IDBI capital

Initiating Coverage

Phillips Carbon Black — BUY

Product mix and efficiencies to drive profitability

Summary

- **Phillips Carbon Black (PCB) is the largest manufacturer of carbon black in India (46% market share by capacity) and seventh largest in the world.**
- **Rising tyre demand in India alongside production curbs in China (lower supplies) provide strong visibility on volume growth/margins for PCB.**
- **We expect PCB's sales/EBITDA/net profit to grow at a CAGR of 14.5%/30.5%/93.4% over FY17-19E. Its net debt to EBITDA to improve from 2.6x in FY17 to 1.3x by FY19; return on equity is likely to improve from 6.5% in FY17 to 18.5% in FY19. Given these factors, PCB's stock is currently trading at an inexpensive valuation of 10.5x/8.9x FY18/FY19 EPS.**
- **We initiate coverage on the stock with a BUY, Target price - Rs911.**

Key Highlights and Investment Rationale

- **Brownfield expansion with modest capex**
  PCB is expanding carbon black capacity by 66k tonnes via brownfield expansion (current capacity - 472k tonnes) with a modest capex of Rs1,700 mn by Q2FY19. Further, PCB is doubling its high-margin specialty grade carbon to 24k tonnes with a capex of Rs700 mn by Q3FY18. We expect volumes to grow at a CAGR of 4.5% over FY17-FY19E.
- **EBITDA/tonne to expand on better product mix, efficiencies and volumes**
  We expect PCB's EBITDA margin to expand on the back of improving operating efficiencies, higher volumes and better product mix in favour of non-rubber products. We expect EBITDA/tonne to increase from Rs7,438 in FY17 to Rs11,056 in FY19E.
- **Initiate coverage with BUY; TP of Rs911**
  We believe PCB is in a sweet spot currently given rising tyre demand in India, competitive position in the international markets and improving product mix in favour of non-rubber products. The company's credit profile is also likely to strengthen with higher free cash flows and falling net debt. The stock is currently trading at an inexpensive valuation of 10.5x/8.9x FY18/FY19 EPS. **We assign a PE multiple of 12.0x to our FY19E EPS and derive a target price of Rs911.**

TP	**Rs911**
CMP	**Rs676**
Potential upside / downside	+35%
Previous Rating	---

V/s Consensus

EPS (Rs)	FY18E	FY19E
IDBI Capital	64.3	75.9
Consensus	65.8	72.8
% difference	*(2.3)*	*4.3*

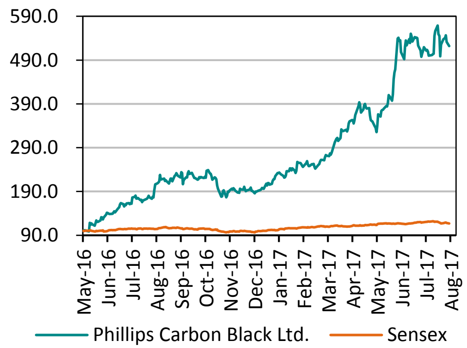
Key Stock Data

Bloomberg / Reuters	PHCB IN / PHIL.BO
Sector	Chemical & Fertilizers
Shares o/s (mn)	34
Market cap. (Rs mn)	23,286
Market cap. (US$ mn)	362
3-m daily average value (Rs mn)	457
52-week high / low	Rs684 / 201
Nifty / Sensex	9,884 / 31,646

Shareholding Pattern (%)

Promoters	53.6
FII	11.6
DII	1.8
Public	33.0

Relative to Sensex (%)



Price Performance (%)

	-1m	-3m	-12m
Absolute	16.0	55.3	175.9
Rel to Sensex	18.1	53.7	164.3

Financial snapshot (Rs mn)

Year	FY2015	FY2016	FY2017	FY2018E	FY2019E
Revenue	24,702	19,108	19,459	25,894	27,892
EBITDA	1,523	1,826	2,776	4,240	4,730
EBITDA (%)	*6.2*	*9.6*	*14.3*	*16.4*	*17.0*
Adj. PAT	126	173	700	2,216	2,617
EPS (Rs)	3.7	5.0	20.3	64.3	75.9
EPS Growth (%)	*(161.3)*	*37.3*	*304.1*	*216.7*	*18.1*
PE (x)	184.6	134.5	33.3	10.5	8.9
Dividend Yield (%)	0.2	0.4	1.1	1.6	2.1
EV/EBITDA (x)	23.2	17.5	11.0	7.2	6.2
RoE (%)	2.5	2.2	6.5	18.2	18.5
RoCE (%)	5.6	6.2	10.4	16.5	17.3

Source: Company; IDBI Capital Research

Industry Overview

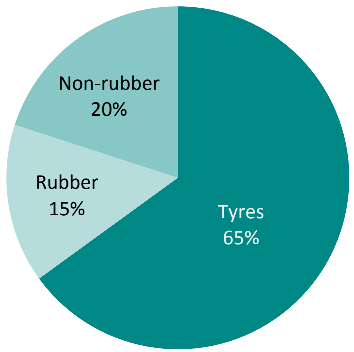
65% of carbon black demand is linked to the tyre industry

- **Carbon black – a critical raw material for tyre industry**

Carbon black is produced by the thermal decomposition of hydrocarbons (liquid and gaseous hydrocarbons) under controlled conditions, most commonly through incomplete combustion of the feedstock. The most common source of feedstock for the production of carbon black is a heavy stream of hydrocarbon derived from coal or crude oil processing, which is referred to as carbon black oil (CBO). Based on its properties, carbon black can be divided into three broad categories: rubber black, high performance rubber black and non-rubber black, including Specialty black.

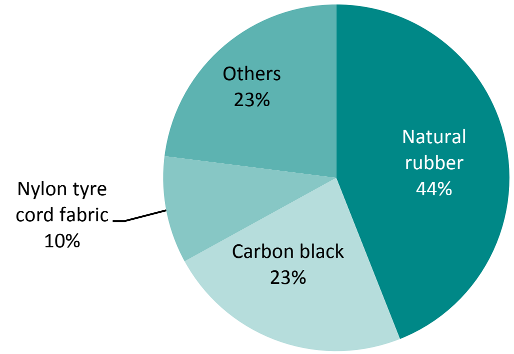
Carbon black is a key raw material used in manufacturing automotive tyres. Nearly 65% of the demand for carbon black comes from the tyres segment, 15% from rubber-based applications and nearly 20% demand is linked to printing inks, coatings, cables, belts & hoses, plastics, other specialty chemicals, etc. It is used as a reinforcing agent in rubber products such as tyres, tubes, conveyer belts, cables and other mechanical rubber goods. Carbon black constitutes 10% of the raw material cost of tyre companies and forms ~23% of volume of the tyre.

Figure 1: Carbon black demand break-up



Source: Industry; IDBI Capital Research

Figure 2: Break-up of raw materials (by weight) used in a tyre



Source: Industry; IDBI Capital Research

- **Global carbon black industry consolidated**

Global carbon black capacity stands at ~16.0mn tonnes with China as the largest player with a capacity of 7mn tonnes. Carbon black industry is consolidated with top nine players accounting for 50% of the capacity. China has the largest carbon black capacity (7 mn tonnes) while its domestic demand is ~4mn tonnes. Due to excess capacity, exports from China have a major impact in the global carbon black market. China exports nearly 0.7mn tonnes of carbon black annually.

Cabot Corp, Birla Carbon and Orion Engineered Carbons (Orion) are three largest carbon black manufacturers in the world. Other prominent players include SID Richardson, Tokai Carbon, PCBL and Jiangxi Black Cat Carbon Black.

Domestic companies enjoy duty protection as there is anti-dumping duty on imports of carbon black from China

- **Even domestic carbon black industry remains consolidated; enjoys duty protection**

India's carbon black capacity is ~1.0mn tonnes with consumption of ~0.8mn tonnes in FY17. Domestic carbon black industry is also consolidated with only five producers. PCB enjoys highest market share of 35% (FY17) in domestic market according to our estimate. PCB also has 84% market share (FY17) in carbon black exports out of India.

In the domestic market, carbon black players enjoy protection as there is an anti-dumping duty on imports of carbon black used in rubber applications from China of atleast $397/tonne till November 2020.

Table 1: Indian carbon black industry capacities

Companies	Capacity (ktpa)
PCB	472
SKI Carbon Black India	315
Himadri Speciality Chemical	120
CCIL	85
RalsonCarbon	36

Source: Company; IDBI Capital Research

- **Lower crude prices makes Indian carbon black players competitive internationally**

Carbon black can be manufactured using Carbon black feed stock (CBFS) or CBO. Indian companies used CBFS as feedstock while Chinese companies use CBO as a feedstock due to abundant availability of coal tar in China.

Until CY14, Chinese companies enjoyed some inherent advantages as their plants were located adjacent to cheaper raw material source. Also, they had better yields due to use of coal tar. This made them far more competitive against the Indian players.

However, the scenario reversed since the beginning of CY15 when crude oil prices started falling. CBFS prices fell with fall in crude oil prices. This led to lower prices for key raw material (CBFS) for Indian companies. While CBFS prices were falling, stringent environmental norms in China led to a fall in carbon black production from small and marginal players. As per our sources, the Chinese production continues to face restriction on account of pollution concerns, thus curbing additional supplies in the global market.

Meanwhile, Indian companies became competitive in the international markets and they stepped up exports over FY15-17 which helped their utilization levels and hence, margins.

Since the fall in crude oil prices, Indian companies have become competitive in the global carbon black market

Figure 3: Changing dynamics of carbon black demand-supply

FY13-15	FY16 onwards
Weak domestic demand, over-capacity leading to under-utilization for Indian companies	Improving domestic demand from tyre manufacturers
High crude price leading to high raw material prices for domestic carbon black manufacturers	Fall in crude prices leading to lower raw material costs
Dumping from China, Russia and other countries into India	Fall in Chinese crude steel production and stringent pollution norms for making carbon black leading to lower Chinese supplies
Anti-dumping duty imposed in November 2015	Indian companies competitive in export market leading to higher sales in the overseas markets

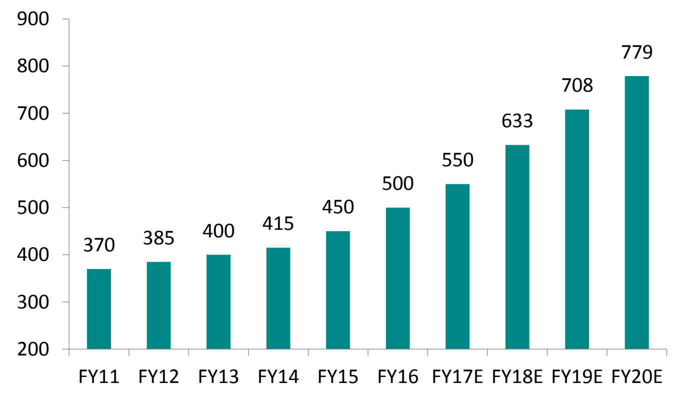
Source: Industry; IDBI Capital Research

- **Expanding tyre manufacturers provide visibility on domestic volumes**

Domestic carbon black manufacturers volumes have improved after the anti-dumping duty was imposed (November 2015) and also due to increase in exports (as Chinese manufacturers lost competitiveness) since the beginning of FY16.

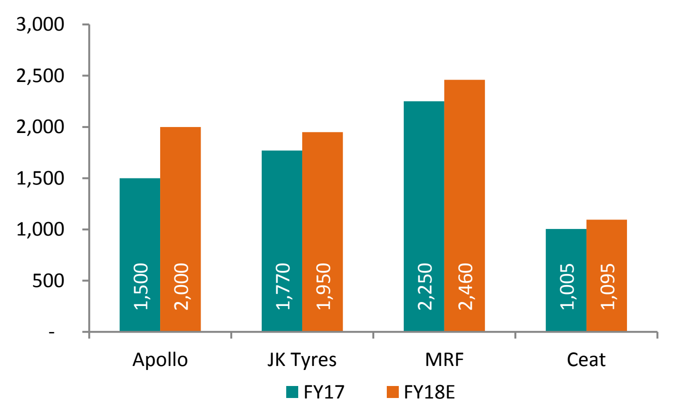
Looking ahead, domestic tyre companies are expanding their capacities which provide strong visibility on volume offtake for domestic carbon black manufacturers.

Figure 4: Indian tyre market –(Rs bn)



Source: Company; IDBI Capital Research

Figure 5: Expanding tyre capacities in India -(Tpd)



Source: Company; IDBI Capital Research

Global specialty carbon black market is dominated by top four producers

- **Specialty carbon black industry dominated by top few players**

Specialty carbon black is a processed carbon black powder with high carbon content and pigmentation characteristics. Also known as pigment black, it is used to impart distinctive characteristics in specialized end user applications. Specialty carbon black finds majority applications in plastics, printing inks and paints & coatings industry for pigmentation and imparting desired properties such as UV protection and conductivity. Specialty carbon black has higher margins per metric ton compared to margins in rubber carbon black. Hence, top carbon black manufacturers focus on raising product sales in favour of specialty blacks.

Globally, top four carbon black players dominate the specialty black market. There are several barriers to entry such as technological know-how, customer approvals, availability of skilled personnel, etc to enter the specialty market.

Global specialty carbon black demand is estimated to be a ~1.0mn tonnes. Orion has been a consistent market leader with market share of 26%, 25% and 25% in CY2016, CY2015 and CY2014, respectively. Other large players in include Cabot Corp., Birla Carbon and Mitsubishi.

Competitive analysis

Long gestation to get approvals from tyre companies, development of new grades, scale and establishing long-term customer relationships are the key barriers to entry

Although, carbon black is a commodity chemical, however, companies compete on the basis of grades offered, quality, etc. Further, moving up the value chain towards specialty grades is likely to be a strategy for smaller companies, although it is.

Long gestation to get approvals from tyre companies, development of new grades to meet diverse needs of customers, scale and establishing long-term customer relationships are the key barriers to entry in this business.

Broadly the companies operating in the carbon black have reported improvement in margins during CY14-16. Thai Carbon (a part of Birla Carbon) enjoys highest EBIT margin compared to its peers.

Table 2: EBIT margins of some large carbon black producers

	CY14	CY15	CY16
Cabot Corp.	12%	9%	12%
Tokai Carbon	5%	3%	13%
Thai Carbon	11%	13%	21%
Phillips Carbon Black	4%	6%	12%

Source: Company; IDBI Capital Research

About the Company

PCB's carbon black manufacturing facilities are backed by co-gen power plants

Incorporated in 1960, PCB is a part of the RP-Sanjiv Goenka Group. It was set up in collaboration with a US company Phillips Petroleum in 1962 using the oil furnace technology. This technology was the most widely accepted manufacturing process of carbon black, patented by its then collaborator and world carbon black leader, Phillips Petroleum Company, USA. In the late 80s, PCB signed a technical agreement with Columbian Chemicals Company, USA, and updated its technology to gain flexibility, better product range, production capacity and energy conservation. PCB has more than 50 years' experience in the carbon black industry.

PCB is the largest carbon black producer in India (seventh largest globally) with a total capacity of 472k tonnes. It has integrated power plants at all of its plant locations. Out of the 472k tonnes capacity, the company has dedicated 12k tonnes of capacity to make high-margin specialty grade carbon black.

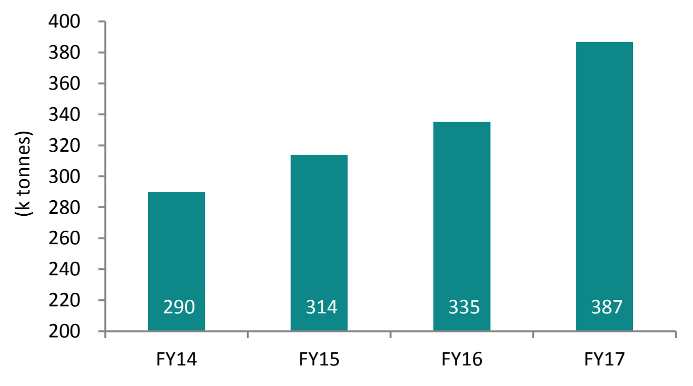
Table 3: Details of manufacturing capacities

Plant	Carbon Black Capacity	Captive Power Plant Capacity	Products Manufactured
Durgapur (Kolkata)	147k tonnes	30 MW	All ASTM and MRG grades
Palej (Gujarat)	95k tonnes	12 MW	Specialty blacks for plastics, inks and MRG
Mundra (Gujarat)	140k tonnes	24 MW	All ASTM grades and few specialty black grades
Kochi (Kerala)	90k tonnes	10 MW	All hard blacks

Source: Company, IDBI Capital Research

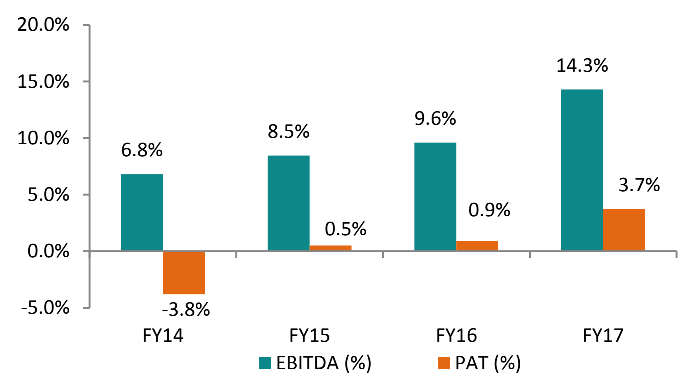
The company has reported steady increase in volumes over FY14-17. Also, EBITDA margin improved on the back of higher volumes, internal efficiencies and improvement in product mix over FY14-17.

Figure 6: Sales volumes rose steadily over FY14-17



Source: Company; IDBI Capital Research

Figure 7: Margins improved over FY14-17



Source: Company; IDBI Capital Research

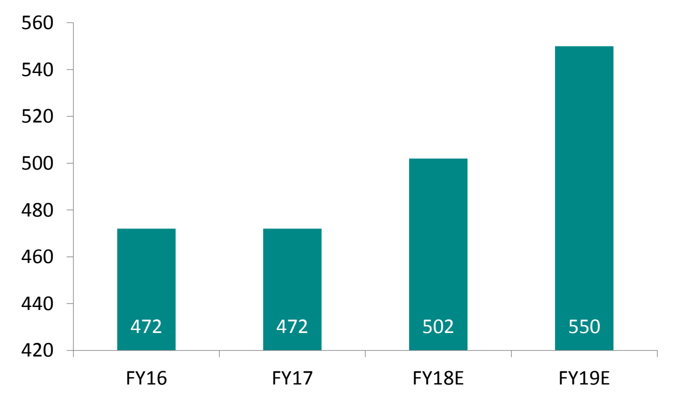
Key Investment Rationale

Sales volumes are likely to increase at CAGR of 4.5% over FY17-19E

- **Brownfield capacity expansion with modest capex**

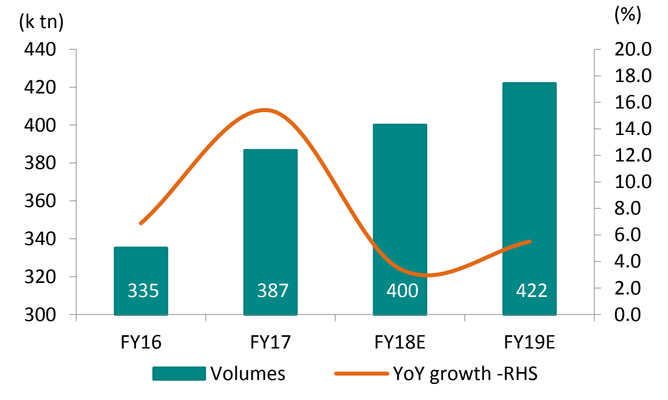
PCB is expanding carbon black capacity by 66k tonnes via brownfield expansion (current capacity - 472k tonnes) with a modest capex of Rs1,700 mn by Q2FY19. Currently, it is the only one expanding carbon black capacity in India and has the ability to produce 56 different grades of carbon black. Further, PCB is doubling its specialty grade carbon to 24k tonnes with a capex of Rs700 mn by Q3FY18. Specialty grade FY15/FY16/FY17 volumes stood at 2.5k/4.7k/8.0k tonnes, respectively. We expect PCB's total volumes to increase from 387k tonnes in FY17 to 422k tonnes in FY19.

Figure 8: Carbon black capacity ramp up (ktpa)



Source: Company; IDBI Capital Research

Figure 9: Steady growth in volumes



Source: Company; IDBI Capital Research

- **Strategic initiative to move towards specialty grade carbon black to be margin accretive**

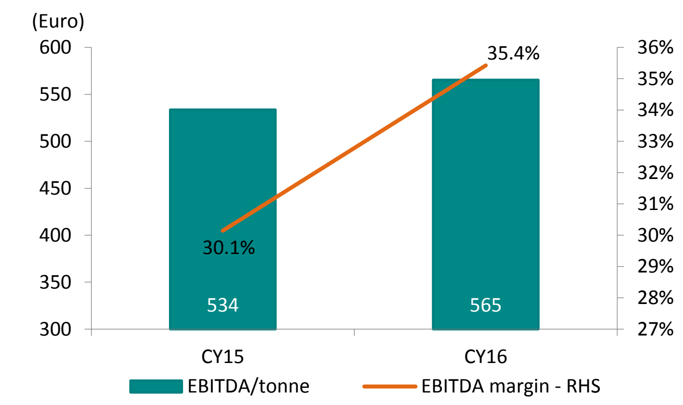
PCBL aims to improve its product mix in favour of non-rubber (including specialized carbon grades) products which find applications in inks, plastics, paints and coatings, toners, electronic components etc.

During FY17, non- rubber products formed 9% of total volumes but contributed 20% to EBITDA. The company targets non-rubber (including specialty carbon black) volumes to be 20% of total volumes and contribute 40% to EBITDA by FY20. Specialty grade carbon blacks have EBITDA/tonne which are nearly 3-5x of rubber grade. We expect PCB's EBITDA/tonne to increase from Rs7,438 in FY17 to Rs11,056 in FY19E partly driven by improvement in product mix.

The strategy to move towards specialty blacks is in-line with global giants such as Orion, Cabot and Birla Carbon. Orion derived 24% of carbon black volumes from specialty products with EBITDA/tonne of Euro565 in CY16.

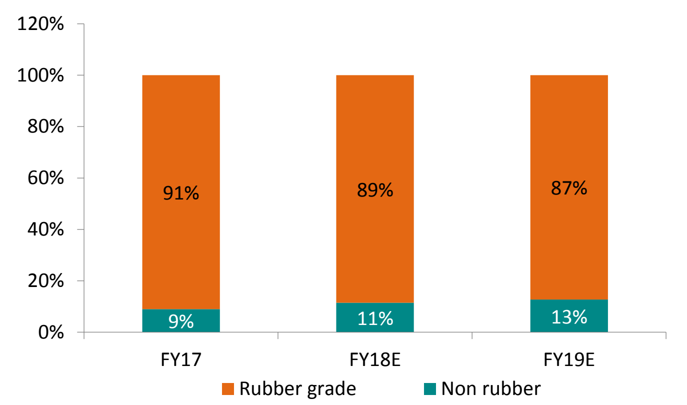
High-margin non-rubber volumes to rise over FY17-19

Figure 10: Orion's EBITDA/tonne (ktpa)



Source: Company; IDBI Capital Research

Figure 11: PCB's non-rubber volumes to rise



Source: Company; IDBI Capital Research

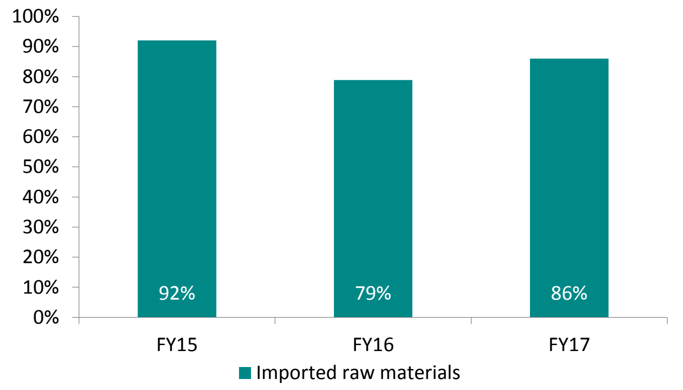
- **Internal measures to boost margins**

PCB's management remains focused on improving operating efficiencies via various measures which include: i) developing new grades of carbon black, ii) improving product characteristics to meet more stringent customer specifications, iii) modifying reactor designs to improve yields.

Further, there have been changes in raw material sourcing strategy. Prior to 2013, there was an overdependence on the US for raw material procurement, which entailed a longer lead time and higher risk of inventory losses due to fluctuating prices. This was curtailed by developing Singapore, South Korea and India as sourcing hubs.

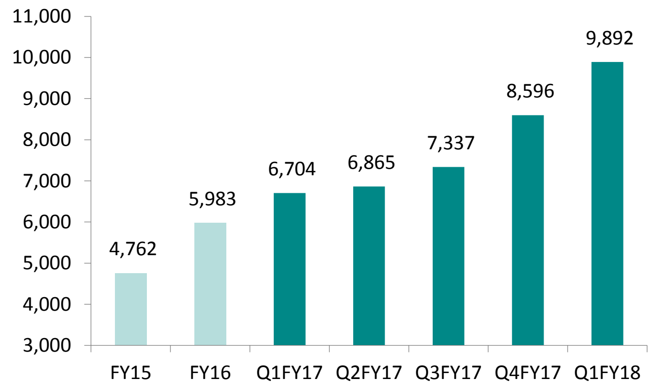
EBITDA/tonne has increased remarkably since FY15

Figure 12: Raw material dependency on imports has come off



Source: Company; IDBI Capital Research

Figure 13: EBITDA/tonne boosted by both, internal and external factors



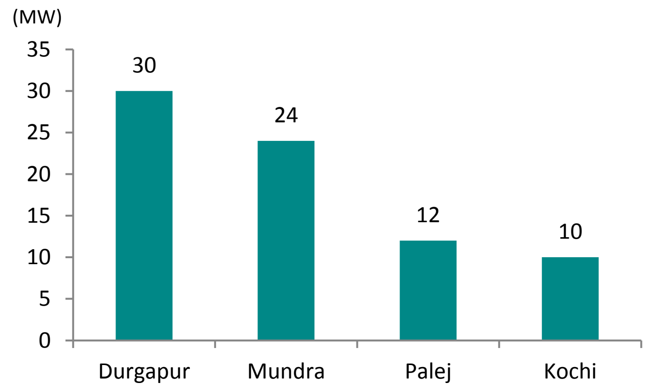
Source: Company; IDBI Capital Research

Also, the company has recruited several key personnel to drive internal efficiencies and raise specialty volumes. Mr. Kaushik Roy, MD, has worked at Apollo Tyres for nearly 20 years before joining PCB in 2013. Further, several several senior members with technical and marketing expertise in developing specialty carbon black products have been added.

- **Power plant aid margins**

PCB's all four carbon black facilities generate power using lean gases which are generated during the process of manufacturing carbon black. It generates 1,300 units of electricity per tonne of CB produced while per tonne of carbon black requires 336 units of power. Approximately 40% of power generated is used to manufacture carbon black while the balance is sold to the grid. Chinese carbon black manufacturers do not have co-generation power plants and hence, PCB is competitive against the Chinese players.

Figure 14: PCB has power plant at all its location



Source: Company; IDBI Capital Research

Figure 15: Power segment profitability strong

	FY14	FY15	FY16	FY17
Carbon Black prod. (k tn)	289	312	332	383
Power generation (mn units)	346	342	372	484
Power export (mn units)	204	199	225	304
Power sale (Rs mn)	650	690	770	810
Power EBITDA (Rs mn)	480	490	450	510
EBITDA margin (%)	73.8	71.0	58.4	63.0

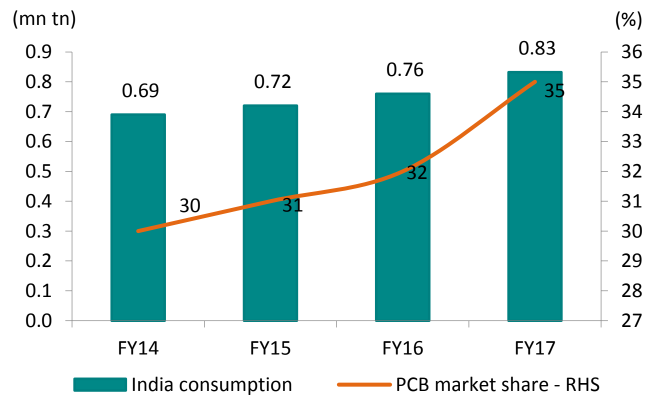
Source: Company; IDBI Capital Research

PCB held 85% market share in exports of carbon black from India during FY17 indicating its product acceptance among global tyre manufacturers

- **Approvals from marquee clients in place**

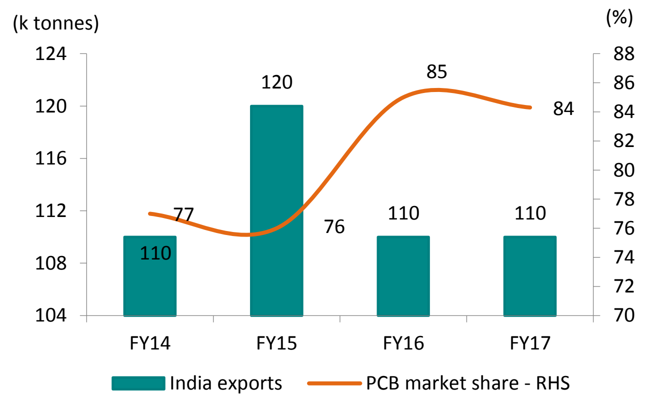
PCB has approvals from majority of Indian tyre manufacturers; it is also an approved vendor for several global tyre companies. Its clientele includes MRF, CEAT, Apollo Tyres, Continental, Bridgestone, Pirelli, Goodyear, Cooper, etc. Since PCB's products find acceptance by global tyre manufacturers, it has been opportunistically exporting to some large players. PCB 's market share in exports of carbon black from India has remained over 75% even though it has only 46% of India's capacity.

Figure 16: Indian consumption of carbon black



Source: Company; IDBI Capital Research

Figure 17: Exports of carbon black from India



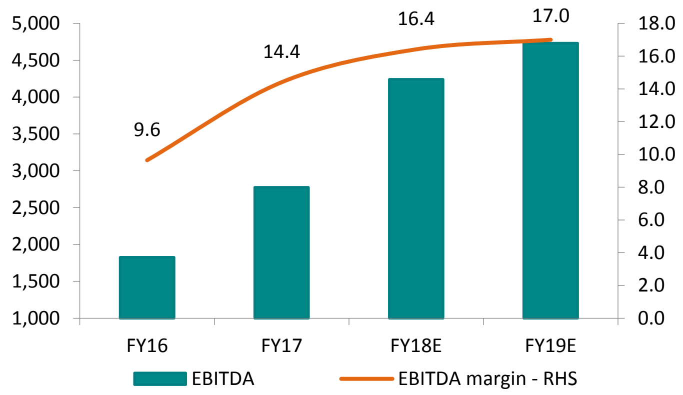
Source: Company; IDBI Capital Research

EBITDA and return ratios to improve; leverage to come off

We expect PCB's EBITDA/net profit to grow at a CAGR of 30.5%/93.4% over FY17-19 on improvement in product mix, operational efficiencies and higher volumes.

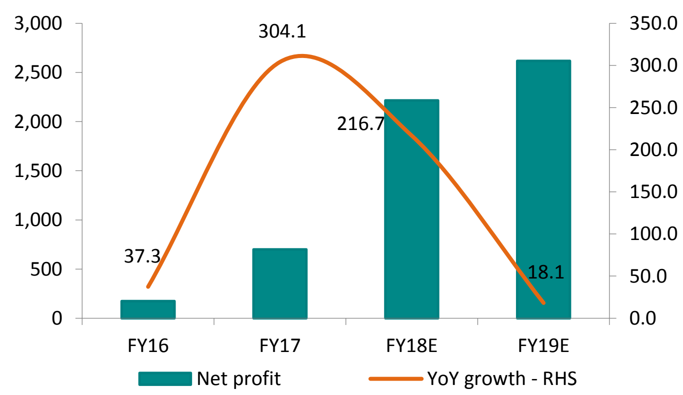
We expect net profit to grow 216.7% YoY in FY18

Figure 18: EBITDA margin on an uptrend



Source: Company; IDBI Capital Research

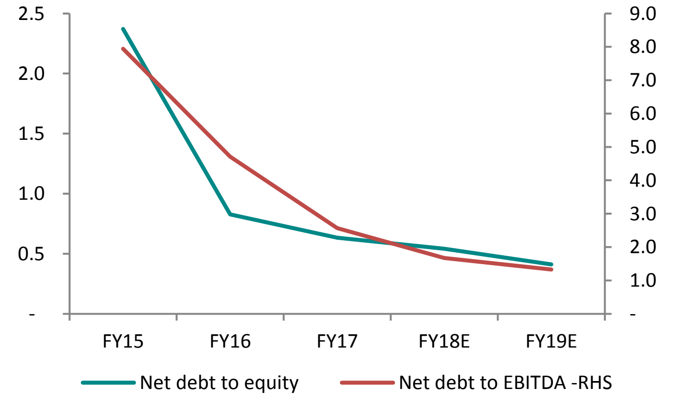
Figure 19: PAT to grow at a CAGR of 92.9% over FY17-19



Source: Company; IDBI Capital Research

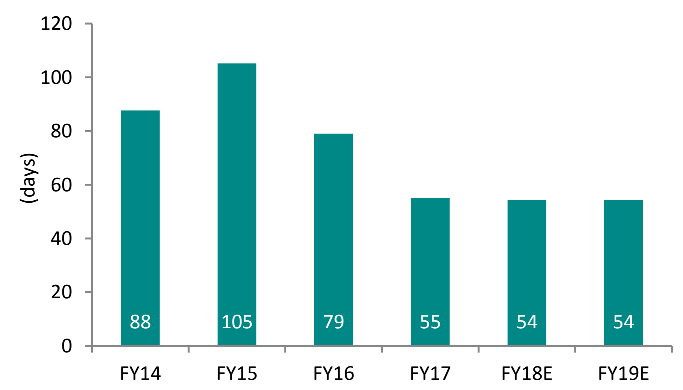
We expect PCB's net debt to fall from Rs7. 1 bn in FY17 to Rs6.3 bn by FY19E despite heavy capex of ~Rs2.7 bn over FY18-19E. PCB's working capital cycle has fallen from 105 days to 55 days in FY17. Looking ahead, we anticipate working capital cycle to largely remain stable over FY17-19E.

Figure 20: Credit profile to improve sharply



Source: Company; IDBI Capital Research

Figure 21: Working capital to remain stable

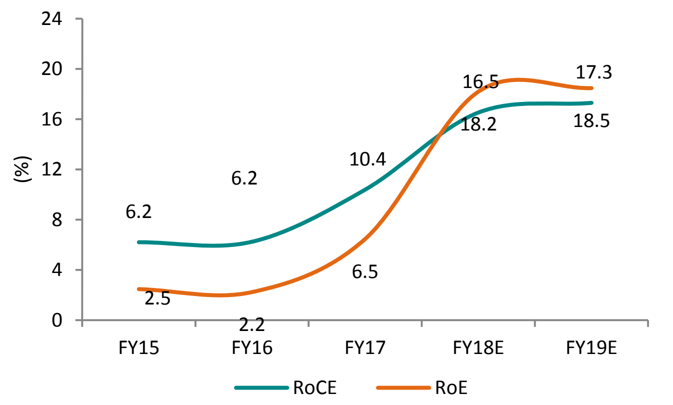


Source: Company; IDBI Capital Research

Return on equity is expected to increase from 6.5% in FY17 to 18.5% in FY19E. Free cash flows are likely to be positive despite high capex during FY18-19E.

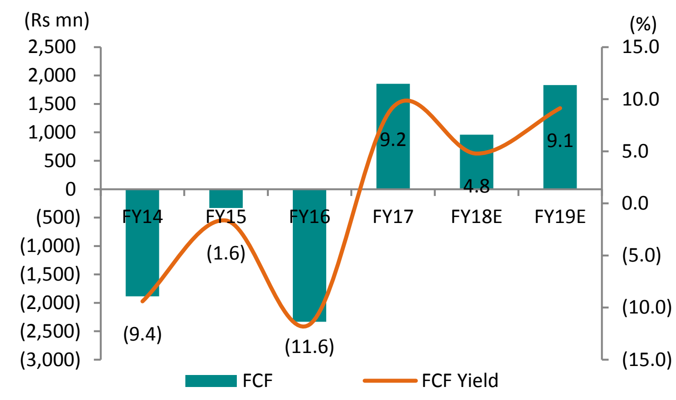
Free cash flows are expected to remain over Rs1 bn during FY18-19 even after heavy capex

Figure 22: Return ratios on an uptrend



Source: Company; IDBI Capital Research

Figure 23: Free cash flow yield to remain robust



Source: Company; IDBI Capital Research

Financial Matrix

Table 4: Key assumptions

	Unit	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18E	FY19E
Capacity	tonnes	360,000	360,000	421,000	421,000	472,000	472,000	472,000	472,000	502,000	550,000
Production	tonnes	258,374	305,950	316,508	296,555	288,676	311,823	332,038	383,316	400,000	422,000
Cap. Utilization	%	72	85	75	70	61	66	70	81	80	77
Sales volumes	tonnes	255,777	308,605	314,348	293,309	287,839	313,562	335,146	386,694	400,000	422,000
Net Sales	Rs mn	12,325	16,901	21,807	22,807	22,761	24,673	18,941	19,269	25,832	27,827
Realization	Rs/tonne	48,187	54,767	69,372	77,757	79,075	78,685	56,515	49,831	64,580	65,941

Source: Company data, IDBI Capital Research

Valuation and Outlook

PCB stock is currently trading at an inexpensive valuation of 10.5x/8.9x FY18/FY19 EPS

- **Initiate coverage with TP of Rs911, provides 35% upside potential; BUY**

  We believe PCB is in a sweet spot currently given rising tyre demand in India, competitive position in the international markets and improving product mix with rising sales of specialty products. The company's credit profile is also likely to strengthen with higher free cash flows and declining debt. We expect PCB's sales/EBITDA/net profit to grow at a CAGR of 14.5%/30.5%/93.4% over FY17-19E. Its net debt to EBITDA to improve from 2.6x in FY17 to 1.3x by FY19; return on equity is likely to improve from 6.5% in FY17 to 18.5% in FY19. Given these factors, we believe the stock is currently trading at an inexpensive valuation of 10.5x/8.9x FY18/FY19 EPS. We assign a PE multiple of 12.0x to our FY19E EPS and derive a target price of Rs911.

Key risks

- **Rise in crude prices:** A sharp increase in the crude oil price can impact the company's ability to compete with Chinese players in the export market and thus affect its volumes and margins.
- **Slowdown in tyre demand:** Demand for carbon black is mainly dependent on growth in the tyre industry. Any slowdown in the domestic tyre demand can have adverse impact on PCB's volumes and margins.
- **Geopolitical risks:** Sine the company procures raw material (CBFS) mainly from the overseas markets, any geopolitical concerns could affect the company's ability to source raw material at desired prices.

Financial Summary

Profit & Loss Account

(Rs mn)

Year-end: March	FY16	FY17	FY18E	FY19E
Net sales	19,108	19,459	25,894	27,892
Growth (%)	*(22.6)*	*1.8*	*33.1*	*7.7*
Operating expenses	(17,282)	(16,683)	(21,654)	(23,161)
EBITDA	**1,826**	**2,776**	**4,240**	**4,730**
Growth (%)	*19.9*	*52.0*	*52.7*	*11.6*
Depreciation	(622)	(606)	(667)	(734)
EBIT	**1,205**	**2,170**	**3,573**	**3,997**
Interest paid	(718)	(514)	(761)	(723)
Other income	-	-	62	68
Pre-tax profit	**487**	**1,655**	**2,874**	**3,341**
Tax	(313)	(955)	(658)	(724)
Effective tax rate (%)	*64.4*	*57.7*	*22.9*	*21.7*
Net profit	**173**	**700**	**2,216**	**2,617**
Adjusted net profit	**173**	**700**	**2,216**	**2,617**
Growth (%)	*37.3*	*304.1*	*216.7*	*18.1*
Shares o/s (mn)	*34*	*34*	*34*	*34*

Cash Flow Statement

(Rs mn)

Year-end: March	FY16	FY17	FY18E	FY19E
Pre-tax profit	487	1,655	2,874	3,341
Depreciation	535	693	667	734
Tax paid	888	(383)	(658)	(724)
Chg in working capital	5,027	(135)	(932)	(296)
Other operating activities	-	-	-	-
Cash flow from operations (a)	**6,936**	**1,831**	**1,950**	**3,054**
Capital expenditure	(6,486)	(415)	(1,100)	(1,600)
Chg in investments	(462)	(632)	5	-
Other investing activities	-	-	-	-
Cash flow from investing (b)	**(6,948)**	**(1,047)**	**(1,095)**	**(1,600)**
Equity raised/(repaid)	-	-	-	-
Debt raised/(repaid)	(3,094)	(1,720)	(100)	(900)
Dividend (incl. tax)	(104)	(248)	(372)	(496)
Chg in minorities	-	-	-	-
Other financing activities	-	-	-	-
Cash flow from financing (c)	**(3,198)**	**(1,968)**	**(472)**	**(1,396)**
Net chg in cash (a+b+c)	**(3,209)**	**(1,185)**	**383**	**58**

Balance Sheet

(Rs mn)

Year-end: March	FY16	FY17	FY18E	FY19E
Net fixed assets	14,891	14,613	15,046	15,912
Investments	1,737	2,369	2,363	2,363
Other non-curr assets	-	-	-	-
Current assets	**9,129**	**8,643**	**10,073**	**10,760**
Inventories	2,442	2,435	3,185	3,431
Sundry Debtors	4,382	4,657	4,954	5,337
Cash and Bank	506	250	192	116
Loans and advances	6	5	5	5
Total assets	**25,757**	**25,624**	**27,483**	**29,036**
Shareholders' funds	**10,384**	**11,259**	**13,103**	**15,224**
Share capital	345	345	345	345
Reserves & surplus	10,039	10,915	12,758	14,879
Total Debt	**9,103**	**7,383**	**7,283**	**6,383**
Secured loans	7,053	5,481	5,581	5,081
Unsecured loans	2,050	1,902	1,702	1,302
Other liabilities	1,522	2,101	2,101	2,101
Curr Liab & prov	**4,749**	**4,881**	**4,996**	**5,328**
Current liabilities	4,713	4,824	4,937	5,265
Provisions	35	57	58	63
Total liabilities	**15,374**	**14,365**	**14,380**	**13,812**
Total equity & liabilities	**25,757**	**25,624**	**27,483**	**29,036**
Book Value (Rs)	**301**	**327**	**380**	**442**

Source: Company; IDBI Capital Research

Financial Ratios

Year-end: March	FY16	FY17	FY18E	FY19E
Adj. EPS (Rs)	5.0	20.3	64.3	75.9
Adj. EPS growth (%)	*37.3*	*304.1*	*216.7*	*18.1*
EBITDA margin (%)	*9.6*	*14.3*	*16.4*	*17.0*
Pre-tax margin (%)	*2.5*	*8.5*	*11.1*	*12.0*
ROE (%)	*2.2*	*6.5*	*18.2*	*18.5*
ROCE (%)	*6.2*	*10.4*	*16.5*	*17.3*
Turnover & Leverage ratios (x)				
Asset turnover (x)	0.8	0.8	1.0	1.0
Leverage factor (x)	2.9	2.4	2.2	2.0
Net margin (%)	*0.9*	*3.6*	*8.6*	*9.4*
Net Debt/Equity (x)	0.8	0.6	0.5	0.4
Working Capital & Liquidity ratio				
Inventory days	47	46	45	45
Receivable days	84	87	70	70
Payable days	57	90	72	72

Valuation

Year-end: March	FY16	FY17	FY18E	FY19E
P/E (x)	134.5	33.3	10.5	8.9
Price / Book value (x)	2.2	2.1	1.8	1.5
PCE (x)	29.3	17.8	8.1	6.9
EV / Net sales (x)	1.7	1.6	1.2	1.1
EV / EBITDA (x)	17.5	11.0	7.2	6.2
Dividend Yield (%)	*0.4*	*1.1*	*1.6*	*2.1*

Notes

Dealing	(91-22) 6637 1150	dealing@idbicapital.com

Key to Ratings Stocks:

BUY: Absolute return of 15% and above; **ACCUMULATE:** 5% to 15%; **HOLD:** Upto ±5%; **REDUCE:** -5% to -15%; **SELL:** -15% and below.

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Phillips Carbon Black (PHICAR)

₹ 625

Improving operating matrix, gains to follow…

Rating matrix

Rating	:	Buy
Target	:	₹ 825
Target Period	:	12-18 months
Potential Upside	:	32%

What's changed?

Target	Changed from ₹ 550 to ₹ 825
EPS FY18E	Changed from ₹ 41.7 to ₹ 50.0
EPS FY19E	Changed from ₹ 45.7 to ₹ 55.0
Rating	Unchanged

Key financials

₹ crore	FY16	FY17	FY18E	FY19E
Net Sales	1894.7	1927.1	2191.4	2302.0
EBITDA	165.0	260.2	311.8	338.0
Net Profit	22.7	72.8	172.3	189.5
EPS	6.6	21.1	50.0	55.0

Valuation summary

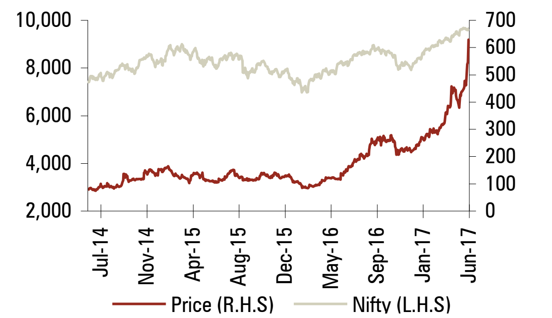
	FY16	FY17	FY18E	FY19E
P/E	94.1	29.6	12.5	11.4
Target P/E	124.3	39.1	16.5	15.0
EV / EBITDA	18.3	10.4	8.6	7.9
P/BV	4.1	2.1	1.8	1.6
RoNW*	4.4	13.8	24.6	22.5
RoCE*	7.1	16.5	18.8	19.1
ROIC*	8.4	16.1	19.1	17.4

* Return ratios adjusted for revaluation reserve amounting to ~₹500 crore in FY17-19E

Stock data

Stock Data	₹ crore
Market Capitalization	2154
Total Debt (FY17)	677
Cash and Cash Equivalent (FY17)	115.6
Enterprise Value	2715.1
52 week H/L	637 / 138
Equity Capital	34.5
Face Value	₹ 10
MF Holding (%)	0.9
FII Holding (%)	8.2

Price Chart



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- Phillips Carbon Black (PCBL) is the largest manufacturer of carbon black domestically. It is a proxy to play on the robust demand outlook of domestic tyres and consequent automobile demand
- PCBL has successfully turned around its operations with operational efficiencies and economies of scale resulting in 480 bps improvement in EBITDA margins to 13.5% in FY17 vs. 8.7% in FY16
- The exit rate of EBITDA/tonne was at ₹ 8597/tonne in Q4FY17 vs. the annual rate of ₹ 6731/tonne in FY17, thereby indicating robust profitability potential, going ahead. Given the increasing share of speciality grade carbon black coupled with operational efficiencies realised through higher sales volume, we have built in EBITDA/tonne of ₹ 7571/tonne in FY18E and ₹ 7834/tonne in FY19E
- PCBL is currently operating at 94% utilisation levels. However, it is executing de-bottlenecking & brownfield expansion, which will result in a steady increase (5.7% CAGR) in volumes over FY17-19E
- Bottomline growth, however, will be exponential on account of an increase in EBITDA margins (120 bps over FY17-19E) and absence of DTA provisioning. Ensuing PAT is expected at ~₹ 172.3 crore in FY18E and ₹ 189.5 crore in FY19E vs. ~₹ 72.8 crore in FY17 thereby ensuing re-rating in valuation to continue

Carbon black; robust product demand domestically; PCBL industry leader

Carbon black is used as a reinforcement material providing tensile strength to tyres. It is a critical component for manufacturing tyres and forms ~26% by volume of the tyre weight and ~10% by value of tyre costs. In India, total capacity for manufacturing carbon black as of FY16 was at 1 MT with consumption at ~0.8 MT. PCBL with a capacity of 411 KT is the largest player domestically with market share in excess of 30%. PCBL is witnessing strong domestic demand and is running at almost full capacity levels with capacity already sold out for FY18E. Domestic sales volume in FY17 was at 294 KT vs. 243 KT in FY16, up 21% YoY. PCBL with a market share in excess of 30% is indeed a proxy for the domestic automobile industry with robust prospects, going forward.

Improving operating matrix, re-rating to sustain, retain BUY

The operating matrix of PCBL is steadily on the uptrend with the company realising robust profitability at the P&L level in FY17. On the balance sheet side, the matrix is even more encouraging with PCBL generating ~₹ 358 crore as cash flow from operations and consequent retiring of debt to the tune of ~₹ 350 crore in FY17. It incorporates a steady improvement in net working cycle with net working capital (NWC) days coming in at 47 days in FY17 vs. 72 days in FY16. We expect the robust cash flow generation trend to continue with PCBL offering a cash flow yield of ~10% in FY17-19E. On the return ratios front, PCBL clocked double digit return ratios in FY17 (first time in five year bloc of FY12-17) with RoE at 14% & RoCE at 16.5% (adjusted for revaluation reserve). We expect return ratios to further improve to ~25% at the RoE level and ~20% at the RoCE level over FY17-19E. Going forward, in FY17-19E, we expect sales to grow at 9.3% CAGR in FY17-19E while EBITDA is expected to grow at 14.0% CAGR in FY171-19E. Consequent EPS is expected at ₹ 50/share in FY18E and ₹ 55/share in FY19E. We value PCBL at ₹ 825, i.e. 15.0x P/E on FY19E EPS of ₹ 55.0/share. We maintain our **BUY** rating on the stock. We have been positive on the stock ever since our initiation under the *Nano Nivesh* brand (price level at ₹ 175 levels). We believe there is a further leg up in the story with further upside potential in the stock.

Financial summary

Profit and loss statement				₹ Crore
(Year-end March)	FY16	FY17	FY18E	FY19E
Net Sales	1892.7	1924.8	2188.9	2299.1
Other Operating Income	2.1	2.2	2.6	2.8
Total Operating Income	1894.7	1927.1	2191.4	2302.0
Growth (%)	-23.3	1.7	13.7	5.0
Raw Material Expenses	1,344.6	1,236.6	1,405.5	1,468.7
Employee Expenses	73.4	81.7	90.9	95.5
Selling Expense	68.7	77.2	87.2	91.6
Other Operating Expense	243.2	271.4	296.1	308.2
Total Operating Expenditure	1,729.8	1,666.9	1,879.6	1,963.9
EBITDA	165.0	260.2	311.8	338.0
Growth (%)	8.3	57.7	19.8	8.4
Depreciation	55.0	60.7	61.6	68.5
Interest	70.9	51.4	42.4	37.3
Other Income	18.0	20.2	13.2	10.8
PBT	57.0	168.3	221.0	243.0
Exceptional Item	0.0	0.0	0.0	0.0
Total Tax	34.3	95.5	48.6	53.5
PAT	22.7	72.8	172.3	189.5
Growth (%)	80.3	220.1	136.9	10.0
EPS (₹)	6.6	21.1	50.0	55.0

Source: Company, ICICIdirect.com Research

Cash flow statement				₹ Crore
(Year-end March)	FY16	FY17	FY18E	FY19E
Profit after Tax	22.7	72.8	172.3	189.5
Add: Depreciation	55.0	60.7	61.6	68.5
(Inc)/dec in Current Assets	150.4	14.8	-101.1	-43.7
Inc/(dec) in CL and Provisions	130.1	158.4	19.7	-7.5
Others	70.9	51.4	42.4	37.3
CF from operating activities	429.1	357.9	195.0	244.2
(Inc)/dec in Investments	-98.0	14.5	60.0	35.0
(Inc)/dec in Fixed Assets	-33.9	-49.2	-130.0	-130.0
Others	21.3	109.4	0.0	0.0
CF from investing activities	-110.6	74.8	-70.0	-95.0
Issue/(Buy back) of Equity	0.0	0.0	0.0	0.0
Inc/(dec) in loan funds	-198.3	-344.4	-50.0	-60.0
Interest & Dividend paid	-81.3	-76.2	-83.7	-86.9
Inc/(dec) in Share Cap	0.0	0.0	0.0	0.0
Others	0.0	-42.2	42.2	0.0
CF from financing activities	-279.6	-462.8	-91.5	-146.9
Net Cash flow	39.0	-30.1	33.4	2.3
Opening Cash	11.5	50.6	20.6	54.0
Closing Cash	50.6	20.6	54.0	56.3

Source: Company, ICICIdirect.com Research

Balance sheet				₹ Crore
(Year-end March)	FY16	FY17	FY18E	FY19E
Liabilities				
Equity Capital	34.5	34.5	34.5	34.5
Reserve and Surplus	488.3	994.0	1,167.2	1,307.1
Total Shareholders funds	522.7	1,028.5	1,201.7	1,341.6
Total Debt	1,021.4	677.0	627.0	567.0
Deferred Tax Liability	49.1	205.2	205.2	205.2
Minority Interest / Others	0.6	0.0	0.0	0.0
Total Liabilities	1,593.8	1,910.7	2,033.9	2,113.8
Assets				
Gross Block	1,323.8	1,974.1	2,027.9	2,287.9
Less: Acc Depreciation	524.4	586.6	648.2	716.8
Net Block	799.4	1,387.5	1,379.7	1,571.1
Capital WIP	73.4	73.8	150.0	20.0
Total Fixed Assets	872.8	1,461.3	1,529.7	1,591.1
Investments	170.4	155.8	95.8	60.8
Inventory	244.2	243.5	269.9	283.5
Debtors	439.0	465.7	509.7	535.4
Loans and Advances	90.0	22.9	43.8	46.0
Other Current Assets	7.6	34.0	43.8	46.0
Cash	50.6	20.6	54.0	56.3
Total Current Assets	831.4	786.7	921.2	967.1
Current Liabilities	310.4	463.8	479.8	472.4
Provisions	24.3	10.6	14.4	14.2
Current Liabilities & Prov	334.7	474.4	494.1	486.6
Net Current Assets	496.8	312.2	427.1	480.5
Others Assets	53.9	-18.6	-18.6	-18.6
Application of Funds	1,593.8	1,910.7	2,033.9	2,113.8

Source: Company, ICICIdirect.com Research

Key ratios				
(Year-end March)	FY16	FY17	FY18E	FY19E
Per share data (₹)				
EPS	6.6	21.1	50.0	55.0
Cash EPS	22.5	38.7	67.9	74.9
BV	151.7	298.5	348.7	389.3
DPS	2.5	6.0	10.0	12.0
Cash Per Share (Incl Invst)	64.1	51.2	43.5	34.0
Operating Ratios (%)				
EBITDA Margin	8.7	13.5	14.2	14.7
PAT Margin	1.2	3.8	7.9	8.2
Inventory days	47.1	46.2	45.0	45.0
Debtor days	84.7	88.3	85.0	85.0
Creditor days	59.9	87.9	80.0	75.0
Return Ratios (%)				
RoE*	4.4	13.8	24.6	22.5
RoCE*	7.1	16.5	18.8	19.1
RoIC*	8.4	16.1	19.1	17.4
Valuation Ratios (x)				
P/E	94.1	29.6	12.5	11.4
EV / EBITDA	18.3	10.4	8.6	7.9
EV / Net Sales	1.6	1.4	1.2	1.2
Market Cap / Sales	1.1	1.1	1.0	0.9
Price to Book Value	4.1	2.1	1.8	1.6
Solvency Ratios				
Debt/EBITDA	6.2	2.6	2.0	1.7
Debt / Equity	2.0	0.7	0.5	0.4
Current Ratio	2.3	1.6	1.7	1.9
Quick Ratio	1.6	1.1	1.2	1.3

Source: Company, ICICIdirect.com Research

** Return ratios adjusted for revaluation reserve amounting to ~₹500 crore in FY17-19E*

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Sell: -10% or more;

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