Initiating Coverage 20 June 2016

Oriental Carbon Chemicals Ltd

Current Previous
CMP: Rs 509

Rating: BUY Rating: NR
Target: Rs 700 Target: NR

(NR-Not Rated)

STOCK INFO	
INDEX	
BSE	506579
NSE	OCCL
Bloomberg	OTCC IN EQUITY
Reuters	ORCR.BO
Sector	Others
Face Value (Rs)	10
Equity Capital (Rs mn)	103
Mkt Cap (Rs mn)	5,240
52w H/L (Rs)	675 / 375
Avg Daily Vol (BSE+NSE)	6,405

SHAREHOLDING PATTERN	%
(as on Mar. 2016)	
Promoters	51.0
FIIs	-
DIIs	13.2
Public & Others	35.7

STOCK PERFORMANCE(%)	3m	6m	12m
OCCL	8.3	(6.9)	2.7
SENSEX	7.7	5.3	(1.6)

Source: Bloomberg, IndiaNivesh Research



Source: Bloomberg, IndiaNivesh Research

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OCCL is the third largest player in insoluble sulfur manufacturing after Solutia Inc, USA a subsidiary of Eastman Chemicals, USA and Shikoku Chemicals Corporation, Japan. The current market share of OCCL across the globe is 9% and 60% in Indian market. We believe the company will be beneficiary of the rising demand of Radialized Tyres especially from the Commercial Vehicles segment in India. In addition capacity expansion along with entry in North American market along with adding new larger clients is another catalyst for the stock. We initiate coverage on OCCL and recommend a BUY on the stock with target price of Rs 700.

Key Investment Rationale

- Higher Radialization of tyres augurs well for OCCL. The proportion of Insoluble Sulfur is more (1.7x higher) in radial tyres as compared to bias tyre. Demand for radialized tyre is increasing because of fuel efficiency, better mileage and light weight tyres.
- In India radialization in the passenger car segment has reached a saturation level; however, in the commercial vehicle tyre segment, rate of radialization stands at around 33%, we believe Insoluble sulfur demand would grow in double digit in medium to long term in domestic market due to increase in radialization in CV.
- OCCL's capacity expansion at Mundra will help them enter into new markets and add new larger clients. IS demand in North America stand at ~15% of total global demand, OCCL's Entry into North American markets and supply to larger tyre manufacturers would be a key growth driver of sales.
- OCCL has 60% market share in India and enjoy strong entry barriers. Closely guarded technological knowhow and long gestation period leads to very high entry barrier for IS industries.
- The company is planning to restructure its subsidiary Schrader Duncan ltd (SDL), to make it profitable.

Risk

- Price of Insoluble sulfur is highly dependent on Eastman: Eastman is the global price initiator of IS as it has world's largest capacity and price reduction by them may hurt other players.
- Insoluble Sulfur Industry is highly dependent on growth of tyre industry which is growing at a muted rate of only 3-4% globally.

Valuation

We believe the company will be beneficiary of the rising demand of radialized tyres especially from the commercial vehicles segment in India. In addition, capacity expansion in SEZ Mundra along with entry in North American market is another key catalyst for the stock. At CMP of Rs 509, the stock trades at PER of 9.7x and 8x its FY17E and FY18E; EPS of Rs 52.2 and Rs 63.6 respectively. Compared to its peers OCCL enjoys higher ROE and a higher margin, thus we assign a multiple of 11x (2 year forward PE) and value OCCL Rs 700 and we recommend BUY rating on the stock.

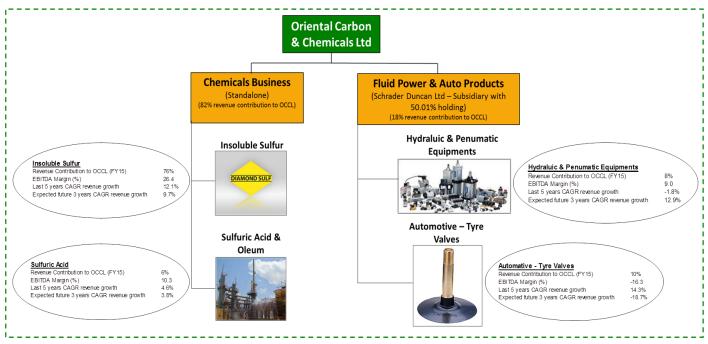
Financial Performance

YE March (Rs Mn)	Net Sales	EBITDA	Adj.PAT	Adj.EPS (Rs)	EBITDA Margin	RoE(%)	Adj.P/E(x)	EV / EBITDA (x)
FY14	3,308	689	391	37.9	20.8	20.5	13.4	8.8
FY15	3,468	682	491	47.6	19.7	21.8	10.7	8.7
FY16	3,381	818	495	48.0	24.2	18.8	10.6	7.0
FY17E	3,756	878	539	52.2	23.4	17.7	9.7	6.8
FY18E	4,301	1,052	656	63.6	24.5	18.5	8.0	5.6

Source: Company, IndiaNivesh Research

Company Profile

The core business of OCCL is manufacturing and sales of Insoluble Sulfur, which is used as a vulcanizing agent Oriental Carbon and Chemicals Ltd (OCCL) belong to JP Goenka Group of companies. OCCL manufactures Insoluble Sulfur, Sulfuric Acid and Oleums. The core business of OCCL is manufacturing and sales of Insoluble Sulfur, which is used as a vulcanizing agent. OCCL is the leading insoluble sulfur producer in India and a major supplier into Europe. Diamond Sulf is the brand, under which Insoluble Sulfur is sold by the company and it is offered in various grades like high dispersion, high stability, and special grade. The company has manufacturing facility at Dharuhera, Haryana, with a capacity of 12000 MTPA and Mundra SEZ, Gujarat with a capacity of 11000 MTPA. It is now expanding it's IS capacity by 11,000 MTPA in two phases of 5500 MTPA each at its SEZ plant at Mundra (Gujarat) by April 2017 and April 2018, respectively.

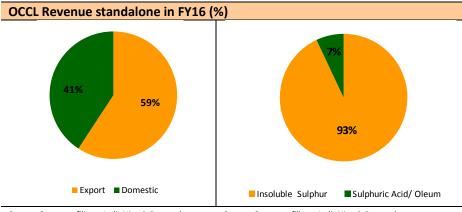


Source: Company filings; IndiaNivesh Research

OCCL is also engaged in the production of Sulfuric Acid & Oleum

SDL, its subsidiary, is engaged in the manufacturing of Automotive Tyre Valves and Fluid Automation Equipment. OCCL is also engaged in the production of Sulfuric Acid & Oleum which constitute about 7% of the total sales of the company in standalone revenue. The company has a subsidiary Schrader Duncan Ltd (SDL), where it holds 50.01% stake, is engaged in the manufacturing of automotive tyre valves and pneumatic products such as hydraulic and pneumatic cylinders, pneumatic valves and accessories. SDL had total revenue of Rs 635 mn as on FY16 which constitute ~18.8% of total consolidated revenue. However, as of FY16 SDL is a loss making entity (Reported Rs 69 mn loss in FY16), expected to turn positive in FY18e with higher sales in the Fluid Automation Equipment segment and reduced losses from the Automotive Valves segment.

In FY16 Exports contributed 59% and Insoluble Sulfur contributed 93% of standalone revenue for OCCL.

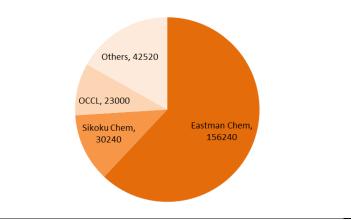


Source: Company filings; IndiaNivesh Research

Source: Company filings; IndiaNivesh Research

The company began production of insoluble sulfur in 1994 with 3,000 MTPA/year of capacity and expanded it to 23,000 MTPA/year. OCCL is the third largest player in insoluble sulfur manufacturing after Solutia Inc, USA a subsidiary of Eastman Chemicals, USA and Shikoku Chemicals Corporation, Japan. The current market share of OCCL across the globe is 9% and 60% in Indian market.

OCCL is the third largest player after Solutia Inc, USA a subsidiary of Eastman Chemicals, USA and Shikoku Chemicals Corporation, Japan



Market Share of Global Players for IS in CY14 (MTPA)

Source: Notch Report; IndiaNivesh Research

OCCL contributes ~ 23000 MTPA of insoluble sulfur and stands behind Eastman Chem and Shikoku Chem.

The company has presence in all continents across the world, and a 40 plus customer base. Its major customers include Continental, Bridgestone, JK Tyre, Pirelli, CEAT, Goodyear, Apollo, MRF, etc.

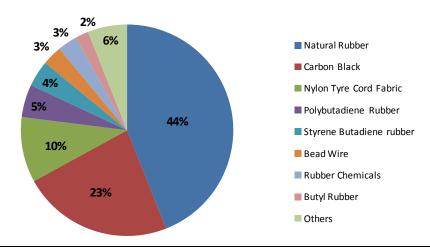
Investment Rationale

- 1. Higher demand of Radialized tyres augurs well for OCCL
- The rate of growth of Insoluble sulfur is mainly attributed to huge investments planned by the tyre companies and a shift in the ongoing trend in the industry towards radialization and premium tyres. The rubber chemicals which consist 3% of the total raw material of a tyre as shown below and Insoluble Sulfur is one of them. The proportion of Insoluble Sulfur is more in radial tyre by about 1.7x

of that required in cross-ply bias tyre. Further most of the capacities that are being set up are for radial tyres and hence this should provide a strong boost to IS consumption.

Percentage of weight of raw materials in tyre manufacturing

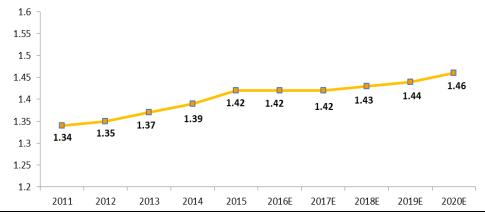
Insoluble sulfur forms a critical part in the manufacturing of Radial Tyres



Source: ATMA; IndiaNivesh Research

- The global demand for Insoluble sulfur was 252000 MT in CY14, where 91% of this demand was used in tyre production. Radial passenger vehicle tyre production accounts for 39% of IS demand while radial truck and bus tyres accounted for another 34% of demand, Other tyre types, including OTR, ag (agricultural tyres), aircraft, motorcycle, and racing, accounted for 18% of volumes.
- With radialization and R&D spending, the ratio of IS to tyre rubber has been continuously increasing in the past years, and expected to increase from 1.42 to 1.46, i.e. more insoluble sulfur will be used for every unit of rubber used to produce a tyre. With an expected increase in the number of tyres produced, and higher IS content per tyre, it should provide a double benefit to IS producers.

Radialisation: Insoluble sulfur to tyre ratio



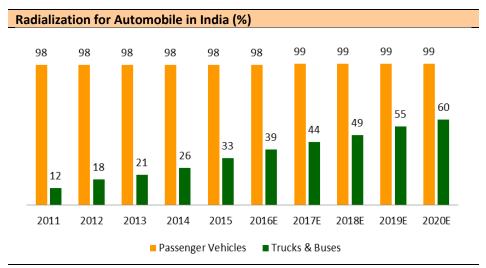
Source: Notch Report; IndiaNivesh Research

In a growing IS industry scenario OCCL is in a sweet spot to leverage its manufacturing capabilities, brand, long term relationships with domestic as well as multinational companies and a strong sales network across the globe.

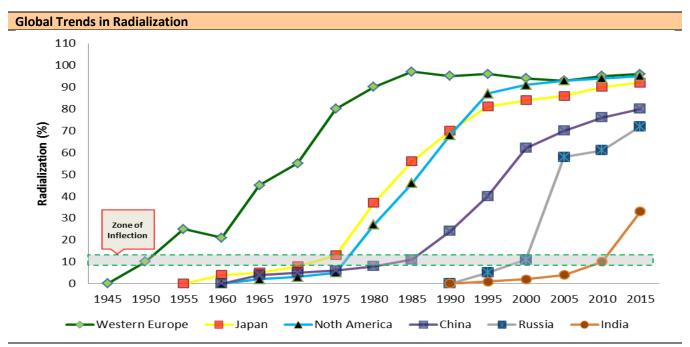
2. Commercial vehicles are the key growth driver of domestic IS demand

i) Under radialized CV segment: Radialization in the passenger car segment has reached a saturation level (98% mark); however, in the commercial vehicle tyre segment, rate of radialization stands at around 33%, which is quite low as compared to the radialization rate in developed markets or even China.

IS demand would be driven by CV segment in India as radialization Rate currently is quite low when compared with the developed markets



Source: ATMA; IndiaNivesh Research

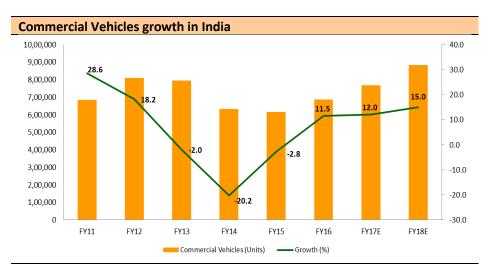


Source: Industry Literature; IndiaNivesh Research

Crossed inflection pont: Radialization levels in tyres worldwide have stabilized with the US, EU and Japan at 95~100%. China at 75% and is catching up with the developed world. A study of usage of radial tyres across various markets indicates that adoption has remained modest till a radialization level of 9~11% is achieved. In the past, markets have exhibited growth along a S-curve once this level or "zone of inflection" is breached. Going by current trends, India has entered in this zone of inflection in 2010-11 after which domestic demand for MHCV radial tyres started to

emulate towards the experience of other countries. Normally the strong growth sustains for 15-20 years after reaching inflection point till it reaches 90% or above. We can expect similar strongth growth in India too.

ii) Growth in CV segment: The CV industry was the worst affected during the economic downturn. However Overall CV Cycle has bottom out. M&HCV production has been 30% higher in FY16. This provides further opportunity for radialization of tyres in India, which, augers well for IS manufacturers like OCCL.



Source: ATMA; IndiaNivesh Research

- We expect Commercial vehicle segment (M&HCV + LCV) to grow in India at a CAGR of 13.5 % from FY16 to FY18E on the back of huge pent up demand, improvement in fleet operator sentiments due to better freight availability, higher government spending on infrastructure, firm freight rates and reduction in diesel prices and pre-buying due to new safety norms applicable.
- OCCL on standalone basis witnessed sound growth in domestic market at a CAGR of 11.56% from FY11 to FY16; going ahead we expect domestic revenue to grow at CAGR of 15.04% from FY16 to FY18e. Key growth driver would be 1) Higher rate of radialization in CV 2) Revival in CV demand.

Assessing demand of IS in India

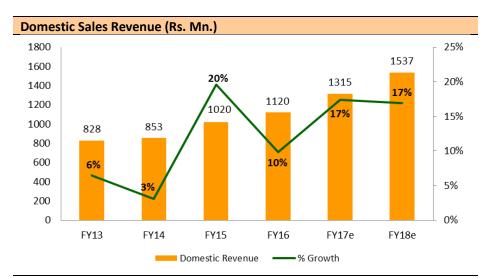
Radial Tyre & IS consumption growth in India

	Total Tyre	%	Total Inc	dia Tyre (Mn units)	Segme Radiali		Total India Ty - Radial (re Production Mn units)	_	(Kg) / re	IS Cons (MT) -		IS Consumption
Year	Production in India (Mn units)	Growth	PV	CV	PV	CV	PV	CV	PV	CV	PV	CV	(MT) Non- Radial
2010-11	119.20	22%	27.7	24.9	98%	12%	27.2	3.0	6.5	35	2471	1462	7753
2011-12	125.40	5%	28.7	25.6	98%	18%	28.2	4.6	6.5	35	2563	2256	7608
2012-13	122.78	-2%	32.1	26.4	98%	21%	31.4	5.5	6.5	35	2860	2713	7410
2013-14	128.88	5%	31.7	26.3	98%	26%	31.0	6.8	6.5	35	2824	3346	7177
2014-15	146.15	13%	35.7	27.3	98%	33%	35.0	9.0	6.5	35	3188	4414	7153
2015-16e	143.23	-2%	38.2	26.8	98%	39%	37.5	10.4	6.5	35	3411	5113	6487
2016-17e	151.82	6%	42.5	29.4	99%	44%	42.0	12.9	6.5	35	3824	6345	6555
2017-18e	160.93	6%	47.1	32.4	99%	49%	46.7	15.9	6.5	35	4245	7773	6602

Source: ATMA; IndiaNivesh Research

Key Assumptions -

- 1) IS consumption is expected to grow at a CAGR of 11.4% for FY16e-18e period because of increase propotion of radialization in CV.
- 2) For the growth of PV sales growth in India we have assumed GDP multiplier of 1.6x and CV sales growth in India we have assumed GDP multiplier of 1.3x.
- 3) For PV & CV segment, weight of tyre is assumed to be about 6.5 kg and 35 kg respectively.
- 4) For Radial Tyre we assume 1.4% of insoluble sulfur (1.7x higher than non-radial tyre) is used for each kg of a tyre while for Non Radial Tyre we assume 0.8% of insoluble sulfur being used for each kg of a tyre.



Source: ATMA; IndiaNivesh Research

OCCL Standalone Sales (Rs. mn)	FY12	FY13	FY14	FY15	FY16	FY17e	FY18e
Total net sales	2178	2255	2617	2826	2747	3131	3636
Growth%	37%	4%	16%	8%	-3%	14%	16%
Export	1401	1427	1764	1806	1627	1817	2099
Growth%	47%	2%	24%	2%	-10%	12%	16%
Domestic	778	828	853	1020	1120	1315	1537
Growth%	22%	6%	3%	20%	10%	17%	17%

Source: Company filings; IndiaNivesh Research

Average Insoluble Sulfur Price/Kg



Source: ZAUBA; IndiaNivesh Research

The average price/month for insoluble sulfur in India in 2015 as shown in the above table, we see that the price is moving between Rs 112-130/kg.

OCCL's IS sales Realization

Insoluble Sulfur	FY12	FY13	FY14	FY15
Average Sales Realisation/Kg (In INR)	119.58	129.15	135.25	124.57

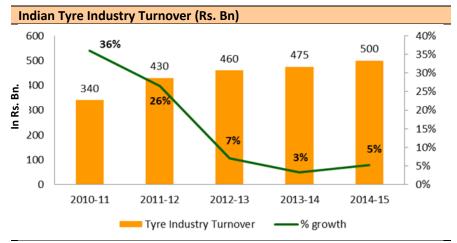
Source: IndiaNivesh Research

We can see that OCCL had a slighly better realization/kg for IS than the prevailing price in domestic market due to higher realization from export market and value added products. Its 64% of the revenue comes from exports which has made it earn a premium.

Overview of Domestic Tyre Industry:

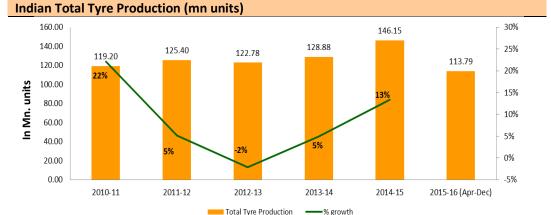
Tyre industry in India has grown at a CAGR of 12% in the last five years in revenue terms. The turnover of Indian tyre industry has reached Rs 500 bn in FY15 vs. Rs 250 bn in FY10.

The Indian tyre industry has become a Rs. 500 bn market



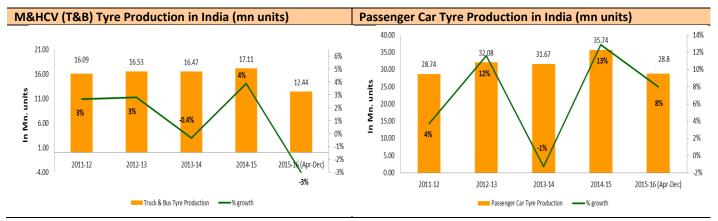
Source: ATMA; IndiaNivesh Research

■ In number terms, the tyre production grew at a CAGR of 5.2% in last five years and 13% in FY15. The double digit growth came in FY15 due to revival in automobile sales after three years of moderate growth.



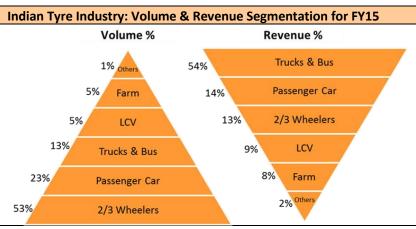
The Indian tyre production has grown at a CAGR of 5.2% for period FY11-15

Source: ATMA; IndiaNivesh Research



Source: ATMA; IndiaNivesh Research

Despite strong M&HCV growth, tyre production de-grew by 3% due to dumping from China. The Indian tyre industry is feeling the heat of cheap tyre imports from China. According to Automotive Tyre Manufacturers' Association (ATMA) (Source: Economic Times 28 May 2015), import of Truck and Bus radial tyres (TBR) from China has gone up three times from 0.19 mn tyres in FY14 to 0.55 mn tyres in FY15 and China has accounted for 70% of total TBR import in volume terms in India. The recent devaluation of Chinese currency has further heightened the concerns of already rising import of Chinese tyres. However, the industry body ATMA is constantly raising its concerns to the government and demanding an anti-dumping duty and correction in inverted duty structure for the sector.



Source: ATMA; IndiaNivesh Research

■ MHCV tyres contribute the most to the tyre industry, at about 54%, as they have a quicker replacement cycle. Currently MHCVs consume ~18mn tyres in India, with bias/cross ply accounting for 13mn (70% penetration). But Due to low maintenance cost and higher fuel efficiency, there has been a gradual shift from bias/cross ply tyres to radial tyres over the last few years. We believe radial penetration is expected to increase 4-5% every year and touch a 60% penetration by 2020 from the current 33% penetration. Demand for CV tyres is projected to increase to 30mn by 2020.

M&HCV (T&B) Tyre Production - Radial & Bias (units)

	FY 2014-	15		Radial as		FY 2015-16		Radial as
Months	Bias	Radial	Total	% of total	Bias	Radial	Total	% of total
April	981420	388885	1370305	28%	911505	480433	1391938	35%
May	1059443	408106	1467549	28%	898073	524469	1422542	37%
June	994341	437268	1431609	31%	881306	518321	1399627	37%
July	1001403	448362	1449765	31%	888114	524832	1412946	37%
August	942038	451032	1393070	32%	842556	519946	1362502	38%
September	964742	470557	1435299	33%	887298	510524	1397822	37%
October	916581	447358	1363939	33%	902242	470741	1372983	34%
November	950287	498650	1448937	34%	833705	457479	1291184	35%
December	915425	517143	1432568	36%	895064	493976	1389040	36%
Total	8725680	4067361	12793041	32%	7939863	4500721	12440584	36%
Avg Mthly (Apr-Dec)	969520	451929	1421449	32%	882207	500080	1382287	36%
% change (YoY)					-9%	11%	-3%	

Source: ATMA: IndiaNivesh Research

Above table shows that radial tyre is growing at a faster pace in M&HCV segment total sales increased by 11% YoY for 9MFY16 despite 3% decline in overall production. This indicates that now the consumer is demanding better quality product and is ready to pay the price for it.

3. Strong investment in Radial Tyre in domestic market would accelerate the demand of Insoluble Sulfur

Sensing enormous scope and changing trends in the tyre industry, tyre companies, both domestic and international, are investing heavily in radialization in tyres, mainly truck and bus tyres India.

Radial Tyre capacity addition in India

Company	Location	Project	production/	Post expansion- Tyres production/ Day
Apollo Tyres	Chennai	Brownfield	6,000	16,000
JK Tyre	Chennai	Brownfield	25167	33500
Continental	Faridabad, Haryana	Greenfield	-	611
Michelin	Chennai	Greenfield	-	833

Source: Bloomberg; Capitaline; IndiaNivesh Research

In recent times, many tyre companies have announced TBR capacity expansion. As per Rubber Asia article, India's major tyre maker Apollo Tyres is working on brownfield expansion in the Chennai plant for TBR capacity where it plans to increase the TBR capacity to 16,000 tyres per day in next one-and-a-half years from the current capacity of 6,000 tyres per day. JK Tyre & Industries has invested around Rs 15 billion to improve its capacities of TBR and passenger radials at its Chennai plant. After the completion of expansion at Chennai, the company's passenger car radial (PCR) capacity will go up from 7.6 million tyres to 9.8 million tyres per annum, and truck and bus radial tyre (TBR) capacity will go up to 2.26 million from 1.46 million tyres per annum.

International players are also gearing up to tap the growing demand for TBR tyres in the country. Last year, Continental launched TBR tyres in the domestic market. The German tyre maker will be rolling out the radial tyre from its plant based in Faridabad, Haryana State, which has an annual capacity of 220,000 radial tyres. Michelin too has started rolling out TBR tyres from its Chennai plant, which has an annual capacity of 300,000 radial tyres for commercial vehicles. Investments in India by Indian and International tyre companies for expanding their tyre capacities would

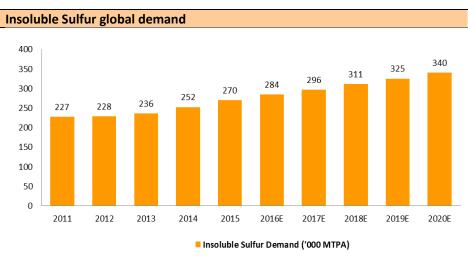
India's Apollo Tyres and JK Tyre have been investing on expansions for TBR segment

International players like
Continental and Michelin have
been investing in India for
expansions in TBR segment

lead to an increased demand for insoluble sulfur, and OCCL having good presence in Indian market would be the sole beneficiary.

4. Global IS demand would be driven by global tyre growth.

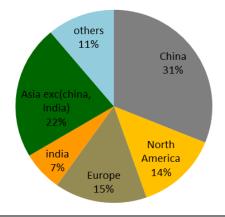
As per Notch report, total demand for IS is forecasted to grow at a CAGR of 5% driven by Asia, particularly China, India, Indonesia, Thailand, Vietnam, Brazil and Russia. IS world demand is expected to reach 3,40,000 MTPA by 2020 from 2,52,000 MTPA in CY14. This growth will be driven by the \$28 bn investment in tyre capacity expansions by 2020. In particular, insoluble sulfur demand will directly benefit from the ongoing trend in the tyre industry towards premium tyres, including high performance, winter and low rolling resistance tyres. In the truck tyre segment, ongoing radialization trends will also drive greater demand for IS.



Source: Notch Report; Company filings; IndiaNivesh Research

Continued rise in demand for passenger cars is developing markets such as India and China and projected rise in automotive ownership over the next few years in Non-BRIC emerging nations such as Columbia, Indonesia, Vietnam, Egypt, Turkey and South Africa will also help sustain growth prospects for insoluble sulfur in coming years

Country Wise World Demand for Insoluble Sulfur in CY14



India, Indonesia, Thailand, Vietnam, Brazil and Russia to be the leaders in demand for IS

We expect North America, China,

Source: Notch Report; IndiaNivesh Research

Global market for tyres is heavily dependent on the automotive industry, which in turn is a barometer of general economic health in a country. While automobile production trends influence demand patterns in the OEM tyre market sector, vehicle population, replacement cycles, and emergence of disruptive technologies influence demand patterns in the replacement tyre sector. Demand for better quality tyres leads to radial tyres which will drive demand for insoluble sulfur. GDP growth, employment levels, consumer discretionary spends, and average vehicle operating life influence demand in the passenger car tyre market. Expansion of commercial vehicle and overall health of public transportation, mining, construction, and agriculture end-user industries, influence demand for truck, bus, aircraft, industrial and utility vehicle, and farm implement tyres.

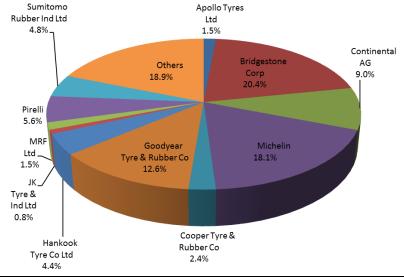
Global Vehicle Production (mn units)

Country	2010	2011	2012	2013	2014	CAGR 2010-14
India	3.55	3.94	4.15	3.90	3.86	2.1%
China	18.26	18.42	19.27	22.12	23.72	6.8%
Japan	9.63	8.40	9.94	9.63	9.77	0.4%
Europe	17.03	18.28	17.00	16.88	17.25	0.3%
Others	15.52	15.89	15.45	17.94	16.72	1.9%
North America	12.15	13.47	15.80	16.50	17.42	9.4%
Total	76.15	78.40	81.62	86.95	88.75	3.9%
Growth		3.0%	4.1%	6.5%	2.1%	

Source: US Department of Transportation; IndiaNivesh Research

Global vehicle production has grown at a CAGR of 3.9% for period 2010-14. The fastest growing market is North America which includes- USA, Canada & Mexico, which has grown at a CAGR of 9.4% for period 2010-14. China remains second and India third with 6.8% and 2.1% CAGR growth for period 2010-14. Major tyre demand is expected to come from these fast growing countries, which will demand radial tyres and insoluble sulfur.

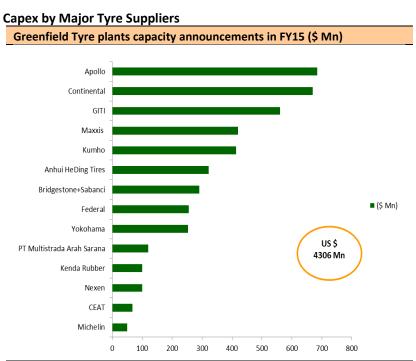




Source: Bloomberg; IndiaNivesh Research

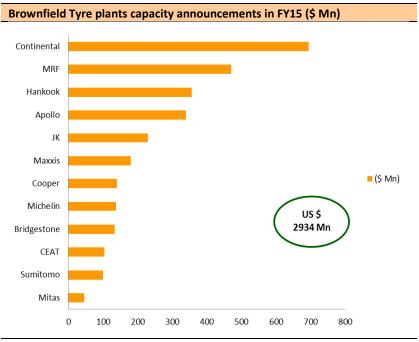
In terms of tyre manufacturers, Bridgestone Corp leads the global market share with 20.4% followed by Michelin with 18.1% and then Goodyear tyre and Rubber co with

Top three global players to dominate the market with over 50% of the market share 12.6%. These three companies dominate the market with over 50% of the market share. Top Indian companies like – MRF Ltd, Apollo Tyres and JK Tyre also feature with global market share of approx. 4%. These companies deal with different geographies and have tie-ups with the car manufacturers (OEM) and tyre replacement stations.



Source: ATMA; IndiaNivesh Research

Tyre plant capacity expansions by major companies would result in more demand for insoluble sulfur.



Source: ATMA; IndiaNivesh Research

OCCL has established itself as the second alternate supplier

5. Strong Clientele/ Global presence

OCCL is the third largest player after Solutia Inc, USA (~62% market share), a subsidiary of Eastman Chemicals, USA and Shikoku Chemicals Corporation, Japan, the only three recognized players in IS, globally. OCCL derives ~64% of its standalone revenues from exports with Europe being the major market. In terms of the global IS market, OCCL has now established itself as the second alternate supplier to tyre producers in the West and has also started supply to two tyre plants in North America. It supplies to all Indian companies (MRF, Apollo, CEAT, JK Tyres, and Birla Tyres) and to two of the three biggest global tyre companies (Goodyear and Continental who have a combined global tyre share of 34%). OCCL does not supply to Michelin (second biggest tyre company in the world) due to large quantity commitment for which OCCL lacks capacity. After planned capacity expansion it may start supply to Michelin too. It also supplies to other players like Pirelli, Sumitomo, Hankook and Nokian.



Source:Company filings; IndiaNivesh Research

OCCL has a presence in 21 countries across the world with a large presence in Asia and Europe which is expected to be the leading market in terms of demand for radialized tyres. It also has an office and warehouse in Germany to facilitate easy distribution of products in Europe.

Competition Landscape

An Overview of top IS suppliers

Peer Comparison

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Leading IS Suppliers	Headquarters	Existing Capacity (MTPA) as of FY16		Geographic Focus
Eastman Chemicals (Flexsys)	Kingsport, TN, USA	155000	195000	USA, Canada, Asia Pacific
Shikoku Chemicals	Kagawa, Japan	30000	39000	Japan
OCCL	Kolkata, India	23000	34000	India, Europe
Shanghai Jinghai Chemicals	Shanghai, China	16000	26000	China
Others	-	51000	60000	China, India, Others
Total		275000	354000	

Source: Notch Report; IndiaNivesh Research

World's leading producer of IS – Eastman and Shikoku **Eastman** is world's leading producer of insoluble sulfur. The current plants combined capacity is of ~155000 MTPA. Nienburg and Kuantan are the largest plants, each with an estimated capacity of ~40000 MTPA, while the others each have an estimated ~15000 MTPA of capacity. It is expanding its Insoluble sulfur capacity at Kuantan, Malaysia by ~40,000 MTPA to make it the largest IS plant in the world. This plant is expected to be operational from first half of 2017. This expansion will help them remain the market leader and the price maker for IS. Eastman's main markets are USA, Canada and Asia Pacific where it supplies Insoluble sulfur to most of the tyre and rubber industries under brand name — Crystex.

Shikoku Chemicals has traditionally focused on the Japanese market for insoluble sulfur, and the company is a leading supplier to Bridgestone. It operates three plants through an affiliated company, Shikoku Keizai Corporation, located in Tadotsu, Kagawa; Naruto, Tokushima; and Hiki-un, Saitam. It has combined capacity of ~30000 MTPA and is currently expanding capacity by 30-40% (9000-12000 MTPA) in Kagawa, Japan by 2017. It sells IS under a trade name known as "Mu-cron".

OCCL is the third largest IS supplier in the world and plans to sell in North America and China. It is expanding IS plant capacity in two phases to reach 34000 MTPA by 2018. It sells IS under brand name- Diamond Sulf.

Shanghai Jinghai Chemicals is a Chinese company mainly focusing in China. It plans to expand it's IS plant capacity by 10000 MTPA by 2018 to meet the Chinese demand. It sells IS under brand name - Sangian.

Other IS suppliers include – China Sunsine Chemicals, Jiangsu Sinorgchem which majorly supply to the Chinese market and Korea Kumho focusing on the Korean market.

6. Entry in North America: a growth driver

- Recently OCCL has started supply of IS to Continental AG and others in North America. As per the management the company is targeting around 10% market share in North America by FY18. We believe that the North American market whose IS demand is 14% of total global demand would be the key driver of the growth for OCCL's exports.
- The North American region comprises the U.S., Canada, and Mexico, which is also a matured automotive market. However, several OEMs are setting up manufacturing facilities in Mexico, owing to cheap labor and low cost of production. This has increased the vehicle production volume of Mexico, and hence will drive the tyre market in the country. Additionally, the vehicle parc (vehicle in use) volume and the average lifespan of vehicles are increasing in U.S.; this boosts the growth of the tyre aftermarket. The North American automotive tyre market is projected to grow at a CAGR of 6.5% from 2016 to 2020 as per Notch report.
- The demand for insoluble sulfur in North America totalled 40,000 tons in CY15, or 14% of global demand. This demand level is based on regional tyre production (passenger car and truck/bus only) totalling 235 mn units in 2015. The North America market for insoluble sulfur is dominated by HS grades, which accounted for 77% of total demand in 2015. HD grades have made major inroads into North American market and accounted for 23% of volumes in 2015, while standard grades account for the 4% of demand, mainly in non-tyre rubber goods. The US accounts for 78% of the North American market, with Canada accounting for 12% and Mexico for 9% of regional volumes. In North America as

OCCL has started supply of IS to in North America to tap a bigger geography

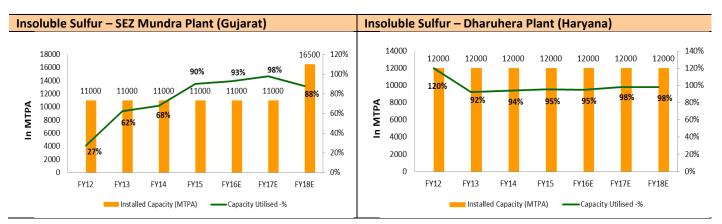
North American region comprises the US, Canada, and Mexico, but US to be the differentiator

The North America market for insoluble sulfur is dominated by HS grades of CY14, Bridgestone, Michelin and Goodyear each had ~20% market share and OCCL is already supplying IS to Goodyear and Bridgestone in other geographies. Further adding capacity in Mudra will enable OCCL to start IS supply to new clients as well.

7. Capacity Expansion and adding new client would boost the sales

OCCL is expanding its capacity by 11000 MTPA in two stages at its Mundra SEZ plant OCCL is expanding its capacity in two stages at its Mundra SEZ plant, which will increase its capacity by 11000 MTPA to 34000 MTPA and will cater to growing export markets. With visibility of 90% capacity utilization, OCCL is adding 11,000 MTPA IS capacity at Mundra with an investment of Rs. 1.60 bn, through mix of debt and internal accruals. First phase of 5,500 MTPA is expected to get commissioned in FY17 end; work on second phase will finish in FY18 end. Currently OCCL does not supply to Michelin (second biggest tyre company) due to large quantity commitment which the company lacks. Adding new capacity may help to service Michelin.

We believe that Mundra SEZ apart from providing fiscal benefits would result in significant savings in freight in servicing the export orders. Choosing Mundra as the location for the new plant has given many advantages to OCCL. Firstly, exports account for greater than 60% of the total sales and hence a production facility near a port will help reduce logistic and freight cost. Secondly, as it is an SEZ, power costs are lower and there are also income tax benefits. Thirdly, more land and common infrastructure is already available for future expansion.



Source: Company filings; IndiaNivesh Research

OCCL expects world IS demand to rise to 340000 MTPA by 2020 Eastman is increasing its capacity by 40000 MTPA and Shikoku by 30-40% by H1FY17 OCCL has mentioned in their presentation (Notch report) that IS demand by 2020 would rise by 70000 MTPA to 340000 MTPA. On Supply side around 40,000 MTPA plant in Malaysia is going to come by Eastman. At the same time OCCL's 11,000 MTPA capacity is going to come on stream and also Shikoku Chemicals is increasing capacity by around 30%-40% by the first-half of 2017. It means 50,000 to 60,000 MTPA would be coming on stream from the supply side, thus we believe that the supply is growing with the market opportunities. OCCL believes that it is not much impacted by Eastman controlling the price as it has better margins.

OCCL has developed value added grades of IS which has good demand. It will help OCCL to have an edge its competitors

The Industry has strong entry barriers and it takes 5-6 years to actually start sales for a new entrant

Schrader Duncan has two businesses, one is Tyre valves, and other is fluid power & automation

Fluid Power & Automation (FPA)
portfolio caters to various
engineering and other industries

8. Quality is the key to success in IS Industry

■ The demand of value added Insoluble Sulfur grades such as AS, HD grades is growing. The reasons for this are the advantage that it offers such as ease of handling and more production flexibility to the consumer. OCCL through continuous Research and Development efforts has developed new value added grades many of which are now approved by international tyre companies. This gives an edge to OCCL against competitors from China in the international market besides helping to sustain realization levels.

9. Entry barrier: long gestation period to stabilize

The Industry has strong entry barriers as the industry is closely guarded by technological knowhow and it takes at least 3-4 years for any new entrant to actually start production due to environmental approvals and plant setup. Thereafter it takes another 2 years to tie-up with the tyre manufacturers. Existing users of IS do not easily switch to the new entrants due to their relation with current players. As an example of this, Finorchem (Chinese) who was a new entrant in the IS business tried to sell to the global IS users but unable to do so and ultimately it has shut down recently.

II. Schrader Duncan ltd (SDL) - (A subsidiary of OCCL)

Schrader Duncan Itd (SDL) is a subsidiary of OCCL (holds 50.01% stake). Schrader Duncan has two businesses, one is Tyre valves, and other is the pneumatic (fluid power & automatic) actuators. Pneumatic actuators is doing well, however, the Tyre valves business is currently under stress.

Fluid Power & Automation (FPA) portfolio includes pneumatics, hydraulics and valve automation Systems for diverse applications in segments like metals, energy & environment, cement, printing & packaging, pharma, machine tools, material handling, process, construction machinery and other general engineering industries. Pneumatic systems are dependent on the force of compressed air to transmit power.

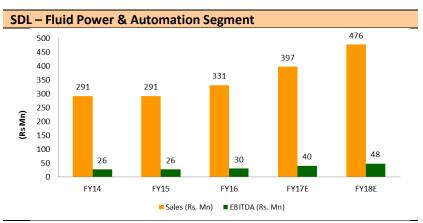
Under this segment the company produces pneumatic cylinders, hydraulic cylinders, pneumatic valves, air preparation units, pneumatic accessories, valve automation system, etc.

- <u>Hydraulic cylinder</u> is a mechanical actuator that is used to give a unidirectional force through a unidirectional stroke. It has many applications, notably in construction equipment (engineering vehicles), manufacturing machinery, and civil engineering.
- <u>Pneumatic cylinders</u> (also known as air cylinders) are mechanical devices which produce force, often in combination with movement, and are powered by compressed gas (typically air).

Pneumatic valves are amongst an array of components responsible for controlling the pressure rate and amount of air as it moves through a pneumatic system.

This business is likely to grow at a faster rate leading to SDL making profits

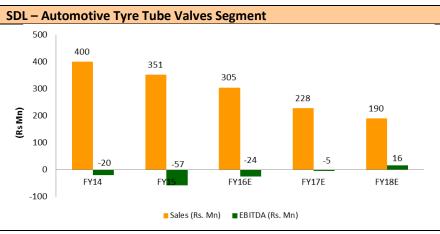
This business generates losses for the company. SDL plans to reduce sales and production in this business to reduce losses



Source: Company filings; IndiaNivesh Research

Automotive & off-highway (OTR) tyre offering includes tyre tube vales & accessories, tubeless tyre valves (TTV) and tyre repair products.

- Automotive valve consists of a valve stem into which a valve core is threaded, and is used on virtually all automobile tyres and motorcycle tyres and most wider rimmed bicycle tyres. The valve core is a poppet valve assisted by a spring. The valve consists of an externally threaded hollow cylindrical metal tube, typically of brass.
- The growing demand for tube and tubeless tyres in the automotive segment, presents an opportunity for volume and market share growth.
- In the foreseeable future the focus of the company will be on pneumatic valves rather than tyre valves.



Source: Company filings; IndiaNivesh Research

SDL is expected to make profits in FY18e from the Fluid Automation Equipment segment which is expected to grow as demand from user industry picks up. SDL is restructuring its business where it will reduce focus on Automotive Valves segment sales in order to reduce the losses as the demand is low.

SDL segmentwise sales	FY14	FY15	FY16	FY17E	FY18E
Automotive tyre tube valves	400.36	351.48	304.56	228.42	189.59
Fluid Power & Automation	290.88	291.32	330.58	396.70	476.04
Total Net Sales (Rs Mn)	691.24	642.80	635.14	625.12	665.62

Source: Company filings; IndiaNivesh Research

The company is trying to reduce losses in SDL by gradually cutting Automative tyre tubes valve sales. During this transformation SDL aims to make profits in FY18 by improving sales in Fluid Automation business which is a highly profitable business backed by strong demand from engineering and other industries.

Fluid Power & Automation segment to grow at a CAGR of 13.1% from period FY16 to FY18E. While Automotive tyre tubes valve segment to de-grow at a CAGR of 14.3% from period FY16 to FY18E.

Key Assumptions -

- 1. Automotive valve business to de-grow by 14.3% as it is a loss making entity and the company is planning to reduce their expenses and sales.
- Fluid Automation business has an average 9-10% EBITDA margin for last three
 years. Demand for these products are increasing from engineering and other
 industries so SDL plans to increase its sales of Fluid Automations in order to
 make the company profitable.

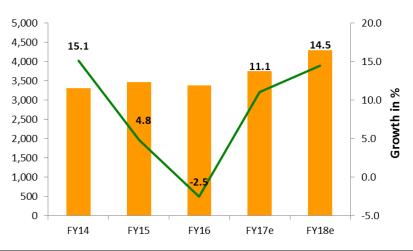
Financials

Consolidated Financials

Net Sales is expected to grow at 12.79% CAGR from FY16-FY18e

Consolidated Net Sales (Rs Mn)

Standalone revenue to grow at a CAGR of 15.04% and SDL revenue to grow at CAGR of 2.37% from FY16- FY18e

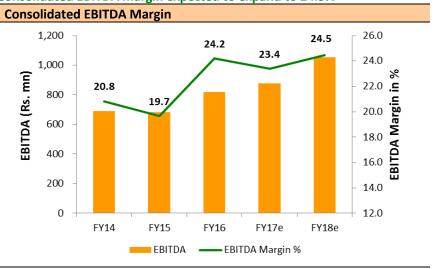


Source: Company filings; IndiaNivesh Research

Net Sales is expected to increase by 12.79% CAGR from FY16-FY18e on account of strong demand in domestic market (15.9% CAGR growth from FY16-FY18e) due to higher growth of radialized tyre in CV segment and value added products. We believe major growth would be witnessed from FY18e due to plant expansion along with entry into new markets (North America and China to drive their growth). In addition, OCCL has also shifted its product range from low grade Insoluble Sulfur to value added Insoluble Sulfur grades such as AS, HD grades, which helps company to get better realization.

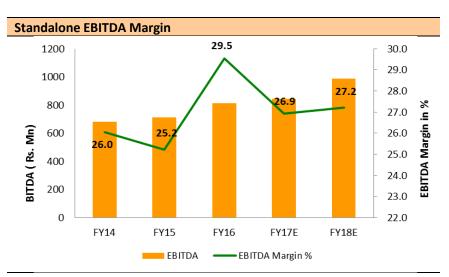
We expect standalone revenue to grow at a CAGR of 15.04% and SDL revenue to grow at CAGR of 2.37% from FY16-FY18e.

Consolidated EBITDA margin expected to expand to 24.5%



Source: Company filings; IndiaNivesh Research

On consolidated basis, currently the EBITDA margin is low because of SDL where automotive tyre tube valves segment has a negative EBITDA. We expect on a consolidated basis EBITDA margin to expand by 30 bps in next two years due to % share of higher grade IS increasing and margin improvement of its subsidiary SDL with Fluid Power & Automation segment having improved sales.

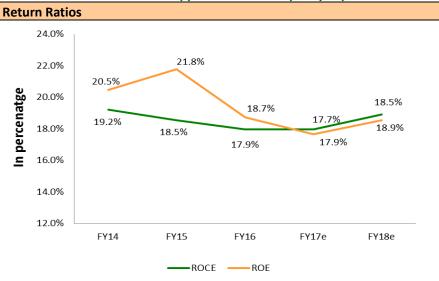


Standalone basis EBITDA Margin to remain above 26%

Source: Company filings; IndiaNivesh Research

We expect OCCL (standalone basis) to maintain EBITDA Margin of 26% due to improvement in capacity utilization and better product mix. We believe higher operating leverage and strong customer base with long-term relations would help OCCL sustain its margin in the longer term.

ROE and ROCE would remain suppressed due to capacity expansion

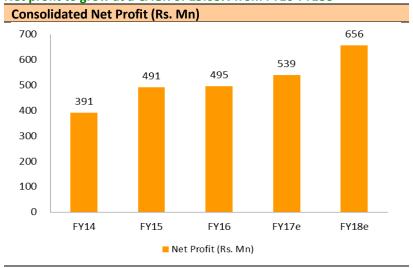


Capacity addition by OCCL to grow return ratios back in FY18e

Source: Company filings; IndiaNivesh Research

Return ratios for OCCL is expected to further contract in FY17e due to capex plans and thereafter it will start to show upward trend due to incremental capacity becoming available. OCCL has proposed a brownfield capacity expansion plan, at Mundra, Gujarat, at an investment of Rs. 1.6bn, funded through a mix of debt and internal accruals. This expansion will increase the existing capacity of IS (23,000 MTPA) of OCCL to 34,000 MTPA in two phases. Benefit of 1st phase will accrue in FY18 and 2nd phase in FY19. Hence full benefit of expansion will be visible FY19 onwards.

Net profit to grow at a CAGR of 15.08% from FY16-FY18e



Net profit to grow on account of improved capacity utilization and better EBITDA margins

Source: Company filings; IndiaNivesh Research

Net profit expected to grow on account of improvement in capacity utilization and higher EBITDA Margins, offset by increase in interest expense. SDL is expected to turn positive by FY18 with higher sales in the Fluid Automation Equipment segment and reduced losses from the Automotive Valves segment.

Forecasted fundamentals for OCCL (SA) and SDL

Quick	OCCL Standalone		SDL		OCCL Consolidated		
Fundamentals	FY 17E	FY 18E	FY 17E	FY 18E	FY 17E	FY 18E	
Net Sales (Rs. mn)	3131	3636	625	666	3756	4301	
EBITDA (Rs. Mn)	843	989	35	63	878	1052	
PAT (Rs. Mn)	557	654	-18	1	523	657	
Minority Interest	-	-	-	-	-16	1	
Adj. PAT (Rs. Mn)	557	654	-18	1	539	656	
EPS (Rs)	54.01	63.48	-4.90	0.40	52.25	63.62	

Source: IndiaNivesh Research

Key Risks

- Price of Insoluble sulfur highly depends on Eastman; as Eastman is the largest supplier, any price reduction by them will hurt operating margin of other players.
- Insoluble sulfur Industry is highly dependent on growth of tyre industry.
- OCCL derives roughly 64% of revenues in foreign currency and stands exposed to currency fluctuations. Any unfavorable currency trends in the future can severely dent the profitability of the company.
- Leading tyre companies are investing in India in order to increase their tyre plant capacities which may lead Eastman to start IS plant in India, which may negatively impact OCCL.

Valuation:

We believe the company will be beneficiary of the rising demand of radialized tyres especially from the commercial vehicles segment in India. In addition, capacity expansion in SEZ Mundra along with entry in North American market is the key catalyst for the stock. At CMP of Rs 509, the stock trades at PER of 9.7x and 8x its FY17E and FY18E; EPS of Rs 52.2 and Rs 63.6 respectively. Since there are no comparable peer for the company as it is the only producer of IS in India we compare its valuation with other rubber chemical producers like NOCIL, Deepak Nitrite and Phillips Carbon. Compared to its rubber chemical peers OCCL enjoys higher ROE and a higher margin, thus we assign a multiple of 11x (2 year forward PE) and value OCCL Rs 700 and we recommend BUY rating on the stock.

Peer Comparison (Rubber Chemical Companies)

Peer group comparison (FY16)	Sales (Rs mn)	EBITDA margin (%)	PAT (Rs mn)	ROE (%)	ROCE (%)	PE (X)
OCCL	3381	24.2	495	18.8	18.0	10.2
NOCIL	7078	19.7	783	16.6	17.7	10.5
Deepak Nitrite Ltd	13573	12.1	627	10.0	15.3	14.7
Phillips Carbon Black Ltd	18927	10.6	214	3.0	4.2	21.9

 $Source: {\it Bloomberg; Capitaline; IndiaNivesh Research}$

OCCL is into insoluble sulfur which is used by the rubber industry, whereas NOCIL is the largest rubber chemicals (Accelerators, Antioxidants, Antidegradants, Pre Vulcanization Inhibitor, Post Vulcanization Stabilizer) manufacturer in India. Deepak Nitrite Ltd is a leading supplier of rubber specialty chemicals (anti-oxidant PANA, DNPT, resorcinol, Para Nitro Cholorobenzene, Ortho Toluidine) with global presence. While Phillips Carbon Black Ltd is the eighth largest carbon black manufacturer in the world. Carbon black is a major reinforcing filler used in rubber compounds. OCCL is having a better EBITDA margin and return ratios when compared to the above mentioned companies and trades below its peers PE(x) TTM basis, so there lies an opportunity.

OCCL has been trading at an average PE of 11.6x for the last 3 years on back of strong net profit growth at a CAGR of 20.6% and maintaining EBITDA margin above 20%. Compared to its peers it enjoys higher ROE and a higher margin, thus we assign a multiple of 11x (2 year forward PE) and value OCCL Rs 700.

Income Statement (Consolidated)

Y E March (Rs m)	FY14	FY15	FY16	FY17E	FY18E
Net sales	3,308	3,468	3,381	3,756	4,301
Growth (%)	15	5	(3)	11	15
Operating expenses	(2,619)	(2,786)	(2,563)	(2,878)	(3,249)
Operating profit	689	682	818	878	1,052
Other operating income	0	0	0	0	0
EBITDA	689	682	818	878	1,052
Growth (%)	25.1	(1.1)	19.9	7.4	19.8
Depreciation	(129)	(164)	(203)	(211)	(239)
Other income	77	136	57	68	75
EBIT	637	654	671	735	888
Finance cost	(135)	(104)	(84)	(82)	(88)
Exceptional item	0	0	0	0	0
Profit before tax	487	559	587	653	800
Tax (current + deferred)	(96)	(98)	(126)	(130)	(143)
Profit / (Loss) for the period	391	461	461	523	657
Associates, Min Int	(1)	30	35	16	(1)
Reported net profit	391	491	495	539	656
Extraordinary item	(14)	8	0	0	0
Adjusted net profit	391	491	495	539	656
Growth (%)	50	26	1	9	22

Source: Company, IndiaNivesh Research

Balance Sheet (Consolidated)

balance sheet (consolidated)					
Y E March (Rs m)	FY14	FY15	FY16	FY17E	FY18E
Share capital	103	103	103	103	103
Reserves & surplus	1,966	2,339	2,729	3,167	3,706
Net Worth	2,069	2,442	2,832	3,271	3,809
Minority Interest	176	146	111	96	97
Total Liabilities	1,811	1,805	1,571	1,837	1,882
Non-current liabilities	863	669	449	551	584
Long-term borrowings	663	441	214	314	344
Deferred tax liabilities	184	211	211	211	211
Other Long term liabilities	5	4	4	6	7
Long term provisions	10	13	20	20	23
Current Liabilities	948	1,136	1,121	1,286	1,297
Short term borrowings	301	398	411	473	515
Trade payables	231	296	198	282	315
Other current Liabilities	340	361	440	445	367
Short term provisions	76	81	72	86	100
Total Liabilities and Equity	4,056	4,393	4,514	5,203	5,787
Non Current Assets	2,399	2,503	2,671	3,253	3,434
Net Block	2,244	2,191	2,463	3,043	3,216
Goodwill	0	0	0	0	0
Non-current Investments	112	266	155	155	155
Long-term loans and advances	0	0	0	0	0
Deferred tax Assets	0	0	0	0	0
Other non current Assets	43	45	53	55	63
Current Assets	1,657	1,890	1,843	1,951	2,353
Inventories	497	530	508	574	631
Sundry Debtors	647	676	609	704	804
Cash & Bank Balances	124	183	110	73	224
Other current Assets	0	0	0	0	0
Loans & Advances	387	500	614	598	691
Current Investments	3	2	2	2	2
Total (Assets)	4,056	4,393	4,514	5,203	5,787

Source: Company, IndiaNivesh Research

Cash Flow Statement (Consolidated)

Y E March (Rs m)	FY14	FY15	FY16	FY17E	FY18E
Profit before tax	487	559	587	653	800
Depreciation	129	164	203	211	239
Change in working capital	(139)	(81)	(46)	(43)	(278)
Total tax paid	(75)	(71)	(126)	(130)	(143)
Others	58	(33)	27	14	13
Cash flow from operations (a)	461	538	646	705	631
Capital expenditure	(163)	(111)	(475)	(791)	(412)
Change in investments	(60)	(153)	111	0	0
Others	114	134	49	66	67
Cash flow from investing (b)	(109)	(130)	(315)	(725)	(346)
Free cash flow (a+capex)	298	427	170	(85)	219
Equity raised/(repaid)	0	0	0	0	0
Debt raised/(repaid)	(162)	(125)	(214)	163	72
Dividend (incl. tax)	(72)	(88)	(95)	(100)	(118)
Others	(134)	(134)	(94)	(82)	(88)
Cash flow from financing (c)	(367)	(348)	(403)	(18)	(133)
Net change in cash (a+b+c)	(15)	59	(73)	(37)	151
Reconciliation of Other balances	0	0	0	0	0
Cash as per Balance Sheet	124	183	110	73	224

Source: Company, IndiaNivesh Research

Key Ratios (Consolidated)

Y E March	FY14	FY15	FY16	FY17E	FY18E
Adjusted EPS (Rs)	37.9	47.6	48.0	52.2	63.6
Growth	50.4	25.7	0.9	8.7	21.8
Dividend/share (Rs)	7.0	8.5	9.3	9.7	11.4
Dividend payout ratio	18.5	17.8	19.3	18.6	18.0
EBITDA margin	20.8	19.7	24.2	23.4	24.5
EBIT margin	19.3	18.9	19.8	19.6	20.6
Net Margin	11.8	14.2	14.7	14.3	15.2
Tax rate (%)	19.8	17.5	21.5	19.9	17.9
Debt/Equity(x)	0.4	0.3	0.2	0.2	0.2
Inventory Days	55	56	55	56	54
Sundry Debtor Days	71	71	66	68	68
Trade Payable Days	25	31	21	27	27
Du Pont Analysis - ROE					
Net margin	11.8	14.2	14.7	14.3	15.2
Asset turnover (x)	0.8	0.8	0.8	0.8	0.8
Leverage factor (x)	2.1	1.9	1.7	1.6	1.6
ROE(%)	20.5	21.8	18.8	17.7	18.5
RoCE (%)	19.2	18.5	18.0	17.9	18.9
Valuation (x)					
PER	13.4	10.7	10.6	9.7	8.0
PCE	10.1	8.0	7.5	7.0	5.9
Price/Book	2.5	2.1	1.9	1.6	1.4
EV/EBITDA	8.8	8.7	7.0	6.8	5.6

Source: Company, IndiaNivesh Research

Initiating Coverage

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