Motilal Oswal

FINANCIAL SERVICES

31 August 2023 Update | Sector: Insurance

Star Health

BSE SENSEX	
64,831	



S&P CNX

19,254

Bloomberg	STARHEAL IN
Equity Shares (m)	576
M.Cap.(INRb)/(USDb)	369.7 / 4.5
52-Week Range (INR)	780 / 451
1, 6, 12 Rel. Per (%)	2/1/-22
12M Avg Val (INR M)	432

Financials Snapshot (INR b)

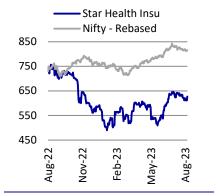
i manciais Snap		0)	
Y/E March	2023	2024E	2025E
NEP	112.6	134.5	159.7
U/W Profit	2.0	5.0	6.8
РВТ	8.3	14.4	17.7
РАТ	6.2	10.8	13.3
Ratios (%)			
Claims	65.0	63.5	63.3
Commission	13.7	13.7	13.7
Expense	16.7	16.3	15.8
Combined	95.3	93.5	92.8
RoE	11.1	15.2	16.0
EPS (INR)	10.6	18.6	22.9
Valuations			
P/E (x)	59.2	33.9	27.5
P/BV (x)	5.6	4.8	4.1

Shareholding pattern (%)

Jun-23	Mar-23	Jun-22
58.3	58.3	58.8
3.1	1.4	2.1
33.1	35.2	34.7
5.6	5.0	4.3
	58.3 3.1 33.1	3.1 1.4 33.1 35.2

FII Includes depository receipts

Stock Performance (1-year)



CMP: INR632 TP: INR730 (+16%)

Buy

Building a 'healthier' future!

- Stepping into the spotlight | All growth levers at play
 - Star Health (STARHEAL) is expected to clock 20% retail health premium CAGR over FY23-25 led by: 1) increasing sum assured per policy, 2) price hike in its flagship product, and 3) deeper penetration that is driving growth in the number of policies.
 - Management is intensely focusing on growing the business through the banca channel, with the help of the benefit-based products that have much higher profitability than retail health products. The share of banca stood at 5% in FY23 and is expected to double by FY25.
 - The share of specialized products too has continued to rise and was at 15.5% in FY23 vs. 11.2% in FY21. The contribution of network hospitals to cashless claims has also been rising (67% in FY23 vs. 55% in FY21). We expect the trajectory to sustain given the increasing number of specialized products as well as rising associations with hospitals.
 - STARHEAL has maintained its guidance of reaching a combined ratio of 93-95%, with a bias towards the lower end. Further, with solvency at 218%, we do not envisage any equity dilution in the near term.
 - We expect a 19% NEP CAGR over FY23-25 and project the combined ratio to improve to 92.5% in FY25 from 95.0% in FY23. These should result in a PAT CAGR of 47% over FY23-25 and RoE improving to 16% in FY25 from 11% in FY23. We reiterate our BUY rating with a 1-year TP of INR730 (premised on 32x FY25E EPS).

Macro factors aided by favorable regulations to drive industry growth

- The Expense of Management (EOM) regulation will have positive outcomes for STARHEAL as a majority of the competition is above the threshold of 35%/30% (SAHIs/GI players), while STARHEAL operates well below.
- In terms of commissions, overall payouts were in excess of 30% for new book and 15% for old book. Management is looking to optimize the commission ratio by charging differently on old book and new book.
- The exposure draft had a clause that if the existing EOM is below the ceiling then it has to be maintained at levels of the last three-year average. However, the same has been removed.
- IFRS implementation is likely in a couple of years and that would benefit its
 profitability ratios as expenses would be booked over the term of the products.
- From here on, simultaneous activation of three key growth drivers: 1) a surge in the count of policies issued (retail health penetration of just 4%), 2) strategic implementation of price hikes (file & use rules make it easier), and 3) an upswing in the sum assured per policy will translate into a sustainable 20%+ CAGR for the industry over the medium term.

Prayesh Jain - Research Analyst (Prayesh.Jain@motilaloswal.com)

Research Analyst: Nitin Aggarwal (Nitin.Aggarwal@MotilalOswal.com) | Nemin Doshi (Nemin.Doshi@MotilalOswal.com

Investors are advised to refer through important disclosures made at the last page of the Research Report.

Motilal Oswal research is available on www.motilaloswal.com/Institutional-Equities, Bloomberg, Thomson Reuters, Factset and S&P Capital.

Several initiatives would drive strong premium growth

- STARHEAL has taken a 25% price hike in its flagship product Family Health Optima – which has been well accepted by the market. The impact of the same on the number of policies is much lesser than earlier anticipated.
- Currently, less than 10% of policyholders increase their sum assured at the time of renewal. The company targets to raise this to 15%+ in near future.
- Specialized products, such as Senior Citizen, Cancer-related, Heart-related products etc., have done really well for the company. STARHEAL with its strong team of medical professionals has been able to price these products to ensure healthy profitability. The same would be difficult for competition to replicate.
- STARHEAL is focusing on a profitable product mix by increasing the share of specialized products. The company also aims to: a) augment claims processing through network hospitals, b) focus on profitable banca products, and c) hike prices.

Network expansion and improved settlement capability to augur well

- While individual agents (82% share) would continue to be the bedrock for STARHEAL's growth, distribution channels such as banca (5%) and digital (9%) will grow at a faster pace with cumulative share likely to rise in next few years.
- STARHEAL works with 14,000+ network hospitals and seven home health care (HHC) service providers. HHC service is a game changer in health care industry. Through technology, the TAT for claims settlement has improved and at present STARHEAL settles 90% of cashless claims within the stipulated two hours.

Focusing on profitable growth; reiterate BUY

- We remain optimistic on the overall growth prospects for STARHEAL backed by: a) its strong growth potential in retail health segment due to its underpenetration, b) healthy earnings growth owing to normalization of claims ratio, and c) limited cyclicality risk (commercial lines and motor insurance have high cyclicality risks).
- We expect the company's overall gross premium to report 19% CAGR over FY23-25 driven by 20% CAGR in retail health business and 10% CAGR in group business. Claims ratios are likely to normalize to ~64% with combined ratio at ~93%. These are likely to propel STARHEAL's profitability over FY23-25.
- We reiterate our BUY rating on the stock with a 1-year TP of INR730 (premised on 32x FY25E EPS).

Health insurance industry: the outlook appears bright

- Health insurance premium has witnessed a robust CAGR of 18% vs. 7% for the entire general insurance industry during FY19-23. Of this, retail health has clocked a CAGR of 18% too.
- India is a highly underpenetrated market with a healthcare OPE of 51% vs. 26% globally. India's healthcare expenditure in FY22 stood at USD95b, which is expected to post a 12% CAGR over FY22-32 to reach ~USD290b (as per World Bank estimates).
- The pandemic has heightened awareness regarding the necessity of insurance and emphasized not only on the need for coverage, but also on the importance of having sufficient protection.
- From here on, simultaneous activation of three key growth drivers: 1) a surge in the count of policies issued (retail health penetration of just 4%), 2) strategic implementation of price hikes (file & use rules make it easier), and 3) an upswing in the sum assured per policy will translate into a sustainable 20%+ CAGR for the industry over the medium term.

Exhibit 1: Indian healthcare spends growing in double digits (USD b)...

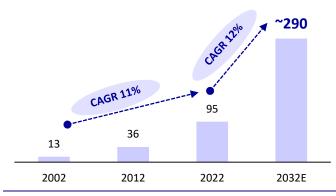


Exhibit 2: ...with strong organized market growth across segments

	Market size (USD b)	Organized market 5yr CAGR
Healthcare Delivery (IPD & OPD)	USD60b	12%
Pharma & Wellness (Online - 5%)	USD25b	20%+
Diagnostics, Devices & Others	USD10b	13%

Source: CRISIL Estimates, rainbow & Medplus DRHP filings, MOFSL, Company

Source: World Bank Estimates, MOFSL, Company

Exhibit 3: India's out-of-pocket expenses on healthcare remain high ...

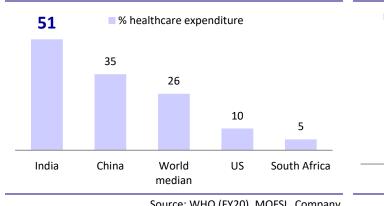
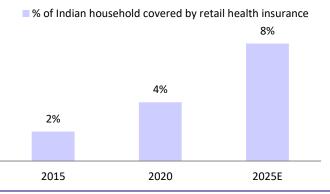


Exhibit 4: ...with substantial room for growth

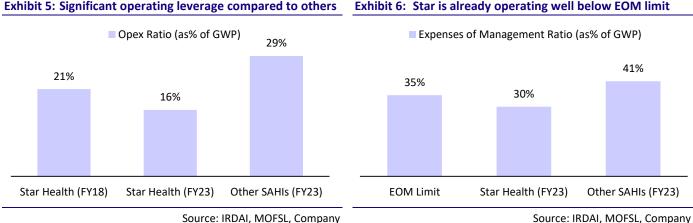


Source: WHO (FY20), MOFSL, Company

Source: IRDAI, MOFSL, Company

Regulations have been favorable for the industry

- EOM shall be capped at 35% for SAHIs and 30% for general insurers. Further, if the actual EOM exceeds 10% of the projected EOM given in the business plan (at the beginning of the year) then there will be no variable pay to the MD/CEO/ KMP for the said year.
- Currently, all SAHIs except STARHEAL have EOM above 35% and they will have to reduce this as per the glide path indicated in the EOM regulation. The combined ratio for the general insurance players is more than 100% and hence their ability to charge higher commission is limited (excess can still be charged to shareholders' account).
- In terms of commissions, overall payouts were in excess of 30% for new book and 15% for old book. Management is looking to optimize the commission ratio by charging differently on old book and new book.
- The exposure draft had a clause that if the existing EOM is below the ceiling then it has to be maintained at levels of the last three-year average. However, the same has been removed.
- File & Use has made life easier for insurance companies as the pricing action can be prompt, which will allow them to maintain profitability.

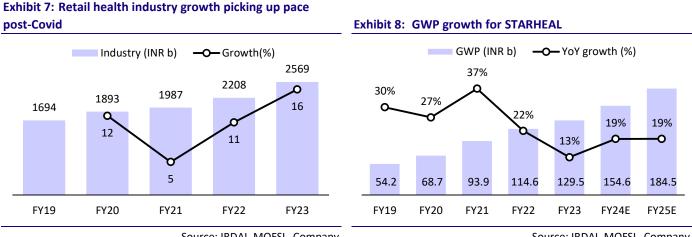


Source: IRDAI, MOFSL, Company

Several initiatives would boost strong premium growth

- During FY18-23, STARHEAL clocked a 27% CAGR in its health premium and had a retail market share of 34% in FY23 vs. 24% in FY18.
- Overall, SAHIs have registered a 33% CAGR during the period aided by inherent strengths in the business model, including: 1) a strong agency channel network, 2) ample management focus on one segment, 3) a wide suite of curated product offerings, and 4) deep connects with hospitals. These strengths, in our view, will empower SAHIs to maintain their market dominance.
- STARHEAL has taken a 25% price hike in its flagship product – Family Health Optima – which has been well accepted by the market. The impact of the same on the number of policies is much lesser than earlier anticipated.
- Currently, less than 10% of policyholders increase their sum assured at the time of renewal. The company targets to raise this to 15%+ in near future.
- Over the decade, STARHEAL's focus will be to increase the share of high sum assured policies and raise the contribution from HNIs. Moreover, the company wants to be in a position to price its products 10-20% higher than competition.

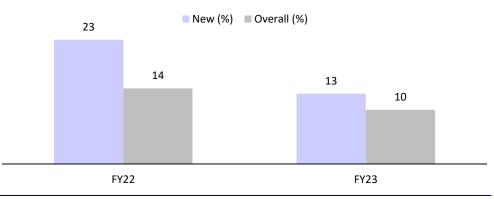
Tier 1 and metro towns witness an average sum assured in the range of INR0.5m to INR1.0m, while in lower tier towns the sum assured initially starts from INR0.1m to INR0.2m and then scales up in later years. The company is aiming to increase this further through increasing awareness of adequate sum assured.



Source: IRDAI, MOFSL, Company

Source: IRDAI, MOFSL, Company

Exhibit 9: Growth in average sum assured for the retail health policies

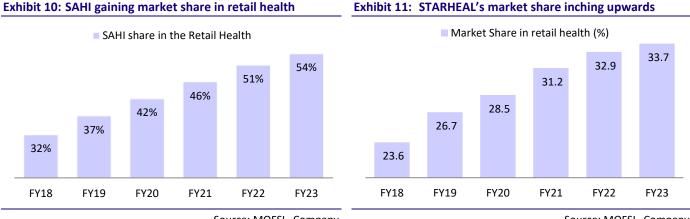


Source: MOFSL, Company

Diversifying its premium mix towards more profitable segments

- STARHEAL, in recent years, has increased its share of premium from more profitable products. The first move towards this goal was to reduce the share of group business to 6% in FY23 from 11% in FY21.
- Conversely, the company has increased the share of specialized products to 16% in FY23 from 10% in FY19, which have a relatively higher profitability.
- The company has been the pioneer in specialty products such as new born baby cover from day 1, transplantation where donor is also being covered, artificial insemination et al. Management aims to launch more such products.
- Specialized products, such as Senior Citizen, Cancer-related, Heart-related products etc., have done really well for the company. STARHEAL with its strong team of medical professionals has been able to price these products to ensure healthy profitability. The same would be difficult for competition to replicate.
- The combined ratio for the Senior Citizen product is much lesser than 100%, indicating strong underwriting and right pricing of the product.

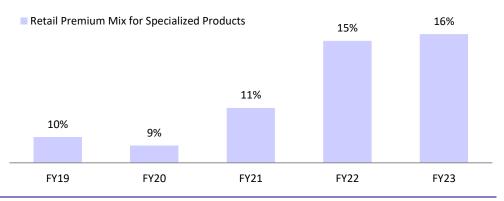
- Going ahead, the company plans to scale up its business on the credit-linked side and also aims to increase the sum assured per policy in the segment, which will help improve the combined ratio.
- STARHEAL will soon enter the premium financing business through tie-ups with fintech players without taking any risk on its balance sheet.



Source: MOFSL, Company

Source: MOFSL, Company

Exhibit 12: Retail premium mix for specialized products



Source: MOFSL, Company

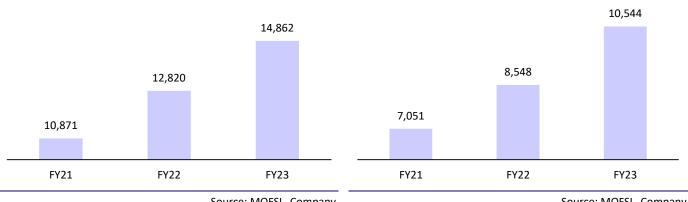
Improving hospital network relationships

- STARHEAL, in a bid to improve the claim experience for its clients and revive the loss ratios, has taken action against several hospitals in the past. Action could mean a simple notice of suspension.
- A preferred hospital network is a win-win for all the three stakeholders: 1) hospitals get higher footfalls, 2) customer gets seamless service and faster claim settlements and 3) the company benefits from agreed pricing, which leads to lower loss ratios.
- Hospital tie ups are helping STARHEAL improve its claim ratios as the company is playing the role of claim scrutinizer through its team of medical professionals.
- Currently, ~14,000 hospitals are empanelled with STARHEAL as the rest got dismissed for various irregularities.

Star Health

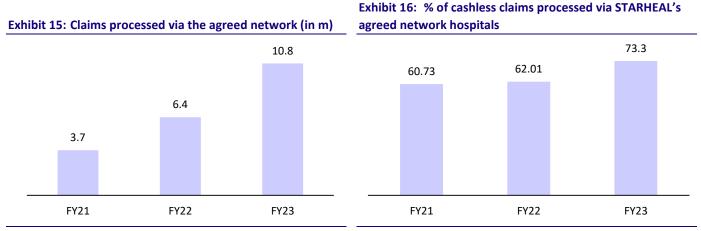
Exhibit 14: Its network hospitals with pre-agreed pricing

Exhibit 13: STARHEAL's network hospitals



Source: MOFSL, Company





Source: MOFSL, Company

Source: MOFSL, Company

Agency channel's share to reduce

- Going ahead, the company aims to optimize commission payouts to agents on the back-book by linking payout to the loss ratios of each agent. Besides, rates could differ on back-book and the new business.
- Industry garners ~70% of the business from individual agents, while STARHEAL generates 82% of its business from this channel.
- The gap will be addressed by scaling up digital and banca channels at a faster pace than the agency business over the next few years.
- The company aims to scale up the share of digital and banca channels to 20% over the next 3-5 years from ~15% at present. About 70% renewals are expected in FY24 via the digital methods.

Exhibit 17: GWP from Digital Channels (as a % of total GWP)



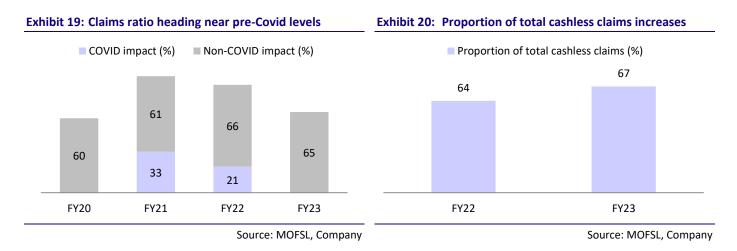


Source: MOFSL, Company

Source: MOFSL, Company

Strengthening claims capability and focusing on higher digital sales

- STARHEAL works with 14,000+ network hospitals and seven home health care (HHC) service providers. HHC service is a game changer in the health care industry.
- It is among the first to implement hospital scorecard, which is evaluated based on various parameters that help in automating claims procedure.
- Currently, it has 2,900+ hospitals meeting the good hospital score and 14% of them have a pre-authorization for auto adjudication.
- About 90% of the cashless claims settlements have a turnaround time of less than two hours. The cashless claims settlement process operates as a hub-and spoke model – hub being the Chennai office and spokes being 12 zonal offices (zonal offices can settle claims upto specific amounts).
- Combined ratio in metro cities is relatively higher than lower tier cities. Further, digital customers report relatively lower loss ratios (50%) than agency channel. Hence, the company is focusing intensely to increase the penetration in lower tier cities and enhance its digital sales.
- Median age of the customers is 46-47 years for STARHEAL. As age increases, premium also rises and hence the claim ratios can be under control.



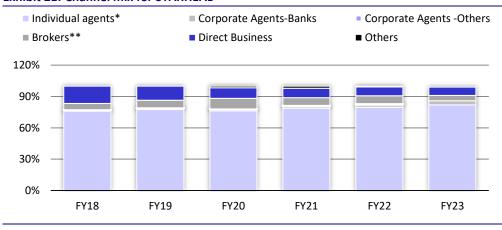


Exhibit 21: Channel mix for STARHEAL

Source: MOFSL, Company

Focusing on profitable growth; reiterate BUY

- We remain optimistic on the overall growth prospects for STARHEAL backed by: a) its strong growth potential in retail health segment due to its underpenetration, b) healthy earnings growth owing to normalization of claims ratio, and c) limited cyclicality risk (commercial lines and motor insurance have high cyclicality risks).
- We expect the company's overall gross premium to report 19% CAGR over FY23-25 driven by 20% CAGR in retail health business and 10% CAGR in group business. Claims ratios are likely to normalize to ~64% with combined ratio at ~93%. These are likely to propel STARHEAL's profitability over FY23-25.
- We reiterate our BUY rating on the stock with a 1-year TP of INR730 (premised on 32x FY25E EPS).

Key risks

- Intensified competition from multi-line general insurers could pose a risk to STARHEAL's growth prospects and market position.
- Failure to estimate incurred medical expenses accurately or the frequency of claims used in the pricing of products could have a severe effect on the business.
- Catastrophic events, such as natural disasters, could materially increase the claims liabilities, resulting in losses.
- Adverse movement in investment yields could hurt investment income.

Financials and valuations

Income Statement								(INR m)
Y/E March	2018	2019	2020	2021	2022	2023	2024E	2025E
Retail Health	36,291	46,789	58,252	82,075	1,00,870	1,19,475	1,43,437	1,72,125
Group Health	4,026	5,938	8,897	9,963	12,066	8,076	8,884	9,772
РА	1,165	1,270	1,337	1,489	1,685	1,939	2,229	2,564
Total GDPI	41,611	54,154	68,651	93,885	1,14,635	1,29,525	1,54,550	1,84,460
Change (%)	40.6	30.1	26.8	36.8	22.1	13.0	19.3	19.4
NWP	31,961	41,415	52,395	71,794	1,08,096	1,23,196	1,46,999	1,75,448
NEP	27,397	35,795	46,841	46,266	98,092	1,12,616	1,34,504	1,59,658
Change (%)	43.3	30.7	30.9	-1.2	112.0	14.8	19.4	18.7
Net claims	16,921	23,410	30,305	43,764	85,400	73,204	85,448	1,01,063
Net commission	1,366	2,637	3,404	14,922	16,828	16,828	20,116	24,009
Expenses	8,613	9,827	11,013	14,031	18,443	20,538	23,918	27,807
Employee expenses	6,291	7,220	8,526	11,765	13,436	14,537	16,862	19,560
Other expenses	2,322	2,607	2,487	2,266	5,007	6,001	7,056	8,246
Underwriting Profit/(Loss)	497	-78	2,119	-17,385	-20,673	2,046	5,021	6,779
Investment income (PH)	887	1,398	1,639	2,505	4,796	5,014	6,140	7,232
Operating profit	1,384	1,214	3,873	-14,880	-15,878	7,060	11,161	14,011
Investment income (SH)	544	612	1,212	1,718	3,214	3,331	4,029	4,582
РВТ	1,712	1,389	4,632	-14,527	-14,024	8,264	14,429	17,741
Тах	10	540	1,389	-3,601	-3,559	2,078	3,607	4,435
Tax rate (%)	0.6	38.9	30.0	24.8	25.4	25.1	25.0	25.0
PAT	1,702	849	2,633	-10,926	-10,465	6,186	10,822	13,306

Balance sheet								(INR M)
Y/E March	2018	2019	2020	2021	2022	2023	2024E	2025E
Equity Share Capital	4,556	4,556	4,906	5,481	5,755	5,817	5,817	5,817
Reserves & Surplus	5,040	7,726	14,132	29,516	40,285	59 <i>,</i> 839	70,661	83,967
Net Worth	9,596	12,282	19,038	34,996	46,040	65,656	76,477	89,783
FV change	-	-	31	-76	267	234	-	-
Borrowings	2,500	2,500	2,500	2,500	7,200	4,700	4,700	4,700
Other liabilities	21,374	33,943	38,361	67,589	81,629	92,988	1,11,456	1,30,486
Total Liabilities	33,470	48,725	59,930	1,05,010	1,35,136	1,63,577	1,92,633	2,24,970
Investments (SH)	8,658	9,523	18,110	27,941	44,939	53,459	61,979	70,498
Investments (PH)	12,988	20,778	24,789	40,426	68,796	80,462	94,463	1,11,263
Net Fixed Assets	969	981	1,019	990	1,171	1,113	1,163	1,213
Def Tax Assets	-	1,420	70	4,213	7,767	5,689	5,689	5,689
Current Assets	5,834	7,093	9,827	12,650	6,828	8,444	9,206	10,987
Cash & Bank	5,021	8,930	6,114	18,790	5,635	5,636	20,134	25,319
Total Assets	33,470	48,725	59,930	1,05,010	1,35,136	1,54,803	1,92,633	2,24,970

E: MOSL Estimates

Financials and valuations

Ratios								
Y/E March	2018	2019	2020	2021	2022	2023	2024E	2025E
GWP growth	40.6	30.1	26.8	36.8	22.1	13.0	19.3	19.4
NWP growth	40.0	29.6	26.5	37.0	50.6	14.0	19.3	19.4
NEP growth	43.3	30.7	30.9	-1.2	112.0	14.8	19.4	18.7
Claim ratio	61.8	65.4	64.7	94.6	87.1	65.0	63.5	63.3
Commission ratio	4.3	6.4	6.5	20.8	15.6	13.7	13.7	13.7
Expense ratio	26.9	23.7	21.0	19.5	17.1	16.7	16.3	15.8
Combined ratio	93.0	95.5	92.2	134.9	119.7	95.3	93.5	92.8
Profitability Ratios (%)								
RoE	19.5	7.8	16.8	-40.4	-25.8	11.1	15.2	16.0
Valuations	2018	2019	2020	2021	2022	2023	2024E	2025E
BVPS (INR)	21.1	27.0	38.8	63.9	80.0	112.9	131.5	154.4
Change (%)	21.5	28.0	43.9	64.6	25.3	41.1	16.5	17.4
Price-BV (x)	29.9	23.4	16.2	9.9	7.9	5.6	4.8	4.1
EPS (INR)	3.7	1.9	5.4	-19.9	-18.2	10.6	18.6	22.9
Change (%)	44.2	-50.1	187.9	-471.5	-8.8	-158.5	74.9	23.0
Price-Earnings (x)						59.2	33.9	27.5

E: MOSL Estimates

Investment in securities market are subject to market risks. Read all the related documents carefully before investing

NOTES

Explanation of Investment Rating				
Investment Rating	Expected return (over 12-month)			
BUY	>=15%			
SELL	< - 10%			
NEUTRAL	< - 10 % to 15%			
UNDER REVIEW	Rating may undergo a change			
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation			

*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proc https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx Enquiry Proceedings of Motilal Oswal Financial Limited Services available website are on the

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com. Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the"1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore In Singapore, this report is being distributed by Motilal Oswal Capital Markets Singapore Pte Ltd ("MOCMSPL") (Co. Reg. NO. 201129401Z) which is a holder of a capital markets services license and an exempt financial adviser in Singapore. As per the approved agreement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of First Schedule of Financial Advisors Act (CAP 110) provided to MOCMSPL by Monetary Authority of Singapore. Persons in Singapore should contact MOCMSPL in respect of any matter arising from, or in connection with this report/publication/communication. This report is distributed solely to persons who qualify as "Institutional Investors", of which some of whom may consist of "accredited" institutional investors as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Accordingly, if a Singapore person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform MOCMSPL.

Specific Disclosures

- MOFSL, Research Analyst and/or his relatives does not have financial interest in the subject company, as they do not have equity holdings in the subject company.
- MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company 2
- MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months 3
- MOFSL, Research Analyst and/or his relatives do not have material conflict of interest in the subject company at the time of publication of research report 4
- Research Analyst has not served as director/officer/employee in the subject company 5
- MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months 6
- MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months 7
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- MOFSL has not received any compensation or other benefits from third party in connection with the research report g
- 10 MOFSL has not engaged in market making activity for the subject company

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- served subject company as its clients during twelve months preceding the date of distribution of the research report.
- The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures. Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report. Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential 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 MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

Disclaimer:

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. This report and information herein is solely for informational purpose and may 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. 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. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. 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 MOFSL 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. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is meant for the clients of Motilal Oswal only. Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No::022-40548085.

Grievance	Red	ressal	Cel	ı:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412. AMFI: ARN.: 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products. Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com. for DP to dporievances@motilaloswal.com.