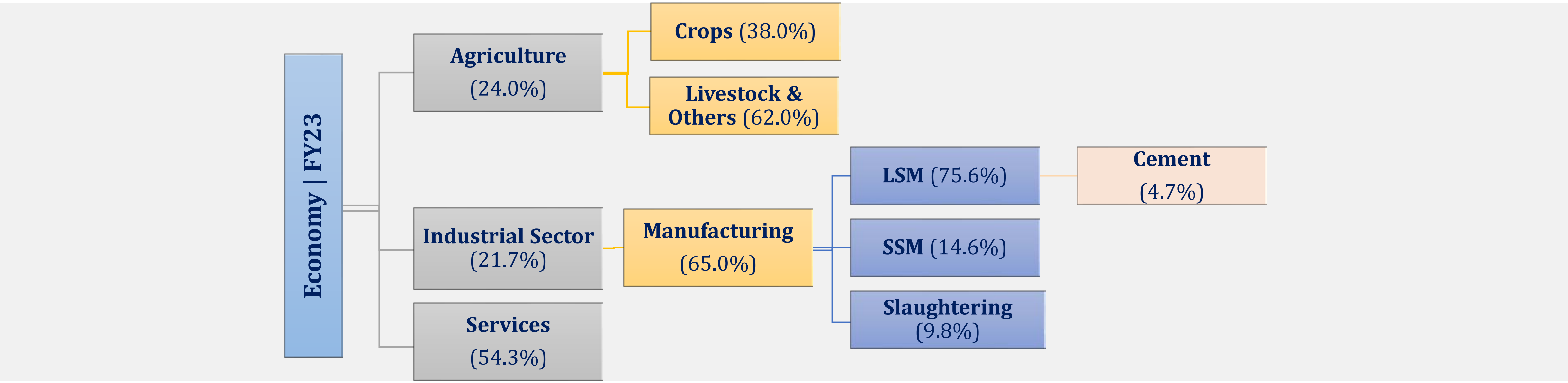
Manufactured cement then stored in silos before packaging and sale to end consumers.

Source: PACRA Internal Database

Cement

Local | Overview

- In FY23, Pakistan's GDP (nominal) stood at PKR~79.7trn (FY22: PKR~63.3trn), contracting, in real terms, by ~0.17% YoY (FY22: ~6.3% growth). Industrial activities in FY23 held ~21.7% share in the GDP while the manufacturing activities made up ~65% of the value addition. In 1QFY24, Pakistan's GDP (nominal) stood at PKR~22.6trn (1QFY23: PKR~18.4trn), rising in real terms by ~2.5% (1QFY23: ~0.99%). However, the GDP growth rate of ~1.0% in real terms for the 2QFY24 signals a deceleration in comparison to both 2QFY23 and 1QFY24 when real GDP growth rate stood at ~2.2% and ~2.5%, respectively.
- Large Scale Manufacturing (LSM) in Pakistan is essential for the economic growth considering its linkages with other sectors, as it represented ~75.6% value of manufacturing activities in FY23. The LSM fell by ~10.3% in FY23 (FY22: ~11.7%) However, it increased by ~0.51% YoY in 7MFY24 period.
- The Cement sector is classified as a Large Scale Manufacturing (LSM) industrial component within the industrial sector. In FY23, the cement sector's weight in the QIM was recorded at ~4.7%. During 7MFY24, the cement production witnessed an uptick of ~0.1% YoY.



Note: 1QFY24 and SPLY real growths rate have been revised upwards by PBS.

Source: PBS

Cement

Local | Snapshot

- The country's infrastructural developments and construction activities alongside multiple allied sectors (steel, wood, tiles etc.) are directly influenced by the performance of the cement sector.
- In FY23, the overall sector gross revenue grew by ~17.2%, although total dispatches dipped by ~15.1%. The ~40.0% higher retention prices per bag drove the sector's topline.
- The sector comprises 16 companies (after Askari Cement merged with Fauji Cement) and is divided into two regions, North and South, with North covering areas of Punjab, KPK and AJK and South including areas of Sindh and Baluchistan.
- Cement sector is organized and is oligopolistic in nature, with most players listed on the PSX. Market capitalization of the sector was recorded around PKR~584bln in Mar'24 (SPLY: PKR~378bln). Overall economic growth and GoP spending on development projects are the main drivers of the sector's growth.
- During FY23, Pakistan's per capita cement consumption stood at ~215Kg whereas world average per capita consumption is recorded at ~550Kg, reflecting an immense potential for growth in cement demand.

Overview | Local	FY21	FY22	FY23	1HFY23	1HFY24
Gross Revenue (PKR bln)	542	687	805	202	338
Contribution to GDP	1.04%	1.08%	1.01%	0.5%*	0.7%*
Sector Players	17	16			
Market Structure	Oligopoly				
Production Capacity (mln MT)	69	70	77	-	-
	FY21	FY22	FY23	8MFY23	8MFY24
Offtake (mln MT)	48	48	40	27	26
Exports (mln MT)	9	5	5	3	4
Total Offtake (mln MT)	57	53	45	30	30
North Region (Avg Price/50Kg Bag)	613	764	1,064	1,041	1,205
South Region (Avg Price/50Kg Bag)	631	777	1,081	1,038	1,192
Regulator	Securities and Exchange Commission of Pakistan (SECP)				
Associations	All Pakistan Cement Manufacturers Association (APCMA)				

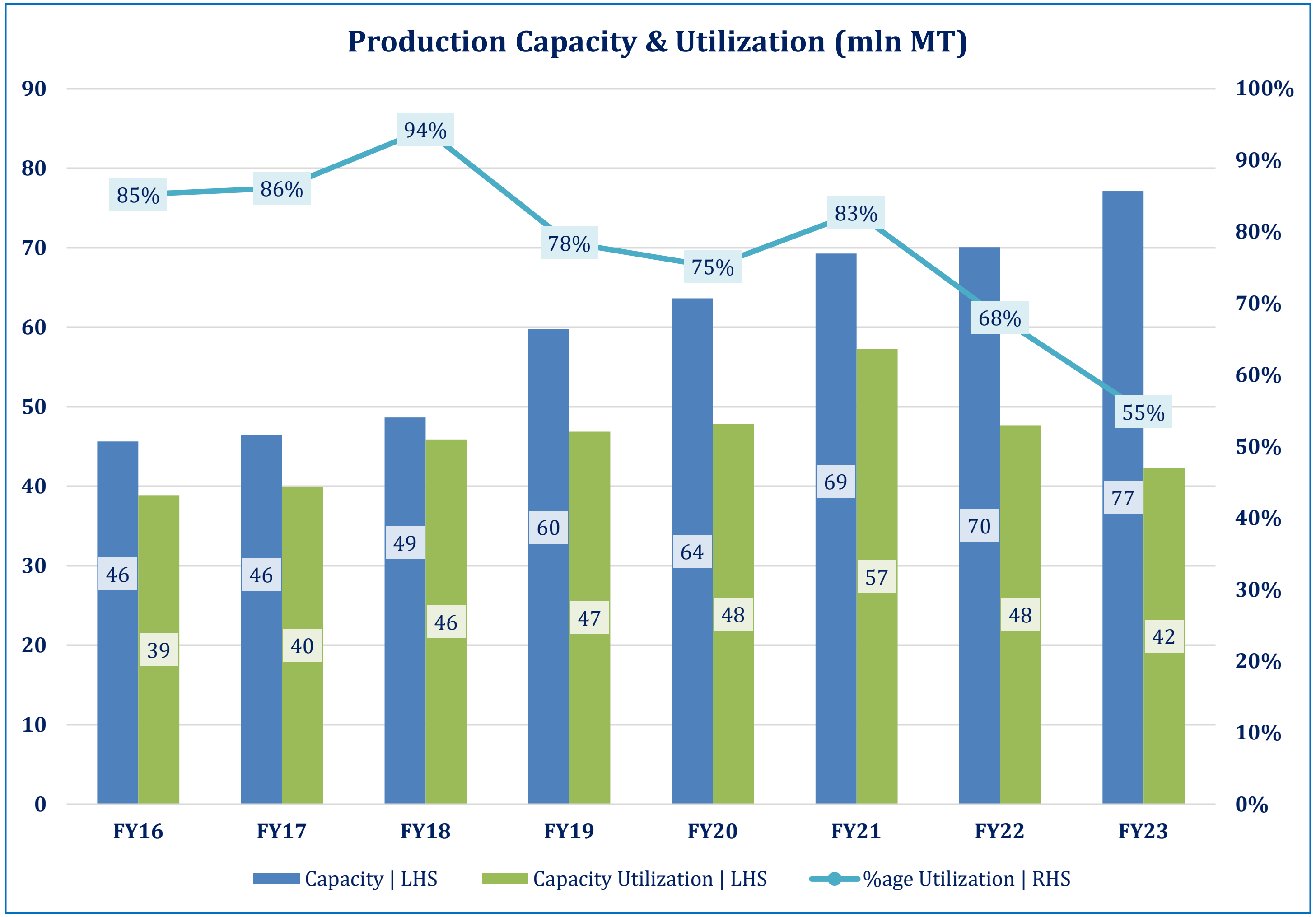
** Sector's contribution to GDP is for 1QFY24 and 1QFY23*

Source: PES, APCMA, PBS, Financial Statements

Cement

Supply Side | Production

- Cement sector's production capacity was recorded at ~77mln MT in FY23 (~70mln MT in FY22), an increase of ~10.0% YoY.
- ~76% of the operational plants are located in the North Region, while remaining ~24% capacity is located in the South Region.
- The sector held PKR~46.0bln worth of LTFF & TERF financing facilities by End-Feb'24 (End-Feb'23: PKR~48.0bln).
- The LTFF facility serves to dilute the borrowing cost of projects, making it an attractive opportunity for the players to expand. However, LTFF discount rates were revised down to ~3% in Dec'22, compared with ~5% during the prior period.



Source: PES, APCMA, PBS

Cement

Supply Side | Production

- The sector has 15 operational companies with 28 operational plants across the country. 10 companies have presence in North region while 3 have presence in the South region, whereas 3 companies have production plants in both regions.

- As of Jun'23, Lucky Cement Ltd. Is the largest player with a production capacity of ~15.3mln MT (Jun'22: ~12.2mln MT) followed by Bestway Cement Ltd. and D.G Khan Cement Ltd., as depicted.

- Companies in the South Region incur lower transportation costs while transporting imported coal from port to their plants. Moreover, due to their close proximity to the port, their access to export markets through sea routes increases in comparison to their northern counter parts.

- Although the companies in the North Region have to incur higher transportation costs, these companies have access to Afghanistan and Indian market for exports.

Production Capacity | ('000' MT)									
		FY23				1HFY24			
Sr.	Company	No. of Plants	North	South	Total	No. of Plants	North	South	Total
1	Lucky Cement Ltd.	2	10,216	5,084	15,300	2	9,645	5,310	14,955
2	Bestway Cement Ltd.	5	11,623	-	11,623	5	14799	-	14,799
3	Fauji Cement Company Ltd.	3	7,472	-	7,472	3	8355	-	8,355
4	Maple Leaf Cement Factory Ltd.	2	7,100	-	7,100	2	8190	-	8,190
5	D.G. Khan Cement Company Ltd.	3	2,010	4,710	6,720	3	4,221	2,835	7,056
6	Pioneer Cement Ltd.	1	5,195	-	5,195	1	5454	-	5,454
7	Kohat Cement Company Ltd.	2	4,913	-	4,913	2	5018	-	5,018
8	Cherat Cement Company Ltd.	1	4,536	-	4,536	1	4536	-	4,536
9	Power Cement Ltd.	1	-	3,371	3,371	1	-	3,371	3,371
10	Attock Cement Pakistan Ltd.	1	-	3,027	3,027	1	-	3,027	3,027
11	Dewan Cement Ltd.	2	1,080	1,860	2,940	2	1,134	1,953	3,087
12	Gharibwal Cement Ltd.	1	2,010	-	2,010	1	2111	-	2,111
13	Fecto Cement Ltd.	1	1,000	-	1,000	1	945	-	945
14	Flying Cement Company Ltd.	1	720	-	720	1	1197	-	1,197
15	Thatta Cement Company Ltd.	1	-	693	693	1	0	577	577
16	Dandot Cement Ltd.*	1	504	-	504	1	504	-	504
	Total	28	58,379	18,745	77,124	28	66,109	17,073	83,182

*Not active during FY23.

Source: APCMA, PACRA Internal Database, Financial Statements

Cement

Supply Side | Cost Break up (FY23)

- Major raw materials used in cement manufacturing are limestone, clay and gypsum. Raw materials and packaging, however, constituted a smaller portion of the production cost ~13.0% in FY23 (FY22: ~14.0%).

- Cement manufacturing is a highly energy-intensive process as ~1MT of clinker requires ~4.6mln BTUs of energy equivalent to burning ~160Kg of bituminous coal.

- Energy costs constituted ~72.0% of the total cost of the production in FY23 (FY22: ~68.0%). Coal, being a cheap source of energy, is extensively used by cement companies for the manufacturing process, therefore, it constitutes a major chunk of the energy cost.

- Majority of the cement manufacturers rely on imported coal to meet their energy needs, which implies their exposure to exchange rate movements as well as fluctuations in international coal prices.

Sr.	Company	Raw Material	Packaging	Fuel	Power	Others
1	**Attock Cement Pakistan Ltd.**	6%	6%	54%	12%	22%
2	**Bestway Cement Ltd.**	7%	8%	53%	19%	12%
3	**Cherat Cement Company Ltd.**	7%	8%	53%	14%	17%
4	**DG Khan Cement Company Ltd.**	2%	7%	54%	15%	23%
5	**Dewan Cement Ltd.**	8%	9%	55%	15%	14%
6	**Fauji Cement Company Ltd.**	9%	6%	56%	16%	13%
7	**Flying Cement Company Ltd.**	4%	11%	40%	36%	9%
8	**FECTO Cement Ltd.**	4%	5%	62%	19%	9%
9	**Gharibwal Cement Ltd.**	5%	5%	67%	10%	13%
10	**Kohat Cement Company Ltd.**	6%	8%	57%	21%	8%
11	**Pioneer Cement Ltd.**	6%	8%	59%	16%	11%
12	**Maple Leaf Cement Factory Ltd.**	6%	7%	53%	14%	19%
13	**Power Cement Ltd.**	11%	6%	59%	16%	8%
14	**Thatta Cement Company Ltd.**	8%	6%	61%	17%	7%
15	**Lucky Cement Ltd.**	6%	7%	53%	14%	19%
Sector Average		**6%**	**7%**	**57%**	**15%**	**15%**

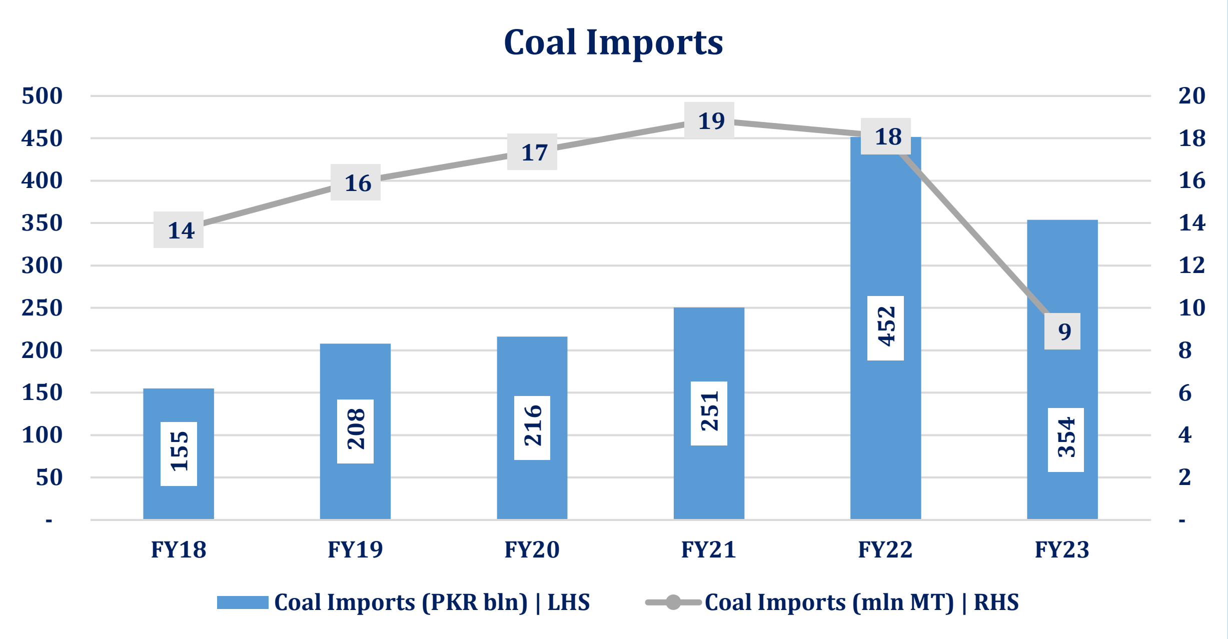
***Note**: Dandot Cement Ltd. was not active during FY23. BTUs stands for British Thermal Units.*

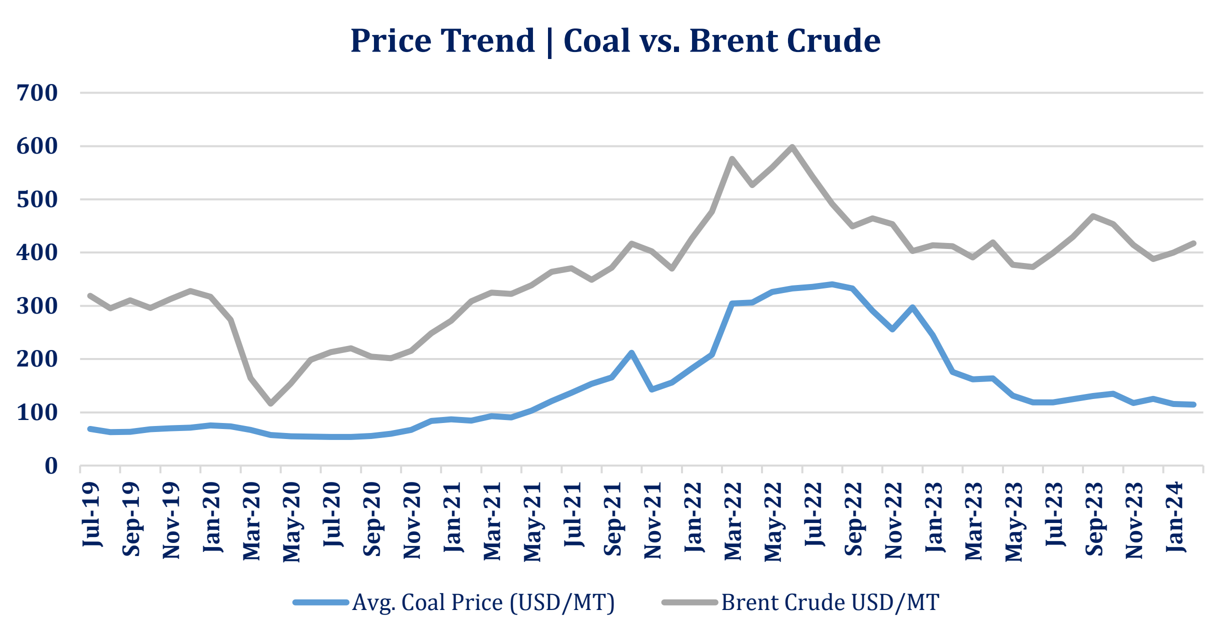
Source: PACRA Internal Database, Companies Financials, US Department of Energy

Cement

Raw Material | Coal

- National coal imports in FY23 stood at ~8.9mln MT, recording a massive decrease of ~50.8% YoY. This resulted due to SBP's import ban (May'22-Jun'23). In comparison, value of imports were down just ~21.7% YoY to PKR~354bln due to ~39.0% PKR devaluation against the USD.
- Energy commodity prices (coal and Brent crude) were at multi-year high levels throughout CY22, averaging USD~292.7/MT and USD~99.8/bbl, respectively. However, during CY23, the demand factors that caused a decline in oil prices (averaged USD~82.6/bbl) included concerns about global economic growth (especially slowdown in China). On the supply side, despite voluntary output cuts by OPEC+ countries and Russia-Ukraine war, oil supplies have remained higher than expected, increasing global supply and putting a downward pressure on crude oil prices.
- During CY22, global coal demand reached an all-time high. However, with an aim of zero carbon emission by CY30, a global shift towards renewable energy sources (wind and solar) was observed during CY23 that resulted in a downward pressure on the coal prices (averaged USD~145.9/MT).





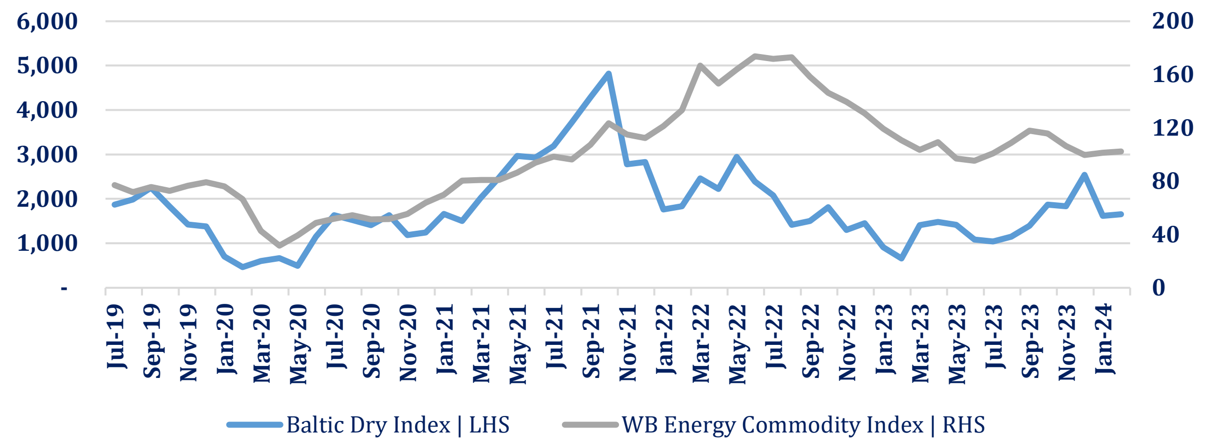
Source: WB, PBS, IPPA, EIA

Cement

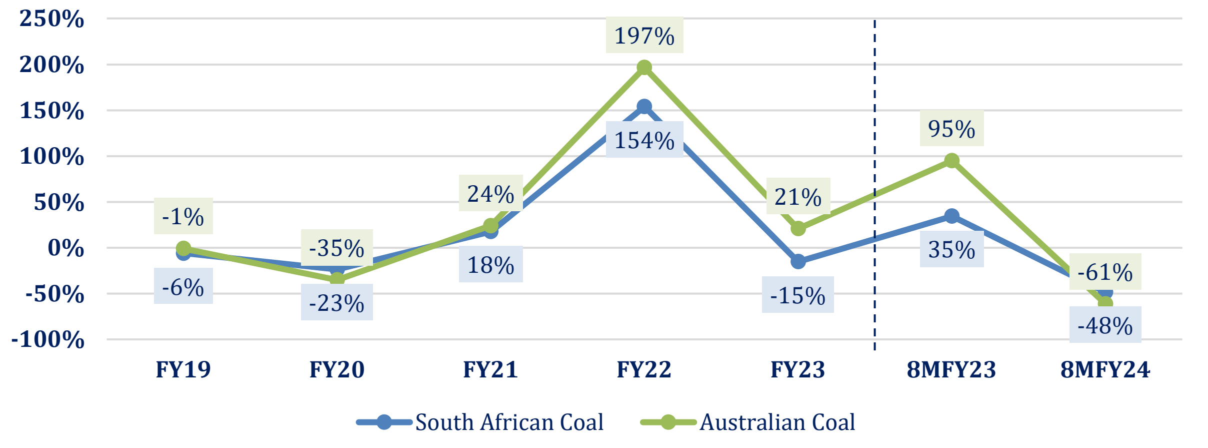
Raw Material | Prices

- During FY23, global energy commodities as well as global freights remained low. The Baltic dry index was lowest in Jan'23 at ~658. At the same time international energy commodity Index was also low.
- South African and Australian average FOB coal prices have declined by ~48.0% and ~61.0% in 8MFY24 YoY and stood at USD~108/MT (Feb'23: USD~209/MT) and USD~139/MT (Feb'23: USD ~360/MT) in Feb'24.
- In FY23, South African bituminous coal held ~60.3% share in the country's total coal imports (FY22: ~59%) with landing costs clocking in at PKR~45,725/MT (FY22: PKR~28,386/MT), up ~61.0% YoY despite lower imports. Local manufacturers keep energy cost in check by importing Afghan coal.
- South African coal imports from Afghanistan held ~11.5% share in the total coal imports and landing cost of bituminous variety clocked in at PKR~33,964/MT (FY22: PKR~17,255/MT), up ~97.0% YoY due to massive PKR devaluation of ~39.0%. Meanwhile, non-bituminous quality clocked in at PKR~30,559/MT (FY22: PKR~15,636/MT), up ~93.8% YoY.
- In general terms, hike in energy commodity and freight rate prices together with PKR devaluation imply major cost pressure on the local cement sector and puts pressure on the country's import bill.

Commodity & Freight Indices



Coal Price Movement

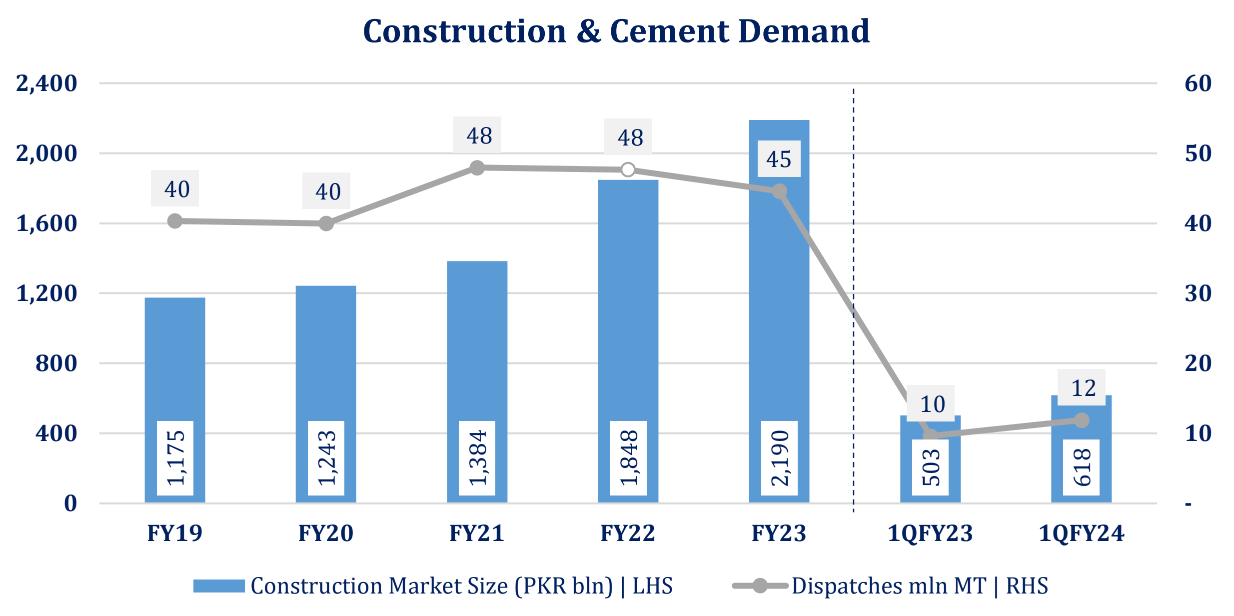


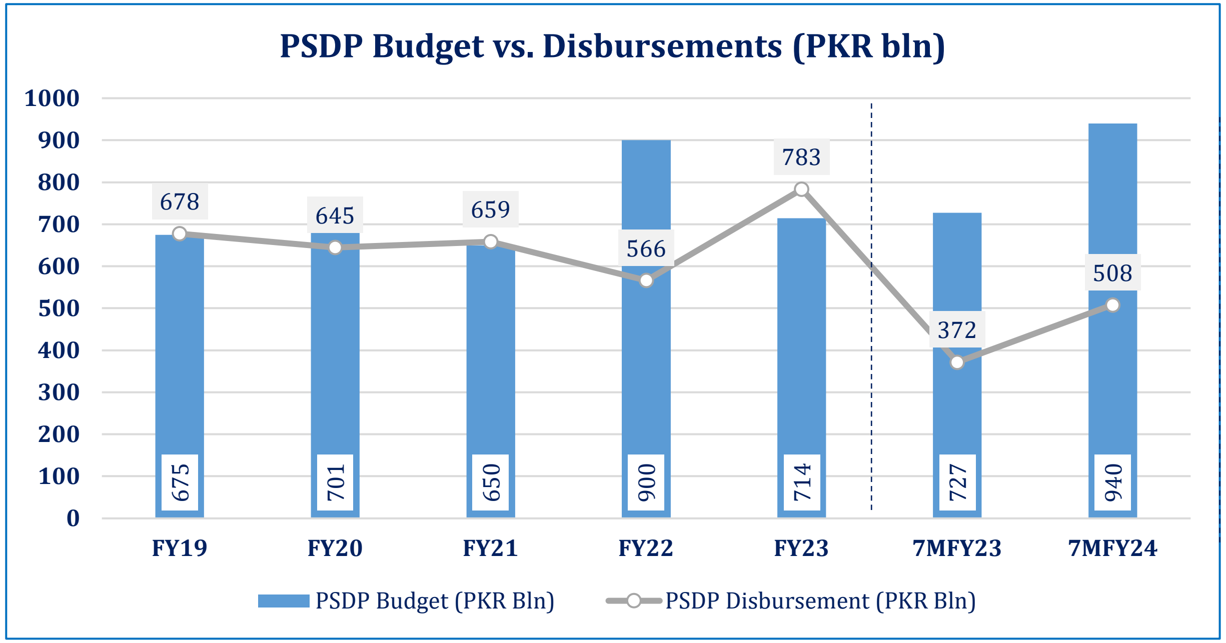
Source: WB, Baltic Exchange

Cement

Local | Demand Side

- Demand for cement is correlated with construction and infrastructure development by both the Private and Public Sector Development Program (PSDP). Historically, (FY19-23) PSDP fund disbursements have been ~10.0% lower than the budgeted amounts. Amid economic and socio-political vulnerabilities during FY23, PSDP spending was cut to PKR~714bln from PKR~900bln during FY22. During 7MFY24, ~46.0% of the planned PKR~940bln PSDP spending got disbursed (7MFY23: ~49.0%).
- Historically (FY19-22), construction sector, on average, held ~2.8% share in the national GDP. During FY23, this stood at ~2.7%. The IMF cut Pakistan's real GDP FY24 growth forecast to ~2.0% in Jan'24. However, the Staff-Level Agreement regarding second tranche of the total USD~3.0bln SBA program and factors such as declining inflation forecasts, steady interest rates and political stability in the country are expected to improve demand for construction materials.



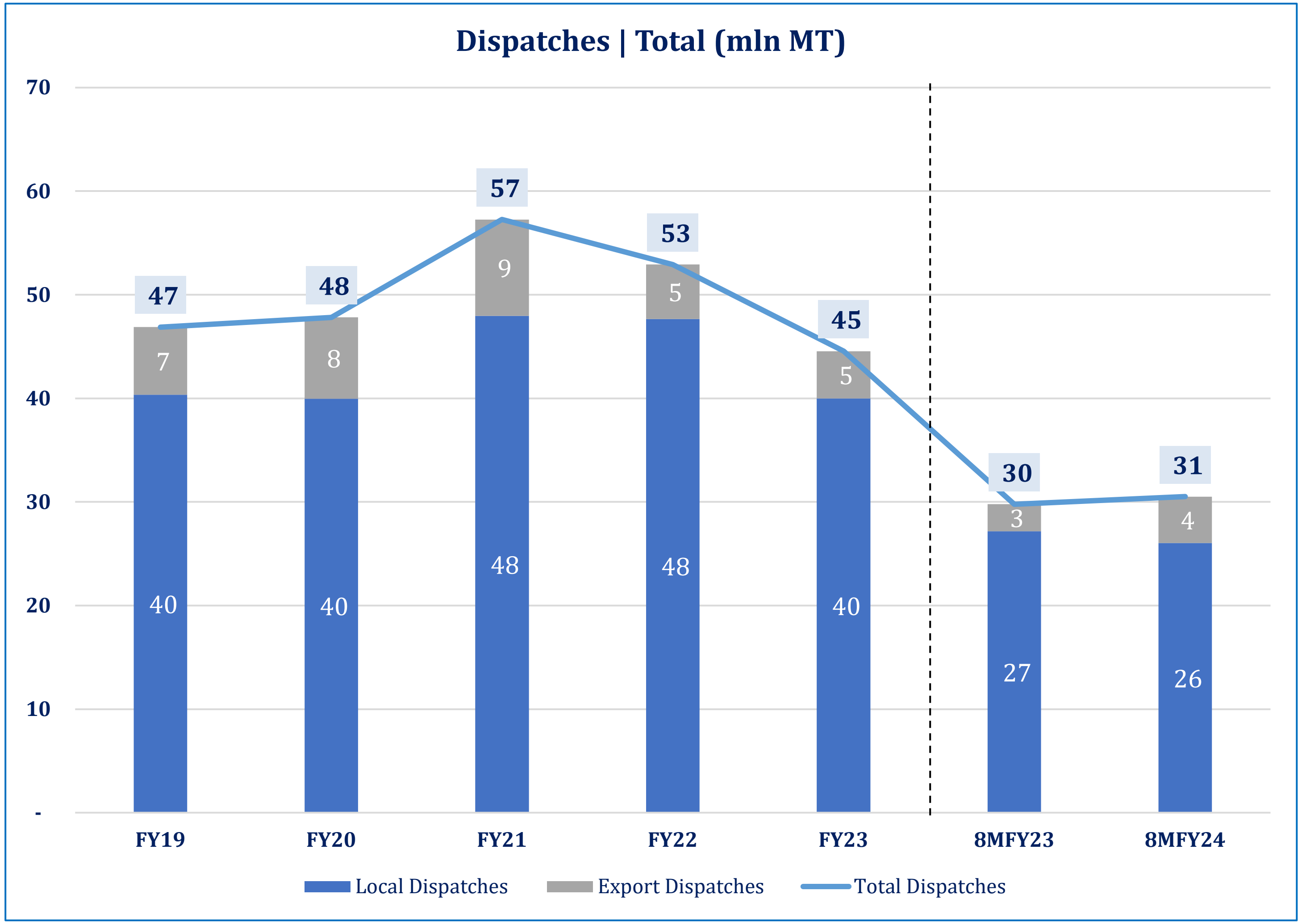


Source: APCMA, PC, Economic Survey, IMF

Cement

Demand Side | Total Dispatches

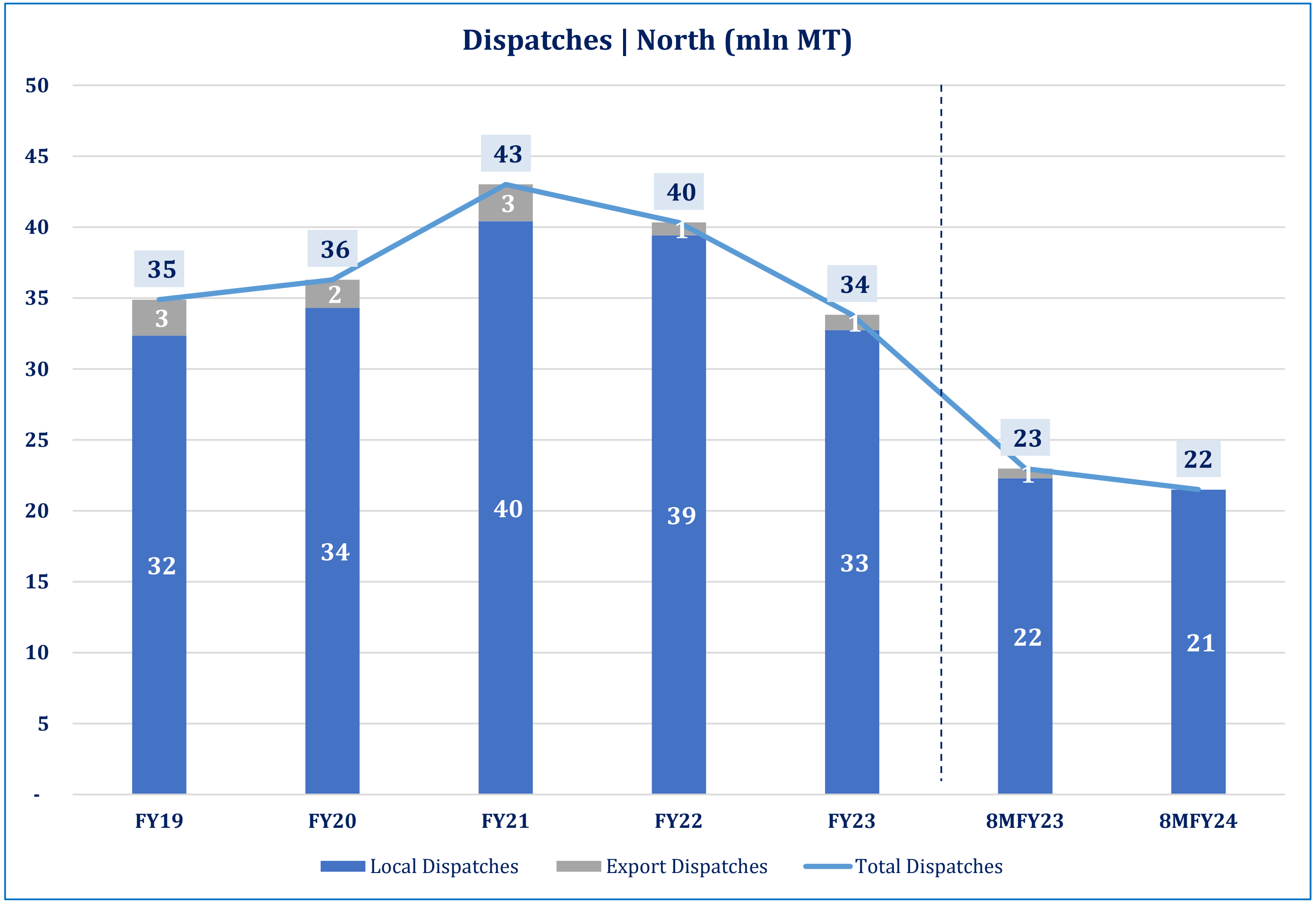
- The country's south to north dispatch ratio stands at 1:3x ratio in terms of total volumes dispatched.
- In FY23, total dispatches stood at ~45mln MT (FY22: ~53mln MT) declining ~15.1% YoY. Of these, export volumes held ~10% while local dispatches held ~90% share (same as SPLY).
- In 8MFY24, total dispatches increased by ~2.0% YoY. Local dispatches declined ~4.0% while export dispatches rose by ~73.0% YoY during the same period due to heightened demand of cement during the period under review.
- Total dispatches for 8MFY24 stood at ~30mln MT of which ~15.0% comprised exports while ~85.0% volumes comprised local dispatches.



Cement

Demand Side | North Dispatches

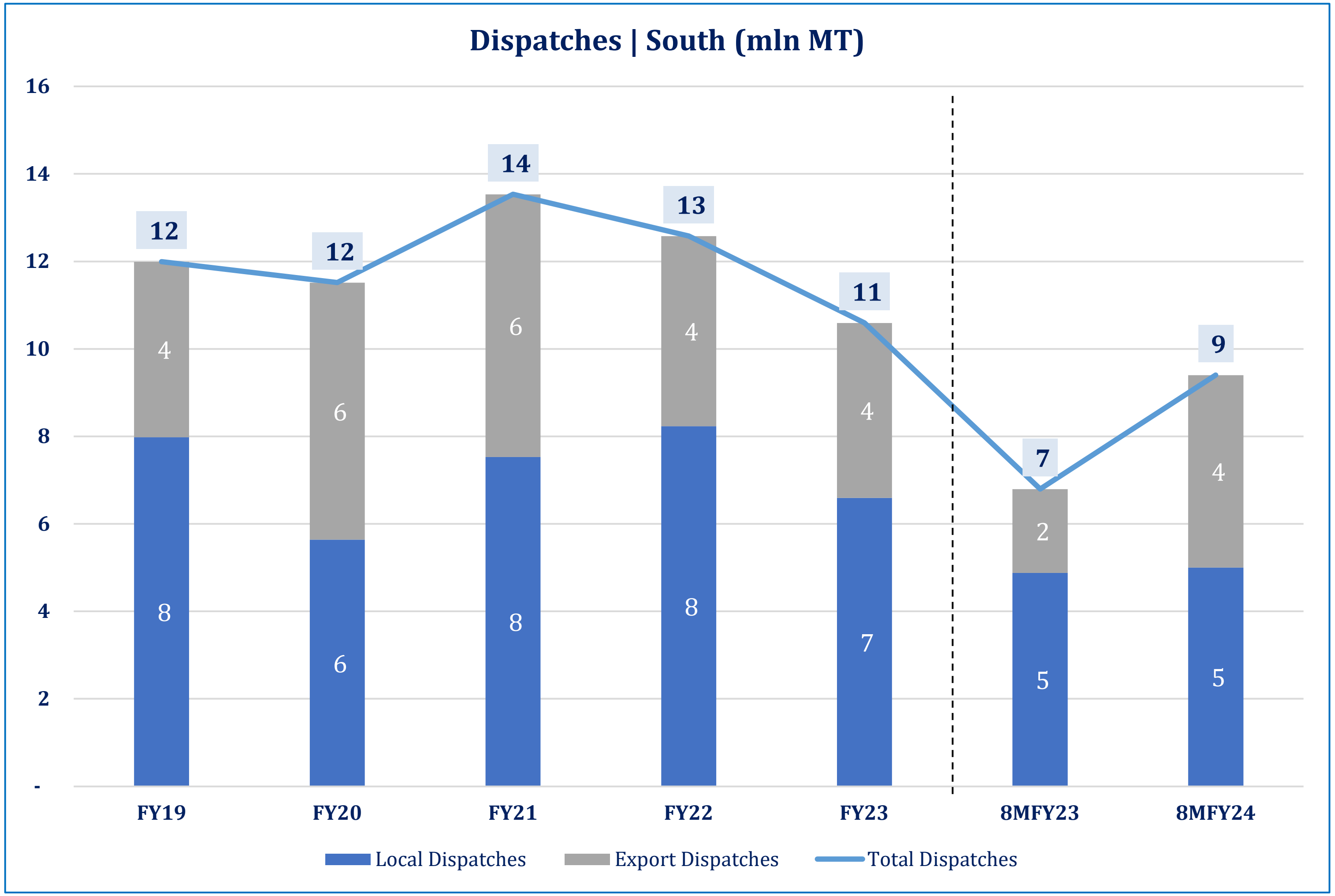
- Historically (FY19-22), the North region represented ~75.0% share in the overall national dispatches (FY23: ~76.0%).
- In FY23, dispatches in the North stood at ~34mln MT (FY22: ~40mln MT) declining ~15.0% YoY. Of these, export volumes held ~3.0% while local dispatches held ~97.0% share.
- During 8MFY24, total North dispatches receded by ~2.5% YoY. Local dispatches declined ~4.5% YoY, while export dispatches grew by ~33.0% YoY during the same period.
- Of the ~22.0mln MT dispatches in the North region during 8MFY24 (SPLY: ~23mln MT), ~2.0% dispatches by volumes comprised exports while ~98.0% volumes comprised local dispatches.



Cement

Demand Side | South Dispatches

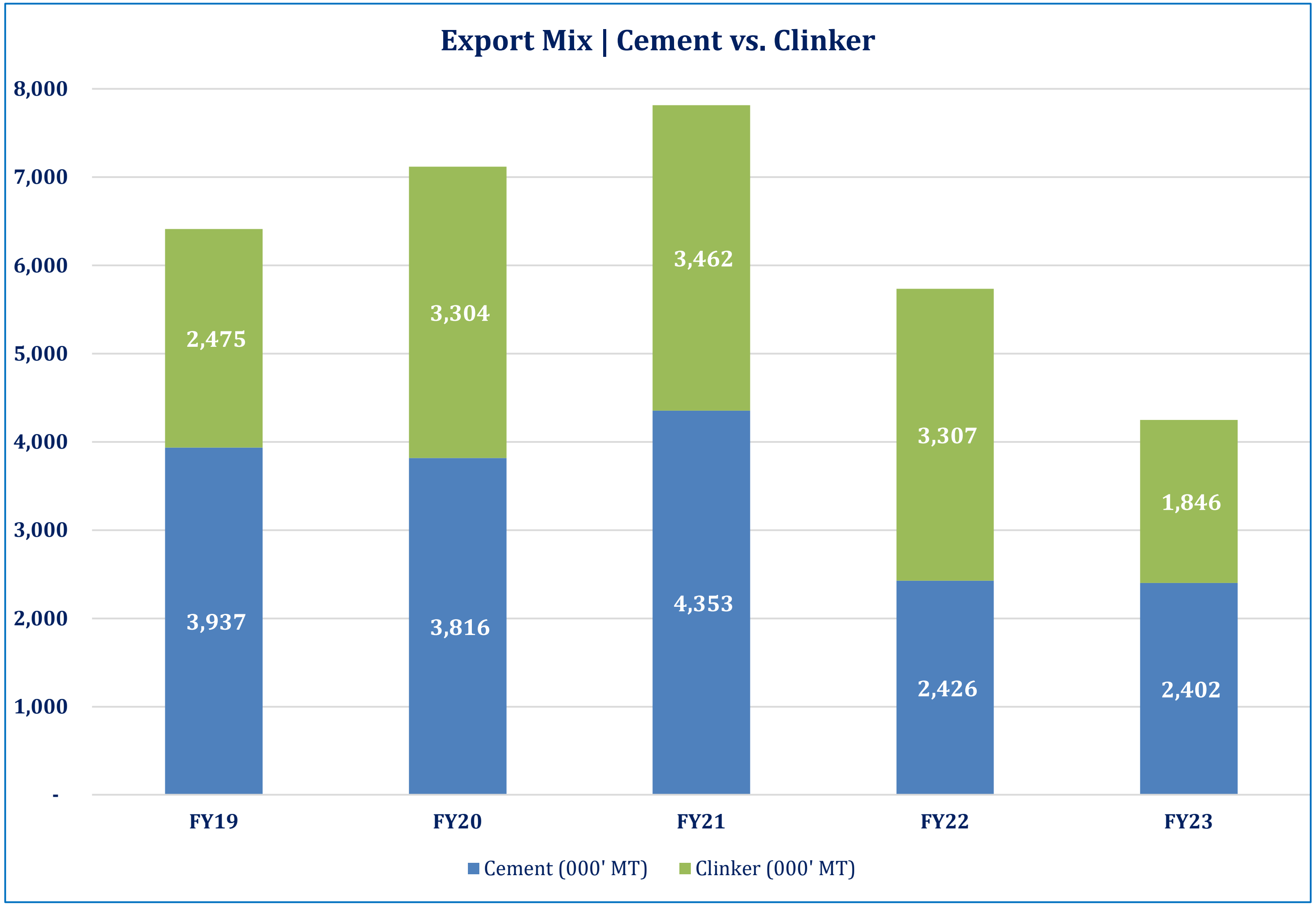
- Historically (FY19-22), the South market represented ~25.0% share in total national dispatches (FY23: ~24.0%).
- In FY23, South dispatches stood at ~11mln MT (FY22: ~12mln MT) declining ~8.3% YoY. Of these, export volumes held ~30.0% while local dispatches held ~70.0% share.
- During 8MFY24, South local dispatches declined by ~7.0%, while South export dispatches increased by ~87% leading to a ~19.3% increase in total South dispatches.
- During 8MFY24, South dispatches stood at ~9mln MT of which ~44.0% dispatches comprised exports while ~56.0% volumes comprised local dispatches.



Cement

Demand Side | Export Mix

- Pakistan's cement exports in FY23 were valued at PKR~47.8bln (FY22: PKR~39.2bln), representing ~0.7% of the country exports (FY22: ~0.8%); while export volumes stood at ~4.2mln MT (FY22: ~5.7mln MT).
- Total cement exports during 8MFY24 by value stood at PKR~46.9bln (8MFY23: PKR ~27.3bln), down ~71.8% YoY and represented ~0.8% of national exports (8MFY23: ~0.6%); while cement export volumes stood at ~4.2mln MT (8MFY23: ~2.5mln MT) for the same period and depicted an increase of ~73.0% YoY.
- In recent years (FY19-22), clinker exports have had a sizeable chunk in cement related product exports. In value terms, FY23 cement exports were ~1.8x the value of clinker exports (FY22: ~1:1)



Source: PBS

Cement

Demand Side | Export Partners (FY23)

- In FY23, clinker export value stood at PKR~466/50Kg (FY22: PKR~299/50Kg), while that for ordinary Portland cement export recorded at PKR~634/50Kg (FY22: PKR~401/50Kg), ~36.1% (~1.4x) higher than that of clinker (FY22: ~34.1%).
- Although white cement fetched the most premium price among all categories, but hold almost negligible share in the overall export mix.
- Bangladesh held the highest share of ~64.0% in Pakistan's clinker exports, as the local cement sector relies heavily on imported raw material due to non-availability of raw material for cement locally.
- Afghanistan, in FY23, held the highest share in Pakistan's ordinary Portland cement exports at ~44.0%. During 8MFY24, export value of cement increased by meagre ~0.1% in USD terms (8MFY23: ~26.0%) and ~71.7% (8MFY23: ~70.0%) in PKR terms.

Sr.	Export Destinations	Exports ('000' MT)	Exports (PKR mln)	Share (Vol.)	Share (PKR)	PKR/MT
Clinker						
1	Bangladesh	1,192	10,829	65%	63%	9,082
2	Sri Lanka	375	3,632	20%	21%	9,692
3	Tanzania	99	948	5%	6%	9,579
4	Others	180	1,798	10%	10%	10,015
	Total	**1,846**	**17,208**	**100%**	**100%**	**9,323**
Ordinary Portland Cement						
1	Afghanistan	1,058	12,910	44%	43%	12,200
2	Madagascar	414	5,307	17%	18%	12,819
3	Sri Lanka	299	4,692	13%	15%	15,679
4	Others	620	7,402	26%	24%	11,944
	Total	**2,391**	**30,311**	**100%**	**100%**	**12,676**
White Portland Cement						
1	Afghanistan	7	181	67%	60%	24,938
2	Tanzania	1	55	12%	18%	40,745
3	Sri Lanka	1	36	12%	12%	28,287
4	Others	1	28	9%	9%	28,011
	Total	**11**	**300**	**100%**	**100%**	**27,567**

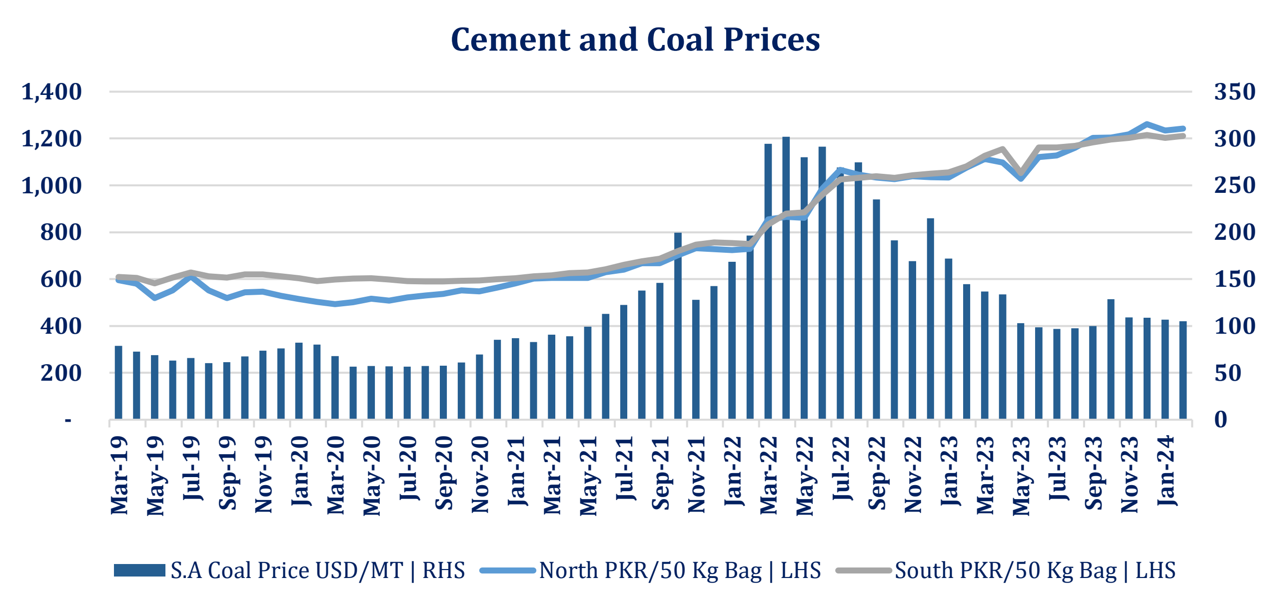
***Note**: HS codes for Clinker, Ordinary Portland Cement and White Portland Cement are 25231000, 25232900 and 25232100 , respectively.*

Source: PBS

Cement

Demand Side | Price Dynamics

- Cement prices are a function of the market demand and supply dynamics. These are generally dependent upon the behavior of major cost components of cement production, including coal prices, exchange rates, fuel costs and freight charges.
- Since the beginning of FY23, local cement prices have exhibited steady growth, reaching PKR~1,130/50Kg bag and PKR~1,161/50Kg bag in North and South, respectively, as at End-Jun’23 (SPLY: PKR~1,046/50Kg bag (North) and PKR~996/50Kg bag (South)).
- Local prices of cement rose by ~39.0% YoY during FY23 due to increase in freight charges, whereas prices of South African coal were down ~14.1% YoY. However, the PKR depreciated by ~39.4% YoY for the same period, which resulted in revenue growing by just ~17.2%.
- Clinker is exported at low prices as compared to cement, therefore, is not very profitable for the companies on stand-alone basis but it comes with other additional benefits like increased capacity utilization and availability of export refinance facility at subsidized rates.
- Going forward coal prices are expected to follow a downward trend owing to a shift towards renewable sources as well due to a steady supply.



Comparison | Local vs. Export Prices							
Avg Prices (PKR/50Kg bag)	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**8MFY23***	**8MFY24***
North	584	528	571	767	1,064	696	1,205
South	595	608	606	777	1,080	716	1,192
Export Clinker	336	375	334	401	466	-	-
Export Cement	454	519	442	540	638	552	651

Note: *Cement export prices pertain to 7MFY23 and 7MFY24*

Source: APCMA, PBS, WB

Cement

Local | Business Risk

Financial Highlights (PKR mln)							
Companies	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**1HFY23**	**1HFY24**
Gross Sales	**440,007**	**401,747**	**541,566**	**686,541**	**804,890**	**201,919**	**338,456**
Net Sales	307,432	254,779	377,727	498,173	602,443	289,709	348,760
Cost of Sales	238,700	243,517	288,676	375,232	454,597	216,959	229,153
Gross profit	**68,042**	**11,234**	**88,079**	**122,941**	**147,846**	**72,750**	**95,907**
Operating Expense	12,380	9,865	9,922	52,740	61,597	31,501	38,041
Operating Profit	**55,662**	**1,369**	**78,157**	**70,202**	**86,249**	**41,249**	**57,865**
Finance Cost	10,077	18,866	14,407	16,279	31,688	13,690	20,637
Profit/(Loss) before Tax	**49,480**	**(13,642)**	**67,892**	**58,349**	**60,805**	**30,479**	**41,609**
Taxation	12,349	(513)	16,231	5,824	11,435	(4,331)	(1,356)
Profit/(Loss) after Tax	**37,131**	**(13,129)**	**51,661**	**52,524**	**49,369**	**34,810**	**42,965**

- In FY23, sector size grew by ~17.2% YoY reaching to PKR~805bln (FY22: PKR~687bln), on the back of a massive ~39% average increase in the local 50Kg cement bag retention prices. Additionally, despite a decrease in both local and export dispatches of ~16.0% and ~13.0% respectively, the sector's net revenue grew by ~20.9% YoY.
- The sector's cost of goods sold also registered major upward movement, growing ~21.0% YoY, owing to ~26.0% YoY higher energy and ~14.0% YoY higher raw material & packaging cost.

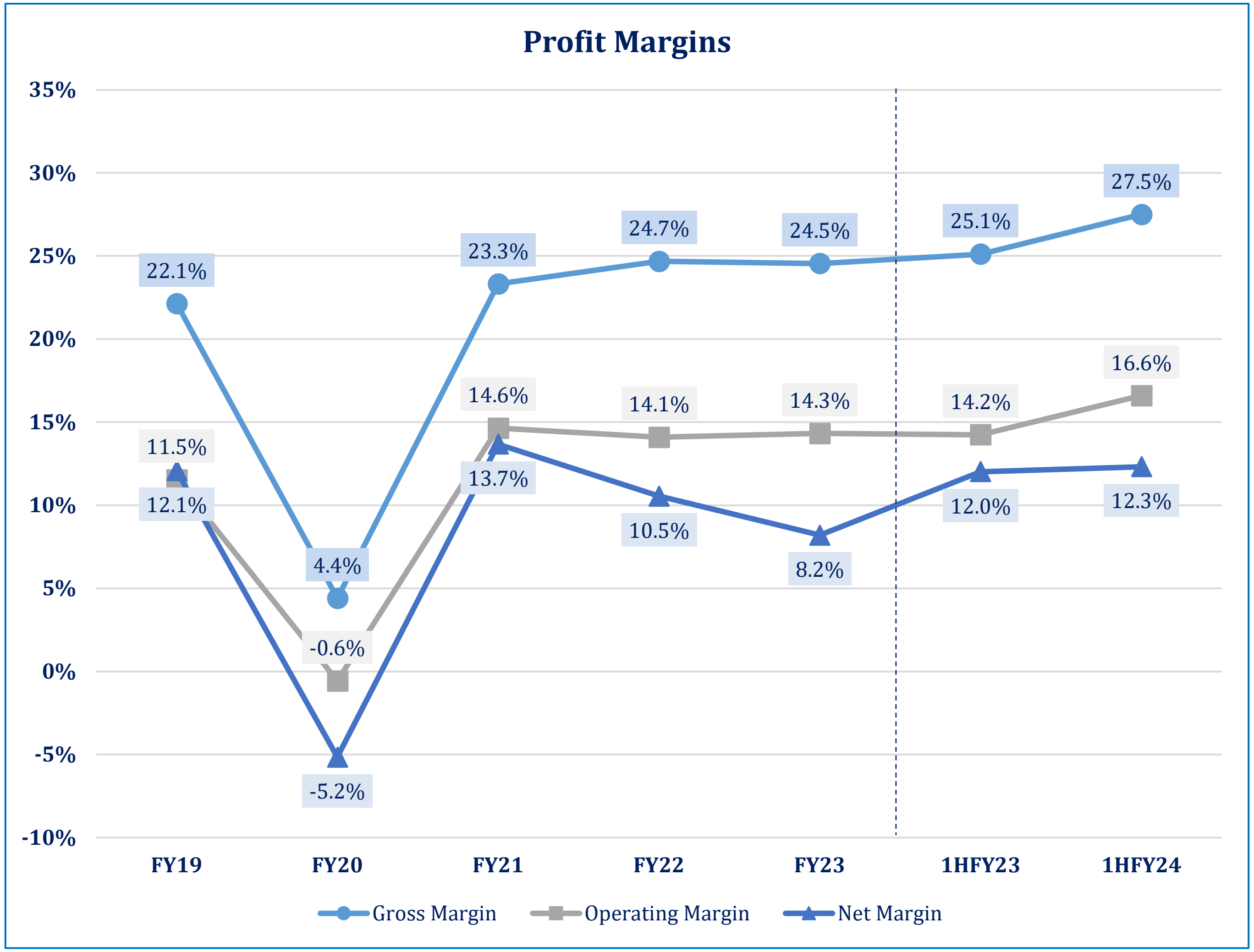
Note: *Calculations are based on data of all 16 listed entities in the sector.*

Source: APCMA, PES, Companies Financial, PACRA Internal Database

Cement

Local | Business Risk

- In FY23, the sector's average gross margins declined to ~24.5% (FY22: ~24.7%) due to a larger increase in cost of sales (~21.0%) compared with ~17.2% YoY increase in revenue.
- However, average operating margins slightly rose to ~14.3% (FY22: ~14.1%) owing to a smaller increase in operating expenses (~16.8%) than increase in gross sales (~17.2% YoY). Additionally, operating expenses stood at ~10.2% of net revenues (FY22: ~10.5%).
- However, with a massive increase in the finance cost and tax expense (~94.7% and ~96.3% YoY, respectively), net margins decreased by ~21.9% and clocked in at ~8.2% during FY23 (FY22: ~10.5%).
- Local dispatches increased by ~10.0% YoY in 1HFY24, while retention price per bag increased by ~14.8% contemporaneously, whereas, prices of South African coal followed a downward trend and dipped by ~49.0%. Improvement in retention prices maintained the sector margins during 1HFY24.
- Average gross margins stood at ~27.5% in 1HFY24, operating margins at ~16.6% and net margins at ~12.3%.

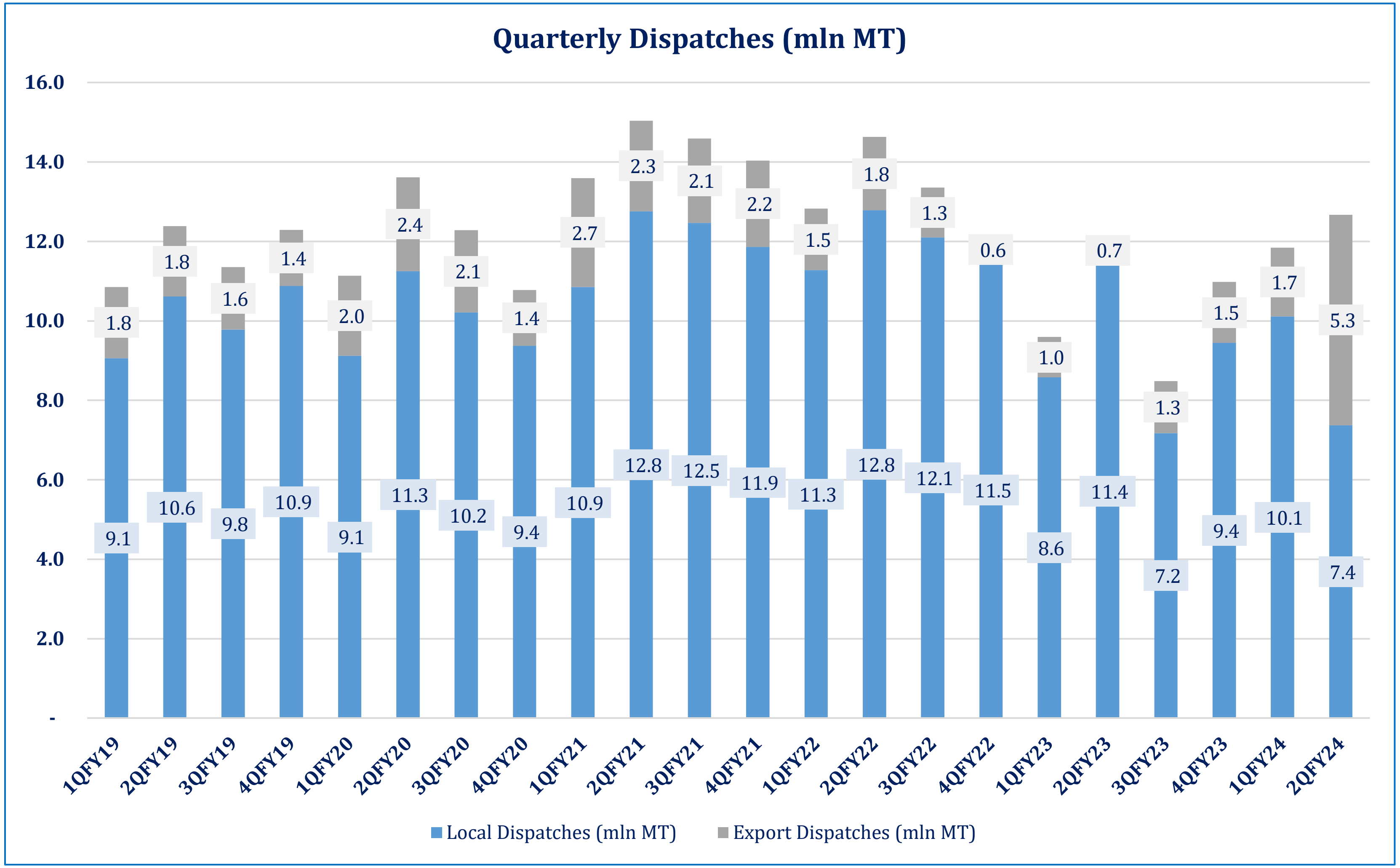


Source: APCMA, PES, Companies Financial, PACRA Internal Database

Cement

Local | Business Risk

- Being a primary construction material, cement offtake is highly dependent upon infrastructure development and construction activities in the country.
- Federal PSDP budget for FY23 was set at PKR~714bln*, of which ~110.0% was authorized/disbursed, providing a base line support for the construction activities in the country, amidst hawkish monetary policy, high levels of inflation and forex reserve crisis, leading to lower levels of dispatches.
- While PSDP budget for FY24 was set at PKR~940bln, ~54.0% of the federal PSDP funds were authorized/disbursed during 7MFY24 (7MFY23: ~51.0%).
- Quarterly dispatches have been on a rise since 4QFY23 due to a stable political and economic situation, appreciation currency, increasing foreign reserves, IMF's SBA, reducing inflation, stable though high interest rates.



*Revised.

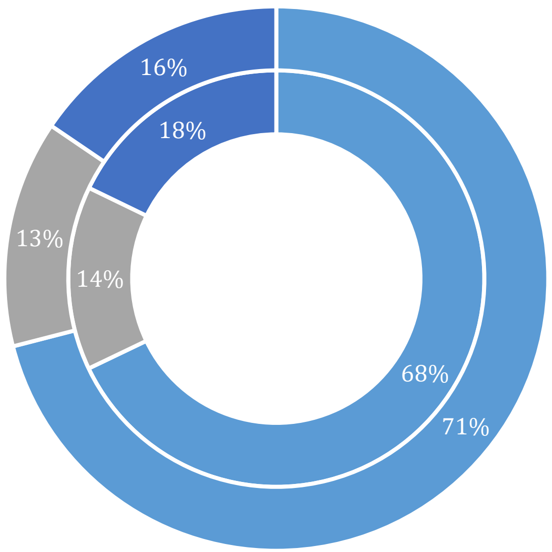
Source: APCMA, PBS, IMF

Cement

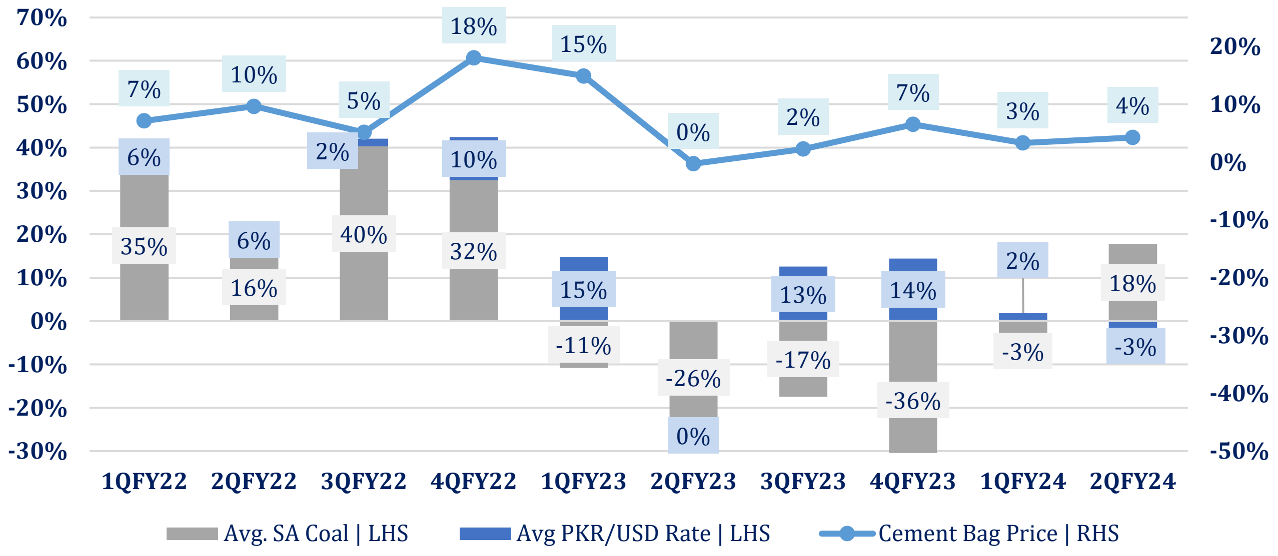
Local | Business Risk

- During FY23, although the sector experienced ~39.0% increase YoY prices per 50Kg bag, there was a decline of ~14.1% in South African coal prices (South African coal holds ~46.1% share on average in Pakistan's coal imports), while PKR lost ~39.0% value against the USD. The sector has been relying on imported Afghan coal which is cheaper, although, both Australian and South African coal prices are tracing a downward trajectory. These dynamics increased energy cost component to ~71.0% (FY22: ~68.0%; FY21: ~57%) in the sector's COGS mix.
- During 2QFY24, cement bag prices were up ~17.0% YoY whereas prices of South African coal fell by ~39.0% YoY. Meanwhile, the PKR simultaneously appreciated by ~2.0% against the USD. All three factors contributing positively to the sector. Going forward, in case PKR appreciation and the declining trend in average energy input prices continues, sector gross margins are expected to improve and hence consumers of cement will likely benefit from this development.

COGS Breakup | FY22 (Inner), FY23 (Outer)



Cement | Major Input Price (QoQ Trend)



Note: *Calculations for COGS is based on data of all 16 listed entities in the sector. 50 Kgs of cement require 8Kgs of Coal energy equivalent).*

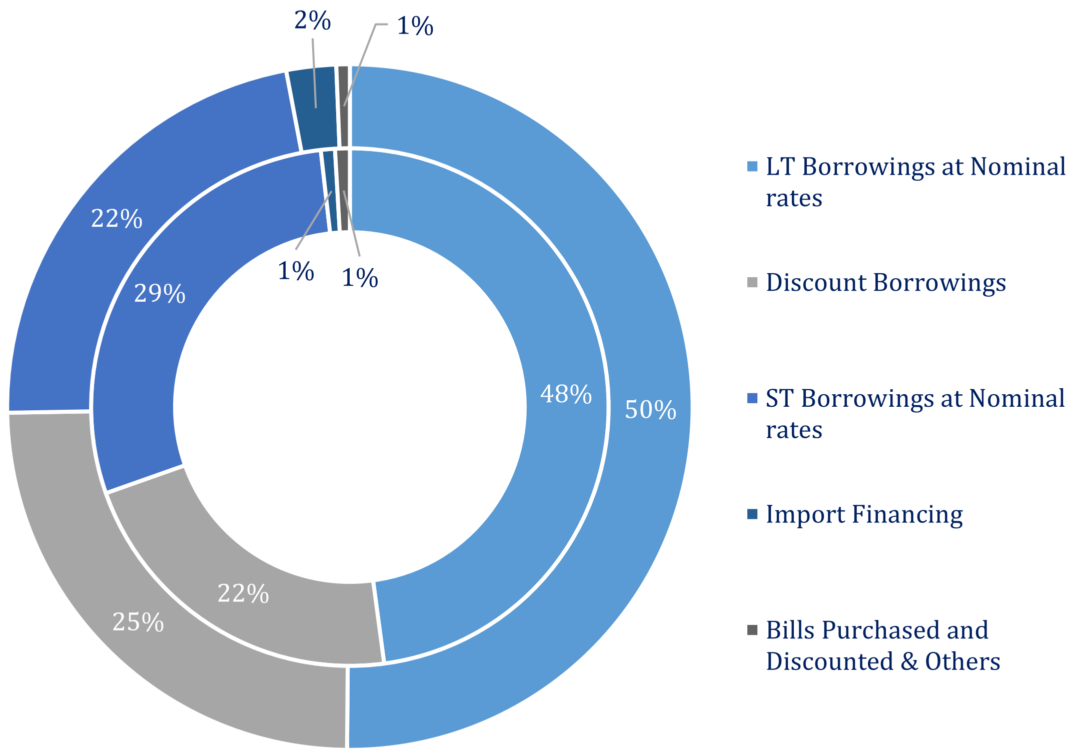
Source: APCMA, PBS, IMF

Cement

Financial Risk | Borrowings

- By End-Feb’24, total borrowings of the sector stood at PKR~257bln (End-Feb’23: PKR~289bln), declining by ~12.4% YoY.
- Long-term borrowings as at End-Feb’24 comprised ~68.8% of the total borrowings (End-Feb’23: ~65.4%), while short-term borrowings represented ~31.2% (End-Feb’23: ~34.6%).
- Short-term borrowings at normal rates as at End-Feb’24 decreased by ~44.3% and reached PKR~57.0bln (End-Feb’23: PKR~82.6bln).
- Long-term borrowings at normal rates as at End-Feb’24 stood at PKR~128.9bln (End-Feb’23: PKR~138.4bln), down ~7.4% YoY.
- Discounted borrowings comprising LTFF and EFS represented ~25.0% of total borrowings and stood at PKR~63.2bln as at End-Feb’24 (End-Feb’23: PKR~65.8bln), registering a decline of ~2.8% YoY.
- Import financing held ~2.3% share in total borrowing and stood at PKR~6.0bln (End-Feb’23: PKR~2.5bln), up ~57.8% YoY as SBP withdrew import restrictions in Jun’23.

Borrowing Mix | Feb'23 (Inner), Feb'24 (Outer)



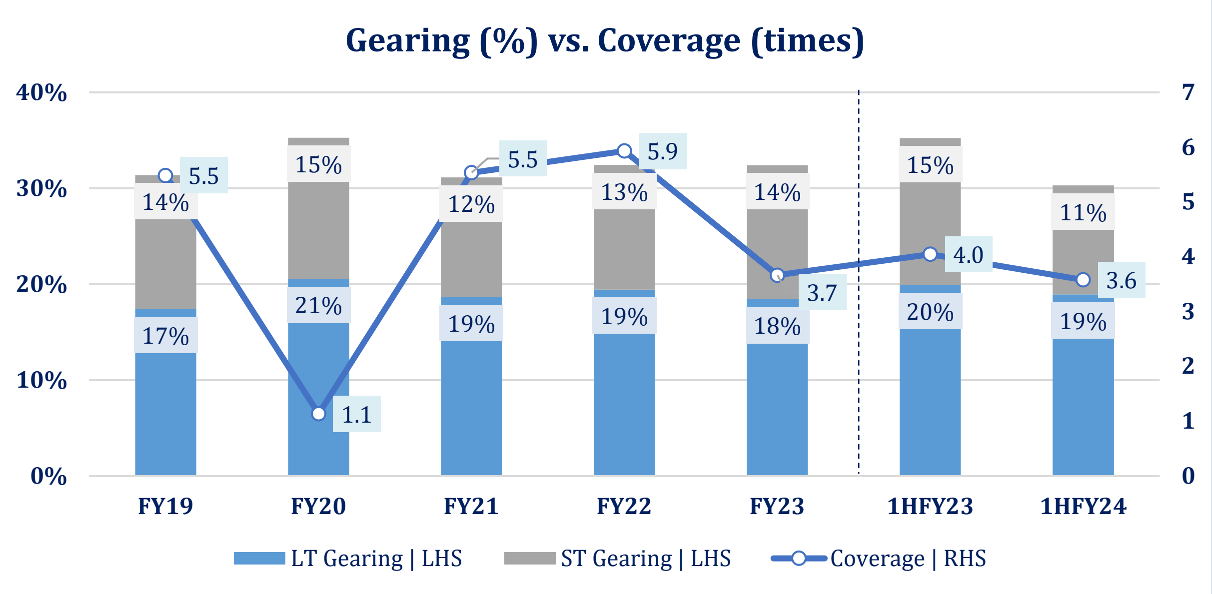
__Note:__ Borrowing figures is representative of ‘Manufacture of cement, lime and Clinker as per SBP.

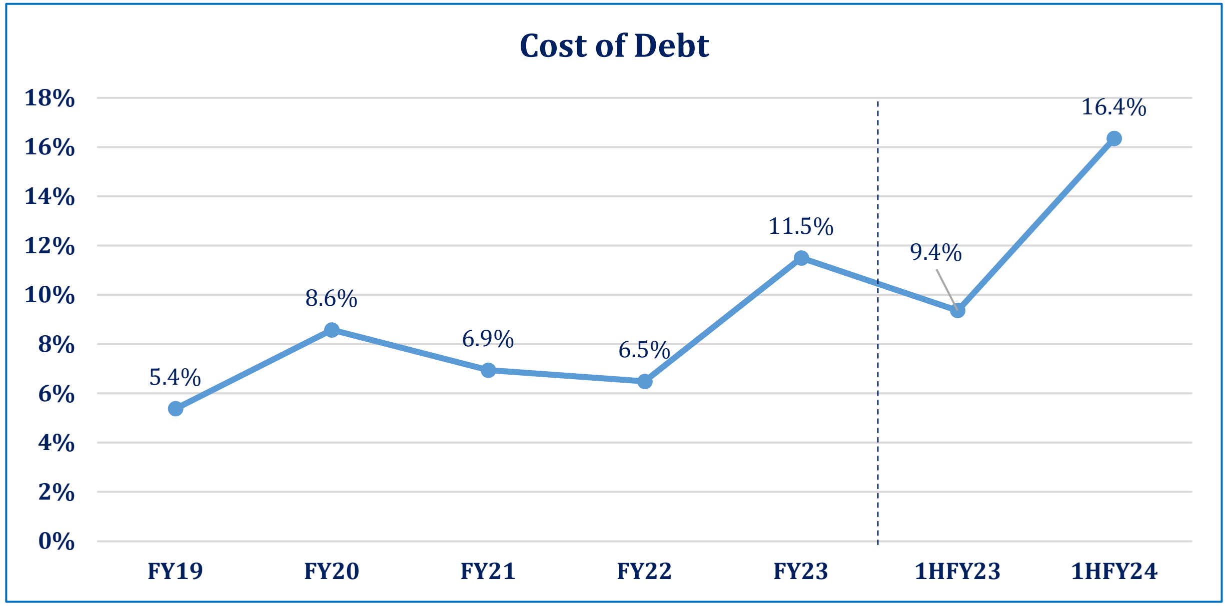
Source: Companies Financial, PACRA Internal Database, SBP

Cement

Financial Risk | Coverage & Cost of Debt

- In FY23, the sector's debt-to-equity ratio stood at ~32.0% (FY22: ~32.0%), as the increase in total debt of ~9.9% YoY offset growth in equity by the same percentage. During 1HFY24, the sector's gearing stood at ~30.0% (1HFY23: ~35.0%) as total debt was down ~12.3% YoY while the equity grew by ~9.9% YoY.
- The Sector's average debt coverage reduced to ~3.7x in FY23 (FY22: ~5.9x) as average EBITDA increased by ~20.2% while average finance cost increased by ~94.7% YoY owing to hawkish monetary stance by the SBP. During 1HFY24, coverage dipped to ~3.6x, as EBITDA grew by ~33.0% YoY while finance cost grew by ~51.0%
- Owing to increase in sector's borrowings as well as SBP's hawkish policy in FY23, the sector's effective average cost of debt increased to ~11.5% (FY22: ~6.5%). During 1HFY24, this further grew to ~16.4% (SPLY: ~9.4%).





Note: *Calculations are based on data of all 16 listed entities in the sector.*

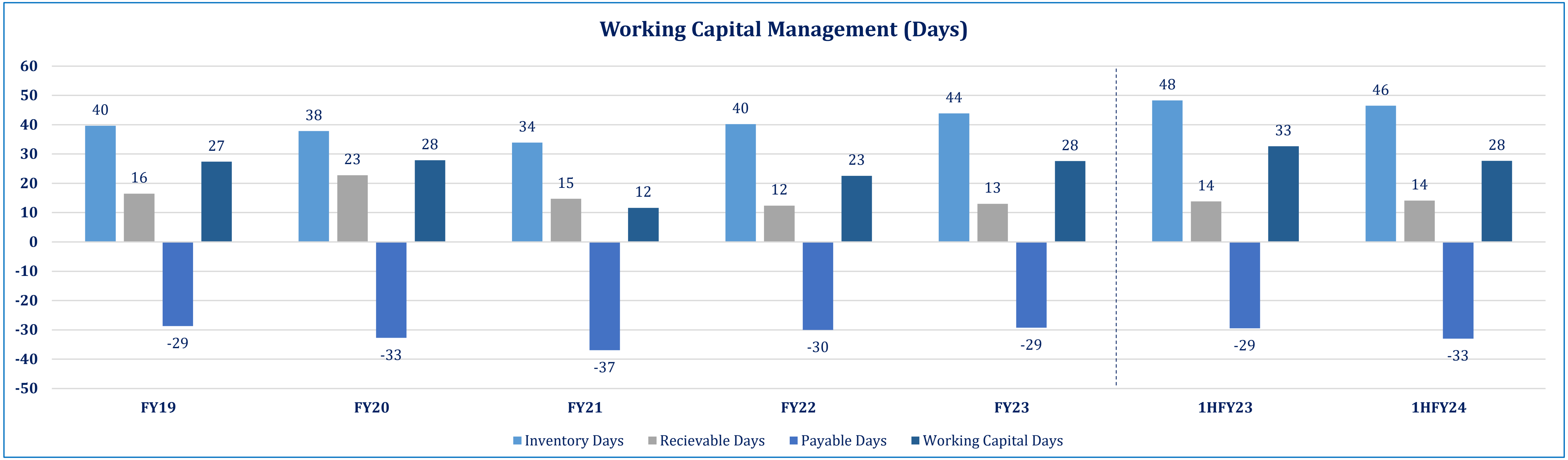
Source: Companies Financial, PACRA Internal Database

Cement

Financial Risk | Working Capital Management

- In FY23, the sector's average working capital days were recorded at ~28 days (FY22: ~23 days), as inventory days increased to ~44 (FY22: ~40 days) owing largely to growth in inventories by ~32.0% YoY as well due to an increase in receivable by ~27.0% YoY. However, the sector's payable days declined by ~1 day to ~29 days in FY23 (FY22: ~30 days) due to an increase in trade payables ~18.0% YoY, while the sector's net revenues grew by ~21.0% YoY.

- 1HFY24 working capital (WC) days declined to ~28 days (1HFY23: ~33 days) , as inventory days decreased to to ~46 days (1HFY23: ~48 days) while receivable days remained steady at ~14 days. Payable days increased to ~33 days (1HFY23: ~29 days).



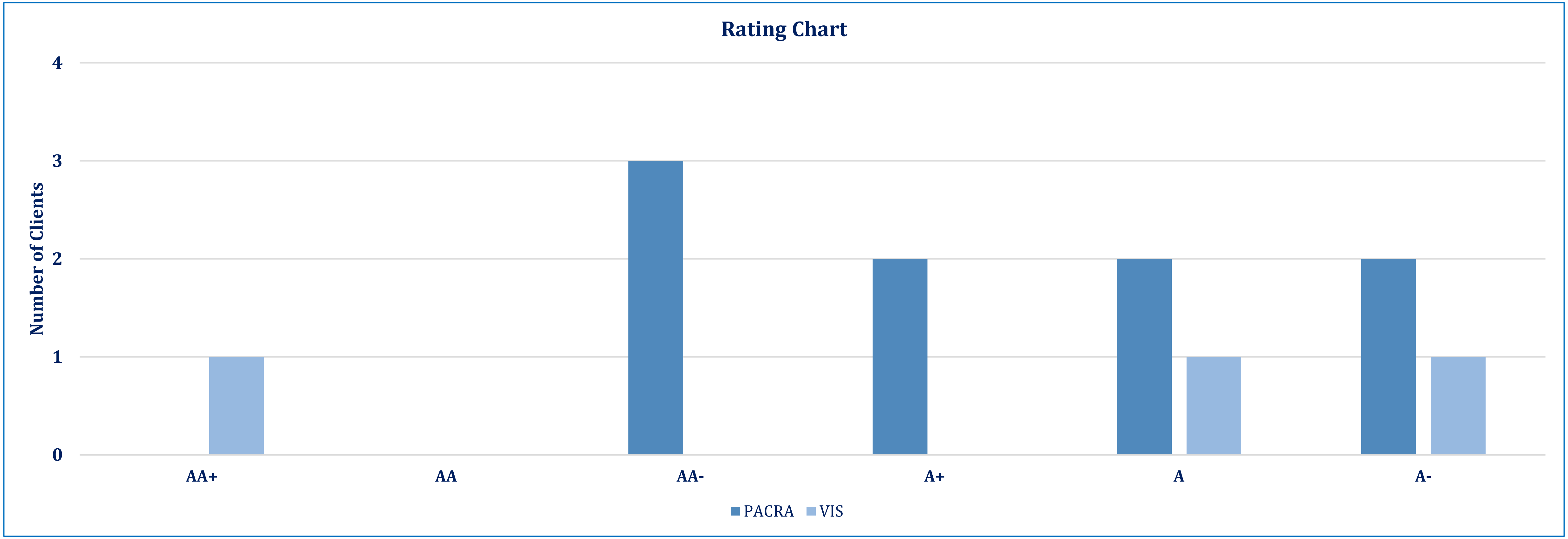
***Note**: Calculations are based on data of all 16 listed entities in the sector.*

Source: APCMA, PBS, Companies Financial, PACRA Internal Database

Cement

Rating Curve

- PACRA rates 9 clients in the cement sector, with the rating bandwidth of A- to AA-. Collectively, PACRA-rated clients make up ~56% of the total sector in terms of production capacity.



Source: PACRA Internal Database

Cement

Duty Structure

PCT Code	Description	Custom Duty		Additional Custom Duty		Federal Excise Duty		Sales Tax		Income Tax	
	Raw Material for Cement	**FY23**	**FY24**	**FY23**	**FY24**	**FY23**	**FY24**	**FY23**	**FY24**	**FY23**	**FY24**
2701.12	Bituminous Coal	3%	3%	2%	2%	-	-	18%	18%	11%	12%
2701.19	Other Coal	3%	3%	2%	2%	-	-	18%	18%	11%	12%
2523.1	Cement Clinker	11%	11%	2%	2%	PKR 2/Kg	PKR 2 per 1 tariff unit	18%	18%	11%	12%
	Finished Goods	**FY23**	**FY24**	**FY23**	**FY24**	**FY23**	**FY24**	**FY23**	**FY24**	**FY23**	**FY24**
6810.11	Building Block and Bricks	20%	20%	6%	6%	-	-	18%	18%	11%	12%
2523.21	White Cement	20%	20%	6%	6%	PKR 2/Kg	PKR 2 per 1 tariff unit	18%	18%	11%	12%
2523.29	Other Cement	20%	20%	6%	6%	PKR 2/Kg	PKR 2 per 1 tariff unit	18%	18%	11%	12%

Source: FBR

Cement

Porter's 5 Forces Model

POTENTIAL NEW ENTRY

- Low threat to Entry
- High Capital cost of plant development and query availability
- Extensive regulatory requirement to establish new plants
- Strong dealer network of established players

BUYERS

- Medium to high
- Abundance supply
- Homogeneous nature of the product

SUBSTITUTES

- No/Low threat of substitutes
- Indispensable component of construction

SUPPLIERS

- Medium to High
- Abundance supply of basic raw material
- Heavy reliance on imported coal comes with its set of challenges

COMPETITIVE RIVALRY

- High capacity enhancement amid stagnant demand increases competition

Cement

SWOT

Strengths

- Local availability of basic raw material
- Low-cost skilled and unskilled labor
- Capital-intensive sector
- Good margins in period of robust demand
- Demand Potential
- Strong dealership and distribution network
- Non-availability of substitute

Weaknesses

- Quick perishability of finished product
- Heavy reliance on imported coal
- Exposure to exchange rate volatility
- Extensive regulatory requirements

Threats

- Increasing cost of energy
- High Production capacity – supply surplus
- Low demand in export markets
- Rising environmental concerns related to production of cement
- Competition in export markets with cheaper Iranian cement

Opportunities

- Low per capita consumption
- Improving infrastructure under PSDP & CPEC related projects

Cement

Outlook: Stable

- In FY23, Pakistan's economy posted a real GDP contraction of ~0.17% (FY22: ~6.1% growth). Meanwhile, the LSM shrunk by ~10.3% (FY22: ~11.8%), owing majorly to supply-chain disruptions which resulted from SBP-imposed import restrictions, along with the flash floods of Aug'22 and consequent sluggish demand across major industrial sectors of the country. In 2QFY24, however, the real GDP growth stood at ~1.0% (SPLY: ~2.2%).
- Meanwhile, the SBP estimates the GDP growth at ~2-3% for FY24, while IMF reduced Pakistan's GDP forecast to ~2.0%. FY23 was also marred by significantly high levels of inflation with average national CPI recording at ~29.4% (SPLY: ~21.3%). However, inflation has eased and stood at ~23.1% as at Feb'24 (Feb'23: ~31.5%). During FY23, PKR experienced depreciation of ~39.0% against USD. However, PKR appreciated by ~8.6% during 8MFY24.
- The local cement sector is classified as a Large Scale Manufacturing (LSM) industrial component within the industrial sector. In FY23, the cement sector's weight in the QIM was recorded at ~4.7%. The LSM fell by ~10.3% in FY23 (FY22: ~11.7%). However it increased by ~0.5% YoY in 7MFY24 period. In FY23, the sector contributed ~1.0% to GDP (FY22: ~1.07%) and ~9.4% to LSM (FY22: ~9.8%).
- In FY23, the sector's average gross margins declined to ~24.5% (FY22: ~24.7%) due to a larger increase in cost of sales (~21.0%) compared with ~17.2% YoY increase in revenue. However, average operating margins marginally rose to ~14.3% (FY22: ~14.1%) owing to a smaller increase in operating expenses (~16.8%). Additionally, operating expenses stood at ~10.2% of net revenues (FY22: ~10.5%). However, despite of a massive increase in finance cost and tax expense (~94.7%) and ~96.3% YoY respectively, net margins decreased by just ~21.9% and clocked in at ~8.2% during FY23 (FY22: ~10.5%).
- By End-Feb'24, sector borrowings stood at PKR~257.0bln (End-Feb'23: PKR~289.0bln), down ~12.4%YoY. Long-term borrowings formed ~68.8% of the total borrowings (End-Feb'23: ~65.4%), while short term borrowings represented ~31.2% of the total borrowings (End-Feb'23: ~34.6%)
- Since the price of cement is rising, the sector can be expected to maintain its pricing power. This may help the sector to sustain its margins. Given the sector's prudent shift towards Afghan and local coal; investment in renewable and heat recovery plants is also expected to keep the cost side in check.
- Going forward, lower input costs, increased cement prices, stable offtakes, socio-economic stability, IMF SBA staff level agreement of 2nd tranche of USD~1.1bln, lower inflation levels and increasing foreign reserves is expected to keep sector players' performance intact.

Cement

Bibliography

- All Pakistan Cement Mill Association (APCMA)
- Pakistan Economic Survey (PES)
- State Bank of Pakistan (SBP)
- Pakistan Bureau of Statistics (PBS)
- Companies Financial Statements
- PACRA Internal Database
- AI Cement
- US Department of Geology
- FBR
- TIPP
- UN Comtrade
- FED
- WB
- IMF
- cemnet.com
- ICR

Research Team	Saniya Tauseef *Senior Manager* saniya.tauseef@pacra.com	Ayesha Wajih *Supervising Senior* ayesha.wajih@pacra.com	Sabeen Mirza *Research Analyst* sabeen.mirza@pacra.com
Contact Number: +92 42 35869504			

DISCLAIMER

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