KHADIM ALI SHAH BUKHARI SECURITIES (PVT) LTD.

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Pakistan: Chemicals

Chemicals: Well positioned to take the catch

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Initiation on EPCL (OP), LOTCHEM (OP) and DOL (Neutral)

We initiate coverage on the Chemical sector with an 'Outperform' stance. Engro Polymer (EPCL; Target Price PkR 59) is our top pick in the sector. We have a Buy stance on Lotte Chemical (LOTCHEM; Target Price PkR 20) and a Neutral stance on Descon Oxychem (DOL; Target Price PkR 31). The upside in LOTCHEM and DOL is limited due to emerging risks of margin sustainability. We think the recent upsurge in international margins is likely to sustain in the short run on the back of global market dynamics. We expect the downstream sectors to post robust demand and chemical sectors' fortunes to remain upbeat amid duty protection, PkR depreciation and import substitution.

- **Downstream segments to post robust demand.** Over the last three years, PVC (EPCL) industry has shown impressive double-digit growth and this momentum is likely to continue - not only from conventional segment of pipes and fittings but also from other segments. Similarly, favourable government policies to revive textile sector exports could boost upstream segment demand (PTA for LOTCHEM, Caustic Soda for EPCL and Hydrogen Peroxide for DOL and EPCL). We believe announced expansions by the various chemical manufacturers (PVC & H_2O_2 for EPCL, and H_2O_2 for DOL & SPL) is a testament of strong demand dynamics in their respective sectors.

- **Favourable margins to result in higher profitability.** We anticipate PVC-Ethylene and PTA-PX margins to remain on the higher side in the short-run, driven by over-supply in global ethylene and paraxylene markets. We expect higher international margins to eventually converge to their long-run averages, once downstream PVC and PTA planned expansions come online post 2020.

- **PkR depreciation to provide a sustainable growth.** Pricing mechanism of the sector mimics the movement in the international prices. Recent rounds of PkR depreciation (26% since Jan'18) has helped in improving local margins – as primary margins are dollarized. Furthermore, efficiency measures taken by the specific companies (EPCL (9), LOTCHEM (16) have reduced their breakeven levels resulting in higher profitability. Though most of PkR adjustment to REER has already taken place, it may continue to provide a sustainable cushion against sectoral headwinds, in our view. Our price targets are based on a DCF and imply 48%, 18% and 10% upside for EPCL, LOTCHEM and DOL respectively.

Well positioned to take the catch

We initiate coverage on Pakistan's Chemical sector with an overweight stance on the sector. EPCL (Target Price PkR 59) is our top pick in the sector. While we also have a BUY call on LOTCHEM (Target Price PkR 20) and a NEUTRAL stance on DOL (Target Price PkR 31). The upside in LOTCHEM and DOL is limited due to emerging risks on margin sustainability. The sector has been in the limelight because of its favourable positioning in the current macroeconomic space; PkR devaluation has a net positive impact on the sector. We think the recent policy calibration (to revive exports and cut imports) would have favourable impact on the sector and can translate into robust earnings growth. There are 27 listed companies in the sector with the total market capitalization of PkR ~317 bn (US$ ~2.31 bn). The top three listed companies in terms of market caps are: COLG, ICI and EPCL. The reason why we are focusing on EPCL, LOTCHEM and DOL is because of robust industry dynamics. Along with that, all these companies offer high liquidity with average daily trading volumes of 7.6mn, 10.09mn and 3.42mn shares respectively for EPCL, LOTCHEM and DOL.

- Accounting for 2.4% weight in the benchmark index (100 index), chemical sector is composed of 27 listed companies. The sector is composed of companies with different line of business that includes PSF, Soda Ash, caustic soda, hydrogen gas, hydrochloric acid, PVC resins, paints etc. The sector has outperformed the benchmark index by 3% in the last 12 months.

- The three companies (EPCL, LOTCHEM and DOL) combined have outperformed the benchmark (100 index) by 57%, 154% and 129% respectively in 2018. Despite that, we anticipate 3yr EPS CAGR of 18% p.a for EPCL which can drive future performance. On the other hand, LOTCHEM and DOL are estimated to post 3yr EPS CAGR of -7% and 3% respectively.

- Most of the listed chemical companies are supporting industries to the textile sector. Policy changes (rationalizing the electricity and gas tariffs for the export-oriented sectors) on the sectoral front (especially textiles) from the incumbent government is expected to benefit the textile sector in coming years, in our view. This may positively reflect in the whole value chain, especially for the upstream sectors like Chemicals.

Company Name	Outst. Shares (Mn)	Price	Market Cap (PKRMn)	Market Cap (USDMn)	Free Float (Mn)	Free Float (%)
Colgate - Palmolive Ltd	57.60	2,010	115,776.0	869.05	4.80	8%
I.C.I Pakistan Ltd	92.40	766.17	70,794.11	508.52	13.85	15%
Engro Polymer & Chemicals Ltd	908.90	39.44	35,847.02	256.39	232.21	26%
Lotte Chemical Pakistan Ltd	1,514.20	16.97	25,695.97	184.28	378.55	25%
Archroma Pakistan Ltd	34.10	515.35	17,573.44	125.59	8.53	25%
Akzo Nobel Pakistan Ltd	46.40	149.77	6,949.33	49.69	10.57	23%
Nimir Industrial Chemicals Ltd	110.60	59.70	6,602.82	47.21	38.71	35%
Sitara Chemicals	21.40	314.90	6,738.86	48.19	7.50	35%
Biafo Industries Ltd	26.40	215.00	5,676.00	40.59	8.80	33%
Pakistan Oxygen Ltd	25.00	222.89	5,572.25	39.84	10.02	40%
Wah Nobel Group of Comp.	9.00	350.00	3,150.00	22.52	3.15	35%
Descon Oxychem Ltd	102.00	28.01	2,857.02	20.05	40.80	40%
Ittehad Chemicals Ltd	84.70	26.99	2,286.05	16.38	26.95	32%
Nimir Resins Ltd	282.60	7.41	2,094.07	14.85	84.79	30%
Agritech Ltd	392.40	5.01	1,965.92	14.03	294.32	75%
Ghani Gases Ltd	138.90	12.43	1,726.53	12.42	64.97	47%
Berger Paints Pakistan Ltd	20.50	80.08	1,641.64	12.30	8.18	40%
Sitara Peroxide	55.10	27.36	1,507.54	10.66	33.06	60%
Dynea Pakistan Ltd	18.90	80.21	1,515.97	11.34	12.27	65%
Pak Gum and Chemicals Ltd	4.30	125.25	538.58	3.85	0.64	15%
Leiner Pak Gelatine Ltd	7.50	16.99	127.43	0.89	0.75	10%
Sardar Chemical Industries Ltd	6.00	16.13	96.78	0.72	1.65	28%
Pakistan P.V.C.	15.00	4.90	73.50	0.52	2.53	17%
Buxly Paints Ltd	1.40	44.65	62.51	0.45	0.50	36%
Data Agro Ltd	4.00	12.11	48.44	0.37	0.80	20%
Shaffi Chemical Industries Ltd	12.00	6.45	77.40	0.55	2.40	20%
Bawany Air Products Ltd	7.50	4.90	36.75	0.27	3.75	50%

Source: Zakheera and PSX

Our positive stance on the sector is primarily driven by the following reasons:

Key Reason #1: Import substitution

- We believe the chemical sector is well positioned in the ongoing macroeconomic space as government is currently taking steps to curb unnecessary imports; Pakistan's foreign reserves are depleting primarily on account of the widening trade deficit. In the past, chemical sector's profitability had suffered due to competition from imports. In the case of PVC, PTA, hydrogen peroxide and most of other products, national tariff commission

(NTC) has imposed anti-dumping duties (EPCL, 9 and DOL,2323). Domestic producers will benefit from this favourable policy shift.

Key Reason #2: Improved operating margins

- Pricing mechanism of the sector mimics international prices (US$ based) because of the competition faced from imports. As pricing of the final product is linked with US$ and the major chunk of the processing cost is in local currency, every round of PkR devaluation improves operating margins of the companies within the sector. We think the operating margins in the sector may improve over the medium term due to cheap input prices.

- Based on the pricing mechanism described above, profitability of many companies in the sector hinges on global commodity price movements. Recent surge in the margins (PVC-Ethylene for EPCL and PTA-PX for LOTCHEM) came on the back of falling prices of ethylene and paraxylene. Both inputs are oil derivatives and are produced mainly by cracking of naphtha, ethane and LNG. Recent decrease in prices of ethylene and paraxylene came on the back of supply glut in their relative markets, due to capacity addition mismatch between inputs and outputs (EPCL, 8 and LOTCHEM,15).

- In case of hydrogen peroxide (H_2O_2), increase in international prices came on back of increasing demand from different segments. Key segments that are driving demand for the product are paper & pulp, textile, and propylene oxide etc. New segments of the product as oxidizing agent in environment segment and in water purification also showing promising growth. Despite the robust demand in the long run, likelihood of weak performance from downstream segments cannot be ruled out.

Key Reason #3: Efficiencies and cash generation.

- Our coverage cluster is operating at peak utilization levels (average utilization of the three companies is above 105%), which has resulted in efficiency gains as well. With volumetric growth out of the equation, manufacturers are working on more efficiency projects to achieve even higher utilization levels without any glitches.

- Few of the examples include: (i) ethylene consumption per ton of PVC has gone down to 480 kgs vs. international benchmark of 500 kgs, (ii) EPCL planning to utilize the surplus hydrogen gas by setting up a hydrogen peroxide facility (H_2O_2), and (iii) LOTCHEM planning to sell surplus electricity to the national grid.

- Along with the increasing efficiency, all three companies under our coverage have substantial cash generation abilities as they enjoy negative cash conversion cycles.

Despite our positive stance on the sector following are the key risks to our investment thesis:

Risk #1: Increase in gas prices

- Any increase in the gas prices can reduce the profitability of chemical sector. Natural gas is used for both fuel and power needs of the companies under our coverage. Though we have assumed a 5yr (2018-23) CAGR of ~9% in gas prices, but a higher increase in gas tariffs would be a key risk to our investment thesis.

- In the wake of the ongoing natural gas shortfall in the country, most of the Punjab based players (only applicable for DOL from our coverage) are getting gas at a much higher rate (70%/30% RLNG/system gas). This fuel mix has adversely impacted the profitability of these companies.

- Though the province of Sindh/KPK get priority for gas consumption from 18th amendment, a change in law to rationalize the country wide gas tariff would be a key risk for companies like EPCL and LOTCHEM.

Risk #2: Reduction/removal of duties

- A reduction/removal in anti-dumping and custom duties would adversely impact chemical manufacturers. Recall that anti-dumping duties in Pakistan are placed for a period of 5 years, thus a delay in re-imposition of duties at the end of designated period would be a risk to our thesis.

18th January 2019

Engro Polymers & Chemicals Ltd (OP)

Achilles with better heels

Price Target: PkR 59 (+48% upside), Current Price: PkR 39.4

Investment thesis

- We like Engro Polymer & Chemicals Ltd (EPCL) due to its monopoly position the PVC market. We forecast 3yr earnings to grow with CAGR of ~18%pa (2018-21) backed by capacity expansions (PVC, caustic flaker, H_2O_2) and efficiency gains. Our EPS estimates are ~20% ahead of consensus as we think the company can surprise positively through (i) higher anticipated margins, (ii) higher PVC volumes through expansion and (iii) entry into hydrogen peroxide (H_2O_2) business (click here) and (iv) efficiency gains. The stock is currently trading at an implied PVC-Ethylene core delta of US$ 300/Ton that is ~20% lower from its 10yr average core delta of US$ 363/Ton (current delta of US$ 505/Ton).
- In the core PVC business (80% of sales), EPCL has announced an expansion of 100KT/PA. This will take the production capacity to 295KT/PA by 3Q2020.
- EPCL is venturing into hydrogen peroxide (H_2O_2) business with a capex of US$ 23 mn - expected capacity of 25,000 tons, ~30% of industry's H_2O_2 capacity by the time it starts operating. EPCL's competitive edge would be to make more profitable use of the surplus hydrogen gas formed as part of its caustic process.
- Besides PVC business, EPCL also operates in the chlor-alkali segment with its co-product (Caustic Soda). The company has a competitive advantage over its peers through an integrated business model and caters to most of Southern market. This production synergy allows EPCL to operate its caustic plant at higher utilization levels compared to its peers.
- EPCL benefits from import substitution via import duties and anti-dumping duties. Thus, import parity pricing translates positively on margins with PkR depreciation. We are modelling PVC-Ethylene core delta ~US$ 380/Ton in 2019 on conducive global outlook. We have gradually normalized the core delta to ~US$ 350/ton in our assumptions.

Valuation

The stock performed 48% in 2018, outperforming the benchmark index by 57%. EPCL is trading at CY19E PE of 5.8x. Our price target of PkR 59 (+48% upside) is based on a DCF.

Key Risks

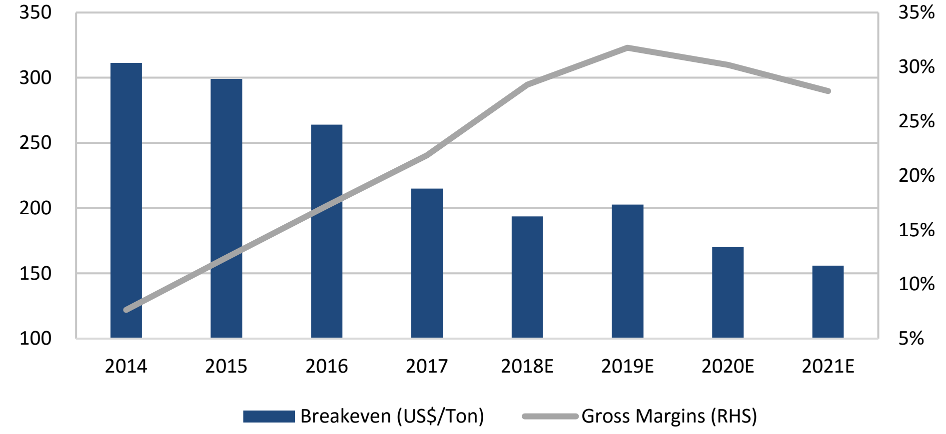
(i) Increase in gas prices (ii) deterioration in core delta, (iii) removal of anti-dumping duty, (iv) demand slowdown, (iv) delay in commissioning of expansion projects and (v) unexpected appreciation of PkR.

Year end Dec PKR Mn	2017	2018E	2019E	2020E	2021E
Income Statement					
Revenue	27,731	34,459	40,159	46,127	63,875
Growth (%)	21%	24%	17%	15%	38%
Gross Margin	22%	28%	30%	29%	26%
EBITDA	5,027	8,493	10,274	10,987	13,248
Profit before tax	3,114	7,155	8,382	9,904	11,439
Tax	(1,060)	(1,720)	(2,263)	(2,411)	(2,411)
Net Profit	2,054	5,435	6,119	7,493	9,028
EPS	2.26	5.98	6.73	8.24	9.93
Balance Sheet					
Current Assets	8,062	10,921	24,269	19,495	21,864
Non-Current Assets	16,253	17,156	16,934	19,703	22,199
Total Assets	24,315	28,077	41,203	39,199	44,063
Total Liabilities	16,595	16,131	25,585	19,085	20,790
Total Equity	7,720	11,946	15,618	20,114	23,273
Cash Flow Statement					
Profit after tax	2,054	5,435	6,119	7,493	9,028
Depreciation	864	932	800	811	818
Change in Working Capital	(2,133)	148	156	(231)	(7,593)
CF from Operations	785	6,514	7,076	8,073	2,253
CF from Investing	242	(2,556)	(4,235)	(1,865)	(2,306)
CF from Financing	(719)	(2,459)	6,302	(10,497)	(2,468)
Net Cash Flow	308	1,499	9,143	(4,289)	(2,520)
Valuation					
EV/EBITDA	8.74	4.85	3.97	3.42	3.28
P/E	17.45	6.60	5.86	4.78	3.97
Dividend Yield (%)	2%	3%	7%	8%	16%

Source: Company Accounts, KASB estimates

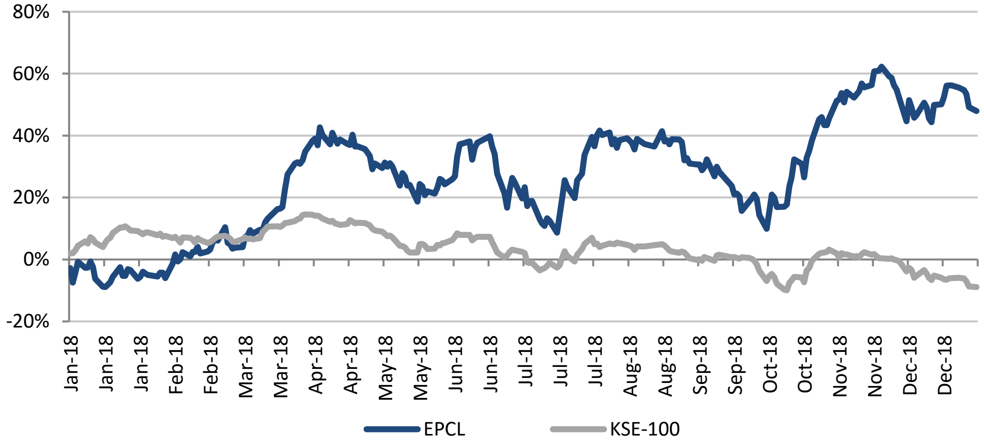
Investment thesis in charts

Declining breakeven levels to increase margins*



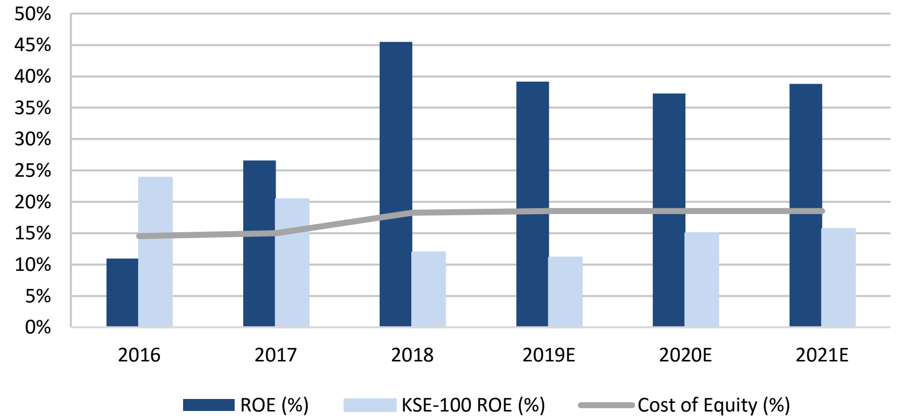
Source: Company data, KASB estimates
*For breakeven we have taken admin cost, D&A, repair& maintenance, fuel cost and finance cost.

EPCL has outperformed KSE-100 by 57% in 2018



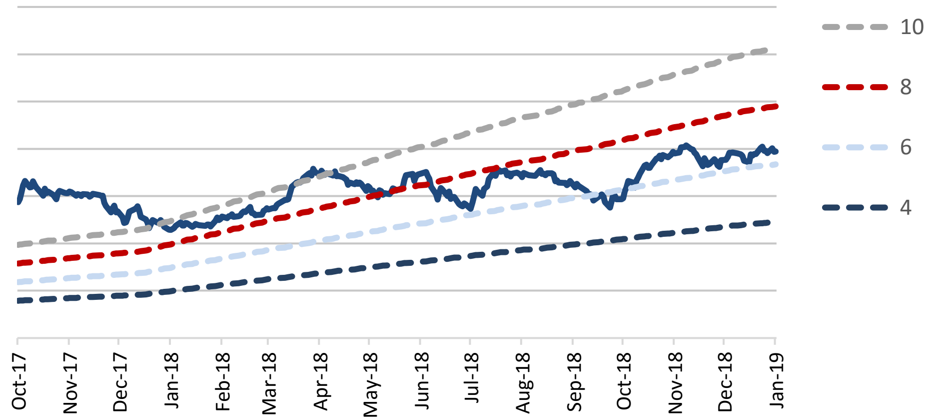
Source: Company data, KASB estimates

ROEs to comfortably surpass the cost of equity



Source: Company data, KASB estimates

Stock's performance on price to earnings (x)



Source: Bloomberg

Company history

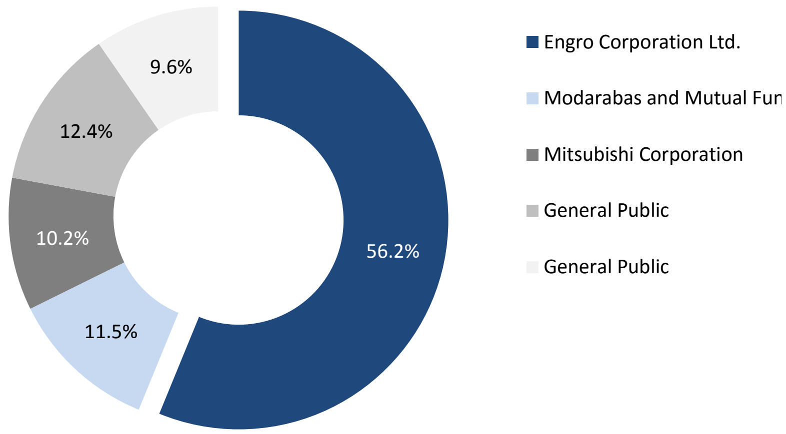
- Engro Polymer is a subsidiary of Engro Corporation which has a 56.2% stake in the company.
- The company was set up in 1997 by the name of Engro Asahi Polymer and Chemical Ltd. It was a joint venture between Engro Chemical (50%), Asahi Glass Company (30%) and Mitsubishi Corporation (20%) to set up a 100,000-ton capacity PVC plant at Port Qasim. The plant came into commercial operation in 1999.
- In 2006, Asahi Glass divested from the business and Engro Chemical acquired its shareholding. The name of the company was changed to Engro Polymer & Chemicals Limited (EPCL).
- In 2007, the Company embarked upon an expansion and backward integration project to enhance the PVC capacity to 150 KT and set up an EDC-VCM and Chlor-alkali plants. Currently, EPCL has PVC capacity of 195 KT and caustic soda capacity of 106 KT along with a captive power plant of 66 MW.
- The company is currently operating in the segments of chlor alkali and polymer with caustic soda and PVC resin. Just like any other efficient chemical company EPCL aspires to draw production synergies. The company has recently announced to set up its hydrogen peroxide (H_2O_2) plant to make the most of hydrogen formed during the production of caustic soda.

Current management and their background

1. **Mr. Imran Anwer – Chief Executive Officer** is the Chief Executive Officer of Engro Polymer & Chemicals since 2015. Imran joined Engro (then Engro Chemicals Pakistan Limited) as Manager, General Accounting in 2005. Prior to this, he was serving as the Chief Financial Officer in Engro Fertilizer Ltd (EFERT). He has proven his leadership skills and displayed strong business acumen and commercial sense whilst handling a major role in Engro Foods such as acquisition and listing of EFERT. He was also associated with Deloitte in 1994, up until 2002 as Manager Corporate Finance. He then joined FUCHS Petroleum, and served as the Chief Financial Officer from 2002 to 2005.

2. **Syed Abbas Raza – Chief Financial Officer** is an experienced professional with degrees in Management Accounting, Business Administration and Electrical Engineering. Prior to joining EPCL, he was working for General Mills, a US multinational, as Finance Director for their South East Asia business, based out of Singapore. Before General Mills, he had a distinguished career with Procter & Gamble spanning almost 2 decades during which he worked in various senior positions in Pakistan, Middle East, Europe and Africa. His last position was CFO, Procter & Gamble, Pakistan.

EPCL's shareholding pattern



Source: Company Financials

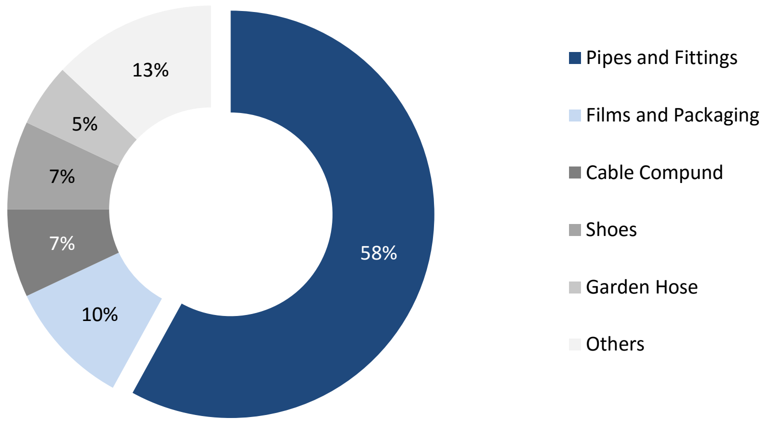
Key Reason #1: Earnings growth momentum to continue

- EPCL currently operates in Polymer and chlor alkali segment with its products of PVC resin and caustic soda. While it faces some competition in the chlor alkali segment, the company enjoys its monopoly position in the polymer segment. The company is estimated to post impressive revenue growth with a 3Yr CAGR of 23% translating into an earnings CAGR of 19% p.a.

- As per our analysis, the growth in revenues will primarily be driven by expansion in the PVC segment. Currently EPCL has PVC production capacity of 195KTPA which is set to go up to 295KT by 3Q2020 (51% increase). The company currently accounts for ~68% of the rapidly growing (3yr CAGR, 13%) PVC market. Based on our analysis, EPCL's market share may increase to 88% post expansion (currently at ~70%).

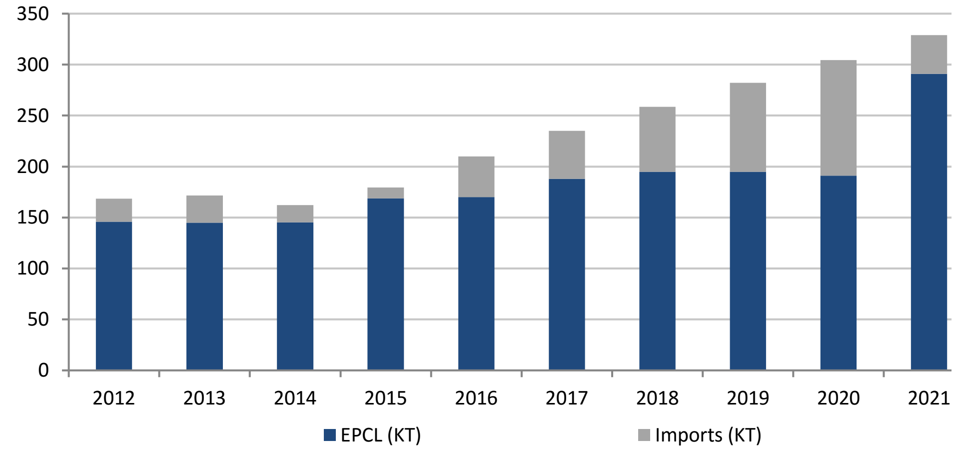
- The existing duty structure allows the company to charge a slight premium on its product, depending on the local demand. The company follows import parity pricing for PVC products (as it has no local competitor) which correlates positively with PkR depreciation.
- Pakistan's per capita PVC consumption is lower than the regional peers, indicating ample room for growth. We are of the view that recent increase in PVC application - especially in-home decor and conventional segments - may post healthy growth translating into higher demand for PVC resin.
- The company has also announced to set up a hydrogen peroxide (H_2O_2) plant with the capacity of ~25KTPA (CY 2020) to bring synergies in its manufacturing process like any other petrochemical company. Currently a portion of the hydrogen formed in the caustic soda production process is being used as fuel for the captive power plant, while the remaining is not being used. This low-cost hydrogen gives EPCL a competitive edge over its peers.

PVC Application



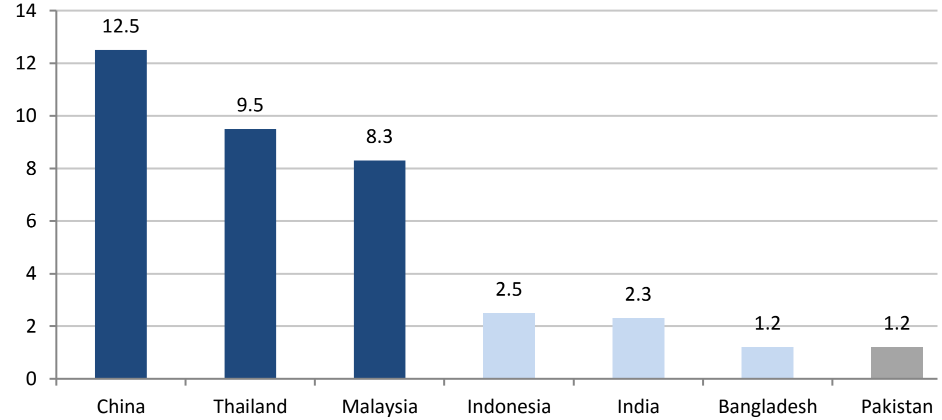
Source: Company Reports

PVC Industry Demand (3yr CAGR 13%, 5yr CAGR 9%)



Source: KASB estimates

Regional Comparison of PVC Consumption (KG/Capita)

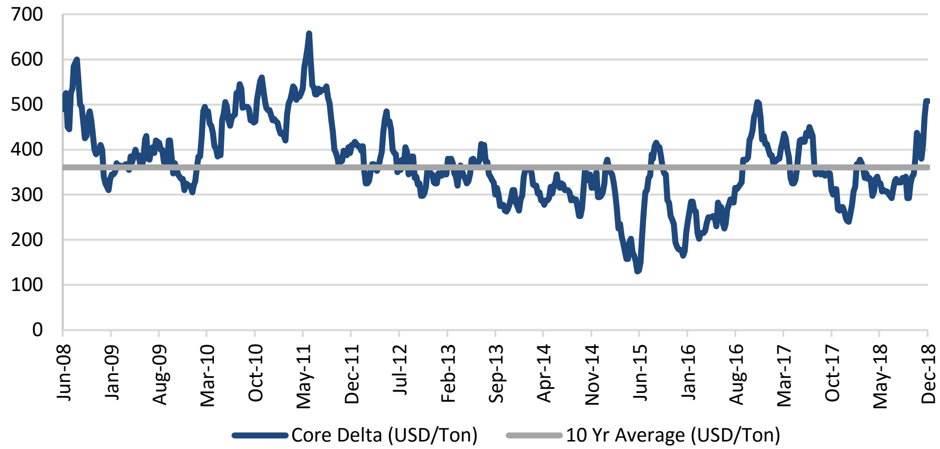


Source: Company Reports

Key Reason #2: Favourable margin outlook

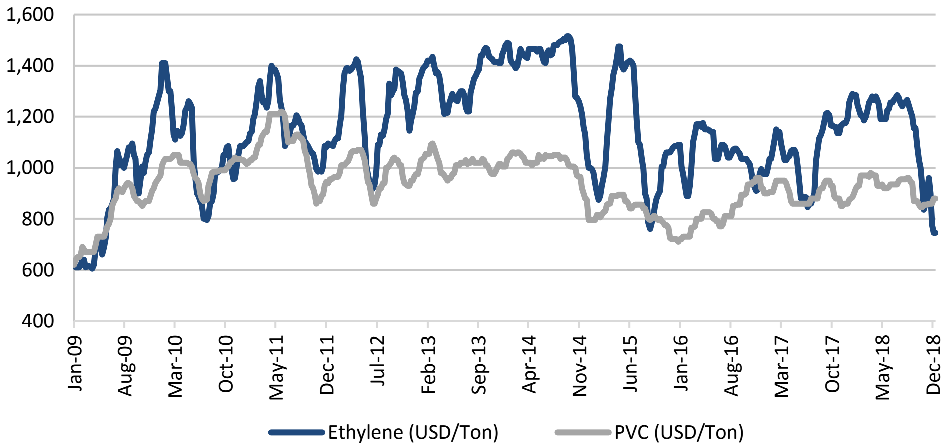
- EPCL's profitability is highly correlated with international PVC-Ethylene margins (core delta) as this segment contributes ~80% to the total revenues.
- Recent surge in the core delta (450+ US$/Ton) came on back of the supply glut in the ethylene market driven by upcoming capacities leading to demand supply imbalance. Conversely, PVC prices have followed a sticky trend.
- Globally ethylene market is estimated to add additional capacity of ~30MTPA (2017-2021). Due to a lagged capacity expansion cycle in the downstream segments of polyethylene and PVC, ethylene market may continue to remain depressed, in our view.
- Naphtha accounts for the highest feed supply share to ethylene crackers followed by Ethane and LPG. Globally, production on ethane and LPG is likely to go up, which will reduce the break-even levels for ethylene cracking. This may keep ethylene prices downward sticky.

Core Delta (US$/Ton)



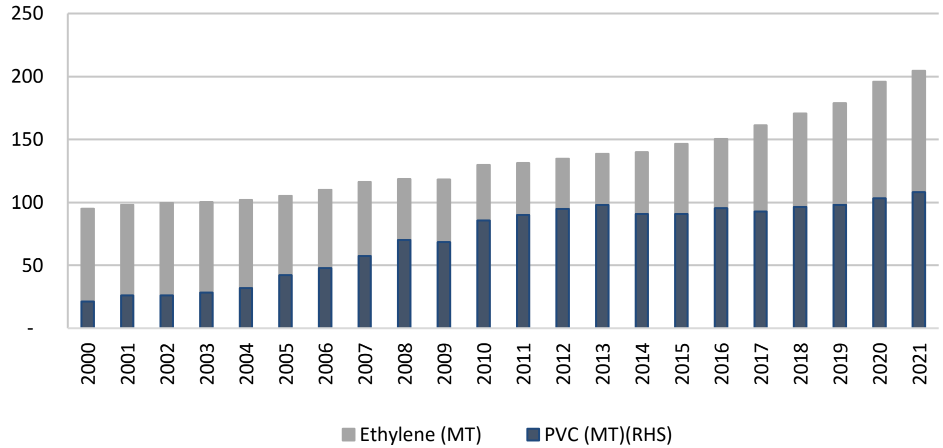
Source: Bloomberg

Ethylene and PVC Price



Source: Bloomberg

Upcoming PVC and Ethylene capacities



Source: Thompson Reuters

Key Reason #3: Increasing efficiencies, depreciating PkR and duty protection has reduced the breakeven operating levels

- Over the past few years EPCL has turned the tide to overcome its inefficiencies by taking several measures to become much more efficient. These efficiency measures include, upgradation of gas turbine of captive power plant, replacement of membranes of caustic plant etc. These measures along with other planned efficiency measures are likely to reduce input requirements in the production process, increasing margins. On the other hand, recent rounds of currency devaluation are also likely to reduce breakeven levels for EPCL, resulting in higher profitability level for the company. This factor is yet to be incorporated by the market. Though both caustic and PVC businesses are inter-related, but on a standalone basis, EPCL's breakeven core-delta comes to around US$ 200/ton for CY18 vs. over US$ 400/ton in CY10.

Recent efficiency measures undertaken

- Along with its ongoing expansion plan, the company has also announced to take efficiency measures worth PkR 2.36 bn. Key measures are the upgradation of gas turbines, replacement of membranes of caustic plant, debottlenecking of hypochlorite (hypo) and HCL plants along with few other efficiency measures (click here).

- As per the recent notification, the company has approved a CAPEX of US$ 9mn to shift to pure oxygen based VCM technology which will be completed by 2020 (click here).

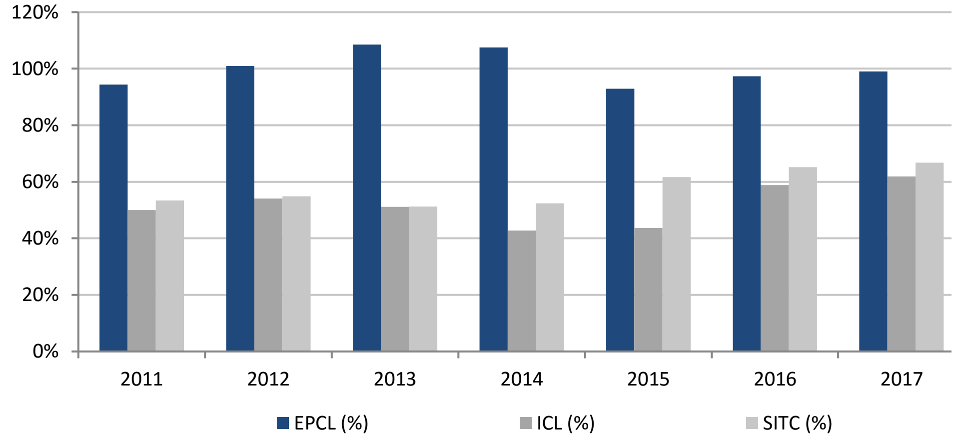
Driving production synergies in the caustic business

- In contrast to other caustic soda players EPCL has been able operate at higher utilization levels. The company's ability to operate its caustic plant at higher utilization levels is driven by the application of chlorine (by product in the process) in its polymer segment. This gives EPCL an edge over other players. Chlorine is a hazardous gas and its handling is of key essence in the production of caustic soda.

Hydrogen peroxide would make better use of surplus hydrogen gas

- The company is likely to benefit from similar synergies in case of the hydrogen peroxide. Existing players in the industry (DOL and SPL) incur major operating cost in the form of natural gas cracking to produce hydrogen gas. In contrast to its competitors in the sector, EPCL will have to bear almost no additional cost to produce hydrogen gas as it already produces surplus hydrogen (by product) in the manufacturing process.

Chlorine Effect; operating at higher level compared to peers



Source: Bloomberg

Protection from foreign competition

- Due to import substitution-based business model, the government has imposed a friendly duty structure, keeping competition away from the market. Despite the reasonable duty structure, persistent dumping was observed from China, Korea and Thailand. In order to prevent that, National Tariff Commission (NTC) has imposed an anti-dumping duty for a period of 5 years (click here).

- The existing duty structure considering the current economic theme, significantly reduces the threat of competition from imports. After the announced expansion takes place, EPCL will also become virtually immune to any new competition due to high barriers to entry (high capex requirements).

Current Duty Structure

Year	Customs Duty	PVC Additional Duty	Regulatory Duty	Ethylene Regulatory Duty
2015	10%	1%		3%
2016	11%	1%		3%
2017	11%	1%	2%	3%
2018	11%	2%	2%	3%

Source: Federal Board of Revenue

Region	Anti-Dumping Duties (ADD) Company	ADD
China	Xinjiang Tianye (Group) Foreign Trade Co. Ltd.	3.44%
	Inner Mongolia Wuhai Chemical Industry Co., Ltd	6.65%
	Tianjin LG Bohai Chemical Co. Ltd	20.47%
	Tianjin Dagu Chemical Co., Ltd	14.34%
	All other exporters	20.47%
Korea	LG Chem, Korea	4.00%
	All Other Exporters	14.97%
Thailand	All Exporters	13.98%
Chinese Taipei	All Exporters	16.68%

Source: National Tariff Commission

Valuation

- We arrived at our TP of 55 using DCF method, with terminal growth rate of 3% and PV of terminal value at PkR 59.07 bn. EPCL is trading at a forward CY19E P/E of 5.8x. We anticipate expansion, efficiency measures along with PkR depreciate to boost earnings.

Risks

Key risk to our thesis includes

- Erosion in Core Delta
- Increase in gas prices
- Changes in Duty Structure
- Removal of Anti-Dumping duty on PVC
- Imposition of additional duties on Ethylene
- Supply glut in hydrogen peroxide market

DCF Valuation

YE: DEC	CY19E	CY20E	CY21E	CY22E	CY23E	CY24E	CY25E
Revenue	40,159	46,127	63,875	67,441	71,131	75,049	79,089
EBITDA	10,933	11,655	14,086	13,868	14,060	14,185	14,157
Tax	(2,472)	(2,611)	(2,646)	(3,025)	(2,948)	(2,922)	(2,933)
Capex	-578	-3,580	-3,314	-5,655	-1,189	-1,186	-1,183
NWC	137	-231	-7,481	-889	-449	-518	-543
FCF	8,020	5,233	645	4,298	9,473	9,558	9,498
PV of FCFE	**8,020**	**4,470**	**479**	**2,722**	**5,089**	**4,374**	**3,685**
Net debt	4,745						
PV of terminal Value	57,954						
Equity value (CY25)	53,209						
TP	59						

Source: KASB estimates

Highly sensitive to core delta

Core Delta (USD/Ton)	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
-30	6.52	7.90	9.35	8.05	8.11	8.21	8.15	49
-20	6.76	8.20	9.78	8.51	8.61	8.72	8.69	52
-10	7.00	8.49	10.21	8.98	9.10	9.24	9.23	55
Base Case	**7.24**	**8.79**	**10.65**	**9.44**	**9.59**	**9.76**	**9.77**	**59**
+10	7.48	9.09	11.08	9.90	10.08	10.28	10.31	62
+20	7.72	9.39	11.51	10.36	10.57	10.79	10.85	65
+30	7.96	9.68	11.94	10.83	11.06	11.31	11.39	68

Source: KASB estimates

Impact of Gas Price Increase on Earnings

Gas Prices	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case	**7.24**	**8.79**	**10.65**	**9.44**	**9.59**	**9.76**	**9.77**	**59**
10% Increase	6.94	8.44	10.18	8.91	9.02	9.15	9.12	55
20% Increase	6.64	8.10	9.71	8.38	8.45	8.54	8.47	51
30% Increase	6.34	7.75	9.24	7.85	7.88	7.93	7.83	47
40% Increase	6.04	7.40	8.77	7.33	7.32	7.32	7.18	43

Source: KASB estimates

Impact of PkR Devaluation on Earnings

USD/PKR	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case	**7.24**	**8.79**	**10.65**	**9.44**	**9.59**	**9.76**	**9.77**	**59**
+5%	7.72	9.36	11.37	10.20	10.39	10.60	10.64	64
+10%	8.19	9.92	12.10	10.95	11.19	11.44	11.52	69
+15%	8.67	10.48	12.82	11.70	11.99	12.28	12.39	75

Source: KASB estimates

Impact of change of fuel mix on Earnings

USD/PKR	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case	**7.24**	**8.79**	**10.65**	**9.44**	**9.59**	**9.76**	**9.77**	**59**
+5%	7.72	9.36	11.37	10.20	10.39	10.60	10.64	64
+10%	8.19	9.92	12.10	10.95	11.19	11.44	11.52	69
+15%	8.67	10.48	12.82	11.70	11.99	12.28	12.39	75

Source: KASB estimates

Although the likelihood of EPCL to get RLNG based fuel mix is extremely remote considering the 18th Amendment. This sensitivity is only done to address market concerns.

Lotte Chemicals (OP)

Better margins to drive the earnings

Investment thesis

- We like Lotte Chemical Pakistan Ltd (LOTCHEM) due to its monopoly position in the PTA industry. Our EPS estimates for 2019 are ~15% ahead of consensus as we think the company can surprise positively due to (i) favourable margin outlook, (ii) PkR depreciation, and (iii) unlevered balance sheet. We expect earnings to peak at PKR 2.19/sh in 2019 due to favourable PTA-PX margins (US$ 123/ton), however, due to capacity constraints, the earnings growth would be limited, in our view. The stock is trading at an implied PTA-PX margin of US$ 85/ton, where it offers an attractive forward D/Y of 10% for 2019.
- LOTCHEM benefits from import substitution via import duties and robust downstream demand from PSF, PFY and PET segments. The Company is hedged against PkR depreciation as it enjoys dollarized margins. We are modelling PTA-PX margins of US$ ~150 /Ton in 2018, which may normalize to US$ 114/ton by 2020 and US$ 84/Ton over the investment horizon. As per our estimates, the breakeven levels for LOTCHEM have gone down to ~US$ 69/Ton vs. US$ 78/Ton in 2016.
- LOTCHEM has applied for the sale of 11-14MW of excess power to K-Electric (KEL). Any development in terms of power purchase agreement may contribute additional ~PkR 0.16/sh to our base case.
- Lotte currently has an unleveraged balance sheet and PkR 8.42 bn of net cash (due to GIDC payables; already accounted for in our valuation) as of Sep'18 – equivalent to ~33% of current market cap, comparable to the likes of ENGRO (~35%). In a rising interest rate scenario, this is an unmatched trait and could come in handy for future capex plans.
- LOTCHEM's clientele is operating at an average utilization level of 100%+. Textile friendly policies may give boost to PTA demand that can make a potential case for capacity expansion.

Valuation

The stock is trading is at 2019 P/E of 7.38x. Our price target of PkR 20 (18% upside) is based on a DCF and implies an Outperform stance.

Key Risks

(i) Increase in gas prices (ii) lower than anticipated PTA-PX margin, and (iii) removal of anti-dumping duty.

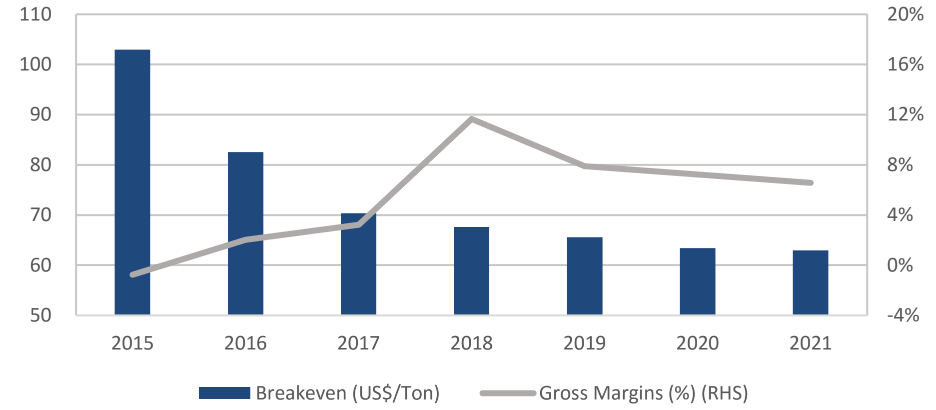
Price Target: PkR 20 (+18% upside), Current Price: PkR 16.97

Year end Dec PKR Mn	2017	2018E	2019E	2020E	2021E
Income Statement					
Revenue	37,034	59,422	76,464	79,907	83,281
Growth (%)	6.5%	60.5%	28.7%	4.5%	4.2%
Gross Margin	3.2%	11.7%	7.9%	7.2%	6.6%
EBITDA	1,403	6,912	5,765	5,422	5,032
Profit before tax	895	6,019	5,004	4,736	4,424
Tax	-483	-1,961	-1,523	-1,344	-1,164
Net Profit	412	4,058	3,481	3,392	3,260
EPS	0.27	2.68	2.30	2.24	2.15
Balance Sheet					
Cash	5,043	9,689	11,488	12,630	13,767
Total Assets	20,541	27,244	31,734	33,176	34,632
Total Liabilities	7,968	11,190	14,925	15,699	16,470
Total Equity	10,677	11,555	12,311	12,977	13,663
Cash Flow Statement					
Profit after tax	412	4,058	3,481	3,392	3,260
Depreciation	650	699	648	601	557
Change in Working Capital	1,327	399	682	140	139
CF from Operations	2,389	5,156	4,811	4,133	3,957
CF from Investing	-1,162	60	-292	-271	-251
CF from Financing	13	-3,173	-2,720	-2,720	-2,568
Net Cash Flow	1,240	2,043	1,799	1,142	1,137
Valuation					
EV/EBITDA	14.72	2.32	2.46	2.41	2.37
P/E	62.31	6.33	7.38	7.58	7.88
Dividend Yield (%)	1.2%	12.4%	10.6%	10.6%	10.0%

Source: Company accounts, KASB estimates

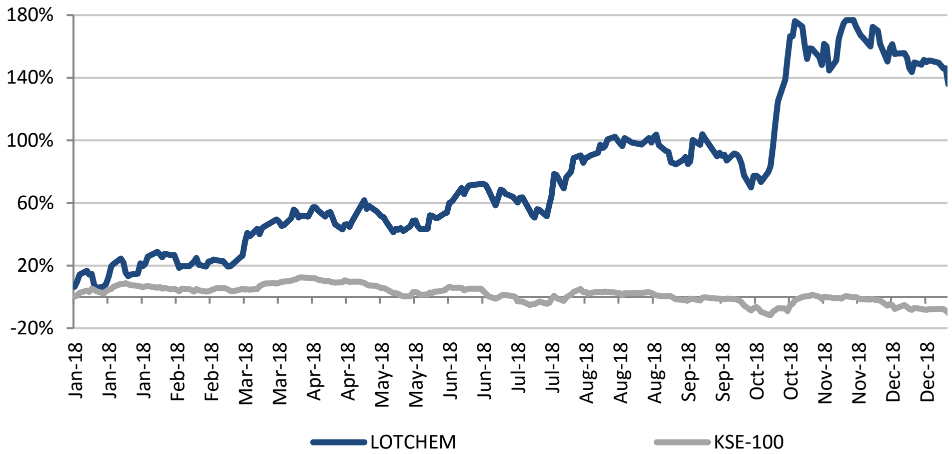
Investment thesis in charts

Decline in breakeven levels to improve margins*



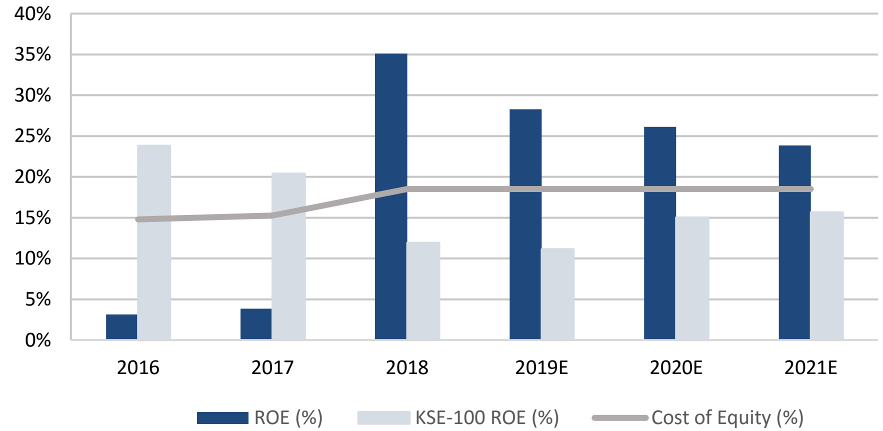
Source: Company data, KASB estimates
*For breakeven we have taken fuel cost, D&A, repair & maintenance and admin cost.

LOTCHEM has outperformed KSE-100 by 154% in last year



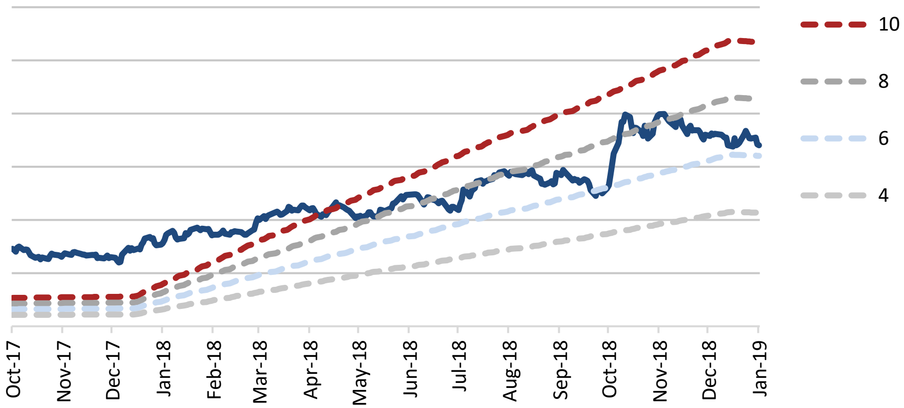
Source: Zakheera

ROEs to converge towards cost of equity in medium term



Source: Company data, KASB estimates

Stock performance in price to earnings (x)



Source: Bloomberg

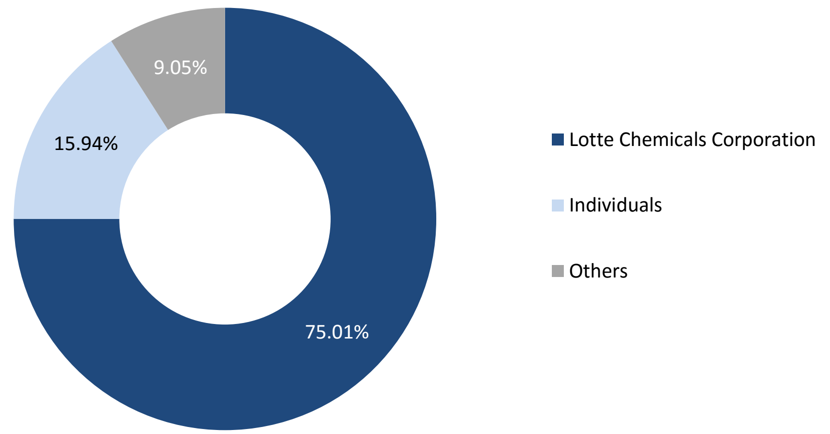
LOTCHEM's background

- The company started its operations in Pakistan in the latter half of 1998 under the supervision of ICI Pakistan. In 2000, PTA business demerged from ICI Pakistan Ltd. into Pakistan PTA Ltd. (PPTA). In 2008, Akzo Nobel acquired ICI globally, making PPTA part of Akzo Nobel. In 2009, KP Chemicals a subsidiary of LOTTE acquired PPTA, making it part of LOTTE and changing its name from PPTA to Lotte Pakistan PTA Ltd. (LPPTA). Later in 2013, name of the company was changed to Lotte Chemicals Pakistan Ltd (LOTCHEM) after KP Chemicals' identity changed globally to Lotte Chemical.
- Major shareholder, Lotte Chemicals Corporation owns 75% of the total shareholding in LOTCHEM. Lotte Chemicals Corporation is a core unit of Lotte group, the fifth-largest conglomerate in South Korea (SK). In terms of sales, Lotte Chemical ranks behind only LG Chem in SK. It is one of the world's largest producers of chemical products such as polyethylene and ethylene.
- Lotte Chemical began as Honam Petrochemical, which was established in 1976 through technological collaboration between companies including Japan's Mitsui group. Lotte group acquired the business in 1979. Honam became Lotte Chemical in 2012, when its management was integrated with KP Chemical.
- In South Korea, Lotte Chemical has the world's biggest ethylene capacity 1 million-ton production systems. It plans to open a joint plant with U.S. company Axiall in the state of Louisiana. The facility is to produce ethylene from shale gas.
- In 2010, the South Korean company acquired Malaysia's Titan Chemicals, now called Lotte Chemical Titan Holding. Seeking to reduce its heavy reliance on commodity chemicals, Lotte Chemical intends to reinforce its water treatment business. In addition, it has research and development programs focused on large-scale battery products, such as energy storage systems.

Current management and their background

- **Mr. Jung Neon Kim – Chairman** has been associated with LOTCHEM since the acquisition by LOTTE Chemical Corporation, South Korea in 2009. Mr Kim has also served as Chief Executive of the Company from May 2014 to June 2015. Mr Kim has been working with LOTTE Chemical Corporation, South Korea since 1991. He stayed in the Singapore Branch from 1996 to 2000. He's been in the PET business since 2001 and in PTA sales for more than ten years with LOTTE Chemical Corporation, South Korea. He is a certified Director of Corporate Governance from Pakistan Institute of Corporate Governance (PICG).
- **Mr. Humair Aijaz – Chief Executive Officer** has over 23 years of experience. After working for Siemens for a year, he joined ICI in 1993 as Management Trainee and has worked in various businesses including Paints, Soda Ash and Pharmaceuticals. He has played an instrumental role in reshaping the company's commercial activities and based on his continued commitment, he was promoted as Director Commercial in 2013, to be later appointed as the Chief Executive of Lotte Chemical Pakistan Ltd in June 2015. He is also serving as Director of Lotte Kolson (Pvt) Limited.

Shareholding Pattern

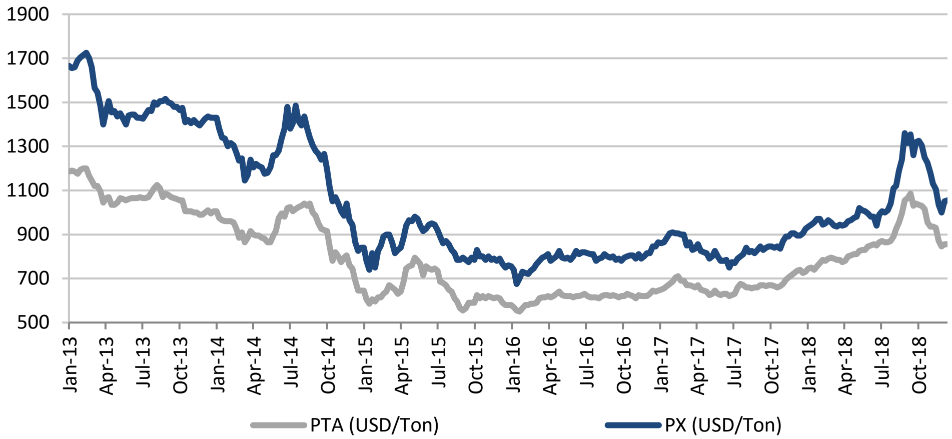


Source: Company data

Key reason # 1: Favourable PTA-PX Margins

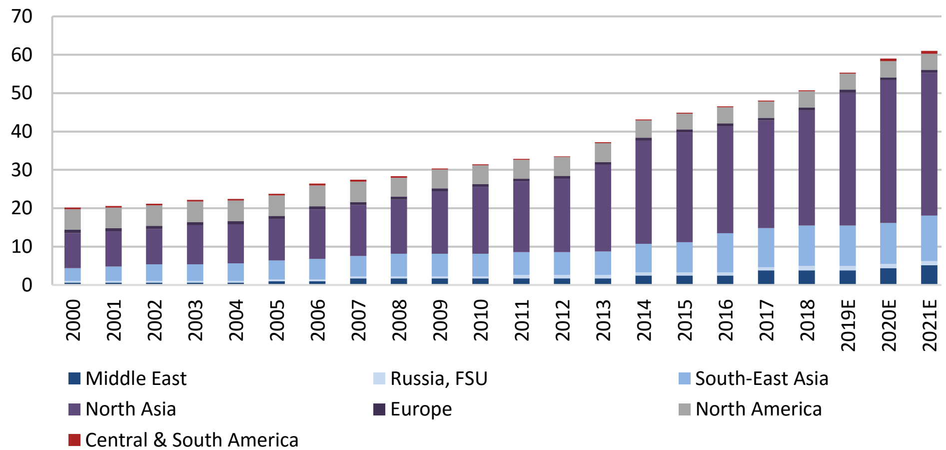
- LOTCHEM's profitability is highly corelated with the international PTA-PX margins as it imports the prior and sells the latter at import parity.
- Recent surge in the PTA-PX margins (200+ US$/ton) came on back of the excess supply in the paraxylene market which was enough to overweigh the effect of planned turnarounds.
- Global installed paraxylene capacity is set to grow by 27% in four years (2017-2021). Bigger chunk (72%) of the upcoming capacities is saturated in the North Asian region followed by 13% in Southeast Asia. On the other hand, PTA capacity is estimated to grow by 17% during the same period.
- We estimate PTA-PX margins to remain downward sticky in the short run on back of the mismatch in the upcoming capacities. This mismatch is likely to phase out in 2020 causing margins to converge below its long run average of US$ 100/ton.
- The stock is currently trading at an implied PTA-PX delta of US$ 85/Ton vis-à-vis current margins of ~US$ 120/ton.

International Prices of PTA and Paraxylene (US$/Ton)



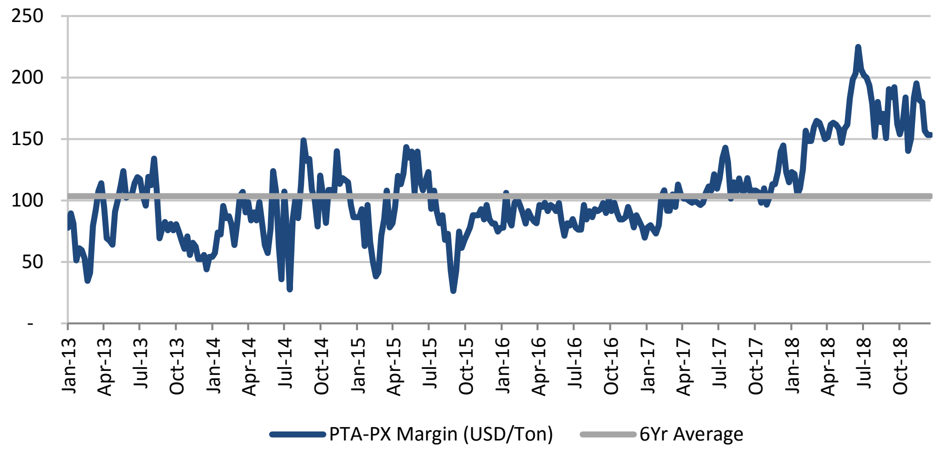
Source: Bloomberg

Paraxylene Capacities to increase by 27% (2017-21)



Source: Thomson Reuters

Elevated PTA Margins (US$/Ton) due to excess PX supply

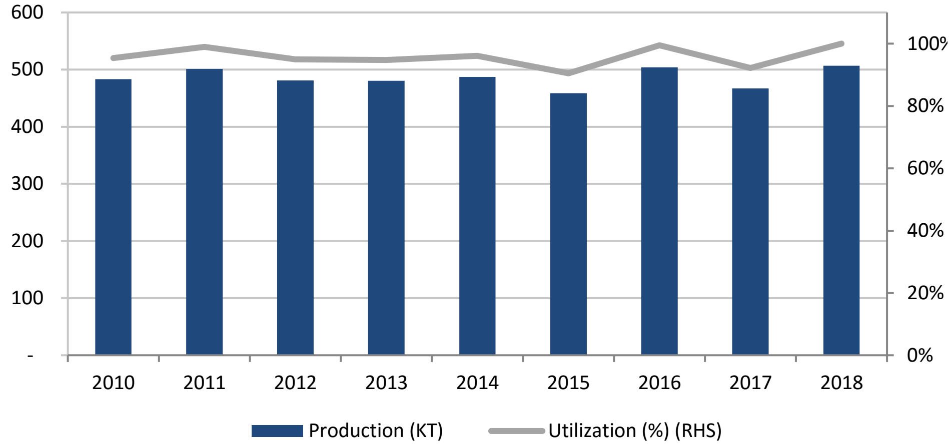


Source: Bloomberg

Key reason # 2: Lower breakeven levels amid efficiencies and PkR depreciation

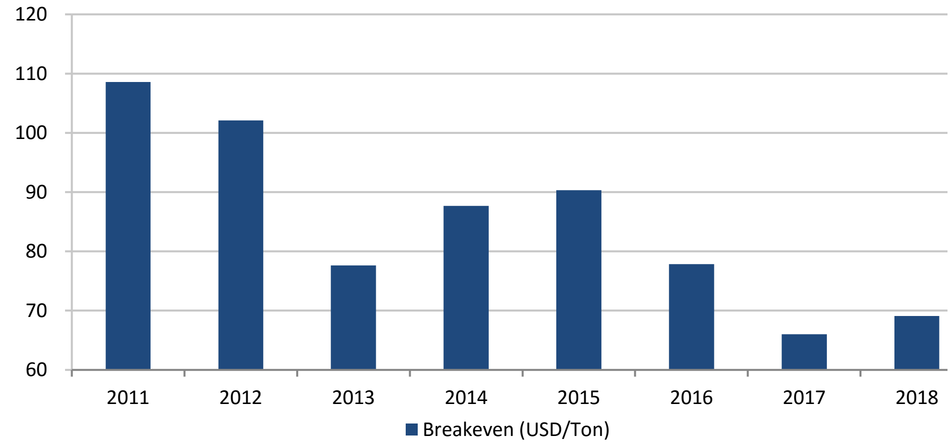
- Over the past few years LOTCHEM has smoothened its operations by reducing the overhaul cycle to 18 days which is conducted after every 2-years.
- The company has recently changed CTA dryer of the PTA plant along with the other key sections of the plant to keep the operations sustainable without compromising on efficiency standards.
- LOTCHEM also enjoys unleveraged balance sheet and healthy other income. The company has controlled its operating cost over time to function beyond 100% utilization levels.
- Company's primary margins are dollarized and are directly proportional to the PkR depreciation. Recent rounds of PkR depreciation against US$ have reduced LOTCHEM's breakeven levels.

Steady production with High Utilization Levels (%)



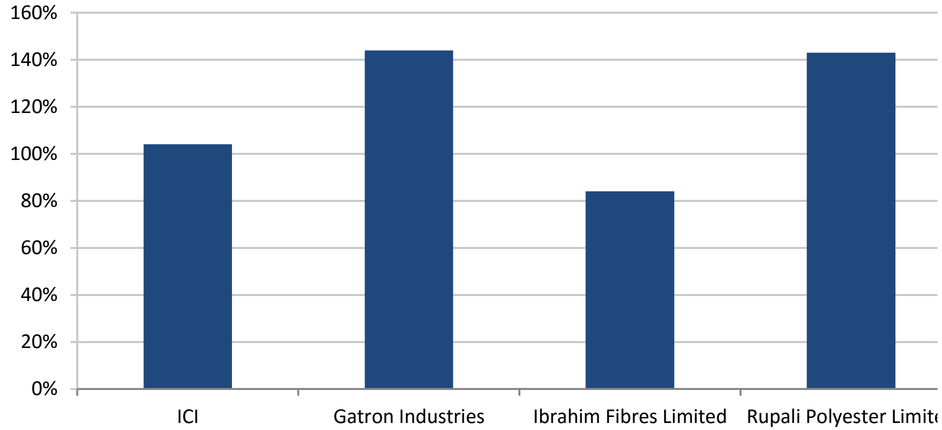
Source: Company Accounts

Efficiency measures and PKR devaluation have lowered breakeven levels



Source: Company data, KASB estimates

Key Clients Operating at High Utilization Levels (%)



Source: Company Accounts

Key reason # 3: Potential power purchasing agreement with Karachi-Electric

- Although, we have not incorporated it in our base case estimates but any development on the deal can provide ~PkR 250mn with EPS contribution of 0.16.
- Sale of excess electricity (11-14MW) to KEL has not materialized for years. The required tariff determination from NEPRA was issued after significant delays. However, the power acquisition contract is still pending for approval from NEPRA.
- Initially, NEPRA dismissed the Power Acquisition Request (PAR) on the grounds that LOTCHEM did not have a No Objection Certificate (NOC) from Sui Southern Gas Co Ltd (SSGC) for usage of sanctioned gas for sale of surplus power.

Key reason # 4: Debt free balance sheet provides extra cushion

- While most of the companies face severe pressure in terms of increasing finance cost in rising interest rate environment, LOTCHEM's unlevered balance sheet provides greater comfort to the company.
- The company currently has a PkR 8.42 bn of net cash as of Sep'18 (inclusive of GIDC payables; we have already accounted for the payables in our valuation).
- A 33% market capitalization (comparable to the likes of ENGRO with 35%) in cash is transpiring into higher dividend payout ratio (9MCY18: 67%). If the sponsors decide to expand, such a cash position would come in handy for equity participation.
- A risk to sustainable income contribution would be immediate payment of GIDC and infrastructure cess. Any positive development in this regard would be a positive surprise for the company.

Key risks

- PTA-PX margin deterioration
- Increase in gas prices
- Provision of mixed fuel (RLNG-System)
- Removal of Customs Duty on PTA imports

Valuation

- We arrived at our target price of PkR20 using DCF method, with terminal growth rate of 3%. LOTCHEM is currently trading at a forward CY19E P/E of 7.38x. We anticipate margins to normalize at US$ 84/Ton in the terminal year

DCF Valuation

YE: DEC	CY19E	CY20E	CY21E	CY22E	CY23E	CY24E	CY25E
Revenue	76,464	79,907	83,281	86,313	90,014	93,915	98,028
EBITDA	5,765	5,422	5,032	4,519	4,118	3,688	3,245
Tax	(1,523)	(1,344)	(1,164)	(1,006)	(884)	(776)	(680)
Capex	(292)	(271)	(251)	(233)	(216)	(200)	(186)
NWC	682	140	139	131	152	161	170
FCF	5,217	4,489	4,259	3,877	3,603	3,274	2,919
PV of FCF	**5,217**	**3,778**	**3,018**	**2,313**	**1,810**	**1,384**	**1,039**
Net debt	(5,065)						
PV of terminal value (FY29)	25,369						
Equity value	30,434						
TP	20						

Source: KASB estimates

- To gauge the quantum of the mentioned risk, we estimated the impact of mentioned risks on the earnings and target price of LOTCHEM.

Earnings sensitivity to PTA Margins

PTA Margin (USD/Tons)	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
-15	1.82	1.72	1.59	1.38	1.21	1.02	0.81	15.62
-10	1.98	1.89	1.78	1.58	1.42	1.24	1.04	17.11
-5	2.14	2.07	1.97	1.78	1.63	1.46	1.27	18.61
Base Case	**2.30**	**2.24**	**2.15**	**1.97**	**1.84**	**1.68**	**1.49**	**20.10**
+5	2.46	2.41	2.34	2.17	2.05	1.89	1.72	21.59
+10	2.62	2.59	2.53	2.37	2.26	2.11	1.95	23.08
+15	2.78	2.76	2.72	2.57	2.47	2.33	2.18	24.58

Source: KASB estimates

Earnings sensitivity to Gas Prices

Gas Prices	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case	**2.30**	**2.24**	**2.15**	**1.97**	**1.84**	**1.68**	**1.49**	**20.10**
10% Increase	2.19	2.13	2.03	1.83	1.69	1.52	1.33	19.06
20% Increase	2.09	2.02	1.90	1.70	1.54	1.36	1.16	18.01
30% Increase	1.98	1.90	1.78	1.56	1.39	1.20	0.99	16.97
40% Increase	1.88	1.79	1.65	1.42	1.24	1.04	0.82	15.93

Source: KASB estimates

Earnings sensitivity to PkR Depreciation

USD/PKR	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case	**2.30**	**2.24**	**2.15**	**1.97**	**1.84**	**1.68**	**1.49**	**20.10**
+5%	2.51	2.45	2.37	2.19	2.05	1.89	1.70	21.77
+10%	2.72	2.67	2.59	2.40	2.27	2.10	1.91	23.44
+15%	2.93	2.88	2.80	2.62	2.48	2.31	2.11	25.11

Source: KASB estimates

Earnings sensitivity to change in fuel mix

(System-RLNG)	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case (100%-0%)	**2.30**	**2.24**	**2.15**	**1.97**	**1.84**	**1.68**	**1.49**	**20.10**
(90%-10%)	2.26	2.20	2.11	1.93	1.79	1.63	1.44	19.77
(80%-20%)	2.22	2.17	2.07	1.89	1.75	1.58	1.39	19.43
(70%-30%)	2.19	2.13	2.03	1.85	1.70	1.53	1.33	19.10

Source: KASB estimates

Although we are of the view that likelihood of EPCL to get a RLNG based fuel mix is extremely remote considering the 18th Amendment. This sensitivity is only done to address market concerns.

Descon Oxychem Ltd (Neutral)

Opposing factors to balance the scale

Price Target: PkR 31 (+9.9% upside), Current Price: PkR 28.01

Investment thesis

- We like DOL due to its strong position in the hydrogen peroxide market as the most efficient player compared to its peers. We are modelling 94% earnings growth in 2019 followed by the earnings decline in following years. Descon (DOL), Sitara Peroxide (SPL) and Engro Polymer & Chemicals Limited (EPCL) all have announced capacity expansions in the segment, which may create a surplus situation by 2021. We estimate ~3% CAGR in earnings over 2018-21 based on mix bag of improved margins in 2019 over-shadowed by (i) rise in gas prices and (ii) possible margin compression on account of supply glut in later years. The stock is trading at an implied H_2O_2 price of PkR 82/kg (50% concentration) vs. the current average price of PkR 85/kg.
- Recent measures taken by the incumbent government to revive textile has enticed H_2O_2 players to enhance their capacity. DOL has planned to add 7KTPA by Dec-19, taking its production capacity to 35KT/PA (50% Concentration). Based on the lucrative margins, Sitara Peroxide Limited has also announced to increase its capacity by 50%, while EPCL has also announced to mark its entry with the nameplate capacity of 25KTPA.
- As per our estimates, these capacity additions are likely to outpace industry demand and will create a supply glut in the local market. Although, local players are relying on the option to export but regional dynamics is likely to provide any favourable space (discussed here, 22). However, higher than estimated demand from textile sector will likely to provide a breather to the industry.
- DOL has a competitive advantage in terms of operational efficiency when compared to its only peer (Sitara Peroxide). It can smoothly operate its plant above 100%.

Valuation

The stock is trading at 2019 PE of 4.5x. Our price target of PkR 31 (+9.9% upside) is based on a DCF.

Key Risks

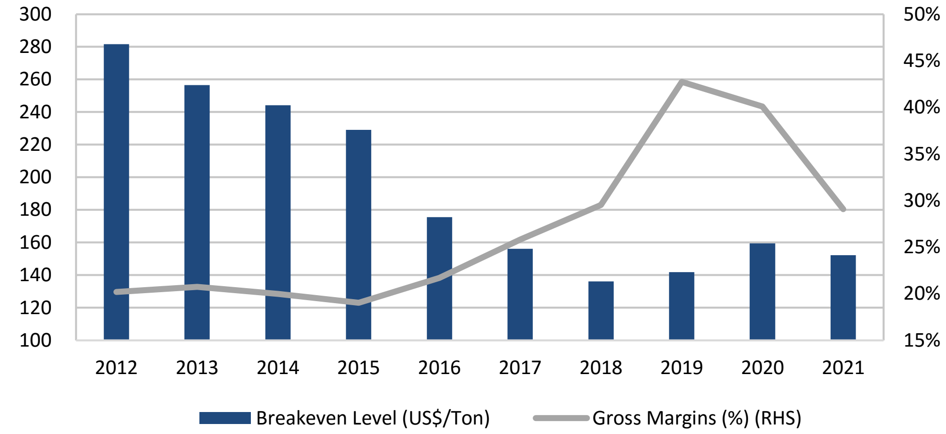
(i) Increase in gas prices (ii) gas and electricity shortfall, (iii) removal of anti-dumping duty and (iv) supply glut in the hydrogen peroxide market.

PkR Mn	2017	2018	2019E	2020E	2021E
Income Statement					
Revenue	1,961	2,088	2,638	2,706	2,548
Growth (%)	24%	6%	26%	3%	-6%
Gross Margin	26%	30%	43%	40%	29%
EBITDA	521	602	1,062	1,005	716
Profit before tax	334	454	906	843	463
Tax	(129)	(132)	(277)	(219)	(107)
Net Profit	205	322	629	623	356
EPS	2.01	3.16	6.16	6.11	3.49
Balance Sheet					
Cash	22	113	2,218	2,384	1,318
Total Assets	2,160	2,039	5,030	5,161	4,943
Total Liabilities	443	264	2,625	3,233	2,660
Total Equity	1,717	1,776	2,404	1,928	2,283
Cash Flow Statement					
Profit after tax	205	322	629	623	356
Depreciation	187	170	158	147	186
Change in Working Capital	(259)	(137)	(964)	(62)	378
CF from Operations	133	356	-178	708	919
CF from Investing	0	-117	-43	-1,384	31
CF from Financing	(264)	2,400	(500)	(600)	(600)
Change in cash	(210)	91	2,105	166	(1,065)
Valuation					
EV/EBITDA	5.4	4.6	2.9	3.5	5.5
P/E	13.9	8.9	4.5	4.6	8.0
Div. Yield (%)	0%	0%	0%	0%	0%

Source: Company accounts, KASB estimates

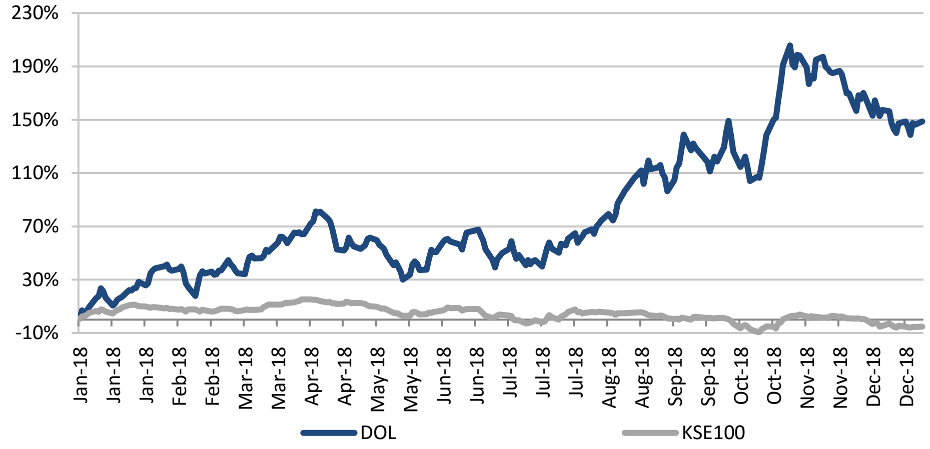
Investment thesis in charts

Declining breakeven levels to increase gross margins*



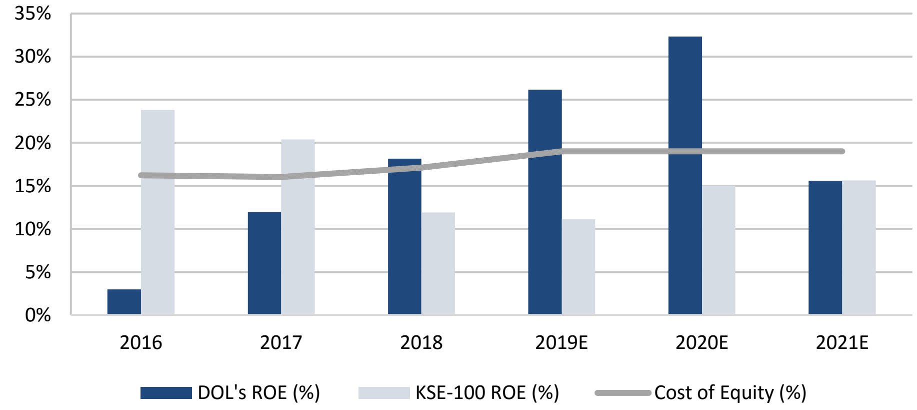
Source: Company data, KASB estimates
*For breakeven we have taken fuel cost, D&A, repair & maintenance and admin cost

DOL has outperformed KSE-100 by 129% in last year



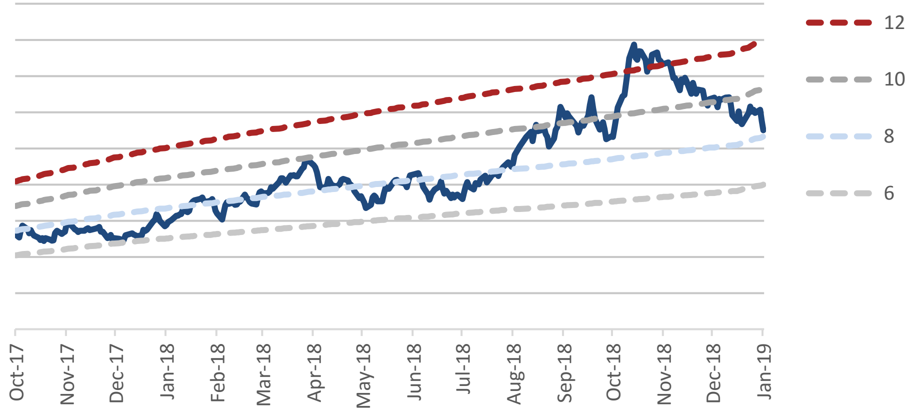
Source: Zakheera

ROEs to peak in 2020 before the supply glut kicks in



Source: Company data, KASB estimates

DOL’s performance in price to earnings (x)



Source: Bloomberg

Descon Oxychem's background

- Descon Oxychem was established in 2008 and has rapidly grown to be the market leader in Pakistan's Hydrogen Peroxide (H_2O_2) market. It has also established a geographical footprint in international regional markets. The company is a part of Descon Engineering's chemicals' line of business.
- Descon Oxychem supplies customized chemistries for textiles, food/ beverage safety, and other industrial and consumer markets. Further, Descon is actively exploring growth in international markets for pulp & paper, cosmetics, and electronics manufacturing.
- Descon Oxychem is well positioned to benefit from market growth opportunities in Pakistan and the serviced international geographies. Its business model, state of the art technology, impeccable product quality, extensive customer service outreach, and close partnerships with its customers give Descon a promising future.

Current management and their background

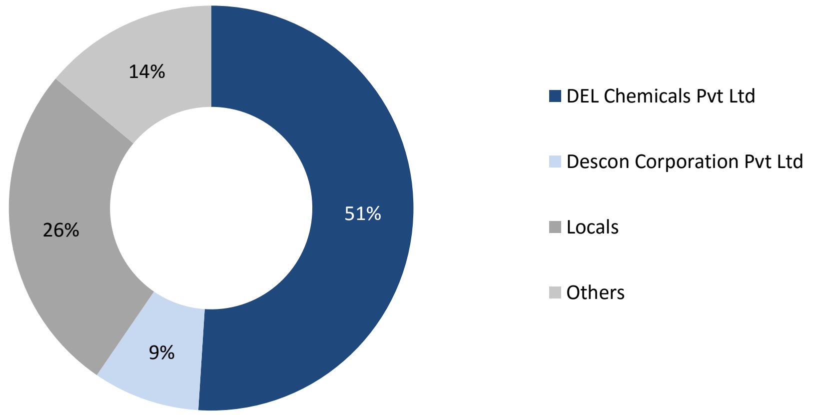
- **Mr. Taimur Dawood – Chairman** currently serves as Chairman of Descon; which includes Descon Engineering Ltd, Descon Oxychem Limited and Descon Power Solutions (Pvt.) Ltd among other Descon entities for the power sector. He is also the Managing Director of Gray Mackenzie Engineering Services BV, the Netherlands.

  He earned his bachelor's degree in industrial engineering from Purdue University, USA and MBA from Columbia University, New York, USA. Prior to joining Descon, Taimur Dawood worked as an equity analyst at Graham Partners, a technology focused hedge fund. He also worked at UBS as a technology analyst.

  Taimur Dawood has over 15 years of work experience in a variety of fields that include product marketing, project finance, strategy development & implementation, turn around management, mergers & acquisitions. From 2001 to 2011, he successfully ran Descon Chemicals as the Chief Executive Officer.

- **Imran Qureshi – Chief Executive Officer** was appointed as CEO on May 28th, 2018. Prior to this appointment, Imran Qureshi was working as the Managing Director of J&P Coats Pakistan for a period of two years till April 2018. Having 20 years' experience in the chemicals industry, Mr. Qureshi has had stints with AkzoNobel Coatings as Business Manager Performance Coatings and worked as a Business Manager with ICI Paints from February 2011 to December 2014. Mr. Qureshi received his degree of Bachelor of Engineering from NED University, Karachi in 1994 and completed his MBA from South-eastern University (Washington D.C.) He also holds a Diploma in Strategic Leadership from Said Business School, University of Oxford, UK.

Shareholding Pattern



Source: Company Accounts

Key reason # 1: Supply to outpace demand

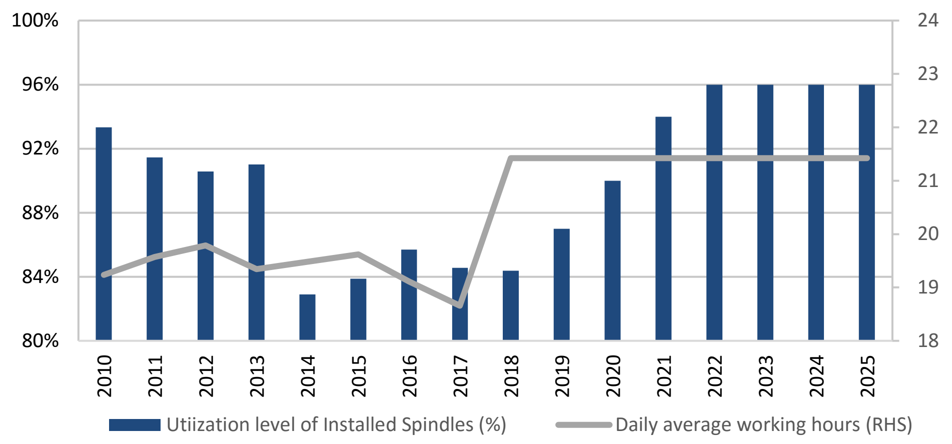
- Hydrogen peroxide industry has been unable to post any significant growth in recent years. Major chunk of industry demand (~80%) primarily comes from the textile sector followed by mining (~15%) and food & beverages (~5%). Recent policy initiatives and economic theme set by the federal government is likely to improve the textile output of the country.
- Recent improvement in hydrogen peroxide business has resulted in capacity expansion announcement from existing players as well as from the new entrants. These improved industry dynamics includes, ~50% increase in price of H_2O_2, PkR devaluation, anti-dumping duty along with the improved outlook for textile demand.

- Despite the discussed improvements, our projections hint towards a possible supply glut in the market as announced capacity additions are likely to outpace the industry demand. As per our estimates, industry demand is likely to grow with a 5yr CAGR of ~4% while installed capacities are projected to grow with a 5yr CAGR of ~12% resulting in a surplus of 22-23 KTPA.
- Companies operating in the segment are balancing the concern of oversupply with the viability of exporting the surplus.

Regional dynamics

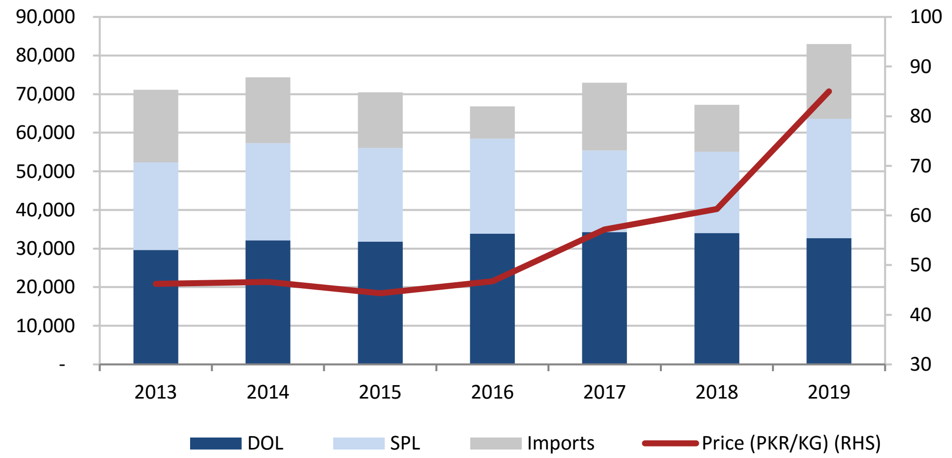
- To put things into perspective, Pakistan has imposed an anti-dumping duty on Bangladesh while India has imposed an anti-dumping duty on both Bangladesh and Pakistan. We are of the view that exporting the product may not be as easy as it seems because of regional dynamics and even if it happens, margins will likely be on the lower side.

Installed spindles are operating at lower utilization levels; can be a point of inflection?



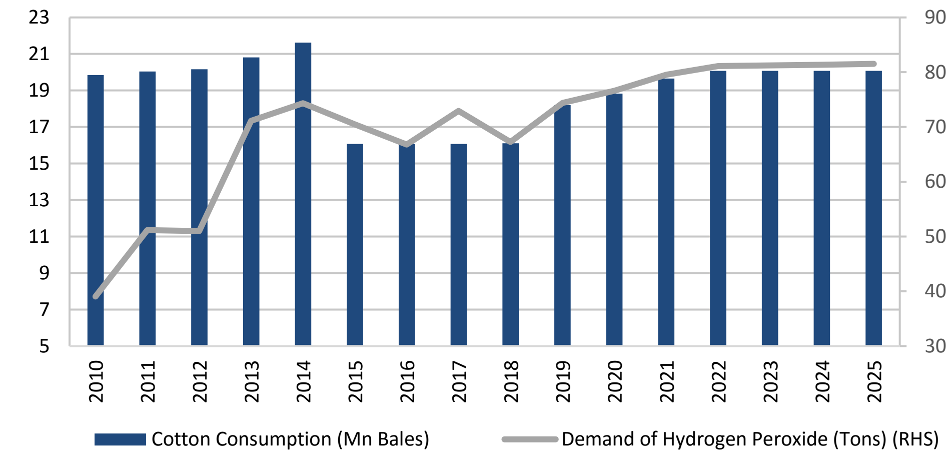
Source: Economic Survey of Pakistan

DOL has the highest share in H_2O_2 market



Source: Company Accounts, PBS

Cotton consumption and demand of Hydrogen Peroxide



Source: Company accounts, economic survey and PBS

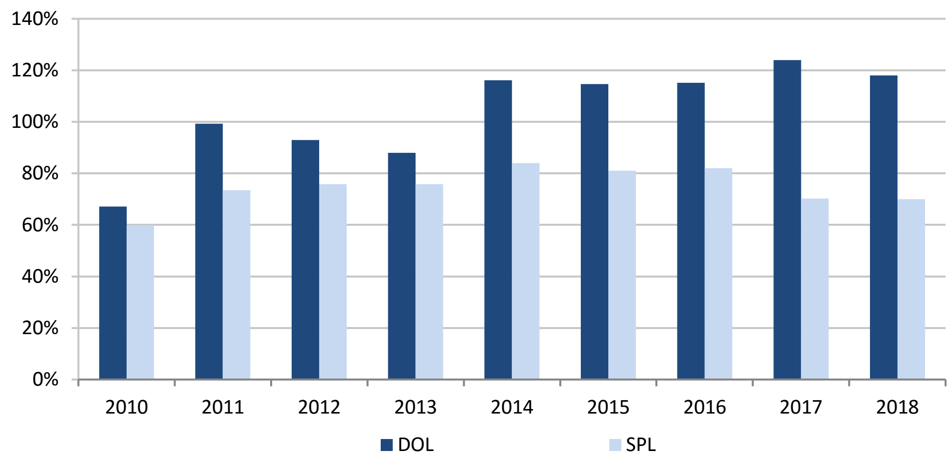
Key reason # 2: Beneficiary of currency depreciation

- Positive change in international dynamics has triggered upsurge in H_2O_2 prices. This increase in price was triggered by rising demand from downstream segments of Paper and Pulp, Textile, water treatment, etc. Rise in international prices coupled with PkR depreciation has resulted in the more than 50% increase in domestic prices.
- As H_2O_2's major operating cost (Gas, except for RLNG) is derived in PkR – unlike PVC and PTA manufacturers – import parity pricing has a higher impact on margins of DOL compared to other companies in our coverage cluster (EPCL and LOTCHEM). Thus, company's breakeven levels tend to get lower with every round of PkR depreciation.

Key reason # 3: Duty protection is providing much-needed comfort

- Hydrogen peroxide industry in the country had suffered losses in the recent past on account of dumping from different countries specially from Bangladesh. In response, National Tariff Commission of Pakistan has imposed an anti-dumping duty on the imports originating from Bangladesh (click here).

Greater operational efficiency than peers



Source: Company accounts, economic survey and PBS

Duty Structure

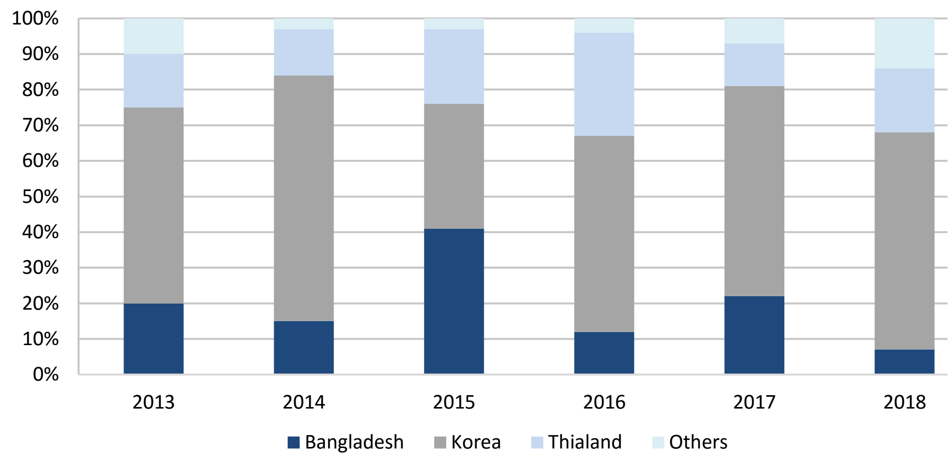
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Customs Duty	10%	10%	10%	10%	10%	10%	10%	11%	11%

Source: FBR

Anti-Dumping Duty Effective till Oct 2020	
Tasnim Chemical Complex Ltd	12.14%
Samuda Chemica Complex Ltd	10.67%
All oher imports originating from Bangladesh	12.14%

Source: National Tariff Commission (NTC)

Composition of imports by origin



Source: Pakistan Bureau of Statistics (PBS)

Valuation

- We have valued DOL using DCF to arrive at our TP of PkR 31. DOL has outperformed the benchmark index by 129% in 2018. DOL is trading at a forward CY19E P/E of 4.5x.

DCF Valuation

YE: JUNE	2019	2020	2021	2022	2023	2024	2025
Revenue	2,638	2,706	2,548	2,462	2,493	2,525	2,558
EBITDA	1,062	1,005	716	485	425	352	279
Tax	(277)	(219)	(107)	(60)	(62)	(62)	(41)
Capex	(265)	1,049	(391)	(305)	(287)	(270)	(254)
NWC	(964)	(62)	378	168	76	97	123
FCF	2,461	255	-559	302	232	255	189
PV of FCF	2,461	222	-414	188	118	104	64
Equity Value	3,139						
TP	31						

Source: KASB estimates

Key risks

Key risk to our thesis includes

- Increase in gas prices
- Supply glut in hydrogen peroxide market (H_2O_2)
- Removal of anti-dumping duty

Earnings sensitivity to gas prices

Gas Price	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case	**6.16**	**6.11**	**3.49**	**2.24**	**2.37**	**2.32**	**1.61**	**30.77**
10% Increase	5.92	5.82	3.15	1.83	1.92	1.82	1.07	27.57
20% Increase	5.68	5.53	2.82	1.42	1.46	1.33	0.53	24.36
30% Increase	5.44	5.24	2.49	1.01	1.01	0.83	(0.01)	21.13

Source: KASB estimates

Earnings sensitivity to PkR depreciation

USD/PKR	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case	**6.16**	**6.11**	**3.49**	**2.24**	**2.37**	**2.32**	**1.61**	**30.77**
5%	6.03	6.82	4.16	2.92	3.07	3.05	2.36	35.29
10%	5.90	7.53	4.84	3.59	3.78	3.78	3.12	39.79
15%	5.77	8.24	5.51	4.26	4.49	4.51	3.87	44.27

Source: KASB estimates

Earnings sensitivity to change in fuel mix

Fuel Mix (System-RLNG)	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Target Price
Base Case (70%-30%)	**6.16**	**6.11**	**3.49**	**2.24**	**2.37**	**2.32**	**1.61**	**30.77**
(60%-40%)	5.88	5.84	3.14	1.88	1.96	1.87	1.11	27.74
(50%-50%)	5.60	5.58	2.79	1.52	1.55	1.41	0.62	24.69
(40%-60%)	5.32	5.31	2.44	1.16	1.14	0.96	0.12	21.64

Source: KASB estimates

Although we foresee low likelihood of change in gas mix for DOL; the sensitivity is done to address market concerns.

This report has been produced by Syed Masroor Hussain Zaidi. He is a Certified Financial Analyst (CFA) level II Candidate and holds a master's degree in Economics from Institute of Business Administration (IBA), Karachi. He has a diverse experience of Research; prior to joining KASB he was associated with BMA Funds.

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Rating Definitions

- Outperform >10% potential of outperformance against KSE100 Index
- Neutral: -10% to 10% potential relative to KSE100 Index
- Underperform <-10% downside potential of relative to KSE100 Index