

Star Health

| | |
|-----------------|---|
| Estimate change | ↓ |
| TP change | ↓ |
| Rating change | ↔ |

| | |
|-----------------------|-------------|
| Bloomberg | STARHEAL IN |
| Equity Shares (m) | 576 |
| M.Cap.(INRb)/(USDb) | 339.4 / 4.1 |
| 52-Week Range (INR) | 735 / 451 |
| 1, 6, 12 Rel. Per (%) | 0/-7/-25 |
| 12M Avg Val (INR M) | 456 |

Financials & Valuations (INR b)

| Y/E March | 2023 | 2024E | 2025E |
|------------|-------|-------|-------|
| NEP | 112.6 | 133.3 | 159.0 |
| U/W Profit | 2.0 | 2.2 | 5.0 |
| PBT | 8.3 | 12.6 | 17.1 |
| PAT | 6.2 | 9.4 | 12.8 |

Ratios (%)

| | | | |
|----------------|------|------|------|
| Claims | 65.0 | 64.8 | 64.2 |
| Commission | 13.7 | 13.6 | 13.6 |
| Expense | 16.7 | 16.6 | 15.8 |
| Combined | 95.3 | 95.0 | 93.6 |
| RoE | 11.1 | 13.4 | 15.7 |
| EPS (INR) | 10.6 | 16.2 | 22.0 |
| EPS Growth (%) | N.A | 52.4 | 35.7 |

Valuations

| | | | |
|----------|------|------|------|
| P/E (x) | 54.5 | 35.8 | 26.4 |
| P/BV (x) | 5.1 | 4.5 | 3.8 |

Shareholding pattern (%)

| As On | Sep-23 | Jun-23 | Sep-22 |
|----------|--------|--------|--------|
| Promoter | 58.0 | 58.3 | 58.6 |
| DII | 6.1 | 3.1 | 1.5 |
| FII | 30.6 | 33.1 | 10.3 |
| Others | 5.2 | 5.6 | 29.6 |

FII Includes depository receipts

CMP: INR581

TP: INR 730 (+26%)

Buy

Higher claims & expense ratios lead to a higher combined ratio

- Star Health (STARHEAL) reported a PAT of INR1.3b in 2QFY24 vs. INR934m in 2QFY23. PAT was 32% below our estimate due to higher-than-expected claims and expense ratios.
- STARHEAL had taken a price revision in Family Health Optima (w.e.f. 1st May'23 on the renewal book), which will be reflected over the next 12 months. The policy renewals (both in volumes and in value) were in line with the company's expectations.
- As compared to the earlier guidance of 63-65% loss ratio, management now expects to exceed the same given the rising incidences of fever and respiratory diseases. We have cut our EPS estimates by 13%/4% for FY24/25 to factor in higher claims and expense ratios in 1HFY24. Considering the long-term growth potential for the industry along with investments by STARHEAL in profitable channels and products, we reiterate our **BUY rating** with a TP of INR730 (based on 33x FY25E EPS).

Higher claims and expense ratios hurt profitability

- STARHEAL's net earned premium grew 15% YoY to INR32b in 2QFY24. GDPI rose 17% YoY to INR37b. Retail Health/Group Health/Personal Accident segments grew 17%/26%/14% YoY during the quarter.
- Incurred claims were broadly in line with our estimate, but the claims ratio at 68.7% was higher than our estimate of 67%. It was up 50bp YoY/ 330bp QoQ. Claims ratio was elevated owing to severity rather than frequency.
- Commission ratio of 13.7% was in line with our expectation; however, expense ratio of 16.8% was higher than our expectations by 50bp. Overall, the combined ratio, at 99.2%, was higher than our forecast of 97%. The ratio stood at 97.9% in 2QFY23.
- Investment income in the policyholders' account, at INR1.5b, was in line with our forecasts while shareholders' investment income at INR1,066m was 3.2% lower than our estimate.
- Profit for 2QFY24 was at INR1.3b vs. our estimate of INR1.8b; a miss of 32%. For 1HFY24, NEP/PAT grew 14%/35% YoY to INR62.5b/INR4.1b.
- Solvency ratio for 2QFY24 was at 2.13 vs. 2.0 in 2QFY23.

Key takeaways from the management commentary

- STARHEAL has launched four new products during the quarter. The Star Smart Health Pro is a digital-first product, where customers can avail online discounts. It is also augmenting the existing product suites by launching various add-on covers, such as Young Star Extra Protect, Home Care Treatment covers and Flu Vaccination covers.
- The company** has tightened its underwriting standards to enhance focus on quality business, leading to the recalibration of some geographies and portability businesses, which have poor LTV.

Valuation and view: Cut our estimates but maintain BUY

- STARHEAL had taken a price revision in Family Health Optima (w.e.f. 1st May'23 on the renewal book), which will be reflected over the next 12 months. The policy renewals (both in volumes and in value) were in line with the company's expectations.
- **Guidance:** NEP growth of 20%, ROE growth of 20%, and solvency ratio of 200%.
- As compared to the earlier guidance of 63-65% loss ratio, management now expects the claims ratio to exceed the guidance range given the rising incidences of fever and respiratory diseases across the country. We have cut our EPS estimates by 13%/4% for FY24/25 to factor in higher claims and expense ratios in 1HFY24. Considering the long-term growth potential for the industry along with investments by STARHEAL in profitable channels and products, **we reiterate our BUY rating with a TP of INR730 (based on 33x FY25E EPS).**

Quarterly Performance

| Y/E March | FY23 | | | | FY24 | | | | (INR m) | | | Act v/s Est. (%) |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|---------------|------------------|
| | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3QE | 4QE | FY23 | FY24E | 2QFY24E | |
| Gross premium | 24,637 | 31,929 | 30,967 | 41,992 | 29,486 | 37,317 | 37,160 | 51,798 | 1,29,525 | 1,55,762 | 37,676 | -1.0 |
| Net written premium | 23,441 | 30,389 | 29,434 | 39,932 | 28,008 | 35,446 | 35,339 | 49,315 | 1,23,196 | 1,48,109 | 35,830 | -1.1 |
| Net earned premium | 26,871 | 27,948 | 28,672 | 29,125 | 30,438 | 32,056 | 34,339 | 36,462 | 1,12,616 | 1,33,294 | 32,480 | -1.3 |
| Investment Income | 1,220 | 1,233 | 1,157 | 1,405 | 1,460 | 1,510 | 1,661 | 1,793 | 5,014 | 6,423 | 1,504 | 0.4 |
| Total Income | 28,090 | 29,181 | 29,829 | 30,530 | 31,898 | 33,566 | 36,000 | 38,254 | 1,17,630 | 1,39,718 | 33,984 | -1.2 |
| Change YoY (%) | 20.6 | 16.1 | 13.9 | 11.4 | 13.6 | 15.0 | 20.7 | 25.3 | 14.3 | 18.8 | 16.5 | |
| Incurred claims | 17,811 | 19,060 | 18,278 | 18,054 | 19,909 | 22,022 | 21,634 | 22,865 | 73,204 | 86,430 | 21,762 | 1.2 |
| Net commission | 3,220 | 3,964 | 4,026 | 5,618 | 3,668 | 4,854 | 4,841 | 6,754 | 16,828 | 20,118 | 4,909 | -1.1 |
| Employee expense | 2,774 | 3,590 | 3,805 | 4,368 | 3,577 | 3,952 | 4,413 | 4,920 | 14,537 | 16,862 | 4,164 | -5.1 |
| Other expenses | 1,498 | 1,465 | 1,306 | 1,739 | 1,829 | 2,012 | 1,697 | 2,166 | 6,001 | 7,704 | 1,684 | 19.4 |
| Total Operating Expenses | 25,303 | 28,079 | 27,415 | 29,780 | 28,983 | 32,839 | 32,586 | 36,706 | 1,10,570 | 1,31,114 | 32,519 | 1.0 |
| Change YoY (%) | -4.8 | -4.3 | -20.3 | 4.9 | 14.5 | 17.0 | 18.9 | 23.3 | -6.9 | 18.6 | 15.8 | |
| Underwriting profit | 1,568 | -131 | 1,258 | -654 | 1,454 | -784 | 1,753 | -244 | 2,046 | 2,180 | -39 | |
| Operating profit | 2,788 | 1,102 | 2,415 | 751 | 2,915 | 726 | 3,414 | 1,548 | 7,060 | 8,603 | 1,466 | -50.5 |
| Shareholder's P/L | | | | | | | | | | | | |
| Transfer from Policyholder's | 2,788 | 1,102 | 2,415 | 751 | 2,915 | 726 | 3,414 | 1,548 | 7,060 | 8,603 | 1,466 | -50.5 |
| Investment income | 838 | 846 | 914 | 790 | 1,040 | 1,066 | 1,115 | 1,195 | 3,388 | 4,415 | 1,102 | -3.2 |
| Total Income | 3,626 | 1,948 | 3,329 | 1,541 | 3,954 | 1,792 | 4,529 | 2,743 | 10,449 | 13,018 | 2,567 | |
| Other expenses | 745 | 741 | 509 | 173 | 110 | 119 | 123 | 126 | 2,174 | 478 | 113 | 5.2 |
| Total Expenses | 746 | 741 | 512 | 180 | 111 | 121 | 123 | 126 | 2,185 | 481 | 113 | 6.9 |
| PBT | 2,880 | 1,207 | 2,817 | 1,361 | 3,844 | 1,671 | 4,406 | 2,617 | 8,264 | 12,538 | 2,454 | -31.9 |
| Tax Provisions | 747 | 276 | 713 | 343 | 965 | 418 | 1,102 | 657 | 2,078 | 3,142 | 614 | -31.9 |
| Net Profit | 2,132 | 931 | 2,105 | 1,018 | 2,879 | 1,253 | 3,305 | 1,959 | 6,186 | 9,396 | 1,841 | -31.9 |
| Key Parameters (%) | | | | | | | | | | | | |
| Claims ratio | 66.3 | 68.2 | 63.7 | 62.0 | 65.4 | 68.7 | 63.0 | 62.7 | 65.0 | 64.8 | 67.0 | 1.7 |
| Commission ratio | 13.7 | 13.0 | 13.7 | 14.1 | 13.1 | 13.7 | 13.7 | 13.7 | 13.7 | 13.6 | 13.7 | 0.0 |
| Expense ratio | 18.2 | 16.6 | 17.4 | 15.3 | 19.3 | 16.8 | 17.3 | 14.4 | 16.7 | 16.6 | 16.3 | 0.5 |
| Combined ratio | 98.2 | 97.9 | 94.8 | 91.4 | 97.8 | 99.2 | 94.0 | 90.8 | 95.3 | 95.0 | 97.0 | 2.2 |
| Solvency | 1.9 | 2.0 | 2.2 | 2.1 | 2.2 | 2.1 | | | 2.1 | 2.2 | | |

Exhibit 1: Cut in our estimates

| INR b | Old Est. | | New Est. | | Change (%) | |
|-----------------------------------|-------------|--------------|-------------|--------------|--------------|--------------|
| | FY24E | FY25E | FY24E | FY25E | FY24E | FY25E |
| Total GDPI | 154.6 | 184.5 | 155.8 | 185.8 | 0.8 | 0.7 |
| NWP | 147.0 | 175.4 | 148.2 | 176.7 | 0.8 | 0.7 |
| NEP | 134.5 | 159.7 | 133.3 | 159.0 | -0.9 | -0.4 |
| Net claims | 85.4 | 101.1 | 86.4 | 102.2 | 1.1 | 1.1 |
| Net commission | 20.1 | 24.0 | 20.1 | 24.0 | 0.0 | -0.1 |
| Expenses | 23.9 | 27.8 | 24.6 | 27.9 | 2.7 | 0.2 |
| Underwriting Profit/(Loss) | 5.0 | 6.8 | 2.2 | 5.0 | -55.7 | -26.0 |
| PAT | 10.8 | 13.3 | 9.4 | 12.8 | -12.9 | -3.9 |
| Claim ratio | 63.5 | 63.3 | 64.8 | 64.2 | 1.3 | 0.9 |
| Commission ratio | 13.7 | 13.7 | 13.6 | 13.6 | -0.1 | -0.1 |
| Expense ratio | 16.3 | 15.8 | 16.6 | 15.8 | 0.3 | -0.1 |

**Key takeaways from the management commentary****Business**

- The health insurance industry, including PA business, grew 26% on the back of 30% growth in Group health and 19% growth in Retail health. For 1HFY24, the retail growth rate was 18% (in line with the industry's retail growth rate of 18%).
- In 1HFY24, Star Health has registered 33% market share in Retail Health, which was more than 3x the second-largest player in the industry.
- As regards the accretion share, Star Health registered 32% Retail Health accretion market share in 1HFY24.
- The average sum insured of new policies has increased by 10% YoY to ~INR0.96m per policy. Policies with sum insured of INR0.5m and above now constitute more than 77% of portfolio vs. 69% in 1HFY23. The share of long term policies with retail GWP has increased to 6% in 1HFY24 vs. 4% in 1HFY23.
- The premium from benefit products has also grown by 30% YoY in 1HFY24. Organic traffic to website rose 52% and this is directly reflecting in digital business growth
- **Guidance:** NEP growth of 20%, ROE growth of 20%, and solvency ratio of 200%.

New policies & price hikes

- STARHEAL had taken a price revision in Family Health Optima (w.e.f. 1st May'23 on the renewal book), which will be reflected over the next 12 months. The policy renewals (both in volumes and in value) were in line with the company's expectations. A drop of 5% in FHO customers was expected.
- Price hike reflection will be seen over a period of 12 months and the company continues to take risk-based pricing actions.
- Loss ratios have been better than the industry.
- Share of specialized products had been on the lower side because of the price hike in the FHO
- Strong growth in NPS and client retention points to improve claim experiences.
- STARHEAL has launched four new products during the quarter. The Star Smart Health Pro is a digital-first product, where customers can avail online discounts. It is also augmenting the existing product suites by launching various add-on covers, such as Young Star Extra Protect, Home Care Treatment covers and Flu Vaccination covers.

Distribution

- Agency business contributed around 82% of overall business in the 1HFY24. The agency strength has increased to 6,65,000 agents, with a net addition of ~40,000 agents in 1HFY24. Addition of another 60k agents is expected in 2HFY24.
- The contribution of fresh business from non-agency has grown to 32%. The Banca business is growing at 57% in 1HFY24.
- The home healthcare program is now live in 11 cities and STARHEAL customers can now avail home healthcare services by speaking with doctors and the medical professionals will visit their homes to provide them of the service.
- In order to increase the penetration in semi-urban and the rural geographies, STARHEAL plans to open 1,000 sales manager stations. These are small individual service centers and sales distribution centers, of which 753 have already become operational in 1HFY24.
- The new Star Wellness App has been launched with the addition of new condition management programs, the number of customers who have availed of the wellness service. Business in 2QFY24 had grown by 77%.

Claims

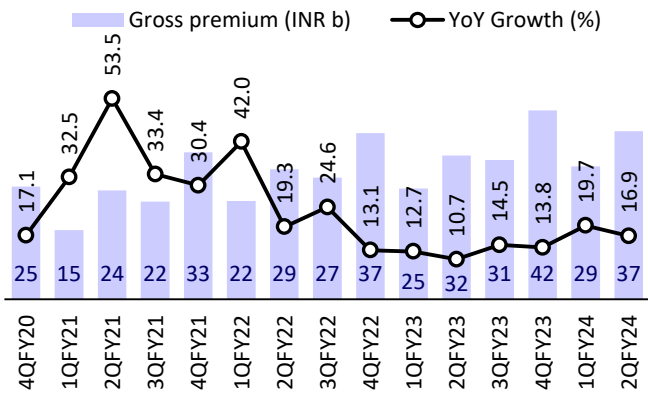
- 84% of the paid claims are cashless vs 79% last year. Cashless TAT came in ~90% for claims settled within two hour time. The auto adjudication of claims helps in drastically reducing the turnaround time.
- ~33% of agreed network hospitals representing 71% of the cashless claims have been onboarded under auto adjudication initiative. Antifraud digital initiatives have produced good savings in the claim (~1.2% incremental benefits in terms of lower claims ratio). In 1HFY24, The total savings are 2.9% through these measures.
- Based on recent claim experience, claim ratio may be pushed beyond the guidance due to high incidence of fever and respiratory diseases across the country.
- STARHEAL has tightened its underwriting standards to enhance focus on quality business, leading to recalibration of some geographies and portability business which are poor LTV.
- 100% cashless claims across the country is being envisioned by IRDAI and is in early stages of implementation.
- Hospital network uniform standard tariff project is still in the conceptual stage.
- The claim ratio in 2QFY24 was higher owing to 2% change in frequency and 6% impact owing to severity.

Others

- STARHEAL has reached out to Ahmedabad Hospital Association and discussed issues extensively with regards to some hospitals being excluded. The matter is amicably resolved.
- The digital ticket size is better than the agency channel. Also, the other matrix is also better on the digital channel side.
- Some underwriting changes for certain geographies have impacted growth for STARHEAL adversely.
- Average ticket size has grown by 9% to INR17,000.
- During the quarter, premium growth was led by value growth (65%) and volume growth (35%).

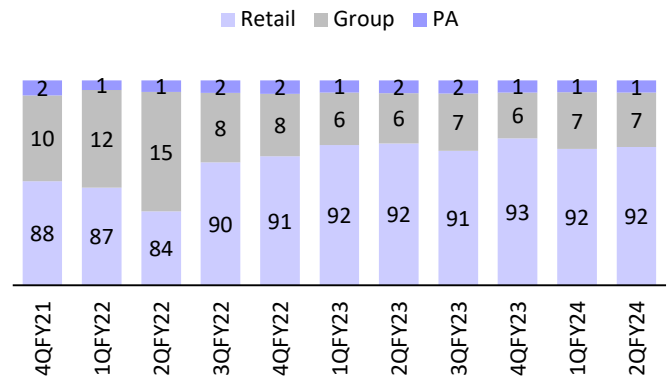
Key exhibits

Exhibit 2: Improvement in premium growth



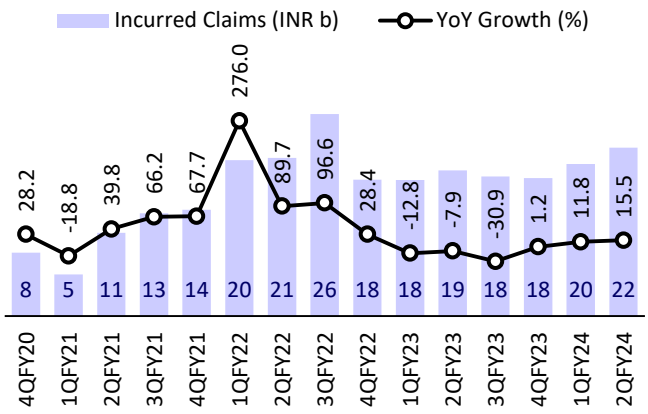
Source: MOFSL, Company

Exhibit 3: Share of retail health is stable



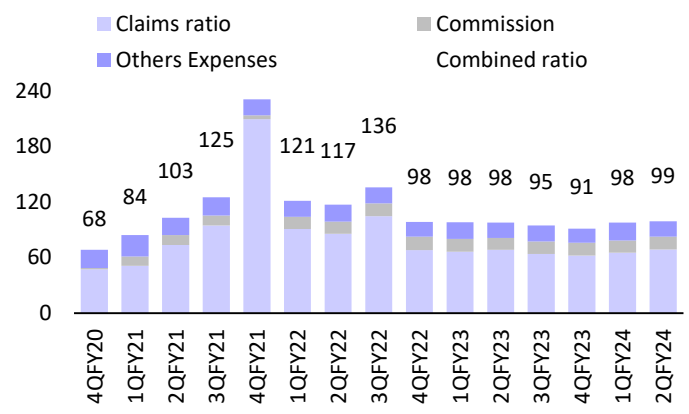
Source: MOFSL, Company

Exhibit 4: Incurred claims increased sequentially



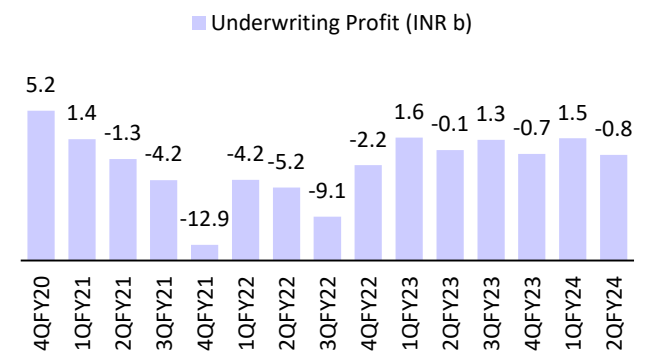
Source: MOFSL, Company

Exhibit 5: Drag in combined ratio sequentially



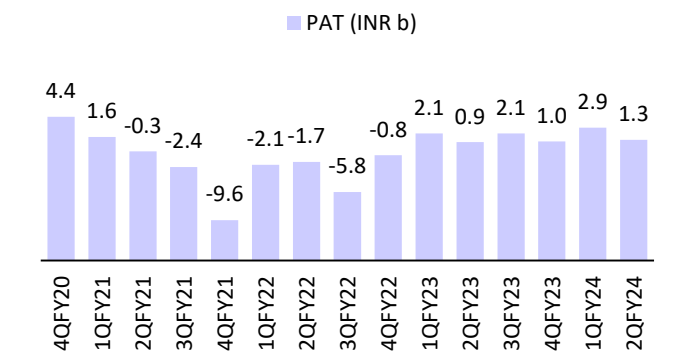
Source: MOFSL, Company

Exhibit 6: Underwriting loss of INR0.8b in 2QFY24



Source: MOFSL, Company

Exhibit 7: Improvement in PAT on YoY basis



Source: MOFSL, Company

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 | 10,095 | 11,105 |
| PA | 1,165 | 1,270 | 1,337 | 1,489 | 1,685 | 1,939 | 2,229 | 2,564 |
| Total GDPI | 41,611 | 54,013 | 68,651 | 93,885 | 1,14,635 | 1,29,525 | 1,55,762 | 1,85,793 |
| Change (%) | 40.6 | 29.8 | 27.1 | 36.8 | 22.1 | 13.0 | 20.3 | 19.3 |
| NWP | 31,961 | 41,287 | 52,395 | 71,794 | 1,08,096 | 1,23,196 | 1,48,151 | 1,76,715 |
| NEP | 27,397 | 36,624 | 46,841 | 46,266 | 98,092 | 1,12,616 | 1,33,336 | 1,59,044 |
| Change (%) | 43.3 | 33.7 | 27.9 | -1.2 | 112.0 | 14.8 | 18.4 | 19.3 |
| Net claims | 16,921 | 22,976 | 30,874 | 43,695 | 85,400 | 73,204 | 86,430 | 1,02,165 |
| Net commission | 1,366 | 2,637 | 3,404 | 14,922 | 16,828 | 16,828 | 20,118 | 23,997 |
| Expenses | 8,613 | 9,827 | 11,013 | 14,031 | 18,443 | 20,538 | 24,566 | 27,866 |
| 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 | 7,704 | 8,306 |
| Underwriting Profit/(Loss) | 497 | 1,184 | 1,550 | -17,316 | -20,673 | 2,046 | 2,222 | 5,016 |
| Investment income (PH) | 887 | 1,398 | 1,639 | 2,505 | 4,796 | 5,014 | 6,423 | 7,566 |
| Operating profit | 1,384 | 2,477 | 3,303 | -14,811 | -15,877 | 7,060 | 8,646 | 12,582 |
| Investment income (SH) | 544 | 612 | 1,212 | 1,718 | 3,214 | 3,331 | 4,400 | 5,005 |
| PBT | 1,712 | 2,652 | 4,062 | -14,458 | -14,024 | 8,264 | 12,568 | 17,052 |
| Tax | 10 | 540 | 1,389 | -3,601 | -3,559 | 2,078 | 3,142 | 4,263 |
| Tax rate (%) | 0.6 | 20.4 | 34.2 | 24.9 | 25.4 | 25.1 | 25.0 | 25.0 |
| PAT | 1,702 | 2,112 | 2,633 | -10,857 | -10,464 | 6,186 | 9,426 | 12,789 |

| 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 | 59,839 | 69,265 | 82,054 |
| Net Worth | 9,596 | 12,282 | 19,038 | 34,996 | 46,040 | 65,656 | 75,081 | 87,870 |
| 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 | 1,13,982 | 1,34,901 |
| Total Liabilities | 33,470 | 48,725 | 59,930 | 1,05,010 | 1,35,136 | 1,63,577 | 1,93,763 | 2,27,471 |
| 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 | 9,278 | 11,067 |
| Cash & Bank | 5,021 | 8,930 | 6,114 | 18,790 | 5,635 | 5,636 | 21,192 | 27,741 |
| Total Assets | 33,470 | 48,725 | 59,930 | 1,05,010 | 1,35,136 | 1,54,803 | 1,93,763 | 2,27,471 |

E: MOFSL Estimates

Financials and valuations

Ratios

| Y/E March | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024E | 2025E |
|-----------------------|-------------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|
| GWP growth | 40.6 | 29.8 | 27.1 | 36.8 | 22.1 | 13.0 | 20.3 | 19.3 |
| NWP growth | 40.0 | 29.2 | 26.9 | 37.0 | 50.6 | 14.0 | 20.3 | 19.3 |
| NEP growth | 43.3 | 33.7 | 27.9 | -1.2 | 112.0 | 14.8 | 18.4 | 19.3 |
| Claim ratio | 61.8 | 62.7 | 65.9 | 94.4 | 87.1 | 65.0 | 64.8 | 64.2 |
| Commission ratio | 4.3 | 6.4 | 6.5 | 20.8 | 15.6 | 13.7 | 13.6 | 13.6 |
| Expense ratio | 26.9 | 23.8 | 21.0 | 19.5 | 17.1 | 16.7 | 16.6 | 15.8 |
| Combined ratio | 93.0 | 92.9 | 93.4 | 134.8 | 119.7 | 95.3 | 95.0 | 93.6 |

Profitability Ratios (%)

| | | | | | | | | |
|-----|------|------|------|-------|-------|------|------|------|
| RoE | 19.5 | 19.3 | 16.8 | -40.2 | -25.8 | 11.1 | 13.4 | 15.7 |
|-----|------|------|------|-------|-------|------|------|------|

Valuations

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024E | 2025E |
|---------------------------|-------------|-------------|-------------|------------|------------|-------------|-------------|-------------|
| BVPS (INR) | 21.1 | 27.0 | 38.8 | 63.9 | 80.0 | 112.9 | 129.1 | 151.1 |
| Change (%) | 21.5 | 28.0 | 43.9 | 64.6 | 25.3 | 41.1 | 14.4 | 17.0 |
| Price-BV (x) | 27.5 | 21.5 | 14.9 | 9.1 | 7.2 | 5.1 | 4.5 | 3.8 |
| EPS (INR) | 3.7 | 4.6 | 5.4 | -19.8 | -18.2 | 10.6 | 16.2 | 22.0 |
| Change (%) | 44.2 | 24.1 | 15.8 | -469.1 | -8.2 | -158.5 | 52.4 | 35.7 |
| Price-Earnings (x) | | | | | | 54.5 | 35.8 | 26.4 |

E: MOFSL 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 Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

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

- 1 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.
- 2 MOFSL, Research Analyst and/or his relatives do not have actual/beneficial ownership of 1% or more securities in the subject company
- 3 MOFSL, Research Analyst and/or his relatives have not received compensation/other benefits from the subject company in the past 12 months
- 4 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
- 5 Research Analyst has not served as director/officer/employee in the subject company
- 6 MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- 7 MOFSL has not received compensation for investment banking/ merchant banking/brokerage services from the subject company in the past 12 months
- 8 MOFSL has not received compensation for other than investment banking/merchant banking/brokerage services from the subject company in the past 12 months
- 9 MOFSL has not received any compensation or other benefits from third party in connection with the research report
- 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)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- 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, nor 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 Redressal Cell:

| 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 dpgrievances@motilaloswal.com.