Cement
Sector Study

March 2022

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Global Overview

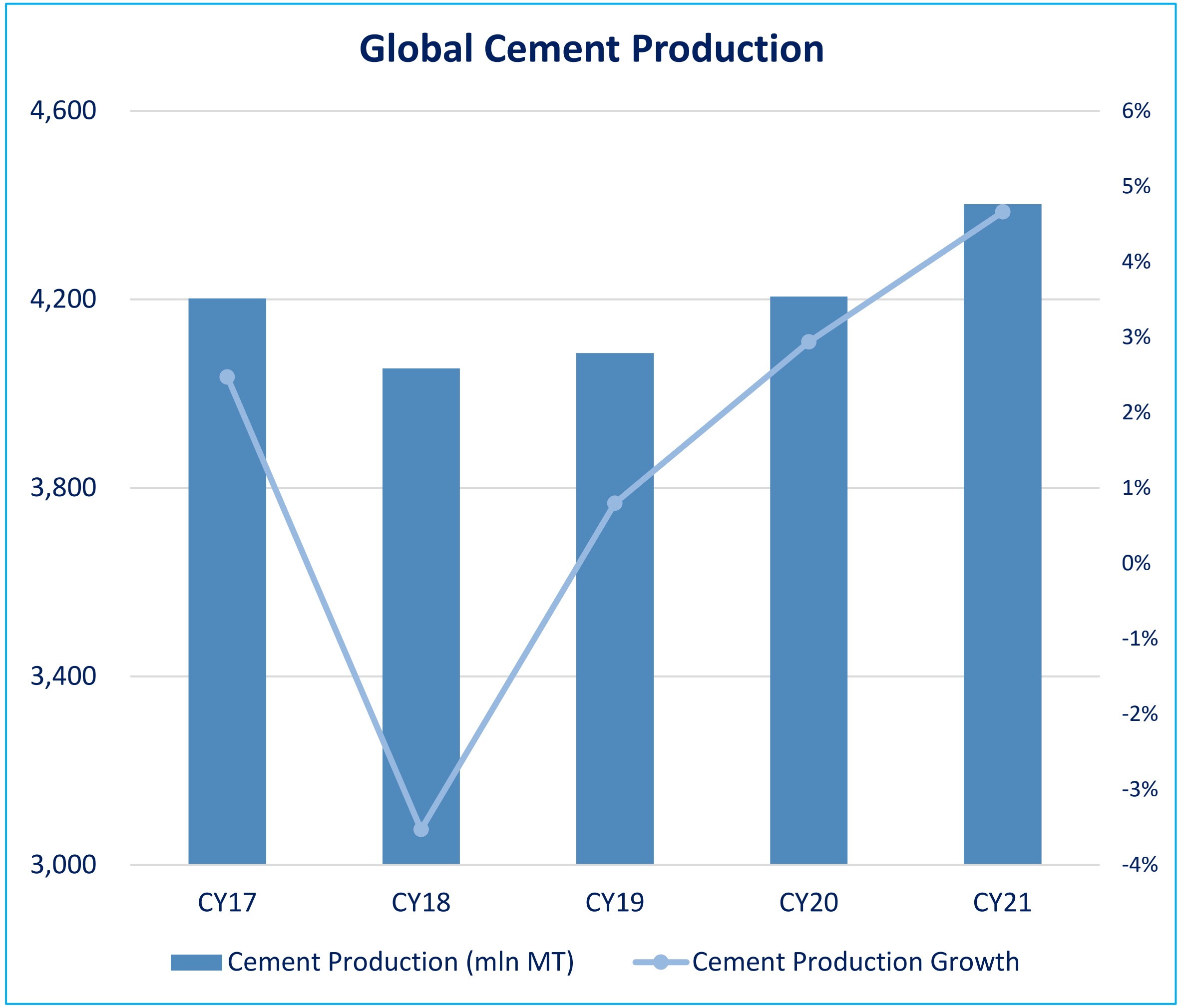
- Cement is an important building material. The Sector has a huge economic impact due to its long and diverse supply chain.

- **Size:** In CY21, estimated global cement industry stood at USD~327bln (CY20: USD~314bln), contributing ~0.3% to the global GDP. The market is expected to reach USD~459bln by CY28 with a CAGR of ~5.1%. The industry also contributes ~7.7% to the world employment.

- **Production:** Global cement production stood at ~4.4bln MT in CY21 recording a growth of ~4.7% YoY.
- Cement production volumes are highly dependent on clinkering capacity; the process is highly energy intensive and clinker is the primary raw material of all cement blends; In CY21 global clinker production capacity grew by ~12mln MT and stood at ~3.7bln MT.

- **Consumption:** Cement is a hydroscopic substance with a maximum shelf life not greater than 3 month, therefor cement consumption closely matches production numbers.

- **Regional Distribution:** China is the largest producer and consumer of cement, as it produces ~57% of total global cement.



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

Cement

Global | Production

- Global cement production is regionally concentrated. Top five countries accounted for ~68.5% of the world's clinker production capacity which hovered around ~3.7bln MT in CY21.
- Global cement production stood at ~4.4bln MT in CY21 (CY20: ~4.2bln MT).
- China stands out as the outlier in global cement manufacturing both in capacity and actual production with more than half of the global market share. The next country to follow, India, has a market share of less than ~10% in the global production.
- Being an energy intensive process, cement manufacturing is the third largest industrial polluter.
- Tightening government regulations and increasing environmental concerns are pushing adoption of green cement. Green cement concept refers to cement manufactured from emissions reducing processes and/or use of less clinker substituted with fly-ash or blast-furnace slag.

Regional Capacity and Production (mln MT)

Sr#.	Country	Clinker Capacity		Cement Production	
		CY20	CY21	CY20	CY21
1	China	54%	53%	57%	57%
2	India	8%	7%	7%	7%
3	Vietnam	2%	2%	2%	2%
4	USA	3%	3%	2%	2%
5	Turkey	2%	2%	2%	2%
6	Indonesia	2%	2%	2%	1%
7	Brazil	2%	2%	1%	1%
8	Iran	2%	2%	2%	1%
9	Russia	2%	2%	1%	1%
10	KSA	2%	2%	1%	1%
11	Others	21%	21%	23%	23%
	Total	**100%**	**100%**	**100%**	**100%**

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

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Global Industry | Top Players

- Cement industry is one of the essential sectors of the global economy. This is due to its massive stand alone output as well as its significance in being an essential part of the supply chain for some major industries such as constructions, chemicals and exploration of natural resources.

- Due to high capital intensive nature of the business, the industry tends to be oligopolistic as market is mostly controlled by only by a few firms in many countries around the world.

- The global cement market is dominated by big companies and top ten largest cement companies have an estimated market share of ~54.2%.

- China is the world's largest producer and consumer of cement as it accounts for ~56.8% of the total global production. Therefore, 3 of the top 10 global players are located there.

- China's cement production is eight times that of the world's second largest producer, India (~7.5%) where only 1 of the top 10 players is located.

Top 10 Global Players

Sr.#	Company	Origin	CY20 Revenues (USD)
1	China National Building Material Group	China	37
2	Cement Roadstone Holdings	Ireland	28
3	Anhui Conch Cement	China	26
4	Holcim	France	25
5	HeidelbergCement	Germany	20
6	Cemex	Mexico	13
7	Votorantim Cimentos	Brazil	7
8	Ultratech	India	6
9	China Resources Cement Holdings	China	5
10	Taiwan Cement Corp	Chinese Taipei	4

Source: Financial Statements

Global | Exports

CY20 Global Export Dynamics							
Sr.#	Exporter	%age Volume Share	Export USD mln	Clinker Export mln MT	Cement Export mln MT	Clinker Export Value USD/MT	Cement Export Value USD/MT
1	Vietnam	17%	1,350	22.6	13.4	34	44
2	Turkey	16%	1,219	15.6	18.3	29	42
3	Iran	7%	312	9.7	5.0	18	28
4	Thailand	6%	548	8.6	4.5	34	57
5	Japan	5%	362	6.0	4.9	32	34
6	Indonesia	4%	321	7.8	1.8	31	44
7	Pakistan	4%	257	4.0	3.7	28	40
8	Germany	3%	521	0.1	6.1	59	85
9	Saudi Arabia	3%	192	3.3	2.4	32	36
10	Korea	2%	205	4.2	1.1	34	55
11	Others	34%	6,116	16.5	56.4	77	86
	World	**100%**	**11,403**	**98.4**	**117.5**	**38**	**65**

- In CY20, estimated global cement export volumes stood at ~118mln MT, representing ~2.7% of global cement production.
- Around ~46% of the total export volumes comprised clinker while ~54% comprised of multiple varieties of cement including Portland grey & white, aluminous and others.
- In USD value terms, clinker exports held a ~33% share while cement exports comprised ~67% of total exports by value, as cement has ~70% higher export per MT value in addition to almost ~19% higher export volumes.
- Top 10 exporting counties held ~66% share in global exported volumes; while with the exception of Germany they on average exported clinker at ~27% and cement at ~55% cheaper rates than the global average.

Source: ITC

Global | Imports

Sr.#	Importer	%age Volumes Share	Imports USD mln	Clinker Import mln MT	Cement Import mln MT	Clinker Import Value USD/MT	Cement Import Value USD/MT
			CY20 Global Import Dynamics				
1	China	17%	1,518	33.4	3.6	40	48
2	Bangladesh	8%	531	17.3	0.1	31	35
3	USA	8%	1,431	1.8	15.4	80	83
4	Philippines	4%	478	3.4	5.7	45	56
5	Ghana	2%	166	4.9	0.5	31	30
6	France	2%	421	1.6	3.3	64	98
7	Hong Kong	2%	226	0.3	4.1	44	52
8	Australia	2%	184	3.6	0.7	35	78
9	Israel	2%	292	0.8	3.20	58	77
10	Ivory Coast	2%	179	3.7	0.02	48	144
11	Others	51%	7,522	40.0	73.4	51	75
Total		**100%**	**12,948**	**110.7**	**110.1**	**43**	**65**

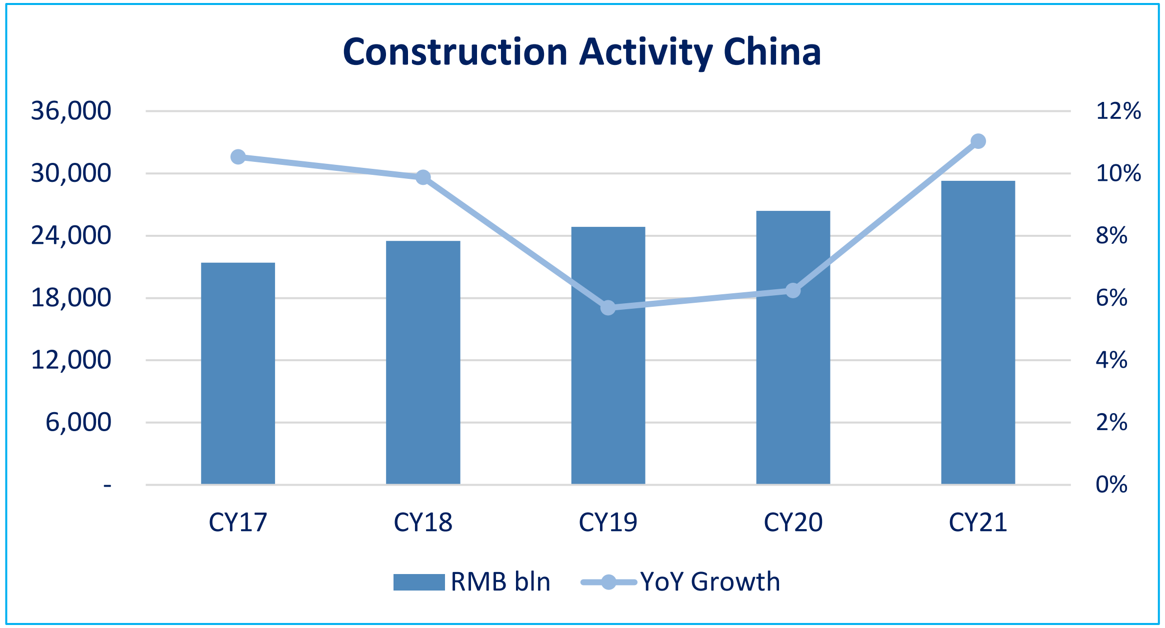
- In CY20, estimated global import volumes of cement stood at ~110.1mln MT. However, in terms of total USD value of imports, clinker held ~37% share while ~63% imports USD value comprised cement.
- Top 10 importing countries held ~64% share in global clinker imports, with China dominating the segment as it holds ~30% share in global clinker imports.
- The cement import segment was more fragmented as the top 10 importers held a ~33% share with USA dominating the segment with a global share of ~14.0%.
- Average USD value per MT of cement imports were ~51% higher than the USD per MT value of clinker exports.

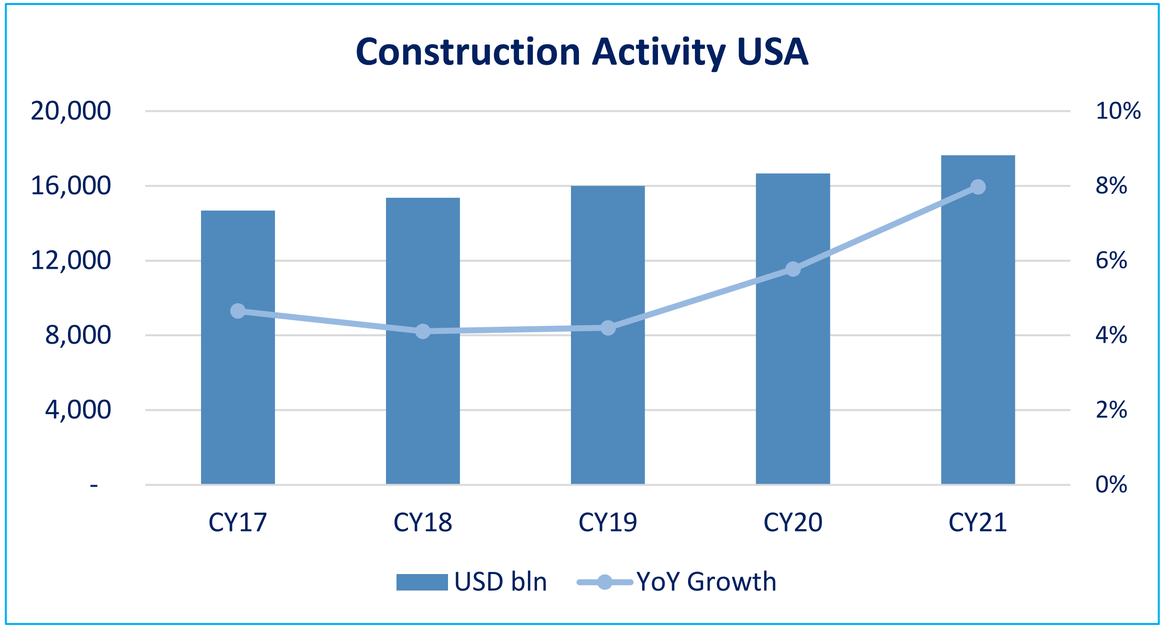
(Global Import and export values have a mismatch due to multiple factors including but not limited to reporting errors, estimations, different reporting periods, freight charges, insurance charges, tariffs and re-exports)

Source: ITC

Global Industry | Demand

- As the COVID-19 related restrictions have eased, the CY21 global cement consumption is estimated to have rebounded at ~6% which had tanked by ~-5% in CY20.
- However the momentum slowed down in 2HCY21 as the low base was realized, while cost pressure also mounted owing to higher energy prices and margins got squeezed due to low cost pass ability.
- Following the slowdown, demand is expected to grow at a normal ~4% growth rate in CY22; selling prices are expected to increase gradually, while restoration of industry margins is mainly subject to energy and freight costs movements in the near future.
- Robust demand for construction, expanding urbanization, infrastructure additions & enhancements, and increasing disposable income are expected to keep cement demand steady going forward; as in CY21 construction activities in world's biggest economies averaged ~10% growth rates.





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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 .

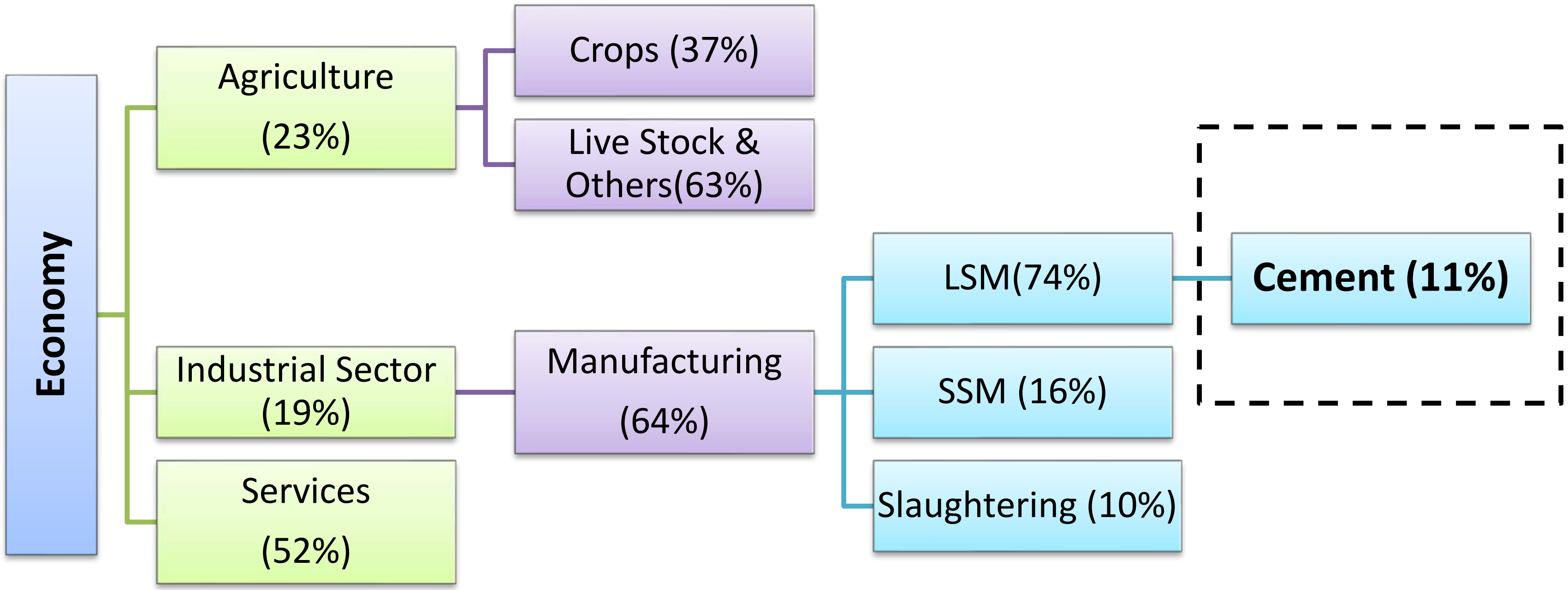
Cooled clinker mixed with gypsum and other additions. It is grinded into fine and homogenous powder, cement.

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

Source: PACRA Internal Database

Local | Economy - Overview

- In FY21, Pakistan's GDP (nominal) stood at PKR~52tln (FY20: PKR~45tln) while the real GDP stood at PKR~39tln (FY20: PKR~37tln) posting a growth rate of ~6% YoY.
- Industrial activities in FY21 represented ~19% share in the GDP and rebounded at ~7.8% YoY (FY20: ~-5.8%), while manufacturing activities representing ~64% value in industrial activities rebounded at ~10.5% in the same period.
- Large Scale Manufacturing (LSM) in Pakistan is essential for economic growth considering its linkages with other sectors, as it represented 74% value of all manufacturing activities in FY21 and rebounded at ~11.4% YoY in FY21 (FY20: ~-11.2%).



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Industry Snapshot | Local

- Cement is an important sector of the country and is also vital for its economic development. 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 FY21, overall sector gross revenues rebounded by ~35% and were recorded at PKR~542bln coming off a low base, as in FY20 due to COVID-19 related restrictions the industry size receded by ~-8.7% to PKR~402bln.
- Cement Sector is composed of 17 companies of which 16 companies are operational. The Sector 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 of the players listed on the PSX, market capitalization of the sector was recorded around PKR~509bln in March'22.
- Overall economic growth and government's spending on development projects are the main drivers of the sector's growth.
- Pakistan's per capita cement consumption is around 215 kg whereas world average per capita consumption is recorded around 550 kg, more than double the consumption in Pakistan, reflecting an immense potential for growth in cement demand.

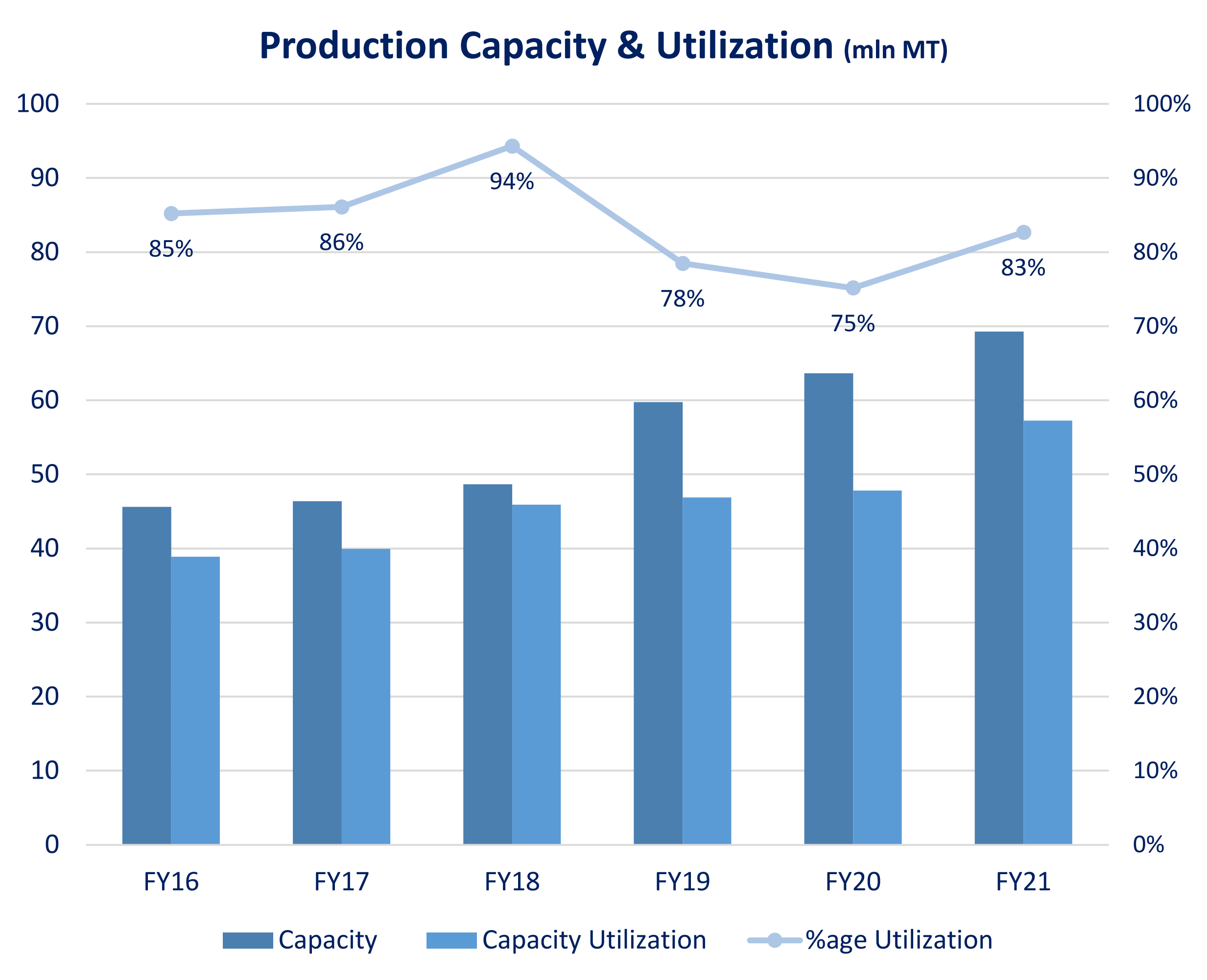
Overview	FY20	FY21
Gross Revenue (PKR bln)	402	542
Contribution to GDP	0.9%	1.04%
Sector Players	18	18
Structure	Oligopoly	
Production Capacity mln MT	63	69
Offtake Local mln MT	40	48
Export mln MT	8	9
Total Offtake mln MT	48	57
North Region (Avg Price/50Kg Bag)	508	613
South Region (Avg Price/50Kg Bag)	601	631.4
Regulator	Securities and Exchange Commission of Pakistan (SECP)	
Associations	All Pakistan Cement Manufacturers Association (APCMA)	

Source: Economic Survey, APCMA, PBS, Financial Statements

Cement

Supply Side | Production

- Cement sector's production capacity is recorded around ~69mln MT in FY21 (~64mln MT in FY20), an increase of ~8.8% YoY.
- Almost ~70% of the operational plants are located in the North Region, while remaining ~30% capacity is located in the South Region.
- Expansion plans for enhancing the sector capacity up to ~87mln MT by FY24 are underway; the industry has also fetched PKR~19bln worth of LTFF & TERF financing facilities by Feburary'22 end.
- The industry's expansion cycles are based on a number of factors. The ongoing promising demand prospects from GoP projects such as Naya Pakistan Housing Program (NPHP), construction of dams, and CPEC Phase-II related activities have encouraged the sector players to go into expansion. Also, the TERF facility has overall diluted the borrowing cost of projects, making it an attractive opportunity for the players to expand.



Source: Pakistan Economic Survey, APCMA, PBS

Cement

Supply Side | Production

- The sector has 16 operational companies with 25 operational plants across the country.

- 10 companies have presence in north region and 4 have presence in only south region whereas 2 companies have production plants in both south and north regions.

- As of June-2021, Lucky Cement is the largest player with estimated cement production capacity of ~12mln MT followed by Bestway and D.G Khan cement with ~10mln MT and ~7mln MT capacities respectively.

- Companies in the South Region have to incur low 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 more transportation cost, these companies have access to Afghanistan and Indian market for Exports.

*Not operational

FY21 Production Capacity (000 MT)

Sr.#	Company	# of Plants	Capacity in North	Capacity in South	Total Capacity
1	Lucky Cement	1	-	12,150	12,150
2	Bestway Cement	4	10,158	-	10,158
3	D.G. Khan Cement	3	2,010	4,710	6,720
4	Maple Leaf Factory	2	5,585	-	5,585
5	Pioneer Cement	1	5,195	-	5,195
6	Kohat Cement	2	4,913	-	4,913
7	Cherat Cement	1	4,536	-	4,536
8	Fauji Cement	1	3,560	-	3,560
9	Power Cement	1	-	3,371	3,371
10	Attock Cement	1	-	3,027	3,027
11	Dewan Cement	2	1,080	1,860	2,940
12	Askari Cement	2	2,670	-	2,670
13	Gharibwal Cement	1	2,010	-	2,010
14	Fecto Cement	1	869	-	869
15	Flying Cement	1	720	-	720
16	Thatta Cement	1	-	548	548
17	Dandot Cement*	1	504	-	504
	Total	**26**	**43,810**	**25,666**	**69,476**

Source: APCMA, PACRA Internal Database, Financial Statements

Cement

Supply Side | Cost Break up

- Major raw materials used in cement manufacturing process are limestone, clay and gypsum; these raw materials and packaging, however constitute a smaller portion of the production cost – ~16% in FY21
- Cement manufacturing is a highly energy intensive process as, 1 MT of clinker requires 4.6mln Btu of energy equant to burning ~160 Kgs of bituminous coal.
- Energy cost constitutes ~60% of the total cost of the production; Coal, being a cheap source of energy, is extensively used by the cement companies in their manufacturing process and it also constitutes of a major chunk of their 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.

		COGS breakup (FY21)				
Sr.#	Company	Raw Material	Packaging	Fuel	Power	Others
1	Attock Cement	12%	6%	38%	17%	27%
2	Bestway cement	9%	12%	44%	21%	14%
3	Cherat Cement	9%	11%	36%	17%	27%
4	DG Khan Cement	2%	8%	35%	17%	38%
5	Dewan Cement	5%	7%	44%	21%	24%
6	FAUJI CEMENT	10%	7%	39%	16%	28%
7	Flying Cement	3%	9%	39%	29%	19%
8	FECTO Cement	6%	8%	48%	24%	13%
9	Gharibwal Cement	5%	7%	49%	12%	26%
10	Kohat Cement	7%	10%	42%	22%	19%
11	Pioneer Cement	9%	11%	46%	22%	11%
12	Maple Leaf Cement	8%	10%	36%	22%	23%
13	Power Cement	9%	8%	44%	21%	19%
14	Thatta Cement	6%	10%	44%	21%	20%
15	Lucky Cement	6%	11%	41%	19%	23%
	Industry	**7%**	**9%**	**40%**	**19%**	**26%**

(Breakups assumed on industry average proportions where not reported in financial statements)

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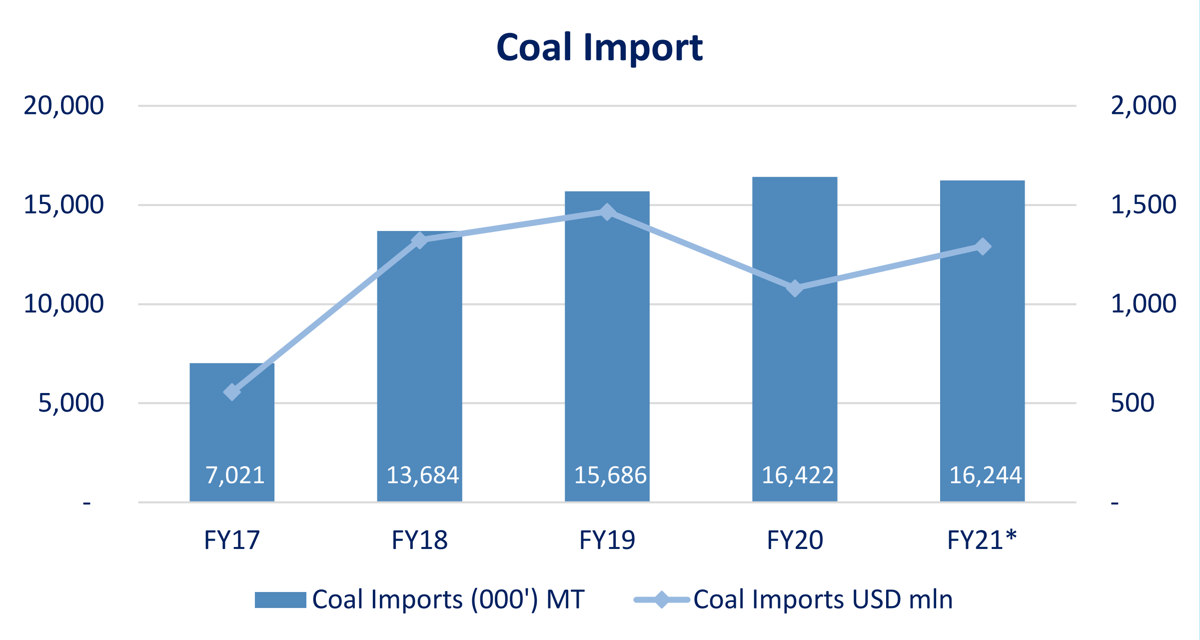
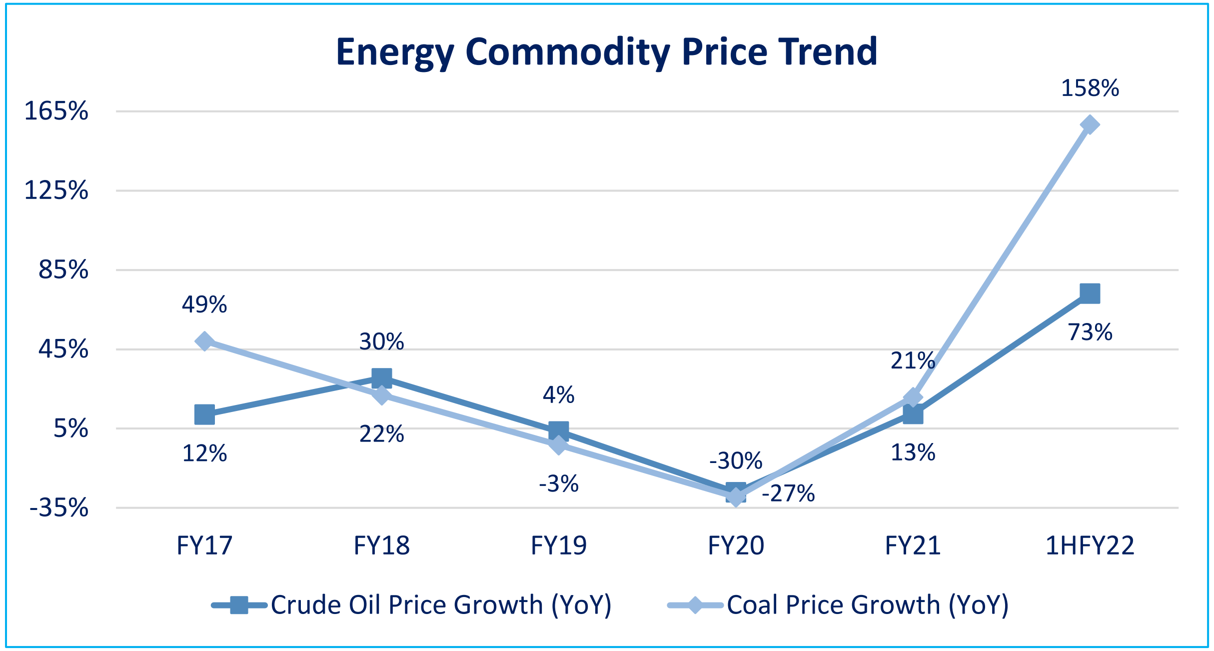
Raw Material | Coal

- In FY21, ~42% of total coal supply of the country was consumed by the cement industry (FY20: ~41%).
- The country’s coal imports in FY21 were estimated at ~16.2mln MT recording a YoY decrease of ~1% (FY19: ~16.4mln MT); however, the estimated value of imports increased by ~19.6% to USD~1.3bln (FY20:USD ~1.1bln) due to a massive hike in global energy prices.
- Energy commodity prices have been in an upward spiral. In 1HFY22, average global crude oil prices grew by ~73% YoY and average coal prices recorded a massive increase of ~158% YoY.
- Although 1HFY22 coal price growth rate was ~85% higher than oil, but coal is still ~137% cheaper in terms of energy equant per USD.



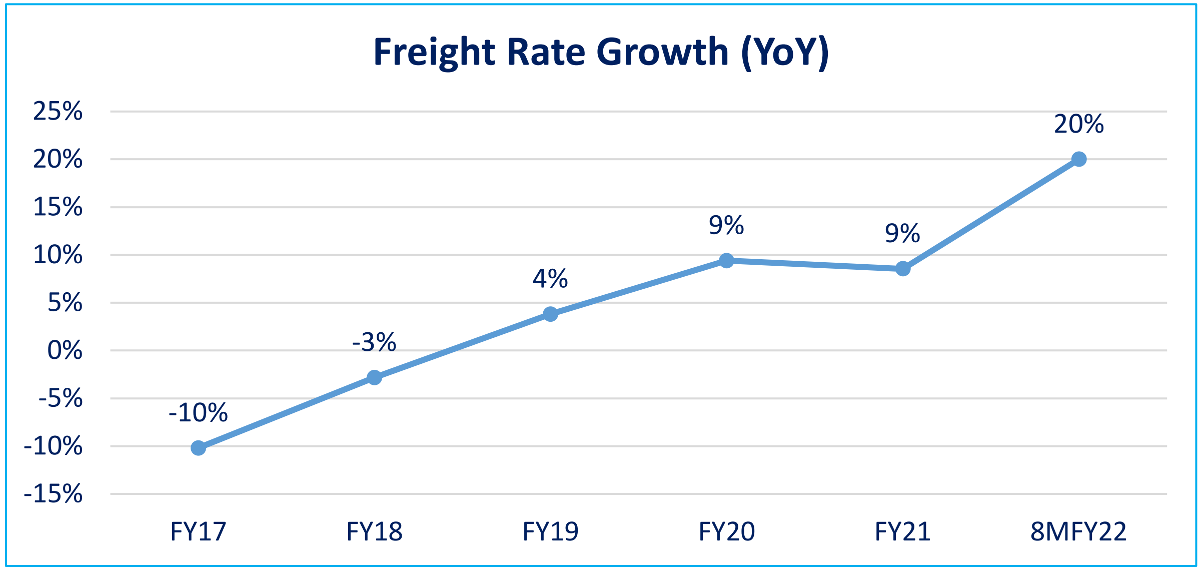


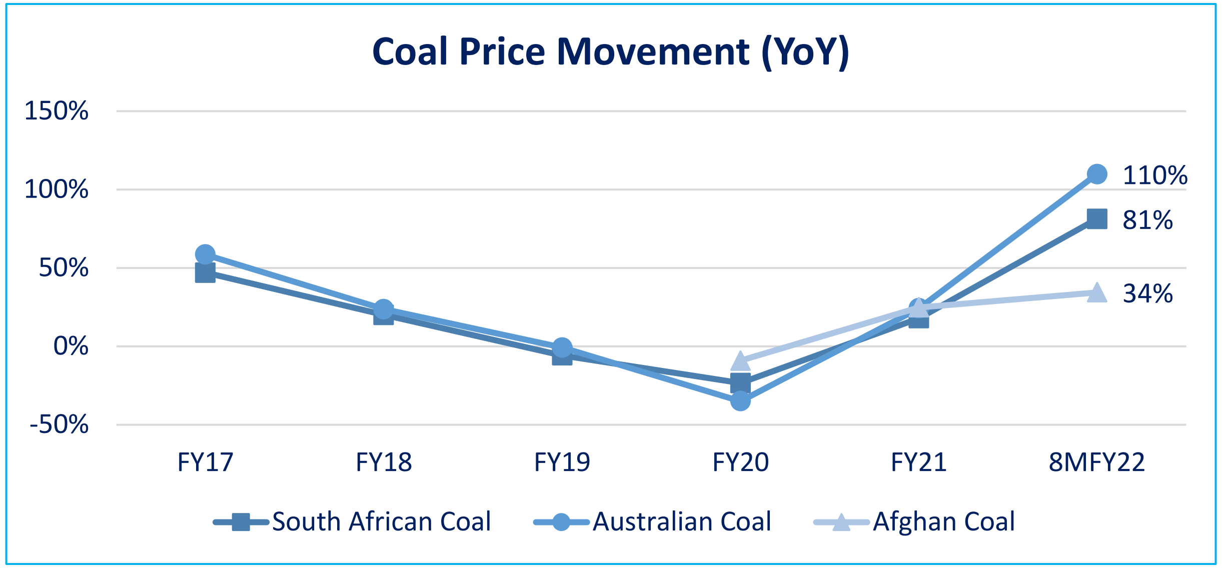
*Prorated

Cement

Raw Material | Coal

- Since the beginning of FY22, global commodity prices have been in an upward spiral; a hike in global freight prices has also been following suit as they too grew by ~20% by 8MFY22 YoY.
- South African and Australian FOB coal prices have grown by ~81% and ~110% in 8MFY22 YoY and stood at USD~169/MT and USD ~196/MT by February 2022.
- Pakistan imports coal from South Africa, Australia and Afghanistan. Lately, cement manufacturers have been relying on imported Afghan coal to keep costs in check, but recently, that too has experienced a significant price increase as its FOB price grew by ~34% in 8MFY22 YoY and stood at USD~157/MT in March 2022.
- Hike in energy commodity and freight rate prices together with PKR devaluation imply major cost pressure on the local cement industry.





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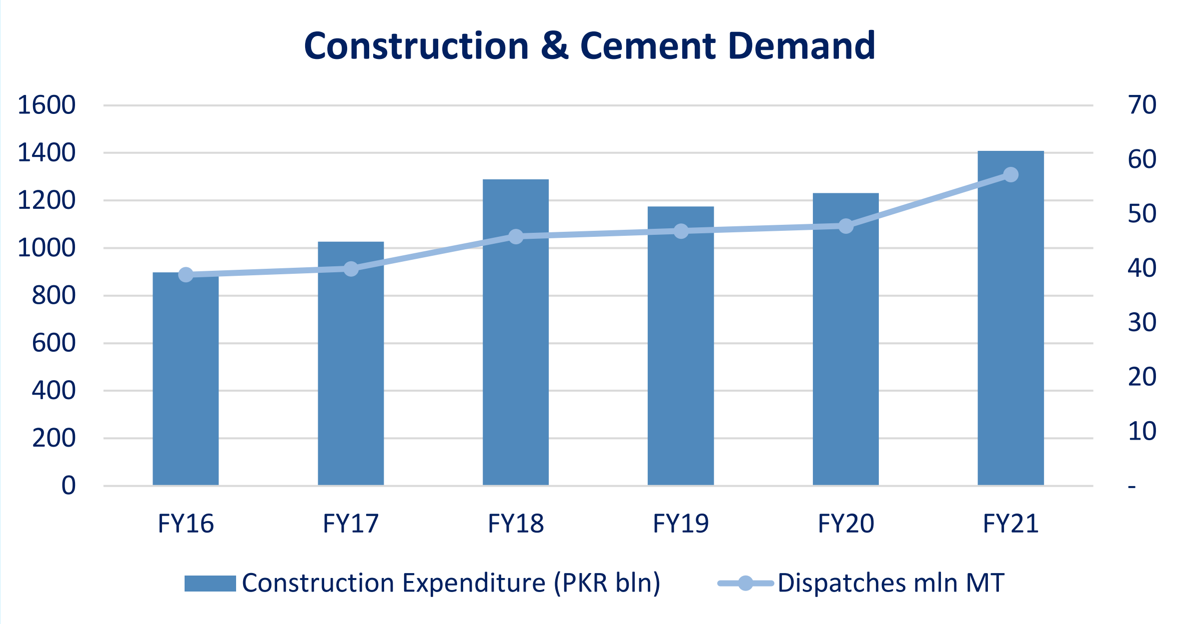
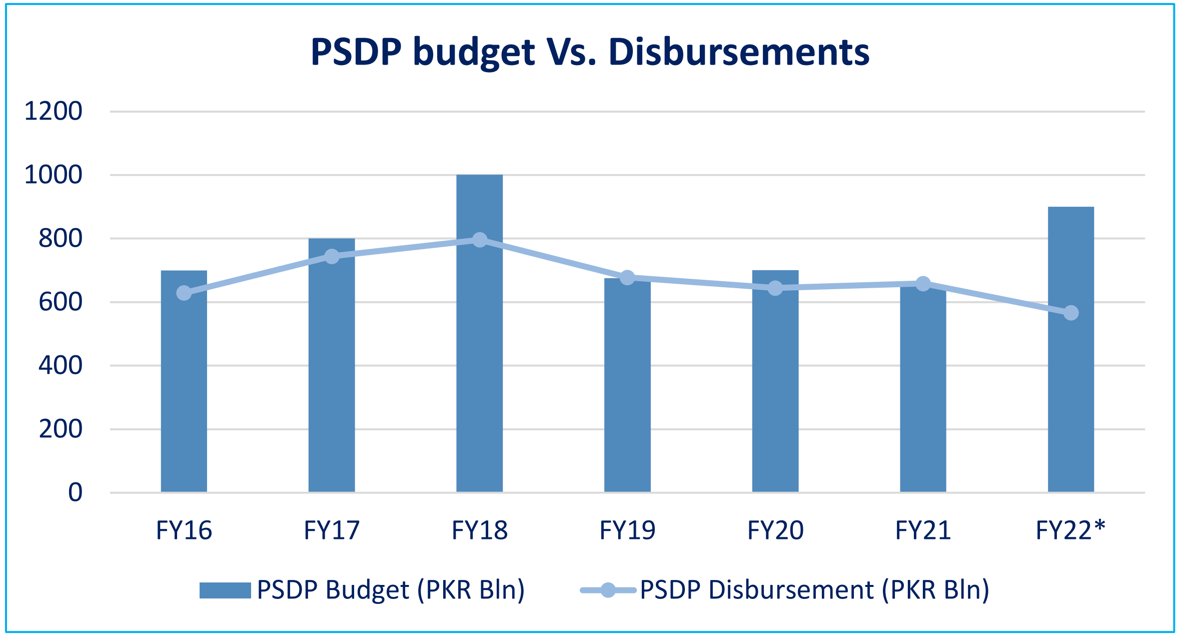
Demand Side | Local

- Cement demand is highly correlated to construction and infrastructure development including private and Public Sector Development Program (PSDP).
- The construction sector grew by ~15% in FY21 while cement dispatches grew by ~19% in the same period.
- Historically the construction sector has on average held ~3% share in the national GDP (at nominal GVA); IMF forecasts Pakistan's average GDP (real) growth rate ~4.7% over the next 5 years; with construction holding a sizeable chunk of economic activities, it can reasonably be expected to maintain positive momentum keeping a steady demand for construction materials.
- Historically, PSDP fund disbursements have been almost ~7% lower than the budgeted amounts. However, ~63% of budgeted amounts for FY22 were disbursed by 7MFY22 indicating high expected disbursements; the total budget standing at PKR~900bln is the highest since FY18.





*FY22 disbursement figures reported as at 7MFY22

Source: APCMA, PC, Economic Survey

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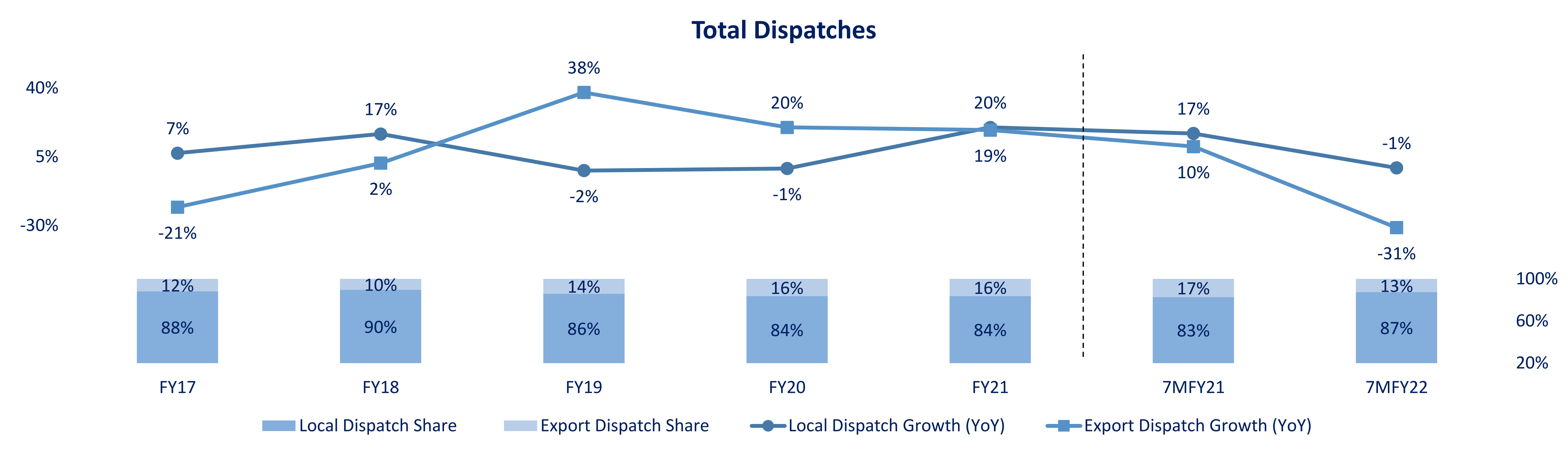
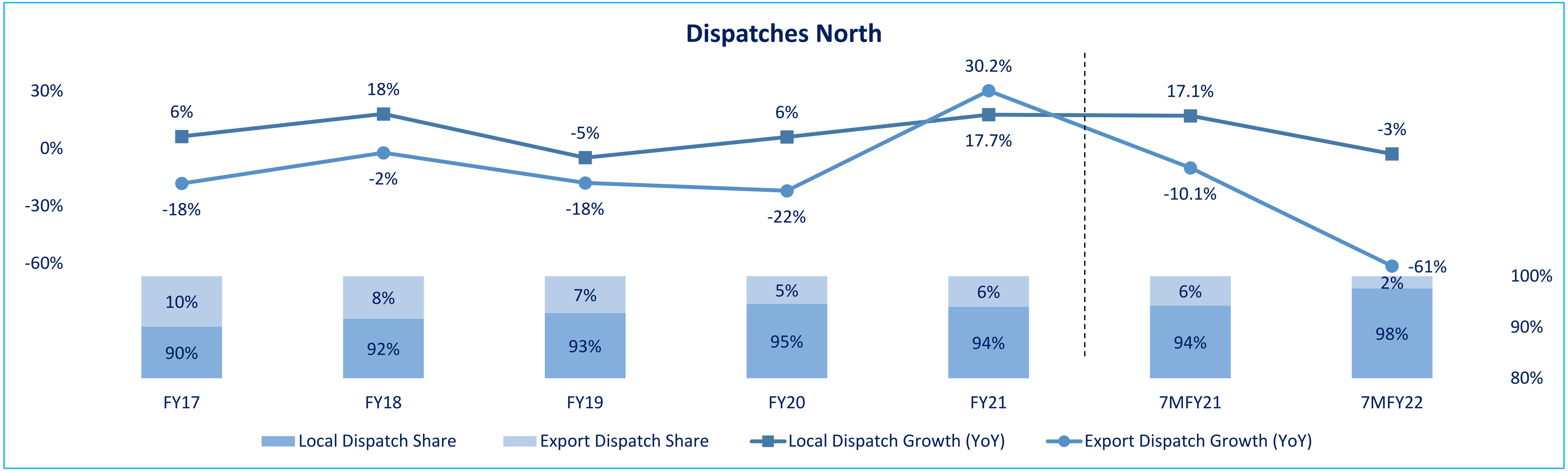
Demand Side | Total Dispatches



- The country's south to north dispatch ratio stands around 1:3 in terms of total volumes dispatched.
- In FY21, total dispatches stood at ~57mln MT growing ~20% YoY; Of these, export volumes held a ~16% share while local dispatches held an ~84% share.
- In 7MFY22, total dispatches receded by ~6% YoY, as local dispatches declined 1% and export dispatches declined by ~31% in the same period, due to suppressed demand caused by high freight charges, increased prices and economic difficulties in many countries.
- Total dispatches for 7MFY22 stood at ~31mln MT of which ~13% dispatches by volumes comprised of exports while ~87% volumes comprised local dispatches.

Source: APCMA, PC, Economic Survey

Demand Side | North Dispatches



- The North market represents 3/4th share in total national dispatches on average.
- In FY21, North dispatches stood at ~42mln MT growing ~18% YoY; of these, export volumes held a ~6% share while local dispatches held a ~94% share.
- In 7MFY22, North dispatches receded by ~6% YoY, as local dispatches declined ~3% and export dispatches declined by ~61% in the same period; as the Afghan market has mostly become unavailable following the change in political landscape and availability of much cheaper Iranian cement.
- Total dispatches for 7MFY22 stood at ~25mln MT of which ~2% dispatches by volumes comprised of exports while ~98% volumes comprised local dispatches.

Source: APCMA, PC, Economic Survey

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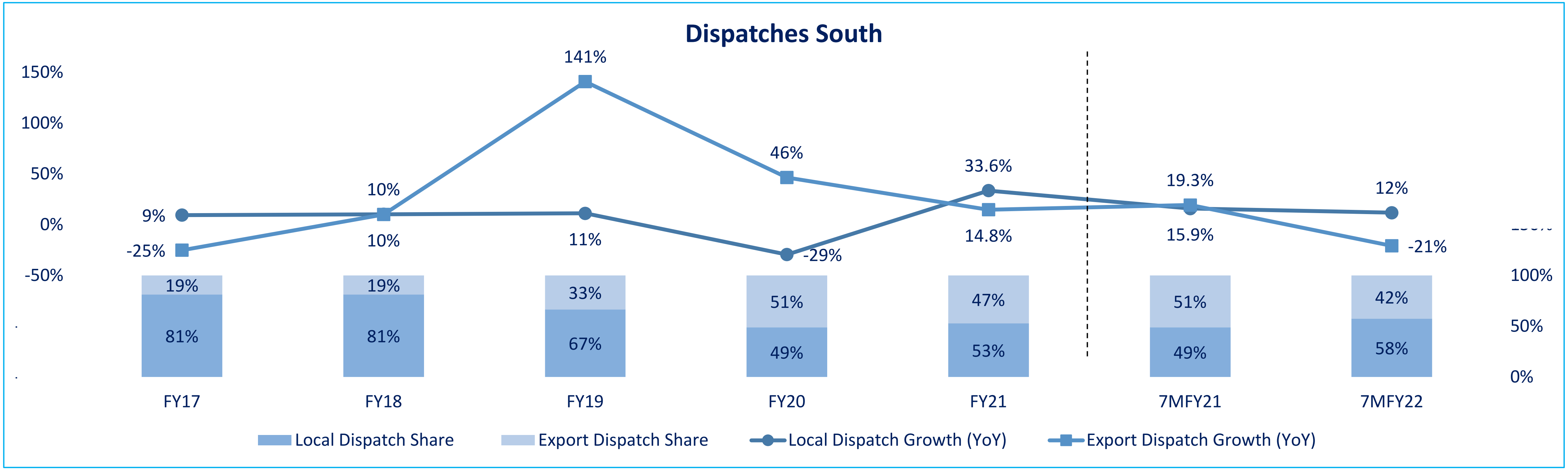
Demand Side | South Dispatches



- The South market represents 1/4th share in total national dispatches on average.
- In FY21, South dispatches stood at ~14mln MT growing ~18% YoY; of these, export volumes held a ~47% share while local dispatches held a ~53% share.
- In 7MFY22, South local dispatches grew by ~12%, while export dispatches declined by ~21% leading to a ~5% decline in total dispatches.
- Total dispatches for 7MFY22 stood at ~8mln MT of which ~42% dispatches comprised of exports while ~58% volumes comprised local dispatches.

Source: APCMA, PC, Economic Survey

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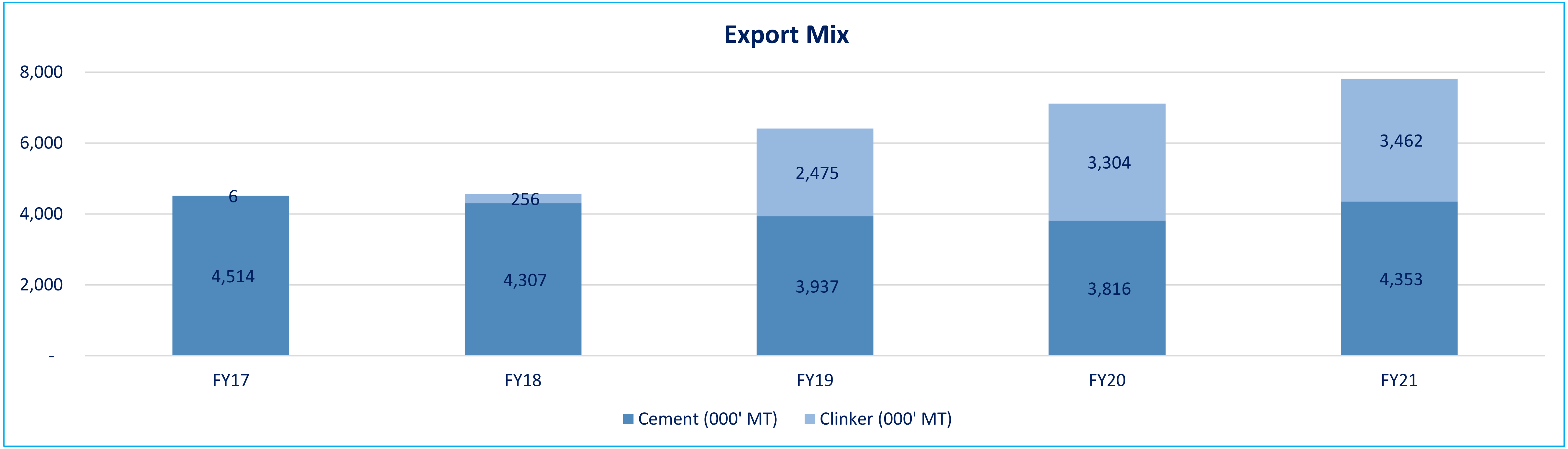
Demand Side | Export Mix

- Pakistan's cement exports in FY21 were valued at PKR~42bln (FY20: PKR~41bln), representing ~1% of total country exports (FY20: ~1.2%); while export volumes stood at ~8mln MT (FY20: ~7mln MT).
- Total exports during 7MFY22 by value stood at PKR~28bln (7MFY21: PKR ~27bln), up 3.1% YoY and represented ~0.9% of the country's exports (7MFY21: ~1.2%); while export volumes stood at ~4mln MT (7MFY21~6mln MT) for the same period.
- In recent years, clinker exports have gained a sizeable chunk in cement related product exports. In value terms, cement to clinker export mix stood at 62:38 in FY21 (FY20: 61:39)



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Demand Side | Export Partners

- Pakistan's cement and clinker exports lack diversified buyers as ~79.4% exports by value were centered around 4 major importing countries in FY21.
- In FY21 Clinker export value per 50Kg bag stood at PKR~233, while cement export value per 50Kg bag stood at PKR~308 i.e. ~32.2% higher than clinker.
- Although white cement fetched the most premium price among all categories, but held less than ~0.5% share in the overall export mix.
- Bangladesh held the highest share of ~59% in clinker exports, as its cement industry relies heavily on imported raw material due to non-availability of raw material for cement locally.
- Afghanistan in FY21 held the highest share in Pakistan's cement exports at ~59%; while Sri Lanka the second largest cement export partner with a ~14% share paid the most premium price for Pakistani cement i.e. ~24% higher than average

Clinker (FY21)						
Sr.#	**Export Partner**	**Exports (MT 000')**	**Exports (PKR mln)**	**Share (Vol.)**	**Share (PKR Value)**	**PKR Value/MT**
1	Qatar	2,046	9,258	59%	57%	4,525
2	China	552	2,846	16%	18%	5,156
3	Sri Lanka	559	2,508	16%	16%	4,487
4	Others	305	1,494	9%	9%	4,900
	Total	**3,462**	**16,108**	**100%**	**100%**	**4,653**

Ordinary Portland Cement (FY21)						
Sr.#	**Export Partner**	**Exports (MT 000')**	**Exports (PKR mln)**	**Share (Vol.)**	**Share (PKR Value)**	**PKR Value/MT**
1	Afghanistan	2,542	14,622	59%	55%	5,751
2	Sri Lanka	625	4,755	14%	18%	7,613
3	Madagascar	525	3,258	12%	12%	6,210
4	Others	649	4,034	15%	15%	6,215
	Total	**4,340**	**26,669**	**100%**	**100%**	**6,144**

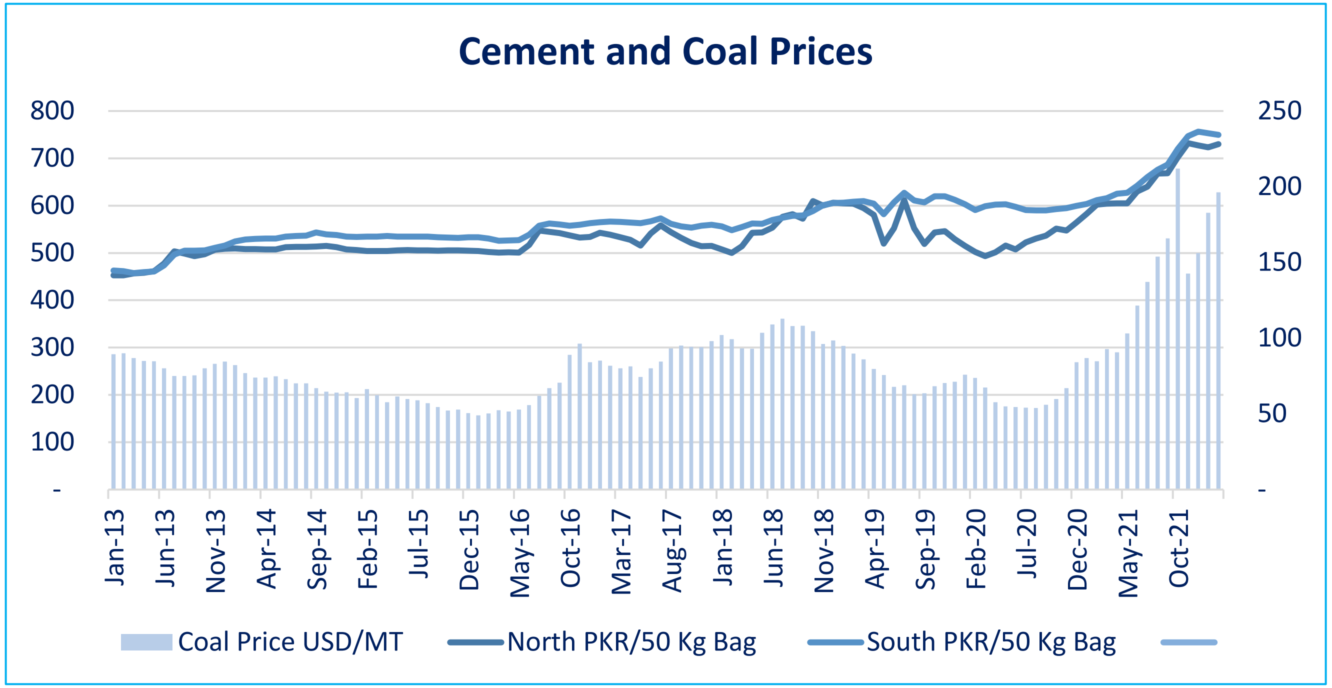
White Portland Cement (FY21)						
Sr.#	**Export Partner**	**Exports (MT 000')**	**Exports (PKR mln)**	**Share (Vol.)**	**Share (PKR Value)**	**PKR Value/MT**
1	Afghanistan	8	117	67%	66%	14,811
2	Oman	2	34	19%	19%	15,064
3	U.R.of Tanzania	1	11	6%	6%	15,800
4	Others	1	16	8%	9%	16,651
	Total	**12**	**178**	**100%**	**100%**	**15,071**

Source: PBS

Cement

Demand Side | Price Dynamics

- Cement prices are a function of the market demand and supply dynamics. Variations in prices are generally dependent upon the behavior of major cost components of cement production, including coal prices, exchange rate, fuel costs and freight charges.
- Since the beginning of FY21, local cement prices have shown a steady month-on-month growth of ~2% in the North and ~1% in the South on average.
- The recent hike in coal prices around the globe has reflected a high correlation of local cement prices with International coal prices. Prices in the North having a slightly higher coefficient of 0.93 compared to coefficient of 0.91 in the South, as manufacturers attempt to pass on the increased energy costs.
- As mentioned in the table below, clinker is exported at very low price as compared to cement; export of clinker 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.



Comparison of Local and Export Prices

Avg Prices in PKR/bag	FY18	FY19	FY20	FY21
North	529	584	528	572
South	560	595	608	606
Export Clinker	191	235	238	233
Export Cement	272	317	329	308

Source: APCMA, PBS

Cement

Business Risk

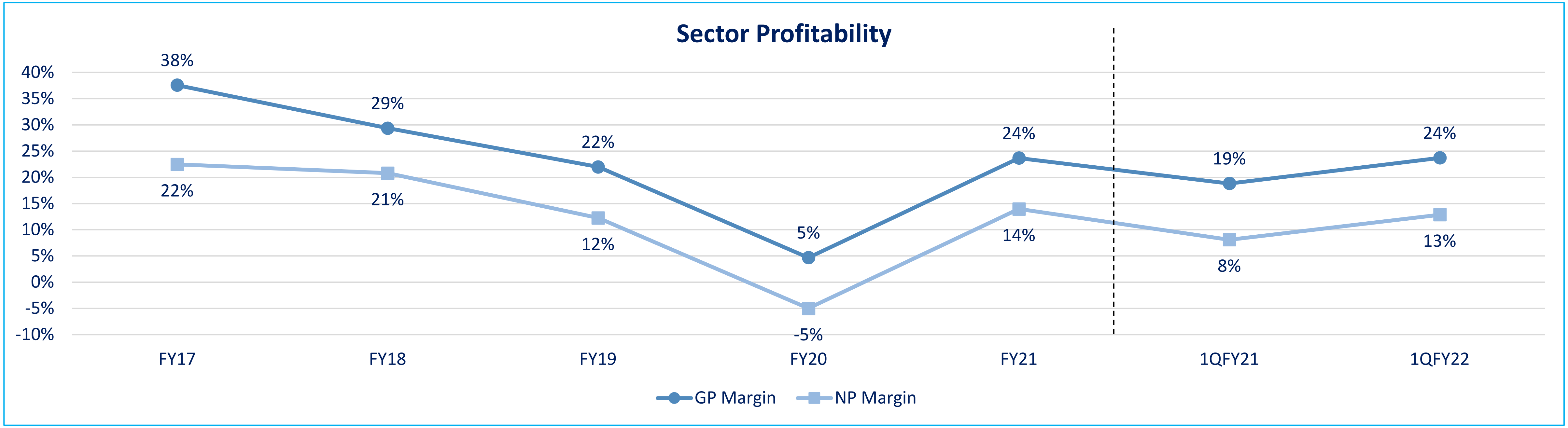
Figures in PKR mln	Sector Financial Highlights						
Listed companies	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**1QFY21**	**1QFY22**
Net Sales	262,038	276,053	291,309	241,815	360,333	98,512	77,077
Cost of Sales	162,359	194,291	226,545	230,443	274,077	74,097	59,106
Gross profit	**98,496**	**81,129**	**64,073**	**11,344**	**85,284**	**23,355**	**14,509**
Operating Expense	12,938	13,979	11,164	9,879	9,472	2,169	4,015
Operating Profit	**85,558**	**67,150**	**52,909**	**1,464**	**75,812**	**21,186**	**10,494**
Finance Cost	2,885	3,772	9,244	17,431	13,538	3,199	3,630
Profit/(Loss) before Tax	**82,673**	**63,378**	**43,665**	**(15,967)**	**62,274**	**17,987**	**6,865**
Taxation	23,809	5,971	7,970	(3,891)	11,951	5,307	614
Profit/(Loss) after Tax	**58,864**	**57,407**	**35,694**	**(12,076)**	**50,323**	**12,680**	**6,250**

- In FY21, sector net revenues rebounded by ~49% YoY reaching PKR~360bln (FY20: PKR~241bln) as a result of both improved dispatches by ~20% and improved retention prices, as price of 50Kg bags grew by ~8%.
- Although in FY21 average international coal prices increased by ~20% in USD terms and ~21% in PKR terms (additional rupee devaluation shock); improved dispatches and retention price enabled better capacity utilization of ~83% (FY20: ~75%), enabling gross margins to record at 24% (FY20: ~5%).

Source: APCMA, Companies Financial, PACRA Internal Database, Economic Survey

Cement

Business Risk (Cont.)

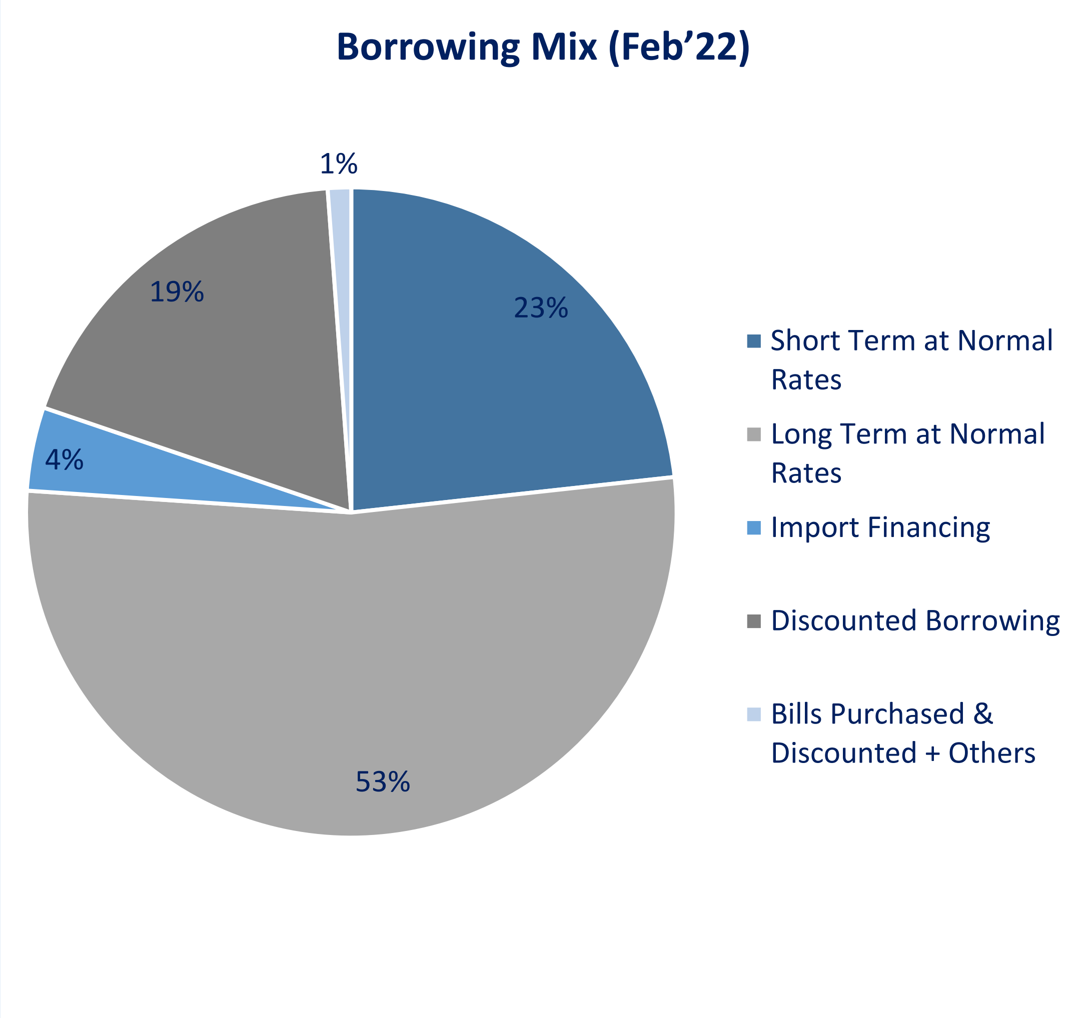


- The industry retained ~21% (FY20: ~0.6%) operating margins owing to improved cost controls, as operating expenses stood at ~3% (FY20: ~4%) of revenues decreasing ~4% YoY, while a ~22% YoY reduction in finance cost enabled the sector to retain net profits of ~14% (FY20: ~-5%).
- However the positive momentum in dispatches was thwarted in 1QFY22 as export dispatches dipped by ~44% resulting a ~6% dip in total dispatches YoY.
- But improvement in retention prices (price of 50kg bag increased by ~23% on average) and ~4% growth in local dispatches maintained the sector margins. GP margins stood at ~24% in 1QFY22 (1QFY21: ~19%), operating margins at ~22% (1QFY21: ~14%) and net margins at ~13% (1QFY21: ~8%).

Cement

Financial Risk - Borrowings

- According to the SBP, by Feburary'22 end Sector borrowings stood at PKR~207bln (7MFY21: PKR~185bln) after growing by ~12%YoY.
- Short-term borrowings at normal rates increased to PKR~48bln after growing ~24% YoY and held a ~23% (7MFY21: ~21%) share in the total borrowing mix.
- Long-term borrowings at normal rates stood at PKR~110bln (7MFY21: PKR~113bln) representing ~53% (7MFY21: ~61%) share of total borrowings, down by ~3% YoY.
- Discounted borrowings comprising LTFF & TERF represented ~19% and stood at PKR~38bln (7MFY21:~21bln), experiencing a significant growth of ~87% YoY.
- Import financing held ~4% shares in total borrowing, standing at PKR~9bln (7MFY21: PKR~6bln), up by ~33% YoY.
- Sector's bills purchased and discounted experienced a significant decrease of ~55% YoY and stood at PKR~2bln (7MFY21: PKR~5bln) representing a ~1% share in the overall borrowing mix.

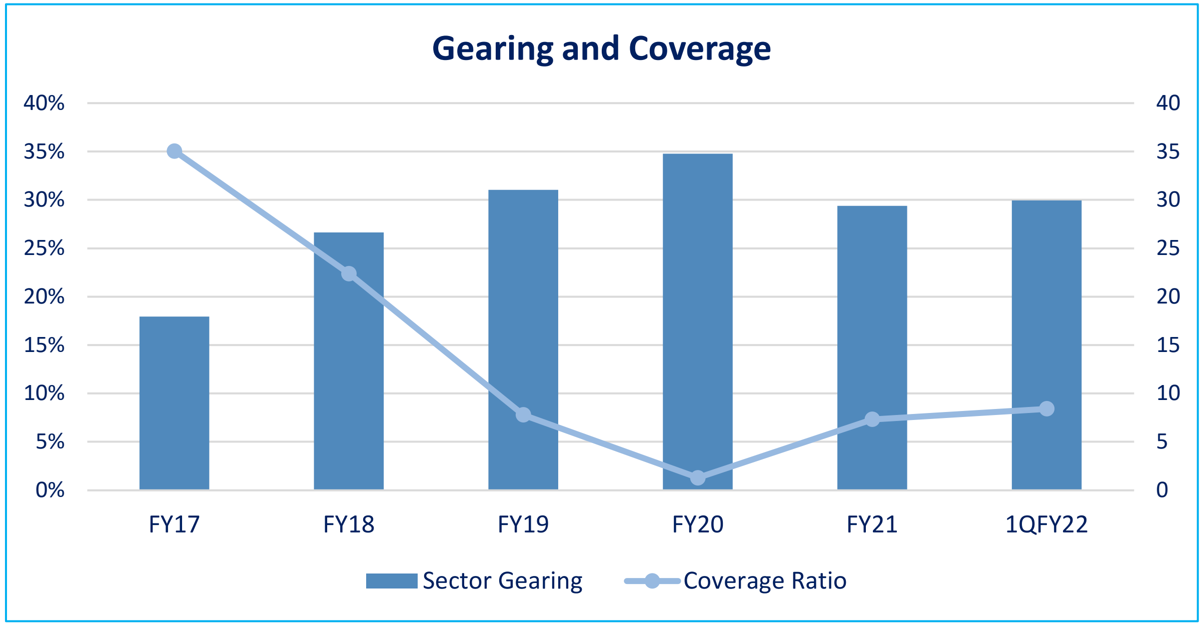


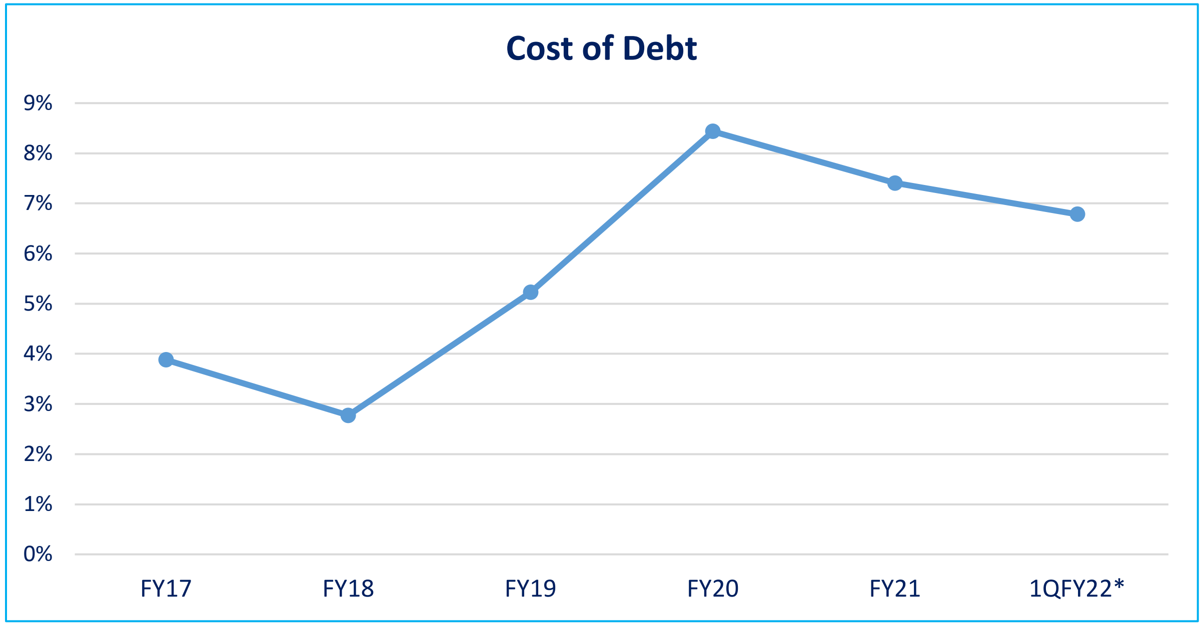
Source: Companies Financial, PACRA Internal Database, SBP

Cement

Financial Risk

- In FY21, the sector's debt to capital ratio stood at ~29% (FY20: ~35%), a major reduction was caused by a ~13% growth in equity. However, sector gearing increased to ~30% in 1QFY22 due to a rise in debt by ~1%.
- Sector coverage ratio recovered to ~7x in FY21 (FY20: ~1x) as PBIT margins increased to ~21% (FY20: ~0.6%) of net revenues posting a ~51x YoY growth, while sector finance cost also reduced by ~22.3% YoY. In 1QFY22, coverage further enhanced to ~8x.
- Owing to improved coverage and gearing, in FY21 sector cost of debt reduced to ~7.4% (FY20: ~8.4%) and further coverage enhancement in 1QFY22 led to an annualized cost of debt of ~6.8%.





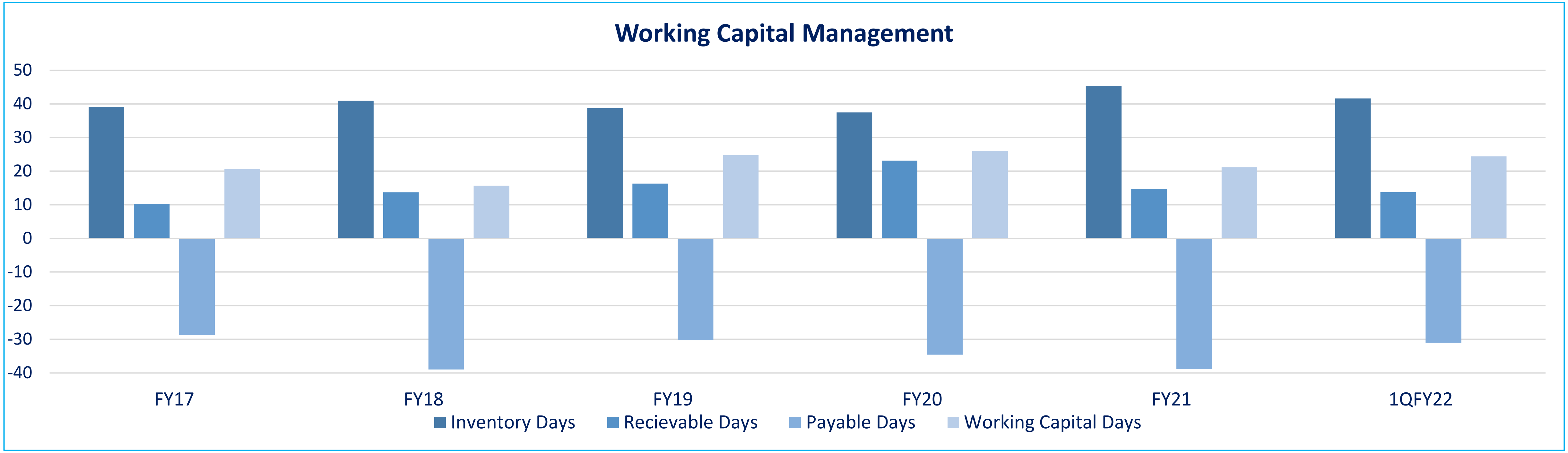
*annualized

Source: Companies Financial, PACRA Internal Database

Cement

Financial Risk-Working Capital

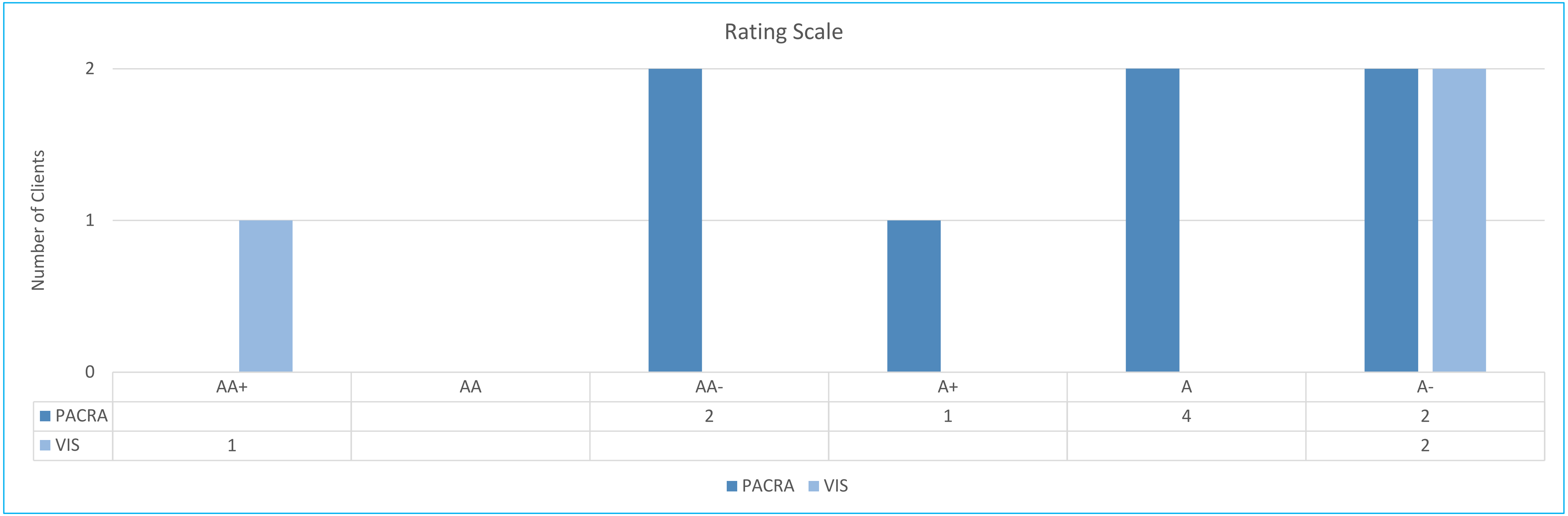
- In FY21 the sector's working capital (WC) days were recorded at ~21 (FY20: ~26 days), as inventory days increased to ~45 (FY20: ~38 days) owing largely to growth in inventories by ~43.9% YoY; receivable days decreased to ~15 (FY20: ~23 days) as sector receivables decreased by ~5.2% and net revenues grew by ~49% YoY; while sector payable days increased to ~39 (FY20: ~35 days) due to 33.7% YoY increase in balances with creditors.
- 1QFY22 working capital (WC) days stood at ~24, as inventory and receivable days dipped to ~42 and ~14 days respectively; however payable days also decreased to ~31; netting an increase of ~3 days in the WC days.



Cement

Rating Curve

- PACRA rates 9 clients in the cement sector. Rating bandwidth of the sector is A- to AA-.
- Collectively PACRA rated clients makeup ~55% of the total sector in terms of its production capacity.



Source: PACRA Internal Database

Cement

Duties & Taxes

PCT Code	Description	Custom Duty		Additional Custom Duty		Federal Excise Duty		Sales Tax		Income Tax	
	Raw Material for Cement	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
2701.1200	Bituminous Coal	3%	3%	2%	2%	-	-	17%	17%	11%	4%
2701.1900	Other Coal	3%	3%	2%	2%	-	-	17%	17%	11%	4%
2523.1000	Cement Clinker	11%	11%	2%	2%	PKR 150/Ton	PKR 150/Ton	17%	17%	11%	0.25%
	Finished Goods	**FY20**	**FY21**	**FY20**	**FY21**	**FY19**	**FY20**	**FY20**	**FY21**	**FY20**	**FY21**
6810.1100	Building Block and Bricks	20%	20%	7%	6%	-	-	PKR 2-10	PKR 2-10	11%	0.25%
2523.2100	White Cement	20%	20%	7%	6%	PKR 150/Ton	PKR 150/Ton	17%	17%	11%	0.25%
2523.2900	Other Cement	20%	20%	7%	6%	PKR 150/Ton	PKR 150/Ton	17%	17%	11%	0.25%

Source: FBR

Cement

Porter 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

- Abundance 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
- Low ability to pass on increased cost of production to end consumers

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.
- Expected increase in NPHS traction.

Cement

Outlook: Stable

- Cement is a major industrial sector in Pakistan as it represented 1.04% of the GDP and ~11% of the LSM sector; it is also among the exporting industries.
- As the economy has gradually recovered from the pandemic, cement sector net revenues also rebounded by ~49% in FY21 YoY while sector profitability margins also rebounded to ~9.7% (FY20: ~-3.2%) and total dispatches rebounded by ~19.7%.
- However, total dispatches dropped by ~4.1% YoY in 1HFY22; a major YoY decline of ~32.5% was observed in export sales, while local dispatches, on the other hand, grew by ~1.9% YoY causing the historic ~5:1 local to export dispatch ratio shifting to ~7:1.
- As per, 1QFY22 financial performance, net revenues grew by ~27.8% YoY while sector profitability margins stood at ~12.9%; however the finer print is more nuanced, the stated growth in net revenues came while gross margins dropped by ~6.1% and total dispatches dropped by ~5.6%; but local dispatches grew by ~3.9% and local price of 50Kg bags grew by ~23.1% YoY, thus industry performance was largely led by enhanced retention prices and local consumption.
- A major cause for concern for the sector in terms of cost is the recent global commodity price spiral that has pushed energy prices to all time highs, with recent unrest in Eastern Europe acting as the plausible impetus to turn the spiral into a super cycle; as coal prices more than doubled since the start of the conflict.
- However even at its highest ever recorded price, energy output from bituminous coal is still ~44.4% cheaper than Crude oil or its derivatives and local cement manufacturers also kept costs low by importing and blending much cheaper Afghan coal, but that too is not without availability issues and its price also saw an upward revision of ~29% in Feb'22 MoM.
- The Sector's ability to pass on energy costs to the local consumers (which it has been able to in the recent HY) would be highly influential in determining industry margins, especially if the current commodity price spiral persists along with adverse movements in the value of PKR (roughly energy equivalent of 8kgs of coal is needed to produce the clinker for a 50Kg cement bag).
- On the demand side, local cement offtake is expected to remain largely stable, as the GoP has budgeted higher PSDP expenditures compared to previous years, a number of CEPC projects are underway with more in the pipeline, NPHP is also reasonably expected to start gaining traction and country's construction sector is a sizeable portion of GDP, and multilateral agencies have a positive growth outlook on it.

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