

Real Estate

All set for yet another good year

Listed real estate players posted a strong performance in 1QFY23 (booking values up +1.77x YoY; down 16% QoQ across a sample of 12 listed companies) in a seasonally weak quarter (2Q is generally the weakest). For FY23, booking values across developers are expected to show 10-30% YoY growth barring exceptions like Mahindra Lifespaces (+80%). Given the sales momentum in 1QFY23 we feel the ask rate for balance 9MFY23 appears to be realistic (Exhibit 2). A key monitorable remains the rise in interest rates / home loan rates which are currently being negated by i) fixed home loan rate schemes floated by developers and ii) limited systemic inventory, rising rental yields and price hikes influencing customer purchases. Given the healthy demand supply scenario, we feel developers with large land banks and aggressive launch pipelines are likely to benefit. Among other segments, retail has recovered sharply on all parameters while commercial / REITs are showing improvement in occupancies. With better access to capital (equity and debt) and minimal leverage, listed developers are looking to accelerate growth via acquisition of land banks / projects through JDA model. We remain positive on the listed real estate space on the back of a) healthy underlying demand, b) strong launch pipeline and c) consolidation theme playing out. We continue to like DLF, Macrotech, Prestige Estates, Oberoi Realty and Phoenix Mills as our preferred picks. Key risks: Slowdown in demand environment.

- **Interest rate worries linger but demand holding up:** Across the listed universe, developers are expected to show 10-30% YoY growth in booking values for FY23 with broad based demand momentum (ticket sizes / regions). Given, the accelerated sales momentum and minimal leverage (less than 1x net debt to equity for the whole sector) business development activities continue at a frenetic pace. Over the past few months commodity inflation has also tapered off (Exhibit 5-6) and launches which were delayed are now likely to pick-up but systemic inventory remains low (Exhibit: 1) and launches continue to lag sales.
- **Leverage remains low; impact of interest rate likely to be minimal:** Across the sample of 12 companies, all companies have net debt to equity below 1.0x as the developers have benefitted from i) liquidation of RTM inventory, ii) stake sale across assets, iii) equity issuances and iv) lower cost of borrowing. Given the current market conditions, developers are likely to maintain low leverage and interest rate hikes are unlikely to impact the cash flow profile meaningfully.
- **Interest rate – Mitigation plans:** Macrotech Developers (one of the largest in the country) believes housing demand is not sensitive to modest increase in interest rate and after first 12-24 months from home purchase, EMI becomes a 'non-issue' due to salary growth. Macrotech has rolled out 'interest rate increase' absorption plan – increase in EMI due to increase in ROI beyond 6.99% to be borne by MDL up till Jun'24. Max. increase borne by Lodha capped at 150 bps. Other developers including Piramal seem to be following the fixed interest rate (6.75%) policy as the focus remains on sales velocity from a developer perspective. We feel this remains an attractive scheme from a customer perspective and given strong minimal debt across developers can be offered for a prolonged period thereby artificially depressing the interest rate volatility upto a certain extent.
- **2QFY23 likely to be QoQ seasonally weak but registration data shows traction:** The average daily registration across Mumbai for the month of August (till 23Aug'22) stood at 248 units per day (+13% YoY; down 32% MoM; +31% higher than Aug'19; Source: IGR) indicating yet another strong month compared to historical years. While 2QFY23 remains the seasonally weakest quarter we don't expect any meaningful change in the positivity across developers.
- **DLF, Macrotech, Oberoi Realty, Phoenix Mills and Prestige Estates are preferred picks:** At a broader level, we are witnessing i) continued optimism in the residential space, ii) sharp recovery in retail and iii) gradual revival in commercial segment. We continue to like DLF, Macrotech, Oberoi and Prestige Estates as our preferred picks in the residential space while Phoenix Mills remains attractive in the mall space.



Manish Agrawal

manish.agrawal@jmfl.com | Tel: (91 22) 66303068

JM Financial Research is also available on:
Bloomberg - JMFR <GO>,
Thomson Publisher & Reuters,
S&P Capital IQ, FactSet and Visible Alpha

Please see Appendix I at the end of this report for Important Disclosures and Disclaimers and Research Analyst Certification.

- **Historical land banks getting monetised:** We have seen developers having large land-banks continue project launches across existing land banks. DLF continues to churn out projects across its land banks in Gurgaon, Macrotech has hit INR 25bn sales run-rate at Palava and Upper Thane (INR 23.38bn in FY18; INR 12.5bn in FY20), Prestige has significantly augmented its pipeline and is looking to create an INR 25bn AIF to add more land parcels while Oberoi has 2 land banks at Thane and is also exploring an acquisition at Gurgaon ([Link](#)). Godrej also is targeting acquisitions worth INR 150bn of GDV while MLIFE looks to add INR 30-40bn annually.
- **Retail recovery better than expected:** Phoenix delivered a superior performance on multiple counts: i) leasing occupancies are back to pre-Covid levels, ii) base rentals have jumped 8-31% on 1QFY20 base indicating escalations coming through, iii) trading densities continue to be higher than pre-Covid levels across malls and iv) 87% of rentals came through as minimum guarantee thereby offering cash flow visibility. With these results, all doubts regarding mall recovery seem to be put to rest and PHNX now focuses on even higher rentals upon renewals (31-49% of area up for renewals over FY23-25). Other mall owners including DLF, Prestige, Oberoi and Brigade are likely to follow a similar trend.
- **REITs trading at negative spreads to G-Secs:** The three listed REITs continue to trade at c.5.5%-6.0% FY23 distribution yields (Exhibit 21) given the i) lack of alternate investments offering such post tax yields and capital appreciation possibilities, ii) expected recovery in rentals / occupancies in FY24 and iii) possible NAV accretion through ROFO acquisitions.

Charts

Exhibit 1. Sales momentum remains healthy in seasonally weak quarter; inventory coming down

Pre-sales (INR bn)	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23	YoY	QoQ
Prestige	4.6	11.2	20.3	18.5	7.3	21.1	42.7	32.7	30.1	310%	-8%
Lodha	5.1	10.7	18.6	25.3	9.6	20.0	26.1	34.6	28.1	194%	-19%
Godrej	15.3	10.7	14.9	26.3	5.0	25.7	15.4	32.5	25.2	407%	-22%
DLF	1.5	8.5	10.2	10.6	10.2	15.1	20.2	27.3	20.4	101%	-25%
Sobha	4.9	6.9	8.9	10.7	6.8	10.3	10.5	11.1	11.5	68%	3%
Brigade	2.5	5.8	9.2	10.2	4.8	8.3	6.8	10.3	8.1	70%	-21%
Oberoi	0.2	3.3	9.7	19.6	1.7	8.3	19.7	9.3	7.6	348%	-18%
Mahindra Lifespaces	0.4	1.2	2.0	3.5	1.5	3.0	2.5	3.3	6.0	315%	84%
Puravankara	4.0	5.0	5.7	7.5	3.1	6.0	6.7	8.3	5.1	63%	-38%
Ashiana	0.3	0.8	1.3	3.0	0.5	1.7	1.5	1.7	1.4	167%	-19%
Kolte Patil	1.6	1.9	3.3	5.1	2.5	4.3	5.6	5.0	4.5	79%	-11%
Sunteck	1.0	2.0	3.5	3.7	1.8	2.7	3.5	5.0	3.3	89%	-34%
Total	41.5	67.9	107.6	144.0	54.7	126.6	161.1	181.0	151.4	177%	-16%
Top 7 Cities Sales	229.8	502.4	772.6	849.2	469.6	750.7	1,001.8	1,032.5	995.3	112%	-4%
Listed Developers (% of total)	18%	14%	14%	17%	12%	17%	16%	18%	15%	-	-
Unsold Inventory Value	5,381	5,235	4,946	4,850	4,862	4,858	4,775	4,659	4,502	-7%	-3%
Inventory in months	70.2	31.3	19.2	17.1	31.1	19.4	14.3	13.5	13.6	-	-

Source: Company, Propequity, JM Financial

Exhibit 2. Booking Values to grow in double digits across companies

Booking Values (INR bn)	FY17	FY18	FY19	FY20	FY21	FY22	1QFY23	1QFY23 Annualised	Bookings Guidance	Balance 9MFY23
Prestige	24.6	33.1	45.6	45.6	54.6	103.8	30.1	120.5	120	90
Macrotech	69.7	81.3	71.7	65.7	59.7	90.2	28.1	112.6	115	87
Godrej	20.2	50.8	53.2	59.2	67.2	78.6	25.2	100.8	100	75
DLF	11.6	10.5	24.4	25.0	30.9	72.7	20.4	81.6	80	60
Sobha	20.1	28.6	31.2	28.8	31.4	38.7	11.5	46.0	43-45	32-34
Brigade	9.6	9.0	17.9	23.8	27.7	30.2	8.1	32.6	35-38	27-30
Oberoi	15.2	13.1	17.5	12.6	32.8	38.9	7.6	30.4	NA	NA
Mahindra Lifespaces	5.4	5.7	10.2	8.2	7.0	10.3	6.0	24.1	NA	NA
Puravankara	11.4	17.4	19.2	17.2	22.2	24.1	5.1	20.5	NA	NA
Kolte Patil	12.2	12.0	14.3	13.2	12.0	17.4	4.5	17.8	21-23	17-19
Sunteck	6.5	5.9	12.0	12.2	10.2	13.0	3.3	13.3	18	15
Ashiana	1.5	1.5	2.3	5.9	4.6	5.1	1.4	5.6	NA	NA
Total	208	269	319	317	360	523	151	606		

Source: Company, JM Financial

Exhibit 3. Cost of debt expected to increase from hereon; DCCDL and Macrotech remain outliers

Interest Cost	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23
Godrej	7.8%	7.6%	7.3%	6.8%	6.7%	6.5%	6.3%	6.0%	6.0%
Mahindra Lifespaces	8.2%	7.4%	7.5%	7.1%	7.1%	6.7%	7.2%	6.5%	6.8%
DLF (DCCDL)	8.6%	8.5%	7.8%	7.5%	7.4%	7.4%	7.1%	7.1%	7.0%
DLF ex rental	9.7%	9.1%	8.9%	8.4%	8.2%	8.0%	7.7%	7.0%	7.1%
Phoenix Mills	9.1%	8.9%	8.5%	8.2%	7.9%	7.8%	7.6%	7.3%	7.5%
Brigade	9.6%	9.2%	9.0%	8.4%	8.1%	7.9%	7.8%	7.7%	7.8%
Sobha	9.6%	9.3%	9.2%	9.0%	9.0%	8.9%	8.7%	8.4%	8.5%
Prestige	9.7%	9.7%	9.3%	9.8%	9.8%	9.8%	9.4%	9.2%	9.4%
Macrotech	NA	NA	NA	12.3%	11.6%	11.4%	11.1%	10.5%	10.1%
Puravankara	11.9%	12.0%	12.0%	12.0%	11.8%	11.3%	10.5%	10.6%	10.7%

Source: Company, JM Financial

Exhibit 4. Debt reduction across sector

Net Debt	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22	1QFY23
DCCDL	178.9	181.0	180.9	191.9	190.7	196.4	192.6	190.6	188.0
Macrotech	NA	169.7	166.3	160.8	124.4	125.1	99.3	93.1	88.6
Prestige	84.1	86.7	84.6	13.1	21.7	30.9	41.7	33.6	39.2
Brigade	36.2	38.3	38.1	35.7	30.5	29.6	27.9	25.4	24.1
DLF Devco	52.3	52.2	51.0	48.9	47.5	39.9	32.2	26.8	22.6
Sobha	30.2	30.5	29.8	28.5	28.2	27.8	26.5	23.4	21.1
Phoenix Mills	47.2	26.2	26.1	26.9	26.9	29.8	18.1	18.8	20.1
Puravankara	25.2	26.6	23.7	23.0	18.5	18.6	18.6	18.5	18.9
Godrej	17.5	27.3	30.8	-5.8	-2.4	0.2	3.1	4.6	9.6
Oberoi	12.5	12.7	13.9	11.2	7.8	8.0	7.2	7.3	7.1
Kolte Patil	0.8	1.0	1.3	1.7	1.3	1.7	1.9	2.9	2.8
Mahindra Lifespaces (non-cons)	2.7	1.7	0.7	1.1	1.5	0.4	-0.9	-1.5	0.0

Source: Company, JM Financial

Exhibit 5. Commodity inflation moderating since Mar'22

Commodity/Component	% Escalation YoY	% Share in total cost	Mar'22 to Jun'22	
			% Change	Weighted impact
Steel	35.1%	12.9%	-19.1%	-2.5%
Flooring Tiles	23.9%	5.0%	-2.0%	-0.1%
Electrical/Plumbing	10.1%	11.8%	-3.2%	-0.4%
Labour	3.0%	34.4%	1.3%	0.4%
External Windows	21.9%	3.9%	-8.4%	-0.3%
RMC	6.3%	10.5%	3.5%	0.4%
Lifts & Elevators	16.6%	3.3%	16.3%	0.5%
Carpentry Materials	15.5%	3.5%	0.0%	0.0%
Painting	13.1%	3.8%	9.9%	0.4%
Cement	14.8%	0.4%	12.9%	0.1%
Overall				-2.2%

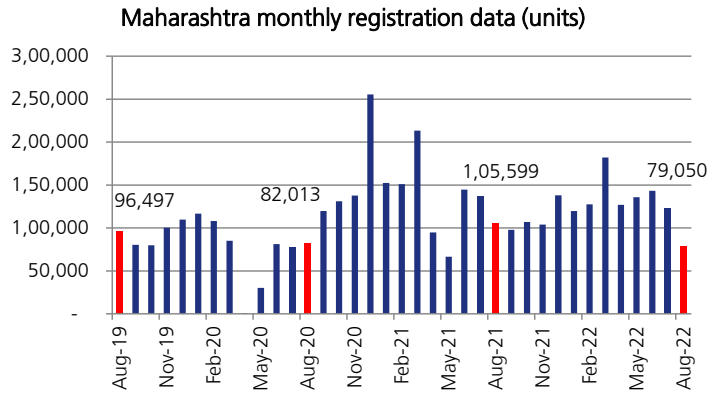
Source: Macrotech, JM Financial

Exhibit 6. Commodities moderating

Commodity	Mar-21	Mar-22	Jun-22	%Change in 1QFY23 & 1QFY22
Steel (ex-works) (INR/tn)	47,500	66,800	54,800	-18.0%
Bulk Cement (ex-GST) /50kg	270	325	350	7.7%
Copper (USD/lbs)	4	4.75	3.71	-21.8%
Aluminium (USD/T)	2,194	3,551	2,445	-31.1%

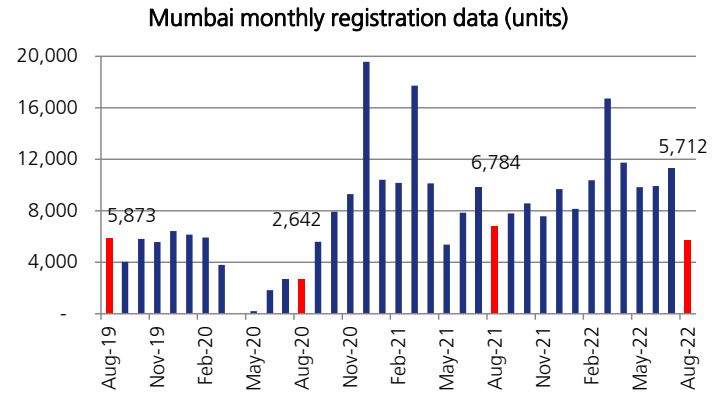
Source: Macrotech, JM Financial

Exhibit 7. Maharashtra registration data



Source: IGR, JM Financial, *Till Aug 23rd 2022

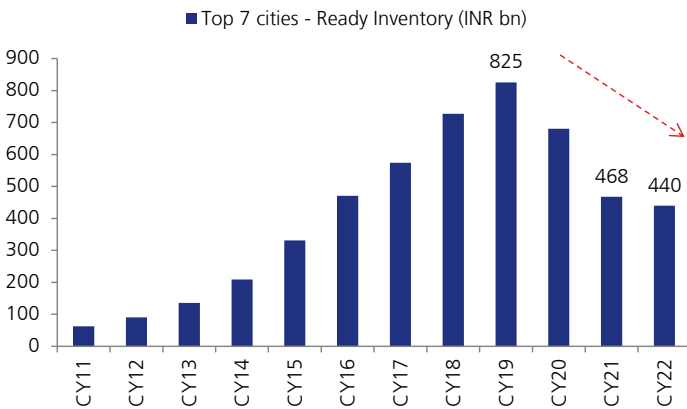
Exhibit 8. Mumbai registration data



Source: IGR, JM Financial, *Till Aug 23rd 2022

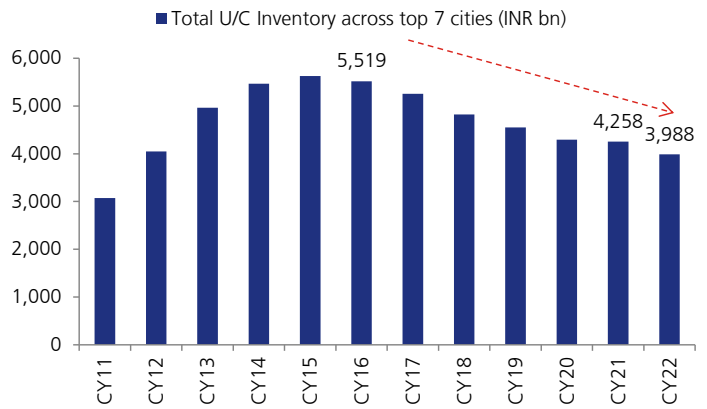
Inventory trends across top 7 cities

Exhibit 9. Ready to move in inventory decreasing across markets



Source: JM Financial, Propequity
Data till May'22

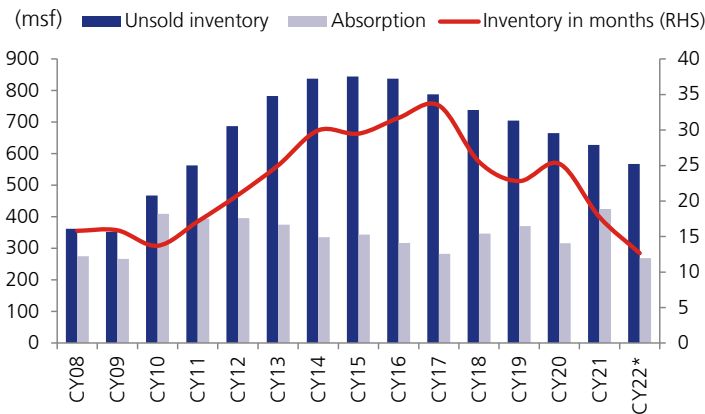
Exhibit 10. Even under-construction inventory is reducing



Source: JM Financial, Propequity
Data till May'22

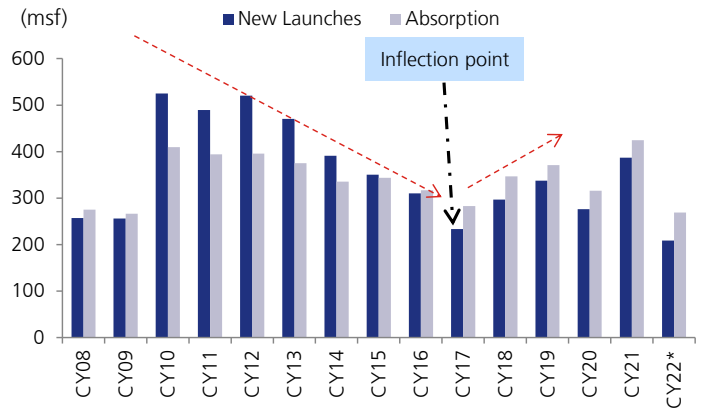
Top 7 cities

Exhibit 11. Inventory in months continues to fall



Source: JM Financial, Propequity
*represents 6M CY22

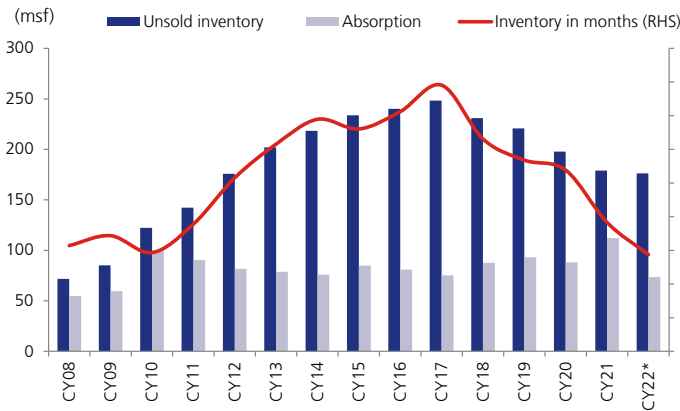
Exhibit 12. Absorption higher than new launches



Source: JM Financial, Propequity
*represents 6M CY22

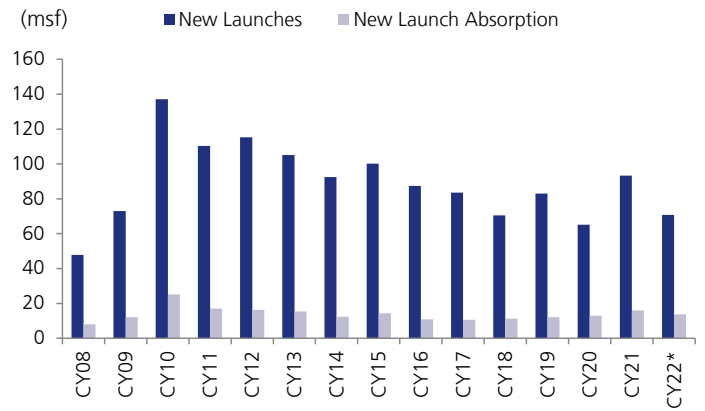
MMR

Exhibit 13. Inventory levels drop below 15 months



Source: JM Financial, Propequity
*Represents 6MCY22

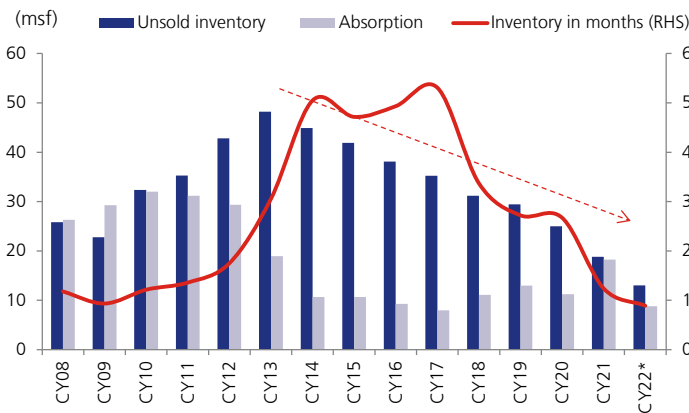
Exhibit 14. New launches are picking up



Source: JM Financial, Propequity
*Represents 6MCY22

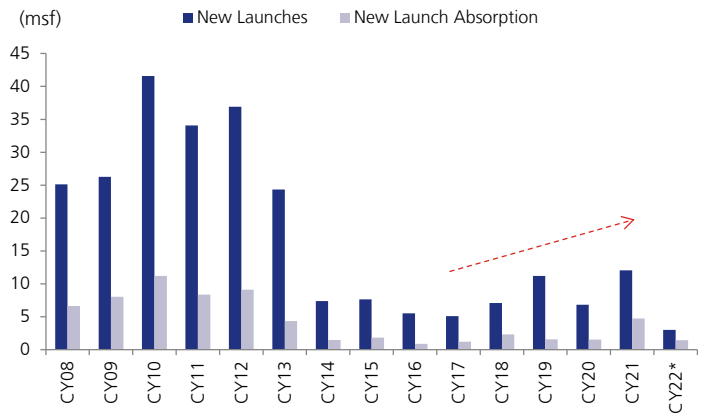
Gurgaon

Exhibit 15. Inventory continues to come down



Source: JM Financial, Propequity
*Represents 6MCY22

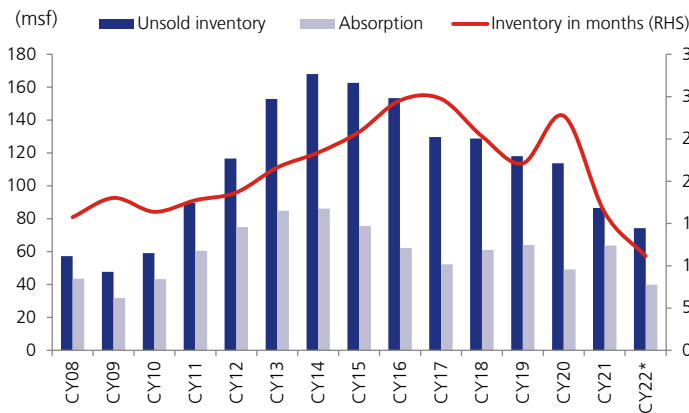
Exhibit 16. New launches seeing a pickup



Source: JM Financial, Propequity
*Represents 6MCY22

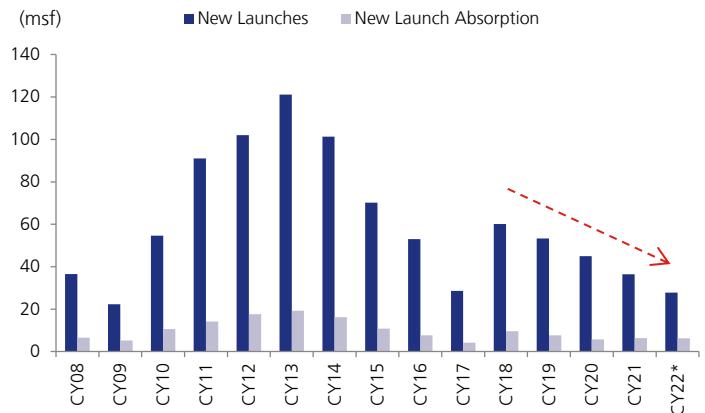
Bangalore

Exhibit 17. Absorption at CY20 levels



Source: JM Financial, Propequity
*Represents 6MCY22

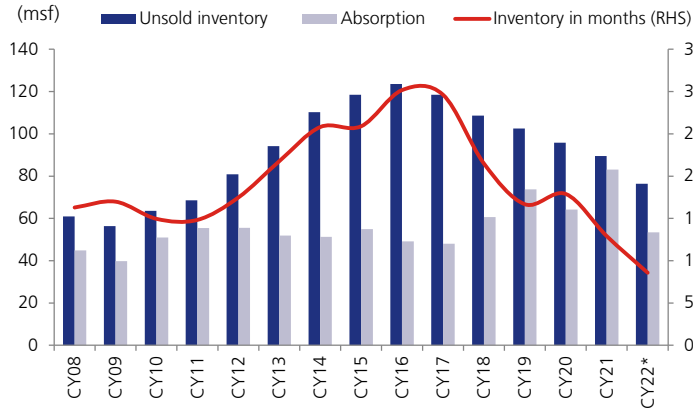
Exhibit 18. New launches remain low



Source: JM Financial, Propequity
*Represents 6MCY22

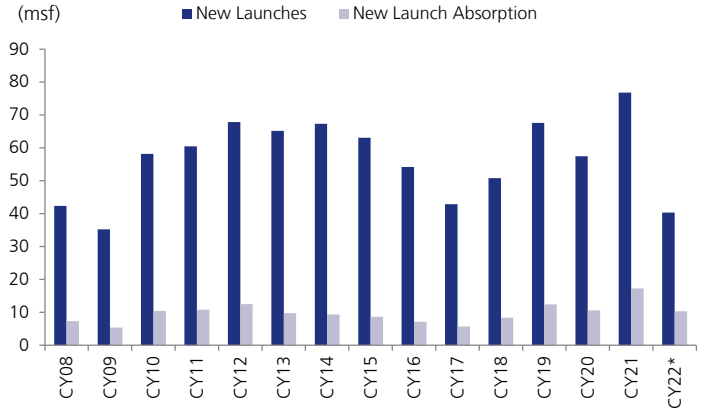
Pune

Exhibit 19. Inventory levels at extremely low levels



Source: Propequity, JM Financial
*Represents 6MCY22

Exhibit 20. New launch absorption picking up



Source: Propequity, JM Financial
*Represents 6MCY22

Exhibit 21. Coverage Universe

Company	Rating	Mkt Cap (Rs bn)	CMP (Rs)	12M TP (Rs)	(% upside)	P / BV (x)			Book Value			
						FY22A	FY23E	FY24E	FY22A	FY23E	FY24E	
Real Estate												
DLF	BUY	911	369	450	22%	2.5	2.3	2.2	150	157	167	
Godrej Properties	SELL	368	1,325	1,485	12%	4.2	4.1	3.8	312	324	348	
Macrotech Developers	BUY	508	1,056	1,410	34%	4.2	3.7	3.2	251	285	327	
Mahindra Lifespaces Developers	BUY	74	480	470	-2%	4.1	3.8	3.7	116	126	131	
Oberoi Realty	BUY	345	952	1,005	6%	3.3	2.9	2.6	286	324	370	
Phoenix Mills	BUY	238	1,333	1,420	6%	3.5	2.9	2.7	383	452	494	
Prestige Estates Projects	BUY	183	455	595	31%	2.0	1.9	1.7	227	244	268	
Sobha Ltd	BUY	66	693	745	8%	2.6	2.4	2.2	265	284	312	
Average						3.3	3.0	2.8				
REIT												
Brookfield India Real Estate Trust	BUY	109	327	335	2%	1.2	1.3	1.4	265	253	240	
Mindspace Business Parks REIT#	BUY	216	365	385	5%	1.4	1.5	1.5	265	251	238	
Average						1.3	1.4	1.4				

Source: Company, JM Financial
Sep'23 TP

REITs

Exhibit 22. Steady occupancies across REITs with all showing improving trends

Embassy	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23
Operational										
Total Completed Area (msf)	26.2	26.2	26.2	32.3	32.3	32.3	32.3	33.6	33.8	33.8
Under Construction	2.7	2.7	2.7	5.7	5.7	5.7	5.7	4.6	4.6	4.6
Proposed Development	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Total Potential area (msf)	33.0	33.0	33.3	42.4	42.4	42.4	42.4	42.6	42.6	42.8
Committed Occupancy (% of completed)	92.8%	92.2%	91.7%	90.6%	88.9%	88.8%	88.5%	87.0%	87.0%	87.0%
Average Rental (INR psf / month)	68	69	70	70	71	71	72	74	75	77
Market Rental (INR psf / month)	89	89	89	90	91	91	91	92	93	93
MTM (%)	31%	29%	27%	29%	28%	28%	26%	24%	24%	21%
WALE	7.0	6.7	6.5	7.1	7.1	6.9	6.9	7.3	7.0	6.9
Mindspace	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23
Operational										
Total Completed Area (msf)	23.1	23.1	23.1	23.9	23.9	23.8	23.9	24.2	24.2	24.4
Under Construction	2.6	2.6	2.6	2.0	2.7	2.7	1.7	2.0	2.1	2.1
Proposed Development	3.8	3.8	3.8	3.6	3.6	4.7	5.7	5.1	5.5	5.3
Total Potential area (msf)	29.5	29.5	29.5	29.5	30.2	31.2	31.3	31.3	31.8	31.8
Committed Occupancy (% of completed)	92.0%	NA	88.9%	86.9%	84.2%	84.4%	84.9%	84.6%	84.3%	85.6%
Average Rental (INR psf / month)	52	NA	54	55	56	57	58	59	62	62
Market Rental (INR psf / month)	64	NA	64	63	64	64	64	63	72	72
MTM (%)	23%	NA	17%	15%	14%	12%	10%	7%	16%	15%
WALE	5.8	NA	5.6	5.8	6.0	6.6	6.7	6.9	6.9	6.8
Brookfield	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23
Operational										
Total Completed Area (msf)	9.8	9.8	10.3	10.3	10.3	10.3	10.3	13.9	14.1	14.2
Under Construction	0.6	0.6	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.0
Proposed Development	3.6	3.6	3.6	3.7	3.7	3.7	3.7	4.4	4.4	4.4
Total Potential area (msf)	14.0	14.0	14.0	14.1	14.1	14.1	14.1	18.5	18.7	18.6
Committed Occupancy (% of completed)	96.0%	NA	87.0%	87.0%	87.0%	85.0%	82.0%	82.7%	83.0%	83.1%
Average Rental (INR psf / month)	62	NA	62	62	65	65	65	62	63	63
Market Rental (INR psf / month)	86	NA	84	84	85	85	84	NA	NA	NA
MTM (%)	38%	NA	36%	36%	31%	31%	29%	NA	NA	NA
WALE	6.8	NA	7.1	6.6	6.5	6.3	6.6	7.3	7.1	7.0

Source: Company, JM Financial

Exhibit 23. FY24 likely to be a year of recovery

DPU	FY23	FY24
Embassy*	21.7	25.4
Mindspace	19.3	21.5
Brookfield	20.3	21.2
Yield	FY23	FY24
Embassy*(@365)	5.9%	6.9%
Mindspace (@365)	5.3%	5.9%
Brookfield (@327)	6.1%	6.4%

Source: Company, JM Financial
Embassy REIT has BBRG estimates

APPENDIX I

JM Financial Institutional Securities Limited

Corporate Identity Number: U67100MH2017PLC296081

Member of BSE Ltd., National Stock Exchange of India Ltd. and Metropolitan Stock Exchange of India Ltd.

SEBI Registration Nos.: Stock Broker - INZ000163434, Research Analyst – INH000000610

Registered Office: 7th Floor, Cnergy, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India.

Board: +9122 6630 3030 | Fax: +91 22 6630 3488 | Email: jmfinancial.research@jmfl.com | www.jmfl.com

Compliance Officer: Mr. Sunny Shah | Tel: +91 22 6630 3383 | Email: sunny.shah@jmfl.com

Definition of ratings	
Rating	Meaning
Buy	Total expected returns of more than 10% for large-cap stocks* and REITs and more than 15% for all other stocks, over the next twelve months. Total expected return includes dividend yields.
Hold	Price expected to move in the range of 10% downside to 10% upside from the current market price for large-cap* stocks and REITs and in the range of 10% downside to 15% upside from the current market price for all other stocks, over the next twelve months.
Sell	Price expected to move downwards by more than 10% from the current market price over the next twelve months.

* Large-cap stocks refer to securities with market capitalisation in excess of INR200bn. REIT refers to Real Estate Investment Trusts.

Research Analyst(s) Certification

The Research Analyst(s), with respect to each issuer and its securities covered by them in this research report, certify that:

All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and

No part of his or her or their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

This research report has been prepared by JM Financial Institutional Securities Limited (JM Financial Institutional Securities) to provide information about the company(ies) and sector(s), if any, covered in the report and may be distributed by it and/or its associates solely for the purpose of information of the select recipient of this report. This report and/or any part thereof, may not be duplicated in any form and/or reproduced or redistributed without the prior written consent of JM Financial Institutional Securities. This report has been prepared independent of the companies covered herein.

JM Financial Institutional Securities is registered with the Securities and Exchange Board of India (SEBI) as a Research Analyst and a Stock Broker having trading memberships of the BSE Ltd. (BSE), National Stock Exchange of India Ltd. (NSE) and Metropolitan Stock Exchange of India Ltd. (MSEI). No material disciplinary action has been taken by SEBI against JM Financial Institutional Securities in the past two financial years which may impact the investment decision making of the investor.

JM Financial Institutional Securities renders stock broking services primarily to institutional investors and provides the research services to its institutional clients/investors. JM Financial Institutional Securities and its associates are part of a multi-service, integrated investment banking, investment management, brokerage and financing group. JM Financial Institutional Securities and/or its associates might have provided or may provide services in respect of managing offerings of securities, corporate finance, investment banking, mergers & acquisitions, broking, financing or any other advisory services to the company(ies) covered herein. JM Financial Institutional Securities and/or its associates might have received during the past twelve months or may receive compensation from the company(ies) mentioned in this report for rendering any of the above services.

JM Financial Institutional Securities and/or its associates, their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (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) covered under this report or (c) act as an advisor or lender/borrower to, or may have any financial interest in, such company(ies) or (d) considering the nature of business/activities that JM Financial Institutional Securities is engaged in, it may have potential conflict of interest at the time of publication of this report on the subject company(ies).

Neither JM Financial Institutional Securities nor its associates or the Research Analyst(s) named in this report or his/her relatives individually own one per cent or more securities of the company(ies) covered under this report, at the relevant date as specified in the SEBI (Research Analysts) Regulations, 2014.

The Research Analyst(s) principally responsible for the preparation of this research report and members of their household are prohibited from buying or selling debt or equity securities, including but not limited to any option, right, warrant, future, long or short position issued by company(ies) covered under this report. The Research Analyst(s) principally responsible for the preparation of this research report or their relatives (as defined under SEBI (Research Analysts) Regulations, 2014); (a) do not have any financial interest in the company(ies) covered under this report or (b) did not receive any compensation from the company(ies) covered under this report, or from any third party, in connection with this report or (c) do not have any other material conflict of interest at the time of publication of this report. Research Analyst(s) are not serving as an officer, director or employee of the company(ies) covered under this report.

While reasonable care has been taken in the preparation of this report, it does not purport to be a complete description of the securities, markets or developments referred to herein, and JM Financial Institutional Securities does not warrant its accuracy or completeness. JM Financial Institutional Securities may not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. This report is provided for information only and is not an investment advice and must not alone be taken as the basis for an investment decision.

The investment discussed or views expressed or recommendations/opinions given herein may not be suitable for all investors. The user assumes the entire risk of

any use made of this information. The information contained herein may be changed without notice and JM Financial Institutional Securities reserves the right to make modifications and alterations to this statement as they may deem fit from time to time.

This report is neither an offer nor solicitation of an offer to buy and/or sell any securities mentioned herein and/or not an official confirmation of any transaction.

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 JM Financial Institutional Securities and/or its affiliated company(ies) 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 a certain category of investors. Persons in whose possession this report may come, are required to inform themselves of and to observe such restrictions.

Persons who receive this report from JM Financial Singapore Pte Ltd may contact Mr. Ruchir Jhunjunwala (ruchir.jhunjunwala@jmfl.com) on +65 6422 1888 in respect of any matters arising from, or in connection with, this report.

Additional disclosure only for U.S. persons: JM Financial Institutional Securities has entered into an agreement with JM Financial Securities, Inc. ("JM Financial Securities"), a U.S. registered broker-dealer and member of the Financial Industry Regulatory Authority ("FINRA") in order to conduct certain business in the United States in reliance on the exemption from U.S. broker-dealer registration provided by Rule 15a-6, promulgated under the U.S. Securities Exchange Act of 1934 (the "Exchange Act"), as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC") (together "Rule 15a-6").

This research report is distributed in the United States by JM Financial Securities in compliance with Rule 15a-6, and as a "third party research report" for purposes of FINRA Rule 2241. In compliance with Rule 15a-6(a)(3) this research report is distributed only to "major U.S. institutional investors" as defined in Rule 15a-6 and is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research report and are not a major U.S. institutional investor, you are instructed not to read, rely on, or reproduce the contents hereof, and to destroy this research or return it to JM Financial Institutional Securities or to JM Financial Securities.

This research report is a product of JM Financial Institutional Securities, which is the employer of the research analyst(s) solely responsible for its content. The research analyst(s) preparing this research report is/are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore, the analyst(s) are not subject to supervision by a U.S. broker-dealer, or otherwise required to satisfy the regulatory licensing requirements of FINRA and may not be subject to the Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

JM Financial Institutional Securities only accepts orders from major U.S. institutional investors. Pursuant to its agreement with JM Financial Institutional Securities, JM Financial Securities effects the transactions for major U.S. institutional investors. Major U.S. institutional investors may place orders with JM Financial Institutional Securities directly, or through JM Financial Securities, in the securities discussed in this research report.

Additional disclosure only for U.K. persons: Neither JM Financial Institutional Securities nor any of its affiliates is authorised in the United Kingdom (U.K.) by the Financial Conduct Authority. As a result, this report is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the matters to which this report relates may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This report is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons.

Additional disclosure only for Canadian persons: This report is not, and under no circumstances is to be construed as, an advertisement or a public offering of the securities described herein in Canada or any province or territory thereof. Under no circumstances is this report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the registration requirement in the relevant province or territory of Canada in which such offer or sale is made. This report is not, and under no circumstances is it to be construed as, a prospectus or an offering memorandum. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. If you are located in Canada, this report has been made available to you based on your representation that you are an "accredited investor" as such term is defined in National Instrument 45-106 Prospectus Exemptions and a "permitted client" as such term is defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada nor should it be construed as being tailored to the needs of the recipient. Canadian recipients are advised that JM Financial Securities, Inc., JM Financial Institutional Securities Limited, their affiliates and authorized agents are not responsible for, nor do they accept, any liability whatsoever for any direct or consequential loss arising from any use of this research report or the information contained herein.