

Johnson Controls-Hitachi Air Conditioning India

1 October 2020

Reuters: JCHA.BO; Bloomberg: JCHAC IN

Regulatory shift to strengthen competitive edge

The government policies towards AC manufacturing in India are undergoing a strategic shift, with various measures such as Phased Manufacturing Programme (PMP), review of FTAs with strict conditions and Quality Control Order (QCO) for component imports. This would make imports costlier and encourage the AC firms to make in India by developing the component ecosystem. Johnson Controls-Hitachi Air Conditioning India (JCH-IN) is well placed to benefit from this change due to backward integrated manufacturing capabilities, India-specific R&D, presence of group companies in supply chain and one-of-its-kind global development center capable of designing and developing ACs for India as well as global needs. It aims to fortify the company's competitive edge by cutting its imports by half and expanding its exports by 3x over the next 3 years. We believe that JCH-IN is nearing an inflection point of reporting stronger volume growth and robust margin expansion. We expect JCH-IN to report revenue/earnings CAGR of 13%/33% over FY20-FY23E, led by 200bps EBITDA margin expansion. We initiate coverage on JCH-IN with a Buy rating and a target price of Rs2,500 based on P/E of 40x 1HFY23E earnings.

Favourable regulatory intervention: With a strong intent to promote and expand domestic manufacturing of ACs and its components, the government has taken several initiatives through policies such as PMP, review of FTAs with strict conditions and QCO for component imports. These schemes will aid in reducing import dependence and promote indigenisation through backward integration by AC companies and establishment of components ecosystem of overseas suppliers in India.

JCH-IN is well placed to reap the benefits: JCH-IN has a competitive edge due to its strategic focus on backward integrated manufacturing plants along with India-specific R&D, technology and product development capabilities. Besides, it is well supported by its group companies present in the supply chain ecosystem of components as well as the presence of one-of-its-kind global development center which can design & develop ACs for India and the world. JCH-IN has an aim of cutting its imports by half and expanding its exports by 3x over the next 3 years.

Nearing an inflection point of growth & margin expansion: JCH-IN is likely to report stronger volume growth, led by foray into mass-market segment, distribution reach expansion and scaling up of exports. Besides, it will deliver healthy margin expansion, led by attaining necessary scale (inflection point for the durables sector to report double digit EBITDA margin is Rs25bn-Rs30bn revenues) and level-playing field with respect to AC firms focusing on cheap imports thus far.

Outlook and valuation: We expect JCH-IN to register 13% revenue CAGR, 22% EBITDA CAGR (aided by 200bps margin expansion) and 33% PAT CAGR over FY20-FY23E. Strong product portfolio, premium brand image, healthy market share (12% in AC), strong global parentage and healthy growth prospects of the AC industry will support the valuation of JCH-IN.

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net revenues	22,413	21,974	19,818	27,014	31,485
EBITDA	1,638	1,722	1,188	2,391	3,095
PAT	859	835	537	1,419	1,970
EPS (Rs)	31.6	30.7	19.8	52.2	72.5
EPS growth (%)	(14.2)	(2.8)	(35.7)	164.2	38.8
EBITDA margin (%)	7.3	7.8	6.0	8.9	9.8
P/E (x)	68.8	70.8	110.1	41.7	30.0
P/BV (x)	9.6	8.6	8.0	6.8	5.7
EV/EBITDA (x)	37.1	35.2	49.8	24.5	18.5
RoCE (%)	15.2	13.9	7.0	18.6	22.6
RoE (%)	14.0	12.1	7.3	16.4	19.0

Source: Company, Nirmal Bang Institutional Equities Research

BUY

Sector: Consumer Durables

CMP: Rs2,175

Target Price: Rs2,500

Upside: 15%

Chirag Muchhala

Research Analyst

chirag.muchhala@nirmalbang.com

+91-22-6273 8092

Rahulkumar Mishra

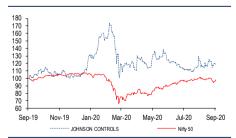
Research Associate rahulkumar.mishra@nirmalbang.com +91-22-6273 8028

Key Data

Current Shares O/S (mn)	27.2
Mkt Cap (Rsbn/US\$mn)	60.3/817.5
52 Wk H / L (Rs)	3,484/1,660
Daily Vol. (3M NSE Avg.)	12,462

Shareholding (%)	1QFY21	4QFY20	3QFY20
Promoter	74.3	74.3	74.3
DII	15.2	16.0	15.8
FII	1.0	1.0	1.0
Others	9.5	8.8	9.0

One -Year Indexed Stock Performance



Price Performance (%)

	1 M	6 M	1 Yr
JCH-IN	3.9	3.6	19.9
Nifty Index	(1.2)	30.8	(2.0)

Source: Bloomberg



1. Strategic shift in Government policies towards AC manufacturing

Over the years, the Indian air-conditioning (AC) industry has been heavily dependent on imports of finished goods, raw materials as well as components. While some of the brands are importing completely built units (CBUs), others import various components and perform only the assembly work at their manufacturing plants in India. This is primarily attributed to (a) lower cost of sourcing from China (b) India's lack of capability in large scale manufacturing due to a much lower scale (India's AC market size of 7mn units vs. China's size of 110mn units) and (c) unavailability of domestic ecosystem of components. Also, large scale availability of raw materials and components from manufacturing giants like China and India's Free Trade Agreements (FTA) with the ASEAN region (which is a hub for large scale global exports after China) facilitate cheaper sourcing of both finished goods (also referred to as CBUs) as well as raw materials and components for brands in India. In the Rs160bn Indian AC industry, around 28% of the units are fully imported as CBUs. In case of the remaining 72% of the industry, around 50% of the components and raw materials are imported - such as compressors, controllers, PCB boards, motors, copper tubes, aluminium fins, cross flow fans and valves. Compressor forms one of the critical components for ACs and constitutes 30%-35% of the total cost.

However, due to the events of the last few months, such as the spread of the novel Coronavirus in China and the rest of the world (which severely disrupted the supply chain dynamics) and the ongoing border conflict with China, the government has taken a stricter stance against the high level of imports. They have a strong intent that the Indian AC industry must undertake domestic manufacturing of both products as well as components and also scout for backward integration opportunities. To achieve this objective, the government has taken several initiatives by introducing policies such as Phased Manufacturing Programme (PMP), review of FTAs with strict conditions and Quality Control Order (QCO).

Phased Manufacturing Programme (PMP)

In order to reduce India's reliance on imports and transform India into a global manufacturing hub, the government has shortlisted 12 champion sectors to make them competitive in the global market, with Air conditioning manufacturing being one of them. The government has notified a draft Phased Manufacturing Programme (PMP) to boost AC manufacturing in India. Under the PMP, the government will increase custom duties on the import of CBUs of ACs and its components in a phased manner over a period of 5 years till 2025. Along with this, there is a likelihood that the import license regime may be introduced (as was done for televisions couple of months back) to promote indigenization and intimate domestic players well in advance to plan their backward integration capabilities.

It must be noted that the basic customs duty (BCD) on AC units was raised to 20% in May 2018 from 10% earlier. In July 2019, the BCD on outdoor and indoor split AC units was hiked to 20% from 10% earlier. Most of the large domestic AC companies have already started the planning of reducing their import components to align themselves with the government's objective behind the PMP introduction. Some companies are planning a more integrated production facilities to increase the share of in-house manufacturing. While others are in talks with their global components suppliers to encourage them to set up facilities in India so that they can do domestic outsourcing instead of imports.

As per the industry sources, the draft PMP suggests that the customs duty on completely built IDUs and ODUs will likely be raised to 30% (from 20% currently) by the fifth year. Also, compressors will likely attract 20% customs duty from the fifth year vs. 12.5% currently. The duty on other AC components such as PCB controller, motor, cross fan and evaporator will increase to 20% (from 10% currently) by the fifth year.



(%) 35 30 30 25 20 20 20 20 15 12.5 10 10 5 0 IDUs/ODUs Compressors Other Components

■ Possible hike in Import Duty over next 5 years

Exhibit 1: Expected hike in Basic Customs Duty under the PMP scheme over next 5 years

Source: Industry, Media articles

The PMP has started to bear fruits as a couple of large global component suppliers are in the process of setting up the domestic manufacturing capacity for their products. The most notable among them being GMCC, the world's largest compressor maker, and Magmet, the largest manufacturer of drives. As per industry sources, GMCC is setting up a facility with capacity to manufacture 1.5mn units of compressors, with a provision to expand it to 6mn units. This will help the existing domestic compressors manufacturers in India such as Highly, which has been reeling under losses due to price disadvantage as most of the Indian AC brands were sourcing cheaper compressors from China. This company was loss making when the customs duty was at 7.5%, but witnessed a turnaround in its business performance when the import duty rose to 12.5%. Hence, phase-wise increase in the customs duty under the PMP scheme will help domestic component suppliers to scale up and be profitable. Highly's current compressor manufacturing capacity is estimated at 2.4mn units while the company is willing to make further investments to ramp up the capacity by 1mn units once the PMP scheme comes into force.

Strict enforcement of Free Trade Agreement (FTA) rules

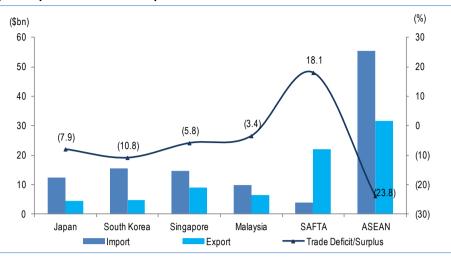
Import Duty as on FY20

The government has a strong intent to plug the loopholes in the FTA agreements such as duty evasion, foul play and re-routing of products which violate the FTA rules. To achieve the same, importers will now need to submit the proof of 35% value addition of goods from the country of import under the FTA route, failing which duty benefits available under the agreement will be denied to them. Also, only furnishing a certificate from an exporter will not suffice and it will be the responsibility of the importer to ensure that the goods imported by them have genuinely met the norm of minimum 35% value addition from the country of import. This will ensure that any product manufactured in China and falsely re-routed to India through these FTA partner countries will not be eligible for duty concessions under the ASEAN FTA. India currently has 32 trade agreements with various countries and regional blocs (like ASEAN and SAFTA).

As per a government official, in a number of cases reported over the years, it was found that most of the goods from non-ASEAN members were diverted to India through ASEAN countries with just change in packing or with some minor modifications and by making incorrect claims of 35% value addition. Such practices were very rampant for electronic items such as mobiles, TVs, set-top boxes, air conditioners, electronic parts and telecomm equipment. In order to strictly enforce the minimum 35% value addition criteria, the government has empowered the customs authorities with more powers to minutely inspect and carefully scrutinize imports of these product categories. If any foul play is found than they can reject the consignment. Such a move by the government will help to prevent any misuse of trade agreements and will ensure fair trading practices among the partner nations. As per industry sources, the government has already started an investigation into an alleged increase in subsidized imports of copper tubes, pipes and HFC components used in R-32 gas from Malaysia, Thailand and Vietnam. In the probe, the degree and extent of alleged subsidization will be determined and, if necessary, countervailing or anti-subsidy duties will be levied.



Exhibit 2: Export/import trade data with partner countries / trade blocs



Source: Industry, Department of Commerce

Note: Figures in brackets represent trade (deficit) / surplus

Quality Control Order (QCO) on components

The government of India introduced non-tariff barrier such as Quality Control Order (QCO), which empowers the Bureau of Indian Standards (BIS) to define standards and testing mechanism/procedures in order to ensure that the imported components in the Indian market are of good quality. Since 2010, the Bureau of Energy Efficiency (BEE) has been rating the energy efficiency of ACs in the form of various star ratings and upgrades these ratings every two years to ensure compliance with the highest level of air quality and emission standards. Similarly, the primary objective of the QCO exercise is to ensure that the components which are used in an AC adhere to the global benchmark and global manufacturing standards. It will also ensure that inferior quality products, which are imported just on the basis of their cheap prices, do not get flooded into the Indian market. Such a practice will greatly favour those AC companies in India who manufacture high quality products and use high quality components. It would severely hit players whose business model revolves around importing cheap/low quality components to reduce their production costs.



2. Where JCH-IN stands amidst these policy changes?

JCH-IN is well placed in the Indian AC industry as the company has strategically focused on backward integrated manufacturing plant (at Kadi in Gujarat), along with India-specific R&D, technology and product development set-up. It is one of the earliest companies to set up manufacturing in India and now has over 30 years of track record. It has a large installed base, with production capacity of 0.9mn units in single shift and 1.5mn units in double shifts at its integrated manufacturing plant at Kadi, Gujarat. Along with the backward integrated facility, JCH-IN is well supported by its group companies situated around the globe and also in India, both in terms of components and technology support. Hence, it possesses a competitive edge compared to other Indian peers in the AC space. Currently, the company is working with the vision of the Indian government to cut down imports of critical components. It is also encouraging overseas vendors to set up factories in India to support the 'Atmanirbhar Bharat' initiative. Moreover, in the next three years, the company plans to reduce its imports by half and increase exports by 3x from the current levels. JCH-IN has already started working with many components manufacturers in India. It is eyeing export opportunities in markets such as the Middle East, Africa and South East Asia.

Supply chain – Strengthened by presence of group companies

For the Indian AC industry, compressor forms one the most critical components and constitutes 30%-35% of the total cost of an entire AC unit. Currently, availability of compressors from domestic vendors is lower as majority of brands import it from China due to cheaper price. Government policies such as the PMP scheme, revision in FTAs and implementation of QCO are aimed at reducing the imports of AC components and pushing for more indigenisation. This would compel the domestic AC players to look for alternate sourcing of AC components (especially compressors) in the domestic market, as higher import duties and stringent inspection norms for imports will have a considerable impact on supply chain. This will create a level-playing field for domestic compressors manufacturers and domestic AC brands are likely to rush to them to place their orders. JCH-IN is favourably placed in light of this anticipated policy change as it has already tied up with its group companies in India and overseas for its raw material sourcing. For instance, JCH-IN sources a large part of its compressors from one of its group companies named Highly Electrical Appliances India Pyt. Ltd. which is an Indian arm of the joint venture between Japan's Hitachi Group and Shanghai's Highly group. This entity manufactures a wide range of compressors, which are used in both ACs and Refrigerators at its Ahmedabad plant. Highly's current compressor manufacturing capacity is 2.4mn units, while it is willing to make further investments to ramp up the capacity by 1mn units once the PMP scheme is implemented. In FY20, JCH-IN sourced products from Highly Electrical Appliances India Pvt. Ltd. worth Rs2.1bn, accounting for 15.4% of its total direct cost.

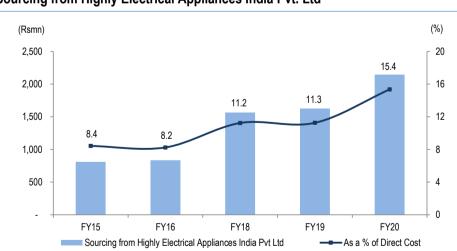


Exhibit 3: Sourcing from Highly Electrical Appliances India Pvt. Ltd



Other global companies of JCH group from where JCH-IN sources its raw materials/finished goods include (1) Qingdao Hisense Hitachi Air Conditioning Systems Co. Ltd, which is a JV between JCH and Hisense to manufacture Commercial ACs (VRF category) and Central ACs for global markets. (JCH-IN sourced products worth Rs633mn in FY20, accounting for 4.5% of direct costs) (2) Hitachi Consumer Products, Thailand, which manufactures products such as ACs, Refrigerators, Washing Machines, Air Purifiers and electrical products (JCH-IN sourced products worth Rs727mn in FY20, accounting for 5.2% of direct costs) and (3) Johnson Controls-Hitachi Components, Thailand, which makes electrical circuit boards for home appliances (JCH-IN sourced products worth Rs834mn in FY20, accounting for 6% of direct costs). Presence of these group companies in the components ecosystem will help JCH-IN to get priority in terms of supplies, ensure strong quality and navigate the FTA and QCO conditions of the Indian government in a better way.

Exhibit 4: Sourcing by JCH-IN from group companies in FY20

Group company	Products manufactured by Group Company	Sourcing in FY20 (in Rsmn)	Sourcing as a % of direct cost
Highly Electrical Appliances India Pvt. Ltd.	Compressors for Air Conditioners and Refrigerators	2,146	15.4
Qingdao Hisense Hitachi Air Condtioning Systems Co Ltd, China	Commercial AC and Household Central AC products	633	4.5
Hitachi Consumer Products (Thailand) Ltd	AC, Refrigerator, Washing Machine, Air Purifiers and eletrical products	727	5.2
Johnson Controls-Hitachi Components (Thailand) Co. Ltd.	Electrical Circuit Boards for Home Appliances	834	6.0

Source: Company, Nirmal Bang Institutional Equities

Global Development Center - A stepping stone towards design excellence

JCH-IN has started a one-of-its-kind design and development facility in India with a view to leverage its global talent pool and deliver products for the diverse needs of different markets across the world. This Global Development Center (GDC), is located at Kadi, Gujarat (next to its AC manufacturing plant) and was built at a cost of US\$20mn (nearly Rs1.4bn) and inaugurated on 1st October, 2018. This facility is equipped with superior research, engineering and testing mechanisms and will focus on strategically increasing the product development capabilities, particularly for residential and packaged ACs. Also, development work for user experience, industrial design, simulation, controls, design quality, project management and engineering information systems is being undertaken at this center. The GDC employs more than 120 engineers and expects to increase the total headcount to 150 in the near future with an aim to maximize the potential of local engineering talent. The facility comprises an office space of 6,600 square meters and laboratory space of 12,000 square meters and can test Air Conditioners in ambient temperatures ranging from -40 degrees C to +60 degrees C.

This GDC will aid in globalizing product development capabilities and support the government's Make in India initiative. The design and development service will be utilized for India's residential and commercial air conditioning products as well as to overseas group companies for product development for the international markets. This will be for the first time that an Indian AC facility will not just make ACs for the export markets but will also offer design and development services to them. Through this facility, JCH-IN would undertake the crucial role of manufacturing and exporting its products from India to foreign regions such as the Middle East, South East Asia and EU markets. This new GDC will integrate the technology, resources, expertise and talent pool to develop latest technology cooling solutions across the globe. JCH-IN's GDC, along with its integrated manufacturing plant, is only the fourth such global center for the JCH group for catering to global RAC needs, besides two centers in Japan and one in China.

The revenue generated from this GDC is booked under the design and development segment of JCH-IN and is entirely billed to the Japanese parent entity (Hitachi Johnson Controls Air Conditioning Inc., Japan) for which JCH-IN receives consultancy service income. Revenue contribution from this segment stood at 3.2% of FY20 revenue and 5.8% of 1QFY21 revenue. The EBIT margin is at very healthy levels in the range of 13%-16%. JCH-IN expects the GDC to be one of the main growth drivers for exports, as India, Africa and the Middle East markets have great synergies in terms of weather conditions and the India made AC products need only minor tweaks before exporting.

(%) (Rsmn) 300 18 15.6 15.0 16 14.0 14 0 250 13.5 13.0 14 12 0 200 12 10 150 8 6 100 4 50 2 0 3QFY19 4QFY19 10FY20 20FY20 3QFY20 4QFY20 10FY21 Revenue ■ EBIT Margin

Exhibit 5: Design and Development Segment - Quarterly Revenue and EBIT Margin trend

Source: Company, Nirmal Bang Institutional Equities Research

Exports - One of the few AC exporters from India, aims at 3x jump in 3 years

JCH-IN started exporting the 'Made in India' room ACs in FY15 and initially catered to the overseas markets of Sri Lanka, Indonesia and Bangladesh. In FY17, new geographies such as the UAE, the Middle East and Nepal were added. In FY19, it expanded its exports footprint to more countries such as Bhutan, Myanmar, Maldives, Oman, Bahrain, Qatar, Saudi Arabia, Iraq and also entered in the African continent by exporting to Kenya and Djibouti. Equipped with an enhanced product range and with an aggressive focus, exports business jumped 13x YoY in FY19. In FY20, direct business operations in Africa and South Asia were started with the help from the newly formed international sales department of JCH-IN.

With expectations of revival in economic activities around the world post the COVID-19 pandemic, JCH-IN aims to increase its exports, from 4% of RAC sales in FY20, with key focus on the Middle East, Africa and South East Asia. The Indian AC industry currently has negligible focus on exports, with only 0.4mn AC units exported out of India compared to the domestic industry size of 7mn units. JCH-IN is one of the first-movers when it comes to exports, which is already exporting its India-made products for the past six years and has an aim to significantly scale it up going forward. JCH-IN's integrated plant at Kadi, Gujarat, along with its GDC (which possess capability to develop ACs for international markets) is one of the four global facilities of the group to cater to the global AC needs of several countries. JCH-IN has already started receiving requests from JCH's other global group companies for supply of ACs. From international geographies, JCH-IN booked revenue of Rs592mn in FY20, accounting for 4% of its room AC sales. The management has a target to expand this to three times over the next three years, led by increase in the number of countries it can service post commissioning of the GDC. Besides AC exports, overseas revenue also came from the design & development service income from the Japanese parent (Rs619mn in FY20, 2.8% of total sales).

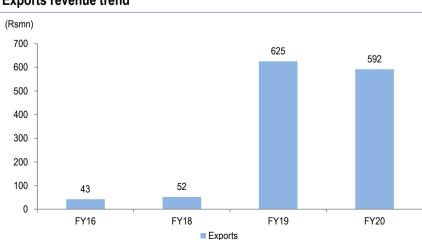


Exhibit 6: AC Exports revenue trend



3. Healthy track record of more than 30 years in India

Room AC – A premium player with a healthy market share of 12%

JCH-IN is one of the prominent names in the Indian AC industry with brand 'Hitachi' having garnered 12% value market share. JCH-IN's product portfolio includes a wide range of products such as inverter ACs, split ACs and window ACs with 96 SKUs and tonnage capacities ranging between 0.9 tonnes to 3.5 tonnes. It has a backward integrated manufacturing plant at Kadi, Gujarat with an installed capacity of 0.9mn units in single shift (can rise up to 1.5mn units in double shifts). JCH-IN has been focused on premium products with superior technology and advance features since inception. Some of the key technological achievements of the company are: (1) Early adoption of star rating labeling for ACs in FY09 before the BEE made it mandatory from January 2010. (2) Being a front-runner and flag bearer of energy efficient ACs, Hitachi's Kashikoi 5100X+ (1 tonne, 5 Star AC) is India's best energy efficient split AC with a score of 6.1 ISEER. (3) With early adoption of inverter technology, 69% of all the SKUs as well as entire 5 star and 4 star split AC range is offered with inverter technology only. (4) Its I-Clean Plus technology automatically cleans the AC's filter every 5 hours and hence, with unrestricted airflow, the machine's energy efficiency remains factory fresh throughout its life time.

JCH-IN has been growing at above industry growth rates. While FY20 was affected due to COVID-19 related disruption and lockdown in March 2020, it managed to outpace industry growth in the first 11 months (April 2019-February 2020) with JCH-IN's split AC sales growing by 21% (vs. industry growth of 15%) while its inverter AC sales grew by 34% (vs. industry growth of 29%). The key drivers of growth for the company have been a strong presence in the premium segment, foray into mass premium category, distribution network expansion and effective advertising.

Initially, JCH-IN had a strong presence only in the premium category. It enhanced its mass-premium portfolio with the launch of new model 'Kaze' in both Split and Window AC variants in order to reach out to the customers from the middle income group who aspire for a quality product but at an affordable price point. Additionally, it has added a lot of retail touch points in Tier 2 and 3 cities over the past two years and introduced new range of inverter RACs to reposition Hitachi as a mid-market brand without losing its prominence in the premium segment. It has enhanced its distribution reach to 10,000 retail touch points (up 2.5x in past 5 years) across 1,350 cities (up 4x in past 7 years) with 1,400 service centers. It also advertised effectively the concept of 'Hitachi Air', clearly highlighting the benefits of providing air which is clean, fresh, silent, odour-free and surround. The brand promotions have also been done in local languages to reach out to a wider audience.

Exhibit 7: Room AC Volume Growth Trend

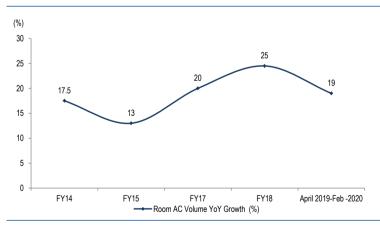
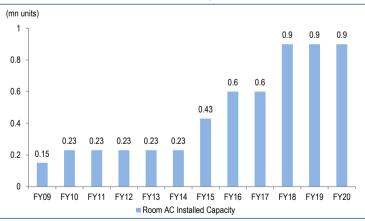


Exhibit 8: Room AC installed capacity trend (mn units)



Source: Company, Nirmal Bang Institutional Equities Research

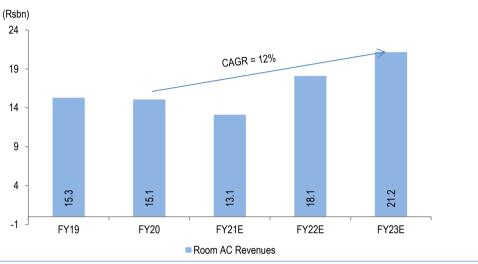
Source: Company, Nirmal Bang Institutional Equities Research

The AC market size in India is likely to rise exponentially from the current low base of only 6% penetration levels. Key growth drivers for the Indian AC market are likely to be (1) extreme weather conditions with hot & humid climate and rising temperatures (2) improving affordability due to rising disposable incomes (3) increasing electrification (4) rapid urbanization and (5) availability of easy financing and EMI schemes.



JCH-IN is likely to be a large beneficiary of the industry growth due to its enhanced product portfolio, inverter push, sales channel expansion, efficient supply chain, improved after sales service and innovative marketing strategies. Besides, factors such as strong focus on backward integration, indigenisation of components, hassle free sourcing of critical raw materials from group companies and strong technical support from its parent provide it with an edge over other Indian peers. We anticipate that JCH-IN will gain further market share and expect the revenue from the Room AC segment to grow at a CAGR of 12% over FY20-FY23E.

Exhibit 9: Room AC Revenue Trend



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 10: Products range in Residential Cooling Solutions



Source: Company, Nirmal Bang Institutional Equities Research

Commercial ACs – Prominent player in VRF, ducted systems and chillers

JCH-IN enjoys a prominent position in the Commercial Air Conditioning space, which includes products such as Ductable ACs, Cassette ACs, Variable Refrigerants Flow (VRF) and Chillers. The company is widely present in all these segments with strong position and healthy market share across these categories. JCH-IN has the capacity to manufacture 120,000 tonnes of Ductable units, 9,000 VRF ODUs and 300 Chiller units per annum at its Kadi plant. Besides, it has tied up with over 500 distributors for the ducted systems and partnered with more than 200 distributors for the VRF category with an aim to increase its B2B presence in more than 140 cities across India. As per the industry expectation, India's commercial HVAC market is expected to reach Rs450bn by 2024, registering a CAGR of 7%. This growth is expected due to rise in infrastructure development like commercial buildings, hotels, industries, hospitals, data centers, large warehouses, educational institutes etc. The product categories of ducted, VRF and chillers are a small part of the HVAC market with an estimated market size of Rs25bn, but it is growing at a much faster pace. JCH-IN has a healthy market share in this category and expects robust growth due to a strong product portfolio, expansion in trade channels, business extraction strategies, in-house manufacturing and introduction of new models.



The Ductable range of Commercial ACs cater to cooling requirements of small corporate offices, banquet halls, small hospitals etc. Under this category, the company offers its flagship 'Takumi' range of ACs, which are equipped with unique energy efficient engineering design and are suitable for cooling requirements of small-sized spaces. It also offers one-to-one cassette ACs, including inverter models for showrooms, restaurants and residences. JCH-IN has relatively high market share in this segment with strong channel network while the competition is lesser due to presence of small number of brands. Introduction of R410A (green gas) and multi circuit option (for better part-load operation) in its range of products helped the company to consolidate its position in the ductable category. JCH-IN's ductable category has grown ahead of the industry on the back of its strong brand awareness, presence in medium to large size orders, regular availability of inventories and wide product basket with multiple SKUs (due to in-house manufacturing capacity of 120,000 tons). In future, growth is likely to be driven by the organised commercial sector with rising number of hypermarkets, supermarkets and offices. However, with the emergence of new energy efficient cooling solutions like VRF, the ductable category is expected to grow at a lower CAGR.

Exhibit 11: Ductable AC growth trend

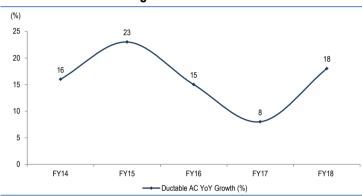
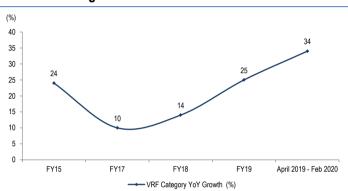


Exhibit 12: VRF growth trend



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

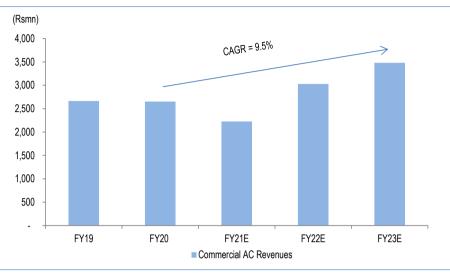
Under its chiller business, JCH-IN offers a wide range of products in air cooled (40 HP to 400 HP) and water cooled category (40 HP to 570 HP). The company offers high capacity air cooled and water cooled screw chillers and highly efficient centrifugal chillers to large building complexes. The company started in-house manufacturing of its water cooled category from 40HP to 120HP from FY11. In the subsequent years, it enhanced the indigenisation content in the water cooled chillers and increased in-house manufacturing capacity up to 180HP. However, the company continues to import chillers with capacities above 190HP. The total installed capacity of JCH-IN for chillers is 300 units per year. Chillers usually find applications in big commercial spaces and heavily rely on commercial real estate projects and infrastructure development for growth. As a result, the segment's performance was affected in the last few years owing to the postponements of public/private investments. The management expects the chiller business to revive in the near future.

Variable Refrigerant Flow (VRF)

The VRF category is considered to be the star category, both in the commercial industry space as well as for JCH-IN. This category system is gaining immense popularity in India with the increasing adoption at corporate offices, hotels, IT offices, high-end residential apartments, villas, retail stores, supermarkets, hospitals, banks, education institutes etc. The preference for VRF is due to its key advantages such as (a) energy efficiency (as it manages heat load variations) and (b) flexibility of connecting various types of indoor units (ductless & duct type indoor units ranging from 0.8HP to 20HP capacity as well as AHU for specific applications). VRF products, which are equipped with the inverter technology offer savings of 25% to 30% compared to the fixed speed compressors. JCH-IN has a strong portfolio of VRF products in the range of 8HP– 54HP and has been consistently growing over the years. JCH-IN has a total installed capacity of 9,000 VRF ODUs per annum. For commercial spaces, JCH-IN's VRF product, namely 'Set Free Sigma Series' is widely accepted by the market as it comes with advanced technology, enhanced energy efficiency, increased flexibility in operations and use of eco-friendly refrigerant. The company also launched a new product range named 'SET FREE Mini' in capacity range of 3HP to 7HP to cater to high-end residential customers, high-end cafes, restaurants etc. Apart from new product launches, the company also invested across the length and breadth of the country

and focused on channel expansion strategy to reach out to maximum customers. It conducted several exhibitions, seminars and meetings to promote its Sigma Series. Over the years, the VRF category has been reporting consistent growth and is expected to grow at a healthy CAGR of 15%.

Exhibit 13: Commercial ACs Revenue Trend



Source: Company, Nirmal Bang Institutional Equities Research

JCH-IN is also a dominant market leader in the AC solutions for telecom towers with its product 'Spacemaker'. However, the capex of telecom towers industry has declined considerably owing to stiff competition and stretched financials. The overall commercial AC portfolio of JCH-IN reported revenue of Rs2.7bn in FY20, accounting for 12% of total sales. With a strong product portfolio, healthy market share, widening distribution network and in-house manufacturing, the growth prospects of JCH-IN are robust. It has also invested in four Engineering Excellence Centers in all four regions of India (North, South, East and West) to ensure a better service network and provide technically skilled staff to customers for their services needs at all times. Over FY20-FY23E, we expect the company's Commercial AC segment to grow at a CAGR of 9.5%.

Exhibit 14: Range of Commercial Cooling and Heating Solutions





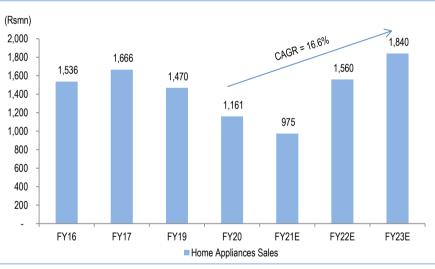
Home Appliances – Trading of refrigerators and air purifiers

JCH-IN is involved in the trading of a wide range of stylish and premium refrigerators. The current product portfolio consists of the frost free range with 8 series and 26 SKUs - ranging from 385 ltrs gross to 700 ltrs gross capacity. This range comes in 2-door, 3-door, 4 door and 6-door options in top freezer, bottom freezer and side-by-side variants and is aligned with the eating habits of Indian consumers. For JCH-IN, refrigerators are completely imported from Thailand under the FTA and hence do not witness any major price escalations due to changes in the import duty structure.

JCH-IN does not operate in the mass market direct cool refrigerators, which account for 75% of total volume. However, the domestic refrigerator industry is witnessing a major transformation from product and design innovations to giving value-for-money and energy-efficient solutions to consumers with a variety of choices. Gradually, the consumer preference is moving towards high capacity models. These high capacity models offer the latest technologies like inverter technology with dual fan cooling, vacuum insulation panels, intelligent controls etc. The rising preference of consumer towards large capacity models in Frost Free and French Door Bottom refrigerators variants bodes well for the future prospects of JCH-IN refrigerators. Besides, this segment is also strategically important for JCH-IN as it allows continuous engagement with channel partners during the lean season for ACs (non-summer season).

JCH-IN also sells Air Purifiers (via trading model) to cater to the increasing demand from Delhi and other metro cities. India's residential Air Purifier market is expected to grow at a steady pace, led by growing urbanization, increase in pollution levels across major cities, higher purchasing power and worsening air quality. Currently, air purifiers are preferred only in select cities where JCH-IN has ensured its product availability. We expect 16.6% CAGR in home appliances sales over FY20-FY23E due to a low base of FY20 (sales had declined 21% YoY to Rs1.2bn due to COVID-19 disruptions).

Exhibit 15: Home Appliances Sales Trend



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 16: Range of Home Appliances





Advertisement and marketing campaigns – Effective brand positioning

JCH-IN has been working effectively on its advertising and marketing campaigns with an aim to communicate its superior product range as well as advance technology. Some of the JCH-IN's popular advertising campaigns include "Every Home Deserves Hitachi Inverter AC", which was marketed aggressively on multiple platforms such as TV, Print, Outdoor and Digital media to create awareness about the use of the inverter technology. Another such campaign is 'Hitachi Air', which is a unique way to explain the benefits of clean air by using JCH-IN products. The concept of 'Hitachi Air' clearly highlights the benefits of providing air, which is clean, fresh, silent, odour-free and surround. The brand promotions have also been done in local languages to reach out to a wider audience. The purpose of the brand building exercise has been to maximize the offerings to the customers in Tier 2 and 3 cities and the South Indian market. With an effective marketing exercise in conjunction with a robust distribution network, JCH-IN has been able to achieve a widespread presence for its products across the country and garner 12% market share for its ACs. On an average, JCH-IN spends around 3% of its sales towards advertisement and sales promotion, while FY20 was an aberration due to COVID-19 led disruptions.

(%) (Rsmn) 1,200 8 7 1,000 6 800 5 600 4 3.2 2.9 2.9 3 400 2.1 2 200 0 FY14 FY15 FY16 FY17 FY18 FY19 FY20 Advertisement and Sales Promotion Expenses -As a % of Sales

Exhibit 17: Advertisement and Sales Promotion Trend

Source: Company, Nirmal Bang Institutional Equities Research

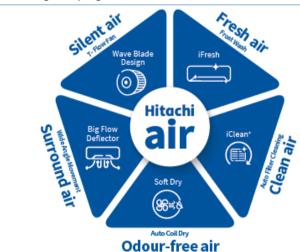


Exhibit 18: JCH-IN's marketing campaign



4. Volume growth and margin expansion nearing an inflection point

JCH-IN well placed to register increased volume growth

Over the past ten years, JCH-IN posted a healthy revenue CAGR of 13% despite being primarily focused on the premium segment in ACs, which had a much smaller industry size. JCH-IN's market share in the room AC category in India has increased from 7% volume share and 9% value share in FY11 to 11% volume share and 12% value share in FY20. We expect the volume growth traction of the company to accelerate in the coming years, led by three key drivers, namely (1) foray into mass-premium category (2) distribution reach expansion and (3) scaling up of exports.

JCH-IN forayed into the mass-premium segment a few years ago considering the low market penetration of Room ACs in India and rising demand from consumers for better cooling solutions at affordable prices. It launched a new range of models named 'Kaze' in both Split and Window AC variants in order to reach out to the customers from the middle income group who aspired for a quality product but at affordable price point. Additionally, it has added a lot of retail touch points in Tier 2 and 3 cities over the past two years and introduced new range of inverter Room ACs to realign the brand as a mid-market player without losing its prominence in the premium segment. The mass-premium segment is likely to be ~60% of total AC industry in volume terms while the premium and entry segments are likely to be 20% each. Given that the mass-premium segment accounts for majority of the market size of room ACs in India, the addressable market size for JCH-IN increases multi-fold, leading to better growth opportunities.

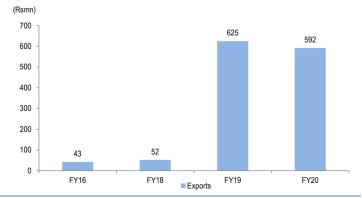
JCH-IN's widespread presence across the country is leveraged by its extensive nationwide network of channel partners comprising direct dealers, distributors, retailers, exclusive sales & services points, Company Owned Company Operated (COCO) Hitachi showrooms and other service points (including multi-brand outlets and authorized service partners). In order to ensure smooth co-ordination between the company and the trade channel, JCH-IN has 5 regional offices and 21 branch offices across the country. In 2010, JCH-IN had a limited presence in 236 cities, which were catered by just 1,800 retail touch points. Following an aggressive expansion strategy, the company increased its sales touch points to 4,000 in FY16 and sharply ramped this up to 10,000 as on FY20. The geographic presence has been enhanced to 1,350 cities. In addition, JCH-IN has 290 exclusive sales & service dealers, 70 Hitachi exclusive showrooms, 1,400 service centers and a staff of over 100 people in the sales team to complement its trade network. The rise in retail touch points (up 2.5x in past 5 years) and expansion of presence across cities (up 4x in past 7 years) will aid in better revenue growth in the years to come. The expansion in retail network is likely to continue as the AC market leader Voltas has access to 19,000 retail touch points, a considerable gap which JCH-IN would be looking to fill.

JCH-IN is one of the few AC exporters out of India, with exports accounting for 4% of its room AC sales in FY20 at Rs592mn. JCH-IN has a target of increasing its exports revenue 3x in the next 3 years, driven by factors such as expansion of addressable markets to be catered to from India within the JCH group (mainly Middle East, Africa and South East Asia) and commissioning of the GDC (which possess capability to develop ACs for international markets) at Kadi, Gujarat. It is one of the only four integrated global facilities of the JCH group (manufacturing plant + design & development center), besides two in Japan and one in China, to cater to the global AC needs of several countries.

Exhibit 19: Trend of retail touch points

(Nos) 12,000 10,000 10,000 9,698 10,000 8.000 8 000 6.000 4 000 4 000 2,000 1.800 2,000 FY20 Sales touch points

Exhibit 20: Room AC exports trend



Source: Company, Nirmal Bang Institutional Equities Research

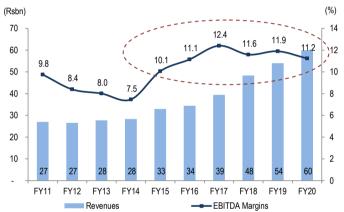


Margin inflection range for peers is Rs25bn-Rs30bn sales, JCH-IN nearing it

A peer analysis of other listed consumer durable firms suggests that a turnover in the range of Rs25bn-Rs30bn is a key inflection point, which provides the necessary scale benefits to post double-digit operating margins on a sustainable basis. As per below exhibits, Whirlpool of India, Havells India and Voltas have shown similar patterns in their operating margin profile. JCH-IN currently operates a gross margin profile in the range of 36% to 39% and is broadly similar to its industry peers. With FY20 revenue of Rs22bn, we believe that it is nearing the inflection point post which it will get the necessary scale and leverage benefits to sustainably report a double-digit EBITDA margin profile compared to the 7.5% to 9% range in which it has operated over the past six years.

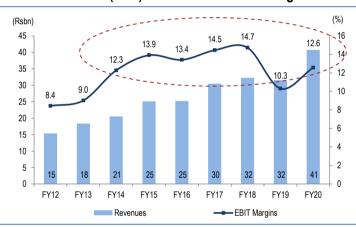
Further, the government's schemes such as PMP, revision in FTAs and implementation of QCO on imported components will benefit companies such as JCH-IN, which has higher domestic sourcing (through backward integrated in-house manufacturing plant and local sourcing of components). It will create a level-playing field for companies relying on domestic sourcing compared to those brands which used to rely on cheap imports and get pricing advantage thus far. This should lead to price parity for all AC firms and translate into better volume growth and margin expansion for companies such as JCH-IN. We expect JCH-IN to register revenue CAGR of 13% over FY20-FY23E (Rs31.5bn in FY23E) with 200bps EBITDA margin expansion to 9.8% in FY23E.

Exhibit 21: Whirlpool of India – Revenue and EBITDA Margin



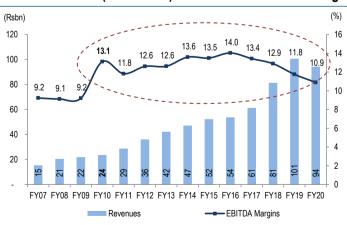
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 22: Voltas (UCP) - Revenue and EBIT Margin



Source: Company, Nirmal Bang Institutional Equities Research Note: Only UCP segment's Revenue and EBIT margin is considered for a like to like comparison of consumer durables business.

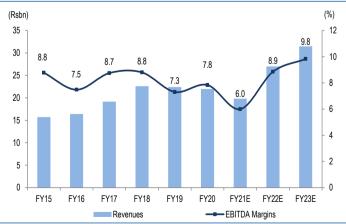
Exhibit 23: Havells (standalone) - Revenue and EBITDA Margin



Source: Company, Nirmal Bang Institutional Equities Research

Note: Standalone revenue and EBITDA is considered for Havells to exclude the impact of Sylvania acquisition

Exhibit 24: JCH-IN – Revenue and EBITDA Margin





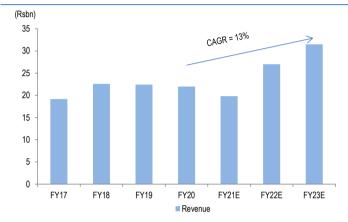
5. Financial analysis of JCH-IN

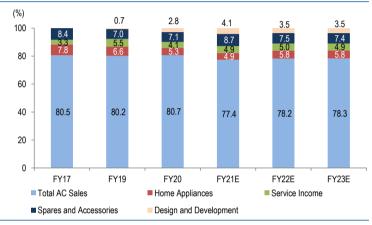
13% revenue CAGR likely over FY20-FY23E

Over FY17-FY20, JCH-IN registered revenue CAGR of only 4.6%, led by two years of flattish sales in FY19 (weak summer season) and FY20 (COVID-19 disruptions). We expect JCH-IN to register a CAGR of 13% over FY20-FY23E. We are factoring in 12.5% CAGR over FY20-FY23E for the Cooling Products segment, owing to foray into the mass-market segment, expansion of distribution channel and rising exports. For the Design & Development segment, expected increase in demand for consulting services from its global subsidiaries is likely to drive 21.2% CAGR over FY20-FY23E, albeit on a low base. Though FY21E has turned out to be a dampener due to the COVID-19 pandemic, the management expects to see recovery from December 2020.

Exhibit 25: Revenue to post 13% CAGR over FY20-FY23E

Exhibit 26: Category-wise sales mix of JCH-IN





Source: Company, Nirmal Bang Institutional Equities Research

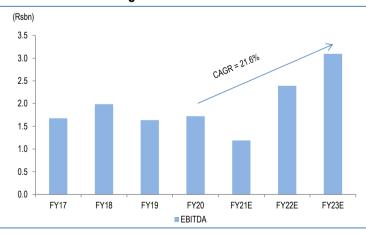
Source: Company, Nirmal Bang Institutional Equities Research

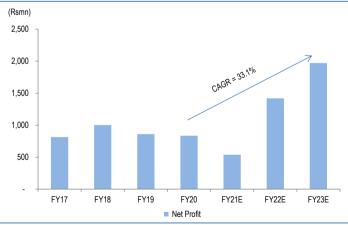
200bps EBITDA margin expansion and 33% PAT CAGR likely over FY20-FY23E

While the gross margin profile of JCH-IN is in line with peers in the range of 36%-39%, it currently operates at a lower operating margin profile in the range of 7.5% to 9%. We expect JCH-IN to report healthy margin expansion over the next three years, led by (a) scale benefits as it achieves an inflection point of revenue and (b) level-playing field due to change in government policies which now favour companies with high domestic sourcing. Over FY20-FY23E, we expect JCH-IN to report EBITDA CAGR of 22% (led by 200bps margin expansion) and PAT CAGR of 33% (led by higher other income & lower tax rate).

Exhibit 27: EBITDA to grow at 22% CAGR over FY20-FY23E

Exhibit 28: PAT to grow at 33% CAGR over FY20-FY23E





Source: Company, Nirmal Bang Institutional Equities Research

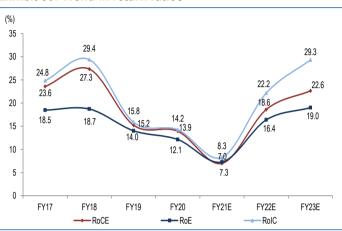
Return ratios likely to improve after resumption of growth & profitability

JCH-IN posted healthy return ratios in FY18 with RoCE/RoE of 27%/19%, respectively. However, two years of flattish growth in FY19 and FY20 led to decline in profitability over FY18-FY20. This led to a fall in return ratios in FY19 and FY20. With resumption of growth and profitability, we expect RoCE/RoE to rise back in FY23E to 23%/19%, respectively, while RoIC is likely to rise to 29%.

Exhibit 29: Margin Profile of JCH-IN

50 38.3 36.8 40 36.5 36.4 36 4 35.8 30 20 9.8 8.8 8.9 78 10 6.0 4.4 0 FY17 FY18 FY20 FY21E FY22E FY23F EBITDA Margins — PAT Margins Gross Margins

Exhibit 30: Trend in return ratios



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Working capital cycle likely to see improvement from FY20 levels

JCH-IN operated at a cash conversion cycle of 59/53 days in FY17/FY18, respectively. However, COVID-19 led disruptions led to elongation in cash conversion cycle to 89 days in FY20. We expect the cash conversion cycle to gradually reduce to 67/65 days in FY22E/FY23E. The ex-cash net working capital rose from 11.2% of sales in FY18 to 18.6% of sales in FY20. We expect it to reduce gradually to 16.8% of sales in FY23E.

Exhibit 31: Trend in cash conversion cycle

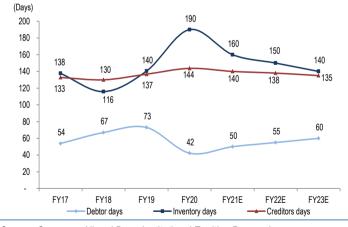


Exhibit 32: Trend in ex-cash net working capital



Source: Company, Nirmal Bang Institutional Equities Research

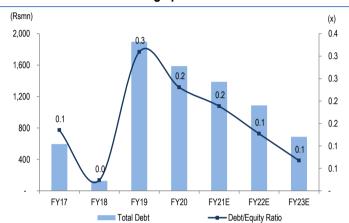
Total asset turnover to rise, leverage position remains low

JCH-IN had a fixed asset turnover of 7x/7.4x in FY17/FY18, respectively. However, it expanded its room AC installed capacity from 0.6mn units to 0.9mn units and also spent Rs1.4bn in setting up the GDC. With two back-to-back years of flattish growth in FY19/FY20, the utilisation of the expanded capacity remains low and hence the fixed asset turnover declined to 4.4x in FY20. With resumption of growth, we expect the fixed asset turnover to rise to 5.3x in FY23E. Further, JCH-IN does not have any long term loans and has only Rs1.6bn worth of short term loans. The current debt-equity ratio is modest at 0.2x in FY20, which we expect to reduce further to 0.1x in FY23E.

Exhibit 33: Fixed Asset Turnover Trend

(Rsmn) (x) 7,000 74 8 68 7 6.000 6 5.000 5 4,000 4 3.000 3 2,000 2 1,000 0 FY17 FY21E FY22E FY23E Gross Block - Fixed Asset Turnover

Exhibit 34: Trend in leverage position



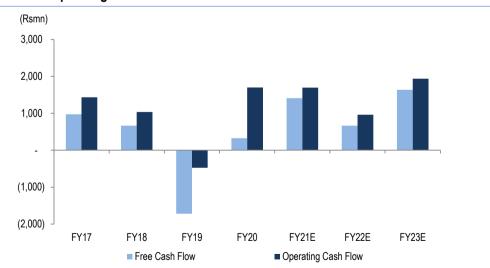
Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Cash flow generation to remain healthy

With healthy revenue growth, rising operating margin, increasing profitability and improvement in the working capital cycle, JCH-IN is expected to generate operating cash flow of Rs4.6bn over FY20-FY23E. The capex related to AC capacity expansion and setting up of GDC has been already incurred in the past three years. With only modest maintenance capex likely over the next three years, we expect JCH-IN to generate positive free cash flow of Rs3.7bn over FY20-FY23E.

Exhibit 35: Trend in Operating Cash Flow and Free Cash Flow



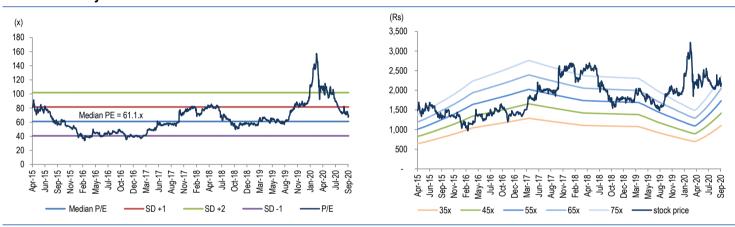


Outlook and Valuation

With a strong intent to expand domestic manufacturing of the AC industry and its components, the government has taken several initiatives through policies such as Phased Manufacturing Programme (PMP) scheme, review of FTAs with strict conditions and Quality Control Order (QCO) for component imports. These schemes will aid in reducing import dependence and promote indigenisation through backward integration by AC companies and establishment of components ecosystem of overseas suppliers in India. JCH-IN is well placed to benefit from these changes due to its backward integrated manufacturing capabilities, India specific R&D, presence of group companies in supply chain and one-of-its-kind global development center capable of designing and developing an AC for India as well as global needs.

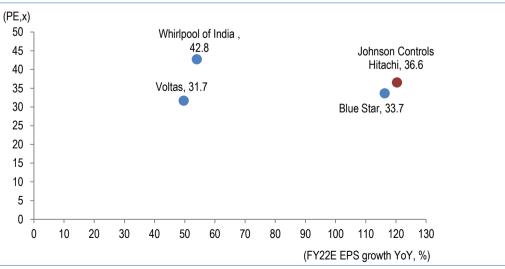
We believe JCH-IN is nearing an inflection point of reporting stronger volume growth and robust margin expansion. Over FY20-FY23E, we expect JCH-IN to report revenue CAGR of 13%, EBITDA CAGR of 22% (led by 200bps margin expansion) and PAT CAGR of 33% (led by higher other income & lower tax rate). We initiate coverage on JCH-IN with a Buy rating and a target price of Rs2,500 based on P/E of 40x 1HFY23E earnings (in line with peers such as Whirlpool of India, Voltas and Havells India). Strong product portfolio, premium brand image, healthy market share (12% in room AC), strong global parentage and healthy growth prospects of AC industry will support the valuation of JCH-IN.

Exhibit 36: One-year forward P/E charts



Source: BSE, Nirmal Bang Institutional Equities Research

Exhibit 37: Peer comparison – FY22E P/E versus EPS growth metrics



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Note – Bloomberg consensus estimates for all the companies. Figures next to the company name indicates current P/E ratio based on FY22E consensus EPS.



Quarterly result analysis

Exhibit 38: JCH-IN's quarterly performance

Y/E March (Rsmn)	1QFY20	4QFY20	1QFY21	YoY %	QoQ %	FY19	FY20	YoY %
Revenues	9,519	4,329	2,696	(71.7)	(37.7)	22,413	21,974	(2.0)
Raw material	6,297	2,607	1,750	(72.2)	(32.9)	14,439	13,974	(3.2)
Staff costs	445	478	440	(1.0)	(7.9)	1,652	1,745	5.7
Other expenses	1,670	973	727	(56.5)	(25.2)	4,685	4,533	(3.2)
Total expenditure	8,412	4,057	2,917	(65.3)	(28.1)	20,775	20,252	(2.5)
EBITDA	1,107	272	(221)	NA	NA	1,638	1,722	5.1
EBITDA margin (%)	11.6	6.3	(8.2)	-	-	7.3	7.8	-
Depreciation	127	167	131	2.8	(21.8)	442	563	27.5
Interest	17	14	38	117.9	169.3	27	50	86.6
Other income	23	12	10	(56.8)	(19.5)	154	82	(47.1)
Exceptional Items	-	(8)	71	-	-	-	(8)	-
PBT	985	95	(309)	NA	NA	1,324	1,183	(10.6)
Tax	349	24	(77)	NA	NA	464	348	(25.1)
Net profit	636	72	(231)	NA	NA	859	835	(2.8)
PAT margin (%)	6.7	1.7	(8.6)	-	-	3.8	3.8	-
EPS (Rs)	23.4	2.6	(8.5)	NA	NA	31.6	30.7	(2.8)

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 39: Segment-wise performance

Y/E March	1QFY20	4QFY20	1QFY21	YoY%	QoQ %	FY19	FY20	YoY %
Revenues (Rsmn)								
Cooling Products	9,394	4,201	2,569	(72.7)	(38.9)	22,256	21,355	(4.0)
Design and Development	140	153	157	12.6	2.5	210	701	234.2
Revenue mix (%)								
Cooling Products	98.5	96.5	94.2	-	-	99.1	96.8	-
Design and Development	1.5	3.5	5.8	-	-	0.9	3.2	-
EBIT (Rsmn)								
Cooling Products	982	96	(363)	NA	NA	1,324	1,138	(14.1)
Design and Development	21	21	21	1.4	(0.9)	26	103	293.9
EBIT margin (%)								
Cooling Products	10.5	2.3	(14.1)	-	-	6.0	5.3	-
Design and Development	15.0	14.0	13.5	-	-	12.5	14.7	-

- JCH-IN reported sales of Rs2.7bn in 1QFY21, down 72% YoY, impacted by COVID-19 led lockdown.
- Gross margin was up 130bps YoY at 35.1%.
- Lower revenues led to EBITDA loss of Rs221mn.
- Consequently, net loss in 1QFY21 stood at Rs231mn.
- The company reported an exceptional item worth Rs71mn in 1QFY21 towards insurance claims from the major fire at company's warehouse. Excluding this gain, net loss would have been ~Rs300mn (without assuming any tax adjustments).
- Cooling products segment sales were Rs2.6bn (94% of total), down 73% YoY, with Rs363mn EBIT loss.
- Design & Development segment sales were Rs157mn, up 13% YoY. EBIT was Rs21m, leading to an EBIT margin of 13.5%, down 150bps YoY.



Company Background

Johnson Controls-Hitachi Air Conditioning India (JCH-IN) is one of the large players in the Indian Air-Conditioning market. It is the Indian subsidiary of the joint venture between the US based Johnson Controls PLC and Japan based Hitachi Appliances, which happened on 1st October 2015. The global JV combines the rich brand name and innovative technology of Hitachi Appliances with globally widespread network & industry leading expertise of Johnson Controls. JCH-IN is the Indian subsidiary of the JV where the promoters hold 74.3% stake. Consequent to the JV, the name of the Indian company was changed from erstwhile Hitachi Home & Life Solutions (India) on 19th August, 2016. JCH-IN is involved in the manufacturing and marketing of a varied range of air-conditioning solutions which find applications both in residential and commercial space. JCH-IN's extensive products range offers solutions for residential, industrial and commercial cooling and includes products such as Room ACs (inverter split, fixed speed and window ACs), VRF Systems, Ductable air conditioners & Chillers, Apart from this, JCH-IN also undertakes trading of premium range of Refrigerators and Air Purifiers. Additionally, JCH-IN is also a leading air conditioning solutions provider for the cooling requirement for the telecom towers. JCH-IN has garnered a 12% value market share and 11% volume market share of the room AC category. It forayed in to the exports business in FY15 and has gradually expanded its overseas presence in the Middle East, Africa, South East Asia and South Asia regions. In FY20, the company established direct business operations in Africa and South Asian countries by forming an international sales department. JCH-IN started a new vertical of Design and Development in FY19 by investing US\$20mn (nearly Rs1.4bn) to set up a Global Development Centre (GDC) in Gujarat, which would aid in developing products for overseas markets as well as provide design & product development related consulting service to the Japanese parent. JCH-IN is recognized as one of the earliest companies to set up AC manufacturing in India. It has its manufacturing facility in Kadi, Gujarat and currently has a total installed capacity of 0.9mn units for Room ACs (single shift), 120,000 tons of Ductable units, 9,000 VRFs ODUs and 300 Chillers units per annum. With a view to ensure timely availability of its products and offer hassle-free after sales services to its customers, JCH-IN is supported by its robust distribution network which comprises 290 exclusive sales and service dealers, 70 Hitachi exclusive showrooms, 10,000 retail touch points and more than 1,400 service centers.

Exhibit 40: Key management personnel

Name	Profile
Mr. Gurmeet Singh, Chairman and MD	Mr. Gurmeet Singh joined Hitachi Home and Life Solutions in January 2001 as Head - Sales and Business planning. After a stint of 11 years with Hitachi, Mr. Singh joined Orient Papers as Vice President - Sales, Marketing and Service. He returned to Hitachi Home and Life Solutions in February 2014 and scaled up to the level of Executive Director (Sales, Marketing and Business Planning). He was appointed as Managing Director in February 2017. He succeeded Mr. Franz Cerwinka as the Chairman of the board from 30th January 2018. Mr Singh is an MBA from Institute of Productivity & Management, Ghaziabad and is currently President of Air Conditioning and Refrigeration Manufacturers Association, India.
Mr. Shinichi lizuka , Director	Mr. Shinichi started his career with Hitachi Ltd in 1979 and was responsible for design on Air Conditioning export. In Hitachi, he held multiple positions in Product Development, Environmental Equipment and Refrigeration & Air-Conditioning division. He started working in India in 2002 and was appointed as MD, Hitachi Home and Life Solutions (India) Ltd in 2006. He was further appointed as COO and President, Johnson Controls-Hitachi Air Conditioning since October 2015. Mr. Shinichi holds a bachelor's degree in Science and Technology from Sophia University.
Mr. Yoshikazu Ishihara , Director	Mr. Ishihara is currently Vice President and General Counsel of Johnson Controls Hitachi Air Conditioning. He possess management experience in leading the international practice group of an international law firm. He has managed a team of 15 legal professionals and collaborated with over 200 legal professionals at Johnson Controls and currently manages all compliance and investigation matters within the company.
Mr. Rishi Mehta, CFO	Mr. Rishi Mehta was appointed as the CFO in January 2018 and is currently designated as CFO and Director Finance since January 2020. Mr Mehta previously worked as CFO for Adient India Private Ltd (formerly Johnsons Control Automotive Ltd). He has rendered his service in other reputed firms like Delphi and Flextronics Design CE (India) Pvt. Ltd. Mr Mehta is a Chartered Accountant and a Post graduate in Commerce.



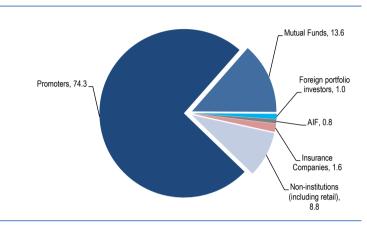
Exhibit 41: Plant location

Plant location	State	Key products
Kadi	Gujarat	Room ACs, Ductable Units, VRF ODUs and Chillers

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 42: Key shareholders

Shareholding pattern	
Promoter & promoter group	74.3
Mutual funds	13.6
Aditya Birla MF	9.2
L&T MF	1.9
Sundaram AMC	1.1
Foreign portfolio investors	1.0
Insurance companies	1.6
Bajaj Allianz Insurance	1.2
Alternate Investment Funds	0.8
Non-institutions (including retail)	8.8



Source: BSE, Nirmal Bang Institutional Equities Research

Key risks

- Room AC is a summer season driven product category. Erratic climatic conditions such as delayed summer or low intensity of heat will affect the AC industry growth.
- Room AC is an intensely competitive industry with presence of many brands. Any further rise in competition and/or irrational pricing by large brands could pose a threat to the market share and margins of the company.
- Any supply chain disruptions, both from local and overseas vendors, for raw materials as well as components will impact the company's production capabilities.
- Failure to implement and introduce new technology-equipped products will lead to loss of market share and sales potential.
- Sharp fluctuations in currency and commodity prices would negatively affect performance.
- JCH-IN has a single location plant at Kadi in Gujarat for both room ACs as well as commercial ACs.
 Any disruption or damage to the manufacturing plant can impact the production and hence sales of the company.
- Room AC sales are driven by the brand pull which a company enjoys in the eyes of a consumer.
 Any damage to the brand image of Hitachi or lack of continuous brand building exercise by the company could impact the sales, market share and hence profitability.
- Export sales could be impacted due to global Geo-political tensions or change in strategy of the JCH group promoters towards the overseas markets assigned to India for servicing.





Financials

Exhibit 43: Income statement

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E	
Net sales	22,413	21,974	19,818	27,014	31,485	Ì
% growth	(0.8)	(2.0)	(9.8)	36.3	16.5	
Raw material costs	14,439	13,974	12,723	17,154	19,898	
Staff costs	1,652	1,745	1,784	2,107	2,330	
Other overheads	4,685	4,533	4,123	5,362	6,161	
Total expenditure	20,775	20,252	18,630	24,623	28,390	
EBITDA	1,638	1,722	1,188	2,391	3,095	
% growth	(17.6)	5.1	(31.0)	101.3	29.4	
EBITDA margin (%)	7.3	7.8	6.0	8.9	9.8	
Other income	154	82	119	146	189	
Interest costs	27	50	74	37	27	
Depreciation	442	563	586	603	625	
Exceptional Items	-	(8)	71	-	-	
Profit before tax	1,324	1,183	718	1,897	2,633	
Tax	464	348	181	477	663	
PAT	859	835	537	1,419	1,970	
PAT margin (%)	3.8	3.8	2.7	5.3	6.3	
EPS (Rs)	31.6	30.7	19.8	52.2	72.5	
% growth	(14.2)	(2.8)	(35.7)	164.2	38.8	

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 45: Balance sheet

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Share capital	272	272	272	272	272
Reserves	5,858	6,613	7,110	8,393	10,091
Net worth	6,130	6,885	7,382	8,665	10,363
Borrowings	1,896	1,587	1,387	1,087	687
Deferred tax liabilities	(166)	(142)	(142)	(142)	(142)
Total liabilities	7,860	8,330	8,627	9,610	10,908
Gross block	3,299	5,034	5,334	5,634	5,934
Depreciation	1,142	1,500	2,086	2,689	3,314
Net block	2,157	3,534	3,248	2,945	2,620
Capital Work in Progress	941	65	50	50	50
Intangible Assets	153	463	463	463	463
Investments	12	11	11	11	11
Inventories	5,555	7,275	5,577	7,050	7,632
Debtors	4,484	2,546	2,715	4,071	5,176
Cash	299	179	1,344	1,534	2,474
Other non-current assets	404	522	495	675	945
Other current assets	1,219	1,105	1,090	1,540	1,826
Total current assets	11,961	11,626	11,222	14,869	18,052
Creditors	5,408	5,500	4,880	6,486	7,360
Other current liabilities & provisions	1,956	1,869	1,486	2,242	2,928
Total current liabilities	7,364	7,368	6,367	8,728	10,288
Net current assets	4,597	4,258	4,855	6,142	7,764
Total assets	7,860	8,330	8,627	9,610	10,908

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 44: Cash flow

//E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
EBIT	1,196	1,159	602	1,788	2,470
(Inc.)/dec. in working capital	(1,775)	219	567	(1,097)	(683)
Cash flow from operations	(578)	1,379	1,170	691	1,787
Other income	154	82	119	146	189
Depreciation	442	563	586	603	625
Tax paid (-)	(492)	(324)	(181)	(477)	(663)
Net cash from operations	(474)	1,699	1,694	963	1,938
Capital expenditure (-)	(1,247)	(1,373)	(285)	(300)	(300)
Net cash after capex	(1,721)	326	1,409	663	1,638
Interest paid (-)	(27)	(50)	(74)	(37)	(27
Dividends paid (-)	(49)	-	(41)	(136)	(272)
Inc./(dec.) in total borrowings	1,770	(309)	(200)	(300)	(400
Inc./(dec.) in investments	-	1	-	-	
Cash from financial activities	1,694	(358)	(315)	(473)	(699
Others	(32)	(88)	71	-	
Opening cash balance	358	299	179	1,344	1,534
Closing cash balance	299	179	1,344	1,534	2,474
Change in cash balance	(60)	(119)	1,165	190	940

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 46: Key ratios

Y/E March	FY19	FY20	FY21E	FY22E	FY23E
Per share (Rs)					
EPS	31.6	30.7	19.8	52.2	72.5
Book value	225.4	253.2	271.5	318.7	381.1
Valuation (x)					
P/E	68.8	70.8	110.1	41.7	30.0
P/BV	9.6	8.6	8.0	6.8	5.7
EV/EBITDA	37.1	35.2	49.8	24.5	18.5
EV/sales	2.7	2.8	3.0	2.2	1.8
Return ratios (%)					
RoCE	15.2	13.9	7.0	18.6	22.6
RoE	14.0	12.1	7.3	16.4	19.0
RoIC	15.8	14.2	8.3	22.2	29.3
Profitability ratios (%)					
EBITDA margin	7.3	7.8	6.0	8.9	9.8
EBIT margin	5.3	5.3	3.0	6.6	7.8
PAT margin	3.8	3.8	2.7	5.3	6.3
Turnover ratios					
Total asset turnover ratio (x)	2.9	2.6	2.3	2.8	2.9
Fixed asset turnover ratio (x)	6.8	4.4	3.7	4.8	5.3
Debtor days	73	42	50	55	60
Inventory days	140	190	160	150	140
Creditor days	137	144	140	138	135
Solvency ratio (x)					
Debt-Equity	0.3	0.2	0.2	0.1	0.1



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Team Details:						
Name		Email Id	Direct Line			
Rahul Arora	CEO	rahul.arora@nirmalbang.com	-			
Girish Pai	Head of Research	girish.pai@nirmalbang.com	+91 22 6273 8017 / 18			
Dealing						
Ravi Jagtiani	Dealing Desk	ravi.jagtiani@nirmalbang.com	+91 22 6273 8230, +91 22 6636 8833			
Michael Pillai	Dealing Desk	michael.pillai@nirmalbang.com	+91 22 6273 8102/8103, +91 22 6636 8830			

Nirmal Bang Equities Pvt. Ltd.

Correspondence Address

B-2, 301/302, Marathon Innova,

Nr. Peninsula Corporate Park, Lower Parel (W), Mumbai-400013.

Board No.: 91 22 6273 8000/1; Fax.: 022 6273 8010