

Brigade Enterprises

Estimate change	↔
TP change	↔
Rating change	↔



Bloomberg	BRGD IN
Equity Shares (m)	230
M.Cap.(INRb)/(USDb)	130.8 / 1.6
52-Week Range (INR)	608 / 431
1, 6, 12 Rel. Per (%)	0/3/-2
12M Avg Val (INR M)	106

Financials & Valuations (INR b)

Y/E Mar	FY23	FY24E	FY25E
Sales	34.4	41.4	47.0
EBITDA	8.6	12.3	14.8
EBITDA (%)	24.9	29.6	31.4
PAT	2.5	5.2	6.7
EPS (INR)	12.1	25.3	32.6
EPS Gr. (%)	42.2	108.8	28.9
BV/Sh. (INR)	158.8	182.0	212.6

Ratios

Net D/E	0.9	0.8	0.6
RoE (%)	8.0	14.8	16.5
RoCE (%)	6.8	9.6	11.1
Payout (%)	21.6	7.9	6.1

Valuations

P/E (x)	46.8	22.4	17.4
P/BV (x)	3.6	3.1	2.7
EV/EBITDA (x)	17.0	11.8	9.6
Div Yield (%)	0.5	0.4	0.4

Shareholding pattern (%)

As On	Jun-23	Mar-23	Jun-22
Promoter	43.8	43.8	43.9
DII	25.5	24.6	24.7
FII	13.7	14.3	13.3
Others	17.1	17.3	18.2

CMP: INR567
TP: INR720 (+27%)
Buy

Steady operational quarter; P&L hit by lower residential recognition

Sales bookings nearly flat excluding sales of landowners' share

- Brigade Enterprises (BEL) reported a steady quarter of bookings with pre-sales of INR10b, up 22% YoY and 13% above our estimate. However, pre-sales declined 33% QoQ due to absence of any new launches in 1QFY24.
- Pre-sales in 1QFY24 included sales of landowners' area at INR1.4b. Excluding this, pre-sales were in line and nearly flat YoY. Sales volume (including landowners' area) stood at 1.46msf, up 18% YoY but down 38% QoQ. Blended realization improved 4% YoY/9% QoQ to ~INR6,800/sqft.
- While BEL did not launch any new phase/project during the quarter, it has ~8msf of residential projects lined up to be launched over the next 12 months. This is likely to drive pre-sales growth in FY24.
- Collections were flattish YoY at INR12.4b but down 15% QoQ. Sustained high spends on construction led to 28% decline in OCF at INR2.7b. BEL repaid INR0.4b of debt (net) and an increase in cash balance of INR0.8b led to INR1b reduction in net debt to INR13.7b (BEL's share).
- P&L performance** – Revenue dipped 28% YoY to INR6.5b (31% below our estimate) as residential segment's revenue halved due to lower recognition while hospitality and rental revenue rose 16% and 23% YoY, respectively. EBITDA came in at INR1.7b, down 25% YoY and 35% below our estimate, resulting in an EBITDA margin of 26.7%, up 100bp YoY. Reported PAT was down 56% YoY to INR0.4b, generating a PAT margin of 6% in 1QFY24.

SEZ leasing muted; momentum in Hospitality sustains

- Occupancy for office and retail portfolio improved slightly to 86% (from 85% in 4QFY23) as BEL leased 0.06msf of space. Leasing revenue was up 14% QoQ to INR2.1b and generated an EBITDA of INR1.6b, with a margin of 75%.
- Hospitality occupancy was flat at 67%, ARR dipped 12% QoQ but was up 16% YoY to ~INR6,200. Revenue grew 13% YoY to INR1b; however, EBITDA was up 31% YoY to INR380m due to 500bp improvement in margin.

Highlights from the management commentary

- New launches and sales:** Upcoming launches are spread out across price points between INR7,000 and INR10,000/sqft. The GDV of ~8msf of launch pipeline is at INR67b with BEL's share at INR44b. The TVS land in Chennai is on track for 4QFY24 launch. Management intends to scale up sales to 10msf in the medium term with 40-50% coming from Hyderabad and Chennai.
- Annuity:** BEL leased 60k sqft during the quarter and it was relatively weak as only SEZ space was available. Physical office space was at 65-70% in Bengaluru and in Chennai Park it was at ~75%. The leasing pipeline remains strong at 1.7msf with strong enquiries for SEZ space too. Management is targeting to fully lease out the annuity portfolio in FY24.

Valuation and view

- While BEL reported lower-than-expected revenue, we retain our P&L estimates for FY24 as overall unit handovers remain on track apart from a minor blip in 1QFY24. With launch pipeline intact for FY24E we also retain our FY24E pre-sales number.
- Management intends to look for more projects in Chennai and Hyderabad while focusing on growth in Bengaluru (to reach 10msf of pre-sales over medium term). Healthy balance sheet and cash flows allow BEL to be aggressive on business development, which is not fully captured in the valuation.
- The CMP implies INR55b of value to its residential business while NAV of current pipeline (including the recently acquired Hyderabad land) stands at INR45b. These indicate limited growth in future project additions.
- **We reiterate our BUY rating on the stock with an unchanged TP of INR720, implying an upside potential of 27%.**

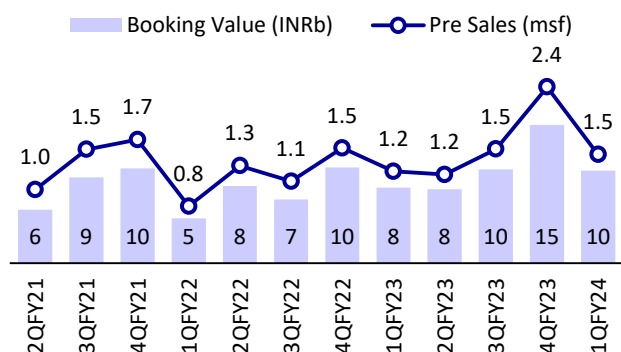
Quarterly Performance

Y/E March	FY23				FY24E				FY23	FY24E	FY24	Var (%)
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			1QE	
Gross Sales	9,025	8,792	8,203	8,428	6,540	9,099	10,753	14,967	34,448	41,359	9,513	-31%
YoY Change (%)	135.8	16.8	-10.9	-10.6	-27.5	3.5	31.1	77.6	14.9	20.1	5.4	
Total Expenditure	6,698	6,628	6,124	6,406	4,792	6,629	7,428	10,257	25,856	29,105	6,808	
EBITDA	2,327	2,165	2,079	2,022	1,748	2,470	3,325	4,710	8,592	12,253	2,705	-35%
Margins (%)	25.8	24.6	25.3	24.0	26.7	27.1	30.9	31.5	24.9	29.6	28.4	-170bps
Depreciation	751	780	781	834	681	843	843	1,004	3,146	3,370	843	
Interest	1,061	1,096	1,184	1,000	1,081	995	995	910	4,342	3,981	995	
Other Income	178	330	383	295	315	305	305	296	1,186	1,222	305	
PBT before EO expense	693	618	497	483	300	937	1,793	3,093	2,291	6,123	1,172	
Extra-Ord expense	-97	-183	0	-170	0	0	0	0	-450	0	0	
PBT	790	801	497	653	300	937	1,793	3,093	2,741	6,123	1,172	
Tax	184	283	70	21	82	236	452	772	558	1,541	295	
Rate (%)	23.3	35.4	14.1	3.1	27.1	25.2	25.2	25.0	20.4	25.2	25.2	
MI & Profit/Loss of Asso. Cos.	-271	-258	-142	-62	-166	-128	-152	-137	-733	-583	-134	
Reported PAT	877	776	569	694	385	829	1,492	2,458	2,916	5,165	1,011	-62%
Adj PAT	802	658	569	530	385	829	1,492	2,458	2,515	5,165	1,011	-62%
YoY Change (%)	-470.8	74.8	-25.9	-18.2	-52.0	26.1	162.3	364.1	59.7	105.4	26.0	
Margins (%)	8.9	7.5	6.9	6.3	5.9	9.1	13.9	16.4	7.3	12.5	10.6	
Operational Performance												
Pre Sales (msf)	1.2	1.2	1.5	2.4	1.5	1.4	2.0	2.0	6.3	6.9	1.3	12%
Booking Value (INRb)	8.1	7.9	10.1	14.9	10.0	9.8	13.2	15.9	41	49	9	13%
Avg rate/sf (INR)	6,680	6,680	6,586	6,286	6,822	6,813	6,718	7,976	6858	7127	6722	1%

E: MOFSL Estimates

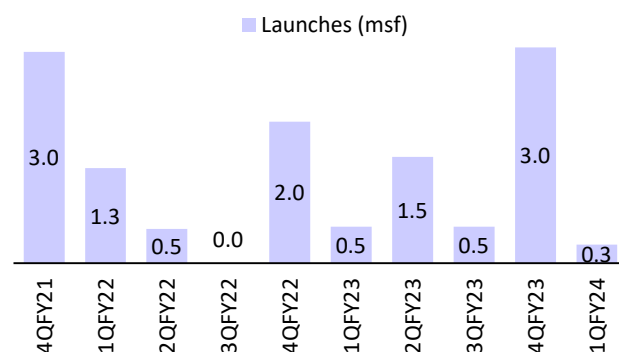
Key exhibits

Exhibit 1: New bookings increased 18% YoY...



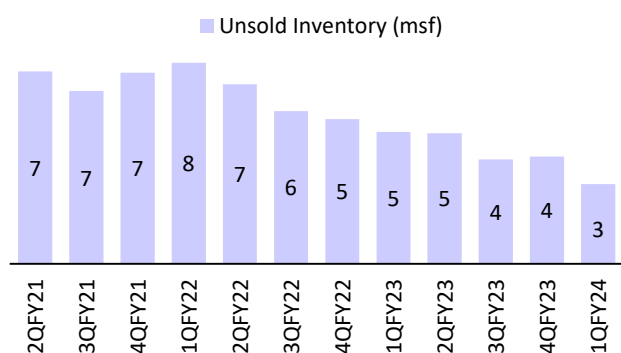
Source: Company, MOFSL

Exhibit 2: ...despite lack of big project launches



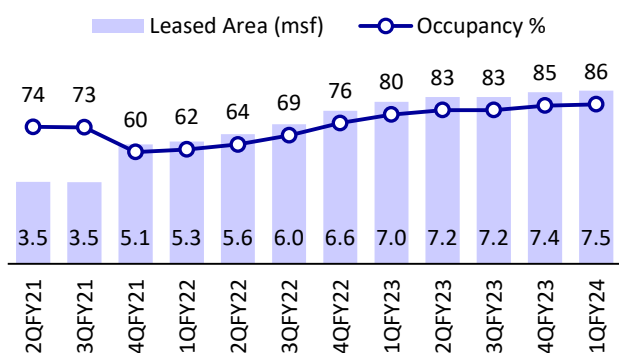
Source: Company, MOFSL

Exhibit 3: Witnessed consistent drop in unsold inventory



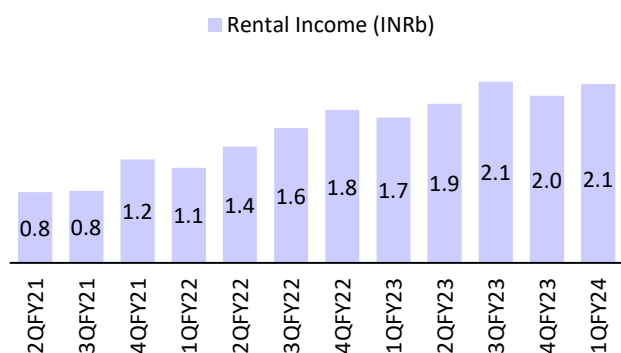
Source: MOFSL, Company

Exhibit 4: Targets to reach 100% occupancy in office portfolio by FY24



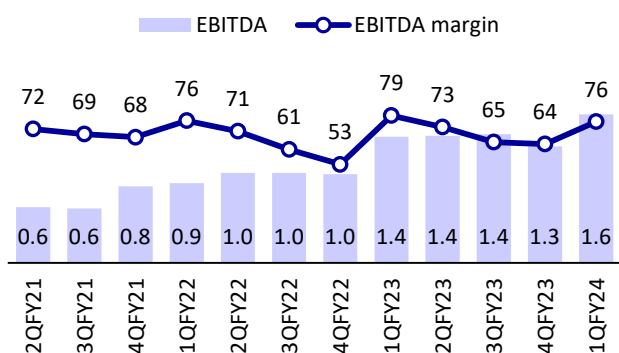
Source: MOFSL, Company

Exhibit 5: Rental income remained steady at INR2b

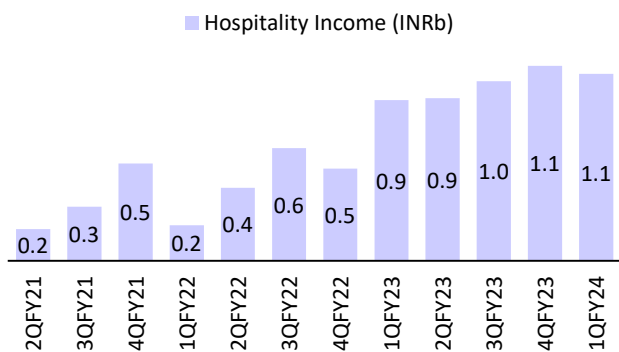


Source: Company, MOFSL

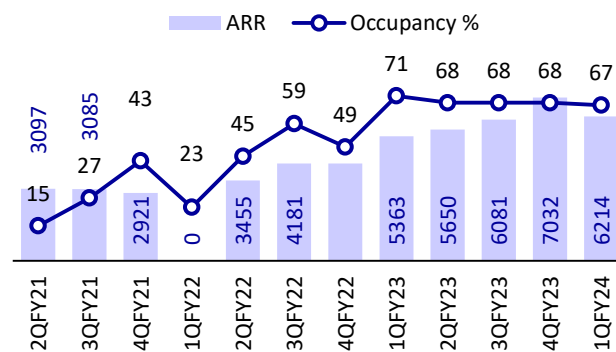
Exhibit 6: EBITDA came in at INR1.4b with 76% margin



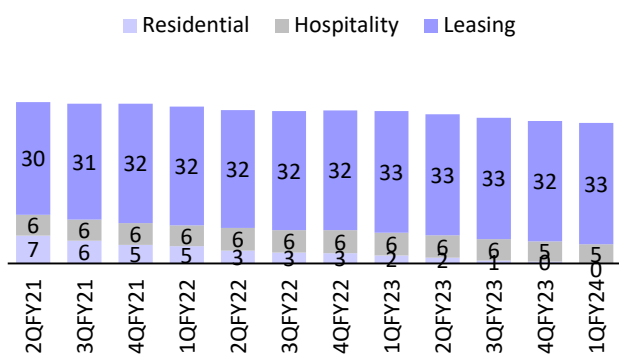
Source: Company, MOFSL

Exhibit 7: Hotel portfolio benefiting from sustained momentum...

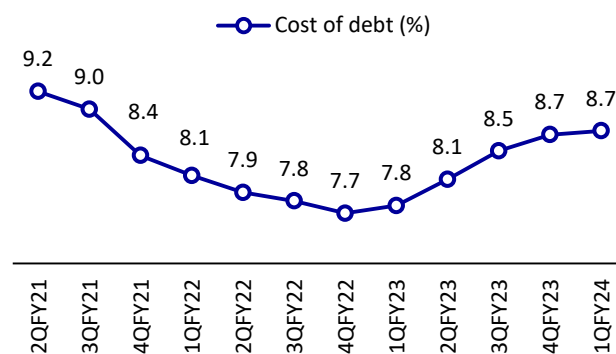
Source: MOFSL, Company

Exhibit 8: ...with consistent growth in ARR

Source: MOFSL, Company

Exhibit 9: Residential segment is now debt free, while debt on office assets remains steady

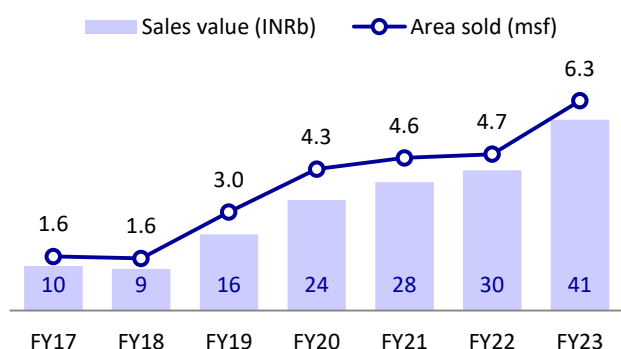
Source: MOFSL, Company

Exhibit 10: Cost of debt stood at 8.7%

Source: MOFSL, Company

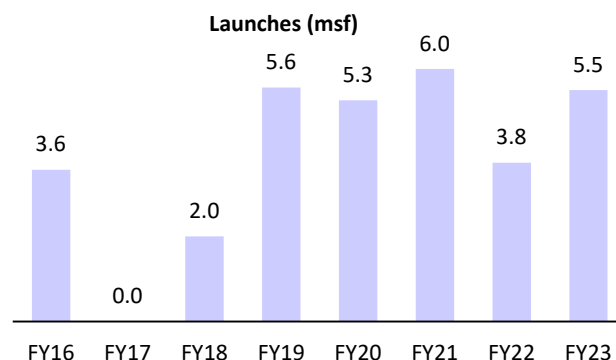
Story in charts

Exhibit 11: Scales up its Residential business and clocks the highest ever sales of 6.3msf in FY23



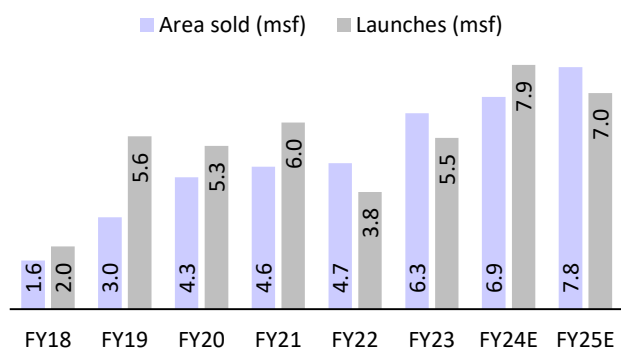
Source: Company, MOFSL

Exhibit 12: Pre-sales posted 32% CAGR over FY18-23, led by an acceleration in launches



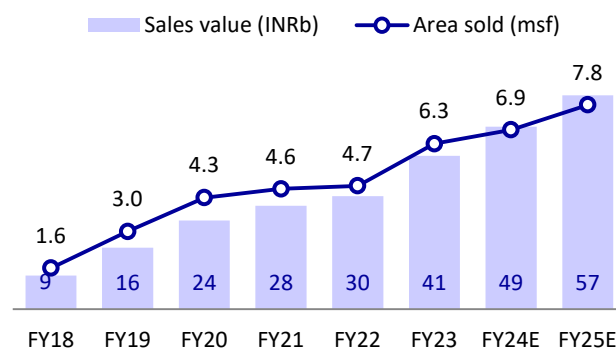
Source: Company, MOFSL

Exhibit 13: Expect volume CAGR of 11% over FY23-25



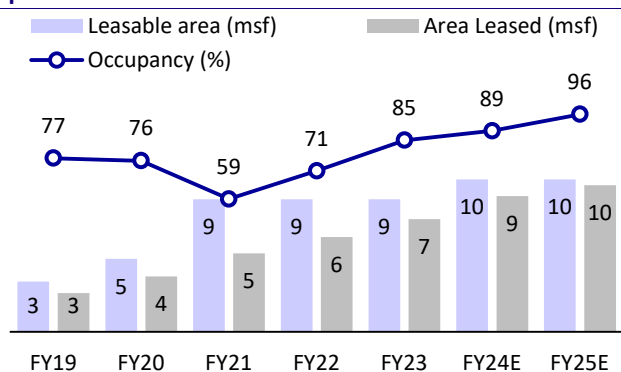
Source: MOFSL, Company

Exhibit 14: Expect bookings to touch INR57b by FY25



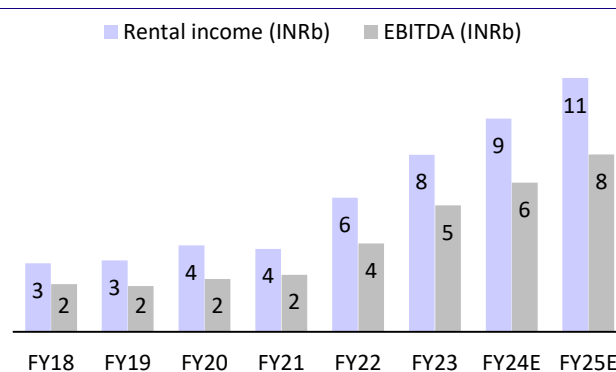
Source: MOFSL, Company

Exhibit 15: Expect occupancy in Annuity assets to gradually improve...

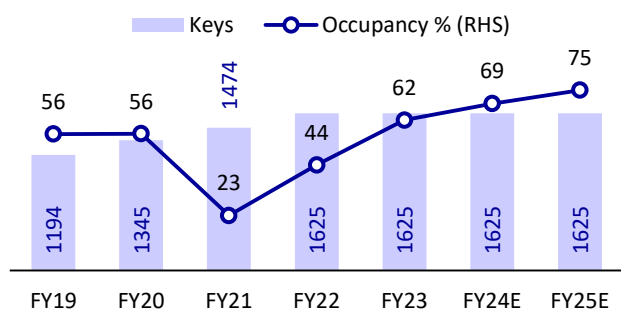


Source: Company, MOFSL

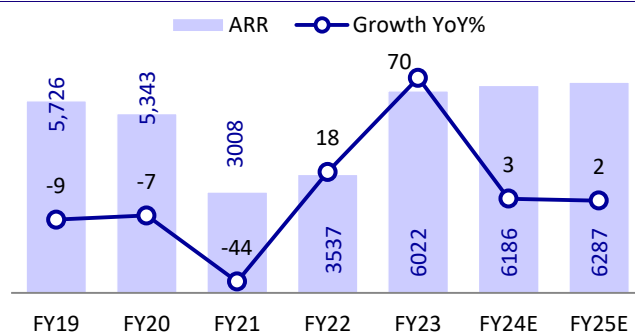
Exhibit 16: ...and Rental income to register 20% CAGR over FY23-25



Source: Company, MOFSL

Exhibit 17: The Hospitality portfolio witnesses a sharp rise in occupancy over the last two years

Source: Company, MOFSL

Exhibit 18: Post the rebound, expect ARR to remain steady

Source: Company, MOFSL

Exhibit 19: Changes to our Earnings estimates

(INR b)	Old		New		Change	
	FY24E	FY25E	FY24E	FY25E	FY24E	FY25E
Revenue	41	47	41	47	0%	0%
EBITDA	12	15	12	15	0%	0%
Adj. PAT	5	7	5	7	0%	0%
Pre-sales	49	57	49	57	0%	0%
Collections	43	52	43	52	0%	0%

Source: MOFSL, Company



Other key conference call takeaways

Hyderabad land:

- BEL won the bid for land at Neopolis, Hyderabad with development potential of 3.5msf as the company intends to use FSI upto 8. INR7b is the total cost including stamp duty. First installment is INR2b, which will be paid by next week and full payment to be done in 90 days.
- Currently projects in Kokapet micro-market are selling at 8-8.5k/sft which increased to INR10k/sft post the auction. Expect the project to make 25-30% EBITDA margin
- BEL had evaluated the first auction in Neopolis a few years back but was not convinced about pricing and surrounding infra. Since then, the micro-market has seen good development and hence the company went ahead with purchase.

Annuity

- In 1QFY24, 12% LfL growth was seen in retail consumption across malls. Electronics, eyewear, cosmetics, Jewelry, travel gear etc. witnessed average growth of 25% YoY. Multiplex segment declined 37% YoY due to muted movie content
- The company is also exploring data center project on 25-acre plot in North Bengaluru. It will be a BTS asset and BEL will share more details once plans are finalized.

P&L

- The government change in Karnataka has led to delay in approvals and issuance of OC, which impacted launches and revenue recognition adversely.
- Physical occupancy has increased and is in the range of 45-65% across the office parks. Multiple projects with total 4,500 units over 5msf and valued at INR30b are near completion and these have relatively high margin. Hence, P&L should improve from 2QFY24.

Valuation and view

- **We value BEL based on our DCF approach:**
 - Its Residential business is valued using the DCF method, considering expected cash flows over the next four years, a WACC of 11.3%, and a terminal value using a perpetual growth rate of 3%;
 - Its operational Commercial assets are valued at an 8.5% cap rate on a FY23 EBITDA basis and ongoing and upcoming projects using DCF; and
 - Its Hospitality business is valued at 15x EV/EBITDA on an FY24E basis.
- Based on the above approach, we arrive at a GAV of INR179b. Netting-off FY24E net debt of INR13b, we derive at a NAV of INR166b, or INR720 per share, indicating a potential upside of 27%.

Exhibit 20: Our SoTP-based approach denotes 27% upside potential for BEL; reiterate BUY

Segment	Valuation metric	Value (INR b)	Per share	As a percentage of NAV
Residential	❖ DCF of three-year cash flow at a WACC of 11.3% and terminal value assuming cash flow sustain in FY22-24	87	379	53%
Commercial	❖ Based on the cap rate of 8.5% for Office and Retail assets on FY24E EBITDA	66	287	40%
Hotel	❖ FY24E EV/EBITDA of 15x	26	112	16%
Gross asset value		179	777	108%
Net debt (BRGD's share)		(13)	(57)	-8%
Net asset value		166	720	100%
No. of shares		230		
Target price		720		
CMP		566		
Upside		27%		

Source: MOFSL

Financials and Valuation

Consolidated Profit & Loss (INR m)

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Total Income from Operations	29,728	26,322	19,500	29,988	34,446	41,359	46,965
Change (%)	56.7	-11.5	-25.9	53.8	14.9	20.1	13.6
Total Expenditure	21,831	19,689	14,780	22,325	25,856	29,105	32,212
% of Sales	73.4	74.8	75.8	74.4	75.1	70.4	68.6
EBITDA	7,897	6,632	4,719	7,663	8,590	12,253	14,753
Margin (%)	26.6	25.2	24.2	25.6	24.9	29.6	31.4
Depreciation	1,400	1,920	2,369	3,505	3,146	3,370	3,861
EBIT	6,497	4,712	2,350	4,158	5,444	8,883	10,892
Int. and Finance Charges	2,785	3,403	3,468	4,436	4,342	3,981	3,756
Other Income	563	494	604	667	1,186	1,222	1,283
PBT bef. EO Exp.	4,274	1,803	-514	389	2,289	6,123	8,418
EO Items	0	-205	-763	-567	450	0	0
PBT after EO Exp.	4,274	1,598	-1,277	-177	2,739	6,123	8,418
Total Tax	1,455	474	-287	497	558	1,541	2,119
Tax Rate (%)	34.0	29.6	22.5	-280.3	20.4	25.2	25.2
Minority Interest	420	-150	-475	-1,448	-651	-583	-361
Reported PAT	2,399	1,274	-515	774	2,832	5,165	6,660
Adjusted PAT	2,399	1,418	77	1,739	2,474	5,165	6,660
Change (%)	72.3	-40.9	-94.6	2,165.4	42.2	108.8	28.9
Margin (%)	8.1	5.4	0.4	5.8	7.2	12.5	14.2

Consolidated Balance Sheet

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Equity Share Capital	1,362	2,044	2,109	2,303	2,303	2,303	2,303
Total Reserves	20,332	20,768	21,368	26,797	30,143	34,899	41,151
Net Worth	21,694	22,811	23,477	29,099	32,445	37,202	43,453
Minority Interest	1,884	1,659	1,156	-323	-1,013	-1,596	-1,957
Total Loans	36,440	44,218	43,897	48,327	45,488	42,988	40,488
Deferred Tax Liabilities	0	0	-2,155	-2,642	-3,317	-3,317	-3,317
Capital Employed	60,018	68,688	66,374	74,461	73,604	75,277	78,667
Gross Block	27,742	36,874	59,464	61,822	62,567	72,253	82,183
Less: Accum. Deprn.	5,019	6,939	9,308	12,814	15,960	19,330	23,191
Net Fixed Assets	22,724	29,935	50,156	49,008	46,608	52,923	58,992
Goodwill on Consolidation	43	43	43	43	203	203	203
Capital WIP	20,097	20,975	4,949	5,407	7,405	1,655	-5,863
Total Investments	977	721	890	5,086	617	617	617
Curr. Assets, Loans&Adv.	64,158	70,935	79,942	88,825	1,05,500	1,11,102	1,20,963
Inventory	48,161	52,094	59,020	62,228	73,273	73,653	79,776
Account Receivables	4,208	4,306	5,272	5,042	4,616	6,799	7,720
Cash and Bank Balance	2,222	3,049	5,594	9,448	14,781	13,951	14,504
Loans and Advances	9,567	11,486	10,056	12,108	12,830	16,699	18,962
Curr. Liability & Prov.	47,980	53,921	69,606	73,908	86,729	91,223	96,245
Account Payables	6,081	5,005	5,770	6,491	7,347	10,366	11,473
Other Current Liabilities	41,803	48,811	63,747	67,333	79,278	80,650	84,537
Provisions	97	105	89	83	105	207	235
Net Current Assets	16,178	17,014	10,336	14,917	18,770	19,879	24,718
Misc Expenditure	0	0	0	0	0	0	0
Appl. of Funds	60,018	68,688	66,374	74,462	73,603	75,276	78,667

Financials and valuations

Ratios

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
Basic (INR)							
EPS	11.7	6.9	0.4	8.5	12.1	25.3	32.6
Cash EPS	18.6	16.3	12.0	25.7	27.5	41.8	51.5
BV/Share	106.1	111.6	114.9	142.4	158.8	182.0	212.6
DPS	1.3	1.0	0.0	1.0	3.0	2.0	2.0
Payout (%)	13.7	19.3	0.0	26.4	21.6	7.9	6.1
Valuation (x)							
P/E	44.2	74.8	1,381.5	61.0	46.2	22.1	17.2
Cash P/E	27.9	31.8	43.4	20.2	20.3	13.4	10.9
P/BV	4.9	4.7	4.5	3.6	3.5	3.1	2.6
EV/Sales	4.7	5.6	7.4	4.8	4.2	3.5	3.0
EV/EBITDA	17.8	22.2	30.6	18.9	16.9	11.7	9.5
Dividend Yield (%)	0.3	0.2	0.0	0.2	0.5	0.4	0.4
FCF per share	-6.5	-13.1	16.4	40.3	29.9	23.7	29.0
Return Ratios (%)							
RoE	10.8	6.4	0.3	6.6	8.0	14.8	16.5
RoCE	8.1	5.9	3.4	25.3	6.8	9.6	11.1
RoIC	12.1	8.2	3.7	28.9	8.2	12.1	12.7
Working Capital Ratios							
Fixed Asset Turnover (x)	1.1	0.7	0.3	0.5	0.6	0.6	0.6
Asset Turnover (x)	0.5	0.4	0.3	0.4	0.5	0.5	0.6
Inventory (Days)	591	722	1,105	757	776	650	620
Debtor (Days)	52	60	99	61	49	60	60
Creditor (Days)	75	69	108	79	78	91	89
Leverage Ratio (x)							
Current Ratio	1.3	1.3	1.1	1.2	1.2	1.2	1.3
Interest Cover Ratio	2.3	1.4	0.7	0.9	1.3	2.2	2.9
Net Debt/Equity	1.6	1.8	1.6	1.3	0.9	0.8	0.6

Consolidated Cash flow

Y/E March	FY19	FY20	FY21	FY22	FY23	FY24E	FY25E
OP/(Loss) before Tax	4,274	1,614	-1,251	-150	2,780	6,123	8,418
Depreciation	1,400	1,920	2,369	3,505	3,146	3,370	3,861
Interest & Finance Charges	2,583	3,403	3,468	4,436	4,342	3,981	3,756
Direct Taxes Paid	-1,117	-642	-536	-1,039	-558	-1,541	-2,119
(Inc)/Dec in WC	-2,363	-1,643	3,814	4,047	1,480	-1,938	-4,287
CF from Operations	4,777	4,652	7,864	10,799	11,189	9,996	9,630
Others	-105	-4	165	-478	-1,186	-1,222	-1,283
CF from Operating incl EO	4,672	4,649	8,029	10,321	10,003	8,774	8,347
(Inc)/Dec in FA	-6,005	-7,328	-4,670	-2,084	-3,887	-3,935	-2,412
Free Cash Flow	-1,333	-2,679	3,359	8,237	6,116	4,839	5,935
(Pur)/Sale of Investments	1,601	237	-342	-4,036	4,469	0	0
Others	40	-75	-2,473	-3,594	1,186	1,222	1,283
CF from Investments	-4,364	-7,166	-7,484	-9,714	1,768	-2,714	-1,130
Issue of Shares	5	320	883	5,028	0	0	0
Inc/(Dec) in Debt	3,925	7,406	3,032	-831	-2,839	-2,500	-2,500
Interest Paid	-3,154	-3,859	-3,943	-3,511	-4,342	-3,981	-3,756
Dividend Paid	-328	-575	0	-276	-613	-409	-409
Others	-1	52	2,029	-78	0	0	0
CF from Fin. Activity	448	3,344	2,000	333	-7,793	-6,890	-6,665
Inc/Dec of Cash	756	827	2,545	940	3,978	-830	552
Opening Balance	1,466	2,222	3,049	2,804	3,745	7,723	6,893
Closing Balance	2,222	3,049	5,594	3,745	7,723	6,893	7,446

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

NOTES

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

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

Disclosures

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

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

<http://online.reports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

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

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

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

Regional Disclosures (outside India)

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

For Hong Kong:

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

For U.S.

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

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

For Singapore

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

Specific Disclosures

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

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

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

Analyst Certification

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

Terms & Conditions:

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

Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, 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.

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 dp grievances@motilaloswal.com.