

## NTPC India

### Safe Play in the Sector

NTPC India (NTPC) is the largest power utility in the Indian Power sector, having 24% & 16% market share in the power generation & installed capacity in India respectively. Private sector is in bad shape on back of poor business economics on back of slew of factors; mentioned in the report. On the other hand, NTPC India, which is a competitive player in the industry, supplies all its power under the long term PPA (Power Purchase Agreement); is insulated to Industry dynamics. Over the next 4 years, company's CWIP will be capitalized. Thus, CWIP ratio to Net Fixed Assets will come down; due to commercialization of 4-5GW capacity/year; enhancing the regulated ROE of the company and improving growth. Thus, given the pain in the sector NTPC on back of its positioning and valuations at 1.1xPBV FY2019E valuations, offers good entry for long-term investors. **We recommend a Buy.**

**Electricity Sector; woes still hard to ignore:** Though government has allowed private participation in the sector, private sector has not been able to dent the space; given most of them are not profitable and have done heavy bidding for power projects. While the demand is likely to improve over next 5 years and new supplies are moderating, we still believe that the PLF's of the industry will rise moderately but with a downward risk. Thus, we believe that while possibly the major negativity could be behind us, it is unlikely that the industry will be out of woods soon.

**NTPC safe haven to take exposure; given its competitive advantages:** Unlike its private players, NTPC's projects operate under the regulated ROE model. CERC regulations ensure that power generators enjoy a fixed return of 15.5%, under the regulated ROE model. Along with this NTPC is a cost competitive power producer; on back of AFS (Assured Fuel Supply) & strong backing of government; which keeps its cash flow healthy. NTPC a safe player in the Industry struggling with poor business economics. In addition, valuations at 1.1xBV FY2019E, factor in a low ROE of 14.0%, with no growth of current assets. Even at conservative valuations, the stock will provide an upside of 27%.

#### Key financials (Consolidated)

Y/E March (₹ cr)	FY2017	FY2018	FY2019E	FY2020E
<b>Net sales</b>	<b>82,042</b>	<b>88,083</b>	<b>96,011</b>	<b>107,532</b>
% chg	11.7	7.4	9.0	12.0
<b>Net profit</b>	<b>10,749</b>	<b>10,526</b>	<b>10,938</b>	<b>12,779</b>
% chg.	(1.4)	(2.1)	3.9	16.8
EBITDA margin (%)	26.2	25.4	25.5	25.7
<b>EPS (₹)</b>	<b>13.0</b>	<b>12.8</b>	<b>13.5</b>	<b>15.9</b>
P/E (x)	11.8	12.0	11.6	9.9
P/BV (x)	1.3	1.2	1.1	1.0
RoE (%)	11.3	10.5	10.2	11.0
RoCE (%)	7.4	6.5	6.6	7.2
EV/Sales (x)	3.0	2.9	2.8	2.3
EV/EBITDA (x)	11.3	11.5	10.9	9.1

Source: Company, Angel Research; Note: CMP as of November 5, 2018

## BUY

CMP ₹154  
Target Price ₹195

Investment Period 12 Months

#### Stock Info

Sector	Power
Market Cap (₹ cr)	1,26,650
Net Debt (₹ cr)	1,16,785
Beta	0.6
52 Week High / Low	186/149
Avg. Daily Volume	6,38,812
Face Value (₹)	10
BSE Sensex	35,012
Nifty	10,553
Reuters Code	NTPC.BO
Bloomberg Code	NTPC.IN

#### Shareholding Pattern (%)

Promoters	61.8
MF / Banks / Indian FIs	24.7
FII / NRIs / OCBs	11.7
Indian Public / Others	1.9

Abs.(%)	3m	1yr	3yr
Sensex	(7.7)	4.1	31.6
NTPC	(3.7)	(14.9)	15.7

#### 3-Year Daily Price Chart



Source: Company, Angel Research

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## Power generation sector; worst behind but woes hard to ignore

Indian Power Sector, which has been one of the heavily regulated sector has witness a slew of reforms; the prominent being Electricity Act 2003; which enabled National Electricity Policy, Rural Electrification, Open access in transmission, phased open access in distribution, mandatory SERCs, license free generation and distribution, power trading, mandatory metering and stringent penalties for theft of electricity.

## Private Sector's aggressive expansion plans take toll on the PLF's

India has been a power deficit economy for long; which lead government take many power reforms, including competitive bidding in power sector in 2006. In FY2008, the power deficit rose to a 10-year high of 11%; aiding merchant power prices hit the roof, rising upwards of Rs10/unit (V/s power tariff of Rs3-4/unit of coal based plants). Since then the private sector took up projects aggressively, hoping to benefit from the trend.

In terms of installed generation capacity private sector share, which was at (14GW of installed capacity with a market share of 11.4% in FY2006), has increased to (143GW of installed capacity with market share of 43.6% in FY2017). Overall, installed generation capacities grew at a CAGR of 9.2% during 2006-17; with private sector capacities addition happening at a CAGR of 23.4%( conventional capacity addition happened at a CAGR of 16.1%) during the same period. However, there counterparts like Central & State Power generation companies witnessed capacity additions at CAGR of 6.6% and 3.6% respectively.

On the demand side, during the same time, the demand has been at 1,212BU in FY2018, registering a CAGR of ~4.6% during the period (FY2006-2018). Over the last 5 years, the power demand has grown at a CAGR of ~4.0% between fiscals 2013 and 2018 while the conventional installed generation capacities grew at a CAGR of 9.0%. As a result, as an indicative average plant load factors (PLFs) of coal plants (~72% of fuel of power plants) declined from 70% in FY2013 to 61% in FY2018. In particular, the PLFs of the private sector generators were even lower at 55% in FY2018; similar to state sector utilities. Central sector; on the other hand which sells power under long term PPA had PLF's of 72%. during the period.

Also at current Industry PLF's, the power deficit of the industry came down to almost 0.7%, while peak demand deficit is around 2.0% in FY2017-18. This indicates that current operative capacities (at current PLF) in the Industry are sufficient to address the power demand without expansion.

## PLF's unlikely to see major improvement in near term

### Demand drivers in place; expect a pick-up

The demand potential of power is still intact as power consumption per capita in the most efficient power, country Hong Kong is around 6,073KWh V/s 1,205KWh in India. The world average of per capita power consumption stood at 3,126 KWh In addition, Indian government has put up the overall Indian per capita demand to increase to 3,000kWh by FY2040; expected CAGR of 4.6%. As per Crisil, India's per capita electricity, consumption will rise gradually at 5.0% CAGR between FY2019-2023. This will be driven by improvement in access to electricity in terms of quality and reliability because of intensive rural electrification and reduction in cost of power supply, resulting

in realization of latent demand from the residential segment. In terms of units, the power consumption will grow a CAGR of 6.5-6.7% during FY2019-2023.

### **But capex plans still alive; at 35GW (excl. renewables) for FY2019-23**

While there are 50GW (excluding renewables) worth of power projects on paper for next five years, it is unlikely that all will see the light; mainly given the constraints in the Industry discussed below. As per Crisil, capacity additions in power generation are expected to slow down to 35 GW (excluding renewables) between fiscals 2019 to 2023 as compared to 88 GW over the past five years. Almost ~65% capacity additions is expected to be by the Central government sector having power purchase agreements and fuel supply arrangements already in place. NTPC will dominate the capacity additions backed by strong execution skills, sound financial strength as well as assured power off-take by PPA holder discoms which insulates it from any downward risk for upcoming capacities.

Crisil expects ~85% of the total 35 GW capacity additions between fiscals 2019 and 2023 to be coal-based, led by a large number of planned projects and the fact that coal continues to remain the most widely available and cheapest source of fuel. On the other hand, there will not be any significant gas-based capacity additions over the next five years because of severe constraints in domestic gas availability. In addition, hydropower capacity additions are estimated at only about 3.2 GW because of long gestation period and geological risks in these projects.

### **Main reasons for tempered capex plans are as follows:**

#### **Lack of fresh power purchase agreements**

Fresh power purchase agreement (PPA) announcements by distribution companies (discoms) have witnessed a sharp decline owing to fall in deficit levels and their poor financial health. Between fiscals 2013 and 2018, only five discoms have conducted case-I bids aggregating to ~9 GW to enter into new long-term PPAs. These states include Delhi, Uttar Pradesh, Kerala, Andhra Pradesh and Telangana. In fact, owing to lower-than-expected growth in power demand and availability of cheaper power in the short-term market, Uttar Pradesh cancelled the 3.8 GW quantum of bids in May 2017. This implies that new PPAs would be difficult unless demand picks up sharply.

No Central and state players participated in the competitive-bidding process so far, as they had been exempt from the process for a period of five years until January 2011. Moreover, during this period, they entered into MoUs for several projects under the fixed RoE model. For instance, NTPC has contracted about 60GW of capacities under the MoU route; thus restricting any major incentive for new capex.

#### **Private sector power generation segment is under financial stress....**

Large capacity additions by the private sector (~80 GW of conventional source-based plants between fiscals 2009 and 2018) without adequate off-take and fuel arrangement have put pressure on the financials of generation companies.

The gravity of the situation can be gauged by a report of Parliamentary Standing Committee on Energy tabled in Parliament in September'2018. According to the report, Independent power producers (IPP) have been facing turbulent times. Most of the power assets are under financial stress because of one or more reasons in varying proportions

a) lower supply of cheap domestic coal b) low demand for power than expected c) delayed payments by distribution companies (DISCOM) d) inability of promoters to infuse equity on account of financial stress e) aggressive tariffs bid under PPAs f) aggressive bidding for coal mines and g) delays in disbursement of loans by banks, h) lack of long term PPA's (almost 21GW of capacity does not have long term PPA).

Overall, it pegs conventional IPP capacity of 66GW in India's electricity sector (~40% of the installed capacity of the IIP and ~70% of the conventional installed capacity of IIP in FY2018) to be under various degrees of financial stress. These include 54GW of coal-based power (44 assets), 6GW gas-based power (9 assets) and 4.5GW of hydropower (13 assets). Crisil, expects, about 21 GW of commissioned capacities are reeling under stress due to lack of long-term PPAs and weak power off-take. Although the government has initiated several measures, robust pickup in power demand is crucial for revival of the stressed generation segment.

### **... leading to a miniscule capex from private sector**

Therefore, with such situation, the private sector expected to slow down their capacity addition from that planned earlier. The trend has already been visible over the last two years. The private sector capacity additions declined to 5 GW in fiscal 2017 and further down to 4 GW in fiscal 2018 compared with average 12 GW being added in the preceding five years. In addition, none of the private sector players have announced new generation project over the past three years. Thus, private players would account for only ~4 GW (12% of capacity additions) between fiscals 2019 and 2023 compared with 54% share over the past five years.

### **Fuel another constraint; at least in near term**

Coal constitutes a major chunk of the power generation as of now (almost 72% of the power generation in FY2018 and 90% of the conventional fuel). As per Crisil, as of September 2017 PPAs worth ~47 GW of the coal-based commissioned capacity were signed under the competitive-bidding route. Of this, about 16 GW capacity were based on imported coal, while the rest uses domestic coal. The power plant based on imported coal; have suffered on back of the change in the Indonesian coal policy. With most power companies not building in a push through of fuel costs, this has affected the financial health of many power companies. The scenario, with the supply of the domestic coal is also not conducive; more so given it is still a government monopoly. Around 23 GW of projects are expected to be under pressure due to lack of domestic coal availability.

However, the new coal allocation policy for power sector, 2017-SHAKTI (Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India) proposes to replace the old linkage allocation policy with more transparent bidding-based linkages. The policy would gradually improve domestic coal availability for about 28 GW of existing and upcoming capacities by fiscal 2023.

Going forward, domestic coal supply to power plants is expected to rise at a CAGR of ~ 6.8% between fiscals 2019 and 2023 backed by higher output from captive mines as well as growth in supply from CIL and Singareni Collieries Company Ltd (SCCL). Thus, increased domestic coal production would lead to significant improvement in coal availability over the next three-five years for power plants.

### Delay in clearance, slow progress on civil works

Delay in land acquisition, rehabilitation and in obtaining environment and forest clearances are expected to delay commissioning of projects. Some large hydro projects in Himachal Pradesh, Uttarakhand, Arunachal Pradesh, and Sikkim have been delayed due to issues such as shortage in workers, agitation by locals at project site, petitions filed by various stakeholders, or lack of adequate environmental and forest clearances.

### Consultation paper on New Tariff policy (FY2019-24)

Central Electricity Regulatory Commission (CERC) has released a consultation paper. The paper is conceptual in nature and highlights issues and options for various tariff parameters, inviting comments from industry participants. While it is just a consultation paper not a regulation, in near term it could remain an overhang over the sectors investments given that it is already railing under challenging time. The salient points of the paper:

- It does not intend to increase financial instability for existing and under construction power assets having financial closure. Hence, RoE revision (if any) will only be for new plants - those commissioning after 31<sup>st</sup> Mar'2019.
- The paper indicates that even in a bear case the RoE cut may be limited 1% (currently 15.5%).
- Evaluating differential RoE for transmission vs. generation assets.
- The paper invites comments on an optional model of implementing a 3-part tariff for generation projects. Under this model, the tariff will be split into a) fixed charge (interest, depreciation, part of O&M, RoE restricted to risk-free rate), b) variable charge (rest of RoE and O&M) and c) energy charge for actual fuel costs based on plant load factor (PLF).

The recovery of fixed charges is linked to target plant availability (PAF), whereas variable charges are linked to the difference between availability and dispatch. This implies that i) if PLF = target PAF (currently 80%), then the plant earns full regulated RoE or ii) if PLF < target PAF, then it will lose RoE on pro rata basis and iii) if PLF > target PAF then the plant gain on regulated RoE on pro rata basis. While this is optically positive for high PLF plants, it is equally negative for low PLF plants and adds much more complexity to state discom power purchase decision-making.

- The paper also proposes a similar segregation of inter-state transmission charges (for Power Grid) between i) fixed charge for long-term open access rights which recover only partial RoE (risk free rate) and ii) a variable charge to recover the balance RoE which will be linked to actual amount of electricity flowing through the line.

## Thus worst behind but; woes hard to ignore

Thus, while the demand pick up is a good news for power generation companies, not all will benefit from the uptick. We believe that the power overs supply situation is alarming & will take long time to settle. While the only savior could be the CERC paper on new Tariff policy (FY2019-24), which proposes plant older than 25 years, to be checked for retirement. It is not clear as to when and how this policy will shape up. Coal based thermal power plants more than 25 years old are about 37GW, out of which around 35.5GW capacity pertain to State / Central sector. If implemented according to Crisil, it will lead ~10GW old plants to be retired, which will tighten the market, making the PLF's rise but slowly. Currently we are not factoring in any replacement of old plants. There exists possibility of a moderate rise in the PLF's to a downward risk over the next 4-5 years. Thus, we believe that while possibly the major negativity could be behind us, it is unlikely that the industry will be out of woods soon.

## NTPC; safe haven in the space

### Largest Power Generator in India

NTPC is the largest pan India power generator in the country, having significant market share in terms of installed capacity as well as in terms of the electricity sold. As on March'2018, the company had standalone-installed capacity of 46GW and coupled with JV's around ~54GW, thus having a market share of 16%. In terms of the electricity generated, NTPC as on March'2018 sold around 294BU, accounting for almost 23% market share in the market. Given its size & scope of operations, probably it will be easier for NTPC to diversify and to spearhead the transition towards increasing non-fossil fuel capacity. For the same it plans to make renewable fuel resources (solar, wind & hydro) ~30% of its basket by 2032 (37GW out of the planned 130GW capacity planned for FY2032).

In addition strong Government support, keeps NTPC's financials healthy. Key ones include a) Tri-Partite Agreement (TPAs) of the Union Cabinet and as agreed by the states and RBI, have been extended for a further period of 10 to 15 years and 26 states have signed the same. The original TPAs were valid up to October 31, 2016. In terms of TPAs, any default in payment by the discoms of a state can be recovered directly from the account of respective state governments with RBI. b) Discoms required to issue LCs covering 105% of the average monthly billing. This has been 100% realization of the dues within the stipulated period for the fifteenth year in succession. Also, a strong government backing aids company to finance its projects at much lower cost than other players; enhancing its competitive positioning.

Thus, NTPC given its leadership position along with strong government backing can easily participate in any organic & inorganic opportunities present in the power industry, given its size & scale of operations.

### Long term PPA's to insulate the company from industry dynamics

Tariffs for power projects are determined under two mechanisms - the fixed-return model and the competitive-bidding model. The fixed-return model allows for complete pass-through of costs (the norms for cost recovery are defined by the Central Electricity Regulatory Commission (CERC) / respective State Electricity Regulatory Commissions (SERCs) and also allow a fixed return of 15.5% on equity. On the other hand, under a competitive bidding model, tariffs over the life of the project are fixed at the time of entering into a power-purchase agreement. The National Tariff Policy, 2006, mandated states to procure their power requirements through a competitive-bidding process. Both central and state utilities were exempt from this rule for five years. However, after January 2011, even Central and state utilities have been required to participate in the bidding process to secure power purchase agreements (PPAs) for power off-take.

However, NTPC is yet to take the competitive bidding route for signing its Long term PPA's. NTPC's projects operate under the regulated ROE model. CERC regulations ensure that power generators enjoy a fixed return of 15.5 per cent, under the regulated ROE model. Moreover, the model also offers incentives to NTPC if operational efficiencies outperform normative parameters defined by the CERC. Further, the regulated tariff regime allows NTPC to pass on any increase in costs through higher tariffs to state distribution utilities.

According to NTPC, it has already signed for almost 35GW in terms of the future capex, thus it insulates NTPC from any risk arising out of the change in demand dynamics as 100% of contracted power is guaranteed to be paid for as long as its plant are available for production (at PAF of 85%). Thus, while in rising demand scenario, the company is unlikely to participate in the upswing in the power tariffs, we believe given the debt driven nature of the industry, along with long gestation period of the power projects, we believe an assured & long term PPA's provide better visibility to the overall IRR of the power projects. NTPC currently has ~44GW of operational capacity under the regulated model with pipeline capacity of ~35GW plus signed under the regulated model. This enables it to pass on increase in costs, limiting the impact on profitability.

### Long-term Fuel Security-Assured Fuel Supply & Strong Coal Mining Portfolio

NTPC through sustained policy advocacy has secured a single ACQ (Annual Contracted Quantity) for all its coal stations resulting in: Optimum utilization of coal leading to reduction in ECR, Avoidance of loss of fixed charges due to coal shortage, More efficient operation of power plants and Higher marginal contribution from operations. NTPC has signed long term Fuel Supply Agreements (FSAs) with CIL and SCCL for supply of coal for a period of 20 years for total ACQ (Annual Contracted Quantity) of ~169 MTPA. ACQ has almost taken care of almost more than ~90% of its annual requirement, with very less dependence on imported coal. During the financial year 2017-18, less than 0.2% of company's coal consumption was from imported sources. Apart from this, the company has been allocated 10 coal blocks with estimated geological reserves of ~7bn tones with estimated mining capacity of 111mn tones per annum. With these coal blocks, NTPC aspires to become one of the largest captive coal mining companies in the country. It is envisaged that by 2030, one-third of NTPC's requirement would be fulfilled from captive mines.



To further improve its fuel efficiency, company has almost 67-70% of its coal capacity linked with the MGR/belt conveyor system to coal mines representing 10 out of 20 of its coal plants, and for rest of the capacities it has MoU with Railways for ensuring smooth coal transportation.

### **Competitive cost power producer in the Industry**

NTPC has been running its plant very efficiently as evident by the PLF factor, where NTPC has over the last two decades have maintained leadership. This is achieved by company on back of sound maintenance practices & real-time monitoring ensure high availability and efficient operations along with periodic structured Technical Audits carried out for all units for identifying and correction of gaps. NTPC has been consistently maintaining spread of 15%-16% in terms of PLF over the last 2 decades on All-India level.

NTPC's Coal stations achieved PLF of 77.9% against All India PLF of 60.7% in FY2018. Also 6 NTPC coal stations among top 10 stations of the country in terms of PLF in FY2018. Thus, efficiency of its plant along with economics of scale aids and competitive factor mentioned above enable company to deliver consistent competitive tariffs. Thus over an 11 year period, the company's tariff have risen at a CAGR of 5.8%, while Fixed component (~35% of the cost) rising 10% while variable (the remaining 65%) rising around 4.1%. Thus, cost competitiveness will enable company to participate in the industry in a healthy way. Thus the recent reforms like flexibility to use renewable power to meet schedule from a thermal station and National Merit Order Operation for reducing average cost of generation, will benefit NTPC.

### **Capex to improve the growth prospects**

Over the last five years, while the private sector conventional capacity additions was at a CAGR of 16.0%, NTPC capacity additions happened a CAGR of ~5.3%. In terms of gross additions, NTPC gross block increased at a CAGR of 3.4% over FY2014-2018 V/s around 15.2% CAGR during FY2014-2009. This is mainly on back of higher CWIP lying on the books. FY2018 marked the beginning of reversal in CWIP ratio and this will continue due to commercialization of 4-5 GW capacity/year. Thus, CWIP as percentage of CWIP plus Net Fixed Assets is expected to come down from 39% in FY2018 to ~31% in FY2020E. NTPC expects this ratio to come down to almost 22% in FY2022E. This will increase regulated ROE of the company. Conservatively, we expect the regulated ROE of the company to grow at CAGR of 14.5% during the next four years. Overall a capex of ~21GW (14GW standalone) is under construction (annually adding 4-5GW/ year). For immediate future around 4.7GW & 5.9GW of capacity is getting added up for FY2019E & FY2020E respectively. Over a long term, the company has plans to have an installed capacity of 130GW by FY2032, a CAGR of 6.5% during the period (FY2018-FY2032E).

### **Valuations, stock factors in a low ROE & growth prospects**

Over FY2018-20E, the company will post a CAGR of 10.5% and 11.6% in the sales and net profit respectively. Apart from the near term triggers, we believe that the long term NTPC is well placed to tap the opportunity in the Industry; mainly on back of the competitive advantages it enjoys. In the near term, the only risk to NTPC is the change in Regulated RoE's, but CERC consultation paper avocadoes the regulation to be



effective for assets commercialising after March'2019. Thus the old assets will continue to enjoy the 15.5% Regulated ROE's.

NTPC is largely insulated from the pain associated with the sector makes it an attractive bet from near term as well as long term. In addition, valuations at 1.1xBV FY2019E, factor in a low ROE of 14.0%, with no growth of current assets. Thus even on a very conservative basis, giving 1.5xBV to the regulated book (which implies current assets will not grow at all); the target price on the stock will work out to be ₹195; an upside of 27.0%, and valuing the company at 1.3xP/BV on FY2020E BV. 10-year forward P/BV multiple of the company has been at 1.8x.

### Company Background

Government of India (GoI) incorporated NTPC in 1975 as a thermal power generation company. Power generation and bulk sale of electricity forms NTPC's principal business, and power is sold through long-term PPAs, mainly signed with state distribution utilities. The company has installed capacity of 53.2GW (including joint ventures and subsidiaries) as on March 31, 2018 represented around 16% of India's capacity and ~23% of the power produced. Coal-based capacities dominate the fuel mix of NTPC group- of the total installed capacity around 85% capacity is coal-based, while the balance is based on gas, hydro and renewable projects. The company has undertaken backward and forward integration and has entered into related businesses, such as consultancy, coal mining and power trading.

**Profit & loss statement (Consolidated)**

Y/E March (₹cr)	FY2016	FY2017	FY2018	FY2019E	FY2020E
Gross sales	73,426	82,042	88,083	96,011	107,532
Net Sales	73,426	82,042	88,083	96,011	107,532
Other operating income	482	1,460	1,788	1,748	1,748
<b>Total operating income</b>	<b>73,908</b>	<b>83,502</b>	<b>89,872</b>	<b>97,759</b>	<b>109,281</b>
% chg	(8.7)	13.0	7.6	8.8	11.8
Total Expenditure	55,003	60,528	65,709	71,553	79,927
Net Raw Materials	47,727	52,550	55,691	61,063	67,960
Other Mfg costs	2,231	2,564	2,937	3,231	3,738
Personnel	4,694	5,243	5,758	6,559	7,471
Other	351	171	1,323	700	759
<b>EBITDA</b>	<b>18,424</b>	<b>21,515</b>	<b>22,375</b>	<b>24,458</b>	<b>27,605</b>
% chg	6.3	16.8	4.0	9.3	12.9
<b>(% of Net Sales)</b>	<b>25.1</b>	<b>26.2</b>	<b>25.4</b>	<b>25.5</b>	<b>25.7</b>
Depreciation & Amortization	5,771	6,010	7,460	7,847	8,814
<b>EBIT</b>	<b>12,652</b>	<b>15,505</b>	<b>14,915</b>	<b>16,612</b>	<b>18,791</b>
% chg	7.5	22.5	(3.8)	11.4	13.1
<b>(% of Net Sales)</b>	<b>17.2</b>	<b>18.9</b>	<b>16.9</b>	<b>17.3</b>	<b>17.5</b>
Interest & other Charges	3,366	3,753	4,447	5,610	5,592
Other Income	949	252	252	252	252
<b>(% of PBT)</b>	<b>8.9</b>	<b>1.9</b>	<b>2.0</b>	<b>1.9</b>	<b>1.7</b>
Share in profit of Associates	-	-	-	-	-
Recurring PBT	10,717	13,463	12,508	13,002	15,199
% chg	3.8	25.6	(7.1)	3.9	16.9
Extraordinary Expense/(Inc.)	98.8	36.8	(21.0)	-	-
<b>PBT (reported)</b>	<b>10,618</b>	<b>13,426</b>	<b>12,529</b>	<b>13,002</b>	<b>15,199</b>
Tax	(162.8)	2,712.4	2,027.8	2,106.2	2,462.2
<b>(% of PBT)</b>	<b>(1.5)</b>	<b>20.2</b>	<b>16.2</b>	<b>16.2</b>	<b>16.2</b>
<b>PAT (reported)</b>	<b>10,781</b>	<b>10,714</b>	<b>10,502</b>	<b>10,895</b>	<b>12,737</b>
Add: Share of earnings of associate	-	-	-	-	-
Less: Minority interest (MI)	(20)	(6)	(42)	(42)	(42)
Prior period items	-	-	-	-	-
PAT after MI (reported)	10,801	10,720	10,544	10,938	12,779
<b>ADJ. PAT</b>	<b>10,901</b>	<b>10,749</b>	<b>10,526</b>	<b>10,938</b>	<b>12,779</b>
% chg	10.5	(1.4)	(2.1)	3.9	16.8
<b>(% of Net Sales)</b>	<b>14.7</b>	<b>13.1</b>	<b>12.0</b>	<b>11.4</b>	<b>11.9</b>
<b>Basic EPS (Rs)</b>	<b>13.2</b>	<b>13.0</b>	<b>12.8</b>	<b>13.3</b>	<b>15.5</b>
% chg	10.5	(1.4)	(2.1)	3.9	16.8

**Balance sheet (Consolidated)**

Y/E March (₹ cr)	FY2016	FY2017	FY2018	FY2019E	FY2020E
<b>SOURCES OF FUNDS</b>					
Equity Share Capital	8,245	8,245	8,245	8,245	8,245
Share Application Money	-	-	-	-	-
Reserves & Surplus	83,330	89,593	95,318	103,383	112,416
<b>Shareholders Funds</b>	<b>91,576</b>	<b>97,838</b>	<b>103,563</b>	<b>111,628</b>	<b>120,661</b>
<b>Minority Interest</b>	<b>793</b>	<b>803</b>	<b>948</b>	<b>948</b>	<b>948</b>
Long-term provisions	6,302	5,746	5,023	5,023	5,023
Total Loans	99,424	113,773	130,049	145,117	130,605
Deferred Tax Liability	1,153	1,485	2,408	2,408	2,408
<b>Total Liabilities</b>	<b>199,248</b>	<b>219,645</b>	<b>241,991</b>	<b>265,124</b>	<b>259,645</b>
<b>APPLICATION OF FUNDS</b>					
Gross Block	98,844	117,088	150,153	163,710	188,848
Less: Acc. Depreciation	5,915	12,556	20,615	28,522	36,472
<b>Net Block</b>	<b>92,929</b>	<b>104,532</b>	<b>129,538</b>	<b>135,187</b>	<b>152,376</b>
Capital Work-in-Progress	75,046	86,896	82,093	92,959	66,868
Goodwill	-	-	-	-	-
<b>Investments</b>	<b>6,473</b>	<b>7,614</b>	<b>8,876</b>	<b>8,876</b>	<b>8,876</b>
Long-term loans and adv.	19,617	19,447	14,612	14,612	14,612
Current Assets	30,599	30,113	39,379	49,671	57,183
Cash	4,938	3,301	4,388	9,762	11,652
Loans & Advances	10,228	11,158	19,909	22,895	26,329
Other	15,433	15,653	15,083	17,014	19,201
Current liabilities	25,417	28,956	32,508	36,181	40,270
<b>Net Current Assets</b>	<b>5,182</b>	<b>1,157</b>	<b>6,871</b>	<b>13,490</b>	<b>16,913</b>
<b>Total Assets</b>	<b>199,248</b>	<b>219,645</b>	<b>241,991</b>	<b>265,124</b>	<b>259,645</b>

### Cash flow statement (Consolidated)

Y/E March (₹ cr)	FY2016	FY2017	FY2018	FY2019E	FY2020E
Profit before tax	10,618	13,426	12,529	13,002	15,199
Depreciation	5,771	6,010	7,460	7,847	8,814
(Inc)/Dec in Working Capital	(442)	2,218	(9,463)	(1,244)	(1,533)
Less: Other income	949	252	252	252	252
Direct taxes paid	163	(2,712)	(2,028)	(2,106)	(2,462)
<b>Cash Flow from Operations</b>	<b>15,161</b>	<b>18,690</b>	<b>8,247</b>	<b>17,246</b>	<b>19,766</b>
(Inc.)/Dec.in Fixed Assets	38,026	(30,094)	(28,263)	(24,422)	952
(Inc.)/Dec. in Investments	4,572	1,141	1,262	-	-
Other income	949	252	252	252	252
<b>Cash Flow from Investing</b>	<b>43,546</b>	<b>(28,702)</b>	<b>(26,749)</b>	<b>(24,170)</b>	<b>1,203</b>
Issue of Equity	-	-	-	-	-
Inc./(Dec.) in loans	(2,828)	14,350	16,275	15,068	(14,512)
Dividend Paid (Incl. Tax)	(3,232)	(4,611)	(4,939)	(4,479)	(5,233)
Others	(61,960)	(1,364)	8,253	1,710	665
<b>Cash Flow from Financing</b>	<b>(68,020)</b>	<b>8,374</b>	<b>19,589</b>	<b>12,299</b>	<b>(19,080)</b>
Inc./(Dec.) in Cash	(9,313)	(1,637)	1,086	5,375	1,890
<b>Opening Cash balances</b>	<b>14,252</b>	<b>4,938</b>	<b>3,301</b>	<b>4,388</b>	<b>9,762</b>
<b>Closing Cash balances</b>	<b>4,938</b>	<b>3,301</b>	<b>4,388</b>	<b>9,762</b>	<b>11,652</b>

### Key ratios

Y/E March	FY2016	FY2017	FY2018	FY2019E	FY2020E
<b>Valuation Ratio (x)</b>					
P/E (on FDEPS)	11.6	11.8	12.0	11.6	9.9
P/CEPS	7.6	7.6	7.0	6.7	5.9
P/BV	1.4	1.3	1.2	1.1	1.0
Dividend yield (%)	2.2	3.1	3.3	3.0	3.5
EV/Sales	3.1	3.0	2.9	2.8	2.3
EV/EBITDA	12.3	11.3	11.5	10.9	9.1
EV / Total Assets	1.1	1.1	1.1	1.0	1.0
<b>Per Share Data (₹)</b>					
EPS (Basic)	13.2	13.0	12.8	13.3	15.5
EPS (fully diluted)	13.2	13.0	12.8	13.3	15.5
Cash EPS	20.1	20.3	21.8	22.8	26.2
DPS	3.4	4.8	5.1	4.6	5.4
Book Value	111.1	118.7	125.6	135.4	146.3
<b>Dupont Analysis</b>					
EBIT margin	17.2	18.9	16.9	17.3	17.5
Tax retention ratio	101.5	79.8	83.8	83.8	83.8
Asset turnover (x)	0.4	0.4	0.4	0.4	0.4
ROIC (Post-tax)	6.9	6.1	5.6	5.8	6.4
Cost of Debt (Post Tax)	3.4	2.8	3.1	3.4	3.4
Leverage (x)	1.1	1.1	1.2	1.2	1.1
Operating ROE	10.7	9.7	8.6	8.6	9.6
<b>Returns (%)</b>					
ROCE (Pre-tax)	6.5	7.4	6.5	6.6	7.2
Angel ROIC (Pre-tax)	11.0	12.5	10.5	10.5	10.9
ROE	12.6	11.3	10.5	10.2	11.0
<b>Turnover ratios (x)</b>					
Asset Turnover (Gross Block)	0.6	0.8	0.7	0.6	0.6
Inventory / Sales (days)	19	18	21	24	25
Receivables (days)	20	16	12	12	12
Payables (days)	25	23	22	22	22
WC cycle (ex-cash) (days)	(3)	(4)	1	12	15
<b>Solvency ratios (x)</b>					
Net debt to equity	1.0	1.1	1.2	1.2	1.0
Net debt to EBITDA	5.1	5.1	5.6	5.5	4.3
Interest Coverage (EBIT / Int.)	3.8	4.1	3.4	3.0	3.4

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Buy (> 15%)

Accumulate (5% to 15%)  
Reduce (-5% to -15%)

Neutral (-5 to 5%)  
Sell (< -15)