Thyrocare Technologies | BUY

Focus on scale + concentrated offerings = competitive advantage

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Thyrocare is one of India's leading and lowest-cost clinical laboratory testing service providers; we expect it to be a key beneficiary of increasing health awareness and rising incomes. Unlike large peers (Dr Lal, Metropolis and SRL), Thyrocare is highly focused on a limited menu of biochemistry tests that are conducted at its highly automated central lab, which drives economies of scale. Furthermore, Thyrocare's focus on building a low-cost, scalable PET-CT scanning franchise (Nueclear) is expected to create value for investors in the long term. Overall, strong branding initiatives, an asset-light model and high growth plans in the expanding organised market should help it deliver a FY16–20 revenue/EBITDA/PAT CAGR of 25%/27%/29%, respectively. We initiate coverage on Thyrocare with a BUY rating and a DCF-based Mar'18 TP of Rs 880.

- **Asset-light model with centralised testing drives high cost-efficiency:** Thyrocare's franchisee-based model allows it to expand rapidly with minimal capital outlay and overheads; also its centralised testing at limited number of highly automated labs that have long-term arrangements with equipment and reagent suppliers helps it achieve economies of scale. As a result, Thyrocare is the cost leader in the organised diagnostics space with best operating margins among peers.

- **Focus on lucrative preventive healthcare testing franchise—Aarogyam:** Thyrocare is set to benefit from rising incomes, increasing medical awareness and preference for preventive healthcare; thus, it is aggressively focusing on growing the Aarogyam franchise—its bouquet of preventive healthcare and wellness tests—via strong promotional activities to capture a significant share of the lucrative preventive healthcare segment. Aarogyam currently accounts for c.53% of revenues and we expect it to account for c.65% of revenues by 2020.

- **Imaging business rollout—a low-cost expansion strategy:** Nueclear's strategy is to create a scalable PET-CT imaging business with prices significantly lower than incumbents through captive sourcing of FluoroDeoxyGlucose (FDG) produced by its own cyclotrons. The company currently operates seven PET-CT scanners and one cyclotron and we expect it to expand the network to 32 scanners by FY2020 and 60 scanners by FY2023, with 2 additional cyclotrons. Most of the incremental growth would be based on a partnership model, wherein Nueclear would provide the scanners, FDG and marketing support, while the partners would be in-charge of managing the centres. This would allow the company to focus on scaling up the business and generating volumes—the key to profitability.

- **Financials and valuation:** We expect Thyrocare to report strong revenue/EBITDA/PAT growth of 25%/27%/29%, respectively, over FY16-20, driven by strong growth in both diagnostics and imaging segments, while maintaining healthy EBITDA margins of 39-41%, resulting in RoIC improving from 20% to 33% over the period. We arrive at a DCF-based TP of Rs 880, implying a P/E of 41.9x on FY19E EPS.

Recommendation and Price Target	
Current Reco.	BUY
Previous Reco.	NR
Current Price Target (12M)	880
Upside/(Downside)	21.2%
Previous Price Target	-
Change	-

Key Data – THYROCAR IN	
Current Market Price	Rs726
Market cap (bn)	Rs39.0/US$0.6
Free Float	25%
Shares in issue (mn)	53.7
Diluted share (mn)	53.7
3-mon avg. daily val. (mn)	Rs23.8/US$0.0
52-week range	780/523
Sensex/Nifty	29,943/9,307
Rs/US$	64.3

Price Performance

%	1M	6M	12M
Absolute	3.4	11.3	-
Relative*	1.6	4.5	-

* To the BSE Sensex

Financial Summary					(Rs mn)
Y/E March	FY15A	FY16A	FY17E	FY18E	FY19E
Net Sales	1,830	2,410	3,019	3,762	4,681
Sales Growth (%)	22.0	31.7	25.3	24.6	24.4
EBITDA	724	935	1,171	1,464	1,883
EBITDA Margin (%)	39.6	38.8	38.8	38.9	40.2
Adjusted Net Profit	452	518	720	888	1,126
Diluted EPS (Rs.)	9.1	10.1	13.4	16.5	21.0
Diluted EPS Growth (%)	0.0	10.1	33.3	23.4	26.7
ROIC (%)	17.5	19.7	23.1	25.1	28.5
ROE (%)	16.4	16.1	18.8	21.0	23.7
P/E (x)	79.5	72.2	54.2	43.9	34.6
P/B (x)	13.0	10.2	9.7	8.7	7.8
EV/EBITDA (x)	53.4	40.8	32.6	26.1	20.2
Dividend Yield (%)	0.5	1.2	0.9	1.1	1.4

Source: Company data, JM Financial. Note: Valuations as of 25/Apr/2017

JM Financial Research is also available on: Bloomberg - JMFR <GO>, Thomson Publisher & Reuters S&P Capital IQ and FactSet

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

Large scale and asset-light model drives competitive advantage

We see Thyrocare as an attractive bet on the structurally growing and highly fragmented diagnostics space in India, where it is well-positioned to benefit from the shift to organised players, by building on its low-cost competency and strong branding initiatives. Thyrocare has a differentiated business model compared to large peers (Dr Lal, Metropolis and SRL) in the organised space; it has: a) a strong focus on a limited menu of preventive care and wellness tests, b) an asset-light franchisee-led model, and c) centralised, large-scale and cost-efficient testing. Additionally, Thyrocare is increasingly focusing on building a pan-India network of PET-CT scan centres under its imaging franchise (Nueclear), which would offer scans at one of the lowest rates in the industry. Thyrocare intends to replicate its success of the asset-light, franchise-based model in the pathology business to grow the Nueclear franchise, which if executed well, could create significant value for investors in the long term.

- Large franchise network drives volumes…: Thyrocare collects samples through a pan-India network of c. 2,900 Authorized Service Providers (ASPs) — comprising Thyrocare Aggregators (TAGs), Thyrocare Service Providers (TSPs) and Online Clients (OLCs), who in turn source these samples from over 25,000 Sample Giving Clients (SGCs) and c.18,000 Patient Giving Clients (PGCs) spread across India. In FY16, it has processed >11mn samples (>31,000 samples a day) and performed >168,000 diagnostic tests a day.

Thyrocare processed >11mn samples in FY16 and performed an average of 168,000 diagnostic tests per day

- …leads to cost competitiveness = price competitiveness: A hub-and-spoke model based on a single centralised processing lab (CPL) and peripheral regional processing labs (RPLs) with state-of-the-art testing equipment enables automation of testing process with limited human intervention that drives economies of scale and price competitiveness vis-à-vis competitors. Furthermore, an asset-light, franchisee-based model, supported by a pan-India network of collection centres, has allowed it to expand presence rapidly with limited capital outlay.

Maintaining cost competitiveness—key differentiator to drive volumes

- Poised to benefit from increasing wellness awareness: Thyrocare is set to benefit from increasing incomes, rising medical awareness and preference for preventive healthcare. It is concentrating on marketing the Aarogyam brand of preventive and wellness tests to referring doctors and individual customers and routinely sets up health camps to spread awareness of lifestyle-related diseases and benefits of undergoing periodic health-checks amongst people. Thyrocare's branding initiatives coupled with its low-cost quality-driven testing will help it sustain its high-growth trajectory, as it captures share from the unorganised players in the c.Rs 500bn under-penetrated and expanding diagnostics market.

Focused on tapping the rising awareness of lifestyle diseases and the benefits of preventive healthcare

- Strong expansion plans for Nueclear: Nueclear's strategy is to create a pan-India imaging business offering PET-CT scans at the lowest price in the industry, as a result of using FDG produced by its own cyclotrons. As of FY16, there were only 15 medical cyclotrons with licenses in India. The company is planning to expand this business via installation of two additional cyclotrons that will cater to an expanded network of 60 PET-CT scan centres over the medium term.

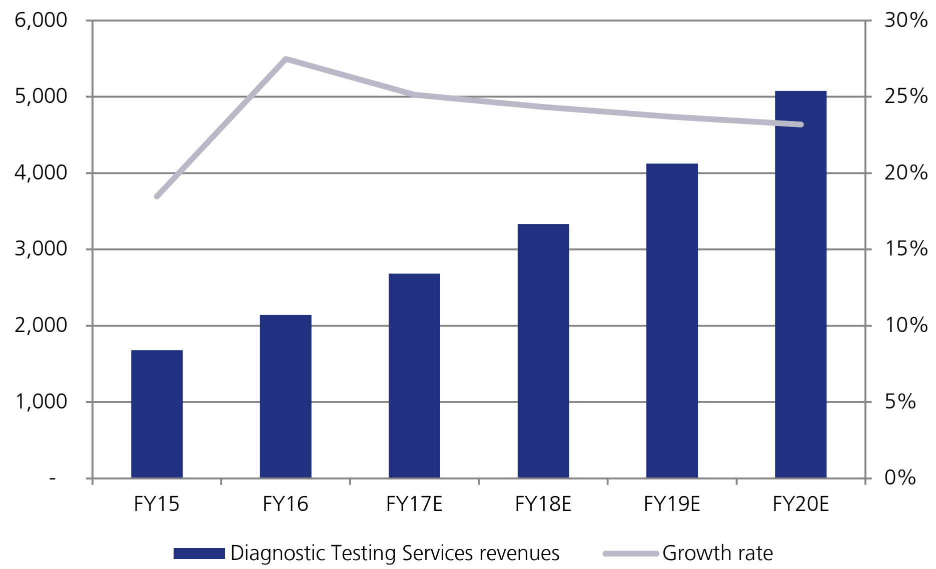
Expansion of imaging business—an additional growth lever

- Robust financial metrics: Thyrocare's Revenue, EBITDA and PAT are expected to increase at a CAGR of 25%, 27% and 29%, respectively, over FY16-FY20, driven by rapid expansion through an asset-light scalable business model in a largely under-penetrated but structurally growing diagnostics market. Consequently, RoIC is expected to improve from 20% in FY16 to 33% in FY20.

Diagnostic testing services: B2C-focused growth promising

Pathology is the key focus area of Thyrocare's diagnostic business which currently accounts for c.89% of revenues. We expect this business to report a CAGR of 24% over FY16-20, driven by the expansion of the Aarogyam brand, addition of RPLs, ramp-up of corporate deals and widening of test menu, which will help Thyrocare to capture a larger share in the organised diagnostics space. Macro-economically, increasing income levels, and penetration of awareness in Tier- II and III class cities will also help in bigger contribution of preventive care in the pie of pathology tests in India.

Exhibit 1. Diagnostic testing services revenues



Source: Company, JM Financial

Expansion of Aarogyam brand and increasing penetration to drive 24% CAGR growth over FY16-20

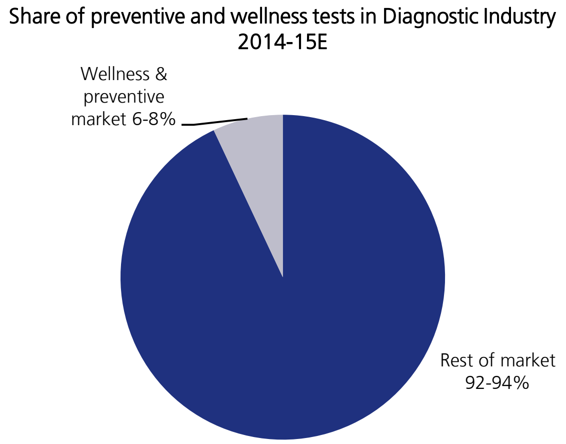
- B2C focused expansion margin accretive: Thyrocare's B2C business currently accounts for less than 25% of revenues. The management is focused on expanding the revenue contribution of this segment through strong promotion of Aarogyam, bulk deals with corporates/insurance companies and tie-ups with online aggregators. Thyrocare markets its 'Aarogyam' brand to customers through its web portal, in-house call centre and independent Direct Selling Associates (DSAs); it charges B2C rates, which are higher than B2B rates charged to authorised service providers for sourcing samples, resulting in higher realisations per test and thus margins. Thyrocare has been spending heavily on its branding (albeit reimbursed by shareholder Agalia Pvt Ltd, which partly exited during the IPO) that should result in higher proportion of direct customers translating into higher realisations. Thyrocare has also been offering discounts for online customers on its own website (www.thyrocare.com/wellness) as well as that of others (including aggregators such as www.preventivecheckups.com, www.bookmycheckup.in and www.upto75.com). To reduce dependence on the franchisee network for B2C growth, Thyrocare has appointed over 300 Blood Collection Technicians (BTechs) and intends to increase their count to 1,000+.

Margins expected to improve by c.260bps over FY16-20

- Focus on wellness and preventive tests—key driver: While its larger peers (Dr Lal PathLabs, SRL and Metropolis) offer a wide range of molecular, anatomical and clinical tests, Thyrocare is focused on wellness and preventive healthcare tests (rather than sick care), packaged under the Aarogyam brand, which have higher growth rates and margins, besides being where Thyrocare has built a significant base. While the non-franchisee business is currently growing at 30-35%, the franchisee-based business growth is relatively lower at c.17-18%. Aarogyam currently accounts for c.53% of revenues and the management intends to grow it to c.75% revenues by 2020. Thyrocare plans to expand the Aarogyam brand through a mix of direct marketing to end customers through a call centre team as well as through doctor references through its recently established in-

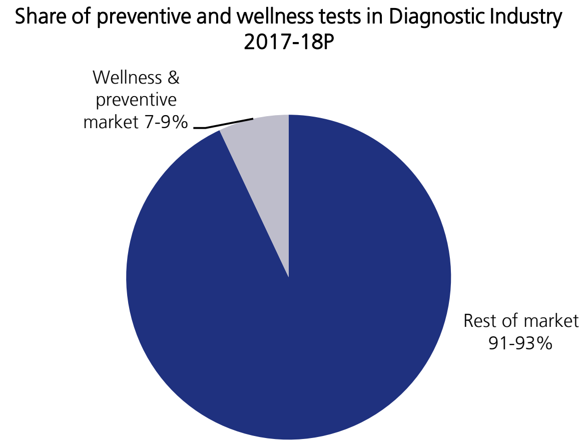
Focus on growing the higher margin B2C business with Aarogyam as the key driver house marketing team. Setting up health camps, rising middle class population, growing awareness of lifestyle diseases and the benefits of preventive healthcare will help this segment sustain the company's growth trajectory.

Exhibit 2. Share of preventive and wellness tests 2014-15E



Source: CRISIL Research report

Exhibit 3. Share of preventive and wellness tests 2017-18P



Source: CRISIL Research report

- **Institutional business picking up:** Thyrocare is seeing increased traction in its institutional business, mainly driven by contracts with corporates (such as TCS, Godrej, Marico, Axis Bank) for their employees through camps as well as insurers (such as Bajaj Allianz, Royal Sundaram and Exide Life) for mandatory tests for policy subscribers/holders. Although margins are lower in this business, it provides significant volumes that would optimise utilisations at existing and upcoming RPLs. The challenge with insurance companies is that they require non-pathology tests (e.g. X-rays) as well, which Thyrocare does not offer currently. To overcome this challenge, Thyrocare is adding non-pathology partners across the country and is trying to work on a co-marketing and co-delivery of services. The company is also evaluating government tenders and has signed a c.Rs 40mn three-year contract with the Brihanmumbai Municipal Corporation (BMC). However, it remains apprehensive of this business, given the extremely low quotes expected from the government bodies, in some cases at 33% discount to Thyrocare's current operating rates, which would severely suppress margins.

Increased focus on bulk deals with corporates and insurance companies to aid volume growth and optimise utilisations at RPLs

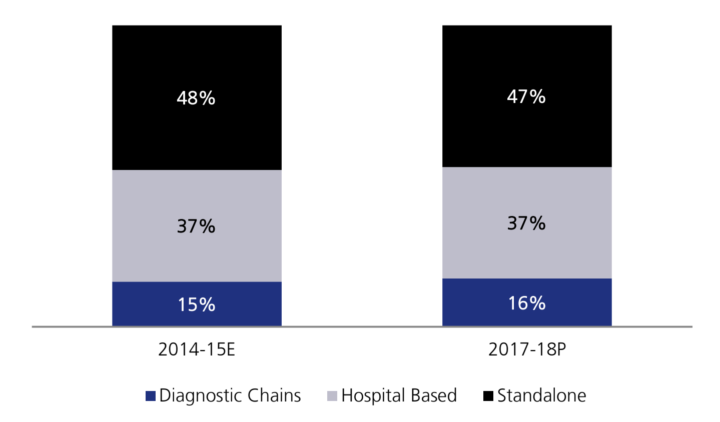
- **Asset-light strategy enables rapid expansion:** Thyrocare's asset-light strategy is based on having a single CPL and expanding the testing capacity through addition of RPLs, while the franchisees (TSPs, TAGs, etc.) collect samples and send them across to the CPL/RPL based on the tests required. This is a key differentiator in comparison to its large peers, which are growing by setting up their own standalone labs, as part of their hub-and-spoke models. While Thyrocare is currently operating only seven labs (1 CPL and 6 RPLs), each of its larger peers has more than 150 labs. High automation levels and standardised nature of tests in its labs allows it to conduct more number of tests/day compared to peers at a much lower investment. Cost of establishing each RPL is c.Rs 25mn-35mn, which can be funded via internal accruals. This asset-light strategy minimises capex requirements and enables Thyrocare to establish a larger footprint at a faster pace. The management is targeting 20 RPLs by 2020 with the location decision being driven by competitive dynamics as well as accessibility and logistics. For instance, Thyrocare is identifying cities that have airports and can provide sizeable number of specimens; thus, its target cities are Patna, Lucknow, Bhubaneswar and Chandigarh. It is also planning to set up an RPL near the Mumbai Airport, which will help it serve entire Maharashtra, while releasing capacity at CPL for performing advanced tests. With respect to franchisee network, Thyrocare's strong branding coupled with pricing flexibility for its franchisees supports its growth plans and maintains exclusivity of franchisees; thus, giving it higher control over costs and quality.

Asset-light model facilitates quick expansion with limited capital outlay resulting in >10 p.p. improvement in RoCE over FY16-20

- **B2B business targets largely unorganised market:** The diagnostic industry is currently dominated by standalone diagnostic centres (c.47-48% of the diagnostics market) and hospital-based diagnostic (c.37% of market) services. Thyrocare, unlike peers, focuses on this largely unorganised market, leveraging its low-cost competency to offer discounted rates for specialty tests to these standalone and hospital-based diagnostic centres, which ensures regular samples for its labs and optimises asset utilisation. B2B business accounts for c.75% of Thyrocare's revenues and remains a key volume generator for the company.

B2B business a lower-margin high-volume business

Exhibit 4. Diagnostic centres by segment



Source: CRISIL Research report

Exhibit 5. Thyrocare's client pool covers the entire industry structure

Hospital-based	Diagnostic centres located within hospitals. Mostly owned by hospitals, may also be given to third-party to manage.	Organised Market
Diagnostic chains	Privately-owned diagnostic centres with two or more centres. Operate mostly through hub-and-spoke model of collection centres.	
Standalone / Mom & Pop centres	Standalone diagnostic centres with a single centre. Majority have a small scale of operations and offer basic diagnostic tests	Unorganised Market

Source: CRISIL Research report

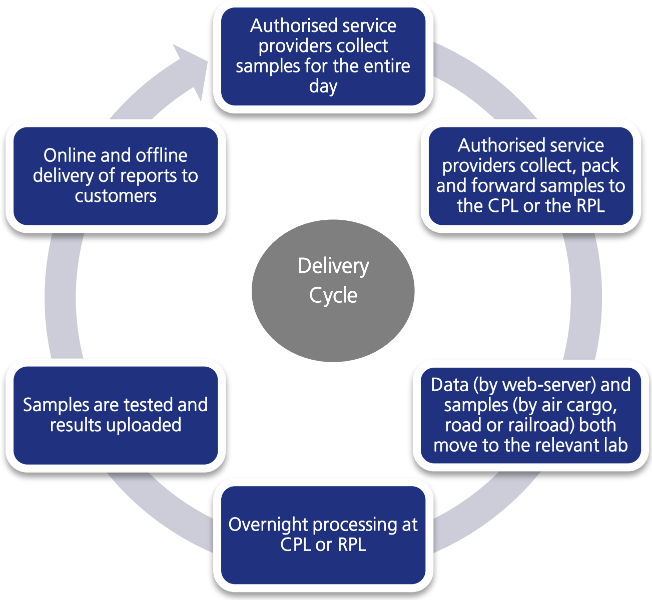
- **Multiple reagent vendors de-risk operations:** Thyrocare has arrangements with vendors, wherein the vendors place their analysers at the company's premises at little or no capital cost and in return Thyrocare places orders for an agreed amount or value of reagents and consumables from the vendors for the period of the arrangement (generally lasts for three to seven years). Currently, Thyrocare sources c.70% of its reagents (by cost) from a single vendor. While this increases bargaining power, any adverse impact on reagent supplies can severely disrupt Thyrocare's operations. The company has announced plans to start moving additional business to new vendors and is targeting to diversify sourcing reagents from three vendors with business split equally among them over the next two years. While operationally positive, this is expected to impact the margins negatively.

Strong vendor relationships lowers cost; focus now on de-risking

- **Efficient logistics ensures quick turnaround:** The collection kits sent to franchisees include bar-coded and standardised vials for collection. Through the company's Charbi system, the franchisees input data that includes the bar-code number, the patient/customer name, type of tests, date of receipt of sample and other details. The samples are then packaged and transported to the CPL by road or air, after which they are collected, collated, checked for sample integrity, temperature and other aspects of pre-analytical quality control and then sent across for processing. Thyrocare bears all costs after the sample is received that includes transportation to the CPL/RPL, testing and uploading the results on the web portal. The company has an arrangement with a courier company in certain locations, where the franchisees can deposit samples with this courier company. The cost associated with such courier service is borne by Thyrocare.

Use of technology and logistic arrangements facilitates low turnaround times

Exhibit 6. Thyrocare's delivery cycle



Source: Company, JM Financial

- Expanding reach: As of FY16, Thyrocare operated through a pan-India network of 1,041 ASPs, comprising 487 TAGs and 354 TSPs spread across 466 cities, 24 states and one union territory. Thyrocare derives c.30% of its revenues from North India (given the high density of healthcare facilities in the NCR), 25% from West India, c. 20-25% from South India and the rest from East India. To reduce dependency on TSPs and TAGs for sourcing samples and to speed up penetration, Thyrocare is focusing on its online channel – Online Clients (OLCs). It has recently forayed into a new sample collection channel—BTechs—which are qualified technicians that collect samples from the customer/patient and deposit them to the nearest collection centre; they mostly work on a part-time basis and collect about four samples a day. The company is targeting to increase the count of BTechs from current 300 to c.1000 to cater to the home collection leads of patients. The company has also set up an in-house marketing team that is responsible for marketing its preventive and wellness packages directly to the end customer as well as to referring doctors. Furthermore, it aims to tap corporates, insurance companies and government bodies to drive high-volume growth.

  Thyrocare has overseas presence in Nepal, Bangladesh and Bahrain and its international operations accounts for 0.6% of pathology revenues. It could expand its network through franchise opportunities—especially in the Middle East— which would ensure volumes at the CPL at Navi Mumbai. Among peers, while Metropolis generates c.25% of revenues from international operations, Dr Lal and SRL Diagnostics generate under 2%.

Increasing penetration while reducing dependency on franchisee network

Exhibit 7. Overseas presence of large diagnostic players

Company	Overseas presence	Revenue contribution
Thyrocare	Nepal, Bangladesh, Bahrain	0.6%
Dr Lal PathLabs	Oman, Saudi Arabia, Kuwait, Nepal, Malaysia, Bangladesh, Qatar	1.5%
Metropolis	Sri Lanka, the UAE, Kenya, Mauritius, Ghana, Zambia, South Africa (exited in Aug'16)	25%
SRL Diagnostics	The UAE, Sri Lanka, Nepal, Africa, the Middle-East, Hong Kong, Maldives, the CIS	2%

Source: Company, JM Financial

- Internationally-certified instruments and fully-automated lab: Automation systems and diagnostic testing instruments and processes are sourced from leading international and Indian healthcare brands such as Siemens, Bio-Rad Laboratories, Roche Diagnostics India and Transasia Bio-medicals Limited. The company has employed fully-automated

Instruments sourced from best companies in the world analysers to carry out high-accuracy tests using technology intensive processes. A barcoded, bi-directionally-interfaced system and an intelligent laboratory information system has helped Thyrocare increase the speed of delivery of diagnostic reports, which in-turn has enabled it to grow accession volume and meet the increasing physician demand for its diagnostic services.

Turnaround times of 4-8 hours for processing samples

What makes Thyrocare a low-cost player?

A centralised lab structure with high level of automation, long-term arrangement with analysers and reagent suppliers, and limited bouquet of volume-driven preventive care tests has helped Thyrocare achieve economies of scale in operations. Scale permits the company to achieve higher asset-utilisation of analysers, which then allows it to secure favourable terms with reagent supplies.

Thyrocare collects samples through a pan-India network of c.2,900 authorized service providers — comprising of Thyrocare Aggregators (TAGs), Thyrocare Service Providers (TSPs) and Online Clients (OLCs), who in turn source these samples from over 25,000 Sample Giving Clients (SGCs) and c.18,000 Patient Giving Clients (PGCs) spread across India. Thyrocare charges its franchisees with fixed rates per test or profile, which are called 'Test Rates'. It also provides ASPs with indicative rate schedules called 'Lab Rates', which the franchisees can charge to the sample-giving client and 'Patient Rates' for the retail customers secured by them. In case retail customers are secured by Direct Selling Associates (DSAs), franchisees are charged with the Patient Rate and are credited with the service charges for the samples collected by them; sales incentives are also provided to DSAs. Thyrocare also provides retail customers with an option to register online on its website for tests and profiles as well as make payments online at Patient Rates. In such a case, it only credits the franchisees with service charges for sample collection.

- Centralised testing drives economies of scale: Thyrocare's CPL, located at Navi Mumbai, is equipped with one of the world's longest lab automation track system (93.5 metres) for seamless sample movements that enables it to conduct an average of c.168,000 tests per day and benefit from economies of scale by bringing down operational expenses per test. High mechanisation results in lower headcounts and manpower cost. Thyrocare follows a leasing model, wherein the equipment and instruments used in the CPL are leased from vendors in exchange for a commitment to purchase reagents and consumables from these vendors for a specified period of time. It benefits financially from this model, as it minimises the capital costs typically associated with diagnostic equipment.

High levels of automation and large scale of operations help keep costs down

- High volumes facilitate low reagent costs: Thyrocare's commitment of high test volumes, long-term nature of purchase agreements and strong existing relationship with vendors allows it to source reagents at one of the lowest rates in the industry vis-à-vis peers. Furthermore, robust growth in sample volumes through geographic expansion and consumer awareness is likely to support low reagent costs.

- RPL-led growth cost-effective: Unlike peers, Thyrocare's focus on driving volumes through expansion of RPLs instead of setting up standalone labs reduces capital outlay and operating expenses. Also, since RPLs conduct relatively routine tests, they do not require complex equipment such as those used at the CPL, reducing capital requirement for upfront purchase of such equipment. Thyrocare has shifted a significant portion of the overall tests in menu to RPL. This releases capacity for high value/complex tests in CPL. Furthermore, to save capital costs, rather than purchasing the premises for RPLs, Thyrocare leases such premises or occupies such premises on a leave and license basis. Each RPL operates with less than 20 employees at local salary-level (average CTC under Rs 300,000), which are lower than average employee costs at the CPL in Navi Mumbai. Also, the company focuses mainly on freshers for lab assistant positions, resulting in lower salary costs as compared to peers. The lower overheads at RPLs has enhanced Thyrocare's capability to reduce unit-cost of tests.

Thyrocare's expansion through RPLs to enable faster turnaround times and reduce costs

Exhibit 8. Lower utilisations indicate headroom for expansion

RPL centers	Average Load	Capacity	Utilisation (%)
Kolkata	6,870	10,000	68.7%
New Delhi	6,623	10,000	66.2%
Coimbatore	3,890	10,000	38.9%
Hyderabad	3,159	10,000	31.6%
Bhopal	2,164	10,000	21.6%
Bengaluru	1,407	10,000	14.1%
Total	**24,113**	**60,000**	**40.2%**

Source: Company, JM Financial

Exhibit 9. Thyrocare's test bouquet – CPL vs. RPL

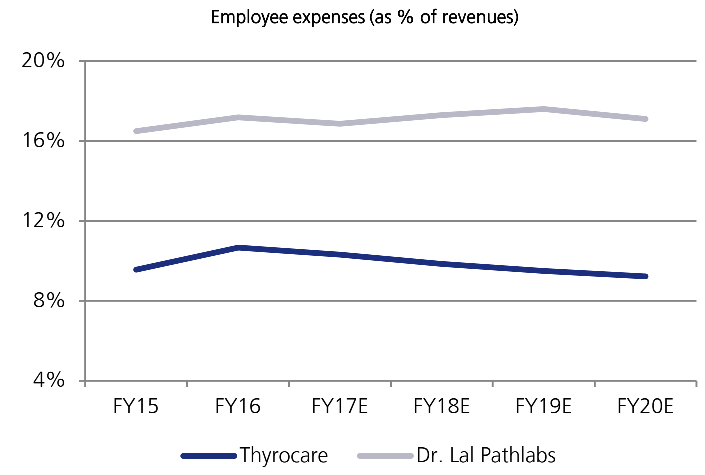
	Performed at CPL	Performed at RPL
Thyroid Tests		
Thyroid Simulating Hormone	Y	Y
Total Triiodothyronine	Y	Y
Total Thyroxine	Y	Y
Non-Thyroid tests		
CLIA	Y	Y
ELISA	Y	
HPLC	Y	Y
Electrophoresis	Y	
Flow cytometry	Y	
Fluorescence Flow cytometry	Y	Y
Nephelometry	Y	
Photometry	Y	Y
Liquid Chromatography Mass Spectrometry	Y	
ICP-MS	Y	
Wellness and Preventive Tests		
Aarogyam A	Y	Y
Thyroid Diabetic Screen, Iron deficiency, Kidney, Cholesterol, Pancreas, Liver, Complete Hemogram		All except Pancreas
Aarogyam B	Y	Y
Vitamin D & Blood Elements & Homocysteine & Aarogyam A excluding pancreas		All except Blood Elements
Aarogyam C	Y	Y
Aarogyam B & Cardiac, Arthritis, Vitamin B12, Folic Acid, Serum Ferritin, Testosterone, Electrolytes		Aarogyam B + Vitamin
Aarogyam D	Y	Y
Thyroid, Liver, Cardiac, Complete Hemogram, Diabetes, Iron Deficiency, Lipid, Renal		All except Cardiac & Renal
Mini Aarogyam	Y	Y
Thyroid, Diabetic, Complete Hemogram		All

Source: Company, JM Financial, CRISIL Research report

Shift of tests to RPLs to free up capacity at CPL for complex tests and reduce turnaround times

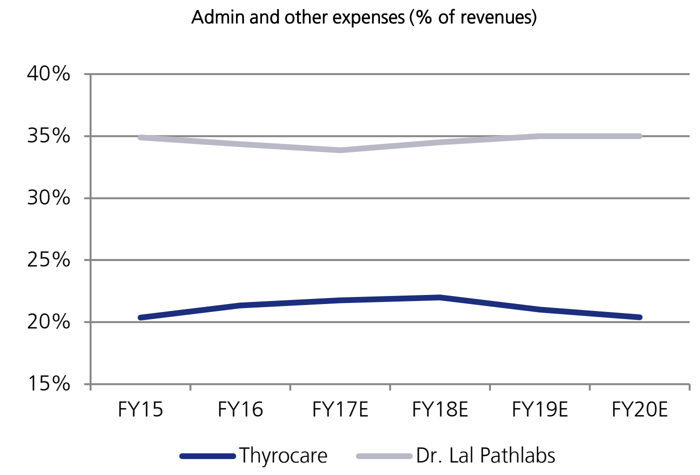
- **Franchisee-based growth lowers overheads:** Due to centralised nature of testing at CPL and RPLs, overheads in terms of manpower, rentals and other administrative expenses are lower. While large peers operate company rented service centres that cater to walk-in customers, Thyrocare entirely sources its revenues from samples collected by its ASPs. It spends rent only for its RPL network and hub centres. As a result rent accounted for 2.2% of revenues in FY16 vs. 4.8% for its peer Dr Lal. Similarly employee expenses and other administrative expenses were lower at 32.0% of revenues in FY16 for Thyrocare vs. 51.6% for Dr Lal.

Exhibit 10. Franchisee model lowers employee costs…



Source: Company, JM Financial

Exhibit 11. …as well as admin & other expenses



Source: Company, JM Financial

Thyrocare charges ASPs fixed rates per test or profile that are processed at the CPL and RPLs and provide them with indicative rates that they may charge to their customers. Direct sales associates (DSAs)—independent agents that originate customer leads—work with ASPs to generate additional patients. Where patients have been procured by the company or its sales associates, it directly charges ASPs for processing and diagnostic testing, and credits them with service charges for sample collection.

- Limited test menu aids higher mechanisation: With offerings of 198 tests as of FY16, Thyrocare focuses on biochemistry-based and preventive healthcare-related tests; this is one of the key differentiating factors vis-à-vis large peers that offer over 3,000 tests. As per a CRISIL Research Report, the biochemistry test specimens have longer stability (48 hours), thus facilitating higher level of mechanisation and centralised testing, which reduces operational costs and probability of errors in final outcome of tests.

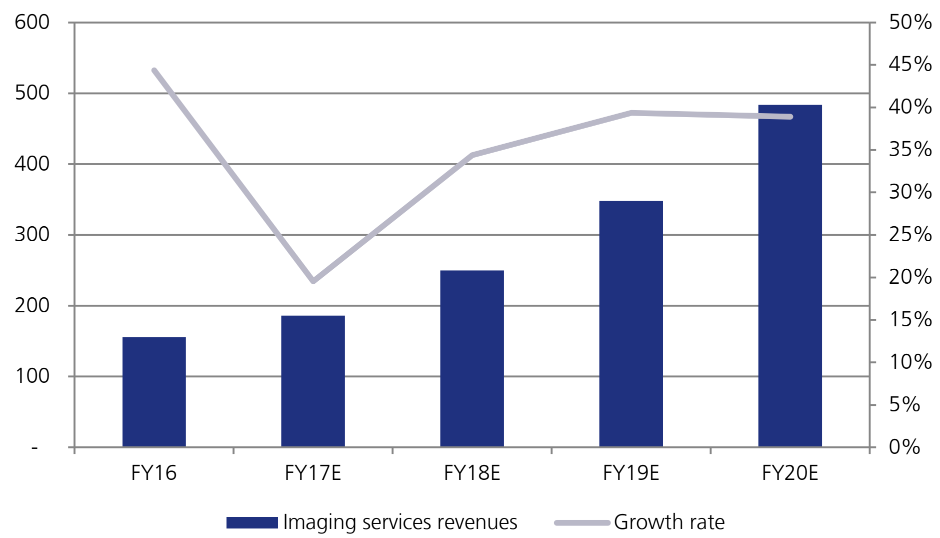
Nueclear: Large opportunity but scan volumes key to profitability

Thyrocare is developing a network of molecular imaging centres through its subsidiary Nueclear Healthcare Limited with an objective to provide high-quality Positron Emission Tomography-Computed Tomography (PET-CT) fusion imaging services at lower costs to cancer patients to assist in cancer diagnosis, staging, monitoring of treatment efficacy and evaluation of disease recurrence. Given the increasing incidence of cancer in India, Nueclear aims to be an early mover and capture a large share of the growing cancer screening market. It is the first branded chain of PET-CT scan centres and also has capabilities to produce and air-lift FDG, which along with high costs and expertise requirement, creates significant barriers to entry for competition.

Focus on developing an affordable PET-CT scanning franchise to leverage on the increasing incidence of cancer in India

Nueclear currently owns one operational cyclotron at its Navi Mumbai facility, which supplies radioactive bio-marker FDG to its PET-CT scanners in Delhi (2), Navi Mumbai (2), Surat and Vadodara; the Hyderabad scanner sources FDG from external sources. Nueclear plans to scale up this business to 60 scan centres with two additional cyclotrons in the medium term (3-6 years), which would entail an investment of c. US$50mn into this business.

Exhibit 12. Imaging services revenues



Source: Company, JM Financial

Revenue growth to be driven by expanding scanner network and increasing utilisations at existing centres

- **Low price strategy to capture market share:** PET-CT is one of the expensive diagnostic tests and is sparsely available in a limited number of centres in India such as government institutes (e.g. defence establishments) that do not cater to outside patients or which give free or highly-subsidised services to the general public, hospitals (trusts and private) and standalone diagnostic centres that offer services on a need basis. As per a study conducted by the Indian Council of Medical Research (ICMR) in 2016, India is likely to have over 1.7mn new cases of cancer by 2020. Nueclear currently has a market share of c.10% of all PET-CT scans being performed in India. Nueclear's strategy is to expand its referring doctor and hospital customer base by offering PET-CT scanning at competitive prices (Rs 9,999 per scan) vs. private competitors (c.Rs 14,000-Rs 24,000), which will help drive growth of its scanning volumes and capture market share from standalone scan centres. Nueclear is able to keep costs low, as a result of producing its own FDG as well as having bulk deals with suppliers for key equipment. The low cost scanning capability has allowed Nueclear become the sole provider of PET-CT scans under the Delhi Arogya Kosh Scheme.

Low-cost strategy to capture market share

- **Shift to partnership model for expansion:** While Nueclear initially expanded to five company-owned scanners across three centres, it faced hurdles managing patients and administration of premises. Thus, it decided to expand via the partnership (PPS) model, wherein Thyrocare will incur the cost of acquiring and maintaining the PET-CT scanners as well as the cost of producing and supplying the FDG to the centre, while the partner (typically a radiologist or nuclear medicine expert) would manage patients and the centre

Partnership model to increase pace of expansion as well as take care of all associated costs, thus trying to replicate the successful franchisee model of its pathology business. The revenues would be split 50:50 between the two. The company is currently experimenting with this model in three locations, i.e., Surat (operational since Sep'16), Vadodara (operational since Feb'17) and Raipur (awaiting commencement approval from the regulator). This model would allow Thyrocare to focus on expanding its network at a desired pace. The company is also exploring the option of selling or leasing the existing company-owned centres to partners.

- **Bulk deal to offer significant cost-benefits:** It has entered into MoUs with Wipro GE Healthcare Private Limited for the purchase of PET-CT scanners and cyclotrons. For every four PET-CT scanners it purchases, subject to agreed terms and conditions, GE has undertaken to supply and install one PET-CT scanner free of cost. This reduces the effective cost of a scanner from US$1mn to US$0.75mn per machine. Similarly, Nuclear will receive the additional cyclotron reactors at $3mn each, with higher capacities (35 curies vs. 17 curies for the first cyclotron, which is also being upgraded at no additional cost). The company has purchased land in Delhi and Coimbatore for the cyclotrons and has placed orders for the same.

Bulk deal with GE facilitates lower capital outlay

Exhibit 13. Scan volumes at PET-CT centres

Centre	Average scans per week	Capacity	Utilisation (%)
Delhi	150	240	63%
Navi Mumbai	150	200	75%
Hyderabad	60	150	40%
Surat	35	90	39%
Vadodara	15	90	17%
Total	**410**	**770**	**53%**

Source: Company, JM Financial

- **Supplier of FDG—logistics is the key:** Nueclear's operational cyclotron facility in Navi Mumbai not only provides FDG for its PET-CT scanners in NCR and Navi Mumbai, but also to third-party PET-CT scanning centres (e.g. Healthcare Global Enterprises Limited and its affiliates). The company also purchases FDG produced by third-parties for use in Nueclear's PET-CT scanning centres when FDG transportation from the Navi Mumbai cyclotron is not feasible (e.g. for its Hyderabad scanning centre).

  Since the quantum of FDG halves every 110 minutes (half-life of isotope) after its production, the proximity of a scan centre to the cyclotron and accessibility to airport is necessary. Thyrocare has an integrated production plan for FDG with air and road logistic infrastructure from Mumbai. It uses air logistics for Delhi, while Surat, Navi Mumbai and the upcoming Nashik centre use road logistics for supply of FDG to PET-CT centres. The company has plans to set up two more cyclotron facilities across India to cater its planned 60 PET-CT scanners. It has already acquired land in Delhi and Coimbatore as well as placed orders for cyclotrons for the same.

- **Scan volumes critical for profitability:** Given the fixed costs incurred in setting up scanners and cyclotrons, utilisation remains a key determinant of overall profitability. The additional cyclotrons, when fully operational, will produce roughly c.100 curies per day, which will be able to serve 60 scanners. Currently, Nueclear is operating with seven scanners with an average run rate of 14 scans per machine per day. A run rate of c.15 scans per machine per day is necessary to be profitable at the EBITDA level per scanner for the company-owned centres and 6-8 scans per machine per day for the partner-run centres. Given that each scanner has capacity to process upto 30 scans per day and each cyclotron has capacity to serve c.20 scanners, there is significant scope to increase volumes and improve profitability.

Breakeven at 6-8 scans per day at partnered centres and 15 scans per day at company-owned centres

Competition: Low-cost competency key differentiator

Thyrocare's competition is mainly from large diagnostic chains in India with national presence—Dr Lal PathLabs, SRL Diagnostics and Metropolis. However, these chains form only a small part (<20%) of the c. Rs 500bn Indian diagnostics market. The diagnostic space is highly fragmented and is dominated by standalone labs, especially in non-metro cities as well as smaller towns and rural areas. Besides competition from the unorganised space, the large players are now facing incremental competition from PE-backed regional diagnostic chains; however, profitable scalability of these players to the national level would be challenging. We expect larger chains to grow at a faster pace, vis-à-vis the mid-teen market growth, driven by shift from standalone labs to diagnostics chains as economies of scale and superior branding favour chains over standalone labs.

Franchisee-led model, limited test menu and centralised testing drives Thyrocare's cost leadership

Operational difference between Thyrocare and peers

Given Thyrocare's franchisee-based model with centralisation of testing, it operates with a limited number of labs (1 CPL + 6 RPLs) compared to other leading diagnostic chains that have standalone labs spread across geographies they operate in with a few players also having a large centralised lab, akin to Thyrocare. However, unlike peers, Thyrocare does not directly collect samples, but depends on its franchisee network for aggregation of samples, besides generating some sales through direct selling as well as bulk deals with institutions. Whereas its peers offer a wide number of tests (3,000+), Thyrocare is focused on a limited bouquet of biochemistry tests—focused on wellness and preventive healthcare—that allows for longer stability of test specimens, thus facilitating centralised testing with high levels of automation.

Thyrocare operates with the lowest number of labs amongst pan-India players

Besides diagnostic testing, Thyrocare is increasingly focusing on expanding its imaging business with sole focus on PET-CT scans, which is expected to aid revenue growth. However, peers such as SRL Diagnostics and Dr Lal PathLabs offer a wider range of radiology tests including X-Rays, mammography, MRI, OPG, ultrasound and RFA.

Exhibit 14. Competition

Company	No. of labs	No. of collection centres	Region
Thyrocare	7	1,000+	Pan-India
SRL Diagnostics	341	7,636	Pan-India
Dr Lal PathLabs	172	4,967	Pan-India
Metropolis	150+	1,000+	Pan-India
Pathcare Labs	30	2,000+	Pan-India
Suburban Diagnostics	89	NA	Maharashtra
Medall	60	NA	South India
Vijaya Diagnostics	40	NA	South India
Suraksha Diagnostics	31	NA	East India
KV Labs	13	NA	North India
Elbit Medical Diagnostics	12	18	South India
Medinova Diagnostics	6 (3 franchisees)	-	Hyderabad and Kolkata
Quest Diagnostics	1	27	Delhi

Source: Company, JM Financial

- Pricing support: Thyrocare is relatively insulated from pricing dynamics in different regions—it charges a flat rate to its franchisees, who in turn charge customers depending on market conditions—and has no major pricing differences across geographies. Other players tend to charge higher prices in their home markets and offer lower rates in other geographies to increase market penetration. For example, Dr Lal has enjoyed premium pricing in northern markets, but has lower prices for select tests (lipid, HbA1C) in the southern region vs. other regions.

- **Franchisee dependence:** Thyrocare is dependent on its franchisee network for aggregation of testing samples for volume-driven growth. Although the company is aggressively promoting its B2C business and diversifying the sources for samples through focus on new channels – online (OLC) and Blood Collection Technicians (BTechs), it continues to rely on its ASPs and hubs for aggregating and sending samples to the nearest RPL or the CPL.
- **Lower revenue per sample:** Thyrocare largely follows a B2B model, wherein it bills its franchisees who then charge the end customers, unlike peers, which record receipts from customers as revenue. Furthermore, the company offers a limited menu of standardised tests, whereas peers offer a wide variety of specialised tests that are more expensive and thus higher priced. Thus, revenue per sample is relatively lower for Thyrocare.
- **Low cost structure:** Thyrocare's focus is on cost leadership and its major cost is reagents. Given the franchisee-based model with centralised testing, its overhead costs are relatively lower translating into higher EBITDA margins, as compared to peers that have a consumer-facing business, and thus higher number of company operated labs and employees.

Thyrocare has stronger earnings growth profile over the medium term driven increasing focus on the lucrative B2C segment with ramp-up of imaging business an additional growth lever

Exhibit 15. Thyrocare vs Dr Lal PathLabs

	Thyrocare	Dr Lal PathLabs
#labs	7	172 (166 own)
#collection points	1,000+	4,967
#patients	n/a	12
Revenue/sample (Rs.)	185	301
Revenue/patient (Rs.)	n/a	662
Revenue mix	~75% B2B and rest B2C	~40% from collection centres; 20% own and rest from pick-up points
Revenue CAGR		
FY12-16	21%	23%
FY16-19E	26%	20%
EBITDA CAGR		
FY12-16	18%	24%
FY16-19E	27%	18%
FY16 margins	39%	26%
RoE (FY16)	14%	26%
ROIC (ex-cash)	18%	57%
Cash as % of Capital Employed	28%	58%
Working capital (days)	25	4

Source: Company, JM Financial

Exhibit 16. Thyrocare vs. SRL

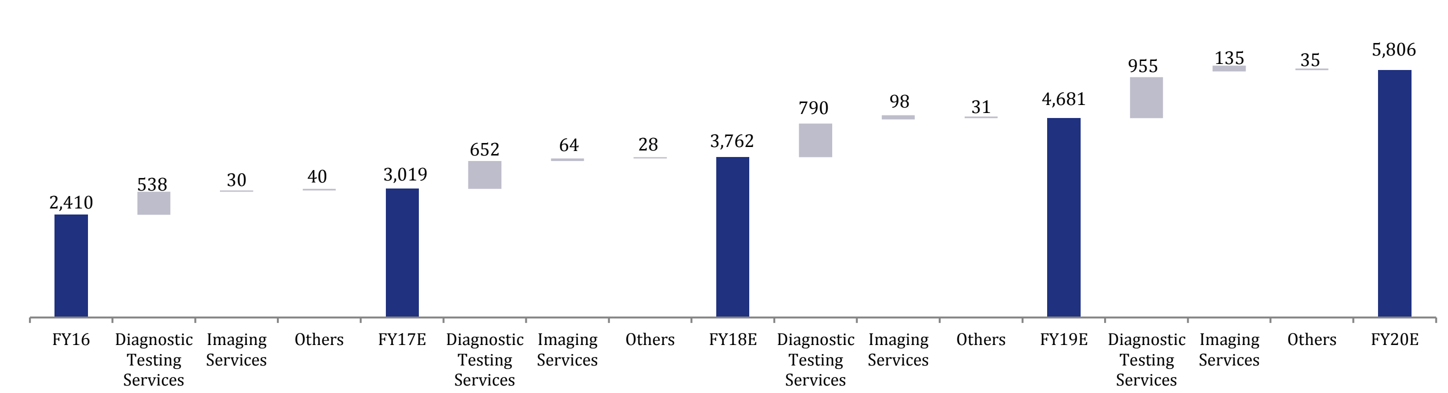
	Thyrocare	SRL
#labs	7	341
#collection points	1,000+	7,636
Revenue/patient (Rs.)	n/a	619
Revenue/lab (Rs.m)	n/a	29
Revenue mix	~75% B2B and rest B2C	~33% walk-in; ~25% from collection centres and ~20% hospitals
Revenue		
FY12-16 CAGR	21%	15%
FY16-19e CAGR	26%	n/a
EBITDA		
FY12-16	18%	45%
FY16-19e	27%	n/a
FY16 margins	39%	24%

Source: Company, JM Financial

Financials: Volumes key to profitability

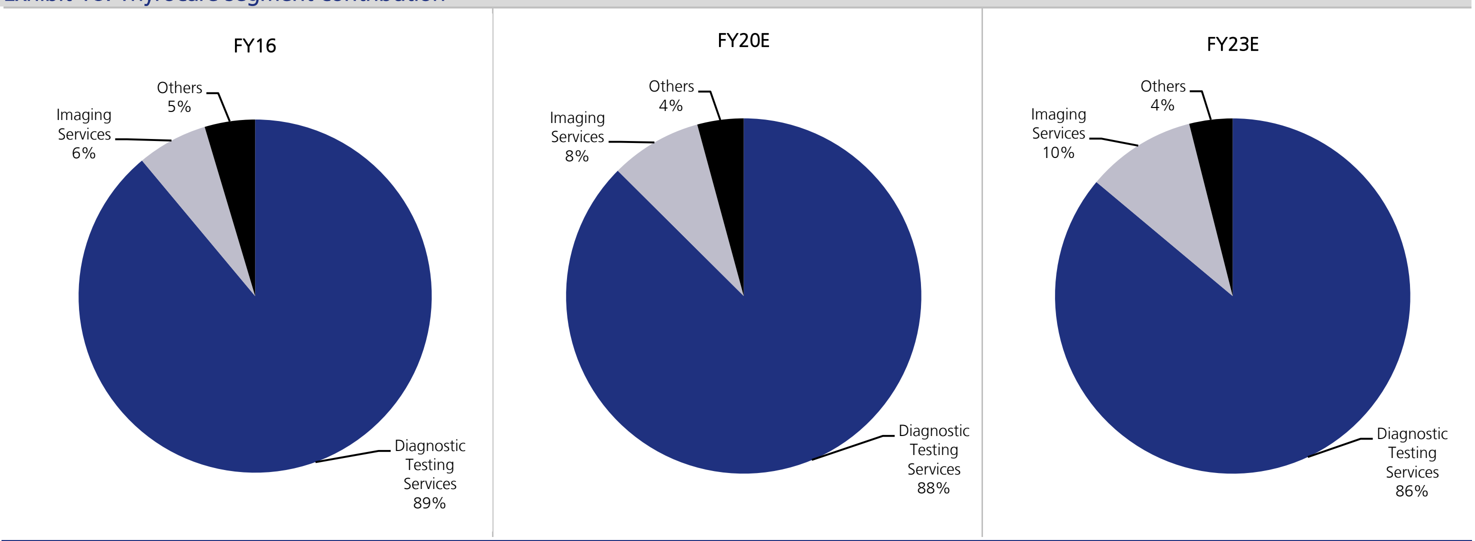
We expect Thyrocare to report FY16–20 Revenue/EBITDA/PAT CAGR at 25%/27%/29%, respectively, beating the mid-teen industry growth, driven by strong volume growth of samples and increasing utilisations at existing centres. We forecast EBITDA margins to improve from 38.8% in FY16 (38.6% in 9MF17) to 41.4% in FY20, driven by the increasing test volumes and shift of testing to the RPLs as well as partnership model for growth in imaging business. As a result, we expect RoIC to improve from 20% to 33% in this period.

Exhibit 17. Thyrocare's segment revenue evolution



Source: Company, JM Financial

Exhibit 18. Thyrocare segment contribution



Source: Company, JM Financial

Exhibit 19. Diagnostics revenue model

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Total samples (mn)	9.1	11.6	14.5	18.0	22.1	27.0	32.6	39.2	46.6
YoY growth	30%	28%	25%	24%	23%	22%	21%	20%	19%
Tests per sample	5.26	5.30	5.34	5.37	5.40	5.43	5.45	5.47	5.49
Total tests (mn)	47.8	61.5	77.4	96.5	119.4	146.5	177.9	214.2	255.6
YoY growth	37%	29%	26%	25%	24%	23%	21%	20%	19%
Revenue per test	35.1	34.8	34.6	34.5	34.5	34.7	35.0	35.3	35.7
YoY growth	-13.6%	-0.9%	-0.6%	-0.3%	0.0%	0.4%	0.9%	1.0%	1.0%
Diagnostic Testing Services Revenues	**1,681**	**2,143**	**2,681**	**3,333**	**4,123**	**5,078**	**6,223**	**7,569**	**9,123**

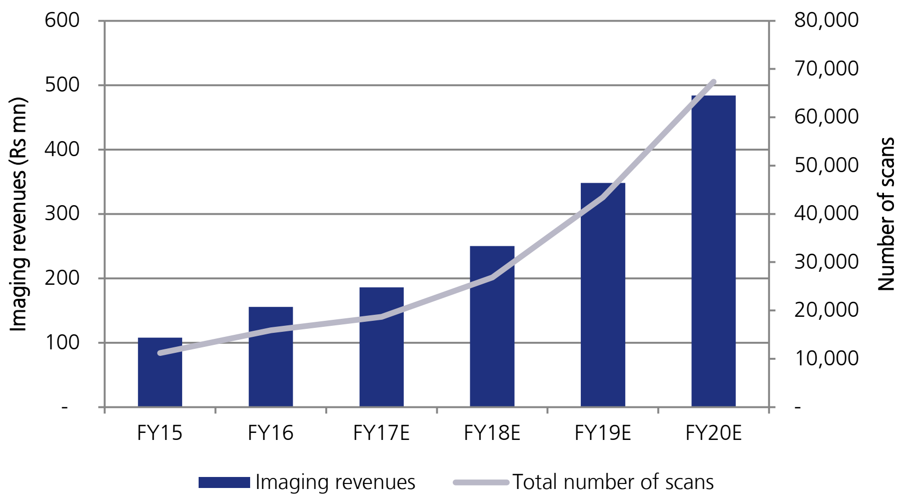
Source: Company, JM Financial

- **Gradual increase in share of wellness revenue:** The contribution of wellness revenue has gone up from 32% in FY12 to c.53% currently. Thyrocare was successful in improving its per sample revenue, despite a reduction in Dec'13 in test rates for thyroid tests, due to increased focus on its Aarogyam brand. Thyrocare expects it to continue to grow, given the rising incidence of lifestyle diseases, increasing awareness of the benefits of preventive testing and the rising middle income population.

- **Expansion of scanner network to drive imaging business:** Imaging revenues are expected to report a CAGR of 33% during FY16-20, driven by expansion of the PET-CT scanner network, as the company opens new centres at Raipur, Nashik, Mumbai (Prabhadevi and Borivali), Pune, Jaipur, Aurangabad, Siliguri and Kolkata, as well as the pick-up in scan volumes at existing centres.

Imaging business revenues to be mainly driven by expansion of PET-CT scan centre network

Exhibit 20. Imaging business growth



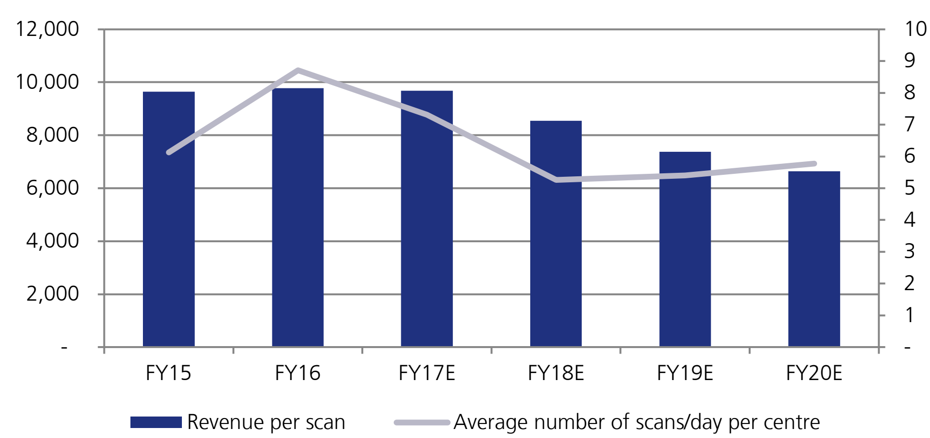
Source: Company, JM Financial

- **Utilisation of PET-CT scanners—key to profitability:** Number of scans per centre is the key determinant of overall profitability of this business. The company plans to expand its network from 7 scanners to 60 scanners in the medium term. Revenue per scan is expected to decline, as the company uses the franchisee model (50% revenue sharing with partner) to expand its scanner network. Given that the scan volumes are lower during the initial period after setup of scanner, we expect the average number of scans per centre per day to remain c.8 in the forecast period, which is close to the 6-8 scans per day necessary for profitability at the EBITDA level at the partnered scan centres, which is well below the 15 scans threshold at the company-owned centres. We expect profitability to improve significantly, as scan volumes at new centres pick up.

Partnership model for growth with 50% of revenues being shared with partners to bring down revenues per scan

Rapid expansion of PET-CT scanner network will bring down overall utilisation rates in the near term

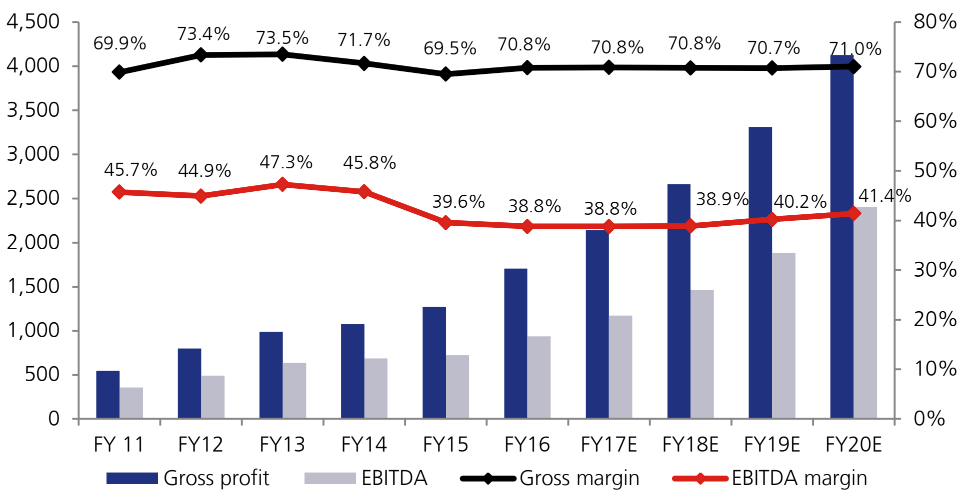
Exhibit 21. Imaging operating metrics



Source: Company, JM Financial

- **Higher utilisations key to margin expansion:** We note that the company had maintained a 44%+ EBITDA margin during FY11-14. However, consolidation of the loss-making Nueclear in FY15 resulted in margins dropping below 40%. Further setting up of RPLs and additional cyclotrons as well as diversification of procurement across multiple vendors is expected to constrain margin growth in the near term. However, margins are likely to improve FY19 onwards driven by the higher contribution from the B2C business, increasing utilisation levels at existing RPLs and PET-CT scan centres as well as shift to partnership model for incremental growth of imaging business. This should offset the likely increase in reagent costs as the company diversifies procurement across multiple vendors.

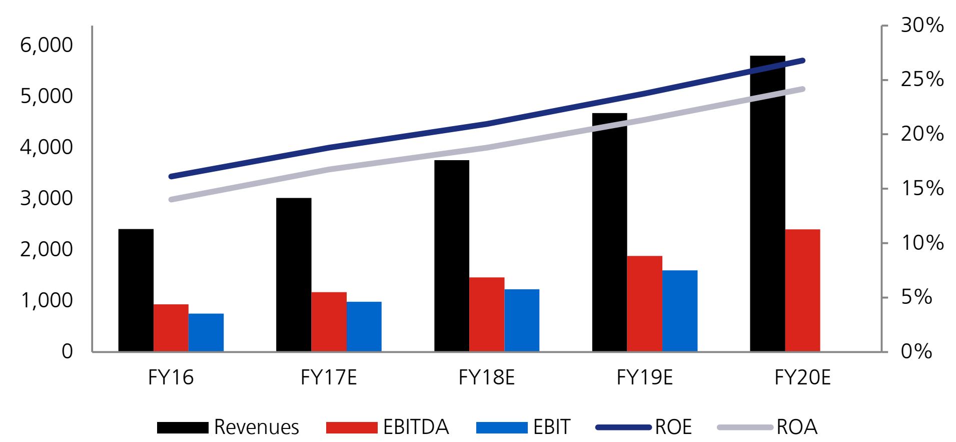
Exhibit 22. Thyrocare's margin profile



Source: Company data, JM Financial
* FY11-FY14 financials are standalone and exclude Nueclear Healthcare

Consolidation of Nueclear Healthcare affected margins; however, improving utilisations at RPLs and ramp up of imaging business with partnership model to result in margin improvement

Exhibit 23. Operational metrics

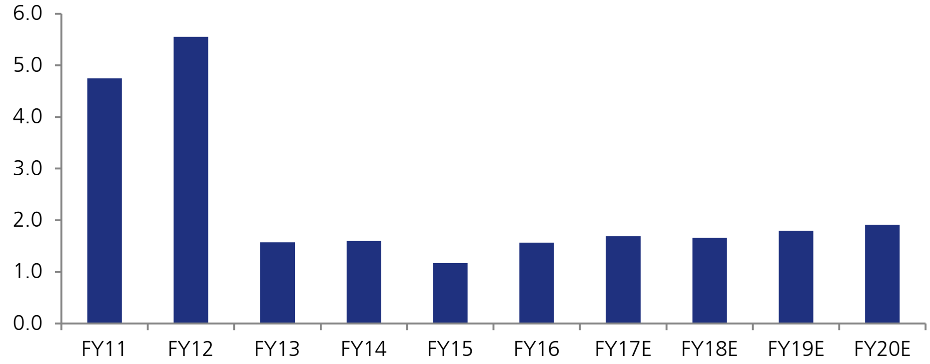


Source: JM Financial, Company

Profitability ratios are expected to improve as volumes at recently opened centres pick up

- **Capital-light model:** Thyrocare has an asset-light franchisee-driven model, which limits the capital outlay. Majority of expenditure is on acquiring land and setting up RPLs as well as cost of cyclotron and PET-CT scanners. Thyrocare's fixed asset turnover stood at a high 5.6x in FY12. However, it dropped to 1.6x in FY13 due to the heavy capex incurred in setting up the CPL; it further fell to 1.2x in FY15 on establishment of the RPL network as well as consolidation of the imaging business. With average utilisation of only 40% in RPL, 25% in CPL and 53% average in PET-CT centres, the fixed asset turnover ratios are currently depressed; we expect it to increase from 1.6x in FY16 to 1.9x in FY20, driven by increasing test and scan volumes.

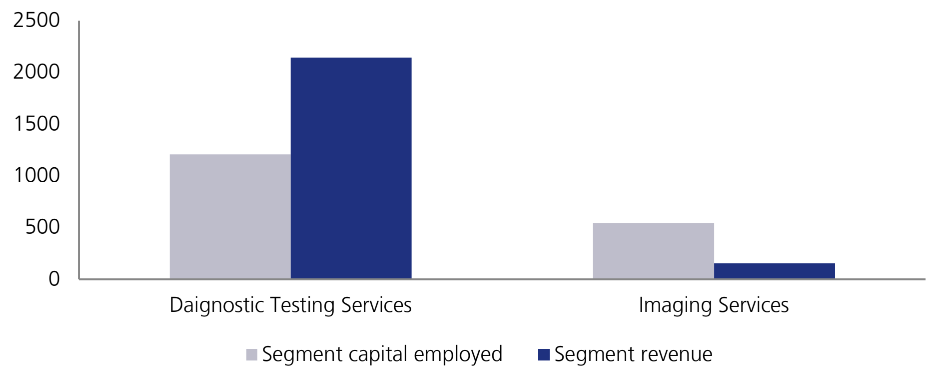
Exhibit 24. Fixed asset turnover



Source: JM Financial, Company

Setting up of CPL in FY13 reduced asset turnover significantly; asset light expansion and improving utilisation to result in gradual improvement

Exhibit 25. Asset turnover pressured by investments in imaging business

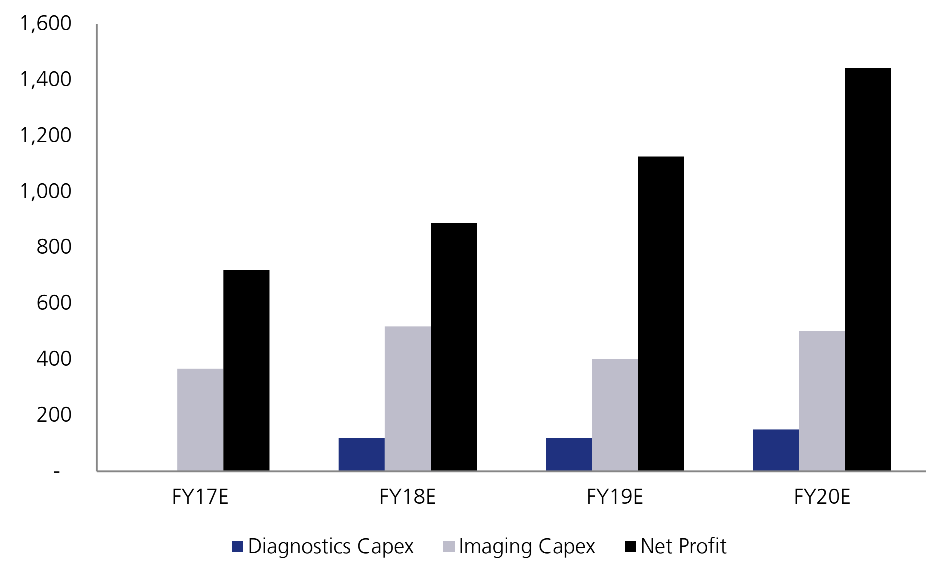


Source: JM Financial, Company; data as of FY16

Asset turnover to remain low in the near term due to the ongoing investments in the imaging business

With assumptions of the addition of 13 new RPLs, 27 new PET-CT scan centres and 2 cyclotrons, we expect c.Rs 2.2bn capital expenditure over FY17E-20E. The set-up cost of a RPL is Rs 25-35mn, a cyclotron is c.Rs 220mn and a PET-CT scanner is c.Rs 50mn.

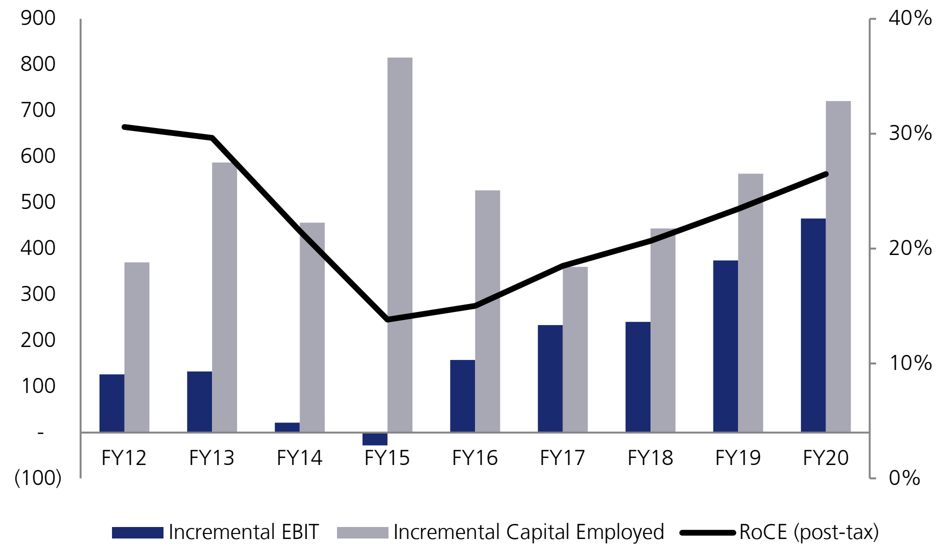
Exhibit 26. Capex plans



Source: JM Financial, Company

Capital requirement to be high for expansion of Nueclear franchise; to be funded entirely by internal accruals

Exhibit 27. RoCE to improve with increasing utilisation



Source: JM Financial, Company
Note: Financials prior to FY15 are Thyrocare's standalone financials (excluding consolidation of Nueclear)

RoCEs dropped post FY13 due to commissioning of the CPL and cyclotron in Navi Mumbai as well as consolidation of Nueclear business; improving utilisations at existing centres to drive RoCE improvement going forward

- **Balance sheet and profitability offers headroom for growth:** Thyrocare is a net cash company and the consolidated entity has a net cash of c.Rs 1bn; of this c.90% is in the form of mutual fund investments. Given its sound business model, consistent growth and stable margins, the company should be in a good position to access capital to take advantage of growth opportunities. The company plans to maintain a dividend payout ratio of 50% and utilise the rest to expand its imaging business (Nueclear).

Valuation

We arrive at a target price of Rs 880 for Thyrocare using a 3-stage DCF model, implying a P/E of 41.9x on FY19 EPS. We have modelled c.25% revenue CAGR with a c.260bps margin increase during FY16–20 We use a WACC of 14.5%, assuming a 6.9% risk-free rate, 5.5% risk premium and beta of 1.39. We assume a terminal growth rate of 5%.

Exhibit 28. DCF valuation

Thyrocare - Consolidated (Rs mn)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
EBIT before financial other income	987	1,227	1,601	2,067	2,625	3,320	4,131										
YoY growth	31%	24%	30%	29%	27%	26%	24%										
Effective tax rate	35%	35%	35%	35%	35%	35%	35%										
Tax on EBIT at effective tax rate	347	425	554	715	909	1,149	1,430										
Tax shield on interest - Nil																	
Adjusted tax	347	425	554	715	909	1,149	1,430										
NOPAT	639	802	1,047	1,352	1,717	2,171	2,701										
YoY growth	34%	26%	30%	29%	27%	26%	24%										
Depreciation & other non-cash charges	184	237	282	338	403	455	486										
Change in adj. net working capital – incr./(decr.)	(51)	(62)	(76)	(94)	(114)	(134)	(151)										
Capex	(435)	(718)	(618)	(766)	(896)	(716)	(416)										
Free cash flow	439	383	787	1,017	1,337	2,044	2,921	3,827	4,893	6,102	7,419	8,786	10,129	11,359	12,381	13,248	14,043
YoY growth	-13%	-13%	106%	29%	31%	53%	43%	31%	28%	25%	22%	18%	15%	12%	9%	7%	6%
Mar'18 DCF																	
Discounting factor		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PV of cash flow		1.00	0.88	0.77	0.67	0.59	0.52	0.45	0.40	0.35	0.31	0.27	0.24	0.21	0.18	0.16	0.14

PV of cash flow - Explicit Period (FY18-23E)	5,404
PV of cash flow - Fading Period (FY24-33E)	20,520
PV of cash flow - Terminal Value	20,148
Enterprise value	46,071
Less:	
Debt	0
Minority interest	0
Add:	
Cash	1,180
Value attributable to equity shareholders	47,251
No. of equity shares	53.7
Value per share (Rs)	**880**
Cost of Capital:	
Risk free rate	6.9%
Risk premium	5.5%
Beta	1.39
Cost of equity	14.5%
WACC	14.5%
Terminal growth rate	5.0%

Source: Company, JM Financial

Exhibit 29. DCF price sensitivity analysis

		WACC (%)				
		13.5%	14.0%	14.5%	15.0%	15.5%
Terminal Growth Rate (%)	4.0%	969	901	841	786	737
	4.5%	995	923	859	802	751
	5.0%	1,024	947	880	820	766
	5.5%	1,056	975	903	839	782
	6.0%	1,093	1,005	928	860	800

Source: JM Financial

- **Nueclear business could create value in long term:** The strong growth plans (60 PET-CT scanners; 3 cyclotrons) for the imaging business over the next 3-6 years would involve significant capital requirement (c. Rs 3.2bn), which the management plans to fund by using 50% of its annual net profits. This is likely to constrain cash flows and margins in the near term. However, given that scale is key to the profitability of this business, if the management is able to execute the planned expansion and generate the desired scan volumes, the company could achieve EBITDA margins of over 50% in the imaging business, which would improve the overall profitability of Thyrocare.
- **Valuations vis-à-vis peers:** Thyrocare trades at a premium to global diagnostic peers which we believe is supported by the large and growing market, strong growth rates (driven by increasing penetration and the shift from unorganised to organised players in India) and superior profitability metrics (driven by the asset-light model and healthy margins). However, Thyrocare's valuations are broadly in-line with domestic healthcare companies.

Exhibit 30. Thyrocare valuations vs. global diagnostic peers

Company	M.Cap (US$ mn)	P/E			EV/EBITDA			RoE (%)			EPS CAGR (%)
		FY17E	FY18E	FY19E	FY17E	FY18E	FY19E	FY17E	FY18E	FY19E	FY17-FY19
Laboratory Corp of America (USA)	14,812	15.1	14.0	12.9	9.8	9.3	8.8	14.7	13.7	13.2	8%
Quest Diagnostics (USA)	14,242	18.7	17.8	16.5	11.4	10.9	10.3	15.6	15.3	16.6	7%
Sonic Healthcare (Australia)	6,831	20.1	18.1	16.8	12.9	11.8	11.1	12.0	12.5	12.9	9%
Fleury (Brazil)	2,242	24.1	20.5	17.7	13.0	11.2	10.0	19.0	20.0	20.9	17%
Integrated Diagnostics (Egypt)	464	23.8	19. 8	15.0	14.0	11.6	9.2	15.1	17.9	23.0	26%
Dr Lal PathLabs (India)	1,241	50.3	42.6	36.4	31.1	26.4	22.4	27.4	25.6	24.1	18%
Thyrocare Technologies (India)	607	54.2	43.9	34.6	32.6	26.1	20.2	18.8	21.0	23.7	25%
Weighted mean		**19.5**	**17.6**	**16.2**	**12.1**	**11.2**	**10.4**	**15.3**	**14.9**	**15.4**	**9%**

Source: JM Financial, Bloomberg

Exhibit 31. Thyrocare valuations vs. domestic healthcare peers

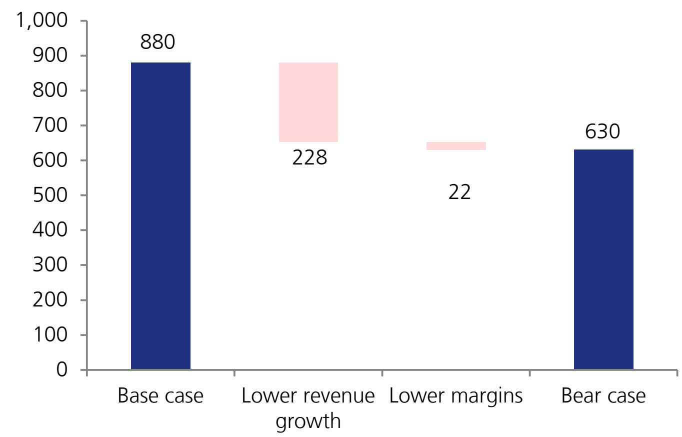
Company	M.Cap (Rs bn)	P/E			EV/EBITDA			RoE (%)			EPS CAGR (%)
		FY17E	FY18E	FY19E	FY17E	FY18E	FY19E	FY17E	FY18E	FY19E	FY17-FY19
Apollo Hospitals	162	57.8	40.3	28.6	23.0	18.6	14.9	7.7	10.3	13.3	42%
Fortis Healthcare	108	94.2	58.6	38.7	30.6	20.2	16.4	4.6	3.8	5.7	55%
Narayana Hrudayalaya	65	81.7	55.4	39.6	28.6	22.2	18.0	8.6	11.4	14.1	44%
HealthCare Global Enterprises	24	126.8	98.2	57.3	24.8	19.3	15.0	3.1	3.9	6.6	49%
Dr Lal PathLabs	80	50.3	42.6	36.4	31.1	26.4	22.4	27.4	25.6	24.1	18%
Thyrocare Technologies	39	54.2	43.9	34.6	32.6	26.1	20.2	18.8	21.0	23.7	25%
Weighted mean		**71.2**	**50.0**	**35.6**	**27.7**	**21.4**	**17.4**	**11.1**	**12.1**	**14.0**	**40%**

Source: JM Financial, Bloomberg

Bear case scenario analysis

Our bear case scenario analysis yields a fair value of Rs 630, assuming lower segmental growth rates of 17% and 22% revenue CAGRs for diagnostics and imaging segments, respectively, over FY16-23 and consequently lower overall margins. The bear case scenario could play out if incremental competition results in lower volume growth and lower realisations in the diagnostics business with the ramp up of imaging business being slower than expected.

Exhibit 32. Bear case scenario: target price impact



Source: JM Financial

Exhibit 33. Base case vs Bear case

	Base Case	Bear Case
Revenue CAGR (FY16-23E)	20%	17%
Diagnostics Revenues	19%	17%
Imaging Revenues	28%	22%
EBITDA CAGR (FY16-23E)	22%	18%
EBITDA margin increase	476 bps	294 bps
PAT CAGR (FY16-23E)	22%	19%
FCF growth rate decline (FY24-33E)	31% to 6%	25% to 6%
Fair Value	**880**	**630**

Source: JM Financial

Key risks

Aggressive growth plans of peers and PE-backed regional players could impact growth trajectory and profitability of Thyrocare

- Competition: The competition, primarily from the organised sector, will continue to grow as the demand for diagnostic services increases and additional companies may enter the Indian market. Many of the potential competitors have brand recognition and possibly greater financial, technical and R&D resources as well as selling and marketing capabilities. A competitor cutting prices may have a significant impact on volumes, which may also be a drag on margins. Some competitors may develop products at prices lower than Thyrocare's that could be viewed by physicians and healthcare providers as functionally equivalent.
- Test concentration: Thyrocare is focused on a limited bouquet of biochemistry tests. If the competitors develop diagnostic tests with competitive pricing, the company's test offerings fall out of favour, customer's preferences change, or ability to conduct these tests is impaired in any way, the business, financial condition and results of operations could be material and adversely impacted.
- Vendor risk: For the RPLs, Thyrocare purchases the equipment and systems used to conduct the pathology testing services (as opposed to the CPL, wherein the equipment and systems are provided for minimal capital cost in exchange for commitments on supply; e.g. reagent purchases). In the event that relationships with vendors weaken or are terminated, it may not be able to continue to source suitable equipment on favourable terms, and therefore the expansion of network of RPLs may entail significant cash outlay, which could adversely affect the financial condition, or may result in delay or suspension of expansion plans, which could adversely impact the growth prospects. The company is working towards having three vendors to reduce concentration risk.
- Franchisee retention: Any inability to retain existing or induct new authorised service providers, any reduction in the number of their patients, or any reduction in tests ordered or samples, without offsetting growth in customer base, could impact the company's ability to successfully grow business and could have a material adverse effect on business, financial condition and results of operations.
- Centralisation risk: The continued operation of the CPL and RPLs can be substantially interrupted due to a number of factors such as natural calamities, power interruptions and water shortages. The occurrence of any such event could result in the temporary or long-term closure of laboratories, severely disrupt business operations, and materially and adversely affect business, results of operations and financial condition, particularly if the CPL is affected by such an event.

Failure to keep pace with technology may lead to competitive pressures

- Technology: The healthcare diagnostic testing services industry is characterised by changing technology and new product introductions. Other companies or individuals, including competitors, may obtain patents or other proprietary rights relating to newer technologies that could reduce the demand for the company's pathology testing services. Any failure to keep pace with advancing technologies or failure to introduce new technologies could have a material adverse effect on the business, financial condition and results of operations.
- Regulatory and policy risk: Diagnostics is not currently highly regulated in India; stricter quality regulations and accreditation standards augurs well for organised players such as Thyrocare. However, any adverse regulations on pricing or provision of subsidised tests by governments can be detrimental to Thyrocare's revenue growth and profitability. Further, the molecular imaging business uses radioactive materials, which are inherently hazardous and, consequently, subject to laws and regulations relating to the protection of the environment and human health and safety as well as laws and regulations relating to the handling, transportation and disposal of biomedical and hazardous wastes. Any harmful event may result in significant losses for the company.

Company background

Thyrocare is one of India's leading pan-India diagnostic chains and conduct an array of medical diagnostic tests and profiles of tests that centre on early detection, and management of disorders and diseases. As of Feb'16, the company offered 198 tests and 59 profiles of tests; these include 16 profiles of wellness and preventive health care tests administered under its "Aarogyam" brand.

Through its wholly-owned subsidiary, Nueclear Healthcare Limited (NHL), it operates a network of PET-CT molecular imaging centres in New Delhi, Navi Mumbai and Hyderabad, focused on early and effective cancer monitoring.

Exhibit 34. Key brands and services

Brand	Service offered	Description
Thyrocare® Think Thyroid. Think Thyrocare.	Diagnostic Testing	Metabolic disorders and Thyroid testing
Aarogyam® Think Wellness. Think Aarogyam	Wellness and Preventive Care	Liver, cholesterol, kidney, thyroid, iron deficiency, testosterone, cardiac markers, pancreas, electrolytes, arthritis, folic acid, toxic elements, diabetic screening, complete haemogram and vitamin deficiency profile
Nueclear® NATIONWIDE NETWORKED All in Nuclear Medicine & Only Nuclear Medicine	Cancer detection and monitoring	PET-CT scan services for diagnosis, staging, monitoring and evaluation of Cancer
WHATERS Let it be pure | www.whaters.com	Water Testing	Physical and chemical contaminants, elements, microbiology, pesticides and volatile organic compounds testing
Sugar Scan™ Control it	Blood Glucose Testing	Markets glucose meters for blood glucose monitoring

Source: Company, JM Financial

Thyrocare operates with a centralised processing laboratory (CPL) in Navi Mumbai for esoteric tests and regional processing laboratories (RPLs) in major cities of India. The company focuses on strong technologies and systems that facilitate it to provide a bouquet of high-quality tests at an affordable cost.

The CPL is fully automated and driven by a bar-coded and bi-directionally-interfaced system and a library information system (LIS). The CPL meets international standards of quality and has received global accreditations from CAP, the NABTCL and the ISO.

The RPLs offers routine tests conducive to high-volume testing, including thyroid tests, profiles of tests offered under the Aarogyam brand, and liver and kidney function tests.

As of FY16, Thyrocare collected samples through a pan-India network of 1,041 ASPs, comprising 487 TAGs and 354 TSPs spread across 466 cities, 24 states and one union territory, which operate under franchise agreements. The ASPs collect samples from local hospitals, laboratories, diagnostic centres, nursing homes, clinics and doctors. TSPs are also authorised to gather samples from patients and retail customers that are either procured directly or in some cases referred to them by the company or its DSAs. ASPs also receive samples through its online client system (OLC), which allows persons or organisations with sample collection capabilities to outsource the processing of samples by placing an order at https://www.thyrocare.com/wellness and delivering samples to the nearest ASP. The company is also planning to increase the count out Blood Collection Technicians from current 300 to c. 1,000 to cater to the home collection leads of patients and deliver them to ASPs. ASPs either deliver samples directly to one of the RPLs, or if the sample is to be processed at the CPL, to one of its 22 hub locations, where samples are aggregated and transported directly to the CPL.

Exhibit 35. Timeline of key events and milestones

Year	Particulars
1996	Commenced operations under the name Thyrocare Diagnostics Pvt Ltd with only seven tests in its menu
2000	Incorporated 'Thyrocare Technologies Limited' and received a certificate for commencement of operations
2001	Received ISO 9001 certification
	Commenced commercial operations under brand 'Thyrocare' following the acquisition of Thyrocare Biotech Private Limited and Thyrocare Diagnostics Private Limited (which were incorporated in 1996)
2005	Received NABL accreditation
2006	Issued fully convertible debentures amounting to c.Rs 250mn to Bennett, Coleman & Company Limited (BCCL)
2007	Received accreditation from the College of American Pathologists (CAP)
2010	Issued certain compulsorily convertible debentures aggregating to Rs 250mn to Agalia, which also acquired equity shares amounting to Rs 1,250mn from promoters and others
	Launched wellness packages under the brand name "Aarogyam"
2011	Migrated to 'Total Laboratory Automation System' installed by Siemens
2012	Moved to a 200,000 sq. ft facility in Turbhe, Navi Mumbai
	Norwest Venture Partners acquired equity shares amounting Rs 1,200mn
2013	Forged international partnerships in Gulf, Bangladesh and Nepal
	Nueclear Healthcare Limited (NHL) commenced operations at the PET-CT centres at Navi Mumbai and conducted over 1,000 scans in the first year of operation.
	Emerging India Fund acquired certain equity shares from Agalia
2014	Installed Aptio, India's first and the world's longest track automation system of 93.5 meters from Siemens
	Commissioned the operations in medical cyclotron facility in Navi Mumbai
	NHL commenced operations at the PET-CT centres in New Delhi and Hyderabad and the PET-CT centres at New Delhi conducted over 1,000 scans in the first year of operations
	Franchisee network crossed 1,000
2015	Opened RPLs in Delhi, Coimbatore, Hyderabad and Kolkata to expand its coverage and volume of tests and samples processed daily
	Acquired the equipment for testing of water samples and commenced operating the equipment under the brand name "WHATERS"
	NHL completed over 10,000 scans at the PET-CT centres in New Delhi, over 10,000 scans at the PET-CT centres in Navi Mumbai from the date of inception and over 1,000 scans at the PET-CT centres in Hyderabad since inception
2016	Went public with IPO being oversubscribed 75 times
	Launched RPLs in Bhopal and Bengaluru

Source: Company, JM Financial

Nueclear Healthcare: Molecular imaging services

Through Nueclear Healthcare Limited (NHL), Thyrocare is developing a growing network of molecular imaging centres, which focuses primarily on early and effective cancer monitoring. Each of the imaging centres use PET-CT scanners to assist in cancer diagnosis, staging, monitoring of treatment, and efficacy and evaluation of disease recurrence. It currently has five operating PET-CT scanners in its three imaging centres: two in Navi Mumbai, two in New Delhi and one in Hyderabad, and intends to open imaging centres in Kolkata, Raipur and Coimbatore.

NHL also owns and operates a medical cyclotron unit in Navi Mumbai, which produces the radioactive bio-marker FDG required for PET-CTs. The cyclotron unit generates FDG used by its PET-CT scanners in Navi Mumbai and New Delhi as well as by third-party PET-CT imaging centres. The FDG for its Hyderabad PET-CT scanners is currently sourced from third parties in Hyderabad to optimise cost and time efficiencies. Nueclear has performed more than 29,000 cancer imaging scans since its inception, of which more than 15,000 are reported in the fiscal 2016.

Related businesses

Besides its core business of offering a bouquet of biochemistry diagnostic tests as well as PET-CT scans, at affordable costs, Thyrocare has also been diversifying into related businesses under the following brands:

- WHATERS: The company currently conducts the following tests—physical and chemical testing, elements testing, microbiology testing, pesticide testing and volatile organic compounds testing. Whaters shares the Thyrocare logistics network to ensure samples can be collected from all major towns and cities in the country. During FY16, the company conducted a total of 2,277 water tests.
- Sugar scan: The company offers a sugar scan blood glucose monitor, to instantly determine their blood glucose levels at an affordable cost (MRP of Rs 1,500).
- Thyrocare metabolic clinic: The company is currently in the process of setting up a nation-wide chain of branded metabolic clinics for individuals with chronic illnesses or who plan to undergo a healthcare procedure. This will serve as a platform for healthcare professionals to provide their services, which will help Thyrocare in sourcing samples and clients for its diagnostic business.

Key management personnel

Exhibit 36. Key members of Thyrocare

Management	Bio
Dr A. Velumani Promoter, Chairman, MD and CEO	Dr A. Velumani founded Thyrocare Technologies Limited in 1996. Prior to Thyrocare, he worked for over 12 years as a scientific officer specialising in immunodiagnostics in general and radioimmunoarrays in particular, at the Bhabha Atomic Research Centre. He holds a PhD in Microbiology from BARC/Mumbai University in Thyroid Biochemistry.
A Sundararaju Director and CFO	A Sundararaju has been in charge of the finance, legal, administrative and franchisee departments of the company since 1996. He is a graduate in law from the University of Bombay.

Source: Company, JM Financial

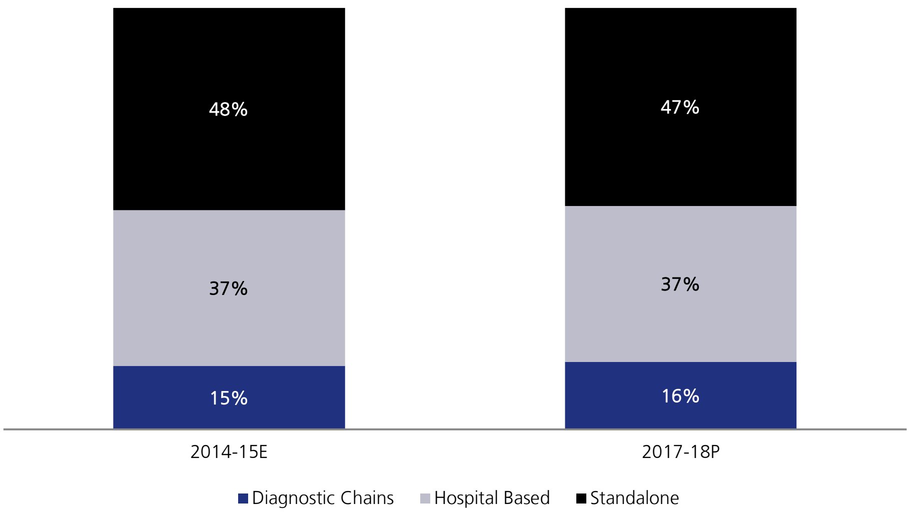
Industry overview

Branded diagnostics: Dawn of a new regime

The Indian diagnostic sector will be a beneficiary of macro-economic improvement, as higher disposable income, lifestyle diseases and inclination towards preventive healthcare drives the healthcare service market. We see national diagnostic chains—Dr Lal, SRL and Thyrocare—comfortably outperforming the market, as the brand building initiatives accelerate the shift towards the organised sector. While the entry barrier is relatively low, greater pricing power, branding and potential accreditation guidelines in the future should insulate larger players from competition.

The diagnostic segment is expected to post rapid growth, as per a CRISIL Research Report. As the chart below shows, its share is expected to go up from 15% to 16%, implying a CAGR of 21-23%.

Exhibit 37. Diagnostic centers by segment

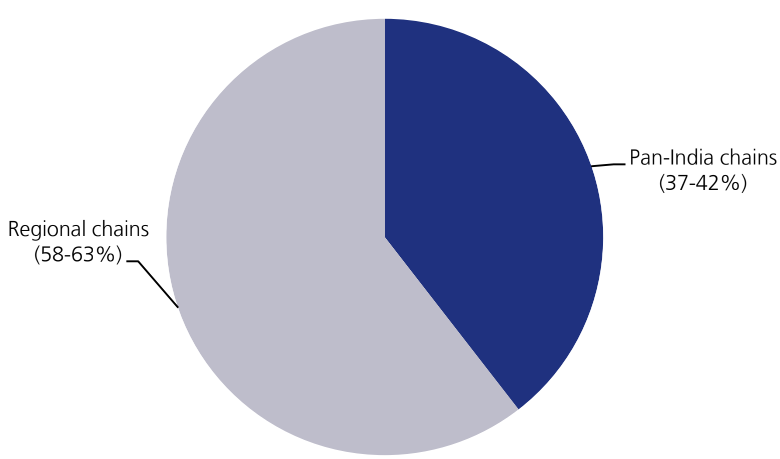


Source: CRISIL Research report

Diagnostic chains' contribution to increase to 16% in the next three years

However, within the diagnostic chains segment pan-India diagnostic chains, which currently corner an estimated 35-40% of the diagnostics chain market, are expected to grow faster; by 2017-18, the share of pan-India players is expected to rise to 37-42%. Regional chains, on the other hand, have c.60-65% of the diagnostics chain market.

Exhibit 38. Diagnostic chains sub-market breakdown



Source: CRISIL Research report

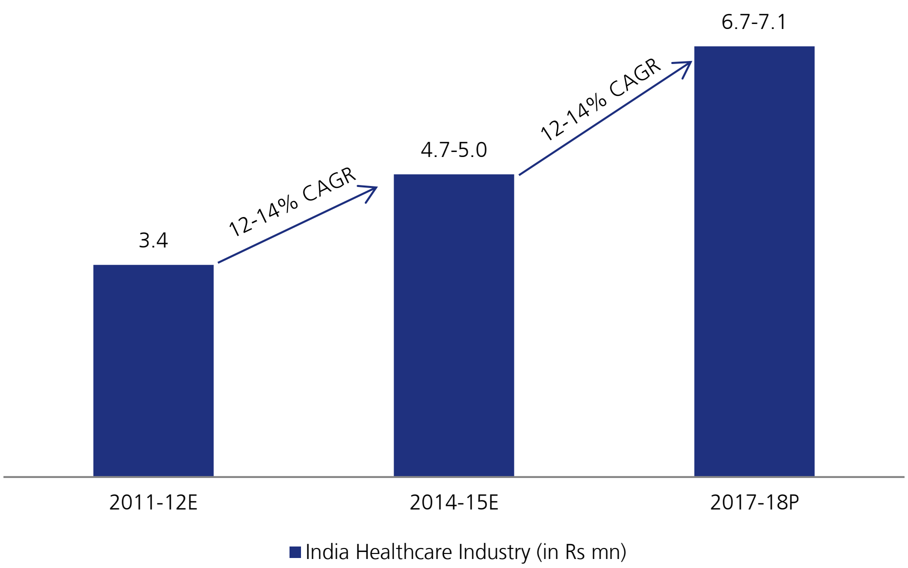
Share of pan-India chains expected to go to 37-42% of the diagnostics chain market by FY18

Healthcare services: Macro drivers in place

India has been one of the fastest-growing economies with an average GDP growth of 7% in the past 15 years. However, India's healthcare spends still lags developing nations. As per WHO, India's total expenditure on healthcare was 4.7% of GDP in 2014 with public expenditure of only 1.41%. India's GDP has expanded from Rs 38,513bn in FY00 to Rs 113,502bn in FY16, a CAGR of 7%, while per-capita healthcare spend has gone up from $89 to c.$260 (on purchasing power parity terms).

The increase in penetration of healthcare especially in rural areas, higher disposable income and higher spend on healthcare translates into double-digit healthcare market growth.

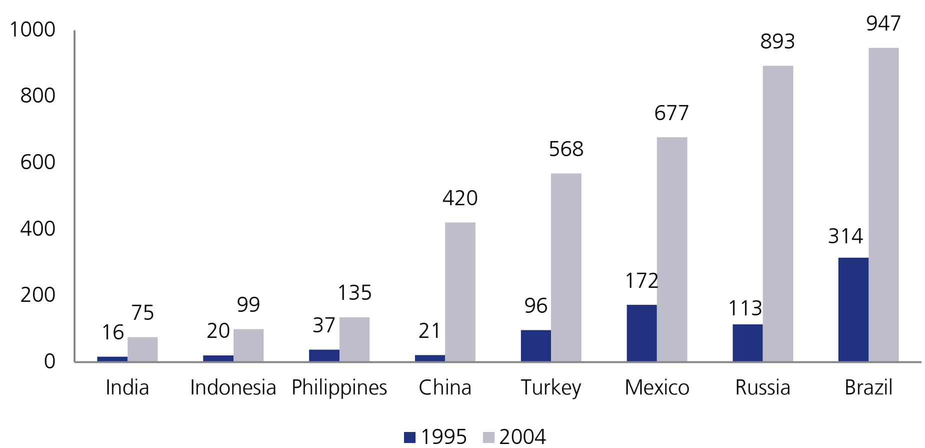
Exhibit 39. Indian healthcare industry growth



Source: CRISIL Research report

- **Increasing per capita expenditure…:** India's per capita healthcare spend has reported a CAGR of over 10% between 2006 and 2015. While increasing incomes have played a role in this, it has been complemented by greater healthcare awareness. Healthcare service providers (hospitals and diagnostics labs) are focusing beyond tier-1 cities, which has translated to an increased access (read volume growth) to services. Only Russia, Turkey, and China have shown faster growth than India.

Exhibit 40. Per capita healthcare spend (US$)

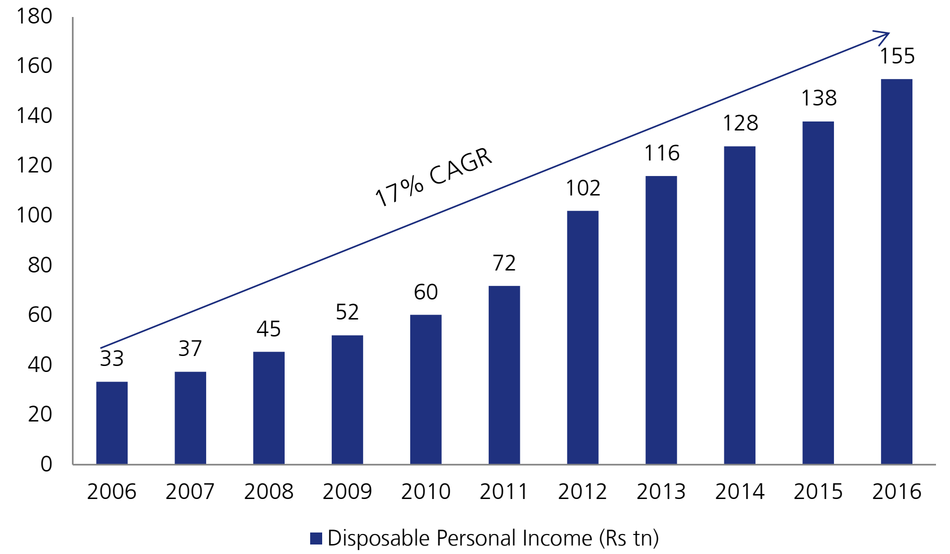


Source: World Bank

…but is among the fastest-growing countries in healthcare spending

- **...aided by growth in disposable income:** As the chart below indicates, India's personal disposable income has grown from Rs 33tn in 2006 to Rs 155tn in 2016, implying a CAGR of 17%. The rise in disposable income has created increasing wealth and this has had a significant impact on healthcare, as the population chases better healthcare services.

Exhibit 41. India's disposable income reported a CAGR of 17% despite the global crisis

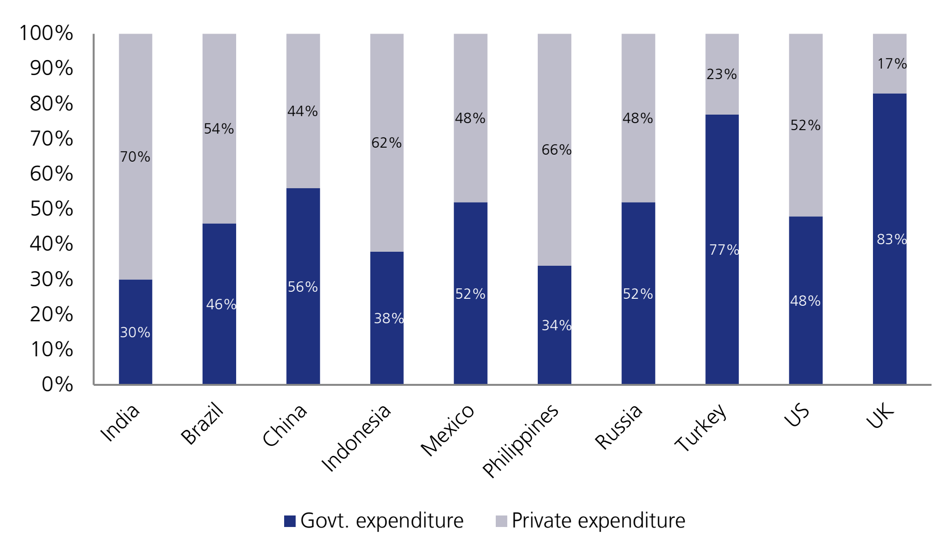


Source: Ministry of Statistics and Programme Implementation (MOSPI); Current Prices

Steady rise in disposable income should help in higher spend on healthcare

Private spending is the backbone of the healthcare sector's growth in general and the diagnostic industry, in particular. While government expenditure (c.30% of total spending) is concentrated towards hospitalisation and medicines, the diagnostics expenditure is largely out-of-pocket. The central and state governments are expanding their healthcare budgets and increasing insurance (government + private).

Exhibit 42. Public and private spend in India vs. peers

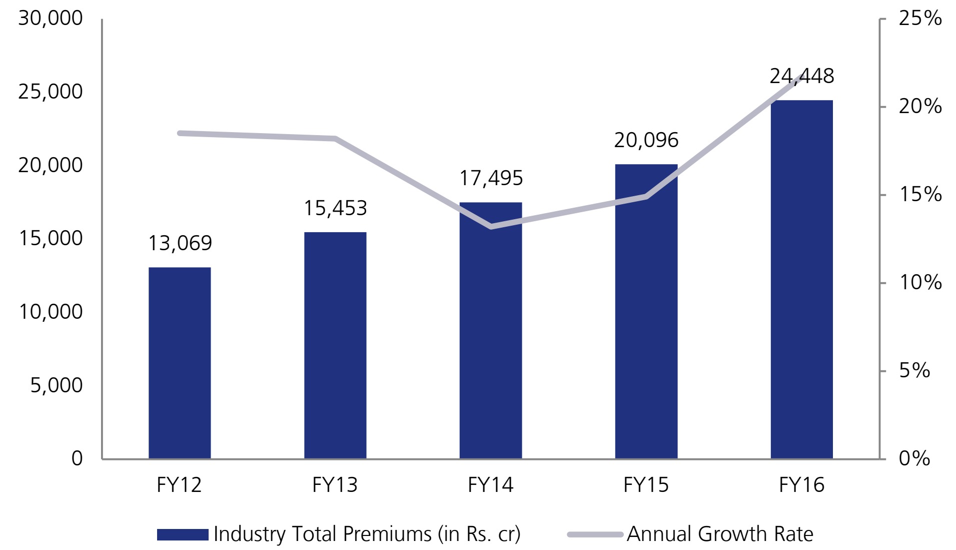


Source: World Bank

Private spending is among the highest in India

- **Increase in insurance coverage:** In 2013, nearly 86% of India's private healthcare expenditure spends was met through out-of-pocket expenditure. In 2013-14, only c.17% of the population subscribed to health insurance. Any increase in the penetration rate of health insurance in India is likely to contribute to the demand for healthcare services, particularly hospitalisation rates, resulting in an increased demand for diagnostic services.

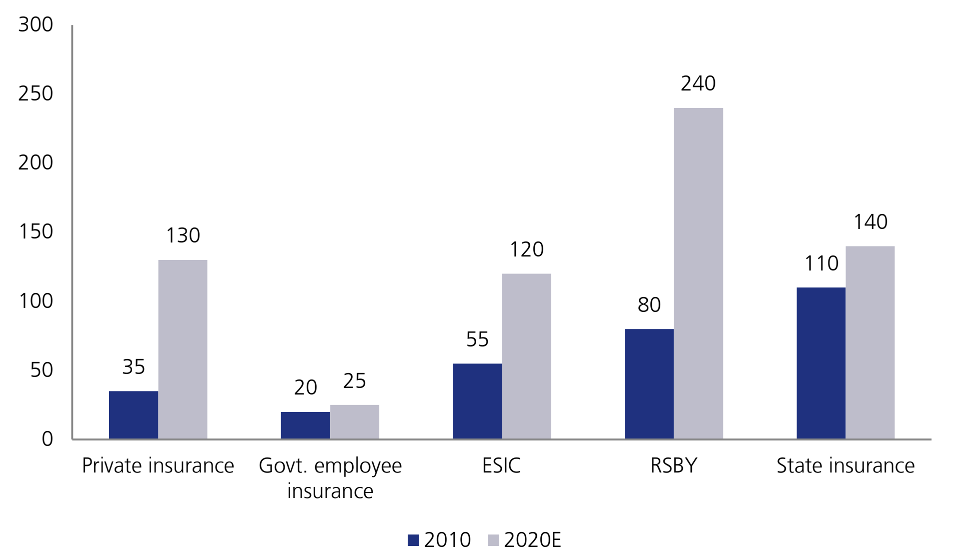
Exhibit 43. Health insurance premiums rising fast



Source: Insurance Regulatory and Development Authority of India, Annual Report 2015-2016

Insurance penetration is only c.17% of the total population or c.215mn people. By 2020, the expectation is to increase the coverage to c.650mn people.

Exhibit 44. Growing insurance penetration…

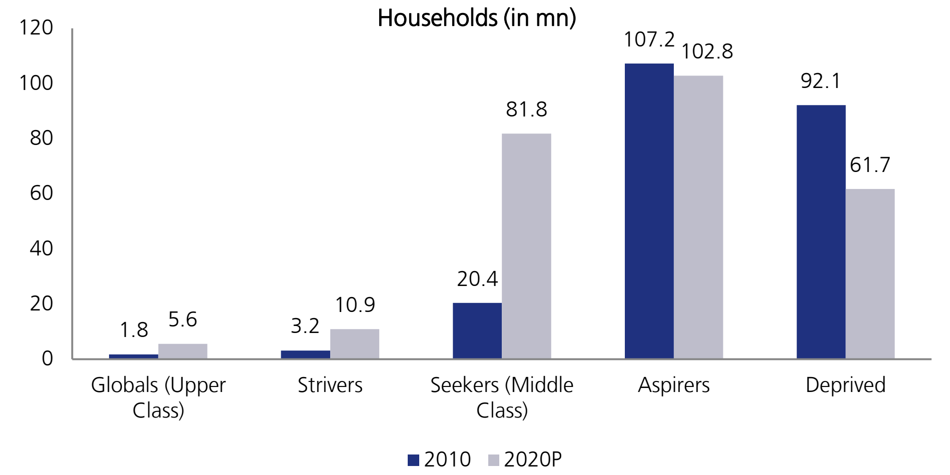


Source: World Bank, McKinsey estimates
RSBY - Rashtriya Swasthya Bima Yojna ESIC - Employees State Insurance Corporation

Higher insurance penetration will aid diagnostic industry growth

- **Affordability no longer a deterrent:** A rising income notwithstanding, India's 'deprived' households are expected to fall by a third between 2010 and 2020, while the middle-class population will expect a four-fold increase. This should ensure that the demand for quality treatment remains strong.

Exhibit 45. ...will be backed by growing affordability



Source: McKinsey Global Institute

Rise of middle-income households to improve affordability of healthcare services

Diagnostics: Direct beneficiary of healthcare expansion

While all the factors mentioned above hold true for the diagnostic industry as well, several other factors should ensure that diagnostics could remain growth leader in the future, as: a) being an asset-light business model, the upfront cost is limited; thus capital allocation is not an issue for expansion; b) regional labs, which incur high investment and longer time to set up, are few in number and satellite labs can be set up in a short period of time; and c) most larger players have invested in brands, so attracting customers is not a major challenge as they become beneficiaries of the shift towards the organised market.

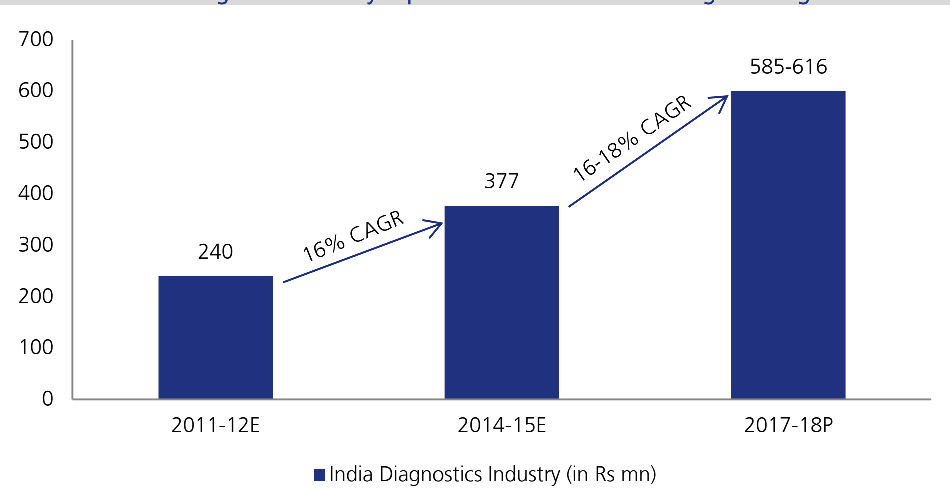
Industry estimates suggest a 16-18% average annual growth, but national chains have recently grown close to 18-20% and we expect the momentum to continue.

- Shift to the organised market: During 2012-16, the average growth for the industry has been c.15-16%, while companies such as Dr Lal and Thyrocare have grown in excess of 20%. Expansion to tier-3 cities and towns, improving access to healthcare facilities, strengthening brand and higher spending on healthcare services should ensure a mid-to-high teen growth.

  For the next three years, it is estimated that the Indian diagnostic industry will report a CAGR of approximately 16-18% to reach approximately between Rs 585bn and Rs 616bn in 2017-18. We have charted the growth of the industry in the chart that follows.

Shift to the organised market to endure mid-to-high teen growth of the industry

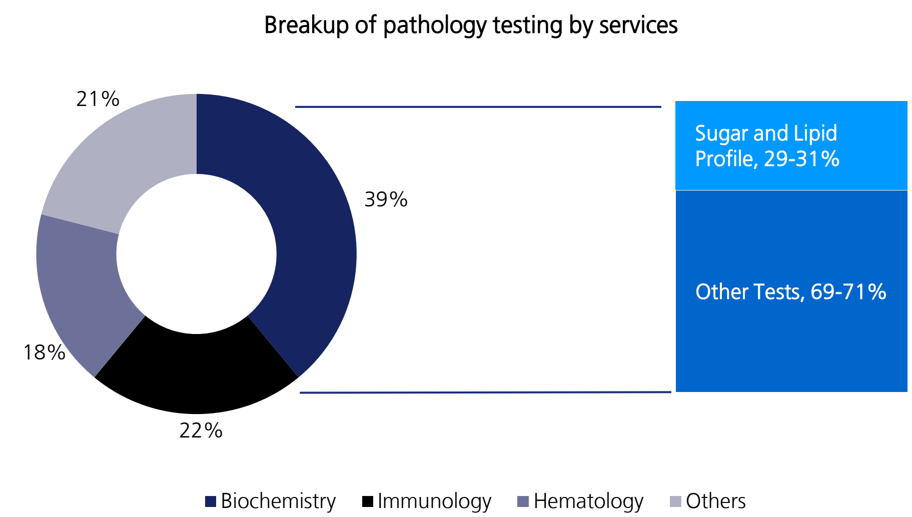
Exhibit 46. Indian diagnostic industry expected to maintain mid-to-high teens growth



Source: CRISIL Research
Note: Data for 2011-2012, 2014-2015 is estimated; data for 2017-2018 is projected.

- **Lifestyle diseases will be the key growth driver…:** Within the pathology space, biochemistry and immunology contribute bulk of the volumes. The bouquet of tests offered by pan-national chains cover almost all of these, but growth in recent years has been driven mainly by sugar and lipid, and immunology. Going forward, we see this segment contributing the most to growth. As India's disease profile gradually shifts towards chronic diseases, biochemistry tests for blood sugar, cholesterol and triglycerides, urea and creatinine, among others, are increasingly being prescribed by doctors to diagnose diseases. For example, biochemical testing helps to identify the risk for diabetes in patients. Also, lipid tests (measuring the amount of cholesterol and triglycerides in the blood) are increasingly being prescribed to patients to identify the risk of cardiovascular diseases. As per a CRISIL Research Report, it is estimated that testing for blood sugar and lipid profiles accounted for approximately 29-31% of the total revenue generated by the biochemistry testing segment in the fiscal year 2014-15. Over the next three fiscal years, it is estimated that this sub-segment will grow at a faster rate than other biochemistry tests; it is expected that this sub-segment will contribute up to 30-32% of the entire biochemistry segment in the fiscal year 2017-18.

Exhibit 47. Biochemistry is the biggest component in pathology



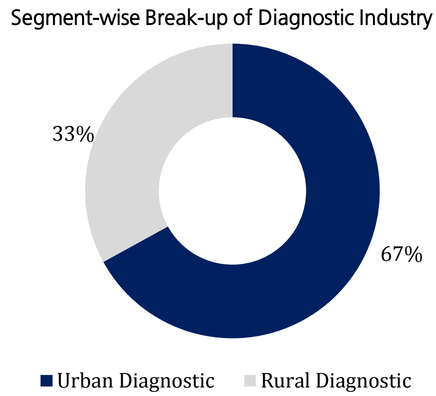
Source: CRISIL Research, JM Financial

- **…which should also drive "preventive" test growth:** The wellness and preventive diagnostics share was c.6-8% of the aggregate diagnostics market (i.e., c.Rs 25-28bn), as per a CRISIL Research Report. The report expects this to generate a strong CAGR growth of c.25% in the next few years and will be 7-9% of the entire market. A majority of these wellness and preventive tests consists of biochemistry tests to screen for an individual's risk of chronic diseases such as cardiovascular diseases, diabetes and cancers. Some diagnostics service providers also offer basic imaging services such as X-rays and ultrasounds, in addition to pathology testing. We see urban-based diagnostic chains with a strong brand to benefit from this shift.

Rural opportunity under-appreciated

- **Urban outpacing rural…:** India's urban population contributes up to 67% of the revenues of the overall diagnostics market, despite having only c.28% of India's total population. Urban areas have been the beneficiaries of GDP growth and despite a relatively higher base, healthcare as well as food/non-food spending between 2004-05 and 2001-12 has surpassed rural spends.

Exhibit 48. Urban areas account for bulk of revenues



Source: CRISIL Research

- …but rural is not a laggard: We see urban dominance to continue until at least the next five years. However, diagnostic companies will not be pressed for growth, as the next leg will be driven by the rural areas. Data from NSSO indicates that growth in rural spending has kept pace with urban areas. Medical spending growth has been broadly in line with non-medical expenditure.

Exhibit 49. Monthly per capita expenditure

Monthly per capita expenditure (Rs)	2004-05		2011-12	
	Rural	Urban	Rural	Urban
Cereals	101	106	153	174
Gram	1	1	2	3
Cereal Substitutes	0	1	1	1
Pulses & Products	17	23	40	51
Milk & Milk Products	47	83	115	184
Edible Oil	26	36	53	70
Egg, Fish & Meat	19	28	68	96
Vegetables	34	47	95	122
Fruits- Fresh	8	19	32	70
Fruits- Dry	2	5	8	21
Sugar	13	16	24	27
Salt	1	1	2	3
Spices	13	16	50	64
Beverages, Refreshments, etc.	25	65	113	236
Food: Total	**308**	**447**	**756**	**1,121**
Pan, Tobacco & Intoxicants	15	17	46	42
Fuel & Light	57	105	114	176
Clothing & Bedding	25	42	86	141
Footwear	4	7	15	26
Education	15	53	50	182
Medical	37	55	95	146
Misc	33	73	76	152
Cons. Services Excl. Conveyance	21	69	57	147
Conveyance	21	74	60	171
Rent	3	59	7	164
Taxes and Cesses	1	9	4	22
Durable Goods	19	43	65	139
Non-Food: Total	**251**	**605**	**673**	**1,509**
All	**559**	**1,052**	**1,430**	**2,630**

Source: NSSO, JM Financial

Financial Tables (Consolidated)

Income Statement (Rs mn)

Y/E March	FY15A	FY16A	FY17E	FY18E	FY19E
Net Sales	1,830	2,410	3,019	3,762	4,681
Sales Growth	22.0%	31.7%	25.3%	24.6%	24.4%
Other Operating Income	0	0	0	0	0
Total Revenue	**1,830**	**2,410**	**3,019**	**3,762**	**4,681**
Cost of Goods Sold/Op. Exp	558	704	880	1,100	1,371
Personnel Cost	175	257	311	371	444
Other Expenses	373	514	656	828	983
EBITDA	**724**	**935**	**1,171**	**1,464**	**1,883**
EBITDA Margin	39.6%	38.8%	38.8%	38.9%	40.2%
EBITDA Growth	5.4%	29.2%	25.2%	25.0%	28.6%
Depn. & Amort.	129	182	184	237	282
EBIT	595	753	987	1,227	1,601
Other Income	81	65	125	131	121
Finance Cost	0	0	0	0	0
PBT before Excep. & Forex	676	818	1,111	1,359	1,722
Excep. & Forex Inc./Loss(-)	0	0	0	0	0
PBT	676	818	1,111	1,359	1,722
Taxes	236	300	391	470	596
Extraordinary Inc./Loss(-)	0	0	0	0	0
Assoc. Profit/Min. Int.(-)	-12	0	0	0	0
Reported Net Profit	452	518	720	888	1,126
Adjusted Net Profit	**452**	**518**	**720**	**888**	**1,126**
Net Margin	24.7%	21.5%	23.9%	23.6%	24.1%
Diluted Share Cap. (mn)	49.5	51.5	53.7	53.7	53.7
Diluted EPS (Rs.)	**9.1**	**10.1**	**13.4**	**16.5**	**21.0**
Diluted EPS Growth	0.0%	10.1%	33.3%	23.4%	26.7%
Total Dividend + Tax	229	539	432	533	676
Dividend Per Share (Rs)	3.9	8.7	6.7	8.3	10.5

Source: Company, JM Financial

Balance Sheet (Rs mn)

Y/E March	FY15A	FY16A	FY17E	FY18E	FY19E
Shareholders' Fund	2,764	3,656	4,016	4,460	5,023
Share Capital	505	537	537	537	537
Reserves & Surplus	2,258	3,119	3,479	3,923	4,486
Preference Share Capital	0	0	0	0	0
Minority Interest	360	0	0	0	0
Total Loans	0	0	0	0	0
Def. Tax Liab. / Assets (-)	-9	-26	-26	-26	-26
Total - Equity & Liab.	**3,115**	**3,631**	**3,991**	**4,435**	**4,998**
Net Fixed Assets	1,562	1,536	1,787	2,269	2,605
Gross Fixed Assets	1,894	2,088	2,523	3,241	3,859
Intangible Assets	16	13	13	13	13
Less: Depn. & Amort.	398	575	759	995	1,277
Capital WIP	50	10	10	10	10
Investments	859	932	932	932	932
Current Assets	862	1,602	1,743	1,744	2,018
Inventories	74	107	134	167	208
Sundry Debtors	49	75	94	117	146
Cash & Bank Balances	51	103	162	62	213
Loans & Advances	90	77	96	120	149
Other Current Assets	599	1,240	1,257	1,277	1,302
Current Liab. & Prov.	168	441	472	510	558
Current Liabilities	72	79	84	90	98
Provisions & Others	96	362	388	420	460
Net Current Assets	694	1,162	1,271	1,234	1,460
Total – Assets	**3,115**	**3,631**	**3,991**	**4,435**	**4,998**

Source: Company, JM Financial

Cash Flow Statement (Rs mn)

Y/E March	FY15A	FY16A	FY17E	FY18E	FY19E
Profit before Tax	676	818	1,111	1,359	1,722
Depn. & Amort.	129	182	184	237	282
Net Interest Exp. / Inc. (-)	-3	0	0	0	0
Inc (-) / Dec in WCap.	-169	9	-51	-62	-76
Others	-61	-12	-125	-131	-121
Taxes Paid	-228	-319	-391	-470	-596
Operating Cash Flow	**345**	**678**	**729**	**932**	**1,210**
Capex	-100	-144	-435	-718	-618
Free Cash Flow	245	534	294	213	592
Inc (-) / Dec in Investments	-1,317	-1,064	0	0	0
Others	1,238	1,032	125	131	121
Investing Cash Flow	**-180**	**-177**	**-310**	**-587**	**-497**
Inc / Dec (-) in Capital	0	0	0	0	0
Dividend + Tax thereon	-229	-450	-360	-444	-563
Inc / Dec (-) in Loans	0	0	0	0	0
Others	0	0	0	0	0
Financing Cash Flow	**-228**	**-450**	**-360**	**-444**	**-563**
Inc / Dec (-) in Cash	**-63**	**52**	**59**	**-99**	**150**
Opening Cash Balance	114	51	103	162	62
Closing Cash Balance	51	103	162	62	213

Source: Company, JM Financial

Dupont Analysis

Y/E March	FY15A	FY16A	FY17E	FY18E	FY19E
Net Margin	24.7%	21.5%	23.9%	23.6%	24.1%
Asset Turnover (x)	0.7	0.7	0.8	0.9	1.0
Leverage Factor (x)	1.2	1.1	1.0	1.0	1.0
RoE	18.7%	16.1%	18.8%	21.0%	23.7%

Key Ratios

Y/E March	FY15A	FY16A	FY17E	FY18E	FY19E
BV/Share (Rs.)	55.8	71.0	74.8	83.0	93.5
ROIC	17.5%	19.7%	23.1%	25.1%	28.5%
ROE	16.4%	16.1%	18.8%	21.0%	23.7%
Net Debt/Equity (x)	-0.3	-0.3	-0.3	-0.2	-0.2
P/E (x)	79.5	72.2	54.2	43.9	34.6
P/B (x)	13.0	10.2	9.7	8.7	7.8
EV/EBITDA (x)	53.4	40.8	32.6	26.1	20.2
EV/Sales (x)	21.1	15.8	12.6	10.2	8.1
Debtor days	10	11	11	11	11
Inventory days	15	12	12	12	12
Creditor days	3	5	5	5	5

Source: Company, JM Financial

APPENDIX I

JM Financial Institutional Securities Limited

Corporate Identity Number: U65192MH1995PLC092522
Member of BSE Ltd. and National Stock Exchange of India Ltd. and Metropolitan Stock Exchange of India Ltd.
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Rating	Meaning
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Hold	Price expected to move in the range of 10% downside to 15% upside from the current market price.
Sell	Price expected to move downwards by more than 10%

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