PhillipCapital

Camlin Fine Sciences (CFIN IN)

Vertical integration to drive value growth

29 March 2016

INDIA | SPECIALTY CHEMICALS | Initiating Coverage

Well positioned in the niche business of global synthetic antioxidants

CFIN is an established global leader of food-grade synthetic antioxidants (market size of ~US$200mn, particularly in Tert-butylhydroquinone (TBHQ) and Butylatedhydroxyanisole (BHA). CFIN has 60% market share (capacity) with TBHQ/BHA capacity of 3600/2400tpa. CFIN's antioxidants sales in FY15 were Rs 3.11bn, implying a blended market share of about 50% in TBHQ and BHA. We estimate CFIN's antioxidants business to maintain 19% CAGR over FY15-18 to Rs 5.2bn.

Entry into blends of antioxidants to add value

Having established global leadership in antioxidants, CFIN is moving forward in blending (which may not be appreciated by its customers) by setting up a small unit in Tarapur, India and a unit in Brazil (with a capacity of 3720tpa) in FY16. Its strategic acquisition of a 65% stake in a Mexico-based blender,DresenQuimica(Dresen), in February 2016 should expedite its progress into the high-margin operation of blends of antioxidants. We believe the Dresen acquisition will be EPS accretive in FY17.

Performance chemicals: Capacity expansion to drive rapid growth

Its acquisition of Italy-based Borregaard's catechol operation in FY12 marked its entry into performance chemicals and made CFIN the second global manufacturer of catechol after Solvay. The acquisition also provided access to catechol-based downstream products. To cater to rising user industry demand, CFIN has doubled its guaiacol capacity to 4000tpa and raised veratrol capacity by 67% to 1000tpa in FY16 – this will lead to 17% sales CAGR over FY15-18 to Rs 2.04bn.

Aromatics: A strategic move towards high-value downstream products, but futuristic

CFIN ventured into the aromatics segment in FY14 to manufacture and market strategic downstream products of guaiacol (one of its performance chemical product) such as vanillin, ethyl vanillin, and other aromatic compounds. Chinese players dominate the vanillin market (global demand of 20,000MTPA). However, with CFIN's complete backward-integrated operation (with full control over intermediate product guaiacol, and basic raw material catechol) it has positioned itself as a quality global vanillin player. Additionally, its catechol-guaiacol based vanillin is a preferred product in advanced markets of US/EU compared to that of Chinese players (made out of toluene) due to quality/health hazard concerns. Currently, CFIN's aromatic sale is miniscule with ~1% contribution and we believe scale up of aromatics will lead value progress of CFIN, but it would be futuristic.

Green field CAPEX of Rs2.5bn ensures growth beyond FY18

Targeting scale and cost advantage, CFIN has planned major greenfield capex of ~Rs 2.5bn (highest till date for CFIN) in Dahej with an integrated manufacturing base for hydroquinone (basic raw material of antioxidants), catechol(basic raw material of performance/aromatic products), and vanillin. CFIN expects to complete and commission the project by the end of FY17 and drive growth from FY18. However, we have not built any revenues from the new project in FY18 – this could provide more upside to our estimates.

Valuations yet to capture the visible value growth; initiate BUY with TPRs 135

We estimate CFIN to deliver revenue and profit CAGR of 15% and 22% over FY16-18. At CMP of Rs 88, the company trades at 11x FY18 EPS and 7x FY18E EV/EBITDA. Considering CFIL's forward move into high-margin antioxidant blends and vanillin and its strong operating/financial efficiency (with 30% ROE, 26% ROCE), we value CFIN at 9x FY18 EV/EBITDA (i.e., same multiple assigned to Aarti Industries) at Rs 135 – implying an upside of 54%. Initiate coverage with a BUY rating.

BUY

CMP RS 88

TARGET RS 135 (+54%)

COMPANY DATA

O/S SHARES (MN) :	97
MARKET CAP (RSBN) :	9
MARKET CAP (USDBN) :	0.1
52 - WK HI/LO (RS) :	129 / 76
LIQUIDITY 3M (USDMN) :	0.5
PAR VALUE (RS) :	1

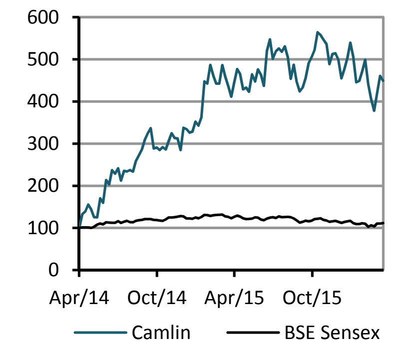
SHARE HOLDING PATTERN, %

	Dec 15	Sep 15	Jun 15
PROMOTERS :	39.9	40.1	52.2
FII / NRI :	0.1	0.1	0.2
FI / MF :	1.5	1.4	0.9
NON PRO :	25.7	19.7	19.5
PUBLIC & OTHERS :	32.7	38.6	27.3

PRICE PERFORMANCE, %

	1MTH	3MTH	1YR
ABS	14.7	-16.6	6.1
REL TO BSE	6.4	-12.0	15.4

PRICE VS. SENSEX



Source: Phillip Capital India Research

KEY FINANCIALS

Rs mn	FY16E	FY17E	FY18E
Net Sales	5,044	6,928	8,717
EBIDTA	872	1,275	1,648
Net Profit	366	584	746
EPS, Rs	3.8	6.1	7.8
PER, x	23.1	14.4	11.3
EV/EBIDTA, x	10.9	8.4	7.0
P/BV, x	5.1	3.8	2.9
ROE, %	22.0	27.7	27.7
Debt/Equity (%)	96.4	123.9	132.1

Source: PhillipCapital India Research Est.

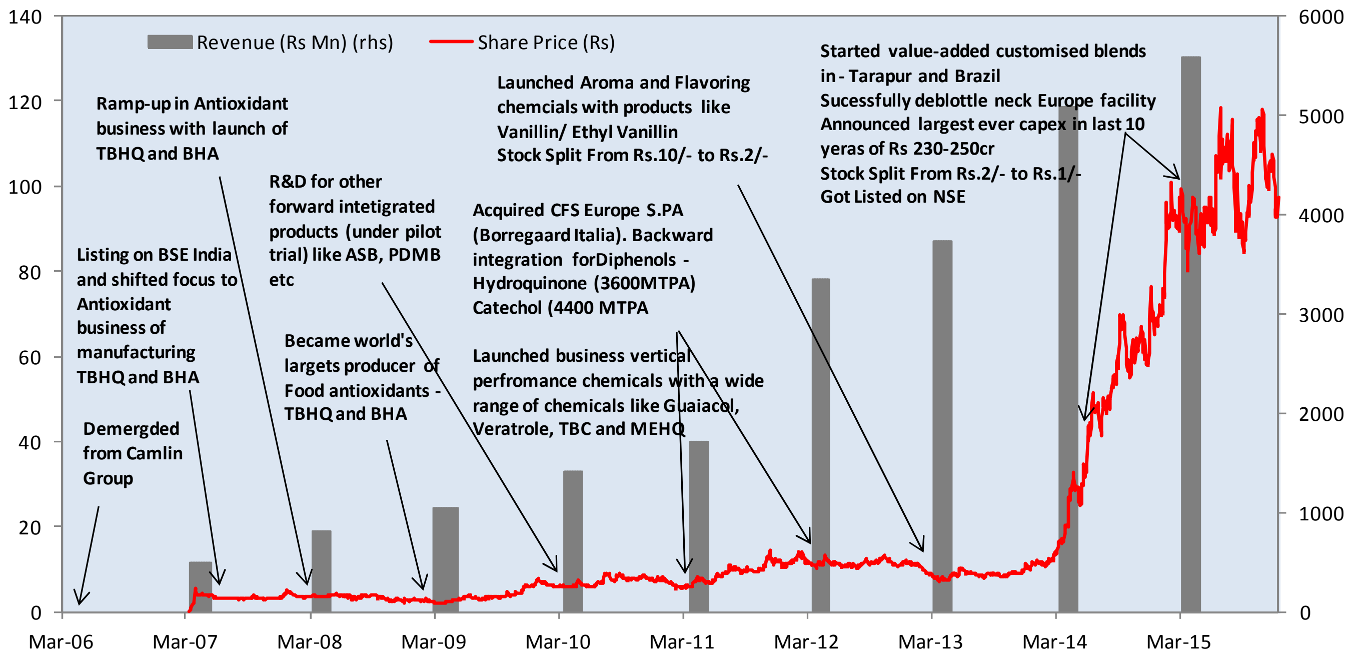
Surya Patra (+ 9122 6667 9968)
spatra@phillipcapital.in

Mehul Sheth (+ 9122 6667 9996)
msheth@phillipcapital.in

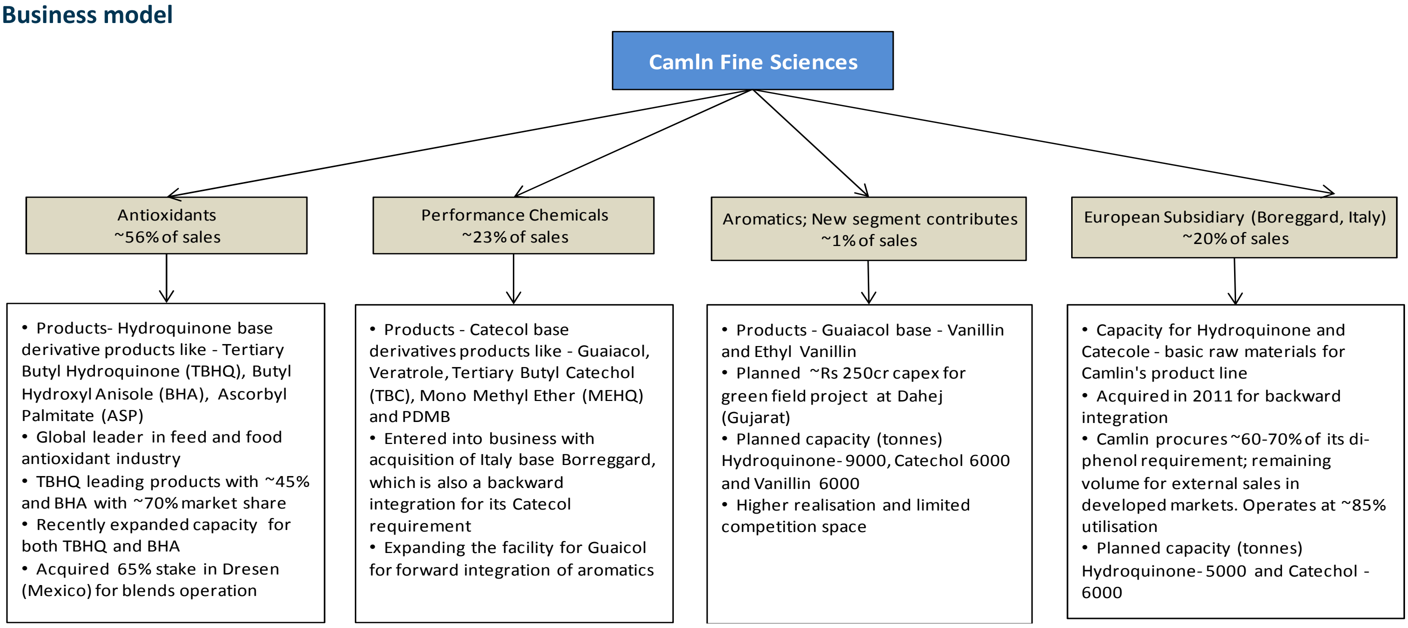
About the Company

- CFIN came into existence after its demerger from Camlin Ltd in December 2006. It is the leading manufacturer of food-grade antioxidants in the world.
- CFIN's business can be categorised into three broad segments– antioxidants, aroma, and performance chemicals.
- Entered into performance chemicals segment with the acquisition of Borregard and become one of the largest producers of di-phenols (hydroquinone and catecole).
- Sophisticated R&D ability.
- Recently entered in to new aroma segment with products like vanillin.
- It has largest ever capex of – ~Rs 2.5bn in Dahej– for an integrated greenfield plant to manufacture hydroquinone, catecole and vanillin, which will drive value growth for the company.

Evolution of Camlin



Business model



Source: Company, PhillipCapital India Research

Investment Rationale

Antioxidants: Niche business; value growth from move to blends

Established global leader in food-grade antioxidants

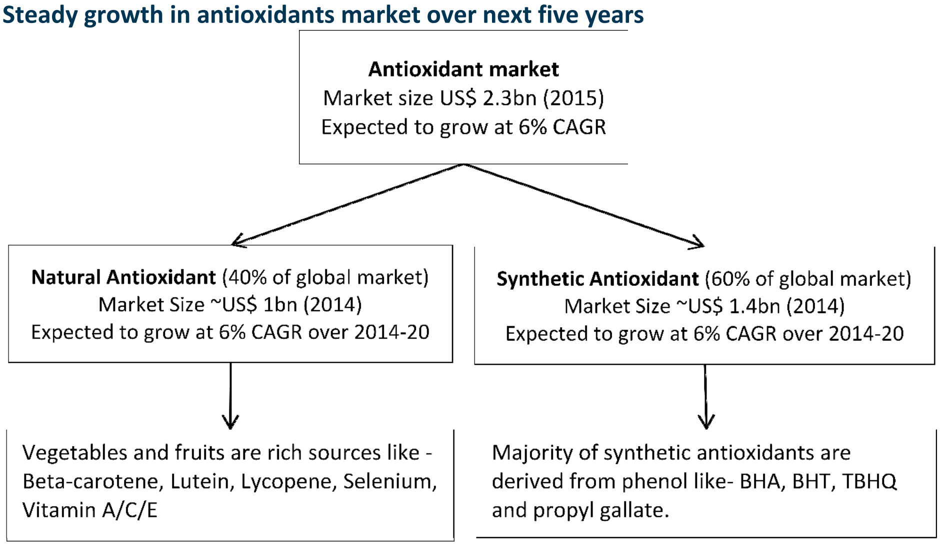
Antioxidants are chemicals that prolong the shelf life of end products by protecting them against deterioration caused by oxidation. They have a wide application in pharmaceuticals, food & beverages, feed additives, and cosmetics industry. These are largely classified into two types– (1) natural antioxidants and (2) synthetic antioxidants –on the basis oftheir manufacturing.

Geographically, Asia Pacific accounts for ~35% of the total food antioxidants market, followed by US and Europe. Asia is expected to be the fastest growing one, primarily India and China, led by the high feed wastage because of the oxidation process due to the humid climate.

Natural antioxidants like - beta-carotene, lutein, lycopene, selenium, vitamin A/C/E, and rosemary are extracted from vegetables and fruits. On the other hand, synthetic antioxidants are chemicals derivatives like butylatedhydroxytoluene(BHT) butylatedhydroxyanisole(BHA), tert-butylhydroquinone(TBHQ), and propyl gallate. CFIN's antioxidant products portfolio is derived from phenols and falls under the synthetic antioxidant segment.

While the growing demand for organic products in the advanced markets boosts demand for natural antioxidants, relatively low prices have resulted in growing popularity of synthetic antioxidants.

Steady growth in antioxidants market over next five years



Source: PhillipCapital India Research

As per industry sources, the global antioxidant market was valued at ~US$ 2.25bn in 2014. While the synthetic antioxidant market was ~US$ 1.35bn (i.e. 60% of total), natural antioxidants were valued at US$ 900mn. Out of the total synthetic antioxidant market, food-grade accounted for ~15% at US$180mn and this is the area of focus for CFIN.

TBHQ and BHA lead the food grade antioxidant market

The key synthetic antioxidants products include Butylatedhydroxytoluene (BHT), Butylatedhydroxyanisole (BHA), and Tert-butylhydroquinone (TBHQ) – those put together account for 80-90% of the total synthetic antioxidants market in the world. Food-grade antioxidant market is largely dominated by TBHQ and BHA with about 60% share. CFIN is the established global leader in TBHQ and BHA with a revenue of Rs 3.11bn in FY15, implying a blended market share of about 50%. BHT is largely an animal-feed-oriented antioxidant.

CFIN is the established global leader in TBHQ and BHA with a revenue of Rs 3.11bn in FY15, implying a blended market share of about 50%.

Limited competition helped CFIN become a global leader in participating antioxidants

The global antioxidant market is well represented by biggies such as Eastman and Solvay, and many fringe Chinese and Indian players. While most antioxidant production by biggies is for captive consumption, fringe players are largely local with no global clout, quality, or scale.

Global scenario of TBHQ and BHA manufacturer

Manufacturer (TBHQ/BHA)	Capacity (TPA)	Comments
Indian Players		
Camlin Fine sciences	~6000	Largest manufacturer and market leader
Nova International	<500	No major focus on antioxidant business
Milestone preservatives	500	Core antioxidant player but with limited capacity
ShevalynMultichem	<500	No major focus on antioxidant business
VDHChemtech	NA	No major focus on antioxidant business
Crystal Quinone	<500	No major focus on antioxidant business
Global players		
Solvay	NA	Large capacity but major focus on captive consumption
Eastman		
Aeci		
China Players		
Guangzhou Taibang	NA	Lower capacity compare to CFIN but no major focus on antioxidant business
Guangdong Food Industry Institute	1000	
Welbon	NA	
Yurui (Shanghai) Chemical Co., Ltd	NA	

Source: PhillipCapital India Research

Leveraging its global reach and strong clientele, CFIN gradually expanded its antioxidant capacity and emerged at the leading global player in food-grade antioxidants, including TBHQ and BHA.

Camlin is one of the largest manufacturers of TBHQ and BHA

Antioxidants as on FY16	Camlin's Capacity (TPA)	Global demand (TPA)	Expected annual growth (%)	Global market Share (%)
Tert-Butyl Hydroquinone (TBHQ)	3600	6000	3	45
Butylated Hydroxyanisole (BHA)	2400	4000	3	70

Source: Company, PhillipCapital India Research

With a global demand of ~6000TPA, TBHQ is a leading antioxidant followed by BHA, which has a global demand of ~4000TPA – both growing at ~3-4% annually. Other antioxidants such as BHT, Ascorbyl Palmitate (ASP), and Ethoxyquin antioxidants are comparatively smaller, but are projected to grow at a CAGR of 4.6% in the next five years. Having TBHQ capacity of 3600tpa (2400tpa in FY15) and BHA capacity of 2400tpa (2000tpa in FY15), CFIN leads the global market with 60% market share.

Integrated model in antioxidants is the key to CFIN's profitable growth

CFIN started its antioxidant operations in 2006 just as a manufacturer of TBHQ and BHA and gradually scaled up operation to become a global leader by FY10. CFIN used to import hydroquinone (HQ) (ingredient for TBHQ/BHA) from Borregaard, Rohdia, and Chinese players until FY12. Its strategic acquisition of HQ operation of Borregaard (along with Catechol) in FY12 backward-integrated its antioxidant operation and ensured global leadership and profitable growth.

Entry into blends of antioxidants to add value

Although antioxidants have a wider application in pharmaceuticals, food & beverages, feed additives, and cosmetics, the blenders of various antioxidants (as required by the user industries) play a key intermediary role between antioxidant manufacturers and food/feed processing industries. Incidentally, blenders of antioxidants enjoy better margin vs. manufacturers, supported by their last-mile connect with user industries.

Having established global leadership in antioxidants, CFIN is moving forward in blending (which may not be appreciated by its customers who are largely blenders) by setting up a small unit in Tarapur, India and a unit in Brazil (with a capacity of 3720tpa) in FY16. Its strategic acquisition of a 65% stake in a Mexico-based blender, DresenQuimica (Dresen), in February 2016 should expedite its progress into the high-margin operation of blends of antioxidants. We believe the Dresen acquisition will be EPS accretive in FY17.

Acquisition of Dresen to expedite its progress in blends and would be EPS accretive

In February 2016, CFIN entered into share-purchase agreements to acquire 65% stake in DresenQuimica (Mexico) along with its group companies. Dresen is engaged in manufacturing and distributing antioxidant blends in Mexico, Peru, and other Latin American markets. It has a large products portfolio of blends, strong distribution channels with market knowledge, and proprietary process/technology. Additionally, Dresen's presence (proximity to America,a leading blends market) is the key reason for the acquisition. As a strategy, CFIN expects to leverage Dresen's technology and market-understanding coupled with its strong positioning in antioxidants for penetrating the US blends market soon.

CFIN expects to leverage Dresen's technology and market-understanding coupled with its strong positioning in antioxidants for penetrating the US blends market soon.

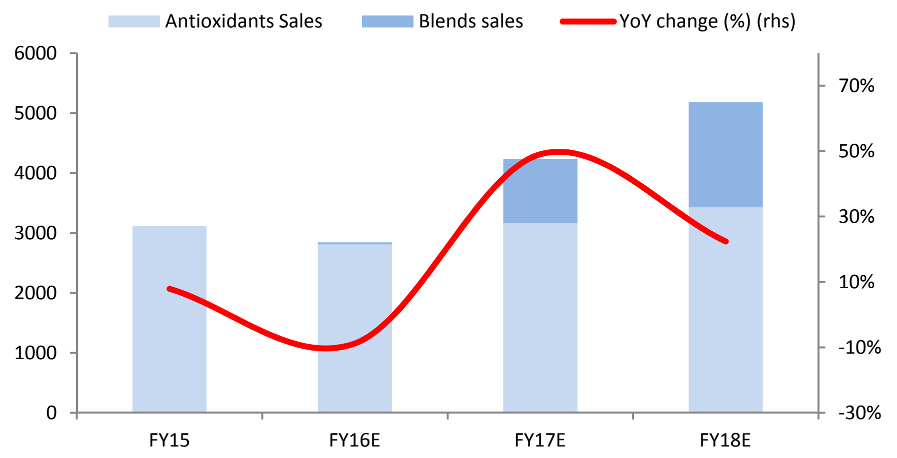
Dresen will be EPS accretive from FY17 only

Particulars (Rs mn)	FY17E	FY18E
Revenue to camlin	980	1568
To EBITDA	204	329
% addition to Camlin's EBITDA	*2.9*	*3.8*
To PAT	98	157
MI	23	55
Incremental PAT to Camlin	75	102
% addition to Camlin's PAT	*12.9*	*13.7*

Source: Company, PhillipCapital India Research Estimates

Dresen had sales of ~US$ 14.8mn with a margin of >20% in 2014 and grew about ~20% in 2015. Considering CFIN's strategic expansion plan into USA, we build sales CAGR of 17% for Dresen over FY16-18 to Rs 1.57bn. We believe that the Dresen acquisition will be EPS accretive in FY17 itself.

Antioxidant revenue mix will see value growth from blends opertation



Source: Company, PhillipCapital India Research Estimates

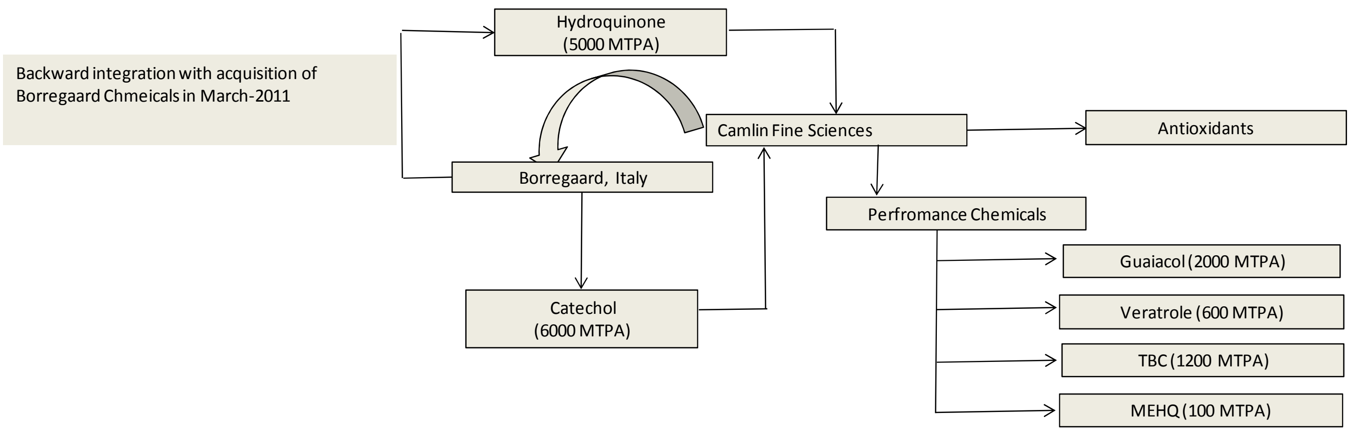
With this acquisition, the antioxidant business would see a lift, volume and value, soon. We estimate CFIN's antioxidants business to maintain 19% CAGR over FY15-18 to Rs 5.2bn.

Performance chemicals: Relatively new; expansion to drive growth

Acquisition of Borregard marked CFIN's entry into performance chemical

To backward-integrate its antioxidants business, CFIN acquired the HQ and catechol operation of Borregaard in FY12. The acquisition of catechol marked its entry into performance chemicals. This acquisition made CFIN the second global manufacturer of catechol after Solvay. Acquisition also provided access to catechol-based downstream products including guaiacol, varatrole, TBC, and hydroquinone mono methyl ether (HQMME). These products have a wide range of applications in industries such as pharma, agrochemicals, flavour and fragrance, dyestuff, and acrylates. This division currently contributes ~23% to sales.

Acquisition of Borregard marked CFIN's entry into performance chemical



Source: Company, PhillipCapital India Research

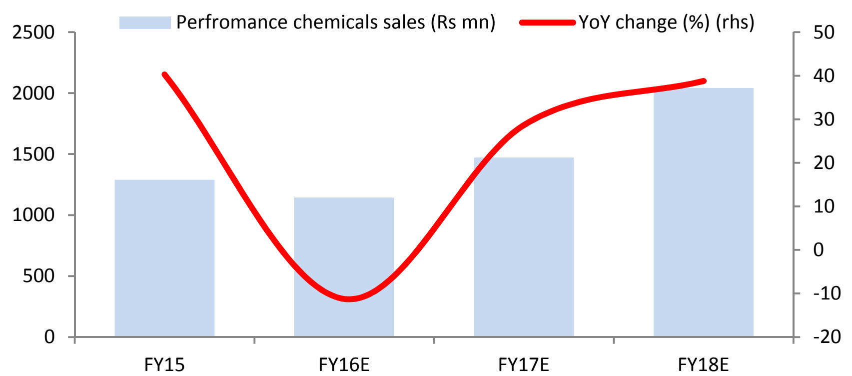
Multiple capacity expansions to boost

With visible huge demand in global market for performance chemicals, CFIN has doubled guaiacol capacity to 4000tpa (2000tpa in FY15) and raised veratrol capacity by 67% to 1000tpa in FY16. Seeing steady progress in user industries, limited competition and capacity expansion by CFIN, we estimate 17% sales CAGR over FY15-18 to Rs 2.04bn.

Performance chemicals growth momentum to continue over strong global demand

Products (Performance chemicals as on FY16)	*CFIN's Capacity (TPA)*	*Global demand (TPA)*	*Expected annual growth (%)*
Hydroquinone Mono Methyl Ether (HQMME)	1200	6000	4
Veratrole	1000	2000	5
TBC	1200	5000	10
Guaiacol	4000	50000	4

Performance chemicals will have strong growth in visible future



Source: Company, PhillipCapital India Research Estimates

Aromatics: Strategic move to high-value downstream, but futuristic

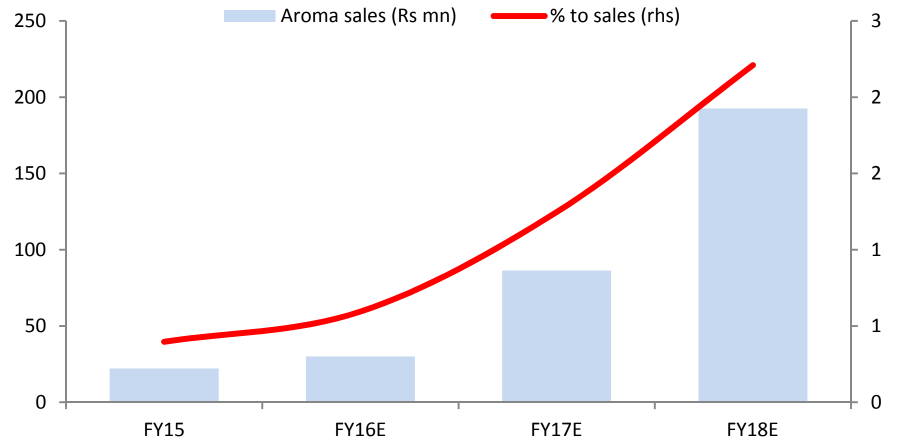
With acquisition of Borregaad, the company has access to guaiacol, which is the basic raw material for producing vanillin and ethyl vanillin. Therefore, CFIN has recently ventured into the aromatics segment in FY14 with an objective to manufacture and market strategic downstream products of guaiacol such as vanillin, ethyl vanillin, and other aromatic compounds.

CFIN's catecho-guaiacol-based vanillin is preferred in advanced markets (US/EU) over the Chinese-made product (made of toluene) due to quality/health hazard concerns from the food industry.

Vanillin market, with global demand of 20,000 MTPA, is dominated by Chinese players. However, with CFIN's completely backward-integrated operation (full control over intermediate product guaiacol and basic raw material catechol) it has positioned itself as a quality global vanillin player. Additionally, CFIN's catecho-guaiacol-based vanillin is preferred in advanced markets (US/EU) over the Chinese-made product (made of toluene) due to quality/health hazard concerns from the food industry.

Currently, CFIN has a pilot plant with a capcity of 300tpa in Tarapur, India, and it is setting up a greenfield facility of vanillin with a capacity of 6000tpa in Dahej, which will drive profitable growth from FY18. As of now, Fin's aromatic sales are miniscule (with ~1% sales contribution); we believe aromatic initiatives will certainly lead to value progress, but it would be a futuristic.

Aroma segment will have gradual pick-up



Source: Company, PhillipCapital India Research Estimates

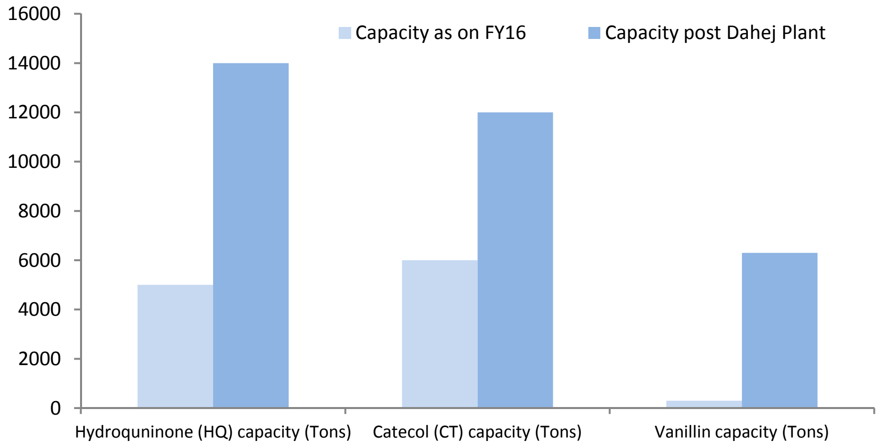
A well-planned mega CAPEX ensures growth beyond FY18

Targeting scale and cost advantage, CFIN has planned major green-field capex of ~Rs 2.5bn (highest till date for CFIN) in Dahej (Gujarat) with an integrated manufacturing base for hydroquinone (basic raw material of antioxidants), catechol (basic raw material of performance/aromatic products), and vanillin. The targeted capacities include hydroquinone (9000mtpa), catechol (6000mtpa), and vanillin (6000mtpa). Currently, it sources hydroquinone and catechol from its Europe plant and other international players. The new capex will offer full backward integration and move it forward to high-value vanillin.

We have not built any revenues from the new Dahej project in FY18 and this could provide more upside to our estimates.

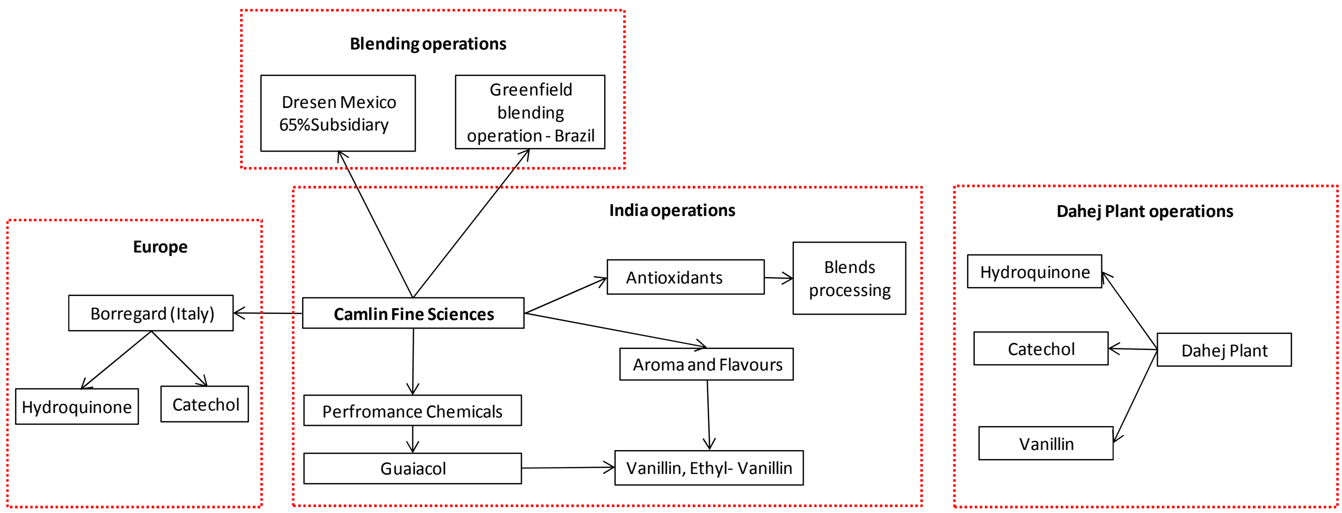
The expansion would be funded 30% from internal accruals and the rest from ECB financing. CFIN is currently in the process of getting environmental clearance for its new project and expectsit to be complete and commissioned by the end of FY17, which would drive growth from FY18. However, we have not built any revenues from the new Dahej project in FY18 and this could provide more upside to our estimates.

Enhanced capacity with Dahej Plant will drive growth FY18 onwards



Source: Company, PhillipCapital India Research

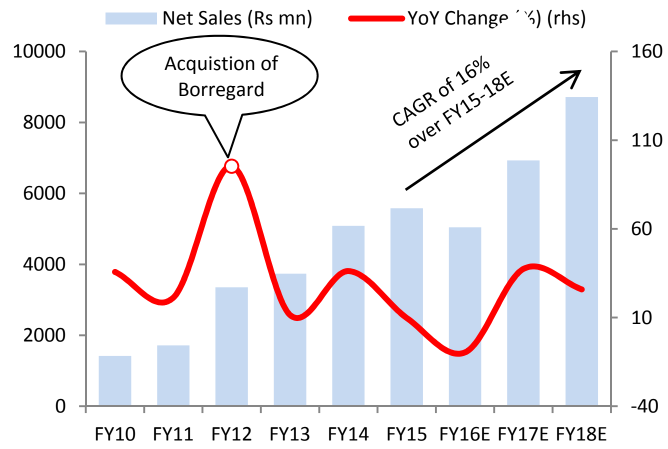
Dahej to integrate Camlin's operation backward as well as forward



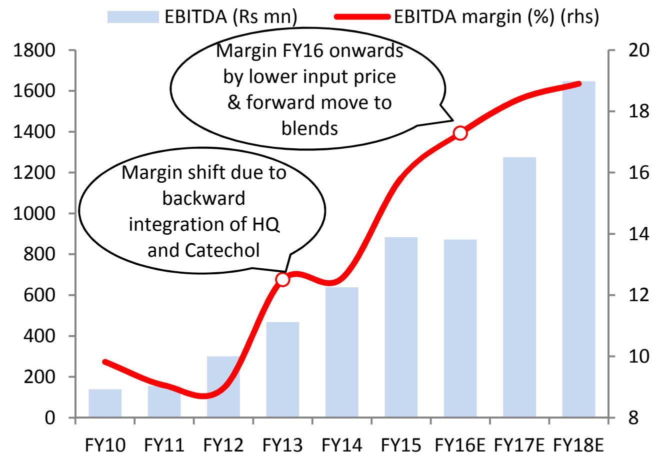
Source: Company, PhillipCapital India Research

Financial performance

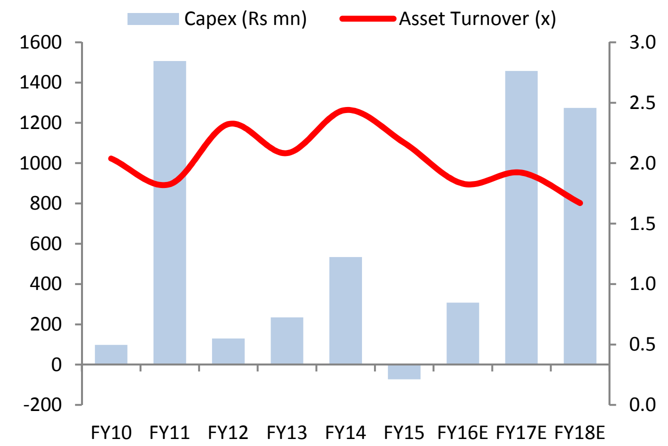
Sales to see 16% CAGR over FY15-18E



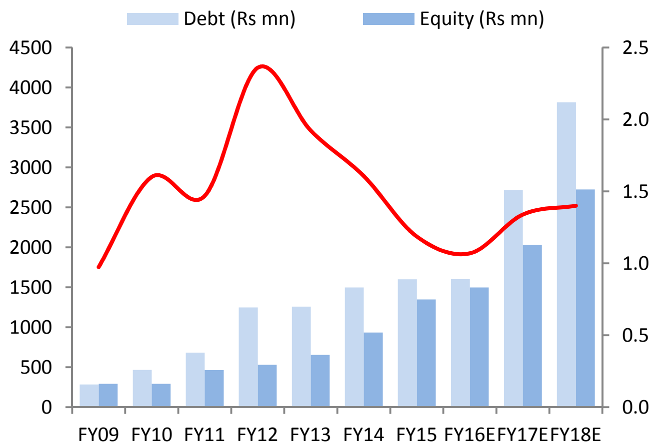
Vertical integration expands margin



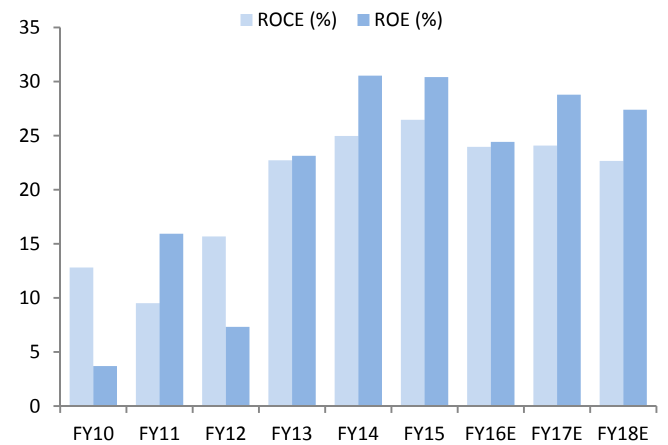
Assets turnover remain healthy despite Highest ever CAPEX



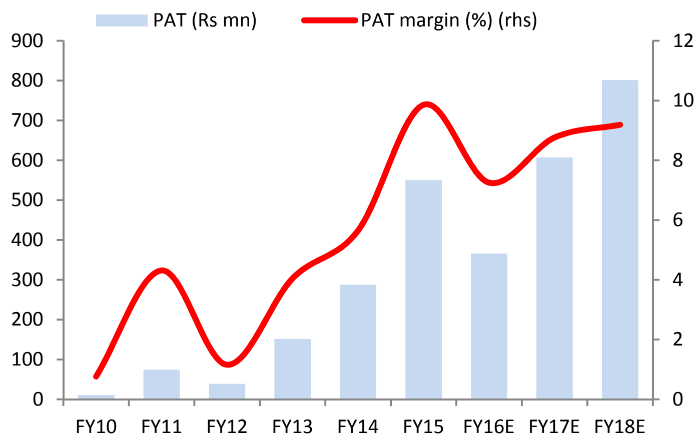
Greenfield Dahej plant raise debt position but remain in comfortable zone



Superior return ratios over FY15-18E



Robust earnings growth



Source: Company, PhillipCapital India Research Estimates

Valuation and outlook

We estimate CFIN to deliver sales/profit CAGR of 15% and 22% over FY15-18 to touch Rs 8.5bn/739mnin FY18E. While antioxidants would see value progress led by its entry into blends, the performance chemicals would see capex-led growth in the near future. Additionally, CFIN's mega expansion with planned commissioning by the end of FY17 would provide incremental upside to our estimates.

At a CMP of Rs 88, CFIN trades at 11x FY18 EPS and 7x EV/EBITDA. Considering CFIL's move into high-margin antioxidant blends and vanillin as well as its strong operating/financial efficiency (with 29% ROE/26% ROCE), we value CFIN at 9x FY18 EV/EBITDA (i.e., same multiple assigned to Aarti Industries) to Rs135– initiate coverage with a BUY rating and target price of Rs 135.

While antioxidants would see value progress led by its entry into blends, the performance chemicals would see capex-led growth in the near future. Additionally, CFIN's mega expansion with planned commissioning by the end of FY17 would provide incremental upside to our estimates.

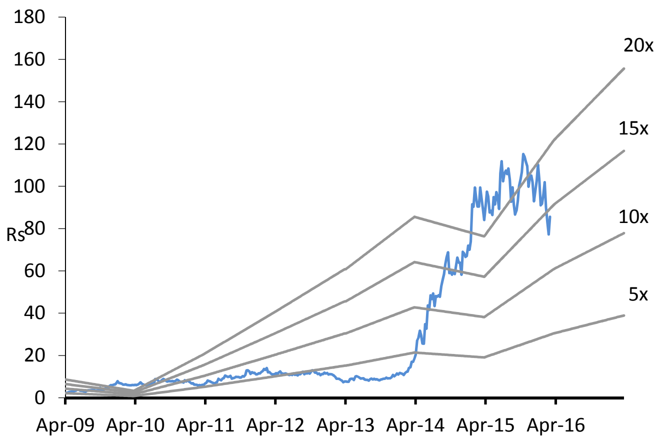
Valuation Table

Particulars	Value (Rsmn)
FT18 EBITDA (Rs mn)	1648
Target Multiple (x)	9
EV (Rs mn)	**14828**
Net debt (Rs mn)*	1647
Target Mcap (Rs mn)	13180
No of shares (mn)	96
Target Price (Rs)	**135**
CMP (Rs)	**88**
Upside	**54%**

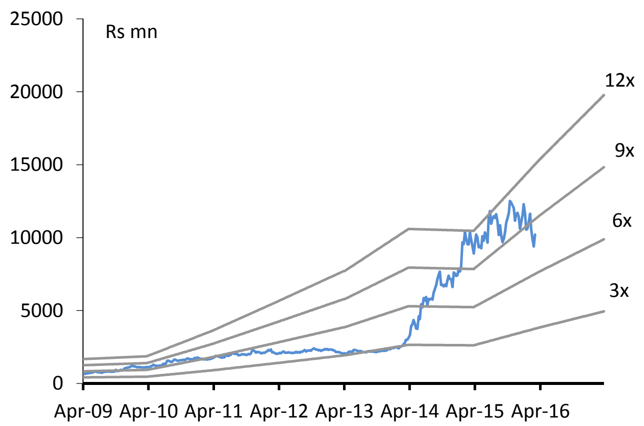
Source: Company, PhillipCapital India Research Estimates

Note: * Net debt is adjusted for debt on Dahej project

One year forward PE band

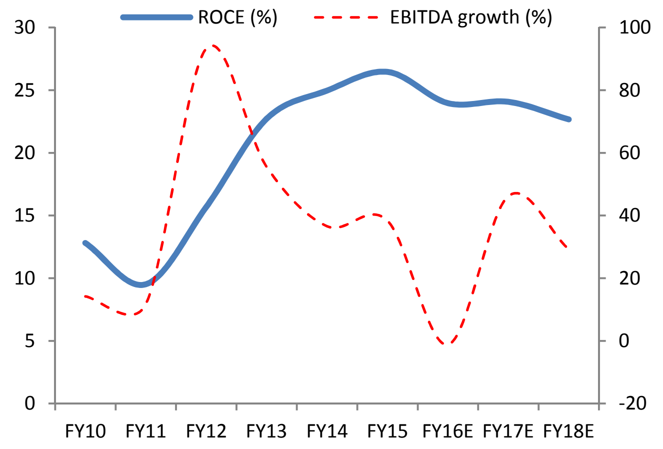


One year forward EV/EBITDA band

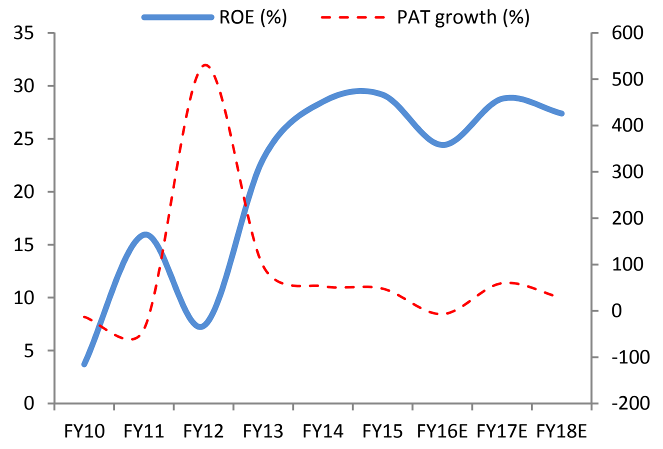


Source: Bloomberg, PhillipCapital India Research Estimates

Improvement in operating efficiency



Earnings to maintain growth momentum



Source: Company, PhillipCapital India Research Estimates

Downside risk to valuation

- Forward move into antioxidant blends may not be appreciated by its customers who are largely blenders and could impact antioxidants sales in the near term
- Adverse fluctuation in currency could impact overall profitability as >85% of its sales are export driven and it import input materials from its Italy based subsidiary.
- Any increase in competition from China could impact its progress

Upside risk

- Earlier-than-expected commissioning of Dahej integrated facility (not factored any sales in FY18) could surprise earnings positively.

Financials

Income Statement

Y/E Mar, Rs mn	FY15	FY16e	FY17e	FY18e
Net sales	**5,583**	**5,044**	**6,928**	**8,717**
Growth, %	10	-10	37	26
Total income	5,583	5,044	6,928	8,717
Raw material expenses	-2,705	-2,088	-2,806	-3,530
Employee expenses	-406	-355	-492	-628
Other Operating expenses	-1,589	-1,730	-2,356	-2,911
EBITDA (Core)	**883**	**872**	**1,275**	**1,648**
Growth, %	38.3	(1.2)	46.2	29.2
Margin, %	15.8	17.3	18.4	18.9
Depreciation	-162	-171	-198	-261
EBIT	**721**	**702**	**1,076**	**1,386**
Growth, %	38.4	(2.6)	53.4	28.8
Margin, %	12.9	13.9	15.5	15.9
Interest paid	-228	-222	-285	-346
Other Non-Operating Income	70	50	76	105
Pre-tax profit	**528**	**530**	**867**	**1,145**
Tax provided	22	-164	-260	-343
Profit after tax	**550**	**366**	**607**	**801**
Net Profit	**550**	**366**	**607**	**801**
Growth, %	43.9	(10.8)	59.7	27.7
Net Profit (adjusted)	**410**	**366**	**584**	**746**
Unadj. shares (m)	96	96	96	96
Wtd avg shares (m)	96	96	96	96

Balance Sheet

Y/E Mar, Rs mn	FY15	FY16e	FY17e	FY18e
Cash & bank	193	555	458	768
Debtors	1,134	1,029	1,394	1,743
Inventory	1,364	1,257	1,704	2,131
Loans & advances	252	242	333	418
Other current assets	86	86	86	86
Total current assets	3,029	3,169	3,975	5,146
Investments	11	11	11	11
Gross fixed assets	2,951	3,158	3,745	5,120
Less: Depreciation	-1,887	-2,057	-2,256	-2,517
Add: Capital WIP	28	130	1,000	900
Net fixed assets	1,092	1,230	2,489	3,503
Total assets	**4,297**	**4,575**	**6,639**	**8,824**
Current liabilities	1,151	1,112	1,528	1,922
Provisions	160	160	160	160
Total current liabilities	1,311	1,272	1,688	2,082
Non-current liabilities	1,637	1,640	2,757	3,853
Total liabilities	2,948	2,912	4,444	5,935
Paid-up capital	96	96	96	96
Reserves & surplus	1,253	1,402	1,935	2,629
Shareholders' equity	1,349	1,662	2,194	2,889
Total equity & liabilities	**4,297**	**4,574**	**6,639**	**8,823**

Cash Flow

Y/E Mar, Rs mn	FY15	FY16e	FY17e	FY18e
Pre-tax profit	528	530	867	1,145
Depreciation	162	171	198	261
Chg in working capital	-357	184	-487	-467
Total tax paid	-64	-164	-260	-343
Other operating activities	-102	-165	-165	0
Cash flow from operating activities	**168**	**555**	**154**	**595**
Capital expenditure	-203	-308	-1,458	-1,275
Chg in investments	1	0	0	0
Cash flow from investing activities	**-201**	**-308**	**-1,458**	**-1,275**
Free cash flow	429	412	-1,162	-735
Debt raised/(repaid)	101	2	1,117	1,096
Cash flow from financing activities	**68**	**115**	**1,230**	**1,044**
Net chg in cash	35	363	-74	364

Valuation Ratios

	FY15	FY16e	FY17e	FY18e
Per Share data				
EPS (INR)	4.1	3.8	6.1	7.8
Growth, %	45.6	(7.0)	59.7	27.7
Book NAV/share (INR)	14.1	17.3	22.9	30.1
FDEPS (INR)	4.1	3.8	6.1	7.8
CEPS (INR)	5.8	5.6	8.2	10.5
CFPS (INR)	2.1	7.0	2.5	5.1
Return ratios				
Return on assets (%)	17.4	11.4	14.0	13.1
Return on equity (%)	40.8	22.0	27.7	27.7
Return on capital employed (%)	26.5	24.0	24.1	22.7
Turnover ratios				
Asset turnover (x)	2.2	1.8	1.9	1.7
Sales/Total assets (x)	1.4	1.1	1.2	1.1
Sales/Net FA (x)	5.2	4.3	3.7	2.9
Working capital/Sales (x)	0.3	0.3	0.3	0.3
Receivable days	74.2	74.4	73.4	73.0
Working capital days	110.2	108.7	104.8	102.8
Liquidity ratios				
Current ratio (x)	2.6	2.8	2.6	2.7
Quick ratio (x)	1.4	1.7	1.5	1.6
Interest cover (x)	3.2	3.2	3.8	4.0
Total debt/Equity (%)	118.6	96.4	123.9	132.1
Net debt/Equity (%)	104.3	63.0	103.0	105.5
Valuation				
PER (x)	21.5	23.1	14.4	11.3
PEG (x) - y-o-y growth	0.5	(3.3)	0.2	0.4
Price/Book (x)	6.3	5.1	3.8	2.9
EV/Net sales (x)	1.8	1.9	1.5	1.3
EV/EBITDA (x)	11.1	10.9	8.4	7.0
EV/EBIT (x)	13.7	13.5	9.9	8.3

Source: Company, PhillipCapital India Research Estimates

Rating Methodology

We rate stock on absolute return basis. Our target price for the stocks has an investment horizon of one year.

Rating	Criteria	Definition
BUY	>= +15%	Target price is equal to or more than 15% of current market price
NEUTRAL	-15% > to < +15%	Target price is less than +15% but more than -15%
SELL	<= -15%	Target price is less than or equal to -15%.

Management

Vineet Bhatnagar (Managing Director)	(91 22) 2483 1919
Kinshuk Bharti Tiwari (Head – Institutional Equity)	(91 22) 6667 9946
Jignesh Shah (Head – Equity Derivatives)	(91 22) 6667 9735

Research

Automobiles
Dhawal Doshi (9122) 6667 9769
Nitesh Sharma, CFA (9122) 6667 9965

Agri Inputs
Gauri Anand (9122) 6667 9943

Banking, NBFCs
Manish Agarwalla (9122) 6667 9962
Pradeep Agrawal (9122) 6667 9953
Paresh Jain (9122) 6667 9948

Consumer
Naveen Kulkarni, CFA, FRM (9122) 6667 9947
Jubil Jain (9122) 6667 9766

Cement
Vaibhav Agarwal (9122) 6667 9967

Economics
Anjali Verma (9122) 6667 9969

Engineering, Capital Goods
Jonas Bhutta (9122) 6667 9759
Hrishikesh Bhagat (9122) 6667 9986

Infrastructure & IT Services
Vibhor Singhal (9122) 6667 9949

Logistics, Transportation & Midcap
Vikram Suryavanshi (9122) 6667 9951

Media
Manoj Behera (9122) 6667 9973

Metals
Dhawal Doshi (9122) 6667 9769
Yash Doshi (9122) 6667 9987

Midcap
Amol Rao (9122) 6667 9952

Oil & Gas
Sabri Hazarika (9122) 6667 9756

Pharma & Speciality Chem
Surya Patra (9122) 6667 9768
Mehul Sheth (9122) 6667 9996

Mid-Caps & Database Manager
Deepak Agarwal (9122) 6667 9944

Strategy
Naveen Kulkarni, CFA, FRM (9122) 6667 9947
Anindya Bhowmik (9122) 6667 9764

Telecom
Naveen Kulkarni, CFA, FRM (9122) 6667 9947
Manoj Behera (9122) 6667 9973

Technicals
Subodh Gupta, CMT (9122) 6667 9762

Production Manager
Ganesh Deorukhkar (9122) 6667 9966

Editor
Roshan Sony 98199 72726

Sr. Manager – Equities Support
Rosie Ferns (9122) 6667 9971

Sales & Distribution

Ashvin Patil (9122) 6667 9991
Shubhangi Agrawal (9122) 6667 9964
Kishor Binwal (9122) 6667 9989
Bhavin Shah (9122) 6667 9974
Ashka Mehta Gulati (9122) 6667 9934

Sales Trader
Dilesh Doshi (9122) 6667 9747
Suniil Pandit (9122) 6667 9745

Execution
Mayur Shah (9122) 6667 9945

Corporate Communications

Zarine Damania (9122) 6667 9976

Contact Information (Regional Member Companies)

SINGAPORE: **Phillip Securities Pte Ltd**
250 North Bridge Road, #06-00 Raffles City Tower,
Singapore 179101
Tel : (65) 6533 6001 Fax: (65) 6535 3834
www.phillip.com.sg

MALAYSIA: **Phillip Capital Management Sdn Bhd**
B-3-6 Block B Level 3, Megan Avenue II,
No. 12, Jalan Yap Kwan Seng, 50450 Kuala Lumpur
Tel (60) 3 2162 8841 Fax (60) 3 2166 5099
www.poems.com.my

HONG KONG: **Phillip Securities (HK) Ltd**
11/F United Centre 95 Queensway Hong Kong
Tel (852) 2277 6600 Fax: (852) 2868 5307
www.phillip.com.hk

JAPAN: **Phillip Securities Japan, Ltd**
4-2 Nihonbashi Kabutocho, Chuo-ku
Tokyo 103-0026
Tel: (81) 3 3666 2101 Fax: (81) 3 3664 0141
www.phillip.co.jp

INDONESIA: **PT Phillip Securities Indonesia**
ANZ Tower Level 23B, Jl Jend Sudirman Kav 33A,
Jakarta 10220, Indonesia
Tel (62) 21 5790 0800 Fax: (62) 21 5790 0809
www.phillip.co.id

CHINA: **Phillip Financial Advisory (Shanghai) Co. Ltd.**
No 550 Yan An East Road, Ocean Tower Unit 2318
Shanghai 200 001
Tel (86) 21 5169 9200 Fax: (86) 21 6351 2940
www.phillip.com.cn

THAILAND: **Phillip Securities (Thailand) Public Co. Ltd.**
15th Floor, Vorawat Building, 849 Silom Road,
Silom, Bangrak, Bangkok 10500 Thailand
Tel (66) 2 2268 0999 Fax: (66) 2 2268 0921
www.phillip.co.th

FRANCE: **King & Shaxson Capital Ltd.**
3rd Floor, 35 Rue de la Bienfaisance
75008 Paris France
Tel (33) 1 4563 3100 Fax : (33) 1 4563 6017
www.kingandshaxson.com

UNITED KINGDOM: **King & Shaxson Ltd.**
6th Floor, Candlewick House, 120 Cannon Street
London, EC4N 6AS
Tel (44) 20 7929 5300 Fax: (44) 20 7283 6835
www.kingandshaxson.com

UNITED STATES: **Phillip Futures Inc.**
141 W Jackson Blvd Ste 3050
The Chicago Board of Trade Building
Chicago, IL 60604 USA
Tel (1) 312 356 9000 Fax: (1) 312 356 9005

AUSTRALIA: **PhillipCapital Australia**
Level 37, 530 Collins Street
Melbourne, Victoria 3000, Australia
Tel: (61) 3 9629 8380 Fax: (61) 3 9614 8309
www.phillipcapital.com.au

SRI LANKA: **Asha Phillip Securities Limited**
Level 4, Millennium House, 46/58 Navam Mawatha,
Colombo 2, Sri Lanka
Tel: (94) 11 2429 100 Fax: (94) 11 2429 199
www.ashaphillip.net/home.htm

INDIA: **PhillipCapital (India) Private Limited**
No. 1, 18th Floor, Urmi Estate, 95 Ganpatrao Kadam Marg, Lower Parel West, Mumbai 400013
Tel: (9122) 2300 2999 Fax: (9122) 6667 9955 www.phillipcapital.in

Disclosures and Disclaimers

PhillipCapital (India) Pvt. Ltd. has three independent equity research groups: Institutional Equities, Institutional Equity Derivatives, and Private Client Group. This report has been prepared by Institutional Equities Group. The views and opinions expressed in this document may, may not match, or may be contrary at times with the views, estimates, rating, and target price of the other equity research groups of PhillipCapital (India) Pvt. Ltd.

This report is issued by PhillipCapital (India) Pvt. Ltd., which is regulated by the SEBI. PhillipCapital (India) Pvt. Ltd. is a subsidiary of Phillip (Mauritius) Pvt. Ltd. References to "PCIPL" in this report shall mean PhillipCapital (India) Pvt. Ltd unless otherwise stated. This report is prepared and distributed by PCIPL for information purposes only, and neither the information contained herein, nor any opinion expressed should be construed or deemed to be construed as solicitation or as offering advice for the purposes of the purchase or sale of any security, investment, or derivatives. The information and opinions contained in the report were considered by PCIPL to be valid when published. The report also contains information provided to PCIPL by third parties. The source of such information will usually be disclosed in the report. Whilst PCIPL has taken all reasonable steps to ensure that this information is correct, PCIPL does not offer any warranty as to the accuracy or completeness of such information. Any person placing reliance on the report to undertake trading does so entirely at his or her own risk and PCIPL does not accept any liability as a result. Securities and Derivatives markets may be subject to rapid and unexpected price movements and past performance is not necessarily an indication of future performance.

This report does not regard the specific investment objectives, financial situation, and the particular needs of any specific person who may receive this report. Investors must undertake independent analysis with their own legal, tax, and financial advisors and reach their own conclusions regarding the appropriateness of investing in any securities or investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realised. Under no circumstances can it be used or considered as an offer to sell or as a solicitation of any offer to buy or sell the securities mentioned within it. The information contained in the research reports may have been taken from trade and statistical services and other sources, which PCIL believe is reliable. PhillipCapital (India) Pvt. Ltd. or any of its group/associate/affiliate companies do not guarantee that such information is accurate or complete and it should not be relied upon as such. Any opinions expressed reflect judgments at this date and are subject to change without notice.

Important: These disclosures and disclaimers must be read in conjunction with the research report of which it forms part. Receipt and use of the research report is subject to all aspects of these disclosures and disclaimers. Additional information about the issuers and securities discussed in this research report is available on request.

Certifications: The research analyst(s) who prepared this research report hereby certifies that the views expressed in this research report accurately reflect the research analyst's personal views about all of the subject issuers and/or securities, that the analyst(s) have no known conflict of interest and no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific views or recommendations contained in this research report.

Additional Disclosures of Interest:
Unless specifically mentioned in Point No. 9 below:

1. The Research Analyst(s), PCIL, or its associates or relatives of the Research Analyst does not have any financial interest in the company(ies) covered in this report.
2. The Research Analyst, PCIL or its associates or relatives of the Research Analyst affiliates collectively do not hold more than 1% of the securities of the company (ies)covered in this report as of the end of the month immediately preceding the distribution of the research report.
3. The Research Analyst, his/her associate, his/her relative, and PCIL, do not have any other material conflict of interest at the time of publication of this research report.
4. The Research Analyst, PCIL, and its associates have not received compensation for investment banking or merchant banking or brokerage services or for any other products or services from the company(ies) covered in this report, in the past twelve months.
5. The Research Analyst, PCIL or its associates have not managed or co-managed in the previous twelve months, a private or public offering of securities for the company (ies) covered in this report.
6. PCIL or its associates have not received compensation or other benefits from the company(ies) covered in this report or from any third party, in connection with the research report.
7. The Research Analyst has not served as an Officer, Director, or employee of the company (ies) covered in the Research report.
8. The Research Analyst and PCIL has not been engaged in market making activity for the company(ies) covered in the Research report.
9. Details of PCIL, Research Analyst and its associates pertaining to the companies covered in the Research report:

Sr. no.	Particulars	Yes/No
1	Whether compensation has been received from the company(ies) covered in the Research report in the past 12 months for investment banking transaction by PCIL	No
2	Whether Research Analyst, PCIL or its associates or relatives of the Research Analyst affiliates collectively hold more than 1% of the company(ies) covered in the Research report	No
3	Whether compensation has been received by PCIL or its associates from the company(ies) covered in the Research report	No
4	PCIL or its affiliates have managed or co-managed in the previous twelve months a private or public offering of securities for the company(ies) covered in the Research report	No
5	Research Analyst, his associate, PCIL or its associates have received compensation for investment banking or merchant banking or brokerage services or for any other products or services from the company(ies) covered in the Research report, in the last twelve months	No

Independence: PhillipCapital (India) Pvt. Ltd. has not had an investment banking relationship with, and has not received any compensation for investment banking services from, the subject issuers in the past twelve (12) months, and PhillipCapital (India) Pvt. Ltd does not anticipate receiving or intend to seek compensation for investment banking services from the subject issuers in the next three (3) months. PhillipCapital (India) Pvt. Ltd is not a market maker in the securities mentioned in this research report, although it, or its affiliates/employees, may have positions in, purchase or sell, or be materially interested in any of the securities covered in the report.

Suitability and Risks: This research report is for informational purposes only and is not tailored to the specific investment objectives, financial situation or particular requirements of any individual recipient hereof. Certain securities may give rise to substantial risks and may not be suitable for certain investors. Each investor must make its own determination as to the appropriateness of any securities referred to in this research report based upon the legal, tax and accounting considerations applicable to such investor and its own investment objectives or strategy, its financial situation and its investing experience. The value of any security may be positively or adversely affected by changes in foreign exchange or interest rates, as well as by other financial, economic, or political factors. Past performance is not necessarily indicative of future performance or results.

Sources, Completeness and Accuracy: The material herein is based upon information obtained from sources that PCIPL and the research analyst believe to be reliable, but neither PCIPL nor the research analyst represents or guarantees that the information contained herein is accurate or complete and it should not be relied upon as such. Opinions expressed herein are current opinions as of the date appearing on this material, and are subject to change without notice. Furthermore, PCIPL is under no obligation to update or keep the information current. Without limiting any of the foregoing, in no event shall PCIL, any of its affiliates/employees or any third party involved in, or related to computing or compiling the information have any liability for any damages of any kind including but not limited to any direct or consequential loss or damage, however arising, from the use of this document.

Caution: Risk of loss in trading/investment can be substantial and even more than the amount / margin given by you. The recipient should carefully consider whether trading/investment is appropriate for the recipient in light of the recipient's experience, objectives, financial resources and other relevant circumstances. PCIPL and any of its employees, directors, associates, group entities, or affiliates shall not be liable for losses, if any, incurred by the recipient. The recipient is further cautioned that trading/investments in financial markets are subject to market risks and are advised to seek trading/investment advice before investing. There is no guarantee/assurance as to returns or profits or capital protection or appreciation. PCIPL and any of its employees, directors, associates, group entities, affiliates are not inducing the recipient for trading/investing in the financial market(s). Trading/Investment decision is the sole responsibility of the recipient.

For U.S. persons only: This research report is a product of PhillipCapital (India) Pvt Ltd., which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S.-regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances, and trading securities held by a research analyst account.

This report is intended for distribution by PhillipCapital (India) Pvt Ltd. only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by the U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated, and/or transmitted onward to any U.S. person, which is not a Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, PhillipCapital (India) Pvt Ltd. has entered into an agreement with a U.S. registered broker-dealer, Decker & Co, LLC. Transactions in securities discussed in this research report should be effected through Decker & Co, LLC or another U.S. registered broker dealer

PhillipCapital (India) Pvt. Ltd.
Registered office: No. 1, 18th Floor, Urmi Estate, 95 Ganpatrao Kadam Marg, Lower Parel West, Mumbai 400013