

Room air conditioners



Focus shifting to inverters

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Room Air Conditioners



Focus shifts to inverters

Inverters estimated to be 30% of volumes in FY18 and 50% in FY20

- **Expect industry volume CAGR of 15% over FY17-20:** We estimate Indian room air conditioner (AC) volumes to grow from 4.7m units in FY17 to 7.2m in FY20, implying a 15% CAGR. This growth is expected to be driven by rising penetration of ACs (4-5% currently v/s 30% global average), higher disposable income, growing urbanization and the year-round AC usage trend. In our view, ACs could be one of the largest discretionary items in India over next few years.
- **Shift toward inverter ACs accelerates – to be 50% of industry by FY20:** Over past few years, demand has been continually shifting toward energy-efficient ACs (5-star/inverter), which contributes ~30-35% of overall industry volumes. According to the Bureau of Energy Efficiency (BEE), all ACs that operate on inverter technology will have to be compulsorily rated from 2018. Consequently, the rating for fixed and variable compressors will be merged. The split AC market is expected to transition to inverter technology over next few years, with inverter ACs projected to account for 30% of the market by FY18 and 50% by 2020. LG's recent move to completely shift to split inverters will accelerate the industry transition, in our view.
- **Higher commodity prices may impact margins – price hikes needed:** Star ratings, which are normally revised every two years, have not been changed since January 2014. Therefore, manufacturers have not resorted to any price hikes. Also, given LG's aggressive pricing strategy, none of the manufacturers have increased prices of late to stay competitive. However, we believe cost pressures stemming from a sharp rise in raw material prices would force companies to hike prices going forward, likely post GST roll out in July, 2017.
- **Competition remains intense; brand, distribution, service center network and dealer margins as key differentiators:** Our discussion with the channel partners indicates that brand, distribution channel (>50–55% of AC sales now in Tier 2 to Tier 4 cities), service center network and dealer support/margins are the key success factors in the AC industry. Competition has increased with players like Daikin, LG, Panasonic, Lloyd Electric and Blue Star eyeing a larger market share.
- **Valuation and risks:** Our preference lies with Blue Star (Initiate coverage with a Neutral, TP: INR680, 25x FY19 UCP segment EPS in line with 10 year average which we value at INR580 and INR100 for remaining business) over Voltas (Downgrade to Sell, TP: INR370, 25x FY19 UCP segment EPS vs. 10 year average of 21x which we value at INR310 and INR60 for remaining business). While Voltas is the market leader in the room AC segment, its share and margins are under threat from players like Daikin, Blue Star, Lloyd Electric and Panasonic. Moreover, we see increasing risks from: a) Industry convergence to inverters where Voltas has weak share b) Inventory destocking prior to GST implementation in July, '17 and new ratings for ACs in Jan,'18. The run up in stock prices over the past two months factor in the positives of a hot summer while ignoring the aforementioned risks to growth and margins.

Valuation snapshot

	FY18		FY19	
	Voltas	Bluestar	Voltas	Bluestar
P/E (x)	28	33	25	23
EV/EBIDTA (x)	25	20	22	15
EV/Sales (x)	2	1	2	1
RoE (%)	17	25	17	31
RoCE (%)	16	20	16	27

Room air conditioners Focus shifts to inverters



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Room air conditioners

Focus shifts to inverter ACs – to be at 50% of sales by FY20 (10-12% in FY16)

- In our view, the Indian room AC industry is at an inflection point and poised to register a CAGR of 15% to 7.2m units in FY20. After being strong in FY17, AC sales are expected to maintain momentum in FY18, despite demonetization-driven weakness. We forecast volumes to increase ~20% in FY17 and ~15% in FY18.
 - The shift to inverter ACs is expected to accelerate with a change in the BEE rating norms from Jan'18. We estimate inverter ACs to account for 50% of industry volumes by FY20. LG's move to completely shift to split inverters will fasten the industry transition, in our view.
 - In India, AC penetration remains at a dismal 4-5%. Nevertheless, this provides significant room for growth. More importantly, given the improving macroeconomic conditions, ACs are now considered as a necessary rather than a luxury item, with many houses even installing multiple ACs. In our view, ACs could be one of the largest discretionary budget items in India over next few years
- From 4.7m units in FY17, India's AC sales are expected to rise to 7.2m units by FY20, implying a 15% CAGR. Key drivers for room AC sales over coming years are:
 - India significantly lags other countries in terms of AC penetration levels. Thus, progress on this front could drive sales significantly.
 - Given the improving macroeconomic conditions, ACs are now considered as a necessary rather than a luxury item, with many houses even installing multiple ACs.
 - AC was previously considered as a seasonal product (used mostly during summer months). However, manufacturers have now started offering heating/cooling options so that it can be used throughout the year.
 - Increasing range of energy-efficient ACs, which addresses the Indian consumers' concerns about high electricity bills.

Exhibit 1: India remains under penetrated vis-à-vis other countries

Country	Penetration (%)
Taiwan	90%
US	87%
Korea	70%
China	53%
Thailand	30%
Indonesia	8%
India	4-5%

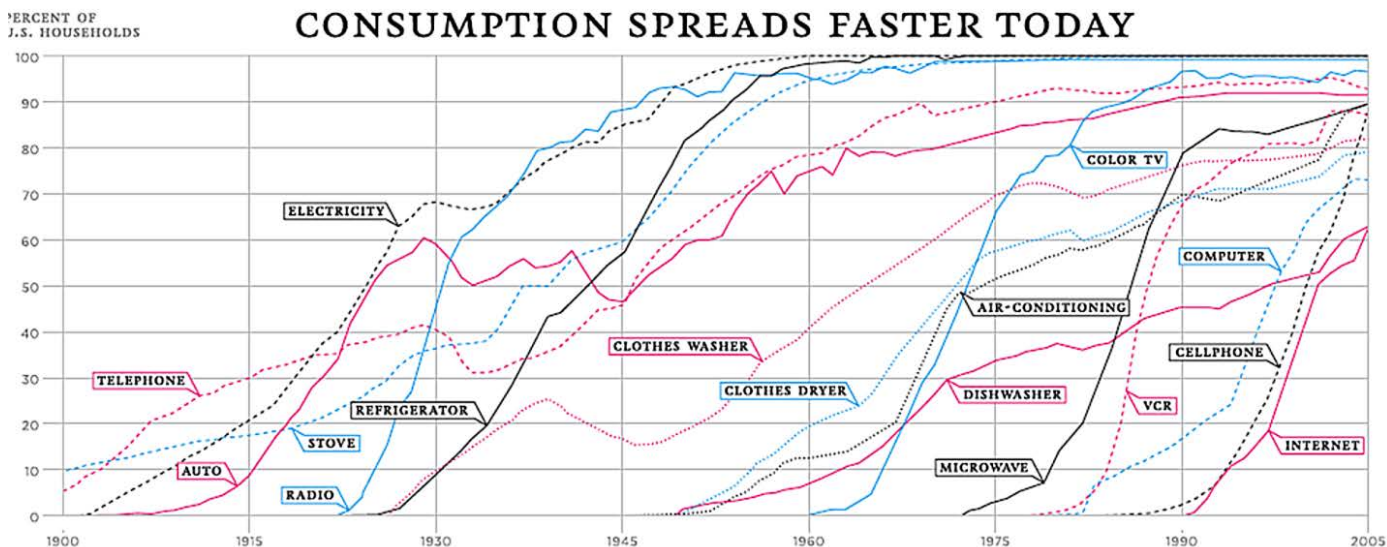
Source: Industry, Blue Star, MOSL

Exhibit 2: Consumer durables penetration across categories

Description	Penetration (%)
Fans	80%
Water Heaters	10%
Mixer - Grinder	35%
TV	77%
Fridge	33%
Air Cooler	8-10%
Microwave	5%
Washing machine	13%
Air Conditioner	3-4%

Source: Industry

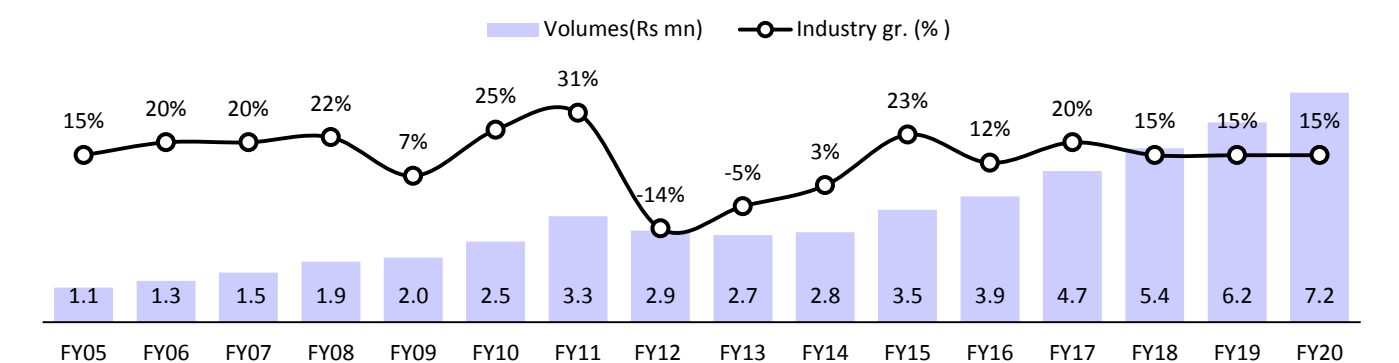
- We take the example of the US to highlight penetration growth of ACs within households. As seen in the chart below, AC penetration started to pick up from 1950s – it then jumped to 15% in 1960 and to 50% by 1975. In contrast, penetration in China grew from 8% in 1995 to 70% in 2004, implying that penetration rates are increasing much faster versus earlier years. We highlight that India's PPP per capital GDP at USD6, 000 is similar to that of the US in 1960s.
- According to the Indian Weather Data Handbook, 2014, the weather profile of 54 major cities shows that 65% of the total numbers of hours in a year have a temperature above 24 degrees. This, supported by rising income levels, has been the key driver of increasing demand for ACs. In our view, ACs could be one of the largest discretionary budget items in India over next few years.

Exhibit 3: Consumer durables penetration growth in the US over time

Source: Industry, Motilal Oswal Research

CY17 outlook – IMD expects ‘above normal summer season’

- According to the Indian Meteorological Department (IMD), CY16 recorded significantly above normal temperature during summers (mean of +1.4 degree above normal temp). This led to strong AC sales in the year. For CY17, it expects mean temperature to be above normal (>1 degree higher) in the north, north-west and plains. Also, most of the south, central and west India regions are expected to have 0.5-1 degree above normal temperature. Notably, above-normal heat waves (+5% degree over max temp) are likely to be witness in north, north-west, east, Madhya Pradesh and Andhra Pradesh. Overall, summer in CY17 is likely to witness above-normal temperature, but should be less severe than last year, as per the IMD forecast.
- For FY18, we forecast industry growth to decelerate to 15%. As the BEE’s star ratings remain unchanged, we do not expect any price hikes on this account. On the other hand, with a sharp rise in commodity prices, the cost of ACs is likely to increase during the year, subject to INR movement (nearly 50-60% of the parts of a split AC are imported, and manufactures usually offset the impact of currency depreciation by passing on price hikes to end-consumers).
- **CY17 off to a good start; March end witnessed a spike in volumes:** The summer season typically starts from March in the south and April in the north – AC demand picks up during these months. The entire country witnessed a relatively warm February, but the temperature was higher in West India, with cities like Mumbai seeing a 15-20% jump in AC sales.. However, the first three weeks of March were a dampener for AC sales, with hail/snow storms leading to a dip in temperatures across north, west and east India. However, a spike in temperatures in the last week of March has led to a strong revival in volumes. We note that March 2016 had witnessed record temperatures, driving a spike in demand for AC sales and subsequently inventory stock-out for dealers in April 2016.
- Although industry players have majorly relied on the summer months (50-60% of total sales), sustained high temperatures following the monsoon (October-December) in recent years have created a new window for AC sales. As a result, ACs demand is for almost 7–8 months in a year, compared to 4–5 months previously.

Exhibit 4: Room AC volumes (FY05–20e) and growth (% YoY)

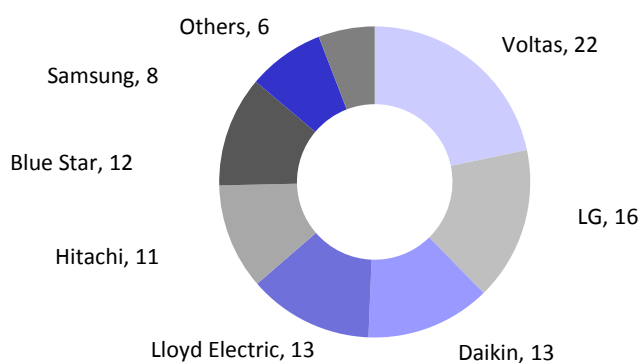
Source: MOSL, Industry

- **Market share of key players in room AC segment:** Based on various media articles, company interactions and reports, we have derived market shares of players in the room AC segment. According to GfK Nielsen's multi-brand outlet survey, Voltas ranked first with a share of ~21% as of 3QFY17.

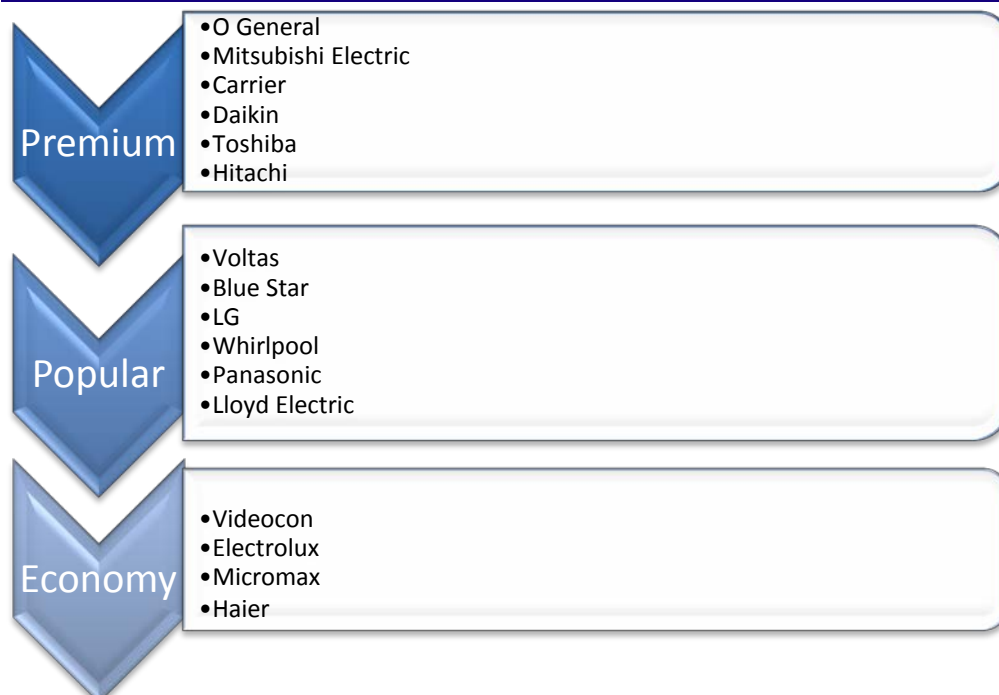
Exhibit 5: Market share in the room AC market

Name of company	Market share (%)
Voltas	22
LG	16
Lloyd Electric	13
Blue Star	12
Daikin	13
Hitachi	13
Samsung	8
Others	6

Source: Media reports, Industry, Channel checks, MOSL

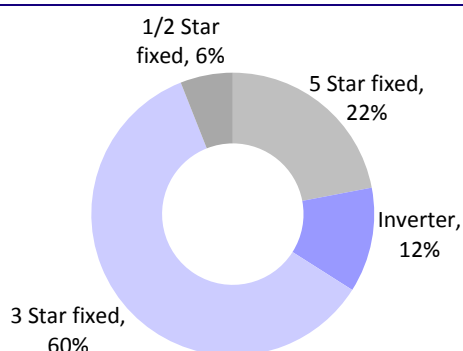
Exhibit 6: Break-up of room AC market share (by player)

Source: Industry, MOSL, Channel checks

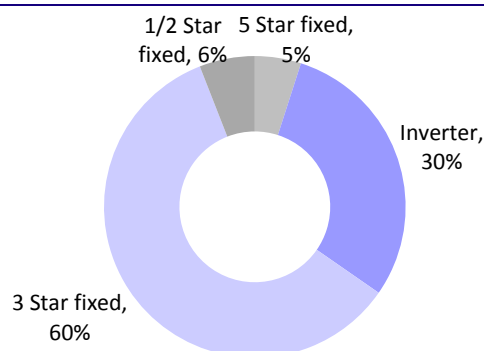
Exhibit 7: Brand hierarchy in the Indian room AC market

Source: Dealer feedback, Industry, MOSL

- The 3-star-rated ACs account for 60% of overall AC sales in India. According to the Bureau of Energy Efficiency (BEE), all ACs that operate on inverter technology will have to be compulsorily rated from 2018 (with the same set of fixed-speed norms). Thus, the rating for fixed and variable compressors will be merged.
- Accordingly, a 4- or 5-star-rated AC will be considered as inverter AC, while the rating of the current 5-star product will be changed to 3-star. Also, the fixed speed AC market would transition to inverter technology over next few years. Given their expected price fall, energy-efficient inverter ACs may eat into the market share of the 5-star fixed-speed ACs. Consequently, inverter ACs should command a market share of 30-35% by FY18 and 50% by 2020 (Source: Blue Star).

Exhibit 8: Break-up of ACs by star ratings (CY16)

Source: Industry, MOSL

Exhibit 9: Breakup of AC sales by star ratings (CY17e)

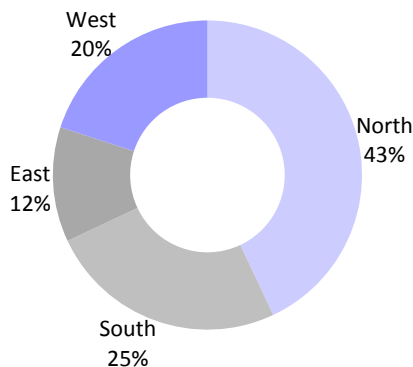
Source: MOSL estimates

Exhibit 10: Inverter sales for key AC manufacturers v/s industry

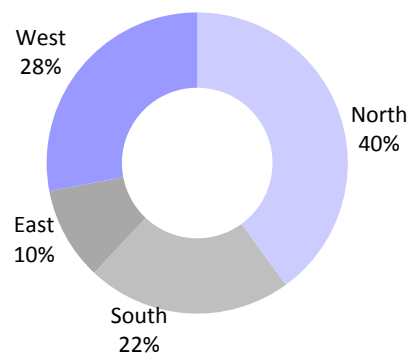
Description	% of total sales
Industry	10%
Daikin	32–35%
Blue Star	15%
Hitachi	40%
Lloyd Electric	<5%
Voltas	5–7%

Source: MOSL, Media reports, Company

- Historically, the Japanese (Daikin, Mitsubishi, Sharp and Hitachi) brands have dominated the Indian inverter AC market. With LG switching over completely to split inverters in CY17, it has resorted to aggressive pricing (down ~20% YoY driven by economies of scale and local manufacturing) to increase its share in this segment. Our interaction with a large north- and west-based dealer suggest that LG accounted for ~40-50% of overall inverter AC sales in February 2017 (constituted ~30% of overall sales v/s 10-15% in CY16).
- Our channel checks also indicate Voltas' share would be <10% in the inverter category – it has been a non-focus area for the company by now. On the other hand, Blue Star has one of the widest ranges of inverter ACs in the country, and it aims to gain a stronger foothold in this segment. The company derives ~13–15% of revenues from this category.
- By region, north India continues to remain the largest market (38–40% of total sales), followed by south India (30%). A key trait of the north Indian market is the preference for window ACs. Split ACs are largely in demand elsewhere in the country. However, since the northern region is the largest market, companies have continued manufacturing window ACs to cater to this demand.

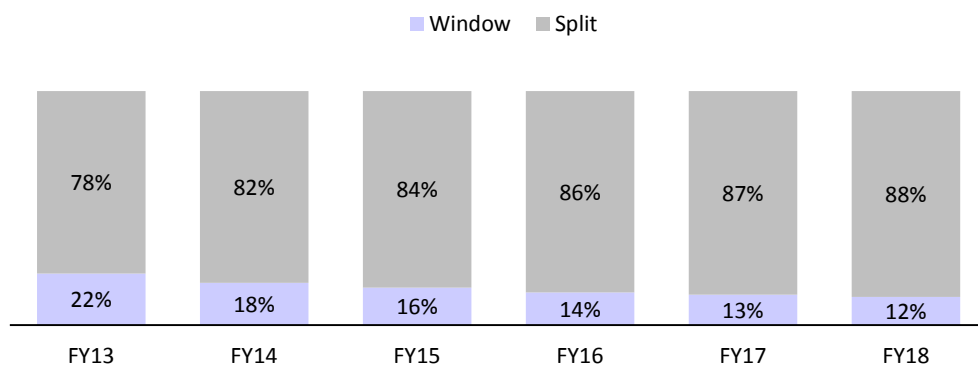
Exhibit 11: Voltas – Region-wise sales break-up (% of total)

Source: Company, MOSL

Exhibit 12: Daikin – Region-wise sales break-up (% of total)

Source: Company, MOSL

- We observed that Samsung and LG exited the window AC market in 2012 as the share of split ACs increased to ~75% of total sales and the price gap between split and window ACs reduced considerably. However, LG has now re-introduced select window AC models. For Voltas, window ACs comprise 24-25% of sales, compared to overall industry window AC sales of 15–16%. This is because Voltas is a leader in the northern market where demand for window ACs continues to remain high. Also, the window AC market size has been relatively stable, with many buyers shifting from air coolers to ACs for the first time (especially in tier 2 and 3 cities).

Exhibit 13: India room ACs – split ACs continue to gain share

Source: Industry, MOSL

- Distribution reach is the key differentiator in the Indian AC market. This has become all the more important since ~50-55% of overall industry volumes are outside metros/tier 1 cities. In our view, Voltas has been able to command a leadership position mainly because it has managed to increase its pan-India touch points to more than 13,000, from 6,500 in FY14.

Exhibit 14: Dealer touch points across the industry

Company Name	FY17
Voltas	~13,000
Blue Star	3,800
Daikin	4,000
Videocon	7,000
Hitachi	4,000
Lloyd Electric	>10000
Symphony	23,400
Micromax	4,000
Carrier Midea	3,200

Source: Company, Industry

- **Dealer margins.** Voltas, LG and Lloyd Electric are very dealer-oriented and offer high margins, while Samsung and Blue Star are not equally so. Voltas provides 35% margins to some of the bigger dealers and 28% to smaller dealers, while LG offers 28-30%. Blue Star, a relatively newcomer to the industry having entered the retail market only in CY11, provides lesser margins of 25-26%. O General and Mitsubishi Electric offer the lowest margins of 18-20%.

Exhibit 15: Dealer margins offered by various AC manufacturers

Name of company	Margin offered
Voltas	+++++++
LG/ Lloyd Electric	++++++
Blue Star/Samsung	+++++
Daikin/Hitachi	++++
Mitsubishi	+++
O General	+++

Source: Industry, MOSL, **higher denotes better margins

- **Branding and ad spends:** Brand name and trust are the other key differentiators in the AC industry. For example, Voltas, through its highly successful 'Murthy campaign' (launched in 2012), has strengthened its relationship with the Indian customers over past four years. The advertisement was also used to highlight the company's 'all-weather air conditioners' with both heating and cooling functionality. In CY17, Voltas has bought back 'Mr Murthy' in its new TVCs that focus on its 'All Star' inverter range of ACs. Blue Star has also used the 'Nobody cools better', 'Get office like cooling at home' and 'Daddy Cool' advertising campaigns to build a strong connect with the Indian customers. Companies typically spend 1-7% of their sales on advertising. Typically, with the onset of the summer season, AC manufacturers step up their advertising spends to capture customer mindshare. For details of marketing campaigns being run by various manufacturers in the 2017 summer season, please refer to the section 'Marketing campaign being run for the 2017 summer' at the end of the report.

Exhibit 16: Ad spends by AC manufacturers

Name of company	INR m	% of UCP sales
LG	500	NA
Hitachi	1,147	7.4%
Blue Star	350	1.8%
Samsung	300	NA
Voltas	500	2.0%
Whirlpool	608	1.7%
Lloyd Electric	500	2.7%
Daikin	750	3.0%

Source: Company, ** FY16 advertising spend

- **R&D spending.** Most AC manufacturers in India follow the 'Outsource and Assembly' model with low spending on R&D. Compressors are mostly sourced from China/Thailand and condensers from local vendors, with the complete AC being assembled at the AC manufacturer's factory. Typical, R&D spends are in the range of 0.2%-2% of sales. Daikin has been among the front runners in terms of R&D spending and has built its first R&D facility at an investment of INR0.6b in Rajasthan. The center is fully operational from July 2016 and would facilitate customization of ACs for climatic conditions in India and other SAARC countries.

Exhibit 17: R&D spending by company

Name of company	FY16	% of total
Voltas	44	0.2%
Blue Star	498	3.2%
Hitachi Home and Life	61	0.4%
Whirlpool	276	0.8%
Daikin	NA	2.5%
Symphony	19	0.5%

Source: Company. MOSL

- Typically, February and March of each year see the launch of new models by AC manufacturers to cater to summer season demand. This year too has been no different. Key features highlighted this year by AC manufacturers:
 - Wifi-enabled ACs which allow users to control the machine using a smartphone. Additionally, smartphones can be used to monitor power usage and consumption. Both Lloyd and Blue Star are highlighting the Wifi features of their ACs.
 - Increased focus on power saving and thus higher range/models of inverter ACs, with each brand trying to highlight the energy-saving potential.
 - Air purifiers as a result of increasing concerns about polluted air within cities.
 - R410A refrigerant gas being used in ACs as an alternative to the ozone-damaging R22 gas. The R22 gas has to be phased out by 2030, but the industry intends to completely switch to R410 by FY20 itself. Most inverter models across companies are using R410 refrigerant gas.
 - Dehumidifiers for controlling humidity, especially during monsoon, so as to offer better comfort.

Exhibit 18: Key marketing campaigns being run by AC manufacturers

Name of company	Tagline	Key features offered
Voltas	'All Star Inverter' air conditioners with all-weather comfort	■ In CY17, Voltas has continued with its "All Star" AC campaign launched in 2016, but has got back Mr Murthy in its TVCs. It focuses on the AC's significant power savings, environment-friendly and super-silent operations, advanced air purifier, and ambient cooling at high temperature. Its 'All Weather Smart ACs' can be operated by a phone using Wifi/GPRS – senses outside temperature and adapts to the weather and keeps a tab on power usage and consumption
LG	Power savings every day	■ Within split AC, LG has completely switched to inverters. LG inverter ACs offer 30% faster cooling, 66% energy savings, super quiet operation (19db), and 99% sterilized air and stabilizer-free operations with 10-year warranty on the inverter compressor and 5-year warranty on the condenser. LG's ACs also offer 'Mosquito Away' technology, 'Himalayan Cool' technology for faster cooling, 'Monsoon Comfort' for controlling humidity and 'Hot & Cold' AC for all-weather usage
Hitachi	'iCare' ACs with 'iClean', 'iSense' and 'iSee' technology	■ Hitachi's inverter ACs offer iClean Plus technology, which automatically cleans the dust in the air filter; iSense which regulates the temperature as per the person's active body movements; iSee which detects faces of people and directs air flow to everyone; Wifi technology to control AC from anywhere; R410 green refrigerant which is eco-friendly
Lloyd	'Khushiyon ki Guarantee'	■ Lloyd has launched Wifi-enabled ACs with 10-year warranty on compressors and 5-year warranty on condensers. This enables the user to control the AC through the use of a smartphone. Wifi feature is available across inverter, 5-star and 3-star range of ACs. It has signed on Mr Amitabh Bachhan as the brand ambassador for its CY17 marketing campaign. With Havells acquiring the brand, we expect an increased focus on margins and working capital
Videocon	'Aryabot' range	■ The 'Aryabot' range of ACs can identify a user's GPS location, switch off the AC when one leaves the house and switch it on before one enters the premises. It comes with a dedicated USB slot for a webcam, which can stream live video on the smartphone. One can also keep a tab of power consumption and, through its budgeting feature, can set limits on electricity consumption. Other features: voice command to control the remote; sleep graph mode to set desired temperature levels for each hour of the night; sense the outside temperature and automatically adjust to set temperature inside
Daikin	'Fill the air with Goodness'	■ Daikin has launched AC's with air purifiers which run on 'Streamer Technology' – these air purifiers helps eliminate bacteria, airborne particles, allergens, pollen and unpleasant odors. ACs offer 64% more power savings (Good for Savings), 15.3% more comfort (Good for Comfort), 75% less CO2 emission (Good for Environment) and Swing Inverter Technology (Good for living). Its ACs also have dehumidifiers, streamer discharge air purifier, intelligent eye (adjusts cooling to human presence), smartphone connectivity for ACs, stabilizer-free operation and all-season ACs for heating/cooling
Blue Star	'Nobody cools better'	■ Blue Star has launched inverter aircon with Wifi, which can be used from any remote location within network range, can work at high temperatures up to 50 degrees and within a voltage range of 160-270V without stabilizer; 30% power saving v/s 5-star split ACs; purifiers for eliminating odors, dust, bacteria and other pollutants
Godrej Appliances	Next World AC(NXW)	■ The NXW is among the most energy-efficient inverter ACs in the country with an Indian Seasonal Energy Efficiency ratio (ISEER) of 5.8. It is adaptable to Indian climatic conditions and delivers high efficiency with a 10-year compressor warranty, 5-year on condenser and with free standard installation
Samsung	Digital inverter ACs	■ Samsung has launched a new S inverter AC range in the affordable luxury segment. This series is engineered to consume less power and produce exceptional cooling comfort. Samsung's digital inverter compressor offers power savings; stabilizer-free operation; virus doctor and easy filter to eliminate dust; multi-jet plus technology for better cooling efficiency; tropicalized compressor for cooling till 52 degrees; turbo cooling; good sleep for regulating temperature throughout the night; and full HD filter and dry cool for comfort even in humid conditions

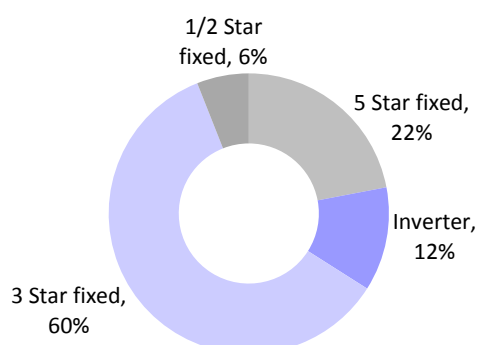
Source: Industry, MOSL

Room aircon industry shifts to inverters

Inverter ACs to account for 30% of industry volumes in FY18E and 50% in FY20E

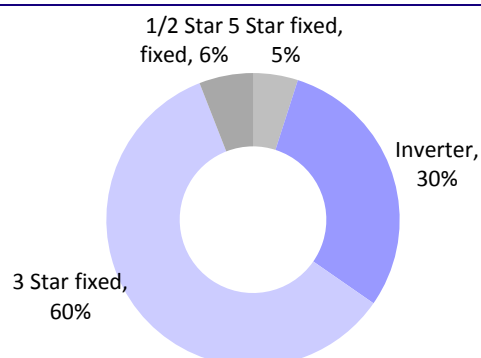
- The room AC industry is shifting toward energy-efficient models (i.e. 5-star/inverter ACs) over past few years, as customers are increasingly becoming aware of lifetime costs of ACs vis-à-vis upfront costs.
- To promote energy-efficiency, the BEE initiated star labeling in 2007 for fixed-speed ACs, where the compressor cuts off or cuts in when the desired temperature has been achieved or the room temperature increases. This program was conducted in 2006, involving key stakeholders such as consumer organizations and manufacturers of ACs/components. January 2007 became a voluntary year for AC star ratings. It was made mandatory from January 2010 for 1-star to 5-star ACs. The ratings were upgraded in January 2012 and January 2014. Also, the first energy efficiency ratio (EER) came into force in 2015.
- Inverters ACs are to be voluntarily labeled from January 2016. These ACs are considered to be more efficient than fixed-speed ACs. Apart from power savings, the key unique sales proposition of an inverter AC is that the set temperature is precise, delivering comfort. As inverter ACs have variable compressors, they have different standards compared to fixed-speed compressor ACs.
- According to the BEE, all ACs that operate on inverter technology will have to be compulsorily rated from 2018. Thus, the ratings for fixed and variable compressors will be merged. Accordingly, a 4- or 5-star-rated AC will be considered as inverter AC, while the rating of the current 5-star product will be changed to 3-star. The split AC market is expected to transition to inverter technology over next few years, with inverter ACs projected to account for 30% of the market by FY18 and 50% by 2020.
- Since June 2015, the BEE has introduced the ISEER ratio for inverter ACs. ISEER is defined as the ratio of total amount of heat that an AC can eliminate to total energy consumed to remove this heat. The minimum ISEER is 4.5 for a 5-star-rated inverter AC and 3.5 for a 3-star-rated inverter AC (equivalent to a 5-star fixed-speed AC).
- Currently, inverter ACs account for 12-15% of the overall market, while 5-star-rated ACs account for 22%. However, 3-star rated ACs are the largest contributors to the market.

Exhibit 19: India AC volume break-up (by rating CY16)

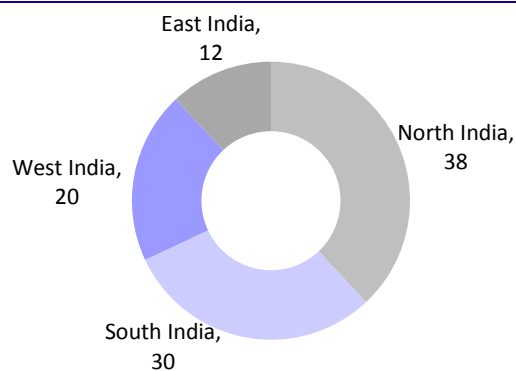


Source: MOSL, Industry

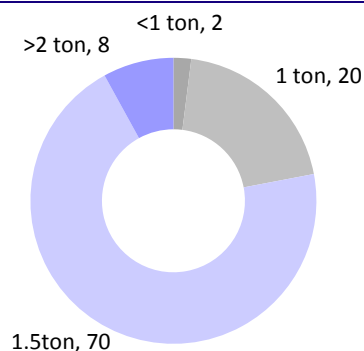
Exhibit 20: India AC volume break-up (by rating CY17E)



Source: MOSL, Industry

Exhibit 21: India region-wise AC sales

Source: Industry

Exhibit 22: AC volume break-up (by tonnage)

Source: Industry

Exhibit 23: AC tonnage and cooling area

Tonnage	Appropriate area
1 ton	120–140sq ft
1.5 ton	150–180sq ft
2 ton	180–240sq ft

Source: MOSL, Industry

- According to Blue Star, inverters ACs are likely to account for 30% of overall industry by FY18 and 50% by FY20. This is expected to be driven by increasing consumer preference for energy-efficient products and convergence of star ratings from CY18.

Exhibit 24: Star rating for window ACs (valid from 1 January 2016)

Description Star Level	Energy Efficiency Ratios (Watt)	
	Minimum	Maximum
1 Star *	2.5	2.69
2 Star **	2.7	2.89
3 Star **	2.9	3.09
4 Star ****	3.1	3.29
5 Star *****	3.3	

Source: BEE; one-star rated ACs cannot be sold from January 1, 2016

Exhibit 25: Star rating for split ACs (from 1 January 2016)

Description Star Level	Energy Efficiency Ratios (Watt)	
	Minimum	Maximum
1 Star *	2.7	2.89
2 Star **	2.9	3.09
3 Star **	3.1	3.29
4 Star ****	3.3	3.49
5 Star *****	3.5	

Source: BEE; one-star rated ACs cannot be sold from January 1, 2016

Exhibit 26: Inverter ACs – Indian Seasonal Energy Efficiency ratio(ISEER)

Description Star Level	Energy Efficiency Ratios (Watt)	
	Minimum	Maximum
1 Star *	3.1	3.29
2 Star **	3.3	3.49
3 Star **	3.5	3.99
4 Star ****	4.0	4.49
5 Star *****	4.5	

Source: BEE; one-star rated ACs cannot be sold from January 1, 2016

- The BEE has introduced a new star rating methodology – Indian Seasonal Energy Efficiency Ratio (ISEER) – for ACs. This evolved rating methodology factors in variance in higher temperature in India and rates ACs accordingly. The ISEER measures energy efficiency of ACs based on weighted average of the performance at outside temperatures between 24 and 43 degree (based on Indian weather data).
- As per Indian Weather Data Handbook, 2014, the weather profile of 54 major cities shows that 65% of the total numbers of hours in a year have a temperature above 24 degrees. Air conditioners in India have hitherto been tested under the IS 1391 code at standard operating conditions (outside temperature of 35 degrees). Star rating is given to manufacturers based on the test results.
- Ratings based on the ISEER have been introduced on a voluntary basis for variable speed (inverter) ACs since June 2015. However, ratings of variable speed and fixed-speed ACs are proposed to be merged from January 2018.

Shift to inverter AC gains traction – LG has the first-mover advantage

- Historically, within the inverter AC segment, Japanese players like Daikin, Mitsubishi Electric and Hitachi have an edge over Indian peers as they have introduced these models earlier in the Indian market and have access to technology from the parent company.
- LG recently exited the fixed-speed AC segment globally. Similarly, it shifted its entire split-AC range to inverters while still continuing with fixed-speed ACs in the window AC segment.
- LG is targeting 30% AC sales growth to 0.9m units in CY17, entirely driven by inverter ACs. It has priced its 1 and 1.5 ton 3-star inverter ACs quite aggressively at INR31,000 and INR35,000, respectively. This compares very favorably to fixed-speed ACs, where the 1 ton 3-star AC costs ~INR28000-30,000, the 1.5 ton 3-star AC is priced at INR34000-35,000 and the 1.5 ton 5-star AC costs INR37,000-40,000 (see table below)
- LG inverter ACs also come with a 10-year warranty on the compressor, 5-year warranty on the condenser, two free gas recharges over five years of purchase, 1-year warranty on inverter chip, stabilizer-free operation (can work in a wide range of voltage fluctuation) and subsidized installation at INR499.

Exhibit 27: LG's inverter AC prices v/s fixed-speed ACs of Voltas and Blue Star

Description	Voltas /Blue Star	LG
3 star fixed, 1.0 ton	INR28000-30,000	-
3 star fixed, 1.5 ton	INR34000-35,000	-
5 star fixed, 1.5 ton	INR37,000-40,000	-
3 star inverter, 1.0 ton	INR36,000-38,000	INR31,000
3 star inverter, 1.5 ton	INR42,000-44,000 (copper)	INR35000 (alloy)/ 37,000(copper)

Source: BEE; one-star rated ACs cannot be sold from January 1, 2016

- Prices of inverter ACs of LG are ~INR7,000-8,000/unit cheaper than those of peers (which are priced at INR42,000-44,000/unit for the 1.5 ton 3-star inverter AC models and INR36,000-38,000 for the 1 ton 3-star inverter AC models); it is also offering subsidized installation at INR499 v/s INR1,500 standard installation.

- LG has been able to price its products aggressively due to benefits from localized manufacturing at its two plants in Pune/Greater Noida and higher volumes. Consequently, the price differential between fixed and inverter models has come down to ~10% (INR2,000-30,000) v/s as much as 20-25% earlier (INR7,000-8,000).
- In our view, LG will completely shift from 1.5 ton 5-star fixed-speed ACs to inverter ACs. We note that although inverter ACs are slightly expensive, they offer much more power consumption and cooling benefits.
- In our view, inverter ACs will do well in metros and large cities/towns where power is reliable. The inverter AC segment is not expected to do that well in smaller cities/towns where power fluctuations can affect inverter/PCB chips which cost INR5,000-7,000.
- In the near term, Voltas will likely take share from LG as the latter has vacated the fixed-speed AC space, wherein products are ~10% cheaper than inverter ACs in the 1/1.5 ton range (Voltas' fixed-speed 1 ton 3-star AC at INR26,000-28,000 v/s LG's 1 ton, 3-star inverter AC at INR31,000; and Voltas' 1.5 ton 3-star fixed-speed AC at INR34,000-35,000 v/s LG's 1.5 ton 3-star inverter AC at INR37,000). As India is a very price-conscious market, consumers may prefer to go with a fixed-speed AC, rather than spending additional 10% on an inverter AC.

Voltas may not see meaningful gains even with LG's complete exit from fixed-speed ACs

- The street is of the view that with LG exiting the fixed-speed AC space, Voltas may see significant market share gains. In our view, this may not be completely correct, and overall gains may be limited to ~1% of the market (see table below). This, in turn, would add ~3-4% to sales in FY18.
- We have made three key assumptions: (1) share of inverter ACs grows to 30% in CY17 v/s ~12% in CY16, (2) LG takes a 50% share in the inverter AC market and (3) Voltas takes a 30% share in the fixed-speed aircon space (~23% share in CY16, +7% YoY and 50% of the 12% share vacated by LG with the balance taken by Lloyd Electric, Daikin, etc.)

Exhibit 28: Voltas may not see a significant market share gain even with LG vacating the fixed-speed AC segment

Industry sales in CY16		100 %	Industry sales in CY17		100 %
Window		15%	Window - Fixed		15%
Split - Fixed		73%	Split - Fixed		55%
Split - Inverter		12%	Split - Inverter		30%
LG market share CY16		% of total market	LG market share CY17		% of total market
Window(25% share by LG)		4%	Window – Fixed		4%
Split (Fixed - 16% share)		12%	Split – Fixed		0%
Split (Inverter - 5% share)		1%	Split - Inverter(50% share)		15%
Total		16%	Total		19%
Voltas market share CY16		% of total market	Voltas market share CY17		% of total market
Window(30% share of Voltas)		5%	Window – Fixed		5%
Split (Fixed - 23% share)		17%	Split - Fixed (30% - Assume Voltas takes share with LG's exit)		17%
Split (Inverter - 5% share)		1%	Split - Inverter(5% share)		2%
Total		22%	Total		23%

Source: MOSL, Industry

High competitive intensity

Brand, distribution, service center network and dealer margins are key

We interacted with some of the largest dealers and channel partners with a pan-India presence to understand the key summer trends in the AC industry. Key takeaways:

- **CY17 off to a good start; March sees a spike at the month end:** The summer season typically starts from March in the south and April in the north – AC demand picks up during these months. The entire country witnessed a relatively warm February, but the temperature was higher in West India, with cities like Mumbai seeing a 15-20% jump in AC sales. However, the first three weeks of March were a dampener for AC sales, with hail/snow storms leading to a dip in temperatures across north, west and east India. However, a spike in temperatures in the last week of March has led to a strong revival in volumes. We note that March 2016 had witnessed record temperatures, driving a spike in demand for AC sales and subsequently inventory stock-out for dealers in April 2016.
- **Dealer margins:** Voltas, LG and Lloyd Electric are very dealer-oriented and provide high margins, while Samsung and Blue Star are not equally so. Voltas provides 35% margins to some of the bigger dealers and 28% to smaller dealers, while LG offers 28-30%. Blue Star, a relatively newcomer to the industry having entered the retail market only in CY11, provides lesser margins of 25-26%. O General and Mitsubishi Electric offer the lowest margins of 18-20%.

Exhibit 29: Dealer margins offered by various AC manufacturers

Name of company	Margin offered
Voltas	+++++++
LG / Lloyd Electric	++++++
Blue Star/Samsung	+++++
Daikin/Hitachi	++++
Mitsubishi	+++
O General	+++

Source: Industry, MOSL, **higher denotes better margins

- **Inverter ACs to account for 30% of sales in CY17/FY18 and 50% in CY20:** Inverter ACs account for ~30% of overall AC sales during Jan-Feb, '17, and given the upcoming summer season, this share could increase to 30-35%. Around 50% of inverter AC sales come from LG and the balance from Whirlpool and Panasonic. Voltas is not selling inverter ACs yet. Sales of inverter ACs are largely restricted to metros/tier 1 cities, given their premium pricing (10-15% higher compared to a 3-star AC with same tonnage). Moreover, the converter chip (converts AC to DC power) is at a high risk of failure due to voltage fluctuations. Each chip costs ~INR5,000-7,000, and can prove to be a sizeable cost for end-customers. To avoid chip failure, inverter ACs need to have in-built stabilizers – LG already has this in its ACs.

Exhibit 30: Inverter AC sales for key manufacturers vs. the industry

Description	% of total
Industry	12-15%
Daikin	32-35%
Blue Star	15%
Lloyd Electric	<5%
Voltas	5-7%

Source: MOSL, Company

- **Shift from 5-star fixed-speed to inverter; Voltas to gain share.** In the near term, Voltas will likely take share from LG as the latter has vacated the fixed-speed AC space, wherein products are ~10% cheaper than inverter ACs in the 1/1.5 ton range (Voltas' fixed-speed 1 ton 3-star AC at INR26,000-28,000 v/s LG's 1 ton, 3-star inverter AC at INR31,000; and Voltas' 1.5 ton 3-star fixed-speed AC at INR34,000-35,000 v/s LG's 1.5 ton 3-star inverter AC at INR37,000). In our view, LG will completely shift from 1.5 ton 5-star fixed-speed ACs to inverter ACs. We note that although the inverter ACs are slightly expensive, they offer much more power consumption and cooling benefits.
- **AC prices retained at 2016 level:** With no change in the BEE star ratings in CY17, most manufacturers have maintained last year's prices for ACs. However, with a sharp rise in commodity costs, there may be a need to increase prices or else margins would come under pressure. With aggressive pricing being offered by LG, other players are unable to raise prices of their fixed-speed ACs, as this would reduce the price gap with inverter ACs.
- **Sale promotions via exchange offers, discounts and free installations to continue:** To promote sales during the upcoming summer season, brands are offering exchange schemes, free installation and discounts. Typical discounts being offered are in the range of 10-15% of MRP. For premium brands like Mitsubishi, Hitachi, O General and Daikin, the discounts are in the range of 8-12%, while in case of Voltas and LG, the discounts are in the 12-15% range. Companies are also offering comprehensive 5-year warranty on ACs. In the case of inverter ACs, companies are offering 10-year warranty on the compressor and 5-year warranty on the condenser.
- **Intensifying competition:** In terms of competition, our channel checks indicate that Daikin, Lloyd Electric, Panasonic and LG are striving to increase their market share/volumes. In fact, Panasonic had offered large dealer margins and witnessed considerable growth in 2012, but it could not sustain this trend. We believe Daikin and Hitachi are trying to enter the popular category, which accounts for ~60% of volumes from the erstwhile premium category.

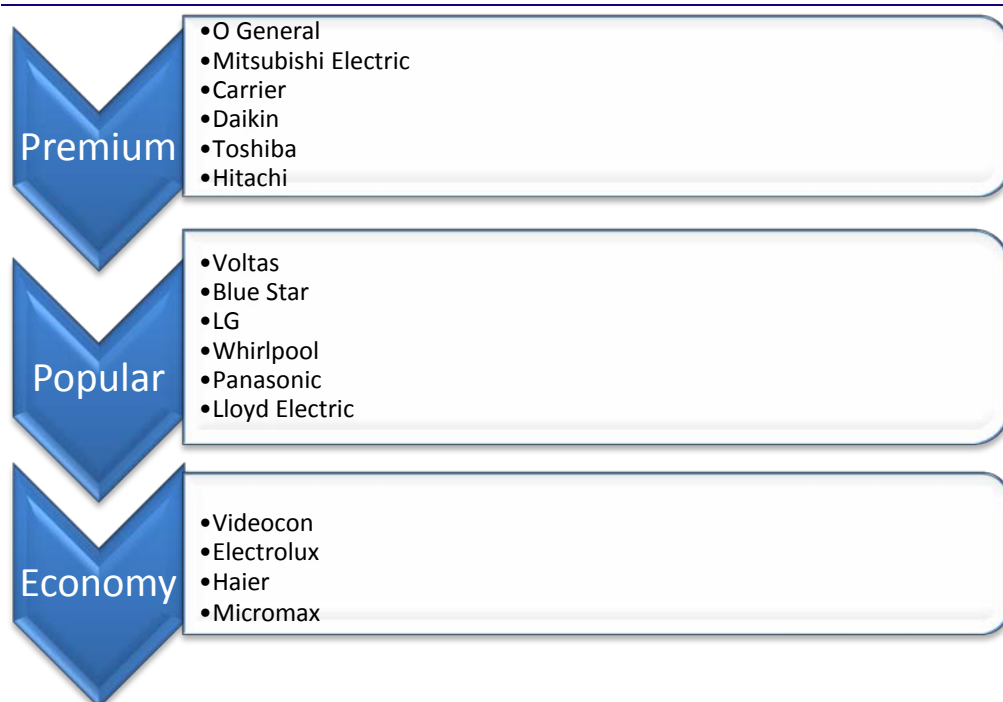
Exhibit 31: Sales growth for key industry players over FY10-16

Company sales	FY10	FY11	FY12	FY13	FY14	FY15	FY16
Voltas	11,871	15,608	15,388	18,356	20,524	25,105	25,565
Blue Star	5,830	7,884	9,326	9,652	10,755	13,317	15,794
Hitachi	6,527	7,687	7,990	9,316	11,055	15,728	16,595
LG	15,068	-	11,802	12,959	13,696	15,750	17,736
Lloyd Electric			808	694	2,520	9,618	13,842
Daikin India	-	6,974	11,962	16,037	18,204	20,129	27,500

YoY Growth (%)	5 year CAGR (FY12-16)							
Voltas	29%	31%	-1%	19%	12%	22%	2%	11%
Blue Star	-3%	35%	18%	3%	11%	24%	19%	11%
Hitachi	37%	18%	4%	17%	19%	42%	6%	16%
LG	31%			10%	6%	15%	13%	8%
Lloyd Electric				-14%	263%	282%	44%	77%
Daikin India			72%	34%	14%	11%	37%	18%
Average	24%	27%	18%	10%	47%	59%	18%	

Source: Company, MOSL

- **Voltas, Blue Star, LG, Daikin and Panasonic** are the most popular brands for dealers. O General, Carrier and Hitachi are considered as the premium brands – higher prices for these brands could be partly ascribed to the use of 100% copper condensers.

Exhibit 32: Brand hierarchy in the Indian room AC market

Source: Dealer feedback, Industry, MOSL

- Voltas is expected to retain its leadership position in the industry, led by its persistent efforts to enhance brand name, distribution reach and dealer support. Voltas' focused advertising and brand-building exercise, along with the TATA brand, helped it earn customer trust. With more than 13,000 touch points, Voltas' distribution network and dealer margins are well ahead of competitors.
- Blue Star primarily focuses on product quality. It offers 27-28% margins to dealers, and has been fairly consistent over the years on its product pricing and margins.
- Panasonic resorted to aggressive strategies in 2012 in quest for more market share. The company achieved the target by reducing prices and offering significant discounts, but was unable to sustain at lower price points. Thereafter, prices had to be normalized, which resulted in a market share loss. Panasonic has resurfaced in 2016, with dealer margins raised to 27–28%. The company is providing exclusive models to dealers to ensure no price undercutting, and has launched a fresh marketing campaign to regain its lost share in the industry.

Exhibit 33: Service centers by company

Name of company	FY17
Voltas	200
Blue Star	400
Hitachi Home and Life	41
Daikin	100+
LG	194
Carrier	175
Lloyds Electric	485
Micromax	400
Panasonic	100

Source: Company, MOSL

Summer strategies of AC manufacturers

In FY18, competition is likely to intensify for market share among AC manufacturers. Based on media articles/channel checks/company feedback, we highlight the key strategies adopted by various players with the early onset of summer.

Blue Star – impressive line-up of AC models; market share target at 13%

- Blue Star continues to grow ~30% in the current financial year, faster than industry growth. The company estimates its market share at 11.5% and the target is to reach 12.5% in FY18 with the newly launched line-up of ACs.
- Blue Star has set a new standard through its latest line-up of over 135 room AC models, 40 of which operate on the new inverter technology. The stellar array ranges in tonnage from 0.7TR to 4.5TR across the 2-star, 3-star and 5-star models, as well as 3-star and 5-star inverter models. For markets which face harsh winters, there is also a complete line-up of inverter split ACs, which cool in summers and heat in winters. 8 of the 19 models of 5-star inverter split ACs are equipped with a 'smart' Wi-Fi feature, which enables users to operate the machine from any place.
- The entire series of star-rated inverter split ACs is equipped to function smoothly within a voltage range of 160-270V, without the aid of an external voltage stabilizer.
- The company intends to increase its R&D investment to INR0.33b in FY18, as against INR0.3b in FY17, on new product development and research & design initiatives.
- With regard to distribution, in 2017, Blue Star's room ACs will be available at 4,000 outlets in 500 locations across the country (via exclusive as well as multi-brand sales outlets, service dealers, retail showrooms and modern trade). Presently, Blue Star has 85 exclusive product stores in the country, which it plans to increase to 100 by end-FY17.
- Around 52% of Blue Star's room AC sales are derived from smaller towns since consumers in these markets are aspirational and prefer premium brands.
- The company has plans to spend ~INR0.45b in the forthcoming summer season (as against INR0.4b in FY17) toward TV commercials as well as ads in mainline dailies, cinema and hoardings.
- The differentiated value proposition '**Nobody cools better**' has resonated well with the residential audience.

Voltas – targeting 15-20% growth this summer season

- Voltas (~21% share) continued to lead the room AC industry in 9MFY17, aided by its robust dealer network, strong brand name (trust in the TATA brand) and focused advertising.
- The company has continued with its 'All Star Ratings' AC range in 2017 based on the unique 'two stage steady cool' compressor, which operates on a two-stage inverter technology providing power savings across weather conditions. This cutting-edge technology leads to significant power savings vis-à-vis an ordinary compressor. In addition, the All Star ACs are environment-friendly and efficient, with super silent operation (noise levels as low as 18 decibels), high ambient cooling (efficient in temperatures as high as 54 degree celsius) and an advanced air purifier. The company is offering this unique range with a 5-year warranty.

- Voltas has also continued with its range of advanced 'All Weather Smart ACs' by integrating three smart features: 1) Smart Access: Wi-Fi enabled ACs can be operated from anywhere and anytime through a smartphone using local Wi-Fi or GPRS connection; 2) Smart Sense: The AC senses outside weather conditions and adapts to the changing environment without any manual intervention; and 3) Smart Analytics: It keeps a tab on the energy usage and consumption trends. In addition, the company has revamped its Smart AC mobile app.
- 2017 has started with scorching summers, with temperatures already crossing 35 degrees across north and west India. AC sales have begun early this year, and a good summer season is expected driven by above-normal temperatures.
- CY16 had a very high base for Voltas, with March sales +45% YoY and April +80% YoY, but still expect to grow 15-20% YoY in FY18 (we build in 20% growth in FY18).
- Commodity prices are up 20-25% over past few quarters, and competitive intensity remains high. The company is expected to maintain margins at same level as last year.

LG India – looking for 30% growth in CY17

- The company is eyeing 30% sales growth this year in this segment. It has started manufacturing its dual-inverter AC series, which it unveiled recently, at its plants at Greater Noida and Pune.
- LG was the first brand to move completely to inverter split-AC manufacturing in the country – it has been working on this strategy since late last year.
- The products are priced in the range of INR36,000-54,000; it has launched 45 models under the new dual-inverter AC series.
- Previously, the price gap between a regular and an inverter AC was as high as 25-30%. LG has leveraged on economies of scale and local production to bring down this gap significantly.
- The company sold ~7.5 lakh units of ACs in 2016. This year, it is aiming to sell ~9 lakh units.
- LG believes the overall pie of inverter ACs will expand exponentially this year. It has a market share of ~22% and aims to increase it to 28% in 2017.
- The price of LG inverter AC is less than the regular 5-star AC of any brand and marginally higher than the 3-star AC.

Daikin India – target to expand reach and market share; doubling capacity at Neemrana to 1.2m units

- The company is not reacting to LG's aggressive inverter pricing, and has maintained prices for its fixed-speed/inverter ACs. Once the expansion at Neemrana is completed, Daikin would look to aggressively take share in the CY18 summer season.
- Under the leadership of the current MD, Mr K. Jawa, Daikin plans to double sales to 1m units in 4–5 years, with the commissioning of a second plant. Globally, the company ranks first in ACs and targets to achieve the same position in India by 2020.
- Over past few years Daikin ACs were generally perceived as expensive. Nevertheless, the company reduced the prices with effect from CY15. Daikin's aim is to sell at the right price, and use the right technology and the right product range to capture the market, including semi-urban areas.

- The company's plant in Neemrana was set up at a cost of INR11b and produces 0.5m ACs, 6,000 ductable and 18,000 chiller units. Daikin intends to set up a second plant at an investment of INR6b. The new facility, which will have manufacturing capacity of 1.2m units per year, is scheduled to commence operations in September 2017.
- Daikin has built its first R&D facility at an investment of INR0.6b – it is presumed to be the foremost in the country by an AC manufacturer. The center became operational in 2016.
- The company has tied up with the Delhi Daredevils IPL team to enhance brand image and reach.
- In 2016, Daikin had launched its marketing campaign under the tag "Fill the air with goodness". The campaign reiterates the company's commitment to provide state-of-the-art technology, which offers comfort, savings and is environment friendly. It has continued with this campaign in CY17 as well.

Panasonic – 'A better life, a better world' – aims for 30-35% growth in FY18

- Launched a 'Sky Series' with radiant cooling technology. Built-in air purifiers will be provided in most ACs at no extra cost. ACs with radiant cooling technology (aim is to cool the room by removing the heat from ceilings and walls) will be priced at INR70,000 and INR85,000 for 1 and 1.5 ton, respectively
- In FY17, Panasonic sales grew 20% to INR15b; it targets FY18 growth of 30-35% and aims to take a 10% share in the market.
- The company launched a new range of ACs with in-built air purification system to tap demand spurred by rising air pollution. The latest series focuses on three areas – comfort, health and beauty – and has been launched with a view to tap the niche consumer segment.
- 'Life Conditioner', range of ACs enhances consumer experience by providing pre-requisite cooling features and using latest Japanese technology. The range is reported to offer 65% energy saving, 99% purer air and 35% faster cooling. Panasonic 'Life Conditioners' are equipped with Nanoe-G & PM 2.5 Air Purification, which eliminates airborne particles. Econavi inverter technology monitors the product's operations, while iAUTO X delivers faster cooling.
- The company launched a top-end AC with radiant cooling system, and is looking at 30-35% growth in sales in FY18.

Godrej Appliances – Eyeing 20% share in inverter/5-star AC segment

- Godrej Appliances has rolled out an energy-efficient AC under its premium NXW brand, which was used for super premium refrigerators until date. The company aims to capture a 20% share across the 5-star and inverter AC segments in CY17.
- The company highlighted that it is the most energy-efficient inverter AC in the country with an ISEER of 5.2. Since June 2015, BEE has introduced ISEER for inverter ACs. ISEER refers to the ratio of the total amount of heat that an AC can eliminate to total energy consumed to remove the heat. The minimum ISEER for a 5-star-rated inverter AC is 4.5.
- Godrej's inverter AC is expected to be among the top 5-star-rated inverter ACs, with 31% savings over a 5-star fixed-speed AC. It is adaptable to Indian climatic conditions and delivers high efficiency. The NXW range would be available in 3440W and 5000W, and the company is offering a 5-year condenser warranty and a 10-year compressor warranty.

- The 5-star category is growing at 40%, and accounts for 22% share of the INR100b industry. Inverter ACs, on the other hand, account for 8% of the market. Godrej has a 10% share in the AC market.
- Godrej is launching 28 new models. It has doubled its ad spend to INR150m. ACs contribute 24% of the company sales, with the share expected to increase to 35-36% in two years.

Samsung – inverter range launched in affordable luxury segment

- Samsung has launched a new S inverter AC range in the affordable luxury segment. This series is engineered to consume less power and produce exceptional cooling comfort.
- The company official said that since the digital inverter range is equipped with an 8-pole motor, it ensures faster cooling performance of up to 43% and consumes lesser energy compared to conventional ACs.
- The S-Inverter digital inverter technology-based ACs are priced in the range of INR35,900 to INR66,600.

Videocon – targets 13% share and to increase presence in Tier 2/3 cities

- Videocon is aiming to corner up to 13% of the AC market this year, mainly by increased penetration in tier II/III cities and B2B sales.
- The company, which recently introduced India's first green AC powered by solar energy, is looking to achieve sales of ~6.5lakh units and turnover of ~INR17.5b this year.
- Videocon would also expand its distribution network to 13,500 points of sales (from 9,000 currently), mainly targeting its core tier II/III markets. The firm's current market share stands at ~10%.
- Videocon, which had introduced app-controlled smart ACs under Aryabot brand in CY16, has received good response from customers. Last year, the group sold around 4 lakh ACs, of which ~9,000 were Aryabot smart ACs.

Exhibit 34: Key marketing campaigns being run by AC manufacturers

Name of company	Tagline	Key features offered
Voltas	'All Star Inverter' air conditioners with all-weather comfort	■ In CY17, Voltas has continued with its "All Star" AC campaign launched in 2016, but has got back Mr Murthy in its TVCs. It focuses on the AC's significant power savings, environment-friendly and super-silent operations, advanced air purifier, and ambient cooling at high temperature. Its 'All Weather Smart ACs' can be operated by a phone using Wifi/GPRS – senses outside temperature and adapts to the weather and keeps a tab on power usage and consumption
LG	Power savings every day	■ Within split AC, LG has completely switched to inverters. LG inverter ACs offer 30% faster cooling, 66% energy savings, super quiet operation (19db), and 99% sterilized air and stabilizer-free operations with 10-year warranty on the inverter compressor and 5-year warranty on the condenser. LG's ACs also offer 'Mosquito Away' technology, 'Himalayan Cool' technology for faster cooling, 'Monsoon Comfort' for controlling humidity and 'Hot & Cold' AC for all-weather usage
Hitachi	'iCare' ACs with 'iClean', 'iSense' and 'iSee' technology	■ Hitachi's inverter ACs offer iClean Plus technology, which automatically cleans the dust in the air filter; iSense which regulates the temperature as per the person's active body movements; iSee which detects faces of people and directs air flow to everyone; Wifi technology to control AC from anywhere; R410 green refrigerant which is eco-friendly
Lloyd	'Khushiyan ki Guarantee'	■ Lloyd has launched Wifi-enabled ACs with 10-year warranty on compressors and 5-year warranty on condensers. This enables the user to control the AC through the use of a smartphone. Wifi feature is available across inverter, 5-star and 3-star range of ACs. It has signed on Mr Amitabh Bachhan as the brand ambassador for its CY17 marketing campaign. With Havells acquiring the brand, we expect an increased focus on margins and working capital
Videocon	'Aryabot' range	■ The 'Aryabot' range of ACs can identify a user's GPS location, switch off the AC when one leaves the house and switch it on before one enters the premises. It comes with a dedicated USB slot for a webcam, which can stream live video on the smartphone. One can also keep a tab of power consumption and, through its budgeting feature, can set limits on electricity consumption. Other features: voice command to control the remote; sleep graph mode to set desired temperature levels for each hour of the night; sense the outside temperature and automatically adjust to set temperature inside
Daikin	'Fill the air with Goodness'	■ Daikin ACs offer 64% more power savings (Good for Savings), 15.3% more comfort (Good for Comfort), 75% less CO2 emission (Good for Environment) and Swing Inverter Technology (Good for living). Its ACs also have dehumidifiers, streamer discharge air purifier, intelligent eye (adjusts cooling to human presence), smartphone connectivity for ACs, stabilizer-free operation and all-season ACs for heating/cooling
Blue Star	'Nobody cools better'	■ Blue Star has launched inverter aircon with Wifi, which can be used from any remote location within network range, can work at high temperatures up to 50 degrees and within a voltage range of 160-270V without stabilizer; 30% power saving v/s 5-star split ACs; purifiers for eliminating odors, dust, bacteria and other pollutants
Godrej Appliances	Next World AC(NXW)	■ The NXW is among the most energy-efficient inverter ACs in the country with an Indian Seasonal Energy Efficiency ratio (ISEER) of 5.8. It is adaptable to Indian climatic conditions and delivers high efficiency with a 10-year compressor warranty, 5-year on condenser and with free standard installation
Samsung	Digital inverter ACs	■ Samsung has launched a new S inverter AC range in the affordable luxury segment. This series is engineered to consume less power and produce exceptional cooling comfort. Samsung's digital inverter compressor offers power savings; stabilizer-free operation; virus doctor and easy filter to eliminate dust; multi-jet plus technology for better cooling efficiency; tropicalized compressor for cooling till 52 degrees; turbo cooling; good sleep for regulating temperature throughout the night; and full HD filter and dry cool for comfort even in humid conditions

Source: Industry, MOSL

Takeaways from ACREX 2017: Asia's largest exhibition for ACs, HVAC, refrigeration and energy efficiency

Industry growth at 15% YoY in CY17; LG inverter pricing predatory

We visited ACREX, Asia's largest exhibition for ACs, HVAC, refrigeration and energy efficiency, where we met the leading AC manufacturers in the country. Key takeaways:

- AC manufacturers expect the industry to grow 15-20% YoY in CY17, following a strong FY17, where sales are expected to have grown by 20% YoY.
- March-June (summer months) account for 50–55% of industry annual AC sales. The CY17 summer season is likely to be good for AC manufacturers. The assumption is supported by the IMD's forecast of 1 degree higher than normal temperature across central and north India. Furthermore, west India is already seeing a spike in temperature. We also note that CY16 had seen record-high temperatures across the country, leading to stock-out at dealers in March-April.
- Demonetization led to inventory in the channel being higher than normal; however, strong sales in February have led to inventory getting cleared out.
- As BEE star ratings remain unchanged, AC manufacturers do not expect any price increases in CY17. However, rising commodity prices imply price hikes would need to be taken to offset cost pressures.
- Consumers have increasingly opted for energy-efficient products; 5-star and inverter AC sales constitute 30% of the market and are growing in high-double-digits.
- LG's shift to inverter split ACs is driven by its parent's global strategy to exit the fixed-speed AC space. However, in India, LG would continue manufacturing window ACs, which account for ~10-15% of its sales.
- LG's aggressive pricing for inverter ACs – 1.5 ton 3-star inverter AC priced at INR35,000 (alloy condenser) and INR37,000 (copper condenser) – has forced peers to lower their inverter AC prices.
- Inverter ACs account for 10-12% of industry volumes, and the share is expected to increase to ~25-30% in CY17 – the shift to inverter ACs is expected to accelerate post CY18.
- With LG exiting the fixed-speed AC space, it may lose some market share in the near term. Pricing for inverter ACs is 10-15% higher than comparable fixed-speed models. Voltas thus may take some share over the near term, but LG stands to benefit from a 3-5 year perspective, in our view.
- 5-star fixed-speed ACs segment (20% of industry) is likely to be worst hit by LG's aggressive pricing in inverter ACs, given the similar price levels in both these segments.
- Competitive intensity remains high, with the established players in the premium category (Daikin and Hitachi) seeking to enhance presence in the popular category (50–60% market share). Also, players like GREE, Midea, Lloyd Electric and Videocon are looking to increase their share in the popular segment.
- Key differentiators in the AC market are brand name, distribution network and dealer margins. Reduction in pricing alone would not lead to sustainable market share gains.

Company-wise key takeaways from ACREX, 2017

Blue Star

- The company expects industry growth of 20% in FY18. Blue Star's sales are projected to accelerate by 25% YoY, driven by new model launches, improved distribution network and focused advertising.
- The company has been relatively weak in north India. However, over past 1-2 years, the focus has been to improve market share in this geography by adding new dealers and focused advertising.
- Launch of LG's inverter ACs has led to peers lowering the prices of their inverter ACs.
- LG may lose some market share in CY17, as cost-conscious Indian buyers may prefer a fixed-speed AC model available at <INR35,000, rather than paying INR35,000-37,000 for a 1.5 ton inverter AC. However, the industry is expected to gradually shift to inverter ACs from CY18.
- CY17 is expected to be a good year for AC sales – the company recently launched new models and would soon come up with a marketing campaign. The company aims to increase its market share to 12.5%.
- Voltas, LG and Carrier have lost market share over the past year, while Blue Star and Lloyd have gained some share.

Hitachi India

- The transition to inverters for the industry will likely be gradual. CY17 is expected to record inverter volumes of 25-30% v/s 10-15% in CY16. The shift could fasten in CY18 with convergence of star ratings.
- LG may lose share in fixed-speed compressors to Voltas in the near term as this space (still likely to draw cost-conscious buyers) has been completely vacated by former. However, LG stands to benefit over the medium term.
- Hitachi has an 11% volume market share in the 4.5m AC industry. The company currently ranks third in the industry after Voltas and LG. Daikin and Lloyd Electric rank lower in terms of volumes.
- Hitachi has voluntarily rated all its inverter AC models for BEE star labeling; it is now focusing on energy efficiency for boosting sales.
- LG's pricing for inverter ACs is very aggressive, and some customer segments would prefer inverter ACs over 5-star fixed-speed ACs, given the cost-efficiency benefits of the former with reducing price differential between the two segments. Hitachi 1.5 ton 3-star inverter AC costs INR40,500, while 1.5 ton 3-star fixed-speed AC is priced at INR34,500.
- Hitachi has been targeting the popular segment, and has AC models across the premium, popular and entry-level categories.
- Competition is intense, with Daikin, Midea, GREE and Lloyd Electric aggressively targeting the market.
- Comparison Hitachi and LG's ACs: 1) LG inverters work till 106% of capacity and Hitachi's at 120%; b) Hitachi has copper condenser, while LG has alloy condenser; c) Hitachi's compressor is tropical rotary, while LG's is only rotary; and d) LG uses R22 gas, while Hitachi uses R410A gas.

LG India

- In 2016, the company launched the dual-inverter technology AC, which is considered to be more efficient than the inverter AC (across 1, 1.5 and 2 tons). Apart from power savings, it also delivers 30% faster cooling.
- In terms of market share, the company undertakes significant amount of B2B sales to residential developers. This has not been captured in the Gsk Neilson data, which is only for multi-brand outlets.

Daikin India

- The real estate sector continues to remain weak, which is impacting demand for HVAC products both on the residential and commercial side.
- The company is content with LG's move to shift to inverter ACs, as this will raise awareness of the product, increase the share of inverters and lead to a faster transition of the industry to inverters. Daikin is among the market leaders globally in inverter AC space.
- LG's inverter pricing has led to peers lowering prices for their inverter models. However, note that the INR35,000 inverter AC model has alloy condensers, while the copper condenser model is priced at INR37,000 (~10-15% cheaper than comparable peers).
- Daikin is not reducing its prices at the moment for inverter models – it will do this in CY18 with the convergence of star ratings for ACs.
- Daikin aims to start its second facility to double capacity to 1m units by September 2017. Sales seen at INR35b in FY17 v/s INR28b in FY16. Target to be the market leader by FY20.
- Demonetization has hurt demand, and inventory in channel is higher than normal – the company will wait to see upcoming summer season and the impact on prices.
- Not affected by the Havells' acquisition of Lloyd as the latter caters to the mass market where Daikin is not present.

Lloyd Electric

- Key factors for market share gains: a) Good team in place, b) strong marketing campaign of "Khushiyaon ki Guarantee" (has roped in Amitabh Bachhan in the campaign), c) strong focus on after-sales via Lloyd app; has the highest number of service centers across the country, d) second-highest touch points (~10,000 dealers), e) lower pricing than competitors, with 1.5 ton 3-star priced at INR28,000 v/s Voltas' similar product pricing at INR31,000. Lloyd is the number three player after Voltas and LG.
- After Voltas, Lloyd provides the highest dealer margin, which incentivizes dealers to stock and sell Lloyd's products.

Marketing campaigns – focussed on inverters

Aggressive marketing campaigns to gain market share

Exhibit 35: Voltas – betting on its “All Star” inverter range of aircon for CY17

VOLTAS

PRESENTING VOLTAS ALL STAR INVERTER AC.
Run throughout the year. Save throughout the year.

FEATURES:

- HIGH AMBIENT COOLING* (35°C)
- LOW AMBIENT HEATING* (-30°C)
- ACTIVE DEHUMIDIFIER
- WARRANTY ON ACs* (5 YEARS)
- STABILIZER FREE OPERATION**
- 5.3 ISEER*
- 100% COPPER**

ALL WEATHER COMFORT ALL YEAR SAVINGS
TWO STAGE STEADY COOL COMPRESSOR
2 x 2

Bring home Voltas All Star Inverter AC powered by the unique Two-Stage Steady Cool Compressor. Unlike other ordinary Inverter ACs, it has two stage expansion of the refrigerant under two stage compression, which gives you maximum efficiency under extreme weather conditions. So even if you run it every season, summer, monsoon and winter, all day and all night, you save on power consumption. Moreover, with Voltas ACs you get a revolutionary 5 year warranty and an attractive 0% finance scheme.

VOLTAS ALL STAR™ INVERTER AC

To locate your nearest store, log on to:
www.voltasac.com/storelocator

Voltas 24x7 Customer Service - 1800 425 4555 (Toll Free).
For product registration SMS <WTA> to 9289525321
Visit us at www.voltasac.com Buy only genuine Voltas stabilizers.

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Voltas House A, Dr. Babasaheb Ambedkar Road, Chinchpokli, Mumbai - 400033. Phone: 022-66656333. Delhi Office - Voltas Ltd., A-43, 1st Floor, Mohan Co-operative Industrial Estate, Mathura Road, New Delhi - 110044. Phone: 011-4681 4681. Vadodra Office - Chinchpokli, Mumbai - 400033. Phone: 022-66656333. THANE - Voltas Ltd. Unit II, 1st Floor, 2nd Pokhran Road, Thane-400601. Phone: 022-67920106/07. G/Voltas adheres to the E-Waste (Management & Handling) Rules 2011, notified by the M. on the E-Waste & Exchange Policy, please contact our E-Waste partner at 1800-419-3293. Actual Products might differ from the one shown above. 5 year warranty is valid till 31st March, 2017 and is applicable on purchase of Voltas ACs only. For E-Waste partner details, please visit www.voltasac.com. *Based on ISO 14644-1:2005. **Based on ISO 14644-1:2005. 5 year warranty refers to 5 years or 50,000 hours, whichever is earlier. For E-Waste partner details, please visit www.voltasac.com.

Source: Industry

24 April 2017

Source: Industry





Switch to Smart. Switch to Lloyd Wi-Fi ACs.

Whether you are choosing a 3 Star, 5 Star or an Inverter AC, choose from Lloyd's smart range of Wi-Fi ACs.



Check out the cool new

LLOYD Wi-Fi ACs

10 years

WARRANTY

5 years

WARRANTY



Special Features

Built-in Wi-Fi	Optional Wi-Fi
Wi-Fi ACs can be controlled from anywhere through your smartphone	Change a non Wi-Fi AC into a Wi-Fi AC by installing a separate small PCB unit
Now no need to worry about battery change or remote damage	After putting Wi-Fi PCB, you can avail all the benefits of a Wi-Fi built-in AC

AIR CONDITIONERS

Model No.	Capacity	Wi-Fi	Star Rating	MRP	Special Offer Price
LS13AS0A-W	1.0 TON	IN-BUILT	★★★★	₹32,990/-	₹29,490/-
LS13AS0B-W	1.0 TON	IN-BUILT	★★★	₹27,990/-	₹24,990/-
LS13ABLR	1.0 TON	NA	★★★	₹26,990/-	₹23,490/-
LS19AXLZLR	1.5 TON	NA	★★★★	₹39,990/-	₹39,490/-
LS24X3LZDX	2.0 TON	NA	★★★★	₹43,490/-	₹39,990/-
LS13MVI	1.0 TON	NA	INVERTER	₹34,990/-	₹29,490/-
LS18MVI	1.5 TON	NA	INVERTER	₹44,990/-	₹37,490/-
LS24VHC	2.0 TON	NA	INVERTER	₹59,990/-	₹51,990/-

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Terms & Conditions: Lloyd does not give warranty on products purchased from any unauthorised dealer or any unauthorised online portal, except where explicitly stated. **Warranty:** Lloyd's 10 years warranty is on 5 Star and Inverter ACs. 10 years warranty on Inverter AC's Compressor. 7 years warranty on 3 Star & 5 Star & 2 year warranty on 1 Star & 2 Star AC's. For detailed terms & conditions visit www.lloydac.com. Please note disclaimer of liability. All products feature, logos & brands are property of their respective owners. Images and/or descriptions provided are for "E.O.E.O." Only valid till 30th April 2017.

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4394; **AIROLI**: 9223544602, **KHARGAR**: 9223566815/9223566816; **NERUL**: 9223544612, **PANVEL**: 9223544607, **KAMOTHE**: 9223555294, **KARJAT**: 9029090125/128, **KHOPOLI**: 9029090142/148, **SEAWARD**: 9223544602, 9029090154/158, **KALAMBOLI**: 9223544740, **URAN**: 9223544603, **GHANSOLI**: 9223544603; **VASHI**: HARI KRIPA SALUS-9930270013; **ALIBABA**: EVERGREEN ELECTRONICS-9372210014/9527279240, HARMON ELECTRONICS-9

Exhibit 38: Godrej NXW range – advertising its claim of being India’s most power-efficient aircon

RDS VOTES

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The...
You have been listed both as a typical information...
Government's on Advertisements for the 2013 Lok
► Cement Mod's standing, P.23
to...
the next struggle to...
P.9



When it comes to an AC, we tend to think too much.



Stop the overthinking.
Here's India's Most Power Saving Green Inverter AC.

Made thoughtfully to deliver the highest energy efficiency and be the most eco-friendly AC with the lowest global warming potential and zero ozone depletion potential.



Godrej NXW
NXW - Next World AC

THINGS MADE THOUGHTFULLY

COMPRESSOR WARRANTY*	CONDENSER WARRANTY*	FREE STANDARD INSTALLATION	ATTRACTIVE FINANCE OFFERS		24x7 CALL CENTRE VISITS UP TO 9 PM WEEKEND SERVICE	Eco Mode
5 YEAR WARRANTY*			NO PROCESSING FEE DOWN PAYMENT COST SWI	CALL US ON 1800 209 5811		Registration of Service

For more information, give a missed call to **0 99808 99808**.

*Finance at the sole discretion of the finance provider. Godrej NXW AC is available in 1 T & 1.5 T. For detailed terms and conditions please visit <http://www.godrejacpliances.com/en-IN/AC.html>.

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Facebook: www.facebook.com/godrejappliance **Twitter:** www.twitter.com/godrej

Source: Industry

Exhibit 39: Mitsubishi Electric – focusing on its inverter range

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 No fees online,
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COMFORT WITH PROTECTION

Mitsubishi Electric makes home comfortable and protective with products that are not just about better but smart living.

2018 star rating as per BEE | Wide & long air flow | I save | Low noise level 19 dB | Auto horizontal, vertical vane
Operating temp. 52 degrees | 100% copper condenser | New LEV control | Blue fin coated condenser

Global leaders in air conditioning with Japanese technology

CASSETTE AIR CONDITIONER

Jet Towel Unit

CITY MULTI VRF SYSTEM

DUCTABLE AIR CONDITIONER

The M.E. advantages: More power saving | 100% copper pipe | 100% imported | Unmatched service | Eco-friendly green refrigerant (R-410A)

Mitsubishi Electric India Pvt. Ltd.

3rd Floor, Unit no. 305-306, "Indira" Sales Plaza Complex, Andheri Kurla Road, J.B. Nagar, Andheri (E) Mumbai-400009, Maharashtra, India.
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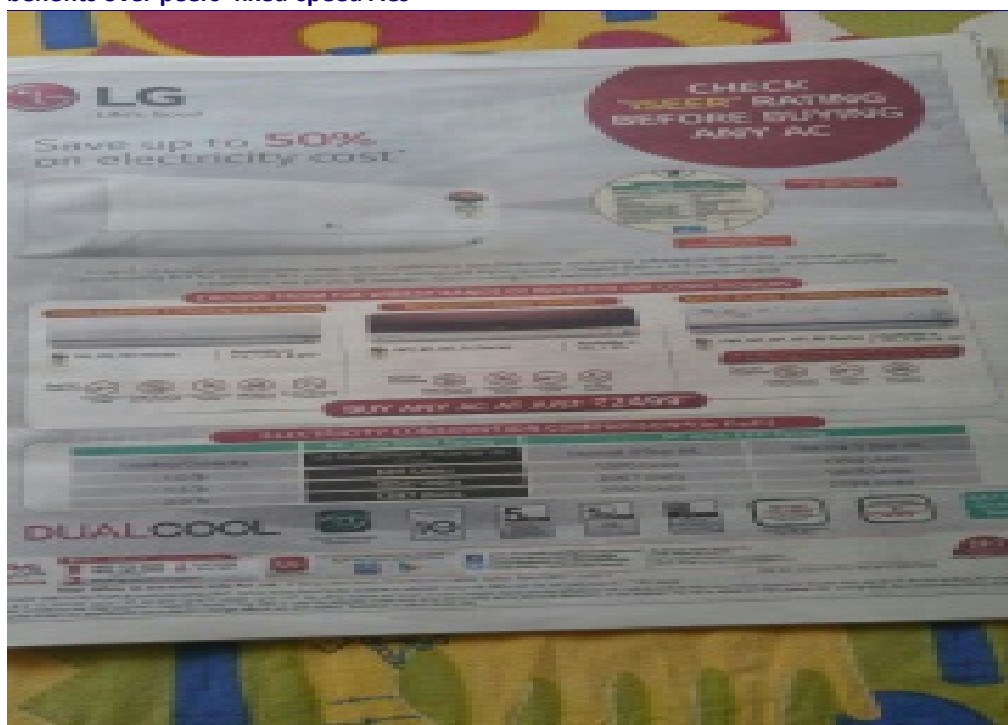
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Exhibit 40: LG has completely exited fixed-speed ACs in CY17 – ad campaign highlights benefits over peers' fixed-speed ACs



Source: Industry

Exhibit 41: Videocon's marketing campaign



Source: Industry

Exhibit 42: Carrier ad focusing on powerful cooling and after-sales

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CYCLOJET
INDIA'S FIRST 360° AIRFLOW SYSTEM OUTDOOR UNIT

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- 33% BIGGER CONDENSER
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Source: Industry

Exhibit 43: Hitachi focusing on inverter ACs – its forte

HITACHI

DON'T JUST SETTLE FOR ANY INVERTER AC. MAKE SURE IT'S 5 STAR INVERTER AC.

EVERY HOME DESERVES HITACHI COOLING.

There's nothing like Hitachi's 5 Star Inverter air conditioners. Simply because they are not just about consistent superior cooling but also great savings. Together they give you a cooling experience like never before.

5 Star Rating | Great Energy Saving | 1.5x Faster Cooling | 100% COPPER | 5 Year Warranty (on Compressor)

Split AC range now starts at ₹ 27,990/-

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FINANCE AVAILABLE | **EASY EMI ₹ 2899/- MONTH** | **1 YEAR EXTENDED WARRANTY** | **FREE SERVICE** | **HCS 24x7 service**

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Source: Industry

Exhibit 44: Onida – Artificial intelligence, advanced cooling

ONIDA OWNERS PRIDE

SUMMER IS HERE. SO IS THE SAVIOUR.

Saves power
Saves money
Saves you from extreme heat

ONIDA Inverter ACs

Artificial Intelligence. Advanced Cooling.

REGALIZO 1.5 TON MRP ₹ 55,990/- | 1 TON MRP ₹ 45,990/-

SPARKLE 1 TON MRP ₹ 38,990/-

SILENT LUV 1 TON MRP ₹ 37,990/-

TRENDY NOVA 1.5 TON MRP ₹ 46,390/-

GRANDEUR 1 TON MRP ₹ 37,490/-

SILK 1.5 TON MRP ₹ 45,990/-

GUSTO 1.5 TON MRP ₹ 46,490/-

5 Year Comprehensive Warranty

PAY JUST ₹ 101/- & TAKE HOME AN ONIDA AC

0% INTEREST RATE

BAJAJ FINSERV | **G** | **KINGS ELECTRONICS** | **TOP TEN** | **village**

Onida India Pvt. Ltd. | 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Source: Company, MOSL

Exhibit 45: Daikin – fill the air with happiness ad campaign

Blue Bus Shelter_Delhi_Visible size

DAIKIN
WORLD'S NO.1 AIR CONDITIONING COMPANY FROM JAPAN

5.8 ISEER RATING

INDIA'S MOST ENERGY EFFICIENT AIR CONDITIONER
FILLS THE AIR WITH GOODNESS

Toll Free: 1800-22-9300, 1800-102-9300
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Exhibit 46: Panasonic – SKY Series 'Life Conditioners' using radiant cooling

Panasonic

THE FUTURE IS UP
NEW ELITE INVERTER SKY SERIES

Presenting Panasonic SKY Series with path-breaking
RADIANT COOLING Technology

Panasonic Sky Series is created around the philosophy of delivering Comfort, Health & Beauty. Its path-breaking Radiant Cooling technology is truly a revolution in air conditioning. It also has an in-built air purifier powered by Nanoe-B that purifies room air of PM2.5 particles. With a stunning Skystream design, Panasonic Sky Series is the perfect addition to your home, health & life.

INVERTER
Save up to 30% energy

SKYSTREAM DESIGN
A sleek, modern design that blends seamlessly with your interior.

XTRA QUIET
Enjoy the peace and quiet of your room.

RADIANT COOLING
Cools the ceiling and the walls first to give you comfortable & even cooling

REGISTERED OFFICE: Panasonic India Pvt. Ltd. 12th Floor, Ambience Island, NH-8, Gurgaon-122002, Haryana, India. Ph.: +91-124-4751300, Fax: +91-124-4751333

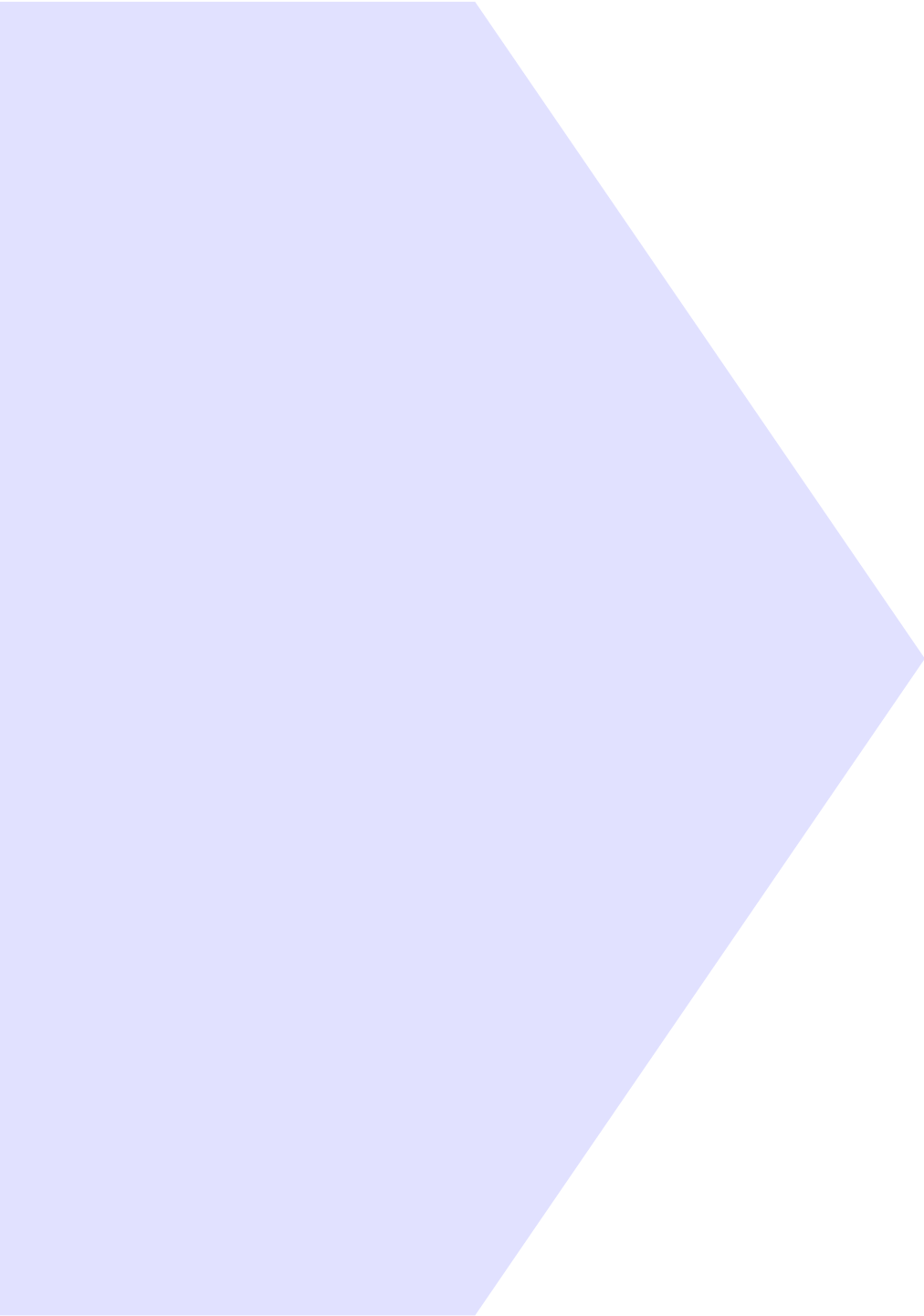
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Companies

BSE Sensex: 29,365

S&P CNX: 9,119

April 2017



Blue Star

BSE SENSEX

29,365

S&P CNX

9,119

CMP: INR 686

TP: INR 680 (-1%)

Neutral



Stock Info

Bloomberg	BLSTR IN
Equity Shares (m)	95.3
52-Week Range (INR)	724 / 408
1, 6, 12 Rel. Per (%)	10/22/51
M.Cap. (INR b)	67.7
M.Cap. (USD b)	1.0
Avg Val, INRm	24
Free float (%)	-

Financials Snapshot (INR b)

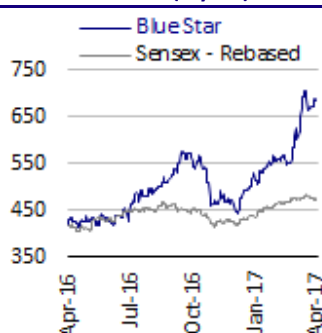
Y/E MARCH	2017E	2018E	2019E
Net Sales	44.7	52.8	61.8
EBITDA (Rs b)	2.3	3.3	4.4
NP	1.3	1.9	2.8
EPS	14.1	20.3	29.5
EPS Gr (%)	7.1	43.8	45.4
BV/Share (Rs)	74.3	86.0	103.0
P/E (x)	48.6	33.8	23.2
P/BV (x)	9.2	8.0	6.7
RoE (%)	20.2	25.3	31.2
RoCE (%)	15.9	20.1	26.6

Shareholding pattern (%)

As On	Dec-16	Sep-16	Dec-15
Promoter	39.1	39.1	39.5
DII	19.7	19.7	20.1
FII	10.3	9.6	8.7
Others	30.9	31.5	31.7

FII Includes depository receipts

Stock Performance (1-year)



On a strong footing

14% share in room aircon by FY19

Plans to expand share in room ACs by focusing on northern region

Blue Star (BLSTR) has guided to increase its share in the room AC market by 100bp annually, reaching 14% by FY19 from 11.9% currently. The company intends to achieve this by expanding its distribution network and focusing on the northern market (accounts for ~38% of the country's AC market), where its share is relatively weak at the moment in comparison to the south and west markets. BLSTR plans to set up new manufacturing facilities in Sri City. We believe that dealer network expansion, new product lines (135 new models with star rating for inverter AC) and new facilities to cater to demand from north and south would help the company to surpass industry growth.

Capex revival to aid growth in projects business

Electro mechanical projects and packaged AC systems business (contributes ~51% of total revenues for the company) has witnessed muted growth over past five years due to a weak macroeconomic scenario, delayed order execution and the company's policy to focus on profitable growth. However, a revival in commercial construction and urban infrastructure activity will help grow the electro mechanical contracting business. The company is a leader in the domestic HVAC segment, with every third commercial building in the country having a BLSTR-installed AC. Given the healthy order book and the strong pipeline in metro rail, hospitals, hotels and commercial real estate (specific pockets), we expect revenue growth of 12%. For 9MFY17, order inflow in the MEP segment remained strong for the company at INR30.5b (+80% YoY). Margins are expected to remain in the 4-5% range.

Focus on exports to support growth

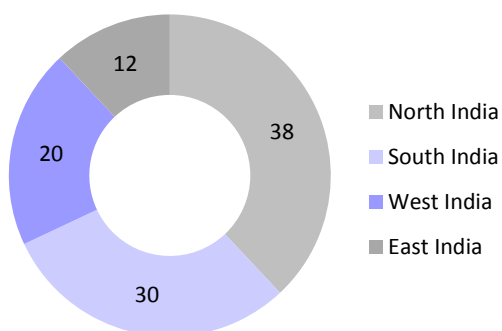
BLSTR intends to increase its revenue share from exports from 6% currently by tapping new opportunities in AC&R products, MEP projects, after-sales service and system integration and agency businesses. It plans to export these products to the Middle East, Africa, SAARC and ASEAN countries. The Middle East Expo 2020, the FIFA World Cup 2022, changes in rules & regulations in the GCC market in favor of energy-efficient ACs and higher FDI limits in SAARC/ASEAN regions would be the key drivers for the AC market.

Valuation and view

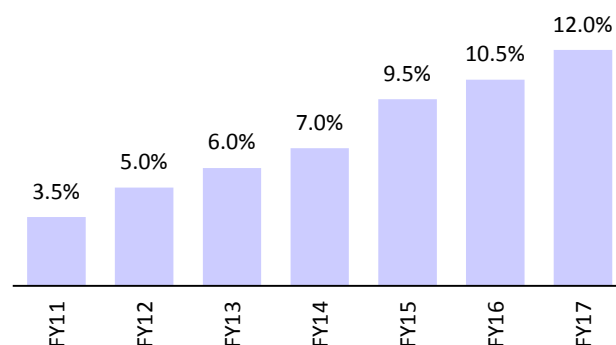
- With a focus on increasing the dealer network, introducing new models and strengthening the brand (via higher ad spend), BLSTR is well poised to increase its share in the room AC business from 11.9% currently to 13.5% in FY18. We initiate coverage on the stock with a **Neutral** rating and an SOTP-based target price of INR680.

Room AC segment to grow ahead of the industry growth

- Blue star has been focusing on increasing the market share in the Room AC segment by expanding its distribution network and focusing on northern region market. Blue Star (BLSTR) has guided to increase its share in the room AC market by 100bp annually, reaching 14% by FY19 from 11.9% currently. The company intends to achieve this by expanding its distribution network and focusing on the northern market (accounts for ~38% of the country's AC market), where its share is relatively weak at the moment in comparison to the south and west markets.

Exhibit 47: Focus to improve market share in the northern region

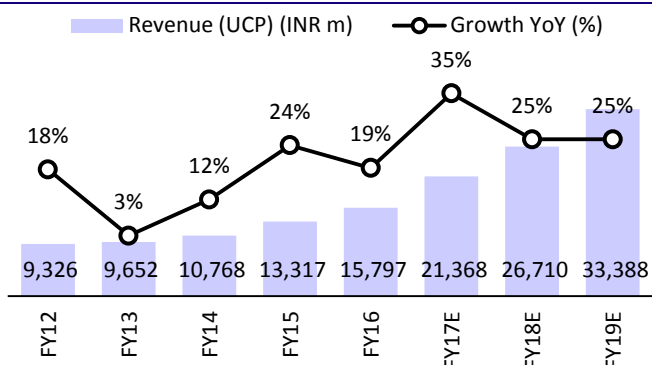
Source: MOSL, Company

Exhibit 48: Plans to increase market share by 100bps every year going ahead

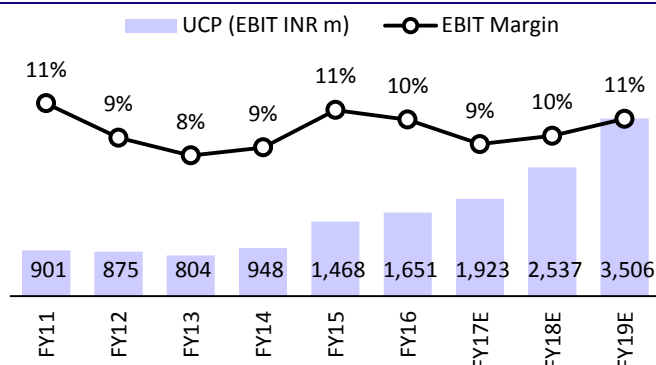
Source: MOSL, Company

UCP segment revenue to grow at 28% CAGR over FY16-19

- We expect revenue to register 28% CAGR over FY16-19E, led by market share gain, increase in distribution network and better penetration in the northern market. We also expect Blue Star's margin to revert back to 10.5% by FY19E from 9% in FY17E. Margins are expected to remain under pressure in FY17 led by higher ad spend in the air purifier segment where it has recently entered. As the product garners acceptance and stabilizes over the next two years, we expect the margins to revert back to 10.5% by FY19E

Exhibit 49: Revenue is expected to register 28% CAGR over FY16-19E

Source: MOSL, Company

Exhibit 50: Margins are expected to revert back to 10.5% by FY2-19E as new product category stabilizes

Source: MOSL, Company

Ventures into allied segment to leverage brand equity/distribution network

To diversify business and leverage its brand equity/distribution network, BLSTR has forayed into an allied business segment of air coolers and air purifiers.

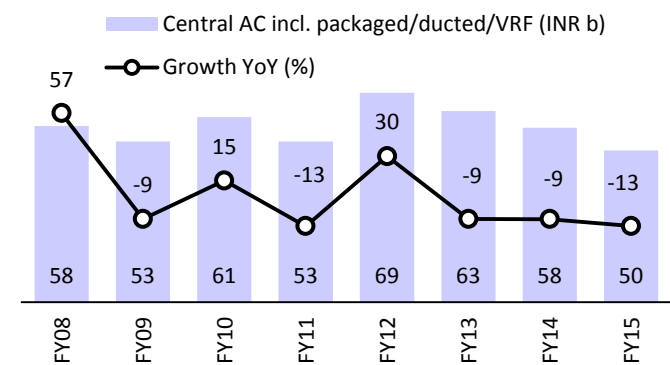
- **Air purifiers:** It launched five models in the air purifier segment to tap the nascent but rapidly growing INR7.5b air purifier industry. The air purifier industry is expected to grow three-fold over next five years. Key players in the Indian market catering to this segment are Sharp, Blueair, Philips and Eureka Forbes
- **Air coolers:** In this category, BLSTR has introduced three models with a focus on the northern and central market. The INR40b (8m units) air coolers market is expected to double over next five years. This business is dominated by unorganized players (70% of the market), while the organized segment is highly concentrated with the top four players accounting for ~90% of revenue. Symphony is a leader in this segment with a 50% share, followed by Videocon Industries and Bajaj Electricals.
- **Water purifiers:** The company has also entered the water purifiers business – it plans to initially focus on the residential segment and then gradually enter the commercial space. BLSTR has formally launched 13 water purifier models, which are priced in the range of INR15,000-45,000. The residential water purifier market is valued at INR42b, and is growing at a 22% CAGR. Water purifier business is highly service-intensive, and the company – given that it is India's largest AC&R service provider – would be able to leverage its service network in the water purifier business. The focus in FY17-18 is on understanding customer preferences, getting the right product and building distribution/service infrastructure. Post 2017, the company will formulate a longer-term strategy.

Focus to strengthen distribution channels

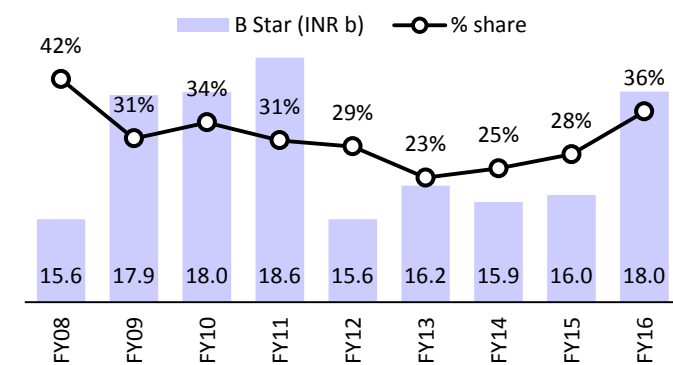
- BLSTR has 2,250 channel partners for room ACs, packaged air conditioning, chillers, cold rooms and refrigeration products/systems. The company has also expanded the retail distribution reach of ACs to 1,500 dealer point retailers and distributors across the country. The focus of the company is to grow its presence in the tier 2/3 markets by 20% YoY.

Project segment dependent on capex revival activity in India

- MEP segment covers the design, manufacturing, installation, commissioning and maintenance of central air conditioning, plants, packaged/ducted systems and variable refrigerant flow (VRF) systems.
- Blue star is a market leader in the MEP segment category. Electro mechanical projects and packaged AC systems business (contributes ~51% of total revenues for the company) has witnessed muted growth over past five years due to a weak macroeconomic scenario, delayed order execution and the company's policy to focus on profitable growth. However, a revival in commercial construction and urban infrastructure activity will help grow the electro mechanical contracting business.

Exhibit 51: MEP industry witnessing de-growth led by

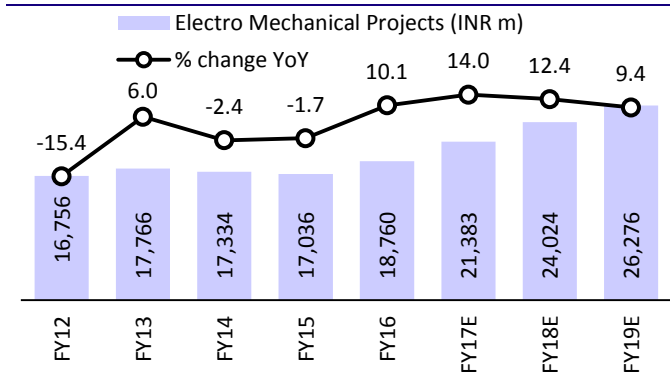
Source: MOSL, Company

Exhibit 52: Execution of projects in MEP segment witnesses traction in FY16

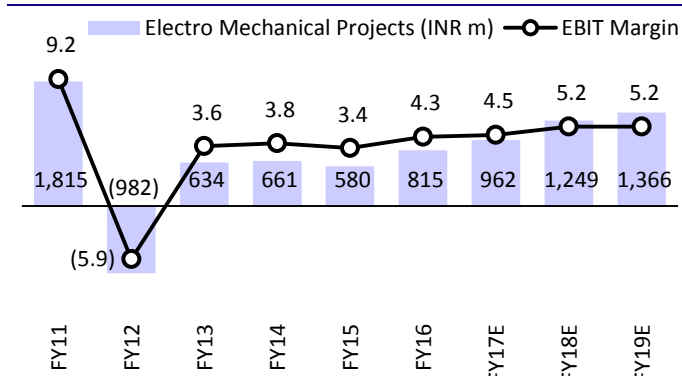
Source: MOSL, Company

Revenue growth of 12% CAGR over FY16-19E

- Given the healthy order book and the strong pipeline in metro rail, hospitals, hotels and commercial real estate (specific pockets), we expect revenue growth of 12%. For 9MFY17, order inflow in the MEP segment remained strong for the company at INR30.5b (+80% YoY). Margins are expected to remain in the 4-5% range.

Exhibit 53: EMP segment to register 12% CAGR growth over FY16-19E

Source: MOSL, Company

Exhibit 54: Margins to remain at threshold level of 5% over FY18-19E

Source: MOSL, Company

Restructuring to focus on core business

- Over past few years, the Blue Star group has undertaken various restructuring initiatives with the intent to consolidate asset ownership and divest non-core businesses. The company plans to focus on its core businesses of ACs, commercial refrigeration, MEP contracting and after-sales service, as well as make a foray into allied segments by leveraging brand equity and distribution network. In FY16, Blue Star InfoTech (BSIL) sold its IT business for a consideration of INR1.8b and retained its lease rental bearing commercial office property. Post the transaction, the boards and shareholders approved a scheme for merging BSIL and its residual subsidiary (Blue Star InfoTech Business Intelligence and Analytics) with BLSTR to align group resources.

Valuation and View

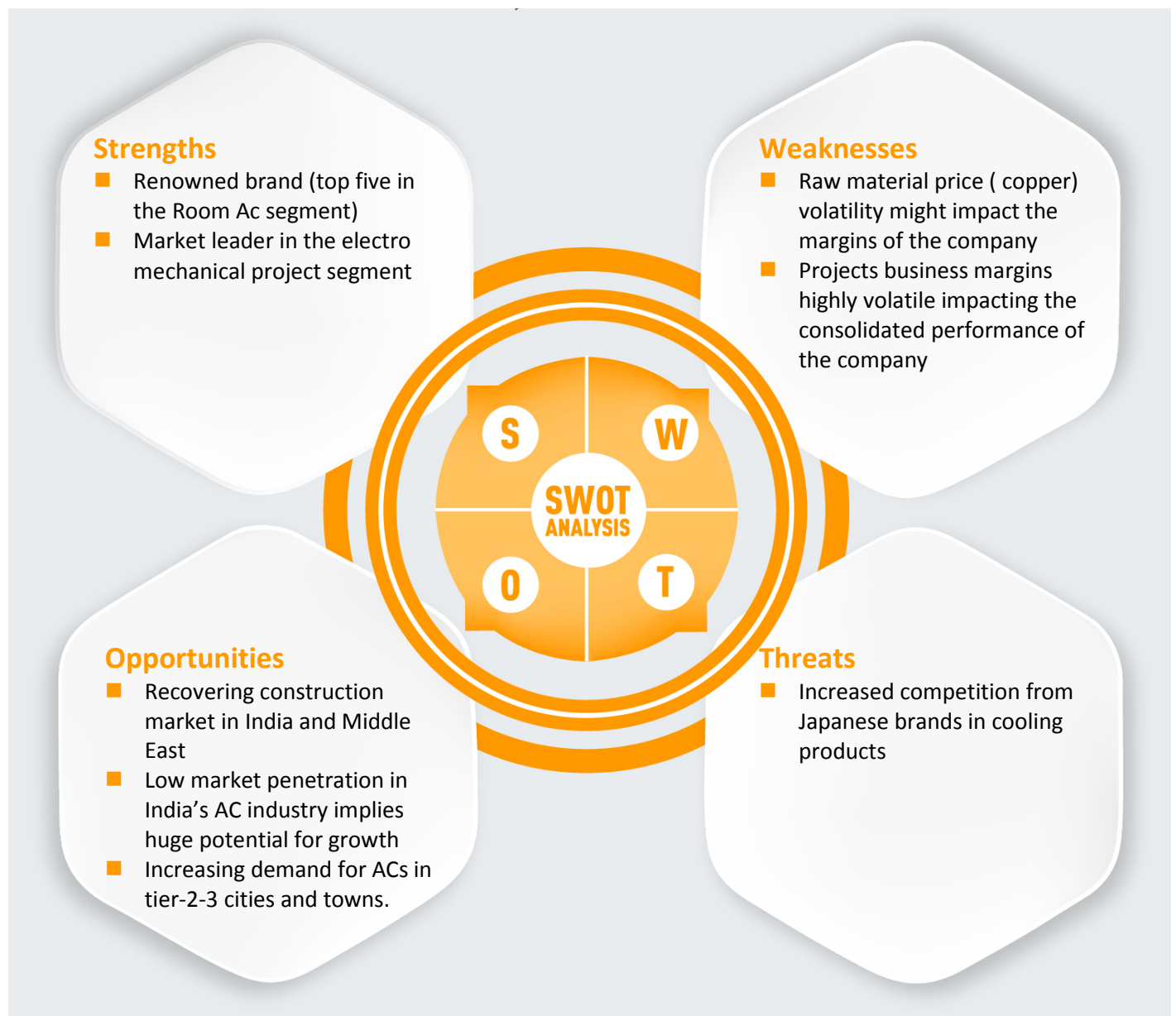
- With a focus on increasing the dealer network, introducing new models and strengthening the brand (via higher ad spend), BLSTR is well poised to increase its share in the room AC business from 11.9% currently to 13.5% in FY18. We believe that Blue Star UCP division deserves to trade at around the same multiples as Voltas (25x its FY19E EPS). We also believe given the market leadership position in the electro mechanical business, Blue star deserves to trade at a premium to Voltas (15x FY19E EPs).
- In our view, management focus on expanding product portfolio, distribution network and having presence in the inverter AC segment should help Blue Star to improve its market share and enhance footprint in new product categories.
- We believe given the clear-cut strategy laid out by management. We expect Blue star to register earnings growth of 11% over FY16-19E. We initiate coverage on the stock with a Neutral rating and value Blue star on an SOTP-based target price of INR680.

Exhibit 55: SOTP Valuation

Description	FY19E EPS	Multiple	Value/Share
Electro Mechanical Projects	4	15	58
Unitary Cooling Products	23	25	577
Professional Electronics	2	20	46
Total			681

Source: MOSL, Company

SWOT Analysis



Bull & Bear case



Bull Case

- ☑ Our bull case assumption has positive impact on sales and operating margins. We assume higher growth in all segments over base case scenario.
- ☑ We have assumed 21% revenue growth for FY16-FY19E and have assumed operating margin expansion of 240bps over FY16-19 to 8.1% driven by operating leverage.
- ☑ This leads to EPS CAGR of 42% in FY19 to INR37.5 assuming the same target multiple that we have taken for the base case, we get a bull case target price of INR850 (upside of 27% to CMP) based on FY19 EPS instead of the base case target price of INR680, upside of 2%.



Bear Case

- ☑ Our bear case assumptions mainly have a negative impact on both sales growth and operating margins for FY17E and FY18E.
- ☑ We are assuming EBITDA margins to remain flattish over FY16-19E in the bear case at 5.9% and sales growth of 13% CAGR over FY16-19E against 18% growth in base case scenario.
- ☑ In our bear case, we assume muted pick up in the consumption activity and delay in pick up in capex cycle. This will lead to 15% in Adjusted PAT over FY16-18E against 33% increase in base case scenario.

Exhibit 56: Scenario Analysis – Bull Case

INR m	FY16	FY17E	FY18E	FY19E
Sales	37,980	44,708	54,962	67,619
Growth YoY (%)	19.4	17.7	22.9	23.0
EBIDTA	2,149	2,319	3,920	5,472
EBIDTA Margin (%)	5.7	5.2	7.1	8.1
Growth YoY (%)	28.5	7.9	69.0	39.6
PAT	1,185	1,345	2,400	3,573
PAT Margin (%)	3.1	3.0	4.4	5.3
PAT Growth 9%)	23.9	13.5	78.4	48.9
SoTP Target	852			

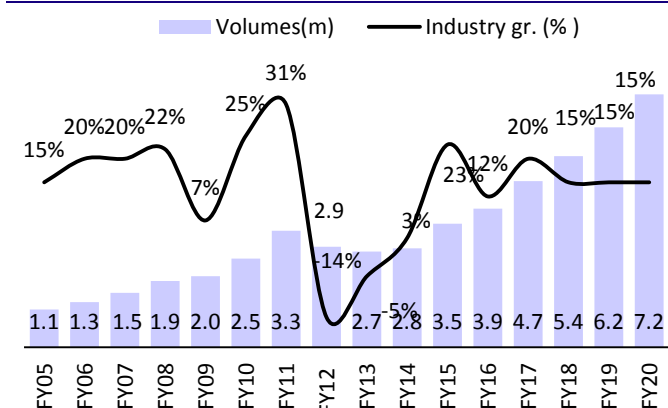
Source: Company, MOSL

Exhibit 57: Scenario Analysis – Bear Case

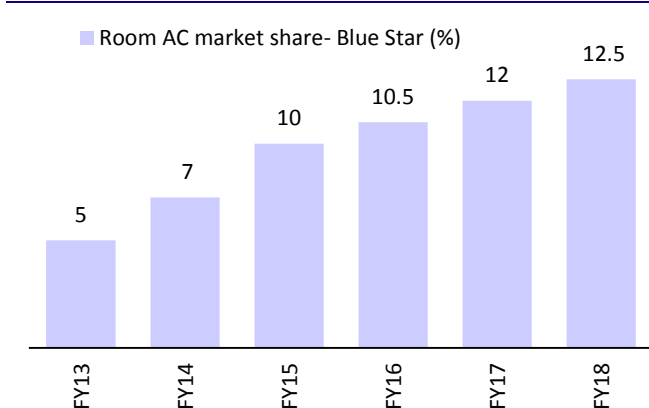
INR m	FY16	FY17E	FY18E	FY19E
Sales	37,980	44,708	50,106	55,133
Growth YoY (%)	19.4	17.7	12.1	10.0
EBIDTA	2,149	2,319	2,646	3,231
EBIDTA Margin (%)	5.7	5.2	5.3	5.9
Growth YoY (%)	28.5	7.9	14.1	22.1
PAT	1,185	1,345	1,470	1,938
PAT Margin (%)	3.1	3.0	2.9	3.5
PAT Growth 9%)	23.9	13.5	9.3	31.8
SoTP Target	479			

Source: Company, MOSL

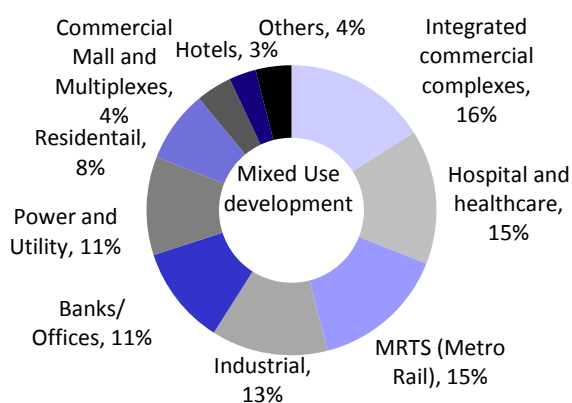
Story in charts

Exhibit 58: Room AC industry to grow at 15% CAGR over FY17-19

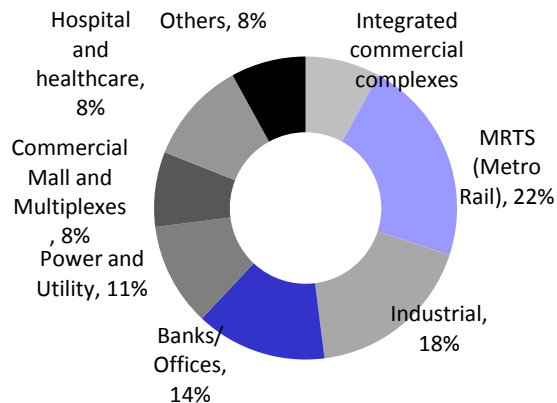
Source: MOSL, Company

Exhibit 59: Blue Star has been able to increase its market share over last few years

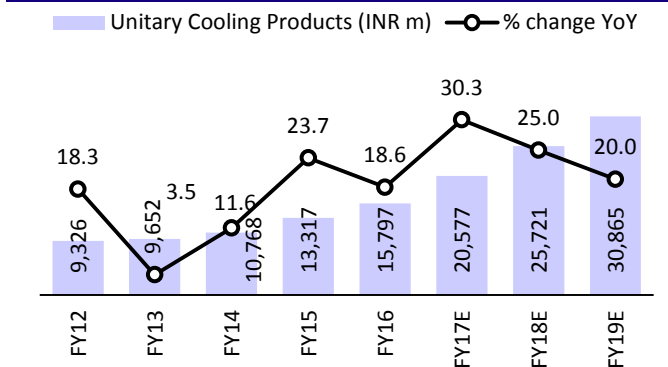
Source: MOSL, Company

Exhibit 60: Commercial complex, healthcare and metro had driven EMP segment order book in FY15

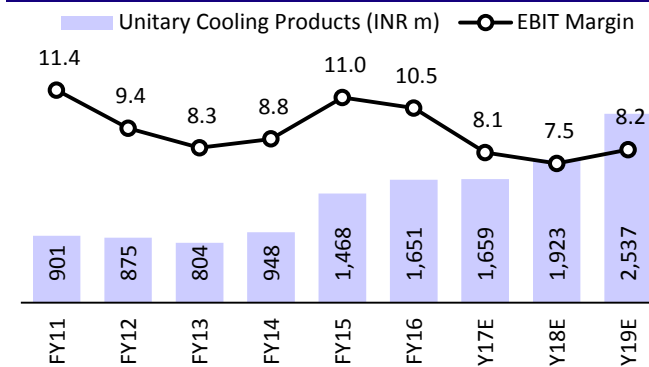
Source: MOSL, Company

Exhibit 61: In FY16, order book was driven by metro, industrial and bank segments

Source: MOSL, Company

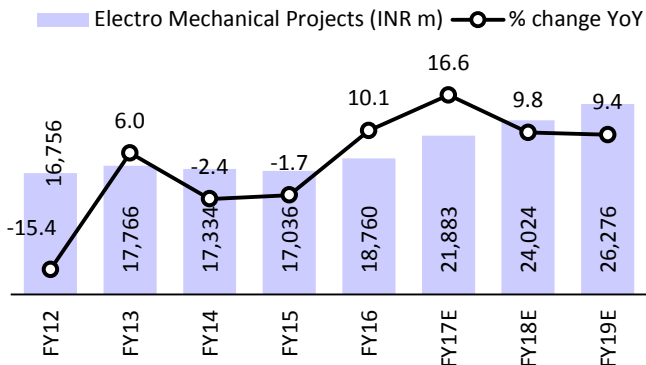
Exhibit 62: UCP segment to deliver above-industry growth, led by increase in distribution reach and focus on inverter AC segment

Source: MOSL, Company

Exhibit 63: Operating margins to be under pressure on higher ad spends on water purifiers

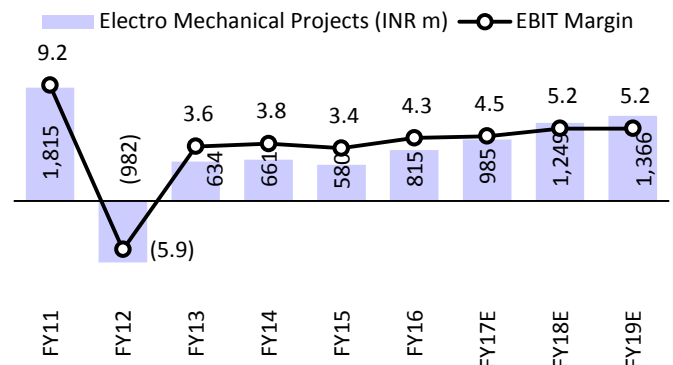
Source: MOSL, Company

Exhibit 64: Robust order book to ensure decent growth in EMP segment revenue



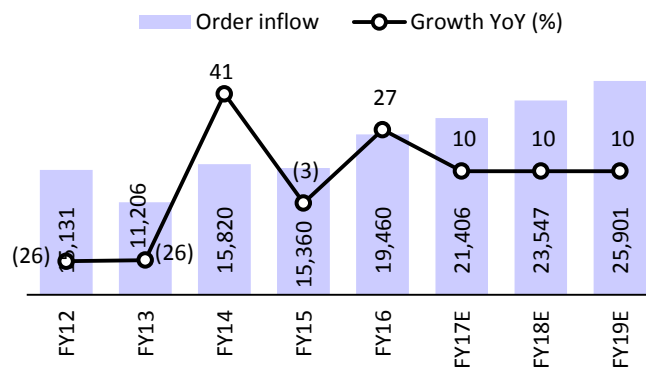
Source: MOSL, Company

Exhibit 65: Margins to remain stable given the company's focus on procuring better-margin orders in EMP segment



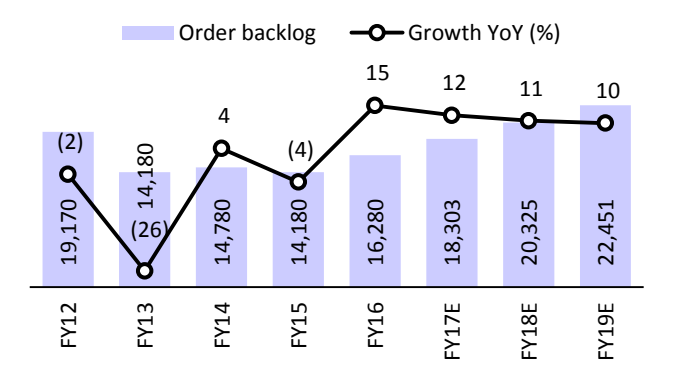
Source: MOSL, Company

Exhibit 66: Order inflow in EMP has improved given traction from metro and industrial segments



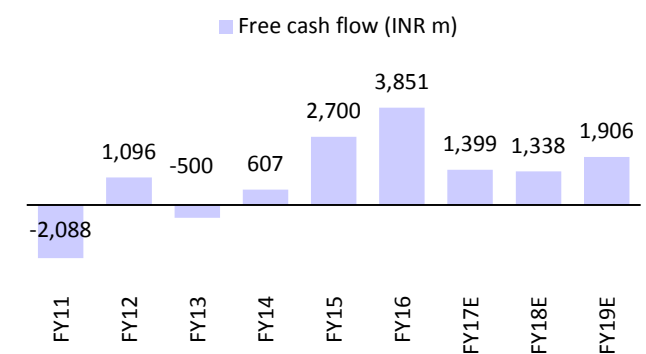
Source: MOSL, Company

Exhibit 67: Order book provides decent medium-term revenue visibility for EMP segment



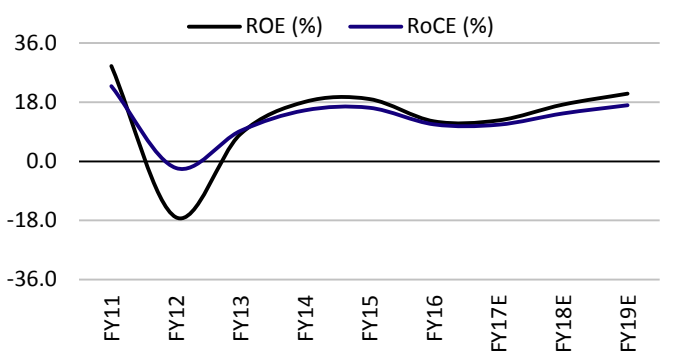
Source: MOSL, Company

Exhibit 68: Free cash flow generation to remain consistent



Source: MOSL, Company

Exhibit 69: Return ratios to improve



Source: MOSL, Company

Financials and valuations

Income Statement						(INR Million)		
Y/E March	2012	2013	2014	2015	2016	2017E	2018E	2019E
Total Revenues	28,204	29,240	29,343	31,819	37,980	44,708	52,793	61,828
Change (%)	-5.2	3.7	0.4	8.4	19.4	17.7	18.1	17.1
Raw Materials	21,996	21,837	20,865	22,143	25,541	31,524	36,528	42,194
Staff Cost	2,207	2,300	2,476	2,675	3,986	3,892	4,748	5,561
Other Expenses	4,223	4,199	4,496	5,329	6,303	6,973	8,234	9,643
EBITDA	-222	904	1,505	1,673	2,149	2,319	3,282	4,430
% of Total Revenues	-0.8	3.1	5.1	5.3	5.7	5.2	6.2	7.2
Other Income	226	365	179	85	297	300	300	300
Depreciation	318	334	378	431	571	591	638	685
Interest	721	528	542	485	432	376	327	225
Exceptional Items	0	0	1	0	0	0	0	0
PBT	-1,034	407	764	841	1,444	1,652	2,618	3,820
Tax	11	25	22	-79	277	330	707	1,032
Rate (%)	-1.1	6.3	2.9	-9.4	19.2	20.0	27.0	27.0
Reported PAT	-1,046	381	742	920	1,167	1,322	1,911	2,789
Change (%)	-166.0	-136.5	94.4	24.1	26.9	13.2	44.6	45.9
Adj. Consolidated PAT	-1,051	391	777	956	1,185	1,345	1,935	2,813
Change (%)	-165.5	-137.2	98.8	23.1	23.9	13.5	43.8	45.4

Balance Sheet						(INR Million)		
Y/E March	2012	2013	2014	2015	2016	2017E	2018E	2019E
Share Capital	180	180	180	180	180	191	191	191
Reserves	3,773	3,827	4,605	4,376	6,124	6,897	8,009	9,625
Net Worth	3,953	4,007	4,785	4,556	6,304	7,088	8,199	9,815
Minority Intetest	0	0	0	0	10	10	10	10
Loans	3,670	4,215	4,944	3,967	3,629	3,629	2,685	1,660
Deferred Tax Liability	-2	-4	-14	-165	-1,860	-1,860	-1,859	-1,860
Capital Employed	7,621	8,218	9,715	8,358	8,084	8,868	9,036	9,626
Gross Fixed Assets	4,176	4,692	5,309	5,694	7,277	7,877	8,477	9,077
Less: Depreciation	2,106	2,419	2,755	3,128	3,699	4,290	4,928	5,613
Net Fixed Assets	2,070	2,273	2,555	2,566	3,578	3,587	3,549	3,464
Capital WIP	315	77	155	224	63	63	63	63
Investments	275	272	333	363	1,681	1,681	1,681	1,681
Goodwill	0	0	0	0	0	0	0	0
Curr. Assets	18,184	18,971	20,307	18,431	18,196	19,953	23,085	27,033
Inventory	4,467	5,098	4,656	4,785	5,348	5,512	6,509	7,623
Debtors	7,676	8,351	8,332	7,948	8,341	8,574	10,125	11,857
Cash & Bank Balance	537	165	684	443	454	860	539	629
Loans & Advances	1,781	2,101	2,496	2,554	196	230	272	318
Current Liab. & Prov.	13,224	13,374	13,634	13,227	15,309	16,315	19,266	22,563
Creditors	7,359	8,036	8,314	8,860	10,820	9,799	11,571	13,551
Other Liabilities	5,865	5,338	5,320	4,367	4,489	6,516	7,695	9,012
Net Current Assets	4,960	5,596	6,673	5,204	2,887	3,638	3,819	4,470
Application of Funds	7,621	8,219	9,715	8,358	8,209	8,968	9,112	9,678

Financials and valuations

Ratios								
Y/E March	2012	2013	2014	2015	2016	2017E	2018E	2019E
Basic (INR)								
Adj EPS	(11.7)	4.3	8.6	10.6	13.2	14.1	20.3	29.5
Cash EPS	(8.2)	8.1	12.8	15.4	19.5	20.3	27.0	36.7
Book Value	44.0	44.6	53.2	50.7	70.1	74.3	86.0	103.0
DPS	1.0	3.0	4.0	5.0	6.5	4.9	7.1	10.3
Payout (incl. Div. Tax.)	-8.6	69.1	46.4	83.0	49.4	35.0	35.0	35.0
Valuation (x)								
P/E				31.4	30.4	48.6	33.8	23.2
Cash P/E				21.6	20.5	33.8	25.4	18.7
EV/EBITDA				20.1	18.1	29.4	20.6	15.0
EV/Sales				1.1	1.0	1.5	1.3	1.1
Price/Book Value				6.6	5.7	9.2	8.0	6.7
Dividend Yield (%)				1.5	1.6	0.7	1.0	1.5
Profitability Ratios (%)								
RoE	-23.2	9.8	17.7	20.5	21.8	20.2	25.3	31.2
RoCE	-3.7	11.2	14.5	16.3	16.6	15.9	20.1	26.6
Turnover Ratios								
Debtors (Days)	99	104	104	91	80	70	70	70
Inventory (Days)	58	64	58	55	51	45	45	45
Creditors. (Days)	95	100	103	102	104	80	80	80
Asset Turnover (x)	3.7	3.6	3.0	3.8	4.7	5.0	5.8	6.4
Leverage Ratio								
Debt/Equity (x)	0.9	1.1	1.0	0.9	0.6	0.5	0.3	0.2
Cash Flow Statement (INR Million)								
Y/E March	2012	2013	2014	2015	2016	2017E	2018E	2019E
PBT before EO Items	-1,034	407	763	841	1,444	1,652	2,617	3,820
Add : Depreciation	318	334	378	431	571	591	638	685
Interest	0	0	0	0	0	0	0	0
Less : Direct Taxes Paid	-7	-27	-22	79	-277	-330	-707	-1,032
(Inc)/Dec in WC	2,105	-1,008	-557	1,228	2,328	-345	-502	-561
CF from Operations	1,382	-294	562	2,579	4,066	1,567	2,046	2,912
(Inc)/Dec in FA	-478	-298	-103	-103	-725	-600	-600	-600
Free Cash Flow	904	-592	459	2,476	3,340	967	1,446	2,312
Investment in liquid assets	-3	3	-60	-31	98	0	0	0
CF from Investments	-481	-295	-164	-134	-627	-600	-600	-600
(Inc)/Dec in Debt	-775	545	729	-977	-279	0	-944	-1,025
(Inc)/Dec in Equity	-4	-68	424	-245	0	11	0	0
Less : Interest Paid	0	0	0	0	-657	0	0	0
Dividend Paid	-105	-270	-421	-526	-1,293	-572	-823	-1,197
CF from Fin. Activity	-883	207	732	-1,748	-2,228	-562	-1,767	-2,222
Inc/Dec of Cash	18	-382	1,130	697	1,210	406	-321	90
Add: Beginning Balance	524	537	165	684	443	454	860	539
Closing Balance	537	165	684	443	1,653	860	539	629

Voltas

BSE SENSEX

29,365

S&P CNX

9,119

VOLTAS

Stock Info

Bloomberg	VOLT IN
Equity Shares (m)	330.8
52-Week Range (INR)	425 / 286
1, 6, 12 Rel. Per (%)	7/1/25
M.Cap. (INR b)	137.0
M.Cap. (USD b)	2.1
Avg Val, INRm	598
Free float (%)	69.7

Financials Snapshot (INR b)

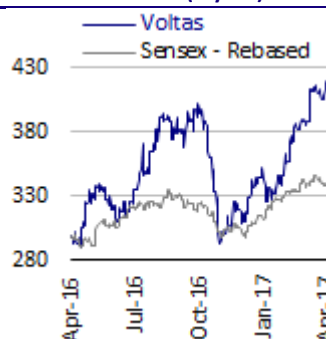
Y/E MARCH	2017E	2018E	2019E
Net Sales	59.3	67.2	75.7
EBITDA (Rs b)	5.5	5.3	6.1
NP	4.5	4.9	5.6
EPS	13.6	14.9	16.9
EPS Gr (%)	16.6	9.9	12.8
BV/Share (Rs)	82.1	92.8	104.8
P/E (x)	30.5	27.8	24.6
P/BV (x)	5.1	4.5	4.0
RoE (%)	17.6	17.1	17.1
RoCE (%)	17.0	16.5	16.5

Shareholding pattern (%)

As On	Dec-16	Sep-16	Dec-15
Promoter	30.3	30.3	30.3
DII	27.1	27.2	27.0
FII	22.4	22.4	21.6
Others	20.2	20.1	21.1

FII Includes depository receipts

Stock Performance (1-year)



CMP: INR 415

TP: INR 370 (-10%)

Sell

Market share and margins near peak

Valuations rich; downgrade to SELL

- **Near-term market share opportunity with LG exiting fixed-speed AC space:** As part of its global strategy, LG (18% share in room ACs) has stopped manufacturing fixed-speed ACs to focus solely on inverter ACs. This should provide opportunities for other players to grab market share in room ACs. Voltas, being a market leader in the room AC segment, stands a good chance to grab a major pie of the opportunity, as market transition toward inverter ACs is expected to take time. Also, given its under penetration in India, the room AC market is expected to register 15% CAGR over the medium term.
- **Competitive intensity remains high:** Our channel check suggests that competitive intensity in the room AC market remains high. Also, players like Hitachi and Daikin are getting aggressive in their push for market share. LG has priced inverter ACs aggressively, with its 3-star 1.5 ton inverter AC costing INR35,000 (alloy condenser) and INR35,000 (copper condenser), similar to the pricing of existing 5-star ACs (20% share in room AC market). Competition and aggressive pricing should exert pressure on margins, in our view.
- **EMP margins to improve as legacy projects near completion:** EMP margins had been under pressure as legacy orders which Voltas had bagged have been executed and provided for. Voltas incrementally has started to bid for the projects at threshold margins of 4-5%, and has also bagged major projects. We believe that margin improvement would be visible in FY18, with legacy project order book reducing and better-margin orders entering the execution cycle.
- **Air coolers to contribute meaningfully in FY18:** Voltas sold 0.14m air coolers in 9MFY17. Note that FY17 is the first year of commercial launch of air coolers for the company. Voltas has launched new models in CY17, and the focus is on further increasing volumes. It intends to be among the top three players in the country's air cooler market over next three years, and is focused primarily on the residential cooler market (estimated at 8m units, market size of ~INR40b (INR5,000 per unit), 70% of which is unorganized). Even if Voltas is able to gain 2-3% of the overall market (8-12% of organized market), it could add sales of INR0.7-1.2b in the UCP segment.
- **Valuation and view:** VOLT trades at 28x FY18E and 24x FY19E EPS. We cut our rating to Sell with a target price of INR370, valuing UCP segment at INR310 (25x FY19E EPS) balance segments at INR60 (15x FY19E EPS) given expensive valuation. In our view, there are positives for the stock – (1) positive impact of 7th Pay Commission, (3) structural uptrend in the AC market and (3) potential improvement in MEP business with pick-up in domestic construction activity – but these are factored in the current price.

Financials and Valuations

Income Statement					(INR Million)		
Y/E March	2013	2014	2015	2016	2017E	2018E	2019E
Total Revenues	55,310	52,660	51,831	58,574	59,282	67,210	75,659
Change (%)	6.7	(4.8)	-2	13	1	13	13
Raw Materials	41,670	38,543	35,974	41,260	41,389	48,924	56,036
Staff Cost	6,325	5,947	5,899	6,699	6,442	6,732	7,035
Other Expenses	4,934	5,515	5,857	6,246	5,958	6,240	6,537
EBITDA	2,380	2,656	4,100	4,369	5,493	5,314	6,051
% of Total Revenues	4.3	5.0	7.9	7.5	9.3	7.9	8.0
Other Income	901	1,002	1,087	1,176	1,951	2,154	2,299
Depreciation	278	248	280	278	268	279	289
Interest	326	225	233	153	154	116	95
Exceptional Items	121	215	462	407	0	0	0
PBT	2,798	3,399	5,136	5,114	7,023	7,073	7,965
Tax	728	941	1,276	1,761	2,388	2,051	2,310
Rate (%)	26.0	27.7	25	34	34	29	29
Adjusted PAT	2,070	2,458	3,860	3,449	4,515	4,962	5,595
Extra-ordinary Income (net)	-	-	0	0	0	0	0
Reported PAT	2,070	2,458	3,860	3,856	4,515	4,962	5,595
Change (%)	27.8	18.7	57	0	17	10	13
Adj. Consolidated PAT	1,955	2,238	3,381	3,856	4,495	4,942	5,575
Change (%)	(37.5)	14.5	51	14	17	10	13

Balance Sheet							
Y/E March	2013	2014	2015	2016			
Share Capital	331	331	331	331	331	331	331
Reserves	15,926	17,862	20,690	23,621	26,829	30,356	34,334
Net Worth	16,256	18,193	21,021	23,952	27,160	30,686	34,665
Minority Intetest	118	138	161	258	258	258	258
Loans	2,612	2,629	1,217	2,600	2,100	2,100	2,100
Deferred Tax Liability	(222)	(239)	(349)	(511)	(511)	(511)	(511)
Capital Employed	18,765	20,721	22,049	26,299	29,007	32,534	36,512
Gross Fixed Assets	4,678	4,198	4,114	5,105	5,318	5,531	5,744
Less: Depreciation	2,568	2,113	2,223	2,894	3,161	3,440	3,729
Net Fixed Assets	2,110	2,086	1,891	2,211	2,156	2,091	2,014
Capital WIP	0	18	44	13	13	13	13
Investments	4,074	7,320	10,939	15,258	15,258	15,258	15,258
Goodwill	888	798	798	723	723	723	723
Curr. Assets	38,352	36,974	34,844	37,255	41,240	48,035	55,328
Inventory	9,784	9,010	8,671	8,928	9,035	10,244	11,531
Debtors	21,927	22,039	21,051	13,066	13,224	14,992	16,877
Cash & Bank Balance	3,498	2,818	2,516	1,971	5,529	7,549	9,753
Loans & Advances	3,142	3,108	2,606	2,856	2,890	3,277	3,689
Current Liab. & Prov.	26,658	26,476	26,466	29,160	30,242	33,366	36,524
Creditors	17,191	16,267	15,414	17,451	16,850	18,183	19,432
Other Liabilities	9,186	10,208	11,051	11,709	13,392	15,183	17,092
Net Current Assets	11,694	10,499	8,378	8,095	10,998	14,670	18,805
Application of Funds	18,766	20,721	22,050	26,299	29,147	32,754	36,812

Financials and Valuations

Ratios

Y/E March	2013	2014	2015	2016	2017E	2018E	2019E
Basic (INR)	5.9	6.8	10.2	11.7	13.6	14.9	16.9
Adj EPS	6.3	7.4	10.2	11.7	13.6	14.9	16.9
Cash EPS	6.8	7.5	11.1	12.5	14.4	15.8	17.7
Book Value	49.2	55.0	63.6	72.4	82.1	92.8	104.8
DPS	1.6	1.9	2.3	2.6	3.3	3.7	4.2
Payout (incl. Div. Tax.)	29.8	29.2	23.3	28.6	28.6	28.6	28.6

Valuation (x)

P/E			22.6	39.8	30.5	27.8	24.6
Cash P/E			20.9	36.8	28.8	26.3	23.4
EV/EBITDA			18.3	31.6	24.4	24.8	21.4
EV/Sales			1.5	2.4	2.3	2.0	1.7
Price/Book Value			3.6	5.7	5.1	4.5	4.0
Dividend Yield (%)			1.0	0.6	0.8	0.9	1.0

Profitability Ratios (%)

RoE	12.6	13.0	17.2	15.3	17.6	17.1	17.1
RoCE	12.4	12.0	16.6	14.8	17.0	16.5	16.5
RoIC	13.7	15.0	28.1	30.4	37.6	37.7	36.8

Turnover Ratios

Debtors (Days)	145	153	148.2	81.4	81.4	81.4	81.4
Inventory (Days)	65	62	61.1	55.6	55.6	55.6	55.6
Creditors. (Days)	158	164	161.4	108.7	103.7	98.7	93.7
Asset Turnover (x)	2.9	2.5	2.4	2.2	2.0	2.1	2.1

Leverage Ratio

Debt/Equity (x)	0.2	0.1	0.1	0.1	0.1	0.1	0.1
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Cash Flow Statement

Y/E March	2013	2014	2015	2016			
PBT before EO Items	2,798	3,399	5,136	5,114	7,023	7,073	7,965
Add : Depreciation	278	248	280	278	268	279	289
Interest	326	225	233	-	-	-	-
Less : Direct Taxes Paid	(728)	(941)	(1,276)	(1,599)	(2,388)	(2,051)	(2,310)
(Inc)/Dec in WC	(202)	98	1,425	(262)	656	(1,652)	(1,932)
CF from Operations	2,472	3,030	5,798	3,530	5,559	3,649	4,013
(Inc)/Dec in FA	(181)	462	58	(213)	(213)	(213)	(213)
Free Cash Flow	2,291	3,492	5,856	3,317	5,346	3,436	3,800
Investment in liquid assets	(957)	(3,247)	(3,619)	(4,320)	-	-	-
CF from Investments	(1,139)	(2,785)	(3,561)	(4,533)	(213)	(213)	(213)
(Inc)/Dec in Debt	399	17	(1,412)	1,383	(500)	-	-
Less : Interest Paid	(326)	(225)	(233)	-	-	-	-
Dividend Paid	(619)	(716)	(894)	(988)	(1,288)	(1,415)	(1,597)
CF from Fin. Activity	(546)	(925)	(2,539)	395	(1,788)	(1,415)	(1,597)
Inc/Dec of Cash	787	(679)	(302)	(607)	3,558	2,020	2,203
Add: Beginning Balance	2,710	3,497	2,818	2,516	1,971	5,529	7,549
Closing Balance	3,497	2,818	2,516	1,865	5,529	7,549	9,753

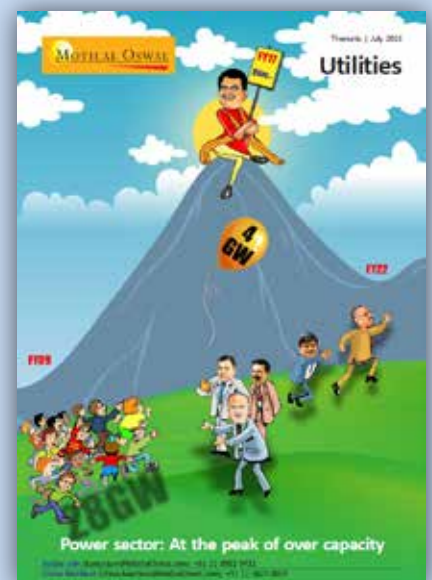
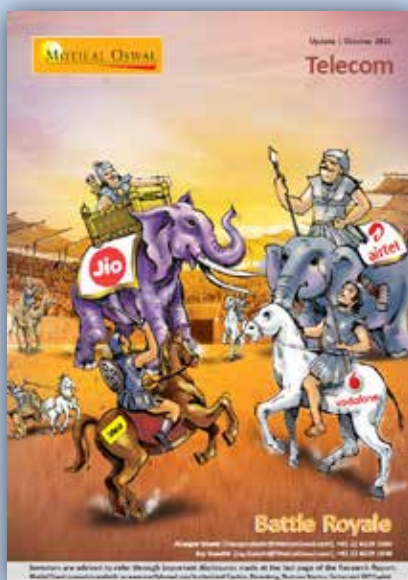
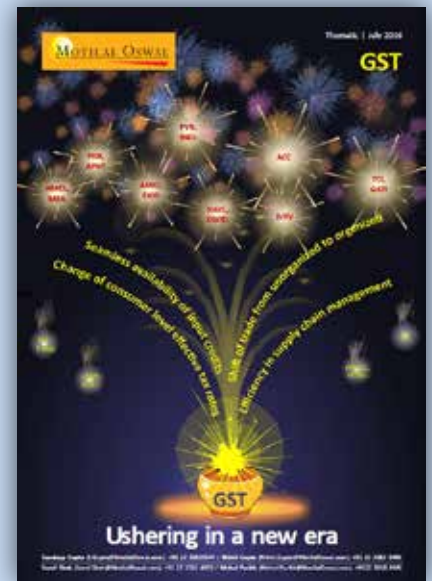
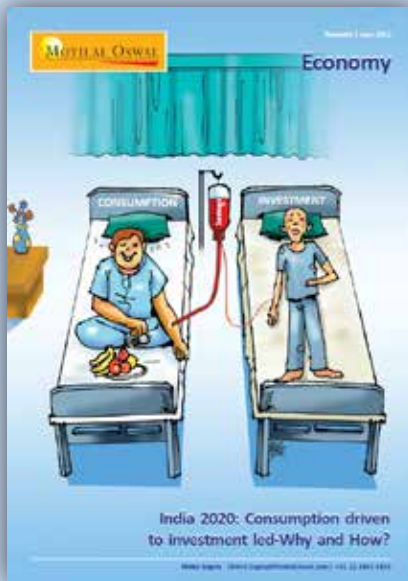
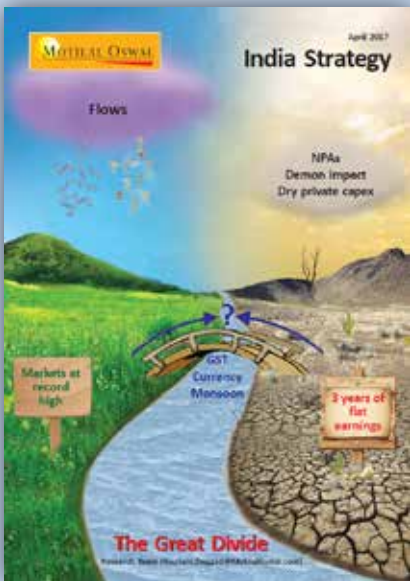
NOTES

February 2012
Thematic

Medical Osmosis

The Big Leap
to a formal economy

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