

Bharat Forge

Refer to important disclosures at the end of this report

Healthy medium-term growth prospects, though near-term concerns remain

- We attended the BHFC Analyst Meet, where Management re-iterated healthy medium-term revenue prospects, supported by growth in the defense, aerospace, e-mobility and aluminium segments.
- In FY24, Management expects revenue growth to be strong in the domestic market, while a muted performance is expected in the overseas markets, especially for North-America Class8 trucks, European HCVs and construction equipment.
- BHFC has significant revenue exposure to the ICE engine and transmission components. Over the medium term, the company is focusing on increasing presence in EVs and Hydrogen vehicles, via initiatives such as: 1) component portfolio expansion; 2) electric 2W/3W vehicle assembly; and 3) retro-fitment of electric drivetrain to ICE vehicles.
- Considering the muted growth prospects in the overseas auto segment ahead and the limited upside potential, we retain our HOLD rating with target price of Rs820/share, based on 24x Dec-24E EPS for the standalone entity.

Key takeaways from the analyst meet

- **2030 Consolidated business targets:** i) Revenue expected to clock CAGR of 12-15% over FY22-30. ii) EBITDA margin expected at over 20% vs 18.9% in FY22. iii) ROCE expansion expected at 500bps over FY22-30. iv) Dividend pay-out at +30% vs 27% in FY22.
- **Positive outlook on underlying industries for the domestic market:** Strong growth is expected across the CV, PV and industrial segments.
- **Muted outlook on underlying industries for overseas markets:** Muted growth is expected due to weak macros for industries such as the North-America Class 8 trucks (-4% growth) and European HCVs (flat growth). Over the medium-term, BHFC sees good opportunity to gain share on account of the China+1 and Europe+1 policies by customers.
- **Diversification strategy:** Company's focus remains on increasing share of revenue from segments like Defense, Aerospace, Light-weighting, E-mobility and Castings.
- **Defense:** Government initiatives like increased sourcing from local players, allowing local players to use testing facilities, etc. are resulting in better prospects. BHFC has been working in areas of artillery guns, armored/protected vehicles, unmanned systems and ammunitions. It expects strong traction over the medium term. Initial trial orders for the Advanced Towed Artillery Gun System (ATAGS) are likely to be announced in the next 3-6 months. Export order-book stands at USD180mn, including USD156mn artillery gun orders.

Please see our sector model portfolio (Emkay Alpha Portfolio): [Automobiles & Auto Ancillaries \(Page 7\)](#)

Financial Snapshot (Standalone)

(Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	36,515	62,546	73,966	81,710	91,687
EBITDA	7,332	16,804	18,975	22,106	25,062
EBITDA Margin (%)	20.1	26.9	25.7	27.1	27.3
APAT	3,269	10,107	11,169	13,514	15,569
EPS (Rs)	7.0	21.7	24.0	29.0	33.4
EPS (% chg)	(42.5)	209.2	10.5	21.0	15.2
ROE (%)	5.8	15.5	14.9	16.0	16.4
P/E (x)	122.2	39.5	35.8	29.5	25.6
EV/EBITDA (x)	56.3	24.8	21.8	18.5	16.0
P/BV (x)	6.7	5.6	5.0	4.5	4.0

Source: Company, Emkay Research

CMP	Target Price
Rs 857	Rs 820 (■)
as of (December 9, 2022)	12 months
Rating	Upside
HOLD (■)	(4.4) %

Change in Estimates

EPS Chg FY23E/FY24E (%)	-/
Target Price change (%)	-
Target Period (Months)	12
Previous Reco	HOLD

Emkay vs Consensus

EPS Estimates		
	FY23E	FY24E
Emkay	24.0	29.0
Consensus	24.0	30.4
Mean Consensus TP (12M)	Rs 912	

Stock Details

Bloomberg Code	BHFC IN
Face Value (Rs)	2
Shares outstanding (mn)	466
52 Week H/L	897 / 595
M Cap (Rs bn/USD bn)	399 / 4.85
Daily Avg Volume (nos.)	1,633,953
Daily Avg Turnover (USD mn)	15.9

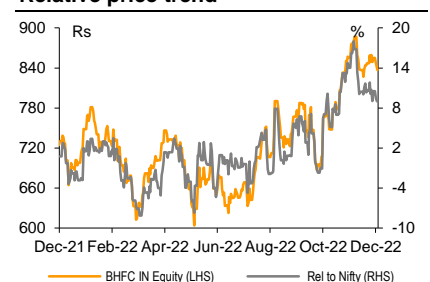
Shareholding Pattern Sep '22

Promoters	45.3%
FIIIs	19.3%
DIIIs	24.7%
Public and Others	10.7%

Price Performance

(%)	1M	3M	6M	12M
Absolute	(2)	9	26	18
Rel. to Nifty	(4)	5	12	12

Relative price trend



Source: Bloomberg

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Key takeaways from the analyst meet (...continued)

- **Aerospace:** Company is manufacturing landing gear, structural parts, jet engine parts and turbochargers. It has won orders from Rolls Royce, Liebherr, Boeing and Honeywell. It is targeting both, the commercial and defense segments. In addition to being a manufacturer of components, it aspires to supply integrated systems and sub-assemblies. This will enhance its position to becoming a Tier 1 supplier.
- **Light-weighting (Aluminium castings and forgings):** Company expects the share of aluminium components to increase per vehicle. It is manufacturing components like control arm, wheel carrier, knuckles, battery housing, covers, etc. for both, ICE vehicles and EVs. Major customers include Audi, Hyundai, BMW and new-age EV OEMs. In castings (CLWT plant), it focuses on both, auto (parts for powertrain, chassis, etc.) and large non-auto parts.
- **E-mobility:** BHFC targets the e-mobility segment through various modes: 1) JV with Refu drive for power electronics. 2) Aluminium components such as battery housing, heat sink and structural parts. 3) ElectroForge JV (Harbinger Motors) for electric drivetrain components for the CV segment. 4) Tork Motors (4,637 bookings) for electric 2Ws/3Ws and components. 5) Focus on retro-fitment of electric drivetrain in trucks and buses. Company targets a potential opportunity of up to 70% of vehicle cost across the 2W, 3W and CV segments, through components such as motor, controllers, power electronics and battery packs. It has set up Kalyani Mobility US center for R&D. It is setting up 3 new plants for EV components (annual capacity of ~150,000 units), CV retro-fitting (annual capacity of ~10,000 units) and EV vehicles, with commissioning expected in FY24.
- **Hydrogen vehicle components:** In future, the company plans to manufacture products relating to fuel cells and hydrogen cylinders.
- **Castings (JS Autocast)** – It is the leader in small-size wind turbines and has presence in the hydraulics, automotive and power generation segments. Company expects strong traction ahead, with 10x revenue potential over the long term. BHFC is looking to expand its product portfolio and add new customers via cross-selling.
- **Overseas subsidiaries:** Company expects aluminium share to increase to 40-45% by FY24 from 25% in FY22, led by ramp-up of its US/Germany plants. Margins remain under pressure in the near term, due to higher energy/employee costs and initial phase of ramp-up for the US plant. Margins are expected to gradually improve, led by pass-through of costs, improvement in scale and better share of aluminium components.
- **Margin improvement:** Management targets annual cost reduction of Rs6bn. Further, improving share of industrial segments such as Oil & Gas, Defense and Aerospace is likely to aid margins.

Exhibit 1: Global segment-wise outlook for CY22 and CY23 – Subdued CY23 outlook across most segments

Segment	Company/Association	CY22 outlook	CY23 outlook
North America Class 8 trucks	Volvo	11% (unchanged)	Flat growth
	Daimler	9% (unchanged)	Stable demand
	Paccar	265,000-285,000 units (earlier 260,000-290,000 units)	260,000-300,000 units
	NADA	13% (unchanged)	
	ACT research (production)	18% (earlier +17%)	-5% (earlier -6%)
North America CV (>6T)	Traton	15% (unchanged)	Flat growth
Europe HCV	Volvo	8% (unchanged)	Flat growth
	Daimler	8% (earlier +1%)	Stable demand
	Paccar	275,000-295,000 units (earlier 270,000-300,000 units)	260,000-300,000 units
Europe CV (>6T)	Traton	10% (unchanged)	Flat growth
India MHCV	Volvo	38% (earlier 28%)	14%
North America Construction Equipment	Volvo	0-10% (earlier 5-15%)	-5% to 5%
	CNH	-5% (unchanged) in Light and +5-10% (unchanged) in Heavy	
	John Deere		flat to +5% by Sep'23
Europe Construction Equipment	Volvo	-5% to 5% (earlier 0-10%)	-5% to 5%
	CNH	-5% to flat (unchanged) in Light and -5-10% (earlier -5% to flat) in Heavy	
India Construction Equipment	ICEMA	double-digit (earlier positive)	
	ACE (revenue)	>25% (earlier 15%-20%)	
Tractors North America	CNH	-15% (earlier -10%) in <140HP and +10-15% (earlier +15) in >140HP	
	John Deere		5-10% for large AG, -5% to flat for small AG (for SY23)
Tractors Europe	CNH	-5% (earlier +5%)	
	John Deere		flat to +5% by Sep'23
Tractors India	Escorts	mid to high single digit (earlier low to mid single digit) by FY23	
	Mahindra & Mahindra	>5% (earlier 3-5%) by FY23	
Global Cars	Mercedes Benz	Slightly above last year (earlier up to +7.5%)	
	Volkswagen	Flattish (earlier +5-10%)	Positive growth
	Audi	+4% (earlier 7-12%)	
	BMW	slight decline (unchanged)	Positive growth
North America Cars	S&P Global (production)	9% (earlier 12%)	6% (earlier 9%)
	NADA	-8% (earlier -5%)	Positive growth
Europe Cars	ACEA	-1%	
	S&P Global (production)	-2% (earlier +1%)	7% (earlier 8%)
India Cars	S&P Global (production)	22%	2%
UK Cars	SMMT	-5% (earlier -3%)	15% (earlier 18%)
Oil & Gas	Halliburton	Double-digit (earlier +35%)	Multi-year upcycle
	Schlumberger	Double-digit (earlier +18%)	Multi-year upcycle

Source: Company, Emkay Research

Key Financials (Standalone)**Income Statement**

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	36,515	62,546	73,966	81,710	91,687
Expenditure	29,183	45,742	54,991	59,603	66,624
EBITDA	7,332	16,804	18,975	22,106	25,062
Depreciation	3,661	4,118	4,310	4,757	5,239
EBIT	3,671	12,686	14,665	17,349	19,823
Other Income	1,405	1,675	1,336	1,677	1,840
Interest expenses	779	1,073	1,305	1,245	1,177
PBT	4,297	13,288	14,696	17,782	20,486
Tax	1,028	3,181	3,527	4,268	4,917
Extraordinary Items	(148)	671	(279)	0	0
Minority Int./Income from Assoc.	0	0	0	0	0
Reported Net Income	3,121	10,778	10,890	13,514	15,569
Adjusted PAT	3,269	10,107	11,169	13,514	15,569

Balance Sheet

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
Equity share capital	931	931	931	931	931
Reserves & surplus	58,555	70,166	78,226	88,316	99,940
Net worth	59,486	71,098	79,158	89,247	100,871
Minority Interest	0	0	0	0	0
Loan Funds	37,135	39,500	37,238	35,983	33,261
Net deferred tax liability	2,346	2,888	2,903	2,920	2,941
Total Liabilities	98,967	113,485	119,298	128,150	137,072
Net block	34,590	33,011	33,431	32,974	32,235
Investment	35,693	38,998	41,998	47,998	54,998
Current Assets	38,163	53,919	62,111	68,757	76,308
Cash & bank balance	2,801	3,828	3,488	3,997	3,640
Other Current Assets	4,234	5,468	6,466	7,143	8,016
Current liabilities & Provision	12,179	14,923	18,492	22,029	26,919
Net current assets	25,984	38,996	43,619	46,728	49,389
Misc. exp	0	0	0	0	0
Total Assets	98,967	113,485	119,298	128,150	137,072

Cash Flow

Y/E Mar (Rs mn)	FY21	FY22	FY23E	FY24E	FY25E
PBT (Ex-Other income) (NI+Dep)	2,745	12,284	13,360	16,105	18,646
Other Non-Cash items	0	0	0	0	0
Chg in working cap	1,818	(10,481)	(5,275)	(3,216)	(3,568)
Operating Cashflow	6,733	1,079	11,287	16,339	18,468
Capital expenditure	(3,128)	(3,026)	(2,500)	(4,500)	(4,500)
Free Cash Flow	3,604	(1,946)	8,787	11,839	13,968
Investments	(8,485)	295	(3,000)	(6,000)	(7,000)
Other Investing Cash Flow	314	245	(1,336)	(1,677)	(1,840)
Investing Cashflow	(9,895)	(812)	(5,500)	(10,500)	(11,500)
Equity Capital Raised	0	0	0	0	0
Loans Taken / (Repaid)	4,304	3,380	(2,262)	(1,255)	(2,722)
Dividend paid (incl tax)	0	(1,642)	(2,561)	(2,830)	(3,425)
Other Financing Cash Flow	(2,317)	(265)	0	0	0
Financing Cashflow	1,521	759	(6,128)	(5,330)	(7,324)
Net chg in cash	(1,641)	1,027	(340)	508	(356)
Opening cash position	4,442	2,801	3,828	3,488	3,997
Closing cash position	2,801	3,828	3,488	3,997	3,640

Source: Company, Emkay Research

Key Ratios

Profitability (%)	FY21	FY22	FY23E	FY24E	FY25E
EBITDA Margin	20.1	26.9	25.7	27.1	27.3
EBIT Margin	10.1	20.3	19.8	21.2	21.6
Effective Tax Rate	23.9	23.9	24.0	24.0	24.0
Net Margin	9.0	16.2	15.1	16.5	17.0
ROCE	4.1	10.1	10.3	11.5	12.3
ROE	5.8	15.5	14.9	16.0	16.4
RoIC	5.2	15.3	15.7	17.7	19.6

Per Share Data (Rs)	FY21	FY22	FY23E	FY24E	FY25E
EPS	7.0	21.7	24.0	29.0	33.4
CEPS	14.9	30.5	33.2	39.2	44.7
BVPS	127.7	152.7	170.0	191.6	216.6
DPS	2.0	5.5	6.1	7.4	8.5

Valuations (x)	FY21	FY22	FY23E	FY24E	FY25E
PER	122.2	39.5	35.8	29.5	25.6
P/CEPS	57.7	28.1	25.9	21.9	19.2
P/BV	6.7	5.6	5.0	4.5	4.0
EV / Sales	11.3	6.7	5.6	5.0	4.4
EV / EBITDA	56.3	24.8	21.8	18.5	16.0
Dividend Yield (%)	0.2	0.6	0.7	0.9	1.0

Gearing Ratio (x)	FY21	FY22	FY23E	FY24E	FY25E
Net Debt/ Equity	0.2	0.2	0.2	0.1	0.0
Net Debt/EBIDTA	1.9	1.0	0.8	0.5	0.1
Working Cap Cycle (days)	231.7	205.2	198.0	190.9	182.1

Growth (%)	FY21	FY22	FY23E	FY24E	FY25E
Revenue	(20.0)	71.3	18.3	10.5	12.2
EBITDA	(29.5)	129.2	12.9	16.5	13.4
EBIT	(47.2)	245.5	15.6	18.3	14.3
PAT	(34.1)	245.3	1.0	24.1	15.2

Quarterly (Rs mn)	Q2FY22	Q3FY22	Q4FY22	Q1FY23	Q2FY23
Revenue	16,066	16,021	16,741	17,594	18,639
EBITDA	4,553	4,034	4,308	4,601	4,522
EBITDA Margin (%)	28.3	25.2	25.7	26.2	24.3
PAT	2,818	2,370	2,640	2,717	2,679
EPS (Rs)	6.1	5.1	5.7	5.8	5.8

Source: Company, Emkay Research

Shareholding Pattern (%)	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22
Promoters	44.8	44.8	45.3	45.3	45.3
FII	25.1	23.4	19.8	18.8	19.3
DII	13.3	20.0	23.6	24.3	24.7
Public and Others	16.9	11.9	11.4	11.6	10.7

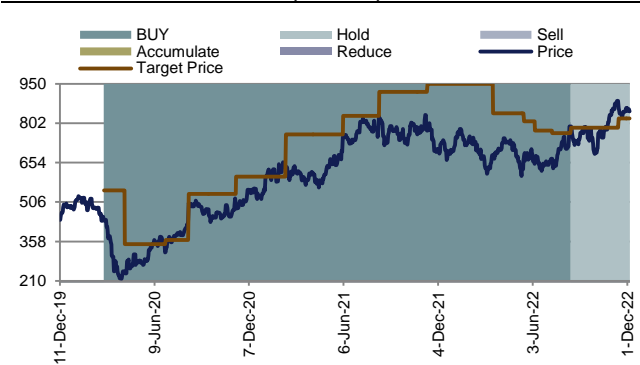
Source: Capitaline

RECOMMENDATION HISTORY (Rs/share)

Date	Closing Price	TP	Period	Rating	Analyst
14-Nov-22	859	820	12m	Hold	Mumuksh Mandlesha
9-Oct-22	767	785	12m	Hold	Mumuksh Mandlesha
28-Aug-22	733	785	12m	Hold	Mumuksh Mandlesha
15-Aug-22	790	785	12m	Hold	Mumuksh Mandlesha
10-Jul-22	669	765	12m	Buy	Mumuksh Mandlesha
7-Jun-22	654	775	12m	Buy	Mumuksh Mandlesha
17-May-22	678	810	12m	Buy	Mumuksh Mandlesha
6-Apr-22	727	840	12m	Buy	Mumuksh Mandlesha
19-Mar-22	682	840	12m	Buy	Mumuksh Mandlesha
24-Feb-22	668	950	12m	Buy	Mumuksh Mandlesha
11-Feb-22	732	950	12m	Buy	Mumuksh Mandlesha
16-Nov-21	801	950	12m	Buy	Mumuksh Mandlesha
13-Nov-21	775	950	12m	Buy	Mumuksh Mandlesha
23-Aug-21	720	920	12m	Buy	Mumuksh Mandlesha
13-Aug-21	820	920	12m	Buy	Mumuksh Mandlesha
2-Jul-21	772	830	12m	Buy	Mumuksh Mandlesha
18-Jun-21	727	830	12m	Buy	Mumuksh Mandlesha
11-Jun-21	748	830	12m	Buy	Mumuksh Mandlesha
5-Jun-21	751	830	12m	Buy	Mumuksh Mandlesha
1-Jun-21	667	760	12m	Buy	Mumuksh Mandlesha
30-May-21	678	760	12m	Buy	Mumuksh Mandlesha
15-Feb-21	628	760	12m	Buy	Mumuksh Mandlesha
17-Nov-20	495	601	12m	Buy	Mumuksh Mandlesha
12-Nov-20	497	601	12m	Buy	Mumuksh Mandlesha
11-Oct-20	466	537	12m	Buy	Mumuksh Mandlesha
28-Sep-20	454	537	12m	Buy	Mumuksh Mandlesha
13-Aug-20	503	537	12m	Buy	Mumuksh Mandlesha
30-Jun-20	319	363	12m	Buy	Mumuksh Mandlesha
29-Jun-20	317	348	12m	Buy	Mumuksh Mandlesha
4-May-20	270	348	12m	Buy	Mumuksh Mandlesha
13-Apr-20	239	348	12m	Buy	Mumuksh Mandlesha
4-Mar-20	437	550	12m	Buy	Mumuksh Mandlesha

Source: Company, Emkay Research

RECOMMENDATION HISTORY (Rs/share)



Source: Bloomberg, Company, Emkay Research

Emkay Alpha Portfolio – Automobiles & Auto Ancillaries



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Sector

Automobiles and Ancillaries

Analyst bio

Raghu holds an MBA and comes with total 13 years of research experience. His team currently covers 17 stocks in the Indian Automobiles and Ancillaries space.

EAP sector portfolio

Company Name	BSE200 Weight	EAP Weight	OW/UW (%)	OW/UW (bps)	EAP Weight based on Current NAV	Change vs last published EAP (bps)
Auto & Auto Ancillaries	4.82	4.82	0%	0	100.00	
Amara Raja Batteries	0.00	0.00	NA	0	0.00	0
Apollo Tyres	0.00	0.02	NA	2	0.41	0
Ashok Leyland	0.19	0.21	10%	2	4.33	0
Atul Auto	0.00	0.02	NA	2	0.51	0
Bajaj Auto	0.43	0.29	-32%	-14	6.10	0
Bharat Forge	0.20	0.20	0%	0	4.20	0
Eicher Motors	0.42	0.42	0%	0	8.71	0
Escorts	0.00	0.02	NA	2	0.41	0
Exide Industries	0.00	0.00	NA	0	0.00	0
Hero Motocorp	0.32	0.22	-33%	-11	4.49	0
Mahindra & Mahindra	1.11	1.13	2%	2	23.33	0
Maruti Suzuki India	1.05	1.06	2%	2	22.06	0
Minda Industries*	0.00	0.02	NA	2	0.47	0
Motherson Sumi Wiring India	0.00	0.02	NA	2	0.48	0
Samvardhana Motherson International	0.13	0.15	16%	2	3.05	0
Suprajit Engineering	0.00	0.02	NA	2	0.49	0
Tata Motors	0.67	0.68	1%	1	14.01	0
Tata Motors DVR*	0.10	0.11	10%	1	2.18	0
TVS Motor	0.21	0.23	8%	2	4.76	0
Cash	0.00	0.00	NA	0	0.0	0

Source: Emkay Research

■ High Conviction/Strong Over Weight ■ High Conviction/Strong Under Weight

Sector portfolio NAV

	Base					Latest
	1-Apr-19	8-Dec-21	9-Jun-22	8-Sep-22	7-Nov-22	8-Dec-22
EAP - Auto & Auto Ancillaries	100.0	132.3	138.6	158.7	162.1	154.3
BSE200 Neutral Weighted Portfolio (ETF)	100.0	131.2	138.2	158.0	161.7	153.4

*Performance measurement base date 1st April 2019

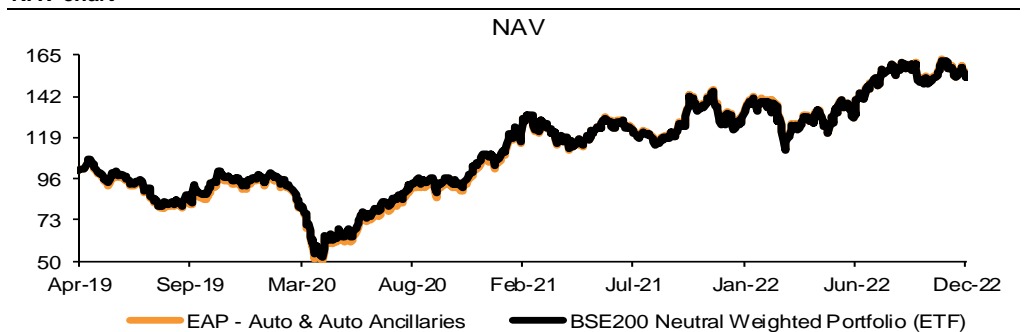
Source: Emkay Research

Price Performance (%)

	1m	3m	6m	12m
EAP - Auto & Auto Ancillaries	-4.8%	-2.8%	11.3%	16.6%
BSE200 Neutral Weighted Portfolio (ETF)	-5.1%	-2.9%	11.0%	16.9%

Source: Emkay Research

NAV chart



Source: Emkay Research

Please see our model portfolio (Emkay Alpha Portfolio): [Nifty](#)

Please see our model portfolio (Emkay Alpha Portfolio): [SMID](#)

“Emkay Alpha Portfolio – SMID and Nifty are a supporting document to the Emkay Alpha Portfolios Report and is updated on regular intervals”

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Emkay Rating Distribution

Ratings	Expected Return within the next 12-18 months.
BUY	Over 15%
HOLD	Between -5% to 15%
SELL	Below -5%

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