March 2024

Initiating Coverage | Sector: Auto Ancillary

Happy Forgings

Expanding opportunities with diversification

Amber Shukla - Research analyst (Amber.Shukla@MotilalOswal.com)

Research analyst: Aniket Mhatre (Aniket.Mhatre@MotilalOswal.com) | **Aniket Desai** (Aniket.Desai@motilaloswal.com)

Happy Forgings

Expanding opportunities with diversification

Happy Forgings (HFL) is a Ludhiana-based company specializing in diversified forging and machining services. With over four decades of industry experience, it manufactures and delivers top-quality, intricate components. It is ranked as the fourth largest engineering-led manufacturer in India for complex and safety-critical, heavy forged, and high-precision machined components. The company is well established within the industries and customer segments it serves, including a) heavy commercial vehicles (contributing to 41% of revenues), b) farm equipment (32%), c) off-highway vehicles (14%) and industrials (13%). Founded in 1979, HFL's entire operations are based out of Ludhiana, Punjab, with three vertically integrated manufacturing facilities. HFL is well poised to grow in the coming years, led by expansion through increased capacities, product diversification, client acquisition, and emerging opportunities in industrials and exports. We expect 21%/25%/30% CAGR (over FY24E-26E) in standalone revenues/EBITDA/PAT and initiate coverage on the stock with a BUY rating and a TP of ~INR1,125 (based on 26x FY26E EPS).

Happy Forgings

BSE SENSEX	S&P CNX
72,500	21,983

HAPPY FORGINGS LIMITED

Stock Info

Bloomberg	HAPPYFOR IN
Equity Shares (m)	94.2
M.Cap.(INRb)/(USDb)	87.4 / 1.1
52-Week Range (INR)	1088 / 904
1, 6, 12 Rel. Per (%)	-4/-/-
12M Avg Val (INR M)	575
Free float (%)	21.4

Standalone Financials Snapshot (INR b)

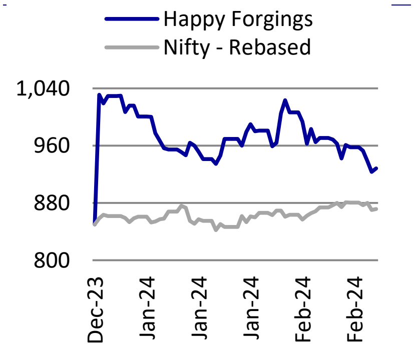
Y/E March	FY24E	FY25E	FY26E
Sales	13.7	16.5	20.0
EBITDA	3.9	4.9	6.0
EBITDA margin %	28.5	29.5	30.2
Adj. PAT	2.4	3.2	4.1
EPS (INR)	25.6	33.9	43.4
EPS growth %	9.9	32.4	27.8
BV/Sh. (INR)	170	199	233
Ratios			
RoE (%)	18.6	18.4	20.1
RoCE (%)	17.1	17.4	19.2
RoIC	19.6	21.6	23.5
Valuations			
P/E (x)	36.2	27.3	21.4
P/BV (x)	5.5	4.7	4.0
EV/EBITDA (x)	22.7	17.3	13.8
EV/Sales (x)	6.5	5.1	4.2

Shareholding pattern (%)

As On	Dec-23
Promoter	78.6
DII	5.8
FII	2.1
Others	13.5

FII Includes depository receipts

Stock's performance (one-year)



CMP: INR928 TP: INR1,125 (+21%) Buy

Expanding opportunities with diversification

Well poised to tap opportunities in growing industrials and exports market

Happy Forgings (HFL) is a Ludhiana-based company specializing in diversified forging and machining services. With over four decades of industry experience, it manufactures and delivers top-quality, intricate components. It is ranked as the fourth largest engineering-led manufacturer in India for complex and safety-critical, heavy forged, and high-precision machined components. The company is well established within the industries and customer segments it serves, including a) heavy commercial vehicles (contributing to 41% of revenues), b) farm equipment (32%), c) off-highway vehicles (14%) and industrials (13%). Founded in 1979, HFL's entire operations are based out of Ludhiana, Punjab, with three vertically integrated manufacturing facilities. HFL is well poised to grow in the coming years, led by expansion through increased capacities, product diversification, client acquisition, and emerging opportunities in industrials and exports. We expect 21%/25%/30% CAGR (over FY24E-26E) in standalone revenues/EBITDA/PAT and initiate coverage on the stock with a BUY rating and a TP of ~INR1,125 (based on 26x FY26E EPS).

Ability to deliver safety-critical, complex forged and machined products

- The company embarked on its journey by manufacturing basic forged components, evolving to produce complex and safety-critical products with closed tolerances. This transformation involved expanding capabilities in both light and heavy forging, as well as machining processes.
- It is the second company in India to have 14,000 ton forging press and among four companies to have 8,000 ton or higher press. It is a supplier to each of the top five Indian OEMs in the M&HCV industry and to four of the top five Indian OEMs in the farm equipment industry.
- The addition of the 14,000 ton press line in Q3FY23 has enabled the company to forge heavier, safety-critical parts, weighing up to 250Kgs, while also expanding its capabilities across various industries. Transitioning from solely a forgings player, HFL has now evolved into a fully machined player, with its machining mix increasing from ~53% in FY14 to ~84% in 9MFY24.

Well diversified mix to help offset cyclical uncertainty

- Over the years, HFL has successfully diversified its user industry across segments and customers. Its exports have now surged to 20% for 9MFY24 from just 13% in 9MFY23. Additionally, its Industrial segment contribution has increased to 13% for 9MFY24 from just 4% in 9MFY23.
- This diversified customer base has helped HFL reduce cyclicality to its core segments such as CVs and tractors. A case in point is the fact that despite weak demand in CVs (flat YoY) and tractors (-5% YoY) for 9MFY24, HFL has been able to post 13.5% YoY revenue growth, given a strong growth in the Industrials (non-tractor) segment.

New orders to drive near-term weakness in core Autos

- The major share of revenue for HFL is attributed to CV and Farm Equipment, constituting ~41% and 32%, respectively, in 9MFY24. While the near-term demand outlook for both the CV and tractor industry appears subdued, we believe structural drivers are in place for a recovery in FY25.
- It is pertinent to note that HFL has a healthy track-record of outperforming the core industry growth in the past. This is also highlighted from the fact that HFL's revenue growth of 13.5% for YTDFY24, outpacing the significantly slower industry performance in both CV and tractor sectors for FY24YTD.
- These new order wins are expected to help drive its outperformance to its core focus auto and tractor segments. We expect HFL's CV/tractor segment revenue to register a CAGR of ~10%/15% over FY24-26E, well ahead of our forecast for these segments.

Industrials/exports to be key growth driver for HFL

- Following the successful installation of its 14k MT press, HFL experienced a major influx of new order wins from the Industrial segment, leading to a substantial increase in the segment's contribution to revenue, rising to 13% for YTDFY24 from just 4% in 9MFY23. HFL expects to ramp up the utilization of this press to 80% in the next three to four years from the current utilization of 40%.
- Further, given its relatively low manufacturing costs and favorable government policies to push localization, India is now emerging as the key beneficiary of this trend with many domestic vendors seeing renewed interest from global OEMs for sourcing from them.
- Like its peers, HFL is also emerging as one of the beneficiaries of this trend. This is evident from its ~60% share of exports in the order book. Accordingly, it expects exports contribution to rise to 25% by FY25 from the current 20% for YTDFY24.

Roadmap for strong growth in place

- We expect an 21% CAGR in standalone revenue over FY24E-26E, led by: i) stable growth in overall CV and farm equipment volumes, ii) addition of new capacities and products, iii) healthy order book, and iv) strategic initiatives to grow businesses such as industrials and exports.
- Profitability is likely to improve, led by increasing share of machining, improving utilization of high weight forgings press (14k tons), better product mix as the company grows in the industrials and exports division. This should also support EBITDA CAGR of ~25% over FY24-26, resulting in consistent increase in EBITDA margin to ~30.2% by FY26 vs 28.5% in FY24. Moreover, PAT is expected to register a CAGR of ~30%.
- Healthy profitability, coupled with improving utilizations, should bode well for free cash flows and improvement in return ratio. The company has guided for annualized capex of INR2b over the next few years. We expect aggregate operating cash flows/free cash flows of INR9.2b/INR3.2b over FY24-26E vs. INR3.4b/-1.2b over FY21-23.

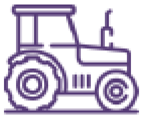
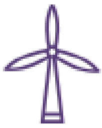
- ROE and ROCE is expected to expand to 20.1%/19.2% by FY26E from 18.6%/17.1% in FY24E. The company repaid almost INR 1.5b worth of debt out of total fresh issue of IN4b, and now the debt stands at INR1.39b (vs. INR2.18b in FY23).

Valuation & view: Initiate coverage with a BUY rating

- On the back of new order wins in Auto segment, we expect HFL to continue to outperform core auto segments. Further, its healthy order wins in the Industrials/exports segments would help drive an improved mix. We expect HFL's revenue/EBITDA/PAT CAGR of 21%/25%/30% over FY24-26E.
- Its superior financial track record relative to peers serves as a testament of its inherent operational efficiencies and is likely to be a key competitive advantage for HFL going forward. We initiate coverage on Happy Forgings with a BUY rating and a TP of INR1,125 (based on 26x FY26E EPS).
- **Key downside risks:** i) Lower-than-anticipated growth in underlying industries, ii) Faster EV adoption in CVs and tractors, iii) Macro headwinds in developed markets.

STORY IN CHARTS

Happy Forgings- Leading forgings and machining company with focus on diversifying its revenue stream

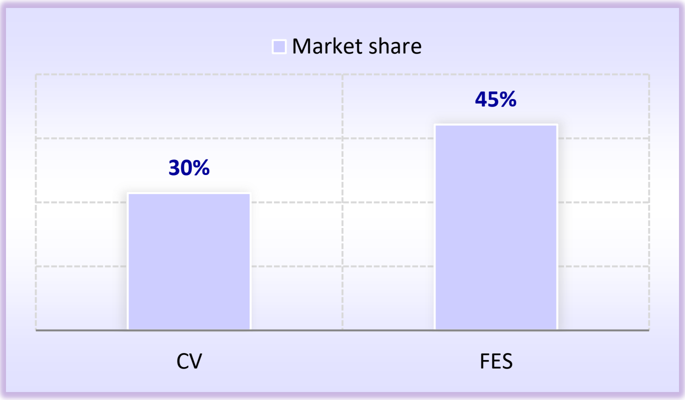
Segments	Products	FY24E		FY26E		FY24-26E
		Revenue (INR m)	Product mix %	Revenue (INR m)	Product mix %	Revenue CAGR %
Commercial vehicle 	❖ Crankshafts ❖ Front Axle Components ❖ Differential case ❖ Suspension	4,925	39	6,014	33	10
Tractors 	❖ Crankshafts ❖ Front Axle Components ❖ Differential case ❖ Suspension	3,996	32	5,322	29	15
Off-highway 	❖ Crankshafts ❖ Front Axle Components ❖ Differential case ❖ Suspension	1,822	15	2,144	12	8
Industrials 	❖ Wind Turbine- Planetary carrier, pinion shaft, Housing ❖ Oil & Gas industry- Valve body ❖ Transmission parts- Shaft, Crown wheel, Ring gears ❖ Railway parts- Bush, Connecting Rod, Camshaft Piston Pin	1,703	14	3,827	21	50
Passenger vehicles 	❖ Crankshafts	100	1	1,080	6	-

HFL performance over FY24-26E vs FY21-24E

	FY21-24E	FY24E-26E
Revenue CAGR %	32.6	21.0
Gross margin %	55.4	56.0
EBITDA CAGR %	34.9	24.6
EBITDA margin %	27.8	29.4
Adj. PAT CAGR %	40.8	30.1

Source: Company, MOFSL

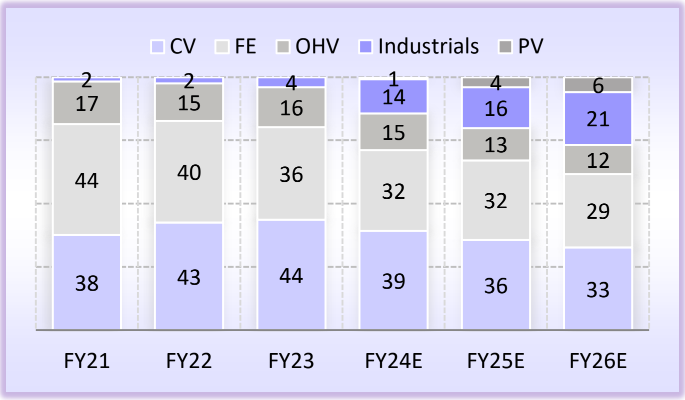
HFL's market share in crankshaft



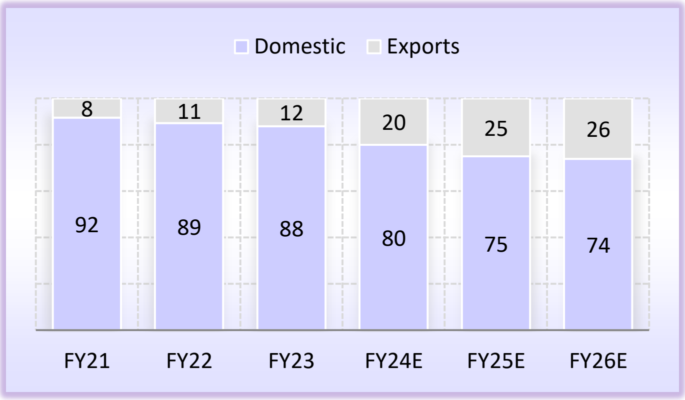
Source: Company, MOFSL

STORY IN CHARTS

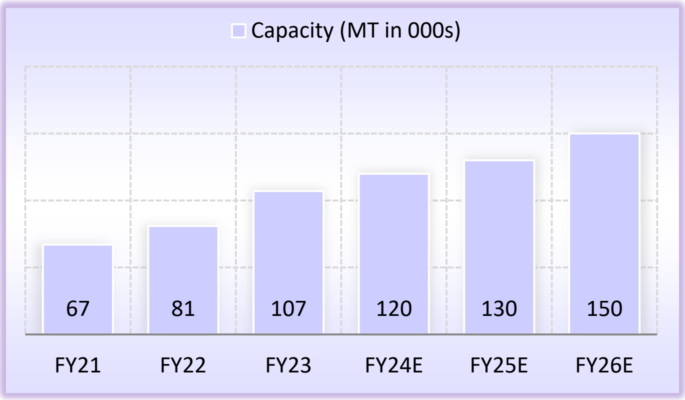
Revenue mix % for industrials continue to expand



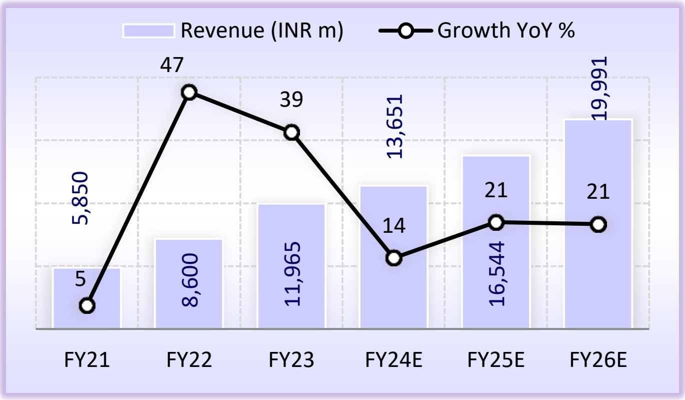
Share % of exports revenue increasing significantly



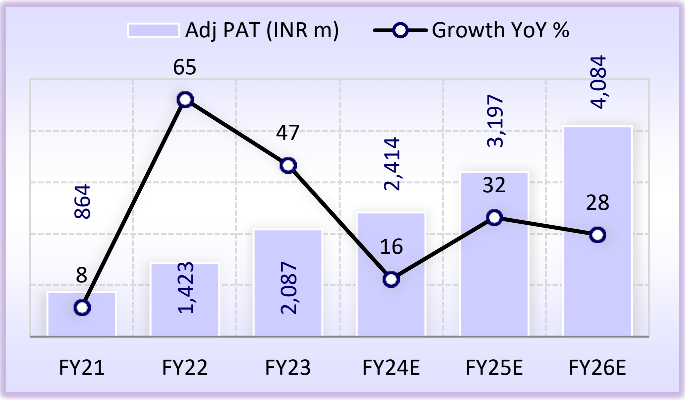
Forgings capacity likely to increase to 150k MT by FY26E



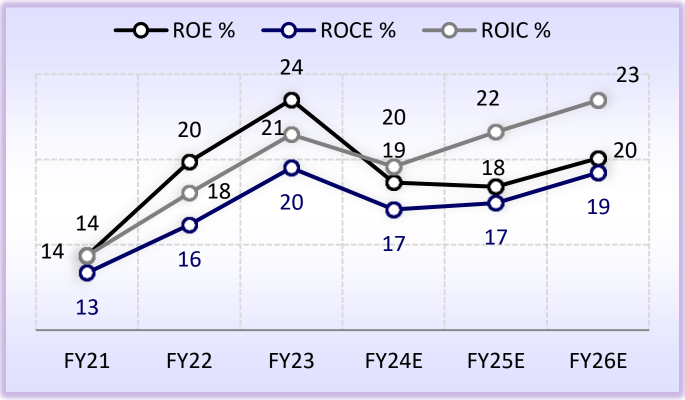
Revenue to register a CAGR of ~21% over FY24-26E



PAT expected to register ~30% CAGR over FY24E-26E



Improvement in return ratios to continue



Ability to deliver safety-critical forged and machined products

Machining mix has increased to 84% in 9MFY24 from 53% in FY14

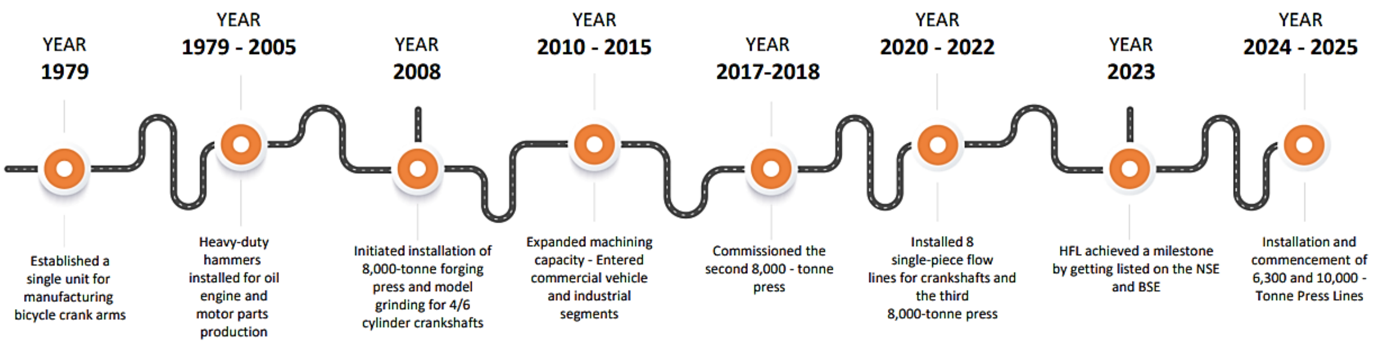
The company embarked on its journey by manufacturing basic forged components, evolving to produce complex and safety-critical products with closed tolerances. This transformation involved expanding capabilities in both light and heavy forging, as well as machining processes. It is the second company in India to have 14,000 ton forging press and among four companies to have 8,000 ton or higher press. It is a supplier to each of the top five Indian OEMs in the M&HCV industry and to four of the top five Indian OEMs in the farm equipment industry. The addition of the 14,000 ton press line in Q3FY23 has enabled the company to forge heavier, safety-critical parts, weighing up to 250Kgs, while also expanding its capabilities across various industries. Transitioning from solely a forgings player, HFL has now evolved into a fully machined player, with its machining mix increasing from ~53% in FY14 to ~84% in 9MFY24. Customer stickiness for HFL is indicated by the fact that the revenue share generated from customers who have remained with the company for over ten years accounts for 76%.

- **Ability to manufacture heavy forged components with high precision:** Happy Forgings Limited (HFL) is the fourth largest Indian forging and machining company with an installed capacity of 120k MT. Given that HFL's mechanical forging press lines range in size from 2,500T to 14,000T, it offers a wide range of solutions in the M&HCV, farm equipment, off-highway construction, and industrial equipment and machinery for oil and gas, power generation, railways, and wind turbine industries. It has integrated manufacturing operations coupled with in-house product and process design capabilities, resulting in a diverse product portfolio with continuous value addition. It is one of the four firms in India with an 8,000-ton forging press or higher, and one of the two companies in India with a 14,000-ton forging press or above. While it could forge products up to 90kg from existing facilities till FY22, the addition of the 14,000 ton press line in Q3FY23 has enabled the company to forge heavier, safety-critical parts, weighing up to 250Kgs, while also expanding its capabilities across various industries.
- **Shift from being a forging-led business to machined component manufacturer:** HFL, founded in 1979 as a forging company, has over the years evolved into a manufacturer of value-added machined products. Since the inception of its machining operations in FY13, the company has shifted its focus toward developing heavier, high-precision critical products with closed tolerances for various end-user industries. Its strength in machining and overall value addition to products has enabled it to establish itself as one of the leading supplier to sectors such as CV, tractors, off-highways, and industrials. The share of machining mix in the company's revenue has increased to ~84% in 9MFY24 from ~53% in FY14.
- **Crankshaft- Complex product with high entry barrier:** Crankshaft contributes ~47% of the overall revenue for the company. HFL has emerged as a leading player in the domestic crankshaft manufacturing industry, with the second largest production capacity for commercial vehicles and high-power industrial crankshafts in India. It is a supplier to each of the top five Indian OEMs in the M&HCV industry and to four of the top five Indian OEMs in the farm equipment

industry. As is a well-known fact, Crankshaft is a safety critical component with high entry barriers. Crankshaft in these segments are typically made to withstand greater loads and pressures than those for passenger vehicles and two-wheelers. This requires potent capabilities to design and manufacture these complex parts, in turn resulting in lower competition. HFL's strong market position in the crankshaft segment is a testament to the company's technological prowess.

- **Long-standing relationships with customers across industries:** HFL's superior forging and machining capabilities, expertise in design and engineering, diverse product portfolio and flexibility to meet customers' varying needs have helped the company establish long-standing customer relationships. It has about a 30% market share in the CV segment and 45% share in the tractor segment in Indian crankshaft industry with strong presence across all key OEMs. Customer stickiness for HFL is indicated by the fact that the revenue share generated from customers who have remained with the company for over ten years amounts to 76%.

Exhibit 1: The growth of Happy Forgings has occurred entirely through organic means…

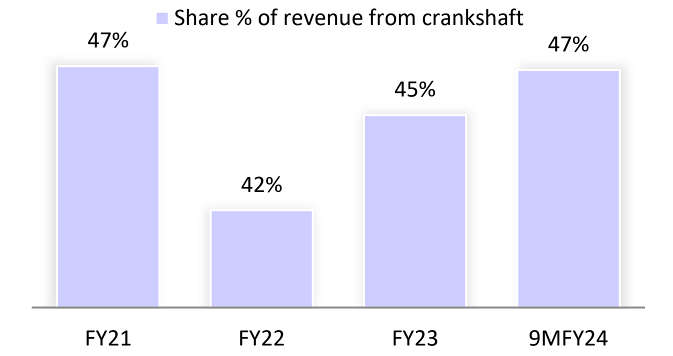


Source: Company, MOFSL

Exhibit 2: …with high focus on heavier, high precision value-added components

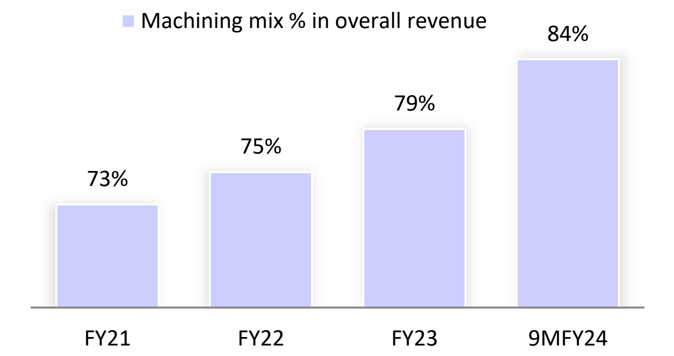
Source: Company, MOFSL

Exhibit 3: Revenue mix of crankshaft has been increasing…



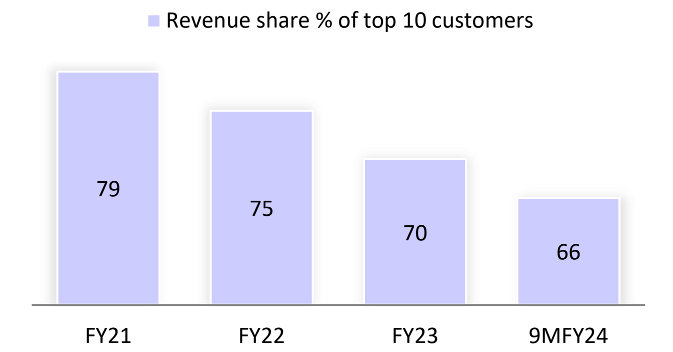
Source: Company, MOFSL

Exhibit 4: … along with the increase in machining mix



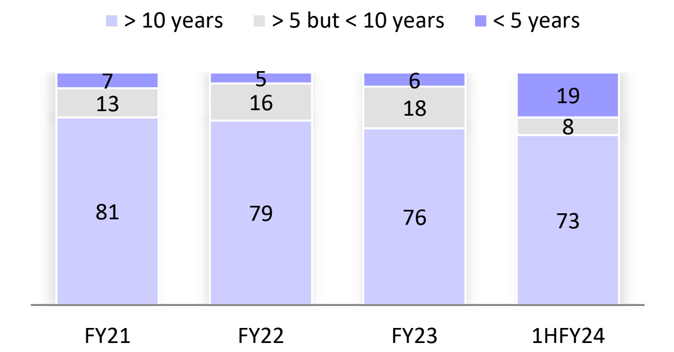
Source: Company, MOFSL

Exhibit 5: With continuous addition of new clients, revenue share of top 10 clients has declined over the last 3-4 years…



Source: Company, MOFSL

Exhibit 6: … while the share of customers with <5 years of relationship has increased



Source: Company, MOFSL

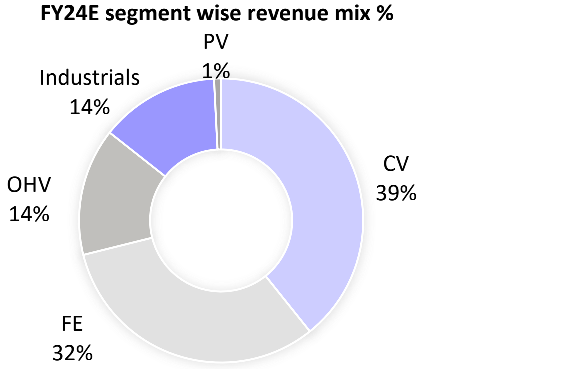
Well diversified mix helps offset cyclical uncertainty

Ramp-up in Industrial business helps offset slowdown in CV and tractors

Over the years, HFL has done well to diversify its user industry across segments and customers. Its exports have now ramped up to 20% for 9MFY24 from just 13% in 9MFY23. Also, its Industrial segment contribution has increased to 13% for 9MFY24 from just 4% in 9MFY23. This diversified customer base has helped HFL reduce cyclicality to its core segments such as CVs and tractors. A case in point is the fact that despite weak demand in CVs (flat YoY) and tractors (-5% YoY) for 9MFY24, HFL has been able to post 13.5% YoY revenue growth, driven by the strong growth in the Industrials (non-tractor) segment.

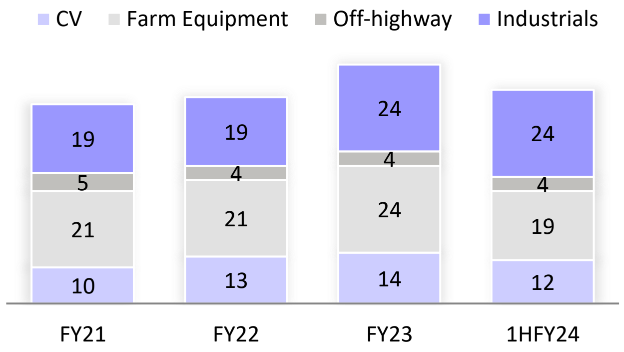
- **Installation of 14k MT press has helped foray into heavier forgings:** Over the last few years, HFL has focused on diversifying its presence in the Industrial segment by concentrating on sectors including wind turbines, oil and gas, and power generation. The customer base of the industrials division has increased to 24 in FY23 from 19 in FY21. Given an extremely encouraging traction from these segments, HFL installed the 14k MT press in 3QFY23. Following the successful installation of the press, HFL experienced a major influx of new order wins from the Industrial segment, leading to a substantial increase in the segment's contribution to revenue, rising to 13% for YTDFY24 from just 4% in 9MFY23.
- **HFL enjoys healthy exports mix:** Over the years, HFL has also ramped its exports presence in multiple regions, including Brazil, Italy, Japan, Spain, Sweden, Thailand, Turkey, the UK, and the USA. It has been able to grow its exports almost 2x over FY20-23. Its exports mix has now increased to 20% for 9MFY24 from just 13% in 9MFY23.
- **A well-diversified base will help balance business cyclicality:** As highlighted above, over the years, HFL has done well to diversify its user industry across segments and customers. Within autos, it supplies to CV OEMs and within the non-auto segment, it supplies to diverse segments, which include farm equipment, off-highway vehicles, and industrial machinery and equipment for oil and gas, power generation, railways, and wind turbine industries. It also has a well-diversified customer base and serves 66 customers as of 9MFY24 vis-à-vis 55 customers in FY21. This diversified customer base has helped HFL reduce cyclicality in its core segments such as CVs and tractors. A case in point is the fact that despite weak demand in CVs (flat YoY) and tractors (-5% YoY) for YTDFY24, HFL has been able to post 13.5% revenue growth, driven by the strong growth in the Industrial (non-tractor) segment.

Exhibit 7: A well-diversified revenue mix with higher presence in CVs and tractors



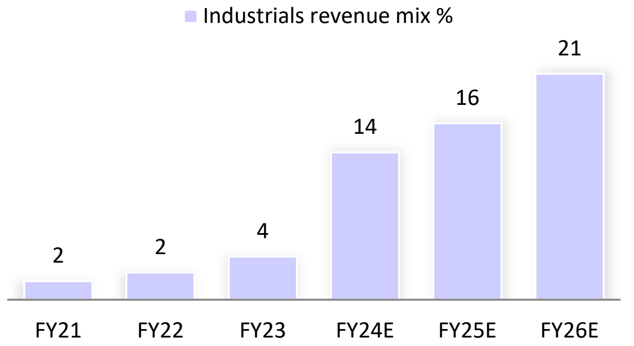
Source: Company, MOFSL

Exhibit 8: …supported by diversified set of customers across segments



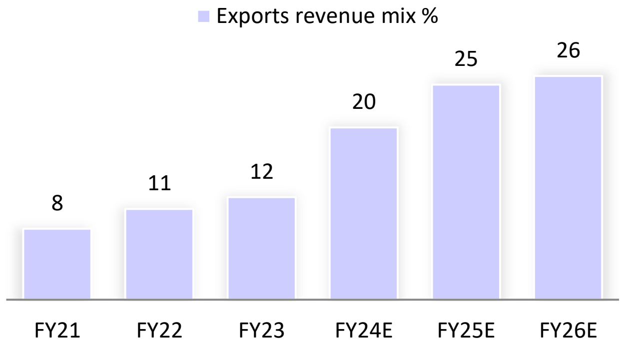
Source: Company, MOFSL

Exhibit 9: Share of revenue from industrials continues to increase



Source: Company, MOFSL

Exhibit 10: Exports revenue mix too increasing at a faster pace



Source: Company, MOFSL

New orders to offset near-term weakness in core Autos

New products in CVs and entry in PVs to drive outperformance in Autos

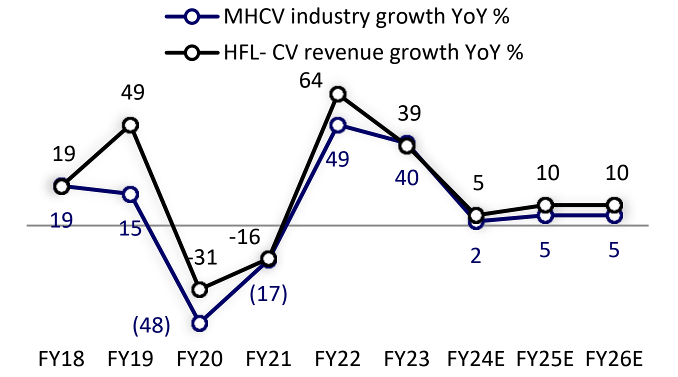
The major share of revenue for HFL is attributed to CV and Farm Equipment, constituting ~41% and 32%, respectively, in 9MFY24. While the near-term demand outlook for both the CV and tractor industry appears subdued, we believe structural drivers are in place for a recovery in FY25. Nevertheless, it is pertinent to note that HFL has a healthy track-record of outperforming the core industry growth in the past. This is also highlighted from the fact that HFL's revenue growth of 13.5% for YTDFY24, outpacing the significantly slower industry performance in both CV and tractor sectors for FY24YTD. Further, we understand that HFL has won new orders for new CV products from major CV OEMs and also in the tractor segment. The management has also indicated that it has won new orders in the PV segment and this segment is likely to contribute to 5% of revenues by FY25. The full impact of all these orders is expected to reflect in FY25. These new order wins are expected to help drive its outperformance to its core auto segments. We expect HFL's CV/tractor segment revenue to register a CAGR of ~10%/15% over FY24-26E, well ahead of our forecast for these segments.

- **India CVs: near-term weakness, but long-term drivers are in place:** We expect the domestic CV industry to post flat volume growth in FY24. Also, the outlook for the next couple of quarter remains subdued, given the upcoming National Elections as fleet operators refrain from making any fresh purchase decisions before the budget announcement. However, we expect CV demand revival to resume post Elections as most of the key demand indicators remain in place which include: 1) high probability of the current ruling government getting elected for the 3rd term and driving continued infrastructure push, 2) healthy fleet operator profitability due to improved pricing discipline and improved turnaround time 3) favorable trucker sentiment index. Hence, although the CV industry may still post a single-digit growth for FY25, one has to note that its more likely due to a weak H1 given that we expect demand to bounce back in H2 and also in FY26 post new Budget announcements.
- **Tractors- FY25E likely to be a better year in terms of demand:** The tractor segment has seen weak demand in FY24, largely led by: 1) weak monsoon which has adversely impacted farmer sentiment, kharif crop, and rabi sowing 2) festive mismatch with Navratri (summer) not falling in this fiscal 3) high base with peak tractor sales achieved in FY23. We expect tractor demand to revive from FY25 onwards and it is expected to be driven by: 1) expectation of normal monsoon 2) Navratri (summer) falling twice in FY25 3) base correction in FY24 4) favorable terms of trade for farmers driving positive sentiment. We factor in tractor industry to post 6% volume CAGR over FY25-26E.
- **New order wins to help drive outperformance over core auto segments:** HFL has had a healthy track record of consistently outperforming both domestic MHCV and tractor industry growth in the past. This can be highlighted from the fact that while the CV industry has posted a 2% decline in volume CAGR over FY19-23 and tractors have delivered a 5% CAGR, HFL has outperformed them, achieving 7% and 18% revenue CAGR in the respective segments during the same period.

- It has recently won new orders for new CV products like front axle beams from large CV OEMs. It has also won orders from the tractor OEMs. Further, by leveraging the existing capabilities, the company intends to diversify into lightweight forging and machined components. It has recently won new orders in the PV segment and this segment's mix is likely to rise to ~5-6% of overall revenue by FY25 from almost nil in FY24E. With certain additional investments in processes, it is exploring manufacturing steering arms, knuckles, suspension parts, and powertrain components tailored for the EV market.

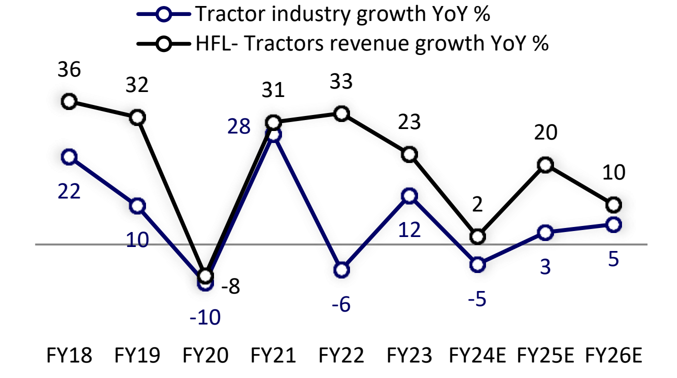
  These new order wins are expected to help drive its outperformance to its core auto and tractor segments even in the coming years. We expect HFL's CV/tractor segment revenue to register a CAGR of ~10%/15% over FY24-26E, well ahead of our industry growth estimate of single-digit growth for both segments.

Exhibit 11: HFL has outperformed underlying MHCV industry



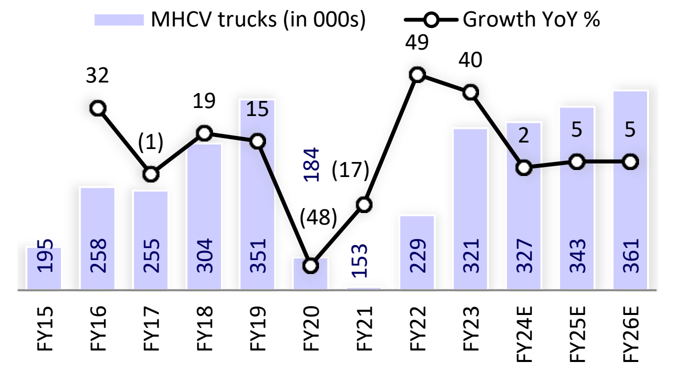
Source: SIAM, MOFSL

Exhibit 12: …as well as tractor industry historically



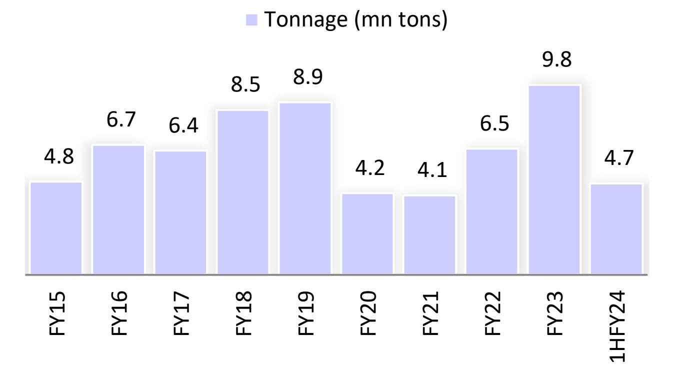
Source: TMA, MOFSL

Exhibit 13: MHCV truck volumes are expected to register a CAGR of ~5% over FY24-26E; to cross its previous peak



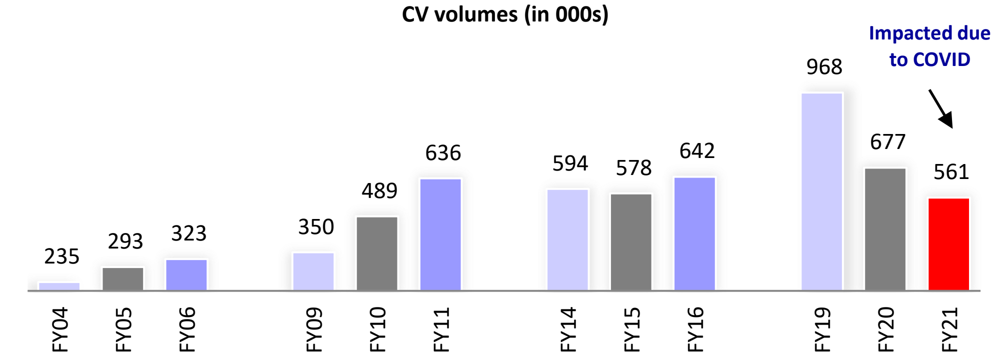
Source: SIAM, MOFSL

Exhibit 14: …however, MHCV tonnage has already crossed its previous peak in FY23



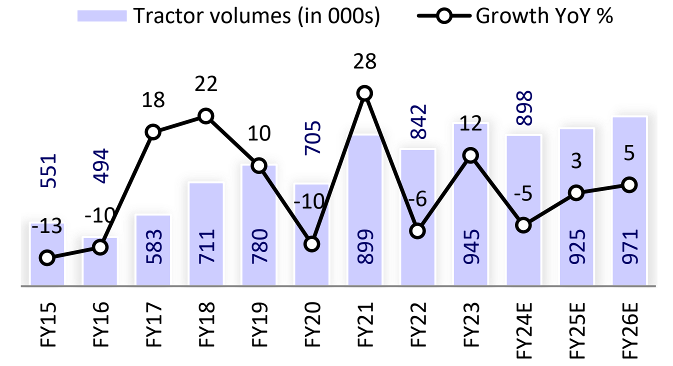
Source: SIAM, MOFSL

Exhibit 15: CV volumes have historically seen a healthy growth, following the election year



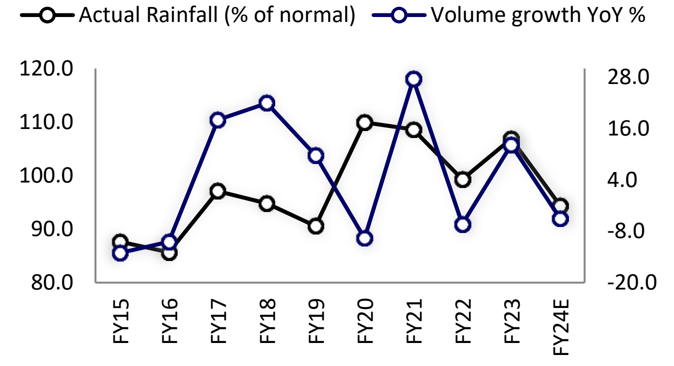
Source: SIAM, MOFSL

Exhibit 16: Domestic tractor volumes have registered ~5% CAGR over FY19-23; FY24 is likely to witness a decline



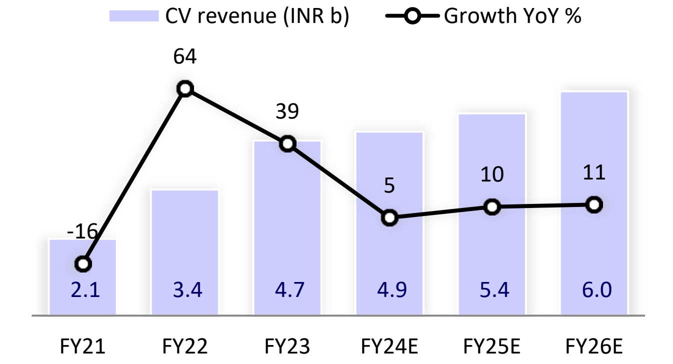
Source: TMA, MOFSL

Exhibit 17: There is a healthy correlation between tractor's volume growth and actual rainfall



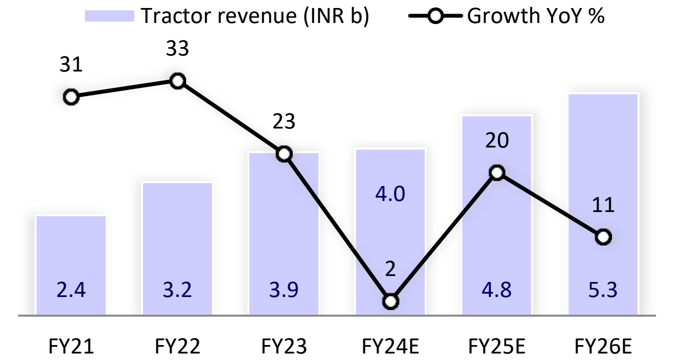
Source: Industry, MOFSL

Exhibit 18: Revenue from CV segment is expected to witness ~10% CAGR over FY24-26E



Source: Company, MOFSL

Exhibit 19: Revenue from tractor segment is likely to register a ~15% CAGR over FY24-26E



Source: Company, MOFSL

Industrials / Exports to be key growth drivers for HFL

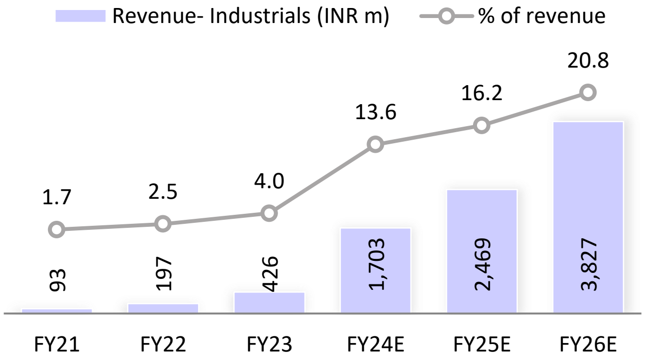
Industrials/exports mix was 13%/20% in 9MFY24 vs 2%/9% in 9MFY23

Following the successful installation of its 14k MT press, HFL experienced a major influx of new order wins from the Industrial segment, leading to a substantial increase in the segment's contribution to revenue, rising to 13% for YTDFY24 from just 4% in 9MFY23. HFL expects to ramp up the utilization of this press to 80% in the next three to four years from the current utilization rate of 40%. Further, given its relatively low manufacturing costs and favorable government policies to push localization, India is now emerging as the key beneficiary of the supply chain derisking strategy by global OEMs. Also, like its peers, HFL is also emerging as one of the beneficiaries of this trend. This is evident from its ~60% share of exports in the order book. Accordingly, it expects exports contribution to rise to ~25% by FY25 from the current 20% for 9MFY24.

- **Addition of 14k MT press opens up huge opportunities for HFL:** The addition of the 14,000 ton press line in Q3FY23 has enabled the company to forge heavier, safety-critical parts, weighing up to 250Kgs, while also expanding its capabilities across various industries. Transitioning from solely a forgings player, HFL has now evolved into a fully machined player, with its machining mix increasing from ~53% in FY14 to ~84% in 9MFY24. The current utilization of this press is about 40% and the company plans to ramp it up to 80% in the next 14-18 months on the back of its new order wins. Ramp-up of the 14k MT press is likely to increase the Industrials mix and help further diversify its revenue mix. We expect revenue from the industrials segment to register a CAGR of ~50% over FY24-26.
- **Global supply chain diversification opens up new opportunities for HFL**
  The global automotive industry has faced multiple supply chain challenges in the recent past due to Ukraine-Russia crisis, US-China trade war, and the impact of COVID. With rising inflation in Europe and US-China trade rivalry, global OEMs are now looking at alternate supply destinations. The demand for ICE components is increasingly shifting to India as several tier-one suppliers in developed regions such as Europe and the US have discontinued investing in ICE due to its current focus on EV transition. Given its relatively low manufacturing costs and favorable government policies to push localization, India is now emerging as one of the key beneficiaries of this trend with many domestic vendors seeing renewed interest from global OEMs for sourcing from them.
- **Already made significant progress in exports market:** Like its peers, HFL is also seeing many export opportunities across segments and has made significant progress in the exports market, with promising opportunities for cross-selling products and expanding into new locations of existing customers, considering their long-standing relationships. Given the favorable trend, HFL's exports have grown 2x in the last four years and its share of exports in revenue has increased to 20% in 9MFY24 from ~8% in FY21. Its strong export momentum is expected to continue going forward, in our view, given that almost 60% of the current order book is from exports. Given this strong traction, the management has indicated that its exports contribution is likely to rise to ~25% by FY25.
- **Off-highway – Long-standing relation with key players in the industry:** Indian OHV market is expected to register a CAGR of ~7.8% over FY24-29 due to rapid

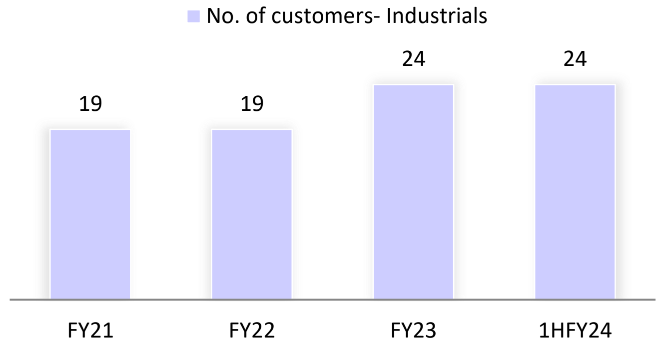
developments in industrialization, urbanization, and increased import-export opportunities. Also, with new CEV-IV emission standards now completely adopted by the Indian OHV industry, there are significant opportunities for India CE manufacturers to enter into developed markets. The company shares long-standing relations with key players such as Dana India and JCB India. We expect revenue from the Off-highway segment to register a CAGR of ~8% over FY24-26.

Exhibit 20: Revenue mix of industrials to continue to grow…



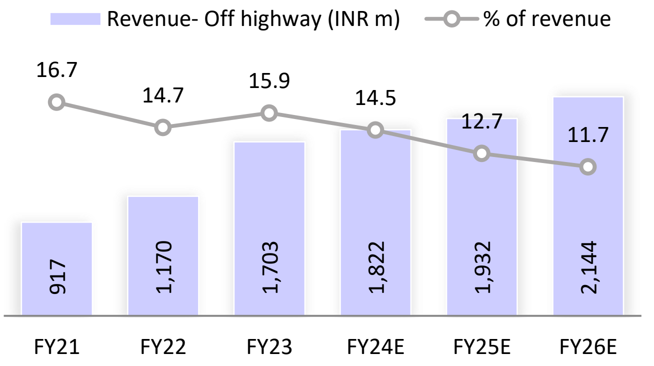
Source: Company, MOFSL

Exhibit 21: …Led by increase in the number of customers



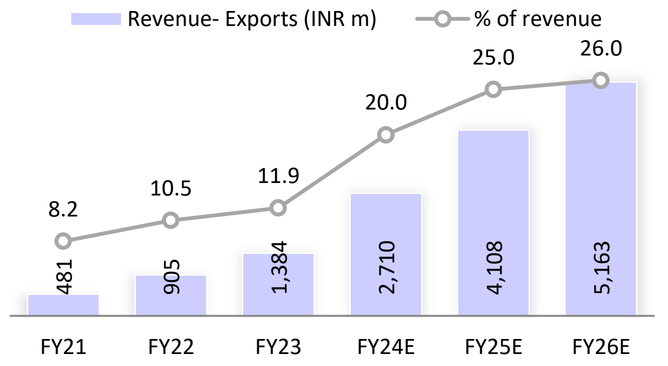
Source: Company, MOFSL

Exhibit 22: Off-highways revenue to grow at a stable pace…



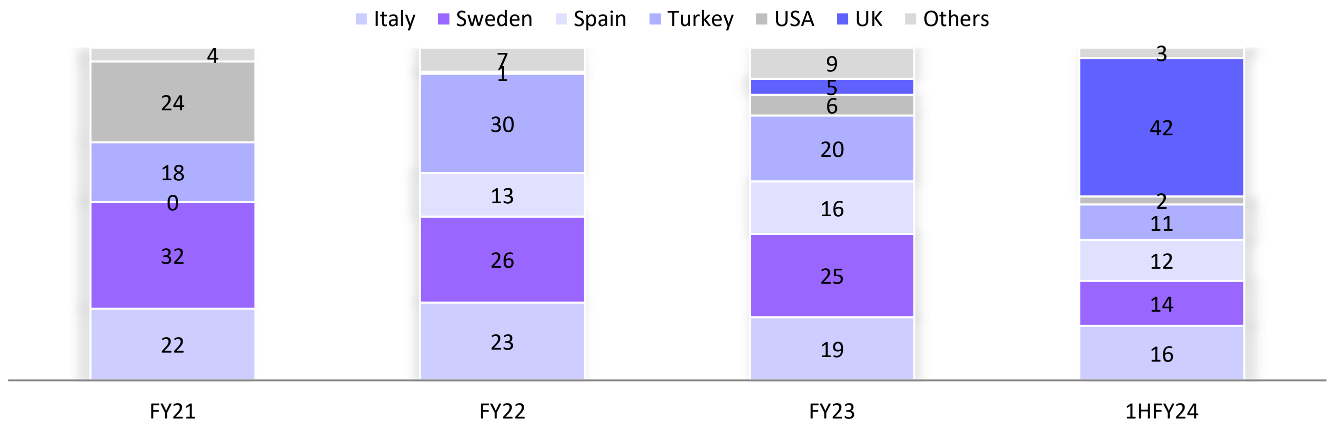
Source: Company, MOFSL

Exhibit 23: Exports to contribute ~26% of revenue by FY26



Source: Company, MOFSL

Exhibit 24: Share of UK in exports mix has increased significantly in 1HFY24



Source: Company, MOFSL

Enjoys best-in-class returns in the industry

Superior margins relative to peers to be competitive advantage for HFL

HFL is a fourth largest forgings player with 30% market share in CVs and 45% in tractors in Indian crankshaft industry. It has the second largest production capacity for commercial vehicles and high-power industrial crankshafts in India. It is one of the four companies in India with an 8,000-ton forging press or higher, and one of the two companies in India with a 14,000-ton forging press or above. Given its inherent capabilities and strong vintage spanning four decades, we believe HFL has significant growth opportunities to tap into multiple sectors / regions in the coming years. Its best-in-class margins, returns, and healthy leverage ratios serve as a testament to its operational efficiencies relative to peers. This superior financial strength is likely to be a competitive advantage for HFL in the coming years.

- **Capability at par with domestic peers:** HFL is the fourth largest forgings player in India with a manufacturing capacity for forgings of 120,000MT and machining of 51,000MT. It has the second largest production capacity for commercial vehicles and high-power industrial crankshafts in India. While its exports mix has grown 2x in the last four years and now accounts for 20% of revenues for YTDFY24, it still trails its peers significantly (BHFC exports contribution at 59%, RKFL at 41% and MM at 34%). Similarly, its Industrials mix (ex of tractors) also lags behind its peers.
- **Opportunity to tap multiple sectors and regions:** Given its inherent capabilities are largely at par with most of its domestic peers, we believe, HFL has significant growth opportunities to tap multiple sectors / regions in the coming years. A case in point being its limited presence in North American market, both in autos and Industrial sectors, where most of its peers have established their presence over the last few years.
- **Best in class financials highlights operational efficiencies:** Its focus on improving its machining mix over the years has enabled HFL to deliver best in class EBIDTA margins over the last few years. This is supported by relatively lower employee and power cost vis-à-vis some of its peers. Also, this is despite the relatively low scale compared to its top two peers in the industry.
- **Likely to see steady margin expansion:** With further improvement in product mix due to increase in industrial and exports businesses, we believe, it can continue to see steady margin expansion in the coming years. Another key highlight is that it has recently repaid almost INR 1.5bn worth of debt from IPO proceeds, post which its leverage ratios are also best in class. As a result, it enjoys the best return ratios in the forging industry. Its superior financial track record relative to peers is a testimony of its inherent operational efficiencies and is likely to be a key competitive advantage for HFL going forward.

Exhibit 25: Forging and machining capacity of key players (FY23)

#	Company	Forging and Machining Capacity (MTPA)	Range of Tonnage Presses	Contribution of machined components to revenue
1	**Happy Forgings**	**T: 153,100** **F: 107,000** **M: 46,100**	**2,500T to 14,000T** **14000T is Mechanical forge press**	**79%**
2	Bharat Forge	T: 750,126 F: 693,750 C: 56,376	1,600T to 16,000T 16000T is Screw forge press	70%
3	CIE Automotive	T: 282,201 F: 214,000 C: 38,201 M: 30,000	150T to 6,300T	NA
4	Craftsman Automation	T: 55,000 C: 30,000 M: 25,000	200T to 3,200T	78%
5	Sansera Engineering	F: 40,000 – 55,000	630 T to 2,500T	NA
6	MM Forgings Limited	T: 120,000	1,600T to 8,000T	NA
7	RK Forging	T: 187,100	2,000T to 12,500T	74%

Source: Company, MOFSL

Exhibit 26: EBITDA margin comparison (%)

EBITDA margin comparison	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Happy Forgings	**27**	**26**	**27**	**27**	**28**	**29**	**30**	**30**
Bharat Forge	20	14	14	19	14	17	18	19
Sona BLW Precision Forgings	28	23	30	27	26	28	29	29
Uno Minda	12	11	11	11	11	11	12	12
CIE India	13	12	8	12	14	16	16	16
Craftsman Automation	24	27	28	24	22	20	21	21
Ramkrishna Forgings	20	17	17	22	22	21	22	23
Sansera Engineering	19	16	19	19	18	17	18	18
MM Forgings	20	18	17	19	19	19	19	18
Endurance Technologies	15	17	16	13	12	13	14	14

Source: Bloomberg, MOFSL

Exhibit 27: ROE % comparison (%)

ROE % comparison	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E	FY26E
Happy Forgings	**29**	**15**	**14**	**20**	**24**	**19**	**18**	**20**
Bharat Forge (Consolidated)	21	7	-2	18	8	16	20	20
Sona BLW Precision Forgings	27	30	17	22	18	21	25	27
Uno Minda	18	9	10	12	17	18	19	19
CIE India	12	8	2	8	-3	16	16	16
Craftsman Automation	15	6	12	15	20	22	22	23
Ramkrishna Forgings	15	1	2	20	21	20	20	17
Sansera Engineering	15	11	13	14	13	15	17	19
MM Forgings	20	10	10	17	21	19	18	NA
Endurance Technologies	21	20	16	12	12	14	17	17

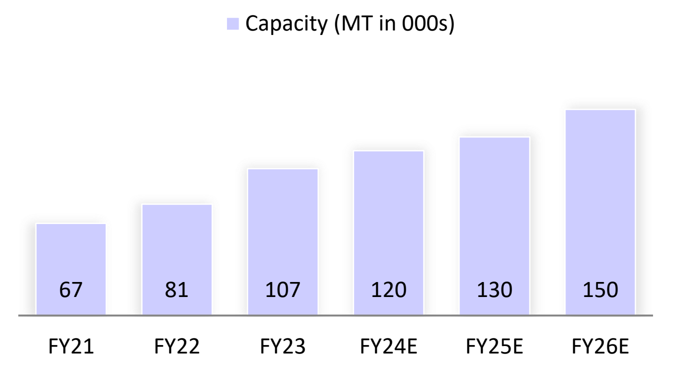
Source: Bloomberg, MOFSL

Roadmap for strong growth in place

Expect 30% PAT CAGR over FY24-26E, led by 21% revenue CAGR and margin expansion

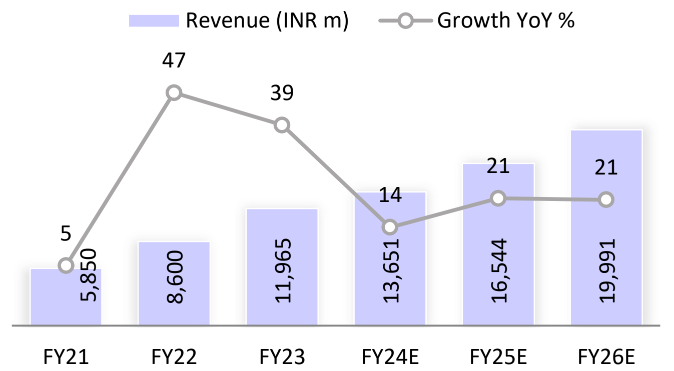
- HFL has a diversified product portfolio catering to both the Auto (~48% of overall revenue) and non-Auto (~52%) segments. Led by its technical strength in both forgings and machining, HFL has established itself as one of the leading player in the industry. It has been in the process of diversifying its revenue stream from CV/farm equipment to industrials and exports and so far has proven to be successful.
- Led by the addition of new heavier press line, leveraging its existing customer relationships and tapping into growing opportunities in Exports and industrial, the company is well placed to witness its next phase of growth. We expect an 21% CAGR in standalone revenue over FY24E-26E, led by: i) stable growth in overall CV and farm equipment volumes, ii) addition of new capacities and products, iii) healthy order book, and iv) strategic initiatives to grow businesses such as industrials and exports.
- Profitability is likely to improve, led by increasing share of machining, improving utilization of high weight forgings press (14k tons), better product mix as the company grows in the industrials and exports division. This should also support EBITDA CAGR of ~25% over FY24-26, resulting in consistent increase in EBITDA margin to ~30.2% by FY26 vs 28.5% in FY24. Moreover, PAT is expected to register a CAGR of ~30%.
- Capacity utilization stands at ~87% for machining and ~60% utilization for forging against the total capacity of ~51k/120k tons. Utilization is expected to improve as the volumes increase, especially for the heavy weight 14k tons press, which is currently operating at 40%. The company is in the process of adding new 6,300k ton press line by 2Q of FY25, post which, the forgings capacity will increase to ~130k tons.
- Healthy profitability, coupled with improving utilizations, should bode well for free cash flows and improvement in return ratio. The company has guided for annualized capex of INR2b over the next few years. We expect aggregate operating cash flows/free cash flows of INR9.2b/INR3.2b over FY24-26E vs. INR3.4b/-1.2b over FY21-23.
- ROE and ROCE is expected to expand to 20.1%/19.2% by FY26E from 18.6%/17.1% in FY24E. The company repaid almost INR 1.5b worth of debt out of total fresh issue of IN4b, and now the debt stands at INR1.39b (vs. INR2.19b in FY23). Net cash balance is expected to reach INR3.9b by FY26E vs INR1.08b in FY24E.

Exhibit 28: Forgings capacity to increase to 150k MT by FY26E



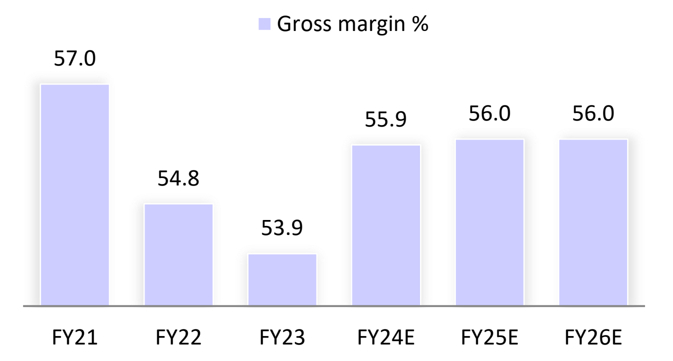
Source: Company, MOFSL

Exhibit 29: Revenue to witness ~21% CAGR over FY24-26E



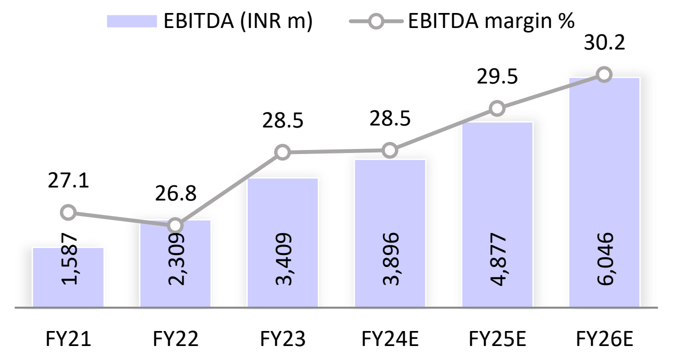
Source: Company, MOFSL

Exhibit 30: Gross margin to remain stable over next 2 years



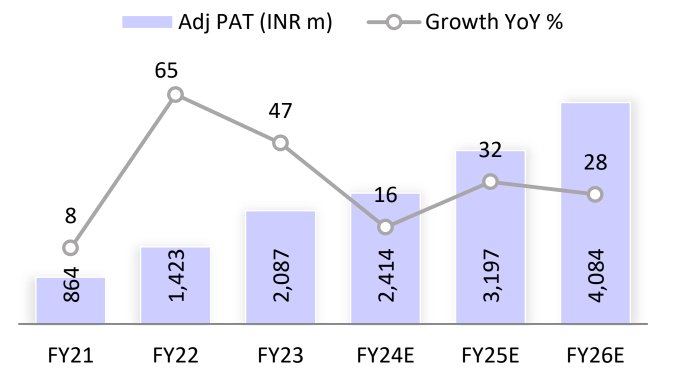
Source: Company, MOFSL

Exhibit 31: EBITDA margin to expand ~170bp over FY24E-26E



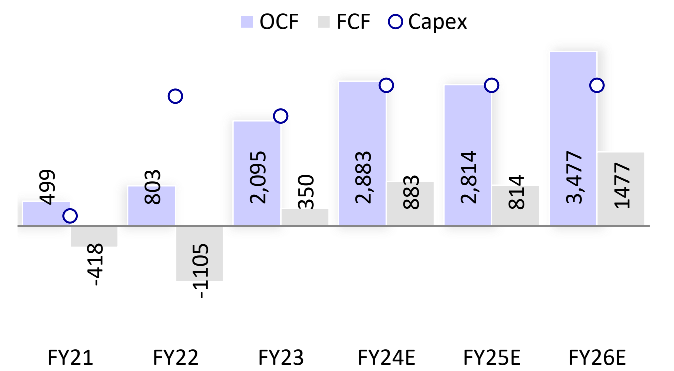
Source: Company, MOFSL

Exhibit 32: PAT expected to register a CAGR of 30% over FY24E-26E



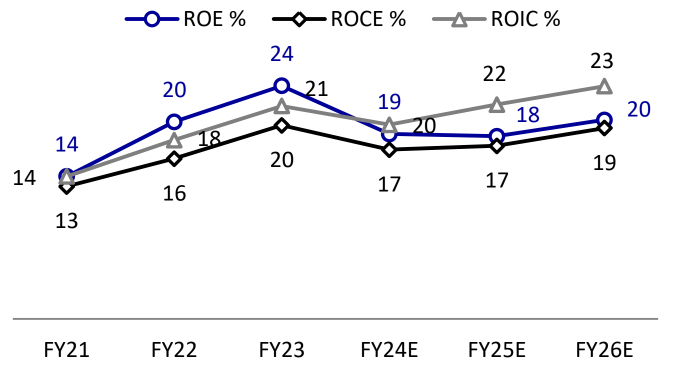
Source: Company, MOFSL

Exhibit 33: FCF/OCF expected to increase over the years



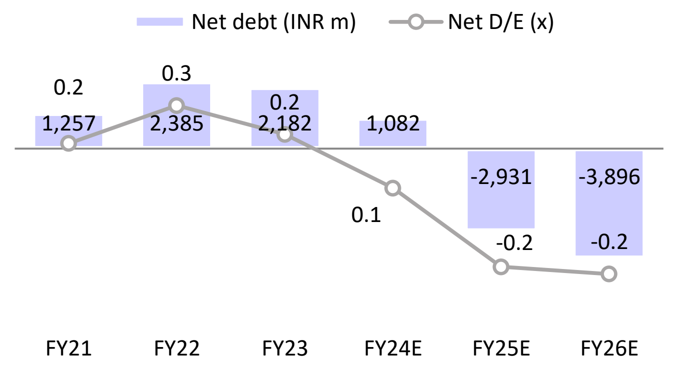
Source: Company, MOFSL

Exhibit 34: ROIC to improve steadily over next three years



Source: Company, MOFSL

Exhibit 35: Already became net cash after IPO proceeds



Source: Company, MOFSL

Valuation & view: Initiate coverage with a BUY rating

- **Ability to deliver safety-critical and machined component:** HFL's engineering capabilities enable it to manufacture complex and safety-critical, heavy forged, and high precision machined components. Over time, the company has forayed into products demanding elevated levels of precision, strength, and durability. This evolution is reflected in its increasing share of machining in overall revenue, which now stands at ~84% vs ~73% in FY21. It is the second company in India to operate 14,000-ton forging press and is among the four companies to have 8,000 ton or higher.
- **Key supplier of crankshafts to more complex CV and farm equipment segment:** HFL's major revenue is contributed by crankshafts, i.e., ~47%, wherein it has a market share of ~45%/35% in CVs and tractors. Crankshafts in these segments are typically made to withstand greater loads and pressures than those for passenger vehicles and two-wheelers. This requires potent capabilities to design and manufacture these complex parts, in turn resulting in lower competition. HFL's major revenue is contributed by segments such as CVs/farm equipment which contribute ~41%/32%. Its presence in these segments ensures higher realizations and better margin vis-à-vis peers.
- **Capitalizing on increasing demand from industrials and exports:** Following the successful installation of its 14k MT press, HFL experienced a major influx of new order wins from the Industrial segment. The current utilization of this press is about 40% and it plans to ramp it up to 80% in the next 14-18 months on the back of its new order wins. On the other hand, HFL has made significant progress in the exports market as well, with promising opportunities for cross-selling products and expanding into new locations of existing customers, considering their long-standing relationships. We expect the share of exports in overall revenue to increase to 26% by FY26 (vs ~8% in FY21).
- **Enjoys best in class returns in the industry:** HFL has consistently maintained one of the highest EBITDA margins among its peers over the past two years, primarily due to its superior machining mix. With anticipated improvements in the product mix, we expect its margins to further improve over our forecast period. Also, post its recent debt repayment, it now enjoys amongst the best return ratios in the forging industry.
- **Initiate coverage with a Buy rating**: On the back of new order wins in Auto segment, we expect HFL to continue to outperform core auto segments. Further, its healthy order wins in the Industrials/exports segments would help drive an improved mix. We expect HFL's revenue/EBITDA/PAT CAGR of 21%/25%/30% over FY24-26E. Its superior financial track record relative to peers serves as a testament of its inherent operational efficiencies and is likely to be a key competitive advantage for HFL going forward. We initiate coverage on Happy Forgings with a BUY rating and a TP of INR1,125 (based on 26x FY26E EPS).

Management profile

Paritosh Kumar Garg is the Chairman and Managing Director of the Company. He holds a bachelor's degree in arts from S.C. Dhawan Government (Evening) College, Ludhiana, Panjab University. He has been associated with the company since incorporation and has over 44 years of experience in the industrial sector. He is involved in the strategic decision making of the Company, oversees the Company's business activities, and is involved in setting up the governance standards of the Company.

Ashish Garg is the Managing Director of the company. He holds a bachelor's degree in science (accounting and finance), and a master's degree in science (manufacturing systems engineering) from the University of Warwick, United Kingdom. He has approximately 17 years of experience in the industrial sector. He currently manages the company's business operations, financial performance, growth strategies, and investments in different capacities and product developments.

Megha Garg is a Whole-time Director of the Company. She holds a bachelor's degree in science (economics) from the University of Nottingham, United Kingdom. She has approximately eight years of experience in the industrial sector. She currently handles the online digital marketing of the Company to engage prospects and capture leads.

Narinder Singh Juneja is the Chief Executive Officer and Whole-time Director of the Company. He holds a post diploma course in mechanical engineering (machine tools operation and maintenance) from Y.M.C.A. Institute of Engineering, State Board of Technical Education, Haryana. He has over 35 years of experience in the industrial sector. Prior to joining the company, he served as the assistant engineer with Krishna Forgings.

Pankaj Kumar Goyal is the Chief Financial Officer of the Company. He has been associated with the company since April 1, 2013. In the company, he handles finance and accounts department. He holds a bachelor's degree in commerce from Government College, Malerkotla, Punjab University, and is an associate member of the Institute of Chartered Accountants of India. He has over 10 years of experience in the finance sector. Before his association with the company, he has previously served with S.T. Cottex Exports Private Limited.

Patwinder Singh is the Chief Operating Officer of the Company. He has been associated with the company since August 1, 2016. He has over 22 years of overall experience. He holds a bachelor's degree in science from Guru Nanak Dev University, and a master's degree in business administration from CSM Institute of Graduate Studies

Mangesh Shantaram Purandare is the Chief Marketing Officer of the company. He has over 27 years of experience in the marketing sector. He has been associated with the Company since December 17, 2019. He holds a bachelor's degree in engineering (industrial) and a master's degree in business administration from University of Pune.

Bindu Garg is the Company Secretary and Compliance Officer of the Company. She has been associated with the company since November 2, 2021, and was appointed as the Company Secretary since July 12, 2022. She holds a bachelor's degree in commerce from Government Bikram College of Commerce, Patiala, Punjab University, and is an associate and a fellow member of the Institute of Company Secretaries of India. She has over 18 years of experience in the finance and secretarial sector.

Bull and Bear cases

Bull case

- ☑ In our Bull case scenario, we factor in a 31% revenue CAGR over FY24-26E (vs ~21% in base case scenario), driven by higher than expected growth in underlying industries such as CVs and tractors along with the faster ramp up of order book in industrials vertical.
- ☑ We expect the EBITDA margin to expand ~300bp from the current levels to reach ~31.5% by FY26, led by an improving mix and favorable operating leverage.
- ☑ As a result, company's earnings is likely to register 45% CAGR over FY24-26E to ~INR54 per share.

Bear Case

- ☑ In our bear case scenario, we assume a revenue CAGR of 11% over FY24-26, assuming weakness in the underlying industries such as CV, tractors and slower than expected execution of the order book in industrials.
- ☑ We expect the EBITDA margin to contract ~150bp from the current levels to reach 27% by FY26.
- ☑ As a result, company's earnings is likely to register just 11% CAGR over FY24-26E to ~INR32 per share.

Exhibit 36: Bulls and Bear cases

	Base				Bull			Bear		
INR m	**FY23**	**FY24E**	**FY25E**	**FY26E**	**FY24E**	**FY25E**	**FY26E**	**FY24E**	**FY25E**	**FY26E**
Revenue	11,965	13,651	16,544	19,991	13,651	17,909	23,431	13,651	15,179	16,823
Gr (%)		14	21	21	14	31	31	14	11	11
EBITDA	3,409	3,896	4,877	6,046	3,896	5,504	7,380	3,896	4,247	4,550
EBITDA Margin (%)	28.5	28.5	29.5	30.2	28.5	30.7	31.5	28.5	28.0	27.0
Dep+Int-OI	609	656	586	564	656	586	564	656	586	564
Tax rate (%)	25	26	26	26	26	26	26	26	26	26
PAT	2,087	2,414	3,197	4,084	2,414	3,664	5,078	2,414	2,727	2,969
EPS (INR)	23.3	25.6	33.9	43.4	25.6	38.9	53.9	25.6	29.0	31.5
Gr (%)		10	32	28	10	52	39	10	13	9
Dividend	0	3	5	9	3	6	10	3	4	8
Networth	9,883	16,008	18,725	21,992	16,008	19,192	23,452	16,008	18,255	20,408
RoE (%)	21.1	18.6	18.4	20.1	18.6	20.8	23.8	18.6	15.9	15.4
Target PE (x)				26			27			25
TP (FY26E EPS)				1,125			1,455			790
Upside (%)				21			57			-15

SWOT analysis

- Engineering DNA-led capabilities help in competitive positioning across all the industries it operates in.
- Diversified portfolio as well as user segments
- Long-standing relationships with clients.

- Lack of overseas manufacturing presence.
- Exposure to Auto ICE products may be at risk if EV transition picks up pace in those segments.

- Increasing outsourcing opportunities due to realignment of global supply chains.
- Strong growth prospects for the industrials division and likely opportunities due to available capacity.
- Addition of new heavier press lines to aid new customer and product additions.

- Faster adoption of EVs in CVs/tractors can adversely impact the overall business growth.
- Cyclical slowdown in CVs and tractors may dent growth.
- Geopolitical challenges may hamper HFL's aspiration to expand in exports.

Key risks

- **Faster EV adoption in CVs and Tractors:** Around ~73% of HFL's revenue is contributed by the tractor and CV division, where a large part of the revenue accrues from crankshafts, which is not used in EVs. While we expect the EV adoption to be more back ended vis-à-vis 2Ws/3Ws/PVs, traction in the electrification trend in the Commercial segment may substantially impact its overall business.

- **Lower-than-anticipated growth in underlying industries:** CV demand has seen some moderation over the past few months, and this trend is expected to continue in 4Q and 1Q due to election-related impacts on new orders. However, the underlying demand indicators remain robust, and we expect a recovery from 2QFY25 onwards. Tractor growth has also been subdued in FY24, but is likely to improve in FY25. Any delays in the recovery process may further impact the overall performance of the company.

- **Risk of macro headwinds in developed markets:** Considering ~20% of revenues is linked to exports, with substantial orders in hand for the international segment, any global slowdown stemming from macro headwinds could hinder the exports business. It derives 49% of its export revenues from UK, 25% from EU and 20% from the US.

Financials and valuation

Income Statement (INR m)

Y/E March	FY21	FY22	FY23	FY24E	FY25E	FY26E
Net Sales	**5,850**	**8,600**	**11,965**	**13,651**	**16,544**	**19,991**
Change (%)	4.7	47.0	39.1	14.1	21.2	20.8
EBITDA	**1,587**	**2,309**	**3,409**	**3,896**	**4,877**	**6,046**
Margin (%)	27.1	26.8	28.5	28.5	29.5	30.2
Depreciation	358	377	542	662	765	870
EBIT	**1,230**	**1,931**	**2,868**	**3,234**	**4,112**	**5,176**
Int. and Finance Charges	118	72	125	134	77	54
Other Income - Rec.	59	61	57	140	256	360
EO Expense/(Income)		-0.1	-0.1	-	-	-
PBT after EO Exp.	**1,171**	**1,920**	**2,800**	**3,240**	**4,291**	**5,482**
Current Tax	316	471	685	826	1,094	1,398
Deferred Tax	-10	27	29	-	-	-
Tax Rate (%)	26.2	25.9	25.5	25.5	25.5	25.5
Reported PAT	**864**	**1,423**	**2,087**	**2,414**	**3,197**	**4,084**
PAT Adj for EO items	**864**	**1,423**	**2,087**	**2,414**	**3,197**	**4,084**
Change (%)	8.0	64.6	46.7	15.7	32.4	27.8
Margin (%)	14.8	16.5	17.4	17.7	19.3	20.4
Adj PAT	**864**	**1,423**	**2,087**	**2,414**	**3,197**	**4,084**
Change %	8	65	47	16	32	28

Balance Sheet (INR m)

Y/E March	FY21	FY22	FY23	FY24E	FY25E	FY26E
Equity Share Capital	90	179	179	188	188	188
Total Reserves	6,362	7,697	9,704	15,819	18,537	21,804
Net Worth	**6,452**	**7,876**	**9,883**	**16,008**	**18,725**	**21,992**
Deferred Liabilities	202	229	230	230	230	230
Total Loans	1,535	2,404	2,185	1,385	1,185	985
Capital Employed	**8,188**	**10,509**	**12,299**	**17,623**	**20,141**	**23,208**
Gross Block	5,066	5,858	8,591	10,591	12,591	14,591
Less: Accum. Deprn.	919	1,296	1,807	2,468	3,234	4,103
Net Fixed Assets	**4,147**	**4,562**	**6,784**	**8,123**	**9,358**	**10,488**
Capital WIP	404	2,123	748	748	748	748
Total Investments	**0**	**4**	**0**	**3,500**	**3,700**	**4,700**
Curr. Assets, Loans&Adv.	**4,214**	**4,610**	**5,730**	**6,272**	**7,584**	**8,774**
Inventory	1,216	1,840	1,696	2,037	2,493	3,012
Account Receivables	1,658	2,220	3,081	3,008	3,626	4,381
Cash and Bank Balance	278	15	3	303	416	182
Loans and Advances	1,062	535	950	924	1,049	1,199
Curr. Liability & Prov.	**576**	**790**	**963**	**1,019**	**1,249**	**1,501**
Creditors	379	442	477	543	680	822
Other Current Liabilities	178	321	448	438	531	642
Provisions	19	27	38	38	38	38
Net Current Assets	**3,638**	**3,821**	**4,767**	**5,253**	**6,336**	**7,273**
Appl. of Funds	**8,188**	**10,509**	**12,299**	**17,623**	**20,141**	**23,208**

E: MOSL Estimates

Financials and valuation

Financial Ratios

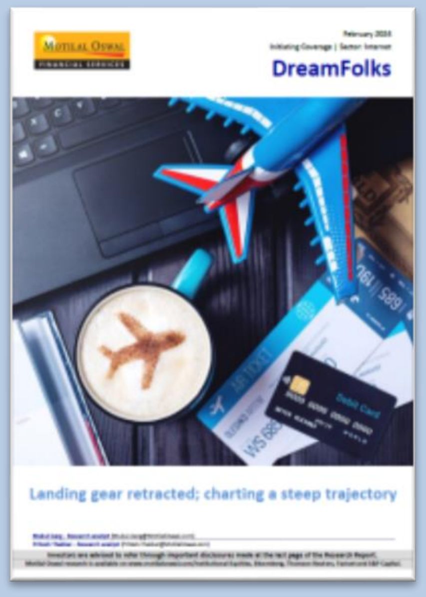
Y/E March	FY21	FY22	FY23	FY24E	FY25E	FY26E
Basic (INR)						
EPS	**19.3**	**15.9**	**23.3**	**25.6**	**33.9**	**43.4**
Cash EPS	27.3	20.1	29.4	32.7	42.1	52.6
BV/Share	144.2	88.0	110.4	169.9	198.8	233.4
DPS	-	-	-	3.1	5.1	8.7
Payout (%)	-	-	-	12.0	15.0	20.0
Dividend Yield (%)	-	-	-	0.3	0.5	0.9
FCF per share	-9.3	-12.4	3.9	9.4	8.6	15.7
Valuation (x)						
P/E	48.0	58.4	39.8	36.2	27.3	21.4
Cash P/E	34.0	46.1	31.6	28.4	22.1	17.6
P/BV	6.4	10.5	8.4	5.5	4.7	4.0
EV/Sales	7.3	9.9	7.1	6.5	5.1	4.2
EV/EBITDA	27.0	37.0	25.0	22.7	17.3	13.8
Return Ratios (%)						
RoE	14.4	19.9	23.5	18.6	18.4	20.1
RoCE (Post-tax)	13.4	16.2	19.5	17.1	17.4	19.2
RoIC	14.4	18.0	21.5	19.6	21.6	23.5
Working Capital Ratios						
Fixed Asset Turnover (x)	1.2	1.5	1.4	1.3	1.3	1.4
Inventory (Days)	62	65	54	50	50	50
Debtor (Days)	95	82	81	81	73	73
Creditor (Days)	37	17	14	14	13	14
Working Capital (Days)	169	152	131	130	120	119
Leverage Ratio (x)						
Net Debt/Equity	0.2	0.3	0.2	0.1	-0.2	-0.2

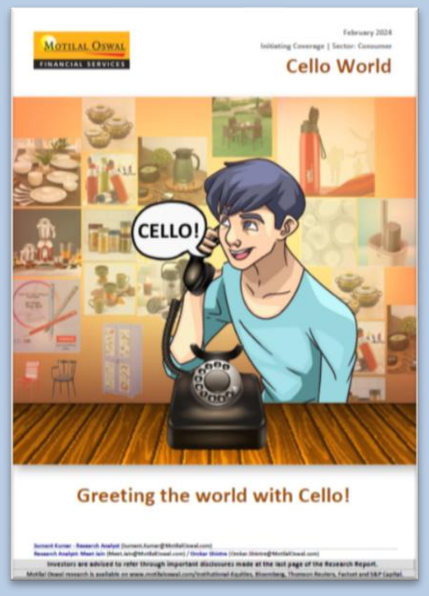
Cash Flow Statement (INR Million)

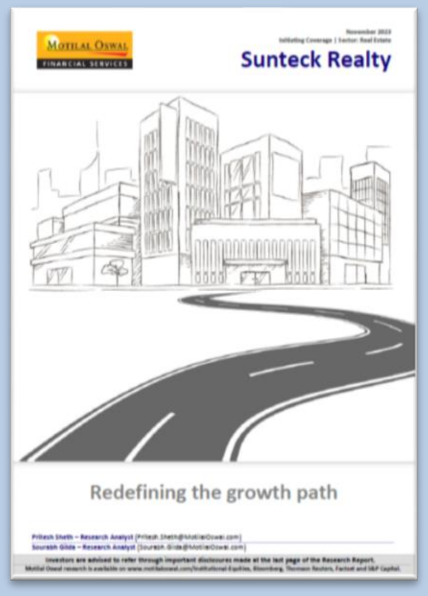
Y/E March	FY21	FY22	FY23	FY24E	FY25E	FY26E
Operating PBT	1,171	1,921	2,800	3,240	4,291	5,482
Depreciation	358	377	542	662	765	870
Interest/Div paid	-118	-72	-125	134	77	54
Direct Taxes Paid	-399	-431	-638	-826	-1,094	-1,398
(Inc)/Dec in WC	-825	-1,088	-779	-187	-969	-1,172
Other items	312	96	295	**-140**	**-256**	**-360**
CF from Operations	**499**	**803**	**2,095**	**2,883**	**2,814**	**3,477**
EO Expense		0	0	**-**	**-**	**-**
CF from Operating incl EO	**499**	**803**	**2,095**	**2,883**	**2,814**	**3,477**
(inc)/dec in FA	-917	-1,908	-1,745	**-2,000**	**-2,000**	**-2,000**
Free Cash Flow	**-418**	**-1,105**	**350**	883	814	1,477
(Pur)/Sale of Investments	288	230	15	-3,500	-200	-1,000
Others	41	21	5	**140**	**256**	**360**
CF from Investments	**-587**	**-1,657**	**-1,725**	**-5,360**	**-1,944**	**-2,640**
Issue of Shares	-	-	-	4,003	-	-
Inc/(Dec) in Debt	351	895	-251	-800	-200	-200
Interest Paid	-254	-68	-119	-134	-77	-54
Dividend Paid	-	-	-	-290	-480	-817
Others	-	-2	-	**-**	**-**	**-**
CF from Fin. Activity	**97**	**825**	**-370**	**2,780**	**-757**	**-1,071**
Inc/Dec of Cash	**8**	**-29**	**-0**	303	113	-234
Add: Beginning Balance	20	29	0	**0**	**303**	**416**
Closing Balance	**29**	**0**	**0**	**303**	**416**	**182**

E: MOFSL Estimates

RECENT INITIATING COVERAGE REPORTS







N O T E S

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. 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 of Singapore .Accordingly, if a Singapore person is not, or ceases to be, such an investor, they 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, 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 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.