

Banking on joint replacement expertise for expansion

Established in 1994 by renowned orthopaedic surgeon Dr Vikram Shah, Shalby Ltd. (Shalby) is a leading multi-specialty chain of hospitals with specific expertise in joint replacement. The initial focus was mainly on arthroplasty (orthopaedic surgical procedure) driven by growing incidences of joint related disorders such as osteoarthritis aggravated by rapid ageing and lack of exercise besides altered lifestyles. Arthroplasty now accounts for ~44% of revenues as the company is tapping other therapies and procedures. The company has a pan-India presence with a network of 11 multi-specialty hospitals with an aggregate bed capacity of 2012 beds across India, especially in Tier I and Tier II cities. The company also runs outpatient clinics in India and abroad.

Market leader in fast growing joint replacement surgeries

Rapid ageing, greater life expectancy, lack of exercise as well as altered lifestyles are driving the incidence of osteoarthritis among Indians. Knee replacement surgery in India has been growing in double digits over the years. It is expected to emerge as the fourth most common cause of physical disability in India in the next decade. Shalby is a market leader in the procedure of joint replacement surgeries (source: F&S Report). The company has ~15% market share of all joint replacement surgeries conducted by organised private corporate hospitals in India. It has performed more than one lakh joint replacements till date. Led by renowned orthopaedic surgeon Dr Shah, the company has achieved strong brand recall in joint replacement surgeries, especially in Gujarat.

Leverage free balance sheet despite continuous expansion

Shalby owns a debt free balance sheet, a unique feature among hospital chains, which are on expansion mode. Despite continuous expansion in the past decade, the company has remained debt free owing to its asset light model approach and persistent free cash flow generation from legacy hospitals in Ahmedabad owing to brand stickiness.

Valuation & Outlook

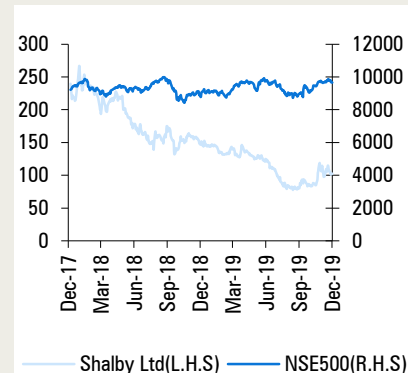
The company has a strong brand equity mainly in Gujarat. Shalby has witnessed significant growth in volumes across its hospital network. Arthroplasty continues to dominate its revenue pie although it has been witnessing greater traction in other specialities as well. Leverage free balance sheet, strong margins and continuous generation of free cash flows also provide additional cushion in a capex heavy industry. However, margins are still skewed towards the top two hospitals. We initiate Shalby with HOLD recommendation mainly due to high concentration risk. We value the company on an SOTP basis by valuing hospitals (above six years) at 8x FY22E EV/EBITDA and hospitals (below six years) at 1x FY22E EV/sales. Hence, we arrive at our SOTP target price of ₹ 110. Ramp up in below six years hospitals will be key to watch for re-rating of stock.



Particulars

Particular	Amount
Market Capitalisation	₹ 1109 crore
Debt (FY19)	₹ 71 crore
Cash (FY19)	₹ 75 crore
EV	₹ 1105 crore
52 week H/L	155/75
Equity capital	₹ 108.0 crore
Face value	₹ 10
MF Holding (%)	0.00%
FII Holding (%)	5.41%

Price Performance Graph



Research Analyst

Siddhant Khandekar
siddhant.khandekar@icicisecurities.com

Mitesh Shah, CFA
mitesh.shah@icicisecurities.com

Sudarshan Agarwal
sudarshan.agarwal@icicisecurities.com

Key Financial Summary (₹ crore)

₹ Crore	FY19	FY20E	FY21E	FY22E	CAGR FY19-22 (%)
Revenues	461.0	518.3	573.3	636.3	11.3
EBITDA	82.2	98.7	114.9	134.0	17.7
EBITDA margins (%)	17.8	19.0	20.0	21.1	
Net Profit	31.7	47.5	58.8	73.0	32.1
EPS (₹)	2.9	4.4	5.4	6.8	
PE (x)	35.0	23.3	18.9	15.2	
M.Cap/ Revenues (x)	2.4	2.1	1.9	1.7	
EV to EBITDA (x)	13.5	10.8	9.0	7.6	
RoCE (%)	6.8	7.9	9.1	10.5	
ROE	4.1	5.8	6.8	7.9	

Source: ICICI Direct Research; Company

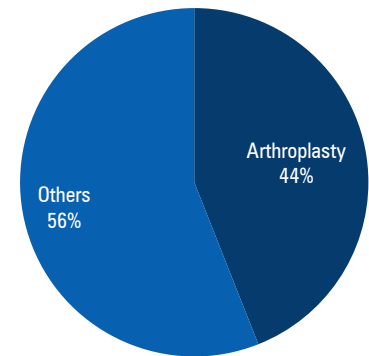
Company Background

Healthcare services under the brand 'Shalby' commenced in 1994 while actual incorporation happened in 2004. Led by Dr Vikram Shah, an orthopaedic surgeon with more than 25 years of professional experience, the company has grown from a single hospital to a chain of multi-specialty hospitals. Its first hospital, Vijay Shalby was established by Shalby Orthopaedic Hospital and Research Centre, one of the group entities, in 1994. Subsequently, SG Shalby and Vrundavan Shalby commenced operations in 2007 and 2011, respectively. From four hospitals in April 2012, the company has grown to 11 hospitals.

The company also has a network of 37 outpatient clinics across 11 states in India and abroad, which act as a separate medium to tap new patients. Internationally also, it has established a strong presence in Africa, Bangladesh and Cambodia with multiple out-patient clinics extending expert healthcare and wellness services to these countries.

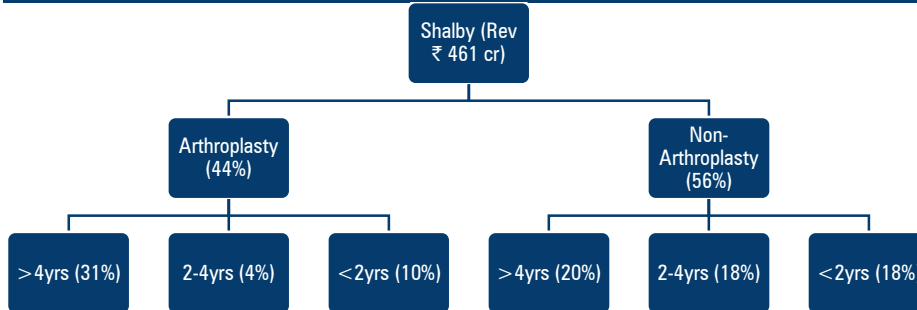
The existing revenue mix between Arthroplasty and other specialties is at ~44:56 (FY19). The total bed capacity was at 2012 with operational beds at 1200. The company employs over 3000 employees including more than 500 doctors. Shalby registered a blended ARPOB of ₹ 31235 and ALOS of 2.69 days (with day care procedures) in FY19.

Arthroplasty - ~44% of revenues



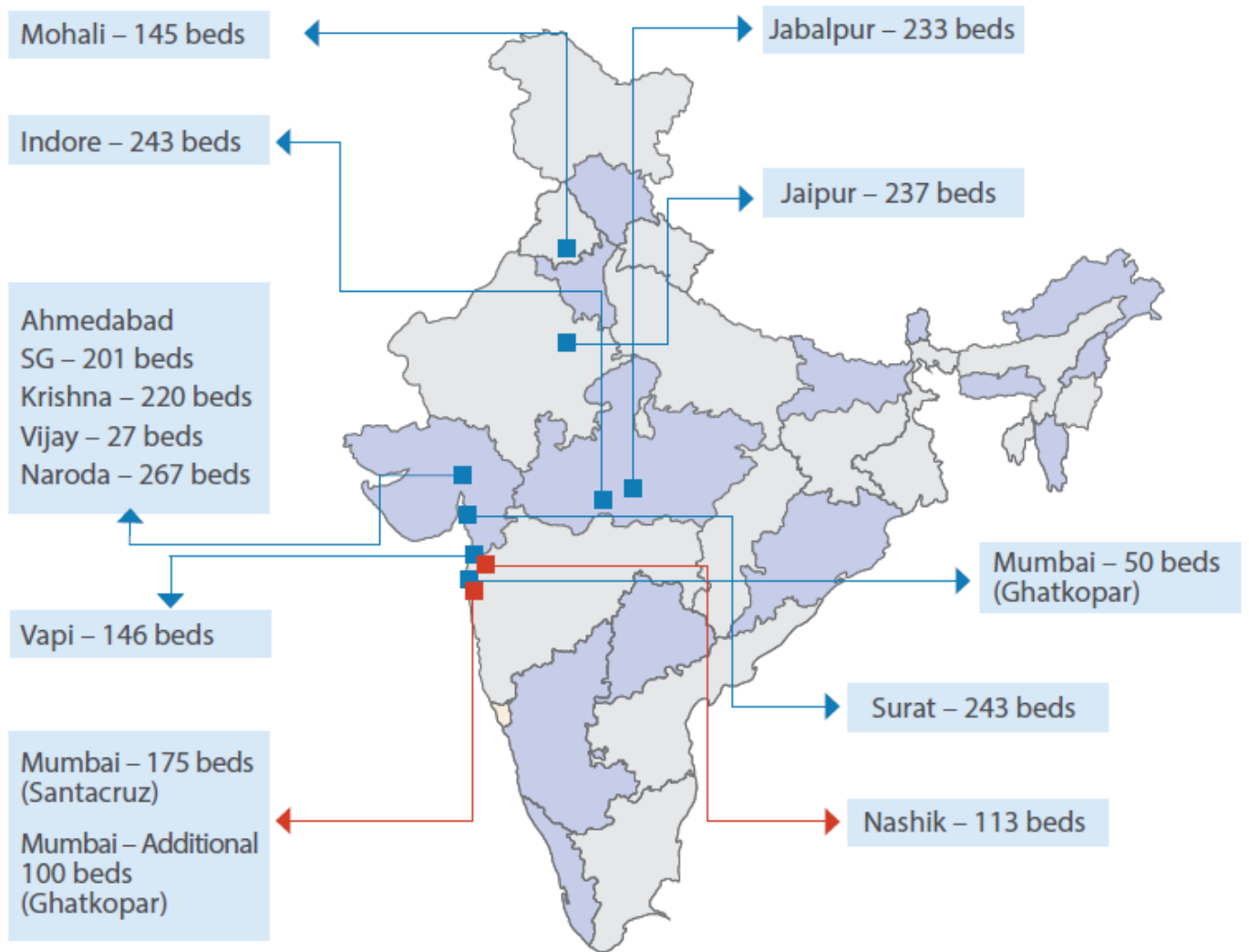
Source: ICICI Direct Research; Company

Exhibit 1: Revenue mix (FY19)



Source: Company, ICICI Direct Research

Exhibit 2: Network of hospitals in India with bed capacity



■ Hospital (operational) ■ Hospital (upcoming)

Map not to scale

Source: ICICI Direct Research, Company

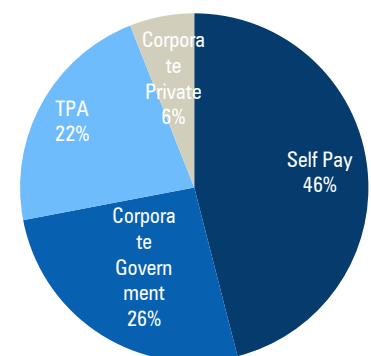
Shalby’s revenue models

Operate and manage (revenue sharing model) - Under this arrangement, the company operates and manages third-party hospitals on a revenue sharing basis without any minimum guarantee/fixed rental, by adopting an asset-light model. While the land is owned by the third-party, the option is available for investment in building, medical equipment, furniture, fixtures, and other fittings in the hospital. The company meets the staffing requirements through its own employee base.

Hospital management contracts - Under this arrangement, Shalby enters into hospital management contracts with third-party hospitals where it is paid a management fee by the concerned hospital. It provides all the expertise and technical know-how for operating the hospital.

Outpatient clinics - Besides operating hospitals, the company offers services to patients through outpatient clinics.

Payee profile



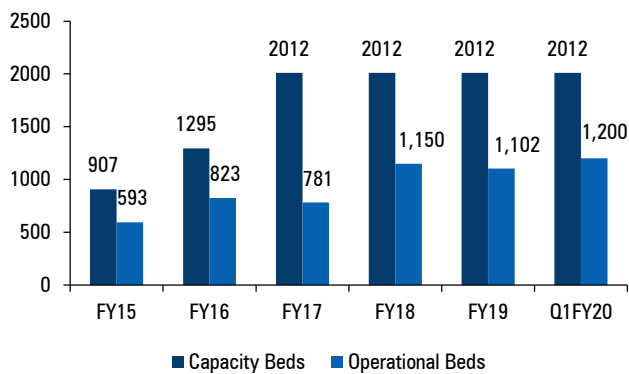
Source: ICICI Direct Research, Company

Exhibit 3: Timeline

Years	Events
2007	Established and commenced operations of first multi-specialty hospital, SG Shalby, at Sarkhej Gandhinagar Highway in Ahmedabad
2013	Krishna Shalby commences operations
2013	Shalby Vapi commences operations
2015	Shalby Jabalpur commences operations
2016	Shalby Indore commences operations
2016	Executed a memorandum of understanding with ZH Private Limited to manage and operate Zynova Shalby
2016	Executed an Operation and Management (O&M) agreement with Kamesh Hospital to commence operations of Shalby Mohali
2017	Entered into an agreement with Bait Al Batterjee Medical Company LLC, Dubai, to provide outpatient orthopaedics and spine surgeries
2017	Shalby Jaipur, Naroda, Surat, Mohali commences operations
2017	Publicly listed through initial public offering (IPO) on BSE & NSE

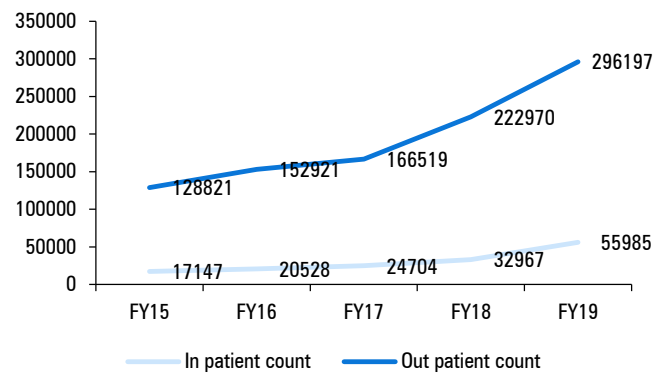
Source: ICICI Direct Research, Company

Exhibit 4: Total & operational beds



Source: ICICI Direct Research, Company

Exhibit 5: In patients & out patients count



Source: ICICI Direct Research, Company

Investment Rationale

Market leader in fast growing joint replacement surgeries

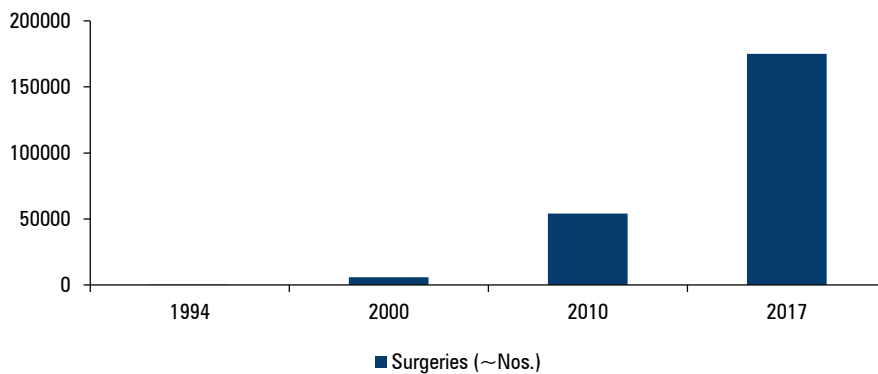
Rapid ageing, greater life expectancy, lack of exercise as well as altered lifestyles are driving the incidence of osteoarthritis among Indians. Osteoarthritis is the most frequent joint disease with a prevalence of ~30% in India. Knee replacement surgeries in India grew at ~30% CAGR since inception of the company till 2017. They are expected to emerge as the fourth most common cause of physical disability in India in the next decade. Having performed 100,000+ joint replacements since 2007, the company has been a market leader in the area of joint replacement surgeries with ~15% market share among organised private corporate hospitals in India.

Led by renowned orthopaedic surgeon Dr Shah, the company has achieved strong brand recall in Gujarat, especially in joint replacement surgeries. Among other unique aspects associated with the company, the most prominent could be the '0 technique' procedure, which reduced surgical time from 150 minutes to 25 minutes and a patient's hospital stay from 15 to three days. Through 48 outpatient clinics, it offers orthopaedic consultation services to patients.

Rapid ageing, greater life expectancy, lack of exercise as well as altered lifestyles are driving the incidence of osteoarthritis among Indians

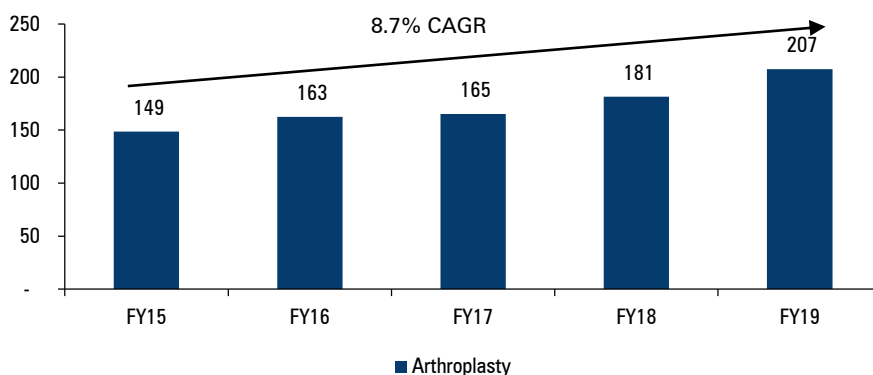
Led by renowned orthopaedic surgeon Dr Shah, the company has achieved strong brand recall in Gujarat, especially in joint replacement surgeries

Exhibit 6: Knee replacement surgeries grow at ~30% CAGR over past three decades



Source: ICICI Direct Research, Company Annual Report FY19

Exhibit 7: Persistent growth in Shalby's arthroplasty segment despite high base



Source: ICICI Direct Research, Company

Expanding in other specialities to de-risk

After achieving critical mass in arthroplasty, the company has been rapidly expanding in other specialties, especially in new hospitals. In the last few years, Shalby has forayed into tertiary and quaternary specialties like cardiology, neurology, oncology, bariatric, liver & renal transplants, etc. A case in point is Jabalpur hospital, which commenced operations in 2014 with a primary focus on cardiology. Similarly, Shalby Indore provides advanced radiation therapy for cancer treatment. The company has engaged the services of 75 doctors with specialisation in the area of orthopaedics and 244 doctors with specialisations in other specialties. Further, in line with its strategy to further strengthen its capabilities in non-orthopaedic specialties, it offers advance post-graduate diplomas in a range of disciplines including non-invasive cardiology, dialysis management, oncology and sports medicine through Shalby Academy. Share of arthroplasty has come down from 97% in FY08 to 44% in FY19.

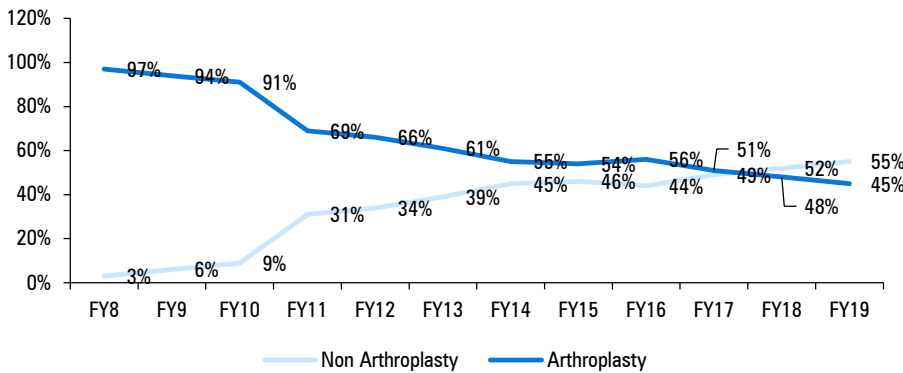
In the last few years, the company has forayed into tertiary and quaternary specialties like cardiology, neurology, oncology, bariatric, liver and renal transplants, etc

Share of arthroplasty has come down from 97% in FY08 to 44% in FY19

The shift is visible, especially in <6 years hospitals where the non-arthroplasty pie is higher than the arthroplasty pie. Thus, hospitals in Indore, Jabalpur, Jaipur, Naroda, Surat and Mohali are running on a multi-specialty model.

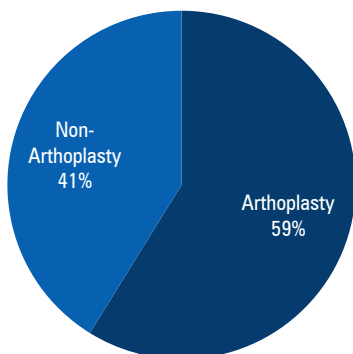
While arthroplasty will continue to remain the cash cow for the company, it can utilise the significant cash flows for expansion in other specialties without additional leverage on the balance sheet.

Exhibit 8: Arthroplasty vs. non-arthroplasty



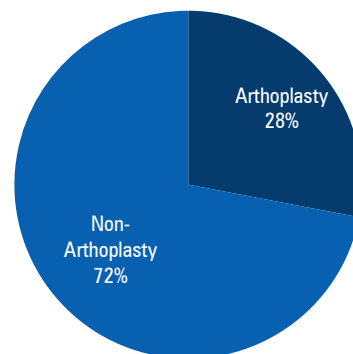
Source: ICICI Direct Research, Company

Exhibit 9: Arthroplasty vs. non-arthroplasty (6+ years)



Source: ICICI Direct Research, Company

Exhibit 10: Arthroplasty vs. non arthroplasty (<6 years)



Source: ICICI Direct Research, Company

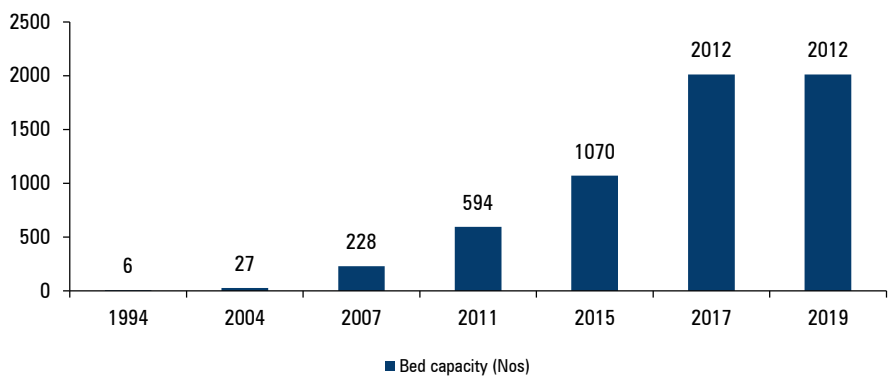
Leverage free balance sheet despite continuous expansion

Shalby is one of the rare hospital chains, which has a debt free balance sheet. Despite aggressive expansion in the past decade, the company remained debt free owing to its assets light model approach and continuous strong free cash flow generation from legacy hospitals in Ahmedabad owing to its strong brand recall. As per the management, the company’s per bed cost is ₹ 40-50 lakh against capex of ₹ 75+ lakh at other corporate hospitals while operational cost is 10-15% lower than industry standard. The company has utilised ₹ 388 crore (out of ₹ 480 crore) from IPO proceed for repayment of loans and purchase of equipment. As a matter of policy, the company has confined itself to mid-tier hospitals (~200 beds), which are relatively easy to manage.

Shalby is one of the rare hospital chains, which has a debt free balance sheet despite aggressive expansion in the past decade

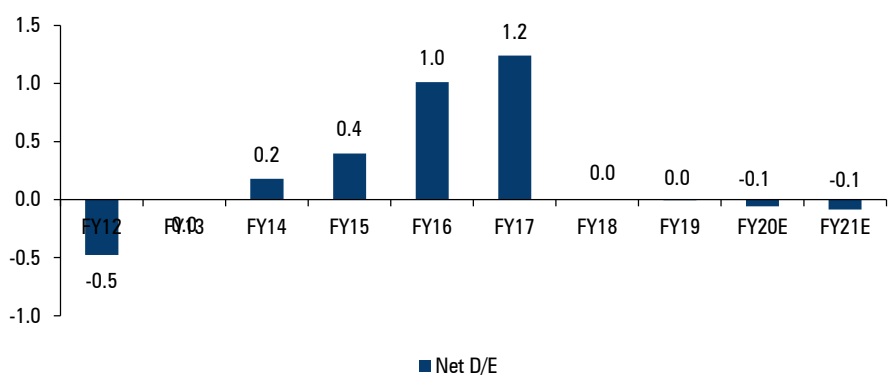
Another peculiar aspect is the design and arrangement of the hospital structure that accommodates 30%+ higher beds on every floor. Similarly, against the industry average of four operation theatres (OTs) for 200 beds, the company’s hospital design accommodates eight OTs for 200 beds, which allows Shalby to perform more surgeries per day.

Exhibit 11: Shalby adds seven hospitals in past decade



Source: ICICI Direct Research, Company

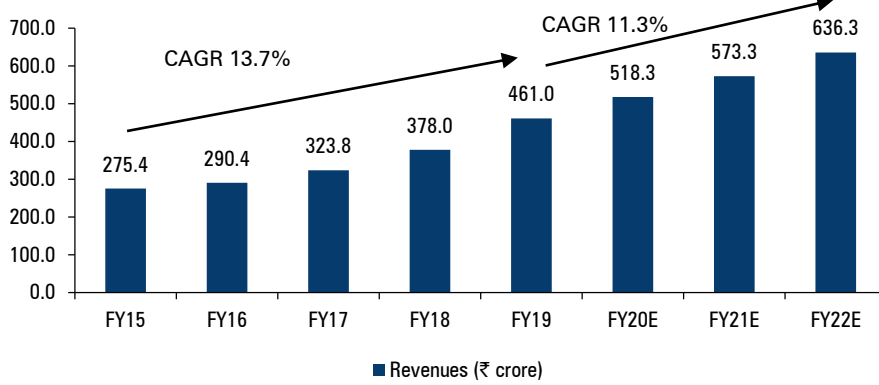
Exhibit 12: Shalby’s debt free balance sheet



Source: ICICI Direct Research, Company

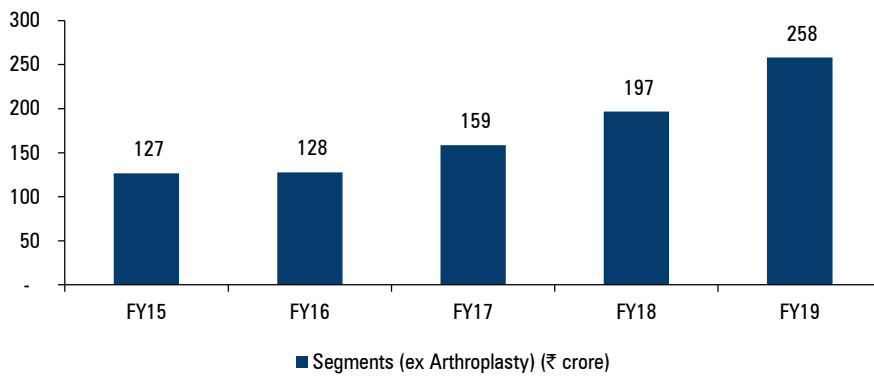
Key financials

Exhibit 13: Revenues expected to grow at 11% CAGR over FY19-22E



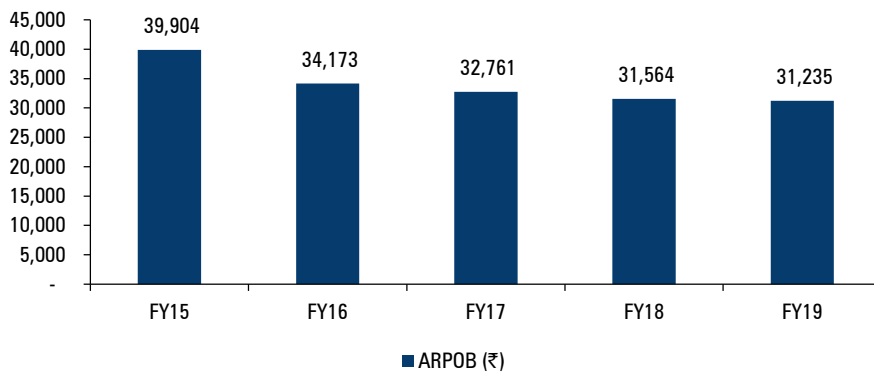
Source: ICICI Direct Research, Company

Exhibit 14: Strong growth in non arthroplasty segments (19.5% CAGR over 2015-19)



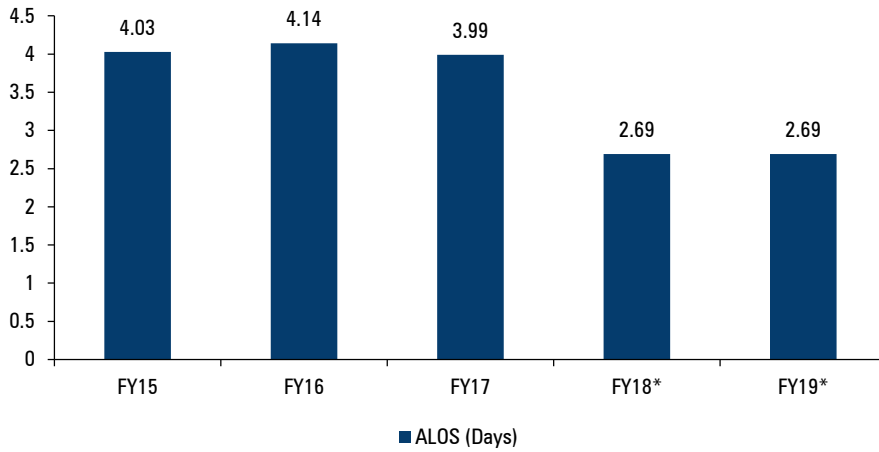
Source: ICICI Direct Research, Company

Exhibit 15: Decline in ARPOB due to change in case mix



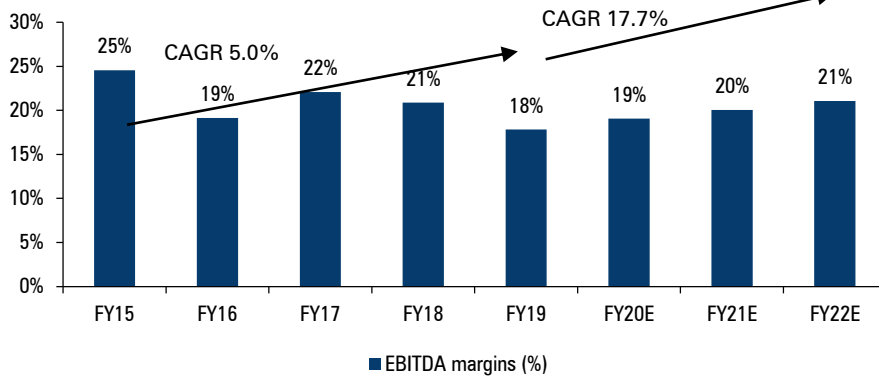
Source: ICICI Direct Research, Company

Exhibit 16: ALOS (days)



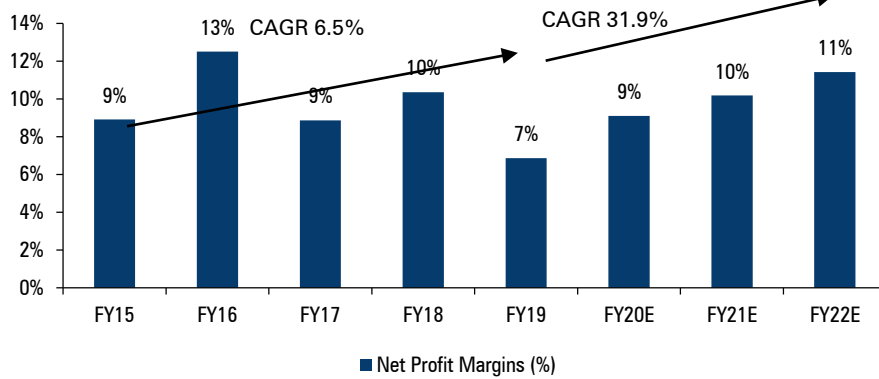
Source: ICICI Direct Research; Company; *included day-care procedures

Exhibit 17: EBITDA likely to grow at 18% CAGR over FY19-22E



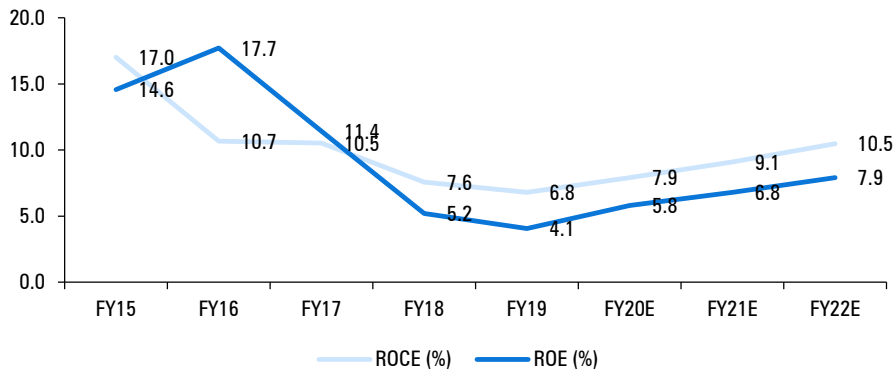
Source: ICICI Direct Research, Company

Exhibit 18: Net profit expected to grow at 32% CAGR over FY19-22E



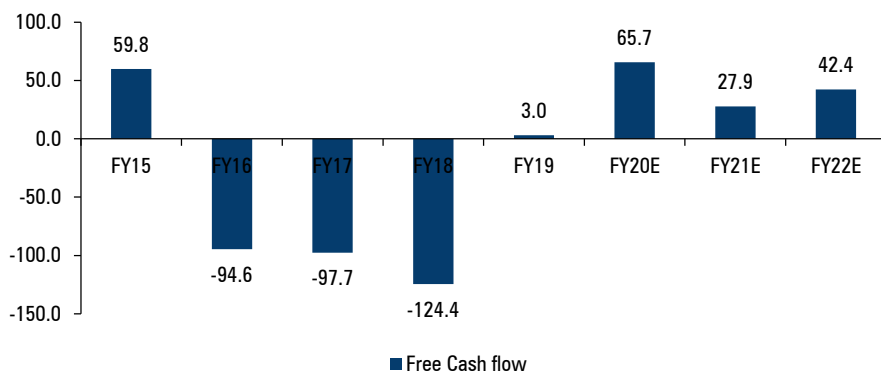
Source: ICICI Direct Research, Company

Exhibit 19: Return Ratios



Source: ICICI Direct Research, Company

Exhibit 20: Expects strong free cash flow generation



Source: ICICI Direct Research, Company

Valuation & Outlook

We expect revenues, EBITDA and PAT to grow at a CAGR of 11%, 17% and 24% in FY19-22E, respectively. Revenues are expected to be driven by an increase in occupancy ratio in less than six years of hospitals and strong growth in the non arthroplasty segment. Margins are expected to be driven by improvement in occupancy ratios and operational efficiency in new hospitals.

The company has a strong brand equity mainly in Gujarat. Shalby has witnessed significant growth in volumes across its hospital network. Arthroplasty continues to dominate its revenue pie although it has been witnessing greater traction in other specialities as well. Leverage free balance sheet, strong margins and continuous generation of free cash flows also provide additional cushion in a capex heavy industry. However, margins are still skewed towards the top two hospitals. We initiate Shalby with HOLD recommendation mainly due to high concentration risk. We value the company on an SOTP basis by valuing hospitals (above six years) at 8x FY22E EV/EBITDA and hospitals (below six years) at 1x FY22E EV/sales. Hence, we arrive at our SOTP target price of ₹ 110. Ramp up in below six years hospitals will be key to watch for re-rating of stock.

We expect revenues, EBITDA and PAT to grow at a CAGR of 11%, 17% and 24% in FY19-22E, respectively

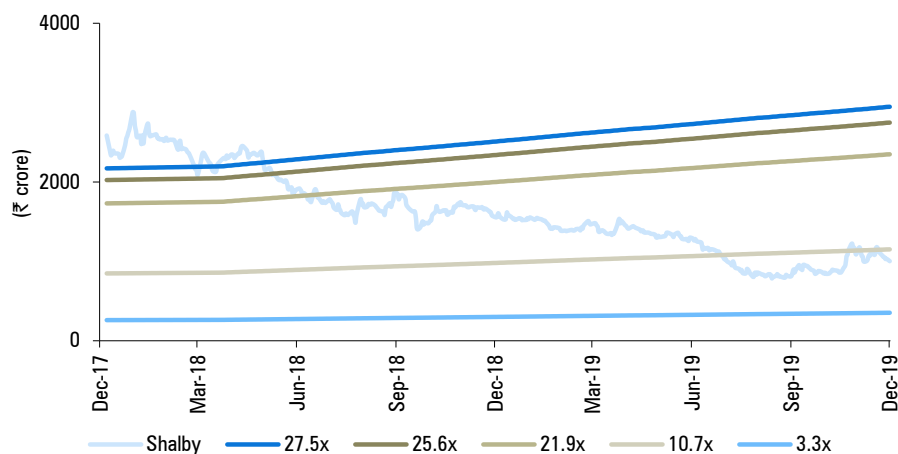
We value the company on an SOTP basis by valuing hospitals (above six years) at 8x FY22E EV/EBITDA and hospitals (below six years) at 1x FY22E EV/sales. Hence, we arrive at our SOTP target price of ₹ 110.

Exhibit 21: Valuation Table

Particulars	Valuation Matrix	Multiple (x)	EV (₹ cr)
Above 6 years	EV/EBITDA	8.0	751
below 6 years	EV/Sales	1.0	364
EV			1,115
Net Debt FY22E (₹ cr)			-89.4
Minority Interest			0.1
Targeted MCap (₹ cr)			1,205
No of shares (cr)			10.8
Per Share Value (₹)			110

Source: ICICI Direct Research

Exhibit 22: One-year forward EV/EBITDA



Source: ICICI Direct Research, Bloomberg

Key concerns

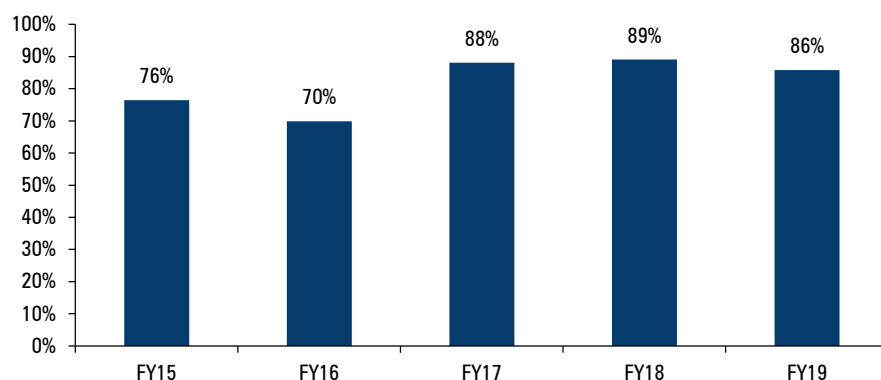
Changing healthcare regulations in India

According to the order dated August 16, 2017, by the National Pharmaceuticals Pricing Authority (NPPA) a cap has been introduced in the pricing of orthopaedic surgical procedures using knee implants performed by hospitals and clinics, among others. As a result, the charges in relation to knee replacement surgeries may have to be reduced in line with the requirements set out in the abovementioned order. This may, in turn, adversely impact the company's margins and profitability. Furthermore, any such passing of a regulation could have an adverse impact on the company's business and financial performance.

High operational profit concentration from four hospitals

Four hospitals, with a presence above six years, contributed 86% to FY19 EBITDA. This includes flagship hospitals SG Shalby and Krishna Shalby. Thus, the company is still exposed to concentration risk. Any adverse impact in any of these legacy hospitals, especially the two flagship assets, could drag down the overall company performance.

Exhibit 23: EBITDA contribution from four Hospitals



Source: Company, ICICI Direct Research

Significant dependence on key man to run business

Dr Vikram Shah's reputation has been the single most driving force in the company's success. Apart from his dexterity in the field of arthroplasty surgeries, the company is also significantly dependent on him for strategic directions and managing business affairs. Hence, there remains a key man focus risk.

Financial Summary

Exhibit 24: Profit and loss statement					₹ crore
Year-end March	FY19	FY20E	FY21E	FY22E	
Total Operating Income	461.0	518.3	573.3	636.3	
Growth (%)	21.9	12.5	10.6	11.0	
Raw Material Expenses	41.2	46.3	51.2	56.9	
Gross Profit	419.8	472.0	522.1	579.4	
Gross Profit Margins (%)	91.1	91.1	91.1	91.1	
Employee Expenses	64.6	72.6	80.3	85.9	
Other Expenditure	273.0	300.6	326.8	359.5	
Total Operating Expenditure	378.8	419.6	458.4	502.3	
EBITDA	82.2	98.7	114.9	134.0	
Growth (%)	4.1	20.2	16.4	16.6	
Interest	8.3	7.8	7.8	7.8	
Depreciation	33.2	35.3	36.2	37.1	
Other Income	9.6	7.8	7.5	8.3	
PBT before Exceptional	50.4	63.4	78.4	97.3	
Less: Exceptional Items	0.0	0.0	0.0	0.0	
PBT after Exceptional Items	50.4	63.4	78.4	97.3	
Total Tax	18.7	15.8	19.6	24.3	
PAT before MI	31.7	47.5	58.8	73.0	
PAT	31.7	47.5	58.8	73.0	
Growth (%)	-19.2	50.2	23.6	24.2	
EPS (Adjusted)	2.9	4.4	5.4	6.8	

Source: ICICI Direct Research

Exhibit 25: Cash Flow Statement					₹ crore
Year-end March	FY19	FY20E	FY21E	FY22E	
Profit/(Loss) after taxation	41.0	47.5	58.8	73.0	
Add: Depreciation & Amortiza	33.2	35.3	36.2	37.1	
Net Increase in Current Asset	-59.7	-14.0	-13.8	-15.6	
Net Increase in Current Liabili	17.7	9.0	8.8	10.0	
Others	2.2	7.8	7.8	7.8	
CF from Operating activ	34.3	85.6	97.8	112.3	
Investments	-12.3	0.0	0.0	0.0	
(Purchase)/Sale of Fixed Ass	-31.3	-20.0	-45.0	-70.0	
Others	8.9	-4.6	-5.1	-5.6	
CF from Investing activi	-34.8	-24.6	-50.1	-75.6	
Inc / (Dec) in Equity Capital	0.0	0.0	0.0	0.0	
Dividend & Dividend tax	0.0	-9.4	-11.9	-15.1	
Other	-40.8	-7.8	-7.8	-7.8	
CF from Financing activ	-40.8	-17.2	-19.7	-22.9	
Net Cash Flow	-41.3	43.8	28.0	13.8	
Cash and Cash Equivalent	115.9	74.6	118.4	146.4	
Cash	74.6	118.4	146.4	160.2	
Free Cash Flow	3.0	65.6	52.8	42.3	

Source: ICICI Direct Research

Exhibit 26: Balance Sheet					₹ crore
Year-end March	FY19	FY20E	FY21E	FY22E	
Equity Capital	108.0	108.0	108.0	108.0	
Reserve and Surplus	671.8	709.9	756.8	814.7	
Total Shareholders funds	779.8	817.9	864.8	922.7	
Total Debt	70.8	70.8	70.8	70.8	
Deferred Tax Liability	9.3	9.5	9.7	9.9	
Minority Interest	0.1	0.1	0.1	0.1	
Other Non Current Liabilities	14.0	14.3	14.6	14.9	
Source of Funds	874.0	912.6	959.9	1,018.3	
Gross Block - Fixed Assets	766.1	786.1	806.1	826.1	
Accumulated Depreciation	74.3	109.6	145.8	183.0	
Net Block	691.9	676.5	660.3	643.2	
Capital WIP	3.4	3.4	28.4	78.4	
Fixed Assets	695.2	679.9	688.7	721.5	
Investments	10.9	10.9	10.9	10.9	
Other non-Current Assets	39.2	43.1	47.4	52.2	
Deferred Tax Assets	11.3	12.5	13.7	15.1	
Inventory	12.8	14.4	15.9	17.7	
Debtors	81.4	91.5	101.2	112.3	
Loans and Advances	23.0	25.3	27.9	30.6	
Cash	74.6	118.4	146.4	160.2	
Total Current Assets	191.8	249.6	291.4	320.8	
Creditors	62.0	69.7	77.1	85.6	
Provisions	0.7	0.7	0.8	0.9	
Other Current Liabilities	11.8	13.0	14.3	15.7	
Total Current Liabilities	74.5	83.4	92.2	102.2	
Net Current Assets	117.3	166.2	199.2	218.6	
Application of Funds	874.0	912.6	959.9	1,018.3	

Source: ICICI Direct Research

Exhibit 27: Ratio Analysis					₹ crore
Year-end March	FY19	FY20E	FY21E	FY22E	
Per share data (₹)					
Reported EPS	2.9	4.4	5.4	6.8	
Cash EPS	2.3	3.5	4.3	5.4	
BV per share	72.2	75.7	80.1	85.4	
Cash per Share	6.9	11.0	13.6	14.8	
Dividend per share	0.6	0.9	1.1	1.4	
Operating Ratios (%)					
Gross Profit Margins	91.1	91.1	91.1	91.1	
EBITDA margins	17.8	19.0	20.0	21.1	
PAT Margins	6.9	9.2	10.3	11.5	
Cash Conversion Cycle	25.5	25.5	25.5	25.5	
Asset Turnover	0.6	0.7	0.7	0.8	
EBITDA conversion Rate	41.8	86.7	85.1	83.8	
Return Ratios (%)					
RoE	4.1	5.8	6.8	7.9	
RoCE	6.8	7.9	9.1	10.5	
RoIC	6.2	8.1	10.2	12.7	
Valuation Ratios (x)					
P/E	35.0	23.3	18.9	15.2	
EV / EBITDA	13.5	10.8	9.0	7.6	
EV / Net Sales	2.4	2.0	1.8	1.6	
Market Cap / Sales	2.4	2.1	1.9	1.7	
Price to Book Value	1.4	1.4	1.3	1.2	
Solvency Ratios					
Debt / EBITDA	0.9	0.7	0.6	0.5	
Debt / Equity	0.1	0.1	0.1	0.1	
Current Ratio	1.6	1.6	1.6	1.6	

Source: ICICI Direct Research

RATING RATIONALE

ICICI Direct endeavours to provide objective opinions and recommendations. ICICI Direct assigns ratings to its stocks according to their notional target price vs. current market price and then categorises them as Buy, Hold, Reduce and Sell. The performance horizon is two years unless specified and the notional target price is defined as the analysts' valuation for a stock

Buy: >15%;

Hold: -5% to 15%;

Reduce: -5% to -15%;

Sell: <-15%



Pankaj Pandey

Head – Research

pankaj.pandey@icicisecurities.com

ICICI Direct Research Desk,
ICICI Securities Limited,
1st Floor, Akruvi Trade Centre,
Road No 7, MIDC,
Andheri (East)
Mumbai – 400 093
research@icicidirect.com

ANALYST CERTIFICATION

We /I, Siddhant Khandekar, Inter CA, Mitesh Shah, CFA, Research Analysts, authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report. It is also confirmed that above mentioned Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months and do not serve as an officer, director or employee of the companies mentioned in the report.

Terms & conditions and other disclosures:

ICICI Securities Limited (ICICI Securities) is a full-service, integrated investment banking and is, inter alia, engaged in the business of stock brokering and distribution of financial products. ICICI Securities Limited is a SEBI registered Research Analyst with SEBI Registration Number – INH000000990. ICICI Securities Limited SEBI Registration is INZ000183631 for stock broker. ICICI Securities is a subsidiary of ICICI Bank which is India's largest private sector bank and has its various subsidiaries engaged in businesses of housing finance, asset management, life insurance, general insurance, venture capital fund management, etc. ("associates"), the details in respect of which are available on www.icicibank.com

ICICI Securities is one of the leading merchant bankers/ underwriters of securities and participate in virtually all securities trading markets in India. We and our associates might have investment banking and other business relationship with a significant percentage of companies covered by our Investment Research Department. ICICI Securities generally prohibits its analysts, persons reporting to analysts and their relatives from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover.

Recommendation in reports based on technical and derivative analysis centre on studying charts of a stock's price movement, outstanding positions, trading volume etc as opposed to focusing on a company's fundamentals and, as such, may not match with the recommendation in fundamental reports. Investors may visit icidirect.com to view the Fundamental and Technical Research Reports.

Our proprietary trading and investment businesses may make investment decisions that are inconsistent with the recommendations expressed herein.

ICICI Securities Limited has two independent equity research groups: Institutional Research and Retail Research. This report has been prepared by the Retail Research. The views and opinions expressed in this document may or may not match or may be contrary with the views, estimates, rating, target price of the Institutional Research.

The information and opinions in this report have been prepared by ICICI Securities and are subject to change without any notice. The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of ICICI Securities. While we would endeavour to update the information herein on a reasonable basis, ICICI Securities is under no obligation to update or keep the information current. Also, there may be regulatory, compliance or other reasons that may prevent ICICI Securities from doing so. Non-rated securities indicate that rating on a particular security has been suspended temporarily and such suspension is in compliance with applicable regulations and/or ICICI Securities policies, in circumstances where ICICI Securities might be acting in an advisory capacity to this company, or in certain other circumstances.

This report is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed. This report and information herein is solely for informational purpose and shall not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. ICICI Securities will not treat recipients as customers by virtue of their receiving this report. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. The recipient should independently evaluate the investment risks. The value and return on investment may vary because of changes in interest rates, foreign exchange rates or any other reason. ICICI Securities accepts no liabilities whatsoever for any loss or damage of any kind arising out of the use of this report. Past performance is not necessarily a guide to future performance. Investors are advised to see Risk Disclosure Document to understand the risks associated before investing in the securities markets. Actual results may differ materially from those set forth in projections. Forward-looking statements are not predictions and may be subject to change without notice.

ICICI Securities or its associates might have managed or co-managed public offering of securities for the subject company or might have been mandated by the subject company for any other assignment in the past twelve months.

ICICI Securities or its associates might have received any compensation from the companies mentioned in the report during the period preceding twelve months from the date of this report for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory service in a merger or specific transaction.

ICICI Securities encourages independence in research report preparation and strives to minimize conflict in preparation of research report. ICICI Securities or its associates or its analysts did not receive any compensation or other benefits from the companies mentioned in the report or third party in connection with preparation of the research report. Accordingly, neither ICICI Securities nor Research Analysts and their relatives have any material conflict of interest at the time of publication of this report.

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

ICICI Securities or its subsidiaries collectively or Research Analysts or their relatives do not own 1% or more of the equity securities of the Company mentioned in the report as of the last day of the month preceding the publication of the research report.

Since associates of ICICI Securities are engaged in various financial service businesses, they might have financial interests or beneficial ownership in various companies including the subject company/companies mentioned in this report.

ICICI Securities may have issued other reports that are inconsistent with and reach different conclusion from the information presented in this report.

Neither the Research Analysts nor ICICI Securities have been engaged in market making activity for the companies mentioned in the report.

We submit that no material disciplinary action has been taken on ICICI Securities by any Regulatory Authority impacting Equity Research Analysis activities.

This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject ICICI Securities and affiliates to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction.